ATTACHMENT 1B

Round 2 Grant Applications

Mitigation and Remediation Grant Program
APPLICATION GUIDELINES

Application Packet Checklist

Please check below to ensure you have a complete application. Once complete, email the following documents, in pdf format with the text "Application for Remediation Grant Program Funding" in the subject line to eadler@co.humboldt.ca.us.

- ☑ Signed Application Submission Form
- ☑ Project Description – Summary of the Project, up to 2 pages.
- ☑ Plot Plan
- ☑ Plot Plan Checklist – Attached
- ☑ Cross sections of proposed work including topographic elevations
- ☑ Scope of Work – Detailed Description of Work
- ☑ Schedule for Completion – Identify Milestones
- ☑ Erosion Control Plan and Monitoring Plan
- ☑ Budget – Be as specific as possible – sample attached
- ☑ Project Maps and Figures
- ☐ Letter(s) of Support (optional)

APPLICATION FORM - Commercial Cannabis Land Use Ordinance Mitigation and Remediation Fund Program

Project Title: 3885 Road 2 Date of Application: 10/6/22

Applicant Name: ENOCH TATTON Project APN: 221-240-015

Contact Person Name and Title: LAUREN TATTON - Project Coordinator

Contact Phone: 707-296-0234 Contact Email: tattonrealestate@gmail.com

Contact Address: 1271 Evergreen Rd #218 Redway, CA 95560

Amount Requested: 149,000 Total Budget: 149,000

Project Timeline: Start Date: Spring 2023 End Date: Fall 2024

Signature of Applicant: 

PLOT PLAN AND TENTATIVE MAP CHECKLIST

The following information must be shown on your plot plan or tentative map. Please check ✓ the box to the left of the items shown on the plot plan or tentative map. If any item is not on your site to your knowledge, write "N/A" next to the box. Plot plans shall be drawn on a minimum size sheet of 8-1/2" x 11", and tentative subdivision maps on a minimum size sheet of 18" x 26". ***Note: This Checklist must be completed by the applicant and submitted with your application.***

Applicant's Name ENOCH TATTON APN 221-240-015

FOR ALL PROJECTS

- ☑ 1. Name of applicant(s)
- ☑ 2. Location or vicinity map (on or attached to the plot plan)
- ☑ 3. The subject parcel (show entire parcel with dimensions)
- ☑ 4. Date, north arrow and scale
- ☐ N/A 5. Name, County road numbers, and width of all existing and proposed access roadways adjacent to or within the subject parcel (indicate width of traveled way, grade (in % slope), and surface)
- ☑ 6. Existing and proposed improvements (label as "existing" and "proposed" with dimensions and distance to nearest two (2) property lines)
  - ☑ a. Structures and buildings (include floor area, height and proposed use)
  - ☑ b. Driveways and turnaround areas (indicate width, grade (in % slope) and surface)
  - ☐ N/A c. Utility lines (electric, gas, telephone, sewer, water, and cable TV)
  - ☑ d. Septic tanks and leachfields (label primary/reserve areas and test holes)
  - ☑ e. Wells
  - ☑ f. Parking and loading areas (show individual parking spaces, including handicapped parking and ramps)
  - ☐ N/A g. Storm drains, curbs and gutters
  - ☑ h. Emergency water storage tanks and fire hydrants
  - ☐ N/A i. Landscaped areas (include proposed exterior lighting)
  - ☐ N/A j. Major vegetation (identify mature trees (12" dbh or larger) to be removed)
  - ☐ N/A k. Diked areas
  - ☐ N/A l. Proposed grading and fill (estimate volume)
  - ☐ N/A m. Signs (indicate size, illuminated, and design (e.g., monument, pylon, etc.))
  - ☐ n. Other - specify _____
- ☑ 7. Direction of surface water runoff
- ☑ 8. Location and width of all existing and proposed easements of record
- ☑ 9. Hazardous areas (indicate on map if on the project site or within 400 feet of the project site):
  - ☐ a. Areas subject to inundation or flooding
  - ☑ b. Steep or unstable slopes
  - ☐ c. Expansive (clay) soils
  - ☐ d. Earthquake faults
  - ☐ e. Hazardous waste or substance sites
  - ☐ f. Other - specify _____
- ☑ 10. Sensitive habitat areas (indicate on map if on project site or within 400 feet of the project site):
  - ☐ a. Creeks, rivers, sloughs and other drainage courses
  - ☐ b. Lakes, ponds, marshes, or "wet" meadows
  - ☐ c. Beaches
  - ☐ d. Sand dunes
  - ☐ e. Other - specify _____
- ☐ N/A 11. Historical buildings or known archaeological or paleontological resources
- ☑ 12. Land use and buildings on adjacent parcels, and approximate distances to closest property lines

FOR LOT LINE ADJUSTMENT PLOT PLANS ONLY

- ☐ 13. Proposed new lines and lines to be eliminated (show lines to be eliminated as dashed)
- ☐ 14. Areas (in square footage or acreage) of the initial and resulting parcels

FOR TENTATIVE SUBDIVISION MAPS ONLY

- ☐ 16. Approximate dimensions and areas of all proposed lots
- ☐ 17. A statement that "All easements of record are shown on the tentative map and will appear on the recorded subdivision map"
- ☐ 18. Contour lines (at _____ intervals)
- ☐ 19. For major subdivisions (5 or more parcels): proposed drainage improvements, details of any grading to be performed, approximate radii of all roadway curves, areas for public use, and typical sections of all streets, highways, ways and alleys
- ☐ 20. Names and assessor's parcel numbers of all contiguous ownerships

NOTE: THE SUBMITTAL OF INCOMPLETE OR ILLEGIBLE PLOT PLANS OR TENTATIVE MAPS WILL CAUSE DELAYS IN THE PROCESSING OF YOUR APPLICATION

ENOCH TATTON 3885 ROAD Z

PROJECT BUDGET:	$149,000

Equipment Mobilization	$5,500

Map point 24	$9,251

- 18" Culvert, 30' long
  - $701 10/11/22 Hilfiker Pipe
    $467 Plastic in 20ft increments
  - $600 Transportation in one load from Eureka
- Loads of rock
  - $3,200 $800 per load @ 4 loads
- Water Truck
  - $750 $125/hr * 6 hrs
- Equipment Services and Labor
  - $4,000

Map point 11	$13,590

- 24" culvert, 40' long
  - $1,640 10/11/22 Hilfiker Pipe
    $820 Plastic in 20ft increments
  - $600 Transportation in one load from Eureka
- Loads of rock
  - $5,600 $800 per load @ 7 loads
- Water Truck
  - $750 $125/hr * 6 hrs
- Equipment Services and Labor
  - $5,000

Map point 13	$21,740

- 54" culvert, 30' long
  - $4,800 10/17/22 C&K Johnsons Industries 707-822-7687
    $160 Metal per foot
  - $340 Coupler
  - $1,600 Transportation in 2 loads from Arcata
- Loads of rock
  - $8,000 $800 per load @ 10 loads
- Water Truck
  - $1,000 $125/hr * 8 hrs
- Equipment Services and Labor
  - $6,000

Map point 21	$21,740

- 54" culvert, 30' long
  - $4,800 10/17/22 C&K Johnsons Industries 707-822-7687
    $160 Metal per foot
  - $340 Coupler
  - $1,600 Transportation in 2 loads from Arcata
- Loads of rock
  - $8,000 $800 per load @ 10 loads
- Water Truck
  - $1,000 $125/hr * 8 hrs
- Equipment Services and Labor
  - $6,000

Map point 18	$39,040

- 72' culvert, 30' long, at a minimum 6% grade
  - $8,700 10/11/22 C&K Johnsons Industries 707-822-7687
    $290 Metal per foot
  - $340 Coupler
  - $1,600 Transportation in 2 loads from Arcata
  - NEED TO ORDER 1 MONTH IN ADVANCE
- Loads of rock
  - $14,400 $800 per load @ 18 loads
- Water Truck
  - $2,000 $125/hr * 16 hrs
- Equipment Services and Labor
  - $12,000

Map point 22	$4,300

- Equipment Services and Labor
  - $3,300
- Erosion Control
  - $1,000

Map point 23	$4,300

- Equipment Services and Labor
  - $3,300
- Erosion Control
  - $1,000

Map point 16	$1,000

- Erosion Control
  - $1,000

Map point 16.1	$4,300

- Equipment Services and Labor

$3,300

- Erosion Control

$1,000

Map point 16.2	$4,300

- Equipment Services and Labor

$3,300

- Erosion Control

$1,000

Equipment Demobilization	$5,500

Professional Services	$14,439

Enoch Tatton
3885 Road Z
Redway, CA 95560
APN 221-240-015
Humboldt County Mitigation and Remediation Grant Program 10.2022

PROJECT DESCRIPTION

The project includes ten encroachments to improve road/stream crossings (Table 1). The ten proposed encroachments are to upgrade or decommission failing and undersized culverts. Work for these encroachments will include excavation, removal of the failing culverts, replacement with a new properly sized culvert, backfilling and compaction of fill, and rock armoring as necessary to minimize erosion.

Table 1. Project encroachments with description

ID	Latitude/Longitude	Description
Crossing-1 (Map Pt. 11)	40.1424, -123.9018	Replace existing 8" diameter culvert with a minimum 24" diameter culvert
Crossing-2 (Map Pt. 13)	40.1467, -123.9006	Replace 24"diameter existing culvert with a minimum 54" diameter culvert
Crossing-3 (Map Pt. 16)	40.1483, -123.9028	Decommission road/stream crossing on a Class II
Crossing-4 (Map Pt. 16.1)	40.1487, -123.9030	Realign stream from diversion to an inside ditch back into the natural channel
Crossing-5 (Map Pt. 16.2)	40.1489, -123.9030	Realign Class III stream from inside ditch to the natural channel and decommission crossing
Crossing-7 (Map Pt. 18)	40.1487, -123.9002	Replace existing 36" diameter culvert and replace with a minimum 72" diameter culvert
Crossing-8 (Map Pt. 21)	40.1466, -123.9009	Replace existing 24" diameter culvert with a minimum 54" diameter culvert
Crossing-9 (Map Pt. 22)	40.1454, -123.9007	Decommission road/stream crossing on Class II
Crossing-10 (Map Pt. 23)	40.1453, -123.9016	Decommission road/stream crossing on Class II
Crossing-11Map Pt. 24)	40.1466, -123.8970	Replace existing 12" diameter culvert with a minimum 18" diameter culvert

PROJECT LOCATION

The project to be completed is located 3885 Road Z in Redway, CA within the Seeley Creek and Redwood Creek watersheds, approximately 4.5 miles northwest of the town of Redway, County of Humboldt, State of California. The project is located in Section 1, T4S, R2E, HumboldtBase and Meridian; in the Ettersburg U.S. Geological Survey 7.5-minute quadrangle; Assessor's Parcel Number 221-240-15; latitude 40.145 N and longitude 123.901 W.

PROJECT IMPACTS

Existing fish or wildlife resources the project could substantially adversely affect include: Southern Torrent Salamander (*Rhyacotriton variegatus),* Coastal Tailed Frog (*Ascaphus Truei),* Chinook Salmon (*Oncorhynchus tshawytscha),* Coho Salmon (O. *kisutch),* Steelhead Trout (O. *mykiss),* amphibians, reptiles, aquatic invertebrates, mammals, birds, and other aquatic and riparian species.

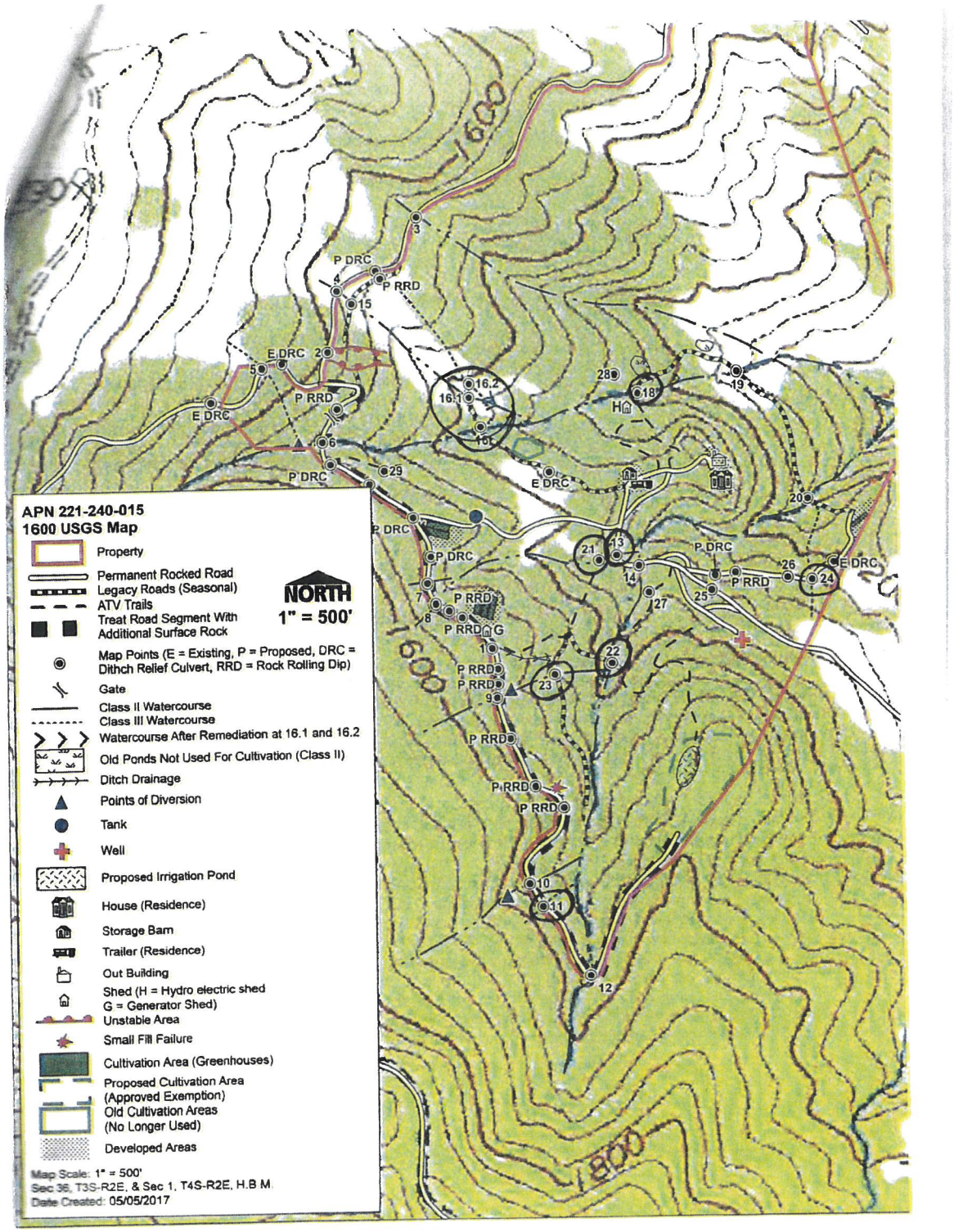
The adverse effects the project could have on the fish or wildlife resources identified above include:

Impacts to water quality:
increased water temperature;
reduced instream flow;
temporary increase in fine sediment transport;

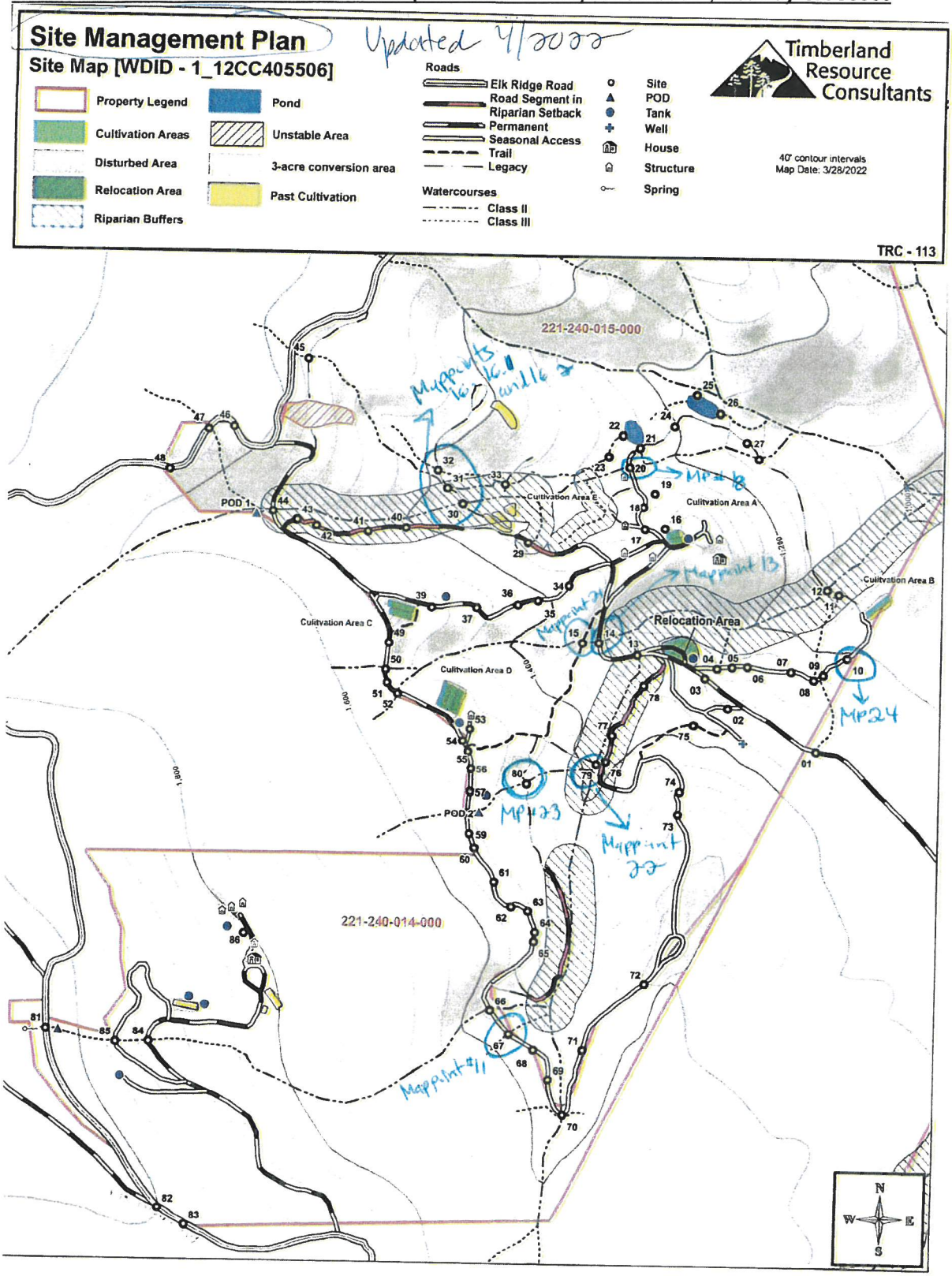
Impacts to bed, channel, or bank and direct effects on fish, wildlife, and their habitat:
loss or decline of riparian habitat;
direct impacts on benthic organisms;

Impacts to natural flow and effects on habitat structure and process:
cumulative effect when other diversions on the same stream are considered;
diversion of flow from activity site;
direct and/or incidental take;
indirect impacts;
impediment of up- or down-stream migration;
water quality degradation; and
damage to aquatic habitat and function.

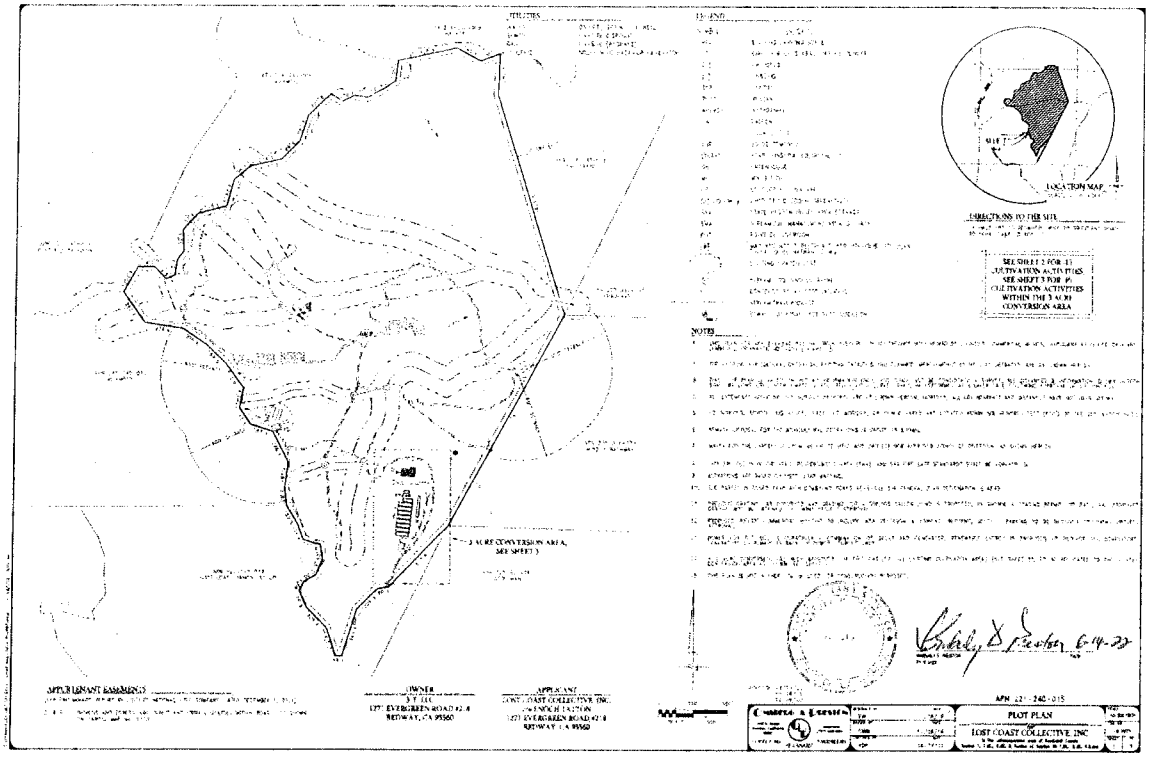
PLOT PLAN: Enoch and Lauren Tatton (APN 221-240-015) 3885 Road Z, Redway CA 95560



PLOT PLAN: Enoch and Lauren Tatton (APN 221-240-015) 3885 Road Z, Redway CA 95560



PLOT PLAN: Enoch and Lauren Tatton (APN 221-240-015) 3885 Road Z, Redway CA 95560



PROJECT WORK SUMMARY:

- **Map point 24**
  - 24" culvert, 30' long
- **Map point 11**
  - 24" culvert, 30' long
- **Map point 13**
  - 54" culvert, 30' long
- **Map point 21**
  - 54" culvert, 30' long
- **Map point 18**
  - 72' culvert, 30' long, at a minimum 6% grade
- **Map point 22**
  - Crossing decommission removing 30" x 20' culvert
  - Removal of 1 Pepperwood, 1 Douglas-fir at the inlet
  - Removal of 1 Pepperwood, 1 Douglas-fir at the outlet

- **Map point 23**
  - Crossing decommission removing 24" x 30' culvert
  - Removal of 1 Pepperwood, 2 Douglas-firs at the inlet
  - Removal of 3 Red Alders, 8 Douglas-firs at the outlet

- **Map point 16**
  - Crossing decommissioned as of 2019 but may need bank work

- **Map point 16.1**
  - Crossing decommission to realign Class II stream out of 130' ditch and into its natural channel

- **Map point 16.2**
  - Crossing decommission to realign Class III stream out of 50' ditch and into its natural channel

SCOPE OF WORK:

Map Point #11: 8" diameter CPP culvert on a very small Class III watercourse. This culvert is undersized and shall be upgraded to a minimum 18" diameter culvert that is a minimum 30' feet in length installed per attached specifications. The replacement of this culvert shall require the excavation and temporary displacement of approximately 13 cubic yards of fill (30' long by 4' deep by 3' wide) and 90 ft^2 of overall disturbance (30' length and 3' width). This will require the loss of native forbs and grasses.

Map Point #13: 24" diameter CMP culvert on a Class II watercourse. This culvert is undersized and shall be upgraded to a minimum 48" diameter culvert that is a minimum 30' feet in length installed per attached specifications. The replacement of this culvert shall require the excavation and temporary displacement of approximately 18 cubic yards of fill (30' long by 6' deep by 6' wide) and 180 ft^2 of overall disturbance (30' length and 6' width). This will require the loss of native forbs and grasses.

Map Point #16: 42" diameter by 20' long CMP culvert on a Class II watercourse. This crossing shall be decommissioned. Decommissioning of this crossing shall require the excavation and temporary displacement of approximately 84 cubic yards of fill (20' long by 7' deep by 20' wide) and 400 ft^2 of overall disturbance (20' length and 20' width). From the culvert extending 30' south pull the entire road fill and use it to blend the cut bank back into the slope. This decommissioning will require the loss of three red alders at 8", 9", and 13" DBH, as well as native forbs and grasses.

SCOPE OF WORK: (Cont.)

Map Point #16.1: A Class II is diverting down the inside ditch for approximately 130' discharging into inlet of Map Point #16. This crossing shall be decommissioned. The Class II will be realigned with its natural channel. Decommissioning of this crossing shall require the excavation and temporary displacement of approximately 160 cubic yards of fill (72' long by 5' deep by 12' wide) and 864 ft^2 of overall disturbance (72' length and 12' width). This decommissioning will require the loss of native forbs and grasses.

Map Point #16.2: A Class III is diverting down the inside ditch for approximately 50' into the Class II that continues for another 150' discharging into inlet of Map Point #16. This road is going to be decommissioned. The Class III will be realigned with its natural channel. Decommissioning of this crossing shall require the excavation and temporary displacement of approximately 84 cubic yards of fill (30' long by 4' deep by 10' wide) and 300 ft^2 of overall disturbance (30' length and 10' width). This decommissioning will require the loss of native forbs and grasses.

Map Point #18: 36" diameter CMP culvert on a Class II watercourse. This culvert is undersized, not to grade, rusted, and in need of replacement. The Discharger shall replace this existing culvert with a 72" diameter culvert set at a grade of at least 6%. The replacement of this culvert shall require the excavation and temporary displacement of approximately 35 cubic yards of fill (30' long by 4' deep by 8' wide) and 240 ft^2 of overall disturbance (30' length and 8' width). This will require the loss of native forbs and grasses.

Map Point #21: 24" diameter CMP culvert on a Class II watercourse. This crossing is undersized and shall be upgraded to a minimum 48" diameter culvert that is a minimum 30' feet in length installed per attached specifications. The replacement of this culvert shall require the excavation and temporary displacement of approximately 25 cubic yards of fill (30' long by 6' deep by 6' wide) and 180 ft^2 of overall disturbance (30' length and 6' width). This will require the loss of native forbs and grasses.

Map Point #22: 30" diameter by 20' long CMP culvert on a Class II watercourse. This crossing shall be decommissioned. The crossing decommissioning requires the excavation and temporary displacement of approximately 155 cubic yards of fill (35' long by 6' deep by 20' wide) and 700 ft^2 of overall disturbance (35' length and 20' width). Decommissioning of this crossing shall require the loss of a 15" DBH pepperwood, and a 16" DBH Douglas-fir at the inlet; the crossing outlet will require a loss of a 19" DBH pepperwood, and an 18" DBH Douglas-fir.

Map Point #23: 24" diameter 30' long CMP culvert is on a Class II watercourse. This crossing shall be decommissioned. The crossing decommissioning requires the excavation and temporary displacement of approximately 170 cubic yards of fill (40' long by 8' deep by 15' wide) and 600 ft^2 of overall disturbance (40' length and 15' width). Decommissioning of this crossing shall require the loss of a 10" DBH pepperwood, and two 0"-2" DBH Douglas-firs at the inlet; the crossing outlet will require a loss of three red alders 3", 4" and 15" DBH, and eight 0"-2" DBH Douglas-firs.

SCOPE OF WORK: (Cont.)

Map Point 24: 12" diameter CMP culvert that has become plugged during the last winter. This culvert is undersized and shall be upgraded to a minimum 18" diameter culvert that is a minimum 30' feet in length installed per attached specifications. The replacement of this culvert shall require the excavation and temporary displacement of approximately 9 cubic yards of fill (20' long by 4' deep by 2' wide) and 40 ft^2 of overall disturbance (20' length and 2' width). This will require the loss of native forbs and grasses.

SCHEDULE FOR COMPLETION:

Projects shall commence during the dry season as soon as June 2023 and ending as soon as October 2024. Once heavy equipment is on-site, all projects shall be completed before heavy equipment departs.

EROSION CONTROL PLAN:

To avoid or minimize impacts to fish and wildlife resources, the applicants shall implement each measure listed below:

Stream Protection. No debris, soil, silt, sand, bark, slash, sawdust, rubbish, cement or concrete washings, oil or petroleum products, or other deleterious material from project activities shall be allowed to enter into or be placed where it may be washed by rainfall or runoff into the stream. All project materials and debris shall be removed from the project site and properly disposed of off-site upon project completion.

Equipment Maintenance. Refueling of machinery or heavy equipment, or adding or draining oil, lubricants, coolants or hydraulic fluids shall not take place within stream bed, channel and bank. All such fluids and containers shall be disposed of properly off-site. Heavy equipment used or stored within stream bed, channel and bank shall use drip pans or other devices (e.g., absorbent blankets, sheet barriers or other materials) as needed to prevent soil and water contamination.

Hazardous Spills. Any material, which could be hazardous or toxic to aquatic life and enters a stream (i.e. a piece of equipment tipping-over in a stream and dumping oil, fuel or hydraulic fluid), the Permittee shall immediately notify the California Emergency Management Agency State Warning Center at 1-800-852-7550, and immediately initiate clean-up activities. CDFW shall be notified by the Permittee within 24 hours at 707-445-6493 and consulted regarding clean-up procedures.

Work Period. All work, not including water diversion, shall be confined to the period June 15 through October 1 of each year. Work within the active channel of a stream shall be restricted to periods of **dry weather.** Precipitation forecasts and potential increases in stream flow shall be considered when planning construction activities. Construction activities shall cease and all necessary erosion control measures shall be implemented prior to the onset of precipitation.

Stream Diversion. When work in a flowing stream is unavoidable, Permittee shall divert the stream flow around or through the work area during construction operations.

Coffer Dams. Prior to the start of construction, Permittee shall divert the stream around or through the work area and the work area shall be isolated from the flowing stream. To isolate the work area, water tight coffer dams shall be constructed upstream and downstream of the work area and water diverted, through a suitably sized pipe, from upstream of the upstream coffer dam and discharge downstream of the downstream coffer dam. Coffer dams shall be constructed of a non-erodible material which does not contain soil or fine sediment. Coffer dams and the stream diversion system shall remain in place and functional throughout the construction period. Coffer dams or stream diversions that fail for any reason shall be repaired immediately.

Work Completion. A notice of completed work shall be submitted to CDFW within 7 days of project completion.

Excavated Fill. Excavated fill material shall be placed in upland locations where it cannot deliver to a watercourse. To minimize the potential for material to enter the watercourse during the winter period, all excavated and relocated fill material shall be tractor contoured (to drain water) and tractor compacted to effectively incorporate and stabilize loose material into existing road and/or landing features.

Runoff from Steep Areas. The Permittee shall make preparations so that runoff from steep, erodible surfaces will be diverted into stable areas with little erosion potential or contained behind erosion control structures. Erosion control structures such as straw bales and/or siltation control fencing shall be placed and maintained until the threat of erosion ceases. Frequent water checks shall be placed on dirt roads, cat tracks, or other work trails to control erosion.

Culvert Installation.

2.11.1 Existing fill material in the crossing shall be excavated down vertically to the approximate original channel and outwards horizontally to the approximate crossing hinge points (transition between naturally occurring soil and remnant temporary crossing fill material) to remove any potential unstable debris and voids in the older fill prism.

2.11.2 Culvert shall be installed to grade, aligned with the natural stream channel, and extend lengthwise completely beyond the toe of fill. If culvert cannot be set to grade, it shall be oriented in the lower third of the fill face, and a downspout or energy dissipator (such as boulders, rip-rap, or rocks) shall be installed above or below the outfall as needed to effectively control stream bed, channel, or bank erosion (scouring, headcutting, or downcutting).

2.11.3 Culvert bed shall be composed of either compacted rock-free soil or crushed gravel. Bedding beneath the culvert shall provide for even distribution of the load over the length of the pipe, and allow for natural settling and compaction to help the pipe settle into a straight profile. The

crossing backfill materials shall be free of rocks, limbs, or other debris that could allow water to seep around the pipe, and shall be compacted.
2.11.4 Culvert inlet, outlet (including the outfall area), and fill faces shall be armored where stream flow, road runoff, or rainfall energy is likely to erode fill material and the outfall area.
2.11.5 Permanent culverts shall be sized to accommodate the estimated 100-year flood flow [slightly larger than the bankfull channel width) including debris, culvert embedding, and sediment loads.

Rock Armor Placement.
2.12.1 No heavy equipment shall enter the wetted stream channel.
2.12.2 No fill material, other than clean rock, shall be placed in the stream channel.
2.12.3 Rock shall be sized to withstand washout from high stream flows, and extend above the ordinary high water level.
2.12.4 Rock armoring shall not constrict the natural stream channel width and shall be keyed into a footing trench with a depth sufficient to prevent instability.

Project Inspection. The Project shall be inspected by Timberland Resource Consulting or a licensed engineer to ensure that the stream crossings were installed as designed. A copy of the inspection report, including photographs of each site, shall be submitted to CDFW within 90 days of completion of this project.

MONITORING PLAN:

Cannabis cultivators shall regularly inspect and maintain the condition of access roads, access road drainage features, and watercourse crossings. At a minimum, cannabis cultivators shall perform inspections prior to the onset of fall and winter precipitation and following storm events that produce at least 0.5 in/day or 1.0 inch/7 days of precipitation. See Required Monitoring tables below for site specific monitoring and reporting requirements. Cannabis cultivators are required to perform all of the following maintenance:

- Remove any wood debris that may restrict flow in a culvert.
- Remove sediment that impacts access road or drainage feature performance.
- Place any removed sediment in a location outside the riparian setbacks and stabilize the sediment.
- Maintain records of access road and drainage feature maintenance for annual reporting.

Cannabis cultivators that are operating in areas that are, or may become, inaccessible during winter months due to extreme weather such as snow, road closures, seasonal access roads to the property, or any other such conditions shall make additional efforts to enhance winterization measures in the absence of monitoring during storm events.

Mitigation and Remediation Grant Program
APPLICATION GUIDELINES

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- ☐Budget – Be as specific as possible – sample attached
- ☐Project Maps and Figures
- ☐Letter(s) of Support (optional)

APPLICATION FORM - Commercial Cannabis Land Use Ordinance Mitigation and Remediation Fund Program

Project Title: Arnochi Date of Application: 10/31/22

Applicant Name: Christopher Arnold Project APN: 210-071-009 004

Contact Person Name and Title: Christopher Arnold owner

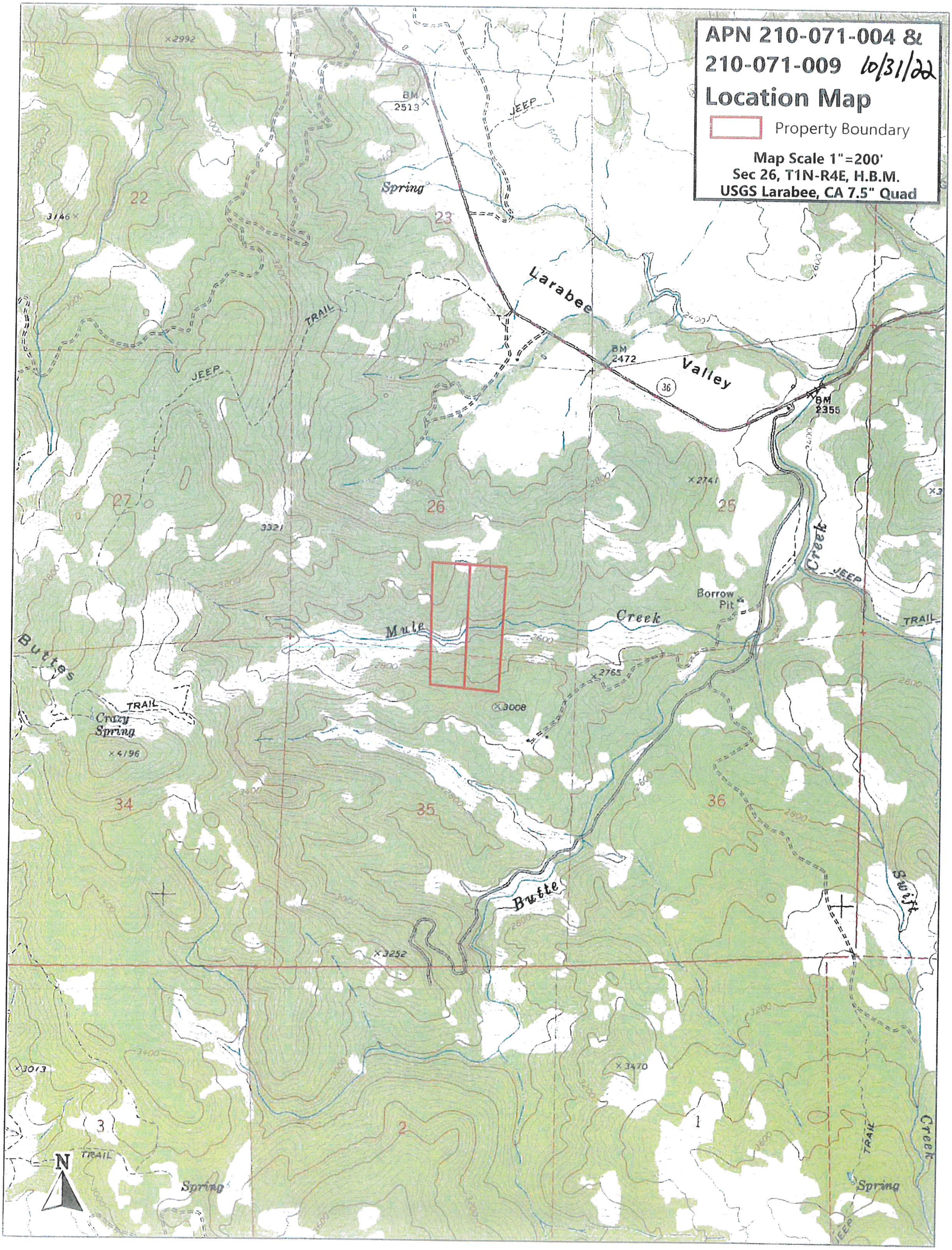
Contact Phone: 7078344325 Contact Email: arnochi@yahoo.com

Contact Address: PO Box 973 Ferndale CA 95536

Amount Requested: $66,000 Total Budget: $75,000

Project Timeline: Start Date: Oct '22 End Date: - oct '23

Signature of Applicant: Chr Dell



APN 210-071-004 &
210-071-009 10/31/22
Location Map
Property Boundary
Map Scale 1"=200'
Sec 26, T1N-R4E, H.B.M.
USGS Larabee, CA 7.5" Quad
Larabee
Valley
Mule
Creek
Butte
Buttes
Swift
Creek
Crazy Spring
Spring
Borrow Pit
BM 2513
BM 2472
BM 2355
36
JEEP
TRAIL
22
23
26
25
27
34
35
36
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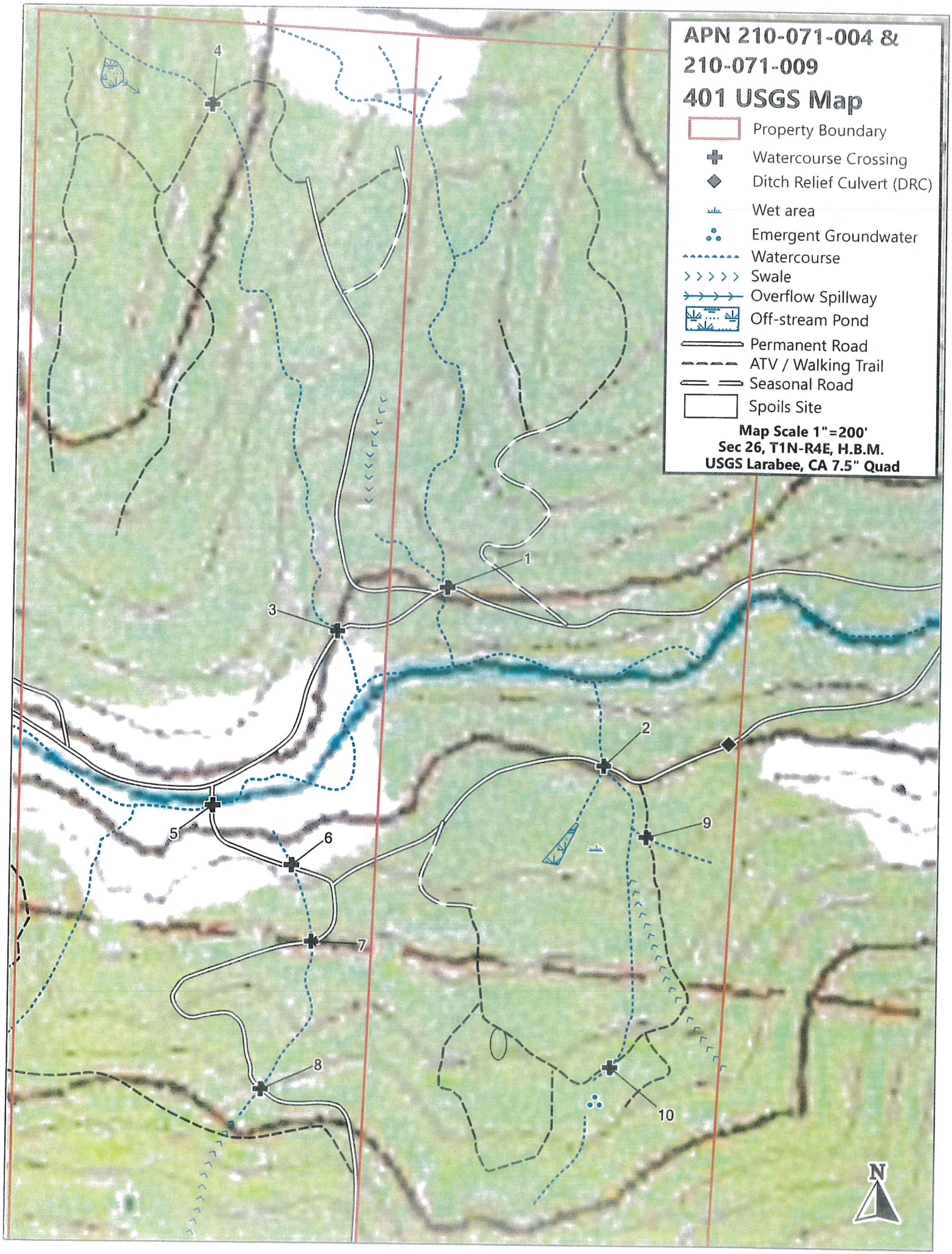
APN 210-071-004 &
210-071-009
401 USGS Map
Property Boundary
Watercourse Crossing
Ditch Relief Culvert (DRC)
Wet area
Emergent Groundwater
Watercourse
Swale
Overflow Spillway
Off-stream Pond
Permanent Road
ATV / Walking Trail
Seasonal Road
Spoils Site
Map Scale 1"=200'
Sec 26, T1N-R4E, H.B.M.
USGS Larabee, CA 7.5" Quad
1
2
3
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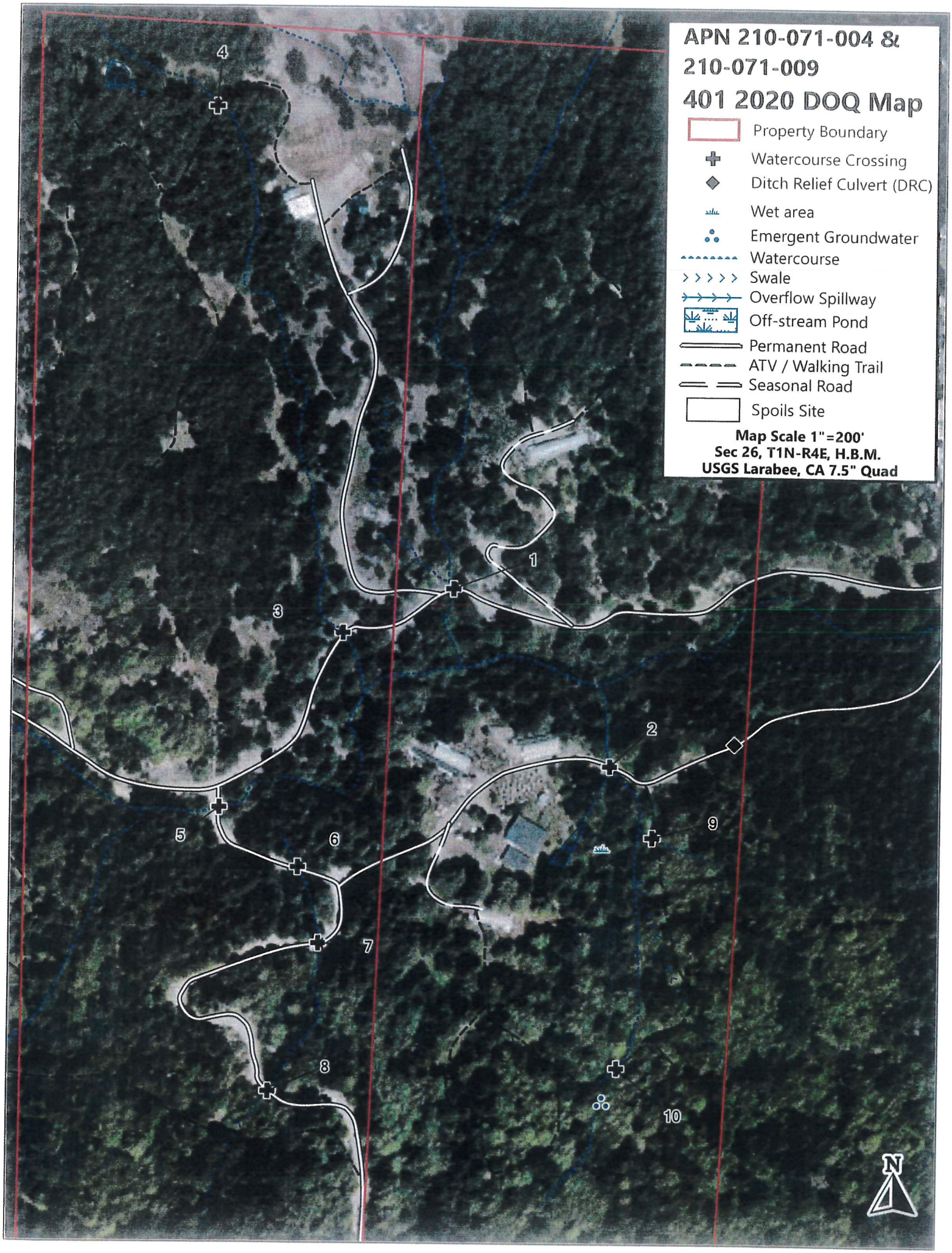
N


APN 210-071-004 &
210-071-009
401 2020 DOQ Map
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Project Description

*SPECIAL NOTE** Prior to starting work TRC recommends contacting Pacific Bell to check on the location of underground utilities on China Mine Road.

Crossing #1: Existing 18-inch diameter by 20-foot long CMP culvert crossing on a Class III watercourse. This crossing shall be upgraded to a minimum 42-inch diameter culvert set to grade with the native channel per the attached crossing installation specifications. The upgrading of the crossing shall require the excavation and temporary displacement of approximately 33 cubic yards of fill and 180 sq ft of overall disturbance (30-feet long by 5.5-feet deep by 6-feet wide). The upgrading of the crossing shall require the permanent placement of less than 3 cubic yards of rock armoring with a mean rock diameter of 2-feet and 56 sq ft of overall disturbance (9-feet long by 1-feet deep by 6-feet wide) per the attached culvert installation specifications. The upgrading of this crossing requires the loss of native grasses, forbs, and ferns.

Crossing #2: Existing 12-inch diameter by 20-foot long corrugated plastic culvert crossing on a Class II watercourse. This crossing shall be upgraded to a minimum 36-inch diameter culvert set to grade with the native channel per the attached crossing installation specifications. The upgrading of the crossing shall require the excavation and temporary displacement of approximately 18 cubic yards of fill and 100 sq ft of overall disturbance (20-feet long by 4.5-feet deep by 5-feet wide). The upgrading of the crossing shall require the permanent placement of approximately 2 cubic yards of rock armoring with a mean rock diameter of 1.5-feet and 37.5 sq ft of overall disturbance (7.5-feet long by 1-feet deep by 5-feet wide) per the attached culvert installation specifications. The upgrading of this crossing requires the loss of native grasses, forbs, and ferns.

Crossing #3: Existing 12-inch diameter by an estimated 20-foot long culvert crossing on a Class III watercourse. The culvert transitions inside the road's fill from a plastic culvert at the inlet into a corrugated metal culvert at the outlet. This crossing shall be upgraded to a minimum 36-inch diameter culvert set to grade with the native channel per the attached crossing installation specifications. The upgrading of the crossing shall require the excavation and temporary displacement of approximately 15 to 20 cubic yards of fill and 180 sq ft of overall disturbance (30-feet long by 5-feet deep by 6-feet wide). The upgrading of the crossing shall require the permanent placement of approximately 3 cubic yards of rock armoring with a mean rock diameter of 1.5-feet and 54 sq ft of overall disturbance (9-feet long by 1.5-feet deep by 6-feet wide) per the culvert installation specifications. The upgrading of this crossing requires the loss of native grasses, forbs, and ferns.

Crossing #5: Two existing 40-foot long by 8-foot-wide railcars set side by side used as a bridge crossing on a Class I watercourse. This bridge is currently not functioning correctly. Several log stringers have rotted away and are in threat of falling into the channel as they rot. If the logs fall into the channel, they will obstruct the watercourse. The active channel is approximately 22-feet wide at this location. This crossing shall be reconstructed using the existing railcars. The work involves the temporary removal of the existing bridge and excavation of the old log abutments. The bridge will span an estimated 22-feet of the natural channel, at a height of at least 4-feet from the channel bottom. The old abutments and shall be cleared to achieve a minimum channel width of 22 feet. Maximum side-slope steepness shall be 1.5:1 or 26 degrees. The bridge deck shall be installed slightly higher in elevation relative to the adjacent road approaches so that road surface runoff drains away from the watercourse and the bridge deck. The bridge crossing shall be appropriately sized to pass 406 CFS, the 100-year peak storm flow, with a minimum 2-feet of freeboard. The bottom of the bridge will be set at least 5-feet above the channel bottom. The bridge shall be set and secured to concrete abutments set into the road prisms approaches outside top of the armored stream banks

165 South Fortuna Boulevard, Fortuna, CA, 95540
707-725-1897
trc@timberlandresource.com

401 Water Quality Certification Application

APN: 210-071-004 & 210-071-009
WDID: 1_12CC414256

per the attached Engineered Bridge Plans from Champman Engineering. Upgrading this crossing will require the excavation and temporary displacement of approximately 40 cubic yards of fill and 1,000 sq ft of overall disturbance (25-feet long by 5-feet deep by 40-feet wide) on each bank. The upgrading of this crossing may require the loss of native grasses and forbs. The upgrading of the crossing shall require the permanent placement of approximately 10 cubic yards of Class 8 Riprap for rock armoring the banks and 54 sq ft of overall disturbance (12-feet long by 1.5-feet deep by 6-feet wide) per the attached specifications. The upgrading of this crossing requires the loss of native grasses, forbs, and ferns. The road surface runoff from the approaches shall be disconnected at the extent feasible as well as rocked for a 100-feet from the crossing. Per Table 1. Project Encroachment covered by this Agreement with Description, LSA Agreement #EPIMS-HUM-17948-R1 attached to this application requires that if surface water is present or becomes present during construction, the Applicant shall have a designated biologist survey the site and adjacent area for fish, amphibians, and turtles three days or less before commencing project activities and if fish, amphibians or turtles are detected, CDFW shall be contacted and work shall not commence until authorized by a CDFW agent.

Crossing #6: Existing 18-inch diameter by 20-foot long smoothed walled plastic culvert crossing with a 10-foot long half-pipe downspout at the outlet on a Class III watercourse. This crossing shall be upgraded to a minimum 24-inch diameter culvert set to grade with the native channel per the attached crossing installation specifications. The upgrading of the crossing shall require the excavation and temporary displacement of approximately 10 to 15 cubic yards of fill and 150 sq ft of overall disturbance (30-feet long by 3 to 5-feet deep by 5-feet wide). The upgrading of the crossing shall require the permanent placement of approximately less than 1 cubic yards of rock armoring with a mean rock diameter of 1.1-feet and 24 sq ft of overall disturbance (6-feet long by 1-feet deep by 4-feet wide) per the attached culvert installation specifications. The upgrading of this crossing requires the loss of native grasses, forbs, and ferns.

Crossing #7: Existing 18-inch diameter by 20-foot long smoothed walled plastic culvert crossing with a 10-foot long half-pipe downspout at the outlet on a Class III watercourse. This crossing shall be upgraded to a minimum 24-inch diameter culvert set to grade with the native channel per the attached crossing installation specifications. The upgrading of the crossing shall require the excavation and temporary displacement of approximately 15 to 20 cubic yards of fill and 150 sq ft of overall disturbance (30-feet long by 3 to 6-feet deep by 5-feet wide). The upgrading of the crossing shall require the permanent placement of approximately less than 1 cubic yards of rock armoring with a mean rock diameter of 1.1-feet and 24 sq ft of overall disturbance (6-feet long by 1-feet deep by 4-feet wide) per the attached culvert installation specifications. The upgrading of this crossing requires the loss of native grasses, forbs, and ferns.

Crossing #9: Existing ford crossing on a spring fed Class II watercourse. This crossing can be maintained by hand and rock armored per the attached rock ford installation specifications. The maintenance of the crossing shall require the excavation and temporary displacement of less than 1 cubic yard of fill and 40 sq ft of overall disturbance (10-feet long by 1-feet deep by 4-feet wide). The upgrading of the crossing shall require the permanent placement of approximately less than 1 cubic yards of rock armoring with a mean rock diameter of 0.5-feet and 40 sq ft of overall disturbance (10-feet long by 1-feet deep by 4-feet wide) per the attached specifications. The upgrading of this crossing requires the loss of native grasses, forbs, and ferns. TRC recommends a critical dip installed on the northern downhill.

Crossing 10: Subsurface water is daylighting and pooling before returning to subsurface flow for approximately 25-feet. Then, approximately 10-feet above Crossing 10 the water daylights again before crossing the road via a rocked ford. See photos 33-40 for further explanation. The distance from the first

signs of daylit water to the "inlet" of Crossing 10 is approximately 45-feet. Of that distance, approximately 20 to 25-feet of the channel has gone subsurface due to lack of a defined channel/inside ditch. During a site visit with CDFW on 2/2/22, the Department determined that it would be best to daylight this channel and reconnect the water flow on the surface. The recommendation at this site comes in three parts. First, recontour the location where the water first daylights in order to prevent pooling and promote flow. This will require pulling back the side slopes of the pooled location stabilize the slope and recontouring the channel bottom to remove the slight berm that is creating a pool. Next, create a continuous channel within the inside ditch of the road so that water can flow above ground all the way to the crossing. Creating this channel will require approximately 2.78-cubic yards and 75-square feet (30-feet long by 2.5-feet wide by 1-foot deep) of excavation within the inside ditch. Gravel sized rock shall be added to the newly created channel to reduce erosion post-excavation. One water tank may require relocation in order to create a stable slope along the inside ditch/channel. Lastly, upgrade the current crossing to a more robust rocked ford per the attached specifications. The crossing will be in the same location as the water is currently crossing the road. The upgrading of the crossing shall require the permanent placement of approximately 2.22 cubic yards of rock armoring with a mean rock diameter of 0.25-feet and 60 sq ft of overall disturbance (20-feet long by 3-feet wide by 1-foot deep). Approximately 35-feet down grade of Crossing 10 there is a rolling dip road drainage feature that shall be maintained as it will function as a critical dip should the ford ever fail.

PLOT PLAN AND TENTATIVE MAP CHECKLIST

The following information must be shown on your plot plan or tentative map. Please check ✓ the box to the left of the items shown on the plot plan or tentative map. If any item is not on your site to your knowledge, write "N/A" next to the box. Plot plans shall be drawn on a minimum size sheet of 8-1/2" x 11", and tentative subdivision maps on a minimum size sheet of 18" x 26". ***Note: This Checklist must be completed by the applicant and submitted with your application.***

Applicant's Name Christopher Arnold APN 210 - 671 - 009
004

FOR ALL PROJECTS

- ☑ 1. Name of applicant(s)
- ☑ 2. Location or vicinity map (on or attached to the plot plan)
- ☑ 3. The subject parcel (show entire parcel with dimensions)
- ☑ 4. Date, north arrow and scale
- ☑ 5. Name, County road numbers, and width of all existing and proposed access roadways adjacent to or within the subject parcel (indicate width of traveled way, grade (in % slope), and surface)
- ☐ 6. Existing and proposed improvements (label as "existing" and "proposed" with dimensions and distance to nearest two (2) property lines)
  - ☐ a. Structures and buildings (include floor area, height and proposed use)
  - ☐ b. Driveways and turnaround areas (indicate width, grade (in % slope) and surface)
  - ☐ c. Utility lines (electric, gas, telephone, sewer, water, and cable TV)
  - ☐ d. Septic tanks and leachfields (label primary/reserve areas and test holes)
  - ☐ e. Wells
  - ☐ f. Parking and loading areas (show individual parking spaces, including handicapped parking and ramps)
  - ☐ g. Storm drains, curbs and gutters
  - ☐ h. Emergency water storage tanks and fire hydrants
  - ☐ i. Landscaped areas (include proposed exterior lighting)
  - ☐ j. Major vegetation (identify mature trees (12" dbh or larger) to be removed)
  - ☐ k. Diked areas
  - ☐ l. Proposed grading and fill (estimate volume)
  - ☐ m. Signs (indicate size, illuminated, and design (e.g., monument, pylon, etc.))
  - ☐ n. Other - specify _____
- ☐ 7. Direction of surface water runoff
- ☐ 8. Location and width of all existing and proposed easements of record
- ☐ 9. Hazardous areas (indicate on map if on the project site or within 400 feet of the project site):
  - ☐ a. Areas subject to inundation or flooding
  - ☐ b. Steep or unstable slopes
  - ☐ c. Expansive (clay) soils
  - ☐ d. Earthquake faults
  - ☐ e. Hazardous waste or substance sites
  - ☐ f. Other - specify _____
- ☑ 10. Sensitive habitat areas (indicate on map if on project site or within 400 feet of the project site):
  - ☑ a. Creeks, rivers, sloughs and other drainage courses
  - ☐ b. Lakes, ponds, marshes, or "wet" meadows
  - ☐ c. Beaches
  - ☐ d. Sand dunes
  - ☐ e. Other - specify _____
- N/A 11. Historical buildings or known archaeological or paleontological resources
- ☐ 12. Land use and buildings on adjacent parcels, and approximate distances to closest property lines

FOR LOT LINE ADJUSTMENT PLOT PLANS ONLY

- ☐ 13. Proposed new lines and lines to be eliminated (show lines to be eliminated as dashed)
- ☐ 14. Areas (in square footage or acreage) of the initial and resulting parcels

FOR TENTATIVE SUBDIVISION MAPS ONLY

- ☐ 16. Approximate dimensions and areas of all proposed lots
- ☐ 17. A statement that "All easements of record are shown on the tentative map and will appear on the recorded subdivision map"
- ☐ 18. Contour lines (at _____ intervals)
- ☐ 19. For major subdivisions (5 or more parcels): proposed drainage improvements, details of any grading to be performed, approximate radii of all roadway curves, areas for public use, and typical sections of all streets, highways, ways and alleys
- ☐ 20. Names and assessor's parcel numbers of all contiguous ownerships

NOTE: THE SUBMITTAL OF INCOMPLETE OR ILLEGIBLE PLOT PLANS OR TENTATIVE MAPS WILL CAUSE DELAYS IN THE PROCESSING OF YOUR APPLICATION

Site Managment Plan

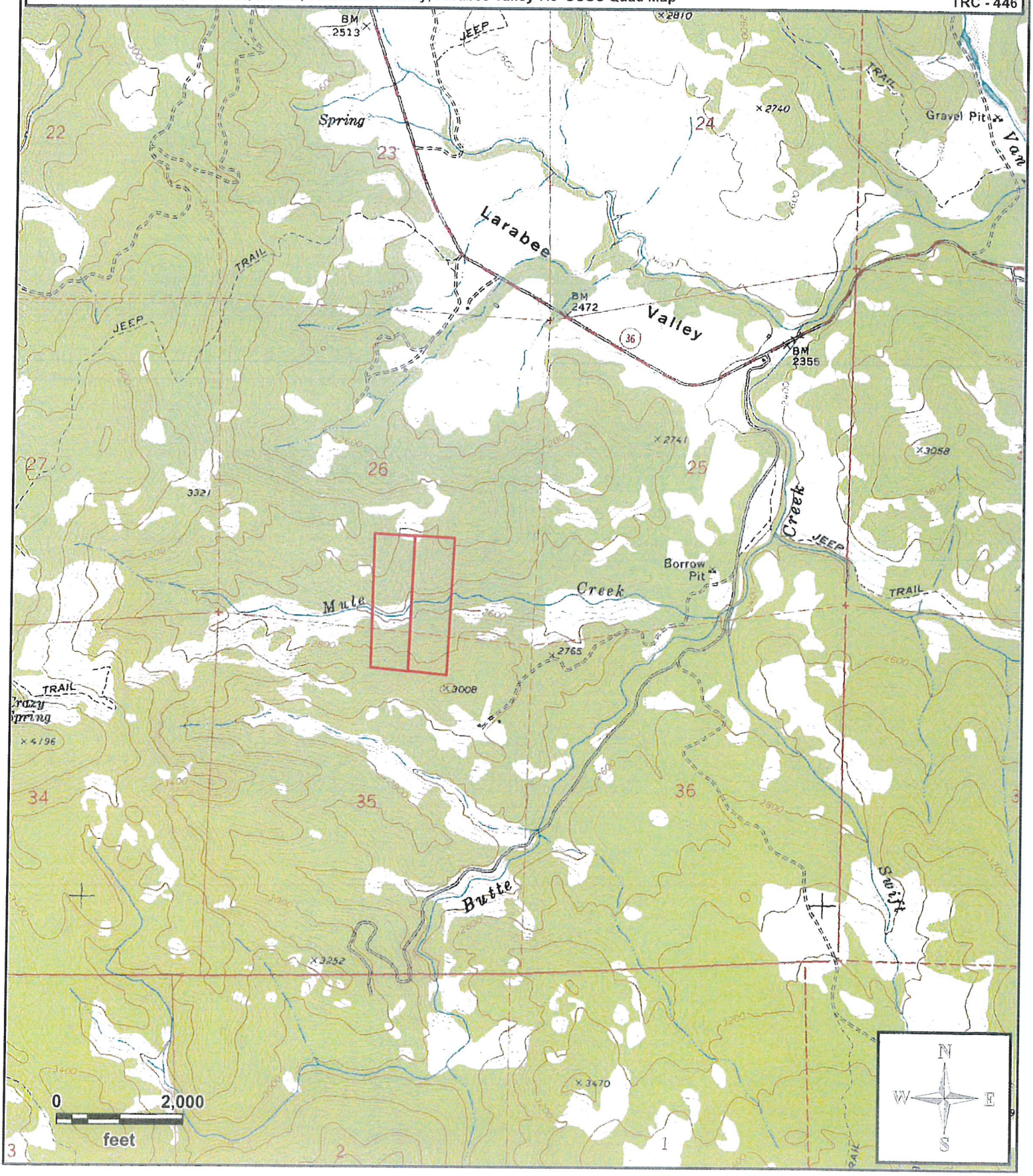
General Location Map WDID - 1_12CC414256

Timberland Resource Consultants

Property Boundary

Located in Section 26, T1N-R4E, H.B.M.; Humboldt County; Larabee Valley 7.5' USGS Quad Map

TRC - 446



Site Management Plan

Site Map WDID - 1_12CC414256

Timberland Resource Consultants

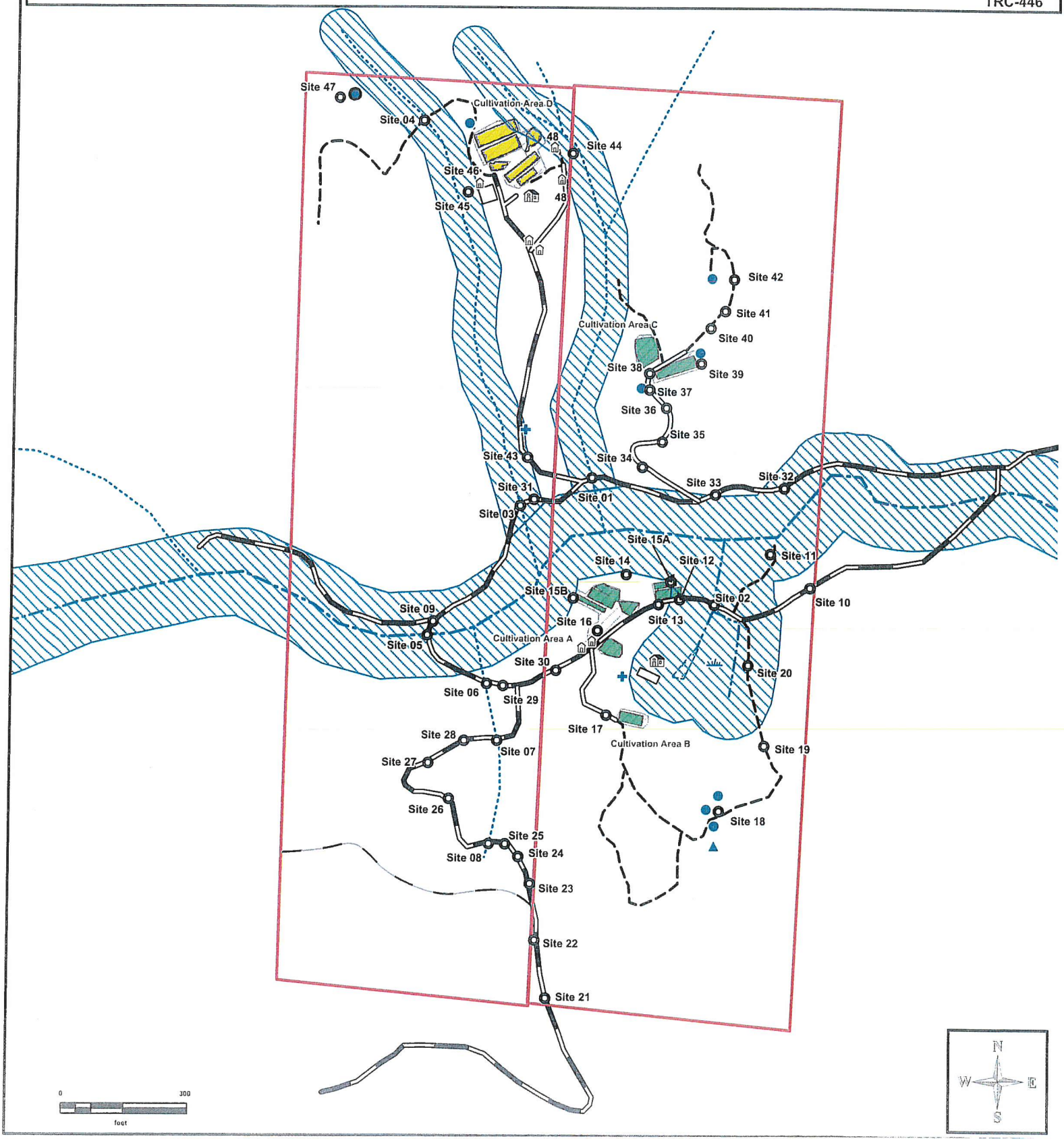
- Property Boundary
- Cultivation Area
- Past Cultivation (Site of Proposed Future Cultivation To Relocate Out-Side of Riparian Setback)
- Disturbed Area
- Site
- POD
- Tank
- Well
- House / Shop
- Structure
- Ag Building

Roads
- Permanent
- Seasonal Access
- Trail
- Legacy

Watercourses
- Class I
- Class II
- Class III

- Class II Wet Area
- Class II Wet Area / Pond
- Offstream Manmade Rain Catchment Pond
- Riparian Setback

TRC-446



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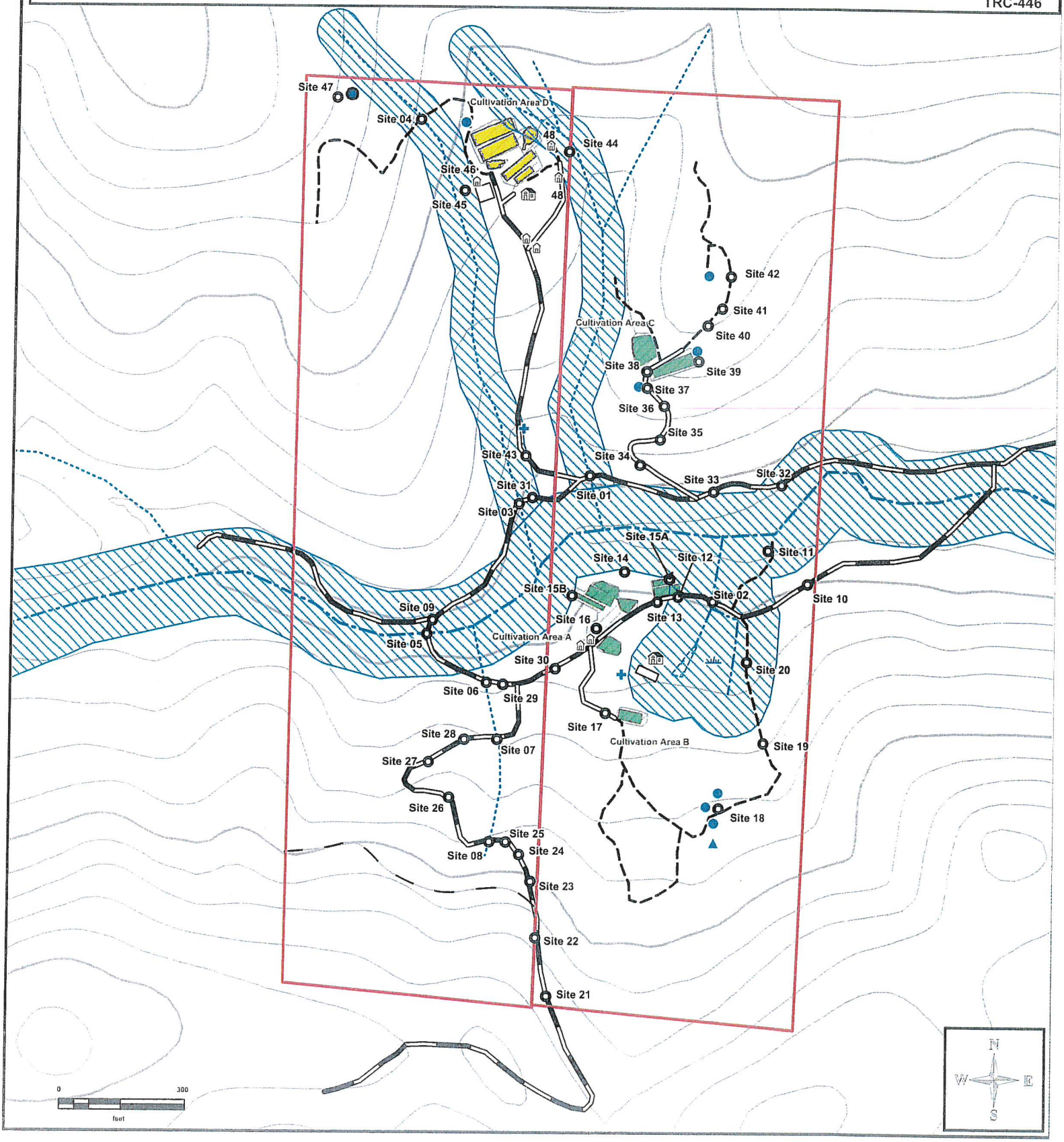
TRC-446



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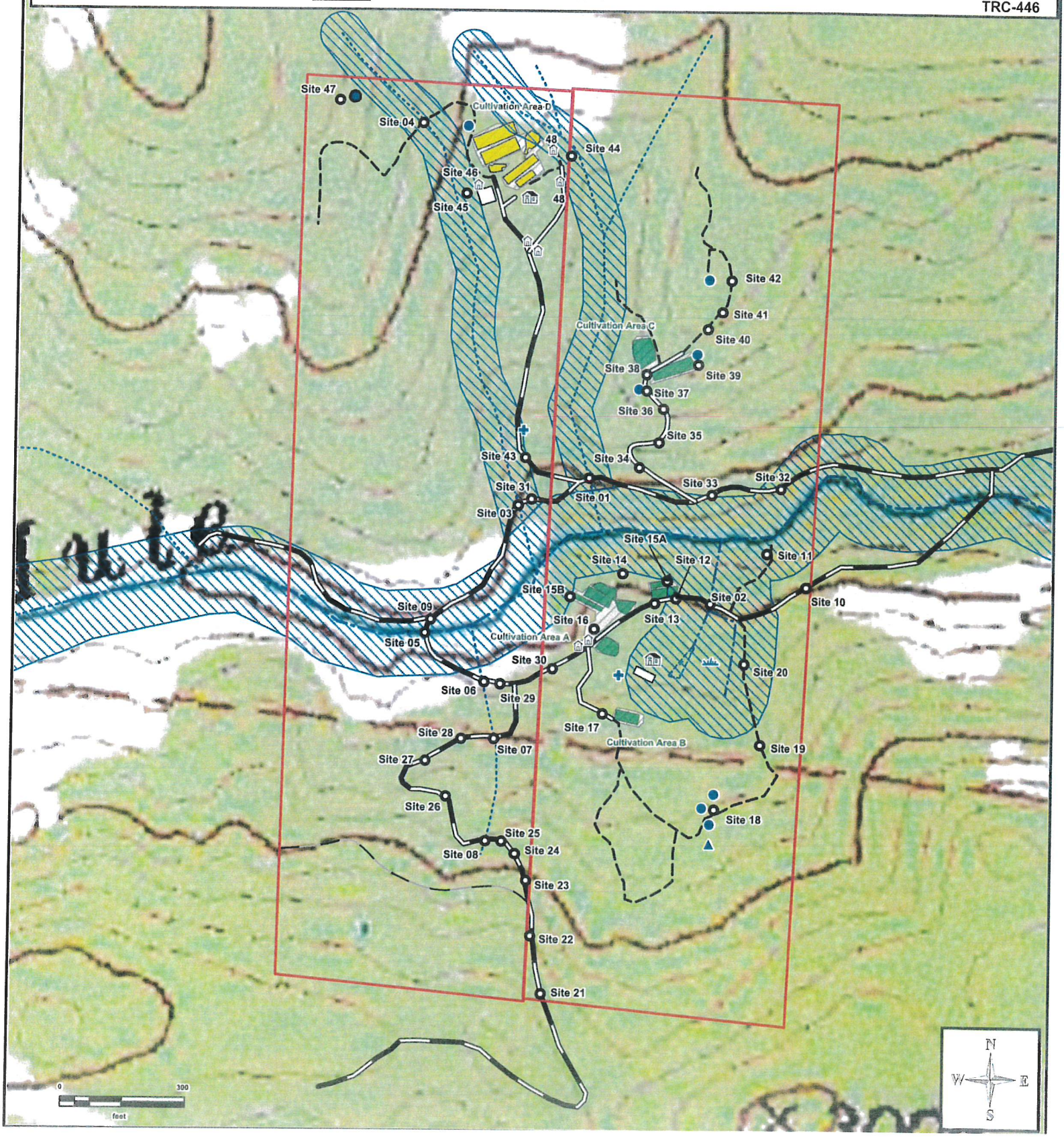
TRC-446



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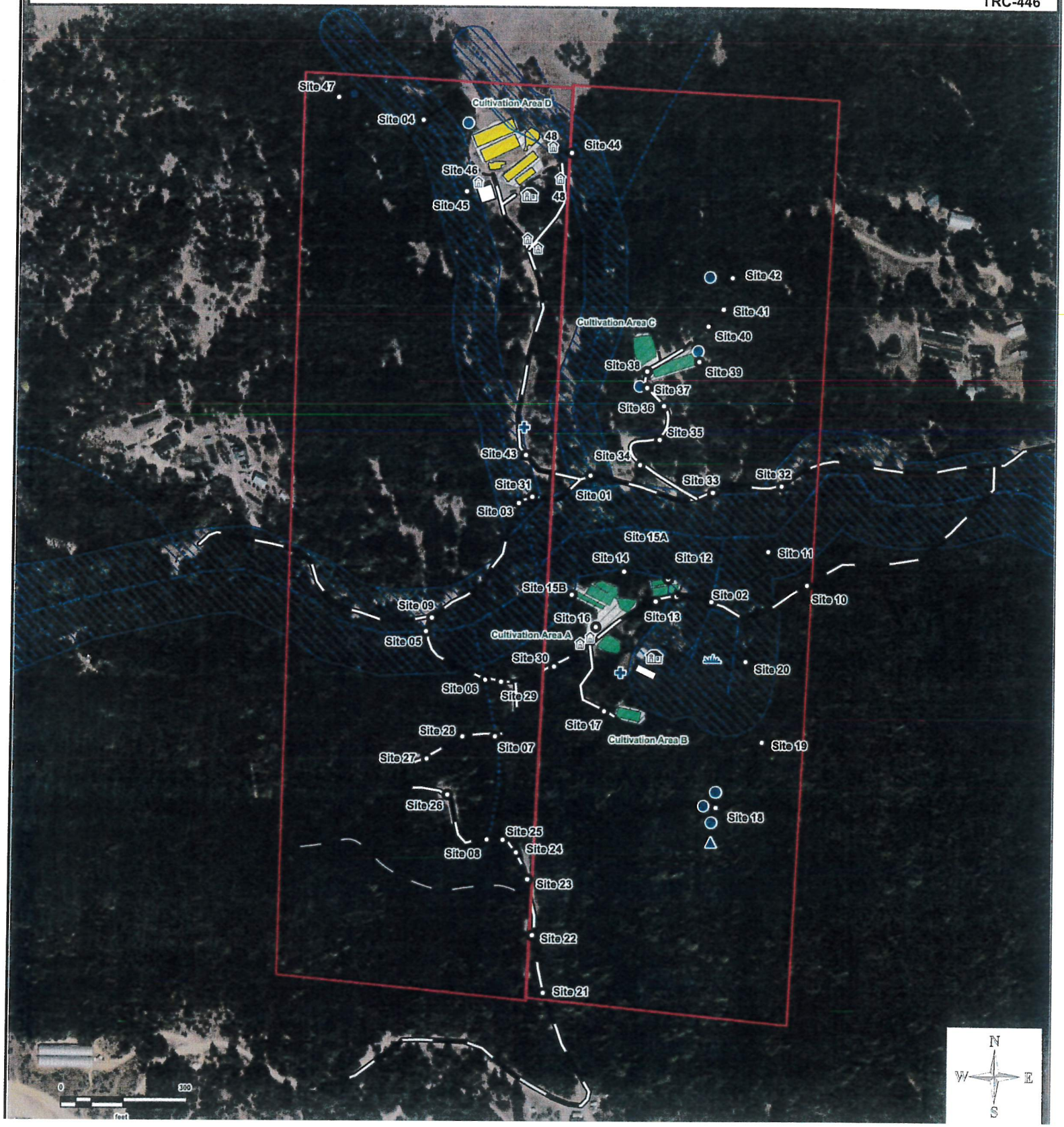

Timberland Resource Consultants

Treatment Implementation Schedule

Unique Point	Proposed Work Completion Date
Site 01	Interim measures Immediately; Mitigation measures prior to 10/15/21 pending the approval of any required permits
Site 02	Interim measures Immediately; Mitigation measures prior to 10/15/21 pending the approval of any required permits
Site 03	Interim measures Immediately; Mitigation measures prior to 10/15/21 pending the approval of any required permits
Site 04	Interim measures Immediately; Mitigation measures prior to 10/15/21 pending the approval of any required permits
Site 05	Prior to 10/15/21 pending the approval of any required permits
Site 06	Interim measures Immediately; Mitigation measures prior to 10/15/21 pending the approval of any required permits
Site 07	Interim measures Immediately; Mitigation measures prior to 10/15/21 pending the approval of any required permits
Site 08	Immediately
Site 09	Prior to 10/15/20
Site 10	Immediately and prior to 10/15 of any year
Site 11	Immediately
Site 12	Immediately
Site 13	Immediately
Site 14	Immediately
Site 15A	As soon as feasible, but no later than 10/15
Site 15B	As soon as feasible, but no later than 10/15
Site 16	Immediately
Site 17	Immediately
Site 18	Immediately
Site 19	Immediately
Site 20	Immediately
Site 21	Annually prior to 10/15
Site 22	Annually prior to 10/15
Site 23	Annually prior to 10/15
Site 24	Annually prior to 10/15
Site 25	Annually prior to 10/15
Site 26	As soon as feasible, but no later than 10/15
Site 27	Annually prior to 10/15
Site 28	Annually prior to 10/15
Site 29	Annually prior to 10/15
Site 30	Annually prior to 10/15
Site 31	Annually prior to 10/15
Site 32	Annually prior to 10/15
Site 33	Annually prior to 10/15
Site 34	As soon as feasible, but no later than 10/15
Site 35	As soon as feasible, but no later than 10/15
Site 36	As soon as feasible, but no later than 10/15
Site 37	As soon as feasible, but no later than 10/15
Site 38	As soon as feasible, but no later than 10/15
Site 39	Immediately
Site 40	Annually prior to 10/15
Site 41	Annually prior to 10/15
Site 42	Annually prior to 10/15
Site 43	As soon as feasible, but no later than 10/15
Site 44	Immediately
Site 45	As soon as feasible, but no later than 10/15
Site 46	Immediately
Site 47	Prior to 10/15/20
Site 48	Immediately
Cultivation Area D	Immediately
POD	Immediately
Mule Creek Road	As required
Wells	Immediately
Portable fuel cannisters	Immediately
Fertilizer Storage	Immediately

Timberland Resource Consultants

SMP - Mitigation Report

WDID# - 1_12CC414256

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Site 01	-123.690905 40.429709	Permanent	X	X	X	Interim measures Immediately; Mitigation measures prior to 10/15/21 pending the approval of any required permits	

Current Condition: Existing watercourse crossing is an 18 inch diameter culvert that is undersized for the calculated 100 year peak streamflow.

Prescribed Action: Interim Measure: Follow the Winterization and Interim Treatments for Erosion Control at Crossings BMPs that are attached. Replace with a minimum 36 inch diameter culvert per the approved Lake and Streambed Alteration Agreement No. 1600-2016-0409-R1.

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Site 02	-123.689868 40.428912	Permanent	X	X	X	Interim measures Immediately; Mitigation measures prior to 10/15/21 pending the approval of any required permits	

Current Condition: Existing watercourse crossing is a 12 inch diameter culvert that is undersized for the calculated 100 year peak streamflow.

Prescribed Action: Interim Measure: Follow the Winterization and Interim Treatments for Erosion Control at Crossings BMPs that are attached. Replace culvert. Minimum culvert diameter, length, and specifications are pending approval by CDFW in a Lake and Streambed Alteration Agreement that is in process.

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Site 03	-123.691498 40.429528	Permanent	X	X	X	Interim measures Immediately; Mitigation measures prior to 10/15/21 pending the approval of any required permits	

Current Condition: Existing watercourse crossing is a 12 inch diameter culvert that is undersized for the calculated 100 year peak streamflow.

Prescribed Action: Interim Measure: Follow the Winterization and Interim Treatments for Erosion Control at Crossings BMPs that are attached. Replace culvert. Minimum culvert diameter, length, and specifications are pending approval by CDFW in a Lake and Streambed Alteration Agreement that is in process.

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Site 04	-123.692369 40.431965	Trail	X	X	X	Interim measures Immediately; Mitigation measures prior to 10/15/21 pending the approval of any required permits	

Current Condition: Existing watercourse crossing is a 12 inch diameter culvert that is undersized for the calculated 100 year peak streamflow.

Prescribed Action: Interim Measure: Follow the Winterization and Interim Treatments for Erosion Control at Crossings BMPs that are attached. Replace culvert. Minimum culvert diameter, length, and specifications are pending approval by CDFW in a Lake and Streambed Alteration Agreement that is in process.

Timberland Resource Consultants

SMP - Mitigation Report

WDID# - 1_12CC414256

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Site 05	-123.692253 40.4287	Permanent	X	X	X	Prior to 10/15/21 pending the approval of any required permits	

Current Condition: Existing permanent 40 foot long, double wide railcar bridge across Class I Mule Creek. Railcars appear to have been installed atop an older bridge constructed of logs, with partially buried logs for abutments. The old log bridge under the railcars are decaying and some have broken off and are obstructing the watercourse.

Prescribed Action: Replace bridge abutments with concrete geo-blocks, remove old bridge debris from the watercourse, and rock armor banks. All work shall be done following specifications that are pending approval by CDFW in a Lake and Streambed Alteration Agreement that is in process.

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Site 06	-123.691748 40.428394	Permanent	X	X	X	Interim measures Immediately; Mitigation measures prior to 10/15/21 pending the approval of any required permits	

Current Condition: Existing watercourse crossing is an 18 inch diameter culvert that is undersized for the calculated 100 year peak streamflow.

Prescribed Action: Interim Measure: Follow the Winterization and Interim Treatments for Erosion Control at Crossings BMPs that are attached. Replace culvert. Minimum culvert diameter, length, and specifications are pending approval by CDFW in a Lake and Streambed Alteration Agreement that is in process.

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Site 07	-123.691655 40.428034	Permanent	X	X	X	Interim measures Immediately; Mitigation measures prior to 10/15/21 pending the approval of any required permits	

Current Condition: Existing watercourse crossing is an 18 inch diameter culvert that is undersized for the calculated 100 year peak streamflow.

Prescribed Action: Interim Measure: Follow the Winterization and Interim Treatments for Erosion Control at Crossings BMPs that are attached. Replace culvert. Minimum culvert diameter, length, and specifications are pending approval by CDFW in a Lake and Streambed Alteration Agreement that is in process.

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Site 08	-123.691708 40.427382	Permanent	X	X	-	Immediately	

Current Condition: Existing, functioning watercourse crossing is an appropriately sized, 18 inch diameter culvert with a 15 foot long downspout attached.

Prescribed Action: Follow the Winterization and Interim Treatments for Erosion Control at Crossings BMPs that are attached.

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Site 09	-123.692204 40.428787	Permanent	X	X	-	Prior to 10/15/20	

Current Condition: Road surface approaches to the permanent bridge.

Prescribed Action: Apply clean, compacted rock to the road surface for 50 feet each side of the bridge as necessary to maintain a stable road surface and to minimize sediment from entering the watercourse.

Timberland Resource Consultants

SMP - Mitigation Report

WDID# - 1_12CC414256

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Site 10	-123.689069 40.429024	Permanent	X	-	-	Immediately and prior to 10/15 of any year	

Current Condition: Existing 12 inch diameter ditch relief culvert. Minor vegetation and debris has accumulated at the inlet and the outlet.

Prescribed Action: Clean out the inlet and the outlet of the ditch relief culvert. Monitor this site throughout the winter to ensure that the ditch relief culvert is functioning.

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Site 11	-123.689403 40.429236	Trail	X	-	-	Immediately	

Current Condition: Remaining components to a hydroelectric system that is no longer in use.

Prescribed Action: Remove the remaining hydroelectric system and associated waterlines and electric wires and store outside of riparian setbacks or dispose of properly.

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Site 12	-123.690158 40.428943	Permanent	X	-	-	Immediately	

Current Condition: Rocked rolling dip needed at this location.

Prescribed Action: Install and maintain rocked rolling dip at this location to cross drain the road surface and prevent ponding on the road surface.

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Site 13	-123.690331 40.42891	Permanent	X	-	-	Immediately	

Current Condition: Rocked rolling dip needed at this location.

Prescribed Action: Install and maintain rocked rolling dip at this location to cross drain the road surface and prevent ponding on the road surface.

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Site 14	-123.690606 40.429099	-	X	-	-	Immediately	

Current Condition: Metal, wood, and plastic hoop house material stored or discarded on the edge of the Class I riparian setback becoming overgrown with vegetation.

Prescribed Action: Remove materials and store in a secure location or dispose of properly.

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Site 15A	-123.690233 40.429054	-	X	X	-	As soon as feasible, but no later than 10/15	

Current Condition: Cultivation area partially located within the 100 foot riparian setback for a Class II watercourse. The riparian setback was identified on the ground at this location.

Prescribed Action: Remove cultivation and related materials from the riparian setback. Grass seed and mulch bare soils within the riparian setback. Keep cultivation soils and materials contained to the remaining cultivation areas located outside of the riparian setbacks. Install straw wattles or box in the downslope edge of the remaining cultivation area as necessary to prevent soils and or materials from leaving the cultivation area and entering the riparian setback.

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Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Site 15B	-123.691044 40.428946	-	X	X	-	As soon as feasible, but no later than 10/15	

Current Condition: Cultivation area partially located within the 100 foot riparian setback for a Class I watercourse. The riparian setback was identified on the ground at this location.

Prescribed Action: Remove cultivation and related materials from the riparian setback. Grass seed and mulch bare soils within the riparian setback. Keep cultivation soils and materials contained to the remaining cultivation areas located outside of the riparian setbacks. Install straw wattles or box in the downslope edge of the remaining cultivation area as necessary to prevent soils and or materials from leaving the cultivation area and entering the riparian setback.

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Site 16	-123.690835 40.428741	-	X	-	-	Immediately	

Current Condition: Soil storage area.

Prescribed Action: All potting soil or soil amendments, when not in use, shall be placed and stored with covers, when needed to protect from rainfall and erosion, to prevent discharge to waters of the state, and to minimize leaching of waste constituents into groundwater.

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Site 17	-123.690752 40.428204	Seasonal	X	-	-	Immediately	

Current Condition: Steep pitch of seasonal road to Cultivation Area B is developing ruts along its surface.

Prescribed Action: Install and maintain a waterbreak at the top of the steep pitch near Cultivation Area B immediately and prior to each winter. Apply compacted rock along the seasonal road that accesses Cultivation Area B.

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Site 18	-123.689802 40.427602	Trail	X	-	-	Immediately	

Current Condition: Existing waterbreak near the Point of Diversion (POD) becoming worn down.

Prescribed Action: Reconstruct and maintain a waterbreak at this location prior to each winter.

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Site 19	-123.689429 40.428017	Trail	X	-	-	Immediately	

Current Condition: Existing waterbreak in need of reconstruction.

Prescribed Action: Reconstruct and maintain a waterbreak at this location prior to each winter.

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Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Site 20	-123.689576 40.42853	Trail	X	-	-	Immediately	
Current Condition: Existing waterbreak at a bank seep along inboard edge of ATV trail in need of reconstruction.						Prescribed Action: Reconstruct and maintain a waterbreak at this location prior to each winter. Or install and maintain a rocked rolling dip at this location.	

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Site 21	-123.691216 40.426411	Permanent	X	-	-	Annually prior to 10/15	
Current Condition: Existing rolling dip becoming worn from normal, seasonal vehicle use.						Prescribed Action: Repair and maintain the rolling dip per the specifications in the attached BMPS: Rocked Rolling Dip Design and Placement.	

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Site 22	-123.691314 40.426778	Permanent	X	-	-	Annually prior to 10/15	
Current Condition: Existing rolling dip becoming worn from normal, seasonal vehicle use.						Prescribed Action: Repair and maintain the rolling dip per the specifications in the attached BMPS: Rocked Rolling Dip Design and Placement.	

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Site 23	-123.691361 40.427132	Permanent	X	-	-	Annually prior to 10/15	
Current Condition: Existing rolling dip becoming worn from normal, seasonal vehicle use.						Prescribed Action: Repair and maintain the rolling dip per the specifications in the attached BMPS: Rocked Rolling Dip Design and Placement.	

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Site 24	-123.69146 40.427303	Permanent	X	-	-	Annually prior to 10/15	
Current Condition: Existing rolling dip becoming worn from normal, seasonal vehicle use.						Prescribed Action: Repair and maintain the rolling dip per the specifications in the attached BMPS: Rocked Rolling Dip Design and Placement.	

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Site 25	-123.691573 40.427382	Permanent	X	-	-	Annually prior to 10/15	
Current Condition: Existing rolling dip becoming worn from normal, seasonal vehicle use.						Prescribed Action: Repair and maintain the rolling dip per the specifications in the attached BMPS: Rocked Rolling Dip Design and Placement.	

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Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Site 26	-123.692045 40.427663	Permanent	X	-	-	As soon as feasible, but no later than 10/15	
Current Condition: Proposed rolling dip location.						Prescribed Action: Install and maintain a rolling dip per the specifications in the attached BMPS: Rocked Rolling Dip Design and Placement.	

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Site 27	-123.692222 40.427888	Permanent	X	-	-	Annually prior to 10/15	
Current Condition: Existing rolling dip becoming worn from normal, seasonal vehicle use.						Prescribed Action: Repair and maintain the rolling dip per the specifications in the attached BMPS: Rocked Rolling Dip Design and Placement.	

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Site 28	-123.691929 40.428032	Permanent	X	-	-	Annually prior to 10/15	
Current Condition: Existing rolling dip becoming worn from normal, seasonal vehicle use.						Prescribed Action: Repair and maintain the rolling dip per the specifications in the attached BMPS: Rocked Rolling Dip Design and Placement.	

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Site 29	-123.691613 40.428383	Permanent	X	-	-	Annually prior to 10/15	
Current Condition: Existing rolling dip becoming worn from normal, seasonal vehicle use.						Prescribed Action: Repair and maintain the rolling dip per the specifications in the attached BMPS: Rocked Rolling Dip Design and Placement.	

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Site 30	-123.691177 40.428484	Permanent	X	-	-	Annually prior to 10/15	
Current Condition: Existing rolling dip becoming worn from normal, seasonal vehicle use.						Prescribed Action: Repair and maintain the rolling dip per the specifications in the attached BMPS: Rocked Rolling Dip Design and Placement.	

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Site 31	-123.691386 40.429568	Permanent	X	X	-	Annually prior to 10/15	
Current Condition: Existing road surface drainage feature (dip and lead-out drain) becoming worn from normal, seasonal vehicle use.						Prescribed Action: Repair and maintain the road surface drainage feature in a manner that minimizes sediment delivery to Mule Creek. See the specifications in the attached BMPS.	

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Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Site 32	-123.689295 40.429655	Permanent	X	X	-	Annually prior to 10/15	
Current Condition: Existing road surface drainage feature (dip and lead-out drain) becoming worn from normal, seasonal vehicle use.						Prescribed Action: Repair and maintain the road surface drainage feature in a manner that minimizes sediment delivery to Mule Creek. See the specifications in the attached BMPS.	

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Site 33	-123.689872 40.429611	Permanent	X	X	-	Annually prior to 10/15	
Current Condition: Existing road surface drainage feature (dip and lead-out drain) becoming worn from normal, seasonal vehicle use.						Prescribed Action: Repair and maintain the road surface drainage feature in a manner that minimizes sediment delivery to Mule Creek. See the specifications in the attached BMPS.	

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Site 34	-123.690486 40.42978	Seasonal	X	-	-	As soon as feasible, but no later than 10/15	
Current Condition: Steep pitch of very rocky seasonal road to Cultivation Area C is developing wheel ruts along its surface.						Prescribed Action: Install and maintain a waterbreak at this location prior to each winter. Grade the road surface to achieve an outsloped drainage pattern where feasible and compact the native rock road surface.	

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Site 35	-123.690324 40.429942	Seasonal	X	-	-	As soon as feasible, but no later than 10/15	
Current Condition: Steep pitch of very rocky seasonal road to Cultivation Area C is developing wheel ruts along its surface.						Prescribed Action: Install and maintain a waterbreak at this location prior to each winter. Grade the road surface to achieve an outsloped drainage pattern where feasible and compact the native rock road surface.	

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Site 36	-123.690294 40.430157	Seasonal	X	-	-	As soon as feasible, but no later than 10/15	
Current Condition: Steep pitch of very rocky seasonal road to Cultivation Area C is developing wheel ruts along its surface.						Prescribed Action: Install and maintain a waterbreak at this location prior to each winter. Grade the road surface to achieve an outsloped drainage pattern where feasible and compact the native rock road surface.	

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Site 37	-123.690437 40.430272	Seasonal	X	-	-	As soon as feasible, but no later than 10/15	
Current Condition: Steep pitch of very rocky seasonal road to Cultivation Area C is developing wheel ruts along its surface.						Prescribed Action: Install and maintain a waterbreak at this location prior to each winter. Grade the road surface to achieve an outsloped drainage pattern where feasible and compact the native rock road surface.	

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Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Site 38	-123.690441 40.430376	Seasonal	X	-	-	As soon as feasible, but no later than 10/15	

Current Condition: Steep pitch of very rocky seasonal road to Cultivation Area C is developing wheel ruts along its surface.

Prescribed Action: Install and maintain a waterbreak at this location prior to each winter. Grade the road surface to achieve an outsloped drainage pattern where feasible and compact the native rock road surface.

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Site 39	-123.690009 40.430442	-	X	-	-	Immediately	

Current Condition: Cultivation soil at the east end of Cultivation Area C

Prescribed Action: Keep cultivation soil and materials contained to the cultivation area. Install straw wattles or box in the downslope edge of the cultivation area as necessary to keep soil and or materials contained to the cultivation area.

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Site 40	-123.689934 40.43067	Trail	X	-	-	Annually prior to 10/15	

Current Condition: Waterbreak in need of reconstruction.

Prescribed Action: Reconstruct and maintain a waterbreak at this location prior to each winter.

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Site 41	-123.689815 40.430779	Trail	X	-	-	Annually prior to 10/15	

Current Condition: Waterbreak in need of reconstruction.

Prescribed Action: Reconstruct and maintain a waterbreak at this location prior to each winter.

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Site 42	-123.689744 40.430982	Trail	X	-	-	Annually prior to 10/15	

Current Condition: Waterbreak in need of reconstruction.

Prescribed Action: Reconstruct and maintain a waterbreak at this location prior to each winter.

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Site 43	-123.691447 40.429834	Permanent	X	-	-	As soon as feasible, but no later than 10/15	

Current Condition: Existing rolling dip becoming worn.

Prescribed Action: Install and maintain a rocked rolling dip per the specifications in the attached BMPS: Rocked Rolling Dip Design and Placement.

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Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Site 44	-123.691117 40.431768	-	X	-	-	Immediately	

Current Condition: Remnant cultivation related waterlines and materials within and nearby the Class III watercourse.

Prescribed Action: Remove and dispose of the cultivation related waterlines and materials within and nearby the Class III watercourse.

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Site 45	-123.69199 40.431515	-	X	-	-	As soon as feasible, but no later than 10/15	

Current Condition: Greenhouse material and cultivation debris consisting of metal and plastic pipe, and lumber are stored within the riparian setback, some of which has access to the Class III watercourse. A small amount of composted plant waste and used soil was also at this location within the riparian setback. A 250 square foot metal cargo shed is also at this location.

Prescribed Action: Remove the greenhouse materials and cultivation waste and store at a location outside of the riparian setback or dispose of properly. The 250 square foot metal cargo storage shed may remain at its location for storage of hand tools and solid materials (i.e. fence posts, lumber, metal, pipe, etc.). No liquids, chemicals, petroleum products or fertilizers shall be stored at this location.

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Site 46	-123.691893 40.431577	-	X	-	-	Immediately	

Current Condition: The generator shed extends into the 50 foot wide riparian setback for the Class III watercourse by approximately 2 to 3 feet. The shed provides full protection from weather and has a compacted rock floor . It houses a 1,000 gallon metal diesel tank equipped with secondary containment, a diesel generator mounted on a small concrete pad, and 1 gallon jugs of motor oil. All of these items are in the section of the shed that is located outside of the riparian setback.

Prescribed Action: Install a drip pan under the generator to contain small oil leaks and or spills. Store motor oil jugs or hand gas containers inside of secondary containment (e.g. plastic totes or sealed metal boxes) while being stored long term inside of the shed. Adequate quantities of absorbent materials shall be stored in the generator shed. Should a spill occur, absorbent materials will be applied immediately as directed on product labeling. Following treatment, absorbent materials will be removed and disposed of appropriately.

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Site 47	-123.693074 40.432104	-	X	X	-	Prior to 10/15/20	

Current Condition: A round rain catchment pond of approximately 45 feet in diameter is located in a small depression under tree canopy cover. It appears to have been installed years ago by a previous landowner, but not used or maintained recently. It is not currently a planned water source for the current landowner. The pond has a liner in place that is in disrepair, and a berm constructed of boards staked in place and 4 to 8 inch diameter Douglas fir poles. It currently still holds water and is becoming filled with leaves, limbs, small trees, and forest litter.

Prescribed Action: Remove the stakes and wood that make up the pond berm and allow the pond to partially drain. Remove the pond liner, waterlines, a nearby abandoned water pump, and any other discarded materials relating to the past pond use. The remaining depression may remain to collect forest litter and revegetate naturally. Monitor the site to ensure that it does not develop into a sediment discharge site. Reconstruction of the pond to keep it as an additional water source, or further pond removal involving excavation may require approved grading plans and a Streambed Alteration Agreement from CDFW prior to construction.

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Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Site 48	-123.691197 40.4316911	-	X	-	-	Immediately	

Current Condition: Existing Outhouses

Prescribed Action: The use of the outhouses shall be discontinued. The structures shall be removed and the holes filled in. Ensure that all waste water disposal is in compliance with the Humboldt County Department of Environmental Health and Human Services.

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Cultivation Area D	-123.691642 40.4317549	-	X	-	-	Immediately	

Current Condition: Past cultivation areas have had greenhouse structures removed. This site was partially located within the 50 foot wide riparian setback for the Class III watercourse. The riparian setback was identified on the ground at this location. This site is currently in planning stages for a proposed, future, permitted cultivation site.

Prescribed Action: Remove any remaining fencing, pots, wooden boxes, and other cultivation-related wastes and materials from within the 50 foot wide riparian setback. Seed and mulch areas of bare soil within the riparian setback with native grass seed and weed free straw (or woodchips). Plan and construct future cultivation areas so disturbed areas remain outside of the riparian setback and in a manner that keeps cultivation soils and materials contained to the immediate cultivation area, outside of the riparian setback.

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
POD	-123.689838 40.427378	-	X	X	X	Immediately	

Current Condition: Approved Point of Diversion.

Prescribed Action: Continue use of the permitted POD per the approved Lake and Steamed Alteration Agreement No. 1600-2016-0409-R1. Remove all unused waterlines and diversion debris and dispose of properly. Prior to the 2020 growing season, install water meters to record all water usage for the irrigation of cannabis and domestic use. Monthly water usage shall be recorded for annual reporting purposes. Also, water storage tank lids shall be kept closed to prevent the access of wildlife and water conservation measures shall be implemented (e.g. drip line irrigation, morning or evening watering, and mulch or cover cropping of cultivated top soils, etc.).

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Mule Creek Road		Permanent	X	X	-	As required	

Current Condition: A segment of Mule Creek Road, a private, permanent community access road, passes through these parcels and is mostly located within the 100 foot wide riparian setback for Mule Creek.

Prescribed Action: Monitor the road periodically during winter to ensure the road surface is stable and adequately drained to prevent ponding and potholing on the road surface, and to minimize sediment runoff. Apply clean compacted rock to the road surface as necessary. Prior to any winter period, grade the road surface as necessary to reestablish worn rolling dips and lead out ditches, and to achieve efficient road surface drainage to reduce ponding on the road surface.

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Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Wells		-	X	X	-	Immediately	

Current Condition: Two Groundwater Wells

Prescribed Action: Prior to the 2020 growing season, install water meters to record all water usage for the irrigation of cannabis and domestic use. Monthly water usage shall be recorded for annual reporting purposes. Also, water storage tank lids shall be kept closed to prevent the access of wildlife and water conservation measures shall be implemented (e.g. drip line irrigation, morning or evening watering, and mulch or cover cropping of cultivated top soils, etc.).

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Portable fuel cannisters		-	X	-	-	Immediately	

Current Condition: All liquid petroleum products (e.g. any size container of any petroleum product) requires secondary containment while not in use and cover from precipitation during the wet season.

Prescribed Action: All liquid petroleum products and their containers shall be stored in secondary containment (e.g. plastic totes, sealed metal boxes, or within the enclosed generator shed) while not in use, wherever these materials are used. Adequate quantities of absorbent materials shall be stored at locations where these types of materials are used and stored. Should a spill occur, absorbent materials will be applied immediately and allowed to absorb as much material as possible. Following treatment, absorbent materials as well as any contaminated soil will be removed and disposed of appropriately.

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Fertilizer Storage		-	X	-	-	Immediately	

Current Condition: Fertilizers and pesticides are stored inside of sheds and the Ag Building outside of riparian setbacks. Secondary containment was not observed inside of sheds.

Prescribed Action: All fertilizer and pesticide storage areas shall have appropriate secondary containment structures, as necessary, to protect water quality and prevent spillage, mixing, discharge, or seepage. See Order WQ 2017-0023-DWQ, Attachment A, Section 2 - Requirements Related To Water Diversions And Waste Discharge For Cannabis Cultivation, Term No. 106.

BMP: Winterization and Interim Treatments for Erosion Control

- **Roads**
  - Existing or newly installed road surface drainage structures such as water bars, rolling dips, ditch relief culverts, and intentionally in/out-sloped segments of road shall be maintained to ensure continued function of capturing and draining surface runoff.
  - Hand tool kick-outs (lead out ditch) for existing wheel rut, surface run-off confinement.
  - Temporary waterbar/cross-wattles installed on road/trail sections of concentrating surface runoff.
  - Clean existing ditch relief culvert inlets, outlets, and contributing ditch lines of current and potential blockage debris by hand.
  - Hand place energy dissipating rock/small woody debris at ditch relief culvert outlets where erosion is occurring.
  - Wattles/straw bales placed at road runoff delivery sites.
  - Touch-up with hand tools of existing surface drainage structures (kick-outs, rolling dips, and waterbars).
  - Seed and straw un-used, or to be abandoned, road surfaces where erosion is occurring.
  - Frequent use of un-surfaced roads should be avoided, particularly when road surfaces are soft/saturated.

- **Crossings**
  - Clean inlets, outlets, and channels above of current and potential blockage debris by hand.
  - Hand place energy dissipating rock/small woody debris at ditch relief culvert outlets.
  - Hand placement of rock armor around culvert inlets.
  - Install staked wattles along the outboard road edge of out-sloped watercourse crossings where direct delivery of road surface runoff is occurring.
  - Hand placement of rock on crossing fill faces where erosion is/may occur as a result of poor crossing construction.

- **Cultivation Areas**
  - Use hand tools to capture cultivation related soils that are not contained (soil from post-harvest plant removal, soil/planter removal, general spillage).
  - Treat beds, pots, new soil storage piles, spent soil piles, and soil disposal piles with cover crops for soil stability and potentially nitrogen fixing/soil amendment.
  - Bagged potting soil should be covered.
  - Install staked wattles or an earthen berm around cultivation soils piles prior to the winter period, annually.
  - Any soil amendment, fertilizer, herbicide, or pesticide that is not 100% sealed should be stored under cover.
  - Cultivation sites with poor or concentrating drainage can have wattles or bales installed prior to winter to help prevent sediment and nutrients from leaving the site.
  - Plastic netting shall be disposed of or stored where it is inaccessible to wildlife.
  - Tarps/dep covers shall be stored so they cannot be blown away.
  - General waste from growing season gathered up and disposed of.
  - Exposed soil surfaces in the cultivation area, as well as graded fill slopes should be seeded, strawed, mulched, jute netted as needed.

- **General Areas**
  - Remove all refuse prior to leaving property for the season.
  - Back fill pit toilets to be abandoned.

BMP: General Recommendations

- **Fertilizers, soil amendments, and pesticides**
  - Fertilizer, soil amendments, and pesticide use it to be recorded in such a manner that cumulative annual totals are recorded for annual reporting.
  - Store in-use fertilizers in a securable storage container, such as a tote or deck box, adjacent to the mixing tanks.

- **Petroleum products and hazardous materials**
  - Utilize spill trays/containment structures and cover over the containment when using, fueling, changing oil on portable generators or petroleum powered water pumps to prevent the potential for leeching, seepage or spillage of petroleum products.
  - It is recommended that all petroleum products and other chemicals are registered with the California Environmental Reporting System (CERS) to satisfy future licensing requirements.

- **Water storage and Use**
  - Water use shall be designed and metered such that water used for the irrigation of cannabis will be recorded separately from domestic use. Water use for the irrigation of cannabis is to be recorded monthly for annual reporting.
  - Ensure lids are secured on all water storage tanks to prevent wildlife from becoming entrapped within the tank.
  - Install float valves, or implement another equivalent system, on all applicable water storage and transfer tanks to prevent unnecessary water diversion and the overflowing of water tanks.

BMP: General Operations BMPs

- If operations require moving of equipment across a flowing stream, such operations shall be conducted without causing a prolonged visible increase in stream turbidity. For repeated crossings, the operator shall install a bridge, culvert, or rock-lined crossing.

- During construction in flowing water, which can transport sediment downstream, the flow shall be diverted around the work area by pipe, pumping, temporary diversion channel or other suitable means. When any dam or 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. Equipment may be operated in the channel of flowing live streams only as necessary to construct the described construction.

- Disturbance or removal of vegetation shall not exceed the minimum necessary to complete operations. The disturbed portion of any stream channel shall be restored to as near their original condition as possible. Restoration shall include the mulching of stripped or exposed dirt areas at crossing sites prior to the end of the work period.

- Structures and associated materials not designed to withstand high seasonal flow shall be removed to areas above the high-water mark before such flows occur.

- No debris, soil, silt, sand, bark, slash, sawdust, rubbish, cement or concrete washing, oil or petroleum products, or other organic or earthen material from any logging, construction, or associated activity of whatever nature shall be allowed to enter into or be placed where it may be washed by rainfall or runoff into waters of the State. When operations are completed, any excess materials or debris shall be removed from the work area. No rubbish shall be deposited within 150 feet of the high-water mark of any stream.

BMP: General Erosion Control

- Timing for soil stabilization measures within the 100 feet of a watercourse or lake: For areas disturbed from May 1 through October 15, treatment shall be completed prior to the start of any rain that causes overland flow across or along the disturbed surface. For areas disturbed from October 16 through April 30, treatment shall be completed prior to any day for which a chance of rain of 30 percent or greater is forecast by the National Weather Service or within 10 days, whichever is earlier.

- Within 100 feet of a watercourse or lake, the traveled surface of logging roads shall be treated to prevent waterborne transport of sediment and concentration of runoff that results from operations. Treatment may consist of, but not limited to, rocking, out sloping, rolling dips, cross drains, water bars, slope stabilization measures, or other practices appropriate to site-specific conditions.

- The treatment for other disturbed areas within 100 feet of a watercourse or lake, including: (A) areas exceeding 100 contiguous square feet where operations have exposed bare soil, (B) approaches to road watercourse crossings out to 100 feet or the nearest drainage facility, whichever is farthest, (C) road cut banks and fills, and (D) any other area of disturbed soil that threatens to discharge sediment into waters in amounts deleterious to the quality and beneficial uses of water, shall be grass seeded and mulched with straw or fine slash. Grass seed shall be applied at a rate exceeding 100 pounds per acre. Straw mulch shall be applied in amounts sufficient to provide at least 2- 4-inch depth of straw with minimum 90% coverage. Slash may be substituted for straw mulch provided the depth, texture, and ground contact are equivalent to at least 2 – 4 inches of straw mulch. Any treated area that has been subject to reuse or has less than 90% surface cover shall be treated again prior to the end of operations.

- Within 100 feet of a watercourse or lake, where the undisturbed natural ground cover cannot effectively protect beneficial uses of water from operations, the ground shall be treated with slope stabilization measures described in #3 above per timing described in #1 above.

- Side cast or fill material extending more than 20 feet in slope distance from the outside edge of a landing which has access to a watercourse or lake shall be treated with slope stabilization measures described in #3 above. Timing shall occur per #1 above unless outside 100 feet of a watercourse or lake, in which completion date is October 15.

- All roads shall have drainage and/or drainage collection and storage facilities installed as soon as practical following operations and prior to either (1) the start of any rain which causes overland flow across or along the disturbed surface within 100 feet of a watercourse or lake protection, or (2) any day with a National Weather Service forecast of a chance of rain of 30 percent or more, a flash flood warning, or a flash flood watch.

BMP: General Erosion Control (Cont.)

- Erosion control and sediment detention devices and materials shall be incorporated into the cleanup/restoration work design and installed prior to the end of project work and before the beginning of the rainy season. Any continuing, approved project work conducted after October 15 shall have erosion control works completed up-to-date and daily.
- Erosion control materials shall be, at minimum, stored on-site at all times during approved project work between May 1 and October 15.
- Approved project work within the 5-year flood plain shall not begin until all temporary erosion controls (straw bales or silt fences that are effectively keyed-in) are installed downslope of cleanup/restoration activities.
- Non-invasive, non-persistent grass species (e.g., barley grass) may be used for their temporary erosion control benefits to stabilize disturbed slopes and prevent exposure of disturbed soils to rainfall.
- Upon work completion, all exposed soil present in and around the cleanup/restoration sites shall be stabilized within 7 days.
- Soils exposed by cleanup/restoration operations shall be seeded and mulched to prevent sediment runoff and transport.
- Straw Wattles (if used) shall be installed with 18 or 24-inch wood stakes at four feet on center. The ends of adjacent straw wattles shall be abutted to each other snugly or overlapped by six inches. Wattles shall be installed so that the wattle is in firm contact with the ground surface.

Monitoring Plan

Cannabis cultivators shall regularly inspect and maintain the condition of access roads, access road drainage features, and watercourse crossings. At a minimum, cannabis cultivators shall perform inspections prior to the onset of fall and winter precipitation and following storm events that produce at least 0.5 in/day or 1.0 inch/7 days of precipitation. See Required Monitoring tables below for site specific monitoring and reporting requirements. Cannabis cultivators are required to perform all of the following maintenance:

- Remove any wood debris that may restrict flow in a culvert.
- Remove sediment that impacts access road or drainage feature performance.
- Place any removed sediment in a location outside the riparian setbacks and stabilize the sediment.
- Maintain records of access road and drainage feature maintenance for annual reporting.

Cannabis cultivators that are operating in areas that are, or may become, inaccessible during winter months due to extreme weather such as snow, road closures, seasonal access roads to the property, or any other such conditions shall make additional efforts to enhance winterization measures in the absence of monitoring during storm events.

Monitoring Requirements

(Tier 1, High Risk, < 1 acre of cultivation)

Monitoring Requirement	Description
Winterization Measures Implemented	Report winterization procedures implemented, any outstanding measures, and the schedule for completion.
Tier Status Confirmation	Report any changes in the tier status.
Third Party Identification	Report any change in third party status as appropriate.
Surface Water Runoff	Report any conditions of surface water runoff, including location, duration, source of runoff (irrigation water, storm water, etc.)
Soil Erosion Control	Report any indications of soil erosion (e.g. gullying, turbid water discharge, landslide, etc.)
Sediment Capture	Report the status of sediment capture measures (e.g. silt fence, fiber rolls, settling basin, etc.)
Erosion/Sediment Capture Maintenance	Report maintenance activities to maintain the effectiveness of erosion control and sediment capture measures (e.g. reinstallation of straw mulch, hydroseeding, tarp placement, removal or

	stabilization of sediment captured, removal of settled sediment in a basin, etc.)
Stabilization of Disturbed Areas	Dischargers characterized as high risk (with any portion of the disturbed area within the riparian setbacks), shall provide a status report describing activities performed to stabilize the disturbed area within the setback
Material(s) Storage Erosion/Spills Prevention	Report materials delivered or stored at the site that could degrade water quality if discharged off-site (e.g. potting soil, manure, chemical fertilizer, gasoline, herbicides, pesticides, etc.)
Holding Tank, Septic Tank, or Chemical Toilet Servicing	Septic tank, or chemical toilet servicing report the dates, activity, and name of the servicing company for servicing holding tanks or chemical toilets

Please note the following information for the table below:

1. Constituents shall be monitored with a calibrated instrument.
2. Samples shall be representative of storm water discharging from the disturbed area.
3. Monitoring shall be performed during all months in which activity is occurring at the site until winterization is complete. Monitoring is not required after winterization is complete for unoccupied sites during the winter months.

The following monitoring and reporting activities are required on a monthly basis for **ALL MONTHS** until winterization procedures are completed:

Constituent	Frequency
Turbidity	Once per calendar month when precipitation exceeds 0.25 in/day or when storm water runoff from the site is generated
pH	Once per calendar month when precipitation amount is forecast to exceed 0.25 in/day

Annual Reporting

Annual Reports shall be submitted to the North Coast Regional Water Quality Control Board by March 1st following the year being monitored. The first Annual Report for this enrollment shall be submitted by March 1st, 2020 and report on monitoring done during the 2019 calendar year. Annual reporting is required each subsequent year of enrollment.

WENDT CONSTRUCTION CO., INC.

1660 NEWBURG ROAD
FORTUNA, CA 95540
(707) 725-5641 LIC. #622738

PROPOSAL

DATE	PROPOSAL #
5/19/2022	2647

NAME / ADDRESS
Arnold, Topher

PROJECT

DESCRIPTION	QTY	COST	TOTAL
INSTALLING NEW CULVERTS PER LSA-1600 MITIGATION REPORT FOR SITE 1, 2, 3, 6, & 7; REPAIR BRIDGE SUPPORTS WITH CONCRETE BLOCKS, MISC WORK AT SITE 20 ($750.00) IF OWNER SUPPLIES PIPE (240 FT) DEDUCT $12,697.00 (cost dabbed from time of estimate xa 25 394		53,479.00	53,479.00
		TOTAL	$53,479.00

66175
w/ updated pipe cost

ACCEPTANCE OF PROPOSAL: The above prices, specifications and conditions are satisfactory and are hereby accepted. You are authorized to do the work as specified. Payment will be made as outlined above.

Signature

Sample Schedule for Completion

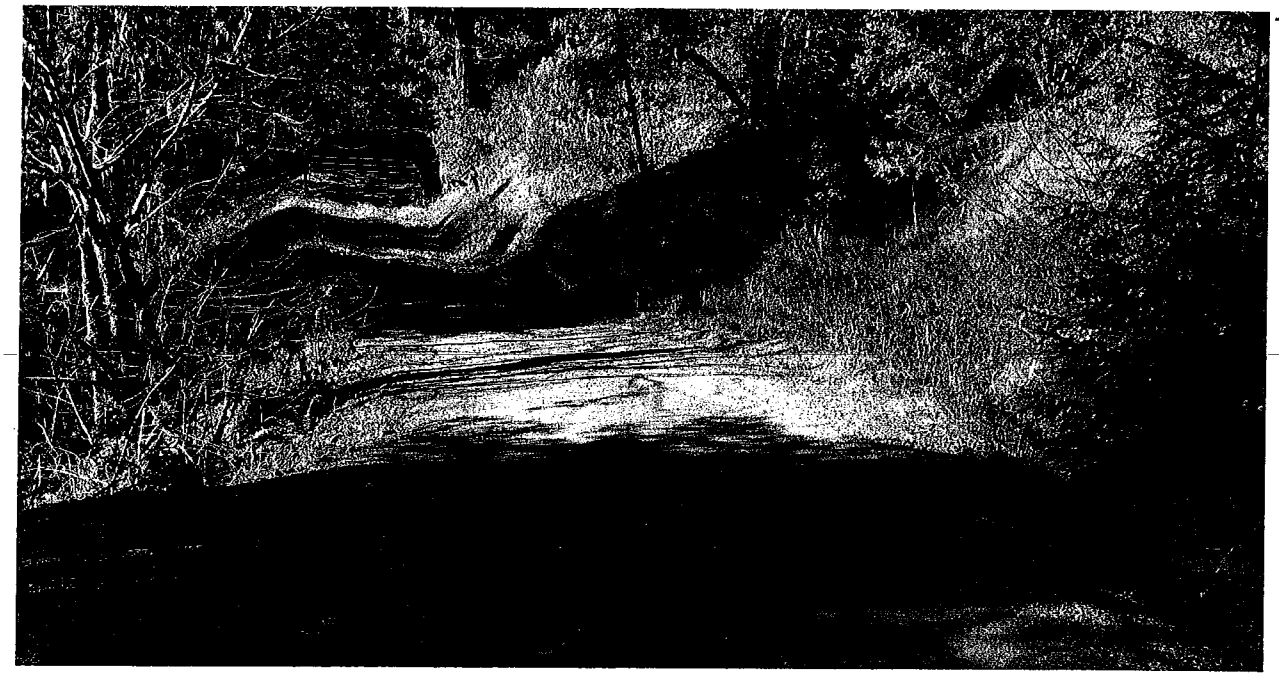
Milestone	Start Date	End Date
Detailed Project Scoping		Complete
Bidding and Contracting	7/22	Complete
Project Ground-Breaking	10/4/22	10/15/22
Inspections by 10/31/22		
Project Completion	10/4/22	10/15/22
Monitoring	monthly	monthly

Sample Budget

Budget Item	Grant	Other Funds
Permit Fees (specify)		
Consultant and professional fees		
Materials		66,000
Equipment		
Other (specify)Let		
TOTAL		

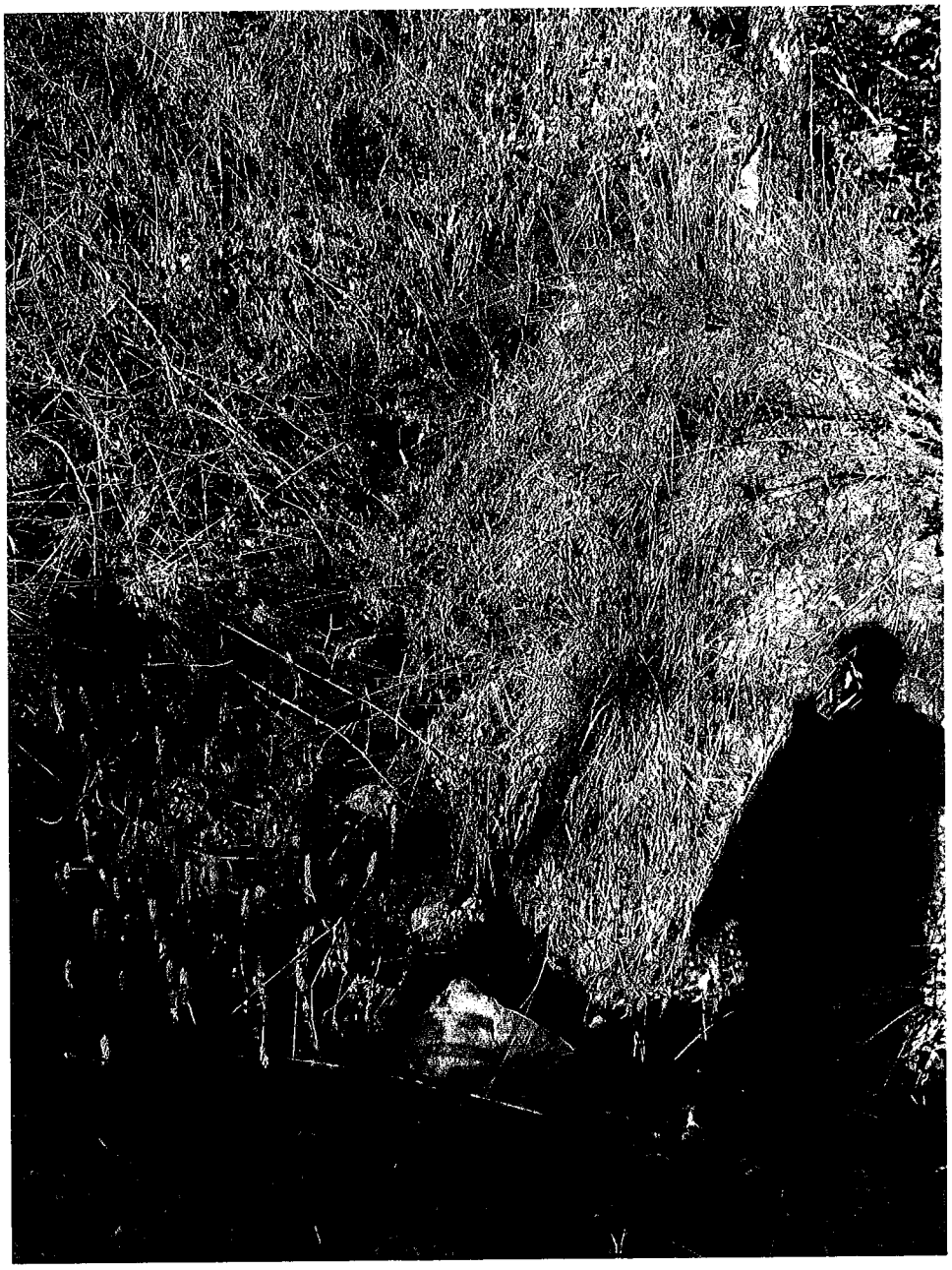
Note: 80% of program funds are required to be spent on physical improvements.

Photographs



Picture 1 & 2: Western (top) and eastern (bottom) approach to Crossing #1 on a watercourse. Photos date 1-21-21.

Photographs



Picture 3: Looking upstream from the inlet to Crossing #1. Photos date 1-21-21.

Photographs

Picture 4: Looking downstream at the inlet to Crossing #1 on a watercourse. Photo date 10-11-19.

Photographs

Picture 5: Looking downstream at the outlet from Crossing #1 on a watercourse. Photo date 1-21-21.

Photographs

Picture 6: Looking downstream at the inlet to Crossing #2 on a watercourse. Photo date 10-11-19.

Photographs

Picture 7: Looking downstream from the outlet at Crossing #2 on a watercourse. Photo date 1-21-21.

Photographs

Picture 8 & 9: Eastern approach & western approach to Crossing #3 on a watercourse. Photos date 10-11-19.

Photographs

Picture 10 & 11: Looking upstream from the inlet (left) to Crossing #3 and downstream from the outlet (right). Photos date 10-11-19.

Photographs

Picture 12 & 13: Looking downstream at the inlet (top) and the outlet (bottom) to Crossing #3. Photos date 10-11-19.

Photographs

Picture 14 & 15: Northern approach (top) & southern approach (bottom) to Crossing #5 on a watercourse. Photos date 10-11-19.

Photographs

Picture 16: Looking upstream from the bridge at Crossing #5 on a watercourse. Photo date 1-21-21.

Photographs

Picture 17: Looking downstream from the bridge at Crossing #5 on a watercourse. Photo date 1-21-21.

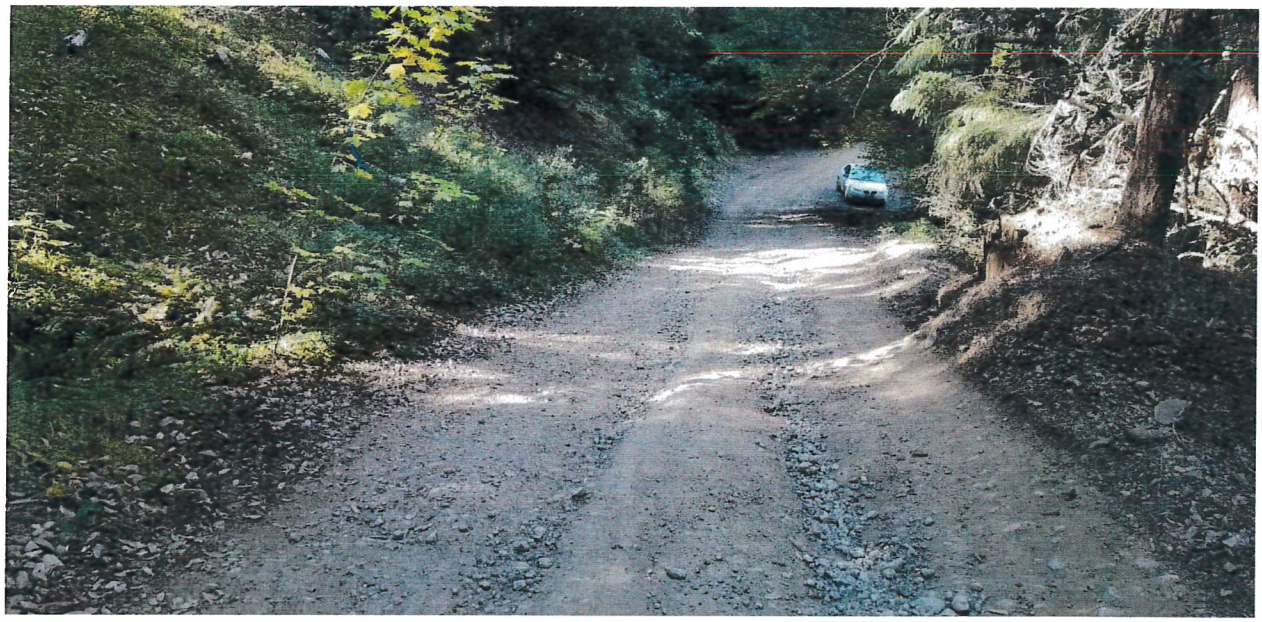
Photographs

Picture 18 & 19: Looking downstream from the inlet to the railcar bridge at Crossing #5 on a watercourse. Upper photo date 12-21-21. Lower photo date 2-03-22.

Photographs

Picture 20: Looking upstream towards the railcar bridge at Crossing #5 on a watercourse. Photos date 12-21-21.

Photographs



Picture 21 & 22: Eastern approach (top) & western (bottom) approach to Crossing #6 on a watercourse. Photos date 10-11-19.

Photographs

Picture 23 & 24: Looking upstream (left) and downstream (right) from Crossing #6 on a watercourse. Photos date 10-11-19.

Photographs

Picture 25 & 26: Looking downstream at the inlet (left) and upstream at the outlet (right) to Crossing #6 on a watercourse. Photos date 10-11-19.

Photographs

Picture 27: Eastern approach (top) & western (bottom) approach to Crossing #7 on a watercourse. Photo date 10-11-19.

Photographs

Picture 28 & 29: Looking upstream (left) and downstream (right) from Crossing #7 on a watercourse. Photos date 10-11-19.

Photographs

Picture 30 & 31: Looking downstream at the inlet (top) and upstream at the outlet (bottom) to Crossing #7 on a watercourse. Photos date 1-21-21.

Photographs

Picture 32: Southern approach to Crossing #9 on a watercourse. Photo date 1-21-21.

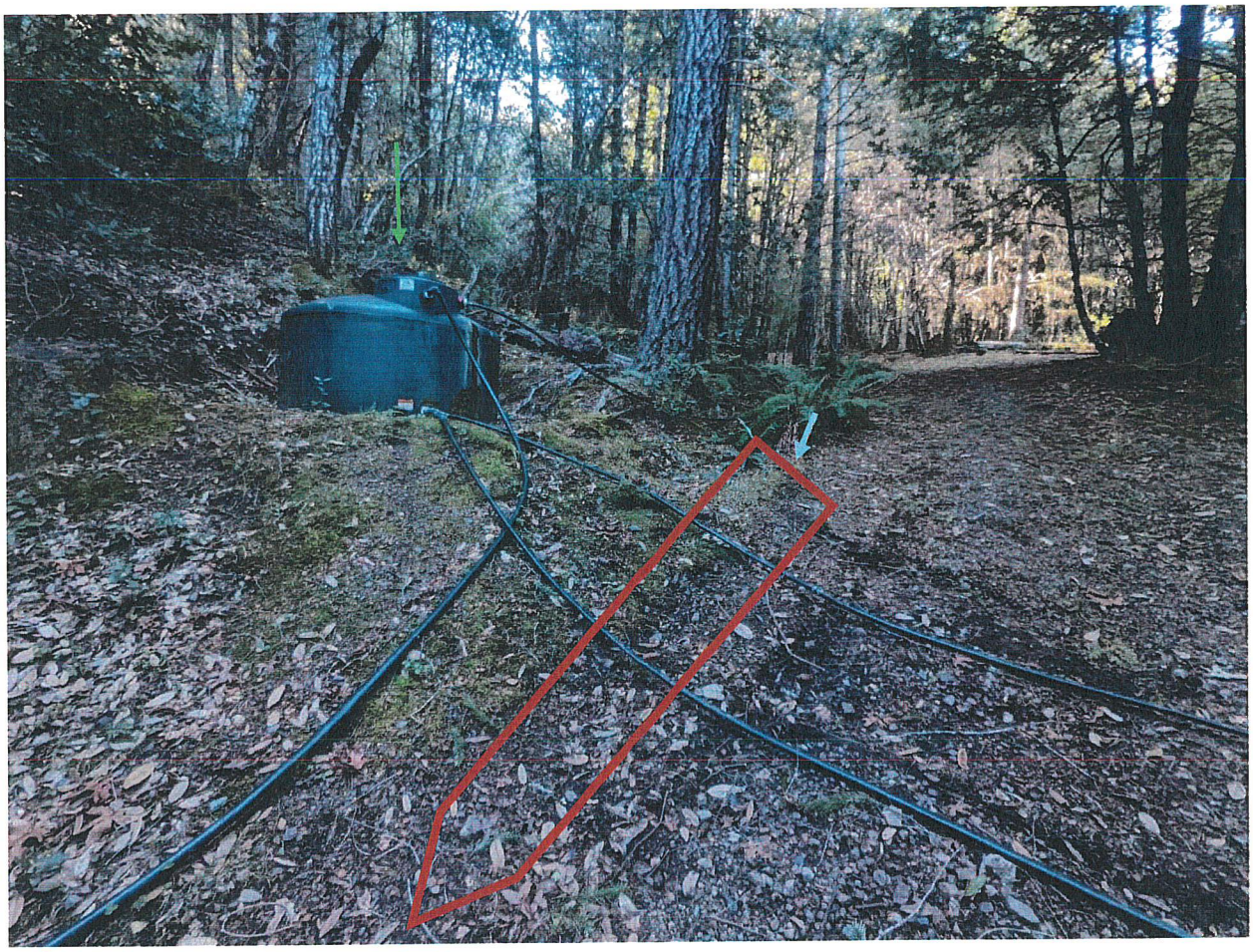
Photographs

Picture 33: Pool located at the top of the channel where water is daylighting before heading to Crossing 10. The top red area indicates the overly steep slope which shall be pulled back and stabilized. The lower red area indicates the small berm which is causing the pooling and shall be removed to promote flow. The blue arrows indicate flow direction. Photo date 2/2/22.

Photographs

Picture 34: Looking downslope from the pooled area towards the inside ditch and Crossing 10. Blue arrows indicate flow direction. The green arrow indicates the location of the water tank that may need to be relocated. Photo date: 2/2/22.

Photographs



Picture 36: Looking upstream towards the pool. The red area shows where the rocked channel/inside ditch will need to be created. The blue arrow indicates flow direction. The green arrow indicates the water tank that may need to be relocated. Photo date: 2/2/22.

Photographs

Picture 37: The blue arrows indicate approximate location where channel shall be created to reconnect surface water flow. Photo date: 2/2/22.

Photographs

Picture 38: Location where water resurfaces before crossing the road at Crossing 10. The red arrow indicates the location of Crossing 10, rocked ford installation. The black arrow indicated the location of the rolling dip downgrade. Photo date: 2/2/22.

Photographs

Picture 39: Crossing 10 which shall be upgraded to a more robust rocked ford. Photo date: 2/2/22.

Photographs

Picture 40: Looking downstream from Crossing 10. Photo date: 2/2/22.

Hydrologic Study

This notification utilizes the Rationale Method to determine the 100-year flood flow recommended in "*Designing Watercourse Crossings for Passage of 100-year Flood Flows, Wood, and Sediment.*" 2017 Peter Cafferata, Thomas Spittler, Michael Wopat, Donald Lindsay, William Short, Drew Coe, Greg Bundros, and Sam Flanagan. This report recommends that the rational method be limited to watersheds less than 25 acres. The 100-year Return-Period precipitation data is from: http://hdsc.nws.noaa.gov/hdsc/pfds/pfds_map_cont.html?bkmrk=ca.

Rational Method

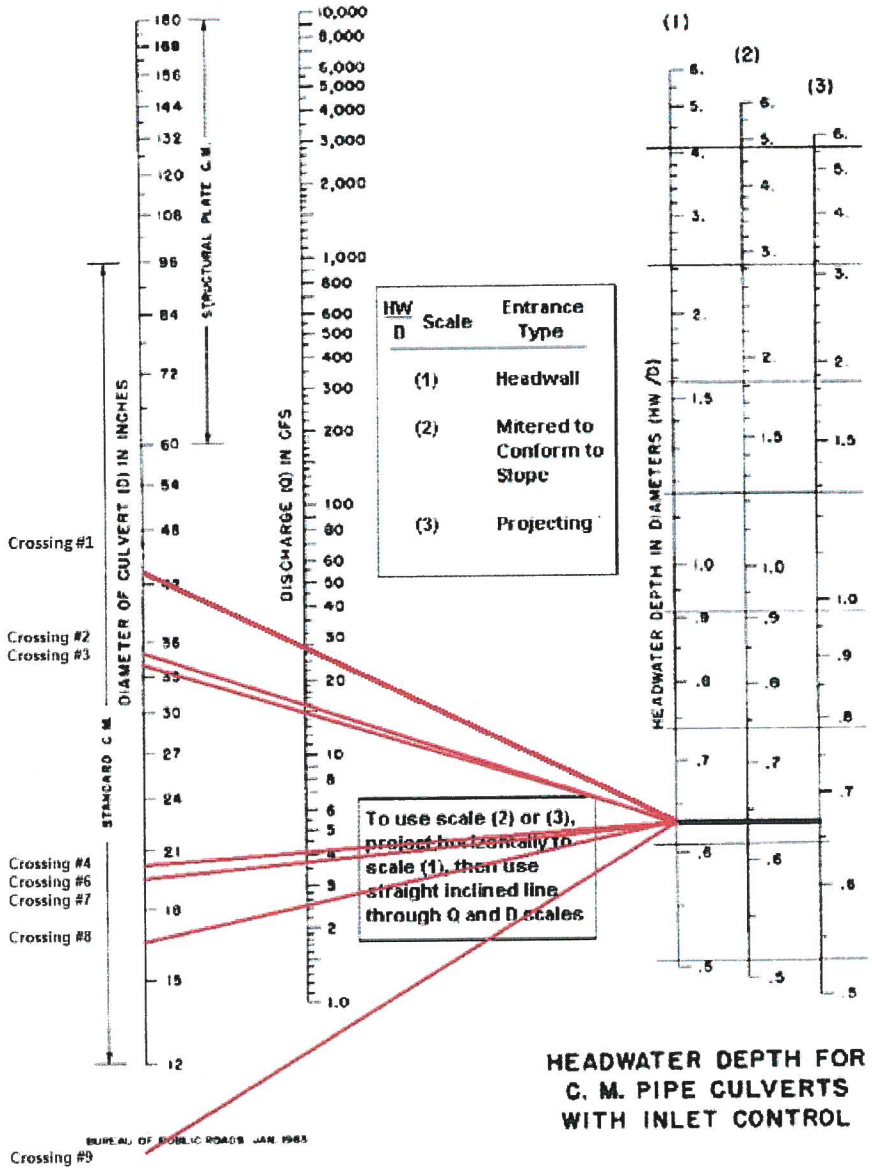
	$T_c = 60((11.9 \times L^3)/H)^{0.385}$				$Q_{100} = CIA$			
No.	Crossing	Channel length (to top of basin) (mi) L	Elevation difference (ft) H	Concentration time (min) Tc	Runoff coefficient C	100-year Return-Period Precipitation (in/hr) I*	Area (acres) A	100-yr flood flow (cfs) Q100
	1				0.35	3.86	22.6	***30.5***
	2				0.35	3.86	12	***16.2***
	3				0.35	3.86	11	***14.9***
	4				0.35	3.86	3	***4.1***
	6				0.35	3.86	3.1	***4.2***
	7				0.35	3.86	2.8	***3.8***
	8				0.35	3.86	1.8	***2.4***
	9				0.35	3.86	0.5	***0.7***
	10				0.35	3.86	1.1	***1.5***

This notification also utilizes the Frequency and Magnitude Method for the Bridge at Crossing #8 & #18 to determine the 100-year flood flow recommended in "*Designing Watercourse Crossings for Passage of 100-year Flood Flows, Wood, and Sediment.*" 2017 Peter Cafferata, Thomas Spittler, Michael Wopat, Donald Lindsay, William Short, Drew Coe, Greg Bundros, and Sam Flanagan. This report recommends that the Frequency and Magnitude Method be used from to watersheds greater than 25 acres. The 100-year Return-Period precipitation data is from: http://hdsc.nws.noaa.gov/hdsc/pfds/pfds_map_cont.html?bkmrk=ca

Magnitude and Frequency Method for 100-year flood flow > 25 ac								Q_{100} (cfs)
No.	Crossing	Area (acres) A	Basin maximum elevation (ft)*	Crossing elevation (ft)*	Area (mi^2) A	Avg. Annual Precipitation (in/yr) P	Elevation (ft/1000) H	North Coast[1] (NC)
1	*5*	466	4196	2600	0.728	75	3.398	***406.4***

Hydrologic Study (Cont.)

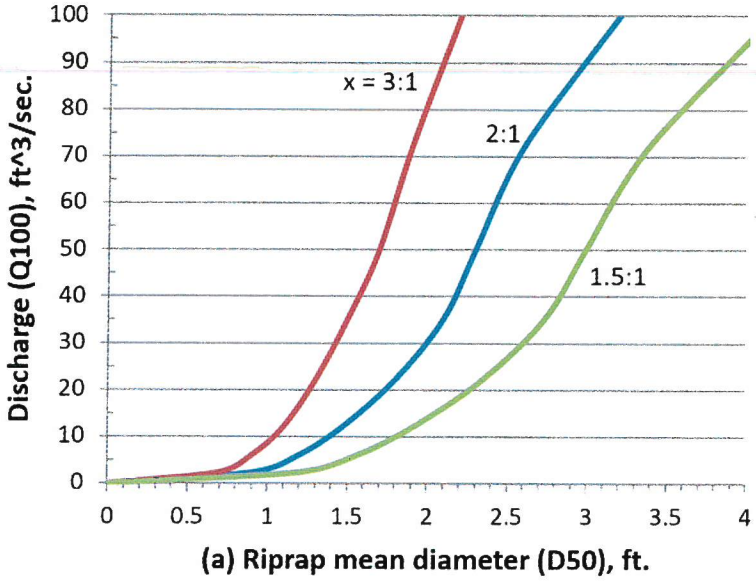
Normann and others (1985) culvert sizing nomograph



This is the same culvert sizing nomograph (Figure 12) referenced in *Designing Watercourse Crossings for Passage of 100-year Flood Flows, Wood, and Sediment.* The nomograph is used by assuming inlet control and a headwater depth to pipe diameter ratio (HW/D) of 0.67.

Hydrologic Study (Cont.)

Simplified design of Rock-armored



The Above Nomograph was used to determine rock diameter for the inlet and outlet of each watercourse crossing.

To determine if the bridge crossing is appropriately designed the criteria outlined in § 722 Title 14 of California Code of regulations for Activities related to Cannabis Cultivation shall be met. The bridge at Crossing #5 within this project shall meet all measures and requirements (AD): (A) Comprised of a single span structure across a stream with all abutments located outside the top of the stream banks, (B) Minimally conveys a 100-year peak storm flow with one foot of freeboard, (C) Does not prevent, impede, or tend to prevent or impede the passing of fish up and downstream, (D) The tops of any abutment footings are below the calculated scour depth. Below is image of a manning calculator that determines the CFS (Flow, Q) of a trapezoidal feature using
channel characteristic including channel width, side slopes, channel roughness, channel slope, and depth of the water. The bridge crossing is appropriately sized to pass 406 CFS, the 100-year peak storm flow, with a minimum 2.2-feet of freeboard. Online Manning Formula Trapezoidal Channel Calculator is from: http://hawsedc.com/engcalcs/Manning-Pipe-Flow.php

Manning Formula Uniform Trapezoidal Channel Flow at Given Slope and Depth

Christopher Arnold Bridge Crossing #5

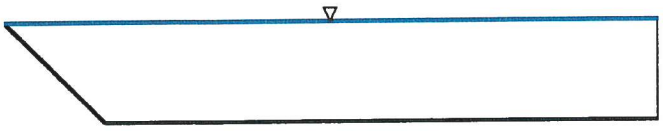
100-year flow channel characteristics

Set units: m | mm | ft | in

Bottom width	22	ft
Side slope 1 (horiz./vert.)	1	
Side slope 2 (horiz./vert.)	0	
Manning roughness, n ?	0.035	
Channel slope	3	% rise/run
Flow depth	4	ft
Bend Angle? (for riprap sizing)		
Stone specific gravity (2.65)		

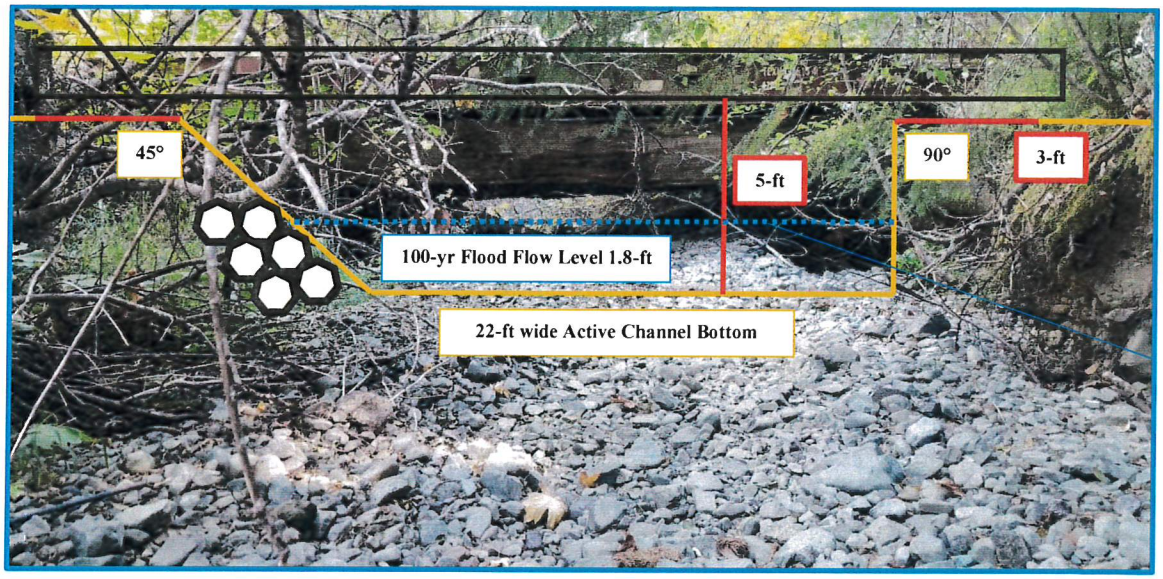
Results

Flow area	96.00	ft^2
Wetted perimeter	31.66	ft
Hydraulic radius	3.03	ft
Velocity, v	15.41	ft/sec
Flow, Q	1478.95	cfs
Velocity head, h_v	3.69	ft
Top width, T	26.00	ft
Froude number, F	1.41	
Shear stress (tractive force), tau	5.58	psf
Implied design ? riprap size based on n	0.53	ft
Required bottom angular riprap size, D50, Maricopa County	0.72	ft
Required side slope 1 angular riprap size, D50, Maricopa County	0.72	ft
Required side slope 2 angular riprap size, D50, Maricopa County	0.72	ft
Required angular riprap size, D50, per Maynord, Ruff, and Abt (1989)	NaN	ft
Required angular riprap size, D50, per Searcy (1967)	1.59	ft



Railcar Bridge Diagram – Crossing #5

Photographs



Photograph 1: Looking downstream at the railcar bridge Crossing #5 where this Notification proposes the bridge reconstructed to remove older log abutments, stringers, and install concrete geo-blocks abutments. Photo date 10-10-2019.

Erosion Control Implementation Specifications

1. Timing for soil stabilization measures within the 100 feet of a watercourse or lake: For areas disturbed from May 1 through October 15, treatment shall be completed prior to the start of any rain that causes overland flow across or along the disturbed surface. For areas disturbed from October 16 through April 30, treatment shall be completed prior to any day for which a chance of rain of 30 percent or greater is forecast by the National Weather Service or within 10 days, whichever is earlier.

2. Within 100 feet of a watercourse or lake, the traveled surface of logging roads shall be treated to prevent waterborne transport of sediment and concentration of runoff that results from operations. Treatment may consist of, but not limited to, rocking, outsloping, rolling dips, cross drains, waterbars, slope stabilization measures, or other practices appropriate to site-specific conditions.

3. The treatment for other disturbed areas within 100 feet of a watercourse or lake, including: (A) areas exceeding 100 contiguous square feet where operations have exposed bare soil, (B) approaches to road watercourse crossings out to 100 feet or the nearest drainage facility, whichever is farthest, (C) road cut banks and fills, and (D) any other area of disturbed soil that threatens to discharge sediment into waters in amounts deleterious to the quality and beneficial uses of water, shall be grass seeded and mulched with straw or fine slash. Grass seed shall be applied at a rate exceeding 100 pounds per acre. Straw mulch shall be applied in amounts sufficient to provide at least 2- 4-inch depth of straw with minimum 90% coverage. Slash may be substituted for straw mulch provided the depth, texture, and ground contact are equivalent to at least 2 – 4 inches of straw mulch. Any treated area that has been subject to reuse or has less than 90% surface cover shall be treated again prior to the end of operations.

4. Within 100 feet of a watercourse or lake, where the undisturbed natural ground cover cannot effectively protect beneficial uses of water from operations, the ground shall be treated with slope stabilization measures described in #3 above per timing described in #1 above.

5. Sidecast or fill material extending more than 20 feet in slope distance from the outside edge of a landing which has access to a watercourse or lake shall be treated with slope stabilization measures described in #3 above. Timing shall occur per #1 above unless outside 100 feet of a watercourse or lake, in which completion date is October 15.

   All roads shall have drainage and/or drainage collection and storage facilities installed as soon as practical following operations and prior to either (1) the start of any rain which causes overland flow across or along the disturbed surface within 100 feet of a watercourse or lake protection, or (2) any day with a National Weather Service forecast of a chance of rain of 30 percent or more, a flash flood warning, or a flash flood watch.

Cofferdam Construction and Use Specifications

The stream crossings #2, #5 & #9 will likely have surface flow present during the June 1 through October 31 work period. Consequently, this project shall require the installation of a temporary diversion structure, so clean water above the work site can be isolated from the construction zone and transported around the work area so it can be discharged to the stream channel with minimal effects on surface flow rates and water quality. In addition, "dirty" water generated within the construction area will be collected and transported off site and discharged in a safe location where it can settle out sediment or infiltrate into soils or gravel and not deliver contaminants to a watercourse. Crossings shall be drained using either gravity fed pipe diversions or pump diversions based upon stream channel and work site conditions. See Cofferdam Specifications appended to this Notification, which is taken from *Weaver, W.E., Weppner, E.M. and Hagans, D.K., 2014, Handbook for Forest, Ranch and Rural Roads: A Guide for Planning, Designing, Constructing, Reconstructing, Upgrading, Maintaining and Closing Wildland Roads, Mendocino County Resource Conservation District, Ukiah, California, 416 p.*

Rock Ford Installation Specifications

- Rocked fords are drainage structures designed to carry watercourses across roads.
- In channel constructed fords shall be of appropriate material that shall withstand erosion by expected velocities and placed in a U-shaped channel to create a drivable crossing.
  - The road shall dip into and out of the rocked ford to minimize diversion potential. Construct a broad rolling dip across the roadbed, centered at the crossing, which is large enough to contain the expected 100-yr flood discharge while preventing flood flow from diverting down the road or around the rock armor.
- The road surface at the ford shall be constructed with clean rock. The rock shall be applied to a minimum depth of 6 inches.
  - A range of interlocking rock armor sizes should be selected and sized so that peak flows will not pluck or transport the armor off the roadbed or the sloping fill face of the armored fill.
- The ford's outlet shall be rock armored to resist downcutting and erosion.
  - *Excavate the keyway and armored area* - Excavate a two to three foot deep "bed" into the dipped road surface and adjacent fillslope (to place the rock in) that extends from approximately the middle of the road, across the outer half of the road, and down the outboard road fill to where the base of the fill meets the natural channel. At the base of the fill, excavate a keyway trench extending across the channel bed.
  - *Armor the basal keyway* - Put aside the largest rock armoring to create the buttresses. Use the largest rock armor to fill the basal trench and create a buttress at the base of the fill. This should have a "U" shape to it and it will define the outlet where flow leaves the armored fill and enters the natural channel.
  - *Armor the fill* - Backfill the fill face with the remaining rock armor making sure the final armor is unsorted and well placed, the armor is two coarse-rock layers in thickness, and the armored area on the fill face also has a "U" shape that will accommodate the largest expected flow.
  - *Armor the top of the fill* - Install a second trenched buttress for large rock at the break-in-slope between the outboard road edge and the top of the fill face.
- If water is expected during the time of use, an adequate sized pipe shall be installed to handle the flow if present (min. 6 inch).
  - The pipe shall be laid over the rocked ford surface.
  - The inlet should be at grade with the upstream flow.
  - The outlet shall drain onto the outlet armoring of the rocked ford.
  - A layer of clean rock/gravel shall be installed over the pipe to establish the running surface of the truck road.
  - Following use, the temporary pipe shall be removed and the placed rock/gravel shall be graded out of the ford and used on the approaches.
  - No significant alteration to the bed and bank of the stream shall occur.
- Road approaches to rocked fords shall be rock surfaced out to the first drainage structure (i.e. waterbar) or hydrologic divide to prevent transport of sediment using rock.
- Bank and channel armoring may occur when appropriate to provide channel and bank stabilization.
- Road approach rock and rock ford armoring shall be reapplied following use as needed to maintain a permanent crossing.

Rock Ford Specifications

Culvert Installation Specifications

- New culvert installations shall be sized to accommodate a 100-year storm.
- New culverts shall be placed at stream gradient, or have downspouts, or have energy dissipaters at outfall.
- Align culverts with the natural stream channel orientation to ensure proper function, prevent bank erosion and minimize debris plugging.
- Place culverts at the base of the fill and at the grade of the original streambed or install a downspout past the base of the fill. Downspouts should only be installed if there are no other options.
- Culverts should be set slightly below the original stream grade so that the water drops several inches as it enters the pipe.
- Culvert beds should be composed of rock-free soil or gravel, evenly distributed under the length of the pipe.
- Compact the base and sidewall material before placing the pipe in its bed.
- Lay the pipe on a well-compacted base. Poor basal compaction will cause settling or deflection in the pipe and can result in separation at a coupling or rupture in the pipe wall.
- Backfill material should be free of rocks, limbs or other debris that could dent or puncture the pipe or allow water to seep around the pipe.
- Cover one end of the culvert pipe, then the other end. Once the ends are secure, cover the center.
- Tamp and compact backfill material throughout the entire process, using water as necessary for compaction.
- Backfill compacting will be done in 0.5 – 1.0 foot lifts until 1/3 of the diameter of the culvert has been covered.
- Push layers of fill over the crossing to achieve the final design road grade, at a minimum of one-third to one-half the culvert diameter.
- Critical dips shall be installed on culvert crossings to eliminate diversion potential.
- Road approaches to crossings shall be treated out to the first drainage structure (i.e. waterbar) or hydrologic divide to prevent transport of sediment.
- Road surfaces and ditches shall be disconnected from streams and stream crossings to the greatest extent feasible. Ditches and road surfaces that cannot be feasible disconnected from streams or stream crossings shall be treated to reduce sediment transport to streams.
- If downspouts are used, they shall be secured to the culvert outlet and shall be secure on fill slopes.
- Culverts shall be long enough so that road fill does not extend or slough past the culvert ends.
- Inlet of culverts and associate fill shall be protected with appropriate measures that extend at least as high as the top of the culvert.
- Outlet of culverts shall be armored with rock if road fill sloughing into channel can occur.
- Armor inlets and outlets with rock, or mulch and seed with grass as needed (not all stream crossings need to be armored).
- Where debris loads could endanger the crossing a debris catchment structure shall be constructed upstream of the culvert inlet.
- Bank and channel armoring may occur when appropriate to provide channel and bank stabilization.

Culvert Installation Specifications

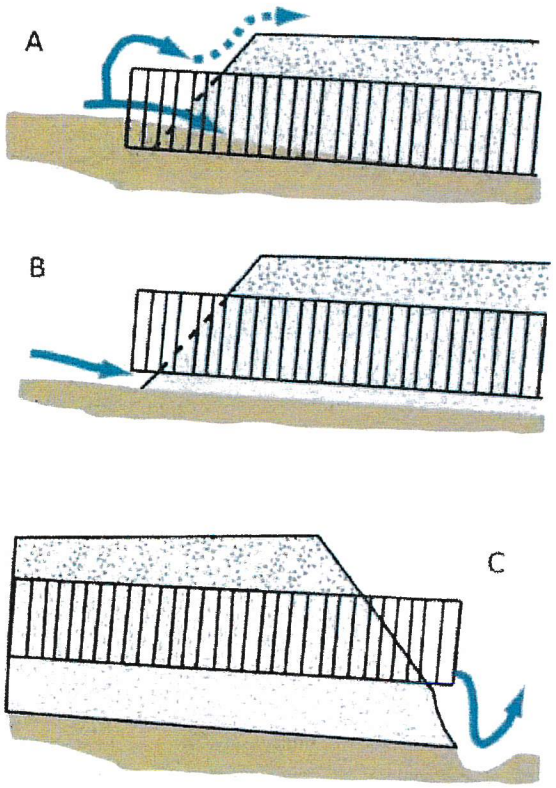
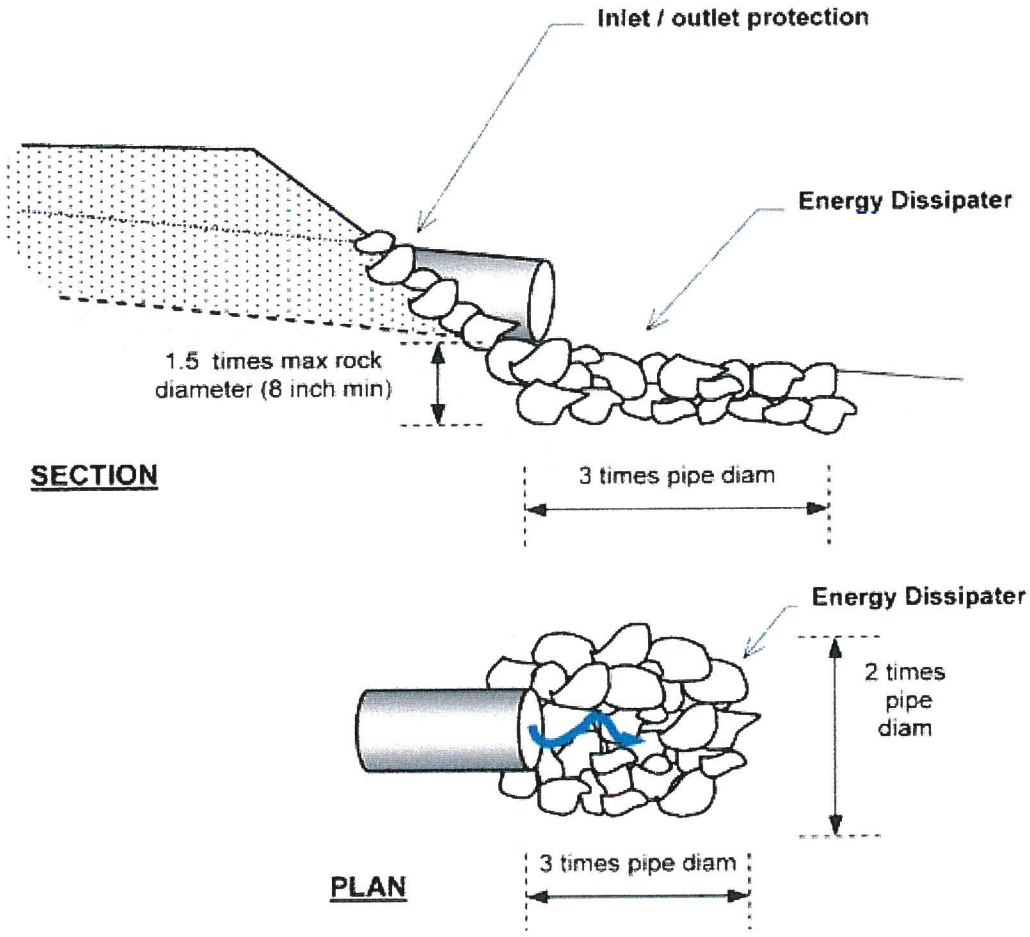
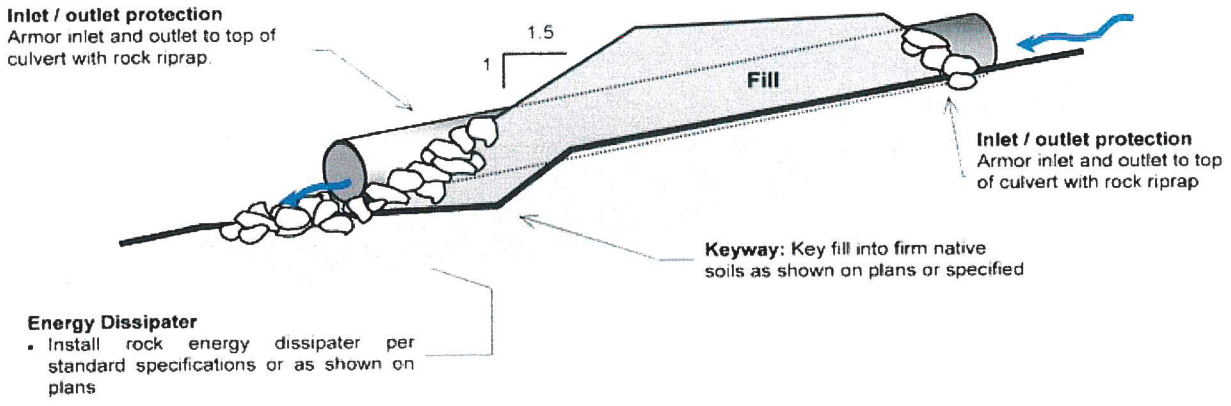


FIGURE 155. *Proper culvert installation involves correct culvert orientation, setting the pipe slightly below the bed of the original stream, and backfilling and compacting the fill as it is placed over the culvert. Installing the inlet too low in the stream (A) can lead to culvert plugging, yet if set too high (B) flow can undercut the inlet. If the culvert is placed too high in the fill (C), flow at the outfall will erode the fill. Placed correctly (D), the culvert is set slightly below the original stream grade and protected with armor at the inlet and outlet. Culverts installed in fish-bearing stream channels must be inset into the streambed sufficiently (>25% embedded) to have a natural gravel bottom throughout the culvert (Modified from: MDSL, 1991).*

HANDBOOK FOR FOREST, RANCH AND RURAL ROADS

Culvert Installation Specifications





Riprap installed to protect the inlet and outlet of a stream crossing culvert from erosion or for energy dissipation should be keyed into the natural channel bed and banks to an approximate depth of about 1.5x the maximum rock thickness. Riprap should be placed at least up to the top of the culvert at both the inlet and outlet to protect them from splash erosion and to trap any sediment eroded from the newly constructed fill slope above.

APPLICATION PACKET CHECKLIST

Please check below to ensure you have a complete application. Once complete, email the following documents, in pdf format with the text "Application for Remediation Grant Program Funding" in the subject line to mrichardson@co.humboldt.ca.us.

- X Signed Application Submission Form
- X Project Description – Summary of the Project, up to 2 pages.
- X Plot Plan
- X Plot Plan Checklist – Attached
- X Cross sections of proposed work including topographic elevations
- X Scope of Work – Detailed Description of Work
- X Schedule for Completion – Identify Milestones
- X Erosion Control Plan and Monitoring Plan
- X Budget – Be as specific as possible – sample attached
- X Project Maps and Figures
- ☐Letter(s) of Support (optional)

APPLICATION FORM - Commercial Cannabis Land Use Ordinance Mitigation and Remediation Fund Program

Project Title: Walker Ridge Road Improvements Date of Application: 10/31/2022

Applicant Name: Walker Ridge Family Farm, LLC Project APN: 216-073-006

Contact Person Name and Title: Wesley Stoft

Contact Phone: (707) 223-1424 Contact Email: susanandwesley@gmail.com

Contact Address: P.O. Box 368, Redway, CA 95560

Amount Requested: $68,171 Total Budget: $146,625.75

Project Timeline: Start Date: 05/01/2023 End Date: 08/01/2023

Signature of Applicant: Wesley Stoft

Project: Walker Ridge Road Improvements

Applicant: Walker Ridge Family Farm LLC

Contact: Wesley Stoft

APN: 216-073-006

Grant Funding Requested: $68,171.00

Project Status: Permitted, Shovel-Ready

Project Description

The project is located at Walker Ridge Family Farm in Humboldt County, on APN 216-073-006 near Harris, California. The property is located off of Bellus Road in the Tom Long Creek Watershed, and contains several unnamed Class III tributaries to Tom Long Creek. Tom Long Creek flows to the East Branch of the Southfork of the Eel River. This project will protect water quality and aquatic ecosystems and limit potential impacts on downstream resources.

The project proposes the upgrade of culverts at seven stream crossings and the installation of armored fill at one other stream crossing, as required by the applicant's Lake and Streambed Alteration Agreement with the California Department of Fish & Wildlife.

While the Humboldt GIS indicates the parcel is in a general area of high slope instability, it is not within a flood hazard zone, nor in an earthquake hazard zone. The parcel is surrounded by rural improved properties. No impact to these other parcels is expected.

This project would storm-proof the stream crossing for a 100 year flood event and reduce the potential for road-related sediment delivery into the Tom Long Creek Watershed. All of the crossing upgrades will be constructed according to standards provided in the "Handbook for Forest, Ranch and Rural Roads" (Weaver, Weppner and Hagans, 2015), and the California Salmonid Stream Habitat Manual, Part X (Weaver, Hagans and Weppner, 2006) by a licensed contractor.

Permanent impacts to existing native channel bed, channel, watercourse banks, and associated riparian habitat will be negligible and avoided. Incidental destruction of small areas of riparian habitat growing on existing road fill or in disturbed channel areas is expected but will be minimized at the proposed sites during remediation.

Green Grove Family Farm
APN: 216-073-006
Plot Plan

- Stream crossing
- Ditch relief culvert
- Point of diversion
- Well
- Water tank
- Cannabis destruction zone
- Storage container

- Onsite wastewater treatment system
- House
- Garage/Shed/Barn
- Other location
- Parking
- Cultivation area
- 600ft buffer around cultivation area
- Streamside Management Area (SMA)

- Irrigation Line
- Stream
- Road
- Setback

Abbreviations:
SC - Stream crossing
DRC - Ditch relief culvert
CA - Cultivation area
POD - Point of diversion
OWTS - Onsite wastewater treatment system

0 100 200 400 Feet

Scale 1:2,400 1 inch = 200 feet
Contour interval: 10-m derived from USGS 10-m DEM
Parcel boundary data: 2015 Humboldt County GIS

N

Prepared September 2017 by:
Pacific Watershed Associates
www.pacificwatershed.com

17' WIDE DIRT ROAD
Bellus Rd
8% Slope
10% Slope
3% Slope
15' WIDE DIRT ROAD
Main Entrance/Exit -Access for property & premises
16% Slope
14.6' WIDE DIRT ROAD
13% Slope
13% Slope
+/- 2,400'
+/- 1,577'
+/- 1,435'
1,235'
1,093'
1,190'
282'
852'
248'
404'
282'
544'
659'
844'
20'
955'
340'
670'
386'
+/- 2,413'
850m
900m
750m
(1) 3,000 gal used for fire supp. *Est. prior to 2017*
Well and Pump (40.0614,-123.6555) *Est. 1957 (irrigation)*
One mobile shipping containers
Garage (20'x40') *Est. 2007*
House (40'x60') Est. 1996
Two mobile shipping containers (8'x20) ea
Garage (25'x40') *Est. 1998*
SC #1 (18" dia.)
SC #2 (12" dia.)
SC #3 (18" dia.)
SC #4 (36" dia.)
SC #5 (24" CMP)
SC #6 (Fill)
SC #7 (Fill); MP #8
SC #8 (12" dia.)
Ephemeral stream (50-ft buffer)
Ephemeral stream (50-ft buffer)
House (40'x40') Est.1987
Four Poly Water Tanks (3,000 gal each) Loc: (40.0596,-123.6558) *Est. 2011*
Cement water tank (10,000 gal - 40.0595, -123.6542) *Est. 1985*
OWTS
Workshop/ Kitchen (20'x30') *Est. 2009*
Two mobile shipping containers (8x20 ea)
Garage/Shed Drying/Processing/ Packaging/Harvest Product Administrative Hold 20'x40'
Nursery 35' X10'
CA #3 Home Garden (5,774 ft2) To be relocated
Well (Irrigation) (40.06165,-123.6522) *Est.2020*
House (37'x50') *Est. 1982*
Intermittent stream (100-ft buffer)
Intermittent stream (100-ft buffer)

Existing outdoor cultivation with total operations of 10,396 sq ft
CA#1 - 1,962 sq ft
CA#2 - 4,738 sq ft
CA#3 - 3,302 sq ft

Existing mixed-light cultivation with total opertations of 2,500 sq ft
CA#3 - 2,472 sq ft

Surface Water Runoff

Figure 2. Site map for WDID #1B161240CHUM, APN 216-073-006, Harris, Humboldt County, California.

P:\GIS\5314

PLOT PLAN AND TENTATIVE MAP CHECKLIST

The following information must be shown on your plot plan or tentative map. Please check ✓ the box to the left of the items shown on the plot plan or tentative map. If any item is not on your site to your knowledge, write "N/A" next to the box. Plot plans shall be drawn on a minimum size sheet of 8-1/2" x 11", and tentative subdivision maps on a minimum size sheet of 18" x 26". ***Note: This Checklist must be completed by the applicant and submitted with your application.***

Applicant's Name _____ APN _____ - _____ - _____

FOR ALL PROJECTS

☐ 1. Name of applicant(s)
☐ 2. Location or vicinity map (on or attached to the plot plan)
☐ 3. The subject parcel (show entire parcel with dimensions)
☐ 4. Date, north arrow and scale
☐ 5. Name, County road numbers, and width of all existing and proposed access roadways adjacent to or within the subject parcel (indicate width of traveled way, grade (in % slope), and surface)
☐ 6. Existing and proposed improvements (label as "existing" and "proposed" with dimensions and distance to nearest two (2) property lines)
- ☐ a. Structures and buildings (include floor area, height and proposed use)
- ☐ N/A ☐ b. Driveways and turnaround areas (indicate width, grade (in % slope) and surface)
- ☐ c. Utility lines (electric, gas, telephone, sewer, water, and cable TV)
- ☐ N/A ☐ d. Septic tanks and leachfields (label primary/reserve areas and test holes)
- ☐ e. Wells
- ☐ N/A ☐ f. Parking and loading areas (show individual parking spaces, including handicapped parking and ramps)
- ☐ N/A ☐ g. Storm drains, curbs and gutters
- ☐ h. Emergency water storage tanks and fire hydrants
- ☐ N/A ☐ i. Landscaped areas (include proposed exterior lighting)
- ☐ N/A ☐ j. Major vegetation (identify mature trees (12" dbh or larger) to be removed)
- ☐ N/A ☐ k. Diked areas
- ☐ l. Proposed grading and fill (estimate volume)
- ☐ N/A ☐ m. Signs (indicate size, illuminated, and design (e.g., monument, pylon, etc.))
- ☐ N/A ☐ n. Other - specify _____

☐ 7. Direction of surface water runoff
☐ ☐ N/A 8. Location and width of all existing and proposed easements of record
☐ 9. Hazardous areas (indicate on map if on the project site or within 400 feet of the project site):
- ☐ N/A ☐ a. Areas subject to inundation or flooding
- ☐ b. Steep or unstable slopes
- ☐ N/A ☐ c. Expansive (clay) soils
- ☐ N/A ☐ d. Earthquake faults
- ☐ N/A ☐ e. Hazardous waste or substance sites
- ☐ N/A ☐ f. Other - specify _____

☐ 10. Sensitive habitat areas (indicate on map if on project site or within 400 feet of the project site):
- ☐ a. Creeks, rivers, sloughs and other drainage courses
- ☐ N/A ☐ b. Lakes, ponds, marshes, or "wet" meadows
- ☐ N/A ☐ c. Beaches
- ☐ N/A ☐ d. Sand dunes
- ☐ N/A ☐ e. Other - specify _____

☐ ☐ N/A 11. Historical buildings or known archaeological or paleontological resources
☐ ☐ N/A 12. Land use and buildings on adjacent parcels, and approximate distances to closest property lines

FOR LOT LINE ADJUSTMENT PLOT PLANS ONLY

☐ ☐ N/A 13. Proposed new lines and lines to be eliminated (show lines to be eliminated as dashed)
☐ ☐ N/A 14. Areas (in square footage or acreage) of the initial and resulting parcels

FOR TENTATIVE SUBDIVISION MAPS ONLY

☐ ☐ N/A 16. Approximate dimensions and areas of all proposed lots
☐ ☐ N/A 17. A statement that "All easements of record are shown on the tentative map and will appear on the recorded subdivision map"
☐ ☐ N/A 18. Contour lines (at _____ intervals)
☐ ☐ N/A 19. For major subdivisions (5 or more parcels): proposed drainage improvements, details of any grading to be performed, approximate radii of all roadway curves, areas for public use, and typical sections of all streets, highways, ways and alleys
☐ ☐ N/A 20. Names and assessor's parcel numbers of all contiguous ownerships

NOTE: THE SUBMITTAL OF INCOMPLETE OR ILLEGIBLE PLOT PLANS OR TENTATIVE MAPS WILL CAUSE DELAYS IN THE PROCESSING OF YOUR APPLICATION

Project: Walker Ridge Road Improvements

Applicant: Walker Ridge Family Farm LLC

Contact: Wesley Stoft

APN: 216-073-006

Grant Funding Requested: $68,171.00

Project Status: Permitted, Shovel-Ready

Scope of Work

The project is for the upgrade of eight failing or non-compliant stream crossings. The scope of work is described in the applicant's LSA agreement with Fish & Wildlife, and is summarized as follows:

Crossing 1: Removal and replacement of an 18-inch culvert with a 50 foot, 24-inch culvert on a near origin Class III watercourse. The original culvert was installed high and short in the fill, causing ponding at the inlet and a 3 foot plunge at the outlet. The crossing has a functional critical dip on the left hingeline and an insloped right road approach, which conveys road runoff to the culvert inlet through the inboard ditch.

The stream crossing will be replaced with a 24-inch diameter by 50 foot long culvert set at the base of the fill and in line with the natural channel. The lower ¾ of the outboard fill slope will be armored with 15 cubic yards of .5-1.5 foot diameter riprap to minimize erosion of the road fill. The crossing will be rebuilt with a critical dip on the left hingeline. This will prevent diversion in the event the culvert plugs or its capacity is exceeded.

Crossing 2: Removal and replacement of an undersized 12-inch diameter culvert with a larger culvert on a near origin Class III watercourse. The original culvert is installed short and high in the fill, with diversion potential down the left roadside.

The stream crossing will be replaced with a 24-inch diameter by 50 foot long culvert set at the base of fill and in line with the natural channel. The road prism will need to be raised 1.5 feet with approximately 15 cubic yards of locally generated fill to accommodate the new, larger pipe. The crossing will be rebuilt with a critical dip on the left hingeline, to prevent diversion in the event the culvert plugs or its capacity is exceeded.

Crossing 2b: Add armor to a near origin, Class III watercourse with no formal drainage structure. This road alignment is located upstream of Stream Crossing #2 (approximately 50') and is a seasonally used quad trail. There is diversion potential down the right road at this site.

An armored fill will be installed at this location to route flow across the roadbed in a way that prevents the diversion of streamflow out of the stream channel and protects the road fill from erosion by creating a broad dip through the road prism and excavating a small keyway in the outboard fill. Dimensions for the keyway will be approximately 10 feet wide at the top, 4 feet wide at the base, 1 foot deep, and 15 feet long. The keyway will be armored with 10 cubic yards of .5-1.5 diameter riprap to accommodate for seasonal stream flow.

Crossing 3: Replace an undersized 18-inch diameter culvert on a Class III watercourse. The culvert was installed high and short in the fill and diversion potential exists down the left road.

The stream crossing will be replaced with a 36-inch diameter by 30 foot long culvert set at the base of fill and in line with the natural channel. The entire inboard and outboard fill slopes will be armored with 5 and 15 cubic yards of .5-1.5 foot diameter riprap, respectively. To prevent diversion potential, the crossing will have a critical dip installed on the left hingeline.

Crossing 5: Replace an undersized 24-inch diameter culvert on a Class III watercourse. The culvert was installed at the base of fill, and in-line with the natural channel, however it is slightly undersized for a 100 year peak streamflow event and associated debris.

The stream crossing will be replaced with a 30-inch diameter by 40 foot long culvert set at the base of fill and in line with the natural channel. The lower ¼ of the inboard and outboard fill slopes will be armored with 2 and 5 cubic yards of .5-1.5 foot diameter riprap, respectively, to protect the road fill from erosion.

Crossing 7: Add a culvert to a Class III watercourse crossing with no formal drainage structure. This crossing is just within the landowner's property boundary, as delineated by the recent parcel boundary survey flags.

The stream crossing will be replaced with a 30-inch diameter by 40 foot long culvert set at the base of fill and in line with the natural channel. The lower ¼ of the inboard and outboard fill slopes will be armored with 2 and 5 cubic yards of .5-1.5 foot diameter riprap, respectively, to protect the road fill from erosion.

Crossing 8: Replace a partially plugged, undersized, 12-inch diameter culvert on a Class III watercourse. The culvert was installed high and short in the fill.

The stream crossing will be replaced with a 24-inch diameter by 20 foot long culvert set at the base of the fill and in line with the natural channel. The lower ¾ of the outboard fill slope will be armored with 5 cubic yards of .5-1.0 foot diameter riprap to protect the road fill from erosion.

Crossing 9: Replace a 36-inch diameter culvert on a Class III watercourse. The culvert is installed at the base of fill, and in-line with the natural channel, however, it is slightly undersized for the 100 year peak streamflow event and associated debris.

The stream crossing will be replaced with a 48-inch diameter by 50 foot long culvert set at the base of fill and in line with the natural channel.The lower ¾ of the inboard and outboard fill slopes will be armored with 10 and 15 cubic yards of .5-2 foot diameter riprap, respectively.

During the project, care will be taken not to unnecessarily disturb the native channels outside of the identified areas. Fill to be permanently removed will be stored in designated locations with no risk of sediment delivery. Following project construction, any disturbed areas where sediment delivery from surface erosion processes is feasible will be seeded and mulched to reduce surface erosion and transport potential.

The proposed crossing upgrades will occur on in-use roads. All disturbance associated with this project will be limited to the road and immediately adjacent channel reaches as necessary to improve road drainage, storm-proof crossings, and prevent sediment delivery to watercourses. All stream crossings will be dry at time of construction. Work will only occur during the period of June 15 through October 15, 2023 to limit and avoid impacts to aquatic habitat and salmonids. Vegetation will only be removed from sites where it is growing on anthropogenically placed fill material, where erosion is likely to deliver to active watercourses, or where necessary for the implementation of effective storm-proofing treatments.

The applicant has secured a SWRCB 401 certification for this project through Pacific Watershed Associates.

Margro Advisors will work with the applicant on maintaining compliance with local and State regulations, and provide support for the project's grant administration and reporting, as needed.

Project: Walker Ridge Road Improvements

Applicant: Walker Ridge Family Farm LLC

Contact: Wesley Stoft

APN: 216-073-006

Grant Funding Requested: $68,171.00

Mitigation and Remediation Fund
Schedule for Completion

Milestone	Start Date	End Date
Final Bidding and Contracting	May 1, 2023	May 31, 2023
Project Ground-Breaking	June 15, 2023	
Project Completion		August 1, 2023
Monitoring	August 1, 2023	Ongoing

Project: Walker Ridge Road Improvements

Applicant: Walker Ridge Family Farm LLC

Contact: Wesley Stoft

APN: 216-073-006

Grant Funding Requested: $68,171.00

Erosion Control and Monitoring Plan

To protect nearby watershed areas and nearby habitat the site is managed to meet standard conditions and follow best practices in accordance with guidelines provided by the North Coast Regional Water Quality Control Board (NCRWQCB). These practices address erosion control and drainage features, spoils management, water storage and use, irrigation runoff, fertilizers and pesticides, and stream and wetland buffers when applicable.

Best practice steps for this site can include:

- Moderate road shaping and ditch-relief used to optimize drainage to stable areas
- Out-sloping maintained to ensure proper capture and capacity of seasonal flow
- Usage of vegetative ground cover and gravel for added sediment control
- Application of straw mulch to exposed soils to minimize erosion
- Careful irrigation, with immediate oversight, to reduce the possibility of irrigation runoff

Applicant will maintain driveways and access roads to eliminate erosion or runoff during storms. Prior to the winter season and significant storm events, roads and cultivation sites will be inspected and monitored to ensure that runoff is prevented. Culverts will be inspected to ensure armoring is maintained and any debris or sediment has been removed..

If potential issues are discovered during or immediately following a storm event, they will be corrected as soon as possible to ensure minimal impact and prevent sediment flow in the future. This will include proper ditching and vegetation buffers, and as needed, straw, seed, wattles, jute cloth, riprap, or other industry standards used to prevent and eliminate runoff.

Project: Walker Ridge Road Improvements

Applicant: Walker Ridge Family Farm LLC

Contact: Wesley Stoft

APN: 216-073-006

Grant Funding Requested: $68,171.00

Total Budget: $146,625.75

Project Budget

Item	Grant Funds	Other Funds (Source)
Permit Fees		
CDFW LSA Agreement		$8,551.75 (Applicant)
SWRCB 401 Certification		$2,417.00 (Applicant)
Consultant and Professional Fees		
Pacific Watershed Associates		$5,445.00 (Round 1)
Margro Advisors	$7,477.00	
*Materials, Equipment and Labor**		
Alpha Pacific Engineering	$60,694.00	$62,041.00 (Round 1)
Totals	**$68,171.00**	**$78,454.75**

*See attached bid for the latest estimate of the project.

NOTE: These requested funds in Round 2 are to be supplemented by the funds tentatively approved on June 14, 2022, by the Board of Supervisors in Round 1. Together they will enable implementation of the complete project.

Walker Ridge Family Farm **License # 982973**
2705 Bell Springs Rd. 95541 **Alpha Pacific Engineering**
Don Grace: (541) 941-8496
Frank Thomas: (707) 354-3232

Breakdown of Labor and Equipment

Culverts

48"x50'	$ 5,319.89
24"x120'	8,214.86
30"x40'	7,128.91
Culvert Delivery	4,100.00
Rip Rap 112 yards	12,544.00
Ground Labor	12,562.34
	49,870.00

Project 2 24" 50' Culvert - Remove and Replace

Ex 320	$ 1,800.00
Ex 160	500.00
Roller	1,200.00
Water truck x 1 load	900.00
Cat D4H	300.00
4x4 Dump truck 14yards Rip r	1,800.00
	$ 6,500.00

Project 3 and 4 24" x 50' Culvert 25 yards Rip Rap

Ex 320	2,400.00
Ex 160	3,000.00
Cat D4H	1,200.00
Skidsteer	1,450.00
Water truck	1,800.00
5 Yard Dump Truck 4x4	3,700.00
Roller	1,200.00
	14,750.00

Project 5 30"x40' Culvert 20 yards Rip Rap

Ex 320	2,400.00
Ex 160	2,000.00
Cat D4H	1,600.00
Skidsteer	
Water truck	900.00
5 Yard Dump Truck 4x4	2,400.00
Roller	800.00

	10,100.00

Project 6 — 30"x40' Culvert 7 yards Rip Rap

Ex 320	2,400.00
Ex 160	2,000.00
Cat D4H	1,600.00
Skidsteer	870.00
Water truck	900.00
5 Yard Dump Truck 4x4	1,200.00
Roller	800.00
	9,770.00

Project 7 — 30"x50' Culvert 15 yards Rip Rap

Ex 320	2,400.00
Ex 160	2,000.00
Cat D4H	1,600.00
Skidsteer	1,015.00
Water truck	900.00
5 Yard Dump Truck 4x4	1,800.00
Roller	800.00
	10,515.00

Project 8 — 24"x20' Culvert 5 yards Rip Rap

Ex 320	1,500.00
Ex 160	400.00
Cat D4H	450.00
Water truck	300.00
5 Yard Dump Truck 4x4	400.00
Roller	
	3,050.00

Project 9 — 48"x50' Culvert 25 yards Rip Rap

Ex 320	4,800.00
Ex 160	4,000.00
Cat JD 700	2,000.00
Water truck	1,800.00
5 Yard Dump Truck 4x4	3,000.00
Roller	2,000.00
Skidsteer	580.00
	18,180.00

TOTAL	**122,735.00**

North Coast Regional Water Quality Control Board

September 15, 2022

Wesley Stoft
P.O. Box 368
Redway, CA 95560
susanadwesley@gmail.com

Dear Wesley Stoft:

Subject: Notice of Applicability (NOA) for Coverage under the State Water Resources Control Board Cannabis Cultivation Policy Cannabis General Water Quality Certification, and Order No. WQ 2019-0001-DWQ General Waste Discharge Requirements

File: Stoft Property Water Quality Certification for Humboldt County APN 216-073-006-000; WDID No. 1B22087CHUM; Place ID: 842934

This letter certifies conditional coverage under the above referenced General Water Quality Order (the Order) and compliance with the referenced Policy for the proposed project (Project) as described in the *Application for 401 Water Quality Certification and/or Waste Discharge Requirements (Dredge/Fill) and Coverage under Order No. WQ 2019-0001-DWQ* (Application) for Wesley Stoft (Applicant) prepared by Pacific Watershed Associates. The Project, as referenced in this NOA includes only: replacement of six existing watercourse crossings with appropriately sized culverts, installation of an armored rock ford on an existing seasonal road, and installation of an appropriately sized culvert on a existing road.

To comply with the Order and Policy, the Applicant must comply with all conditions of this NOA and documents referenced herein.

Any additional instream work beyond the scope of this NOA will require a new application and applicable fee which must be submitted to the Regional Water Board. This NOA does not certify the right to divert or store water, such activities require a valid water right from the Division of Water Rights. To determine if a water right is needed please contact the Division at: CannabisReg@waterboards.ca.gov with any associated questions.

Background

On June 24, 2019, the North Coast Regional Water Quality Control Board (Regional Water Board) received an application for enrollment from the Applicant to comply with the terms of, and obtain coverage under the Order for discharges of waste associated with cannabis cultivation and proposed work outside of waters of the State at Humboldt County assessor parcel numbers (APNs) 216-073-006-000 (the Property). To conduct the work proposed in the Application and comply with the Order, the Project requires coverage under the General Water Quality Certification section of the Policy. On July 7, 2022, the Regional Water Board received the Application containing Project details and requesting coverage under and consistent with the General Water Quality Certification included in Attachment A of the Policy. The appropriate General Water Quality Certification Application Fee was received on July 1, 2022.

The Application provides information related to the Project location, description, environmental need, design criteria, assessment of Project area flora and fauna, monitoring and reporting plans, and environmental protection measures. The Project activities, environmental protection measures included therein, and requirements included as Attachment A of the Policy (https://www.waterboards.ca.gov/water_issues/programs/cannabis/), are considered enforceable components of this NOA. Coverage under this General Water Qualty Certification requires an annual fee to be paid until the instream work and associated monitoring have been completed and the Regional Water Board has issued a Notice of Termination.

Project Description and Scope

The eight instream work locations identified in the Application are collectively referred to as the Project in this NOA. The instream work location naming convention from the Application is used in the descriptions below for consistency. The Project includes instream work locations within the Lower East Branch South Fork Eel River hydrologic unit (HUC 180101060202, Hydrologic Sub-Area 1111.320603) of the South Fork Eel River watershed. The total area of disturbance to streambeds and banks associated with the Project is estimated to be 2,144 square feet. There are approximately 1,655 square feet and 255 linear feet of temporary impacts to streambeds and banks. There are approximately 490 square feet and 82 linear feet of permanent impacts to streambeds and banks.

Instream work at Stream Crossing #1 consists of the replacement of an undersized 18-inch diameter culvert with an appropriately sized 24-inch diameter culvert on a Class III watercourse. Instream work at Stream Crossing #2 consists of the replacement of an undersized 12-inch diameter culvert with an appropriately sized 24-inch diameter culvert on a Class III watercourse. Instream work at Stream Crossing #2B consists of modifying a Class III watercourse ford crossing by installing armored fill crossing on a seasonal road. Instream work at Stream Crossing #3 consists of replacing and undersized 18-inch diameter culvert with an appropriately sized 30-inch diameter culvert on a Class III watercourse. Instream work at Stream Crossing #5 consists of the replacement of an undersized 24-inch diameter culvert with an appropriately sized 30-inch diameter culvert

on a Class II watercourse. Instream work at Stream Crossing #7 consists of the installation of a 30-inch diameter culvert for a Class III watercourse on an existing road. Instream work at Stream Crossing #8 consists of replacing an undersized 12-inch diameter culvert with an appropriately sized 24-inch diameter culvert on a Class III watercourse. Instream work a Stream Crossing #9 consists of the replacement of an undersized 36-inch diameter culvert with an appropriately sized 48-inch diameter culvert on a Class III watercourse.

Based on the extent of the impacts associated with the Project, the Applicant will receive an annual invoice under the Low Impact Discharges Fee Category. The proposed scope of the Project does not exceed what is allowed for coverage under the Order and is in compliance with one or more of the following categorical exemptions of the California Environmental Quality Act (CEQA): California Code of Regulations, title 14, section 15308 (regulatory actions for environmental protections); section 15301 (ongoing or existing projects) and section 15304 (minor alterations to land).

Required Project Design Features

The Project includes revegetation of eroded and denuded streambanks immediately following the completion of work. The reduction of sediment discharges and threatened discharges as a result of appropriate design and construction of the stream crossings account for a portion of the work needed to offset the permanent impacts associated with completing the Project. Completion of the Project will result in 2,144 square feet and 337 linear feet of enhancement to impacted stream channels. Specific Project design features and impact dimensions are described in the Application.

Monitoring Plan

Monitoring of physical stream parameters (e.g., vegetation, signs of erosion or sedimentation, stream stability, and stream flow capacity) will be conducted both before and after Project implementation. Pre-Project monitoring was conducted by the Applicant and Pacific Watershed Associates. Post-Project monitoring shall occur annually and be submitted annually to the Regional Water Board by January 31st of each year. Monitoring will be conducted and recorded by the Applicant and shall include photo documentation of each instream work location with associated notes on plant survival and vigor, stream stability, and signs of bed and bank erosion. At least five years of post-Project monitoring shall be provided until a minimum of 85 percent survival rate is achieved.

Following the completion of each seasonal work period, an annual report shall be submitted to all appropriate agencies (County, Army Corps of Engineers, Regional Water Board, and California Department of Fish and Wildlife). This annual report shall include findings that result from pre- and post-Project monitoring. These findings shall indicate the achievement of performance standards and include the following information:

- Summary of findings
- Identification and discussion of problems with achieving performance standards

- Proposed corrective measures as needed (requires Regional Water Board approval prior to implementation)

All other monitoring requirements, pursuant to the Order, Policy, and proposed in the Application shall be followed in addition to the requirements listed above.

Project Reporting

Monitoring reports shall be submitted at a minimum annually by January 31st of each year, until the monitoring period is over, documenting the achievement of performance standards and project goals.

In addition, a Notice of Completion (NOC) shall be submitted by the Applicant no later than 30 days after the Project has been completed. A complete NOC must include, at a minimum: photographs with a descriptive title, the date each photograph was taken, the name of the photographic site, the WDID number indicated above, and success criteria for the Project. The NOC shall demonstrate that the Project has been carried out in accordance with the Project description as provided in the Application and this NOA. Please note that the Applicant will continue to get billed an annual fee until the monitoring and reporting period has finished, the success criteria have been achieved, and the Regional Water Board has terminated this NOA.

Notice of Applicability & Project Determination

Regional Water Board staff has determined that the proposed activities as described in the Application qualify for coverage and may proceed under the Order so long as the Applicant complies with the conditions prescribed in this NOA, the Order, and the Policy. Approval of this Project requires revegetation of eroded or denuded stream banks, as described in the Application and prescribed in the Required Project Design Features section above.

Please include the Project name and WDID number with all future inquiries and document submittals. Document submittals shall be made electronically to: NorthCoast.Cannabis@waterboards.ca.gov and include “Stoft Water Quality Cert WDID 1B22087CHUM” as part of the subject line.

Please contact staff at NorthCoast.Cannabis@waterboards.ca.gov or 707 576-2676 if you have any questions.

Sincerely,

Matthias St. John
Executive Officer

File Name: Stoft_1B22087CHUM_WQC_NOA

Original to:
Wesley Stoft
P.O. Box 368
Redway, CA 95560
susanadwesley@gmail.com

cc:

California Department of Fish and Wildlife, Christine.HahnVertical@wildlife.ca.gov

Humboldt County, PlanningBuilding@co.humboldt.ca.us

US Army Corps of Engineers, CESPN-Regulatory-Info@usace.army.mil

Jennifer Siu, US Environmental Protection Agency, Siu.Jennifer@epa.gov

State Water Resources Control Board, DWQ.Cannabis@waterboards.ca.gov

North Coast Regional Water Quality Control Board, shannon.utley@waterboards.ca.gov

Pacific Watershed Associates, micheller@pacificwatershed.com

APPLICATION PACKET CHECKLIST

Please check below to ensure you have a complete application. Once complete, email the following documents, in pdf format with the text "Application for Remediation Grant Program Funding" in the subject line to mrichardson@co.humboldt.ca.us.

- X Signed Application Submission Form
- X Project Description – Summary of the Project, up to 2 pages.
- X Plot Plan
- X Plot Plan Checklist – Attached
- X Cross sections of proposed work including topographic elevations
- X Scope of Work – Detailed Description of Work
- X Schedule for Completion – Identify Milestones
- X Erosion Control Plan and Monitoring Plan
- X Budget – Be as specific as possible – sample attached
- X Project Maps and Figures
- ☐Letter(s) of Support (optional)

APPLICATION FORM - Commercial Cannabis Land Use Ordinance Mitigation and Remediation Fund Program

Project Title: Ridge Line Road Improvements (1 of 4) Date of Application: 10/31/2022

Applicant Names: Ridge Line Farms, LLC

Project APN: Intersection of Sawmill Road & Alderpoint Road

Contact Person Name and Title: Jason Gellman, Managing Member, Ridge Line Farms

Contact Phone: (707) 223-6680 Contact Email: supergellman@hotmail.com

Contact Address: P.O. Box 2238, Redway, CA 95560

Amount Requested: $4,285.00 Total Budget: $16,225.00

Project Timeline: Start Date: 4□1□2□23 End Date: □□1□2□23

Signature of Applicant: Jason gellman

Project: Ridge Line Road Improvements (1 of 4)

Applicants: Ridge Line Farms

Contact: Jason Gellman

Project Location: Intersection of Sawmill Road & Alderpoint Road

Grant Funding Requested: $4,285.00

Project Description

The project is located at the intersection of Sawmill Road and Alderpoint Road, near the start of a tributary which flows directly into the Bear Canyon waterway which leads to the South Fork Eel River, in Garberville, California.

This project proposes the removal of asphalt, replacement of a failing undersized culvert, and repaving as required by the Humboldt County Department of Public Works. This is a project among four participating applicants:

1. Ridgeline Farms, LLC
2. Sky High Humboldt LLC
3. Tan Oak Farms LLC
4. Pitilina Corporation

All four applicants have County Compliance Agreements which require the access road that intersects with Alderpoint Road (a County maintained road) to be paved for a minimum width of 20 feet and a length of 50 feet at the intersection. The failing culvert lies below this area.

Humboldt GIS indicates the site is located in a section of the county with high slope instability, although it is not within a flood hazard zone, nor in an earthquake hazard zone. The site is in a 15-30% slope zone, with slopes higher than 50% just north of it and between 30-50% below it. This increases the potential for gravity imposed debris and sediment carry within the waterway below the culvert if not properly armored, sized, and maintained.

This project would storm-proof the stream crossing for a 100 year flood event and reduce the potential for road-related sediment delivery into the unnamed tributary and down to the Bear Canyon waterway. The upgraded stream crossing will protect water quality and aquatic ecosystems, limiting the impact on downstream resources. The

crossing upgrade will be maintained according to standards provided in the “Handbook for Forest, Ranch and Rural Roads” (Weaver, Weppner and Hagans, 2015), and the California Salmonid Stream Habitat Manual, Part X (Weaver, Hagans and Weppner, 2006) by a licensed contractor.

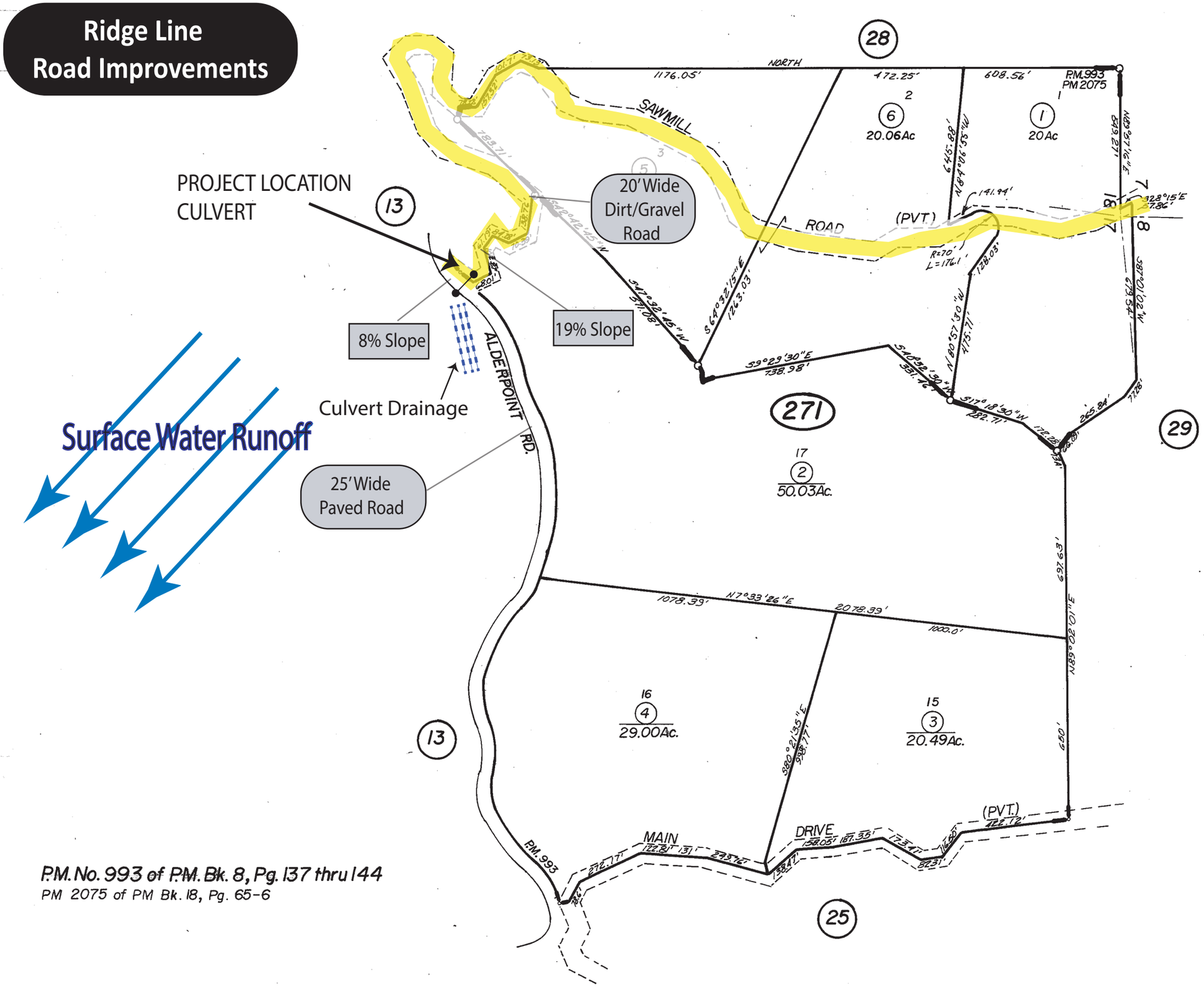
As this is a repair of an existing infrastructure, there will be no permanent impacts to existing native channel bed, channel, watercourse banks, or associated riparian habitat. Incidental destruction of small areas of riparian habitat growing on existing road fill or in disturbed channel areas will be minimized during remediation. No loss of trees is expected. The site is surrounded by rural improved properties. No impact to these parcels is expected.

POR. NE 1/4 SEC. 18 & NW 1/4 SEC. 17, T. 4 S., R. 4 E., H.B.&M.

223-27

1" = 400'

Ridge Line Road Improvements



Sawmill Road

P.M. No. 993 of P.M. Bk. 8, Pg. 137 thru 144
PM 2075 of PM Bk. 18, Pg. 65-6

Assessor's Map Bk. 223-Pg. 27
County of Humboldt, Calif.

REV. 10/30/2022

PLOT PLAN AND TENTATIVE MAP CHECKLIST

The following information must be shown on your plot plan or tentative map. Please check ✓ the box to the left of the items shown on the plot plan or tentative map. If any item is not on your site to your knowledge, write "N/A" next to the box. Plot plans shall be drawn on a minimum size sheet of 8-1/2" x 11", and tentative subdivision maps on a minimum size sheet of 18" x 26". ***Note: This Checklist must be completed by the applicant and submitted with your application.***

Applicant's Name Ridge Line Road I□ pro□e□ents APN Intersection o□Sa□□ill Rd□ Alderpoint Rd□

_____

FOR ALL PROJECTS

☐		1.	Name of applicant(s)
☐		2.	Location or vicinity map (on or attached to the plot plan)
☐		3.	The subject parcel (show entire parcel with dimensions)
☐		4.	Date, north arrow and scale
☐		5.	Name, County road numbers, and width of all existing and proposed access roadways adjacent to or within the subject parcel (indicate width of traveled way, grade (in % slope), and surface)
☐	□A	6.	Existing and proposed improvements (label as "existing" and "proposed" with dimensions and distance to nearest two (2) property lines)
	□A	☐ a.	Structures and buildings (include floor area, height and proposed use)
	□A	☐ b.	Driveways and turnaround areas (indicate width, grade (in % slope) and surface)
	□A	☐ c.	Utility lines (electric, gas, telephone, sewer, water, and cable TV)
	□A	☐ d.	Septic tanks and leachfields (label primary/reserve areas and test holes)
	□A	☐ e.	Wells
	□A	☐ f.	Parking and loading areas (show individual parking spaces, including handicapped parking and ramps)
	□A	☐ g.	Storm drains, curbs and gutters
	□A	☐ h.	Emergency water storage tanks and fire hydrants
	□A	☐ i.	Landscaped areas (include proposed exterior lighting)
	□A	☐ j.	Major vegetation (identify mature trees (12" dbh or larger) to be removed)
	□A	☐ k.	Diked areas
	□A	☐ l.	Proposed grading and fill (estimate volume)
	□A	☐ m.	Signs (indicate size, illuminated, and design (e.g., monument, pylon, etc.))
	□A	☐ n.	Other - specify _____ _____
☐		7.	Direction of surface water runoff
☐	□A	8.	Location and width of all existing and proposed easements of record
☐	□A	9.	Hazardous areas (indicate on map if on the project site or within 400 feet of the project site):
	□A	☐ a.	Areas subject to inundation or flooding
	□A	☐ b.	Steep or unstable slopes
	□A	☐ c.	Expansive (clay) soils
	□A	☐ d.	Earthquake faults
	□A	☐ e.	Hazardous waste or substance sites
		☐ f.	Other - specify _____
☐		10.	Sensitive habitat areas (indicate on map if on project site or within 400 feet of the project site):
		☐ a.	Creeks, rivers, sloughs and other drainage courses
	□A	☐ b.	Lakes, ponds, marshes, or "wet" meadows
	□A	☐ c.	Beaches
	□A	☐ d.	Sand dunes
		☐ e.	Other - specify _____
☐	□A	11.	Historical buildings or known archaeological or paleontological resources
☐		12.	Land use and buildings on adjacent parcels, and approximate distances to closest property lines

FOR LOT LINE ADJUSTMENT PLOT PLANS ONLY

☐	□A	13.	Proposed new lines and lines to be eliminated (show lines to be eliminated as dashed)
☐	□A	14.	Areas (in square footage or acreage) of the initial and resulting parcels

FOR TENTATIVE SUBDIVISION MAPS ONLY

☐	□A	16.	Approximate dimensions and areas of all proposed lots
☐	□A	17.	A statement that "All easements of record are shown on the tentative map and will appear on the recorded subdivision map"
☐	□A	18.	Contour lines (at _____ intervals)
☐	□A	19.	For major subdivisions (5 or more parcels): proposed drainage improvements, details of any grading to be performed, approximate radii of all roadway curves, areas for public use, and typical sections of all streets, highways, ways and alleys
☐	□A	20.	Names and assessor's parcel numbers of all contiguous ownerships

NOTE: THE SUBMITTAL OF INCOMPLETE OR ILLEGIBLE PLOT PLANS OR TENTATIVE MAPS WILL CAUSE DELAYS IN THE PROCESSING OF YOUR APPLICATION

Project: Ridge Line Road Improvements (1 of 4)

Applicants: Ridge Line Farms

Contact: Jason Gellman

Project Location: Intersection of Sawmill Road & Alderpoint Road

Grant Funding Requested: $4,285.00

Scope of Work

The project is for a culvert upgrade and repaving at the intersection of Sawmill Road and Alderpoint Rd, as required by Humboldt County Public Works.

Crossing: The site's existing culvert is deteriorated, placed incorrectly, and undersized to Humboldt County Public Works specifications. It will be replaced with a 18" HDPE double wall plastic pipe.

The proposed construction uses the open trench method as the only viable approach, due to an existing fiber optic line in the vicinity. The existing asphalt will be cut, the fiber line will be located (by hand), existing pipe will be removed and replaced with the new pipe at the correct angle. Then backfill will be compacted and asphalt repaved.

The project requires heavy equipment and new materials. The work will be completed by Van Meter Construction, license number #854560. Prior to starting project operations, the applicants will obtain an encroachment permit from the County.

Margro Advisors will work with the applicants on maintaining compliance with local and State regulations, and provide support for the project's grant administration and reporting, as needed.

Project: Ridge Line Road Improvements (1 of 4)

Applicant: Ridge Line Farms, LLC

Contact: Jason Gellman

Project Location: Intersection of Sawmill Road & Alderpoint Road

Grant Funding Requested: $4,285.00

Mitigation and Remediation Fund
Schedule for Completion

Milestone	Start Date	End Date
Final Project Design	April 1, 2023	April 30, 2023
Bidding and Contracting	May 1, 2023	May 31, 2023
Project Ground-Breaking	June 1, 2023	
Project Completion		August 1, 2023
Monitoring	August 1, 2023	Ongoing

Project: Ridge Line Road Improvements (1 of 4)

Applicants: Ridge Line Farms

Contact: Jason Gellman

Project Location: Intersection of Sawmill Road & Alderpoint Road

Grant Funding Requested: $4,285.00

Erosion Control and Monitoring Plan

The project participants will collaborate to ensure the intersection, culvert, and waterway are properly maintained. Prior to the winter season and significant storm events, the roadway, culvert, and channel will be inspected and monitored to ensure the facility is performing properly in preventing runoff and sediment into the waterway.

If potential issues are discovered in or around the site during or immediately following a storm event, they will be corrected as soon as possible to ensure minimal impact and prevent sediment flow in the future. This will include removal of obstruction or debris, proper ditching and vegetation buffers, and as needed, placement of straw, seed, wattles, jute cloth, riprap, or other industry standards used to prevent and eliminate runoff.

If issues are discovered related to the county maintained areas of the intersection, temporary measures will be used when possible to minimize impacts. The issue will then be reported immediately to the Department of Public Works.

Project: Ridge Line Road Improvements (1 of 4)

Applicants: Ridge Line Farms

Contact: Jason Gellman

Project Location: Intersection of Sawmill Road & Alderpoint Road

Grant Funding Requested: $4,285.00

Total Budget: $16,225.00

Project Budget

Item	Grant Funds	Other Funds (Source)
Permit Fees		
Encroachment Permit	$305.00	
Consultant and Professional Fees		
Margro Advisors	$230.00	$690.00 (Neighbors)
*Materials, Equipment and Labor**		
Van Meter Construction	$3,750.00	$11,250.00 (Neighbors)
Totals	**$4,285.00**	**$11,940.00**

*See attached bid

VAN METER LOGGING, INC.
dba Van Meter Construction

Proposal
Ridgeline Farms/ Gellman

Problem: Existing cross drain culvert is deteriorated, placed incorrectly, and undersized for Humboldt county public works specifications.

Proposed solution: replace existing undersized pipe with a 18" HDPE double wall plastic pipe.

Proposed method of replacement: Due to the known existing fiber optic line in the vicinity the open trench method is the only viable solution. We propose to saw cut the existing asphalt, locate the existing fiber line (by hand), remove the existing pipe, place the new pipe at the correct angle, compact the backfill, and repave

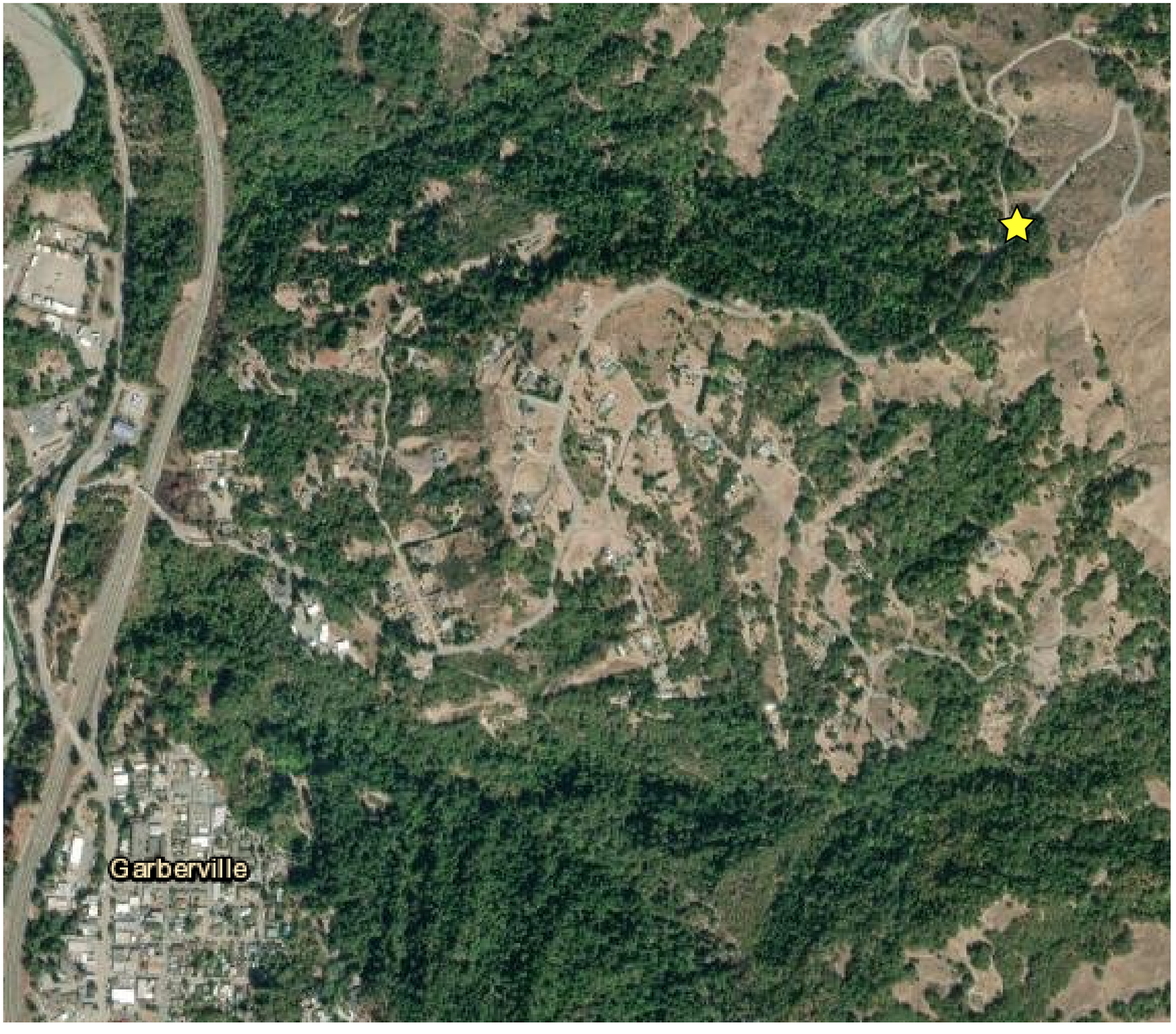
Cost: Lump Sum - $15,000

363 SPROWL CREEK ROAD- PO BOX 573
GARBERVILLE, CALIFORNIA 95542
PHONE 707.223.0311- FAX 707.923.2200

VICINITY MAP

Intersection of Sawmill Road and Alderpoint Road

★ PROJECT LOCATION



Ridge Line Topo Map

Humboldt County Planning and Building Department

0 180 360 720 Feet

0 0.0325 0.065 0.13 Miles

RF= 1:4,514 1 in = 376 ft

N W E S

Printed: October 28, 2022 Web AppBuilder 2.0 for ArcGIS

Highways and Roads

- Principal Arterials
- Minor Arterials
- Major Collectors
- Minor Collectors
- Local Roads
- Private or Unclassified
- Major River or Stream

Blue Line Streams

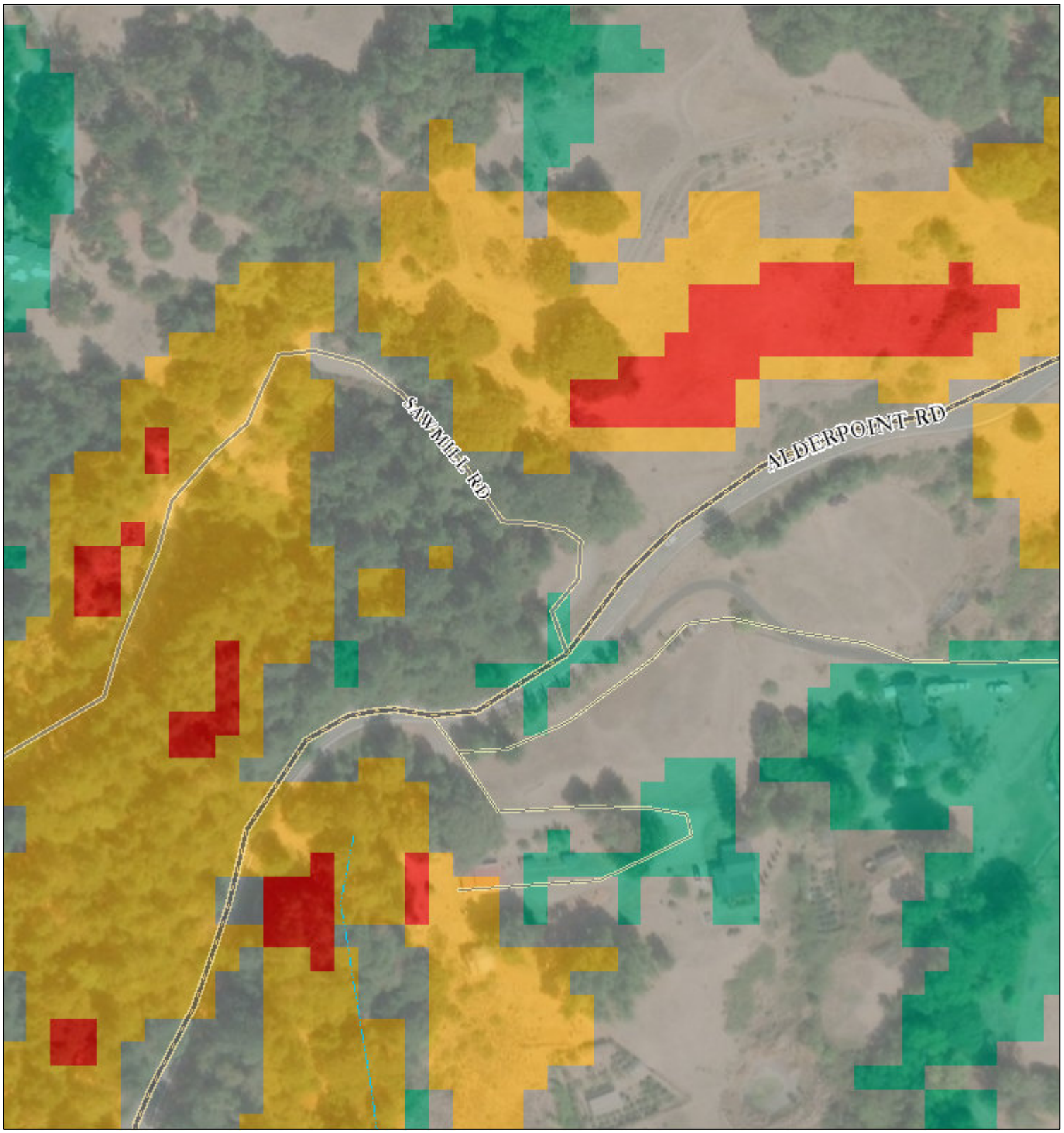
- Perennial 1-3
- Perennial >4
- Intermittent
- Subsurface

Topographic Contours 40ft

- Minor Interval
- Major Interval
- <default layer do not remove>

Map Disclaimer:
While every effort has been made to assure the accuracy of this information, it should be understood that it does not have the force & effect of law, rule, or regulation. Should any difference or error occur, the law will take precedence.

Source: Humboldt County GIS, Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community, FRAP, FEMA, USGS, ESA, CGS, Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community



Ridge Line Slope Map

Humboldt County Planning and Building Department

0 87.5 175 350 Feet

0 0.015 0.03 0.06 Miles

RF= 1:2,257 1 in = 188 ft

N W E S

Highways and Roads

Principal Arterials

Minor Arterials

Major Collectors

Minor Collectors

Local Roads

Private or Unclassified

Major River or Stream

Blue Line Streams

Perennial 1-3

Perennial >4

Intermittent

Subsurface

Slope USGS

15-30%

30 - 50%

+50%

Slope less than 15%

<15%

<default layer do not remove>

Printed: October 28, 2022 Web AppBuilder 2.0 for ArcGIS

Ridgeline Road Improvements- Crossing Photos

Ridgeline Road Improvements- Crossing Photos

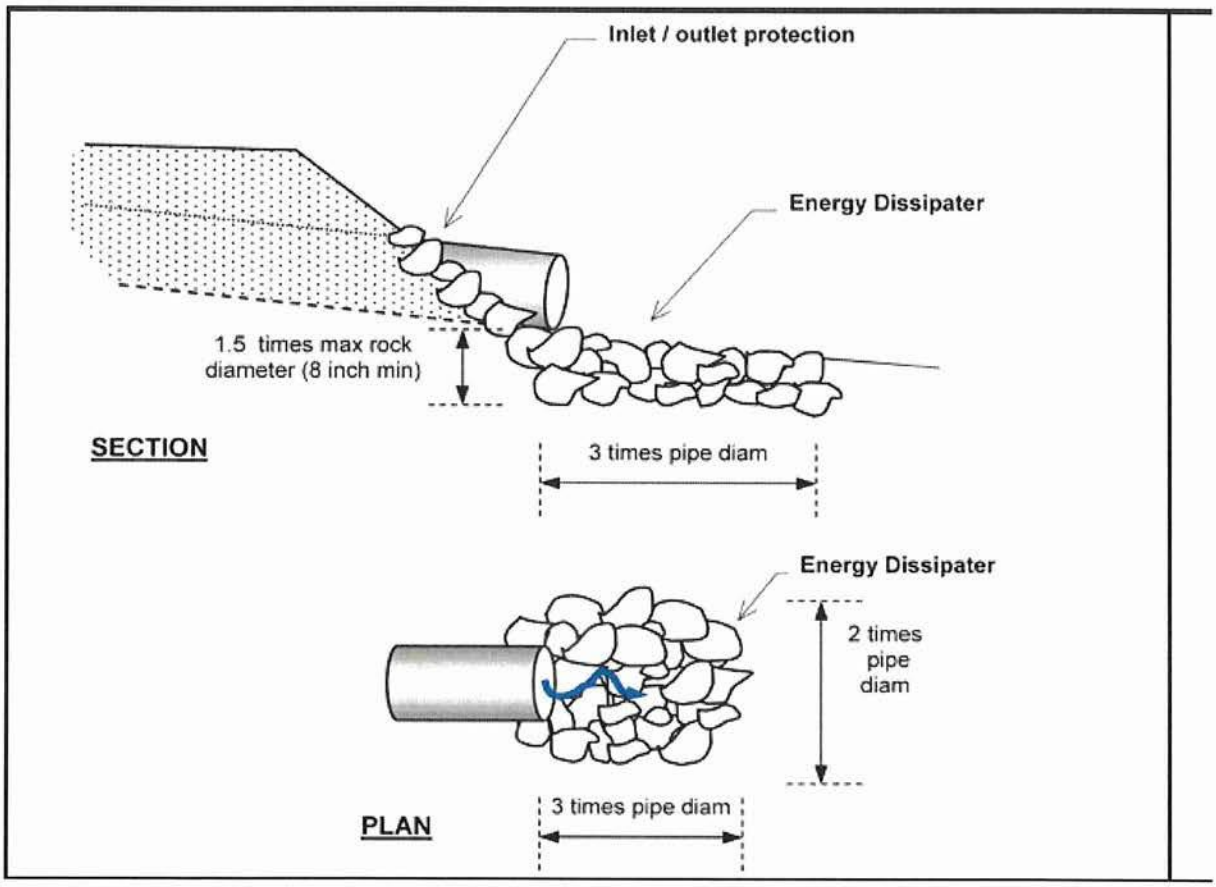
Figure 4 - Site P□otograp□s

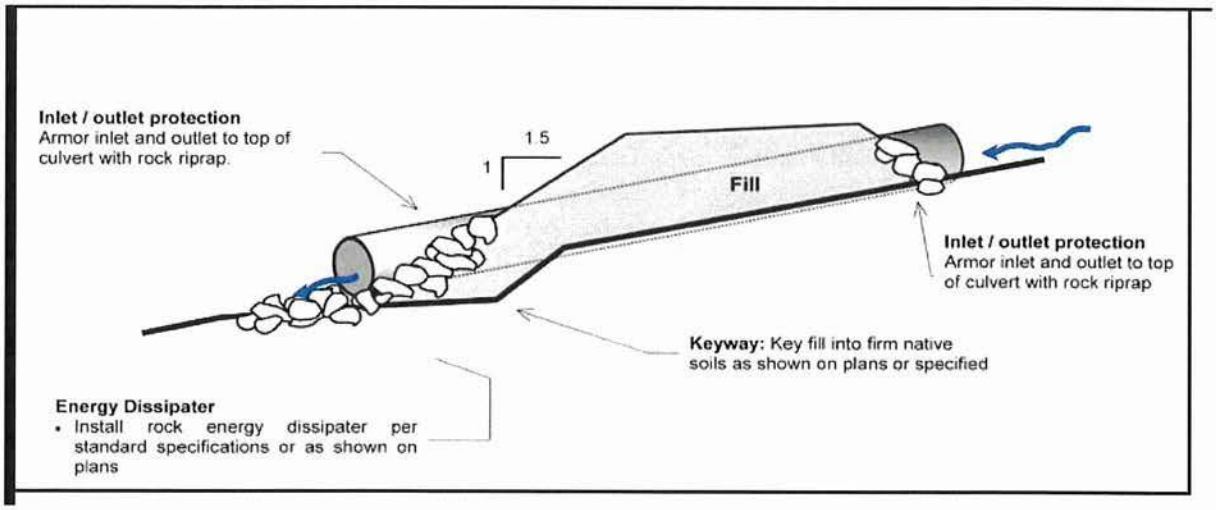
Culvert Installation Specifications

- New culvert installations shall be sized to accommodate a 100-year storm.
- New culverts shall be placed at stream gradient, or have downspouts, or have energy dissipaters at outfall.
  - Align culverts with the natural stream channel orientation to ensure proper function, prevent bank erosion and minimize debris plugging.
  - Place culverts at the base of the fill and at the grade of the original streambed or install a downspout past the base of the fill. Downspouts should only be installed if there are no other options.
  - Culverts should be set slightly below the original stream grade so that the water drops several inches as it enters the pipe.
  - Culvert beds should be composed of rock-free soil or gravel, evenly distributed under the length of the pipe.
  - Compact the base and sidewall material before placing the pipe in its bed.
  - Lay the pipe on a well-compacted base. Poor basal compaction will cause settling or deflection in the pipe and can result in separation at a coupling or rupture in the pipe wall.
  - Backfill material should be free of rocks, limbs or other debris that could dent or puncture the pipe or allow water to seep around the pipe.
  - Cover one end of the culvert pipe, then the other end. Once the ends are secure, cover the center.
  - Tamp and compact backfill material throughout the entire process, using water as necessary for compaction.
  - Backfill compacting will be done in 0.5 – 1.0 foot lifts until 1/3 of the diameter of the culvert has been covered.
  - Push layers of fill over the crossing to achieve the final design road grade, at a minimum of one-third to one-half the culvert diameter.
- Critical dips shall be installed on culvert crossings to eliminate diversion potential.
- Road approaches to crossings shall be treated out to the first drainage structure (i.e. waterbar) or hydrologic divide to prevent transport of sediment.
- Road surfaces and ditches shall be disconnected from streams and stream crossings to the greatest extent feasible. Ditches and road surfaces that cannot be feasible disconnected from streams or stream crossings shall be treated to reduce sediment transport to streams.
- If downspouts are used, they shall be secured to the culvert outlet and shall be secure on fill slopes.
- Culverts shall be long enough so that road fill does not extend or slough past the culvert ends.
- Inlet of culverts and associate fill shall be protected with appropriate measures that extend at least as high as the top of the culvert.
- Outlet of culverts shall be armored with rock if road fill sloughing into channel can occur.
- Armor inlets and outlets with rock, or mulch and seed with grass as needed (not all stream crossings need to be armored).
- Where debris loads could endanger the crossing a debris catchment structure shall be constructed upstream of the culvert inlet.
- Bank and channel armoring may occur when appropriate to provide channel and bank stabilization.

Figure □A - Cul□ert Speci□ications

Culvert Installation Specifications

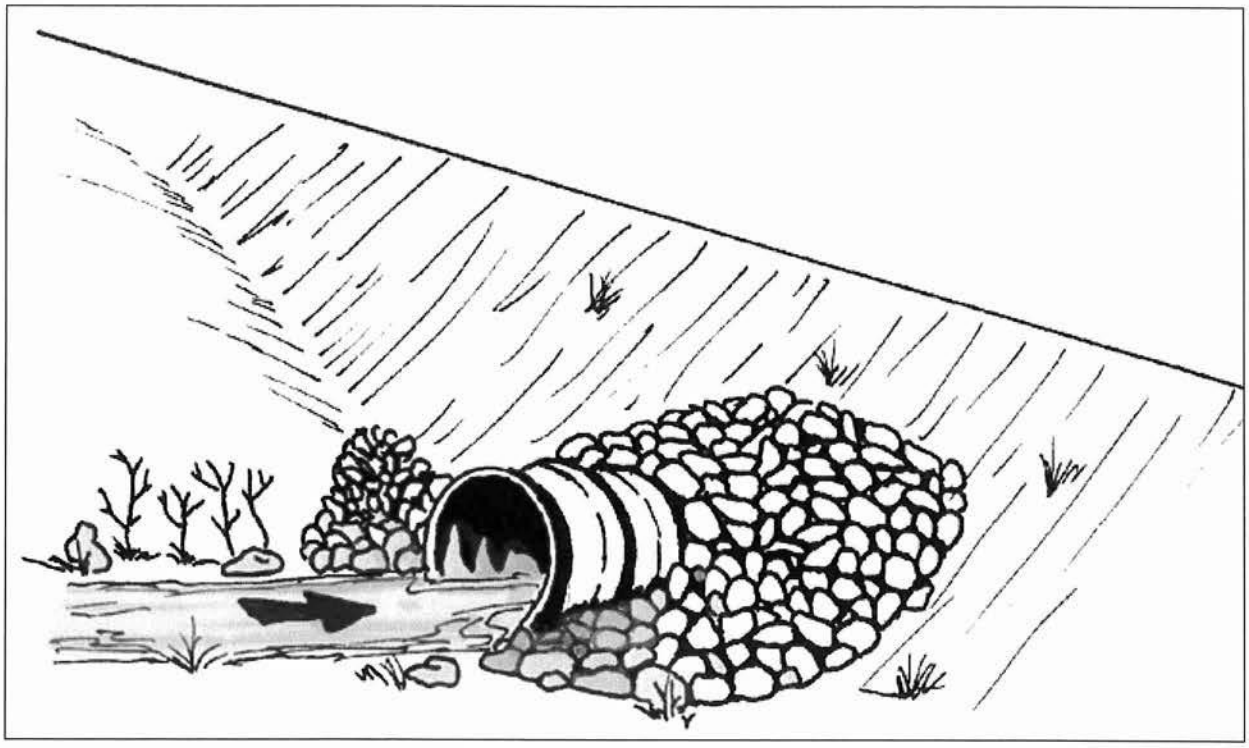




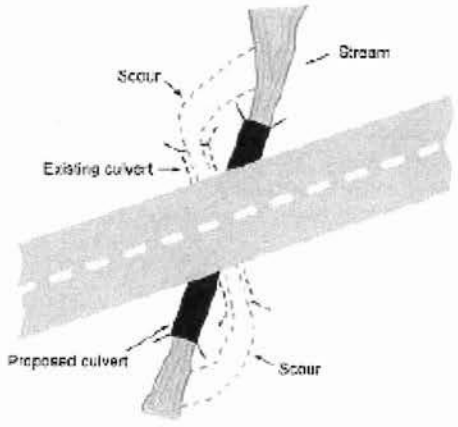
Riprap installed to protect the inlet and outlet of a stream crossing culvert from erosion or for energy dissipation should be keyed into the natural channel bed and banks to an approximate depth of about 1.5x the maximum rock thickness. Riprap should be placed at least up to the top of the culvert at both the inlet and outlet to protect them from splash erosion and to trap any sediment eroded from the newly constructed fill slope above.

Figure □□ - Cul□ert Speci□ications

Culvert Installation Specifications



Rock armor used for inlet and outlet protection (i.e., not as energy dissipation) does not have to be sized to protect against high velocity scour. If the culvert is properly sized and its length is adequate, it should be able to transmit flood flows without scouring the inlet or eroding the outlet around the culvert. Armor shown here is designed to protect the culvert outlet and basal fill from splash erosion and from occasional submergence and currents within standing water (at the inlet) when the culvert plugs. Importantly, inlet and outlet armor also serves to trap sediment that has been eroded or slides down the new constructed fill face in its first several years, until the slope becomes well vegetated.

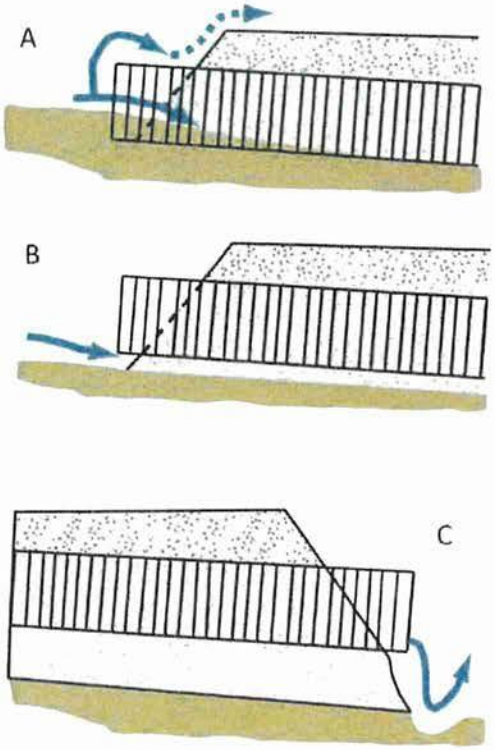


HANDBOOK FOR FOREST, RANCH AND RURAL ROADS

FIGURE 97. *Culvert alignment should be in relation to the stream and not the road. It is important that the stream enters and leaves the culvert in a relatively straight horizontal alignment so streamflow does not have to turn to enter the inlet or discharge into a bank as it exits. This figure shows a redesigned culvert installation that replaces the bending alignment that previously existed. Channel turns at the inlet increase plugging potential because wood going through the turn will not align with the inlet. Similarly, channel turns at the inlet and outlet are often accompanied by scour against the channel banks (Wisconsin Transportation Information Center, 2004).*

Figure □C - Cul□ert Speci□ications

Culvert Installation Specifications



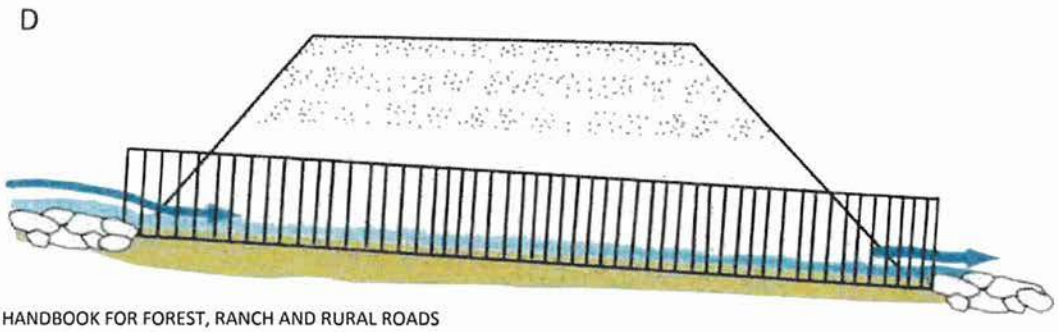


FIGURE 155. *Proper culvert installation involves correct culvert orientation, setting the pipe slightly below the bed of the original stream, and backfilling and compacting the fill as it is placed over the culvert. Installing the inlet too low in the stream (A) can lead to culvert plugging, yet if set too high (B) flow can undercut the inlet. If the culvert is placed too high in the fill (C), flow at the outfall will erode the fill. Placed correctly (D), the culvert is set slightly below the original stream grade and protected with armor at the inlet and outlet. Culverts installed in fish-bearing stream channels must be inset into the streambed sufficiently (>25% embedded) to have a natural gravel bottom throughout the culvert (Modified from: MDSL, 1991).*

HANDBOOK FOR FOREST, RANCH AND RURAL ROADS

Figure D - Culvert Specifications

Distance to Nearest Adjoining Parcel Primary Stucture & Adjoing Parcel Use Code Descriptions

Ridge Line Project Area Map

Humboldt County Planning and Building Department

0 350 700 1,400 Feet

0 0.05 0.1 0.2 Miles

RF= 1:9,028 1 in = 752 ft

N W E S

Highways and Roads

- Principal Arterials
- Minor Arterials
- Major Collectors
- Minor Collectors
- Local Roads
- Private or Unclassified
- Major River or Stream

Blue Line Streams

- Perennial 1-3
- Perennial >4
- Intermittent
- Subsurface
- City Boundary
- Counties
- Parcels
- Parcels (no APN labels)

Printed: October 31, 2022 Web AppBuilder 2.0 for ArcGIS

Figure □ - Adjacent Parcels

APPLICATION PACKET CHECKLIST

Please check below to ensure you have a complete application. Once complete, email the following documents, in pdf format with the text "Application for Remediation Grant Program Funding" in the subject line to mrichardson@co.humboldt.ca.us.

- X Signed Application Submission Form
- X Project Description – Summary of the Project, up to 2 pages.
- X Plot Plan
- X Plot Plan Checklist – Attached
- X Cross sections of proposed work including topographic elevations
- X Scope of Work – Detailed Description of Work
- X Schedule for Completion – Identify Milestones
- X Erosion Control Plan and Monitoring Plan
- X Budget – Be as specific as possible – sample attached
- X Project Maps and Figures
- ☐Letter(s) of Support (optional)

APPLICATION FORM - Commercial Cannabis Land Use Ordinance Mitigation and Remediation Fund Program

Project Title: Ridge Line Road Improvements (4 of 4) Date of Application: 10/31/2022

Applicant Names: Pitilina Corporation

Project APN: Intersection of Sawmill Road & Alderpoint Road

Contact Person Name and Title: Pitt Varbano

Contact Phone: (773) 724-1590 Contact Email: gvarbanova71@gmail.com

Contact Address: 328 Skyway Rd Garberville, CA 95542

Amount Requested: $3,980.00 Total Budget: $16,225.00

Project Timeline: Start Date: 04/01/2023 End Date: 08/01/2023

Signature of Applicant: Pitt

Project: Ridge Line Road Improvements (4 of 4)

Applicants: Pitilina Corporation

Contact: Pitt Varbano

Project Location: Intersection of Sawmill Road & Alderpoint Road

Grant Funding Requested: $3,980.00

Project Description

The project is located at the intersection of Sawmill Road and Alderpoint Road, near the start of a tributary which flows directly into the Bear Canyon waterway which leads to the South Fork Eel River, in Garberville, California.

This project proposes the removal of asphalt, replacement of a failing undersized culvert, and repaving as required by the Humboldt County Department of Public Works. This is a project among four participating applicants:

1. Ridgeline Farms, LLC
2. Sky High Humboldt LLC
3. Tan Oak Farms LLC
4. Pitilina Corporation

All four applicants have County Compliance Agreements which require the access road that intersects with Alderpoint Road (a County maintained road) to be paved for a minimum width of 20 feet and a length of 50 feet at the intersection. The failing culvert lies below this area.

Humboldt GIS indicates the site is located in a section of the county with high slope instability, although it is not within a flood hazard zone, nor in an earthquake hazard zone. The site is in a 15-30% slope zone, with slopes higher than 50% just north of it and between 30-50% below it. This increases the potential for gravity imposed debris and sediment carry within the waterway below the culvert if not properly armored, sized, and maintained.

This project would storm-proof the stream crossing for a 100 year flood event and reduce the potential for road-related sediment delivery into the unnamed tributary and down to the Bear Canyon waterway. The upgraded stream crossing will protect water quality and aquatic ecosystems, limiting the impact on downstream resources. The

crossing upgrade will be maintained according to standards provided in the “Handbook for Forest, Ranch and Rural Roads” (Weaver, Weppner and Hagans, 2015), and the California Salmonid Stream Habitat Manual, Part X (Weaver, Hagans and Weppner, 2006) by a licensed contractor.

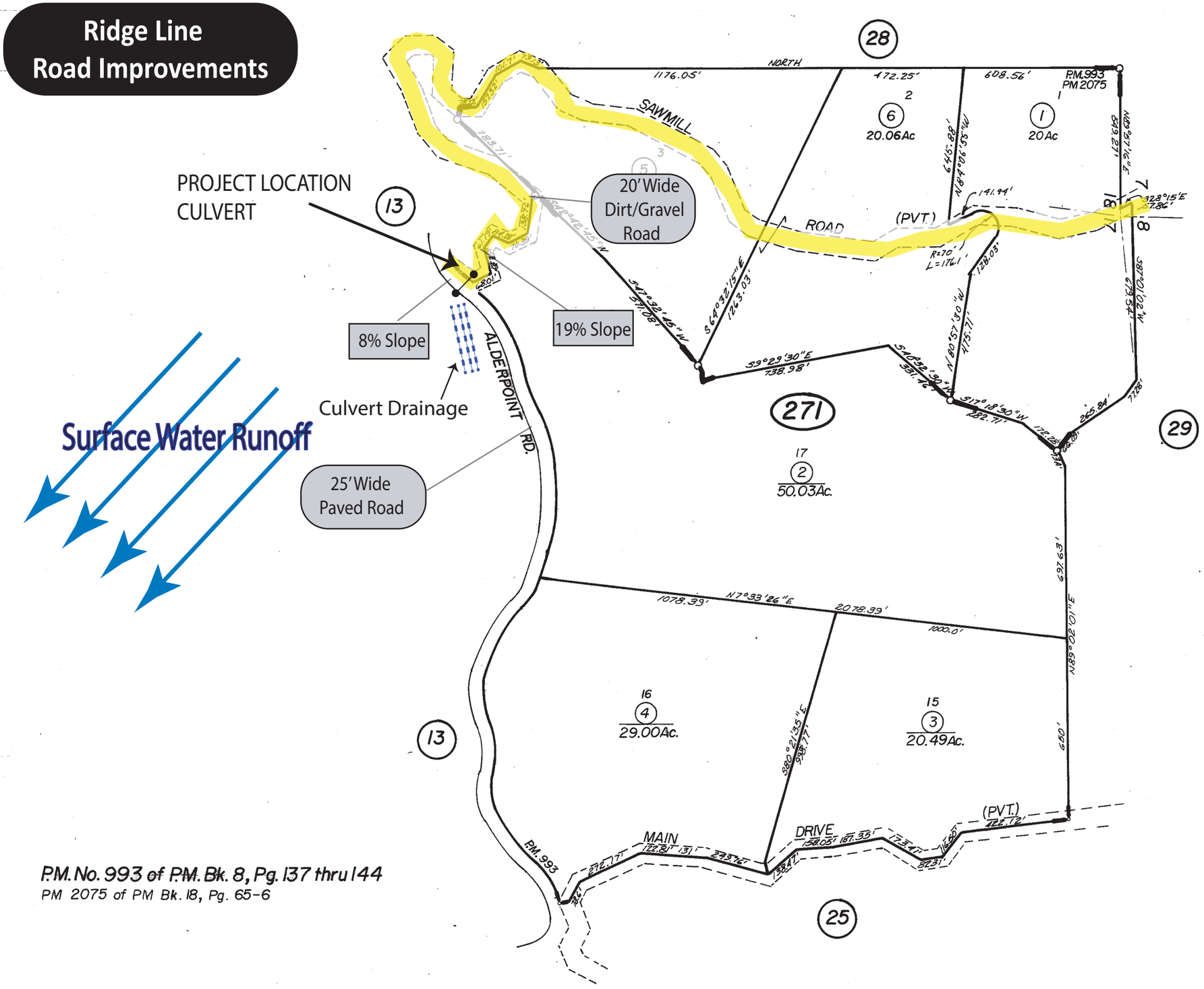
As this is a repair of an existing infrastructure, there will be no permanent impacts to existing native channel bed, channel, watercourse banks, or associated riparian habitat. Incidental destruction of small areas of riparian habitat growing on existing road fill or in disturbed channel areas will be minimized during remediation. No loss of trees is expected. The site is surrounded by rural improved properties. No impact to these parcels is expected.

POR. NE 1/4 SEC. 18 & NW 1/4 SEC. 17, T. 4 S., R. 4 E., H.B.&M.

223-27

1" = 400'

Ridge Line Road Improvements



Sawmill Road

P.M. No. 993 of P.M. Bk. 8, Pg. 137 thru 144
PM 2075 of PM Bk. 18, Pg. 65-6

Assessor's Map Bk. 223-Pg. 27
County of Humboldt, Calif.

REV. 10/30/2022

PLOT PLAN AND TENTATIVE MAP CHECKLIST

The following information must be shown on your plot plan or tentative map. Please check ✓ the box to the left of the items shown on the plot plan or tentative map. If any item is not on your site to your knowledge, write "N/A" next to the box. Plot plans shall be drawn on a minimum size sheet of 8-1/2" x 11", and tentative subdivision maps on a minimum size sheet of 18" x 26". ***Note: This Checklist must be completed by the applicant and submitted with your application.***

Applicant's Name Ridge Line Road I□ pro□e□ents APN Intersection o□Sa□□ill Rd□ Alderpoint Rd□

_____

FOR ALL PROJECTS

☐		1.	Name of applicant(s)
☐		2.	Location or vicinity map (on or attached to the plot plan)
☐		3.	The subject parcel (show entire parcel with dimensions)
☐		4.	Date, north arrow and scale
☐		5.	Name, County road numbers, and width of all existing and proposed access roadways adjacent to or within the subject parcel (indicate width of traveled way, grade (in % slope), and surface)
☐	□A	6.	Existing and proposed improvements (label as "existing" and "proposed" with dimensions and distance to nearest two (2) property lines)
	□A	☐ a.	Structures and buildings (include floor area, height and proposed use)
	□A	☐ b.	Driveways and turnaround areas (indicate width, grade (in % slope) and surface)
	□A	☐ c.	Utility lines (electric, gas, telephone, sewer, water, and cable TV)
	□A	☐ d.	Septic tanks and leachfields (label primary/reserve areas and test holes)
	□A	☐ e.	Wells
	□A	☐ f.	Parking and loading areas (show individual parking spaces, including handicapped parking and ramps)
	□A	☐ g.	Storm drains, curbs and gutters
	□A	☐ h.	Emergency water storage tanks and fire hydrants
	□A	☐ i.	Landscaped areas (include proposed exterior lighting)
	□A	☐ j.	Major vegetation (identify mature trees (12" dbh or larger) to be removed)
	□A	☐ k.	Diked areas
	□A	☐ l.	Proposed grading and fill (estimate volume)
	□A	☐ m.	Signs (indicate size, illuminated, and design (e.g., monument, pylon, etc.))
	□A	☐ n.	Other - specify _____ _____
☐		7.	Direction of surface water runoff
☐	□A	8.	Location and width of all existing and proposed easements of record
☐	□A	9.	Hazardous areas (indicate on map if on the project site or within 400 feet of the project site):
	□A	☐ a.	Areas subject to inundation or flooding
	□A	☐ b.	Steep or unstable slopes
	□A	☐ c.	Expansive (clay) soils
	□A	☐ d.	Earthquake faults
	□A	☐ e.	Hazardous waste or substance sites
		☐ f.	Other - specify _____
☐		10.	Sensitive habitat areas (indicate on map if on project site or within 400 feet of the project site):
		☐ a.	Creeks, rivers, sloughs and other drainage courses
	□A	☐ b.	Lakes, ponds, marshes, or "wet" meadows
	□A	☐ c.	Beaches
	□A	☐ d.	Sand dunes
		☐ e.	Other - specify _____
☐	□A	11.	Historical buildings or known archaeological or paleontological resources
☐		12.	Land use and buildings on adjacent parcels, and approximate distances to closest property lines

FOR LOT LINE ADJUSTMENT PLOT PLANS ONLY

☐	□A	13.	Proposed new lines and lines to be eliminated (show lines to be eliminated as dashed)
☐	□A	14.	Areas (in square footage or acreage) of the initial and resulting parcels

FOR TENTATIVE SUBDIVISION MAPS ONLY

☐	□A	16.	Approximate dimensions and areas of all proposed lots
☐	□A	17.	A statement that "All easements of record are shown on the tentative map and will appear on the recorded subdivision map"
☐	□A	18.	Contour lines (at _____ intervals)
☐	□A	19.	For major subdivisions (5 or more parcels): proposed drainage improvements, details of any grading to be performed, approximate radii of all roadway curves, areas for public use, and typical sections of all streets, highways, ways and alleys
☐	□A	20.	Names and assessor's parcel numbers of all contiguous ownerships

NOTE: THE SUBMITTAL OF INCOMPLETE OR ILLEGIBLE PLOT PLANS OR TENTATIVE MAPS WILL CAUSE DELAYS IN THE PROCESSING OF YOUR APPLICATION

Project: Ridge Line Road Improvements (4 of 4)

Applicants: Pitilina Corporation

Contact: Pitt Varbano

Project Location: Intersection of Sawmill Road & Alderpoint Road

Grant Funding Requested: $3,980.00

Scope of Work

The project is for a culvert upgrade and repaving at the intersection of Sawmill Road and Alderpoint Rd, as required by Humboldt County Public Works.

Crossing: The site's existing culvert is deteriorated, placed incorrectly, and undersized to Humboldt County Public Works specifications. It will be replaced with a 18" HDPE double wall plastic pipe.

The proposed construction uses the open trench method as the only viable approach, due to an existing fiber optic line in the vicinity. The existing asphalt will be cut, the fiber line will be located (by hand), existing pipe will be removed and replaced with the new pipe at the correct angle. Then backfill will be compacted and asphalt repaved.

The project requires heavy equipment and new materials. The work will be completed by Van Meter Construction, license number #854560. Prior to starting project operations, the applicants will obtain an encroachment permit from the County.

Margro Advisors will work with the applicants on maintaining compliance with local and State regulations, and provide support for the project's grant administration and reporting, as needed.

Project: Ridge Line Road Improvements (4 of 4)

Applicants: Pitilina Corporation

Contact: Pitt Varbano

Project Location: Intersection of Sawmill Road & Alderpoint Road

Grant Funding Requested: $3,980.00

Mitigation and Remediation Fund
Schedule for Completion

Milestone	Start Date	End Date
Final Project Design	April 1, 2023	April 30, 2023
Bidding and Contracting	May 1, 2023	May 31, 2023
Project Ground-Breaking	June 1, 2023	
Project Completion		August 1, 2023
Monitoring	August 1, 2023	Ongoing

Project: Ridge Line Road Improvements (4 of 4)

Applicants: Pitilina Corporation

Contact: Pitt Varbano

Project Location: Intersection of Sawmill Road & Alderpoint Road

Grant Funding Requested: $3,980.00

Erosion Control and Monitoring Plan

The project participants will collaborate to ensure the intersection, culvert, and waterway are properly maintained. Prior to the winter season and significant storm events, the roadway, culvert, and channel will be inspected and monitored to ensure the facility is performing properly in preventing runoff and sediment into the waterway.

If potential issues are discovered in or around the site during or immediately following a storm event, they will be corrected as soon as possible to ensure minimal impact and prevent sediment flow in the future. This will include removal of obstruction or debris, proper ditching and vegetation buffers, and as needed, placement of straw, seed, wattles, jute cloth, riprap, or other industry standards used to prevent and eliminate runoff.

If issues are discovered related to the county maintained areas of the intersection, temporary measures will be used when possible to minimize impacts. The issue will then be reported immediately to the Department of Public Works.

Project: Ridge Line Road Improvements (4 of 4)

Applicants: Pitilina Corporation

Contact: Pitt Varbano

Project Location: Intersection of Sawmill Road & Alderpoint Road

Grant Funding Requested: $3,980.00

Total Budget: $16,225.00

Project Budget

Item	Grant Funds	Other Funds (Source)
Permit Fees		
Encroachment Permit		$305.00 (Neighbors)
Consultant and Professional Fees		
Margro Advisors	$230.00	$690.00 (Neighbors)
*Materials, Equipment and Labor**		
Van Meter Construction	$3,750.00	$11,250.00 (Neighbors)
Totals	**$3,980.00**	**$12,245.00**

*See attached bid

VAN METER LOGGING, INC.
dba Van Meter Construction

Proposal
Ridgeline Farms/ Gellman

Problem: Existing cross drain culvert is deteriorated, placed incorrectly, and undersized for Humboldt county public works specifications.

Proposed solution: replace existing undersized pipe with a 18" HDPE double wall plastic pipe.

Proposed method of replacement: Due to the known existing fiber optic line in the vicinity the open trench method is the only viable solution. We propose to saw cut the existing asphalt, locate the existing fiber line (by hand), remove the existing pipe, place the new pipe at the correct angle, compact the backfill, and repave

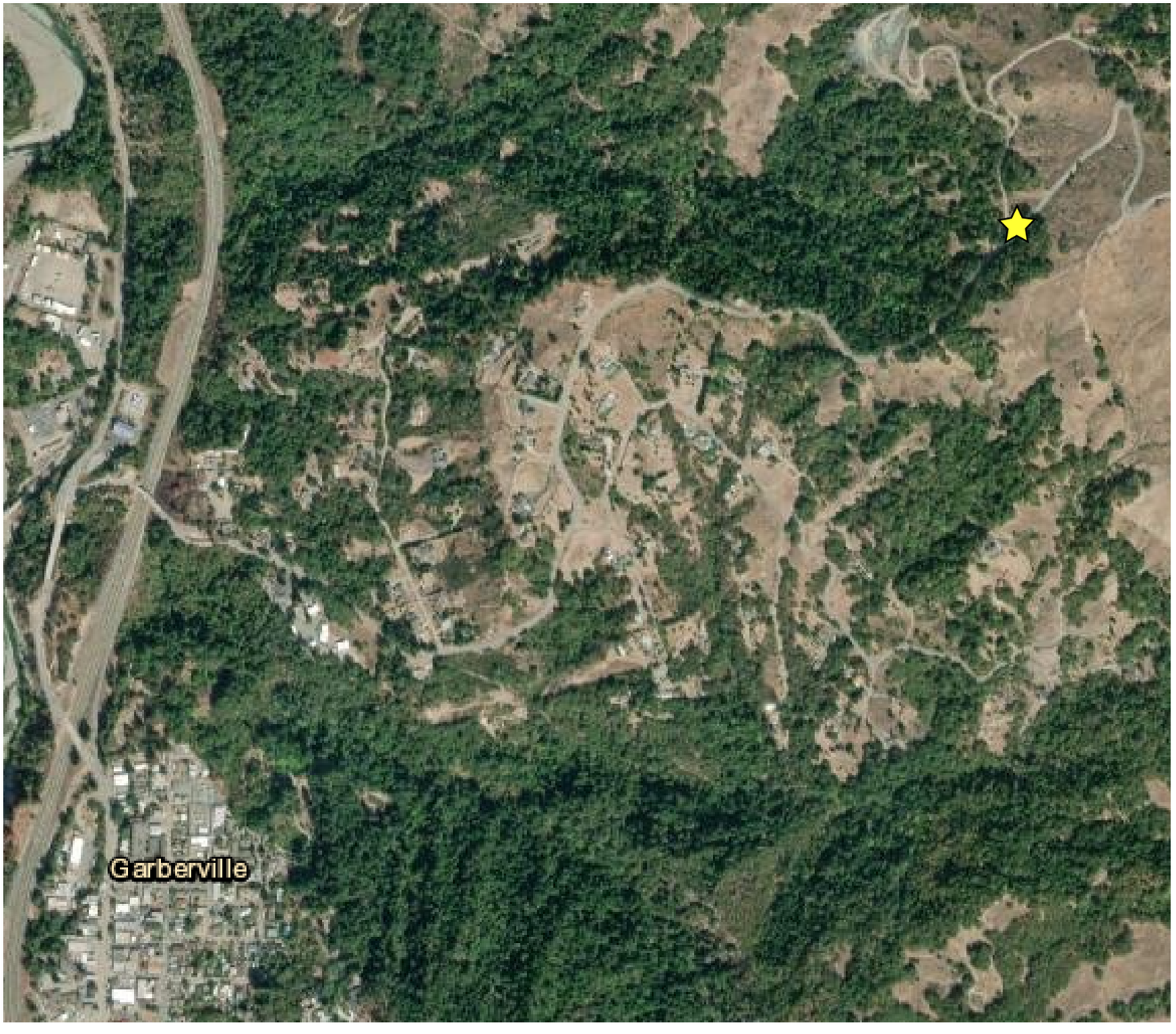
Cost: Lump Sum - $15,000

363 SPROWL CREEK ROAD- PO BOX 573
GARBERVILLE, CALIFORNIA 95542
PHONE 707.223.0311- FAX 707.923.2200

VICINITY MAP

Intersection of Sawmill Road and Alderpoint Road

★ PROJECT LOCATION



Ridge Line Topo Map

Humboldt County Planning and Building Department

0 180 360 720 Feet

0 0.0325 0.065 0.13 Miles

RF= 1:4,514 1 in = 376 ft

N W E S

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Highways and Roads

- Principal Arterials
- Minor Arterials
- Major Collectors
- Minor Collectors
- Local Roads
- Private or Unclassified
- Major River or Stream

Blue Line Streams

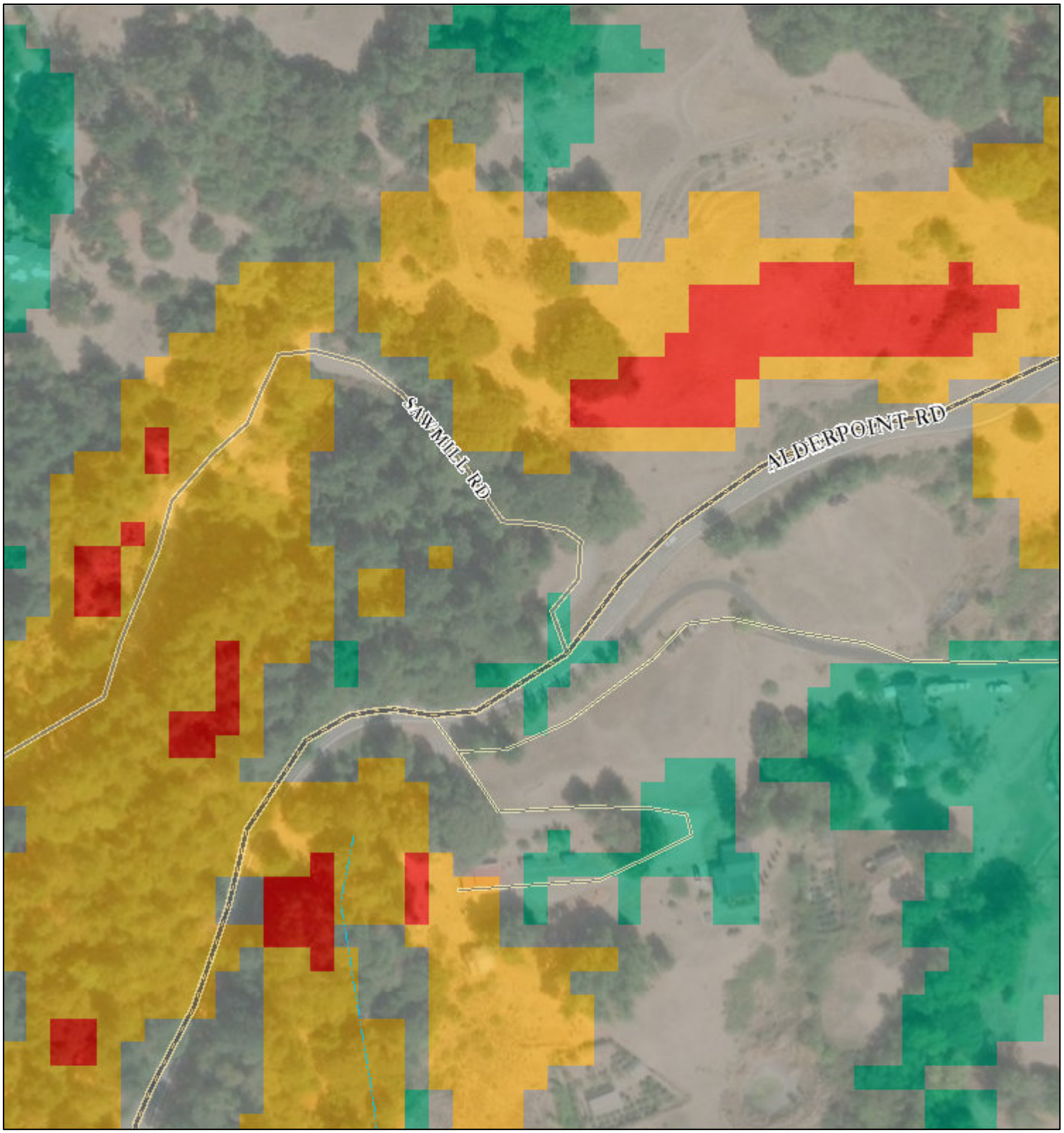
- Perennial 1-3
- Perennial >4
- Intermittent
- Subsurface

Topographic Contours 40ft

- Minor Interval
- Major Interval
- <default layer do not remove>

Map Disclaimer:
While every effort has been made to assure the accuracy of this information, it should be understood that it does not have the force & effect of law, rule, or regulation. Should any difference or error occur, the law will take precedence.

Source: Humboldt County GIS, Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community, FRAP, FEMA, USGS, ESA, CGS, Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community



Ridge Line Slope Map

Humboldt County Planning and Building Department

0 87.5 175 350 Feet

0 0.015 0.03 0.06 Miles

RF= 1:2,257 1 in = 188 ft

N W E S

Highways and Roads

Principal Arterials

Minor Arterials

Major Collectors

Minor Collectors

Local Roads

Private or Unclassified

Major River or Stream

Blue Line Streams

Perennial 1-3

Perennial >4

Intermittent

Subsurface

Slope USGS

15-30%

30 - 50%

+50%

Slope less than 15%

<15%

<default layer do not remove>

Printed: October 28, 2022 Web AppBuilder 2.0 for ArcGIS

Ridgeline Road Improvements- Crossing Photos

Ridgeline Road Improvements- Crossing Photos

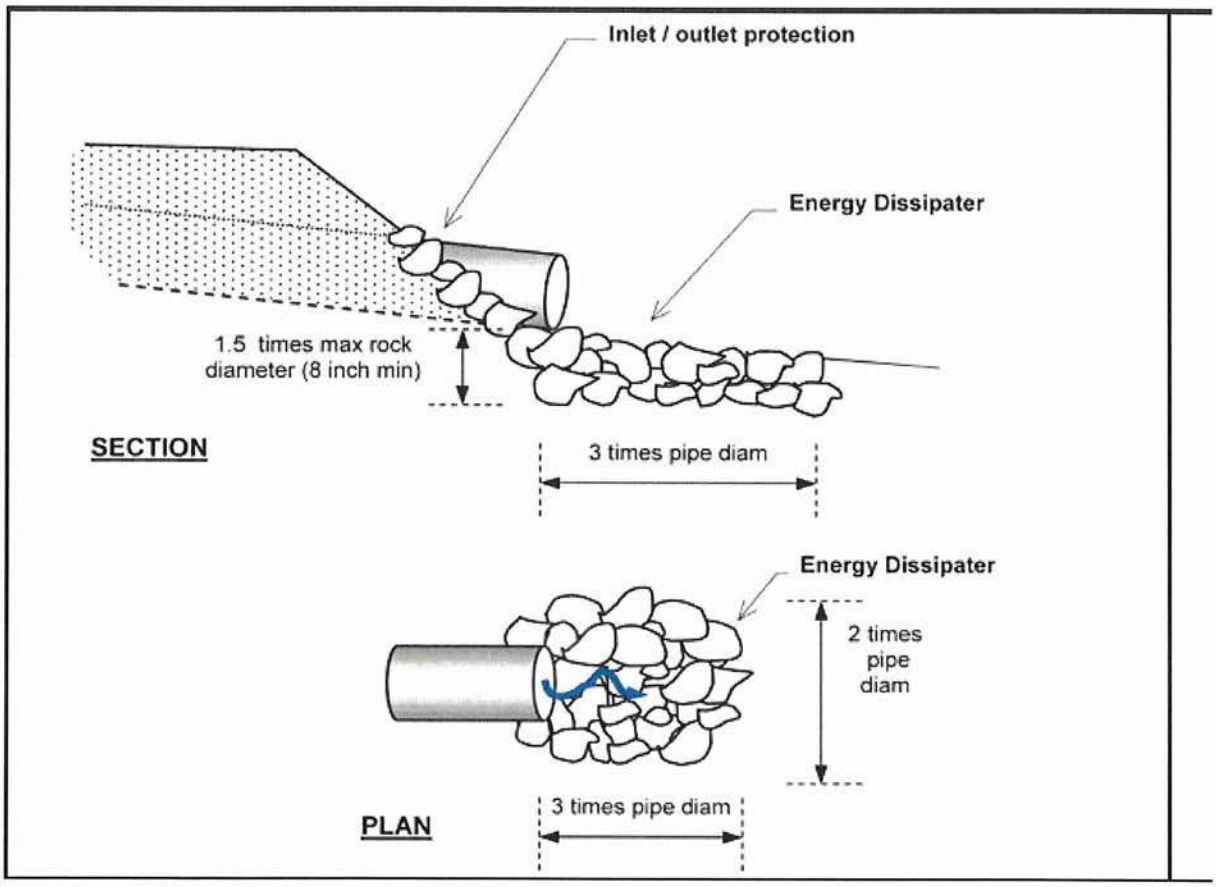
Figure 4 - Site P□otograp□s

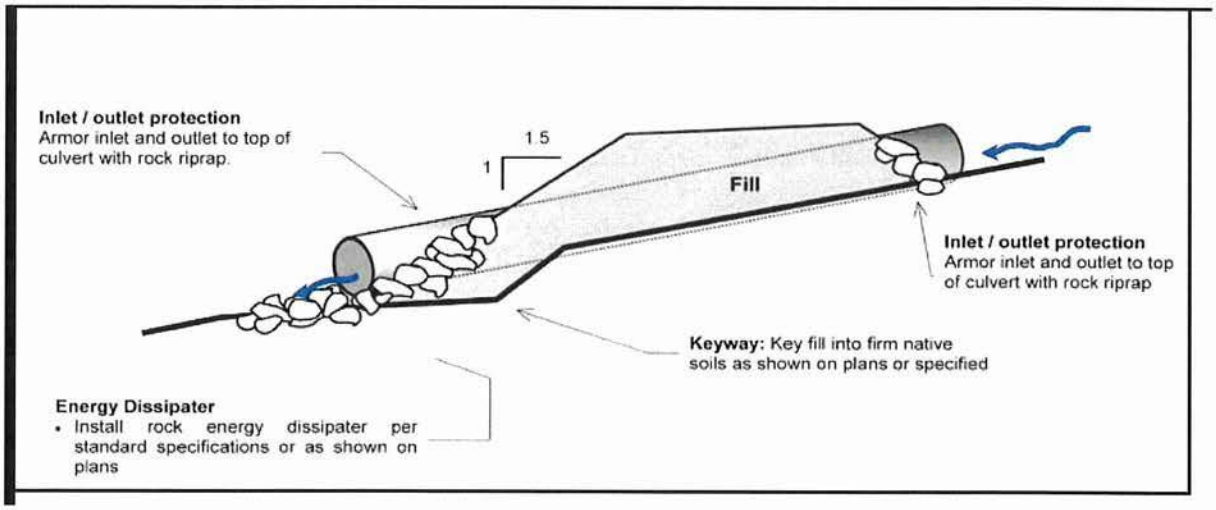
Culvert Installation Specifications

- New culvert installations shall be sized to accommodate a 100-year storm.
- New culverts shall be placed at stream gradient, or have downspouts, or have energy dissipaters at outfall.
  - Align culverts with the natural stream channel orientation to ensure proper function, prevent bank erosion and minimize debris plugging.
  - Place culverts at the base of the fill and at the grade of the original streambed or install a downspout past the base of the fill. Downspouts should only be installed if there are no other options.
  - Culverts should be set slightly below the original stream grade so that the water drops several inches as it enters the pipe.
  - Culvert beds should be composed of rock-free soil or gravel, evenly distributed under the length of the pipe.
  - Compact the base and sidewall material before placing the pipe in its bed.
  - Lay the pipe on a well-compacted base. Poor basal compaction will cause settling or deflection in the pipe and can result in separation at a coupling or rupture in the pipe wall.
  - Backfill material should be free of rocks, limbs or other debris that could dent or puncture the pipe or allow water to seep around the pipe.
  - Cover one end of the culvert pipe, then the other end. Once the ends are secure, cover the center.
  - Tamp and compact backfill material throughout the entire process, using water as necessary for compaction.
  - Backfill compacting will be done in 0.5 – 1.0 foot lifts until 1/3 of the diameter of the culvert has been covered.
  - Push layers of fill over the crossing to achieve the final design road grade, at a minimum of one-third to one-half the culvert diameter.
- Critical dips shall be installed on culvert crossings to eliminate diversion potential.
- Road approaches to crossings shall be treated out to the first drainage structure (i.e. waterbar) or hydrologic divide to prevent transport of sediment.
- Road surfaces and ditches shall be disconnected from streams and stream crossings to the greatest extent feasible. Ditches and road surfaces that cannot be feasible disconnected from streams or stream crossings shall be treated to reduce sediment transport to streams.
- If downspouts are used, they shall be secured to the culvert outlet and shall be secure on fill slopes.
- Culverts shall be long enough so that road fill does not extend or slough past the culvert ends.
- Inlet of culverts and associate fill shall be protected with appropriate measures that extend at least as high as the top of the culvert.
- Outlet of culverts shall be armored with rock if road fill sloughing into channel can occur.
- Armor inlets and outlets with rock, or mulch and seed with grass as needed (not all stream crossings need to be armored).
- Where debris loads could endanger the crossing a debris catchment structure shall be constructed upstream of the culvert inlet.
- Bank and channel armoring may occur when appropriate to provide channel and bank stabilization.

Figure □A - Cul□ert Speci□ications

Culvert Installation Specifications

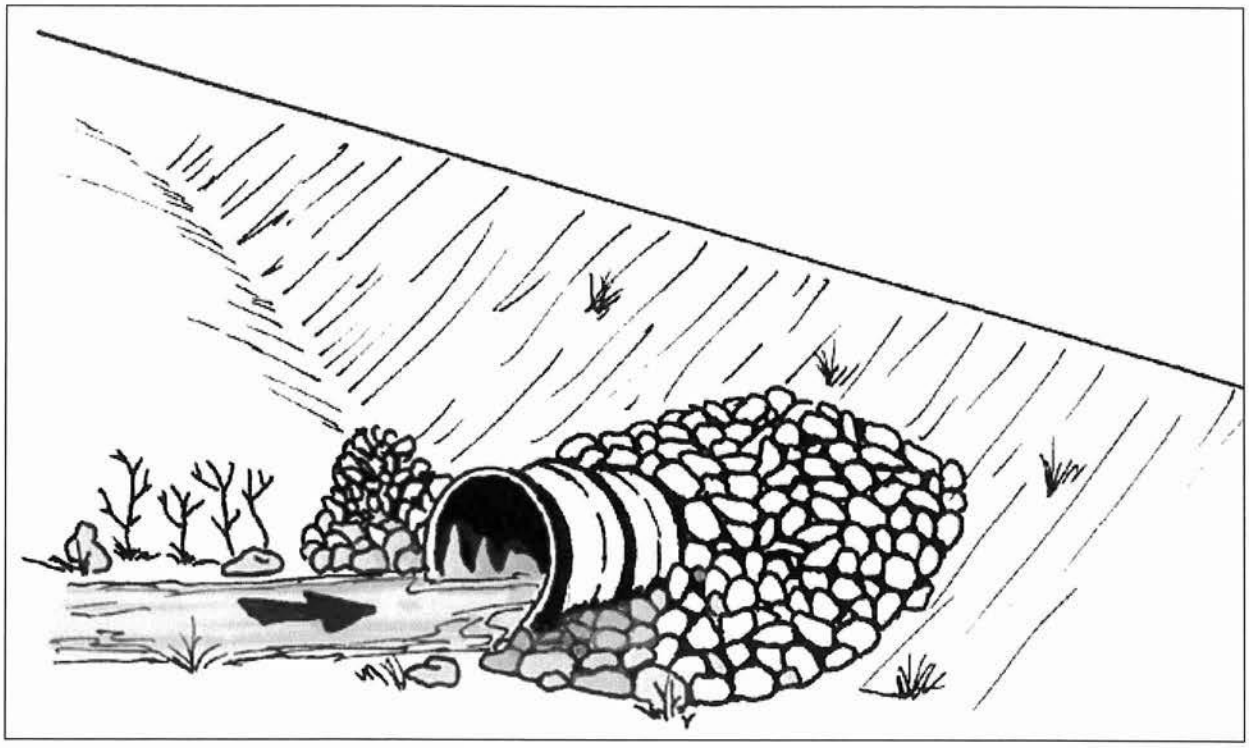




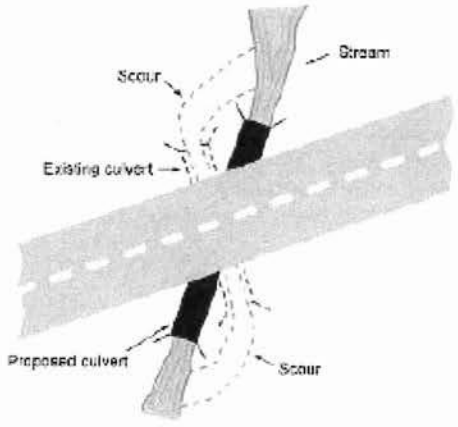
Riprap installed to protect the inlet and outlet of a stream crossing culvert from erosion or for energy dissipation should be keyed into the natural channel bed and banks to an approximate depth of about 1.5x the maximum rock thickness. Riprap should be placed at least up to the top of the culvert at both the inlet and outlet to protect them from splash erosion and to trap any sediment eroded from the newly constructed fill slope above.

Figure □□ - Cul□ert Speci□ications

Culvert Installation Specifications



Rock armor used for inlet and outlet protection (i.e., not as energy dissipation) does not have to be sized to protect against high velocity scour. If the culvert is properly sized and its length is adequate, it should be able to transmit flood flows without scouring the inlet or eroding the outlet around the culvert. Armor shown here is designed to protect the culvert outlet and basal fill from splash erosion and from occasional submergence and currents within standing water (at the inlet) when the culvert plugs. Importantly, inlet and outlet armor also serves to trap sediment that has been eroded or slides down the new constructed fill face in its first several years, until the slope becomes well vegetated.

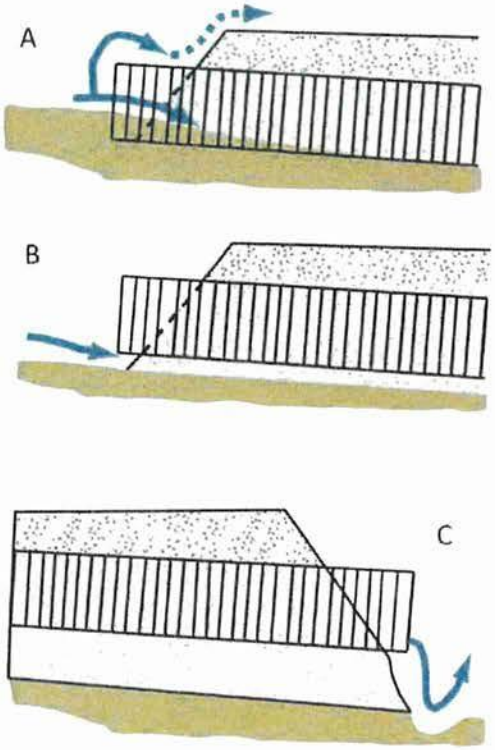


HANDBOOK FOR FOREST, RANCH AND RURAL ROADS

FIGURE 97. *Culvert alignment should be in relation to the stream and not the road. It is important that the stream enters and leaves the culvert in a relatively straight horizontal alignment so streamflow does not have to turn to enter the inlet or discharge into a bank as it exits. This figure shows a redesigned culvert installation that replaces the bending alignment that previously existed. Channel turns at the inlet increase plugging potential because wood going through the turn will not align with the inlet. Similarly, channel turns at the inlet and outlet are often accompanied by scour against the channel banks (Wisconsin Transportation Information Center, 2004).*

Figure □C - Cul□ert Speci□ications

Culvert Installation Specifications



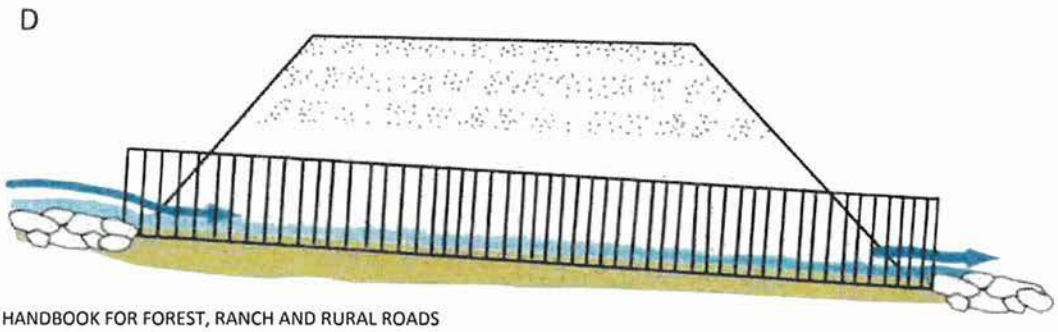


FIGURE 155. *Proper culvert installation involves correct culvert orientation, setting the pipe slightly below the bed of the original stream, and backfilling and compacting the fill as it is placed over the culvert. Installing the inlet too low in the stream (A) can lead to culvert plugging, yet if set too high (B) flow can undercut the inlet. If the culvert is placed too high in the fill (C), flow at the outfall will erode the fill. Placed correctly (D), the culvert is set slightly below the original stream grade and protected with armor at the inlet and outlet. Culverts installed in fish-bearing stream channels must be inset into the streambed sufficiently (>25% embedded) to have a natural gravel bottom throughout the culvert (Modified from: MDSL, 1991).*

HANDBOOK FOR FOREST, RANCH AND RURAL ROADS

Figure D - Culvert Specifications

Distance to Nearest Adjoining Parcel Primary Stucture & Adjoing Parcel Use Code Descriptions

Ridge Line Project Area Map

Humboldt County Planning and Building Department

0 350 700 1,400 Feet

0 0.05 0.1 0.2 Miles

RF= 1:9,028 1 in = 752 ft

N W E S

Highways and Roads

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- Subsurface
- City Boundary
- Counties
- Parcels
- Parcels (no APN labels)

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Figure □ - Adjacent Parcels

APPLICATION PACKET CHECKLIST

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- X Plot Plan
- X Plot Plan Checklist – Attached
- X Cross sections of proposed work including topographic elevations
- X Scope of Work – Detailed Description of Work
- X Schedule for Completion – Identify Milestones
- X Erosion Control Plan and Monitoring Plan
- X Budget – Be as specific as possible – sample attached
- X Project Maps and Figures
- ☐Letter(s) of Support (optional)

APPLICATION FORM - Commercial Cannabis Land Use Ordinance Mitigation and Remediation Fund Program

Project Title: Ridge Line Road Improvements (2 of 4) Date of Application: 10/31/2022

Applicant Name: Sky High Humboldt LLC

Project APN: Intersection of Sawmill Road & Alderpoint Road

Contact Person Name and Title: Rachel Maissen

Contact Phone: (415) 624-5965 Contact Email: skyhighhumboldt@gmail.com

Contact Address: P.O. Box 213, Redway, CA 95560

Amount Requested: $3,980.00 Total Budget: $16,225.00

Project Timeline: Start Date: 04/01/2023 End Date: 08/01/2023

Signature of Applicant: 

Project: Ridge Line Road Improvements (2 of 4)

Applicant: Sky High Humboldt, LLC

Contact: Rachel Maissen

Project Location: Intersection of Sawmill Road & Alderpoint Road

Grant Funding Requested: $3,980.00

Project Description

The project is located at the intersection of Sawmill Road and Alderpoint Road, near the start of a tributary which flows directly into the Bear Canyon waterway which leads to the South Fork Eel River, in Garberville, California.

This project proposes the removal of asphalt, replacement of a failing undersized culvert, and repaving as required by the Humboldt County Department of Public Works. This is a project among four participating applicants:

1. Ridgeline Farms, LLC
2. Sky High Humboldt LLC
3. Tan Oak Farms LLC
4. Pitilina Corporation

All four applicants have County Compliance Agreements which require the access road that intersects with Alderpoint Road (a County maintained road) to be paved for a minimum width of 20 feet and a length of 50 feet at the intersection. The failing culvert lies below this area.

Humboldt GIS indicates the site is located in a section of the county with high slope instability, although it is not within a flood hazard zone, nor in an earthquake hazard zone. The site is in a 15-30% slope zone, with slopes higher than 50% just north of it and between 30-50% below it. This increases the potential for gravity imposed debris and sediment carry within the waterway below the culvert if not properly armored, sized, and maintained.

This project would storm-proof the stream crossing for a 100 year flood event and reduce the potential for road-related sediment delivery into the unnamed tributary and down to the Bear Canyon waterway. The upgraded stream crossing will protect water quality and aquatic ecosystems, limiting the impact on downstream resources. The

crossing upgrade will be maintained according to standards provided in the “Handbook for Forest, Ranch and Rural Roads” (Weaver, Weppner and Hagans, 2015), and the California Salmonid Stream Habitat Manual, Part X (Weaver, Hagans and Weppner, 2006) by a licensed contractor.

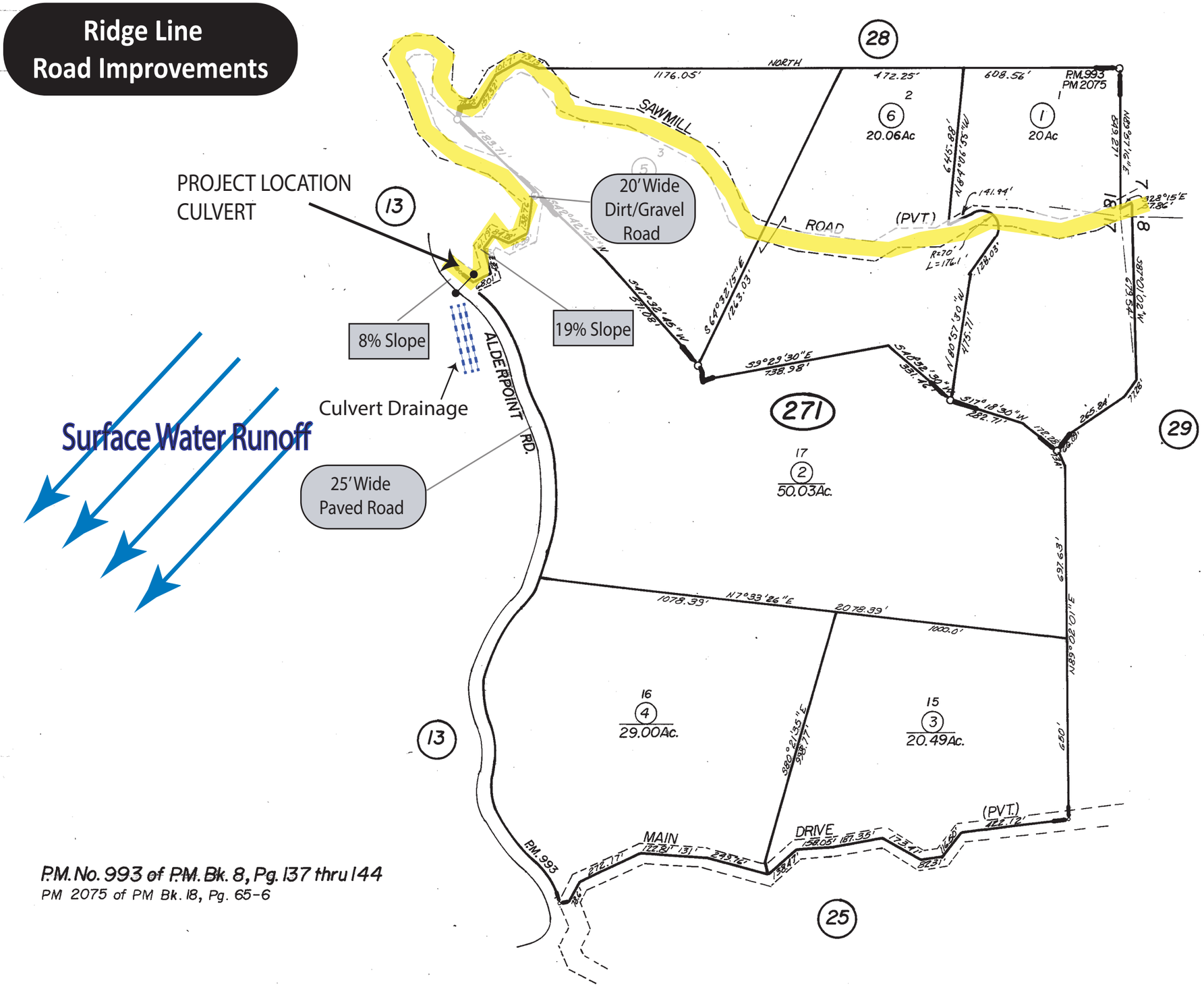
As this is a repair of an existing infrastructure, there will be no permanent impacts to existing native channel bed, channel, watercourse banks, or associated riparian habitat. Incidental destruction of small areas of riparian habitat growing on existing road fill or in disturbed channel areas will be minimized during remediation. No loss of trees is expected. The site is surrounded by rural improved properties. No impact to these parcels is expected.

POR. NE 1/4 SEC. 18 & NW 1/4 SEC. 17, T. 4 S., R. 4 E., H.B.&M.

223-27

1" = 400'

Ridge Line Road Improvements



Sawmill Road

P.M. No. 993 of P.M. Bk. 8, Pg. 137 thru 144
PM 2075 of PM Bk. 18, Pg. 65-6

Assessor's Map Bk. 223-Pg. 27
County of Humboldt, Calif.

REV. 10/30/2022

PLOT PLAN AND TENTATIVE MAP CHECKLIST

The following information must be shown on your plot plan or tentative map. Please check ✓ the box to the left of the items shown on the plot plan or tentative map. If any item is not on your site to your knowledge, write "N/A" next to the box. Plot plans shall be drawn on a minimum size sheet of 8-1/2" x 11", and tentative subdivision maps on a minimum size sheet of 18" x 26". ***Note: This Checklist must be completed by the applicant and submitted with your application.***

Applicant's Name Ridge Line Road I□ pro□e□ents APN Intersection o□Sa□□ill Rd□ Alderpoint Rd□

_____

FOR ALL PROJECTS

☐		1.	Name of applicant(s)
☐		2.	Location or vicinity map (on or attached to the plot plan)
☐		3.	The subject parcel (show entire parcel with dimensions)
☐		4.	Date, north arrow and scale
☐		5.	Name, County road numbers, and width of all existing and proposed access roadways adjacent to or within the subject parcel (indicate width of traveled way, grade (in % slope), and surface)
☐	□A	6.	Existing and proposed improvements (label as "existing" and "proposed" with dimensions and distance to nearest two (2) property lines)
	□A	☐ a.	Structures and buildings (include floor area, height and proposed use)
	□A	☐ b.	Driveways and turnaround areas (indicate width, grade (in % slope) and surface)
	□A	☐ c.	Utility lines (electric, gas, telephone, sewer, water, and cable TV)
	□A	☐ d.	Septic tanks and leachfields (label primary/reserve areas and test holes)
	□A	☐ e.	Wells
	□A	☐ f.	Parking and loading areas (show individual parking spaces, including handicapped parking and ramps)
	□A	☐ g.	Storm drains, curbs and gutters
	□A	☐ h.	Emergency water storage tanks and fire hydrants
	□A	☐ i.	Landscaped areas (include proposed exterior lighting)
	□A	☐ j.	Major vegetation (identify mature trees (12" dbh or larger) to be removed)
	□A	☐ k.	Diked areas
	□A	☐ l.	Proposed grading and fill (estimate volume)
	□A	☐ m.	Signs (indicate size, illuminated, and design (e.g., monument, pylon, etc.))
	□A	☐ n.	Other - specify _____ _____
☐		7.	Direction of surface water runoff
☐	□A	8.	Location and width of all existing and proposed easements of record
☐	□A	9.	Hazardous areas (indicate on map if on the project site or within 400 feet of the project site):
	□A	☐ a.	Areas subject to inundation or flooding
	□A	☐ b.	Steep or unstable slopes
	□A	☐ c.	Expansive (clay) soils
	□A	☐ d.	Earthquake faults
	□A	☐ e.	Hazardous waste or substance sites
		☐ f.	Other - specify _____
☐		10.	Sensitive habitat areas (indicate on map if on project site or within 400 feet of the project site):
		☐ a.	Creeks, rivers, sloughs and other drainage courses
	□A	☐ b.	Lakes, ponds, marshes, or "wet" meadows
	□A	☐ c.	Beaches
	□A	☐ d.	Sand dunes
		☐ e.	Other - specify _____
☐	□A	11.	Historical buildings or known archaeological or paleontological resources
☐		12.	Land use and buildings on adjacent parcels, and approximate distances to closest property lines

FOR LOT LINE ADJUSTMENT PLOT PLANS ONLY

☐	□A	13.	Proposed new lines and lines to be eliminated (show lines to be eliminated as dashed)
☐	□A	14.	Areas (in square footage or acreage) of the initial and resulting parcels

FOR TENTATIVE SUBDIVISION MAPS ONLY

☐	□A	16.	Approximate dimensions and areas of all proposed lots
☐	□A	17.	A statement that "All easements of record are shown on the tentative map and will appear on the recorded subdivision map"
☐	□A	18.	Contour lines (at _____ intervals)
☐	□A	19.	For major subdivisions (5 or more parcels): proposed drainage improvements, details of any grading to be performed, approximate radii of all roadway curves, areas for public use, and typical sections of all streets, highways, ways and alleys
☐	□A	20.	Names and assessor's parcel numbers of all contiguous ownerships

NOTE: THE SUBMITTAL OF INCOMPLETE OR ILLEGIBLE PLOT PLANS OR TENTATIVE MAPS WILL CAUSE DELAYS IN THE PROCESSING OF YOUR APPLICATION

Project: Ridge Line Road Improvements (2 of 4)

Applicant: Sky High Humboldt, LLC

Contact: Rachel Maissen

Project Location: Intersection of Sawmill Road & Alderpoint Road

Grant Funding Requested: $3,980.00

Scope of Work

The project is for a culvert upgrade and repaving at the intersection of Sawmill Road and Alderpoint Rd, as required by Humboldt County Public Works.

Crossing: The site's existing culvert is deteriorated, placed incorrectly, and undersized to Humboldt County Public Works specifications. It will be replaced with a 18" HDPE double wall plastic pipe.

The proposed construction uses the open trench method as the only viable approach, due to an existing fiber optic line in the vicinity. The existing asphalt will be cut, the fiber line will be located (by hand), existing pipe will be removed and replaced with the new pipe at the correct angle. Then backfill will be compacted and asphalt repaved.

The project requires heavy equipment and new materials. The work will be completed by Van Meter Construction, license number #854560. Prior to starting project operations, the applicants will obtain an encroachment permit from the County.

Margro Advisors will work with the applicants on maintaining compliance with local and State regulations, and provide support for the project's grant administration and reporting, as needed.

Project: Ridge Line Road Improvements (2 of 4)

Applicant: Sky High Humboldt, LLC

Contact: Rachel Maissen

Project Location: Intersection of Sawmill Road & Alderpoint Road

Grant Funding Requested: $3,980.00

Mitigation and Remediation Fund
Schedule for Completion

Milestone	Start Date	End Date
Final Project Design	April 1, 2023	April 30, 2023
Bidding and Contracting	May 1, 2023	May 31, 2023
Project Ground-Breaking	June 1, 2023	
Project Completion		August 1, 2023
Monitoring	August 1, 2023	Ongoing

Project: Ridge Line Road Improvements (2 of 4)

Applicant: Sky High Humboldt, LLC

Contact: Rachel Maissen

Project Location: Intersection of Sawmill Road & Alderpoint Road

Grant Funding Requested: $3,980.00

Erosion Control and Monitoring Plan

The project participants will collaborate to ensure the intersection, culvert, and waterway are properly maintained. Prior to the winter season and significant storm events, the roadway, culvert, and channel will be inspected and monitored to ensure the facility is performing properly in preventing runoff and sediment into the waterway.

If potential issues are discovered in or around the site during or immediately following a storm event, they will be corrected as soon as possible to ensure minimal impact and prevent sediment flow in the future. This will include removal of obstruction or debris, proper ditching and vegetation buffers, and as needed, placement of straw, seed, wattles, jute cloth, riprap, or other industry standards used to prevent and eliminate runoff.

If issues are discovered related to the county maintained areas of the intersection, temporary measures will be used when possible to minimize impacts. The issue will then be reported immediately to the Department of Public Works.

Project: Ridge Line Road Improvements (2 of 4)

Applicant: Sky High Humboldt, LLC

Contact: Rachel Maissen

Project Location: Intersection of Sawmill Road & Alderpoint Road

Grant Funding Requested: $3,980.00

Total Budget: $16,225.00

Project Budget

Item	Grant Funds	Other Funds (Source)
Permit Fees		
Encroachment Permit		$305.00 (Neighbors)
Consultant and Professional Fees		
Margro Advisors	$230.00	$690.00 (Neighbors)
*Materials, Equipment and Labor**		
Van Meter Construction	$3,750.00	$11,250.00 (Neighbors)
Totals	**$3,980.00**	**$12,245.00**

*See attached bid

VAN METER LOGGING, INC.
dba Van Meter Construction

Proposal
Ridgeline Farms/ Gellman

Problem: Existing cross drain culvert is deteriorated, placed incorrectly, and undersized for Humboldt county public works specifications.

Proposed solution: replace existing undersized pipe with a 18" HDPE double wall plastic pipe.

Proposed method of replacement: Due to the known existing fiber optic line in the vicinity the open trench method is the only viable solution. We propose to saw cut the existing asphalt, locate the existing fiber line (by hand), remove the existing pipe, place the new pipe at the correct angle, compact the backfill, and repave

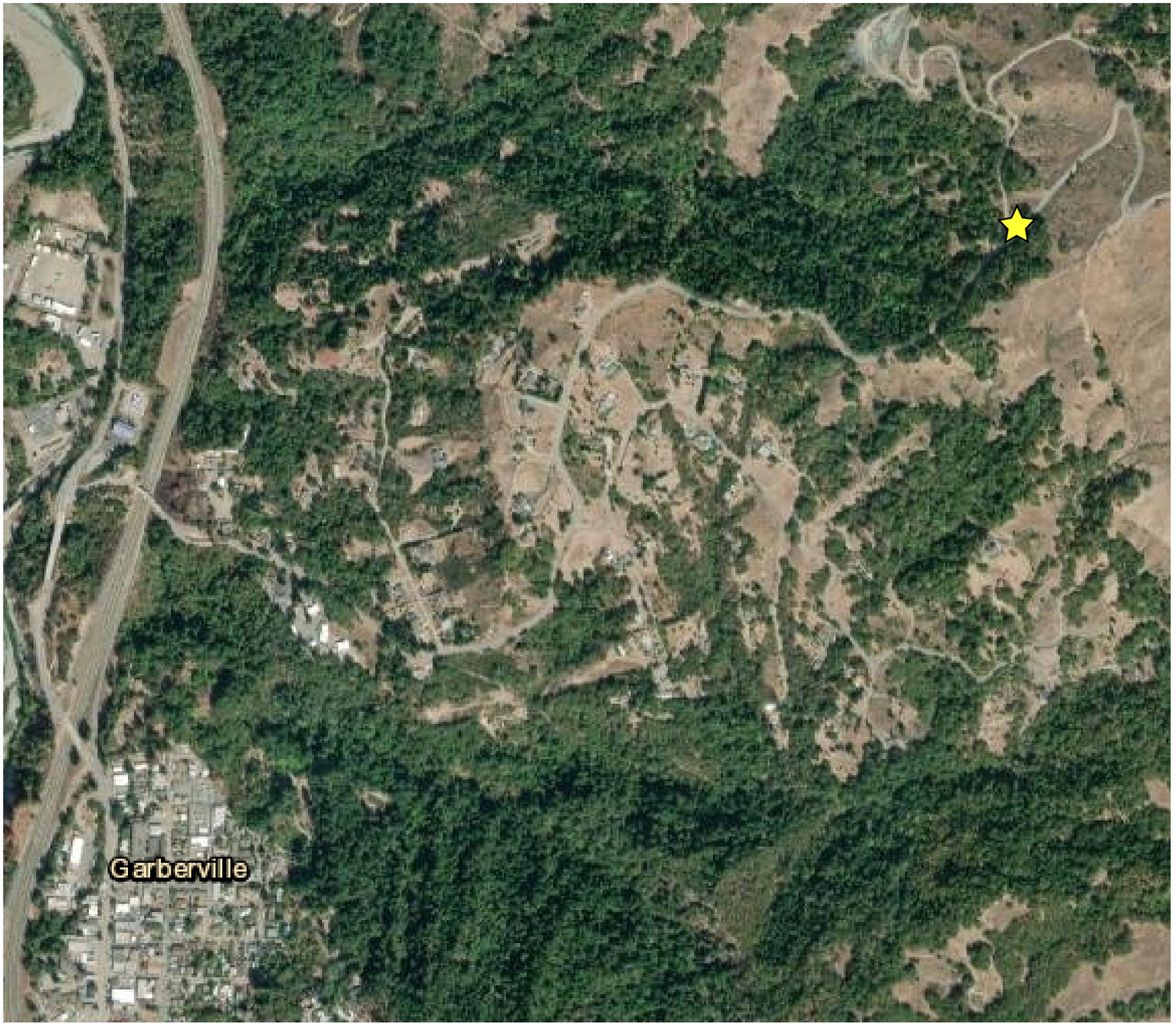
Cost: Lump Sum - $15,000

363 SPROWL CREEK ROAD- PO BOX 573
GARBERVILLE, CALIFORNIA 95542
PHONE 707.223.0311- FAX 707.923.2200

VICINITY MAP

Intersection of Sawmill Road and Alderpoint Road

★ PROJECT LOCATION



Ridge Line Topo Map

Humboldt County Planning and Building Department

0 180 360 720 Feet

0 0.0325 0.065 0.13 Miles

RF= 1:4,514 1 in = 376 ft

N W E S

Printed: October 28, 2022 Web AppBuilder 2.0 for ArcGIS

Highways and Roads

- Principal Arterials
- Minor Arterials
- Major Collectors
- Minor Collectors
- Local Roads
- Private or Unclassified
- Major River or Stream

Blue Line Streams

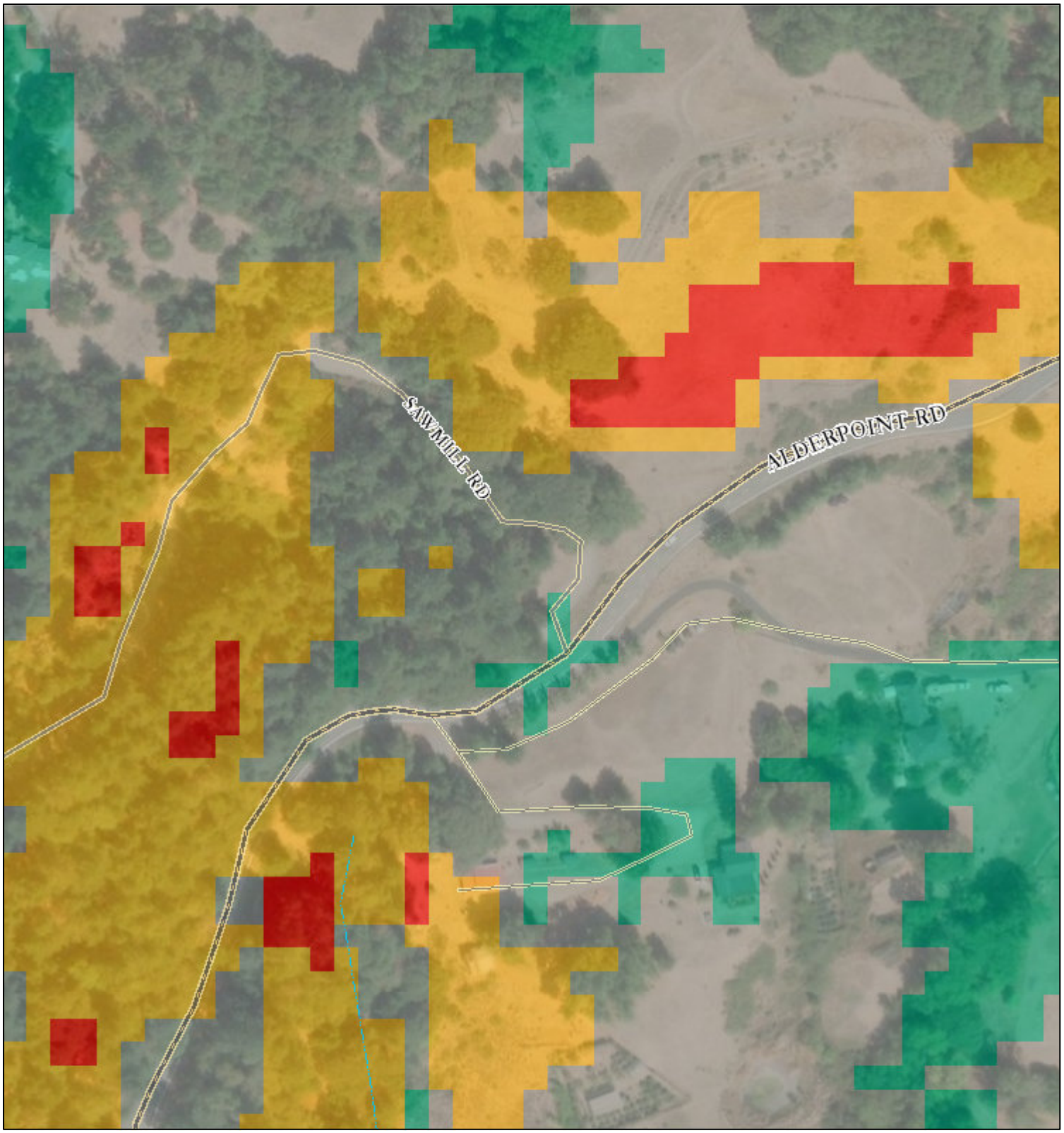
- Perennial 1-3
- Perennial >4
- Intermittent
- Subsurface

Topographic Contours 40ft

- Minor Interval
- Major Interval
- <default layer do not remove>

Map Disclaimer:
While every effort has been made to assure the accuracy of this information, it should be understood that it does not have the force & effect of law, rule, or regulation. Should any difference or error occur, the law will take precedence.

Source: Humboldt County GIS, Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community, FRAP, FEMA, USGS, ESA, CGS, Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community



Ridge Line Slope Map

Humboldt County Planning and Building Department

0 87.5 175 350 Feet

0 0.015 0.03 0.06 Miles

RF= 1:2,257 1 in = 188 ft

N W E S

Highways and Roads

Principal Arterials

Minor Arterials

Major Collectors

Minor Collectors

Local Roads

Private or Unclassified

Major River or Stream

Blue Line Streams

Perennial 1-3

Perennial >4

Intermittent

Subsurface

Slope USGS

15-30%

30 - 50%

+50%

Slope less than 15%

<15%

<default layer do not remove>

Printed: October 28, 2022 Web AppBuilder 2.0 for ArcGIS

Ridgeline Road Improvements- Crossing Photos

Ridgeline Road Improvements- Crossing Photos

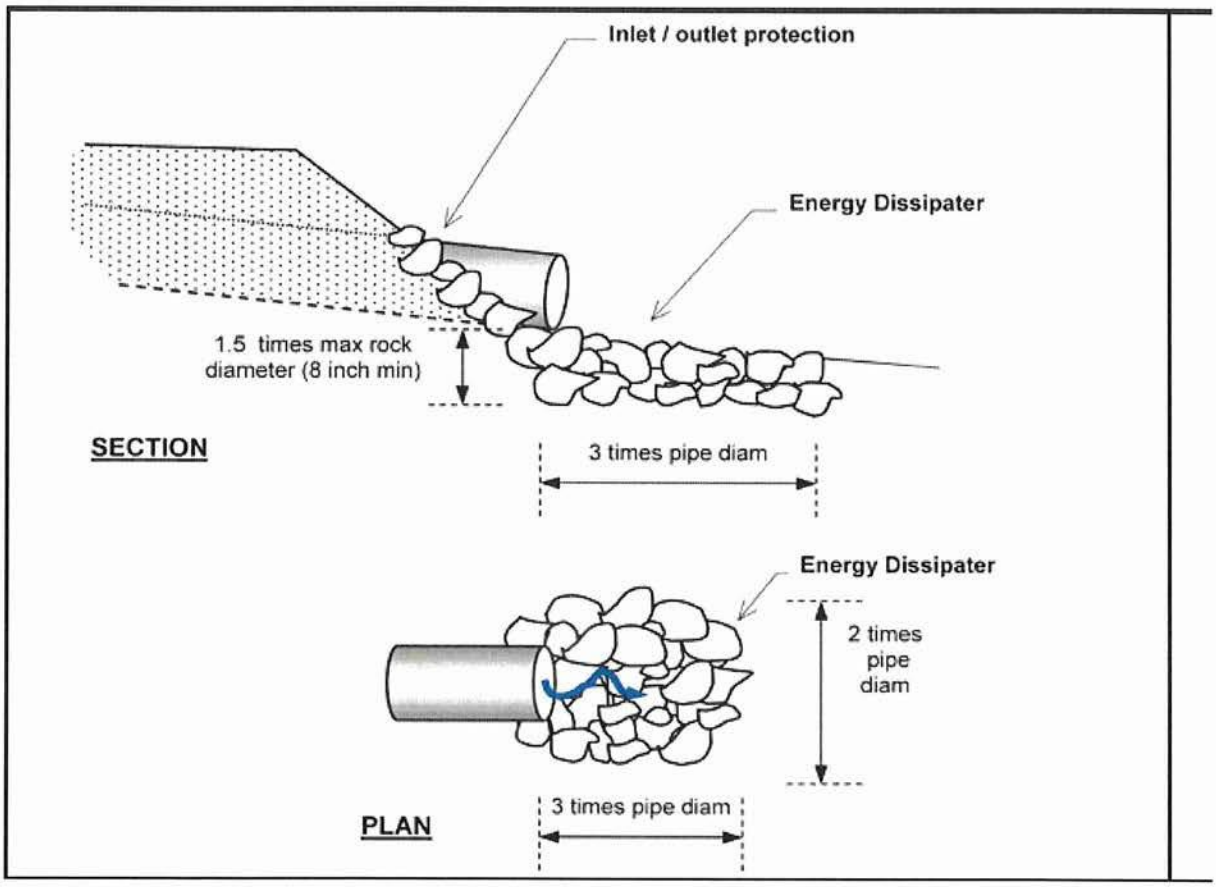
Figure 4 - Site P□otograp□s

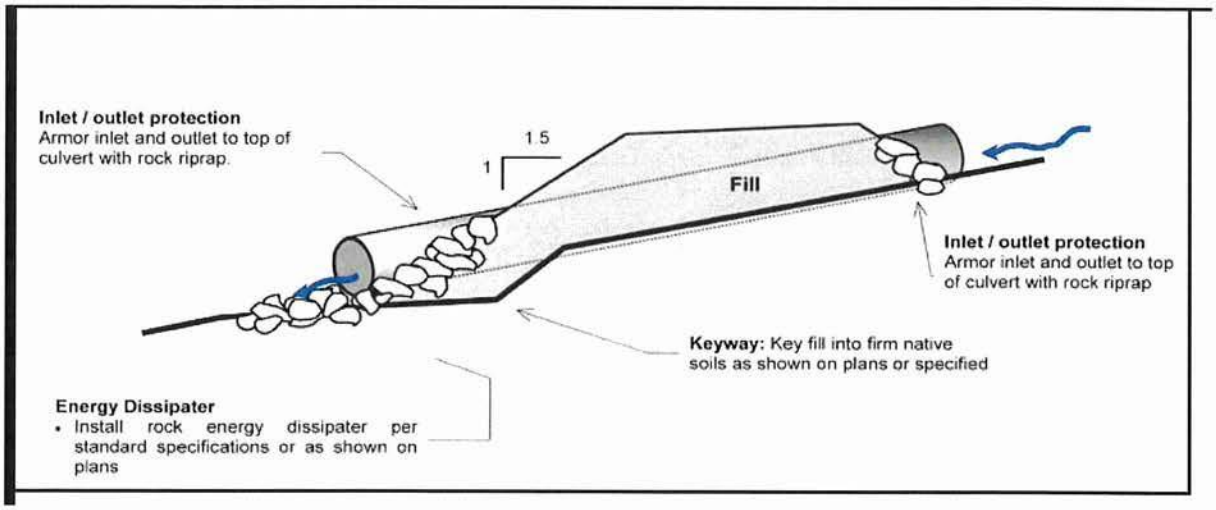
Culvert Installation Specifications

- New culvert installations shall be sized to accommodate a 100-year storm.
- New culverts shall be placed at stream gradient, or have downspouts, or have energy dissipaters at outfall.
  - Align culverts with the natural stream channel orientation to ensure proper function, prevent bank erosion and minimize debris plugging.
  - Place culverts at the base of the fill and at the grade of the original streambed or install a downspout past the base of the fill. Downspouts should only be installed if there are no other options.
  - Culverts should be set slightly below the original stream grade so that the water drops several inches as it enters the pipe.
  - Culvert beds should be composed of rock-free soil or gravel, evenly distributed under the length of the pipe.
  - Compact the base and sidewall material before placing the pipe in its bed.
  - Lay the pipe on a well-compacted base. Poor basal compaction will cause settling or deflection in the pipe and can result in separation at a coupling or rupture in the pipe wall.
  - Backfill material should be free of rocks, limbs or other debris that could dent or puncture the pipe or allow water to seep around the pipe.
  - Cover one end of the culvert pipe, then the other end. Once the ends are secure, cover the center.
  - Tamp and compact backfill material throughout the entire process, using water as necessary for compaction.
  - Backfill compacting will be done in 0.5 – 1.0 foot lifts until 1/3 of the diameter of the culvert has been covered.
  - Push layers of fill over the crossing to achieve the final design road grade, at a minimum of one-third to one-half the culvert diameter.
- Critical dips shall be installed on culvert crossings to eliminate diversion potential.
- Road approaches to crossings shall be treated out to the first drainage structure (i.e. waterbar) or hydrologic divide to prevent transport of sediment.
- Road surfaces and ditches shall be disconnected from streams and stream crossings to the greatest extent feasible. Ditches and road surfaces that cannot be feasible disconnected from streams or stream crossings shall be treated to reduce sediment transport to streams.
- If downspouts are used, they shall be secured to the culvert outlet and shall be secure on fill slopes.
- Culverts shall be long enough so that road fill does not extend or slough past the culvert ends.
- Inlet of culverts and associate fill shall be protected with appropriate measures that extend at least as high as the top of the culvert.
- Outlet of culverts shall be armored with rock if road fill sloughing into channel can occur.
- Armor inlets and outlets with rock, or mulch and seed with grass as needed (not all stream crossings need to be armored).
- Where debris loads could endanger the crossing a debris catchment structure shall be constructed upstream of the culvert inlet.
- Bank and channel armoring may occur when appropriate to provide channel and bank stabilization.

Figure □A - Cul□ert Speci□ications

Culvert Installation Specifications

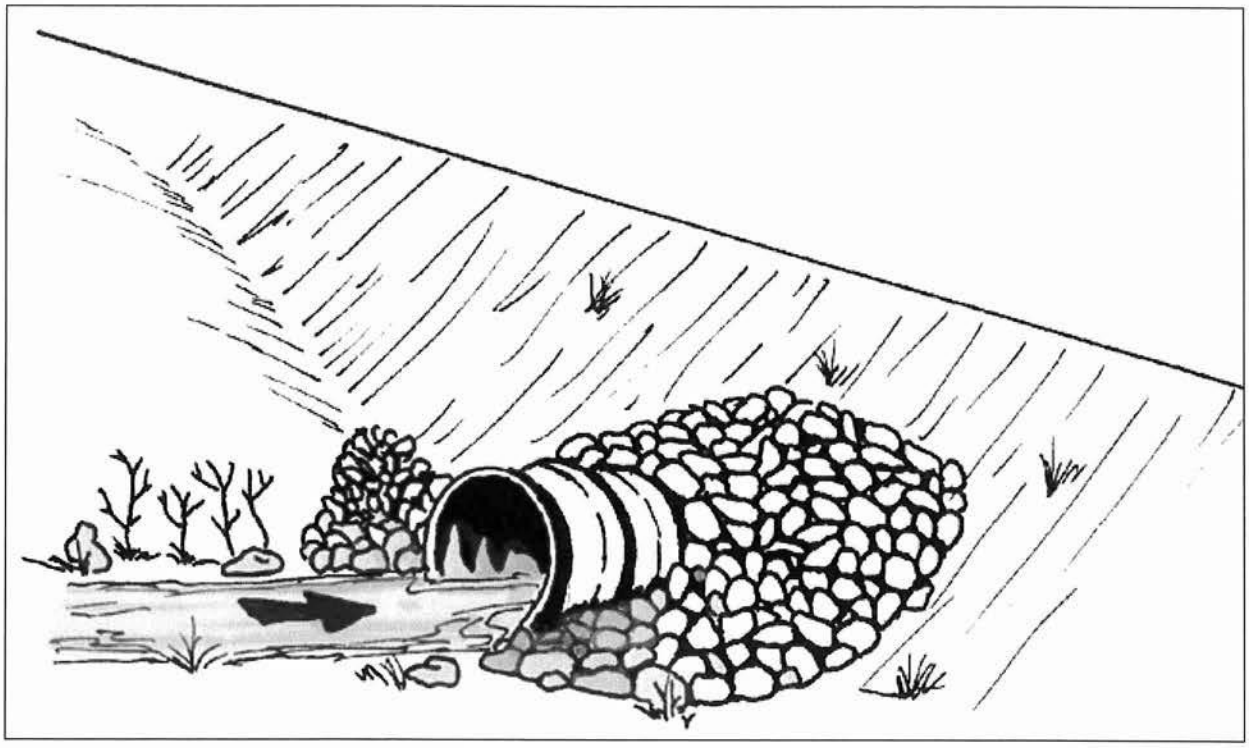




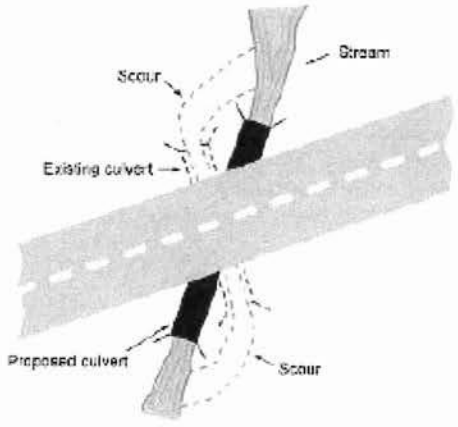
Riprap installed to protect the inlet and outlet of a stream crossing culvert from erosion or for energy dissipation should be keyed into the natural channel bed and banks to an approximate depth of about 1.5x the maximum rock thickness. Riprap should be placed at least up to the top of the culvert at both the inlet and outlet to protect them from splash erosion and to trap any sediment eroded from the newly constructed fill slope above.

Figure □□ - Cul□ert Speci□ications

Culvert Installation Specifications



Rock armor used for inlet and outlet protection (i.e., not as energy dissipation) does not have to be sized to protect against high velocity scour. If the culvert is properly sized and its length is adequate, it should be able to transmit flood flows without scouring the inlet or eroding the outlet around the culvert. Armor shown here is designed to protect the culvert outlet and basal fill from splash erosion and from occasional submergence and currents within standing water (at the inlet) when the culvert plugs. Importantly, inlet and outlet armor also serves to trap sediment that has been eroded or slides down the new constructed fill face in its first several years, until the slope becomes well vegetated.

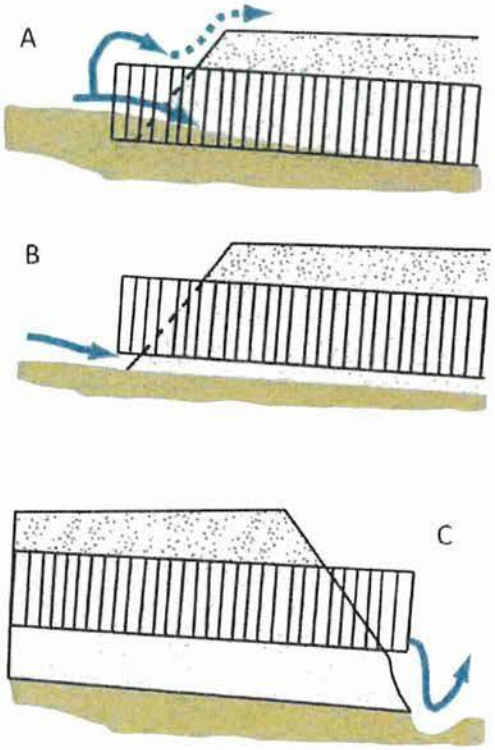


HANDBOOK FOR FOREST, RANCH AND RURAL ROADS

FIGURE 97. *Culvert alignment should be in relation to the stream and not the road. It is important that the stream enters and leaves the culvert in a relatively straight horizontal alignment so streamflow does not have to turn to enter the inlet or discharge into a bank as it exits. This figure shows a redesigned culvert installation that replaces the bending alignment that previously existed. Channel turns at the inlet increase plugging potential because wood going through the turn will not align with the inlet. Similarly, channel turns at the inlet and outlet are often accompanied by scour against the channel banks (Wisconsin Transportation Information Center, 2004).*

Figure □C - Cul□ert Speci□ications

Culvert Installation Specifications



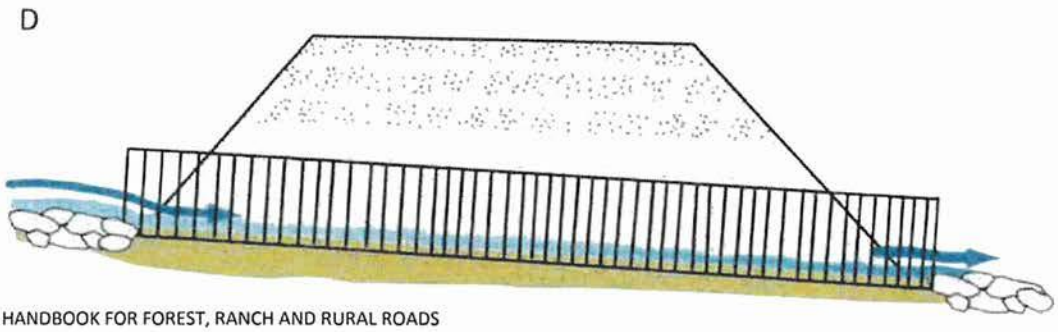


FIGURE 155. *Proper culvert installation involves correct culvert orientation, setting the pipe slightly below the bed of the original stream, and backfilling and compacting the fill as it is placed over the culvert. Installing the inlet too low in the stream (A) can lead to culvert plugging, yet if set too high (B) flow can undercut the inlet. If the culvert is placed too high in the fill (C), flow at the outfall will erode the fill. Placed correctly (D), the culvert is set slightly below the original stream grade and protected with armor at the inlet and outlet. Culverts installed in fish-bearing stream channels must be inset into the streambed sufficiently (>25% embedded) to have a natural gravel bottom throughout the culvert (Modified from: MDSL, 1991).*

HANDBOOK FOR FOREST, RANCH AND RURAL ROADS

Figure D - Culvert Specifications

Distance to Nearest Adjoining Parcel Primary Stucture & Adjoing Parcel Use Code Descriptions

Ridge Line Project Area Map

Humboldt County Planning and Building Department

0 350 700 1,400 Feet

0 0.05 0.1 0.2 Miles

RF= 1:9,028 1 in = 752 ft

N W E S

Highways and Roads

- Principal Arterials
- Minor Arterials
- Major Collectors
- Minor Collectors
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Blue Line Streams

- Perennial 1-3
- Perennial >4
- Intermittent
- Subsurface
- City Boundary
- Counties
- Parcels
- Parcels (no APN labels)

Printed: October 31, 2022 Web AppBuilder 2.0 for ArcGIS

Figure □ - Adjacent Parcels

APPLICATION PACKET CHECKLIST

Please check below to ensure you have a complete application. Once complete, email the following documents, in pdf format with the text "Application for Remediation Grant Program Funding" in the subject line to mrichardson@co.humboldt.ca.us.

- X Signed Application Submission Form
- X Project Description – Summary of the Project, up to 2 pages.
- X Plot Plan
- X Plot Plan Checklist – Attached
- X Cross sections of proposed work including topographic elevations
- X Scope of Work – Detailed Description of Work
- X Schedule for Completion – Identify Milestones
- X Erosion Control Plan and Monitoring Plan
- X Budget – Be as specific as possible – sample attached
- X Project Maps and Figures
- ☐Letter(s) of Support (optional)

APPLICATION FORM - Commercial Cannabis Land Use Ordinance Mitigation and Remediation Fund Program

Project Title: Ridge Line Road Improvements (3 of 4) Date of Application: 10/31/2022

Applicant Names: Tan Oak Farms, LLC

Project APN: Intersection of Sawmill Road & Alderpoint Road

Contact Person Name and Title: Katie Mela

Contact Phone: (707) 223-0004 Contact Email: sohumchic@aim.com

Contact Address: P.O. Box 1030 Garberville, CA 95562

Amount Requested: $3,980.00 Total Budget: $16,225.00

Project Timeline: Start Date: 04/01/2023 End Date: 08/01/2023

Signature of Applicant: Katie Mela

Project: Ridge Line Road Improvements (3 of 4)

Applicants: Tan Oak Farms, LLC

Contact: Katie Mela

Project Location: Intersection of Sawmill Road & Alderpoint Road

Grant Funding Requested: $3,980.00

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This project proposes the removal of asphalt, replacement of a failing undersized culvert, and repaving as required by the Humboldt County Department of Public Works. This is a project among four participating applicants:

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POR. NE 1/4 SEC. 18 & NW 1/4 SEC. 17, T. 4 S., R. 4 E., H.B.&M.

223-27

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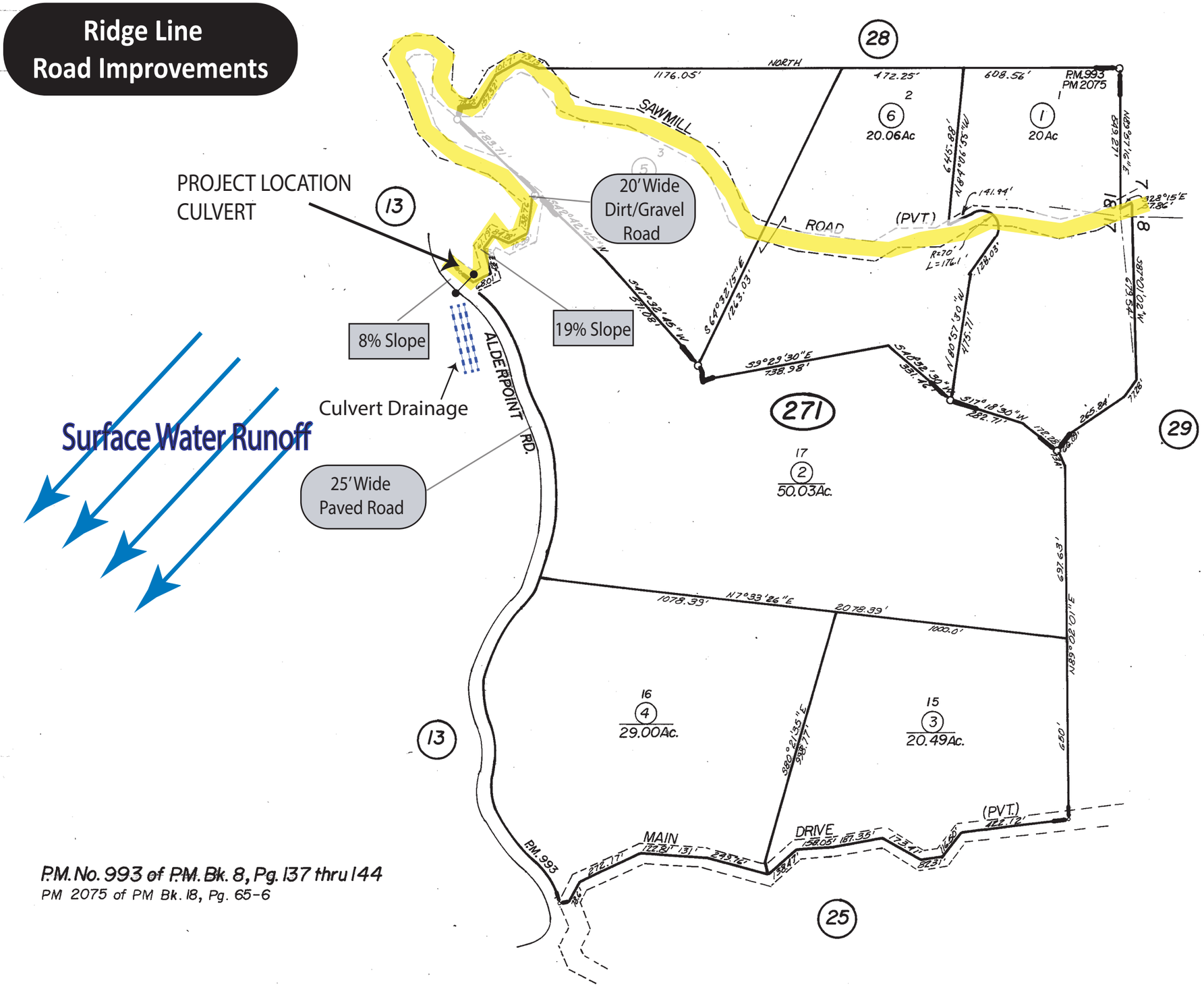
Ridge Line Road Improvements



Sawmill Road

P.M. No. 993 of P.M. Bk. 8, Pg. 137 thru 144
PM 2075 of PM Bk. 18, Pg. 65-6

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REV. 10/30/2022

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FOR ALL PROJECTS

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	□A	☐ a.	Structures and buildings (include floor area, height and proposed use)
	□A	☐ b.	Driveways and turnaround areas (indicate width, grade (in % slope) and surface)
	□A	☐ c.	Utility lines (electric, gas, telephone, sewer, water, and cable TV)
	□A	☐ d.	Septic tanks and leachfields (label primary/reserve areas and test holes)
	□A	☐ e.	Wells
	□A	☐ f.	Parking and loading areas (show individual parking spaces, including handicapped parking and ramps)
	□A	☐ g.	Storm drains, curbs and gutters
	□A	☐ h.	Emergency water storage tanks and fire hydrants
	□A	☐ i.	Landscaped areas (include proposed exterior lighting)
	□A	☐ j.	Major vegetation (identify mature trees (12" dbh or larger) to be removed)
	□A	☐ k.	Diked areas
	□A	☐ l.	Proposed grading and fill (estimate volume)
	□A	☐ m.	Signs (indicate size, illuminated, and design (e.g., monument, pylon, etc.))
	□A	☐ n.	Other - specify _____ _____
☐		7.	Direction of surface water runoff
☐	□A	8.	Location and width of all existing and proposed easements of record
☐	□A	9.	Hazardous areas (indicate on map if on the project site or within 400 feet of the project site):
	□A	☐ a.	Areas subject to inundation or flooding
	□A	☐ b.	Steep or unstable slopes
	□A	☐ c.	Expansive (clay) soils
	□A	☐ d.	Earthquake faults
	□A	☐ e.	Hazardous waste or substance sites
		☐ f.	Other - specify _____
☐		10.	Sensitive habitat areas (indicate on map if on project site or within 400 feet of the project site):
		☐ a.	Creeks, rivers, sloughs and other drainage courses
	□A	☐ b.	Lakes, ponds, marshes, or "wet" meadows
	□A	☐ c.	Beaches
	□A	☐ d.	Sand dunes
		☐ e.	Other - specify _____
☐	□A	11.	Historical buildings or known archaeological or paleontological resources
☐		12.	Land use and buildings on adjacent parcels, and approximate distances to closest property lines

FOR LOT LINE ADJUSTMENT PLOT PLANS ONLY

☐	□A	13.	Proposed new lines and lines to be eliminated (show lines to be eliminated as dashed)
☐	□A	14.	Areas (in square footage or acreage) of the initial and resulting parcels

FOR TENTATIVE SUBDIVISION MAPS ONLY

☐	□A	16.	Approximate dimensions and areas of all proposed lots
☐	□A	17.	A statement that "All easements of record are shown on the tentative map and will appear on the recorded subdivision map"
☐	□A	18.	Contour lines (at _____ intervals)
☐	□A	19.	For major subdivisions (5 or more parcels): proposed drainage improvements, details of any grading to be performed, approximate radii of all roadway curves, areas for public use, and typical sections of all streets, highways, ways and alleys
☐	□A	20.	Names and assessor's parcel numbers of all contiguous ownerships

NOTE: THE SUBMITTAL OF INCOMPLETE OR ILLEGIBLE PLOT PLANS OR TENTATIVE MAPS WILL CAUSE DELAYS IN THE PROCESSING OF YOUR APPLICATION

Project: Ridge Line Road Improvements (3 of 4)

Applicants: Tan Oak Farms, LLC

Contact: Katie Mela

Project Location: Intersection of Sawmill Road & Alderpoint Road

Grant Funding Requested: $3,980.00

Scope of Work

The project is for a culvert upgrade and repaving at the intersection of Sawmill Road and Alderpoint Rd, as required by Humboldt County Public Works.

Crossing: The site's existing culvert is deteriorated, placed incorrectly, and undersized to Humboldt County Public Works specifications. It will be replaced with a 18" HDPE double wall plastic pipe.

The proposed construction uses the open trench method as the only viable approach, due to an existing fiber optic line in the vicinity. The existing asphalt will be cut, the fiber line will be located (by hand), existing pipe will be removed and replaced with the new pipe at the correct angle. Then backfill will be compacted and asphalt repaved.

The project requires heavy equipment and new materials. The work will be completed by Van Meter Construction, license number #854560. Prior to starting project operations, the applicants will obtain an encroachment permit from the County.

Margro Advisors will work with the applicants on maintaining compliance with local and State regulations, and provide support for the project's grant administration and reporting, as needed.

Project: Ridge Line Road Improvements (3 of 4)

Applicants: Tan Oak Farms, LLC

Contact: Katie Mela

Project Location: Intersection of Sawmill Road & Alderpoint Road

Grant Funding Requested: $3,980.00

Mitigation and Remediation Fund
Schedule for Completion

Milestone	Start Date	End Date
Final Project Design	April 1, 2023	April 30, 2023
Bidding and Contracting	May 1, 2023	May 31, 2023
Project Ground-Breaking	June 1, 2023	
Project Completion		August 1, 2023
Monitoring	August 1, 2023	Ongoing

Project: Ridge Line Road Improvements (3 of 4)

Applicants: Tan Oak Farms, LLC

Contact: Katie Mela

Project Location: Intersection of Sawmill Road & Alderpoint Road

Grant Funding Requested: $3,980.00

Erosion Control and Monitoring Plan

The project participants will collaborate to ensure the intersection, culvert, and waterway are properly maintained. Prior to the winter season and significant storm events, the roadway, culvert, and channel will be inspected and monitored to ensure the facility is performing properly in preventing runoff and sediment into the waterway.

If potential issues are discovered in or around the site during or immediately following a storm event, they will be corrected as soon as possible to ensure minimal impact and prevent sediment flow in the future. This will include removal of obstruction or debris, proper ditching and vegetation buffers, and as needed, placement of straw, seed, wattles, jute cloth, riprap, or other industry standards used to prevent and eliminate runoff.

If issues are discovered related to the county maintained areas of the intersection, temporary measures will be used when possible to minimize impacts. The issue will then be reported immediately to the Department of Public Works.

Project: Ridge Line Road Improvements (3 of 4)

Applicants: Tan Oak Farms, LLC

Contact: Katie Mela

Project Location: Intersection of Sawmill Road & Alderpoint Road

Grant Funding Requested: $3,980.00

Total Budget: $16,225.00

Project Budget

Item	Grant Funds	Other Funds (Source)
Permit Fees		
Encroachment Permit		$305.00 (Neighbors)
Consultant and Professional Fees		
Margro Advisors	$230.00	$690.00 (Neighbors)
*Materials, Equipment and Labor**		
Van Meter Construction	$3,750.00	$11,250.00 (Neighbors)
Totals	**$3,980.00**	**$12,245.00**

*See attached bid

VAN METER LOGGING, INC.
dba Van Meter Construction

Proposal
Ridgeline Farms/ Gellman

Problem: Existing cross drain culvert is deteriorated, placed incorrectly, and undersized for Humboldt county public works specifications.

Proposed solution: replace existing undersized pipe with a 18" HDPE double wall plastic pipe.

Proposed method of replacement: Due to the known existing fiber optic line in the vicinity the open trench method is the only viable solution. We propose to saw cut the existing asphalt, locate the existing fiber line (by hand), remove the existing pipe, place the new pipe at the correct angle, compact the backfill, and repave

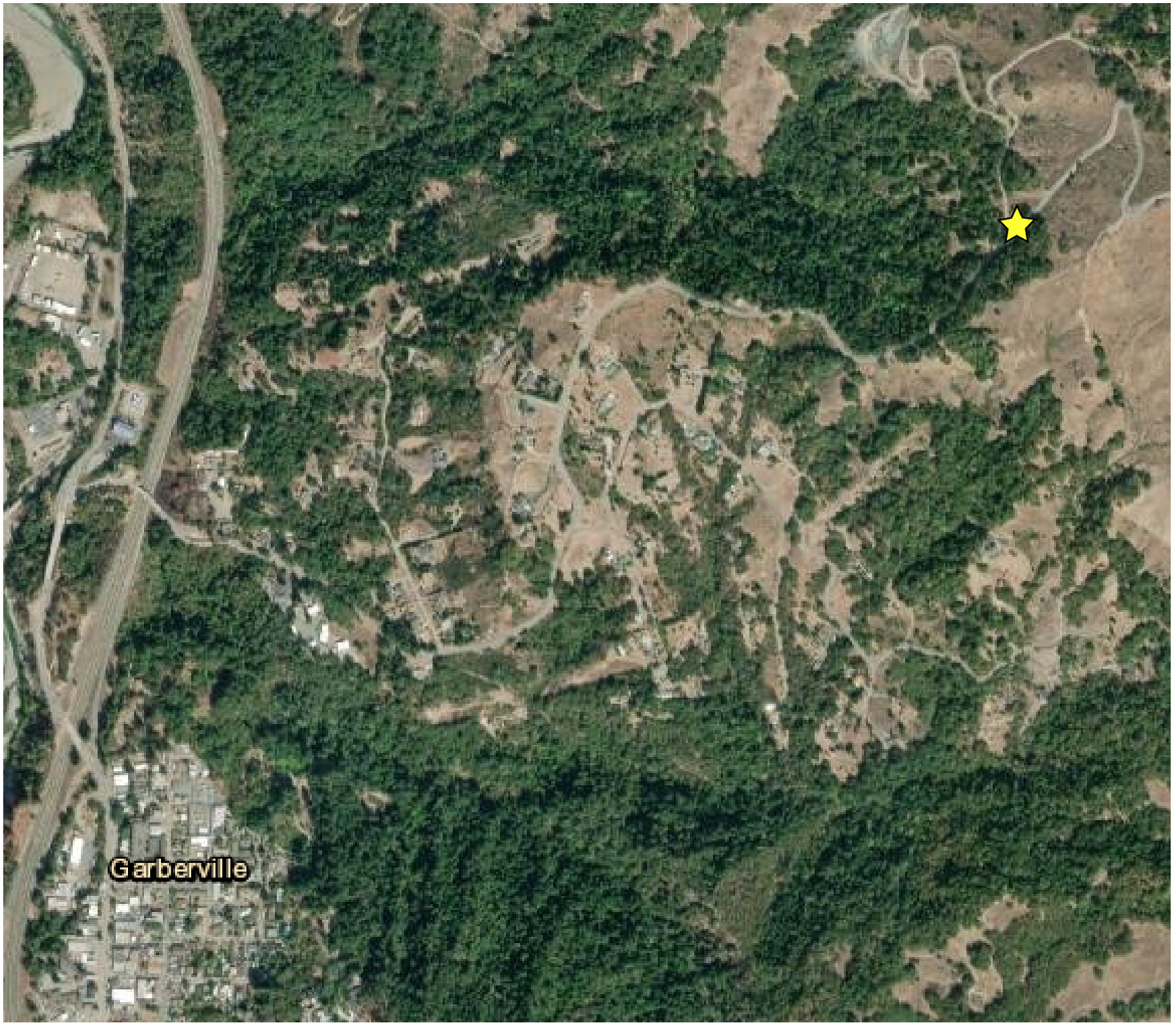
Cost: Lump Sum - $15,000

363 SPROWL CREEK ROAD- PO BOX 573
GARBERVILLE, CALIFORNIA 95542
PHONE 707.223.0311- FAX 707.923.2200

VICINITY MAP

Intersection of Sawmill Road and Alderpoint Road

★ PROJECT LOCATION



Ridge Line Topo Map

Humboldt County Planning and Building Department

0 180 360 720 Feet

0 0.0325 0.065 0.13 Miles

RF= 1:4,514 1 in = 376 ft

N W E S

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Highways and Roads

- Principal Arterials
- Minor Arterials
- Major Collectors
- Minor Collectors
- Local Roads
- Private or Unclassified
- Major River or Stream

Blue Line Streams

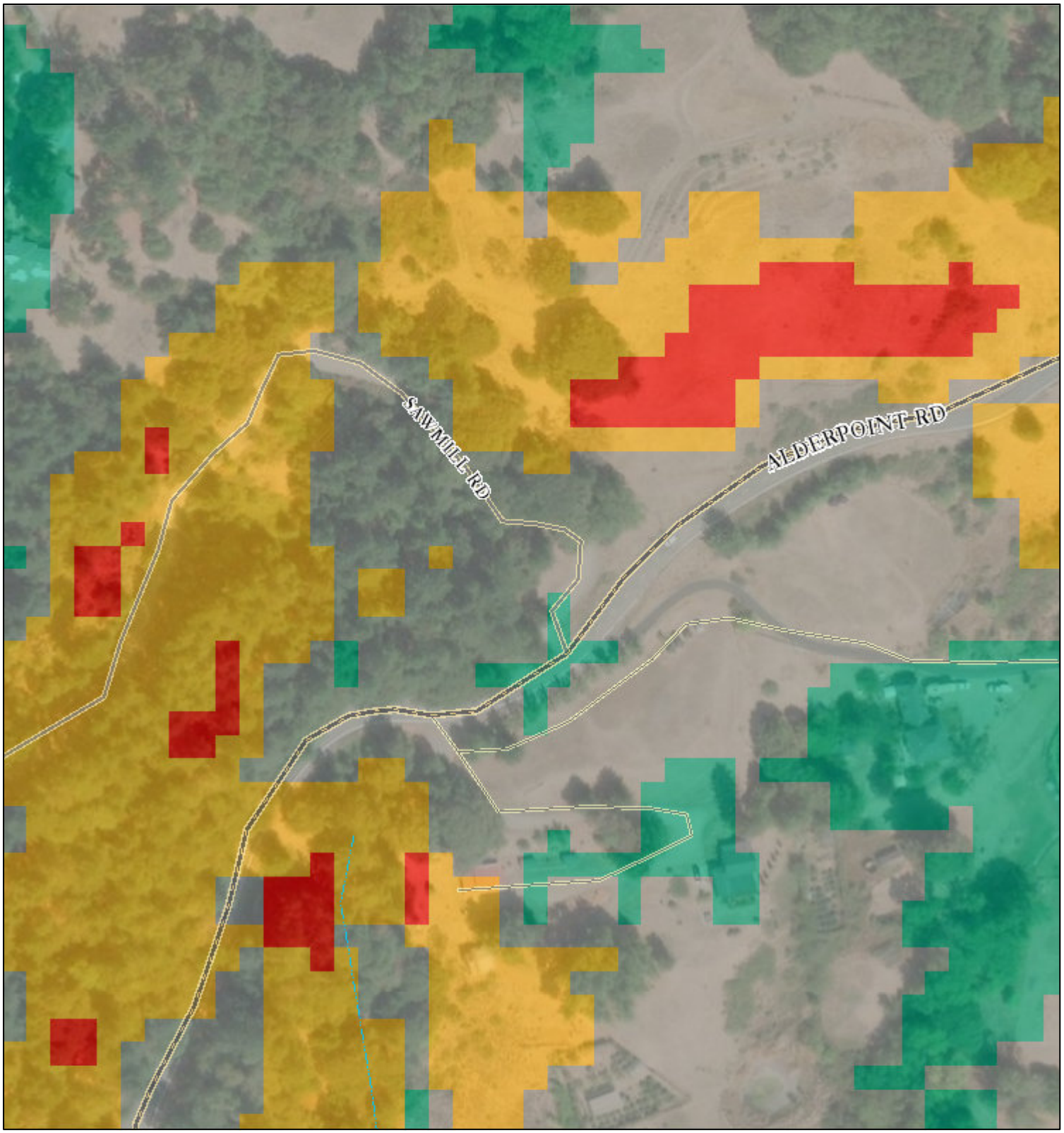
- Perennial 1-3
- Perennial >4
- Intermittent
- Subsurface

Topographic Contours 40ft

- Minor Interval
- Major Interval
- <default layer do not remove>

Map Disclaimer:
While every effort has been made to assure the accuracy of this information, it should be understood that it does not have the force & effect of law, rule, or regulation. Should any difference or error occur, the law will take precedence.

Source: Humboldt County GIS, Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community, FRAP, FEMA, USGS, ESA, CGS, Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community



Ridge Line Slope Map

Humboldt County Planning and Building Department

0 87.5 175 350 Feet

0 0.015 0.03 0.06 Miles

RF= 1:2,257 1 in = 188 ft

N W E S

Highways and Roads

Principal Arterials

Minor Arterials

Major Collectors

Minor Collectors

Local Roads

Private or Unclassified

Major River or Stream

Blue Line Streams

Perennial 1-3

Perennial >4

Intermittent

Subsurface

Slope USGS

15-30%

30 - 50%

+50%

Slope less than 15%

<15%

<default layer do not remove>

Printed: October 28, 2022 Web AppBuilder 2.0 for ArcGIS

Ridgeline Road Improvements- Crossing Photos

Ridgeline Road Improvements- Crossing Photos

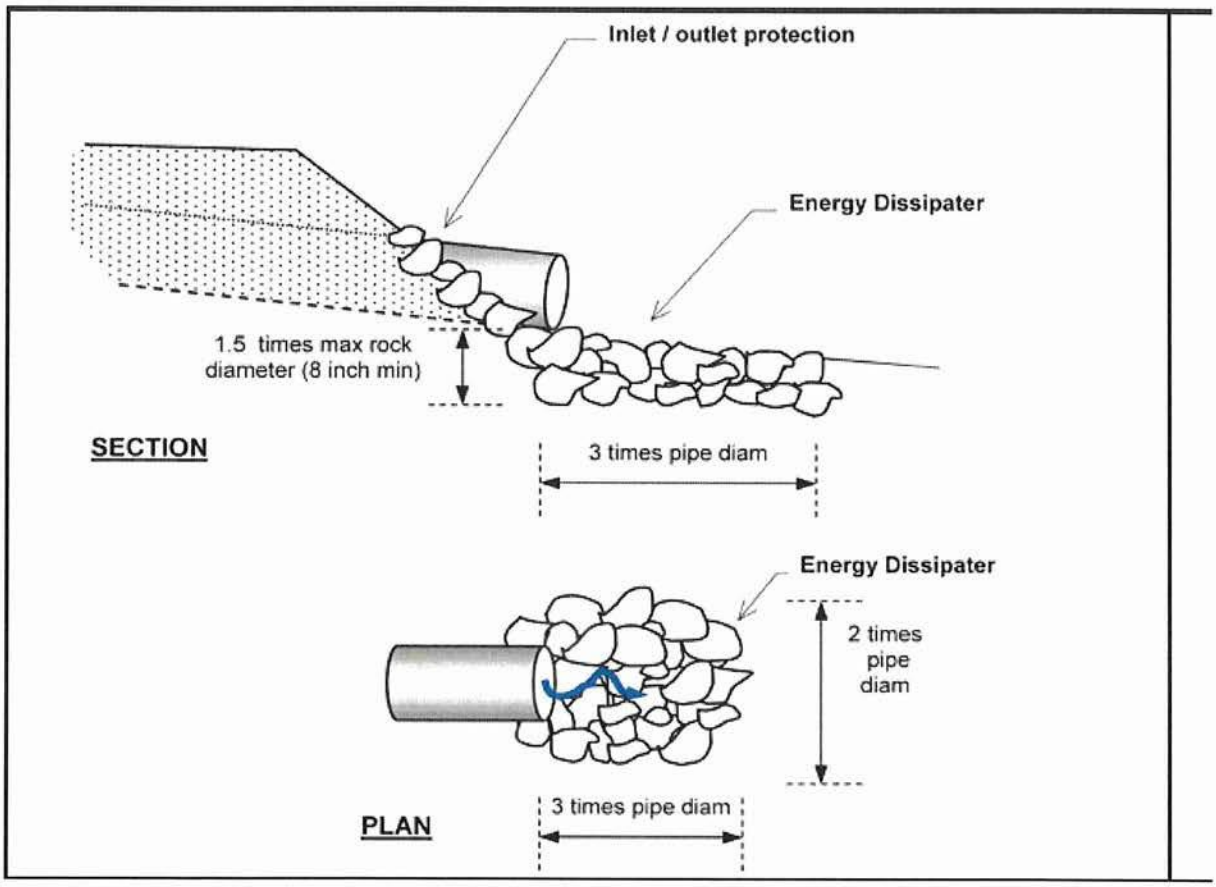
Figure 4 - Site P□otograp□s

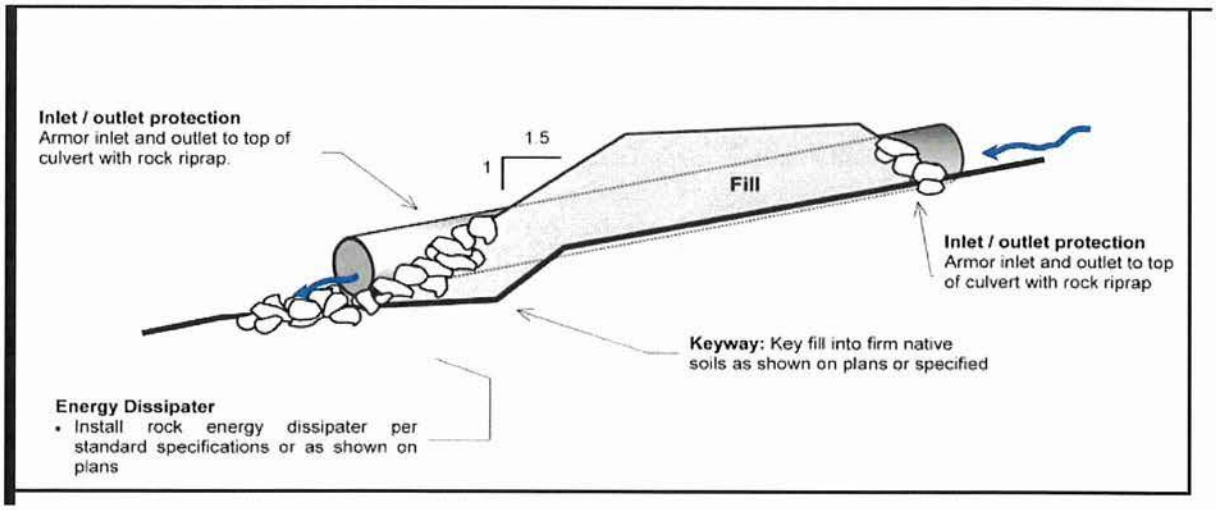
Culvert Installation Specifications

- New culvert installations shall be sized to accommodate a 100-year storm.
- New culverts shall be placed at stream gradient, or have downspouts, or have energy dissipaters at outfall.
  - Align culverts with the natural stream channel orientation to ensure proper function, prevent bank erosion and minimize debris plugging.
  - Place culverts at the base of the fill and at the grade of the original streambed or install a downspout past the base of the fill. Downspouts should only be installed if there are no other options.
  - Culverts should be set slightly below the original stream grade so that the water drops several inches as it enters the pipe.
  - Culvert beds should be composed of rock-free soil or gravel, evenly distributed under the length of the pipe.
  - Compact the base and sidewall material before placing the pipe in its bed.
  - Lay the pipe on a well-compacted base. Poor basal compaction will cause settling or deflection in the pipe and can result in separation at a coupling or rupture in the pipe wall.
  - Backfill material should be free of rocks, limbs or other debris that could dent or puncture the pipe or allow water to seep around the pipe.
  - Cover one end of the culvert pipe, then the other end. Once the ends are secure, cover the center.
  - Tamp and compact backfill material throughout the entire process, using water as necessary for compaction.
  - Backfill compacting will be done in 0.5 – 1.0 foot lifts until 1/3 of the diameter of the culvert has been covered.
  - Push layers of fill over the crossing to achieve the final design road grade, at a minimum of one-third to one-half the culvert diameter.
- Critical dips shall be installed on culvert crossings to eliminate diversion potential.
- Road approaches to crossings shall be treated out to the first drainage structure (i.e. waterbar) or hydrologic divide to prevent transport of sediment.
- Road surfaces and ditches shall be disconnected from streams and stream crossings to the greatest extent feasible. Ditches and road surfaces that cannot be feasible disconnected from streams or stream crossings shall be treated to reduce sediment transport to streams.
- If downspouts are used, they shall be secured to the culvert outlet and shall be secure on fill slopes.
- Culverts shall be long enough so that road fill does not extend or slough past the culvert ends.
- Inlet of culverts and associate fill shall be protected with appropriate measures that extend at least as high as the top of the culvert.
- Outlet of culverts shall be armored with rock if road fill sloughing into channel can occur.
- Armor inlets and outlets with rock, or mulch and seed with grass as needed (not all stream crossings need to be armored).
- Where debris loads could endanger the crossing a debris catchment structure shall be constructed upstream of the culvert inlet.
- Bank and channel armoring may occur when appropriate to provide channel and bank stabilization.

Figure □A - Cul□ert Speci□ications

Culvert Installation Specifications

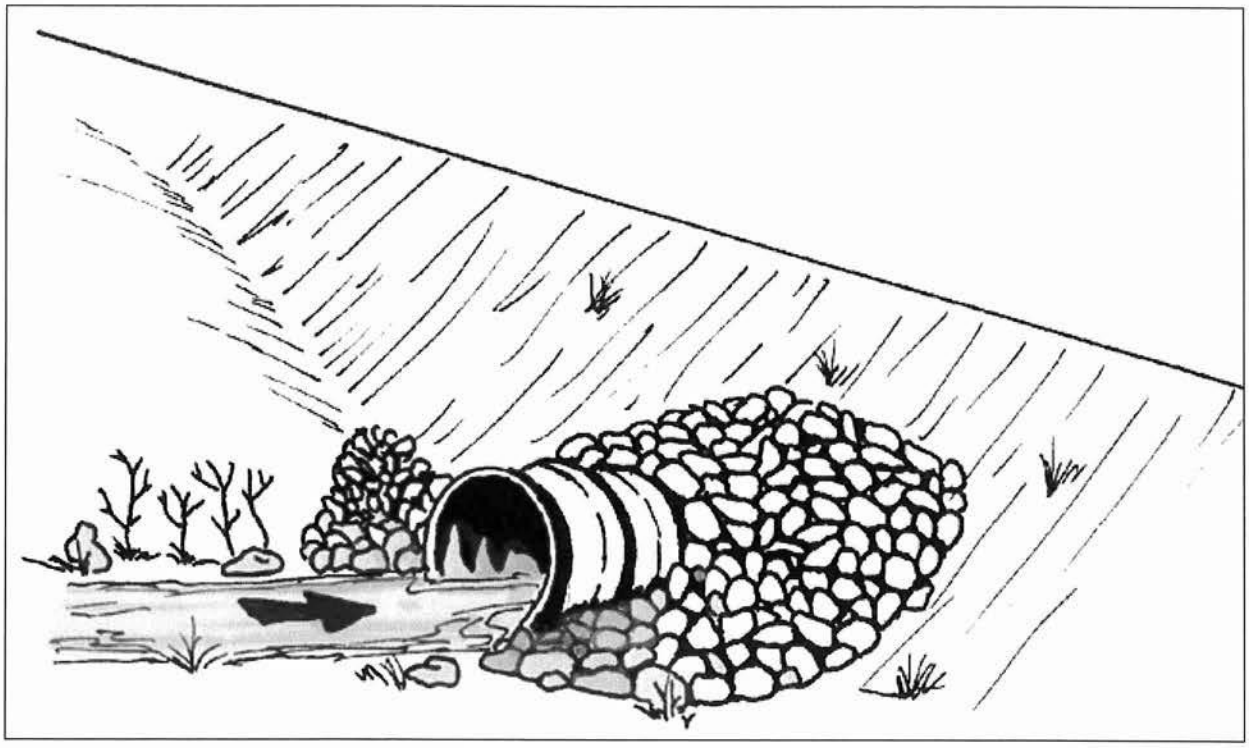




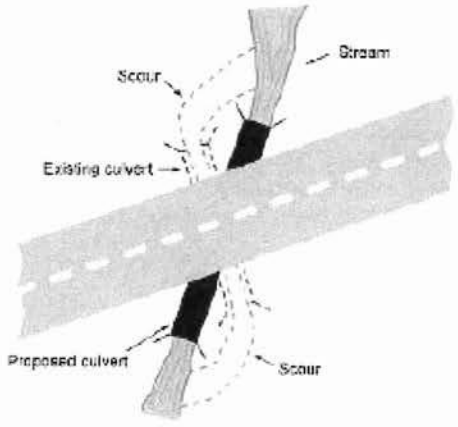
Riprap installed to protect the inlet and outlet of a stream crossing culvert from erosion or for energy dissipation should be keyed into the natural channel bed and banks to an approximate depth of about 1.5x the maximum rock thickness. Riprap should be placed at least up to the top of the culvert at both the inlet and outlet to protect them from splash erosion and to trap any sediment eroded from the newly constructed fill slope above.

Figure □□ - Cul□ert Speci□ications

Culvert Installation Specifications



Rock armor used for inlet and outlet protection (i.e., not as energy dissipation) does not have to be sized to protect against high velocity scour. If the culvert is properly sized and its length is adequate, it should be able to transmit flood flows without scouring the inlet or eroding the outlet around the culvert. Armor shown here is designed to protect the culvert outlet and basal fill from splash erosion and from occasional submergence and currents within standing water (at the inlet) when the culvert plugs. Importantly, inlet and outlet armor also serves to trap sediment that has been eroded or slides down the new constructed fill face in its first several years, until the slope becomes well vegetated.

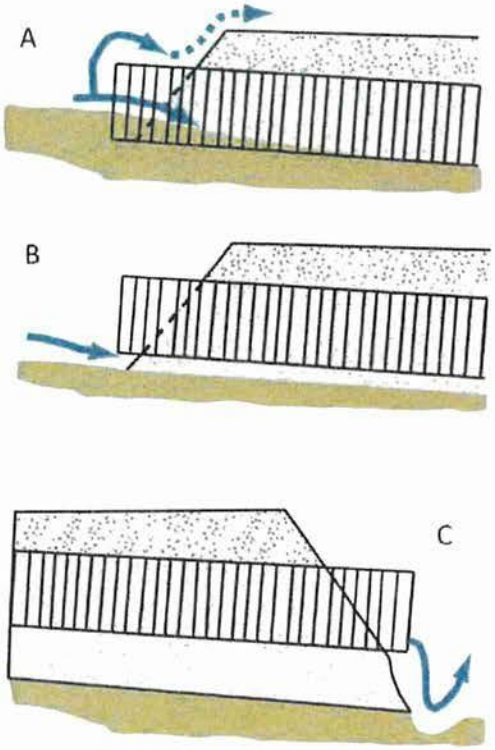


HANDBOOK FOR FOREST, RANCH AND RURAL ROADS

FIGURE 97. *Culvert alignment should be in relation to the stream and not the road. It is important that the stream enters and leaves the culvert in a relatively straight horizontal alignment so streamflow does not have to turn to enter the inlet or discharge into a bank as it exits. This figure shows a redesigned culvert installation that replaces the bending alignment that previously existed. Channel turns at the inlet increase plugging potential because wood going through the turn will not align with the inlet. Similarly, channel turns at the inlet and outlet are often accompanied by scour against the channel banks (Wisconsin Transportation Information Center, 2004).*

Figure □C - Cul□ert Speci□ications

Culvert Installation Specifications



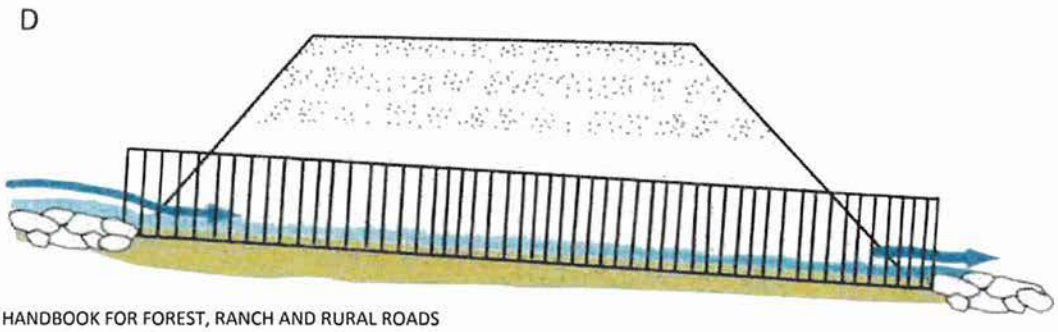


FIGURE 155. *Proper culvert installation involves correct culvert orientation, setting the pipe slightly below the bed of the original stream, and backfilling and compacting the fill as it is placed over the culvert. Installing the inlet too low in the stream (A) can lead to culvert plugging, yet if set too high (B) flow can undercut the inlet. If the culvert is placed too high in the fill (C), flow at the outfall will erode the fill. Placed correctly (D), the culvert is set slightly below the original stream grade and protected with armor at the inlet and outlet. Culverts installed in fish-bearing stream channels must be inset into the streambed sufficiently (>25% embedded) to have a natural gravel bottom throughout the culvert (Modified from: MDSL, 1991).*

HANDBOOK FOR FOREST, RANCH AND RURAL ROADS

Figure D - Culvert Specifications

Distance to Nearest Adjoining Parcel Primary Stucture & Adjoing Parcel Use Code Descriptions

Ridge Line Project Area Map

Humboldt County Planning and Building Department

0 350 700 1,400 Feet

0 0.05 0.1 0.2 Miles

RF= 1:9,028 1 in = 752 ft

N W E S

Highways and Roads

- Principal Arterials
- Minor Arterials
- Major Collectors
- Minor Collectors
- Local Roads
- Private or Unclassified
- Major River or Stream

Blue Line Streams

- Perennial 1-3
- Perennial >4
- Intermittent
- Subsurface
- City Boundary
- Counties
- Parcels
- Parcels (no APN labels)

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Figure □ - Adjacent Parcels

APPLICATION PACKET CHECKLIST

Please check below to ensure you have a complete application. Once complete, email the following documents, in pdf format with the text "Application for Remediation Grant Program Funding" in the subject line to mrichardson@co.humboldt.ca.us.

- X Signed Application Submission Form
- X Project Description – Summary of the Project, up to 2 pages.
- X Plot Plan
- X Plot Plan Checklist – Attached
- X Cross sections of proposed work including topographic elevations
- X Scope of Work – Detailed Description of Work
- X Schedule for Completion – Identify Milestones
- X Erosion Control Plan and Monitoring Plan
- X Budget – Be as specific as possible – sample attached
- X Project Maps and Figures
- ☐Letter(s) of Support (optional)

APPLICATION FORM - Commercial Cannabis Land Use Ordinance Mitigation and Remediation Fund Program

Project Title: Hailey Remediation 049 Date of Application: 10/31/2022

Applicant Name: HWY36Homestead, LLC Project APN: 210-191-049

Contact Person Name and Title: Shell'Don Hailey, Member

Contact Phone: (404) 606-5803 Contact Email: shelldon.hailey@gmail.com

Contact Address: 9171 Wilshire Boulevard #500, Beverly Hills, CA 90210

Amount Requested: $29,173 Total Budget: $29,823

Project Timeline: Start Date: 01/01/2023 End Date: 0□/01/2023

Signature of Applicant: 

Project: HWY36HOMESTEAD Remediation 049

Applicant: HWY36HOMESTEAD, LLC

Contact: Shell'Don Hailey

APN: 210-191-049

Grant Funding Requested: $29,173.00

Project Description

The project is located in Humboldt County, APN 210-191-049, two miles west of Dinsmore, California. The subject parcel is located off of Highway 36, in the Van Duzen watershed.

The project proposes the upgrade of culverts at three stream crossings and the installation of armored fill at one other stream crossing on the property as required by the applicant's Lake and Streambed Alteration Agreement with the California Department of Fish & Wildlife.

While the Humboldt GIS indicates areas of the parcel are designated with high slope instability, it is not within a flood hazard zone, nor in an earthquake hazard zone. The parcel is surrounded by rural improved properties. No impact to these other parcels is expected.

This project would storm-proof stream crossings and reduce the potential for road-related sediment delivery to the Van Duzen Watershed. All of the crossing upgrades will be constructed according to standards provided in the "Handbook for Forest, Ranch and Rural Roads" (Weaver, Weppner and Hagans, 2015), and the California Salmonid Stream Habitat Manual, Part X (Weaver, Hagans and Weppner, 2006) by a licensed contractor.

Permanent impacts to existing native channel bed, channel, watercourse banks, and associated riparian habitat will be negligible and avoided. Incidental destruction of small areas of riparian habitat growing on existing road fill or in disturbed channel areas is expected but will be minimized at the proposed sites during remediation. No loss of trees is expected.

HWY36HOMESTEAD, LLC
PLOT PLAN

NOTES

1. ALL DIMENSIONS AND LOCATIONS ARE APPROXIMATE, INCLUDING: PROPERTY LINES, ROADS, BLDGS, WATER STORAGE TANKS, AND WATER SOURCES.
2. ALL WATER TANKS ARE FOR IRRIGATION USE UNLESS OTHERWISE NOTED

ABBREVIATION

BLDG	BUILDING
EX	EXISTING
GAL	GALLONS
ML	MIXED LIGHT
SF	SQUARE FEET
TYP	TYPICAL

LEGEND

- CULTIVATION OPERATION FOR APN 210-191-049
- CULTIVATION OPERATIONS FOR APN 210-191-050 (CCL20-0000769)
- POINT OF WATER DIVERSION
- DRAINAGE CHANNEL AND FLOW DIRECTION
- PREMISES BOUNDARY & PROPERTY LINE
- STREAM CROSSINGS

HWY 36

APN 210-191-050

25' WIDE PAVED HIGHWAY

16' Wide Main Entrance/Exit -Access for property & premises

APN 210-191-049

15% Slope

SC#3 (40.4845,-123.6450)

15' WIDE DIRT DRIVEWAY

SC#4 (40.4844,-123.6452)

ACCESS ROAD TYP

74'

22% Slope

WATER TANK & PUMP PUMP TO WATER TANKS (1) 1,000 GAL (40.4840, -123.6450)

20% Slope

WATER TANK GRAVITY FED TO CANOPY (1) 3,000 GAL (40.4839, -123.6437)

WATER COLLECTION HOLDING TANK 1,000 GAL (40.4839, -123.6449)

WATER TANK GRAVITY FED TO CANOPY (1) 500 GAL (40.4839, -123.6438)

POINT OF DIVERSION (SPRING BOX) DOMESTIC, IRRIGATION AND FIRE PROTECTION USE (40.4838, -123.6451)

TURN AROUND

SC# 2 (40.4831,-123.6432)

1702'

WATER TANK & PUMP (1) 3,000 GAL (40.4830, -123.6447)

SC# 1 (40.4828,-123.6450)

181'

SEPTIC

61'

8% Slope

Surface Water Runoff

EX HOUSE (20' x 36') (NON-CANNABIS ACTIVITIES)

14% Slope

WATER TANKS GRAVITY FED TO CANOPY (2) 3,000 GAL (40.4829, -123.6451)

Surface Water Runoff

PROPERTY LINE

10% Slope

WATER TANK (1) 500 GAL GRAVITY FED TO CANOPY (40.4826, -123.6456)

SC# 1 (40.4818,-123.6423)

ENTRANCE/EXIT TO PREMISES

IRRIGATION WATER LINE FROM POINT OF DIVERSION TO WATER TANKS

74'

85'

PROPERTY LINE & PREMISES BOUNDARY

APN 210-191-049

WATER TANKS (8) 500 GAL (3) 3000 GAL (2) 4000 GAL (2) 5000 GAL (DOMESTIC) (40.4813, -123.6431)

POD WELL & PUMP DOMESTIC, IRRIGATION AND FIRE PROTECTION USE (40.4812,-123.6456)

(2) 1200 GAL WATER TANKS (2) 1200 GAL (40.4813, -123.6431)

750'

APN 210-191-050

400'±

400'±

N

0 100' 200'

SCALE: 1" = 200'

DATE	REVISED:	PROPERTY DIAGRAM	SITE LOCATION	
8/8/21	OCT. 30,2022		CA STATE HWY 36 BRIDGEVILLE, CA 95526 APN: 210-191-049 & -050	
FIGURE 1 of 1				

PLOT PLAN AND TENTATIVE MAP CHECKLIST

The following information must be shown on your plot plan or tentative map. Please check ✓ the box to the left of the items shown on the plot plan or tentative map. If any item is <u>not</u> on your site to your knowledge, write "N/A" next to the box. Plot plans shall be drawn on a minimum size sheet of 8-1/2" x 11", and tentative subdivision maps on a minimum size sheet of 18" x 26". ***<u>Note:</u> This Checklist must be completed by the applicant and submitted with your application.***

Applicant's Name □ailey Re□ediation □4□ APN 21□-1□1-□4□

_____

FOR ALL PROJECTS

☐ 1. Name of applicant(s)
☐ 2. Location or vicinity map (on or attached to the plot plan)
☐ 3. The subject parcel (show entire parcel with dimensions)
☐ 4. Date, north arrow and scale
☐ 5. Name, County road numbers, and width of all existing and proposed access roadways adjacent to or within the subject parcel (indicate width of traveled way, grade (in % slope), and surface)
☐ 6. Existing <u>and</u> proposed improvements (label as "existing" and "proposed" with dimensions and distance to nearest two (2) property lines)
- ☐ a. Structures and buildings (include floor area, height and proposed use)
- ☐ b. Driveways and turnaround areas (indicate width, grade (in % slope) and surface)
- ☐ ☐ c. Utility lines (electric, gas, telephone, sewer, water, and cable TV)
- ☐ d. Septic tanks and leachfields (label primary/reserve areas and test holes)
- ☐ e. Wells
- ☐ f. Parking and loading areas (show individual parking spaces, including handicapped parking and ramps)
- ☐ ☐ g. Storm drains, curbs and gutters
- ☐ h. Emergency water storage tanks and fire hydrants
- ☐ ☐ i. Landscaped areas (include proposed exterior lighting)
- ☐ ☐ j. Major vegetation (identify mature trees (12" dbh or larger) to be removed)
- ☐ ☐ k. Diked areas
- ☐ ☐ l. Proposed grading and fill (estimate volume)
- ☐ ☐ m. Signs (indicate size, illuminated, and design (e.g., monument, pylon, etc.))
- ☐ ☐ n. Other - specify _____

☐ 7. Direction of surface water runoff
☐ ☐ 8. Location and width of all existing and proposed easements of record
☐ ☐ 9. Hazardous areas (indicate on map if on the project site <u>or</u> within 400 feet of the project site):
- ☐ ☐ a. Areas subject to inundation or flooding
- ☐ ☐ b. Steep or unstable slopes
- ☐ ☐ c. Expansive (clay) soils
- ☐ ☐ d. Earthquake faults
- ☐ ☐ e. Hazardous waste or substance sites
- ☐ f. Other - specify _____

☐ 10. Sensitive habitat areas (indicate on map if on project site <u>or</u> within 400 feet of the project site):
- ☐ a. Creeks, rivers, sloughs and other drainage courses
- ☐ ☐ b. Lakes, ponds, marshes, or "wet" meadows
- ☐ ☐ c. Beaches
- ☐ ☐ d. Sand dunes
- ☐ e. Other - specify _____

☐ ☐ 11. Historical buildings or known archaeological or paleontological resources
☐ 12. Land use and buildings on adjacent parcels, and approximate distances to closest property lines

FOR LOT LINE ADJUSTMENT PLOT PLANS ONLY

☐ ☐ 13. Proposed new lines and lines to be eliminated (show lines to be eliminated as dashed)
☐ ☐ 14. Areas (in square footage or acreage) of the initial and resulting parcels

FOR TENTATIVE SUBDIVISION MAPS ONLY

☐ ☐ 16. Approximate dimensions and areas of all proposed lots
☐ ☐ 17. A statement that "All easements of record are shown on the tentative map and will appear on the recorded subdivision map"
☐ ☐ 18. Contour lines (at _____ intervals)
☐ ☐ 19. For major subdivisions (5 or more parcels): proposed drainage improvements, details of any grading to be performed, approximate radii of all roadway curves, areas for public use, and typical sections of all streets, highways, ways and alleys
☐ ☐ 20. Names and assessor's parcel numbers of all contiguous ownerships

NOTE: THE SUBMITTAL OF INCOMPLETE OR ILLEGIBLE PLOT PLANS OR TENTATIVE MAPS WILL CAUSE DELAYS IN THE PROCESSING OF YOUR APPLICATION

Project: HWY36HOMESTEAD Remediation 049

Applicant: HWY36HOMESTEAD, LLC

Contact: Shell'Don Hailey

APN: 210-191-049

Grant Funding Requested: $29,173.00

Project Status: Awaiting Permitting

Scope of Work

The project is for culvert upgrades at three stream crossings and rock armoring of one stream crossing. The scope of work is described in the applicant's LSA agreement with Fish & Wildlife, and is summarized as follows:

Crossing 1: A small un-culverted fill crossing on a Class III watercourse will be upgraded with an armored fill crossing sized for 100-year stream flows. A headcut just downstream will be laid back to a stable 92:1) angle and 10 cubic yards of rock armor will be installed in a "U-shaped" configuration to prevent the headcut from migrating upstream and potentially undermining the stream crossing.

Crossing 2: In accordance with the specifications in the Notification, a spillway will be installed on a shallow, unlined, spring fed pond that currently lacks an outflow. The modification will render the pond incapable of impounding water and will allow the spring to flow naturally.

Crossing 3: Replace undersized 30" diameter culvert with a minimum 60" diameter culvert.

Crossing 4: Replace undersized 18" diameter culvert with a minimum 48" diameter culvert; and eliminate the fill crossing.

The project requires heavy equipment, culverts and a supply of rock. The work will be completed by Mel Brown Backhoe and Trucking, license number 992015.

Due to the potential stream impact, applicant will apply for a 401 certification from the State Water Resources Control Board.

Project: HWY36HOMESTEAD Remediation 049

Applicant: HWY36HOMESTEAD, LLC

Contact: Shell'Don Hailey

APN: 210-191-049

Grant Funding Requested: $29,173.00

Mitigation and Remediation Fund
Schedule for Completion

Milestone	Start Date	End Date
Detailed Project Design	January 1, 2023	February 1, 2023
Permitting	February 1, 2023	May 1, 2023
Final Bidding and Contracting	May 1, 2023	May 31, 2023
Project Ground-Breaking	June 1, 2023	
Project Completion		August 1, 2023
Monitoring	August 1, 2023	Ongoing

Project: HWY36HOMESTEAD Remediation 049

Applicant: HWY36HOMESTEAD, LLC

Contact: Shell'Don Hailey

APN: 210-191-049

Grant Funding Requested: $29,173.00

Erosion Control and Monitoring Plan

To protect nearby watershed areas and nearby habitat the site is managed to meet standard conditions and follow best practices in accordance with guidelines provided by the North Coast Regional Water Quality Control Board (NCRWQCB). These practices address erosion control and drainage features, spoils management, water storage and use, irrigation runoff, fertilizers and pesticides, and stream and wetland buffers when applicable.

Best practice steps for this site can include:

- Moderate road shaping and ditch-relief used to optimize drainage to stable areas
- Out-sloping maintained to ensure proper capture and capacity of seasonal flow
- Usage of vegetative ground cover and gravel for added sediment control
- Application of straw mulch to exposed soils to minimize erosion
- Careful irrigation, with immediate oversight, to reduce the possibility of irrigation runoff

Applicant will maintain driveways and access roads to eliminate erosion or runoff during storms. Prior to the winter season and significant storm events, roads and cultivation sites will be inspected and monitored to ensure that runoff is prevented. Culverts will be inspected to ensure armoring is maintained and any debris or sediment has been removed..

If potential issues are discovered during or immediately following a storm event, they will be corrected as soon as possible to ensure minimal impact and prevent sediment flow in the future. This will include proper ditching and vegetation buffers, and as needed, straw, seed, wattles, jute cloth, riprap, or other industry standards used to prevent and eliminate runoff.

Project: HWY36HOMESTEAD Remediation 049

Applicant: HWY36HOMESTEAD, LLC

Contact: Shell'Don Hailey

APN: 210-191-049

Grant Funding Requested: $29,173.00

Total Budget: $29,823

Project Budget

Item	Grant Funds	Other Funds (Source)
Permit Fees		
401 Certification	$1,767.00	$650.00 (Applicant)
Consultant and Professional Fees		
Timberland Resource Consultants	$2,500.00	
Margro Advisors	$1,651.00	
*Materials, Equipment and Labor**		
Mel Brown Backhoe and Trucking	$23,255.00	
Totals	**$29,173.00**	**$650.00**

*See attached bid

□□ Y3□□OM□ST□AD Remediation Bid 049

S.C. #1 is a crossing just past house. Identified by GPS coordinates.
Calls for 10 cubic yards of rock to armor.

15 tons of 3" minus	600.00
trucking 4 x 140	560.00
backhoe 1 x 140	140.00
total	1300.00

S.C #3

30' x 60"	4137.00
excavator 12 x 185	2220.00
Backhoe 4 x 140	560.00
Labor 12 x 45	540.00
compactor	150.00
Rock 39 tons	1248.00
Trucking 9 x 140	1260.00
Total	9980.00

S.C. #4

30 x 48"	3195.00
Excavator 8 x 185	1480.00
Backhoe 4 x 140	560.00
Labor 10 x 45	450.00
Compactor	150.00
Rock 26 tons	832.00
Trucking 6 x 140	840.00
total	7507.00

S.C. #2 is a shallow pond. Limited design spec at this time but estimate is to remove dam materials and 14 tons rock

Excavator 8 x 185	1480.00
Backhoe 8 x 140	1120.00
Rock 14 tons	448.00
truck 3 x 140	420.00
total	3468.00

Trucking to get pipe here 1,000.00 (if they can get it on one load)

Grand total $ 23,255.00

The pricing on this estimate should be good for the next 60 days. Prices mostly subject to change with materials especially culvert.

Melvin Clifton Brown Jr. aka Cliff
Gp Mel Brown Backhoe and Trucking
707-498-8001

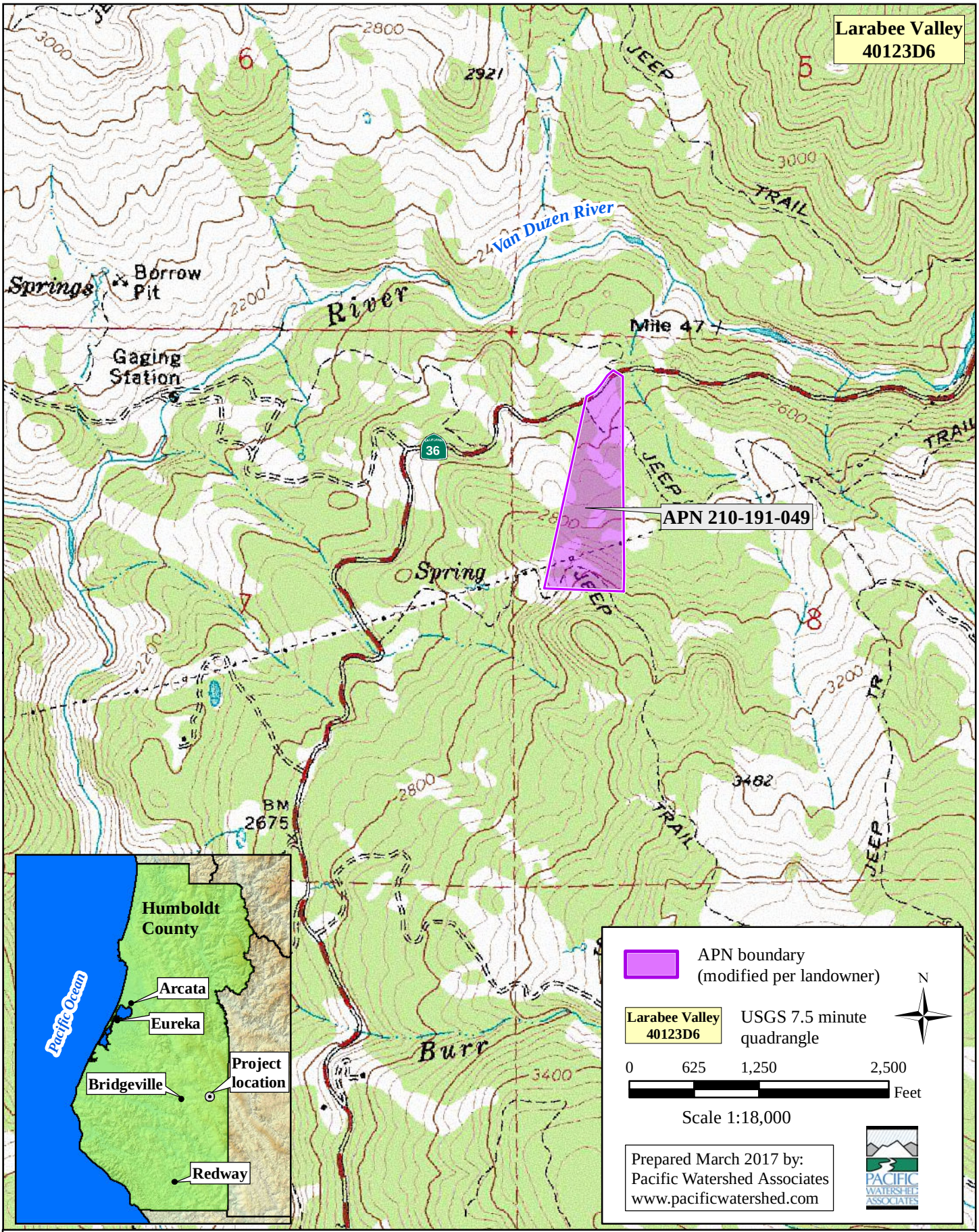
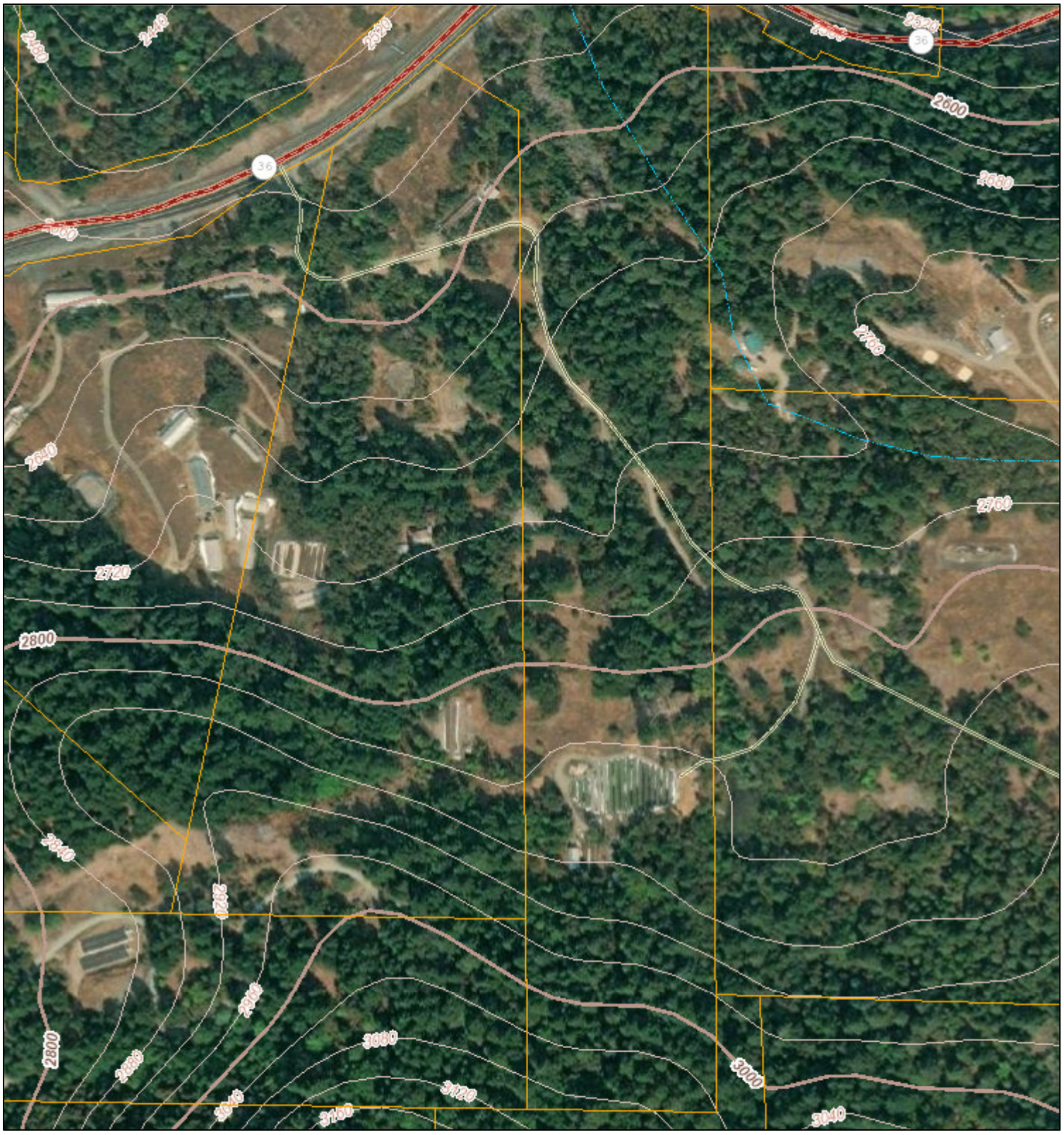


Figure 1. Location map for LSAA map for Highway 36 Homestead, APN 210-191-049, 41600 California State Highway 36, Bridgeville, Humboldt County, California.

P:\GIS\52370

Figure 1 - Vicinity Map



Hailey Topo Map

Humboldt County Planning and Building Department

0 180 360 720 Feet

0 0.0325 0.065 0.13 Miles

RF= 1:4,514 1 in = 376 ft

N W E S

Highways and Roads

Principal Arterials

Minor Arterials

Major Collectors

Minor Collectors

Local Roads

Private or Unclassified

Major River or Stream

Blue Line Streams

Perennial 1-3

Perennial >4

Intermittent

Subsurface

City Boundary

Counties

Parcels (no APN labels)

Topographic Contours 40ft

Minor Interval

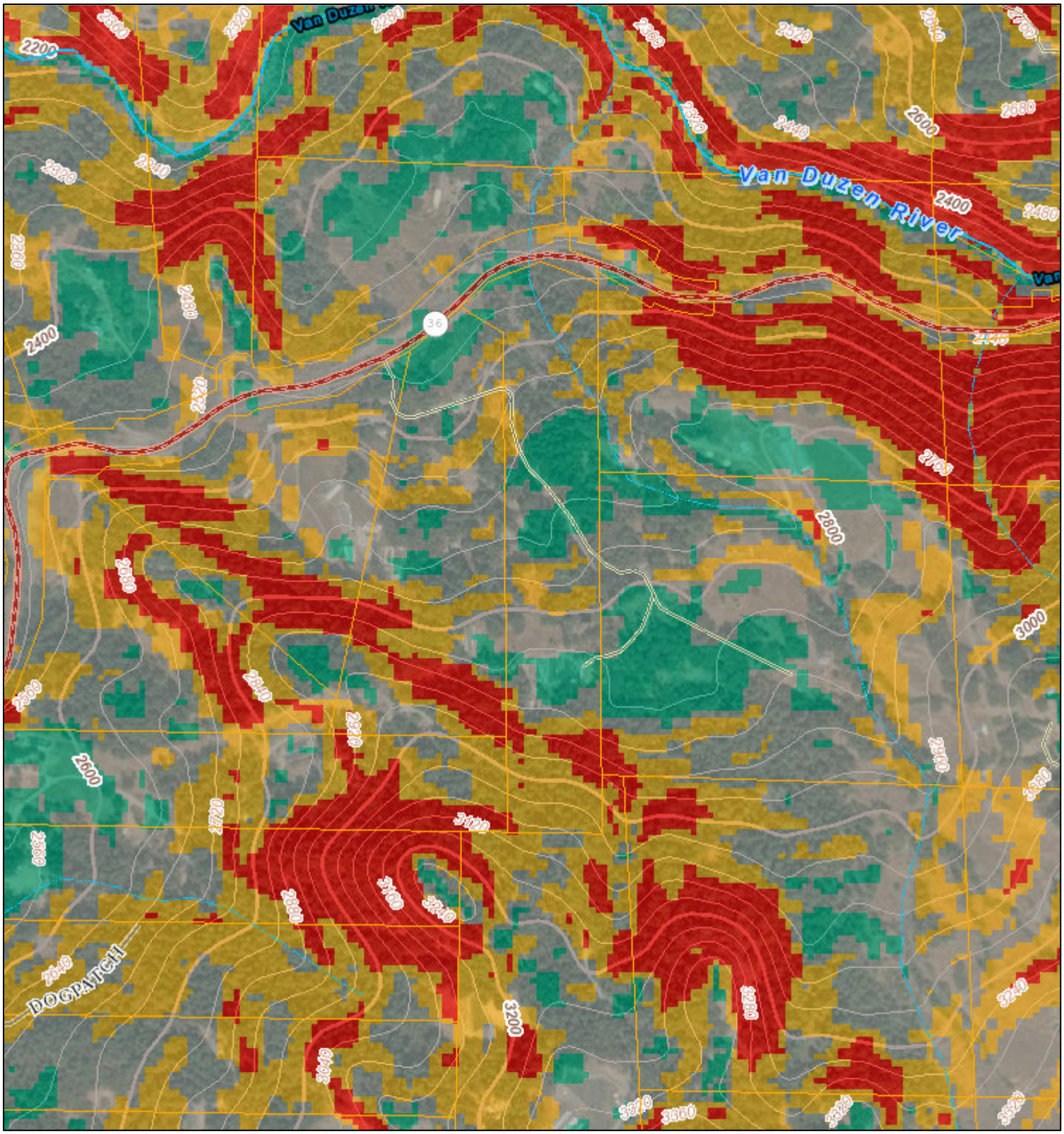
Major Interval

Printed: October 25, 2022 Web AppBuilder 2.0 for ArcGIS

Map Disclaimer:
While every effort has been made to assure the accuracy of this information, it should be understood that it does not have the force & effect of law, rule, or regulation. Should any difference or error occur, the law will take precedence.

Source: Humboldt County GIS, Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community, FRAP, FEMA, USGS, ESA, CGS, Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

Figure 2 - Topo Map



Hailey Slope Map

Humboldt County Planning and Building Department

0 350 700 1,400 Feet

0 0.05 0.1 0.2 Miles

RF= 1:9,028 1 in = 752 ft

N W E S

Highways and Roads
- Principal Arterials
- Minor Arterials
- Major Collectors
- Minor Collectors
- Local Roads

- Private or Unclassified
- Major River or Stream

Blue Line Streams
- Perennial 1-3
- Perennial >4
- Intermittent

- Subsurface
- City Boundary
- Counties
- Parcels (no APN labels)

Slope USGS
- 15-30%
- 30 - 50%
- +50%

Slope less than 15%
- <15%

Printed: October 25, 2022 Web AppBuilder 2.0 for ArcGIS

Map Disclaimer:
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Figure 3 - Slope Map

Photo 3□□o□n□tream □ie□ o□□la□□□□tream c□annel □tandin□abo□e P□□ □P□oto □pril 2□□□□

Stream Crossings (SC)

Photo 4– □o□n□tream □ie□ o□□tream □ro□in□ □□□□□□loo□in□at t□e road bed□□□□i□a □ill cro□in□on □la□□□□□ater co□r□e □it□no □ormal draina□e □tr□ct□re□□ote t□e □mall □eadc□t at t□e o□tboard road □P□oto □pril 2□□□□

Figure 4A - P□otograp□s

Photo 5– □ie□ o□□□ □□□loo□in□ □p□tream at a □eadc□t □ormin□in t□e o□tboard road on □la□□□□□aterco□r□e □P□oto □pril 2□□□□

Photo 6– □ie□ o□lar□e acti□e □eadc□t belo□ □□□□ □P□oto □pril 2□□□□

Figure 4□ - P□otograp□s

Photo 7– □ie□ o□□□ □2 loo□in□do□n□tream at □□inc□diameter c□1□ert inlet on □la□□□□aterco□r□e□□□e c□1□ert inlet i□□li□□tl□ob□c□red b□poorl□place roc□armor □P□oto □pril 2□□□□□

Photo 8– □ie□ o□□□ □□loo□in□do□n□tream at □□inc□diameter c□1□ert inlet on □la□□□□aterco□r□e□□P□oto □pril 2□□□□□

Figure 4C - P□otograp□s

Photo 9– □ie□ o□□□ □□loo□in□ □p□tream at □□inc□diameter c□l□ert o□tlet on □la□□□□aterco□r□e□□□e c□l□ert i□in□talled □i□□in t□e □ill □it□a □ □oot pl□n□e at t□e c□l□ert o□tlet □ □ic□doe□not allo□ □or t□e pa□□a□e o□a□□atic or□ani□m□□P□oto □pril 2□□□□□

Photo 10– □ie□ o□t□e □prin□□ed pond □P□oto □pril 2□□□□□

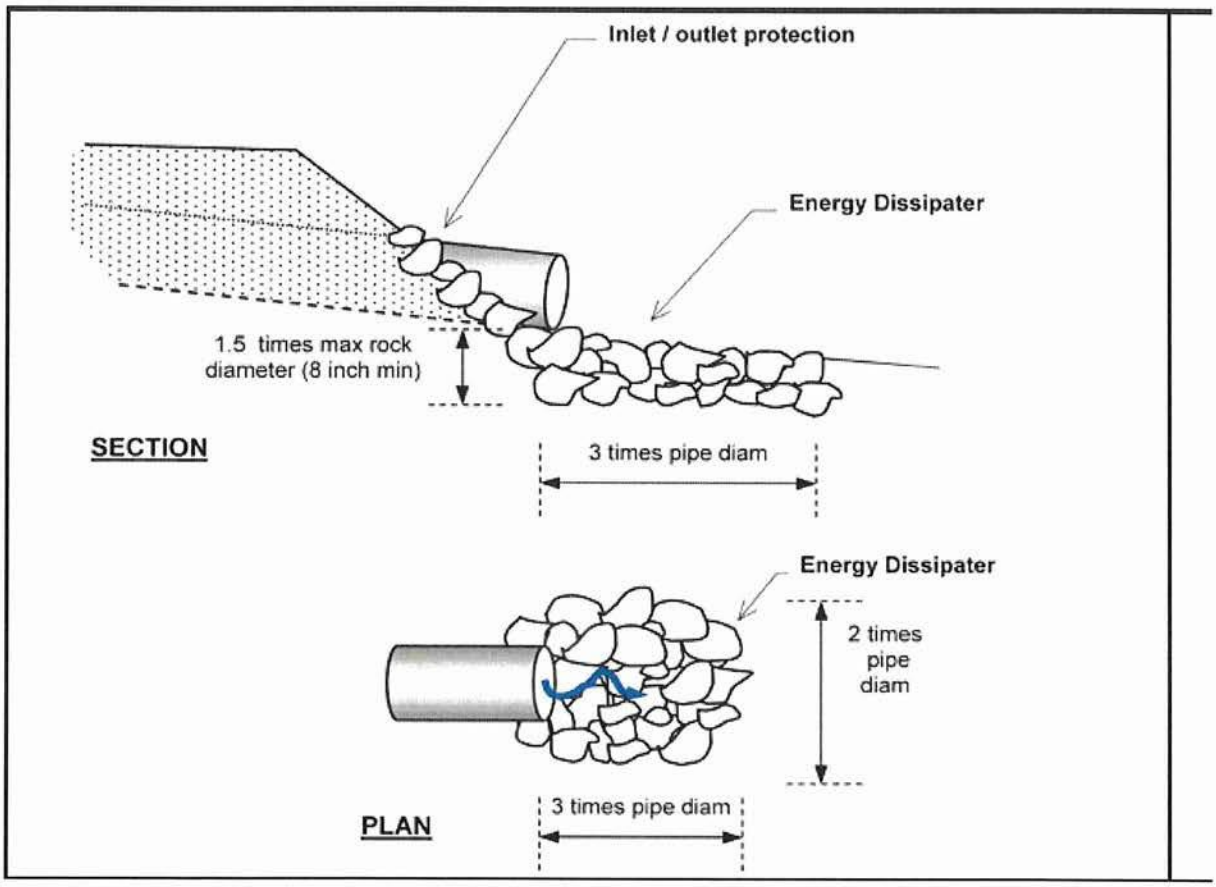
Figure 4D - P□otograp□s

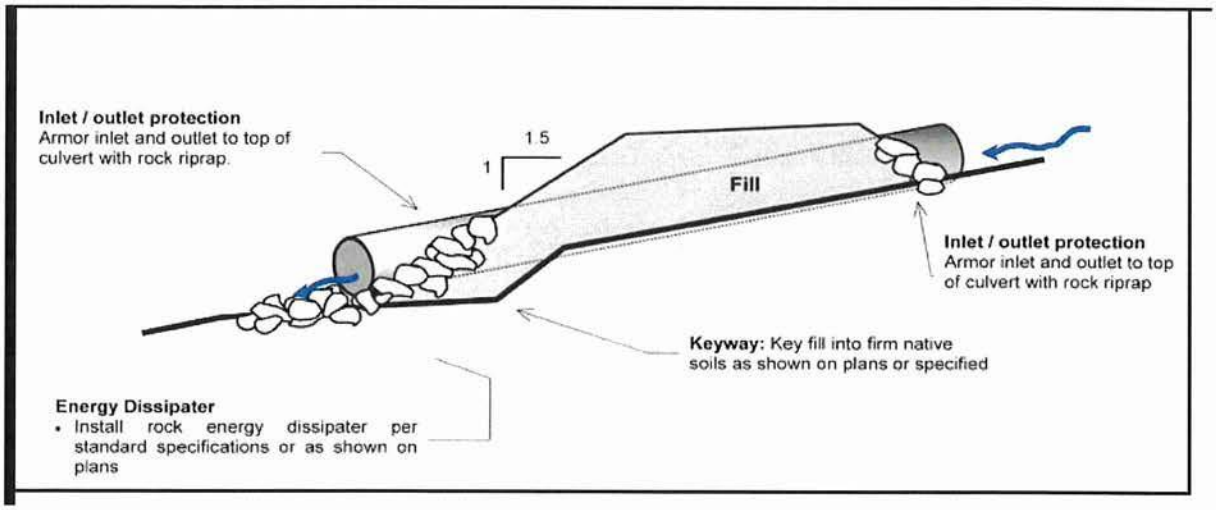
Culvert Installation Specifications

- New culvert installations shall be sized to accommodate a 100-year storm.
- New culverts shall be placed at stream gradient, or have downspouts, or have energy dissipaters at outfall.
  - Align culverts with the natural stream channel orientation to ensure proper function, prevent bank erosion and minimize debris plugging.
  - Place culverts at the base of the fill and at the grade of the original streambed or install a downspout past the base of the fill. Downspouts should only be installed if there are no other options.
  - Culverts should be set slightly below the original stream grade so that the water drops several inches as it enters the pipe.
  - Culvert beds should be composed of rock-free soil or gravel, evenly distributed under the length of the pipe.
  - Compact the base and sidewall material before placing the pipe in its bed.
  - Lay the pipe on a well-compacted base. Poor basal compaction will cause settling or deflection in the pipe and can result in separation at a coupling or rupture in the pipe wall.
  - Backfill material should be free of rocks, limbs or other debris that could dent or puncture the pipe or allow water to seep around the pipe.
  - Cover one end of the culvert pipe, then the other end. Once the ends are secure, cover the center.
  - Tamp and compact backfill material throughout the entire process, using water as necessary for compaction.
  - Backfill compacting will be done in 0.5 – 1.0 foot lifts until 1/3 of the diameter of the culvert has been covered.
  - Push layers of fill over the crossing to achieve the final design road grade, at a minimum of one-third to one-half the culvert diameter.
- Critical dips shall be installed on culvert crossings to eliminate diversion potential.
- Road approaches to crossings shall be treated out to the first drainage structure (i.e. waterbar) or hydrologic divide to prevent transport of sediment.
- Road surfaces and ditches shall be disconnected from streams and stream crossings to the greatest extent feasible. Ditches and road surfaces that cannot be feasible disconnected from streams or stream crossings shall be treated to reduce sediment transport to streams.
- If downspouts are used, they shall be secured to the culvert outlet and shall be secure on fill slopes.
- Culverts shall be long enough so that road fill does not extend or slough past the culvert ends.
- Inlet of culverts and associate fill shall be protected with appropriate measures that extend at least as high as the top of the culvert.
- Outlet of culverts shall be armored with rock if road fill sloughing into channel can occur.
- Armor inlets and outlets with rock, or mulch and seed with grass as needed (not all stream crossings need to be armored).
- Where debris loads could endanger the crossing a debris catchment structure shall be constructed upstream of the culvert inlet.
- Bank and channel armoring may occur when appropriate to provide channel and bank stabilization.

Figure □A - Cul□ert Speci□ications

Culvert Installation Specifications

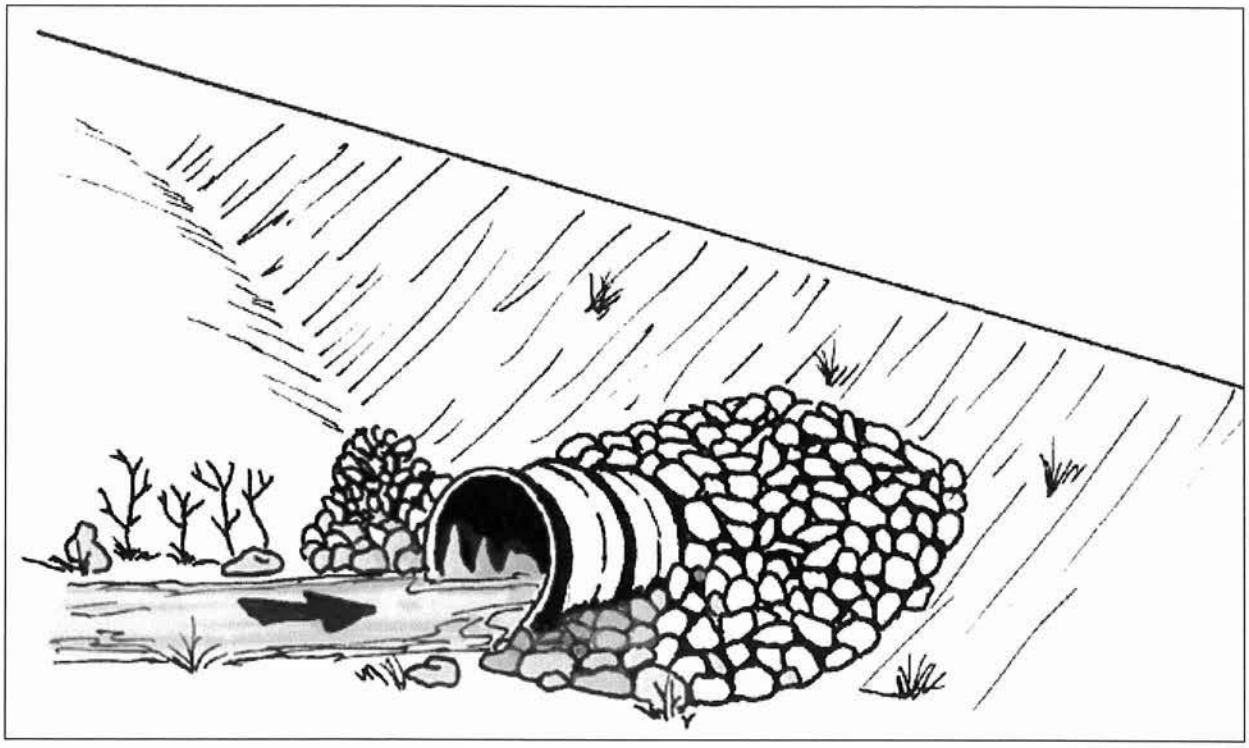




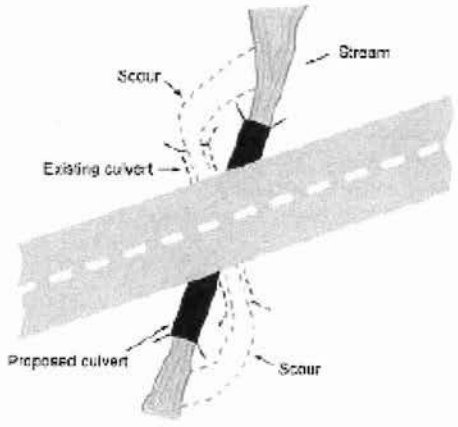
Riprap installed to protect the inlet and outlet of a stream crossing culvert from erosion or for energy dissipation should be keyed into the natural channel bed and banks to an approximate depth of about 1.5x the maximum rock thickness. Riprap should be placed at least up to the top of the culvert at both the inlet and outlet to protect them from splash erosion and to trap any sediment eroded from the newly constructed fill slope above.

Figure □□ - Cul□ert Speci□ications

Culvert Installation Specifications



Rock armor used for inlet and outlet protection (i.e., not as energy dissipation) does not have to be sized to protect against high velocity scour. If the culvert is properly sized and its length is adequate, it should be able to transmit flood flows without scouring the inlet or eroding the outlet around the culvert. Armor shown here is designed to protect the culvert outlet and basal fill from splash erosion and from occasional submergence and currents within standing water (at the inlet) when the culvert plugs. Importantly, inlet and outlet armor also serves to trap sediment that has been eroded or slides down the new constructed fill face in its first several years, until the slope becomes well vegetated.



HANDBOOK FOR FOREST, RANCH AND RURAL ROADS

FIGURE 97. *Culvert alignment should be in relation to the stream and not the road. It is important that the stream enters and leaves the culvert in a relatively straight horizontal alignment so streamflow does not have to turn to enter the inlet or discharge into a bank as it exits. This figure shows a redesigned culvert installation that replaces the bending alignment that previously existed. Channel turns at the inlet increase plugging potential because wood going through the turn will not align with the inlet. Similarly, channel turns at the inlet and outlet are often accompanied by scour against the channel banks (Wisconsin Transportation Information Center, 2004).*

Culvert Installation Specifications

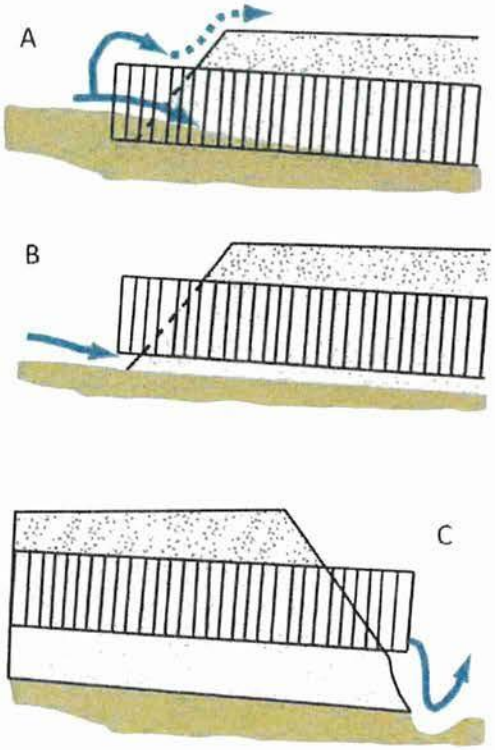
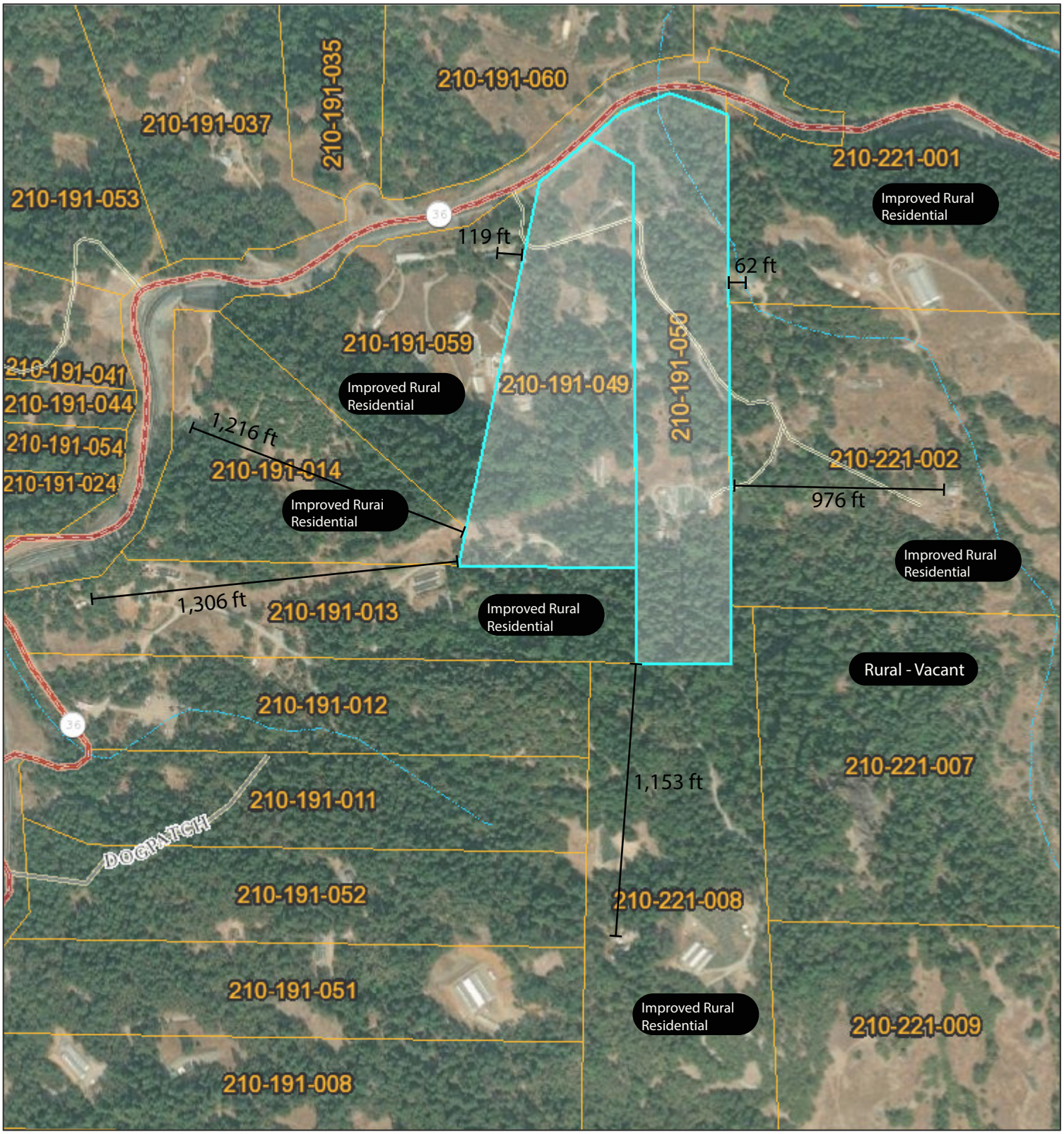


FIGURE 155. *Proper culvert installation involves correct culvert orientation, setting the pipe slightly below the bed of the original stream, and backfilling and compacting the fill as it is placed over the culvert. Installing the inlet too low in the stream (A) can lead to culvert plugging, yet if set too high (B) flow can undercut the inlet. If the culvert is placed too high in the fill (C), flow at the outfall will erode the fill. Placed correctly (D), the culvert is set slightly below the original stream grade and protected with armor at the inlet and outlet. Culverts installed in fish-bearing stream channels must be inset into the streambed sufficiently (>25% embedded) to have a natural gravel bottom throughout the culvert (Modified from: MDSL, 1991).*

HANDBOOK FOR FOREST, RANCH AND RURAL ROADS

Figure D - Culvert Specifications

Distance to □earst Adjoining Parcel Stucture □ Adjoing Parcel □se Code Descriptions



HWY36Homestead Parcel Map

Humboldt County Planning and Building Department

0 350 700 1,400 Feet

0 0.05 0.1 0.2 Miles

RF= 1:9,028 1 in = 752 ft

N W E S

Highways and Roads

- Principal Arterials
- Minor Arterials
- Major Collectors
- Minor Collectors
- Local Roads
- Private or Unclassified
- Major River or Stream

Blue Line Streams

- Perennial 1-3
- Perennial >4
- Intermittent
- Subsurface
- City Boundary
- Counties
- Parcels
- Parcels (no APN labels)

Printed: October 31, 2022 Web AppBuilder 2.0 for ArcGIS

Map Disclaimer:
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Source: Humboldt County GIS, Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community, Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

Figure □ - Adjacent Parcels

APPLICATION PACKET CHECKLIST

Please check below to ensure you have a complete application. Once complete, email the following documents, in pdf format with the text "Application for Remediation Grant Program Funding" in the subject line to mrichardson@co.humboldt.ca.us.

- X Signed Application Submission Form
- X Project Description – Summary of the Project, up to 2 pages.
- X Plot Plan
- X Plot Plan Checklist – Attached
- X Cross sections of proposed work including topographic elevations
- X Scope of Work – Detailed Description of Work
- X Schedule for Completion – Identify Milestones
- X Erosion Control Plan and Monitoring Plan
- X Budget – Be as specific as possible – sample attached
- X Project Maps and Figures
- ☐Letter(s) of Support (optional)

APPLICATION FORM - Commercial Cannabis Land Use Ordinance Mitigation and Remediation Fund Program

Project Title: Hailey Remediation 0□□ Date of Application: 10/31/2022

Applicant Name: HWY36Homestead, LLC Project APN: 210-191-050

Contact Person Name and Title: Shell'Don Hailey, Member

Contact Phone: (404) 606-5803 Contact Email: shelldon.hailey@gmail.com

Contact Address: 9171 Wilshire Boulevard #500, Beverly Hills, CA 90210

Amount Requested: $17,735 Total Budget: $22,652

Project Timeline: Start Date: 01/01/2023 End Date: 0□/01/2023

Signature of Applicant: 

Project: HWY36HOMESTEAD Remediation 050

Applicant: HWY36HOMESTEAD, LLC

Contact: Shell'Don Hailey

APN: 210-191-050

Grant Funding Requested: $17,735.00

Project Status: Awaiting Permitting

Project Description

The project is located in Humboldt County, APN 210-191-050, two miles west of Dinsmore, California. The subject parcel is located off of Highway 36, in the Van Duzen watershed.

The project proposes the upgrade of culverts at two stream crossings on the property as required by the applicant's Lake and Streambed Alteration Agreement with the California Department of Fish & Wildlife.

While the Humboldt GIS indicates the parcel is in an area of high slope instability, it is not within a flood hazard zone, nor in an earthquake hazard zone. The parcel is surrounded by rural improved properties. No impact to these other parcels is expected.

This project would storm-proof stream crossings for a 100 year flood event and reduce the potential for road-related sediment delivery in the Van Duzen Watershed. All of the crossing upgrades will be constructed according to standards provided in the "Handbook for Forest, Ranch and Rural Roads" (Weaver, Weppner and Hagans, 2015), and the California Salmonid Stream Habitat Manual, Part X (Weaver, Hagans and Weppner, 2006) by a licensed contractor.

Permanent impacts to existing native channel bed, channel, watercourse banks, and associated riparian habitat will be negligible and avoided. Incidental destruction of small areas of riparian habitat growing on existing road fill or in disturbed channel areas is expected but will be minimized at the proposed sites during remediation. No loss of trees is expected.

HWY36HOMESTEAD, LLC
PLOT PLAN

NOTES

1. ALL DIMENSIONS AND LOCATIONS ARE APPROXIMATE, INCLUDING: PROPERTY LINES, ROADS, BLDGS, WATER STORAGE TANKS, AND WATER SOURCES.
2. ALL WATER TANKS ARE FOR IRRIGATION USE UNLESS OTHERWISE NOTED

ABBREVIATION

BLDG	BUILDING
EX	EXISTING
GAL	GALLONS
ML	MIXED LIGHT
SF	SQUARE FEET
TYP	TYPICAL

LEGEND

- CULTIVATION OPERATION FOR APN 210-191-049
- CULTIVATION OPERATIONS FOR APN 210-191-050 (CCL20-0000769)
- POINT OF WATER DIVERSION
- DRAINAGE CHANNEL AND FLOW DIRECTION
- PREMISES BOUNDARY & PROPERTY LINE
- STREAM CROSSINGS

HWY 36

APN 210-191-050

25' WIDE PAVED HIGHWAY

16' Wide Main Entrance/Exit -Access for property & premises

APN 210-191-049

15% Slope

SC#3 (40.4845,-123.6450)

15' WIDE DIRT DRIVEWAY

SC#4 (40.4844,-123.6452)

ACCESS ROAD TYP

74'

22% Slope

WATER TANK & PUMP
PUMP TO WATER TANKS
(1) 1,000 GAL
(40.4840, -123.6450)

20% Slope

WATER TANK
GRAVITY FED TO CANOPY
(1) 3,000 GAL
(40.4839, -123.6437)

WATER COLLECTION HOLDING TANK
1,000 GAL
(40.4839, -123.6449)

WATER TANK
GRAVITY FED TO CANOPY
(1) 500 GAL
(40.4839, -123.6438)

POINT OF DIVERSION (SPRING BOX) DOMESTIC, IRRIGATION AND FIRE PROTECTION USE
(40.4838, -123.6451)

TURN AROUND

SC# 2 (40.4831,-123.6432)

1702'

WATER TANK & PUMP
(1) 3,000 GAL
(40.4830, -123.6447)

SC# 1 (40.4828,-123.6450)

181'

SEPTIC

61'

8% Slope

Surface Water Runoff

EX HOUSE
(20' x 36')
(NON-CANNABIS ACTIVITIES)

14% Slope

WATER TANKS
GRAVITY FED TO CANOPY
(2) 3,000 GAL
(40.4829, -123.6451)

Surface Water Runoff

PROPERTY LINE

10% Slope

WATER TANK
(1) 500 GAL
GRAVITY FED TO CANOPY
(40.4826, -123.6456)

SC# 1 (40.4818,-123.6423)

IRRIGATION WATER LINE FROM POINT OF DIVERSION TO WATER TANKS

ENTRANCE/EXIT TO PREMISES

74'

85'

PROPERTY LINE & PREMISES BOUNDARY

APN 210-191-049

WATER TANKS
(8) 500 GAL
(3) 3000 GAL
(2) 4000 GAL
(2) 5000 GAL (DOMESTIC)
(40.4813, -123.6431)

POD WELL & PUMP
DOMESTIC, IRRIGATION AND FIRE PROTECTION USE
(40.4812,-123.6456)

(2) 1200 GAL
WATER TANKS
(2) 1200 GAL
(40.4813, -123.6431)

750'

APN 210-191-050

400'±

400'±

N

0 100' 200'

SCALE: 1" = 200'

DATE	REVISED:	PROPERTY DIAGRAM	SITE LOCATION	
8/8/21	OCT. 30,2022		CA STATE HWY 36 BRIDGEVILLE, CA 95526 APN: 210-191-049 & -050	
FIGURE 1 of 1				

PLOT PLAN AND TENTATIVE MAP CHECKLIST

The following information must be shown on your plot plan or tentative map. Please check ✓ the box to the left of the items shown on the plot plan or tentative map. If any item is not on your site to your knowledge, write "N/A" next to the box. Plot plans shall be drawn on a minimum size sheet of 8-1/2" x 11", and tentative subdivision maps on a minimum size sheet of 18" x 26". ***Note: This Checklist must be completed by the applicant and submitted with your application.***

Applicant's Name □ailey Re□ediation □□□ APN 21□-1□1-□□□

_____

FOR ALL PROJECTS

☐ 1. Name of applicant(s)
☐ 2. Location or vicinity map (on or attached to the plot plan)
☐ 3. The subject parcel (show entire parcel with dimensions)
☐ 4. Date, north arrow and scale
☐ 5. Name, County road numbers, and width of all existing and proposed access roadways adjacent to or within the subject parcel (indicate width of traveled way, grade (in % slope), and surface)
☐ 6. Existing and proposed improvements (label as "existing" and "proposed" with dimensions and distance to nearest two (2) property lines
- ☐ a. Structures and buildings (include floor area, height and proposed use)
- ☐ b. Driveways and turnaround areas (indicate width, grade (in % slope) and surface)
- ☐ ☐ c. Utility lines (electric, gas, telephone, sewer, water, and cable TV)
- ☐ ☐ d. Septic tanks and leachfields (label primary/reserve areas and test holes)
- ☐ ☐ e. Wells
- ☐ f. Parking and loading areas (show individual parking spaces, including handicapped parking and ramps)
- ☐ ☐ g. Storm drains, curbs and gutters
- ☐ ☐ h. Emergency water storage tanks and fire hydrants
- ☐ ☐ i. Landscaped areas (include proposed exterior lighting)
- ☐ ☐ j. Major vegetation (identify mature trees (12" dbh or larger) to be removed)
- ☐ ☐ k. Diked areas
- ☐ ☐ l. Proposed grading and fill (estimate volume)
- ☐ ☐ m. Signs (indicate size, illuminated, and design (e.g., monument, pylon, etc.))
- ☐ ☐ n. Other - specify _____

☐ 7. Direction of surface water runoff
☐ ☐ 8. Location and width of all existing and proposed easements of record
☐ ☐ 9. Hazardous areas (indicate on map if on the project site or within 400 feet of the project site):
- ☐ ☐ a. Areas subject to inundation or flooding
- ☐ ☐ b. Steep or unstable slopes
- ☐ ☐ c. Expansive (clay) soils
- ☐ ☐ d. Earthquake faults
- ☐ ☐ e. Hazardous waste or substance sites
- ☐ f. Other - specify _____

☐ 10. Sensitive habitat areas (indicate on map if on project site or within 400 feet of the project site):
- ☐ a. Creeks, rivers, sloughs and other drainage courses
- ☐ ☐ b. Lakes, ponds, marshes, or "wet" meadows
- ☐ ☐ c. Beaches
- ☐ ☐ d. Sand dunes
- ☐ e. Other - specify _____

☐ ☐ 11. Historical buildings or known archaeological or paleontological resources
☐ 12. Land use and buildings on adjacent parcels, and approximate distances to closest property lines

FOR LOT LINE ADJUSTMENT PLOT PLANS ONLY

☐ ☐ 13. Proposed new lines and lines to be eliminated (show lines to be eliminated as dashed)
☐ ☐ 14. Areas (in square footage or acreage) of the initial and resulting parcels

FOR TENTATIVE SUBDIVISION MAPS ONLY

☐ ☐ 16. Approximate dimensions and areas of all proposed lots
☐ ☐ 17. A statement that "All easements of record are shown on the tentative map and will appear on the recorded subdivision map"
☐ ☐ 18. Contour lines (at _____ intervals)
☐ ☐ 19. For major subdivisions (5 or more parcels): proposed drainage improvements, details of any grading to be performed, approximate radii of all roadway curves, areas for public use, and typical sections of all streets, highways, ways and alleys
☐ ☐ 20. Names and assessor's parcel numbers of all contiguous ownerships

NOTE: THE SUBMITTAL OF INCOMPLETE OR ILLEGIBLE PLOT PLANS OR TENTATIVE MAPS WILL CAUSE DELAYS IN THE PROCESSING OF YOUR APPLICATION

Project: HWY36HOMESTEAD Remediation 050

Applicant: HWY36HOMESTEAD, LLC

Contact: Shell'Don Hailey

APN: 210-191-050

Grant Funding Requested: $17,735.00

Project Status: Awaiting Permitting

Scope of Work

The project is for culvert upgrades at two stream crossings. The scope of work is described in the applicant's LSA agreement with Fish & Wildlife, and is summarized as follows:

Crossing 1: This area contains a steam crossing at the outlet of a reservoir on a class II stream. The Permittee shall make improvements to the outlet of the reservoir, which occurs at a road stream crossing. The existing three culvert reservoir spillway at the stream crossing shall be replaced with a new engineered stream crossing. The current 18" culvert will be replaced with a 30'x36" culvert, and rock armored to meet 100-year flows and associated debris. Water will not be diverted from the reservoir and any prior diversion infrastructure shall be removed.

Crossing 2: Replace undersized, failing culvert with a new stream crossing. The crossing, near the site's driveway is currently undersized and will be replaced with a 24'x48" culvert and rock armored to meet 100-year flows and associated debris.

The project requires heavy equipment, culverts and a supply of rock. The work will be completed by Mel Brown Backhoe and Trucking, license number 992015.

As part of the project, the Applicant will also apply for a 401 certification from the State Water Resources Control Board.

Project: HWY36HOMESTEAD Remediation 050

Applicant: HWY36HOMESTEAD, LLC

Contact: Shell'Don Hailey

APN: 210-191-050

Grant Funding Requested: $17,735.00

Mitigation and Remediation Fund
Schedule for Completion

Milestone	Start Date	End Date
Detailed Project Design	January 1, 2023	February 1, 2023
Permitting	February 1, 2023	May 1, 2023
Final Bidding and Contracting	May 1, 2023	May 31, 2023
Project Ground-Breaking	June 1, 2023	
Project Completion		August 1, 2023
Monitoring	August 1, 2023	Ongoing

Project: HWY36HOMESTEAD Remediation 050

Applicant: HWY36HOMESTEAD, LLC

Contact: Shell'Don Hailey

APN: 210-191-050

Grant Funding Requested: $17,735.00

Erosion Control and Monitoring Plan

To protect nearby watershed areas and nearby habitat the site is managed to meet standard conditions and follow best practices in accordance with guidelines provided by the North Coast Regional Water Quality Control Board (NCRWQCB). These practices address erosion control and drainage features, spoils management, water storage and use, irrigation runoff, fertilizers and pesticides, and stream and wetland buffers when applicable.

Best practice steps for this site can include:

- Moderate road shaping and ditch-relief used to optimize drainage to stable areas
- Out-sloping maintained to ensure proper capture and capacity of seasonal flow
- Usage of vegetative ground cover and gravel for added sediment control
- Application of straw mulch to exposed soils to minimize erosion
- Careful irrigation, with immediate oversight, to reduce the possibility of irrigation runoff

Applicant will maintain driveways and access roads to eliminate erosion or runoff during storms. Prior to the winter season and significant storm events, roads and cultivation sites will be inspected and monitored to ensure that runoff is prevented. Culverts will be inspected to ensure armoring is maintained and any debris or sediment has been removed..

If potential issues are discovered during or immediately following a storm event, they will be corrected as soon as possible to ensure minimal impact and prevent sediment flow in the future. This will include proper ditching and vegetation buffers, and as needed, straw, seed, wattles, jute cloth, riprap, or other industry standards used to prevent and eliminate runoff.

Project: HWY36HOMESTEAD Remediation 050

Applicant: HWY36HOMESTEAD, LLC

Contact: Shell'Don Hailey

APN: 210-191-050

Grant Funding Requested: $17,735.00

Total Budget: $22,652

Budget

Item	Grant Funds	Other Funds (Source)
Permit Fees		
401 Certification		$2,417.00 (Applicant)
Consultant and Professional Fees		
Timberland Resource Cons.	$2,500.00	
Margro Advisors	$1,004.00	
DTN Engineering		$2,500.00 (Applicant)
*Materials, Equipment and Labor**		
Mel Brown Backhoe and Trucking	$14,231.00	
Totals	**$17,735.00**	**$4,917.00**

*See attached bid

□□ Y3□□OM□ST□AD Remediation Bid 050

Crossing 1 at large reservoir currently has on 18" overflow pipe.

30' x 36" with coupler	1230.00
excavator 10 x 185	1850.00
labor 8 x 45	360.00
compactor	150.00
rock 28 tons	896.00
trucking 6x140	840.00
total	$5,326.00

Crossing 2(sc #2) is by gate where driveway meets main common road
Also had no minimum size so guessing 48"

24'x 48"	2527.00	No coupler required. Custom length no extra cost
excavator 10 x 185	1850.00	
Labor 10 x 45	450.00	
backhoe 3 x 140	420.00	
compactor	150.00	
rock 39 tons	1248.00	
trucking (rock) 9x140	1260.00	
total	$7,905.00	

Trucking to get pipe here 1000.00 (if they can get it on one load)

Grand total $14,231.00

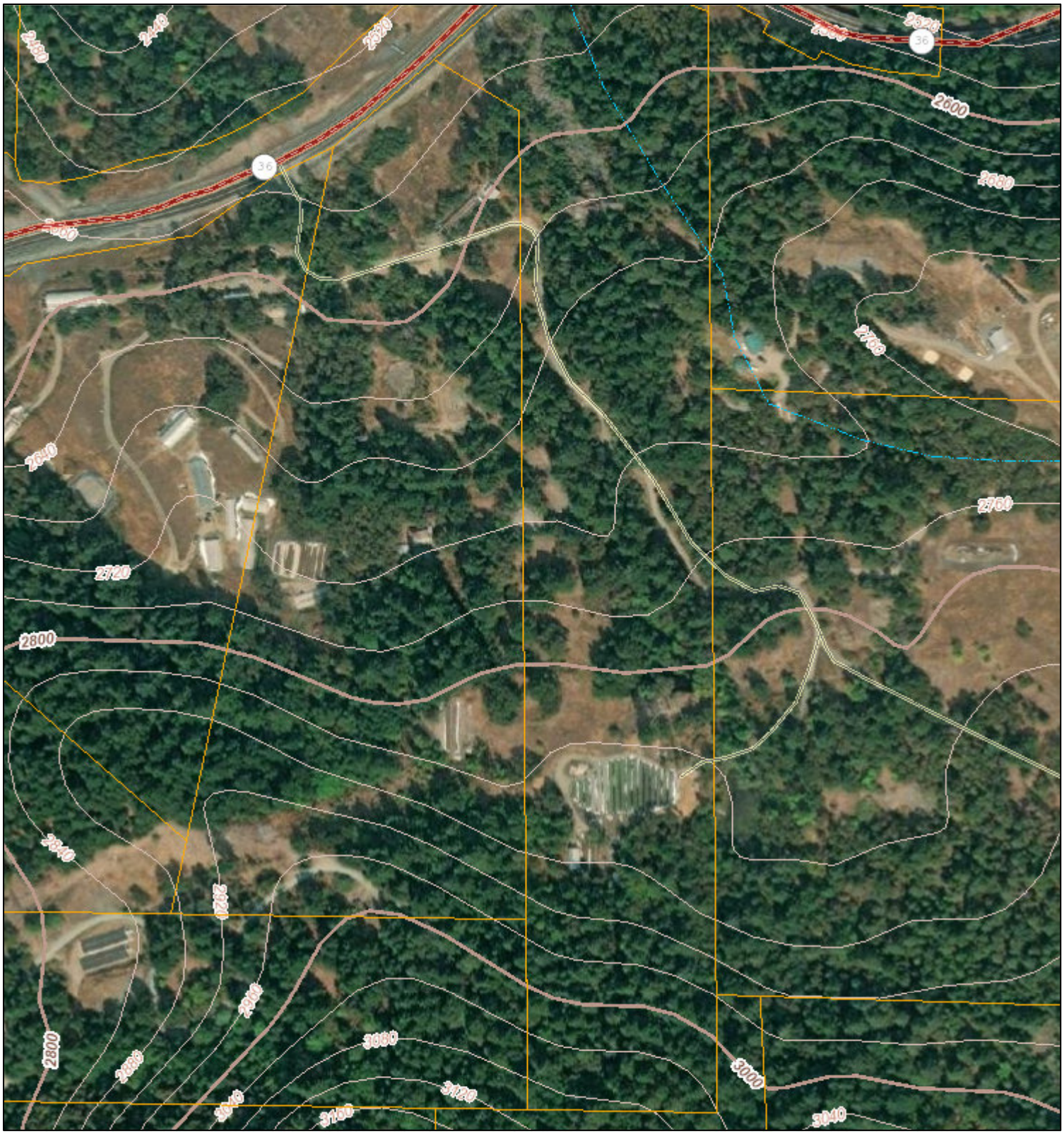
The pricing on this estimate should be good for the next 60 days. Prices mostly subject to change with materials especially culvert.

Melvin Clifton Brown Jr. aka Cliff
Gp Mel Brown Backhoe and Trucking
707-498-8001

Figure 1. LSAA Notification Location Map for APN 210-191-050, located off State Highway 36, Bridgeville, Humboldt County, California.

P:\GIS\51752

Figure 1 - Vicinity Map



Hailey Topo Map

Humboldt County Planning and Building Department

0 180 360 720 Feet

0 0.0325 0.065 0.13 Miles

RF= 1:4,514 1 in = 376 ft

N W E S

Highways and Roads

Principal Arterials

Minor Arterials

Major Collectors

Minor Collectors

Local Roads

Private or Unclassified

Major River or Stream

Blue Line Streams

Perennial 1-3

Perennial >4

Intermittent

Subsurface

City Boundary

Counties

Parcels (no APN labels)

Topographic Contours 40ft

Minor Interval

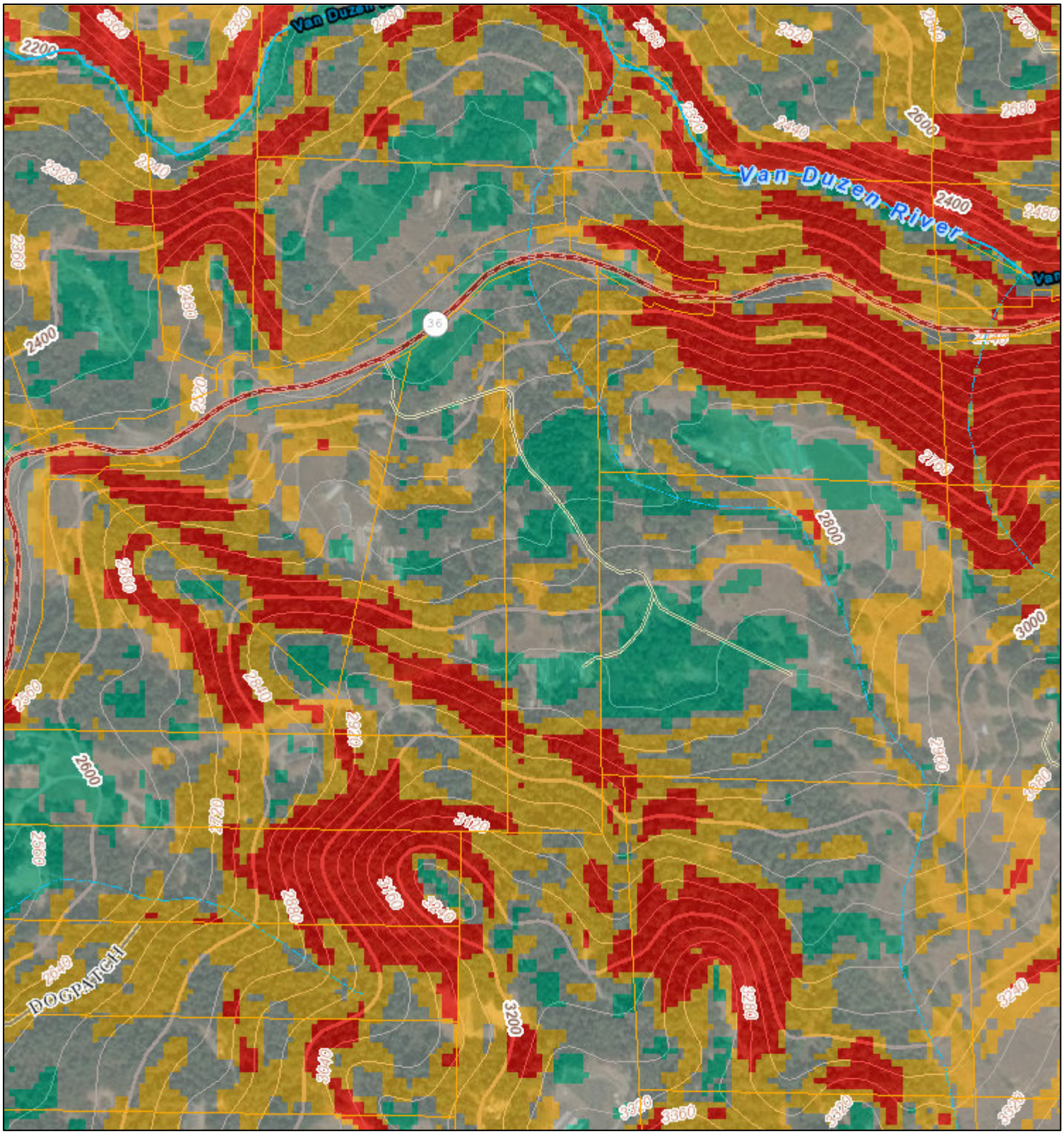
Major Interval

Printed: October 25, 2022 Web AppBuilder 2.0 for ArcGIS

Map Disclaimer:
While every effort has been made to assure the accuracy of this information, it should be understood that it does not have the force & effect of law, rule, or regulation. Should any difference or error occur, the law will take precedence.

Source: Humboldt County GIS, Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community, FRAP, FEMA, USGS, ESA, CGS, Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

Figure 2 - Topo Map



Hailey Slope Map

Humboldt County Planning and Building Department

0 350 700 1,400 Feet

0 0.05 0.1 0.2 Miles

RF= 1:9,028 1 in = 752 ft

N W E S

Highways and Roads
- Principal Arterials
- Minor Arterials
- Major Collectors
- Minor Collectors
- Local Roads

- Private or Unclassified
- Major River or Stream

Blue Line Streams
- Perennial 1-3
- Perennial >4
- Intermittent

- Subsurface
- City Boundary
- Counties
- Parcels (no APN labels)

Slope USGS
- 15-30%
- 30 - 50%
- +50%

Slope less than 15%
- <15%

Printed: October 25, 2022 Web AppBuilder 2.0 for ArcGIS

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Figure 3 - Slope Map

Stream Crossing

Photo 3 - SC #1. View of Stream Crossing #1 from near the left edge of Pond #1 looking downstream.

Photo 4 - SC #1. View of the 12-inch diameter culvert inlet near the left edge of the frame and the middle 15-inch diameter culvert inlet looking downstream.

Photo 5 - SC #1. View of the second 15-inch diameter culvert inlet at the right edge of the stream crossing looking downstream.

Photo 6 - SC #1. View of Stream Crossing #1 from the left road approach. The downstream edge of Pond #1 is visible in the right center of the frame.

Figure 4□ - P□otograp□s

Photo 7 - SC #1. View of Stream Crossing #1 from the outboard edge of the right road approach. The downstream edge of Pond #1 is partially visible in the left center of the frame.

Photo 8 - SC #1. View looking upstream from below the stream crossing near the right bank at the three culvert outlets and existing road bed.

Photo 9 - SC #1. View looking slightly upstream at the existing road bed from below the stream crossing near the left bank. The right bank of Pond #1 is visible in the upper right frame.

Water Storage

Photo 10 - View of the 20,000-gallon water bladder. Water is pumped from POD #1 upslope to this water bladder and then gravity fed for domestic and irrigation purposes.

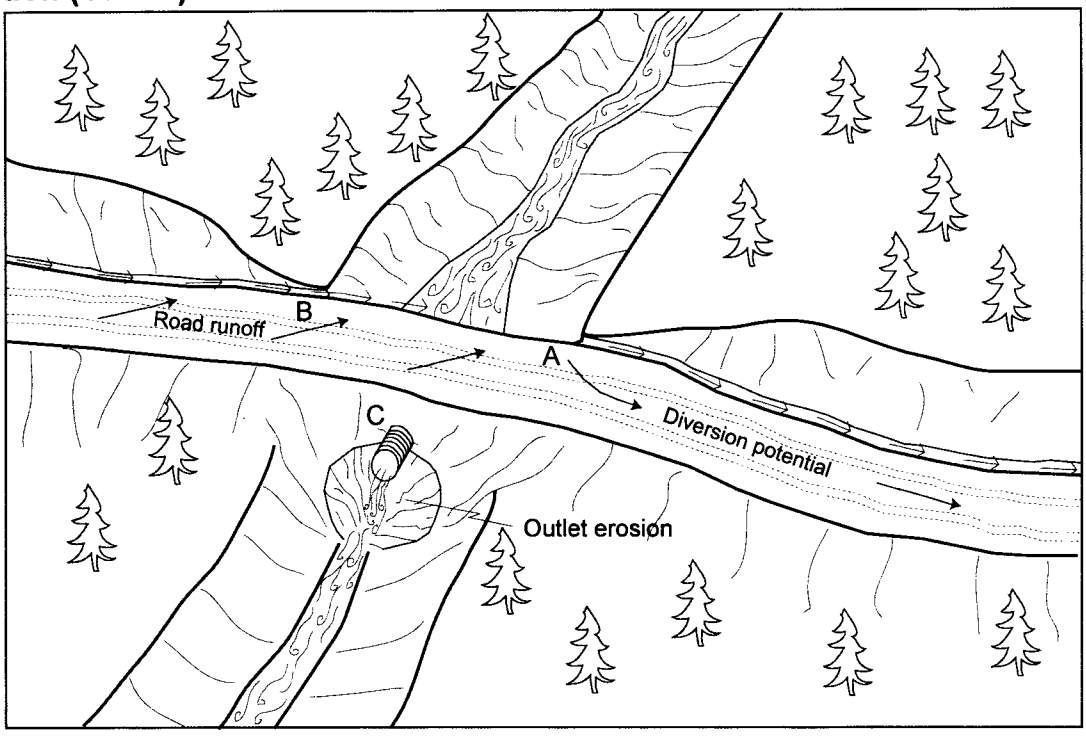
Typical Problems and Applied Treatments for a Non-fish Bearing Upgraded Stream Crossing

Problem condition (before)

A - Diversion potential

B - Road surface and ditch drain to stream

C - Undersized culvert high in fill with outlet erosion

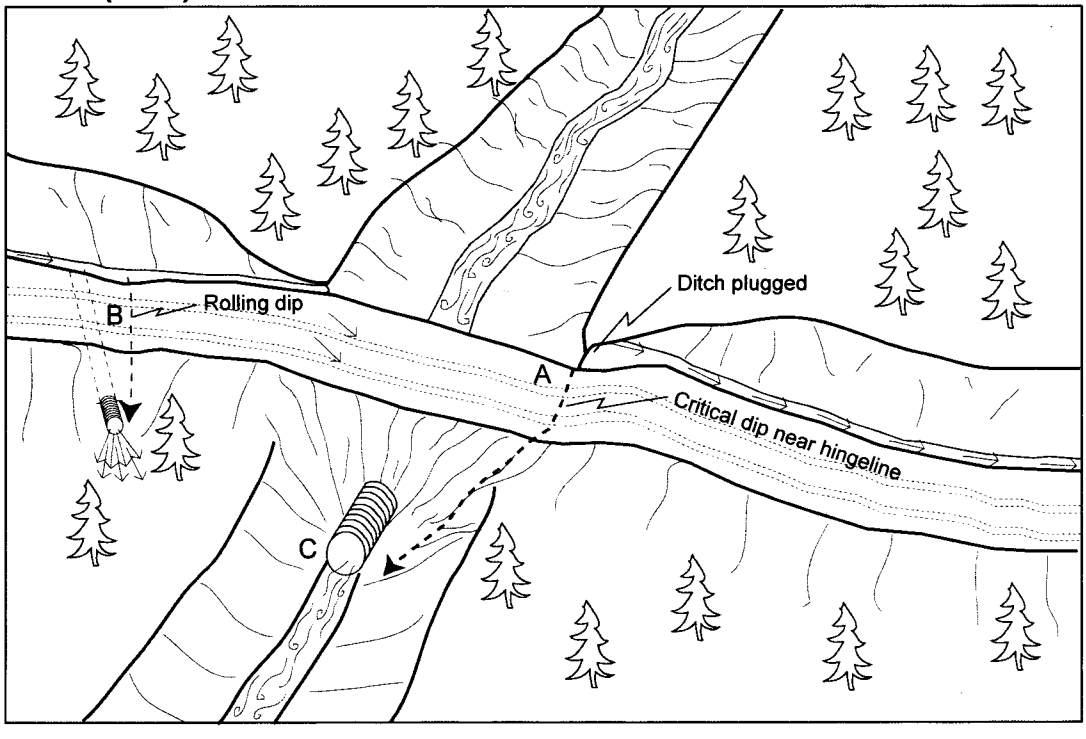


Treatment standards (after)

A - No diversion potential with critical dip installed near hingeline

B - Road surface and ditch disconnected from stream by rolling dip and ditch relief culvert

C - 100-year culvert set at base of fill

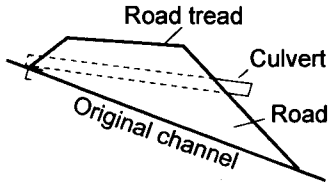
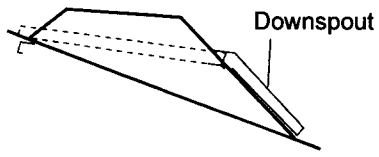
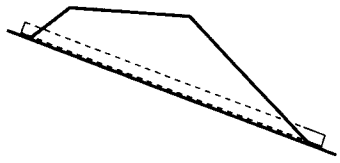


Pacific Watershed Associates Inc.
Geologic and Geomorphic Studies • Watershed Restoration • Wildland Hydrology • Erosion Control • Environmental Services
PO Box 2070, Petaluma, CA 94953 / Ph: 707-773-1385 / Fax: 707-773-1451 / www.pacificwatershed.com

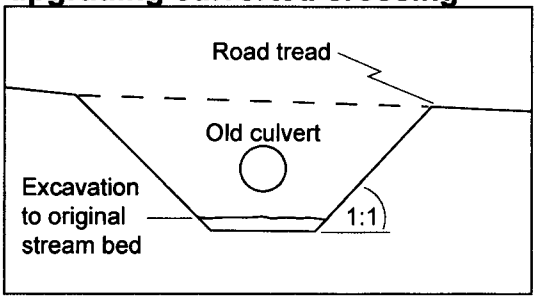
Typical Drawing #1

Figure □A - Cul□ert Speci□ications

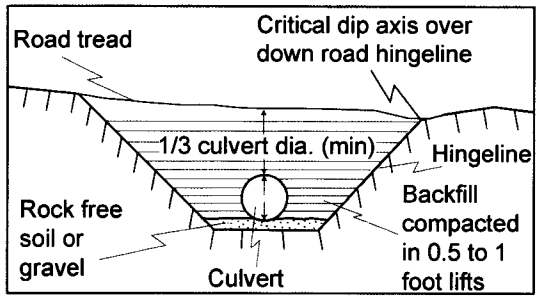
Typical Design of a Non-fish Bearing Culverted Stream Crossing

Existing	Upgraded	Upgraded (preferred)
		
1. Culvert not placed at channel grade. 2. culvert does not extend past base of fill.	1. Culvert not placed at channel grade. 2. Downspout added to extend outlet past road fill.	1. Culvert placed at channel grade. 2. Culvert inlet and outlet rest on, or partially in, the originial streambed.

Excavation in preparation for upgrading culverted crossing



Upgraded stream crossing culvert installation



Note:
Road upgrading tasks typically include upgrading stream crossings by installing larger culverts and inlet protection (trash barriers) to prevent plugging. Culvert sizing for the 100-year peak storm flow should be determined by both field observation and calulations using a procedure such as the Rational Formula.

Stream crossing culvert Installation

1. Culverts shall be aligned with natural stream channels to ensure proper function, and prevent bank erosion and plugging by debris.
2. Culverts shall be placed at the base of the fill and the grade of the original streambed, or downspouted past the base of the fill.
3. Culverts shall be set slightly below the original stream grade so that the water drops several inches as it enters the pipe.
5. To allow for sagging after burial, a camber shall be between 1.5 to 3 incher per 10 feet culvert pipe length.
6. Backfill material shall be free of rocks, limbs or other debris that could dent or puncture the pipe or allow water to seep around pipe.
7. First one end then the other end of the culvert shall be covered and secured.;The center is covered last.
8. Backfill material shall be tamped and compacted throughout the entire process:
   - Base and side wall material will be compacted before the pipe is placed in its bed.
   - Backfill compacting will be done in 0.5 - 1 foot lifts until 1/3 of the diameter of the culvert has been covered. A gas powered tamper can be used for this work.
9. Inlets and outlets shall be armored with rock or mulched and seeded with grass as needed.
10. Trash protectors shall be installed just upstream from the culvert where there is a hazard of floating debris plugging the culvert.
11. Layers of fill will be pushed over the crossing until the final designed road grade is achieved, at a minimum of 1/3 to 1/2 the culvert diameter.

Erosion control measures for culvert replacement

Both mechanical and vegetative measures will be employed to minimize accelerated erosion from stream crossing and ditch relief culvert upgrading. Erosion control measures implemented will be evaluated on a site by site basis. Erosion control measures include but are not limited to:

1. Minimizing soil exposure by limiting excavation areas and heavy equipment distrubance.
2. Installing filter windrows of slash at the base of the road fill to minimize the movement of eroded soil to downslope areas and stream channels.
3. Retaining rooted trees and shrubs at the base of the fill as "anchor" for the fill and filter windrows.
4. Bare slopes created by construction operations will be protected until vegetation can stabilize the surface. Surface erosion on exposed cuts and fills will be minimized by mulching, seeding, planting, compacting, armoring, and/or benching prior to the first rains.
5. Excess or unusable soil will be stored in long term spoil disposal locations that are not limited by factors such as excessive moisture, steep slopes greater than 10%, archeology potential, or proximity to a watercourse.
6. On running streams, water will be pumped or diverted past the crossing and into the downstream channel during the construction process.
7. Straw bales and/or silt fencing will be employed where necessary to control runoff within the construction zone.

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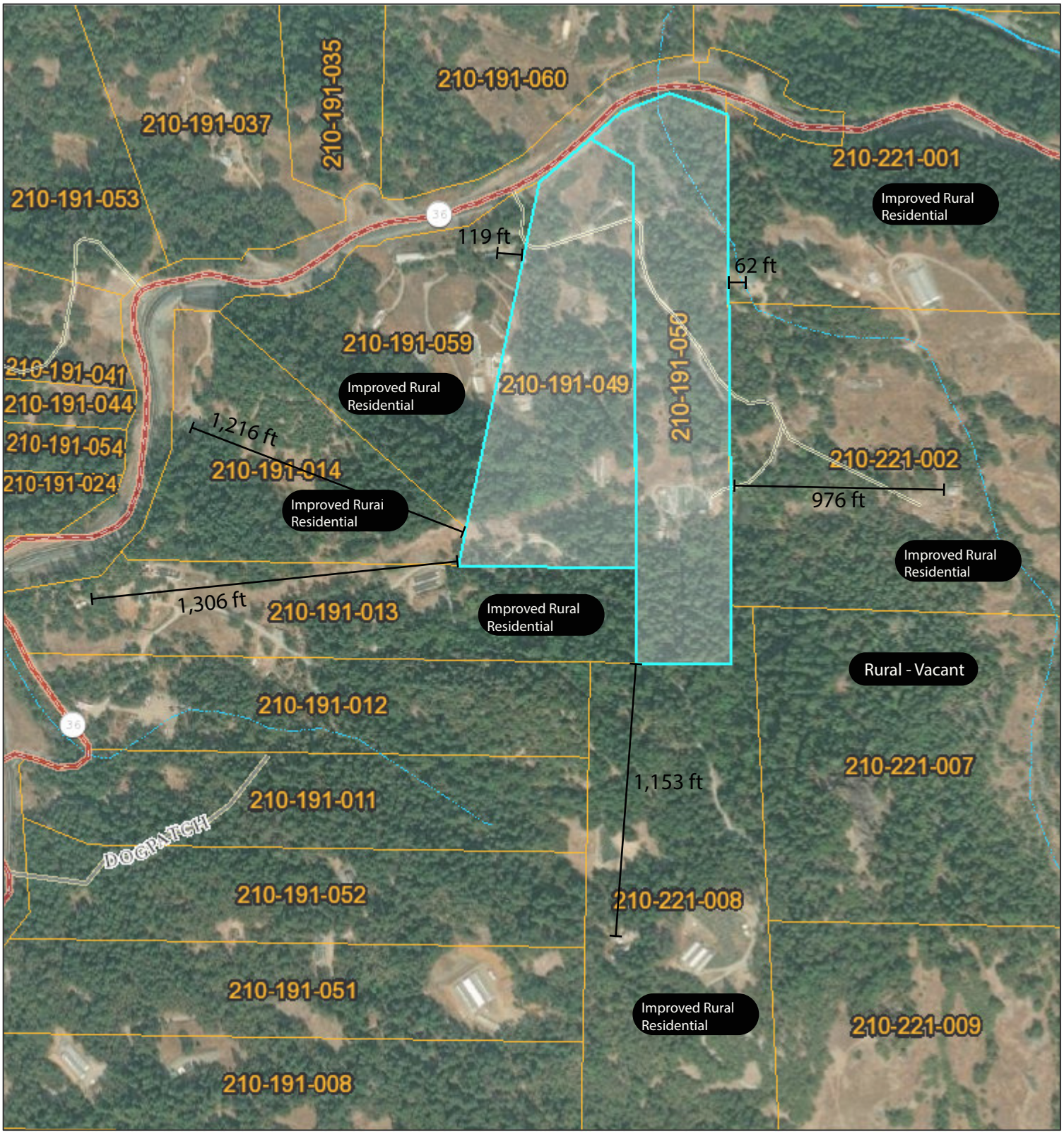
PO Box 2070, Petaluma, CA 94953 / Ph: 707-773-1385 / Fax: 707-773-1451 / www.pacificwatershed.com

Typical Drawing #2

Figure □□ - Cul□ert Speci□ications

Distance to □earst Adjoining Parcel Stucture □ Adjoing Parcel □se Code Descriptions



HWY36Homestead Parcel Map

Humboldt County Planning and Building Department

0 350 700 1,400 Feet

0 0.05 0.1 0.2 Miles

RF= 1:9,028 1 in = 752 ft

N W E S

Highways and Roads

- Principal Arterials
- Minor Arterials
- Major Collectors
- Minor Collectors
- Local Roads
- Private or Unclassified
- Major River or Stream

Blue Line Streams

- Perennial 1-3
- Perennial >4
- Intermittent
- Subsurface
- City Boundary
- Counties
- Parcels
- Parcels (no APN labels)

Printed: October 31, 2022 Web AppBuilder 2.0 for ArcGIS

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Source: Humboldt County GIS, Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community, Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

Figure □ - Adjacent Parcels

Mitigation and Remediation Grant Program
APPLICATION GUIDELINES

Application Packet Checklist

Please check below to ensure you have a complete application. Once complete, email the following documents, in pdf format with the text "Application for Remediation Grant Program Funding" in the subject line to eadler@co.humboldt.ca.us.

- ☑ Signed Application Submission Form
- ☑ Project Description – Summary of the Project, up to 2 pages.
- ☑ Plot Plan
- ☐ Plot Plan Checklist – Attached
- ☑ Cross sections of proposed work including topographic elevations
- ☐ Scope of Work – Detailed Description of Work
- ☑ Schedule for Completion – Identify Milestones
- ☑ Erosion Control Plan and Monitoring Plan
- ☑ Budget – Be as specific as possible – sample attached
- ☑ Project Maps and Figures
- ☐ Letter(s) of Support (optional)

APPLICATION FORM - Commercial Cannabis Land Use Ordinance Mitigation and Remediation Fund Program

Project Title: Delaney LSA repair Date of Application: 10/30/22

Applicant Name: Jennifer Mahoney Project APN: 220-282-010

Contact Person Name and Title: Jennifer Mahoney, Permit holder

Contact Phone: (310) 487-9769 Contact Email: jrm137@humboldt.edu

Contact Address: 4854 Valley East Blvd Apt 5 Arcata, CA 95521

Amount Requested: $71,274.75 Total Budget: $73,774.75

Project Timeline: Start Date: January 2023 End Date: September 2023

Signature of Applicant: _____

PLOT PLAN AND TENTATIVE MAP CHECKLIST

The following information must be shown on your plot plan or tentative map. Please check ✓ the box to the left of the items shown on the plot plan or tentative map. If any item is <u>not</u> on your site to your knowledge, write "N/A" next to the box. Plot plans shall be drawn on a minimum size sheet of 8-1/2" x 11", and tentative subdivision maps on a minimum size sheet of 18" x 26". ***<u>Note:</u> This Checklist must be completed by the applicant and submitted with your application.***

Applicant's Name Jamie Mahaney APN 220 - 282 - 010

FOR ALL PROJECTS

- ☐ 1. Name of applicant(s)
- ☐ 2. Location or vicinity map (on or attached to the plot plan)
- ☐ 3. The subject parcel (show entire parcel with dimensions)
- ☐ 4. Date, north arrow and scale
- ☐ 5. Name, County road numbers, and width of all existing and proposed access roadways adjacent to or within the subject parcel (indicate width of traveled way, grade (in % slope), and surface)
- ☐ 6. Existing <u>and</u> proposed improvements (label as "existing" and "proposed" with dimensions and distance to nearest two (2) property lines)
  - ☐ a. Structures and buildings (include floor area, height and proposed use)
  - ☐ b. Driveways and turnaround areas (indicate width, grade (in % slope) and surface)
  - ☐ c. Utility lines (electric, gas, telephone, sewer, water, and cable TV)
  - ☐ d. Septic tanks and leachfields (label primary/reserve areas and test holes)
  - ☐ N/A e. Wells
  - ☐ f. Parking and loading areas (show individual parking spaces, including handicapped parking and ramps)
  - ☐ g. Storm drains, curbs and gutters
  - ☐ h. Emergency water storage tanks and fire hydrants
  - ☐ i. Landscaped areas (include proposed exterior lighting)
  - ☐ j. Major vegetation (identify mature trees (12" dbh or larger) to be removed)
  - ☐ N/A k. Diked areas
  - ☐ N/A l. Proposed grading and fill (estimate volume)
  - ☐ N/A m. Signs (indicate size, illuminated, and design (e.g., monument, pylon, etc.))
  - ☐ n. Other - specify Cultivation areas
- ☐ 7. Direction of surface water runoff
- ☐ 8. Location and width of all existing and proposed easements of record
- ☐ 9. Hazardous areas (indicate on map if on the project site <u>or</u> within 400 feet of the project site):
  - ☐ N/A a. Areas subject to inundation or flooding
  - ☐ b. Steep or unstable slopes
  - ☐ c. Expansive (clay) soils
  - ☐ d. Earthquake faults
  - ☐ e. Hazardous waste or substance sites
  - ☐ f. Other - specify _____
- ☐ 10. Sensitive habitat areas (indicate on map if on project site <u>or</u> within 400 feet of the project site):
  - ☐ a. Creeks, rivers, sloughs and other drainage courses
  - ☐ N/A b. Lakes, ponds, marshes, or "wet" meadows
  - ☐ N/A c. Beaches
  - ☐ N/A d. Sand dunes
  - ☐ N/A e. Other - specify _____
- ☐ N/A 11. Historical buildings or known archaeological or paleontological resources
- ☐ N/A 12. Land use and buildings on adjacent parcels, and approximate distances to closest property lines

FOR LOT LINE ADJUSTMENT PLOT PLANS ONLY

- ☐ N/A 13. Proposed new lines and lines to be eliminated (show lines to be eliminated as dashed)
- ☐ N/A 14. Areas (in square footage or acreage) of the initial and resulting parcels

FOR TENTATIVE SUBDIVISION MAPS ONLY

- ☐ 16. Approximate dimensions and areas of all proposed lots
- ☐ 17. A statement that "All easements of record are shown on the tentative map and will appear on the recorded subdivision map"
- ☐ 18. Contour lines (at _____ intervals)
- ☐ 19. For major subdivisions (5 or more parcels): proposed drainage improvements, details of any grading to be performed, approximate radii of all roadway curves, areas for public use, and typical sections of all streets, highways, ways and alleys
- ☐ 20. Names and assessor's parcel numbers of all contiguous ownerships

NOTE: THE SUBMITTAL OF INCOMPLETE OR ILLEGIBLE PLOT PLANS OR TENTATIVE MAPS WILL CAUSE DELAYS IN THE PROCESSING OF YOUR APPLICATION

Jennifer Mahaney and
Sean Delaney
Plot Plan 10/30/22
For Apn 220-282-010
APN 220-282-019

N

200ft

Owner: Sean Delaney
(707) 689-8582
P.O. Box 1241
Redway, CA 95560

Utilities

Sewer: Septic Tank and Leach Field

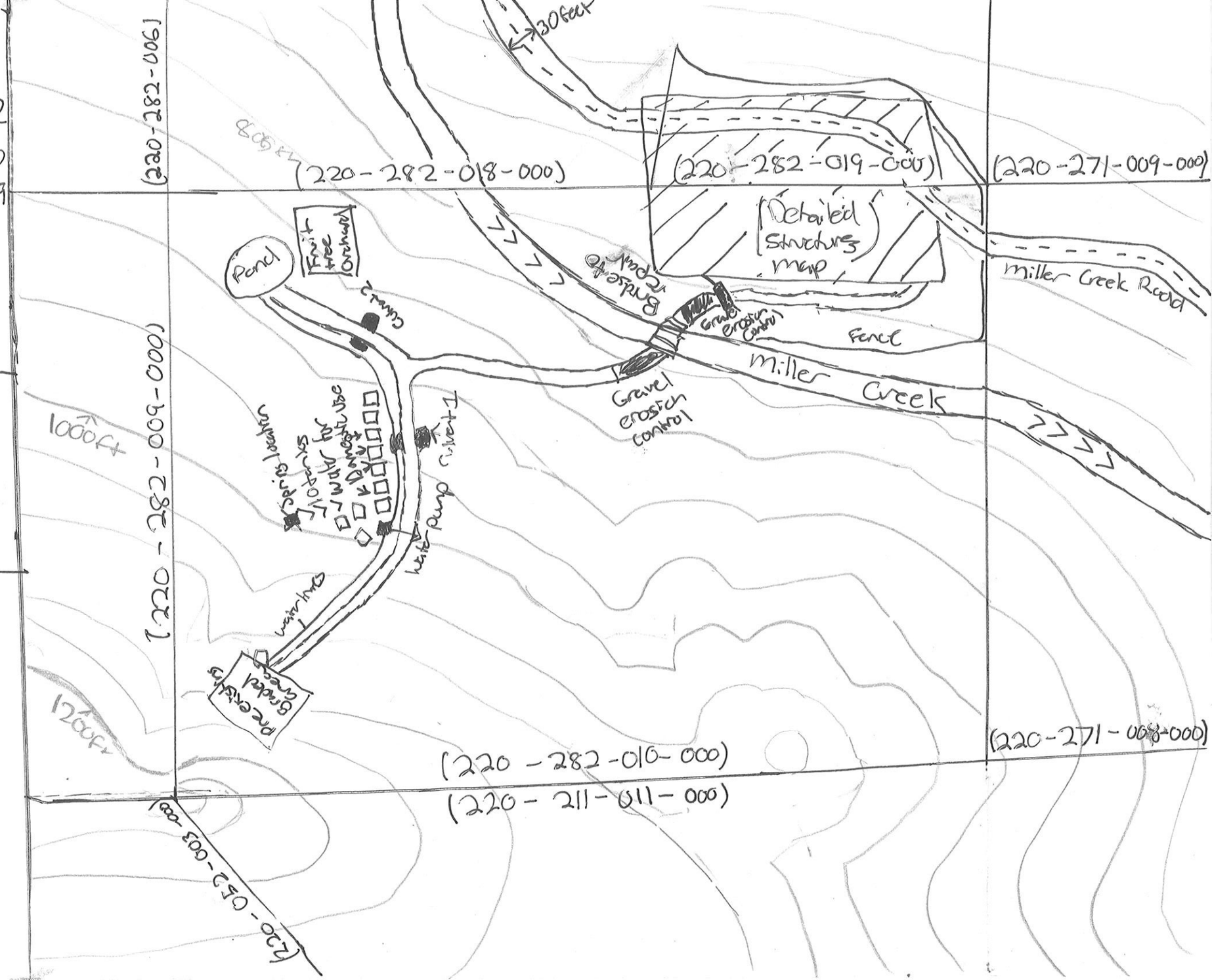
Water: Spring (X)

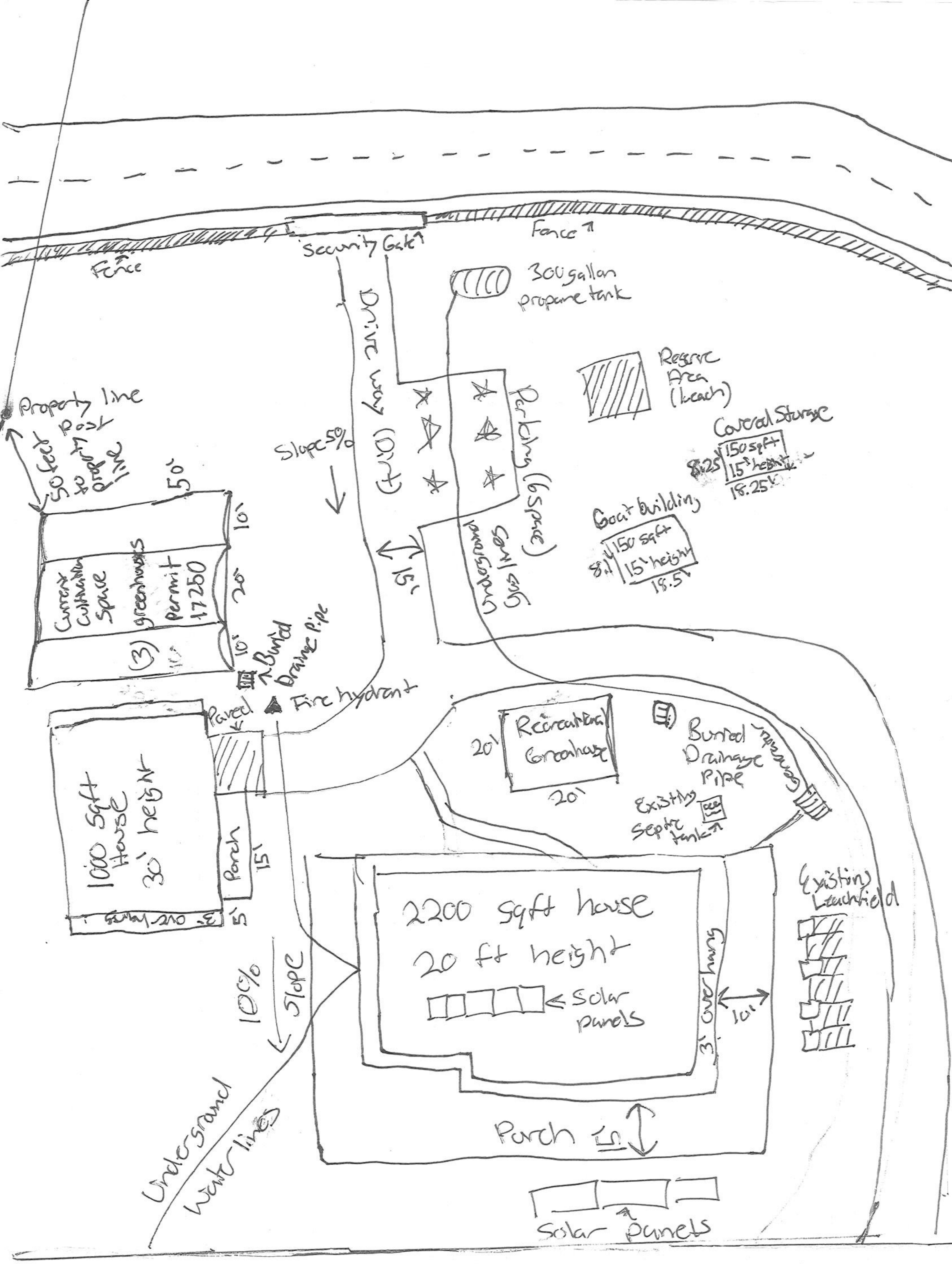
Cannabis irrigation water: Pond

Electricity: Solar wall and propane generator

Internet: Netlink 101

All areas not labeled are heavily vegetated with trees > 12ft





Detailed Structure Map

Plot Plan for 220 - 282 - 010
220 - 282 - 019

Prepared by Jennifer Mahoney
(310) 487 - 9769
jrm137@humboldt.edu

N

20ft

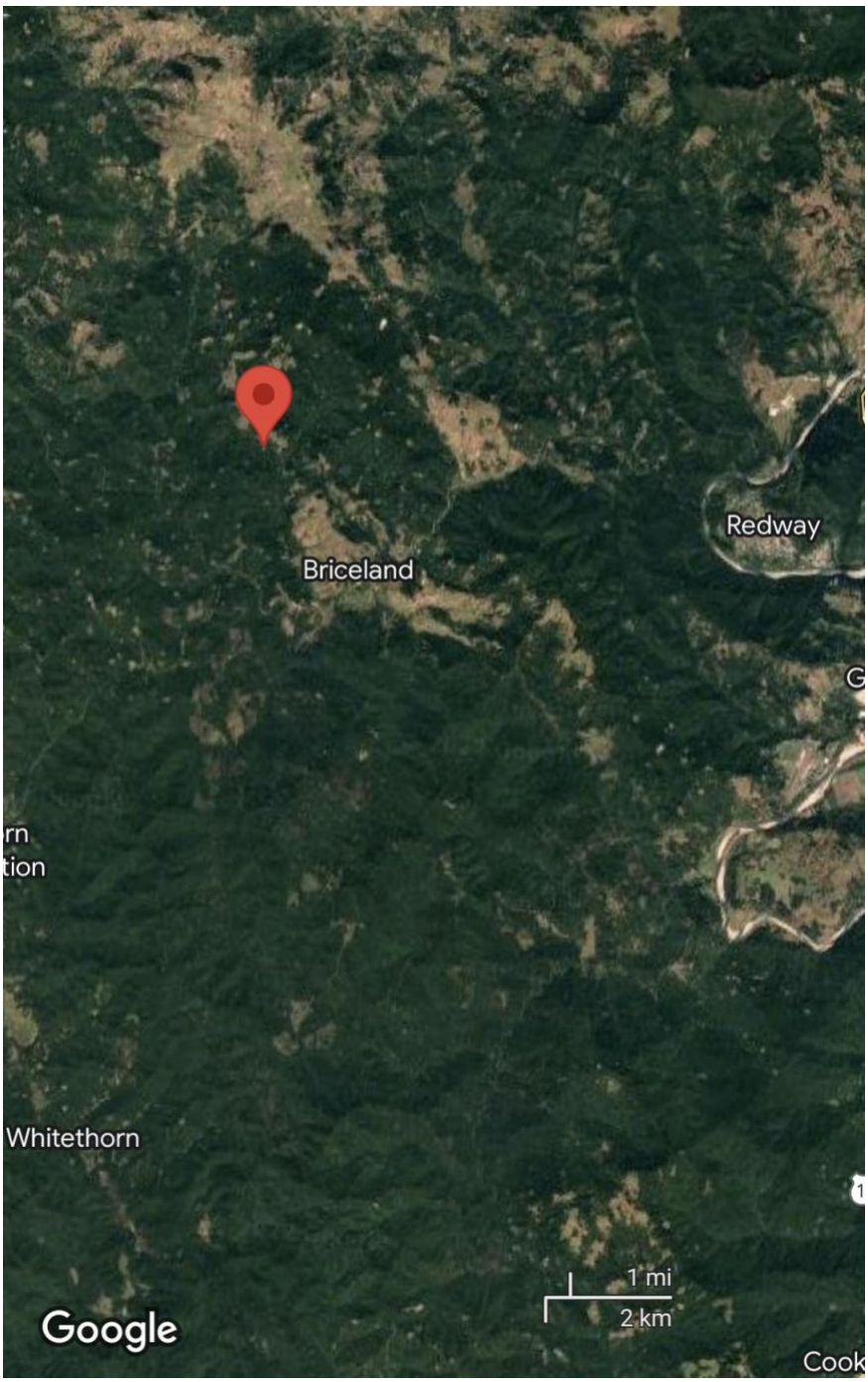
Project Description

The property is a 46 acre parcel located in the heavily impacted Redwood Creek watershed with the connecting water way of Miller Creek running through it. On this parcel there are two residences that are not connected to city water or power. There is also a 2000 sqft commercial cannabis operation currently permitted (17250). Power is obtained through multiple solar panels and a solar battery system. Water is obtained from a spring, our property has never utilized water directly from the creek bed. Despite our efforts to maintain a healthy creek bed environment there have been issues identified while developing our LSA agreement. We had Fish and Game out for our inspection and they determined there were three key areas of repair required to maintain Miller Creek's ongoing health.

The first and second projects are two culverts installed before the purchase if the property that require replacement. The culverts are currently 24 in galvanized steel culverts that are completely rotted out at the bottom. If they were to fail it would cause a detrimental amount of sediment to enter the watershed and may adversely affect salmon production. We would like to replace the culverts, whose locations are depicted on the map attached, with 36 in concrete culverts. These culverts were chosen because they are the longest lasting fire proof culverts we were able to locate in our research.

The third project is a bridge over Miller Creek that allows us to access the entire back half of the property. At this point in time the bridge sits below current flood levels, which is against Fish and Game regulations. The Fish and Game worker said that it's currently configuration is blocking the flow of debris. We have had the bridge wash out before, we have been concerned that this would contribute to erosion. It has also been a growing desire of us and many neighbors on the Blue Slide Creek side of the property that we reinforced the bridge to be used as an escape route in case there is a fire on Blue Slide Creek blocking the outlet. Replacing the crossing to be a permanent crossing above the flood level will maintain the creeks integrity, even in the case of a fire. Because this bridge is located on private property and is not located on the Miller Creek Road sections currently being maintained by the community road association, the burden of repair falls solely on the property owner. This is regardless of the current need for the neighbors to access it in emergency cases.

Location map



Scope of the work

All work will take place at parcel 220-282-010, 2060 Miller Creek Rd in Humboldt county, CA. The projects will be reviewed by Omsberg and Preston Engineering in the months of January and February of 2023. The bridge design has to be approved by the engineer before work can begin, as the bridge repaired would be helpful in completing the culvert replacement. The bridge repair should take place between June 1-August 1 2023, aiming for the driest 3 week period in this gap. The bridge repair would be supervised by a contractor. We would then replace the two culverts directly after the bridge repair. The culverts would be replaced concurrently to better utilize the equipment required. This work would be completed by a hired team.

Schedule for Completion

Milestones	Start Date	End Date
Detailed project scoping	January 1, 2023	March 1, 2023
Engineer Design	March 1, 2023	March 31, 2023
Project Ground-breaking	July 1, 2023	August 1,2023
Fish and Game inspection	August 1, 2023	September 1, 2023
Project Completion	August 1, 2023	September 1, 2023
Monitoring	August 1, 2023	August 1, 2028

Erosion Control Plan

All of the work included is designed to prevent erosion of the hillside and the creek bed area used as a crossing. Erosion will be controlled for during work by completing the work while the springs are not producing water and the creek is dry. The water down stream beyond the culverts and the crossing would be checked for clarity after the repairs during the rain season. This is already a process in place on the farm every year to ensure paths and even natural areas are not depositing sediments into the waterway. This process is completed every winter and would be completed during the five years after the repairs.

Budget (estimates provided by Fish and Game and multiple contractors)

Budget item	Grant	Other funds
Fish and Game permits	7,274.75	
Engineering Fees		2,500.00
Materials: culverts	24,000.00	
Materials: Bridge	30,000.00	
Equipment rentals and labor	10,000.00	
Totals	71,274.75	2,500.00

Project Maps

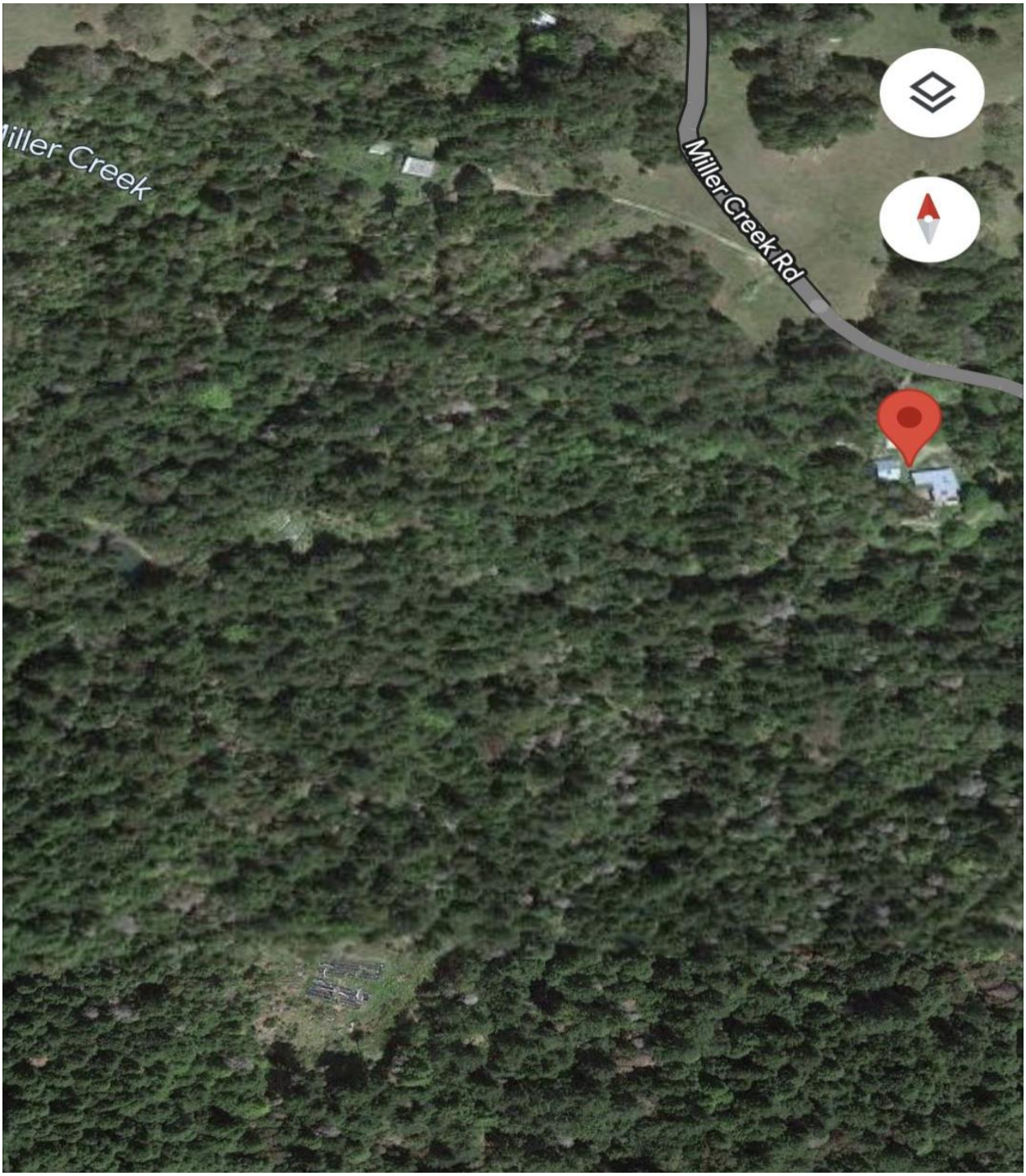


Figure 1. Satellite photo if the parcels 220-282-010, 220-282-019

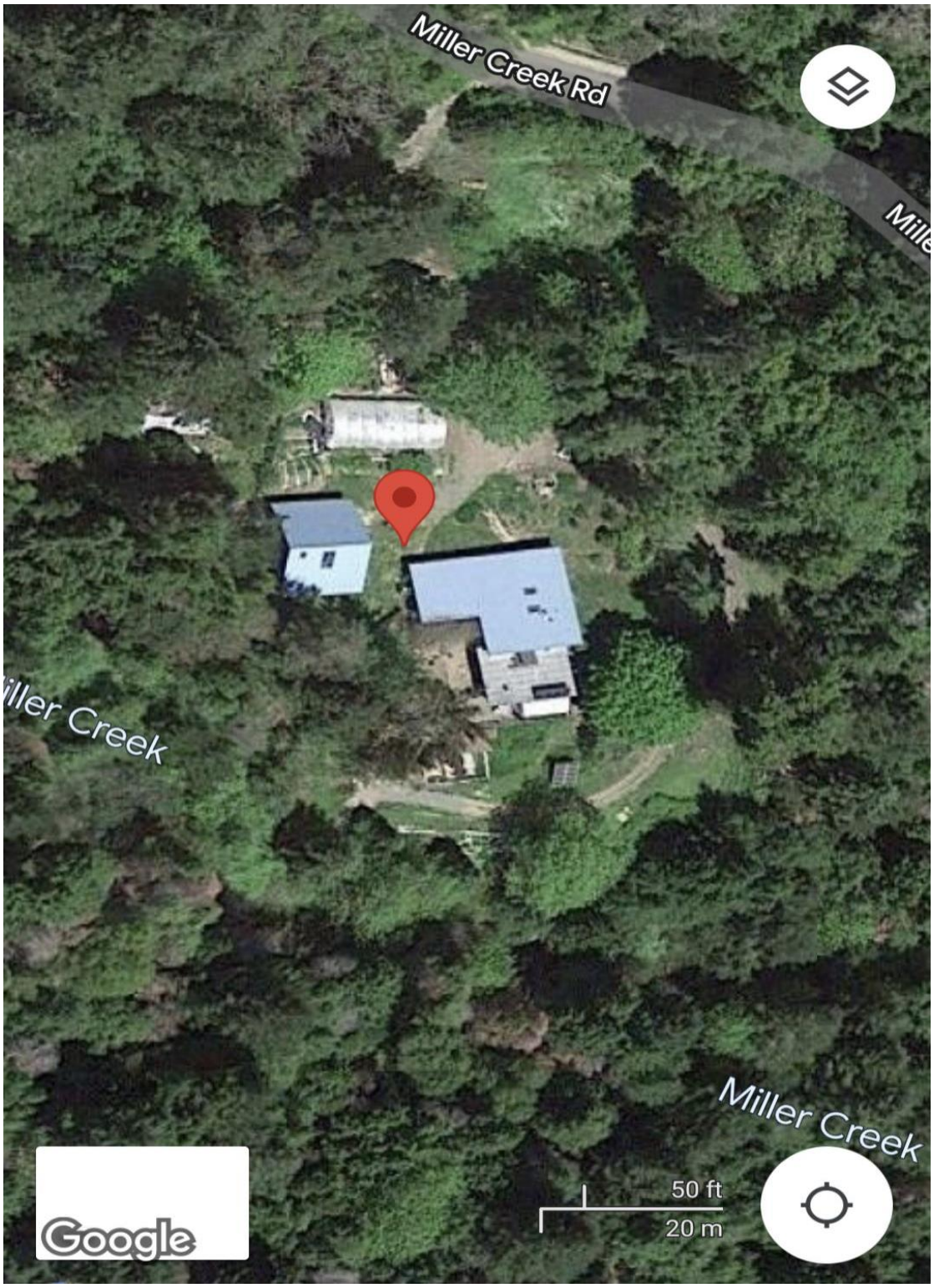


Figure 2. Satellite photography of the homestead

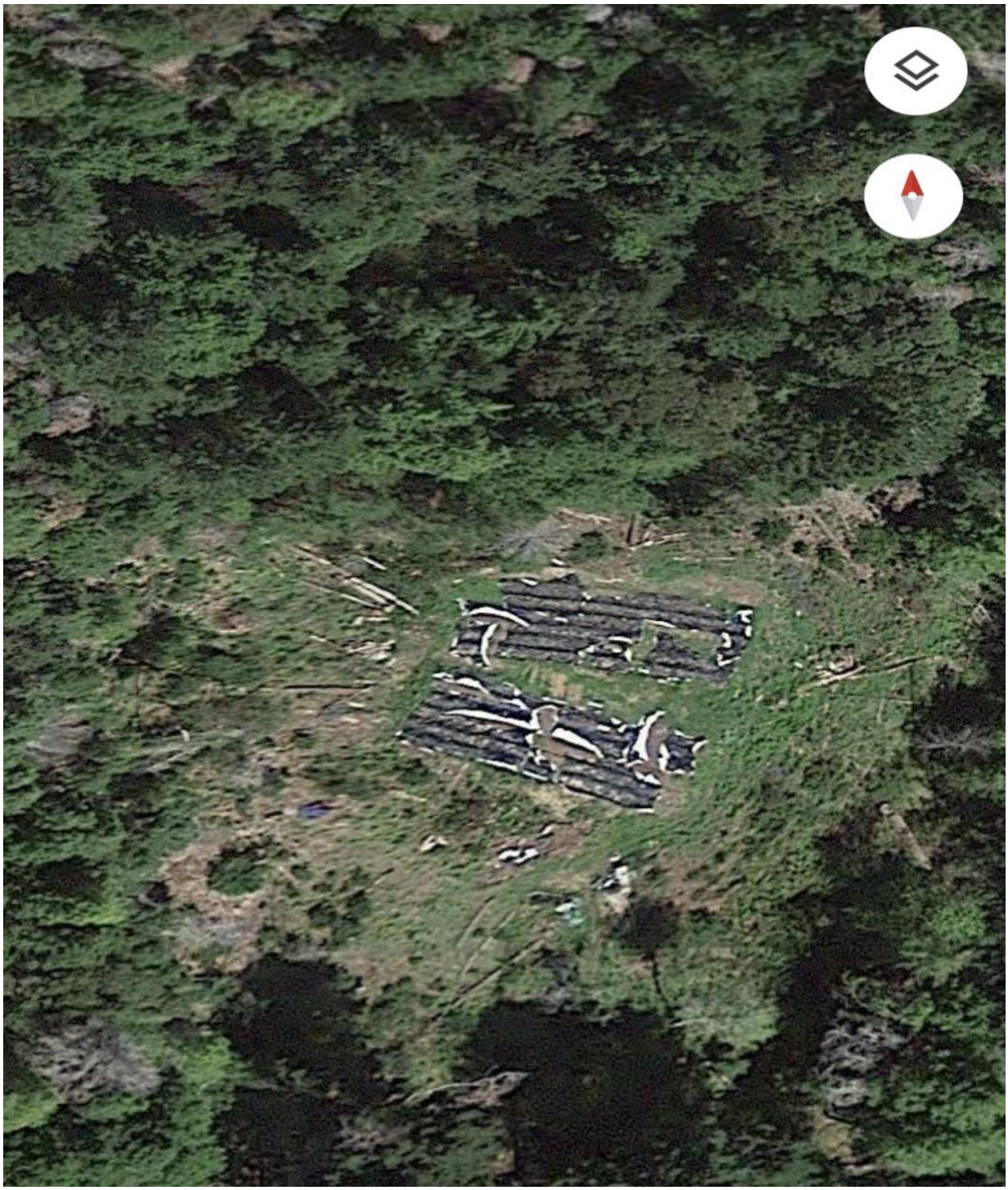


Figure 3. A close up of the previously graded retired cultivation areas

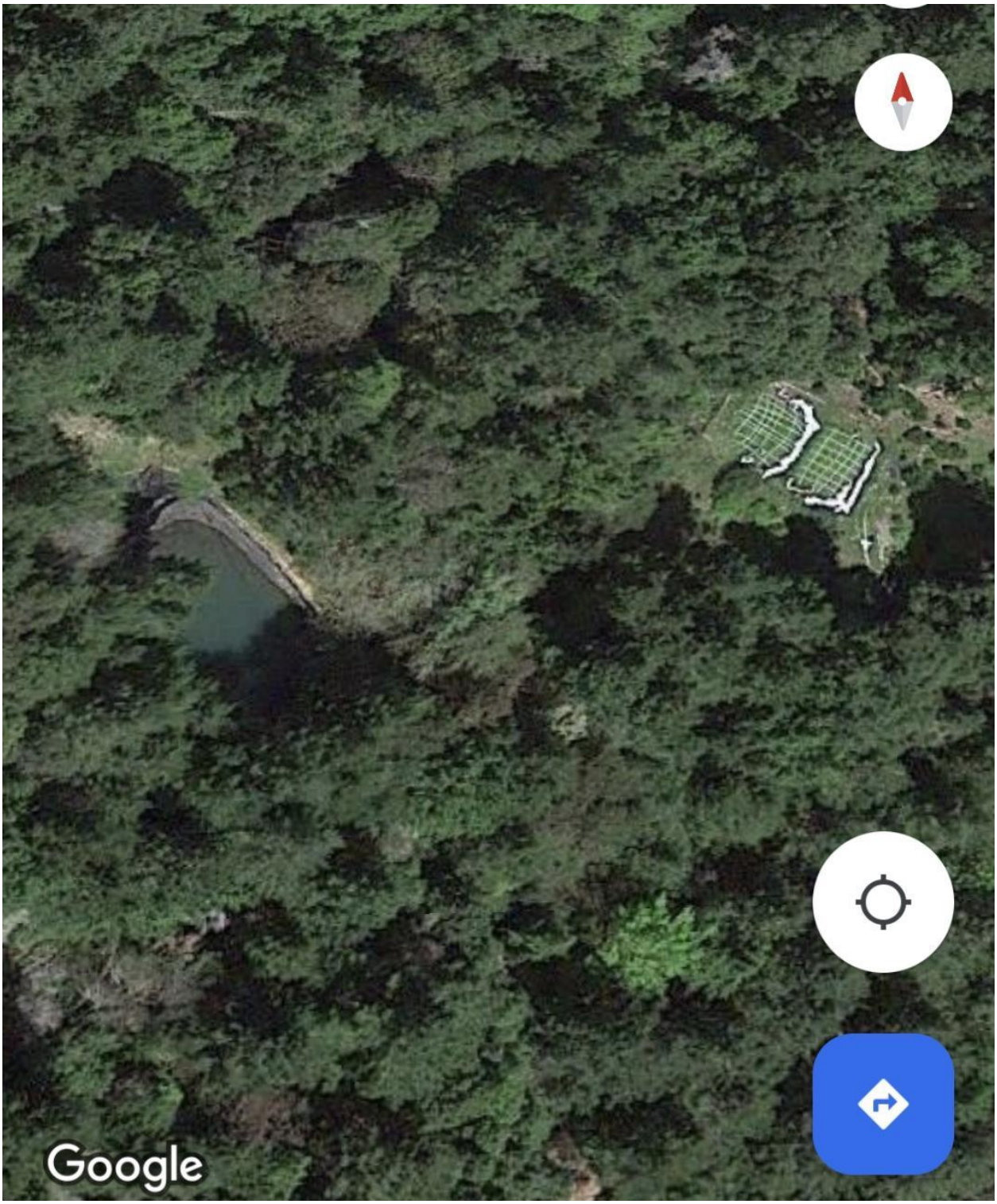
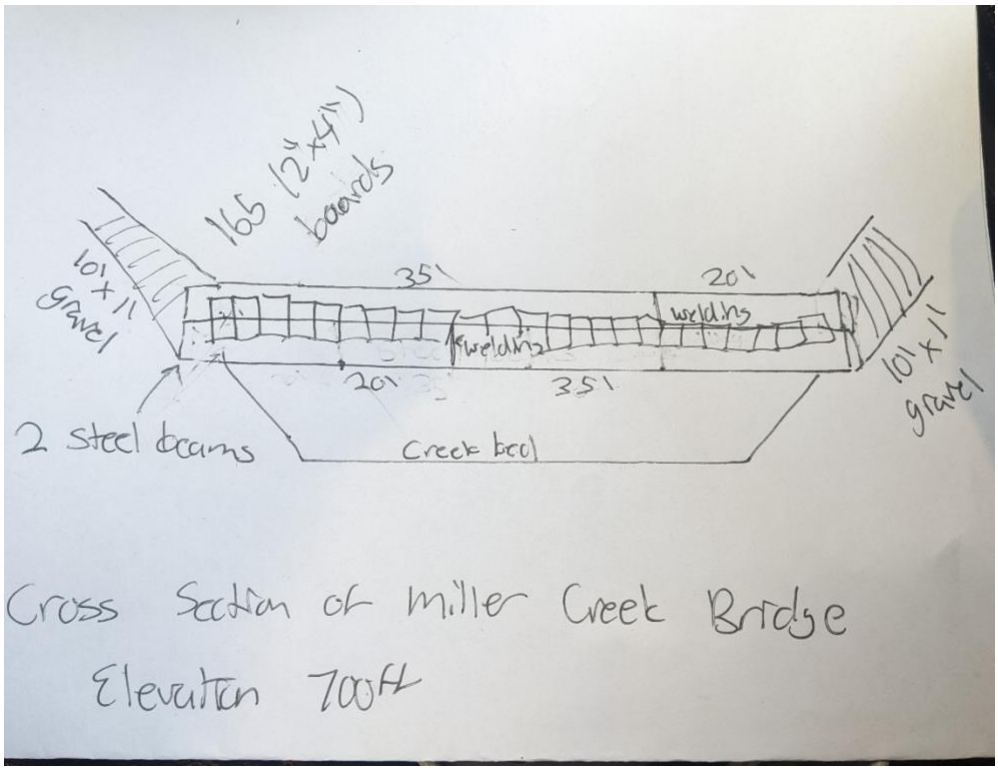


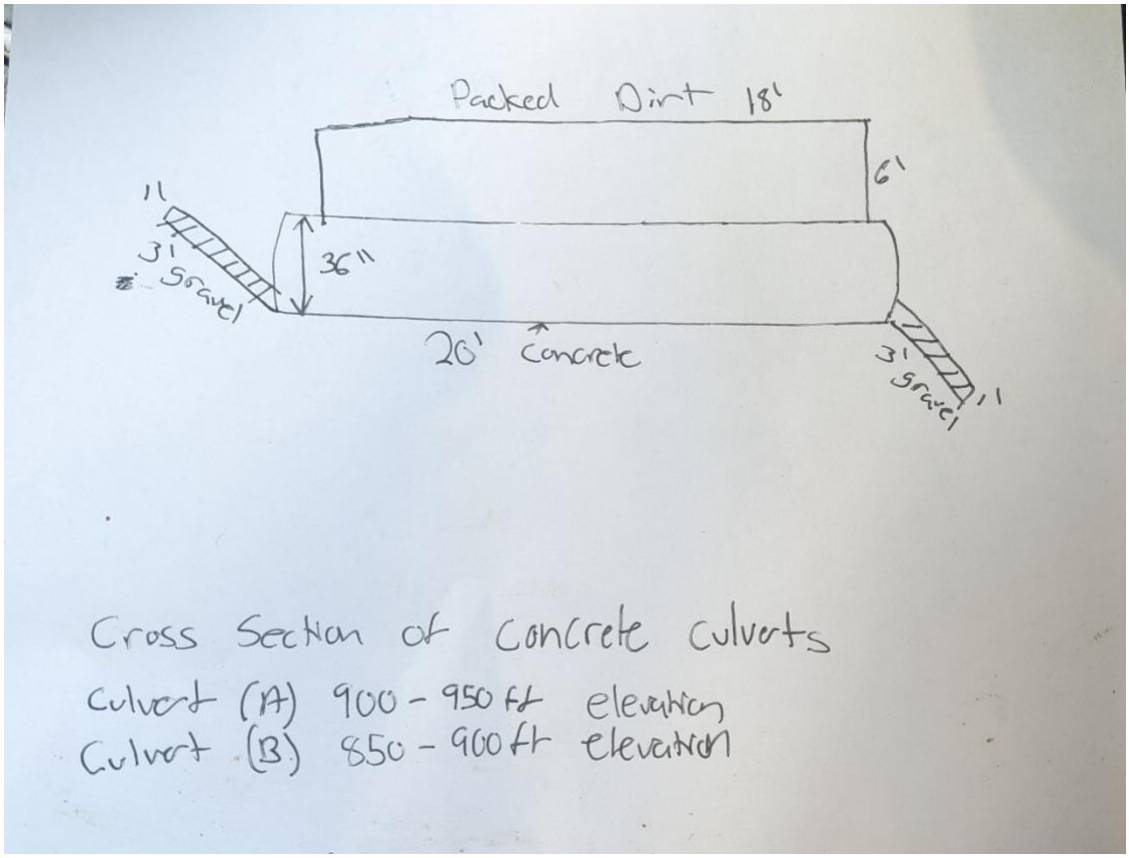
Figure 4. Close up satellite photography of the pond area and the flattened are currently being used as a fruit orchard

Figure 5. Bridge we are requesting to repair in it's current state, pictured here with the creek at it's highest flow

Cross sections



Cross Section of Miller Creek Bridge
Elevation 700ft



Cross Section of Concrete Culverts
Culvert (A) 900 - 950 ft elevation
Culvert (B) 850 - 900 ft elevation

Friends of the Eel River Mitigation and Remediation Grant Program

Sproul Creek Headwaters Road Improvements Application Packet

Table of Contents

Mitigation and Remediation Grant Program
APPLICATION GUIDELINES

Application Packet Checklist

Please check below to ensure you have a complete application. Once complete, email the following documents, in pdf format with the text "Application for Remediation Grant Program Funding" in the subject line to eadler@co.humboldt.ca.us.

- ☒Signed Application Submission Form
- ☒Project Description – Summary of the Project, up to 2 pages.
- ☒Plot Plan
- ☒Plot Plan Checklist – Attached
- N/A ☒Cross sections of proposed work including topographic elevations
- ☒Scope of Work – Detailed Description of Work
- ☒Schedule for Completion – Identify Milestones
- ☒Erosion Control Plan and Monitoring Plan
- ☒Budget – Be as specific as possible – sample attached
- ☒Project Maps and Figures
- ☐Letter(s) of Support (optional)

APPLICATION FORM - Commercial Cannabis Land Use Ordinance Mitigation and Remediation Fund Program

Project Title: Sproul Creek Headwaters Road Improvements

Date of Application: 10/31/2022

Applicant Name: Humboldt Spirit Inc./ Dillon Dupont

Project APN: 222-071-030

Contact Person Name and Title: Dillon DuPont-owner

Contact Phone: 707-223-2078

Contact Email: dillondupont@gmail.com

Contact Address: 3739 Balboa St. Unit 152 San Francisco, CA 94121

Amount Requested: $117,170.00

Total Budget: $151,363.70

Project Timeline: Start Date: June 15th, 2023

End Date: November15th, 2023

Signature of Applicant:

Project Description

Sproul Creek-Headwaters Road Improvements

FOER Mitigation and Remediation Grants Program

Humboldt Spirit Inc.-Dillon DuPont

Project Location

The proposed implementation project is located within the Sproul Creek watershed, approximately 6 miles southwest of the town of Garberville, County of Humboldt, State of California. The project is in Section 16, T05S, R03E, Humboldt Base and Meridian; in the Garberville U.S. Geological Survey 7.5-minute quadrangle; Assessor's Parcel Number 222-071-030-000; latitude 40.0172 N and longitude 123.8363 W at the Parcel centroid. This parcel has nine unnamed Class III tributaries that are the headwaters to Sproul Creek. The parcel contains three access roads that are utilized by the applicant as well as neighbors that reside beyond the parcel. There is an existing road association that is charged with maintaining these roads, but they are not financially equipped for such a large road improvement project.

Approximately seventeen watercourses exist on the subject property consisting of fifteen Class III and two Class II watercourses. These watercourses function as tributaries to Sproul Creek which drains into Jones Creek, flows into Indian Creek and where it drains into the South Fork Eel River approximately 4 miles downstream. Numerous erosion control sites that directly affect watercourses on the subject property.

Project Overview

This Mitigation and Remediation Grant intends to begin implementation on 14 watercourse crossing projects and 18 erosion control projects located on parcel 222-071-030. All of the proposed watercourse crossing projects are located on tributaries that are direct headwaters to the Sproul Creek and the affected watercourse. These projects are primarily located on a community utilized road system utilized by over 40 landowners. These are historic ranch roads that have not been upgraded in decades. Many of the existing watercourse crossings are undersized and not functioning adequately. This property is a historic homestead parcel that dates back prior to the 1930's as the Neilson Ranch. Some project sites defined below will restore some land features that were disturbed in the historical era (pre 1970's). Many of the watercourse crossing project sites are located on community utilized sections of road with culverts that are presumed by condition to have been installed decades ago and are not up to current standards for watercourse crossing structures.

This parcel was purchased in 2021 by the current landowner with numerous cleanup locations, poorly functioning watercourse crossings, and multiple erosion and sediment control site to be implemented. The previous land owner was also subject to violations received from The California Department of Fish and Wildlife (CDFW) and the North Coast Regional Water Quality Control Board in 2015 prior to legalization of cannabis. The previous landowner did not resolve and or complete the necessary restoration and remediation efforts. The current landowner is faced with a huge remediation and restoration project. In 2021 and 2022 the new landowner has coordinated and completed permits with every involved agency.

Project Overview(Continued)

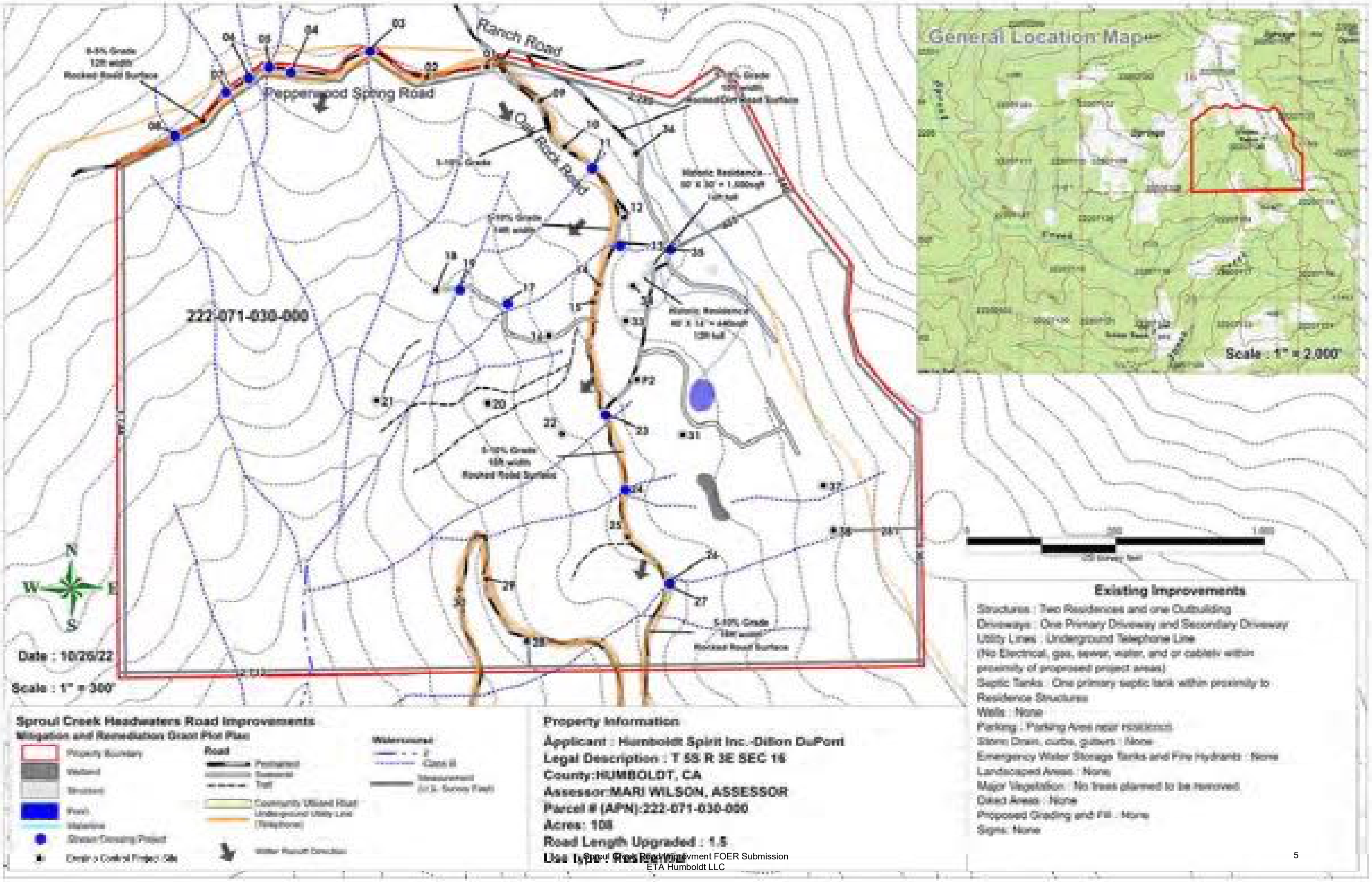
The new landowner has made significant effort and financial commitment to resolve all outstanding issues with involved agencies and has successfully completed all planning and permits necessary for the implementation of the proposed project. To date the current landowner has completed cleanup of the refuse, trash, and legacy cultivation waste on the property. This project has completed and accepting Lake and Streambed Alteration Agreement, 401 Water Quality Permit, and 404 Army Corp permits and Site Management Plan.

Project Overview and Outcome

Fourteen watercourse crossing projects are detailed in the Lake and Streambed Alteration Agreement between the applicant, Humboldt Spirit Inc.-Dillon DuPont, and California Department of Fish and Wildlife. The proposed project also consists of 18 areas where rocked rolling dips, water bars, and ditch relief culverts will be installed to mitigate sediment being transferred into the affected watershed. Planning efforts and project details are outlined in the approved Cleanup, Remediation and Mitigation plan approved by the North Coast Regional Waterboard. A 401 certification has been completed with the State Water Resources Control Board for the culvert upgrades. A 404 certification has also been completed with the Army Corps of Engineers.

This project will improve watercourse crossings and hydrologically disconnect areas that threaten to allow sediment delivery on three shared community utilized road that are moderately travelled and provide access for multiple neighbors that reside beyond the parcel. There are six crossings on Pepperwood Springs Rd., five crossings on Oak Rock Rd. and one crossing on Ranch Rd. to be upgraded. There are two crossings on a trail on the parcel that will be decommissioned, and the stream channel will be restored. There is also one ditch relief culvert located on a legacy road on the parcel that will be improved by installing erosion control materials and a waterbar. In addition, there are nine locations where a rocked rolling dip will be installed, five areas where ditch relief culverts will be installed, as well as three areas where a Waterbar will be installed to assure that potential sediment delivery will be mitigated.

These upgraded watercourse crossings and other road improvements will achieve 100-year flood requirements and reduce sediment deposits into unnamed tributaries, Sproul Creek, and the South Fork Eel River, protecting water quality and aquatic ecosystems and limiting impact on downstream resources. The objective of this implementation project is to protect and improve salmonid habitat through controlling and preventing road-related erosion within the streamside riparian zones and upland areas in the watershed. Biological benefits of stream restoration are derived from reestablishing important ecological functions on degraded streams. These are functions that can be observed and measured on high quality streams. Restoration accomplishes this by establishing a stable channel morphology which will support the development of a diverse stream ecosystem. Environmental standards and regulations have determined a standard for environmental compliance in effort to reduce, minimize and mitigate impacts associated with the human environmental interface of cannabis cultivation properties.


Ranch Road
Pepperwood Spring Road
222-071-030-000
General Location Map
Scale : 1" = 2,000'
Historic Residence
Date : 10/26/22
Scale : 1" = 300'
Sproul Creek Headwaters Road Improvements
Property Boundary
Road
Watercourse
Class III
Water Runoff Direction
Property Information
Applicant : Humboldt Spirit Inc.-Dillon DuPont
Legal Description : T 5S R 3E SEC 16
County:HUMBOLDT, CA
Assessor:MARI WILSON, ASSESSOR
Parcel # (APN):222-071-030-000
Acres: 108
Road Length Upgraded : 1.5
Existing Improvements
Structures : Two Residences and one Outbuilding
Driveways : One Primary Driveway and Secondary Driveway
Utility Lines : Underground Telephone Line
Septic Tanks : One primary septic tank within proximity to
Residence Structures
Wells : None
Storm Drain, curbs, gutters : None
Emergency Water Storage Tanks and Fire Hydrants : None
Landscaped Areas : None
Major Vegetation : No trees planned to be removed
Diked Areas : None
Proposed Grading and Fill : None
Signs: None

PLOT PLAN AND TENTATIVE MAP CHECKLIST

The following information must be shown on your plot plan or tentative map. Please check ✓ the box to the left of the items shown on the plot plan or tentative map. If any item is not on your site to your knowledge, write "N/A" next to the box. Plot plans shall be drawn on a minimum size sheet of 8-1/2" x 11", and tentative subdivision maps on a minimum size sheet of 18" x 26". ***Note: This Checklist must be completed by the applicant and submitted with your application.***

Applicant's Name _ Humboldt Spirit Inc.-Dillon DuPont_ APN 222-071-030

FOR ALL PROJECTS

- ☒ 1. Name of applicant(s)
- ☒ 2. Location or vicinity map (on or attached to the plot plan)
- ☒ 3. The subject parcel (show entire parcel with dimensions)
- ☒ 4. Date, north arrow and scale
- ☒ 5. Name, County road numbers, and width of all existing and proposed access roadways adjacent to or within the subject parcel (indicate width of traveled way, grade (in % slope), and surface)
- ☒ 6. Existing and proposed improvements (label as "existing" and "proposed" with dimensions and distance to nearest two (2) property lines)
  - ☒ a. Structures and buildings (include floor area, height and proposed use)
  - ☒ b. Driveways and turnaround areas (indicate width, grade (in % slope) and surface)
  - ☒ c. Utility lines (electric, gas, telephone, sewer, water, and cable TV)
  - ☒ d. Septic tanks and leachfields (label primary/reserve areas and test holes)
  - NA e. Wells
  - ☒ f. Parking and loading areas (show individual parking spaces, including handicapped parking and ramps)
  - NA g. Storm drains, curbs and gutters
  - NA h. Emergency water storage tanks and fire hydrants
  - NA i. Landscaped areas (include proposed exterior lighting)
  - NA j. Major vegetation (identify mature trees (12" dbh or larger) to be removed)
  - NA k. Diked areas
  - NA l. Proposed grading and fill (estimate volume)
  - NA m. Signs (indicate size, illuminated, and design (e.g., monument, pylon, etc.))
  - NA n. Other - specify _____
- ☒ 7. Direction of surface water runoff
- ☒ 8. Location and width of all existing and proposed easements of record
- NA 9. Hazardous areas (indicate on map if on the project site or within 400 feet of the project site):
  - a. Areas subject to inundation or flooding
  - b. Steep or unstable slopes
  - c. Expansive (clay) soils
  - d. Earthquake faults
  - e. Hazardous waste or substance sites
  - f. Other - specify _____
- ☒ 10. Sensitive habitat areas (indicate on map if on project site or within 400 feet of the project site):
  - ☒ a. Creeks, rivers, sloughs and other drainage courses
  - ☒ b. Lakes, ponds, marshes, or "wet" meadows
  - NA c. Beaches
  - NA d. Sand dunes
  - ☒ e. Other - specify _Wetland_
- ☒ 11. Historical buildings or known archaeological or paleontological resources
- ☒ 12. Land use and buildings on adjacent parcels, and approximate distances to closest property lines

FOR LOT LINE ADJUSTMENT PLOT PLANS ONLY

- ☐ 13. Proposed new lines and lines to be eliminated (show lines to be eliminated as dashed)
- ☐ 14. Areas (in square footage or acreage) of the initial and resulting parcels

FOR TENTATIVE SUBDIVISION MAPS ONLY

- ☐ 16. Approximate dimensions and areas of all proposed lots
- ☐ 17. A statement that "All easements of record are shown on the tentative map and will appear on the recorded subdivision map"
- ☐ 18. Contour lines (at _____ intervals)
- ☐ 19. For major subdivisions (5 or more parcels): proposed drainage improvements, details of any grading to be performed, approximate radii of all roadway curves, areas for public use, and typical sections of all streets, highways, ways and alleys
- ☐ 20. Names and assessor's parcel numbers of all contiguous ownerships

NOTE: THE SUBMITTAL OF INCOMPLETE OR ILLEGIBLE PLOT PLANS OR TENTATIVE MAPS WILL CAUSE DELAYS IN THE PROCESSING OF YOUR APPLICATION

Sproul Creek-Headwaters, Humboldt Spirit Inc. Road Improvements

FOER Mitigation and Remediation Grants Program

Scope of Work

Overview

Fourteen Watercourse Crossing upgrades are planned to be upgraded and eighteen Erosion/Sediment control project sites are planned to be implemented.

Stream Crossing 03: An existing 8-inch diameter by 20-foot-long CMP culvert on a watercourse. The crossing is too short, shot-gunned, not-to-grade, eroding the road fill slope at the outlet, and undersized for the 100-year flow. This notification proposes this culvert be upgraded to a minimum 18-inch diameter culvert set to grade of the watercourse with a length extending past the fill prism of the road per the attached culvert installation specifications. The upgrading of this crossing requires the removal and displacement of approximately 15 to 20 cubic yards of fill and 120 ft_2 of overall disturbance (30-feet long by 4-feet deep by 4-feet wide). The upgrading of this crossing may require the loss of native grasses, forbs, and ferns.

Stream Crossing 04: An existing 8-inch diameter by 20-foot-long smooth steel culvert on a watercourse that is too short, shot-gunned, not-to-grade, eroding the road fill slope at the outlet, and undersized for the 100-year flow. This notification proposes this culvert be upgraded to a minimum 18-inch diameter culvert set to grade of the watercourse with a length extending past the fill prism of the road per attached culvert installation specifications. The upgrading of this crossing requires the removal and displacement of approximately 15 to 20 cubic yards of fill and 120 ft_2 of overall disturbance (30-feet long by 4-feet deep by 4-feet wide). The upgrading of this crossing may require the loss of native grasses, forbs, and ferns.

Stream Crossing 05: An existing 12-inch diameter by 20-foot-long double walled plastic culvert crossing on a watercourse that is too short, shot-gunned, not-to-grade, eroding the road fill slope at the outlet, and undersized for the 100-year flow. This notification proposes this culvert be upgraded to a minimum 18-inch diameter culvert set to grade of the watercourse with a length extending past the fill prism of the road per the attached culvert installation specifications. The upgrading of this crossing requires the removal and displacement of approximately 15 to 20 cubic yards of fill and 120 ft_2 of overall disturbance (30-feet long by 4-feet deep by 4-feet wide). The upgrading of this crossing may require the loss of native grasses, forbs, and ferns.

Stream Crossing 06: An existing 12-inch diameter by 20-foot-long CMP culvert crossing on a watercourse that is too short, shot-gunned, not-to-grade, eroding the road fill slope at the outlet, and undersized for the 100-year flow. This notification proposes this culvert be upgraded to a minimum 24-inch diameter culvert set to grade of the watercourse with a length extending past the fill prism of the road per the attached culvert installation specifications. The upgrading of this crossing requires the removal and displacement of approximately 20 to 25 cubic yards of fill and 150 ft_2 of overall disturbance (30-feet long by 4-feet deep by 5-feet wide). The upgrading of this crossing may require the loss of native grasses, forbs, and ferns.

Stream Crossing 07: An existing 12-inch diameter by 20-foot-long half CMP, half smooth steel culvert crossing on a watercourse crossing that is too short, shot-gunned, not-to-grade, eroding the road fill slope at the outlet, and undersized for the 100-year flow. This notification proposes this culvert be upgraded to a minimum 30-inch diameter culvert set to grade of the watercourse with a length extending past the fill prism of the road per the attached culvert installation specifications. The upgrading of this crossing requires the removal and displacement of approximately 30 to 35 cubic yards of fill and 150 ft_2 of overall disturbance (30-feet long by 6-feet deep by 5-feet wide). The upgrading of this crossing may require the loss of native grasses, forbs, and ferns.

Stream Crossing 08: An existing 8-inch diameter by 20-foot-long CMP culvert crossing on a watercourse that is too short, shot-gunned, not-to-grade, eroding the road fill slope at the outlet, and undersized for the 100-year flow. This notification proposes this culvert be upgraded to a minimum 18-inch diameter culvert set to grade of the watercourse with a length extending past the fill prism of the road per the attached culvert installation specifications. The upgrading of this crossing requires the removal and displacement of approximately 15 to 20 cubic yards of fill and 120 ft_2 of overall disturbance (30-feet long by 4-feet deep by 4-feet wide). The upgrading of this crossing may require the loss of native grasses, forbs, and ferns.

Stream Crossing 11: An existing 24-inch diameter by 20-foot-long double walled plastic culvert crossing on a watercourse that is adequately sized for the 100-year flow, but it is too short and lacks a rock armor energy dissipater which is resulting in the erosion of the fill slope. This notification proposes the applicant attach a minimum 20-foot culvert extension or downspout to the outlet of the culvert with a flexible single-walled 24-inch diameter culvert that outlets beyond the fill prism of the road and rock armor the outlet per the attached specifications. The upgrading of this crossing may require the loss of native grasses, forbs, and ferns.

Stream Crossing 13: A Class III watercourse that lacks an adequate crossing structure and is being diverted down the inside ditch of the road approximately 150-feet before being relieved by the DRC at SMP Site 14/P8/WQ10. This notification proposes that the watercourse crossing be realigned with a minimum 18-inch diameter culvert and set to grade with the watercourse with a length extending past the fill prism of the road per the attached culvert installation specifications. The upgrading of this crossing requires the removal and displacement of approximately 20 to 25 cubic yards of fill and 160 ft_2 of overall disturbance (40-feet long by 4-feet deep by 4-feet wide). The upgrading of this crossing will require the removal of one California Bay tree sapling and may require the loss of native grasses, forbs, and ferns. Timberland Resource Consultants suggests that the inside ditch be cleared and that the DRC that is currently diverting the flow from the Class III watercourse be upgraded to an 18-inch diameter DRC.

Stream Crossing 17: An existing 18-inch diameter by 20-foot-long double walled plastic culvert crossing on a watercourse on an abandoned road. This notification proposes that this crossing be decommissioned per the attached specifications. The decommissioning of this crossing requires the removal of approximately 15 to 20 cubic yards of fill and 120 ft_2 of overall disturbance (30-feet long by 4 feet deep by 4 feet wide). The decommissioning of this crossing may require the loss of native grasses, forbs, and ferns.

Stream Crossing 19: An existing 18-inch diameter by 20-foot-long double walled plastic culvert on a watercourse crossing on an abandoned road. The installation of this culvert misaligned the watercourse. This notification proposes that this crossing be decommissioned, and the watercourse be re-aligned to the native channel per the attached decommissioning specifications. The decommissioning of this crossing requires the removal and displacement of approximately 15 to 20 cubic yards of fill and 120 ft_2 of overall disturbance (30-feet long by 4-feet deep by 4-feet wide). The realignment of this crossing will require the removal of four Douglas fir trees, one 15-inch diameter, one 11-inch diameter, one 7-inch diameter, one 3-inch diameter and a few Douglas fir seedlings at the crossing outlet. The decommissioning of the crossing may also require the loss of native grasses, forbs, and ferns.

Stream Crossing 23: An existing 18-inch by 20-foot-long CMP and 12-inch diameter by 20-foot-long CMP culvert crossing on a watercourse that is becoming plugged, and one culvert is already plugged, at the inlet. The culverts are shot-gunned, not-to-grade, too short, eroding the road fill slope at the outlet, and undersized for the 100-year flow. This notification proposes this culvert be upgraded to a minimum 30-inch diameter culvert set to grade of the watercourse with a length extending past the fill prism of the road per the attached culvert installation specifications. The upgrading of this crossing requires the removal and displacement of approximately 30 to 35 cubic yards of fill and 150 ft_2 of overall disturbance (30-feet long by 6-feet deep by 5-feet wide). The upgrading of this crossing may require the loss of native grasses, forbs, and ferns.

Stream Crossing 24: An existing 18-inch diameter by 20-foot-long corrugated aluminum culvert crossing on a watercourse that is shot-gunned, not-to-grade, too short, eroding the road fill slope at the outlet, and undersized for the 100-year flow. This notification proposes this culvert be upgraded to a minimum 36-inch diameter culvert set to grade of the watercourse with a length extending past the fill prism of the road per the attached culvert installation specifications. The upgrading of this crossing requires the removal and displacement of approximately 20 to 30-cubic yards of fill and 100 ft_2 of overall disturbance (20-feet long by 6-feet deep by 6-feet wide). The upgrading of this crossing will require the removal of two Douglas fir trees, one 17-inch diameter and one 18-inch diameter. The upgrading of this crossing may require the loss of native grasses, forbs, and ferns.

Stream Crossing 26: An existing 18-inch diameter by 20-foot-long steel culvert crossing on a watercourse that is shot-gunned, not-to-grade, too short, eroding the road fill slope at the outlet, and undersized for the 100-year flow. This notification proposes this culvert be upgraded to a minimum 30-inch diameter culvert set to grade of the watercourse with a length extending past the fill prism of the road per the attached culvert installation specifications. The upgrading of this crossing requires the removal and displacement of approximately 30 to 35-cubic yards of fill and 150 ft_2 of overall disturbance (30-feet long by 6-feet deep by 5-feet wide). The upgrading of this crossing may require the loss of native grasses, forbs, and ferns.

Stream Crossing 35: An existing 8-inch diameter by 20-foot-long steel culvert crossing on a watercourse that is shot-gunned, not-to-grade, too short, misaligned, and undersized for the 100-year flow. This notification proposes this culvert be upgraded to a minimum 18-inch diameter culvert set to grade of the watercourse with a length extending past the fill prism of the road per the attached culvert installation specifications. The upgrading of this crossing requires the removal and displacement of approximately 15 to 20-cubic yards of fill and 120 ft_2 of overall disturbance (30-feet long by 4-feet deep by 4-feet wide). The upgrading of this crossing will require the removal of one 6-inch diameter white oak. The upgrading of this crossing may require the loss of native grasses, forbs, and ferns.

Ditch Relief Culvert (DRC) 38: An existing ditch relief culvert consisting of a 12" corrugated metal pipe that is no longer needed. No inside ditch or concentrated road surface runoff flows reach this culvert as the road up-grade is heavily vegetated and no longer used. Legacy refuse metal debris have been discarded or used as riprap in the past below the outlet of the ditch relief culvert and within the watercourse channel.
This notification proposes that the refuse and metal debris be removed, erosion materials be applied per the specifications outlined in the attached General Erosion Control specifications and a waterbar be installed.

Site 1: Multiple ditch relief culverts are to be Installed on the inside ditch on the adjoining parcel to the north which Is also enrolled In the State Cannabis General Order. See that enrollment for details. {WDID# 1_ 12CC417597) From this site to Site 08 and the property boundary to the west, remove the outboard roadside berms and out slope sections of this road in-between and upgrade of the watercourse crossings, as feasible.

Site 2: Install a rocked rolling dip as flagged in the field, per the specifications outlined in the attached BMPs. See rocked/Rolling Dip Design and Placement, General Operations BMPs, and General Erosion Control specifications.

Site 9: Install a 15" diameter ditch relief culvert per the specifications outlined in the attached BMPs. See Ditch Relief Culvert, and Permanent Culvert Crossing Design (Inlet and Outlet Armoring), General Operations BMPs, and General Erosion Control specifications.

Site 10: Install a 15" diameter ditch relief culvert per the specifications outlined in the attached BMPs. See Ditch Relief Culvert, and Permanent Culvert Crossing Design (Inlet and Outlet Armoring), General Operations BMPs, and General Erosion Control specifications.

Site 12: Install a rocked rolling dip as flagged in the field, per the specifications outlined in the attached BMPs. See rocked/Rolling Dip Design and Placement, General Operations BMPs, and General Erosion Control specifications.

Site 15: Install a rocked rolling dip as flagged in the field, per the specifications outlined in the attached BMPs. See rocked/Rolling Dip Design and Placement, General Operations BMPs, and General Erosion Control specifications.

Site 16: Install a waterbar to the specifications outlined in the attached BMPs. See attached BMPs: Waterbar Construction, General Operations BMPs, and General Erosion Control specifications.

Site 18: Install a water bar to the specifications outlined in the attached BMPs. Maintain as necessary. See attached BMPs: Water bar Construction, General Operations BMPs, and General Erosion Control specifications.

Site 24: Install a rocked rolling dip approximately 130' upgrade of this watercourse crossing. Maintain the kickout drainage feature regularly. See Permanent Culvert Crossing, Permanent Culvert Crossing Design: Critical Dip and Hydrologic Disconnect Placement, Critical Dip, Culvert Orientation, Inlet and Outlet Armoring, General Operations BMPs, and General Erosion Control specifications. (Note: this site will also receive an upgraded culvert per the LSA.)

Site 25: Install a rocked rolling dip as flagged in the field that captures the Inside ditch, per the specifications outlined in the attached BMPs. See rocked/Rolling Dip
Design and Placement, General Operations BMPs, and General Erosion Control specifications.

Site 28: Clear the Inside ditch upgrade approximately 250'. Install an 18" diameter ditch relief culvert In combination with a rocked rolling dip, as flagged in the field, per the specifications outlined in the attached BMPs: See Permanent Culvert Crossing, Permanent Culvert Crossing Design: Critical Dip and Hydrologic Disconnect Placement, Critical Dip, Culvert Orientation, Inlet and Outlet Armoring, General Operations BMPs, and General Erosion Control specifications.

Site 29: Clear the Inside ditch upgrade approximately 250'. Install an 18" diameter ditch relief culvert In combination with a rocked rolling dip, as flagged in the field, per the specifications outlined in the attached BMPs: See Ditch Relief Culvert, and Permanent Culvert Crossing Design (Inlet and Outlet Armoring), General Operations BMPs, and General Erosion Control specifications.

Site 30: Install a rocked rolling dip as flagged in the field, per the specifications outlined in the attached BMPs. See rocked/Rolling Dip Design and Placement, General Operations BMPs, and General Erosion Control specifications.

Site 33: Install a rocked rolling dip as flagged in the field, per the specifications outlined in the attached BMPs. See rocked/Rolling Dip Design and Placement, General Operations BMPs, and General Erosion Control specifications.

Site 34: Install a rocked rolling dip as flagged in the field, per the specifications outlined in the attached BMPs. See rocked/rolling Dip Design and Placement, General Operations BMPs, and General Erosion Control specifications.

Site 36: Clear the Inside ditch upgrade approximately 250'. Upgrade with a 15" diameter ditch relief culvert per the specifications outlined in the attached BMPs. See Ditch Relief Culvert, and Permanent Culvert Crossing Design (Inlet and Outlet Armoring), General Operations BMPs, and General Erosion Control specifications.

Site 37: Remove the organic cultivation-related wastes from the outlet channel, remove the ditch relief culvert and install a waterbar to the specifications outlined in the attached BMPs. See Waterbar Construction, General Operations BMPs, and General Erosion Control specifications.

Milestone	Start Date	End Date
Grant Awarded		
Detailed Project Scoping/ Pre Site Documentation	June 15, 2023	July 15th
Project Construction and Implementation	July 15, 2023	October 15, 2023
Project Completion Reports Submitted	October 15, 2023	November 15, 2023
Project Completion		November 15,2023

Erosion Control Measures

1. Timing for soil stabilization measures within the 100 feet of a watercourse or lake: For areas disturbed from May 1 through October 15, treatment shall be completed prior to the start of any rain that causes overland flow across or along the disturbed surface. For areas disturbed from October 16 through April 30, treatment shall be completed prior to any day for which a chance of rain of 30 percent or greater is forecast by the National Weather Service or within 10 days, whichever is earlier.

2. Within 100 feet of a watercourse or lake, the traveled surface of logging roads shall be treated to prevent waterborne transport of sediment and concentration of runoff that results from operations. Treatment may consist of, but not limited to, rocking, out-sloping, rolling dips, cross drains, water bars, slope stabilization measures, or other practices appropriate to site-specific conditions.

3. The treatment for other disturbed areas within 100 feet of a watercourse or lake, including: (A) areas exceeding 100 contiguous square feet where operations have exposed bare soil, (B) road cut banks and fills, and (C) any other area of disturbed soil that threatens to discharge sediment into waters in amounts deleterious to the quality and beneficial uses of water, shall be grass seeded and mulched with straw. Grass seed shall be applied at a rate exceeding 100 pounds per acre. Straw mulch shall be applied in amounts sufficient to provide at least 2- 4-inch depth of straw with minimum 90% coverage. Slash may be substituted for straw mulch provided the depth, texture, and ground contact are equivalent to at least 2 – 4 inches of straw mulch. Any treated area that has been subject to reuse or has less than 90% surface cover shall be treated again prior to the end of operations.

4. Within 100 feet of a watercourse or lake, where the undisturbed natural ground cover cannot effectively protect beneficial uses of water from sediment introduction, the ground shall be treated with slope stabilization measures described in #3 above per timing described in #1 above.

5. Sidecast or fill material extending more than 20 feet in slope distance from the outside edge of a roadbed, which has access to a watercourse or lake, shall be treated with slope stabilization measures described in #3 above. Timing shall occur per #1 above unless outside 100 feet of a watercourse or lake, for which completion date is October 15.

6. All roads shall have drainage and/or drainage collection and storage facilities installed as soon as practical following operations and prior to either (1) the start of any rain which causes overland flow across or along the disturbed surface within 100 feet of a watercourse or lake protection, or (2) any day with a National Weather Service forecast of a chance of rain of 30 percent or more, a flash flood warning, or a flash flood watch.

Annual Winterization Measures

Winterization measures consist of general cleanup and winter-preparation activities that both prepare for and utilize, anticipated, local winter weather.

- Any exposed soils resulting from winterization activities shall be seeded and straw mulch.
- Any/all areas of exposed soils in and around cultivation areas are seeded and either straw mulched with weed-free straw or woodchips.
- All existing culvert inlets, interiors, and outlets shall be cleared of any existing or potential obstructions to include; debris upstream of the culvert such as sediment, loose, moveable rocks, and raftable, small, woody debris.
- Damage or wear resulting from vehicular use to road surfaces (such as rutting or wheel tracks) and/or road surfacing (such as rock) that would impair road surface drainage or drainage features (such as out sloping, waterbars, rolling dips, etc.) shall be repaired before the Winter Period.
- All existing surface drainage features and sediment capture features shall be maintained if needed to ensure continued function through the Winter Period.
- All fertilizers and petroleum products will be stored in an area located outside of riparian setbacks, completely sealed, placed in secondary containment (liquids), and stored in a manner that prevents contact with precipitation and surface runoff.
- Chemical toilets will be removed from the property until need resumes the following cultivation season, or at a minimum serviced and left unused during periods when not in use.
- Water storage tank lids shall be appropriately closed to prevent the access of wildlife.
- All refuse/trash shall be removed and disposed of appropriately.
- All inorganic material capable of being transported by wind or rain shall be secured and stored appropriately.

Monitoring Plan

Applicants shall regularly inspect and maintain the condition of access roads, access road drainage features, and watercourse crossings. At a minimum, cannabis cultivators shall perform inspections before the onset of fall and winter precipitation and following storm events that produce at least 0.5 in/day or 1.0 inch/7 days of precipitation. See Required Monitoring tables below for specificity monitoring and reporting requirements. Cannabis cultivators are required to perform all of the following maintenance:

- Remove any wood debris that may restrict flow in a culvert.
- Remove sediment that impacts access road or drainage feature performance.
- Place any removed sediment in a location outside the riparian setbacks and stabilize the sediment.
- Maintain records of access road and drainage feature maintenance for annual reporting.

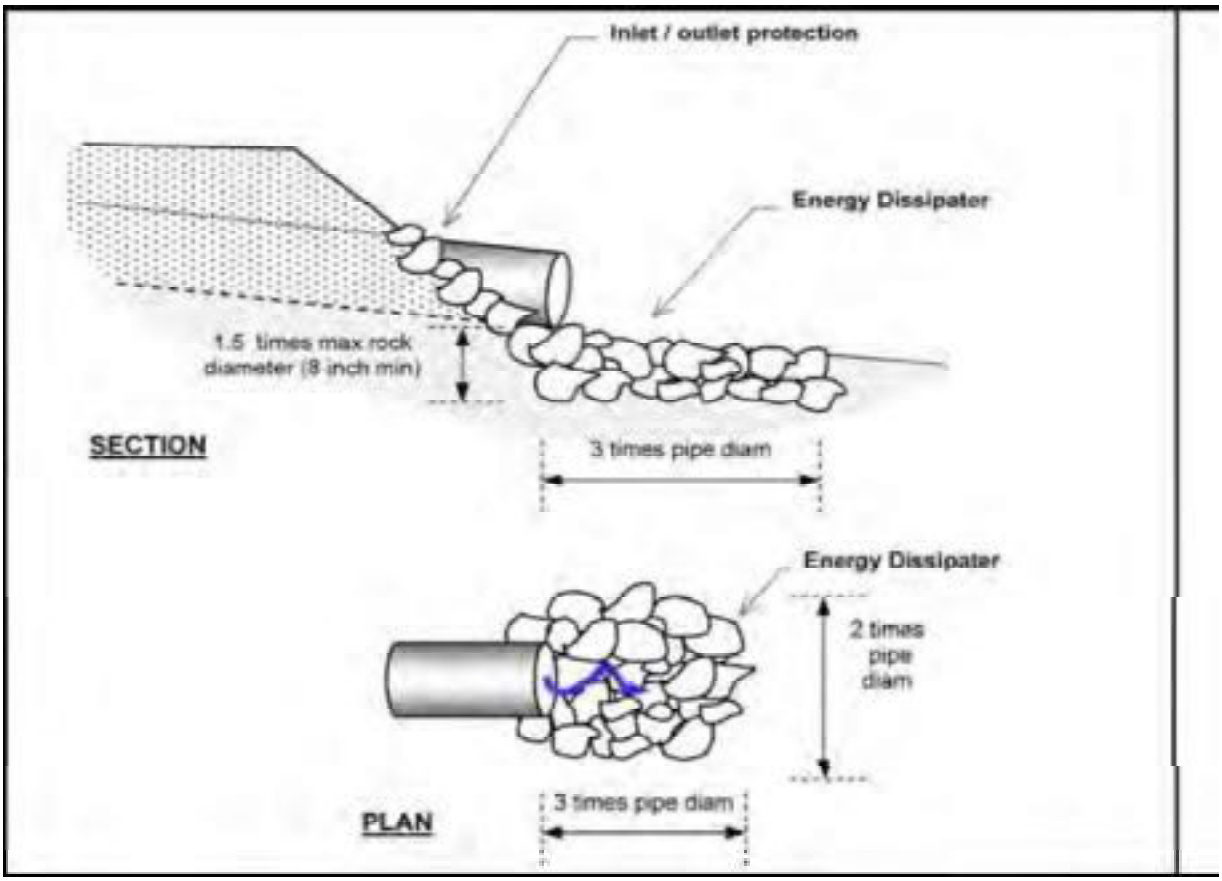
Areas that are, or may become, inaccessible during winter months due to extreme weather such as snow, road closures, seasonal access roads to the property, or any other such conditions shall make additional efforts to enhance Winterization measures in the absence of monitoring during storm events.

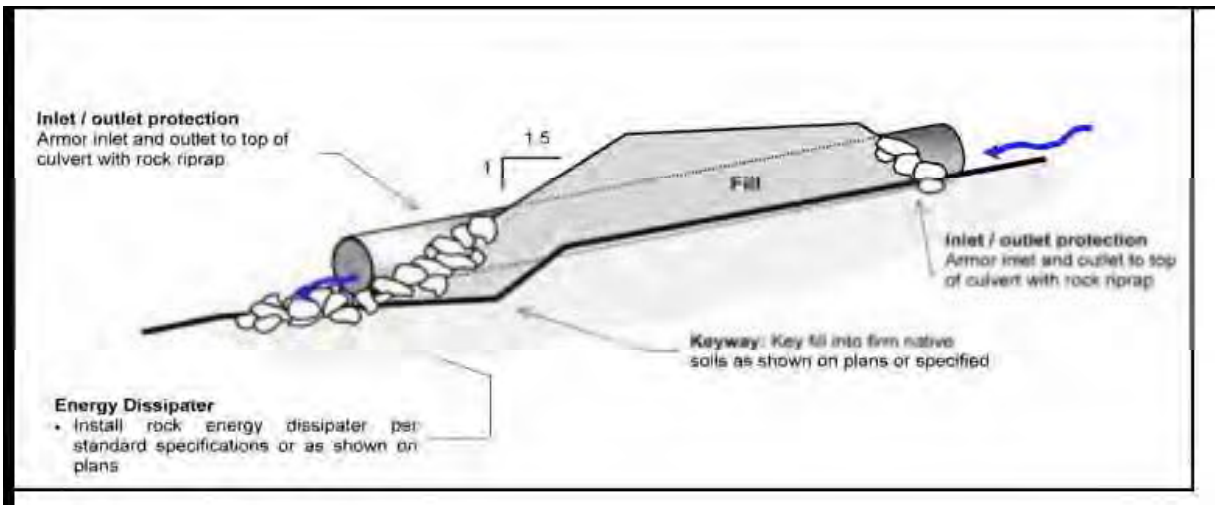
Monitoring Requirement	Description
Winterization Measures Implemented	Report winterization procedures implemented, any outstanding measures, and the schedule for completion.
Tier Status Confirmation	Report any changes in the tier status.
Third-Party Identification	Report any change in third-party status as appropriate.

Culvert Installation Specifications

- New culvert installations shall be sized to accommodate a 100-year storm.
- New culverts shall be placed at stream gradient, or have downspouts, or have energy dissipaters at outfall.
    - Align culverts with the natural stream channel orientation to ensure proper function, prevent bank erosion and minimize debris plugging.
    - Place culverts at the base of the fill and at the grade of the original streambed or install a downspout past the base of the fill. Downspouts should only be installed if there are no other options.
    - Culverts should be set slightly below the original stream grade so that the water drops several inches as it enters the pipe.
    - Culvert beds should be composed of rock-free soil or gravel, evenly distributed under the length of the pipe.
    - Compact the base and sidewall material before placing the pipe in its bed.
    - Lay the pipe on a well-compacted base. Poor basal compaction will cause settling or deflection in the pipe and can result in separation at a coupling or rupture in the pipe wall.
    - Backfill material should be free of rocks, limbs or other debris that could dent or puncture the pipe or allow water to seep around the pipe.
    - Cover one end of the culvert pipe, then the other end. Once the ends are secure, cover the center.
    - Tamp and compact backfill material throughout the entire process, using water as necessary for compaction.
    - Backfill compacting will be done in 0.5 – 1.0 foot lifts until 1/3 of the diameter of the culvert has been covered.
    - Push layers of fill over the crossing to achieve the final design road grade, at a minimum of one-third to one-half the culvert diameter.
- Critical dips shall be installed on culvert crossings to eliminate diversion potential.
- Road approaches to crossings shall be treated out to the first drainage structure (i.e. waterbar) or hydrologic divide to prevent transport of sediment.
- Road surfaces and ditches shall be disconnected from streams and stream crossings to the greatest extent feasible. Ditches and road surfaces that cannot be feasible disconnected from streams or stream crossings shall be treated to reduce sediment transport to streams.
- If downspouts are used, they shall be secured to the culvert outlet and shall be secure on fill slopes.
- Culverts shall be long enough so that road fill does not extend or slough past the culvert ends.
- Inlet of culverts and associate fill shall be protected with appropriate measures that extend at least as high as the top of the culvert.
- Outlet of culverts shall be armored with rock if road fill sloughing into channel can occur.
- Armor inlets and outlets with rock, or mulch and seed with grass as needed (not all stream crossings need to be armored).
- Where debris loads could endanger the crossing a debris catchment structure shall be constructed upstream of the culvert inlet.
- Bank and channel armoring may occur when appropriate to provide channel and bank stabilization.
- Stabilize the site pursuant to Addendum 12A.

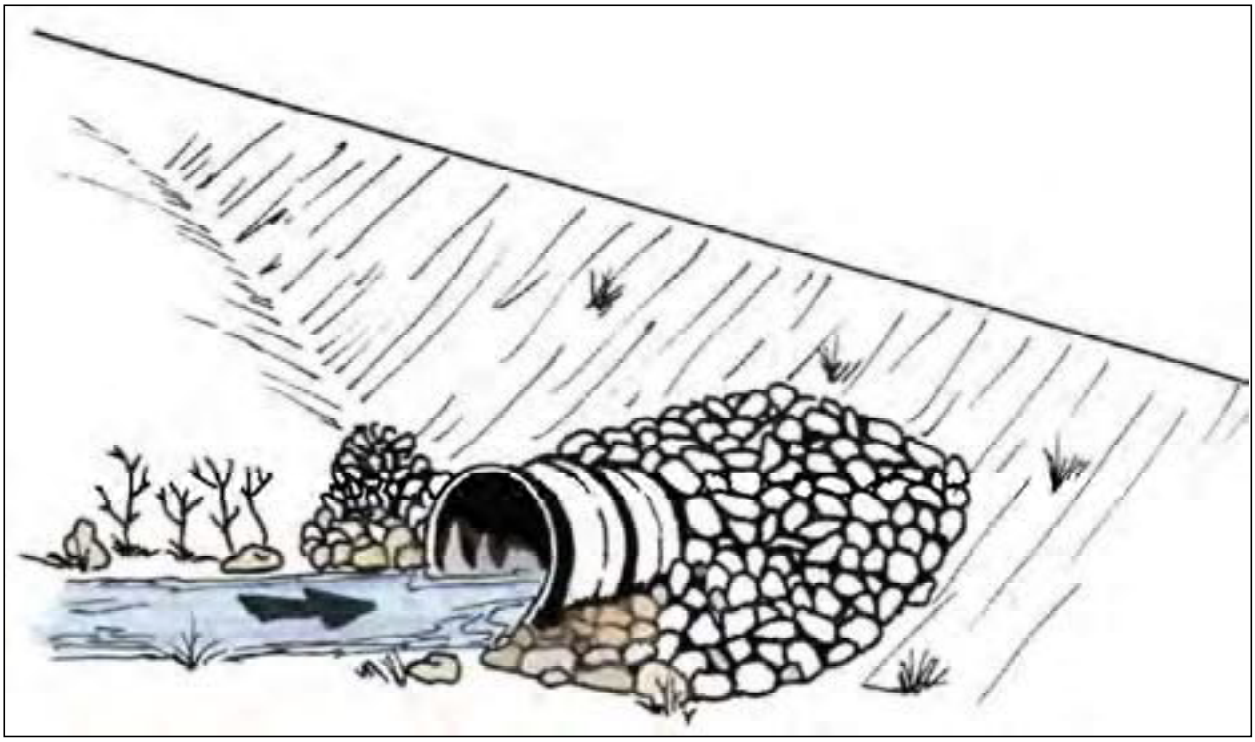
Culvert Installation Specifications





Riprap installed to protect the inlet and outlet of a stream crossing culvert from erosion or for energy dissipation should be keyed into the natural channel bed and banks to an approximate depth of about 1.5x the maximum rock thickness. Riprap should be placed at least up to the top of the culvert at both the inlet and outlet to protect them from splash erosion and to trap any sediment eroded from the newly constructed fill slope above.

Culvert Installation Specifications



Rock armor used for inlet and outlet protection (i.e., not as energy dissipation) does not have to be sized to protect against high velocity scour. If the culvert is properly sized and its length is adequate, it should be able to transmit flood flows without scouring the inlet or eroding the outlet around the culvert. Armor shown here is designed to protect the culvert outlet and basal fill from splash erosion and from occasional submergence and currents within standing water (at the inlet) when the culvert plugs. Importantly, inlet and outlet armor also serves to trap sediment that has been eroded or slides down the new constructed fill face in its first several years, until the slope becomes well vegetated.

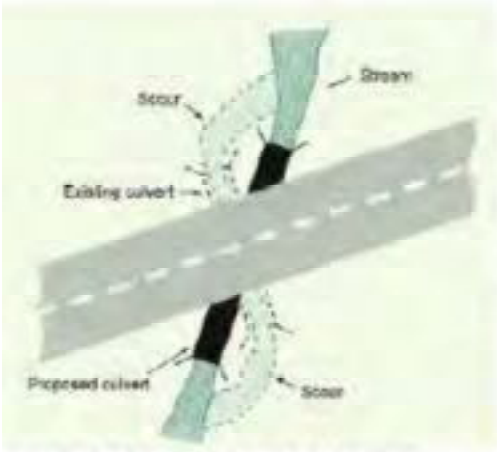


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FIGURE 97. Culvert alignment should be in relation to the stream and not the road. It is important that the stream enters and leaves the culvert in a relatively straight horizontal alignment so streamflow does not have to turn to enter the inlet or discharge into a bank as it exits. This figure shows a redesigned culvert installation that replaces the bending alignment that previously existed. Channel turns at the inlet increase plugging potential because wood going through the turn will not align with the inlet. Similarly, channel turns at the inlet and outlet are often accompanied by scour against the channel banks (Wisconsin Transportation Information Center, 2004).

Culvert Installation Specifications

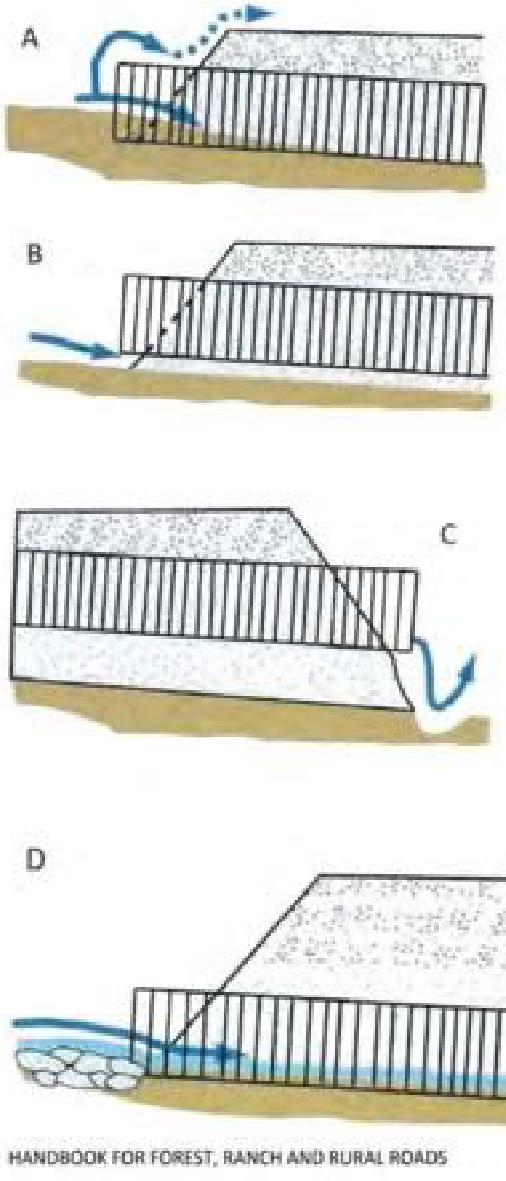

FIGURE 155. *Proper culvert installation involves correct culvert orientation, setting the pipe slightly below the bed of the original stream, and backfilling and compacting the fill as it is placed over the culvert. Installing the inlet too low in the stream (A) can lead to culvert plugging, yet if set too high (B) flow can undercut the inlet. If the culvert is placed too high in the fill (C), flow at the outfall will erode the fill. Placed correctly (D), the culvert is set slightly below the original stream grade and protected with armor at the inlet and outlet. Culverts installed in fish-bearing stream channels must be inset into the streambed sufficiently (>25% embedded) to have a natural gravel bottom throughout the culvert (Modified from: MDSL, 1991).*

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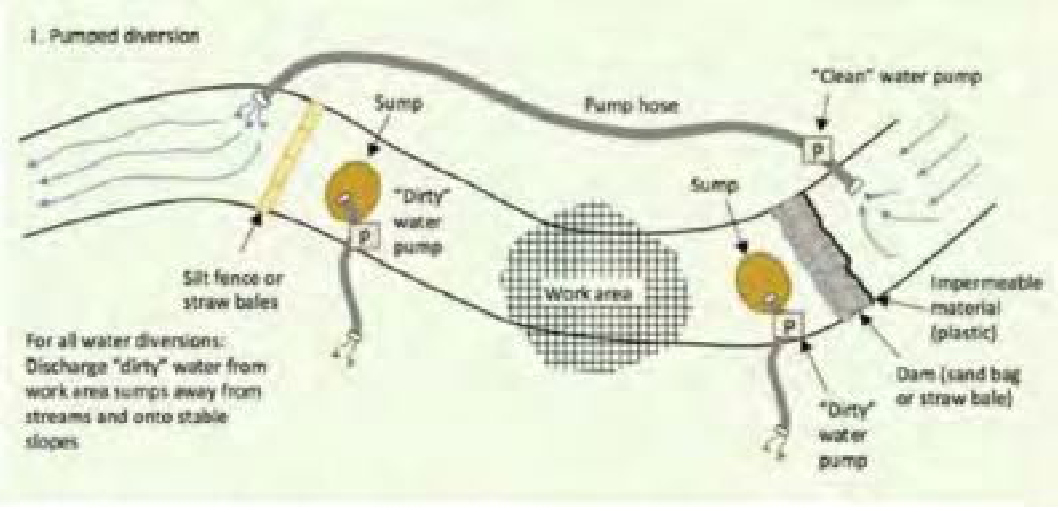
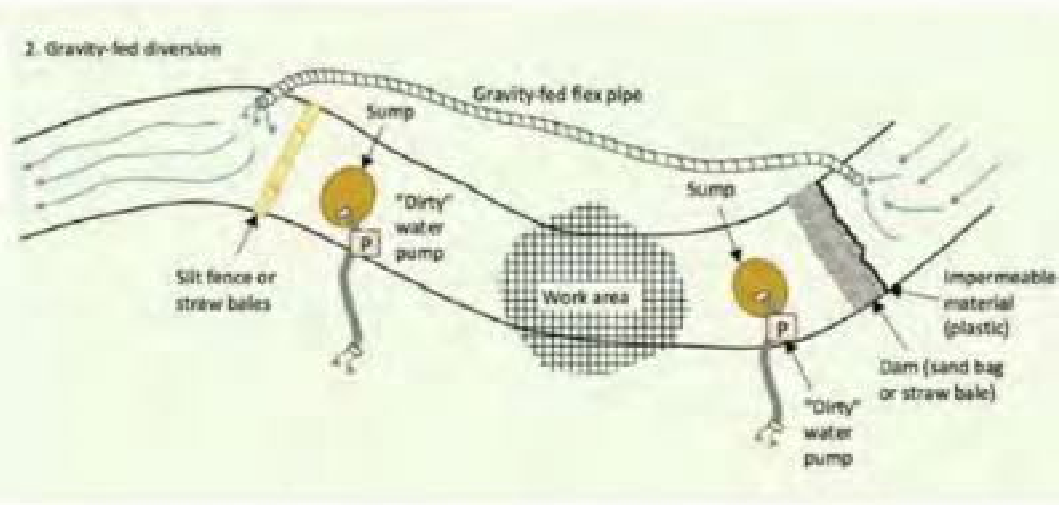
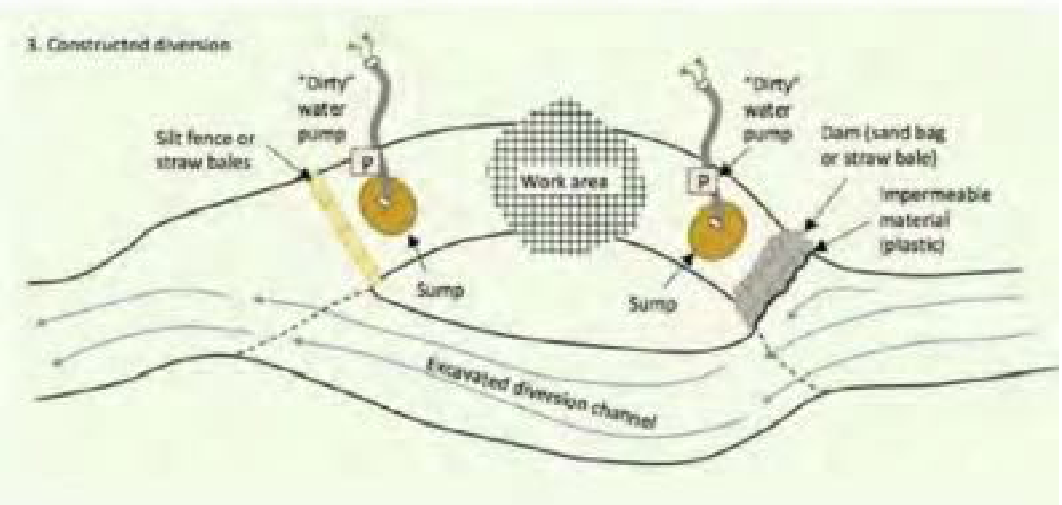
Cofferdam Construction and Use Specifications







Cofferdam Construction and Use Specifications

FIGURE 197. *Flex pipe stream diversion around a road construction site. The inlet to this 6 inch diameter flex pipe inlet collects clear streamflow from a retention dam above the project site and gravity feeds it around the project area and back into the natural channel downstream from construction work (see photo).*

FIGURE 198. *Sand bag retention dam on this small stream was used to pond streamflow so it could be pumped around a culvert installation site. The green intake hose is screened to keep out rocks and debris while the red pump hose extends several hundred feet around the project work area.*

FIGURE 199. *For larger streams, pump trucks, large pumps or multiple small pumps can be used to pump streamflow around project work sites. Here, a pump truck is used to temporarily divert flow in a fish bearing stream where dual culverts are being replaced with a railcar bridge. Young fish were removed from this fish bearing stream before project work started.*

BMP: Crossing Abandonment

- Excavate and removing all fill materials placed in the stream channel when the crossing was originally built.
- Excavated banks shall be laid back to a 2:1 (50%) or natural slope to prevent slumping and soil movement.
- Fill material should be excavated to recreate the original channel grade (slope) and orientation.
- All bare soils should then be mulched, seeded, and planted to minimize erosion until vegetation can protect the soil surface.
- The approaching road segments shall be cross-road(waterbars) drained to prevent road runoff from discharging across the freshly excavated channel sideslopes.
- When fills are removed, they shall be excavated to form a channel that is as close as feasible to natural watercourse grade and orientation.
- The excavated channel bed should be as wide, or slightly wider than, the original watercourse channel.
    - This can be better determined by observing the channel width of the watercourse up slope of crossing to be removed at a point in which the crossing or any other disturbance has not affected the natural channel slope and width.
- Temporary crossings shall be removed by November 15.
    - Any temporary culvert crossing left in after October 15 or installed between October 15 and May 1, shall be sized to accommodate the estimated 100-year flow.
- In certain situations, bank and channel rock and woody debris armoring may be appropriate to provide channel and bank stabilization.

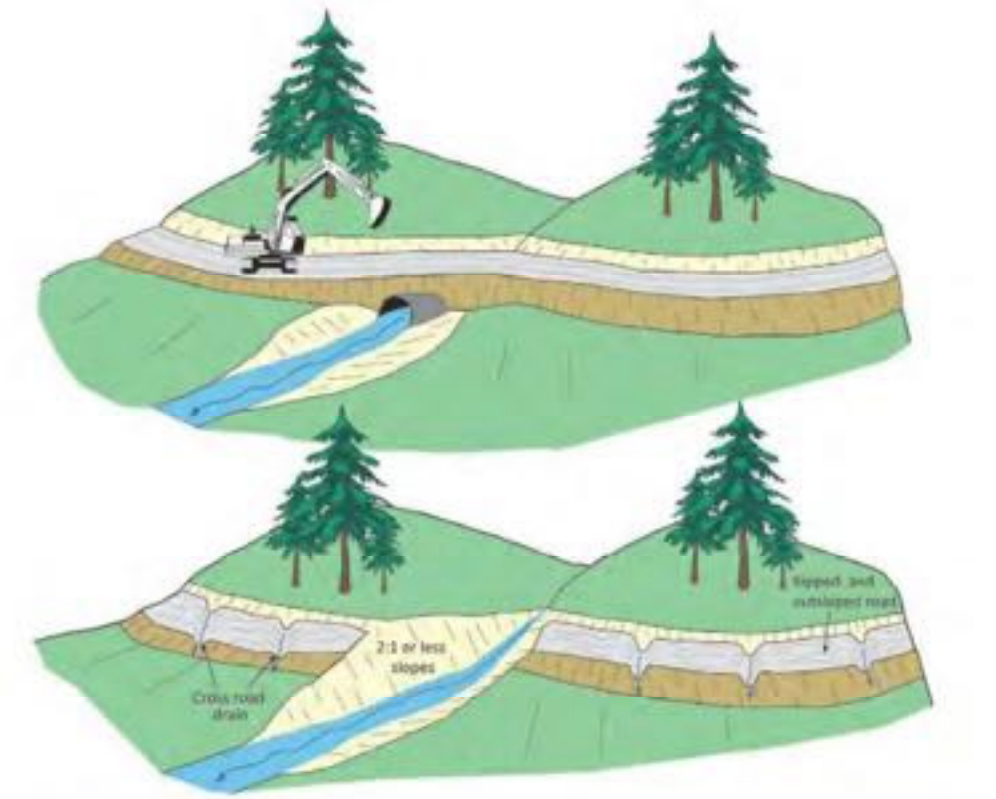


FIGURE 263. *On roads that are to be closed (decommissioned), all stream crossing culverts and fills should be removed. Stream crossing excavations are best performed using an excavator. The original channel should be excavated and exhumed down to the former streambed, with a channel width equal or greater than the natural channel above and below the crossing. Sideslopes should be laid back to a stable angle, typically a 2:1 (50%) gradient, or less. Spoil can be endhauled off-site or stored on the road bench adjacent the crossing, provided it is placed and stabilized where it will not erode or fail and enter the stream.*

BMP: Ditch Relief Culvert

- Install ditch relief culverts at an oblique (typically 30 degree) angle to the road so that ditch flow does not have to make a sharp angle turn to enter the pipe. On low gradient roads (<5%), where ditch flow is slow, ditch relief culverts can be installed at right angles to the road.
- Install ditch relief culverts (DRC) to outlet at, and drain to, the base of the fill
- If it cannot be installed at the base of the fill, install the DRC with a grade steeper than the inboard ditch draining to the culvert inlet, and then install a downspout on the outlet to carry the culverted flow to the base of the fillslope or energy dissipater material at outlet to prevent erosion or the outboard road fill.
- Downspouts longer than 20 feet should be secured to the hillslope for stability.
- Ditch relief culverts should not carry excessive flow such that gullying occurs below the culvert outlet or such that erosion and down-cutting of the inboard ditch is occurring.
- Do not discharge flows from ditch relief culverts onto unstable areas or highly erodible hillslopes.
- If the ditch is on an insloped or crowned road, consider reshaping road outsloping to drain the road surface. The ditch and the ditch relief culvert would then convey only spring flow from the cutbank and hillslope runoff, and not turbid runoff from the road surface.

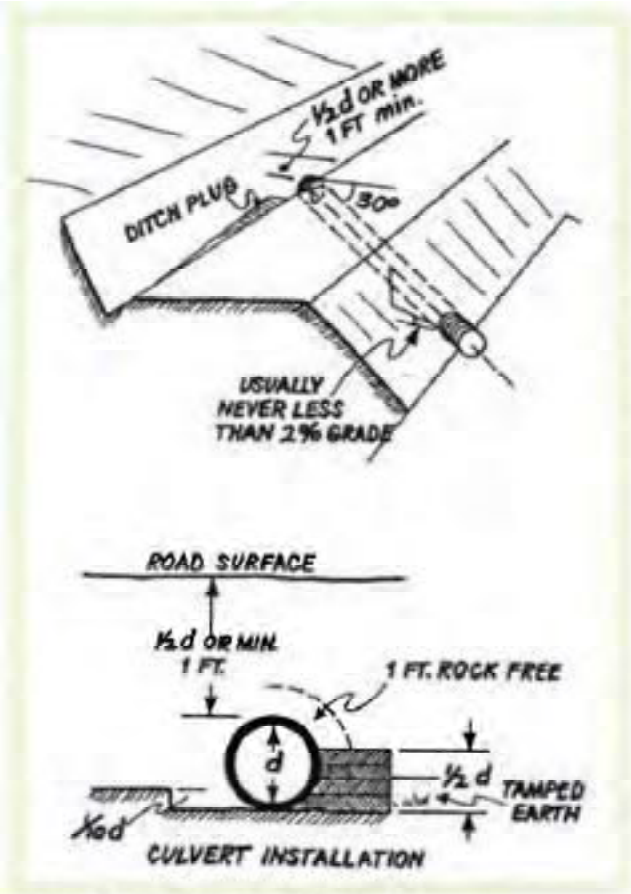


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FIGURE 48. *The elements of a properly installed ditch relief culvert. The culvert is angled at about 30 degrees to the road alignment to help capture flow and prevent culvert plugging or erosion of the inlet area. It is set at the base of the fill (ideally) or with a grade slightly steeper than the grade of the contributing ditch (but never with a grade less than 2 percent) (USDA-SCS, 1983). At a minimum, the grade of the ditch relief culvert should be sufficient to prevent sediment accumulation at the inlet or deposition within the culvert itself (it should be self-cleaning) (USDA-SCS, 1983).*

BMP: Waterbar Construction

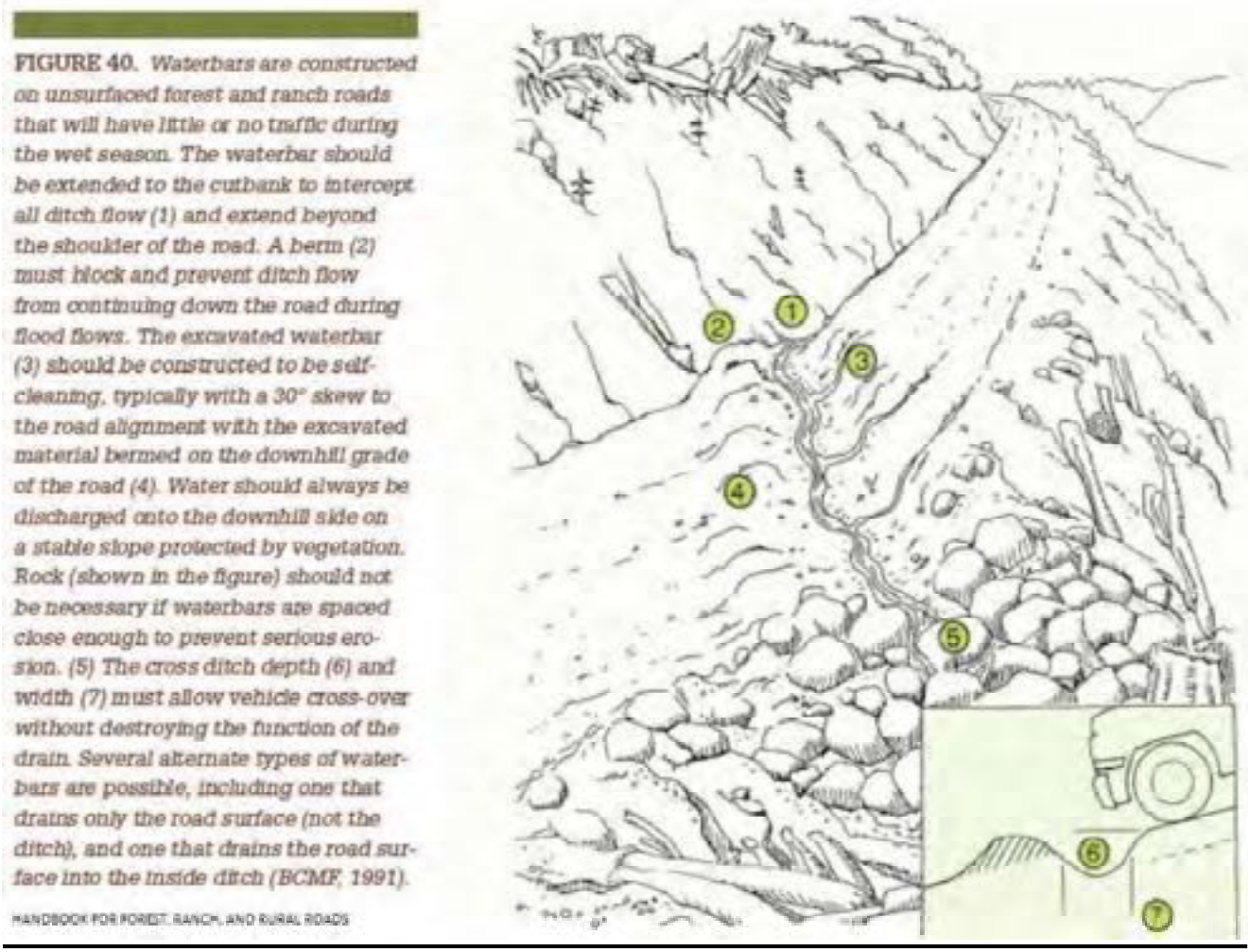

FIGURE 40. *Waterbars are constructed on unsurfaced forest and ranch roads that will have little or no traffic during the wet season. The waterbar should be extended to the cutbank to intercept all ditch flow (1) and extend beyond the shoulder of the road. A berm (2) must block and prevent ditch flow from continuing down the road during flood flows. The excavated waterbar (3) should be constructed to be self-cleaning, typically with a 30° skew to the road alignment with the excavated material bermed on the downhill grade of the road (4). Water should always be discharged onto the downhill side on a stable slope protected by vegetation. Rock (shown in the figure) should not be necessary if waterbars are spaced close enough to prevent serious erosion. (5) The cross ditch depth (6) and width (7) must allow vehicle cross-over without destroying the function of the drain. Several alternate types of waterbars are possible, including one that drains only the road surface (not the ditch), and one that drains the road surface into the inside ditch (BCMF, 1991).*

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Erosion and Monitoring Control Plan

WDID# - 1_12CC407540

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Site 01/P6/WQ 2	-123.836474 40.020162	Permanent	X	X	-	Prior to 10/15/23	

Current Condition: Existing ditch relief culvert currently drains 850' of inside ditch line which has formed a gully below the road. This segment of road to the west property boundary has outboard berms from road surface grading which prevent surface runoff from leaving the road.

Prescribed Action: Multiple ditch relief culverts are to be installed on the inside ditch on the adjoining parcel to the north which is also enrolled in the State Cannabis General Order. See that enrollment for details (WDID# 1_12CC417597) Remove outboard side berms and/or out slope sections of this road in-between and up grade watercourse crossings as feasible to the property boundary to the west, past Site 08.

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Site 2	-123.837191 40.020056	Permanent	X	X	-	Prior to 10/15/23	

Current Condition: Concentrated road surface runoff is eroding the road surface and discharging in the surface waters.

Prescribed Action: Install rocked rolling dip as flagged in the field, per the specifications outlined in the attached BMPs. See rocked/Rolling Dip Design and Placement, General Operations BMPs, and General Erosion Control specifications.

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Site 03/P5/WQ 3	-123.837191 40.020056	Permanent	X	X	X	Prior to 10/15/23 pending the approval of any required permits	

Current Condition: Class III watercourse crossing consisting of a 8" diameter corrugated metal pipe that is too short, shotgunned, not-to-grade, eroding the road fillslope at the outlet, and undersized for the 100-year storm event.

Prescribed Action: Upgrade the existing culvert with an 18" diameter culvert per the specifications in the attached BMP's. See Permanent Culvert Crossing, Permanent Culvert Crossing Design: Critical Dip and Hydrologic Disconnect Placement, Critical Dip, Culvert Orientation, Inlet and Outlet Armoring, General Operations BMPs, and General Erosion Control specifications.

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Site 04/P4/WQ 4	-123.838823 40.020109	Permanent	X	X	X	Prior to 10/15/23 pending the approval of any required permits	

Current Condition: Class III watercourse crossing consisting of a 8" diameter steel pipe that is too short, shotgunned, not-to-grade, eroding the road fillslope at the outlet, and undersized for the 100-year storm event.

Prescribed Action: Upgrade the existing culvert with an 18" diameter culvert per the specifications in the attached BMP's. See Permanent Culvert Crossing, Permanent Culvert Crossing Design: Critical Dip and Hydrologic Disconnect Placement, Critical Dip, Culvert Orientation, Inlet and Outlet Armoring, General Operations BMPs, and General Erosion Control specifications.

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Site 05/P3/WQ 5	-123.839084 40.020141	Permanent	X	X	X	Prior to 10/15/23 pending the approval of any required permits	

Current Condition: Class III watercourse crossing consisting of a 12" diameter double-walled plastic pipe that is too short, shotgunned, not-to-grade, eroding the road fillslope at the outlet, and undersized for the 100-year storm event.

Prescribed Action: Upgrade the existing culvert with an 18" diameter culvert per the specifications in the attached BMP's. See Permanent Culvert Crossing, Permanent Culvert Crossing Design: Critical Dip and Hydrologic Disconnect Placement, Critical Dip, Culvert Orientation, Inlet and Outlet Armoring, General Operations BMPs, and General Erosion Control specifications.

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Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Site 06/P2/WQ 6	-123.839334 40.020049	Permanent	X	X	X	Prior to 10/15/23 pending the approval of any required permits	
Current Condition: Class III watercourse crossing consisting of a 12" diameter half corrugated half steel metal pipe that is too short, shotgunned, not-to-grade, eroding the road fillslope at the outlet, and undersized for the 100-year storm event.						Prescribed Action: Upgrade the existing culvert with an 24" diameter culvert per the specifications in the attached BMP's. See Permanent Culvert Crossing, Permanent Culvert Crossing Design: Critical Dip and Hydrologic Disconnect Placement, Critical Dip, Culvert Orientation, Inlet and Outlet Armoring, General Operations BMPs, and General Erosion Control specifications.	

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Site 07/P1/WQ 7	-123.839607 40.019924	Permanent	X	X	X	Prior to 10/15/23 pending the approval of any required permits	
Current Condition: Class III watercourse crossing consisting of a 12" diameter corrugated metal pipe that is too short, shotgunned, not-to-grade, eroding the road fillslope at the outlet, and undersized for the 100-year storm event.						Prescribed Action: Upgrade the existing culvert with an 30" diameter culvert per the specifications in the attached BMP's. See Permanent Culvert Crossing, Permanent Culvert Crossing Design: Critical Dip and Hydrologic Disconnect Placement, Critical Dip, Culvert Orientation, Inlet and Outlet Armoring, General Operations BMPs, and General Erosion Control specifications.	

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Site 08/WQ 8	-123.840219 40.019507	Permanent	X	X	X	Prior to 10/15/23 pending the approval of any required permits	
Current Condition: Class III watercourse crossing consisting of a 8" diameter corrugated metal pipe that is too short, shotgunned, not-to-grade, eroding the road fillslope at the outlet, and undersized for the 100-year storm event.						Prescribed Action: Upgrade the existing culvert crossing with an 18" culvert per the specifications in the attached BMP's. See Permanent Culvert Crossing, Permanent Culvert Crossing Design: Critical Dip and Hydrologic Disconnect Placement, Critical Dip, Culvert Orientation, Inlet and Outlet Armoring, General Operations BMPs, and General Erosion Control specifications.	

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Site 09/Point 1	-123.835825 40.019852	Permanent	X	X	-	Prior to 10/15/23	
Current Condition: Long, undrained, inside ditch is discharging to surface waters via the inlet of the watercourse crossing culvert at Site 11.						Prescribed Action: Install a 15" diameter ditch relief culvert per the specifications outlined in the attached BMPs. See Ditch Relief Culvert, and Permanent Culvert Crossing Design (Inlet and Outlet Armoring), General Operations BMPs, and General Erosion Control specifications.	

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Site 10	-123.835528 40.019428	Permanent	X	X	-	Prior to 10/15/23	
Current Condition: Long, undrained, inside ditch is discharging to surface waters via the inlet of the watercourse crossing culvert at Site 11.						Prescribed Action: Install a 15" diameter ditch relief culvert per the specifications outlined in the attached BMPs. See Ditch Relief Culvert, and Permanent Culvert Crossing Design (Inlet and Outlet Armoring), General Operations BMPs, and General Erosion Control specifications.	

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Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Site 11/P7/WQ 9	-123.83519 40.019238	Permanent	X	X	X	Prior to 10/15/23 pending the approval of any required permits	

Current Condition:	Prescribed Action:
Class III watercourse crossing consisting of a 24" diameter double-walled plastic pipe that is adequately sized for the 100-year event but it is too short and lacks a rock armor energy dissipater that is resulting in the erosion of the fillslope.	Attach a minimum 20' culvert extension to the outlet of the existing culvert with a flexible single-walled 24" diameter pipe that outlets approximately where the existing flagging in the channel is located. Rock armor the outlet per the specifications outlined in the attached BMPs. See Permanent Culvert Crossing: Inlet and Outlet Armoring, General Operations BMPs, and General Erosion Control specifications.

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Site 12	-123.8348 40.018782	Permanent	X	X	-	Prior to 10/15/23	

Current Condition:	Prescribed Action:
Concentrated road surface runoff is eroding the road surface and discharging in the surface waters.	Install rocked rolling dip as flagged in the field, per the specifications outlined in the attached BMPs. See rocked/Rolling Dip Design and Placement, General Operations BMPs, and General Erosion Control specifications.

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Site 13/Point 2	-123.834838 40.018542	Permanent	X	X	X	Prior to 10/15/23 pending the approval of any required permits	

Current Condition:	Prescribed Action:
Class III watercourse lacks an adequate watercourse crossing and is being diverted down the inside ditch approximately 150' before being drained by the ditch relief culvert at Site 14.	Re-align the watercourse to its original channel by installing a new 18" diameter culvert crossing per the specifications in the attached BMP's. See Ditch Relief Culvert, and Permanent Culvert Crossing Design (Inlet and Outlet Armoring), General Operations BMPs, and General Erosion Control specifications.

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Site 14/P8/WQ 10	-123.835105 40.018163	Permanent	X	X	-	Prior to 10/15/23 pending the approval of any required permits	

Current Condition:	Prescribed Action:
Ditch relief culvert consisting of a 12" diameter corrugated metal pipe that is shotgunned, not-to-grade, too short, and rusted through causing significant scour and erosion of the road fill prism. A Class III watercourse was diverted up grade by the inside ditch to this DRC.	Clear the inside ditch up grade to Site 13. Upgrade with a 18" diameter ditch relief culvert per the specifications outlined in the attached BMPs. See Ditch Relief Culvert, and Permanent Culvert Crossing Design (Inlet and Outlet Armoring), General Operations BMPs, and General Erosion Control specifications.

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Site 15	-123.835168 40.018	Permanent	X	X	-	Prior to 10/15/23	

Current Condition:	Prescribed Action:
Concentrated road surface runoff is eroding the road surface and discharging in the surface waters.	Install rocked rolling dip as flagged in the field, per the specifications outlined in the attached BMPs. See rocked/Rolling Dip Design and Placement, General Operations BMPs, and General Erosion Control specifications.

Erosion and Monitoring Control Plan Cont.

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Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Site 16/P26	-123.835697 40.017686	Trail	X	X	-	Prior to 10/15/23	
Current Condition: Concentrated road surface runoff is eroding the road surface.						Prescribed Action: Install a waterbar to the specifications outlined in the attached BMPs. See attached BMPs: Waterbar Construction, General Operations BMPs, and General Erosion Control specifications.	

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Site 17/C4	-123.836204 40.017994	Trail	X	X	X	Prior to 10/15/23 pending the approval of any required permits	
Current Condition: Class III watercourse crossing consisting of an 18" diameter double-walled plastic pipe on a road longer needed or used.						Prescribed Action: Decommission the watercourse crossing per the specifications outlined in the attached BMPs: See Crossing Abandonment or Permanent Culvert Crossing, General Operations BMPs, and General Erosion Control specifications.	

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Site 18	-123.836856 40.018075	Trail	X	X	-	Prior to 10/15/23	
Current Condition: Concentrated road surface runoff is eroding the road surface and discharging to surface waters.						Prescribed Action: Install a waterbar to the specifications outlined in the attached BMPs. See attached BMPs: Waterbar Construction, General Operations BMPs, and General Erosion Control specifications.	

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Site 19/C3/C3.1/P23	-123.837057 40.018095	Trail	X	X	X	Prior to 10/15/23 pending the approval of any required permits	
Current Condition: Class III watercourse crossing consisting of an 18" diameter double-walled plastic pipe on a road longer needed or used. The installation of this culvert misaligned the watercourse.						Prescribed Action: Decommission the watercourse crossing, and re-align the watercourse as flagged, per the specifications outlined in the attached BMPs: See Crossing Abandonment, General Operations BMPs, and General Erosion Control specifications.	

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Site 20	-123.836426 40.017058	-	X	-	-	Prior to 10/15/23	
Current Condition: 10,000-gallon water storage bladder without containment.						Prescribed Action: Remove and dispose of the water storage bladder and all other cultivation-related wastes.	

Erosion and Monitoring Control Plan Cont.

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Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Site 21	-123.837761 40.017071	-	-	-	-	-	

Current Condition: The "steep failing streambank" mentioned here in the original 2015 Inspection Report is associated with natural stream channel erosion which can be observed in other untouched reaches up and down channel from this. No development disturbances at this location created this condition. Also, the 2015 Inspection Report has no mention to why this location was even mentioned in the report or what the issue is with this location.

Prescribed Action: None. Site for reference.

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Site 22/ST2	-123.835528 40.01678	-	X	-	-	Prior to 10/15/23	

Current Condition: Small, lined, off-stream water transfer and storage impoundment that has cleaned up and disposed of.

Prescribed Action: Remove and dispose of the liner and all other cultivation-related wastes.

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Site 23/C2/P9/WQ 16	-123.835079 40.017189	Permanent	X	X	X	Prior to 10/15/23 pending the approval of any required permits	

Current Condition: Class III watercourse crossing consisting of an 18" and 12" diameter corrugated metal pipes with one that is becoming plugged, and one already plugged, at the inlet, shotgunned, not-to-grade, too short, eroding the road fillslope at the outlet, and undersized for the 100-year storm event.

Prescribed Action: Upgrade the existing culvert with an 30" diameter culvert per the specifications in the attached BMP's. See Permanent Culvert Crossing, Permanent Culvert Crossing Design: Critical Dip and Hydrologic Disconnect Placement, Critical Dip, Culvert Orientation, Inlet and Outlet Armoring, General Operations BMPs, and General Erosion Control specifications.

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Site 24/P10/WQ 17	-123.834765 40.01628	Permanent	X	X	X	Prior to 10/15/23 pending the approval of any required permits	

Current Condition: Class III watercourse crossing consisting of an 18" diameter corrugated aluminum pipe that is shotgunned, not-to-grade, too short, eroding the road fillslope at the outlet, and undersized for the 100-year storm event. Concentrated road surface runoff is discharging to surface waters via a kickout drainage feature immediately down grade of the outlet.

Prescribed Action: Install a rocked rolling dip approximately 130' up grade of this watercourse crossing. Maintain the kickout drainage feature regularly. Upgrade the existing culvert with an 36" diameter culvert per the specifications in the attached BMP's. See Permanent Culvert Crossing, Permanent Culvert Crossing Design: Critical Dip and Hydrologic Disconnect Placement, Critical Dip, Culvert Orientation, Inlet and Outlet Armoring, General Operations BMPs, and General Erosion Control specifications.

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Site 25	-123.834728 40.015839	Permanent	X	X	-	Prior to 10/15/23	

Current Condition: Concentrated road surface runoff is eroding the road surface and discharging in the surface waters.

Prescribed Action: Install rocked rolling dip as flagged in the field that captures the inside ditch, per the specifications outlined in the attached BMPs. See rocked/Rolling Dip Design and Placement, General Operations BMPs, and General Erosion Control specifications.

Erosion and Monitoring Control Plan Cont.

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Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Site 26/P11/WQ 18	-123.83422 40.015425	Permanent	X	X	X	Prior to 10/15/23 pending the approval of any required permits	

Current Condition: Class III watercourse crossing consisting of an 18" diameter steel pipe that is shotgunned, not-to-grade, too short, eroding the road fillslope at the outlet, and undersized for the 100-year storm event.

Prescribed Action: Upgrade the existing culvert with an 30" diameter culvert per the specifications in the attached BMP's. See Permanent Culvert Crossing, Permanent Culvert Crossing Design: Critical Dip and Hydrologic Disconnect Placement, Critical Dip, Culvert Orientation, Inlet and Outlet Armoring, General Operations BMPs, and General Erosion Control specifications.

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Site 27	-123.834241 40.015334	Permanent	X	X	-	As required	

Current Condition: Kickout drainage feature that is functioning properly.

Prescribed Action: None. Maintain regularly.

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Site 28/WQ 19 & 20	-123.835923 40.014865	Permanent	X	X	-	Prior to 10/15/23	

Current Condition: Long, undrained, inside ditch is discharging to surface waters down grade. Concentrated road surface runoff is eroding the road surface.

Prescribed Action: Clear the inside ditch up grade approximately 250'. Install an 18" diameter ditch relief culvert in combination with a rocked rolling dip, as flagged in the field, per the specifications outlined in the attached BMPs: See Permanent Culvert Crossing, Permanent Culvert Crossing Design: Critical Dip and Hydrologic Disconnect Placement, Critical Dip, Culvert Orientation, Inlet and Outlet Armoring, General Operations BMPs, and General Erosion Control specifications.

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Site 29/WQ 19 & 20	-123.83642 40.015433	Permanent	X	X	-	Prior to 10/15/23	

Current Condition: Long, undrained, inside ditch is discharging to surface waters down grade. Concentrated road surface runoff is eroding the road surface.

Prescribed Action: Clear the inside ditch up grade approximately 250'. Install an 18" diameter ditch relief culvert in combination with a rocked rolling dip, as flagged in the field, per the specifications outlined in the attached BMPs: See Ditch Relief Culvert, and Permanent Culvert Crossing Design (Inlet and Outlet Armoring), General Operations BMPs, and General Erosion Control specifications.

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Site 30	-123.836744 40.015336	Permanent	X	X	-	Prior to 10/15/23	

Current Condition: Concentrated road surface runoff is eroding the road surface.

Prescribed Action: Install rocked rolling dip as flagged in the field, per the specifications outlined in the attached BMPs. See rocked/Rolling Dip Design and Placement, General Operations BMPs, and General Erosion Control specifications.

Erosion and Monitoring Control Plan Cont.

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Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Site 31	-123.834075 40.016781	-	X	-	-	Prior to 10/15/23	
Current Condition: Potting soils storage area within riparian setbacks and hosting thistles.						Prescribed Action: Relocate or reuse potting soils, eradicate thistles.	

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Site 32/R1/P24/WQ 11	-123.834062 40.017236	Permanent	X	X	-	Prior to 10/15/23	
Current Condition: Pond overflow consisting of an 18" diameter double-walled pipe that is sized and functioning properly. However, the outlet lacks an adequate rock armor energy dissipater.						Prescribed Action: Install an rocked armor energy dissipater per the specifications outlined in the attached BMPs. See Permanent Culvert Crossing Design: Inlet and Outlet Armoring.	

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Site 33	-123.834772 40.017832	Seasonal	X	X	-	Prior to 10/15/23	
Current Condition: Concentrated road surface runoff is eroding the road surface.						Prescribed Action: Install rocked rolling dip as flagged in the field, per the specifications outlined in the attached BMPs. See rocked/Rolling Dip Design and Placement, General Operations BMPs, and General Erosion Control specifications.	

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Site 34	-123.834695 40.018155	Seasonal	X	X	-	Prior to 10/15/23	
Current Condition: Concentrated road surface runoff is eroding the road surface.						Prescribed Action: Install rocked rolling dip as flagged in the field, per the specifications outlined in the attached BMPs. See rocked/Rolling Dip Design and Placement, General Operations BMPs, and General Erosion Control specifications.	

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Site 35/C1/P26	-123.834266 40.01849	Permanent	X	X	X	Prior to 10/15/23 pending the approval of any required permits	
Current Condition: Class III watercourse crossing consisting of an 8" diameter corrugated metal pipe that is shotgunned, not-to-grade, too short, misaligned, and undersized for the 100-year storm event.						Prescribed Action: Upgrade the existing culvert with an 18" diameter culvert per the specifications in the attached BMP's. See Permanent Culvert Crossing, Permanent Culvert Crossing Design: Critical Dip and Hydrologic Disconnect Placement, Critical Dip, Culvert Orientation, Inlet and Outlet Armoring, General Operations BMPs, and General Erosion Control specifications.	

Erosion and Monitoring Control Plan Cont.

WDID# - 1_12CC407540

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Site 36	-123.834668 40.019377	Permanent	X	X	-	As required	

Current Condition: Existing ditch relief culvert consisting of an 15" diameter corrugated metal pipe that has a crushed inlet, improper angle, shotgunned, and exposed in the fill.

Prescribed Action: Clear the inside ditch up grade approximately 250'. Upgrade with a 15" diameter ditch relief culvert per the specifications outlined in the attached BMPs. See Ditch Relief Culvert, and Permanent Culvert Crossing Design (Inlet and Outlet Armoring), General Operations BMPs, and General Erosion Control specifications.

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Site 37/WQ 13	-123.83238 40.016328	Legacy	X	X	-	Prior to 10/15/23	

Current Condition: Ditch relief culvert consisting of a 8" corrugated metal pipe that is no longer needed. No inside ditch or concentrated road surface runoff flows reach this culvert as the road up grade is heavily vegetated and not used. Organic cultivation-related was

Prescribed Action: Remove the organic cultivation-related wastes from the outlet channel, remove the ditch relief culvert and install a waterbar to the specifications outlined in the attached BMPs. See Waterbar Construction, General Operations BMPs, and General Erosion Control specifications.

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Site 38/WQ 14	-123.832253 40.015913	Legacy	X	X	X	Prior to 10/15/23	

Current Condition: Ditch relief culvert consisting of a 12" corrugated metal pipe that is no longer needed. No inside ditch or concentrated road surface runoff flows reach this culvert as the road up grade is heavily vegetated and not used. Legacy refuse metal debris have been discarded or used as rip-rap in the past below the outlet of the ditch relief culvert and is within the watercourse channel.

Prescribed Action: Remove the ditch relief culvert and install a waterbar to the specifications outlined in the attached BMPs. See Waterbar Construction, General Operations BMPs, and General Erosion Control specifications. Remove the legacy refuse metal debris, lay-back stream channel slopes, and treat distrubed soils with erosion control measures per the specifications outlined in the attached BMPs. See General Operations BMPs, and General Erosion Control specifications.

	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
P1/WQ 12	-123.833113 40.01747	-	-	-	-	-	

Current Condition: Historic Point of Diversion of the Nelson Ranch, still in use.

Prescribed Action: None. Site for reference.

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
P2/P21 & P22	-123.834633 40.017287	-	-	-	-	-	

Current Condition: POD and water storage tanks have been removed.

Prescribed Action: None. Site for reference.

Erosion and Monitoring Control Plan Cont.

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Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
P27	-123.833813 40.016899	Permanent	-	-	-	-	
Current Condition: Road surface has been adequately rocked.						Prescribed Action: None. Site for reference.	

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
G1, G2, G3, G4, OG1	N/A	-	-	-	-	-	
Current Condition: All cultivation related wastes and refuse has been cleaned up and has been disposed of.						Prescribed Action: None. Site for reference.	

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
ST3/P19	N/A	-	-	-	-	Immediately	
Current Condition: Plastic septic tank no longer in use.						Prescribed Action: None. Consult with Humboldt County Health and Human Services regarding the future of this septic tank.	

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Past Cultivation Areas	N/A	-	X	X	-	Prior to 10/15/23	
Current Condition: Past cultivation areas that are no longer used with remaining cultivation-related materials, fencing, and wastes.						Prescribed Action: Remove any remaining fencing, pots, or other cultivation-related wastes and materials from these areas. Seed and mulch the Past Cultivation Area, and any Disturbed Area associated with its removal, with erosion control or native grass seed mix and weed free straw(or woodchips) per the specifications outlined in the attached BMPs: See General Erosion Control specifications. If cultivation soil is not re-used, contour the cultivation-related soils into the ground outside of any riparian buffer areas, and seed and mulch the contoured soils with erosion control or native grass seed mix and weed free straw.	

Erosion and Monitoring Control Plan Cont

WDID# - 1_12CC407540

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Water Storage and Use	N/A	-	X	X	-	Prior to 10/15/23	

Current Condition: Currently there is not enough water storage on the property to meet forbearance requirements during the required period from April 1st to October 31st. At present there are no devices or procedures in place to record water usage associated with the irrigation of cannabis and domestic use.

Prescribed Action: Using water use estimates, the cannabis cultivator is to install and fill approximately 23,000 gallons of additional storage prior to the Forbearance Period for 2019/2020. Recorded water use data shall be used to determine remaining, or exact, storage needs to meet full forbearance. Any additional storage needed to meet water needs during the Forbearance Period shall be installed and filled prior to the Forbearance Period for 2021. Less water storage may be sufficient if recorded water usage numbers determine that actual water use is less than estimates. Water metering devices, or procedures for the well(s), shall be installed to record all water diverted, pumped, and used water for the irrigation of cannabis and domestic use. Water meter(s) and water supply infrastructure shall be designed/installed in a manner such that water usage for the irrigation of cannabis can be recorded separately from water used for domestic use. Additionally, if there are multiple sources of water, infrastructure/metering device(s) shall be design/installed in a manner that each source of water is recorded separately. Monthly water usage shall be recorded for annual reporting purposes. Also, water storage tank lids shall be appropriately closed to prevent the access of wildlife and, if not currently implemented, water conservation measures such as drip line irrigation, morning or evening watering, and mulch or cover cropping of cultivated top soils shall also be implemented.

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Liquid Petroleum Products	N/A	-	-	X	-	As required	

Current Condition: All liquid petroleum products (e.g. any size container of any petroleum product) requires secondary containment while not in immediate use and cover from precipitation during the wet season. Adequate quantities of absorbent materials shall also be stored at all locations where these types of materials are used and stored.

Prescribed Action: Any/all liquid petroleum products and their containers shall be stored in secondary containment (e.g. plastic totes or sealed metal boxes) while being stored long term or not in immediate use, wherever these materials are used anywhere on the property. Adequate quantities of absorbent materials (e.g. purpose made materials for oil and fuel spills, cat litter) shall be stored at all locations where these types of materials are used and stored. Should a spill of these materials occur, absorbent materials will be applied immediately and allowed enough time to absorb as much material as possible. Following treatment, absorbent materials applied as well as any contaminated soil will be removed and disposed of appropriately for the spilled material. See attached BMPs: Generator, Fuel, and Oil Management for further details.

Erosion and Monitoring Control Plan Cont.

WDID# - 1_12CC407540

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Treatment Priority	Date Completed
Generators and Gas Powered Pumps	N/A	-	-	X	-	As required	

Current Condition: All liquid petroleum powered generators and pumps require secondary containment, and cover from precipitation during the wet season. Adequate quantities of absorbent materials shall also be stored at all locations where the generators and gas powered pumps are used and stored.	**Prescribed Action:** Any/all liquid petroleum powered generators or pumps (large or small) shall be stored in secondary containment (e.g. plastic totes, sealed metal boxes, drip pans, pre-fabricated portable containment berms or fabricated and lined containment basins) while being stored long term or not in immediate use, wherever these materials are used anywhere on the property. Adequate quantities of absorbent materials shall be stored at all locations where these types of materials are used and stored. Should a spill of these materials occur, absorbent materials will be applied immediately and allowed enough time to absorb as much material as possible. Following treatment, absorbent materials applied as well as any contaminated soil will be removed and disposed of appropriately for the spilled material. See attached BMPs: Generator, Fuel, and Oil Management for further details.

Site Management Plan

Site Map [WDID - 1_12CC407540]

Property Boundary
Proposed Cultivation
Disturbed Area - None
Past Cultivation
Wetland
Riparian Area
Pond
Structure

Roads
Permanent
Seasonal Access
Trail
Foot Trail
Legacy

Watercourses
Class II
Class III
Class IV

Site
POD
Tank

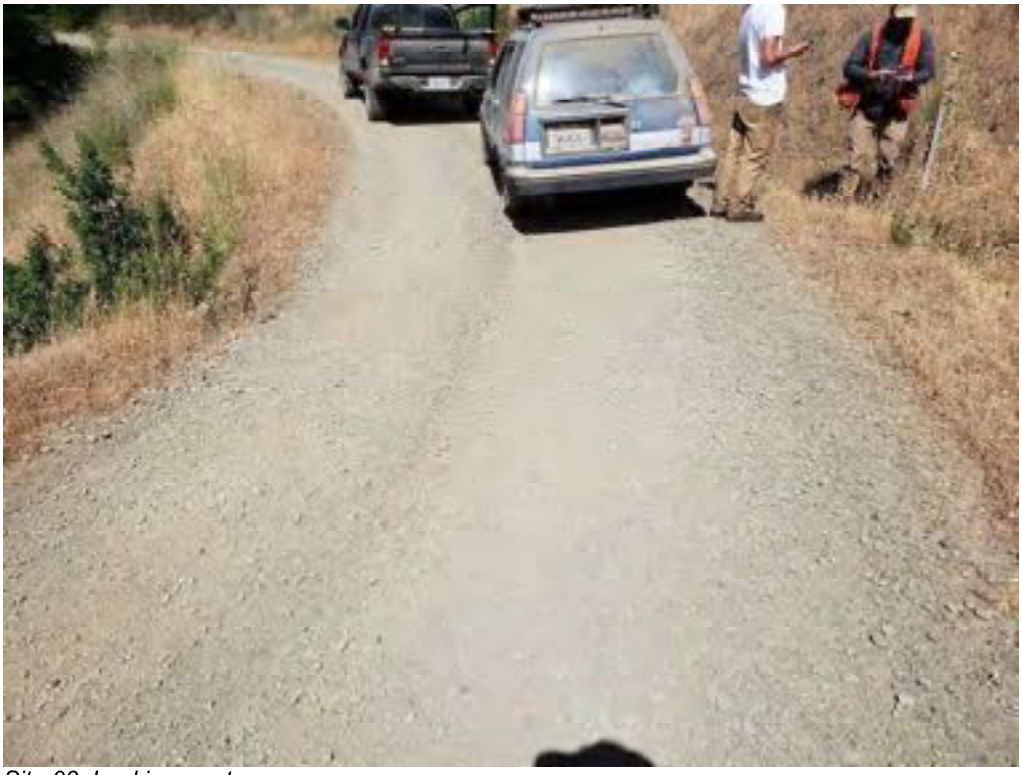
Timberland Resource Consultants

2020 NAIP DOQ
Map Date 08/10/2021

TRC - 525

Photographs Correlating to Site Management Plan Map

Photo Dates: February 3rd, June 8th, and July 7th , 2021



Site 03. Looking west.

Site 03. Looking down channel from the outlet.

Site 03. Looking up channel from the inlet.

Site 03. Looking at the outlet.

Site 04. Looking up channel from the inlet.

Site 04. Looking at the inlet of the channel.

Site 04. Looking at the outlet.

Site 04. Looking down channel from the outlet. The upgraded culvert will extend to where the man is hanging the blue flagging.

Site 05. Looking up grade to the east towards Site 04..

Site 05. Looking at the inlet to the lower right and up channel to the upper left.

Site 05. Looking at the outlet.

Site 05. Looking down channel from the outlet.

Site 06. Looking at the inlet.

Site 06. Looking up channel from the inlet.

Site 06. Looking at the outlet.

Site 06. Looking down channel from the outlet. The upgraded culvert will outlet approximately where the blue flagging is hanging.

Site 07. Looking up channel from the inlet.

Site 07. Looking at the outlet.

Site 07. Looking down channel from the outlet. The upgraded culvert will outlet approximately in the brush to the upper center of the photo.

Site 08. Looking up channel from the inlet of the culvert.

Site 08. Looking at the inlet.

Site 08. Looking at the outlet of the culvert.

Site 09

Site 10

Site 11. Looking at the outlet of the culvert.

Site 11. Looking at the inlet.

Site 11. Looking up channel from the inlet.

Photo looking at where the proposed outlet of the watercourse crossing at Site 11 will be approximately.

Site 12. Hydrologic disconnect for Sites 13, 14, and 23.

Looking up grade from Site 12 towards Site 11.

Site 13. Looking up grade at Site 13. A Class III watercourse is diverted down the inside ditch to the right. Re-alignment of this watercourse will consist of a culvert installed diagonally across the road from the grass patch in the upper center right to the lower left of the photo.

Site 13. Proposed outlet location.

Site 13. Proposed inlet location.

Site 14. Looking down grade at Site 14 with Site 15 further down grade a short distance.

Site 14. Looking at the outlet of the ditch relief culvert.

Site 14. Looking up grade towards Site 13.

Site 15 looking up grade towards Site 14. Hydrologic disconnect for Site 23.

Photo looking up grade at Site 16.

Site 17

Inlet of the watercourse crossing at Site 17.

Outlet of the watercourse crossing at Site 17

Site 19. The watercourse crossing here will be decommissioned and will be re-aligned to its natural channel up grade approxiametly to where this photo was taken.

Site 19. Approximately location of watercourse re-alignement. A waterbar (Site 18) will be installed further up grade from the re-aligned watercourse.

Inlet of Site 19

Inlet of Site 19 looking up channel.

Site 19. Looking down channel from the outlet.

Site 19. Looking at the outlet.

Site 19. Photo of the southeastern embankment of G5/G6/G, immediately down stream of the outlet of the watercourse crossing at Site 19. Note vegetation and rotted tree in the upper right. Indicative that this location has been in this condition for many years and was not recently created.

Photo looking north at G5, G6, & G6 from the channel immediately below Site 19.

Site 20.

Site 21. This site was in the 2015 Inspection Report

Looking at the upper extent of Site 21.

Looking at the lower extent of Site 21.

Photo looking southwest at Site 21.

Site 22

Site 23. Looking down grade.

Site 23. The outlet is to the right center, inlet is to the left center out of frame.

Outlet of watercourse crossing at Site 23. Blue flag represents proposed outlet of culvert upgrade.

Site 23 looking up channel from the inlet. The inlet is to the right of the photo by the tree.

Site 23. Looking down channel from the outlet. The upgraded culvert will outlet approximately where the blue flag is being hanged.

Looking up grade from Site 23 towards Site 14 and 15.

Site 24. Looking down grade.

Site 24. Inlet of the watercourse crossing.

Site 24. Outlet of the watercourse crossing.

Site 25 looking up grade towards Site 24.

Site 26. Inlet of the watercourse crossing.

Site 26. Outlet of the watercourse crossing.

Site 26. Looking down channel from the outlet.

Site 27 looking up grade at Site 26.

Site 34. Looking up grade at Site 34.

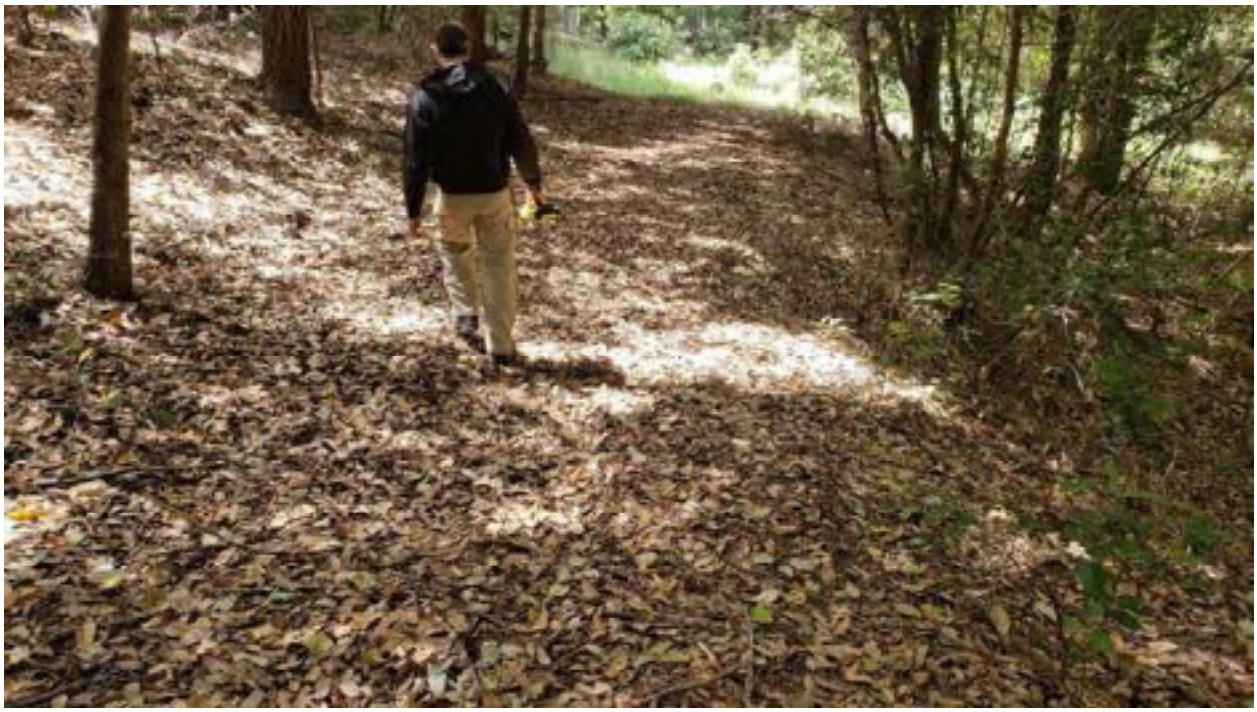
Site 35. Looking at the inlet to the lower center right and the incoming stream channel to the center left where the rotten stump is located.

Site 35. Looking at the outlet(circled). The culvert upgrade will re-align the watercourse to its original channel, which will require the outlet to be placed in the lower left of the photo.

Site 35. Looking at the down channel and where the culvert outlet will approximately be located.

Site 36

Photo looking up grade at the road down to G1, G2, G3, and G4 from approximately where the photos on page 19 of the 2015 Inspection Report were taken.



Looking down grade from the same location the previous photo was taken, on the road down to G1, G2, G3, and G4.

G1

G2

G3

G4

G5, G6, & G7.

Looking up grade at OG1.

Looking down grade at OG1.

ST3

Photo looking at the Past Cultivation Area located adjacent to Site 31 and P27.

Photographs corresponding to all CDFW Notification Points

Photo 6: Stream Crossing 03. Looking downstream towards the inlet of the 8-inch diameter culvert at stream crossing 03. Photo date 9-1-2021.

Photographs corresponding to all CDFW Notification Points

Photo 7: Stream Crossing 03. Looking upstream from the inlet of the 8-inch diameter culvert at stream crossing 03. Photo date 9-1-2021.

Photographs corresponding to all CDFW Notification Points

Photo 8: Stream Crossing 03. The roadside approach to stream crossing 03 facing west. Photo date 9-1-2021.

Photographs corresponding to all CDFW Notification Points

Photo 9: Stream Crossing 03. Looking upstream towards the outlet of the 8-inch diameter culvert at stream crossing 03. Photo date 9-1-2021.

Photographs corresponding to all CDFW Notification Points

Photo 10: Stream Crossing 03. Looking downstream from the outlet of the 8-inch diameter culvert at stream crossing 03. Photo date 9-1-2021.

Photographs corresponding to all CDFW Notification Points

Photo 11: Stream Crossing 04. Looking downstream towards the inlet of the 8-inch diameter culvert at stream crossing 04. Photo date 9-1-2021.

Photographs corresponding to all CDFW Notification Points

Photo 12: Stream Crossing 04. Looking upstream from the inlet of the 8-inch diameter culvert at stream crossing 04. Photo date 9-1-2021.

Photographs corresponding to all CDFW Notification Points

Photo 13: Stream Crossing 04. The roadside approach to stream crossing 04 facing West. Photo date 9-1-2021.

Photographs corresponding to all CDFW Notification Points

Photo 14: Stream Crossing 04. Looking upstream towards the outlet of the 8-inch diameter culvert at stream crossing 04. Photo date 9-1-2021.

Photographs corresponding to all CDFW Notification Points

Photo 15: Stream Crossing 04. Looking downstream from the outlet of the 8-inch diameter culvert at stream crossing 04. Photo date 9-1-2021.

Photographs corresponding to all CDFW Notification Points

Photo 16: Stream Crossing 05. Looking downstream towards the inlet of the 12-inch diameter culvert at stream crossing 05. Photo date 9-1-2021.

Photographs corresponding to all CDFW Notification Points

Photo 17: Stream Crossing 05. Looking upstream from the inlet of the 12-inch diameter culvert at stream crossing 05. Photo date 9-1-2021.

Photographs corresponding to all CDFW Notification Points

Photo 18: Stream Crossing 05. The roadside approach to stream crossing 05 facing West. Photo date 9-1-2021.

Photographs corresponding to all CDFW Notification Points

Photo 19: Stream Crossing 05. Looking upstream towards the outlet of the 12-inch diameter culvert at stream crossing 05. Photo date 9-1-2021.

Photographs corresponding to all CDFW Notification Points

Photo 20: Stream Crossing 05. Looking downstream from the outlet of the 12-inch diameter culvert at stream crossing 05. Photo date 9-1-2021.

Photographs corresponding to all CDFW Notification Points

Photo 21: Stream Crossing 06. Looking downstream towards the inlet of the 12-inch diameter culvert at stream crossing 06. Photo date 9-1-2021.

Photographs corresponding to all CDFW Notification Points

Photo 22: Stream Crossing 06. Looking upstream from the inlet of the 12-inch diameter culvert at stream crossing 06. Photo date 9-1-2021.

Photographs corresponding to all CDFW Notification Points

Photo 23: Stream Crossing 06. Looking upstream towards the outlet of the 12-inch diameter culvert at stream crossing 06. Photo date 9-1-2021.

Photographs corresponding to all CDFW Notification Points

Photo 24: Stream Crossing 06. Looking downstream from the outlet of the 12-inch diameter culvert at stream crossing 06. Photo date 9-1-2021.

Photographs corresponding to all CDFW Notification Points

Photo 25: Stream Crossing 07. Looking downstream towards the inlet of the 12-inch diameter culvert at stream crossing 07. Photo date 9-1-2021.

Photographs corresponding to all CDFW Notification Points

Photo 26: Stream Crossing 07. Looking upstream from the inlet of the 12-inch diameter culvert at stream crossing 07. Photo date 9-1-2021.

Photographs corresponding to all CDFW Notification Points

Photo 27: Stream Crossing 07. The roadside approach to stream crossing 07 facing Southwest. Photo date 9-1-2021.

Photographs corresponding to all CDFW Notification Points

Photo 28: Stream Crossing 07. Looking upstream towards the outlet of the 12-inch diameter culvert at stream crossing 07. Photo date 9-1-2021.

Photographs corresponding to all CDFW Notification Points

Photo 29: Stream Crossing 07. Looking downstream from the outlet of the 12-inch diameter culvert at stream crossing 07. Photo date 9-1-2021.

Photographs corresponding to all CDFW Notification Points

Photo 30: Stream Crossing 08. Looking downstream towards the inlet of the 8-inch diameter culvert at stream crossing 08. Photo date 9-1-2021.

Photographs corresponding to all CDFW Notification Points

Photo 31: Stream Crossing 08. Looking upstream from the inlet of the 8-inch diameter culvert at stream crossing 08. Photo date 9-1-2021.

Photographs corresponding to all CDFW Notification Points

Photo 32: Stream Crossing 08. The roadside approach to stream crossing 08 facing West. Photo date 9-1-2021.

Photographs corresponding to all CDFW Notification Points

Photo 33: Stream Crossing 08. Looking upstream towards the outlet of the 8-inch diameter culvert at stream crossing 08. Photo date 9-1-2021.

Photographs corresponding to all CDFW Notification Points

Photo 34: Stream Crossing 08. Looking downstream from the outlet of the 8-inch diameter culvert at stream crossing 08. Photo date 9-1-2021.

Photographs corresponding to all CDFW Notification Points

Photo 35: Stream Crossing 11. Looking downstream towards the inlet of the 24-inch diameter culvert at stream crossing 11. Photo date 9-1-2021.

Photographs corresponding to all CDFW Notification Points

Photo 36: Stream Crossing 11. Looking upstream from the inlet of the 24-inch diameter culvert at stream crossing 11. Photo date 9-1-2021.

Photographs corresponding to all CDFW Notification Points

Photo 37: Stream Crossing 11. The roadside approach to stream crossing 11 facing Northwest. Photo date 9-1-2021.

Photographs corresponding to all CDFW Notification Points

Photo 38: Stream Crossing 11. Looking towards the outlet of the 24-inch diameter culvert at stream crossing 11. Photo date 9-1-2021.

Photographs corresponding to all CDFW Notification Points

Photo 39: Stream Crossing 11. Looking downstream from the outlet of the 24-inch diameter culvert at stream crossing 11. Photo date 9-1-2021.

Photographs corresponding to all CDFW Notification Points

Photo 40: Stream Crossing 13. Looking upstream from the road where inlet of stream crossing 13 is proposed. Photo date 9-1-2021.

Photographs corresponding to all CDFW Notification Points

Photo 41: Stream Crossing 13. Looking downstream from the road where the outlet of stream crossing 13 is proposed. Photo date 9-1-2021.

Photographs corresponding to all CDFW Notification Points

Photo 42: Stream Crossing 13. The roadside approach to stream crossing 13 facing North. The blue line indicates where the proposed culvert will be installed in-line with the native stream channel. Photo date 9-1-2021.

Photographs corresponding to all CDFW Notification Points

Photo 43: Stream Crossing 13. Looking downslope along the inside ditch that is currently diverting the flow away from the native stream channel at stream crossing 13. Photo date 9-1-2021.

Photographs corresponding to all CDFW Notification Points

Photo 44: Stream Crossing 13. Looking upslope from the inlet of the DRC along the inside ditch that is currently diverting the flow away from the native stream channel at stream crossing 13. Photo date 9-1-2021.

Photographs corresponding to all CDFW Notification Points

Photo 45: Stream Crossing 13. Looking upstream towards the outlet of the 12-inch DRC that is the current outlet of the water from stream crossing 13. Photo date 9-1-2021.

Photographs corresponding to all CDFW Notification Points

Photo 46: Stream Crossing 13. Looking downstream stream from the outlet of the 12-inch diameter DRC that is the current outlet of the water from stream crossing 13. Photo date 9-1-2021.

Photographs corresponding to all CDFW Notification Points

Photo 47: Stream Crossing 17. Looking downstream towards the inlet of the 18-inch diameter culvert at stream crossing 17 that is proposed for removal. Photo date 9-1-2021.

Photographs corresponding to all CDFW Notification Points

Photo 48: Stream Crossing 17. Looking upstream from the inlet of the 18-inch diameter culvert at stream crossing 17 that is proposed for removal. Photo date 9-1-2021.

Photographs corresponding to all CDFW Notification Points

Photo 49: Stream Crossing 17. The roadside approach to stream crossing 17 that is proposed for removal facing East. Photo date 9-1-2021.

Photographs corresponding to all CDFW Notification Points

Photo 50: Stream Crossing 17. Looking upstream towards the outlet of the 18-inch diameter culvert at stream crossing 17 that is proposed for removal. Photo date 9-1-2021.

Photographs corresponding to all CDFW Notification Points

Photo 51: Stream Crossing 17. Looking downstream from the outlet of the 18-inch diameter culvert at stream crossing 17 that is proposed for removal. Photo date 9-1-2021.

Photographs corresponding to all CDFW Notification Points

Photo 52: Stream Crossing 19. Looking downstream towards the inlet of the 18-inch diameter culvert that is proposed for removal at stream crossing 19. Photo date 9-1-2021.

Photographs corresponding to all CDFW Notification Points

Photo 53: Stream Crossing 19. Looking upstream from the road along the native stream channel that is to be realigned at stream crossing 19. Photo date 9-1-2021.

Photographs corresponding to all CDFW Notification Points

Photo 54: Stream Crossing 19. The roadside approach to stream crossing 19 facing West. The red line depicts where the current misaligned 18-inch culvert is located. The blue line depicts where the native channel used to flow and also where the channel will be realigned to after the stream crossing is decommissioned. Photo date 9-1-2021.

Photographs corresponding to all CDFW Notification Points

Photo 55: Stream Crossing 19. Looking upstream towards the outlet of the 18-inch diameter culvert at stream crossing 19. Photo date 9-1-2021.

Photographs corresponding to all CDFW Notification Points

Photo 56: Stream Crossing 19. Looking downstream from the outlet of the 18-inch diameter culvert at stream crossing 19. Photo date 9-1-2021.

Photographs corresponding to all CDFW Notification Points

Photo 57: Stream Crossing 19. Looking downstream from the road. The pink flag indicates where the native stream channel is and where the stream will be realigned to once stream crossing 19 is decommissioned. Photo date 9-1-2021.

Photographs corresponding to all CDFW Notification Points

Photo 58: Stream Crossing 23. Looking downstream towards the inlet of the double barreled 18-inch and clogged 12-inch diameter culvert at stream crossing 23. Photo date 9-1-2021.

Photographs corresponding to all CDFW Notification Points

Photo 59: Stream Crossing 23. Looking upstream from the inlet of stream crossing 23. Photo date 9-1-2021.

Photographs corresponding to all CDFW Notification Points

Photo 60: Stream Crossing 23. The roadside approach to stream crossing 23 facing North. Photo date 9-1-2021.

Photographs corresponding to all CDFW Notification Points

Photo 61: Stream Crossing 23. Looking upstream towards the outlet of the double barreled 18-inch and clogged 12-inch diameter culvert at stream crossing 23. Photo date 9-1-2021.

Photographs corresponding to all CDFW Notification Points

Photo 62: Stream Crossing 23. Looking downstream from the outlet of stream crossing 23. Photo date 9-1-2021.

Photographs corresponding to all CDFW Notification Points

Photo 63: Stream Crossing 24. Looking downstream towards the inlet of the 18-inch diameter culvert at stream crossing 24. Photo date 9-1-2021.

Photographs corresponding to all CDFW Notification Points

Photo 64: Stream Crossing 24. Looking upstream from the inlet of the 18-inch diameter culvert at stream crossing 24. Photo date 9-1-2021.

Photographs corresponding to all CDFW Notification Points

Photo 65: Stream Crossing 24. The roadside approach to stream crossing 24 facing South. Photo date 9-1-2021.

Photographs corresponding to all CDFW Notification Points

Photo 66: Stream Crossing 24. Looking upstream towards the outlet of the 18-inch diameter culvert at stream crossing 24. Photo date 9-1-2021.

Photographs corresponding to all CDFW Notification Points

Photo 67: Stream Crossing 24. Looking downstream from the outlet of the 18-inch diameter culvert at stream crossing 24. Photo date 9-1-2021.

Photographs corresponding to all CDFW Notification Points

Photo 68: Stream Crossing 26. Looking downstream towards the inlet of the 18-inch diameter culvert at stream crossing 26. Photo date 9-1-2021.

Photographs corresponding to all CDFW Notification Points

Photo 69: Stream Crossing 26. Looking upstream from the inlet of the 18-inch diameter culvert at stream crossing 26. Photo date 9-1-2021.

Photographs corresponding to all CDFW Notification Points

Photo 70: Stream Crossing 26. The roadside approach to stream crossing 26 facing South. Photo date 9-1-2021.

Photographs corresponding to all CDFW Notification Points

Photo 71: Stream Crossing 26. Looking upstream towards the outlet of the 18-inch diameter culvert at stream crossing 26. Photo date 9-1-2021.

Photographs corresponding to all CDFW Notification Points

Photo 72: Stream Crossing 26. Looking downstream from the outlet of the 18-inch diameter culvert at stream crossing 26. Photo date 9-1-2021.

Photographs corresponding to all CDFW Notification Points

Photo 73: Stream Crossing 35. Looking towards the inlet of the 8-inch diameter culvert at stream crossing 35. Photo date 6-8-2021.

Photographs corresponding to all CDFW Notification Points

Photo 74: Stream Crossing 35. Looking upstream from the inlet of the 8-inch diameter culvert at stream crossing 35. Photo date 9-1-2021.

Photographs corresponding to all CDFW Notification Points

Photo 75: Stream Crossing 35. The roadside approach to stream crossing 35 facing North. Photo date 9-1-2021.

Photographs corresponding to all CDFW Notification Points

Photo 76: Stream Crossing 35. Looking upstream towards the outlet of the 8-inch diameter culvert at stream crossing 35. Photo date 9-1-2021.

Photographs corresponding to all CDFW Notification Points

Photo 77: Stream Crossing 35. Looking downstream from the outlet of the 8-inch diameter culvert at stream crossing 35. Photo date 9-1-2021.

Photographs corresponding to all CDFW Notification Points

Photo 78: DRC 38: Looking at legacy Refuse downstream from the DRC. Photo date 6-10-2021

Photo 79: DRC 38: Looking at legacy Refuse downstream from the DRC. Photo date 6-10-2021

Photographs corresponding to all CDFW Notification Points

Photo 80: DRC 38: Looking at legacy Refuse downstream from the DRC. Photo date 6-10-2021

Photo 81: DRC 38: Looking at legacy Refuse downstream from the DRC. Photo date 6-10-2021

Project Name-Sproul Creek-Headwaters Road Improvements
Applicant- Humboldt Spirit Inc Dillon Dupont
Project Budget

Budget Item	Cost	FOER Grant Funds	Humboldt Spirit Inc-Paid
Professional and Consulting Fees	$29,298.70	$12,600.00	$17,898.70
1600 Lake and Stream Alteration Agreement Permit Fees	$14,898.00	$0.00	$14,898.00
401/404 Certifications Permit Fees	$2,417.00	$0.00	$2,417.00
Contractor Bid for entire job, Labor, materials and equipment	$104,750.00	$104,570.00	$0.00
Total	$151,363.70	$117,170.00	$34,613.70

LEWIS LAND
DEVELOPMENT INC.
751 E Branch RD
Garberville Ca 95542
ph# 707 -223-3937
Lic #1012107

Estimate

DATE	ESTIMATE #
10/24/2022	118

BILL TO
DILLION DuPONT sprowl cr

ITEM	DESCRIPTION	QTY	RATE	AMOUNT
	remove an install 17 culverts			0.00
	straw	40	25.00	1,000.00
	1\4 to riprap	16	700.00	11,200.00
	15"x20'culverts	3	700.00	2,100.00
	18"x20' culverts	7	800.00	5,600.00
	24"x20 culverts	2	1,100.00	2,200.00
	24" band	1	60.00	60.00
	24"x20 culverts	2	1,100.00	2,200.00
	30"x20"	3	1,400.00	4,200.00
	36"x20' culvert	1	2,000.00	2,000.00
	9 rolling dips			0.00
	base rock	18	335.00	6,030.00
	excavator	191	250.00	47,750.00
	10yd truck	48	165.00	7,920.00
	skidsteer	60	165.00	9,900.00
	10yd truck & trailer	14	185.00	2,590.00

Subtotal	104,750.00
7.25% Tax	
Total	104,750.00

ETA Humboldt, LLC
77 Ave of the giants #4
Phillipsville, CA 95559 US
+1 7079231180
etahumboldtvv@gmail.com

Estimate

ADDRESS	SHIP TO		
Dillon Dupont Humboldt Spirit Inc	Dillon Dupont Humboldt Spirit Inc	ESTIMATE DATE	1012 10/26/2022

SERVICE	DESCRIPTION	QTY	RATE	AMOUNT
Grant Consulting Services	Project Scoping and direct on site consultation with General Contractor for implementation	20	105.00	2,100.00T
Grant Consulting Services	Project Initiation correspondence with CDFW, NCRWQCB, and Army Corps of Engineers	4	105.00	420.00T
Grant Consulting Services	Project completion on site documentation for reporting to CDFW, NCRWQCB and Army Corps of Engineers	16	105.00	1,680.00T
Grant Consulting Services	Work Completion Reports and erosion control implementation / success rate reporting to CDFW, NCRWQCB and Army Corps of Engineers	80	105.00	8,400.00T

SUBTOTAL	12,600.00
TAX	0.00
TOTAL	**$12,600.00**

Accepted By

Accepted Date

STATE OF CALIFORNIA

DEPARTMENT OF FISH AND WILDLIFE

LAKE AND STREAMBED ALTERATION PROGRAM

Information Regarding Amendments of Lake or Streambed Alteration Agreements

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The holder of an agreement ("holder") may request the Department of Fish and Wildlife (CDFW) to amend a Lake or Streambed Alteration Agreement ("agreement"), provided the request is received by CDFW in writing prior to the agreement's expiration. If the request is not received prior to the agreement's expiration, CDFW will be unable to accept the request. In that case, the holder will need to notify CDFW in accordance with Fish and Game Code section 1602 or section 1611 and obtain a new agreement in order to begin or continue the work covered by the expired agreement.

In order to request an amendment, the holder shall complete and submit the attached Amendment Request form, with the correct fee, to the CDFW regional office that serves the area where the project is located.

For more information on Lake and Streambed Alteration Agreements, see Fish and Game Code section 1600.

FOR DEPARTMENT USE ONLY				
Date Received	*Amount Received*	*Approved?*	*Date Approved*	*Expiration Date*
	$	☐ Yes ☐ No		
Assigned to:				

REQUEST TO AMEND LAKE OR STREAMBED ALTERATION AGREEMENT

Complete EACH field, unless otherwise indicated, and submit ALL required enclosures, attachments, and fee(s) to the CDFW regional office that serves the area where the project will occur. Attach additional pages to notification, if necessary.

1. APPLICANT REQUESTING AMENDMENT

If the applicant is a business, agency, or utility, please include the name of the applicant's representative, who should be an employee of the applicant.	
Name	Dillon DuPont
Business/Agency	
Mailing Address	3739 Balboa St. Suite 152
City, State, Zip	San Francisco, CA 94121
Phone Number	707-223-2078
Email	dillondupont@gmail.com

2. CONTACT PERSON (*Complete only if different from applicant.*)

Name	Vanessa Valare
Business/Agency	ETA Humboldt LLC
Mailing Address	P.O. Box 147
City, State, Zip	Phillipsville, CA 95559
Phone Number	707-923-1180
Email	etahumboldt@gmail.com

While an applicant is legally responsible for complying with Fish and Game Code section 1602 et seq., an applicant may designate and authorize an agent (e.g., lawyer, consultant, or other individual) to act as a Designated Representative. The Designated Representative is authorized to sign the notification and any agreement on behalf of the Applicant.

Do you authorize the Contact Person above to represent you as your Authorized Designated Representative?

☑ Yes, I authorize.	☐ No, I do not authorize.

3. PROJECT INFORMATION

Project Name (as identified in the Final Agreement)	DuPont water diversion, pond spillway and stream crossings project
Agreement Number	EPIMS-HUM-22999-R1
Expiration Date	04/14/2027

4. AMENDMENT REQUEST AND FEE

Check the applicable box below and refer to the current fee schedule to determine the appropriate amendment fee.

- A minor amendment is one that would not significantly modify the scope or nature of any project covered by the agreement or any measure included in the agreement to protect fish and wildlife resources, as determined by CDFW, or an amendment to transfer the agreement to another entity by changing the name of the entity to the name of the transferee (see Cal. Code Regs., tit. 14, § 699.5, subd. (a)(10)).
- A major amendment is one that would significantly modify the scope or nature of any project covered by the agreement or any measure included in the agreement to protect fish and wildlife resources, or require additional environmental review, as determined by CDFW (see Cal. Code Regs., tit. 14, § 699.5, subd. (a)(7)).

☑ Minor Amendment ☐ Major Amendment

Note: CDFW is not required to determine whether an amendment is complete or otherwise process the amendment until CDFW has received the correct fee.

5. AMENDMENT DESCRIPTION

A. Describe the amendment in detail

- Written description of all project activities with detailed step-by-step description of project implementation.
- Include any structures (e.g., rip-rap, culverts) that will be placed or modified in or near the stream, river, or lake, and any channel clearing.
- Specify volume, and dimensions of all materials and features (e.g., rip rap fields) that will be used or installed.
- Enclose diagrams, drawings, design plans, construction specifications, and maps that provide all of the following: site specific construction details; dimensions of each structure and/or extent of each activity in the bed, channel, bank or floodplain; overview of the entire project area (i.e., "bird's-eye view") showing the location of each structure and/or activity, significant area features, stockpile areas, areas of temporary disturbance, and where the equipment/machinery will access the project area.
  - A helpful resource to assist in the development of quality PDF maps in Google Earth. See Using Google Earth to Map your Property (PDF).

The project is limited to 17 encroachments. One encroachment is for water diversion from an unnamed tributary to Sproul Creek. Water is diverted for domestic use only. Work for the water diversion will include use and maintenance of the water diversion infrastructure. One encroachment is for the installation of an armored pond spillway. Three encroachments are for the realignment of native channels, removal of failed culverts remediation and decommissioning of an abandoned road. The 12 other proposed encroachments are to upgrade existing culverts that are failing or undersized. Work for these encroachments will include excavation, removal of existing culverts, replacement with new properly sized culverts, backfilling and compaction of fill, and rock armoring as necessary to minimize erosion.

☐ Continued on additional page(s)

B. Explain the reason(s) for the amendment request

Permittee was unable to get the work that was scheduled for completion in 2022 done, and would like to amend the agreement to push the work completion dates for all projects one year forward. SC13, SC17 and SC19 will be completed in 2023. SC11, SC23, SC24, SC35, and DRC 38 will be completed in 2024. SC3, SC4, SC5, SC6, SC7 and SC8 will be competed in 2025, and SC26 will be completed in 2026. Amendment is also to update costs of projects. All culvert replacements will cost $5,000.00 each instead of $2,500.00 due to inflation.

☐ Continued on additional page(s)

6. SIGNATURE

I hereby certify that to the best of my knowledge the information in this amendment request ("request") is true and correct and that I am authorized to sign this request as, or on behalf of, the applicant. I understand that if any information in this request is found to be untrue or incorrect, CDFW may suspend processing this request or suspend or revoke any draft or final Lake or Streambed Alteration Agreement issued pursuant to this request. I understand also that if any information in this request is found to be untrue or incorrect and the changes described in this request has already begun, I and/or the applicant may be subject to civil or criminal prosecution. I understand that this notification applies only to the project(s) described herein and that I and/or the applicant may be subject to civil or criminal prosecution for undertaking any project not described herein, unless CDFW has been separately notified of that project in accordance with Fish and Game Code section 1602 or 1611.

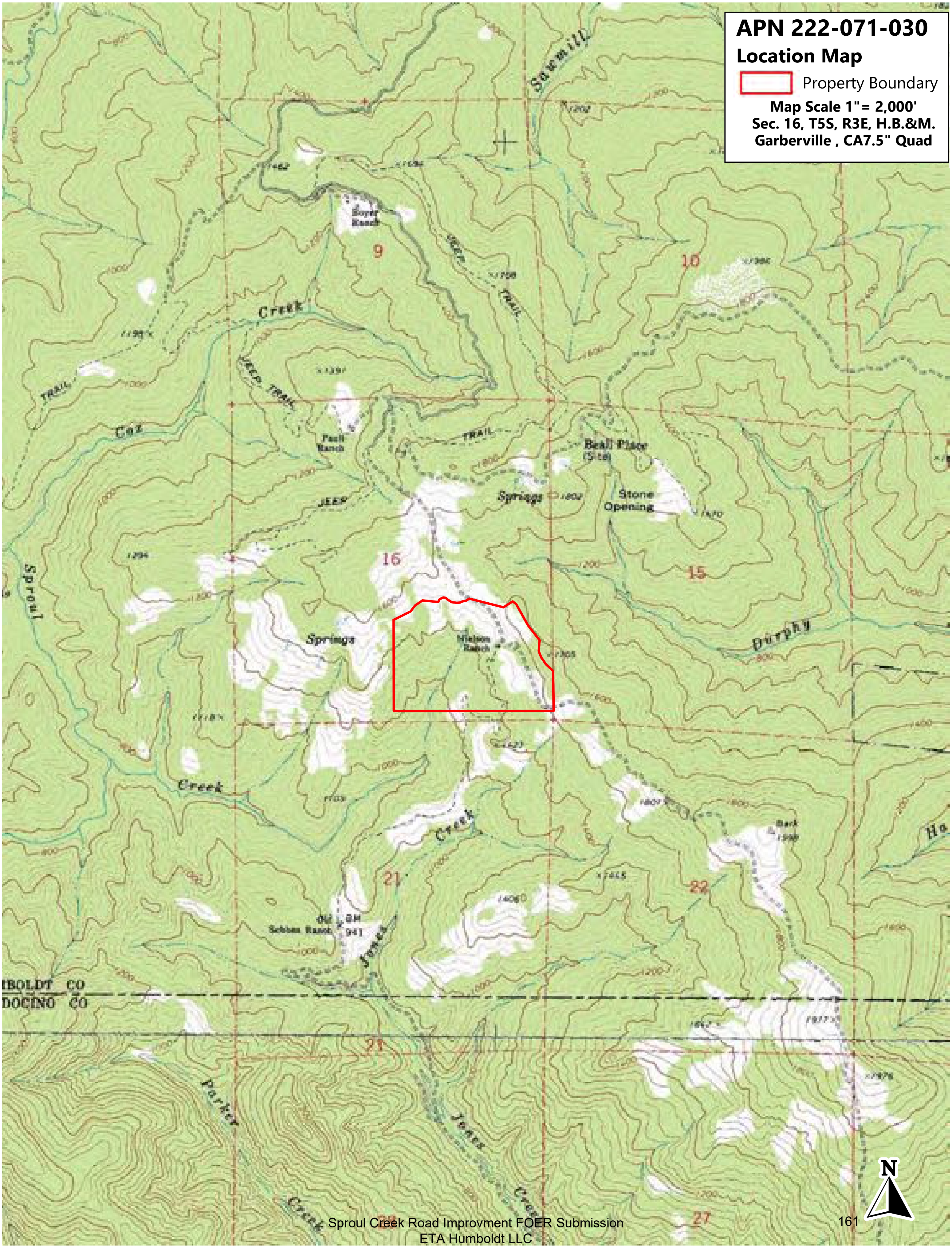
Signature of Applicant or Applicant's Authorized Representative

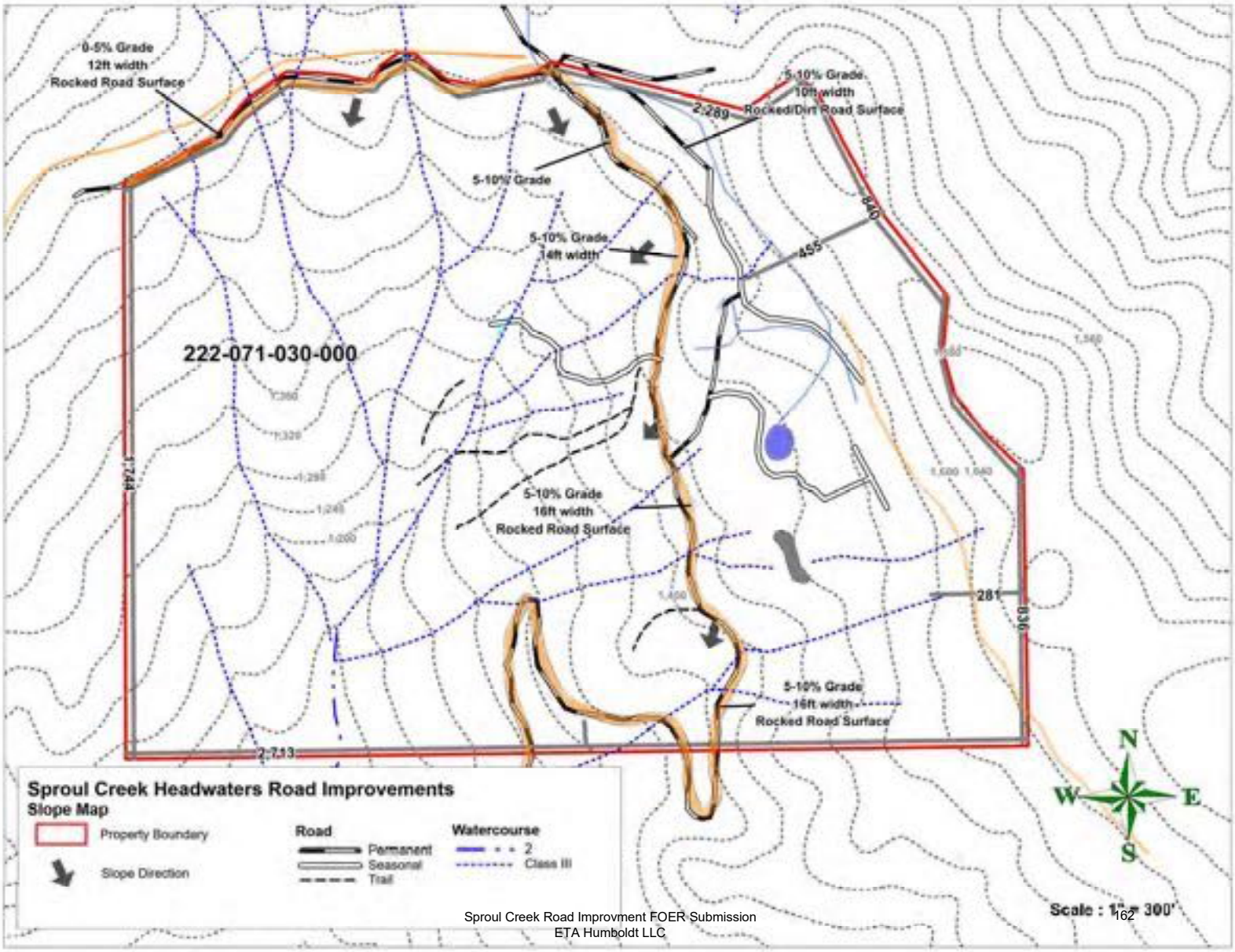
Date

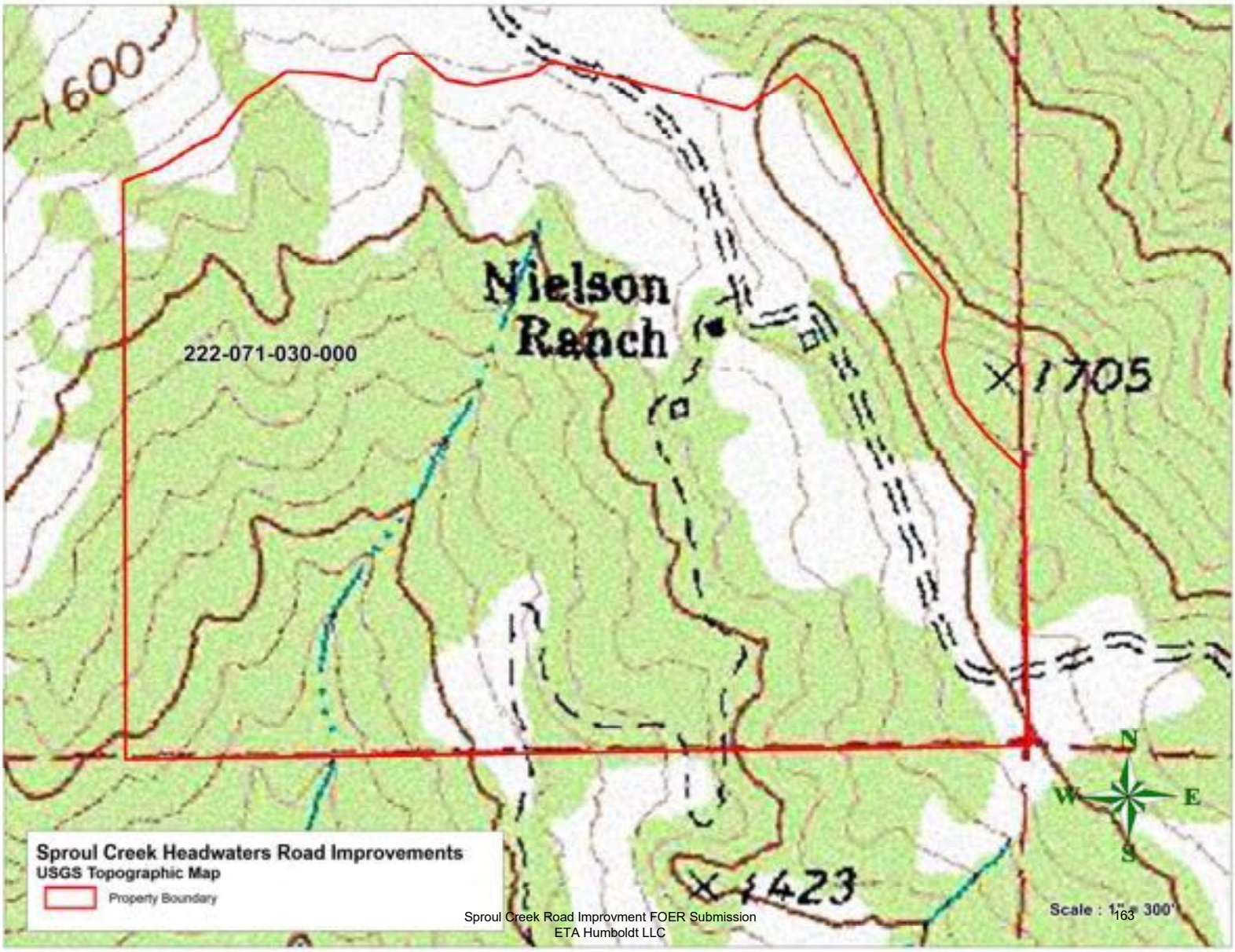
Dillon Dupont

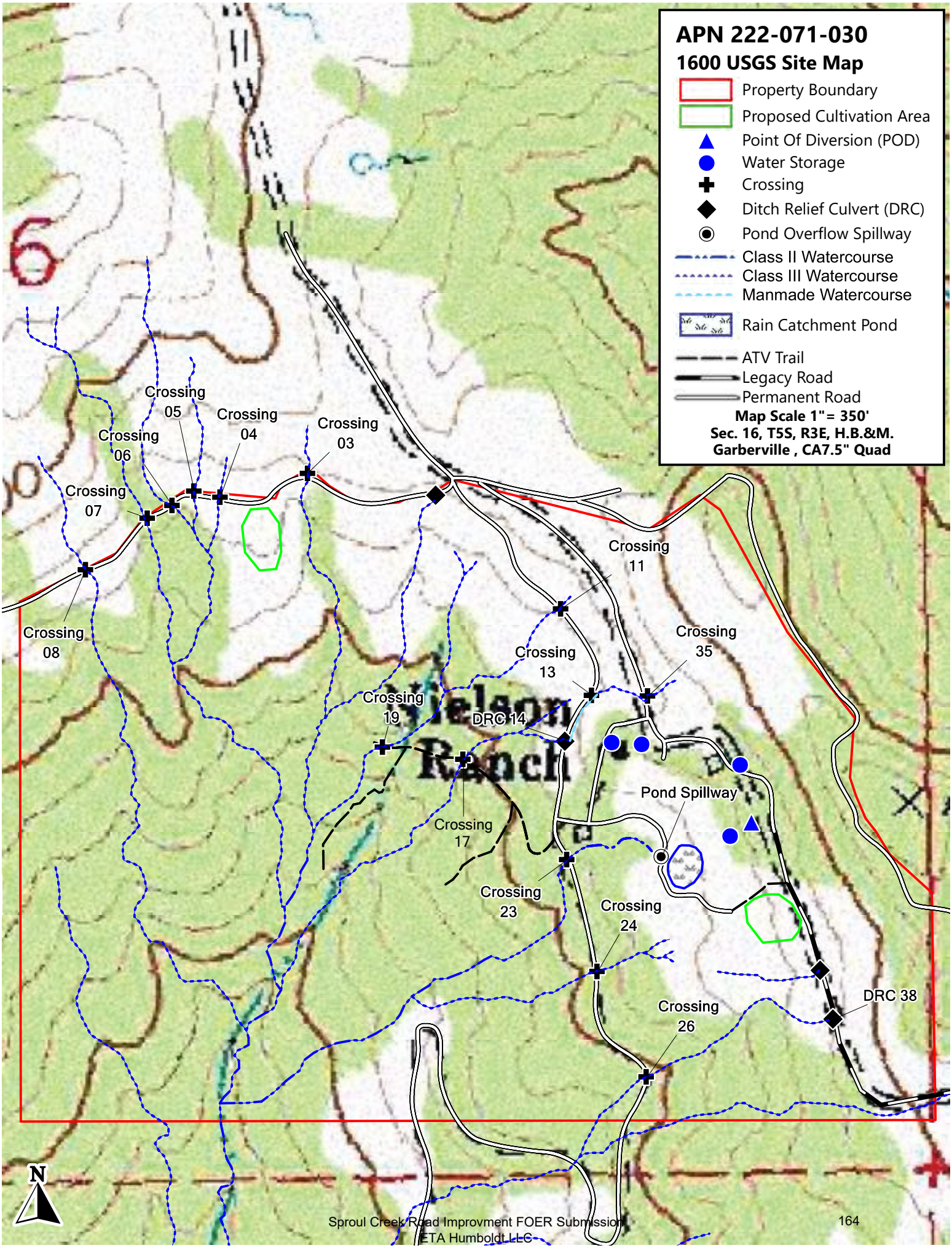
Print Name

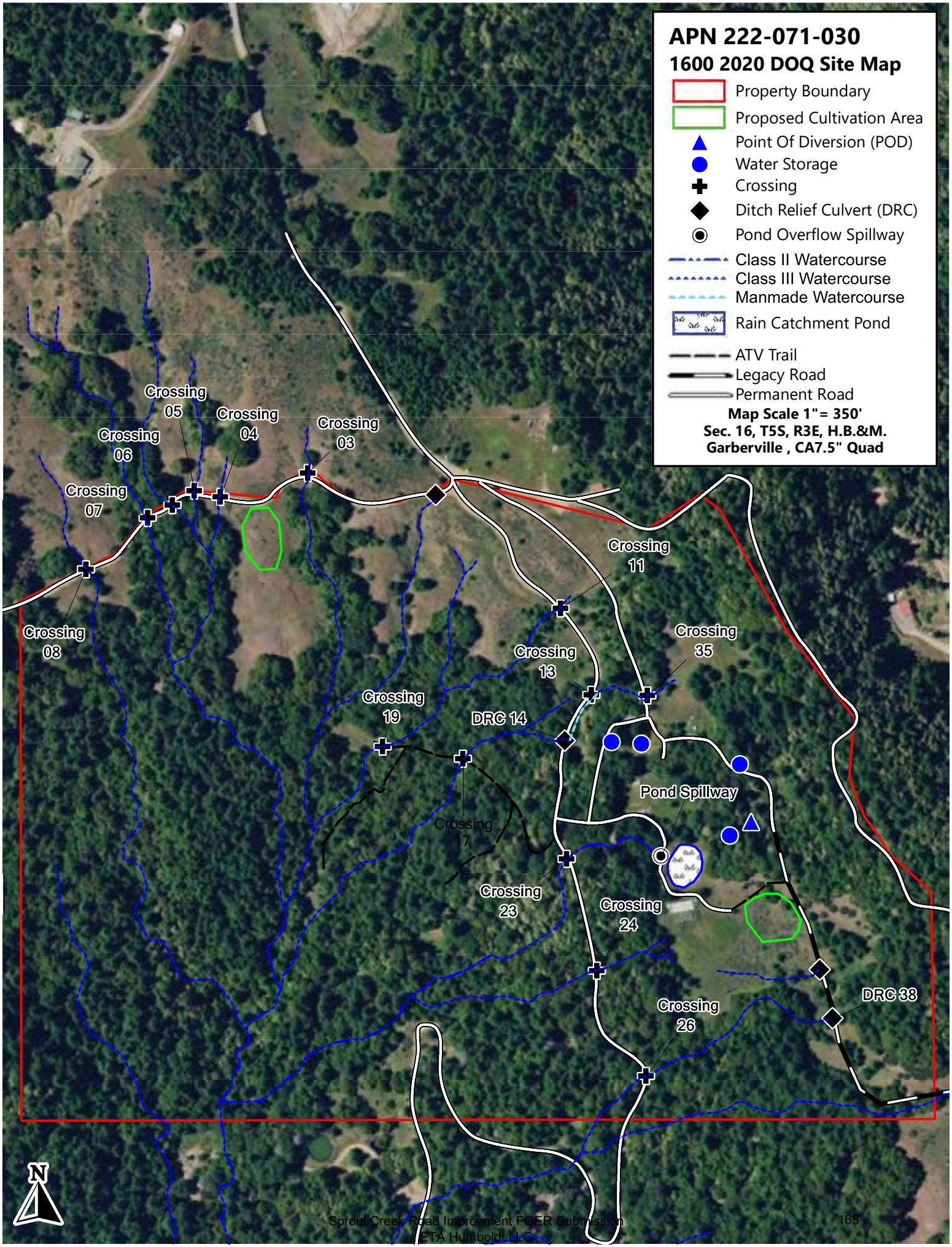
Note: If approved, a copy of this form must be available at the work site with the original agreement.


APN 222-071-030
Location Map
Property Boundary
Map Scale 1"= 2,000'
Sec. 16, T5S, R3E, H.B.&M.
Garberville , CA7.5" Quad
N
Sawmill
Boyer Ranch
Creek
JEEP TRAIL
TRAIL
Cox
Paul Ranch
Beall Place (Site)
Springs
Stone Opening
JEEP
Sproul
Springs
Nielson Ranch
Durphy
Creek
Creek
Old Sebben Ranch
Jones
Bark
Parker
Jones
Creek
9
10
16
15
21
22
27


0-5% Grade
12ft width
Rocked Road Surface
5-10% Grade
10ft width
Rocked/Dirt Road Surface
2,289
5-10% Grade
5-10% Grade
14ft width
840
455
222-071-030-000
1,744
5-10% Grade
16ft width
Rocked Road Surface
281
836
5-10% Grade
16ft width
Rocked Road Surface
2,713
Sproul Creek Headwaters Road Improvements
Slope Map
Property Boundary
Slope Direction
Road
Permanent
Seasonal
Trail
Watercourse
2
Class III
N
W
E
S
Scale : 1" = 300'


1600
Nielson Ranch
222-071-030-000
1705
1423
N
W
E
S
Sproul Creek Headwaters Road Improvements
USGS Topographic Map
Property Boundary
Scale : 1" = 300'


APN 222-071-030
1600 USGS Site Map
Property Boundary
Proposed Cultivation Area
Point Of Diversion (POD)
Water Storage
Crossing
Ditch Relief Culvert (DRC)
Pond Overflow Spillway
Class II Watercourse
Class III Watercourse
Manmade Watercourse
Rain Catchment Pond
ATV Trail
Legacy Road
Permanent Road
Map Scale 1"= 350'
Sec. 16, T5S, R3E, H.B.&M.
Garberville , CA7.5" Quad
Crossing 03
Crossing 04
Crossing 05
Crossing 06
Crossing 07
Crossing 08
Crossing 11
Crossing 13
Crossing 35
Crossing 19
DRC 14
Crossing 17
Crossing 23
Crossing 24
Crossing 26
Pond Spillway
DRC 38
N


APN 222-071-030
1600 2020 DOQ Site Map
Property Boundary
Proposed Cultivation Area
Point Of Diversion (POD)
Water Storage
Crossing
Ditch Relief Culvert (DRC)
Pond Overflow Spillway
Class II Watercourse
Class III Watercourse
Manmade Watercourse
Rain Catchment Pond
ATV Trail
Legacy Road
Permanent Road
Map Scale 1"= 350'
Sec. 16, T5S, R3E, H.B.&M.
Garberville , CA7.5" Quad
Crossing 05
Crossing 04
Crossing 03
Crossing 06
Crossing 07
Crossing 08
Crossing 11
Crossing 35
Crossing 13
Crossing 19
DRC 14
Pond Spillway
Crossing 17
Crossing 23
Crossing 24
DRC 38
Crossing 26
N

Lake or Streambed Alteration Agreement Annual Reporting

Permittee: Dillon Dupont

Project Name: DuPont Water Diversion, Pond Spillway, and Stream Crossings Project

Date: 10-13-2022

NOTIFICATION NO. EPIMS-HUM-22999-R1

Unnamed Tributary to Sproul Creek, Tributary to the South Fork Eel River, Tributary to the Eel River and the Pacific Ocean Assessor Parcel Number: 222-071-030-000

Project Location

The project to be completed is located within the Sproul Creek watershed, approximately 6 miles southwest of the town of Garberville, County of Humboldt, State of California. The project is located in Section 16, T05S, R03E, Humboldt Base and Meridian; in the Piercy U.S. Geological Survey 7.5-minute quadrangle; Assessor's Parcel Number 222-071-030-000; latitude 40.0201 N and longitude 123.8388 W at the point of diversion (POD).

Reporting Requirements

Streambed Alteration Agreement - Notification #EPIMS-HUM-22999-R1 October 31, 2022 for the following projects: SC-13, SC-17, SC-19. A notice of completed work (condition 2.4), with supplemental photos, shall be submitted to CDFW within seven (7) days of project completion.

Project Status

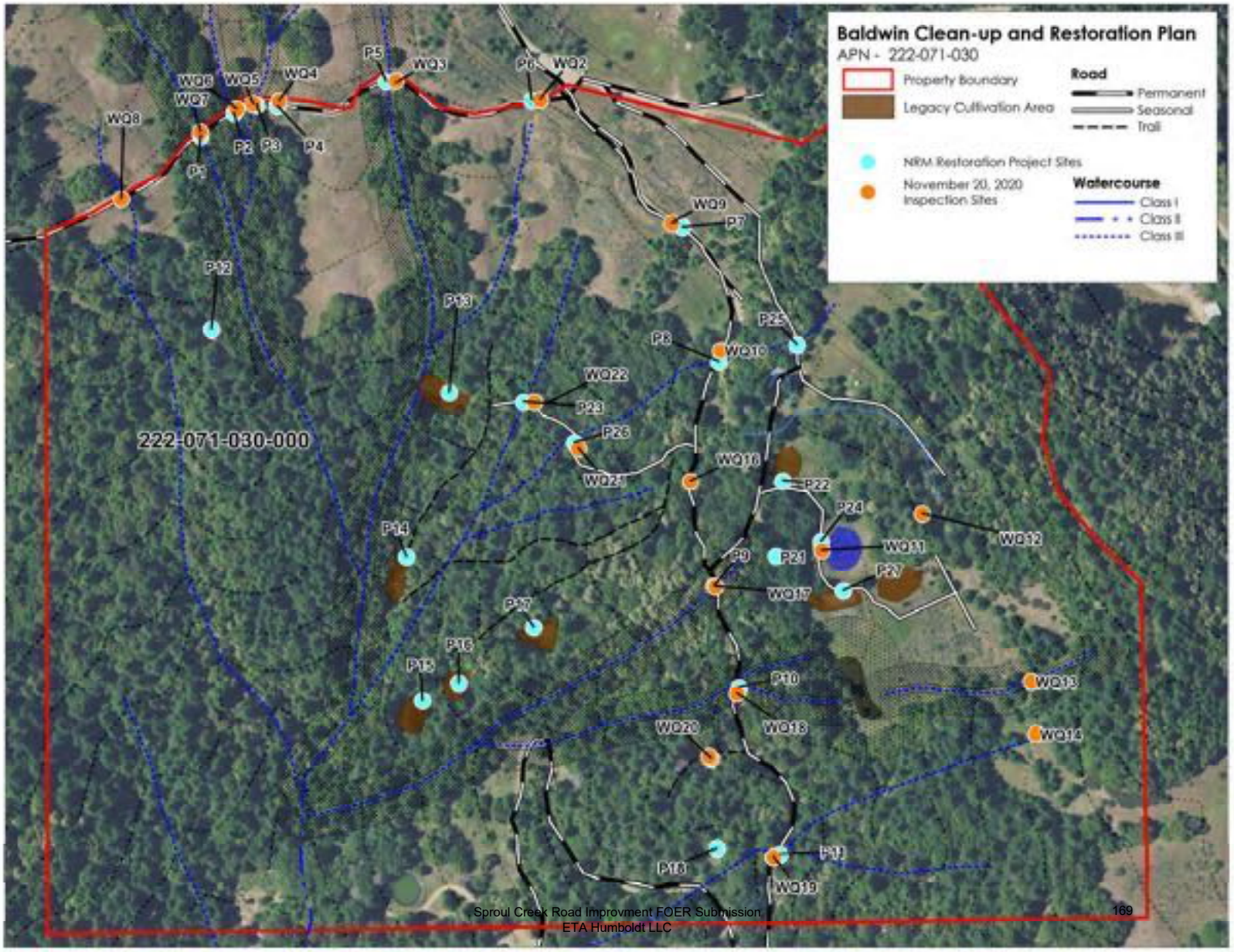
The projects site SC-13, SC-17, and SC-19, have not been completed for the reporting year of 2022. It has been reported by the landowner that they are preparing to complete the aforementioned project sites during the work period of June 1 through October 31, 2023. As part of this reporting document an amended Completion Schedule is being submitted. The new estimations for completion of the proposed work will still be accomplished within the 5-year time frame of the Streambed Alteration Agreement. The modified work completion timeline will adjust the work completion timeframe by one year with an ending date expected to be 2025. The proposed timeline for completion will retain the estimation for completion by no later than October 31, 2025 for the following projects: SC-26, and DRC-38.

Progress to Date

In 2022 the new landowner and Permittee has been in the process of transferring ownership of the property. The landowner has also been coordinating with the Waterboard for the final requested items regarding the approval of a property wide Clean-Up and Restoration Plan. The CRMP was approved July 20th of 2022. The landowner has also successfully had a Section 401 water quality certification and 404 Army Corps permit completed by Timberland Resource Consultants. The 401 and 404 permit have been approved by the associated agencies. Due to extensive permitting and financial responsibilities to many agencies and governing bodies the landowner has been unable to complete the projects SC-13, SC-17, SC-19. The table attached below overviews the requested changes to the estimated times for completion.

Project Site Identification	Estimated Completion Date
POD-1	(Annual use and Maintenance) April 1 – November 15
SC-3	Replace existing undersized 8-inch diameter culvert with minimum 18" diameter culvert set to grade. Rock armor inlet and outlet as necessary to minimize potential erosion. The proposed work shall be completed by no later than October 31, 2025.
SC-4	Replace an existing undersized 8-inch diameter culvert with minimum 18-inch diameter culvert set to grade. Rock armor inlet and outlet as necessary to minimize potential erosion. The proposed work shall be completed by no later than October 31, 2025.
SC-5	Replace existing 12-inch diameter culvert with minimum 18-inch diameter culvert set to grade. Rock armor inlet and outlet as necessary to minimize potential erosion. The proposed work shall be completed by no later than October 31, 2025.
SC-6	Replace existing 12-inch diameter culvert with minimum 24-inch diameter culvert set to grade. Rock armor inlet and outlet as necessary to minimize potential erosion. The proposed work shall be completed by no later than October 31, 2025.
SC-7	Replace existing 12-inch diameter culvert with minimum 30-inch diameter culvert set to grade. Rock armor inlet and outlet as necessary to minimize potential erosion The proposed work shall be completed by no later than October 31, 2025.
SC-8	Replace existing 8-inch diameter culvert with minimum 18-inch diameter culvert set to grade. Rock armor inlet and outlet as necessary to minimize potential erosion. The proposed work shall be completed by no later than October 31, 2025.
SC-11	An adequately sized 24-inch diameter culvert is present, but slightly short. Installation of a flexible 20-foot by 24-inch diameter culvert downspout or extension is required and shall have a rock armor energy dissipater installed at the outlet to minimize potential erosion. The proposed work shall be completed by no later than October 31, 2024.
SC-13	A Class III watercourse lacking an adequate stream crossing structure and diverting down the inside ditch of the road shall be realigned to its historic channel. Install minimum 18-inch diameter culvert set to grade. The proposed work shall be completed by no later than October 31, 2023.
SC-17	An existing 18-inch diameter culvert on an abandoned road shall be removed and decommissioned. The proposed work shall be completed by no later than October 31, 2023.

Project Site Identification	Estimated Completion Date
SC-19	An existing, misaligned, and failing 18-inch culvert on an abandoned road shall be removed and the road decommissioned. The crossing shall be realigned to match with the native channel. This is a site of remediation. The proposed work shall be completed by no later than October 31, 2023.
SC-23	Replace an existing double barrel 18-inch diameter culvert(s) shall be removed and upgraded to a minimum 30-inch diameter culvert. The proposed work shall be completed by no later than October 31, 2024.
SC-24	Replace an existing 18-inch diameter culvert with a minimum 36-inch diameter culvert set to grade. Rock armor the inlet and outlet as necessary to minimize potential erosion. The proposed work shall be completed by no later than October 31, 2024.
SC-26	Replace an existing 18-inch diameter with a minimum 30-inch diameter culvert set to grade. Rock armor the inlet and outlet as necessary to minimize potential erosion. The proposed work shall be completed by no later than October 31, 2025.
SC-35	Replace an existing undersized 8-inch diameter culvert with a minimum 18-inch diameter culvert set to grade. Rock armor as necessary to minimize potential erosion. The proposed work shall be completed by no later than October 31, 2024.
DRC-38	Legacy metal debris and refuse shall be removed from the watercourse channel below. The proposed work shall be completed by no later than October 31, 2025.
Off-stream Pond-1	An off-stream pond shall have the overflow spillway adequately rock armored extending past the toe of the embankment and into the stream channel below. The proposed work shall be completed by no later than October 31, 2024.


Baldwin Clean-up and Restoration Plan
APN - 222-071-030
Property Boundary
Legacy Cultivation Area
Road
Permanent
Seasonal
Trail
NRM Restoration Project Sites
November 20, 2020 Inspection Sites
Watercourse
Class I
Class II
Class III
222-071-030-000
WQ1
WQ2
WQ3
WQ4
WQ5
WQ6
WQ7
WQ8
WQ9
WQ10
WQ11
WQ12
WQ13
WQ14
WQ15
WQ16
WQ17
WQ18
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P19
P21
P22
P23
P24
P25
P26
P27

Cleanup and Abatement Order No. R1-2021-0056

Proposed Project Timeline Extension Request

Project Name: DuPont Water Diversion, Pond Spillway, and Stream Crossings Project

Date: 10-17-2022

Unnamed Tributary to Sproul Creek, Tributary to the South Fork Eel River, Tributary to the Eel River and the Pacific Ocean Assessor Parcel Number: 222-071-030-000

Project Location

The projects to be completed is located within the Sproul Creek watershed, approximately 6 miles southwest of the town of Garberville, County of Humboldt, State of California. The project is located in Section 16, T05S, R03E, Humboldt Base and Meridian; in the Garberville U.S. Geological Survey 7.5-minute quadrangle; Assessor's Parcel Number 222-071-030-000; latitude 40.0201 N and longitude 123.8388 W at the point of diversion (POD).

Project Status

The project Sites 01/WQ2, 2, 09, 10, 12, 15, 16, 18, 20, 22/ST2, 25, 31, 32/ R1/ WQ11, 33, 34, have not been completed for the reporting year of 2022. It has been reported by the landowner that they are preparing to complete the aforementioned project sites during the work period of June 1 through October 31, 2023. As part of this reporting document an amended Completion Schedule is being submitted. The new estimations for completion of the proposed work will still be accomplished within the 5-year time frame of the CAO. The modified work completion timeline will adjust the work completion timeframe by one year with an ending date expected to be 2025. The proposed timeline for completion will retain the estimation for completion by no later than October 31, 2025 for the following projects: Site 11 / WQ 9, 17 / C4, 19 / C3/3.1, 23 / C2/ WQ16, 24 / WQ 17, 26 / WQ 18, 37 / WQ 13, and 38 / WQ 14.

Progress to Date

In 2022 the new landowner and Permittee has been in the process of transferring ownership of the property. The landowner has also been coordinating with the Waterboard for the final requested items regarding the approval of a property wide Clean-Up and Restoration Plan. The CRMP was approved July 20th of 2022. The new landowner has continued general clean-up of the property. The landowner has also successfully had a Lake and Streambed Alteration Agreement, Section 401 water quality certification and 404 Army Corps permit completed by Timberland Resource Consultants. The LSAA, 401 and 404 permit have been approved by the associated agencies. Due to extensive permitting and financial responsibilities to multiple taxing and regulating agencies. The landowner has been unable to complete implementation for the projects scheduled for Completion in 2022. The table attached below overviews the requested changes to the estimated times for completion.

Justification for Timeline Extension

The financial costs of applying for and receiving all the permits associated with this project is extensive. The applicant hired two different agencies to assist in filing the necessary paperwork, and paid

$14,898.25to CDFW for the LSAA, $2,417 to SWRCB for the 401, $11,563.80 to TRC for filing and document creation fees, and $12,236.25 to ETA Humboldt for consulting services related to the violation, filing and document creation fees. It came to over 40,000 dollars to create a plan and pay permit fees to all agencies involved. This is in addition to the purchase agreement for the land itself. At the same time, the applicant's revenue was reduced drastically due to the major reduction in value of Cannabis Products. Partner these factors with out-of-control inflation on all products and services, and the applicant simply ran out of money to implement the projects that were supposed to be completed in 2022.

The applicant purchased this property because it is next door to their property, and they would like to see the property cleaned up and remediated. The applicant intends on making this happen as soon as possible. As such, they are currently applying for the Friends of the Eel River Mitigation and Remediation Grants program. This project in the Sproul Creek refuge watershed, and free of Humboldt County Code Enforcement Violations makes it extremely qualified for this grant. If awarded, the grant funds will allow the applicant to complete all the notification points in both the Lake and Streambed Alteration Agreement and the CRMP, likely faster than the timeline states. We will know if they get this grant sometime in February 2023. Even if they do not get the grant award, the applicants are committed to completing of the projects within this amended timeline.

Implementation Schedule	
Prior to 10-15-2023	
Site	**Proposed Work Completion Date**
Site 01/WQ2	08-15-2023
Site 2	08-15-2023
Site 09	08-15-2023
Site 10	08-15-2023
Site 12	08-15-2023
Site 15	09-15-2023
Site 16	09-15-2023
Site 18	09-15-2023
Site 20	09-15-2023
Site 22/ST2	09-15-2023

Site 25	10-10-2023
Site 31	10-10-2023
Site 32/ R1/ WQ11	10-10-2023
Site 33	10-10-2023
Site 34	10-10-2023
Prior to 10-15-2024	
Site 03 / WQ 3	08-15-2024
Site 04 / WQ 4	08-15-2024
Site 05 / WQ 5	08-15-2024
Site 06 / WQ 6	08-15-2024
Site 07 / WQ 7	08-15-2024
Site 08 / WQ 8	09-15-2024
Site 13	09-15-2024
Site 14 / WQ 10	09-15-2024
Site 28 / WQ 19	09-15-2024
Site 29 / WQ 20	09-15-2024
Prior to 10-15-2024	
Site 30	10-10-2024
Site 36	10-10-2024
Site 35/C1	10-10-2024
Prior to 10-15-2025	
Site 11 / WQ 9	08-15-2025
Site 17 / C4	08-15-2025
Site 19 / C3/3.1	08-15-2025
Site 23 / C2/ WQ16	08-15-2025
Site 24 / WQ 17	08-15-2025
Site 26 / WQ 18	09-15-2025
Site 37 / WQ 13	09-15-2025
Site 38 / WQ 14	09-15-2025

Adaptive Management Plan					
Waterboard Inspection Point	**Corresponding Project Site Reference**	**Project Description**	**Project Current Status**	**Project Recommendations**	**Project Timeline**
WQ1	NA	Inadequately drained section of road. Inadequate intervals of hydrologic disconnects from a 100ft section of inside ditch.	This WQ1 Site is located on the adjacent property, the landowner has been informed of specific road upgrades and is in the process of coordinating the installation of ditch relief culverts on this section of road.	Specifications and details on disconnecting the hydrologically connected ditch relief culvert will be outlined in the pending Lake and Streambed Alteration Agreement (LSAA), Site Management Plan (SMP), and Water Quality Certification (401).	Adjacent landowner is currently in the process of coordinating with the road association and hiring contractors to hydrological disconnect this inside ditch and install appropriately space ditch relief culverts. Work is expected to initiate on August 20th 2021.
WQ2	P6	An existing 24-inch ditch relief culvert (DRC) that is accepting run-off from 600 feet of ditch. There is active gully erosion occurring downslope of the DRC in the grassland soils.	Pending Applicable Permits	Adjacent land owner will Install four new ditch relief culverts on the road that leads to this location.	Adjacent landowner is currently in the process of coordinating with the road association and hiring contractors to hydrological disconnect this inside ditch and install appropriately space ditch relief culverts. Work is expected to initiate on August 20th 2021.
WQ3	P5	8-inch culvert on a Class III stream	Pending Applicable Permits	The existing culvert will be replaced with a new 18-inch CMP, installed at an 18 percent grade.	Pending Applicable permits LSAA (Feb 2022) 401(April 2022) Expected work initiation in June 2022
WQ4	P4	Rusted 8.5 Inch Metal culvert located on a Class III watercourse	Pending Applicable Permits	The existing culvert will be replaced with a new 18-inch CMP, installed at an 29 percent grade.	Pending Applicable permits LSAA (Feb 2022) 401(April 2022) Expected work initiation in June 2022
WQ5	P3	Class III stream crossing with a 12-inch corrugated plastic culvert installed not to grade.	Pending Applicable Permits	The existing culvert will be replaced with a new 18-inch CMP, installed at an 17 percent grade.	Pending Applicable permits LSAA (Feb 2022) 401(April 2022) Expected work initiation in June 2022

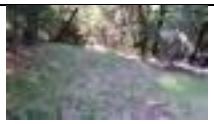
Waterboard Inspection Point	Corresponding Project Site Reference	Project Description	Project Current Status	Project Recommendations	Project Timeline
WQ6	P2	Class III stream crossing with a 12-inch CMP, undersized and rusted through, shotgun outlet.	Pending Applicable Permits	Replaced with a new 18- inch CMP, installed at a 19 percent grade. Further specifications are referenced in the submitted CRM, and will be addressed in the SMP, LSAA, and 401 to come.	Pending Applicable permits LSAA (Feb 2022) 401(April 2022) Expected work initiation in August 2022 Installation of additional DRC's
WQ7	P1	Class III stream crossing with a 12-inch CMP. This culvert is undersized with a shotgun outlet	Pending Applicable Permits	This culvert is proposed to be replaced with a new 18-inch CMP, installed at a 28 percent grade.	Pending Applicable permits LSAA (Feb 2022) 401(April 2022) Expected work initiation in June 2022
WQ8		Inadequate Watercourse Crossing	Pending Applicable Permits	Pending Site Management Plan/ LSAA Recommendations	Pending Applicable permits LSAA (Feb 2022) 401(April 2022) Expected work initiation in June 2022
WQ9	P7	Inadequately drained inside ditch. A 24" DRC that is accepting too much flows resulting in erosion at the outlet.	No Change	Install two ditch relief culverts on the road approach/ inside ditch at appropriately placed intervals to reduce the amount of flows associated at this site.	Work is expected to initiate in August 19th 2021
WQ10	P8	Existing 12-inch ditch relief culvert (DRC) That is accepting flows from and inadequately drained inside ditch.	No Change	Replace the existing DRC with an 18-inch CMP at a steeper grade. Flows will be reduced due to installation of DRCs above this project location.	Work is expected to initiate in August 19th 2021
WQ11	P24	Pond Overflow consisting of 24" outlet armored with woody debris.	No Change	Armor pond overflow outlet	Pending Applicable permits LSAA (Feb 2022) 401(April 2022) Expected work initiation in April 2023
WQ12	NA	Spring Point of Diversion	No change	Decommision Spring	Pending applicable permnits
WQ13	NA	Legacy crossing with historic structure material in the channel	No change	Pending	Pending Applicable permits LSAA (Feb 2022) 401(April 2022) Expected work initiation in June 2023

Waterboard Inspection Point	Corresponding Project Site Reference	Project Description	Project Current Status	Project Recommendations	Project Timeline
WQ14	NA	Legacy scrap metal located in watercourse channel below a watercourse crossing on a legacy road.	No Change	Pending	Pending Applicable permits LSAA (Feb 2022) 401(April 2022) Expected work initiation in June 2023
WQ15	NA	Waste Potting soils	Soils have been removed and area has revegetated with native grasses	Recommendations Complete	Completed
WQ16	NA	Greenhouse Bordering wetlands	Greenhouse structure still exists wetland has been delineated and associated buffer t the greenhouse was found to be adequate. No cannabis cultivation has taken place on this property since the original violation.	None	None
WQ17	P09	18-inch CMP on a 2-foot-wide, Class II channel	No Change	Is proposed to be upgraded with a new 24-inch CMP.	Pending Applicable permits LSAA (Feb 2022) 401(April 2022) Expected work initiation in June 2023
WQ18	P10	15-inch CMP on a Class III watercourse. Undersized, Plugged inlet and Shotgun Outlet	No Change	It is proposed to upgrade to an 18" culvert .	Pending Applicable permits LSAA (Feb 2022) 401(April 2022) Expected work initiation in June 2023
WQ19	P11	18" CMP located on a Class III watercourse crossing. Rusted through, not functioning adequately.	No Change	Proposed to Upgrade to an 18" culvert.	Pending Applicable permits LSAA (Feb 2022) 401(April 2022) Expected work initiation in June 2024
WQ20	NA	Inadequately drained section of road.	No change	Road drainage features are pending recommendations from Site Management Plan expected to be completed by September 2021. Work is expected to initiate in 2022.	None

Waterboard Inspection Point	Corresponding Project Site Reference	Project Description	Project Current Status	Project Recommendations	Project Timeline
WQ21	NA	Watercourse Crossings with and 18" Plastic Culvert. To short causing erosion on the inlet and outlet.	No Change	This section of road is expected to be decommissioned of which the crossings will be pulled and water bars installed. Any and all work within or near stream channels is pending a Final Agreement from CDFW.	Pending Applicable permits LSAA (Feb 2022) 401(April 2022) Expected work initiation in June 2022
WQ22	P23	Removal and Stream Channel Restoration Project 23 is currently an 18-inch corrugated plastic culvert on a Class III stream crossing. This culvert is misaligned and not outflowing into the correct watercourse causing erosion to the outlet.	No Change	The recommendation is to restore this site and return the flow course to its original channel pending applicable permits	Pending Applicable permits LSAA (Feb 2022) 401(April 2022) Expected work initiation in June 2022
NA	P22	Discontinuation of Illegal Water Diversion	The use of this water diversion has been ceased	Remove Diversion infrastructure pending applicable permits (LSAA)	Pending Applicable permits LSAA (Feb 2022) 401(April 2022) Expected work initiation in June 2022
NA	P25	8-inch CMP (corrugated metal pipe) on a Class III stream	No change	replaced with an 18-inch CMP set to approximate channel grade	Pending Applicable permits LSAA (Feb 2022) 401(April 2022) Expected work initiation in June 2022
NA	P26	Section of road that is inadequately drained	No change	Install Rolling Dip	Work expected to initiate June 2022

Work Completion Report

Waterboard Inspection Point	Corresponding Project Site Reference	Project Description	Project Recommendation	Project Current Status	Project Timeline	Before	After
NA	P12	Removal of Grow Area 1 from Riparian Protection Buffer Legacy Cultivation Materials consisting of pots, potting soil, fencing, netting, fencing and stakes.	Clean up and dispose of all cultivation related waste at a licensed waste disposal facility.	All cultivation materials have been clean from this site. The associated location has completely grassed over.	Recommendation Completed	No Picture	 ETA Humboldt July 15th,2021
NA	P13	Removal of Grow Area 2 from Riparian Protection Buffer. Legacy Cultivation Materials consisting of pots, potting soil, fencing, netting, fencing and stakes.	All Cannabis-related infrastructure at the site will be completely removed. This includes all remaining irrigation materials, pots, and refuse such as nutrient containers and plastic support netting.	All cultivation materials have been clean from this site. The associated location has completely grassed over.	Recommendation Completed	 NRM, June 15, 2017	 ETA Humboldt July 15th,2021
NA	P14	**Removal of Grow Area 3 from Riparian Protection Buffer**	Clean up all remaining infrastructure included smart pots, potting soil, stakes, fencing, and bags of trash and fertilizer	All cultivation materials have been clean from this site. The associated location has completely grassed over.	Recommendation Completed	 NRM, June 15, 2017	 ETA Humboldt July 15th,2021

Waterboard Inspection Point	Corresponding Project Site Reference	Project Description	Project Recommendation	Project Current Status	Project Timeline	Before	After
NA	P15	**Removal of Grow Area 4 from Riparian Protection Buffer**	All Cannabis-related infrastructure at the site will be completely removed. This includes all irrigation materials, pots, and refuse such as nutrient containers and plastic support netting.	All remaining Cannabis related materials have been removed.	Recommendation Completed	 NRM, June 15, 2017	 ETA Humboldt July 15th,2021
NA	P16	Removal of Grow Area 5 from Riparian Protection Buffer	Removal of the remaining soil and pots at this location.	All remaining Cannabis related materials have been removed.	Recommendation Completed	 NRM, June 15, 2017	 ETA Humboldt July 15th,2021
NA	P17	**Removal of Grow Area 6 from Riparian Protection Buffer**	All cultivation related materials had been removed prior to NRM site inspection on May 5, 2017	Completed Area was grassed over at the time of inspection. Remaining fencing and soil were removed since NR's Site inspection.	Recommendation Completed	 NRM, June 15, 2017	 NRM, June 15, 2017
NA	P18	**Removal of Grow Area 7 from Riparian Protection Buffer**	Remove all remaining cultivation related materials consisting of soil, and miscellaneous refuse.	All remaining trash and cultivation related materials have been removed. One small travel trailer.	Recommendation Completed	None	 ETA Humboldt July 15th,2021

Waterboard Inspection Point	Corresponding Project Site Reference	Project Description	Project Recommendation	Project Current Status	Project Timeline	Before	After
NA	P19	Illegal septic system/ travel trailer	Remove or permit the existing septic system.	Trailer and all domestic/ cultivation relate waste have been removed. Septic system is still in place.	Work / permitting on this site is expected to begin June 2022.	 NRM, June 15, 2017	 ETA Humboldt July 15th,2021
NA	P20	Removal of Trash and Wastes Threatening Water Quality	Is cultivation-related and domestic garbage and wastes located at various sites throughout the property (Photos 51-55). These materials include plastic containers, tarps, pallets, irrigation materials, spent potting soils, buckets, stales, plastic ties, bottles and empty soil bags, among others	All materials must be disposed of at a licensed waste disposal facility, and all disposal receipts must be kept as proof of proper disposal.	Recommendation Completed	 NRM, June 15, 2017	 ETA Humboldt July 15th,2021
NA	P21	Removal of Water Storage Tank from Watercourse	Remove these tanks and place outside of the riparian buffer.	Tanks have been removed.	Recommendation Completed	 NRM, June 15, 2017	 ETA Humboldt July 15th,2021

APPLICATION PACKET CHECKLIST

Please check below to ensure you have a complete application. Once complete, email the following documents, in pdf format with the text "Application for Remediation Grant Program Funding" in the subject line to mrichardson@co.humboldt.ca.us.

- X Signed Application Submission Form
- X Project Description – Summary of the Project, up to 2 pages.
- X Plot Plan
- X Plot Plan Checklist – Attached
- X Cross sections of proposed work including topographic elevations
- X Scope of Work – Detailed Description of Work
- X Schedule for Completion – Identify Milestones
- X Erosion Control Plan and Monitoring Plan
- X Budget – Be as specific as possible – sample attached
- X Project Maps and Figures
- ☐Letter(s) of Support (optional)

APPLICATION FORM - Commercial Cannabis Land Use Ordinance Mitigation and Remediation Fund Program

Project Title: Green Grass Farms Remediation Date of Application: 10/31/2022

Applicant Name: Green Grass Farms, LLC Project APN: 216-083-003

Contact Person Name and Title: Morgan Stoft, Managing Member

Contact Phone: (707) 223-5000 Contact Email: morganstoft@gmail.com

Contact Address: P.O. Box 190, Garberville, CA 95542

Amount Requested: $9,926.00 Total Budget: $13,784.00

Project Timeline: Start Date: 01/01/2023 End Date: 08/01/2023

Signature of Applicant: Morgan Stoft

Project: Green Grass Farms Remediation

Applicant: Green Grass Farms, LLC

Contact: Morgan Stoft

APN: 216-083-003

Grant Funding Requested: $9,926.00

Project Description

The project is located on Humboldt County APN 216-083-003, at 4244 Bell Springs Road, near Harris, California. The property is located in the Eel River watershed, and contains an unnamed Tributary to Jewett Creek, which is tributary to the Eel River.

The project proposes the decommissioning of one stream crossing, and upgrade of two undersized stream crossings as required by the applicant's Lake and Streambed Alteration Agreement with the California Department of Fish & Wildlife.

GIS indicates the parcel is in an area of high slope instability. It is not within a flood hazard zone, nor in an earthquake hazard zone. The parcel is surrounded by rural improved properties. No impact to these other parcels is expected.

Crossing upgrades are expected to minimize baseline sedimentation levels entering the watershed from the property, and will avoid potential significant impacts associated with total crossing failure. All of the crossing upgrades will be constructed according to BMPs found in the "Handbook for Forest, Ranch and Rural Roads" (Weaver, Weppner and Hagans, 2015), and the California Salmonid Stream Habitat Manual, Part X (Weaver, Hagans and Weppner, 2006).

These watercourse crossing upgrades will achieve 100-year flood event requirements and reduce potential sediment deposits into the streams that are connected to the Eel River, protecting water quality and aquatic ecosystems and limiting impact on downstream resources.

Permanent impacts to existing native channel bed, channel, watercourse banks, and associated riparian habitat will be negligible and avoided. Incidental destruction of small areas of riparian habitat growing on existing road fill or in disturbed channel areas is expected but will be minimized at the proposed sites during remediation. No loss of trees is expected.

- Stream crossing
- Pond spillway
- Point of diversion
- Well
- Water tank
- Cannabis destruction zone/compost area
- Shipping container
- Outhouse
- Proposed pond
- Quarry
- House
- Shed
- Secure cannabis waste storage area
- Water line
- Stream
- Road
- Easement road
- Property setback
- Stream setback
- Slope direction/%
- Parking space
- Graded area
- Cultivation area
- Old cultivation area
- Accessory propogation area
- Pond
- Streamside management area (SMA) - 51-ft centerline buffer (See note)
- 600 ft buffer around cultivation area
- APN 216-083-003

Abbreviations:
SC - Stream crossing
CA - Cultivation area
POD - Point of diversion
<P> - Proposed

0 100 200 400 Feet

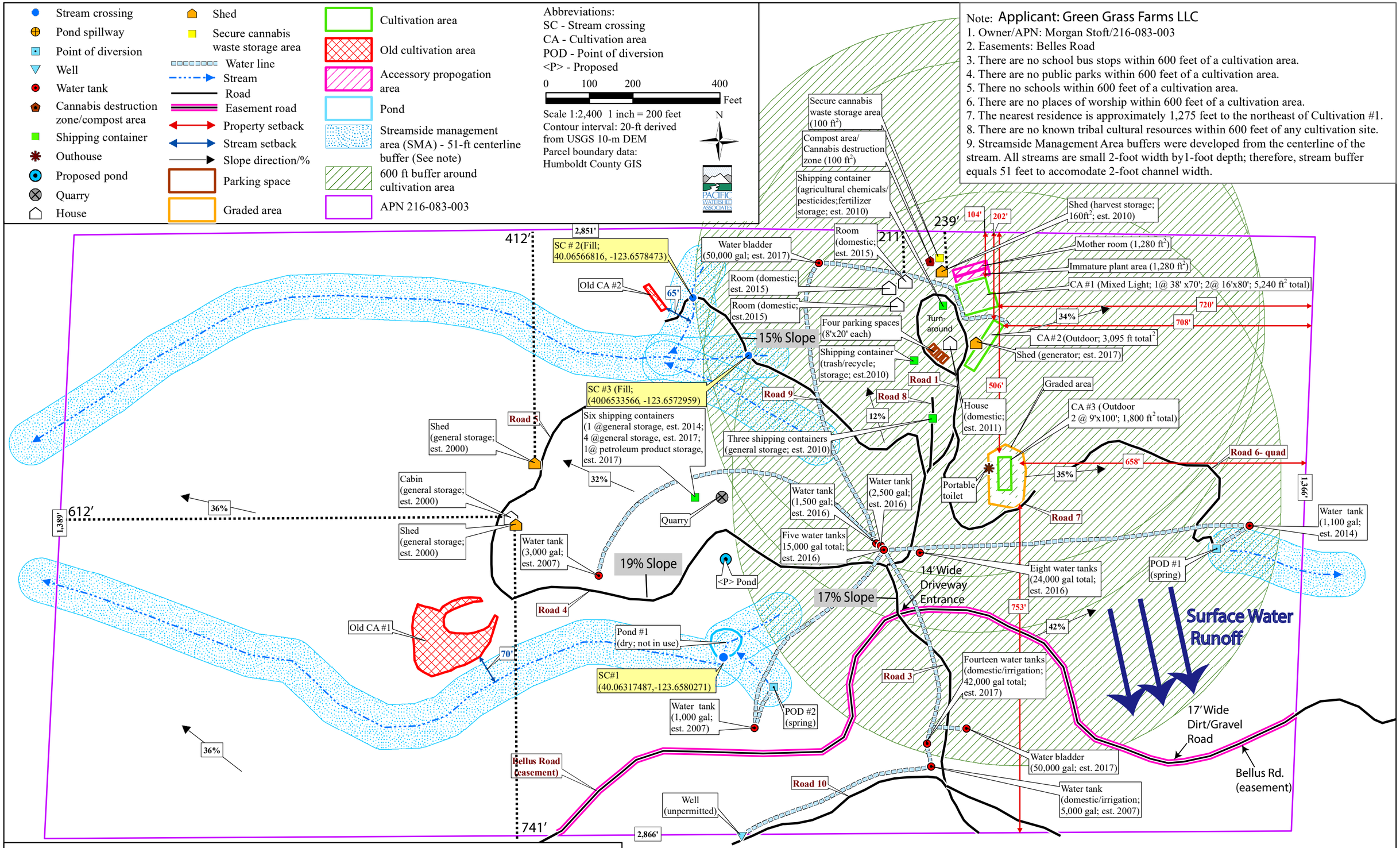
Scale 1:2,400 1 inch = 200 feet
Contour interval: 20-ft derived from USGS 10-m DEM
Parcel boundary data: Humboldt County GIS

N

PACIFIC WATERSHED ASSOCIATES

Note: Applicant: Green Grass Farms LLC

1. Owner/APN: Morgan Stoft/216-083-003
2. Easements: Belles Road
3. There are no school bus stops within 600 feet of a cultivation area.
4. There are no public parks within 600 feet of a cultivation area.
5. There no schools within 600 feet of a cultivation area.
6. There are no places of worship within 600 feet of a cultivation area.
7. The nearest residence is approximately 1,275 feet to the northeast of Cultivation #1.
8. There are no known tribal cultural resources within 600 feet of any cultivation site.
9. Streamside Management Area buffers were developed from the centerline of the stream. All streams are small 2-foot width by1-foot depth; therefore, stream buffer equals 51 feet to accomodate 2-foot channel width.



Humboldt CCLUO Site Plan for Morgan Stoft, APN 216-083-003, Harris, Humboldt County, California.

P:\GIS\5312

REV. 10/30/2022

PLOT PLAN AND TENTATIVE MAP CHECKLIST

The following information must be shown on your plot plan or tentative map. Please check ✓ the box to the left of the items shown on the plot plan or tentative map. If any item is <u>not</u> on your site to your knowledge, write "N/A" next to the box. Plot plans shall be drawn on a minimum size sheet of 8-1/2" x 11", and tentative subdivision maps on a minimum size sheet of 18" x 26". ***<u>Note:</u> This Checklist must be completed by the applicant and submitted with your application.***

Applicant's Name Green Grass Far□s Re□ediation APN 21□-□□3-□□3 _____

FOR ALL PROJECTS

☐ 1. Name of applicant(s)
☐ 2. Location or vicinity map (on or attached to the plot plan)
☐ 3. The subject parcel (show entire parcel with dimensions)
☐ 4. Date, north arrow and scale
☐ 5. Name, County road numbers, and width of all existing and proposed access roadways adjacent to or within the subject parcel (indicate width of traveled way, grade (in % slope), and surface)
☐ 6. Existing <u>and</u> proposed improvements (label as "existing" and "proposed" with dimensions and distance to nearest two (2) property lines)
- ☐ a. Structures and buildings (include floor area, height and proposed use)
- ☐ b. Driveways and turnaround areas (indicate width, grade (in % slope) and surface)
- ☐ N/A ☐ c. Utility lines (electric, gas, telephone, sewer, water, and cable TV)
- ☐ d. Septic tanks and leachfields (label primary/reserve areas and test holes)
- ☐ e. Wells
- ☐ f. Parking and loading areas (show individual parking spaces, including handicapped parking and ramps)
- ☐ N/A ☐ g. Storm drains, curbs and gutters
- ☐ h. Emergency water storage tanks and fire hydrants
- ☐ N/A ☐ i. Landscaped areas (include proposed exterior lighting)
- ☐ N/A ☐ j. Major vegetation (identify mature trees (12" dbh or larger) to be removed)
- ☐ N/A ☐ k. Diked areas
- ☐ N/A ☐ l. Proposed grading and fill (estimate volume)
- ☐ N/A ☐ m. Signs (indicate size, illuminated, and design (e.g., monument, pylon, etc.))
- ☐ N/A ☐ n. Other - specify _____

☐ 7. Direction of surface water runoff
☐ 8. Location and width of all existing and proposed easements of record
☐ ☐ N/A 9. Hazardous areas (indicate on map if on the project site <u>or</u> within 400 feet of the project site):
- ☐ N/A ☐ a. Areas subject to inundation or flooding
- ☐ N/A ☐ b. Steep or unstable slopes
- ☐ N/A ☐ c. Expansive (clay) soils
- ☐ N/A ☐ d. Earthquake faults
- ☐ N/A ☐ e. Hazardous waste or substance sites
- ☐ f. Other - specify _____

☐ 10. Sensitive habitat areas (indicate on map if on project site <u>or</u> within 400 feet of the project site):
- ☐ a. Creeks, rivers, sloughs and other drainage courses
- ☐ b. Lakes, ponds, marshes, or "wet" meadows
- ☐ N/A ☐ c. Beaches
- ☐ N/A ☐ d. Sand dunes
- ☐ e. Other - specify _____

☐ ☐ N/A 11. Historical buildings or known archaeological or paleontological resources
☐ ☐ 12. Land use and buildings on adjacent parcels, and approximate distances to closest property lines

FOR LOT LINE ADJUSTMENT PLOT PLANS ONLY

☐ ☐ N/A 13. Proposed new lines and lines to be eliminated (show lines to be eliminated as dashed)
☐ ☐ N/A 14. Areas (in square footage or acreage) of the initial and resulting parcels

FOR TENTATIVE SUBDIVISION MAPS ONLY

☐ ☐ N/A 16. Approximate dimensions and areas of all proposed lots
☐ ☐ N/A 17. A statement that "All easements of record are shown on the tentative map and will appear on the recorded subdivision map"
☐ ☐ N/A 18. Contour lines (at _____ intervals)
☐ ☐ N/A 19. For major subdivisions (5 or more parcels): proposed drainage improvements, details of any grading to be performed, approximate radii of all roadway curves, areas for public use, and typical sections of all streets, highways, ways and alleys
☐ ☐ N/A 20. Names and assessor's parcel numbers of all contiguous ownerships

NOTE: THE SUBMITTAL OF INCOMPLETE OR ILLEGIBLE PLOT PLANS OR TENTATIVE MAPS WILL CAUSE DELAYS IN THE PROCESSING OF YOUR APPLICATION

Project: Green Grass Farms Remediation

Applicant: Green Grass Farms, LLC

Contact: Morgan Stoft

APN: 216-083-003

Grant Funding Requested: $9,926.00

Scope of Work

The purpose of the project is to decommission one stream crossing, and upgrade two others. The scope of work is described in the applicant's LSA agreement with Fish & Wildlife, and is summarized as follows:

Crossing 1: Decommission a dirt ford stream crossing and restore the stream channel. There is an existing dirt ford on a Class II crossing. As it is no longer in use, the crossing requires no significant grading; just minor back-blading of disturbed soil to sculpt the approaches and slightly widen the channel per specifications. The work will require approximately 7 cubic yards of fill (20 feet long by 1 foot deep by 10 feet wide) and 200 square feet of overall disturbance (20 feet in length and 10 feet in width). No loss of trees or vegetation is expected.

Crossing 2: Upgrade crossing to a more stable rock ford. Site was an existing dirt/rock ford used for accessing a historic cultivation site. As the cultivation has been relocated, the road is not used extensively by the applicant. Given the rocky nature of the road bed, work at this crossing only requires placement of a rock armored apron or armored fill-slope extending from the outboard edge of the road down the base of the fill to the natural channel. The crossing upgrade will require the placement of approximately 5-10 cubic yards of small rip rap to armor the fill-slope (20 feet long by 1 foot deep by 10 feet wide) and 200 square feet of overall disturbance (20 feet length and 10 feet width). No loss of trees or vegetation is expected.

Crossing 3: Upgrade crossing to a more stable rock ford. Site was an existing dirt/rock ford used for accessing a historic cultivation site. As the cultivation has been relocated, the road is not used extensively by the applicant. Given the rocky nature of the road bed, work at this crossing only requires placement of a rock armored apron or armored fill-slope extending from the outboard edge of the road down the base of the fill to the natural channel. The crossing upgrade will require the placement of approximately 5-10 cubic yards of small rip-rap to armor the fill-slope (20 feet long by 1 foot deep by 10 feet

wide) and 200 square feet of overall disturbance (20 feet length and 10 feet width). No loss of trees or vegetation is expected.

Prior to starting project operations, the applicant will work with Timberland Resource Consultants to obtain a 401 certification permit for the work.

Margro Advisors will work with the applicant on maintaining compliance with local and State regulations, and provide support for the project's grant administration and reporting, as needed.

Project: Green Grass Farms Remediation

Applicant: Green Grass Farms, LLC

Contact: Morgan Stoft

APN: 216-083-003

Grant Funding Requested: $9,926.00

Mitigation and Remediation Fund
Schedule for Completion

Milestone	Start Date	End Date
Permitting	January 1, 2023	May 1, 2023
Final Bidding and Contracting	May 1, 2023	May 31, 2023
Project Ground-Breaking	June 1, 2023	
Project Completion		August 1, 2023
Monitoring	August 1, 2023	Ongoing

Project: Green Grass Farms Remediation

Applicant: Green Grass Farms, LLC

Contact: Morgan Stoft

APN: 216-083-003

Grant Funding Requested: $9,926.00

Erosion Control and Monitoring Plan

To protect nearby watershed areas and nearby habitat the site is managed to meet standard conditions and follow best practices in accordance with guidelines provided by the North Coast Regional Water Quality Control Board (NCRWQCB). These practices address erosion control and drainage features, spoils management, water storage and use, irrigation runoff, fertilizers and pesticides, and stream and wetland buffers when applicable.

Best practice steps for this site can include:

- Moderate road shaping and ditch-relief used to optimize drainage to stable areas
- Out-sloping maintained to ensure proper capture and capacity of seasonal flow
- Usage of vegetative ground cover and gravel for added sediment control
- Application of straw mulch to exposed soils to minimize erosion
- Careful irrigation, with immediate oversight, to reduce the possibility of irrigation runoff

Applicant will maintain driveways and access roads to eliminate erosion or runoff during storms. Prior to the winter season and significant storm events, roads and cultivation sites will be inspected and monitored to ensure that runoff is prevented. Culverts will be inspected to ensure armoring is maintained and any debris or sediment has been removed..

If potential issues are discovered during or immediately following a storm event, they will be corrected as soon as possible to ensure minimal impact and prevent sediment flow in the future. This will include proper ditching and vegetation buffers, and as needed, straw, seed, wattles, jute cloth, riprap, or other industry standards used to prevent and eliminate runoff.

Project: Green Grass Farms Remediation

Applicant: Green Grass Farms, LLC

Contact: Morgan Stoft

APN: 216-083-003

Grant Funding Requested: $9,926.00

Total Budget: $13,784.00

Project Budget

Item	Grant Funds	Other Funds (Source)
Permit Fees		
SWRCB 401 Certification		$2,417.00 (Applicant)
Consultant and Professional Fees		
Timberland Resource Consultants	$1,059.00	$1,441.00 (Applicant)
Margro Advisors	$595.00	
*Materials, Equipment and Labor**		
Timber Ridge Land Development LLC	$8,272.00	
Totals	**$9,926.00**	**$3,858.00**

*See attached bid

Timber Ridge Land Development LLC

From TRLD LLC
po Box 190
Address Line 2
Gaberville

Invoice For Green Grass Farms LLC
4244 Bell Springs RD
Address Line 2
Garberville Ca 95542

Invoice ID 001
Issue Date 10/25/2022
PO Number
Due Date

Subject 3 Stream Crossing

Description	Quantity	Unit Price	Amount
Dump Truck	18	140.00	2,520.00
Excavator	16	180.00	2,880.00
Skid Steer	8	125.00	1,000.00
Rock	6	312.00	1,872.00
			0.00
			0.00

Subtotal 8,272.00

Discount (0.25 = 25%) 0%

Amount Due **8,272.00**

Notes

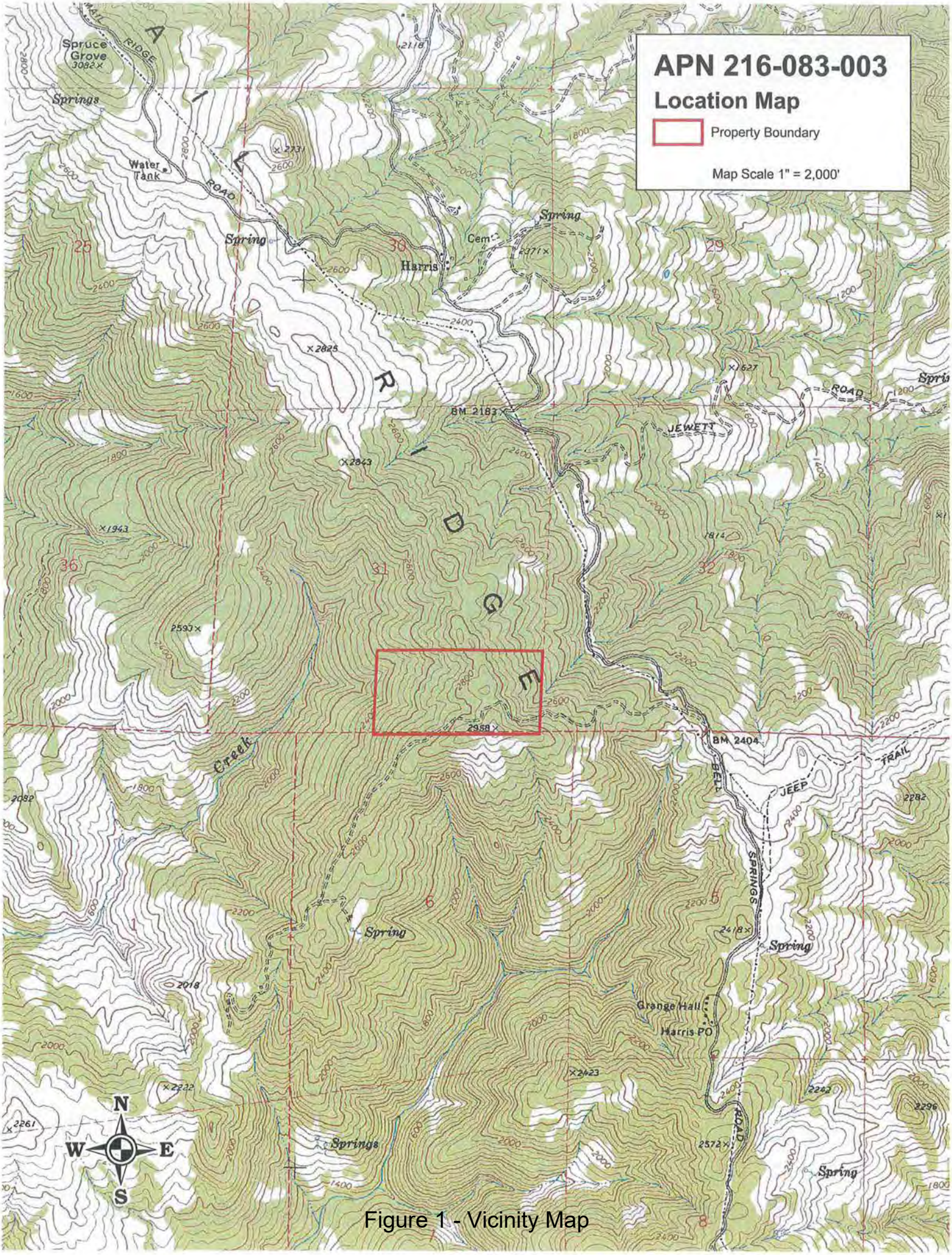
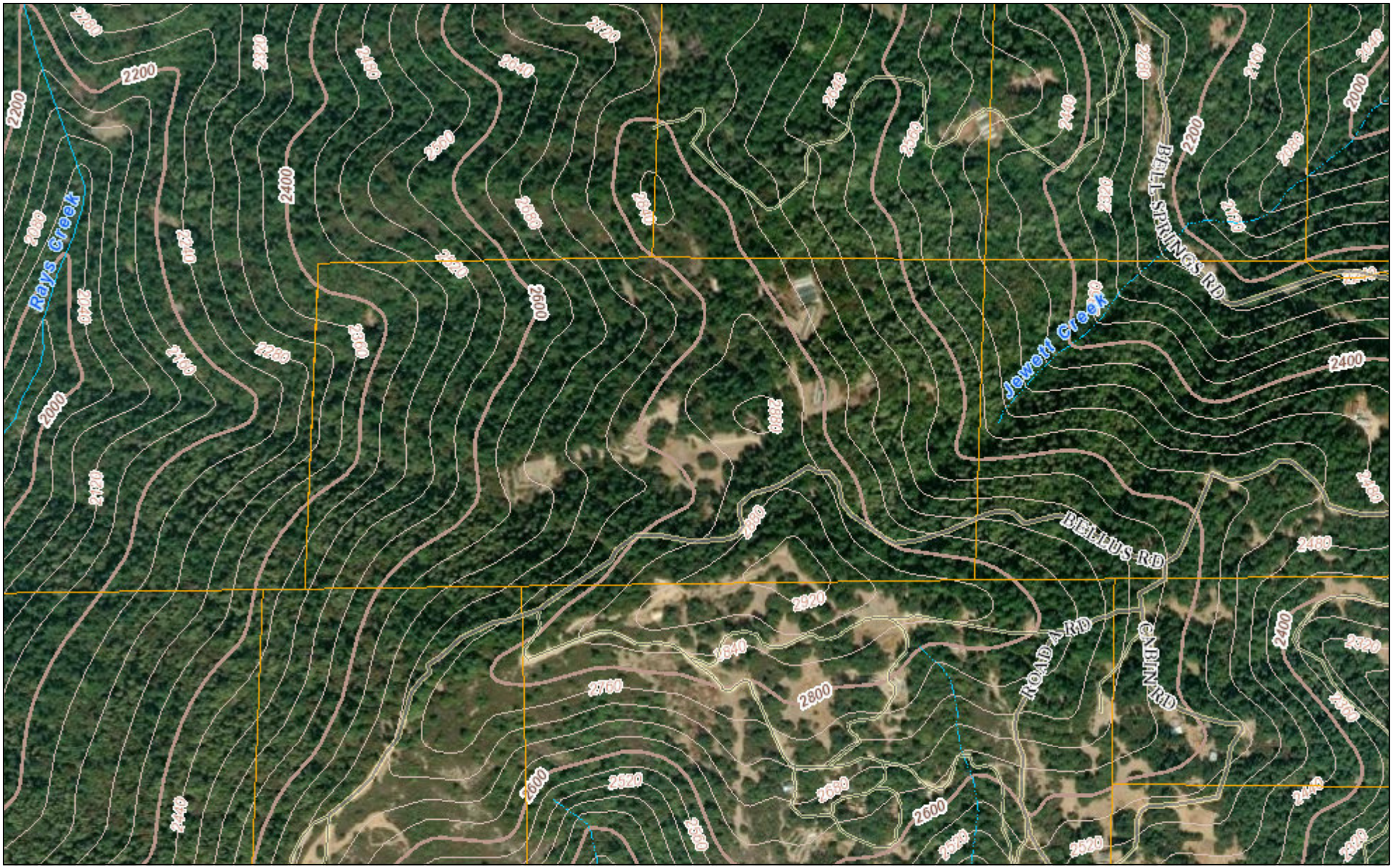


Figure 1 - Vicinity Map



M Stoft Topo Map

Humboldt County Planning and Building Department

Printed: October 25, 2022 Web AppBuilder 2.0 for ArcGIS

Map Disclaimer:
While every effort has been made to assure the accuracy of this information, it should be understood that it does not have the force & effect of law, rule, or regulation. Should any difference or error occur, the law will take precedence.

Highways and Roads
- Principal Arterials
- Minor Arterials
- Major Collectors
- Minor Collectors
- Local Roads
- Private or Unclassified

Blue Line Streams
- Perennial 1-3
- Perennial >4
- Intermittent
- Major River or Stream
- Subsurface

- City Boundary
- Counties
- Parcels (no APN labels)

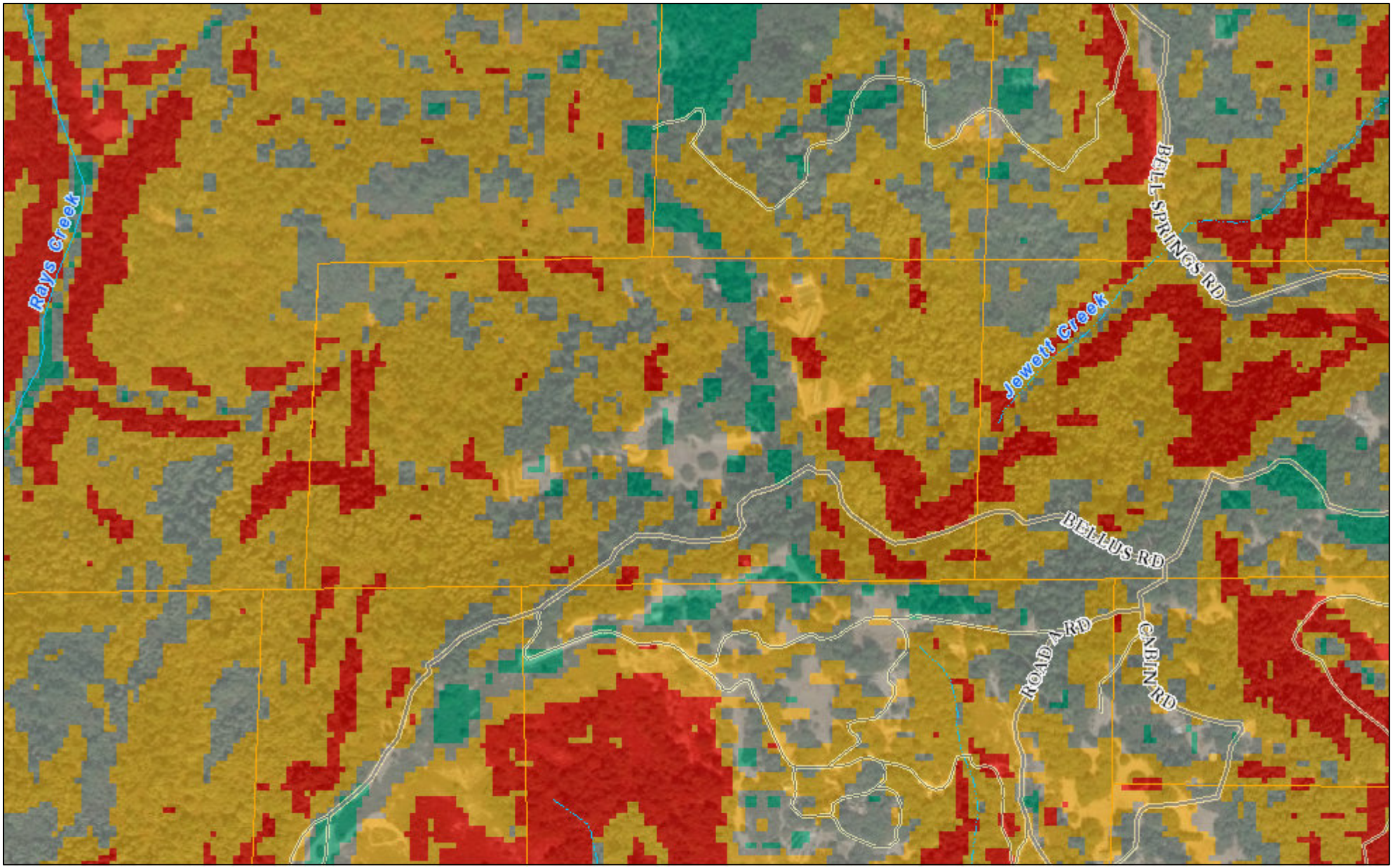
Topographic Contours 40ft
- Minor Interval
- Major Interval

0 350 700 1,400 Feet
0 0.05 0.1 0.2 Miles
RF= 1:9,028 1 in = 752 ft

N W E S

Sources: Humboldt County GIS
Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community
FRAP, FEMA. USGS. ESA, CGS
Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

Figure 2 - Topo Map



M Stoft Slope Map

Humboldt County Planning and Building Department

Printed: October 25, 2022 Web AppBuilder 2.0 for ArcGIS

Map Disclaimer:
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Highways and Roads
- Principal Arterials
- Minor Arterials
- Major Collectors
- Minor Collectors
- Local Roads
- Private or Unclassified
- Major River or Stream

Blue Line Streams
- Perennial 1-3
- Perennial >4
- Intermittent
- Subsurface
- City Boundary
- Counties
- Parcels (no APN labels)

Slope USGS
- 15-30%
- 30 - 50%
- +50%

Slope less than 15%
- <15%

0 350 700 1,400 Feet
0 0.05 0.1 0.2 Miles
RF= 1:9,028 1 in = 752 ft

N W E S

Sources: Humboldt County GIS
Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community
FRAP, FEMA. USGS. ESA, CGS
Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

Figure 3 - Slope Map

Permanent Crossing Decommissioning Specifications

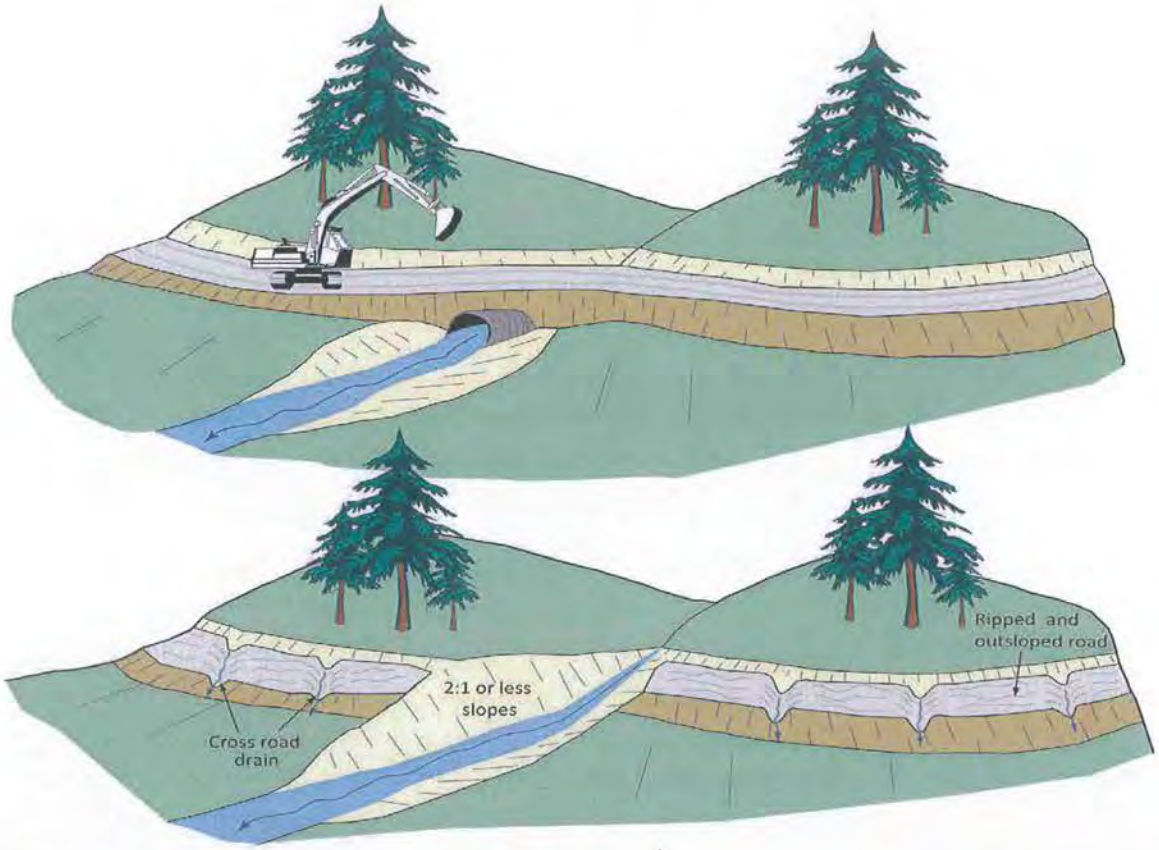


Figure 4A - Decommissioning Specifications

Permanent Crossing Decommissioning Specifications (Cont.)

On roads that are to be closed (decommissioned), all stream crossing culverts and fills should be removed. Stream crossing excavations are best performed using an excavator. The original channel should be excavated and exhumed down to the former streambed, with a channel width equal or greater than the natural channel above and below the crossing. Sideslopes should be laid back to a stable angle, typically a 2:1 (50%) gradient, or less. Spoils can be endhauled off-site or stored on the road bench adjacent the crossing, provided it is placed and stabilized where it will not erode or fail and deliver to a watercourse.

Figure 4□ - Deco□ □issioning Speci□cations

Permanent Crossing Decommissioning Specifications (Cont.)

- Excavating and removing all fill materials placed in the stream channel when the crossing was originally built.
- Fill material should be excavated to recreate the original channel grade (slope) and orientation.
- The excavated channel bed should be as wide, or slightly wider than, the original watercourse channel.
  - This can be better determined by observing the channel width of the watercourse up slope of crossing to be removed at a point in which the crossing or any other disturbance has not affected the natural channel slope and width.
- If the channel side slopes were disturbed, they should be graded (excavated) back to a stable angle (generally less than 50% (2:1)) to prevent slumping and soil movement.
- The bare soils should then be mulched, seeded, and planted to minimize erosion until vegetation can protect the surface.

The approaching, hydrologically connected road segments should be cross-road drained to prevent road runoff from discharging across the freshly excavated channel side slopes.

Figure 4C - Deco□ □issioning Speci□cations

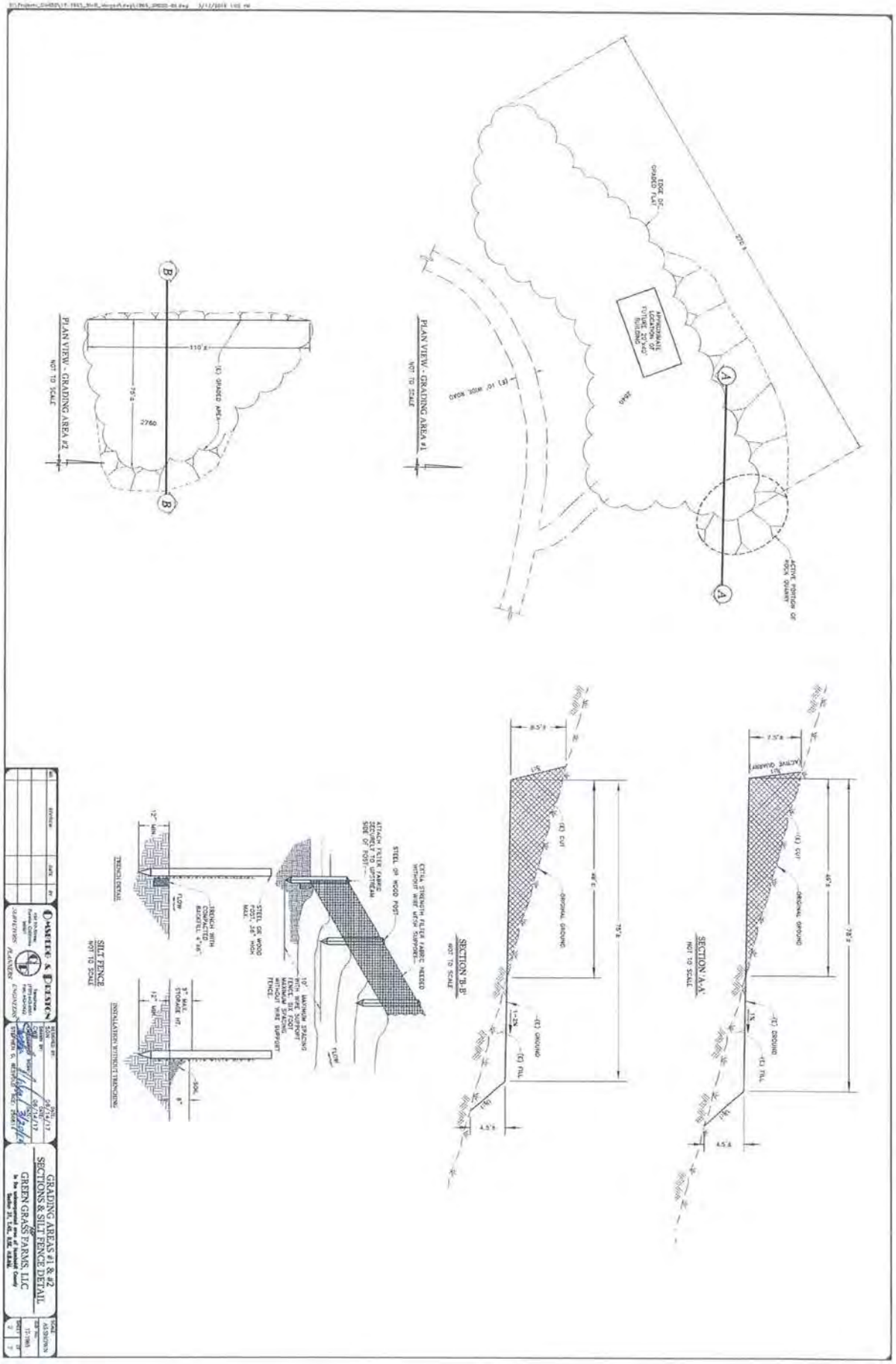


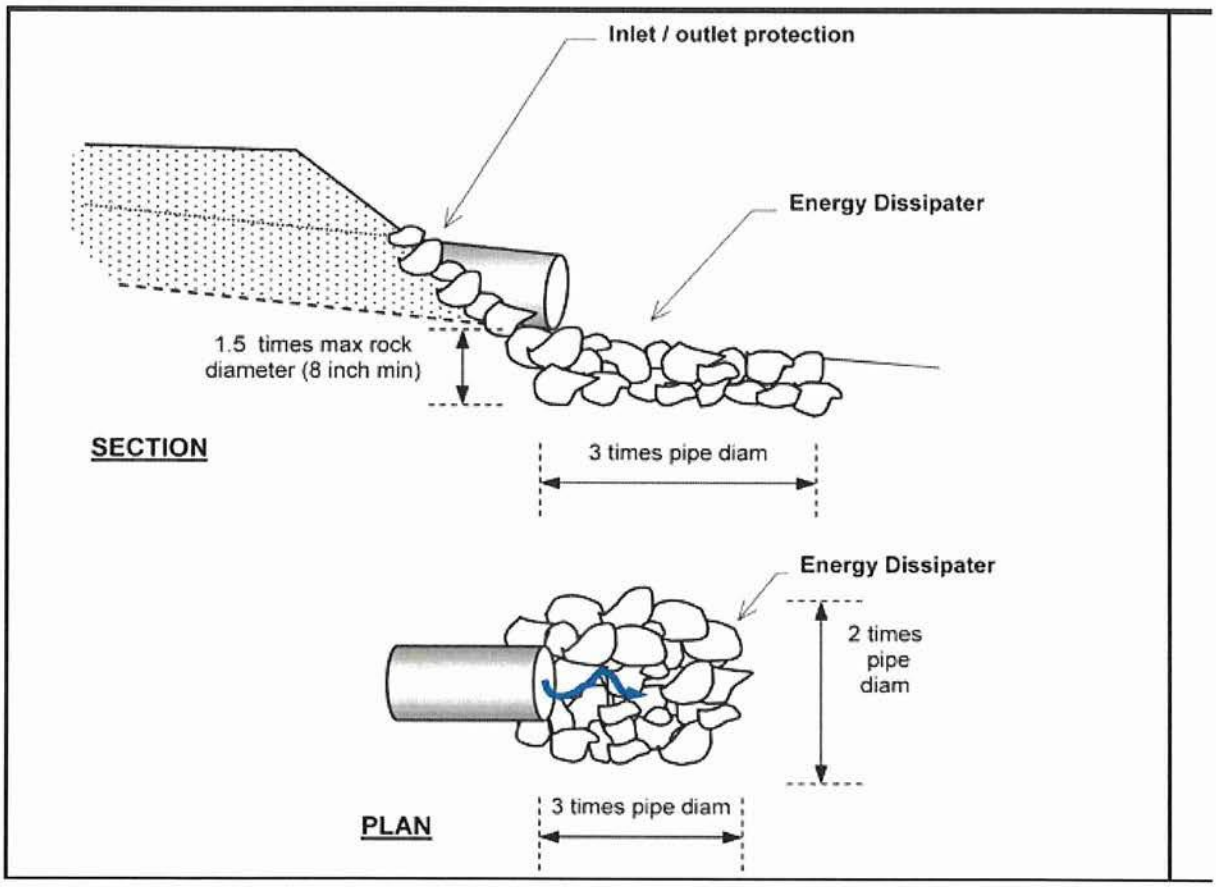
Figure 4D - Deco□ □issioning Speci□cations

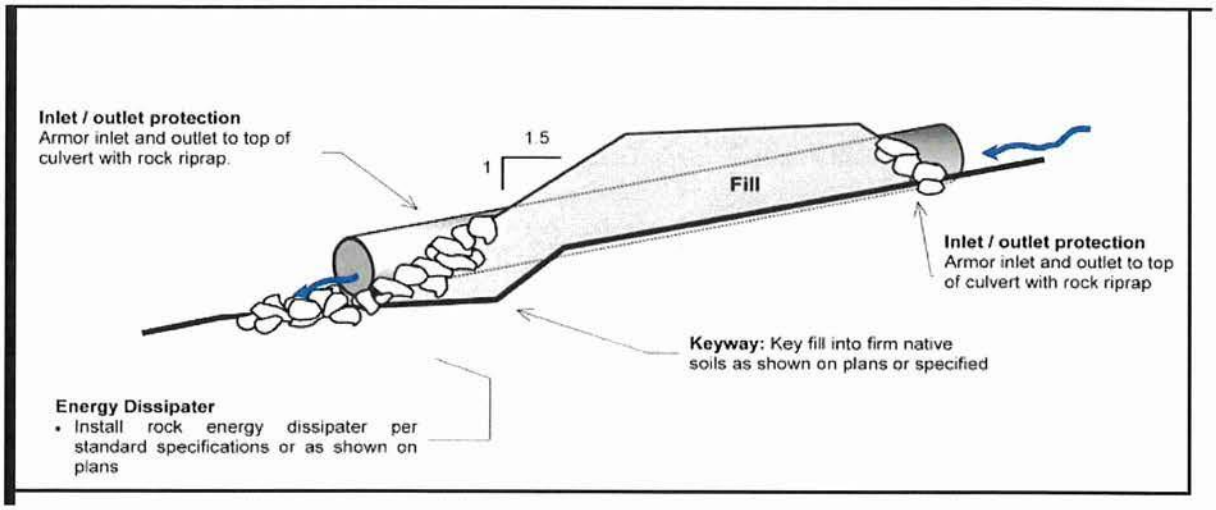
Culvert Installation Specifications

- New culvert installations shall be sized to accommodate a 100-year storm.
- New culverts shall be placed at stream gradient, or have downspouts, or have energy dissipaters at outfall.
  - Align culverts with the natural stream channel orientation to ensure proper function, prevent bank erosion and minimize debris plugging.
  - Place culverts at the base of the fill and at the grade of the original streambed or install a downspout past the base of the fill. Downspouts should only be installed if there are no other options.
  - Culverts should be set slightly below the original stream grade so that the water drops several inches as it enters the pipe.
  - Culvert beds should be composed of rock-free soil or gravel, evenly distributed under the length of the pipe.
  - Compact the base and sidewall material before placing the pipe in its bed.
  - Lay the pipe on a well-compacted base. Poor basal compaction will cause settling or deflection in the pipe and can result in separation at a coupling or rupture in the pipe wall.
  - Backfill material should be free of rocks, limbs or other debris that could dent or puncture the pipe or allow water to seep around the pipe.
  - Cover one end of the culvert pipe, then the other end. Once the ends are secure, cover the center.
  - Tamp and compact backfill material throughout the entire process, using water as necessary for compaction.
  - Backfill compacting will be done in 0.5 – 1.0 foot lifts until 1/3 of the diameter of the culvert has been covered.
  - Push layers of fill over the crossing to achieve the final design road grade, at a minimum of one-third to one-half the culvert diameter.
- Critical dips shall be installed on culvert crossings to eliminate diversion potential.
- Road approaches to crossings shall be treated out to the first drainage structure (i.e. waterbar) or hydrologic divide to prevent transport of sediment.
- Road surfaces and ditches shall be disconnected from streams and stream crossings to the greatest extent feasible. Ditches and road surfaces that cannot be feasible disconnected from streams or stream crossings shall be treated to reduce sediment transport to streams.
- If downspouts are used, they shall be secured to the culvert outlet and shall be secure on fill slopes.
- Culverts shall be long enough so that road fill does not extend or slough past the culvert ends.
- Inlet of culverts and associate fill shall be protected with appropriate measures that extend at least as high as the top of the culvert.
- Outlet of culverts shall be armored with rock if road fill sloughing into channel can occur.
- Armor inlets and outlets with rock, or mulch and seed with grass as needed (not all stream crossings need to be armored).
- Where debris loads could endanger the crossing a debris catchment structure shall be constructed upstream of the culvert inlet.
- Bank and channel armoring may occur when appropriate to provide channel and bank stabilization.

Figure □A - Cul□ert Speci□cations

Culvert Installation Specifications

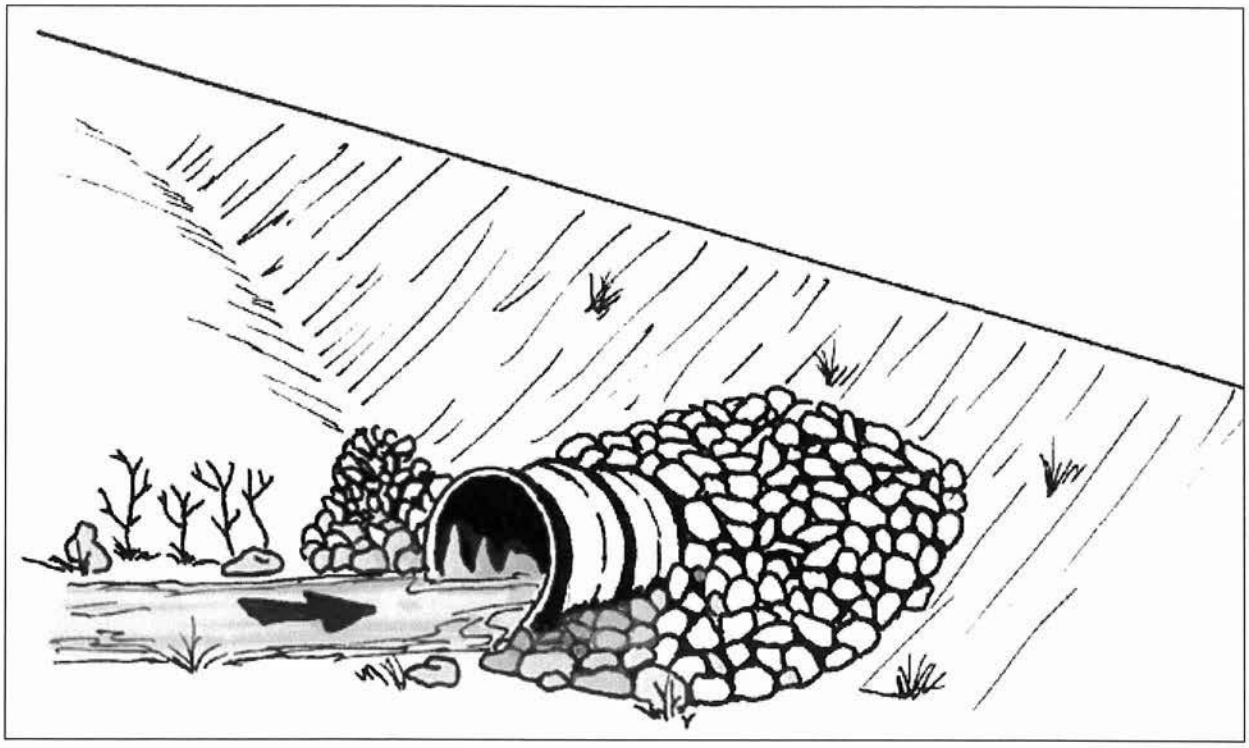




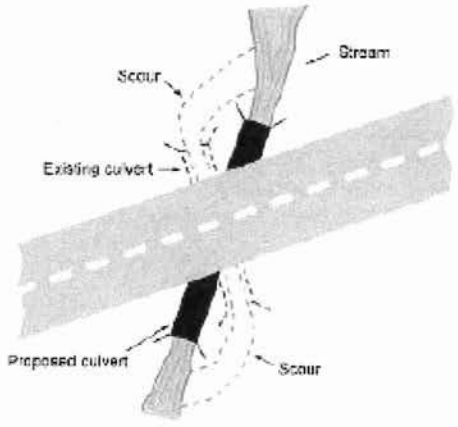
Riprap installed to protect the inlet and outlet of a stream crossing culvert from erosion or for energy dissipation should be keyed into the natural channel bed and banks to an approximate depth of about 1.5x the maximum rock thickness. Riprap should be placed at least up to the top of the culvert at both the inlet and outlet to protect them from splash erosion and to trap any sediment eroded from the newly constructed fill slope above.

Figure □□ - Cul□ert Speci□ications

Culvert Installation Specifications



Rock armor used for inlet and outlet protection (i.e., not as energy dissipation) does not have to be sized to protect against high velocity scour. If the culvert is properly sized and its length is adequate, it should be able to transmit flood flows without scouring the inlet or eroding the outlet around the culvert. Armor shown here is designed to protect the culvert outlet and basal fill from splash erosion and from occasional submergence and currents within standing water (at the inlet) when the culvert plugs. Importantly, inlet and outlet armor also serves to trap sediment that has been eroded or slides down the new constructed fill face in its first several years, until the slope becomes well vegetated.



HANDBOOK FOR FOREST, RANCH AND RURAL ROADS

FIGURE 97. *Culvert alignment should be in relation to the stream and not the road. It is important that the stream enters and leaves the culvert in a relatively straight horizontal alignment so streamflow does not have to turn to enter the inlet or discharge into a bank as it exits. This figure shows a redesigned culvert installation that replaces the bending alignment that previously existed. Channel turns at the inlet increase plugging potential because wood going through the turn will not align with the inlet. Similarly, channel turns at the inlet and outlet are often accompanied by scour against the channel banks (Wisconsin Transportation Information Center, 2004).*

Figure □C - Cul□ert Speci□ications

Culvert Installation Specifications

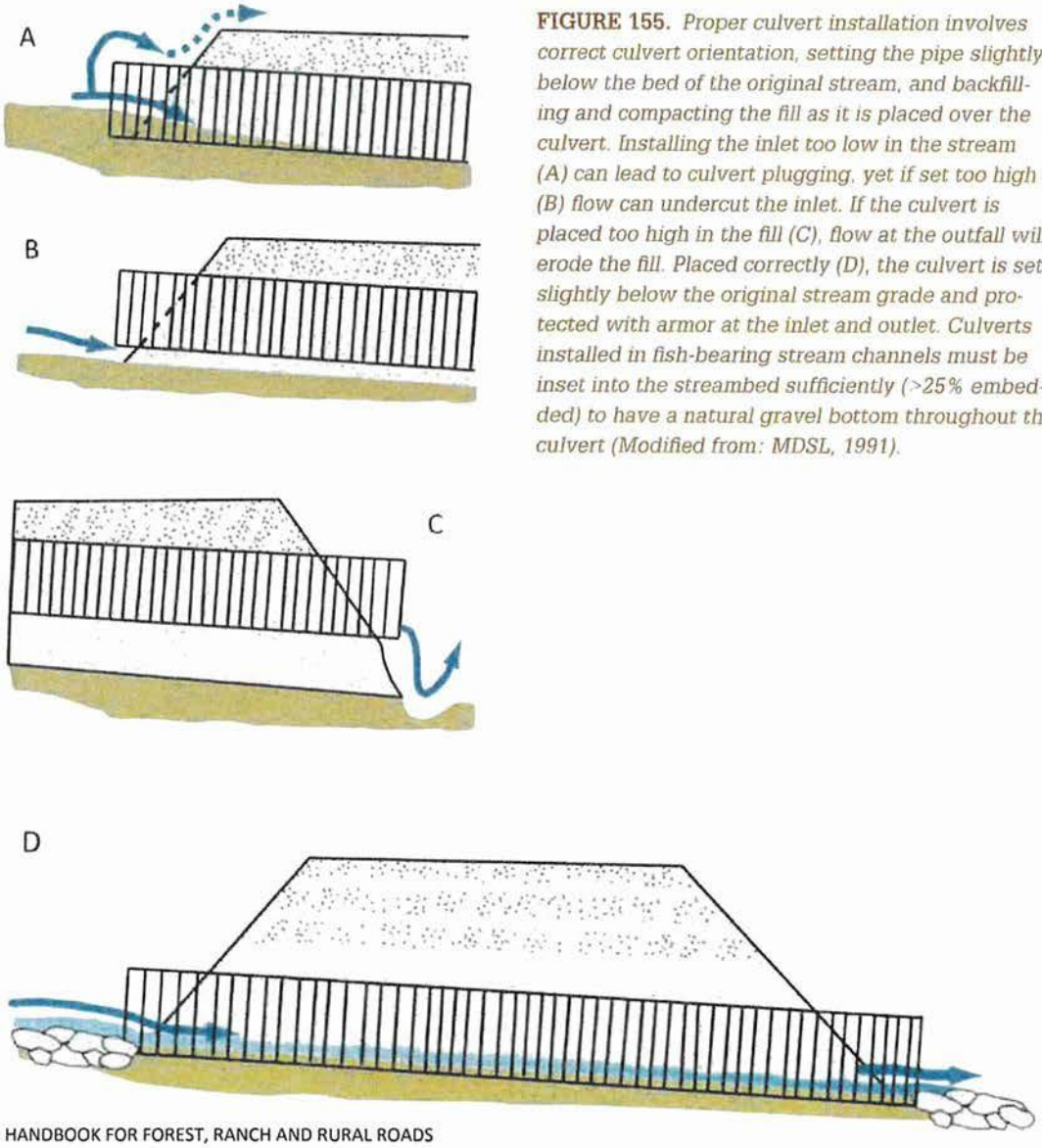
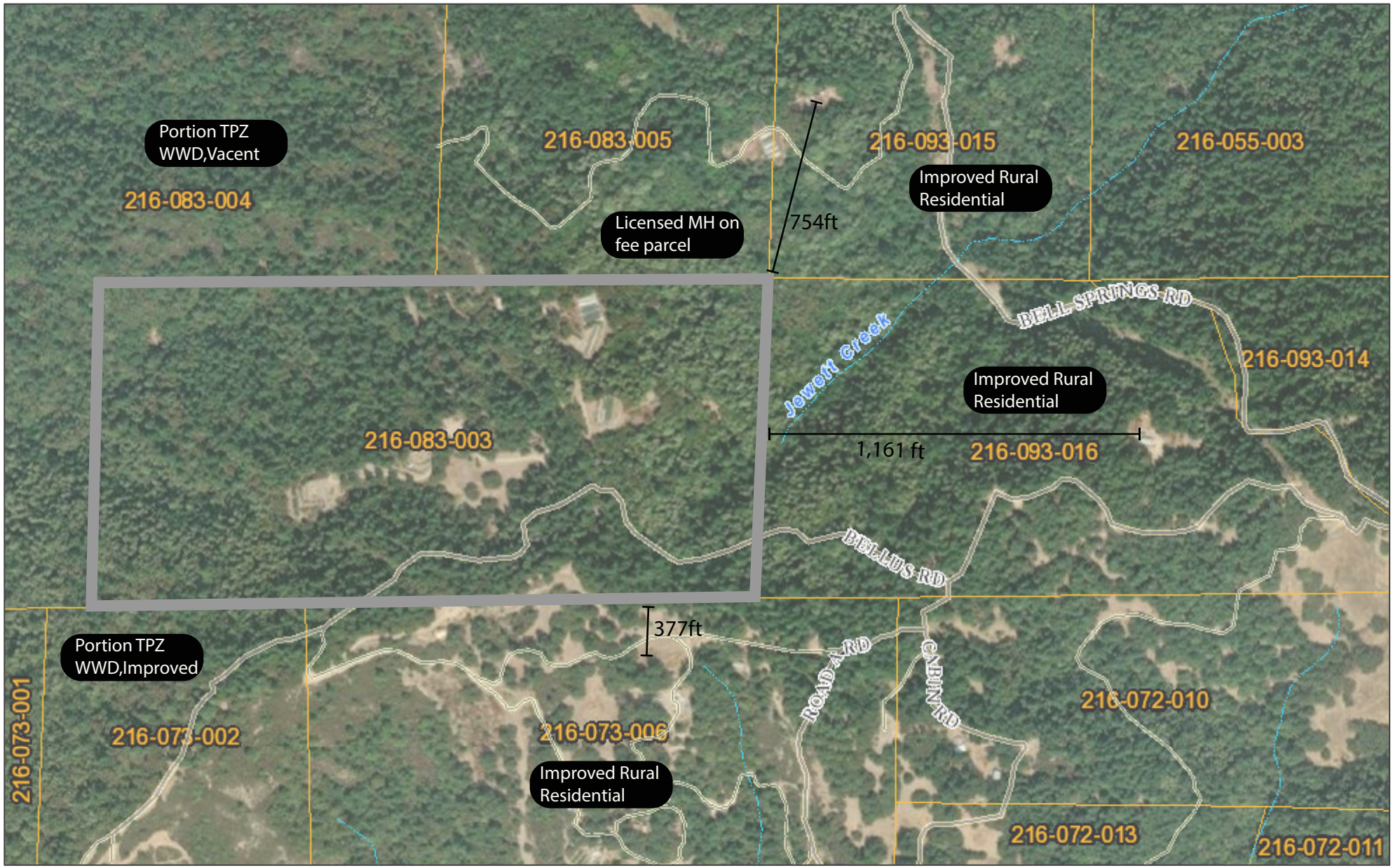


FIGURE 155. *Proper culvert installation involves correct culvert orientation, setting the pipe slightly below the bed of the original stream, and backfilling and compacting the fill as it is placed over the culvert. Installing the inlet too low in the stream (A) can lead to culvert plugging, yet if set too high (B) flow can undercut the inlet. If the culvert is placed too high in the fill (C), flow at the outfall will erode the fill. Placed correctly (D), the culvert is set slightly below the original stream grade and protected with armor at the inlet and outlet. Culverts installed in fish-bearing stream channels must be inset into the streambed sufficiently (>25% embedded) to have a natural gravel bottom throughout the culvert (Modified from: MDSL, 1991).*

HANDBOOK FOR FOREST, RANCH AND RURAL ROADS

Figure □D - Cul□ert Speci□ications

Distance to Nearst Adjoining Parcel Stuctures & Adjoing Parcel Use Code Descriptions



Green Grass Parcel Map

Humboldt County Planning and Building Department

Printed: October 31, 2022 Web AppBuilder 2.0 for ArcGIS

Map Disclaimer:
While every effort has been made to assure the accuracy of this information, it should be understood that it does not have the force & effect of law, rule, or regulation. Should any difference or error occur, the law will take precedence.

Highways and Roads
- Principal Arterials
- Minor Arterials
- Major Collectors
- Minor Collectors
- Local Roads
- Private or Unclassified
- Major River or Stream

Blue Line Streams
- Perennial 1-3
- Perennial >4
- Intermittent
- Subsurface
- City Boundary
- Counties
- Parcels
- Parcels (no APN labels)

0 350 700 1,400 Feet
0 0.05 0.1 0.2 Miles
RF= 1:9,028 1 in = 752 ft

Sources: Humboldt County GIS
Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community
Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

Figure □ - Adjacent Parcels

APPLICATION PACKET CHECKLIST

Please check below to ensure you have a complete application. Once complete, email the following documents, in pdf format with the text "Application for Remediation Grant Program Funding" in the subject line to mrichardson@co.humboldt.ca.us.

- X Signed Application Submission Form
- X Project Description – Summary of the Project, up to 2 pages.
- X Plot Plan
- X Plot Plan Checklist – Attached
- X Cross sections of proposed work including topographic elevations
- X Scope of Work – Detailed Description of Work
- X Schedule for Completion – Identify Milestones
- X Erosion Control Plan and Monitoring Plan
- X Budget – Be as specific as possible – sample attached
- X Project Maps and Figures
- ☐Letter(s) of Support (optional)

APPLICATION FORM - Commercial Cannabis Land Use Ordinance Mitigation and Remediation Fund Program

Project Title: Big Sun Farms Road Improvements Date of Application: 10/31/2022

Applicant Name: Big Sun Farms, Inc. Project APN: 216-073-002; 216-073-007

Contact Person Name and Title: Gregg Stefani, CEO

Contact Phone: (707) 972-9510 Contact Email: gregg@bigsunfarms.com

Contact Address: P.O. Box 1012, Garberville, CA 95542

Amount Requested: $121,136.74 Total Budget: $140,562.49

Project Timeline: Start Date: 03/01/2023 End Date: 08/01/2023

Signature of Applicant: _____

Project: Big Sun Farms Road Improvements

Applicant: Big Sun Farms, Inc

Contact: Gregg Stefani

APN: APN: 216-073-002; 216-073-007

Grant Funding Requested: $121,136.74

Project Status: Shovel-ready

Project Description

The project is located at Big Sun Farms in Humboldt County, which is comprised of parcels APN:216-073-002 and APN:216-073-007, near Harris, California. The property is located in the Eel River watershed, and contains an unnamed tributary to Tom Long Creek, which is a tributary to the East Branch, South Fork of the Eel River.

The project proposes to upgrade one stream crossing, and replace four dirt ford stream crossings with culverts of various sizes as required by the applicant's LSA agreement with the Department of Fish & Wildlife.

While the Humboldt GIS indicates the parcels are in a general area of high slope instability, they are not within a flood hazard zone, nor in an earthquake hazard zone. The parcels are surrounded by rural improved properties. No impact to these other parcels is expected.

Crossing upgrades are expected to minimize baseline sedimentation levels entering the watershed from the property, and will avoid potential significant impacts associated with total crossing failure. All of the crossing upgrades will be constructed according to BMPs found in the "Handbook for Forest, Ranch and Rural Roads" (Weaver, Weppner and Hagans, 2015), and the California Salmonid Stream Habitat Manual, Part X (Weaver, Hagans and Weppner, 2006) by a licensed contractor.

These upgraded watercourse crossings with newly installed culverts, will achieve 100-year flood requirements. In addition, they will reduce sediment deposits into the streams that are connected to the Eel River, protecting water quality and aquatic ecosystems and limiting impact on downstream resources.

In most cases, permanent impacts to existing native channel bed, channel, watercourse banks, and associated riparian habitat will be negligible and avoided. One of the projects, Crossing 5, may require the removal of a few common madrone and/or

manzanita trees to clear the flow for the culvert's inlet and outlet. The other projects will only result in the loss of some native grasses and forbs. While incidental destruction of small areas of riparian habitat is expected in placement of the culverts, efforts will be taken to minimize impacts at the proposed sites during remediation. No loss of trees is expected in the other installations.

PLN-11457-CUP Big Sun Farms

August 19, 2021

Page 18

1,153'

33' Wide Dirt&Gravel Road

(8) 5,000 gal (Irrigation)

(1) 5,000 gal (Domestic)

Surface Water Runoff

19% Slope

23' Wide Driveway Entrance

3,185'

231'

11% Slope

20' Wide Driveway

Project Site Crossing#4

Project Site Crossing#5

(1) 2,500 gal (Irrigation)

113'

75'

10% Slope

(4) 5,000 gal (Irrigation)

Surface Water Runoff

1,155'

Project Site Crossing#6

216-073-002-000

(1) 5,000 gal (Domestic)

2,583'

4,476'

Storage Barn (Non-Cannabis)

Surface Water Runoff

Project Site Crossing#1

Project Site Crossing#2

2,481'

9% Slope

18' Wide Driveway

16% Slope

18' Wide Driveway

1,226'

Groundwater Well (Domestic) Unpermitted

(6) 5,000 gal (Irrigation)

216-073-007-000

14% Slope

997'

(1) 1,000 gal (Irrigation)

119'

90'

194'

(2) 2,500 gal (Fire)

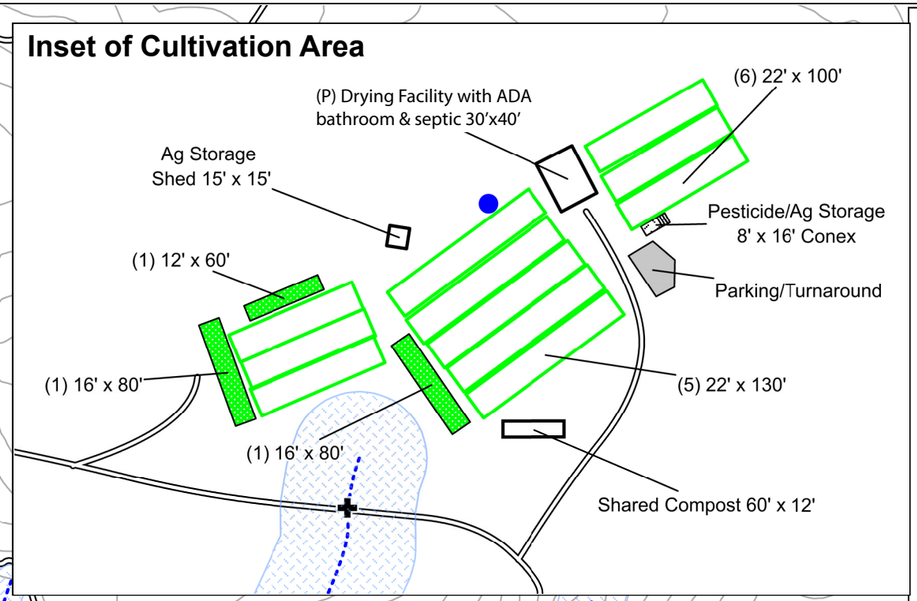
947'

Diversion for Fire Storage

ROAD A

N

Inset of Cultivation Area



Site Plan

APN: 216-073-002
216-073-007

- Property Boundary
- Cultivation Area
- Nursery Area
- Riparian Buffer
- Rain Catchment Pond
- Overflow Spillway
- Class II Watercourse
- Class III Watercourse
- Permanent Road
- Seasonal Road
- Bellas Road
- Shipping Container
- Structure
- Private Residence
- Watercourse Crossing
- Water Tank
- Spring
- Point of Diversion
- Groundwater Well

Project Information:
Applicant/Property Owner: Big Sun Farms Inc.

Parcel Size: 113 acres
APN(s): 216-073-007, 216-073-002
APPS #: 11457
Zoning: U
Cultivation Area: 27,500 SqFt

Directions: The project is located in Humboldt County, in the New Harris area, on both sides of Road A, approximately 1.76 miles west from the intersection of Bell Springs Road and Road A.

For planning purposes only.

This is not a boundary survey.

No schools, school bus stops, places of worship or tribal cultural resources are located within 600 feet of Cultivation Areas.

Map Scale 1" = 470'

REV. 10/30/2022

PLOT PLAN AND TENTATIVE MAP CHECKLIST

The following information must be shown on your plot plan or tentative map. Please check ✓ the box to the left of the items shown on the plot plan or tentative map. If any item is <u>not</u> on your site to your knowledge, write "N/A" next to the box. Plot plans shall be drawn on a minimum size sheet of 8-1/2" x 11", and tentative subdivision maps on a minimum size sheet of 18" x 26". ***<u>Note:</u> This Checklist must be completed by the applicant and submitted with your application.***

Applicant's Name _____ APN 21□-□□3-□□2□21□-□□3-□□□ _____

FOR ALL PROJECTS

☐ 1. Name of applicant(s)
☐ 2. Location or vicinity map (on or attached to the plot plan)
☐ 3. The subject parcel (show entire parcel with dimensions)
☐ 4. Date, north arrow and scale
☐ 5. Name, County road numbers, and width of all existing and proposed access roadways adjacent to or within the subject parcel (indicate width of traveled way, grade (in % slope), and surface)
☐ 6. Existing <u>and</u> proposed improvements (label as "existing" and "proposed" with dimensions and distance to nearest two (2) property lines)
- ☐ a. Structures and buildings (include floor area, height and proposed use)
- ☐ b. Driveways and turnaround areas (indicate width, grade (in % slope) and surface)
- ☐ N/A c. Utility lines (electric, gas, telephone, sewer, water, and cable TV)
- ☐ N/A d. Septic tanks and leachfields (label primary/reserve areas and test holes)
- ☐ e. Wells
- ☐ f. Parking and loading areas (show individual parking spaces, including handicapped parking and ramps)
- ☐ N/A g. Storm drains, curbs and gutters
- ☐ h. Emergency water storage tanks and fire hydrants
- ☐ N/A i. Landscaped areas (include proposed exterior lighting)
- ☐ N/A j. Major vegetation (identify mature trees (12" dbh or larger) to be removed)
- ☐ N/A k. Diked areas
- ☐ N/A l. Proposed grading and fill (estimate volume)
- ☐ N/A m. Signs (indicate size, illuminated, and design (e.g., monument, pylon, etc.))
- ☐ N/A n. Other - specify _____ _____

☐ 7. Direction of surface water runoff
☐ N/A 8. Location and width of all existing and proposed easements of record
☐ N/A 9. Hazardous areas (indicate on map if on the project site <u>or</u> within 400 feet of the project site):
- ☐ N/A a. Areas subject to inundation or flooding
- ☐ N/A b. Steep or unstable slopes
- ☐ N/A c. Expansive (clay) soils
- ☐ N/A d. Earthquake faults
- ☐ N/A e. Hazardous waste or substance sites
- ☐ f. Other - specify _____

☐ 10. Sensitive habitat areas (indicate on map if on project site <u>or</u> within 400 feet of the project site):
- ☐ a. Creeks, rivers, sloughs and other drainage courses
- ☐ N/A b. Lakes, ponds, marshes, or "wet" meadows
- ☐ N/A c. Beaches
- ☐ N/A d. Sand dunes
- ☐ e. Other - specify _____

☐ N/A 11. Historical buildings or known archaeological or paleontological resources
☐ 12. Land use and buildings on adjacent parcels, and approximate distances to closest property lines

FOR LOT LINE ADJUSTMENT PLOT PLANS ONLY

☐ N/A 13. Proposed new lines and lines to be eliminated (show lines to be eliminated as dashed)
☐ N/A 14. Areas (in square footage or acreage) of the initial and resulting parcels

FOR TENTATIVE SUBDIVISION MAPS ONLY

☐ N/A 16. Approximate dimensions and areas of all proposed lots
☐ N/A 17. A statement that "All easements of record are shown on the tentative map and will appear on the recorded subdivision map"
☐ N/A 18. Contour lines (at _____ intervals)
☐ N/A 19. For major subdivisions (5 or more parcels): proposed drainage improvements, details of any grading to be performed, approximate radii of all roadway curves, areas for public use, and typical sections of all streets, highways, ways and alleys
☐ N/A 20. Names and assessor's parcel numbers of all contiguous ownerships

NOTE: THE SUBMITTAL OF INCOMPLETE OR ILLEGIBLE PLOT PLANS OR TENTATIVE MAPS WILL CAUSE DELAYS IN THE PROCESSING OF YOUR APPLICATION

Project: Big Sun Farms Road Improvements

Applicant: Big Sun Farms, Inc

Contact: Gregg Stefani

APN: APN: 216-073-002; 216-073-007

Grant Funding Requested: $121,136.74

Project Status: Shovel-ready

Scope of Work

The project is for the upgrade of five failing or non-compliant stream crossings. The scope of work is described in the applicant's LSA agreement with Fish & Wildlife, and is summarized as follows:

Crossing 1: Use Rip rap to armor and stabilize existing culvert and channel.

Crossing 2: Replace existing dirt ford culvert with minimum 30" diameter culvert per specifications. Upgrading the crossing will require the excavation and temporary displacement of approximately 13.89 cubic yards of fill and 125 square feet of overall disturbance (estimated to be 25 feet long by 3 feet deep and 5 feet wide). The upgrading of this crossing may require the loss of native grasses and forbs.

Crossing 4: Replace existing dirt ford with minimum 36" diameter culvert per specifications. Install culvert at the lower eastward channel and create a rocked channel for the upper, westward watercourse to cross the road in the same location as the lower channel. The rocked channel will need to be at least 50 feet long and shall extend approximately 15 feet west past the upper, westward channel to catch any subsurface water seeping out of the cutbank. The channel shall be approximately 3 feet wide with 2:1 side slope. Creating this rocked channel will require the excavation and temporary displacement of approximately 5.56 cubic yards of fill and 150 square feet of overall disturbance (estimated to be 50 feet long by 1 foot deep by 3 feet wide). The culvert at the lower, eastward watercourse shall be installed per the attached specifications. Upgrading the crossing will require the excavation and temporary displacement of approximately 15.56 cubic yards of fill and 80 square feet of overall disturbance (estimated to be 30 feet long by 3.5 feet deep by 4 feet wide). The upgrading of this crossing may require the loss of native grasses and forbs.

Crossing 5: Replace existing dirt ford culvert with minimum 30" diameter culvert per specifications. Remove slash piles and clear road fill. Road drainage features will need

to be installed to redirect the road runoff away from the watercourse channel. Install the 30” diameter culvert at the lower channel per specifications. A channel will need to be created to ensure all the water crosses at the lower location. Creating this channel will require the removal of approximately 2.78 cubic yards of native soil and 75 square feet of overall disturbance (estimated to be 15 feet long by 1 foot deep by 5 feet wide). Creating this channel may require the removal of madrone and/or manzanita trees. The culvert installation will require the excavation and temporary displacement of approximately 8.89 cubic yards of fill and 100 square feet of overall disturbance (estimated to be 20 feet long by 3 feet deep by 4 feet wide).

Crossing 6: Replace existing dirt ford culvert with minimum 48” diameter culvert. The ford is too high and is placed at a change in grade which is causing sediment to back up and water to pool upstream of the crossing. Additionally, the road is discharging sediment into the watercourse and will need to have drainage features installed. Install the 48-inch diameter culvert per specifications. Upgrading this crossing will require the excavation and temporary displacement of approximately 26.67 cubic yards of rock and fill and 120 square feet of overall disturbance (20 feet long by 6 feet deep by 6 feet wide). The upgrading of this crossing may require the loss of native grasses and forbs. This crossing may have surface flow between June 1 and October 31 (the work period). Consequently, a cofferdam per specifications may be required.

The work will be completed by Alpha Pacific Engineering, license number 982973. Due to the potential stream impact, the owner has obtained a 401 certification from the State Water Resources Control Board for this project, making it shovel-ready as soon as funding is made available and the contractor is scheduled.

Margro Advisors will work with the applicant on maintaining compliance with local and State regulations, and provide support for the project’s grant administration and reporting, as needed.

Project: Big Sun Farms Road Improvements

Applicant: Big Sun Farms, Inc

Contact: Gregg Stefani

APN: APN: 216-073-002; 216-073-007

Grant Funding Requested: $121,136.74

Mitigation and Remediation Fund
Schedule for Completion

Milestone	Start Date	End Date
Detailed Project Design	March 1, 2023	March 31, 2023
Final Bidding and Contracting	April 1, 2023	April 30, 2023
Project Ground-Breaking	June 1, 2023	
Project Completion		August 1, 2023
Monitoring	August 1, 2023	Ongoing

Project: Big Sun Farms Road Improvements

Applicant: Big Sun Farms, Inc

Contact: Gregg Stefani

APN: APN: 216-073-002; 216-073-007

Grant Funding Requested: $121,136.74

Erosion Control and Monitoring Plan

To protect nearby watershed areas and nearby habitat the site is managed to meet standard conditions and follow best practices in accordance with guidelines provided by the North Coast Regional Water Quality Control Board (NCRWQCB). These practices address erosion control and drainage features, spoils management, water storage and use, irrigation runoff, fertilizers and pesticides, and stream and wetland buffers when applicable.

Best practice steps for this site can include:

- Moderate road shaping and ditch-relief used to optimize drainage to stable areas
- Out-sloping maintained to ensure proper capture and capacity of seasonal flow
- Usage of vegetative ground cover and gravel for added sediment control
- Application of straw mulch to exposed soils to minimize erosion
- Careful irrigation, with immediate oversight, to reduce the possibility of irrigation runoff

Applicant will maintain driveways and access roads to eliminate erosion or runoff during storms. Prior to the winter season and significant storm events, roads and cultivation sites will be inspected and monitored to ensure that runoff is prevented. Culverts will be inspected to ensure armoring is maintained and any debris or sediment has been removed..

If potential issues are discovered during or immediately following a storm event, they will be corrected as soon as possible to ensure minimal impact and prevent sediment flow in the future. This will include proper ditching and vegetation buffers, and as needed, straw, seed, wattles, jute cloth, riprap, or other industry standards used to prevent and eliminate runoff.

Project: Big Sun Farms Road Improvements

Applicant: Big Sun Farms, Inc

Contact: Gregg Stefani

APN: APN: 216-073-002; 216-073-007

Grant Funding Requested: $121,136.74

Total Budget: $140,562.49

Project Budget

Item	Grant Funds	Other Funds (Source)
Permit Fees		
CDFW LSA Agreement		$7,359.75 (Applicant)
401 Certification		$2,066.00 (Applicant)
Consultant and Professional Fees		
Timberland Resource Consultants		$10,000.00 (Applicant)
Margro Advisors	$6,857.00	
*Materials, Equipment and Labor**		
Alpha Pacific Engineering	$114,279.74	
Totals	**$121,136.74**	**$19,425.75**

*See attached bid

License # 982973
Alpha Pacific Engineering
Don Grace: (541) 941-8496
Frank Thomas: (707) 354-3232

Gregg Stefani, Big Sun Farms
PO Box 1012 Garberville CA.

Job Site
Big Sun Farms
Bellus Rd. Harris CA. 95542

Culverts

3 - 48"x20'	$	5,319.40
6 - 30"x20'		6,998.80
2 - 36"x20'		3,619.60
6 - 48" Culvert Bands		904.95
4 - 30" Culvert Bands		616.00
1 - 36"Culvert Band		120.99
Culvert Delivery		4,100.00
Rip Rap 125 Yards		14,450.00
Equipment move in/out		4,840.00
	$	**40,969.74**

Project Site 1 Rip Rap to Existing Culvert 15 yards

Excavator 8 hours	$	2,400.00
Cat D4H Rolling Dip		800.00
Roller Compaction		430.00
Water Truck 2500 Gallons		450.00
Dump Truck		520.00
	$	**4,600.00**

Project Site 2 30"x50' Culvert

Excavator	$	3,600.00
Cat D4H		1,600.00
Roller		600.00
Water Truck		900.00
Dump Truck		1,395.00
	$	**8,095.00**

Project Site 4 36"x40' Culvert

Excavator	$	4,800.00
Cat D4H		3,000.00
Roller		875.00

Water Truck	900.00
Dump Truck	1,240.00
Rip Rap 20 yards	**$ 10,815.00**

Project Site 5 30"x40' Culvert

Excavator	$ 3,800.00
Cat D4H	2,180.00
Roller	670.00
Water Truck	900.00
Dump Truck	450.00
Rip Rap 10 yards	**$ 8,000.00**

Project Site 6 48"x50' Culvert

Excavator	$ 12,000.00
Cat D4H	10,000.00
Roller	4,800.00
Water Truck	1,800.00
Dump Truck	6,200.00
	$ 34,800.00

Ground Labor 200 Hours	$ 7,000.00

Total	**$ 114,279.74**

North Coast Regional Water Quality Control Board

September 14, 2021

Big Sun Farms Inc.
5737 Kanan Road 629
Agoura Hills, CA 91901
greggstefani@gmail.com

Dear Big Sun Farms Inc.:

Subject: Notice of Applicability (NOA) for Coverage under the State Water Resources Control Board Cannabis Cultivation Policy Cannabis General Water Quality Certification, and Order No. WQ 2019-0001-DWQ General Waste Discharge Requirements

File: Big Sun Farms Inc. Property Water Quality Certification for Humboldt County APNs 216-073-002-000 and 216-073-007-000; WDID No. 1B21175CHUM; Place ID: 825234

This letter certifies conditional coverage under the above referenced General Water Quality Order (the Order) and compliance with the referenced Policy for the proposed project (Project) as described in the *Application for 401 Water Quality Certification and/or Waste Discharge Requirements (Dredge/Fill) and Coverage under Order No. WQ 2019-0001-DWQ* (Application) for Big Sun Farms Inc. (Applicant) prepared by Timberland Resource Consultants. The Project, as referenced in this NOA includes only: replacement of three existing fill stream crossings and one rock ford crossing with appropriately sized and designed culverts.

To comply with the Order and Policy, the Applicant must comply with all conditions of this NOA and documents referenced herein.

Any additional instream work beyond the scope of this NOA will require a new application and applicable fee which must be submitted to the Regional Water Board. This NOA does not certify the right to divert or store water, such activities require a valid water right from the Division of Water Rights. To determine if a water right is needed please contact the Division at: CannabisReg@waterboards.ca.gov with any associated questions.

Background

On June 11, 2019, the North Coast Regional Water Quality Control Board (Regional Water Board) received an application for enrollment from the Applicant to comply with the terms of, and obtain coverage under the Order for discharges of waste associated

with cannabis cultivation and proposed work outside of waters of the State at Humboldt County assessor parcel numbers (APNs) 216-073-002-000 and 216-073-007-000 (the Property). To conduct the work proposed in the Application and comply with the Order, the Project requires coverage under the General Water Quality Certification section of the Order. On August 9, 2021, the Regional Water Board received the Application containing Project details and requesting coverage under and consistent with the General Water Quality Certification included in Attachment A of the Policy. The appropriate General Water Quality Certification Application Fee was received on August 9, 2021.

The Application provides information related to the Project location, description, environmental need, design criteria, assessment of Project area flora and fauna, monitoring and reporting plans, and environmental protection measures. The Project activities, environmental protection measures included therein, and requirements included as Attachment A of the Policy (https://www.waterboards.ca.gov/water_issues/programs/cannabis/), are considered enforceable components of this NOA. Coverage under this General Water Qualty Certification requires an annual fee to be paid until the instream work and associated monitoring have been completed and the Regional Water Board has issued a Notice of Termination.

Project Description and Scope

The four instream work locations identified in the Application are collectively referred to as the Project in this NOA. The instream work location naming convention from the Application is used in the descriptions below for consistency. The Project includes instream work locations within the Lower East Branch South Fork Eel River hydrologic unit (HUC 180101060202, Hydrologic Sub-Area 1111.320603) of the South Fork Eel River watershed. The total area of ground disturbance associated with the Project is estimated to be 525 square feet. There are approximately 525 square feet and 95 linear feet of temporary impacts to stream beds and banks.

Instream work at Crossing No. 2 consists of replacing an exsisting fill crossing on a Class III watercourse with an appropriately sized 30-inch diameter culvert. Instream work at Crossing No. 4 consists of replacing an existing fill crossing on a Class III watercourse with a 36-inch diameter culvert at a low point of the road and constructing a rocked channel for collecting and coveying water and subsurface seapage from a nearby Class III stream. Instream work at Crossing No. 5 consists of replacing a fill crossing with 30-inch diameter culvert and removing slash, debris, and road fill. Instream work at Crossing No. 6 consists of the replacing a rock ford with an appropriately sized 48-inch diameter culvert.

Based on the extent of the impacts associated with the Project, the Applicant will receive an annual invoice under the Low Impact Discharges Fee Category. The proposed scope of the Project does not exceed what is allowed for coverage under the Order and is in compliance with one or more of the following categorical exemptions of the California Environmental Quality Act (CEQA): California Code of Regulations, title 14, section 15308 (regulatory actions for environmental protections); section 15301 (ongoing or existing projects) and section 15304 (minor alterations to land).

Required Project Design Features

The Project includes revegetation of eroded and denuded streambanks immediately following the completion of work. The reduction of sediment discharges and threatened discharges as a result of appropriate design and construction of the stream crossings account for a portion of the work needed to offset the permanent impacts associated with completing the Project. Completion of the Project will result in 525 square feet and 95 linear feet of enhancement to impacted stream channels. Specific Project design features and impact dimensions are described in the Application.

Monitoring Plan

Monitoring of physical stream parameters (e.g. vegetation, signs of erosion or sedimentation, stream stability, and stream flow capacity) will be conducted both before and after Project implementation. Pre-Project monitoring was conducted by the Applicant and Timberland Resource Consultants. Post-Project monitoring shall occur annually and be submitted annually to the Regional Water Board by January 31st of each year. Monitoring will be conducted and recorded by the Applicant and shall include photo documentation of each instream work location with associated notes on plant survival and vigor, stream stability, and signs of bed and bank erosion. At least five years of post-Project monitoring shall be provided until a minimum of 85 percent survival rate is achieved.

Following the completion of each seasonal work period, an annual report shall be submitted to all appropriate agencies (County, Army Corps of Engineers, Regional Water Board, and California Department of Fish and Wildlife). This annual report shall include findings that result from pre- and post-Project monitoring. These findings shall indicate the achievement of performance standards and include the following information:

- Summary of findings
- Identification and discussion of problems with achieving performance standards
- Proposed corrective measures as needed (requires Regional Water Board approval prior to implementation)

All other monitoring requirements, pursuant to the Order WQ 2019-0001-DWQ and proposed in the Application shall be followed in addition to the requirements listed above.

Project Reporting

Monitoring reports shall be submitted at a minimum annually by January 31st of each year, until the monitoring period is over, documenting the achievement of performance standards and project goals.

In addition, a Notice of Completion (NOC) shall be submitted by the Applicant no later than 30 days after the Project has been completed. A complete NOC must include, at a minimum: photographs with a descriptive title, the date each photograph was taken, the name of the photographic site, the WDID number indicated above, and success criteria for the Project. The NOC shall demonstrate that the Project has been carried out in accordance with the Project description as provided in the Application and this NOA.

Please note that the Applicant will continue to get billed an annual fee until the monitoring and reporting period has finished, the success criteria have been achieved, and the Regional Water Board has terminated this NOA.

Notice of Applicability & Project Determination

Regional Water Board staff has determined that the proposed activities as described in the Application qualify for coverage, and may proceed under the Order so long as the Applicant complies with the conditions prescribed in this NOA, Order WQ 2019-0001-DWQ, and the Cannabis Policy. Approval of this Project requires revegetation of eroded or denuded stream banks, as described in the Application and prescribed in the Required Project Design Features section above.

Please include the Project name and WDID number with all future inquiries and document submittals. Document submittals shall be made electronically to: NorthCoast.Cannabis@waterboards.ca.gov and include "Big Sun Farms Inc. Water Quality Cert WDID 1B21175CHUM" as part of the subject line.

Please contact staff at NorthCoast.Cannabis@waterboards.ca.gov or 707-576-2676 if you have any questions.

Sincerely,

Matthias St. John
Executive Officer

210914_EB_er_Big Sun Farms Inc._1B21175CHUM_WQC_NOA

Original to:
Big Sun Farms Inc.
5737 Kanan Road 629
Agoura Hills, CA, 91901
greggstefani@gmail.com

cc:

California Department of Fish and Wildlife, r1lsaeureka@wildlife.ca.gov
Humboldt County, PlanningBuilding@co.humboldt.ca.us
US Army Corps of Engineers, CESPN-Regulatory-Info@usace.army.mil
Jennifer Siu, US Environmental Protection Agency, Siu.Jennifer@epa.gov
State Water Resources Control Board, DWQ.Cannabis@waterboards.ca.gov
North Coast Regional Water Quality Control Board, ermias.berhe@waterboards.ca.gov
Timberland Resource Consultants, carroll@timberlandresource.com

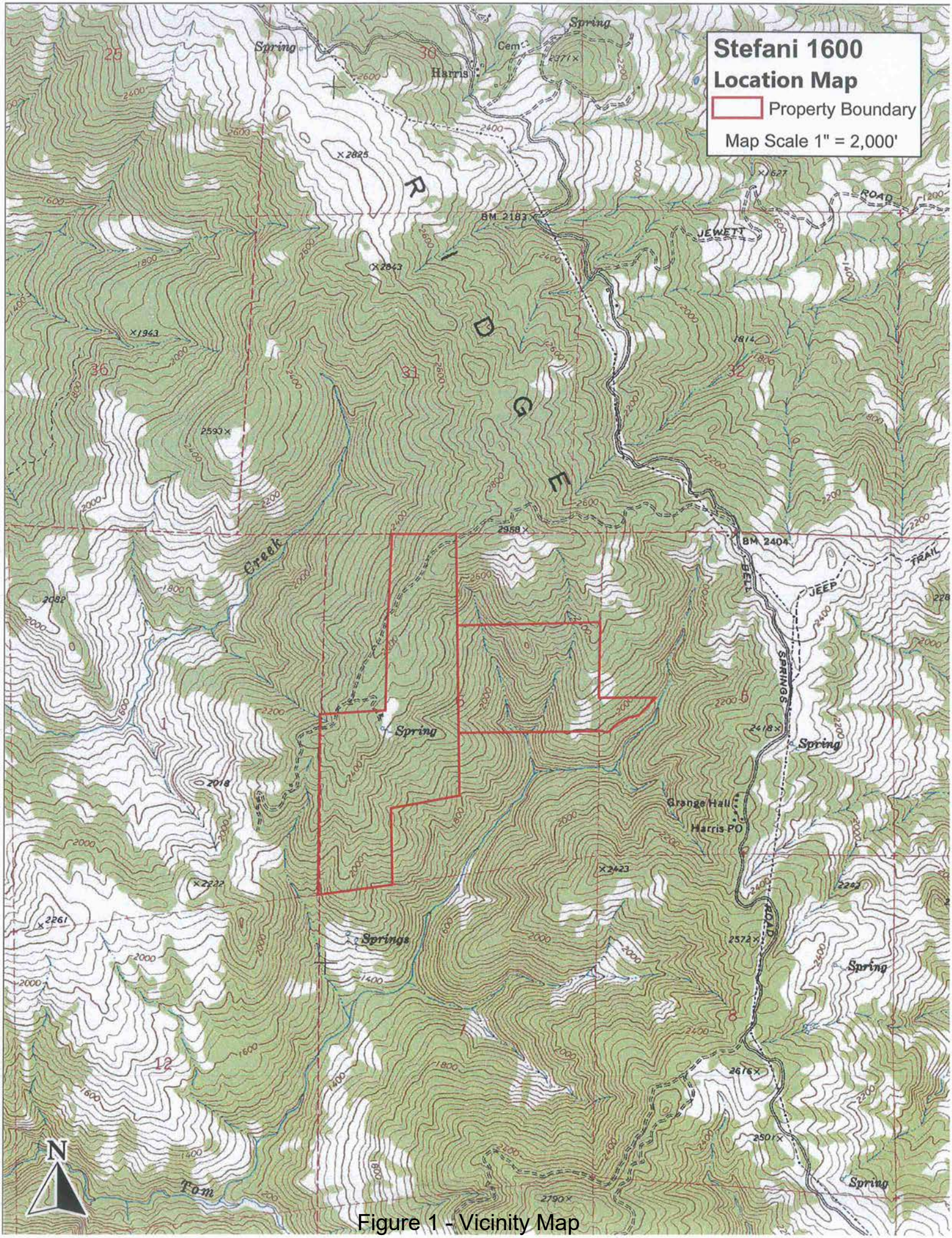
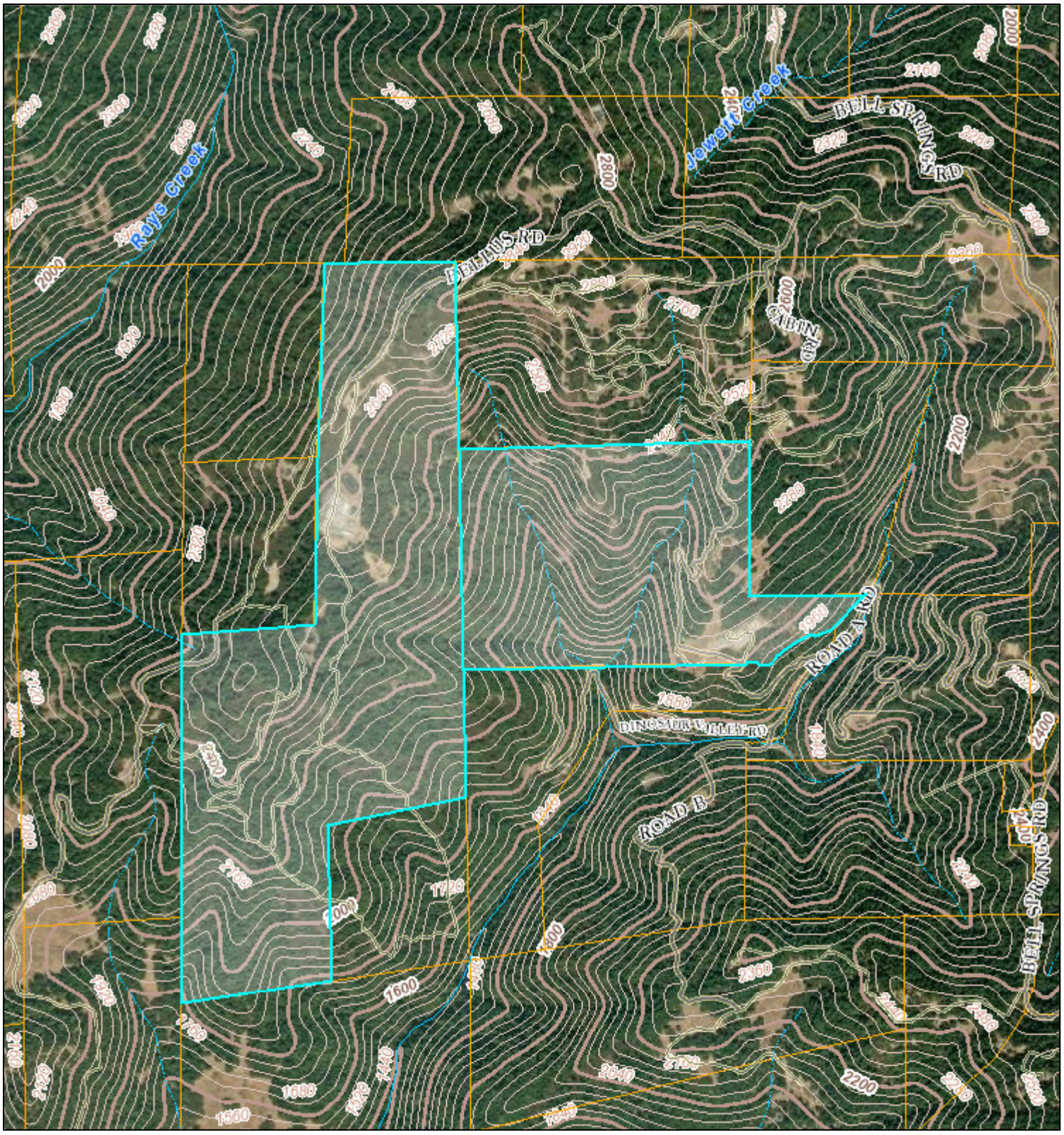


Figure 1 - Vicinity Map



Big Sun Topo Map

Humboldt County Planning and Building Department

0 700 1,400 2,800 Feet

0 0.125 0.25 0.5 Miles

RF= 1:18,056 1 in = 1,505 ft

N W E S

Highways and Roads

- Principal Arterials
- Minor Arterials
- Major Collectors
- Minor Collectors
- Local Roads
- Private or Unclassified
- Major River or Stream

Blue Line Streams

- Perennial 1-3
- Perennial >4
- Intermittent
- Subsurface
- City Boundary
- City Boundary (750K)
- Counties
- Parcels (no APN labels)

Topographic Contours 40ft

- Minor Interval
- Major Interval

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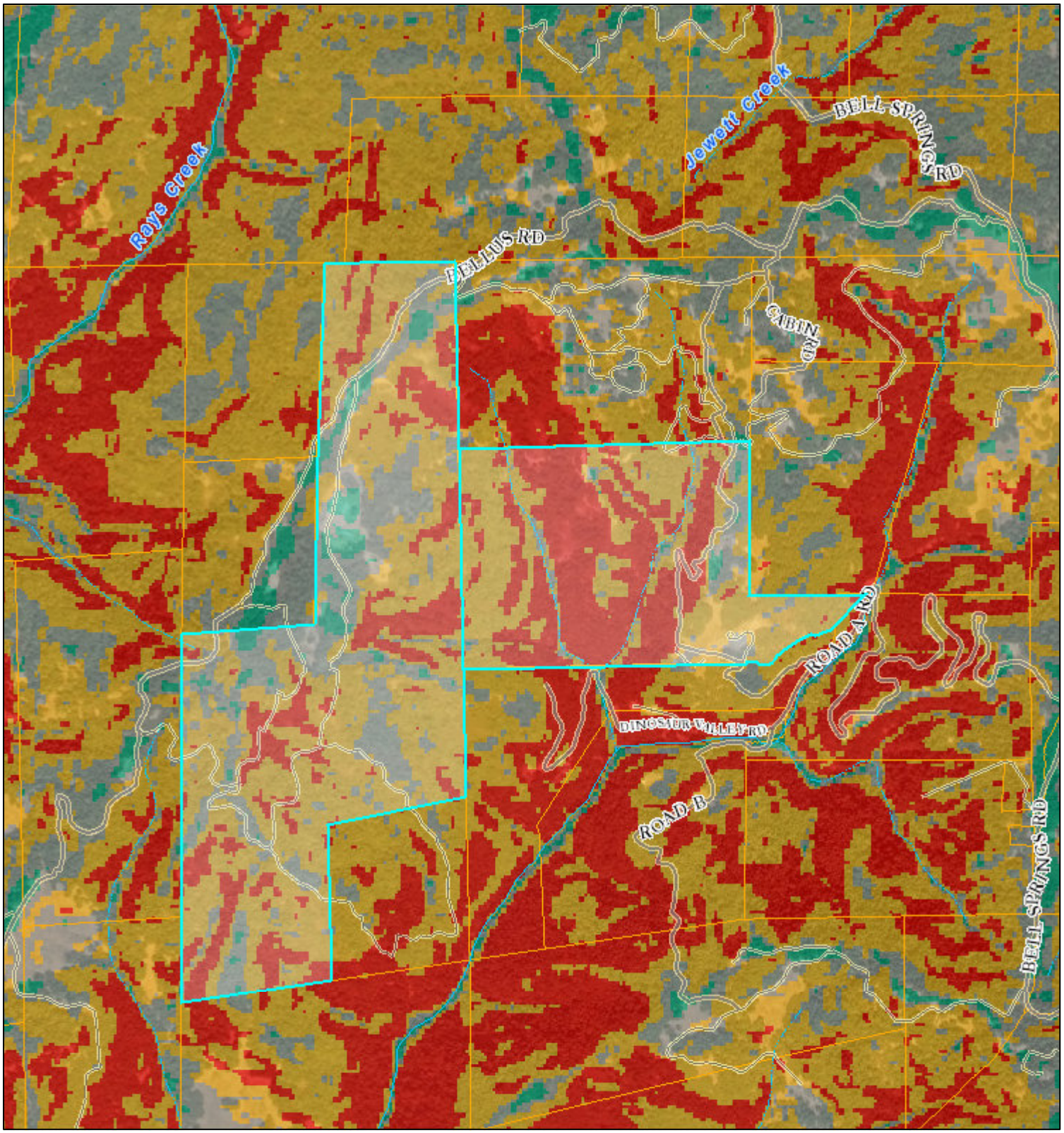


Big Sun Slope Map

Humboldt County Planning and Building Department

0 700 1,400 2,800 Feet

0 0.125 0.25 0.5 Miles

RF= 1:18,056 1 in = 1,505 ft

N W E S

Highways and Roads
- Principal Arterials
- Minor Arterials
- Major Collectors
- Minor Collectors
- Local Roads

- Private or Unclassified
- Major River or Stream

Blue Line Streams
- Perennial 1-3
- Perennial >4
- Intermittent

- Subsurface
- City Boundary
- City Boundary (750K)
- Counties
- Parcels (no APN labels)

Slope USGS
- 15-30%
- 30 - 50%
- +50%

Slope less than 15%
- <15%

Printed: October 31, 2022 Web AppBuilder 2.0 for ArcGIS

Map Disclaimer:
While every effort has been made to assure the accuracy of this information, it should be understood that it does not have the force & effect of law, rule, or regulation. Should any difference or error occur, the law will take precedence.

Source: Humboldt County GIS, Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community, FRAP, FEMA, USGS, ESA, CGS, Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

BMP: Permanent Culvert Crossing

- New culvert installations shall be sized to accommodate flows associated with a 100-year storm event.
- If the new culvert is replacing a poorly installed old culvert, the crossing may need to be abandoned to the following standard:
  - When fills are removed they shall be excavated to form a channel that is as close as feasible to natural watercourse grade and orientation, and that is wider than the natural channel.
  - Excavated banks shall be laid back to a 2:1 (50%) or natural slope.
- New culverts shall be placed at stream gradient, or have downspouts, or have energy dissipaters at outfall.
  - Align culverts with the natural stream channel orientation to ensure proper function, prevent bank erosion, and minimize debris plugging. See Figure 97 below.
  - Place culverts at the base of the fill and at the grade of the original streambed or install a downspout past the base of the fill. Downspouts should only be installed if there are no other options.
  - Culverts should be set slightly below the original stream grade so that the water drops several inches as it enters the pipe.
  - Culvert beds should be composed of rock-free soil or gravel, evenly distributed under the length of the pipe.
  - Compact the base and sidewall material before placing the pipe in its bed.
  - Lay the pipe on a well-compacted base. Poor basal compaction will cause settling or deflection in the pipe and can result in separation at a coupling or rupture in the pipe wall.
  - Backfill material should be free of rocks, limbs, or other debris that could dent or puncture the pipe or allow water to seep around the pipe.
  - Cover one end of the culvert pipe, then the other end. Once the ends are secure, cover the center.
  - Tamp and compact backfill material throughout the entire process, using water as necessary for compaction.
  - Backfill compacting will be done in 0.5 – 1.0 foot lifts until 1/3 of the diameter of the culvert has been covered.
  - Push layers of fill over the crossing to achieve the final design road grade, road fill above the culvert should be no less than one-third to one-half the culvert diameter at any point on the drivable surface.
- Critical dips shall be installed on culvert crossings to eliminate diversion potential. Refer to Figure 84 below.
- Road approaches to crossings shall be treated out to the first drainage structure (i.e. waterbar, rolling dip, or hydrologic divide) to prevent transport of sediment.
- Road surfaces and ditches shall be disconnected from streams and stream crossings to the greatest extent feasible. Ditches and road surfaces that cannot be feasible disconnected from streams or stream crossings shall be treated to reduce sediment transport to streams.
- If downspouts are used, they shall be secured to the culvert outlet and shall be secure on fill slopes.
- Culverts shall be long enough so that road fill does not extend or slough past the culvert ends.
- Inlet of culverts, and associate fill, shall be protected with appropriate measures that extend at least as high as the top of the culvert.
- Outlet of culverts shall be armored with rock if road fill sloughing into channel can occur.
- Armor inlets and outlets with rock, or mulch and seed with grass as needed (not all stream crossings need to be armored).
- Where debris loads could endanger the crossing, a debris catchment structure shall be constructed upstream of the culvert inlet.
- Bank and channel armoring may occur, when appropriate, to provide channel and bank stabilization.

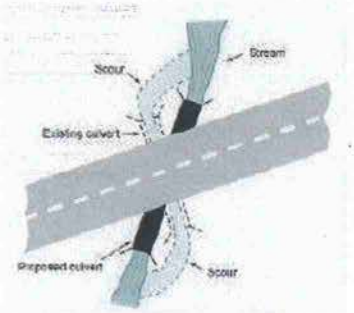


FIGURE 97. *Culvert alignment should be in relation to the stream and not the road. It is important that the stream enters and leaves the culvert in a relatively straight horizontal alignment so streamflow does not have to turn to enter the inlet or discharge into a bank as it exits. This figure shows a redesigned culvert installation that replaces the bending alignment that previously existed. Channel turns at the inlet increase plugging potential because wood going through the turn will not align with the inlet. Similarly, channel turns at the inlet and outlet are often accompanied by scour against the channel banks (Wisconsin Transportation Information Center, 2004).*

HANDBOOK FOR FOREST, RANCH AND RURAL ROADS

Figure 4A - Culvert Specifications

BMP: Permanent Culvert Crossing Design (Critical Dip and Hydrologic Disconnect Placement)

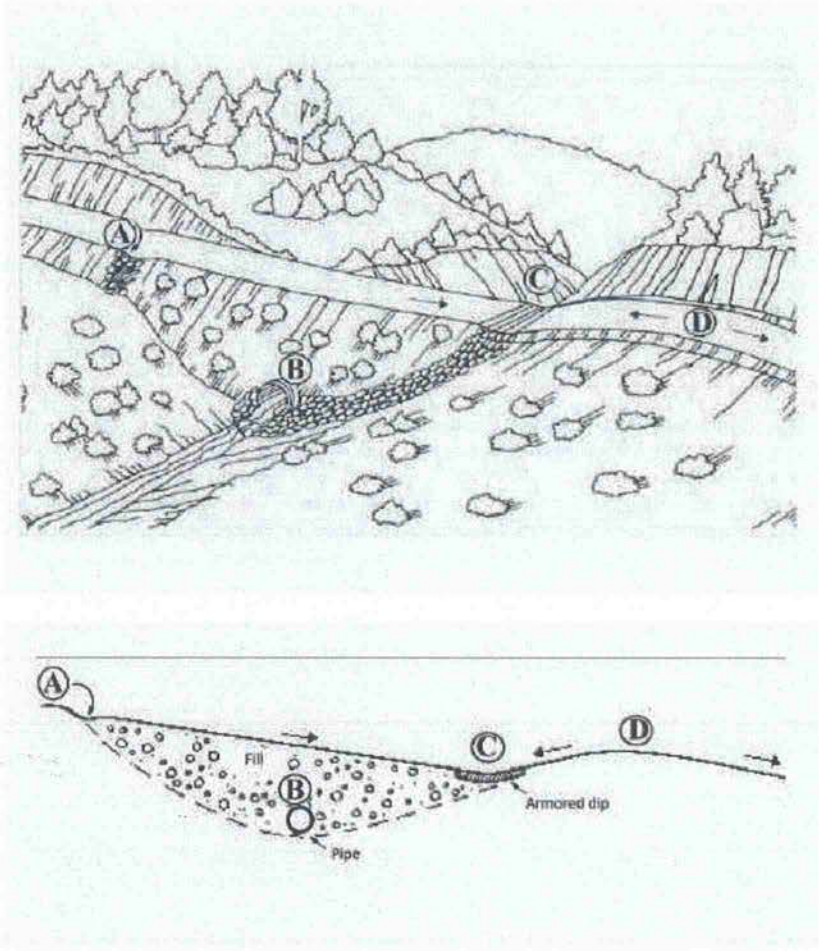


FIGURE 84. *Critical dips or dipped crossing fills should be centered near a stream crossing's down-road hingeline, not over the centerline of the crossing where overtopping could cause washout or severe erosion of the fill. If the stream crossing culvert (B) plugs, water will pond behind the fill until reaching the critical dip or low point in the crossing (C) and flowing back down into the natural stream channel. The down-road ditch must be plugged to prevent streamflow from diverting down the ditch line. For extra protection in this sketch, riprap armor has been placed at the critical dip outfall and extending downslope to the stream channel. This is only required or suggested on stream crossings where the culvert is highly likely to plug and the crossing fill overtopped. The dip at the hinge line is usually sufficient to limit erosional damage during an overtopping event. Road surface and ditch runoff is disconnected from the stream crossing by installing a rolling dip and ditch relief culvert just up-road from the crossing (A) (Keller and Sherar, 2003).*

HANDBOOK FOR FOREST, RANCH AND RURAL ROADS

Figure 4 - Culvert Specifications

BMP: Permanent Culvert Crossing Design (Culvert Orientation)

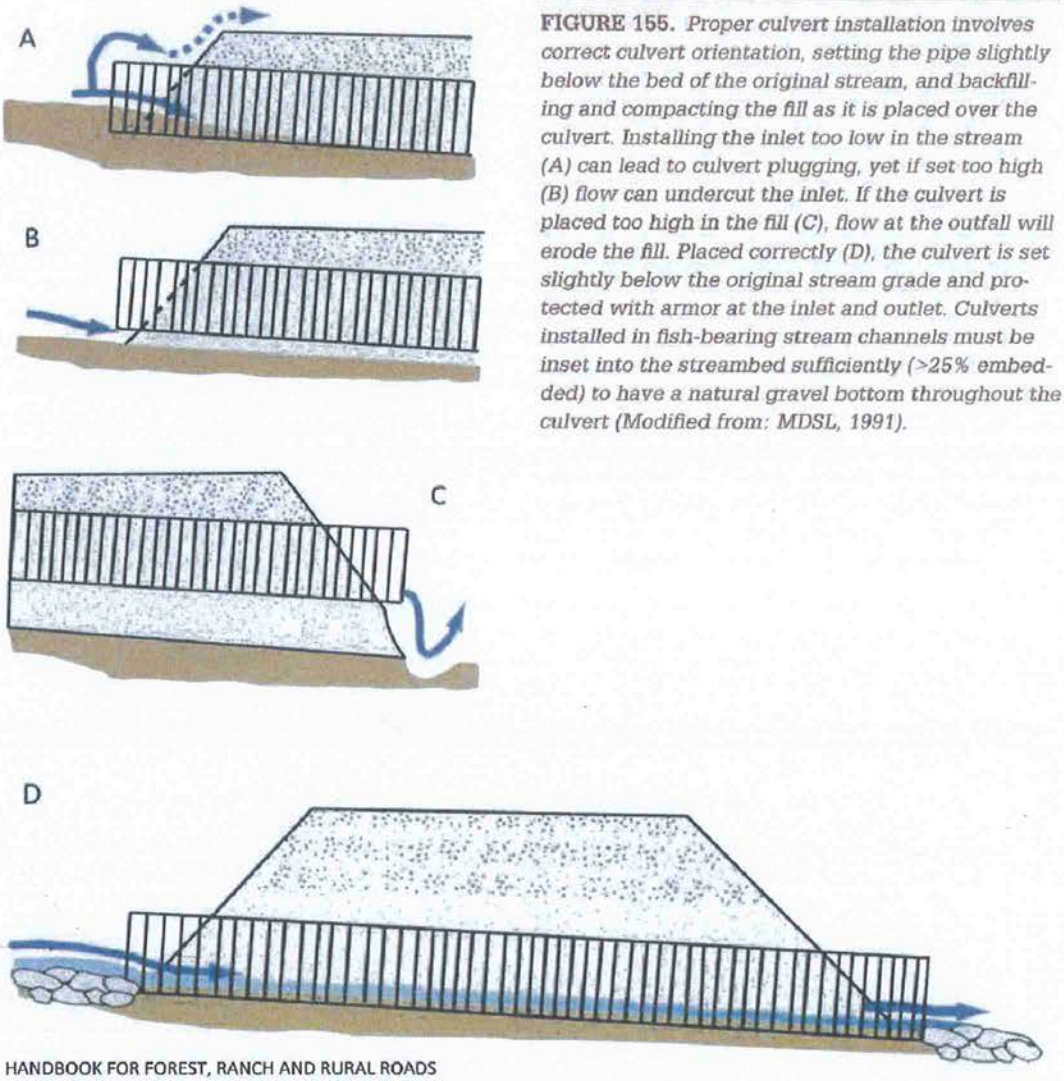
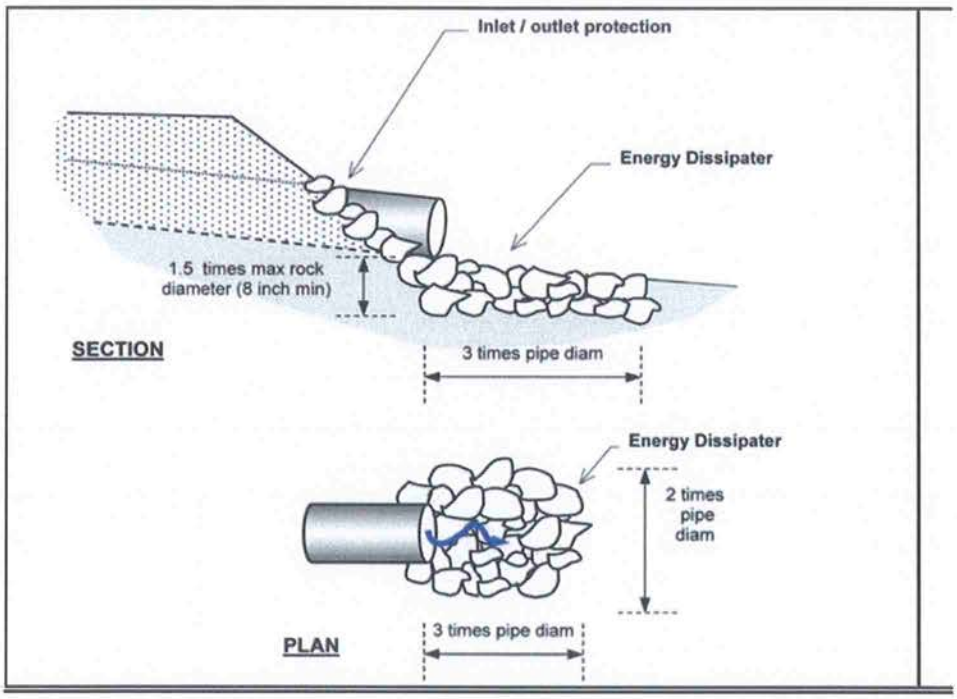


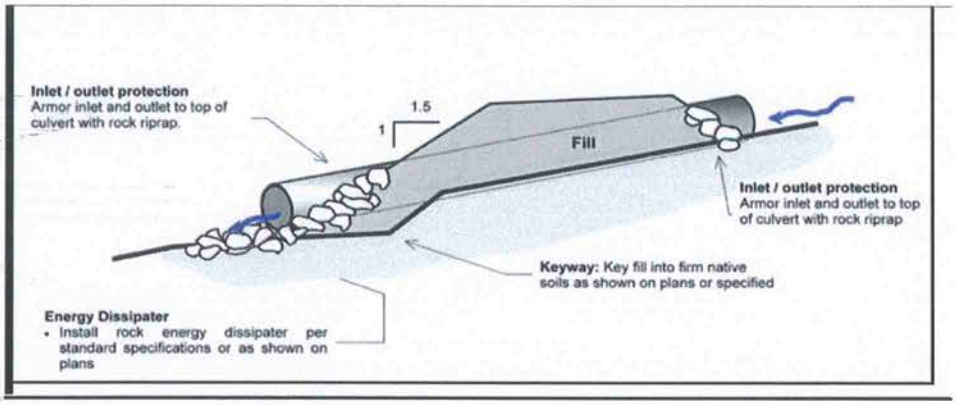
FIGURE 155. *Proper culvert installation involves correct culvert orientation, setting the pipe slightly below the bed of the original stream, and backfilling and compacting the fill as it is placed over the culvert. Installing the inlet too low in the stream (A) can lead to culvert plugging, yet if set too high (B) flow can undercut the inlet. If the culvert is placed too high in the fill (C), flow at the outfall will erode the fill. Placed correctly (D), the culvert is set slightly below the original stream grade and protected with armor at the inlet and outlet. Culverts installed in fish-bearing stream channels must be inset into the streambed sufficiently (>25% embedded) to have a natural gravel bottom throughout the culvert (Modified from: MDSL, 1991).*

HANDBOOK FOR FOREST, RANCH AND RURAL ROADS

Figure 4C - Culvert Specifications

BMP: Permanent Culvert Crossing Design (Inlet and Outlet Armoring)





Riprap installed to protect the inlet and outlet of a stream crossing culvert from erosion or for energy dissipation should be keyed into the natural channel bed and banks to an approximate depth of about 1.5x the maximum rock thickness. Riprap should be placed at least up to the top of the culvert at both the inlet and outlet to protect them from splash erosion and to trap any sediment eroded from the newly constructed fill slope above.

Figure 4D - Culvert Specifications

BMP: Permanent Culvert Crossing Design (Inlet and Outlet Armoring) Cont.

- Inlets of culverts and associate fills shall be protected with rock armoring that extends at least as high as the top of the culvert.
- Outlets of culverts shall be provided a rocked energy dissipater at the outfall of the culvert.
- Outlets of culverts and associate fills shall be protected with rock armoring that extends at least as high as the top of the culvert if road fill sloughing into channel can occur.
- Prior to inlet and outlet rocking, the inlet and outlets shall be prepared. Preparation will include removal of vegetation and stored materials from the inlet and outlet.
- Inlets may require construction of an inlet basin.
- Slopes at the outlet should be shaped to a 2:1 or natural slope prior to placing rock armor.
- Rock used at culvert inlets and outlets should be a matrix of various sized rocks and rip-rap that range from a 3" dia. to a 2' dia.
- The largest rocks should be places at the base of the culvert or fill. Incrementally smaller rocks shall be placed over the larger rocks at the armoring extend up the slope. Voids and spaces shall be back filled with smaller gravels and rocks.

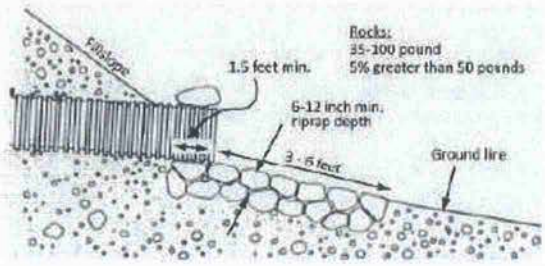
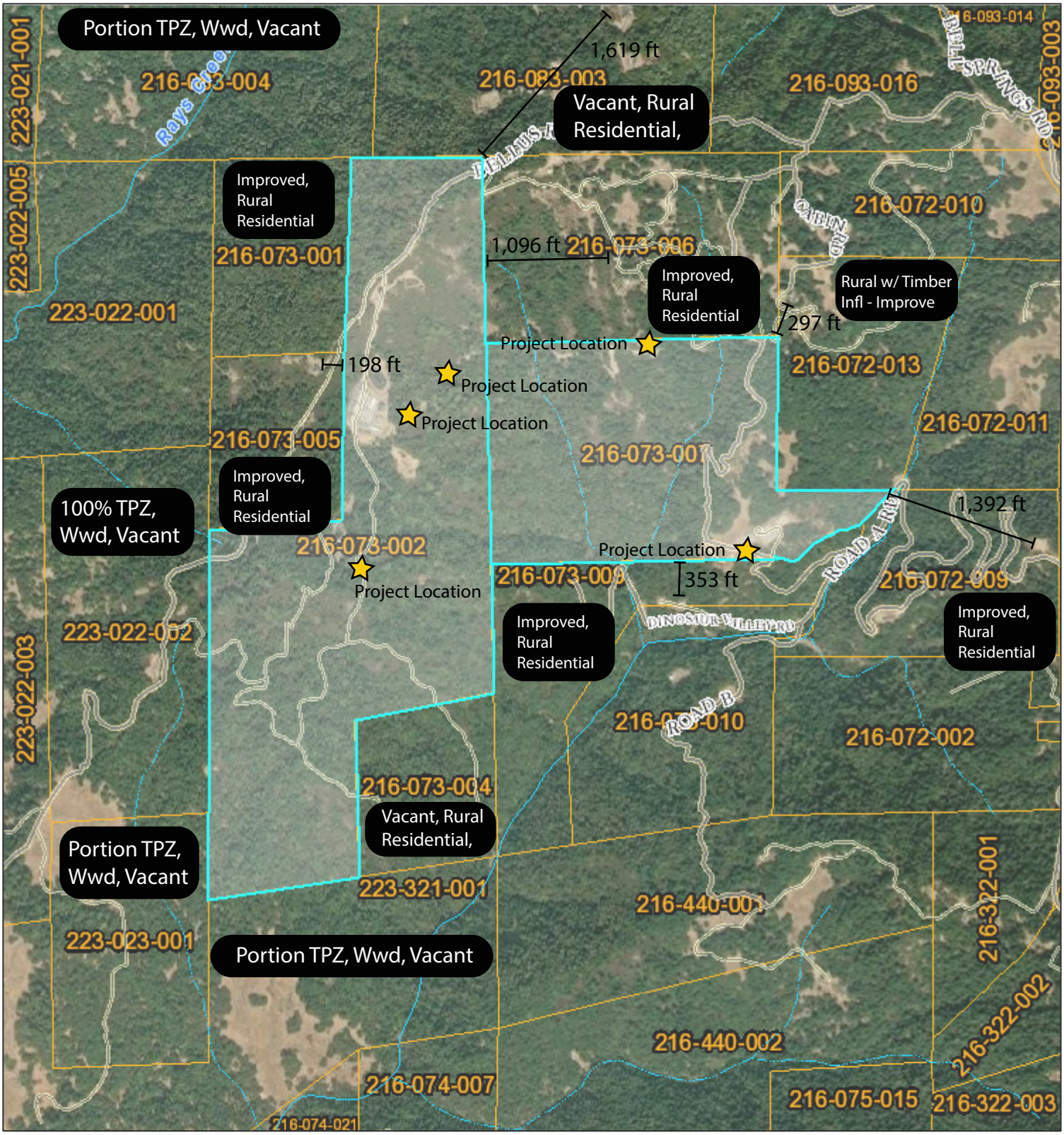


FIGURE 107A. *Riprap armor at culvert outlet (Modified from: Keller et al., 2011).*

FIGURE 107B. *Riprap armor at culvert inlet (Keller and Sherar, 2003).*

Figure 4□ - Cul□ert Speci□ications

Distance to Nearest Adjoining Parcel Primary Stucture & Adjoing Parcel Use Code Descriptions



Big Sun Farms Parcel Map

Humboldt County Planning and Building Department

0 700 1,400 2,800 Feet

0 0.125 0.25 0.5 Miles

RF= 1:18,056 1 in = 1,505 ft

N W E S

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Highways and Roads
- Principal Arterials
- Minor Arterials
- Major Collectors
- Minor Collectors
- Local Roads
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Blue Line Streams
- Perennial 1-3
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Map Disclaimer:
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Source: Humboldt County GIS, Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community, Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

Figure □ - Adjacent Parcels

Project Description:

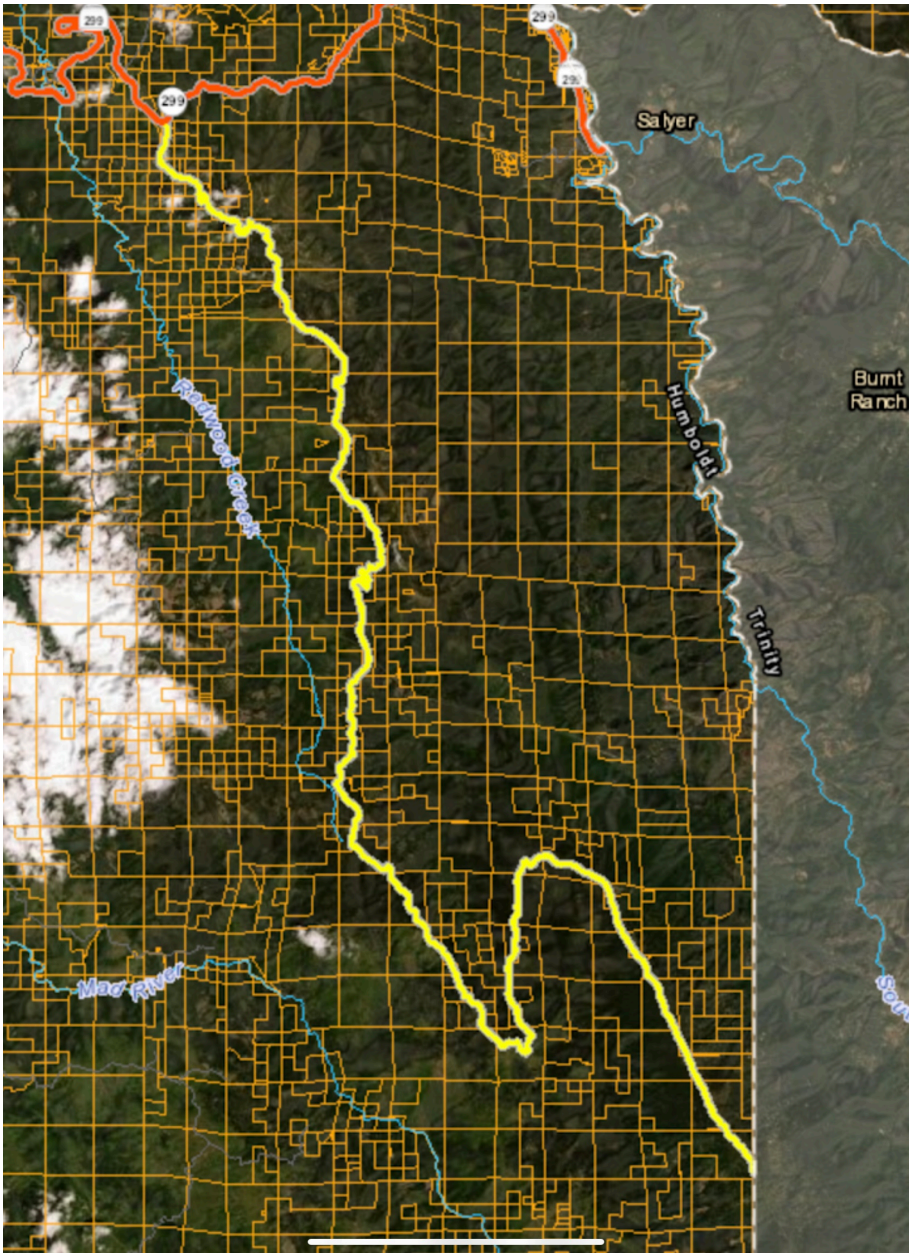
Forest Road 1 is a paved firewood needs repair and maintenance. Along to top ridge, Lab Creek Grade, there are many potholes and fallen trees from the winter storm every year. We are proposing the potholes to be fixed and the water drainages cleaned after this years winter storm.

A fuels reduction project along Forest Road 1 has also been conducted from Horse Mountain to mile marker 21 from Highway 299 this year. Soil erosion monitoring would need to be conducted after the snow melt to see its effects on the land.

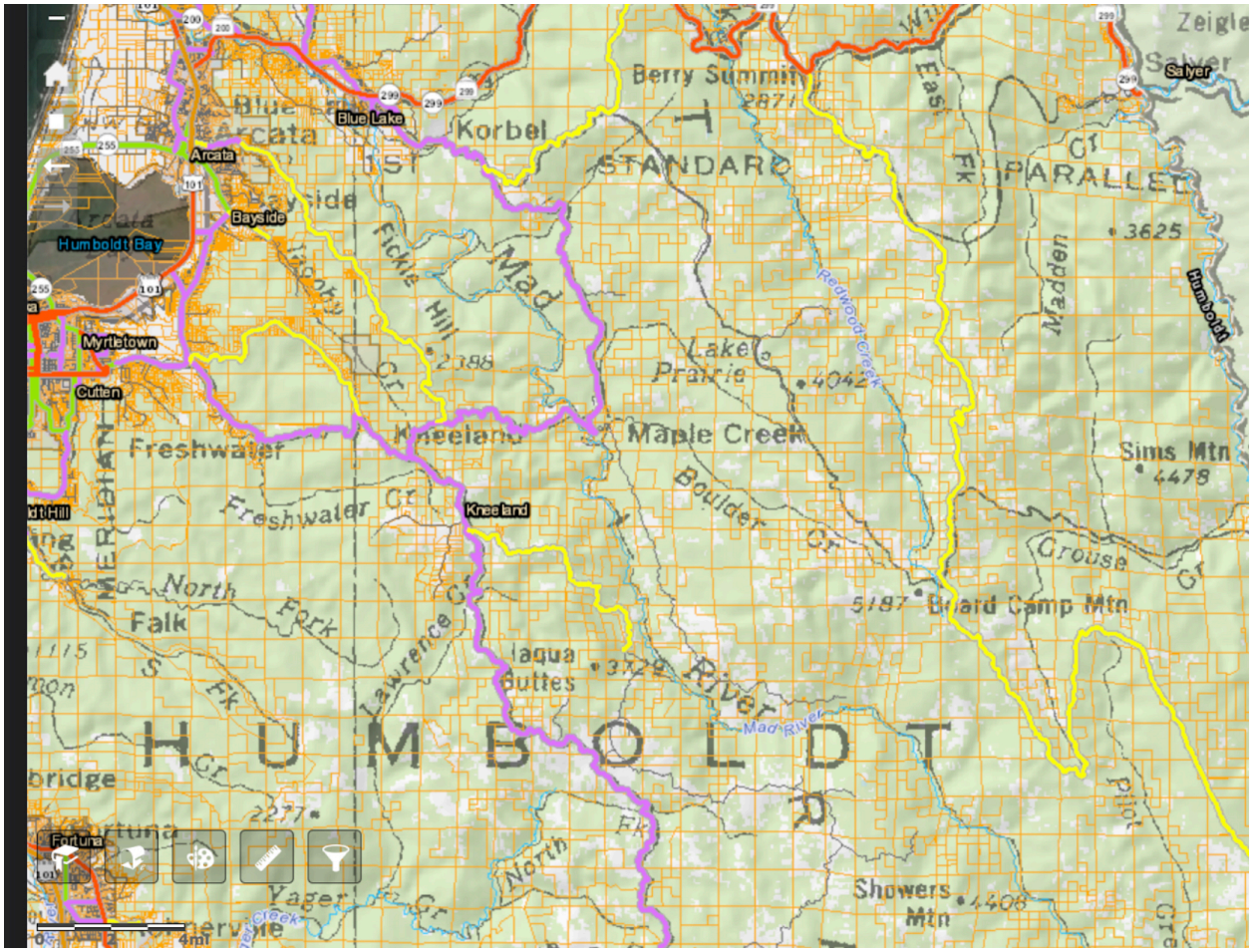
Forest Road 1 travels above Minor Creek through Noisy Creek of the Redwood Creek Watershed.

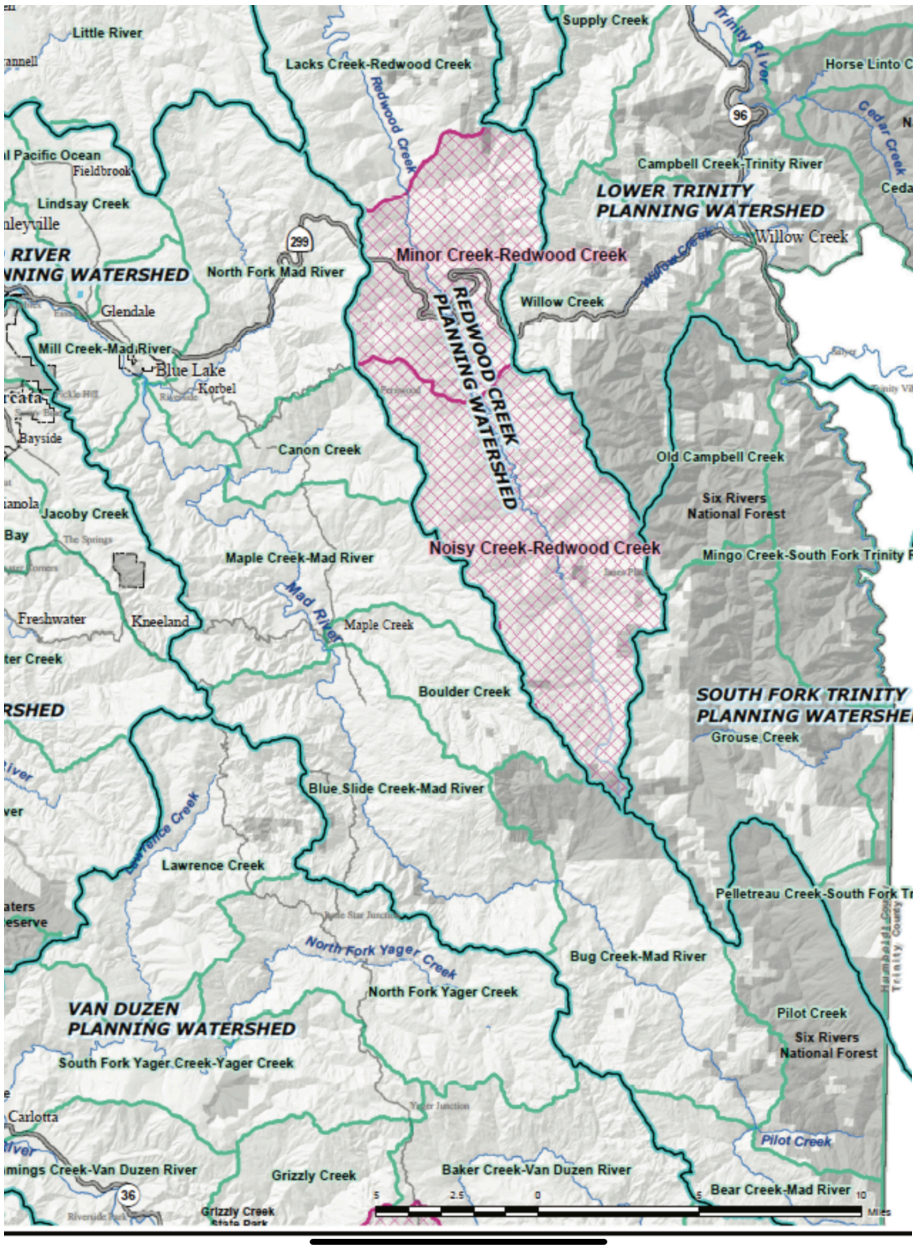
Asphalt repair, culver clean out, water bar maintenance, and fallen tree removal will be conducted.

Plot Plan



Cross Sections




Little River
Lacks Creek-Redwood Creek
Supply Creek
Trinity River
Horse Linto C
Redwood Creek
96
Cedar Creek
Campbell Creek-Trinity River
LOWER TRINITY
PLANNING WATERSHED
Willow Creek
Minor Creek-Redwood Creek
299
North Fork Mad River
REDWOOD CREEK
PLANNING WATERSHED
Willow Creek
Glendale
Mill Creek-Mad River
Blue Lake
Korbel
Bayside
Canon Creek
Old Campbell Creek
Six Rivers
National Forest
Jacoby Creek
Noisy Creek-Redwood Creek
Mingo Creek-South Fork Trinity R
Maple Creek-Mad River
Mad River
Freshwater
Kneeland
Maple Creek
Boulder Creek
SOUTH FORK TRINITY
PLANNING WATERSHE
Grouse Creek
Blue Slide Creek-Mad River
Lawrence Creek
Pelletreau Creek-South Fork Tr
North Fork Yager Creek
Bug Creek-Mad River
North Fork Yager Creek
VAN DUZEN
PLANNING WATERSHED
Pilot Creek
Six Rivers
National Forest
South Fork Yager Creek-Yager Creek
Carlotta
Pilot Creek
Grizzly Creek
Baker Creek-Van Duzen River
Bear Creek-Mad River
36
Grizzly Creek
5
2.5
0
5
10
Miles
N
W
E
S

Mitigation and Remediation Grant Program
APPLICATION GUIDELINES

Application Packet Checklist

Please check below to ensure you have a complete application. Once complete, email the following documents, in pdf format with the text "Application for Remediation Grant Program Funding" in the subject line to eadler@co.humboldt.ca.us.

- ☐Signed Application Submission Form
- ☐Project Description – Summary of the Project, up to 2 pages.
- ☐Plot Plan
- ☐Plot Plan Checklist – Attached
- ☐Cross sections of proposed work including topographic elevations
- ☐Scope of Work – Detailed Description of Work
- ☐Schedule for Completion – Identify Milestones
- ☐Erosion Control Plan and Monitoring Plan
- ☐Budget – Be as specific as possible – sample attached
- ☐Project Maps and Figures
- ☐Letter(s) of Support (optional)

APPLICATION FORM - Commercial Cannabis Land Use Ordinance Mitigation and Remediation Fund Program

Project Title: Forest Road 1 Maintenance and Repair Date of Application: 10/31/2022

Applicant Name: GarlandCo LLC Project APN: _____

Contact Person Name and Title: Allen Ng Grant Writer

Contact Phone: 626 383 9625 Contact Email: Garlandco707@gmail.com

Contact Address: 61 Ole Hansen Road, Eureka CA 95503

Amount Requested: 652,000 Total Budget: 852,000

Project Timeline: Start Date: 5/1/2023 End Date: 10/31/2023

Signature of Applicant: _____

Schedule for Completion

Milestone	Start Date	End Date
Detailed Project Scoping	5/1/2023	
Bidding and Contracting	6/1/2023	
Project Ground-Breaking	7/1/2023	
Inspections by County / F.S.	7/1/2023	10/31/2023
Project Completion		10/31/2023
Monitoring	5/1/2024	6/1/2024

Budget

Budget Item	Grant	Other Funds
Permit Fees (specify)	100,000	
Consultant and professional fees	50,000	
Materials	300,000	
Equipment	10,000	180,000
Other (specify) Labor	192,000	20,000
TOTAL	652,000	200,000

The following information must be shown on your plot plan or tentative map. Please check ✓ the box to the left of the items shown on the plot plan or tentative map. If any item is not on your site to your knowledge, write "N/A" next to the box. Plot plans shall be drawn on a minimum size sheet of 8-1/2" x 11", and tentative subdivision maps on a minimum size sheet of 18" x 26". ***Note: This Checklist must be completed by the applicant and submitted with your application.***

Applicant's Name Allen Ng APN _____ - _____ - _____

FOR ALL PROJECTS

- ☑ 1. Name of applicant(s)
- ☑ 2. Location or vicinity map (on or attached to the plot plan)
- ☑ 3. The subject parcel (show entire parcel with dimensions)
- ☑ 4. Date, north arrow and scale
- ☑ 5. Name, County road numbers, and width of all existing and proposed access roadways adjacent to or within the subject parcel (indicate width of traveled way, grade (in % slope), and surface)
- ☑ 6. Existing and proposed improvements (label as "existing" and "proposed" with dimensions and distance to nearest two (2) property lines)
  - ☐ a. Structures and buildings (include floor area, height and proposed use)
  - ☐ b. Driveways and turnaround areas (indicate width, grade (in % slope) and surface)
  - ☐ c. Utility lines (electric, gas, telephone, sewer, water, and cable TV)
  - ☐ d. Septic tanks and leachfields (label primary/reserve areas and test holes)
  - ☐ e. Wells
  - ☐ f. Parking and loading areas (show individual parking spaces, including handicapped parking and ramps)
  - ☐ g. Storm drains, curbs and gutters
  - ☐ h. Emergency water storage tanks and fire hydrants
  - ☐ i. Landscaped areas (include proposed exterior lighting)
  - ☐ j. Major vegetation (identify mature trees (12" dbh or larger) to be removed)
  - ☐ k. Diked areas
  - ☐ l. Proposed grading and fill (estimate volume)
  - ☐ m. Signs (indicate size, illuminated, and design (e.g., monument, pylon, etc.))
  - ☑ n. Other - specify 41 miles of asphalt.
- ☐ TBD 7. Direction of surface water runoff
- ☐ NA 8. Location and width of all existing and proposed easements of record
- ☐ NA 9. Hazardous areas (indicate on map if on the project site or within 400 feet of the project site):
  - ☐ a. Areas subject to inundation or flooding
  - ☐ b. Steep or unstable slopes
  - ☐ c. Expansive (clay) soils
  - ☐ d. Earthquake faults
  - ☐ e. Hazardous waste or substance sites
  - ☐ f. Other - specify _____
- ☑ 10. Sensitive habitat areas (indicate on map if on project site or within 400 feet of the project site):
  - ☑ a. Creeks, rivers, sloughs and other drainage courses
  - ☐ b. Lakes, ponds, marshes, or "wet" meadows
  - ☐ c. Beaches
  - ☐ d. Sand dunes
  - ☐ e. Other - specify _____
- ☐ NA 11. Historical buildings or known archaeological or paleontological resources
- ☐ NA 12. Land use and buildings on adjacent parcels, and approximate distances to closest property lines

FOR LOT LINE ADJUSTMENT PLOT PLANS ONLY

- ☐ NA 13. Proposed new lines and lines to be eliminated (show lines to be eliminated as dashed)
- ☐ 14. Areas (in square footage or acreage) of the initial and resulting parcels

FOR TENTATIVE SUBDIVISION MAPS ONLY

- ☐ NA 16. Approximate dimensions and areas of all proposed lots
- ☐ NA 17. A statement that "All easements of record are shown on the tentative map and will appear on the recorded subdivision map"
- ☐ NA 18. Contour lines (at _____ intervals)
- ☐ NA 19. For major subdivisions (5 or more parcels): proposed drainage improvements, details of any grading to be performed, approximate radii of all roadway curves, areas for public use, and typical sections of all streets, highways, ways and alleys
- ☐ AN 20. Names and assessor's parcel numbers of all contiguous ownerships

NOTE: THE SUBMITTAL OF INCOMPLETE OR ILLEGIBLE PLOT PLANS OR TENTATIVE MAPS WILL CAUSE DELAYS IN THE PROCESSING OF YOUR APPLICATION

APPLICATION PACKET CHECKLIST

Please check below to ensure you have a complete application. Once complete, email the following documents, in pdf format with the text "Application for Remediation Grant Program Funding" in the subject line to mrichardson@co.humboldt.ca.us.

- X Signed Application Submission Form
- X Project Description – Summary of the Project, up to 2 pages.
- X Plot Plan
- X Plot Plan Checklist – Attached
- X Cross sections of proposed work including topographic elevations
- X Scope of Work – Detailed Description of Work
- X Schedule for Completion – Identify Milestones
- X Erosion Control Plan and Monitoring Plan
- X Budget – Be as specific as possible – sample attached
- X Project Maps and Figures
- ☐Letter(s) of Support (optional)

APPLICATION FORM - Commercial Cannabis Land Use Ordinance Mitigation and Remediation Fund Program

Project Title: Aldebaran's Gaze Remediation Date of Application: 10/31/2022

Applicant Name: Aldebaran's Gaze, LLC Project APN: 223-091-003

Contact Person Name and Title: Bryan Harpel, Managing Member

Contact Phone: (707) 407-5038 Contact Email: harpelharp@gmail.com

Contact Address: P.O. Box 415, Garberville, CA 95542

Amount Requested: $17,040.00 Total Budget: $26,002.45

Project Timeline: Start Date: 01/01/2023 End Date: 08/01/2023

Signature of Applicant: _____

Project: Aldebaran's Gaze Remediation

Applicant: Aldebaran's Gaze, LLC

Contact: Bryan Harpel

APN: 223-091-003

Grant Funding Requested: $17,040.00

Project Description

The project is located on Humboldt County APN 223-091-003 near Garberville, California. The property is located on Ross Road, in the Eel River watershed, approximately eight miles east of Garberville.

The project proposes the upgrade of an undersized culvert along with removal of legacy hydroelectric facility infrastructure at one stream crossing as required by the applicant's Lake and Streambed Alteration Agreement with the California Department of Fish & Wildlife.

While the Humboldt GIS indicates the parcels are in a general area of high slope instability, they are not within a flood hazard zone, nor in an earthquake hazard zone. The parcels are surrounded by rural improved properties. No impact to these other parcels is expected.

This project would storm-proof the stream crossing for a 100 year flood event and reduce the potential for road-related sediment delivery into the unnamed tributary and down to the south fork of the Eel River. The upgraded stream crossing will protect water quality and aquatic ecosystems, limiting the impact on downstream resources. The crossing upgrade will be constructed according to standards provided in the "Handbook for Forest, Ranch and Rural Roads" (Weaver, Weppner and Hagans, 2015), and the California Salmonid Stream Habitat Manual, Part X (Weaver, Hagans and Weppner, 2006) by a licensed contractor.

Permanent impacts to existing native channel bed, channel, watercourse banks, and associated riparian habitat will be negligible and avoided. Incidental destruction of small areas of riparian habitat growing on existing road fill or in disturbed channel areas is expected but will be minimized at the proposed sites during remediation. No loss of trees is expected.

ALDEBARAN'S GAZE
CCL18-0002794
APN: 223-091-003

PROPERTY/PREMISES BOUNDRY

518.25 ft

1771.8 ft

532'

338'

651.6 ft

1904.6 ft

1654.7 ft

472'

663'

747'

544'

100' SMA Setback

50' SMA Setback

Project Site
Crossing#1&
Micro-Hydroelectric

10% Slope

Upper Greenhouses-
(1,013.75 Sq Ft total)
Greenhouse 1- 20.25'x20.83'
Greenhouse 2- 10.25' x 57.75'

Garden 1
(1,451.75 sqft total)
1 - 7.75' x 38' (294.5 sqft)
2 - 6.75' x 47' (317.25 sqft)
3 - 7.5' x 34' (255 sqft)
4 - 7.5' x 37.5' (281.25 sqft)
5 - 7.5' x 40.75' (303.75)

Garden 2
(600.5 sqft total)
1 - 14' x 4' (56 sqft)
2 - 10' x 11' (110 sqft)
3 - 18' x 6' (108 sqft)
4 - 14' x 8' (112 sqft)
5 - 15.5' x 6' (93 sqft)
6 - 6.75' x 18' (121.5 sqft)

Garden 3
(1,088.44 sqft total)
1 - 21.5' x 5' (107.5 sqft)
2 - 6.75' x 42.75' (288.56 sqft)
3 - 27.5' x 9' (247.5 sqft)
4 - 7' x 22.375' (156.63 sqft)
5 - 7.375' x 22' (162.25 sqft)
6- 7' x18' (126 sqft)

Garden 4
(1,285.3 sqft total)
A- 23' x 24' x 22' x 29' (592.4 sqft)
B- 30' x 24' x 23' x 29' (692.9 sqft)

Note:
-Processing will be done offsite.
-A non-exclusive right of way for ingress and egress for public utilities and pipeline over and in all of the roads on map site.

Personal Garden
200 Sq Ft
4 x 4 Redwood Boxes- (6)
(17.5' x 47' ft)

Storage & Drying Shed
(14 x 47 ft)

Greenhouse 1
(20.25ft x 20.83ft)

Greenhouse 2
(10.25ft x 57.75ft)

Garage for Fuel,
Records, Pesticides
& Equipment Storage
(12 x 20 ft)

Residence (42x44 ft)
(Non-premises)
Est.1977

Tool Storage
Shed(10 x 12 ft)

Propane Tank

Solar

Generator

Propagation Area
(14' X 20' ft)

Generator

Water Meter

2-500 g
(40.1260,
-123.7127)

3,500 g (40.1262, -123.7124)

3,500 g (40.1261, -123.7121)

3,500 g (40.1261, -123.7121)

2-5,000 g (40.1262, -123.7120)

13- 5,000 g (40.1261, -123.7121)

5-5,000 g (40.1262, -123.7125)

Administrative Hold Container (3 x 3 ft)

Storage (10 x 20 ft)

Solar System (4kW)

2-300 g (40.1260, -123.7127)

3,000g Fire Suppression
Tank (40.1258,-123.7123)

1,500 g
LOC: 40.12661
-123.7104

Location of POD
Irrigation
40.1265, -123.7100

POD

30 ft Buffer
From Property Line

HOMESTEAD ROAD

8' ATV TRAIL

Greenhouse 3
Propagation Area
(50 x 14 ft)

12' Wide
Dirt/Gravel
Driveway

Parking &
Turn Area

Shipping Container
Packaging & Harvest
Product Storage (8 x 20 ft)

Solar, Amendments,
Pesticides Shed
(10 x 9 ft)

Compost Area
46x50x58 Ft

12' Wide
Dirt/Gravel
Driveway

24' Wide
Road

11% Slope

12% Slope

Surface Water
Runoff

Main Entrance
& Exit

22' Wide
Driveway
Entrance

Legend

- Poly Water Storage Tanks
- Storage Blatter
- Surface Water Diversion
- AG Storage
- Refuse
- Solar System(s) 4kW
- Residence
- Septic & Leach Field
- Cleared, Roads & Trail Areas
- Propane Tank
- Class II Watercourse
- Class III Watercourse
- Non-Premises
- Irrigation Lines
- Irrigation Lines (Domestic)
- Personal Garden

N

100 feet
Scale

TOTAL CULTIVATION AREA: 9,978.05 SQ FT

REV. 10/30/2022

PLOT PLAN AND TENTATIVE MAP CHECKLIST

The following information must be shown on your plot plan or tentative map. Please check ✓ the box to the left of the items shown on the plot plan or tentative map. If any item is <u>not</u> on your site to your knowledge, write "N/A" next to the box. Plot plans shall be drawn on a minimum size sheet of 8-1/2" x 11", and tentative subdivision maps on a minimum size sheet of 18" x 26". ***<u>Note:</u> This Checklist must be completed by the applicant and submitted with your application.***

Applicant's Name Alde□aran□s Ga□e Re□ediation APN 223-□□1-□□3 _____

FOR ALL PROJECTS

☐ 1. Name of applicant(s)
☐ 2. Location or vicinity map (on or attached to the plot plan)
☐ 3. The subject parcel (show entire parcel with dimensions)
☐ 4. Date, north arrow and scale
☐ 5. Name, County road numbers, and width of all existing and proposed access roadways adjacent to or within the subject parcel (indicate width of traveled way, grade (in % slope), and surface)
☐ 6. Existing <u>and</u> proposed improvements (label as "existing" and "proposed" with dimensions and distance to nearest two (2) property lines)
- ☐ a. Structures and buildings (include floor area, height and proposed use)
- ☐ b. Driveways and turnaround areas (indicate width, grade (in % slope) and surface)
- ☐ N/A ☐ c. Utility lines (electric, gas, telephone, sewer, water, and cable TV)
- ☐ d. Septic tanks and leachfields (label primary/reserve areas and test holes)
- ☐ N/A ☐ e. Wells
- ☐ f. Parking and loading areas (show individual parking spaces, including handicapped parking and ramps)
- ☐ N/A ☐ g. Storm drains, curbs and gutters
- ☐ h. Emergency water storage tanks and fire hydrants
- ☐ N/A ☐ i. Landscaped areas (include proposed exterior lighting)
- ☐ N/A ☐ j. Major vegetation (identify mature trees (12" dbh or larger) to be removed)
- ☐ N/A ☐ k. Diked areas
- ☐ N/A ☐ l. Proposed grading and fill (estimate volume)
- ☐ N/A ☐ m. Signs (indicate size, illuminated, and design (e.g., monument, pylon, etc.))
- ☐ N/A ☐ n. Other - specify _____

☐ 7. Direction of surface water runoff
☐ 8. Location and width of all existing and proposed easements of record
☐ ☐ N/A 9. Hazardous areas (indicate on map if on the project site <u>or</u> within 400 feet of the project site):
- ☐ N/A ☐ a. Areas subject to inundation or flooding
- ☐ N/A ☐ b. Steep or unstable slopes
- ☐ N/A ☐ c. Expansive (clay) soils
- ☐ N/A ☐ d. Earthquake faults
- ☐ N/A ☐ e. Hazardous waste or substance sites
- ☐ f. Other - specify _____

☐ 10. Sensitive habitat areas (indicate on map if on project site <u>or</u> within 400 feet of the project site):
- ☐ a. Creeks, rivers, sloughs and other drainage courses
- ☐ N/A ☐ b. Lakes, ponds, marshes, or "wet" meadows
- ☐ N/A ☐ c. Beaches
- ☐ N/A ☐ d. Sand dunes
- ☐ e. Other - specify _____

☐ ☐ N/A 11. Historical buildings or known archaeological or paleontological resources
☐ 12. Land use and buildings on adjacent parcels, and approximate distances to closest property lines

FOR LOT LINE ADJUSTMENT PLOT PLANS ONLY

☐ ☐ N/A 13. Proposed new lines and lines to be eliminated (show lines to be eliminated as dashed)
☐ ☐ N/A 14. Areas (in square footage or acreage) of the initial and resulting parcels

FOR TENTATIVE SUBDIVISION MAPS ONLY

☐ ☐ N/A 16. Approximate dimensions and areas of all proposed lots
☐ ☐ N/A 17. A statement that "All easements of record are shown on the tentative map and will appear on the recorded subdivision map"
☐ ☐ N/A 18. Contour lines (at _____ intervals)
☐ ☐ N/A 19. For major subdivisions (5 or more parcels): proposed drainage improvements, details of any grading to be performed, approximate radii of all roadway curves, areas for public use, and typical sections of all streets, highways, ways and alleys
☐ ☐ N/A 20. Names and assessor's parcel numbers of all contiguous ownerships

NOTE: THE SUBMITTAL OF INCOMPLETE OR ILLEGIBLE PLOT PLANS OR TENTATIVE MAPS WILL CAUSE DELAYS IN THE PROCESSING OF YOUR APPLICATION

Project: Aldebaran's Gaze Remediation

Applicant: Aldebaran's Gaze, LLC

Contact: Bryan Harpel

APN: 223-091-003

Grant Funding Requested: $17,040.00

Scope of Work

The project is for the upgrade of one non-compliant stream crossing along with the removal of legacy micro-hydroelectric infrastructure debris. The scope of work is described in the applicant's LSA agreement with Fish & Wildlife, and is summarized as follows:

Crossing 1: Replace undersized (short) 48" diameter by 20' culvert with a new 48" diameter by 30' long culvert. Remove micro-hydroelectric facility debris and restore channel/banks to natural condition. Debris will be properly disposed of at a local waste facility.

The project will require a new culvert and a supply of rock and related materials for rip rap to stabilize the channel. Estimated completion of the project will require 16 hours of excavation, 8 hours of labor, and 6 hours of machine transport. The work requires heavy equipment and will be completed by Eel River Excavation.

Prior to starting project operations, the applicant will work with Timberland Resource Consultants to obtain a 401 certification permit for the work.

Margro Advisors will work with the applicant on maintaining compliance with local and State regulations, and provide support for the project's grant administration and reporting, as needed.

Project: Aldebaran's Gaze Remediation

Applicant: Aldebaran's Gaze, LLC

Contact: Bryan Harpel

APN: 223-091-003

Grant Funding Requested: $17,040.00

Mitigation and Remediation Fund
Schedule for Completion

Milestone	Start Date	End Date
Detailed Project Design	January 1, 2023	February 1, 2023
Permitting	February 1, 2023	May 1, 2023
Final Bidding and Contracting	May 1, 2023	May 31, 2023
Project Ground-Breaking	June 1, 2023	
Project Completion		August 1, 2023
Monitoring	August 1, 2023	Ongoing

Project: Aldebaran's Gaze Remediation

Applicant: Aldebaran's Gaze, LLC

Contact: Bryan Harpel

APN: 223-091-003

Grant Funding Requested: $17,040.00

Erosion Control and Monitoring Plan

To protect nearby watershed areas and nearby habitat the site is managed to meet standard conditions and follow best practices in accordance with guidelines provided by the North Coast Regional Water Quality Control Board (NCRWQCB). These practices address erosion control and drainage features, spoils management, water storage and use, irrigation runoff, fertilizers and pesticides, and stream and wetland buffers when applicable.

Best practice steps for this site can include:

- Moderate road shaping and ditch-relief used to optimize drainage to stable areas
- Out-sloping maintained to ensure proper capture and capacity of seasonal flow
- Usage of vegetative ground cover and gravel for added sediment control
- Application of straw mulch to exposed soils to minimize erosion
- Careful irrigation, with immediate oversight, to reduce the possibility of irrigation runoff

Applicant will maintain driveways and access roads to eliminate erosion or runoff during storms. Prior to the winter season and significant storm events, roads and cultivation sites will be inspected and monitored to ensure that runoff is prevented. Culverts will be inspected to ensure armoring is maintained and any debris or sediment has been removed..

If potential issues are discovered during or immediately following a storm event, they will be corrected as soon as possible to ensure minimal impact and prevent sediment flow in the future. This will include proper ditching and vegetation buffers, and as needed, straw, seed, wattles, jute cloth, riprap, or other industry standards used to prevent and eliminate runoff.

Project: Aldebaran's Gaze Remediation

Applicant: Aldebaran's Gaze, LLC

Contact: Bryan Harpel

APN: 223-091-003

Grant Funding Requested: $17,040.00

Total Budget: $26,002.45

Project Budget

Item	Grant Funds	Other Funds (Source)
Permit Fees		
CDFW LSA Agreement		$5,888.45 (Applicant)
SWRCB 401 Certification	$2,417.00	
Consultant and Professional Fees		
Timberland Resource Consultants		$2,500.00 (Applicant)
Margro Advisors	$423.00	$574.00 (Applicant)
*Materials, Equipment and Labor**		
Eel River Excavation	$14,200.00	
Totals	**$17,040.00**	**$8,962.45**

*See attached bid

EEL RIVER EXCAVATION
3450 upper sawmill rd
City- Garberville
State- ca
Zip code- 95542
Tel.707-672-4818
Estimate # 1
DATE. 10/26/2022
SOLDTO. Aldebarans Gaze LLC
Bryan harpel

Project notes - replace 48" culvert

DESCRIPTION	Quantity	Rate	AMOUNT
Rock and Rip Rap	2	1000	$2000
Machines hours -30,000#Excavator	16 hours	275	$4400
Culvert pipe	2	3000	$6000
Machine Transport	6 hr	200	$ 1200
Man hours 1 Person	8 hr	50	$ 400
TOTAL			$14,200

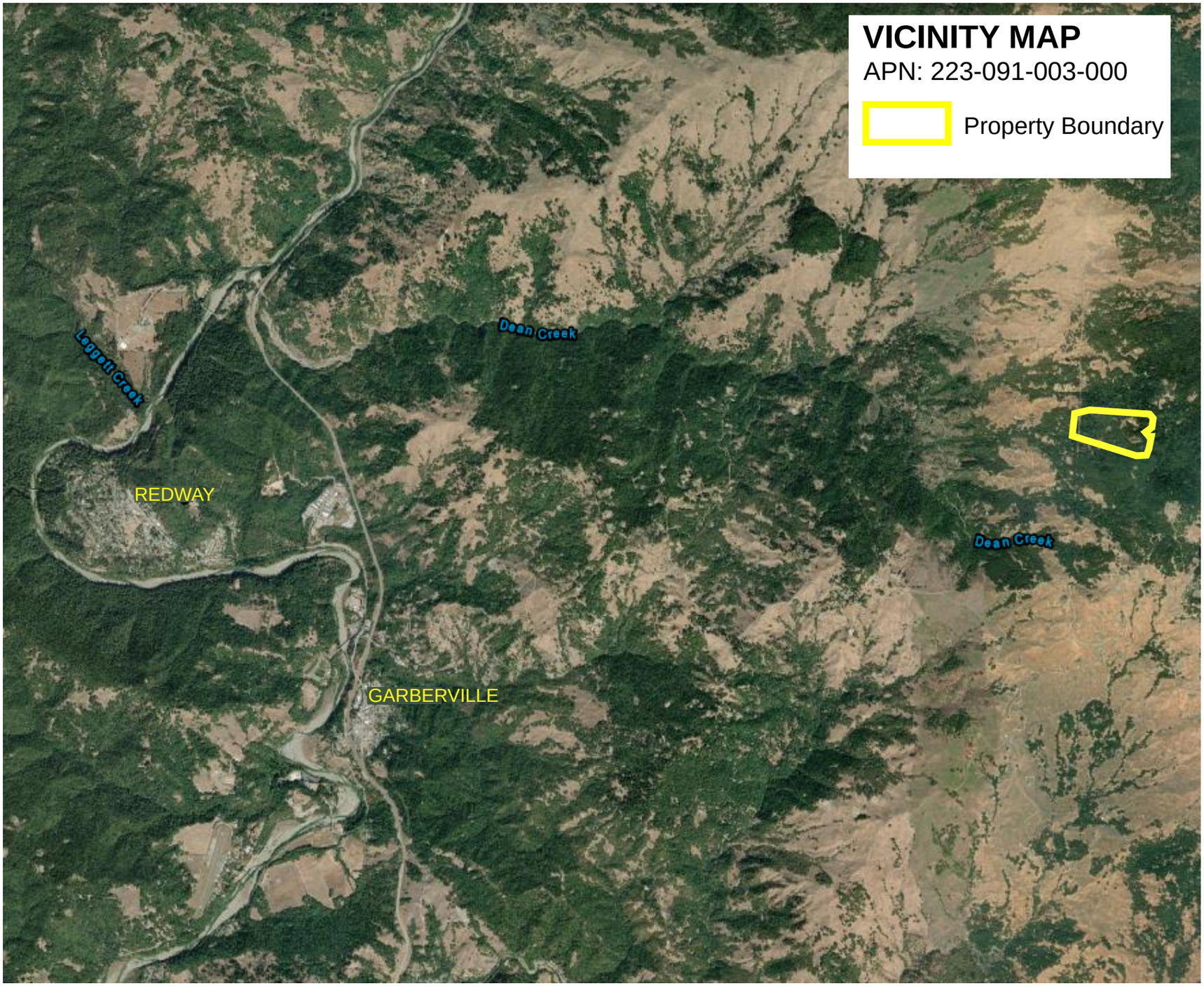


Figure 1 - Vicinity Map

Harpel Topo Map

Humboldt County Planning and Building Department

Printed: October 25, 2022 Web AppBuilder 2.0 for ArcGIS

Map Disclaimer:
While every effort has been made to assure the accuracy of this information, it should be understood that it does not have the force & effect of law, rule, or regulation. Should any difference or error occur, the law will take precedence.

Highways and Roads
- Principal Arterials
- Minor Arterials
- Major Collectors
- Minor Collectors
- Local Roads
- Private or Unclassified
- Major River or Stream

Blue Line Streams
- Perennial 1-3
- Perennial >4
- Intermittent
- Subsurface
- City Boundary
- Counties
- Parcels (no APN labels)

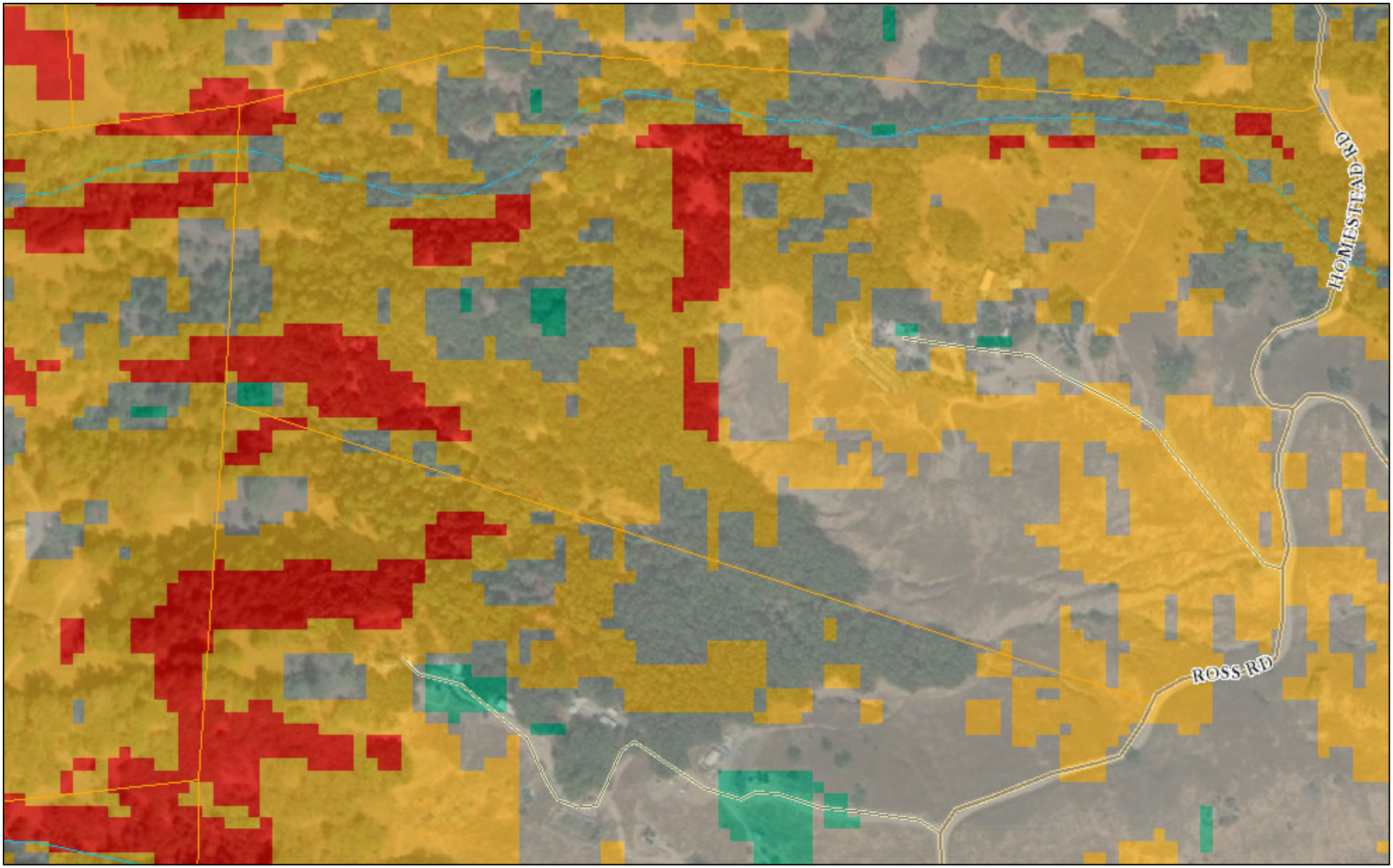
Topographic Contours 40ft
- Minor Interval
- Major Interval

0 180 360 720 Feet
0 0.0325 0.065 0.13 Miles
RF= 1:4,514 1 in = 376 ft

N W E S

Sources: Humboldt County GIS
Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community
FRAP, FEMA. USGS. ESA, CGS
Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

Figure 2 - Topo Map



Harpel Slope Map

Humboldt County Planning and Building Department

Printed: October 25, 2022 Web AppBuilder 2.0 for ArcGIS

Map Disclaimer:
While every effort has been made to assure the accuracy of this information, it should be understood that it does not have the force & effect of law, rule, or regulation. Should any difference or error occur, the law will take precedence.

Highways and Roads
- Principal Arterials
- Minor Arterials
- Major Collectors
- Minor Collectors
- Local Roads
- Private or Unclassified
- Major River or Stream

Blue Line Streams
- Perennial 1-3
- Perennial >4
- Intermittent
- Subsurface
- City Boundary
- Counties
- Parcels (no APN labels)

Slope USGS
- 15-30%
- 30 - 50%
- +50%

Slope less than 15%
- <15%

0 180 360 720 Feet
0 0.0325 0.065 0.13 Miles
RF= 1:4,514 1 in = 376 ft

N W E S

Sources: Humboldt County GIS
Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community
FRAP, FEMA. USGS. ESA, CGS
Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

Figure 3 - Slope Map

Cofferdam Construction and Use Specifications

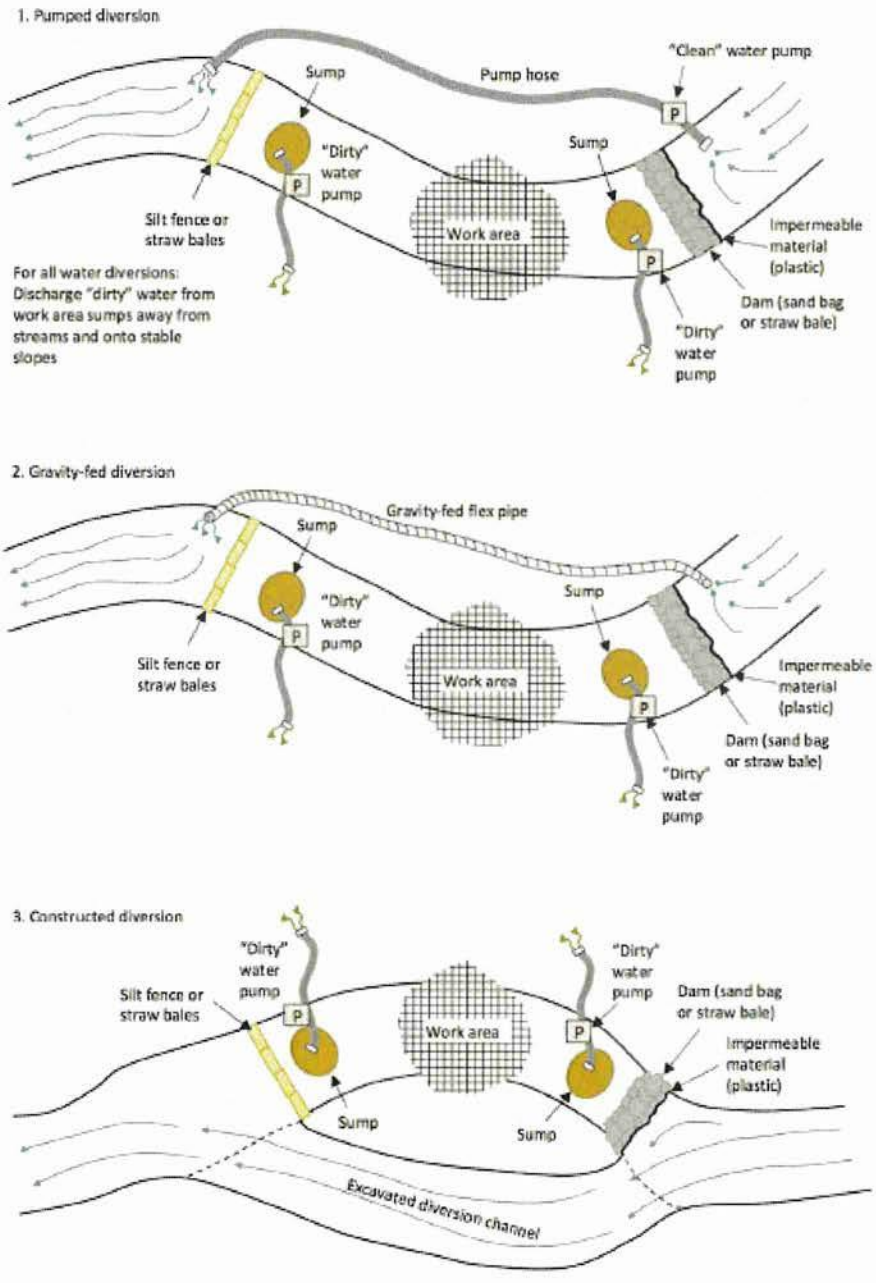


Figure 4A - Co□erda□ Speci□cations

FIGURE 197. *Flex pipe stream diversion around a road construction site. The inlet to this 6 inch diameter flex pipe inlet collects clear streamflow from a retention dam above the project site and gravity feeds it around the project area and back into the natural channel downstream from construction work (see photo).*

FIGURE 198. *Sand bag retention dam on this small stream was used to pond streamflow so it could be pumped around a culvert installation site. The green intake hose is screened to keep out rocks and debris while the red pump hose extends several hundred feet around the project work area.*

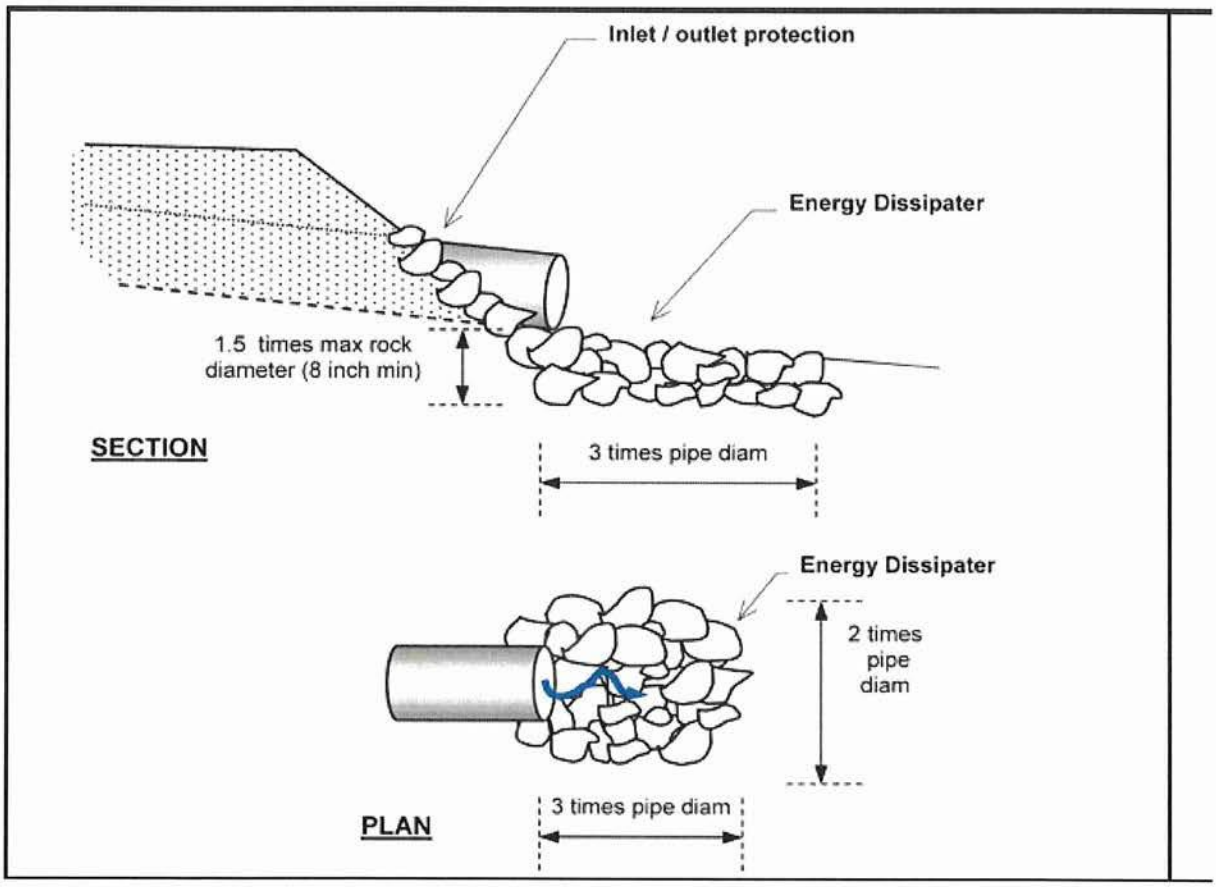
FIGURE 199. *For larger streams, pump trucks, large pumps or multiple small pumps can be used to pump streamflow around project work sites. Here, a pump truck is used to temporarily divert flow in a fish bearing stream where dual culverts are being replaced with a railcar bridge. Young fish were removed from this fish bearing stream before project work started.*

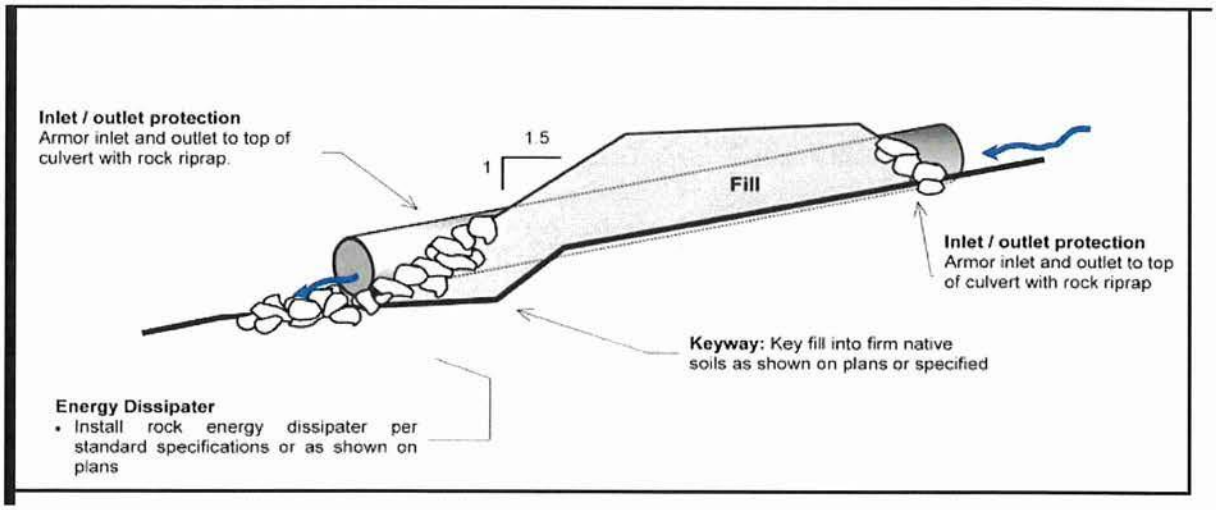
Culvert Installation Specifications

- New culvert installations shall be sized to accommodate a 100-year storm.
- New culverts shall be placed at stream gradient, or have downspouts, or have energy dissipaters at outfall.
  - Align culverts with the natural stream channel orientation to ensure proper function, prevent bank erosion and minimize debris plugging.
  - Place culverts at the base of the fill and at the grade of the original streambed or install a downspout past the base of the fill. Downspouts should only be installed if there are no other options.
  - Culverts should be set slightly below the original stream grade so that the water drops several inches as it enters the pipe.
  - Culvert beds should be composed of rock-free soil or gravel, evenly distributed under the length of the pipe.
  - Compact the base and sidewall material before placing the pipe in its bed.
  - Lay the pipe on a well-compacted base. Poor basal compaction will cause settling or deflection in the pipe and can result in separation at a coupling or rupture in the pipe wall.
  - Backfill material should be free of rocks, limbs or other debris that could dent or puncture the pipe or allow water to seep around the pipe.
  - Cover one end of the culvert pipe, then the other end. Once the ends are secure, cover the center.
  - Tamp and compact backfill material throughout the entire process, using water as necessary for compaction.
  - Backfill compacting will be done in 0.5 – 1.0 foot lifts until 1/3 of the diameter of the culvert has been covered.
  - Push layers of fill over the crossing to achieve the final design road grade, at a minimum of one-third to one-half the culvert diameter.
- Critical dips shall be installed on culvert crossings to eliminate diversion potential.
- Road approaches to crossings shall be treated out to the first drainage structure (i.e. waterbar) or hydrologic divide to prevent transport of sediment.
- Road surfaces and ditches shall be disconnected from streams and stream crossings to the greatest extent feasible. Ditches and road surfaces that cannot be feasible disconnected from streams or stream crossings shall be treated to reduce sediment transport to streams.
- If downspouts are used, they shall be secured to the culvert outlet and shall be secure on fill slopes.
- Culverts shall be long enough so that road fill does not extend or slough past the culvert ends.
- Inlet of culverts and associate fill shall be protected with appropriate measures that extend at least as high as the top of the culvert.
- Outlet of culverts shall be armored with rock if road fill sloughing into channel can occur.
- Armor inlets and outlets with rock, or mulch and seed with grass as needed (not all stream crossings need to be armored).
- Where debris loads could endanger the crossing a debris catchment structure shall be constructed upstream of the culvert inlet.
- Bank and channel armoring may occur when appropriate to provide channel and bank stabilization.

Figure □A - Cul□ert Speci□ications

Culvert Installation Specifications

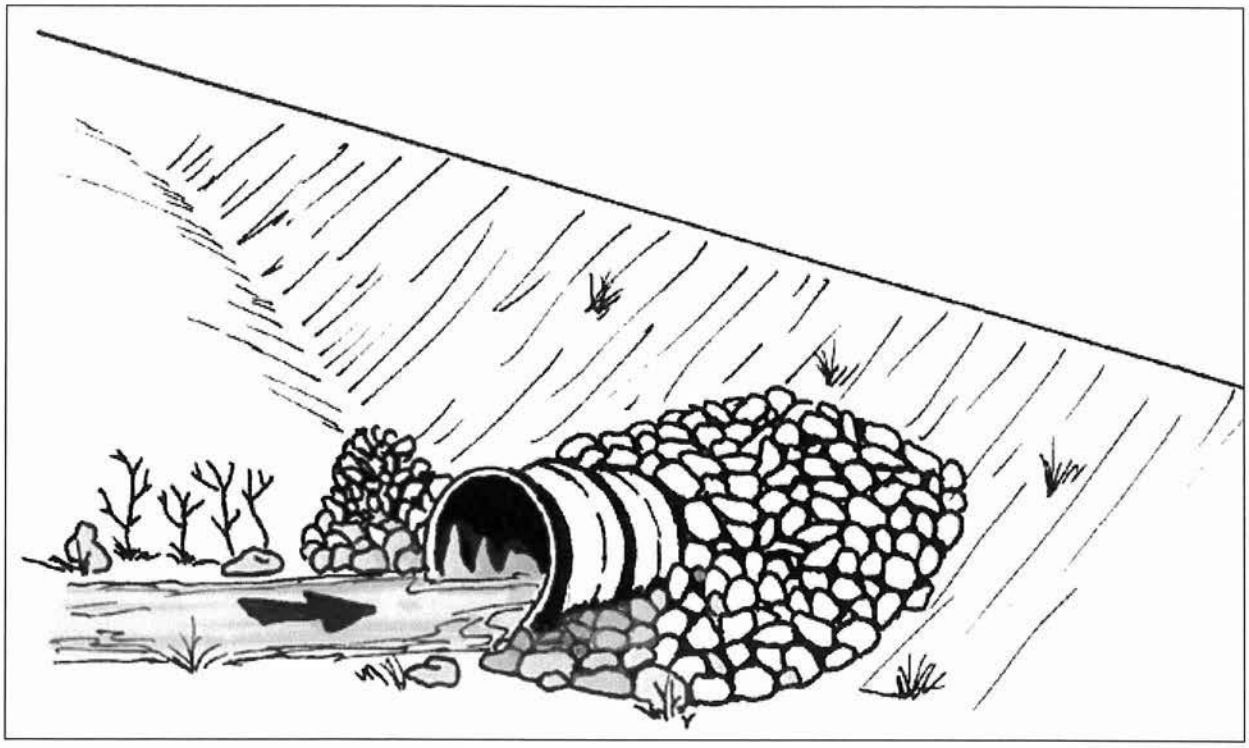




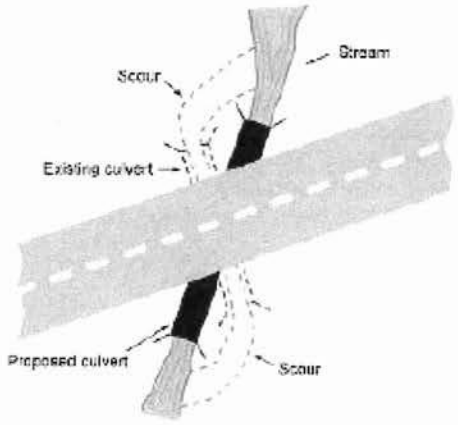
Riprap installed to protect the inlet and outlet of a stream crossing culvert from erosion or for energy dissipation should be keyed into the natural channel bed and banks to an approximate depth of about 1.5x the maximum rock thickness. Riprap should be placed at least up to the top of the culvert at both the inlet and outlet to protect them from splash erosion and to trap any sediment eroded from the newly constructed fill slope above.

Figure □□ - Cul□ert Speci□ications

Culvert Installation Specifications



Rock armor used for inlet and outlet protection (i.e., not as energy dissipation) does not have to be sized to protect against high velocity scour. If the culvert is properly sized and its length is adequate, it should be able to transmit flood flows without scouring the inlet or eroding the outlet around the culvert. Armor shown here is designed to protect the culvert outlet and basal fill from splash erosion and from occasional submergence and currents within standing water (at the inlet) when the culvert plugs. Importantly, inlet and outlet armor also serves to trap sediment that has been eroded or slides down the new constructed fill face in its first several years, until the slope becomes well vegetated.



HANDBOOK FOR FOREST, RANCH AND RURAL ROADS

FIGURE 97. *Culvert alignment should be in relation to the stream and not the road. It is important that the stream enters and leaves the culvert in a relatively straight horizontal alignment so streamflow does not have to turn to enter the inlet or discharge into a bank as it exits. This figure shows a redesigned culvert installation that replaces the bending alignment that previously existed. Channel turns at the inlet increase plugging potential because wood going through the turn will not align with the inlet. Similarly, channel turns at the inlet and outlet are often accompanied by scour against the channel banks (Wisconsin Transportation Information Center, 2004).*

Culvert Installation Specifications

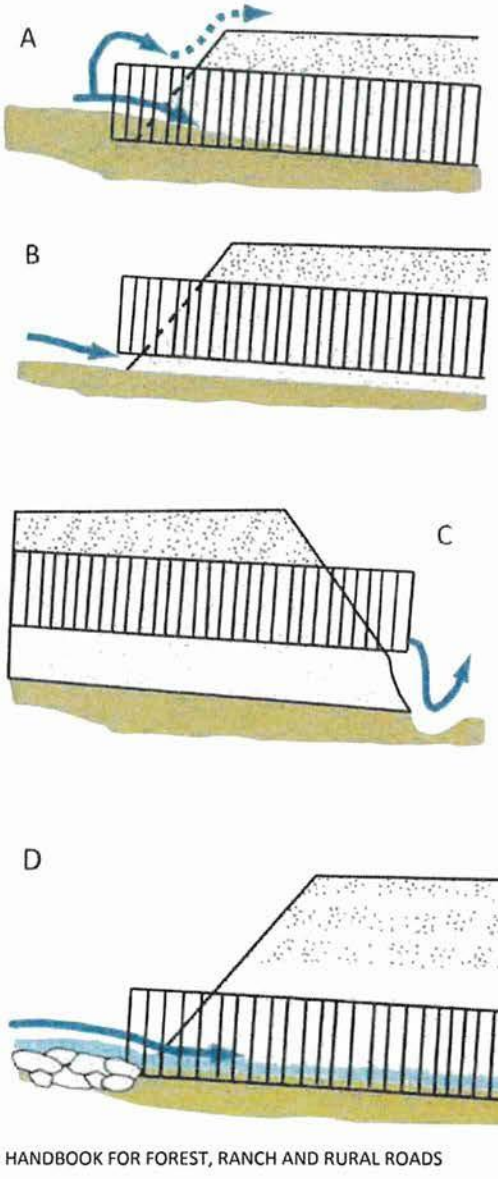
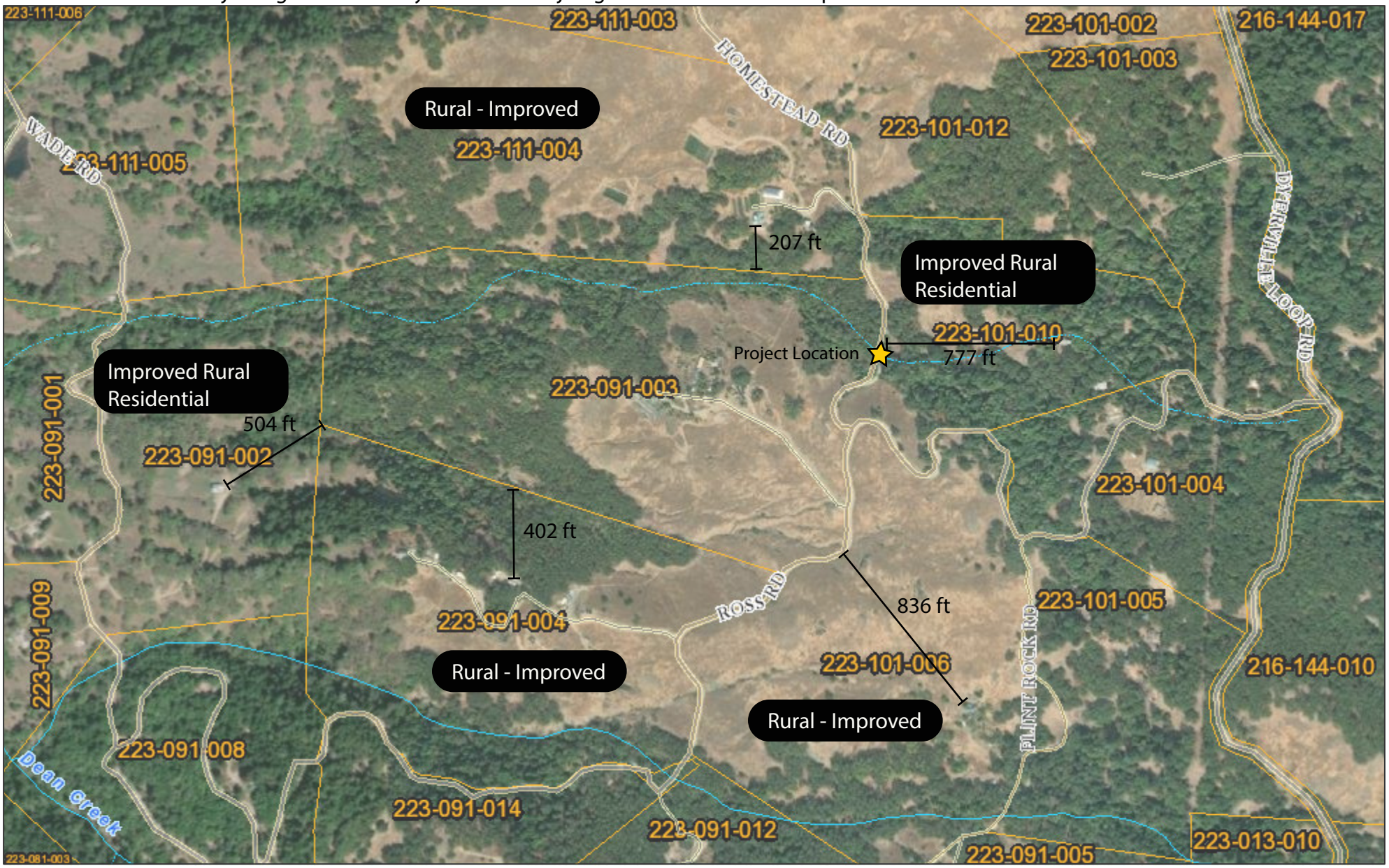


FIGURE 155. *Proper culvert installation involves correct culvert orientation, setting the pipe slightly below the bed of the original stream, and backfilling and compacting the fill as it is placed over the culvert. Installing the inlet too low in the stream (A) can lead to culvert plugging, yet if set too high (B) flow can undercut the inlet. If the culvert is placed too high in the fill (C), flow at the outfall will erode the fill. Placed correctly (D), the culvert is set slightly below the original stream grade and protected with armor at the inlet and outlet. Culverts installed in fish-bearing stream channels must be inset into the streambed sufficiently (>25% embedded) to have a natural gravel bottom throughout the culvert (Modified from: MDSL, 1991).*

HANDBOOK FOR FOREST, RANCH AND RURAL ROADS

Figure □D - Cul□ert Speci□cations

Distance to Nearest Adjoining Parcel Primary Stucture & Adjoing Parcel Use Code Descriptions



Aldeberan's Gaze Parcel Map

Humboldt County Planning and Building Department

Printed: October 31, 2022 Web AppBuilder 2.0 for ArcGIS

Map Disclaimer:
While every effort has been made to assure the accuracy of this information, it should be understood that it does not have the force & effect of law, rule, or regulation. Should any difference or error occur, the law will take precedence.

Highways and Roads
- Principal Arterials
- Minor Arterials
- Major Collectors
- Minor Collectors
- Local Roads
- Private or Unclassified
- Major River or Stream

Blue Line Streams
- Perennial 1-3
- Perennial >4
- Intermittent
- Subsurface
- City Boundary
- Counties
- Parcels
- Parcels (no APN labels)

0 350 700 1,400 Feet
0 0.05 0.1 0.2 Miles
RF= 1:9,028 1 in = 752 ft

N W E S

Sources: Humboldt County GIS
Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community
Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

Figure □ - Adjacent Parcels

APPLICATION PACKET CHECKLIST

Please check below to ensure you have a complete application. Once complete, email the following documents, in pdf format with the text "Application for Remediation Grant Program Funding" in the subject line to mrichardson@co.humboldt.ca.us.

- X Signed Application Submission Form
- X Project Description – Summary of the Project, up to 2 pages.
- X Plot Plan
- X Plot Plan Checklist – Attached
- X Cross sections of proposed work including topographic elevations
- X Scope of Work – Detailed Description of Work
- X Schedule for Completion – Identify Milestones
- X Erosion Control Plan and Monitoring Plan
- X Budget – Be as specific as possible – sample attached
- X Project Maps and Figures
- ☐Letter(s) of Support (optional)

APPLICATION FORM - Commercial Cannabis Land Use Ordinance Mitigation and Remediation Fund Program

Project Title: Eagle Creek Ranch Road Improvements Date of Application: 10/31/2022

Applicant Name: □coMeds, LLC Project APN: 223-111-004

Contact Person Name and Title: Robert May

Contact Phone: (415) 710-5000 Contact Email: robert@humboldtsky.com

Contact Address: 1001 Bridgeway #474 Sausalito, CA 94965

Amount Requested: $24,486 Total Budget: $29,052

Project Timeline: Start Date: 04/01/2023 End Date: 08/01/2023

Signature of Applicant: 

Project: Eagle Creek Ranch Road Improvements

Applicant: EcoMeds, LLC

Contact: Robert May

APN: APN: 223-111-004

Grant Funding Requested: $24,486.00

Project Status: Permitted**,** Shovel-ready

Project Description

The project is located in Humboldt County, on parcel APN 223-111-004, at 230 Homestead Road, Garberville, California. The property is located in the Eel River watershed, and contains an unnamed tributary to Dean Creek, which is a tributary to the South Fork of the Eel River.

The project proposes rock armoring of two stream crossings and the removal of a water storage bladder at another crossing as required by the applicant's LSA agreement with Fish & Wildlife.

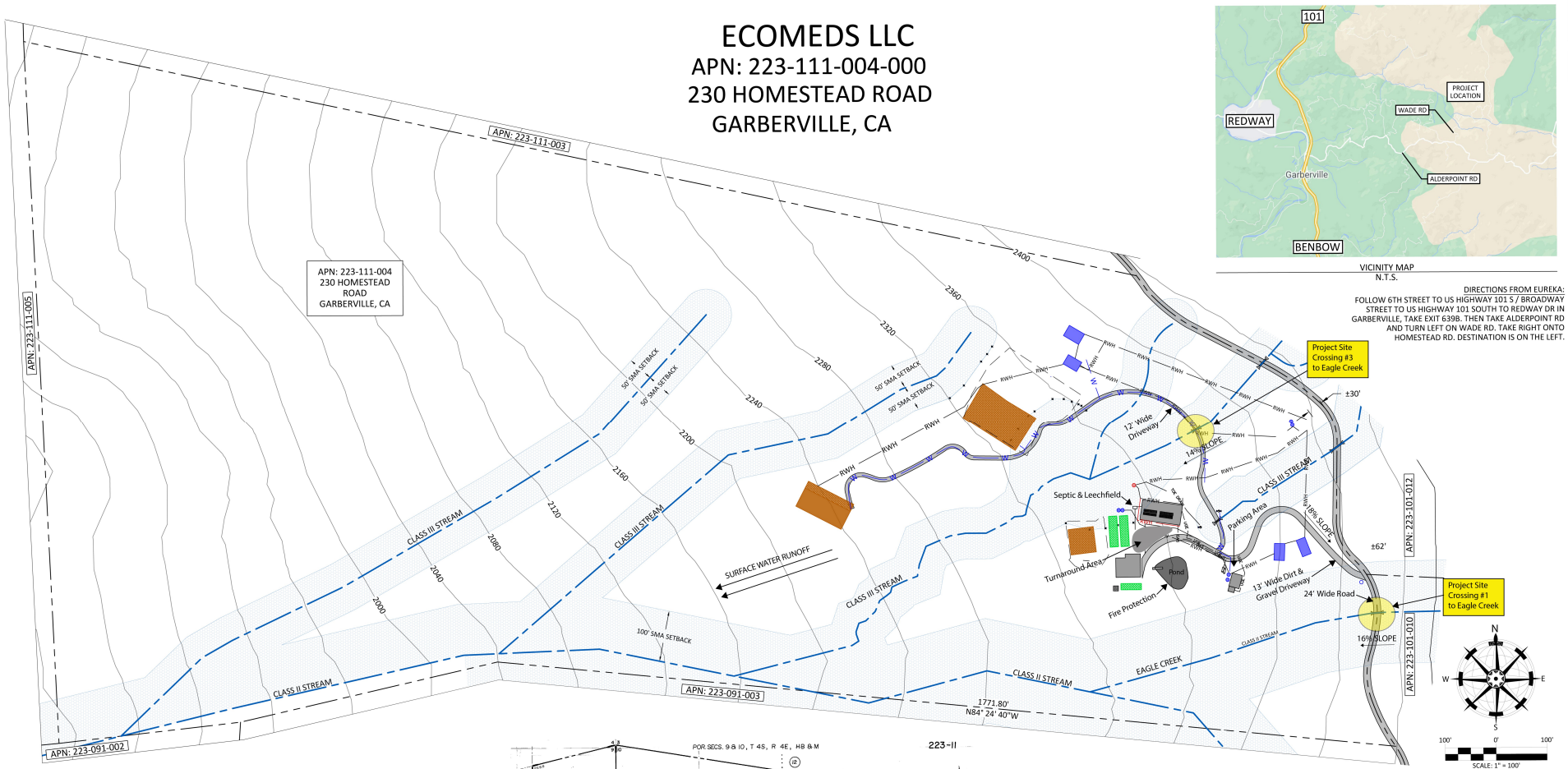
While the Humboldt GIS indicates the parcel is in an area of high slope instability, it is not within a flood hazard zone, nor in an earthquake hazard zone. The parcel is surrounded by rural improved properties. No impact to these other parcels is expected.

Crossing upgrades are expected to minimize baseline sedimentation levels entering the watershed from the property, and will avoid potential significant impacts associated with total crossing failure. All of the crossing upgrades will be constructed according to BMPs found in the "Handbook for Forest, Ranch and Rural Roads" (Weaver, Weppner and Hagans, 2015), and the California Salmonid Stream Habitat Manual, Part X (Weaver, Hagans and Weppner, 2006) by a licensed contractor.

These upgraded watercourse crossings will achieve required 100-year flood requirements and reduce potential sediment deposits into the streams connected to the Eel River, protecting water quality, aquatic ecosystems, and limiting impact on downstream resources.

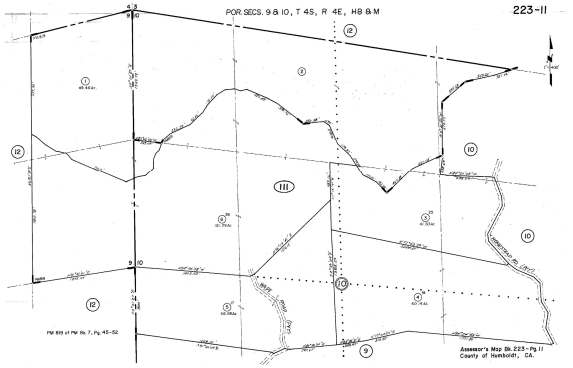
Permanent impacts to existing native channel bed, channel, watercourse banks, and associated riparian habitat will be negligible and avoided. Incidental destruction of small areas of riparian habitat growing on existing road fill or in disturbed channel areas is expected at the proposed sites but will be minimized during remediation. No loss of trees is expected.

ECOMEDS LLC
APN: 223-111-004-000
230 HOMESTEAD ROAD
GARBERVILLE, CA



VICINITY MAP
N.T.S.

DIRECTIONS FROM EUREKA:
FOLLOW 6TH STREET TO US HIGHWAY 101 S / BROADWAY STREET TO US HIGHWAY 101 SOUTH TO REDWAY DR IN GARBERVILLE, TAKE EXIT 639B. THEN TAKE ALDERPOINT RD AND TURN LEFT ON WADE RD. TAKE RIGHT ONTO HOMESTEAD RD. DESTINATION IS ON THE LEFT.



PARCEL MAP
N.T.S.

LEGEND

<P>	PROPOSED	POD	POINT OF DIVERSION
<E>	EXISTING	POS	POINT OF STORAGE
W	WELL	POU	POINT OF USE
P	PROPANE TANK		STREAM / CREEK
	ELECTRIC / TELEPHONE POLE		PROPERTY LINE
RWH RWH	RAINWATER HARVEST FILL LINE		EXISTING 40' CONTOUR
	RAIN WATER HARVEST GUTTER SYSTEM	OHE	OVER-HEAD ELECTRIC
W W	WATER SUPPLY LINE		FENCE / WALL
	PROPOSED	OHT	OVER-HEAD TELEPHONE
	STREAM MANAGEMENT AREA		EXISTING WATER STORAGE
	EXISTING GREENHOUSE CULTIVATION		EXISTING WATER STORAGE
	PROPOSED GREENHOUSE CULTIVATION		EXISTING OUTDOOR CULTIVATION
			PROPOSED OUTDOOR CULTIVATION

SRA REQUIREMENTS

☒ PROVIDE ADEQUATE WATER STORAGE AND DELIVERY AS OUTLINED BY SRA ORDINANCE AND CALFIRE REQUIREMENTS.

☒ PROVIDE ADEQUATE TURN AROUND AND PULLOUTS AS OUTLINED BY SRA ORDINANCE AND CALFIRE REQUIREMENTS.

PROPERTY LINE AND BEARING NOTES

THIS IS NOT A RECORD OF SURVEY. THE BOUNDARY SHOWN IS APPROXIMATE AND BASED OFF OF ASSESSOR'S PARCEL MAPS. NO SURVEY MONUMENTS ARE FOUND NOR SHOWN. CONTOURS SHOWN WERE IMPORTED FROM HUMBOLDT COUNTY GIS MAPPING DEPARTMENT. AERIALS ARE FROM DRONE FLIGHTS AND GOOGLE EARTH PRO.

CONTRACTOR ALERT!

CONTRACTOR MUST CONTACT USA NORTH DIG AT 811 AT LEAST 72 HOURS BEFORE ANY EARTHWORK OR ACTIVITIES THAT MAY IMPACT EXISTING UNDERGROUND UTILITIES. EXISTING UTILITY ALIGNMENTS BOTH HORIZONTALLY AND VERTICALLY MUST BE VERIFIED BY THE CONTRACTOR PRIOR TO ANY CONSTRUCTION ACTIVITIES.

811

OWNER / APPLICANT INFORMATION

OWNER/APPLICANT:
MAILING ADDRESS:
EMAIL:

PARCEL / SITE INFORMATION

ZONING: AE-B-6
LOT SIZE: 60.81 ACRES
PARCEL CENTROID: N40° 07' 44.39", W123° 42' 55.75"
PARCEL 4 OF ASSESSOR'S MAPS, BK 223 PG 11
CREEKS / STREAMS: YES
GRADING: SEE GRADING PLAN
WATER: RAIN WATER CATCHMENT
WASTE WATER: SEPTIC SYSTEM
POWER: RENEWABLE ENERGY & BACKUP GENERATOR
TREES TO BE REMOVED: NO

CULTIVATION NOTES

☒ THERE ARE NO SCHOOLS, SCHOOL BUS STOPS, PLACE OF WORSHIP, PUBLIC PARKS, OR TRIBAL CULTURAL RESOURCES WITHIN 600' OF CULTIVATION AREAS.

☒ THERE ARE NO OFFSITE RESIDENCES WITHIN 275' OF CULTIVATION AREAS

REV. 10/30/2023 - Margo Advisors

DTN ENGINEERING & CONSULTING
dnicoletti@dtnengineering.com

NO.	HISTORY / REVISIONS	BY	CHCK	DATE

PLOT PLAN FOR EAGLE CREEK ROAD IMPROVEMENTS
EcoMeds LLC
230 HOMESTEAD ROAD
GARBERVILLE, CA

APN: 223-111-004-000
DRAWN BY: RGN - UDD
DATE: 8/18/2022

PLOT PLAN OVERALL

SHEET NO. 1

save_date:8/18/2022 file_name:223-111-004_plot_plan.dwg

PLOT PLAN AND TENTATIVE MAP CHECKLIST

The following information must be shown on your plot plan or tentative map. Please check ✓ the box to the left of the items shown on the plot plan or tentative map. If any item is not on your site to your knowledge, write "N/A" next to the box. Plot plans shall be drawn on a minimum size sheet of 8-1/2" x 11", and tentative subdivision maps on a minimum size sheet of 18" x 26". ***Note: This Checklist must be completed by the applicant and submitted with your application.***

Applicant's Name _____ APN 223-111-□□4

_____

FOR ALL PROJECTS

- ☐ 1. Name of applicant(s)
- ☐ 2. Location or vicinity map (on or attached to the plot plan)
- ☐ 3. The subject parcel (show entire parcel with dimensions)
- ☐ 4. Date, north arrow and scale
- ☐ 5. Name, County road numbers, and width of all existing and proposed access roadways adjacent to or within the subject parcel (indicate width of traveled way, grade (in % slope), and surface)
- ☐ 6. Existing and proposed improvements (label as "existing" and "proposed" with dimensions and distance to nearest two (2) property lines)
  - ☐ a. Structures and buildings (include floor area, height and proposed use)
  - ☐ b. Driveways and turnaround areas (indicate width, grade (in % slope) and surface)
  - ☐ c. Utility lines (electric, gas, telephone, sewer, water, and cable TV)
  - ☐ d. Septic tanks and leachfields (label primary/reserve areas and test holes)
  - ☐ e. Wells
  - ☐ f. Parking and loading areas (show individual parking spaces, including handicapped parking and ramps)
  - ☐ g. Storm drains, curbs and gutters
  - ☐ h. Emergency water storage tanks and fire hydrants
  - ☐ i. Landscaped areas (include proposed exterior lighting)
  - ☐ j. Major vegetation (identify mature trees (12" dbh or larger) to be removed)
  - ☐ k. Diked areas
  - ☐ l. Proposed grading and fill (estimate volume)
  - ☐ m. Signs (indicate size, illuminated, and design (e.g., monument, pylon, etc.))
  - ☐ n. Other - specify _____
- ☐ 7. Direction of surface water runoff
- ☐ 8. Location and width of all existing and proposed easements of record
- ☐ 9. Hazardous areas (indicate on map if on the project site or within 400 feet of the project site):
  - ☐ a. Areas subject to inundation or flooding
  - ☐ b. Steep or unstable slopes
  - ☐ c. Expansive (clay) soils
  - ☐ d. Earthquake faults
  - ☐ e. Hazardous waste or substance sites
  - ☐ f. Other - specify _____
- ☐ 10. Sensitive habitat areas (indicate on map if on project site or within 400 feet of the project site):
  - ☐ a. Creeks, rivers, sloughs and other drainage courses
  - ☐ b. Lakes, ponds, marshes, or "wet" meadows
  - ☐ c. Beaches
  - ☐ d. Sand dunes
  - ☐ e. Other - specify _____
- ☐ 11. Historical buildings or known archaeological or paleontological resources
- ☐ 12. Land use and buildings on adjacent parcels, and approximate distances to closest property lines

FOR LOT LINE ADJUSTMENT PLOT PLANS ONLY

- ☐ 13. Proposed new lines and lines to be eliminated (show lines to be eliminated as dashed)
- ☐ 14. Areas (in square footage or acreage) of the initial and resulting parcels

FOR TENTATIVE SUBDIVISION MAPS ONLY

- ☐ 16. Approximate dimensions and areas of all proposed lots
- ☐ 17. A statement that "All easements of record are shown on the tentative map and will appear on the recorded subdivision map"
- ☐ 18. Contour lines (at _____ intervals)
- ☐ 19. For major subdivisions (5 or more parcels): proposed drainage improvements, details of any grading to be performed, approximate radii of all roadway curves, areas for public use, and typical sections of all streets, highways, ways and alleys
- ☐ 20. Names and assessor's parcel numbers of all contiguous ownerships

NOTE: THE SUBMITTAL OF INCOMPLETE OR ILLEGIBLE PLOT PLANS OR TENTATIVE MAPS WILL CAUSE DELAYS IN THE PROCESSING OF YOUR APPLICATION

Project: Eagle Creek Ranch Road Improvements

Applicant: EcoMeds, LLC

Contact: Robert May

APN: APN: 223-111-004

Grant Funding Requested: $24,486.00

Scope of Work

The project is for rock armoring of two stream crossings and removal of a water bladder imposed within the roadway buffer at another stream crossing. The scope of work is described in the applicant's LSA agreement with Fish & Wildlife, and is summarized as follows:

Crossing 1: Existing 36" diameter culvert is properly sized to meet 100-year events but requires proper rock armoring for flows and associated debris, especially with regard to the outflow, to minimize erosion. Armoring must fill in eroded voids and stabilize erosion as directed by a licensed engineer. Work will require removing metal debris from the stream channel before rock armoring. Debris will be discarded at a proper waste facility following removal. Incidental destruction of small areas of riparian habitat growing on existing road fill or in disturbed channel areas is expected but will be minimized during remediation.

Crossing 2: Remove water bladder from roadside, restore any drainage features, and dispose of discarded material at a proper waste facility.

Crossing 3: Existing 24" culvert is properly sized to meet 100-year events but requires proper rock armoring for flows and associated debris, especially with regard to the outflow, to minimize erosion. Armoring must fill in eroded voids and stabilize erosion as directed by a licensed engineer. Incidental destruction of small areas of riparian habitat growing on existing road fill or in disturbed channel areas is expected but will be minimized during remediation.

The project requires heavy equipment and a supply of rock. The work will be completed by Edwards Excavation & Restoration, license number 971935. The Water Board has issued a 401 certification for this project.

Project: Eagle Creek Ranch Road Improvements

Applicant: EcoMeds, LLC

Contact: Robert May

APN: APN: 223-111-004

Grant Funding Requested: $24,486.00

Mitigation and Remediation Fund
Schedule for Completion

Milestone	Start Date	End Date
Final Bidding and Contracting	April 1, 2023	April 30, 2023
Project Ground-Breaking	June 1, 2023	
Project Completion		August 1, 2023
Monitoring	August 1, 2023	Ongoing

Project: Eagle Creek Ranch Road Improvements

Applicant: EcoMeds, LLC

Contact: Robert May

APN: APN: 223-111-004

Grant Funding Requested: $24,486.00

Erosion Control Plan

To protect nearby watershed areas and nearby habitat the site is managed to meet standard conditions and follow best practices in accordance with guidelines provided by the North Coast Regional Water Quality Control Board (NCRWQCB). These practices address erosion control and drainage features, spoils management, water storage and use, irrigation runoff, fertilizers and pesticides, and stream and wetland buffers when applicable.

Best practice steps for this site can include:

- Moderate road shaping and ditch-relief used to optimize drainage to stable areas
- Out-sloping maintained to ensure proper capture and capacity of seasonal flow
- Usage of vegetative ground cover and gravel for added sediment control
- Application of straw mulch to exposed soils to minimize erosion
- Careful irrigation, with immediate oversight, to reduce the possibility of irrigation runoff

Applicant will maintain driveways and access roads to eliminate erosion or runoff during storms. Prior to the winter season and significant storm events, roads and cultivation sites will be inspected and monitored to ensure that runoff is prevented.

If potential issues are discovered during or immediately following a storm event, they will be corrected as soon as possible to ensure minimal impact and prevent sediment flow in the future. This will include proper ditching and vegetation buffers, and as needed, straw, seed, wattles, jute cloth or other industry standards used to prevent and eliminate runoff.

Project: Eagle Creek Ranch Road Improvements

Applicant: EcoMeds, LLC

Contact: Robert May

APN: APN: 223-111-004

Grant Funding Requested: $24,486.00

Project Budget

Item	Grant Funds	Other Funds (Source)
Permit Fees		
401 Certification		$2,066.00 (Applicant)
Consultant and Professional Fees		
DTN Engineering		$2,500.00 (Applicant)
Margro Advisors	$1,386.00	
*Materials, Equipment and Labor**		
Edwards Excavation & Restoration	$23,100.00	
Totals	**$24,486.00**	**$4,566.00**

*See attached bid

Estimate

Date	Estimate #
10/23/2022	5

EDWARDS
EXCAVATION & RESTORATION
General Engineering Contractors

P.O. Box 245
Whitethorn, CA 95589
Cell 707-496-3353
Phone/Fax 707-986-1578
edwardsexcavation@hotmail.com

LIC#971935
LTO# A11409

Ea□le Creek Ranch LLC

Description	Qty/ Hour	Rate	Total
Job description- LSA compliance work			
Mobilization of equipment	1	2,500.00	2,500.00
Crossing #1 remove metal debris from channel then armoring outflow of existing 36" culvert			
Trucking and rock	1	10,000.00	10,000.00
Equipment services	1	3,500.00	3,500.00
Trucking out scrape metal	1	900.00	900.00
Riprap Placement Labor			
Equipment services	1	1,000.00	1,000.00
Crossing #3 armor outlet of existing 24" culvert			
Trucking and rock	1	2,000.00	2,000.00
Equipment services	1	700.00	700.00
Demobilization of equipment	1	2,500.00	2,500.00

All equipment, trucking, & material price subject to change due to potential cost increase

Total $23,100.00

July 25, 2018 WDID:1_12CC403281

ROBERT MAY
230 HOMESTEAD ROAD
GARBERVILLE, CA 95542

Subject: Notice of Applicability - Waste Discharge Requirements Water Quality Order WQ-2017-0023-DWQ

The attached Notice of Applicability provides notice that the requirements of the State Water Board *Cannabis Cultivation Policy- Principles and Guidelines for Cannabis Cultivation* (Policy), and the *General Waste Discharge Requirements and Waiver of Waste Discharge Requirements for Discharges of Waste Associated with Cannabis Cultivation Activities*, Order No. WQ-2017-0023-DWQ (General Order) are applicable to the site as described below. Based on the information provided, the Discharger self-certifies the cannabis cultivation activities are consistent with the requirements of the State Water Board Policy and General Order.

Please direct all submittals, discharge notifications, and questions regarding compliance and enforcement to the North Coast Regional Water Quality Control Board Cannabis Program at (707) 576-2676 or northcoast.cannabis@waterboards.ca.gov .

Sincerely,

Matthias St. John
Executive Officer
North Coast Regional Water Quality Control Board

180723_1L_1_12CC403281_1B16289CHUM_EcoMeds LLC_NOA_TW

NOTICE OF APPLICABILITY – WASTE DISCHARGE REQUIREMENTS, WATER QUALITY ORDER WQ-2017-0023-DWQ, ECOMEDS LLC, HUMBOLDT COUNTY APN(s) 223-111-004; WDID: 1_12CC403281

Robert May (hereafter "Discharger") submitted information through the State Water Resources Control Board's (State Water Board's) online portal on July 03, 2018, for discharges of waste associated with cannabis cultivation related activities. Based on the information provided, the Discharger self-certifies the cannabis cultivation activities are consistent with the requirements of the State Water Board *Cannabis Cultivation Policy-Principles and Guidelines for Cannabis Cultivation* (Policy), and the *General Waste Discharge Requirements and Waiver of Waste Discharge Requirements for Discharges of Waste Associated with Cannabis Cultivation Activities*, Order No. WQ-2017-0023-DWQ (General Order). This letter provides notice that the Policy and General Order are applicable to the site as described below. You are hereby assigned waste discharge identification (WDID) number **1_12CC403281**. The original WDID assigned by the North Coast Regional Water Quality Control Board was 1B16289CHUM.

The Discharger is responsible for all the applicable requirements in the Policy, General Order, and this Notice of Applicability (NOA).

1. FACILITY AND DISCHARGE DESCRIPTION

All dischargers enrolled under the North Coast Regional Water Board's Order (R1-2015-0023) or the Central Valley Regional Water Board's Order (R5-2015-0113) as of October 17, 2017, (the adoption date of the General Order) may retain the reduced setbacks applicable under the appropriate Regional Water Board order unless the Executive Officer for the appropriate Regional Board determines that the reduced setbacks applicable under their regional order are not protective of water quality. However, sites that expand their cannabis cultivation area or other cannabis related activities must comply with the riparian setbacks in the General Order.

The information submitted by the Discharger states the disturbed area is equal to or greater than 2,000 square feet and less than 1 acre (43,560 square feet), no portion of the disturbed area is within the setback requirements, no portion of the disturbed area is located on a slope greater than 30 percent, and the cannabis cultivation area is less than or equal to 1 acre.

Based on the information submitted by the Discharger, the cannabis cultivation activities are classified as Tier 1 Low Risk.

2. SITE-SPECIFIC REQUIREMENTS

The Policy and General Order are available on the Internet at <*http://www.waterboards.ca.gov/cannabis*>. The Discharger shall ensure that all site operating personnel know, understand, and comply with the requirements contained in the

Policy, General Order, this NOA, and the Monitoring and Reporting Program (MRP, Attachment B of the General Order). Note that the General Order contains standard provisions, general requirements, and prohibitions that apply to all cannabis cultivation activities.

The application requires the Discharger to self-certify that all applicable Best Practicable Treatment or Control (BPTC) measures are being implemented, or will be implemented by the onset of the winter period (November 15 - April 1), following the enrollment date. Landowners of the cultivation site in the North Coast Region are required to submit and implement *Site Management Plans* that describes how BPTC measures are implemented property-wide, including BPTC measures implemented to address discharges from legacy activities (e.g. former timber harvest, road building, mining, etc.) at the site per Provision C.1.a. of the General Order. Dischargers that cannot implement all applicable BPTC measures by the onset of the winter period, following their enrollment date, shall submit to the appropriate Regional Water Board a *Site Management Plan* that includes a time schedule and scope of work for use by the Regional Water Board in developing a compliance schedule as described in Attachment A of the General Order.

During reasonable hours, the Discharger shall allow the State Water Board or Regional Water Quality Control Board (collectively Water Boards), California Department of Fish and Wildlife, CAL FIRE, and any other authorized representatives of the Water Boards upon presentation of a badge, employee identification card, or similar credentials, to:

i. Enter premises and facilities where cannabis is cultivated; where water is diverted, stored, or used; where wastes are treated, stored, or disposed; or in which any records are kept;

ii. Access and copy, any records required to be kept under the terms and conditions of the Policy and General Order;

iii. Inspect, photograph, and record audio and video, any cannabis cultivation sites, and associated premises, facilities, monitoring equipment or device, practices, or operations regulated or required by the Policy and General Order; and

iv. Sample, monitor, photograph, and record audio and video of site conditions, any discharge, waste material substances, or water quality parameters at any location for the purpose of assuring compliance with the Policy and General Order.

3. TECHNICAL REPORT REQUIREMENTS

The following technical report(s) shall be submitted by the Discharger as described below:

A Site Management Plan, by September 30, 2018, consistent with the requirements of General Order Provision C.1.a., and Attachment A, Section 5. Attachment D of the General Order provides guidance on the contents of the Site Management Plan.

A Site Closure Report must be submitted 90 days prior to permanently ending cannabis cultivation activities and seeking to rescind coverage under the General Order. The *Site Closure Report* must be consistent with the requirements of General Order Provision C.1.e., and Attachment A, Section 5. Attachment D of the General Order provides guidance on the contents of the *Site Closure Report.*

4. MONITORING AND REPORTING PROGRAM

The Discharger shall comply with the Monitoring and Reporting Program (MRP). Attachment B of the General Order provides guidance on the contents for the annual reporting requirement. Annual reports shall be submitted to the Regional Water Board by March 1 following the year being monitored. The Discharger shall not implement any changes to this MRP unless and until a revised MRP is issued by the Regional Water Board Executive Officer or the State Water Board Division of Water Quality Deputy Director, or the State Water Board Chief Deputy Director.

5. ANNUAL FEE

According to the information submitted, the discharge is classified as Tier 1 Low Risk with the current annual fee assessed at $1,000. The fee is due and payable on an annual basis until coverage under this General Order is formally rescinded. To rescind coverage, the Discharger must submit a Notice of Termination, including a Site Closure Report at least 90 days prior to termination of activities and include a final MRP report.

6. TERMINATION OF COVERAGE UNDER THE GENERAL ORDER & REGIONAL WATER BOARD CONTACT INFORMATION

Cannabis cultivators that propose to terminate coverage under the Conditional Waiver or General Order must submit a Notice of Termination (NOT). The NOT must include a *Site Closure Report* (see Technical Report Requirements above), and Dischargers enrolled under the General Order must also submit a final monitoring report. The Regional Water Board reserves the right to inspect the site before approving a NOT. Attachment C of the General Order includes the NOT form and Attachment D of the General Order provides guidance on the contents of the *Site Closure Report.*

If the Discharger cannot comply with the General Order, or will be unable to implement an applicable BPTC measure contained in Attachment A by the onset of the winter period each year, the Discharger shall notify the Regional Water Board staff by telephone at (707) 576-2676 or email at northcoast.cannabis@waterboards.ca.gov so that a site-specific compliance schedule can be developed.

cc: Kevin Porzio, State Water Resources Control Board, dwq.cannabis@waterboards.ca.gov
Michael Vella, California Department of Food and Agriculture, michael.vella@cdfa.ca.gov

Cheri Sanville, California Department of Fish and Wildlife, cheri.sanville@wildlife.ca.gov
Steve Werner, Humboldt County Planning Division, swerner@co.humboldt.ca.us

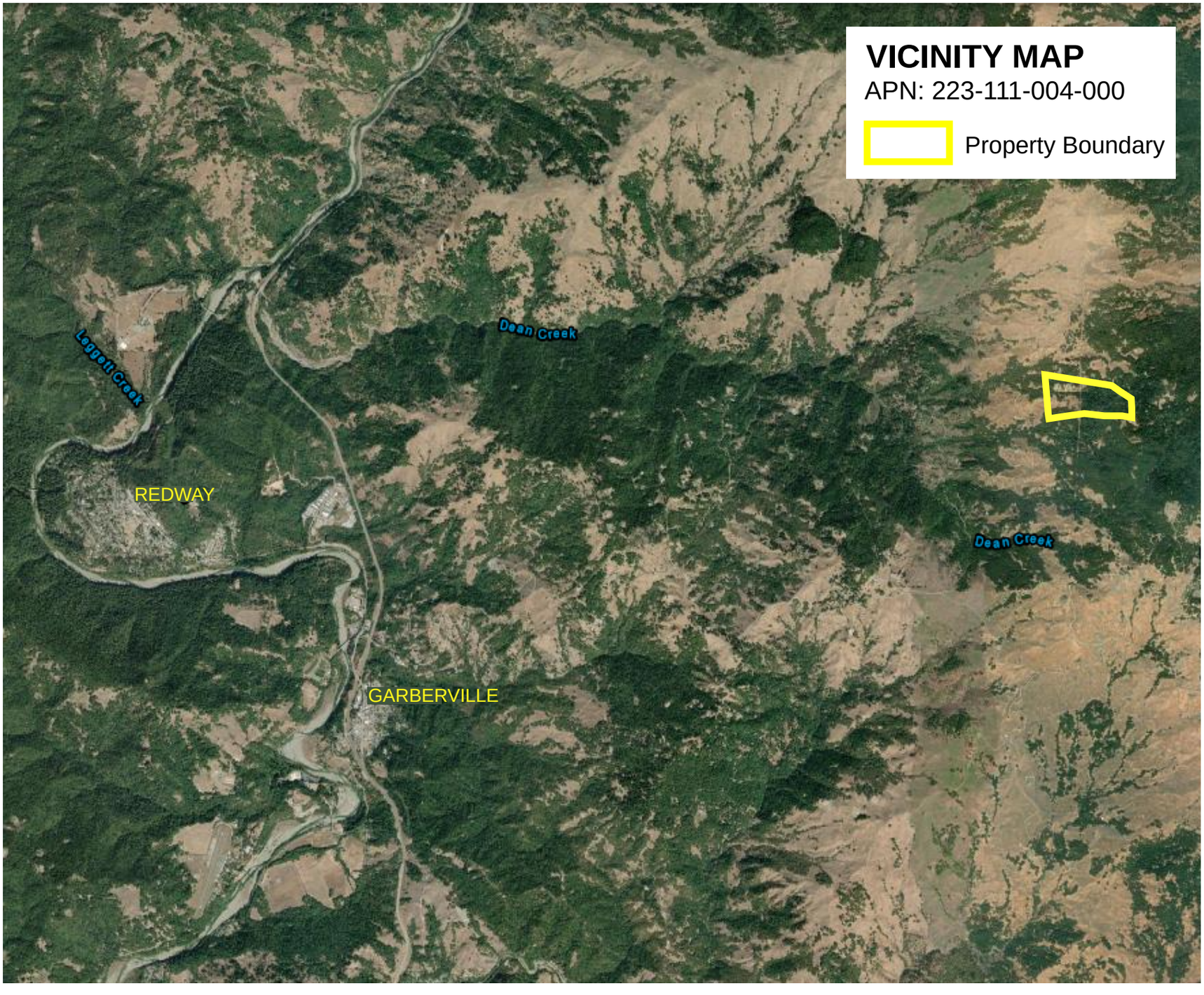


Figure 1 - Vicinity Map

May Topo Map

Humboldt County Planning and Building Department

Printed: October 25, 2022 Web AppBuilder 2.0 for ArcGIS

Map Disclaimer:
While every effort has been made to assure the accuracy of this information, it should be understood that it does not have the force & effect of law, rule, or regulation. Should any difference or error occur, the law will take precedence.

Highways and Roads
- Principal Arterials
- Minor Arterials
- Major Collectors
- Minor Collectors
- Local Roads
- Private or Unclassified
- Major River or Stream

Blue Line Streams
- Perennial 1-3
- Perennial >4
- Intermittent
- Subsurface

- City Boundary
- Counties
- Parcels (no APN labels)

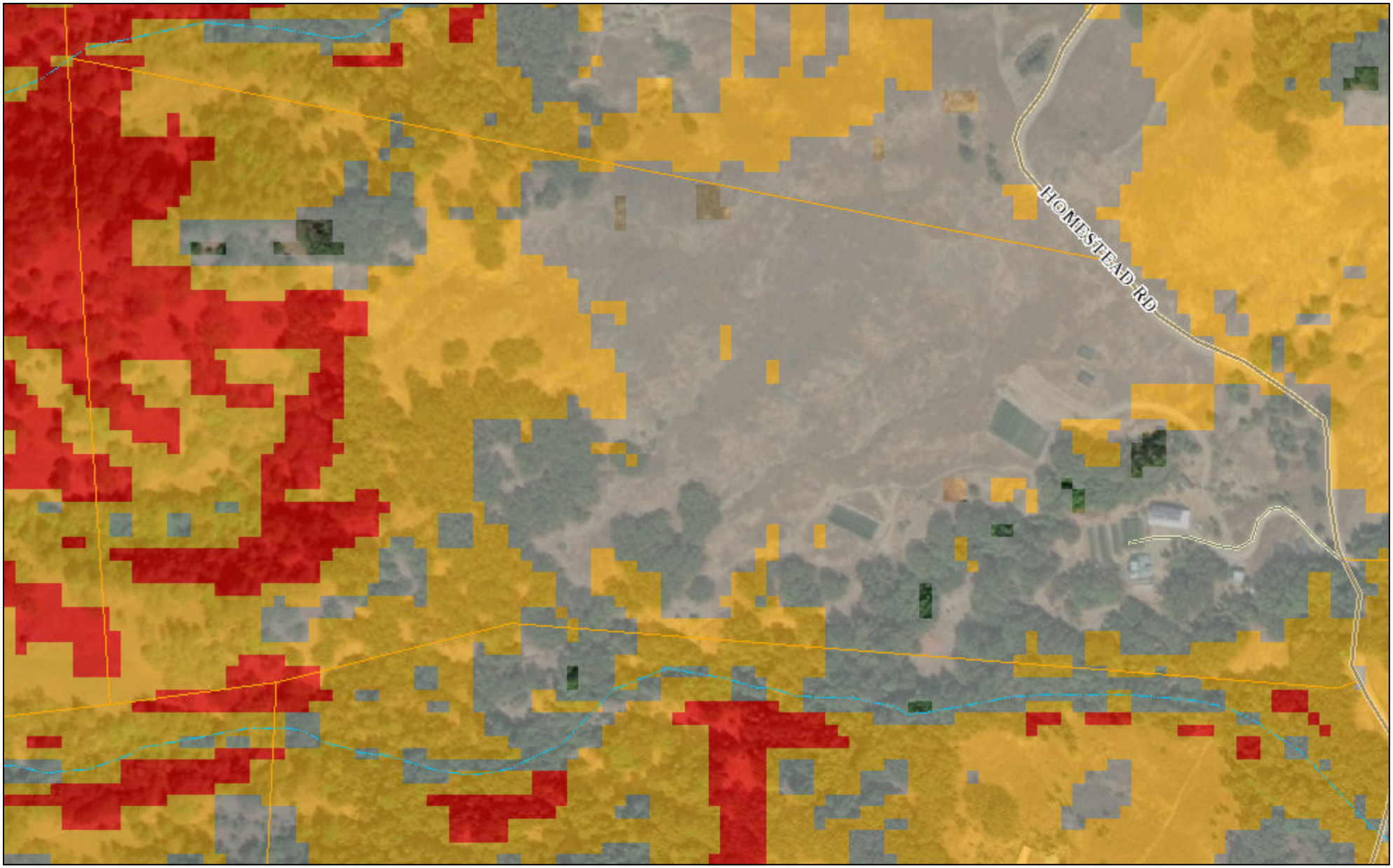
Topographic Contours 40ft
- Minor Interval
- Major Interval

0 180 360 720 Feet
0 0.0325 0.065 0.13 Miles
RF= 1:4,514 1 in = 376 ft

N W E S

Sources: Humboldt County GIS
Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community
FRAP, FEMA. USGS. ESA, CGS
Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

Figure 2 - Topo Map



May Slope Map

Humboldt County Planning and Building Department

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0 0.0325 0.065 0.13 Miles
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FRAP, FEMA. USGS. ESA, CGS
Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

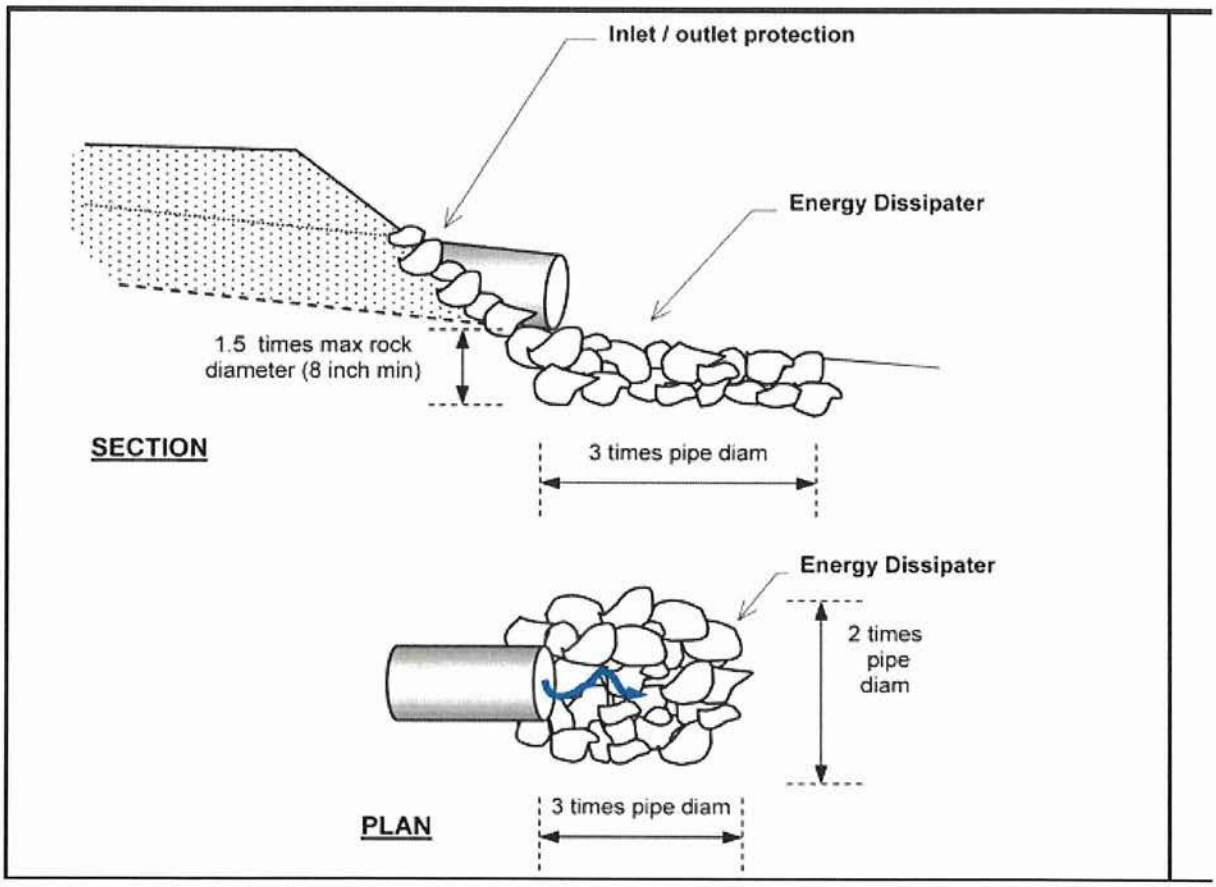
Figure 3 - Slope Map

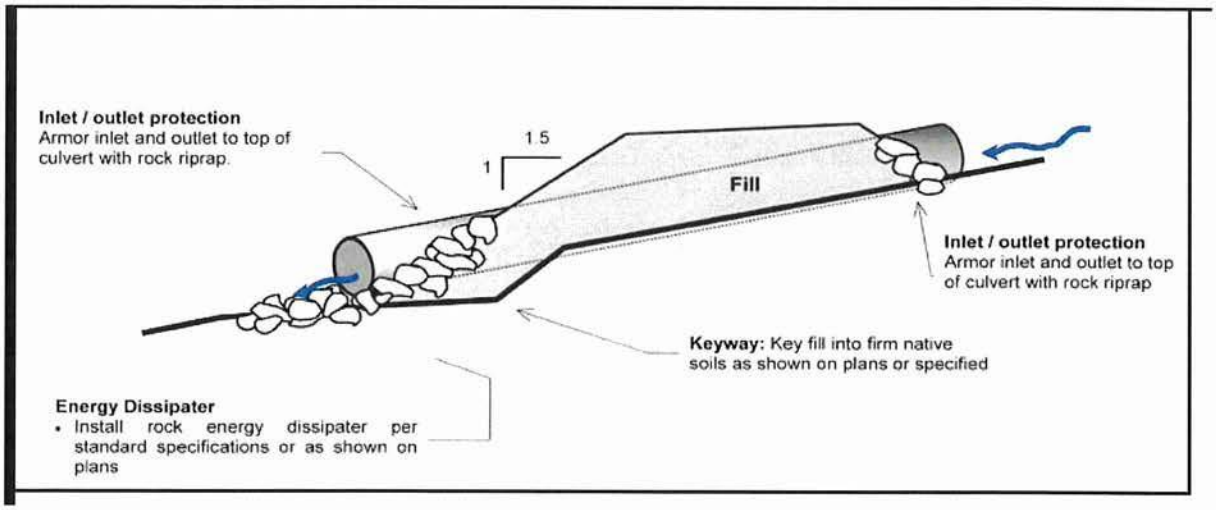
Culvert Installation Specifications

- New culvert installations shall be sized to accommodate a 100-year storm.
- New culverts shall be placed at stream gradient, or have downspouts, or have energy dissipaters at outfall.
  - Align culverts with the natural stream channel orientation to ensure proper function, prevent bank erosion and minimize debris plugging.
  - Place culverts at the base of the fill and at the grade of the original streambed or install a downspout past the base of the fill. Downspouts should only be installed if there are no other options.
  - Culverts should be set slightly below the original stream grade so that the water drops several inches as it enters the pipe.
  - Culvert beds should be composed of rock-free soil or gravel, evenly distributed under the length of the pipe.
  - Compact the base and sidewall material before placing the pipe in its bed.
  - Lay the pipe on a well-compacted base. Poor basal compaction will cause settling or deflection in the pipe and can result in separation at a coupling or rupture in the pipe wall.
  - Backfill material should be free of rocks, limbs or other debris that could dent or puncture the pipe or allow water to seep around the pipe.
  - Cover one end of the culvert pipe, then the other end. Once the ends are secure, cover the center.
  - Tamp and compact backfill material throughout the entire process, using water as necessary for compaction.
  - Backfill compacting will be done in 0.5 – 1.0 foot lifts until 1/3 of the diameter of the culvert has been covered.
  - Push layers of fill over the crossing to achieve the final design road grade, at a minimum of one-third to one-half the culvert diameter.
- Critical dips shall be installed on culvert crossings to eliminate diversion potential.
- Road approaches to crossings shall be treated out to the first drainage structure (i.e. waterbar) or hydrologic divide to prevent transport of sediment.
- Road surfaces and ditches shall be disconnected from streams and stream crossings to the greatest extent feasible. Ditches and road surfaces that cannot be feasible disconnected from streams or stream crossings shall be treated to reduce sediment transport to streams.
- If downspouts are used, they shall be secured to the culvert outlet and shall be secure on fill slopes.
- Culverts shall be long enough so that road fill does not extend or slough past the culvert ends.
- Inlet of culverts and associate fill shall be protected with appropriate measures that extend at least as high as the top of the culvert.
- Outlet of culverts shall be armored with rock if road fill sloughing into channel can occur.
- Armor inlets and outlets with rock, or mulch and seed with grass as needed (not all stream crossings need to be armored).
- Where debris loads could endanger the crossing a debris catchment structure shall be constructed upstream of the culvert inlet.
- Bank and channel armoring may occur when appropriate to provide channel and bank stabilization.

Figure 4A - Culvert Specifications

Culvert Installation Specifications

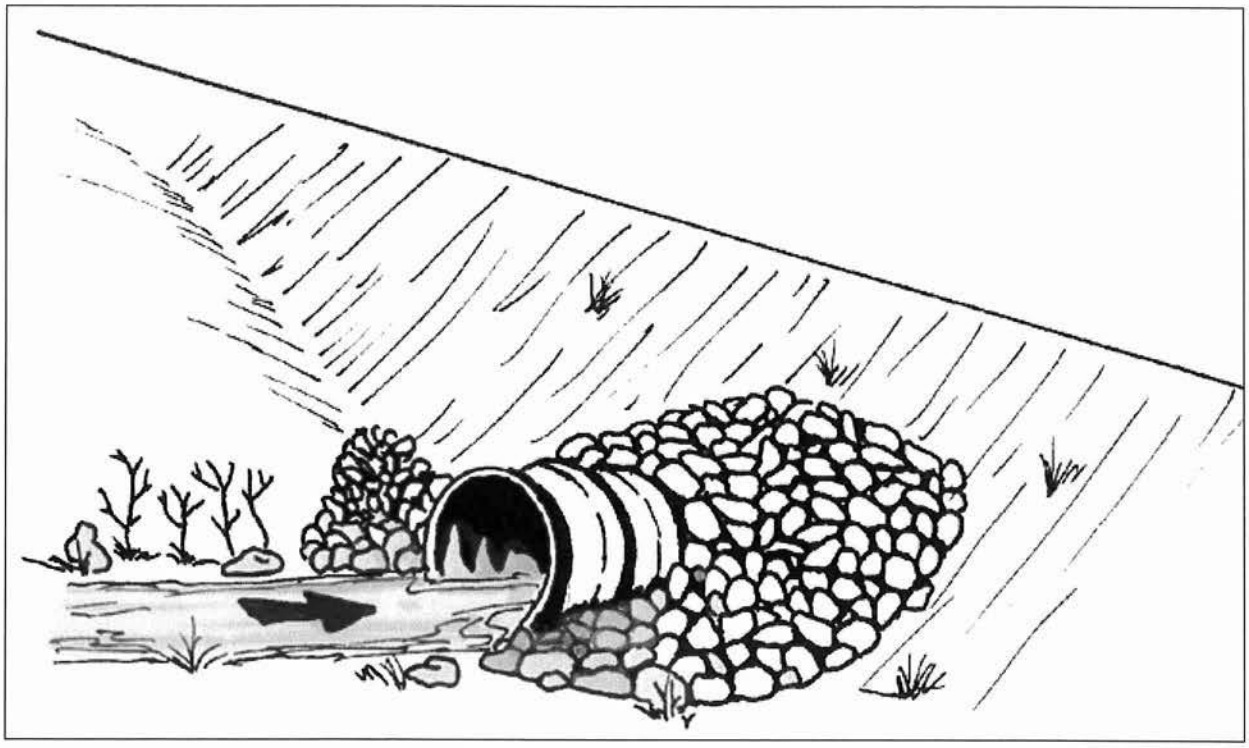




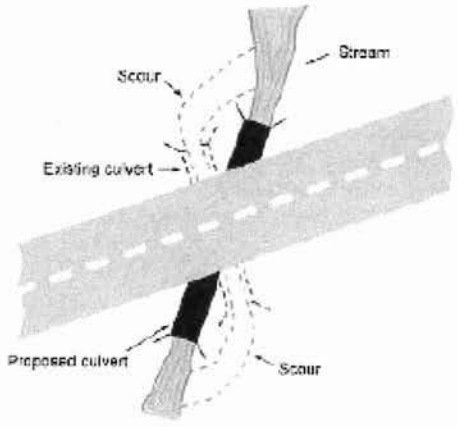
Riprap installed to protect the inlet and outlet of a stream crossing culvert from erosion or for energy dissipation should be keyed into the natural channel bed and banks to an approximate depth of about 1.5x the maximum rock thickness. Riprap should be placed at least up to the top of the culvert at both the inlet and outlet to protect them from splash erosion and to trap any sediment eroded from the newly constructed fill slope above.

Figure 4 - Culvert Specifications

Culvert Installation Specifications



Rock armor used for inlet and outlet protection (i.e., not as energy dissipation) does not have to be sized to protect against high velocity scour. If the culvert is properly sized and its length is adequate, it should be able to transmit flood flows without scouring the inlet or eroding the outlet around the culvert. Armor shown here is designed to protect the culvert outlet and basal fill from splash erosion and from occasional submergence and currents within standing water (at the inlet) when the culvert plugs. Importantly, inlet and outlet armor also serves to trap sediment that has been eroded or slides down the new constructed fill face in its first several years, until the slope becomes well vegetated.



HANDBOOK FOR FOREST, RANCH AND RURAL ROADS

FIGURE 97. *Culvert alignment should be in relation to the stream and not the road. It is important that the stream enters and leaves the culvert in a relatively straight horizontal alignment so streamflow does not have to turn to enter the inlet or discharge into a bank as it exits. This figure shows a redesigned culvert installation that replaces the bending alignment that previously existed. Channel turns at the inlet increase plugging potential because wood going through the turn will not align with the inlet. Similarly, channel turns at the inlet and outlet are often accompanied by scour against the channel banks (Wisconsin Transportation Information Center, 2004).*

Culvert Installation Specifications

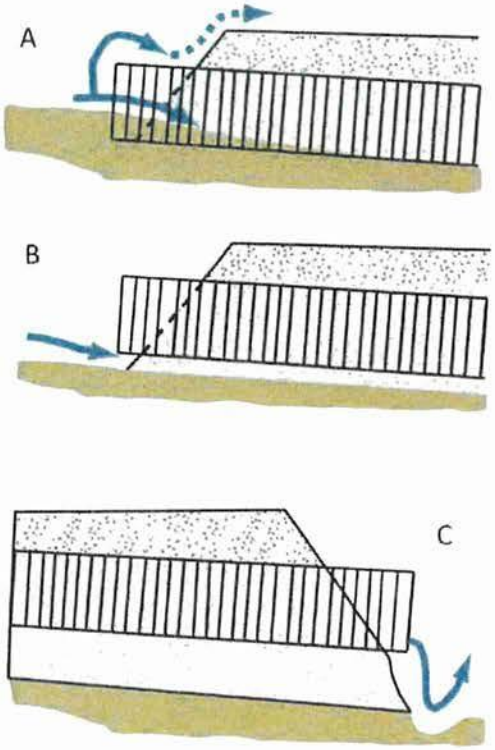
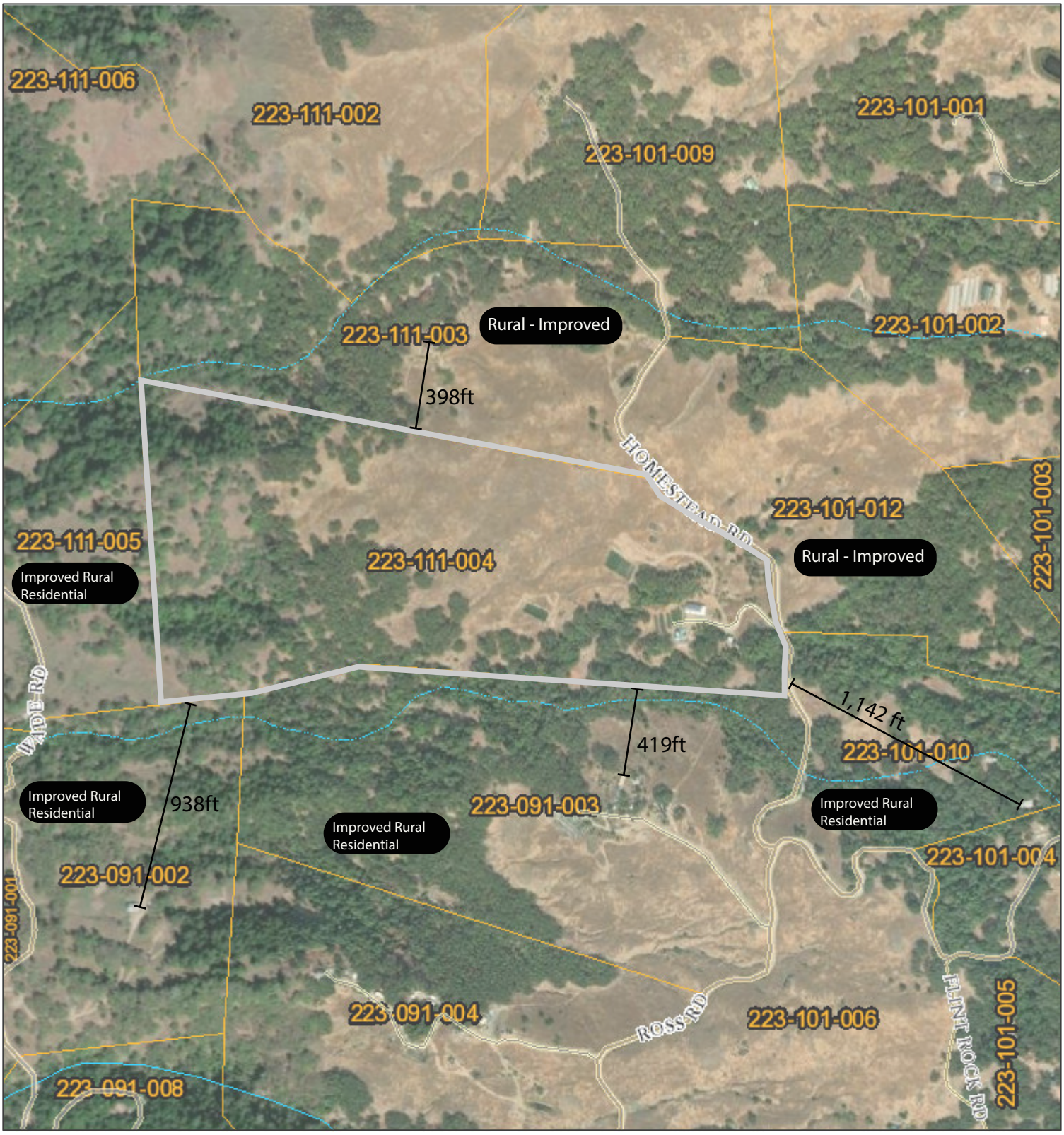


FIGURE 155. *Proper culvert installation involves correct culvert orientation, setting the pipe slightly below the bed of the original stream, and backfilling and compacting the fill as it is placed over the culvert. Installing the inlet too low in the stream (A) can lead to culvert plugging, yet if set too high (B) flow can undercut the inlet. If the culvert is placed too high in the fill (C), flow at the outfall will erode the fill. Placed correctly (D), the culvert is set slightly below the original stream grade and protected with armor at the inlet and outlet. Culverts installed in fish-bearing stream channels must be inset into the streambed sufficiently (>25% embedded) to have a natural gravel bottom throughout the culvert (Modified from: MDSL, 1991).*

HANDBOOK FOR FOREST, RANCH AND RURAL ROADS

Figure 4D - Culvert Specifications

Distance to Nearst Adjoining Parcel Stuctures & Adjoing Parcel Use Code Descriptions



Eagle Creek Parcel Map

Humboldt County Planning and Building Department

0 350 700 1,400 Feet

0 0.05 0.1 0.2 Miles

RF= 1:9,028 1 in = 752 ft

N W E S

Printed: October 31, 2022 Web AppBuilder 2.0 for ArcGIS

Highways and Roads
- Principal Arterials
- Minor Arterials
- Major Collectors
- Minor Collectors
- Local Roads

- Private or Unclassified
- Major River or Stream

Blue Line Streams
- Perennial 1-3
- Perennial >4

- Intermittent
- Subsurface
- City Boundary
- Counties
- Parcels
- Parcels (no APN labels)

Figure □ - Adjacent Parcels

APPLICATION PACKET CHECKLIST

Please check below to ensure you have a complete application. Once complete, email the following documents, in pdf format with the text "Application for Remediation Grant Program Funding" in the subject line to mrichardson@co.humboldt.ca.us.

- X Signed Application Submission Form
- X Project Description – Summary of the Project, up to 2 pages.
- X Plot Plan
- X Plot Plan Checklist – Attached
- X Cross sections of proposed work including topographic elevations
- X Scope of Work – Detailed Description of Work
- X Schedule for Completion – Identify Milestones
- X Erosion Control Plan and Monitoring Plan
- X Budget – Be as specific as possible – sample attached
- X Project Maps and Figures
- ☐Letter(s) of Support (optional)

APPLICATION FORM - Commercial Cannabis Land Use Ordinance Mitigation and Remediation Fund Program

Project Title: Foleva Road Improvements Date of Application: 10/31/2022

Applicant Name: Avenue of the Giants Farm, LLC Project APN: 211-384-013

Contact Person Name and Title: Sonya Foleva. Managing Member

Contact Phone: (707) 800-5313 Contact Email: sonya.foleva@gmail.com

Contact Address: P.O. Box 112, Miranda, CA 95553

Amount Requested: □33□□□ Total Budget: □33□□□

Project Timeline: Start Date: 4/1/2023 End Date: 8/1/2023

Signature of Applicant: _____

Project: Foleva Road Improvement

Applicant: Ave of the Giants LLC

Contact: Sonya Foleva

APN: 211-384-013

Grant Funding Requested: $33,787.00

Project Status: Shovel-ready

Project Description

The project is located on Humboldt County APN 211-384-013 near Miranda, California. Located at 1550 Cathey Road, the property sits within the South Fork Eel River watershed, approximately 3 miles north of Miranda.

The project proposes rerocking the roadway surface at the entrance with Cathy Road, to mitigate erosion.

While the Humboldt GIS indicates the parcel is in a general area of high slope instability, it is not within a flood hazard zone, nor in an earthquake hazard zone. The parcel is surrounded by rural improved properties. No impact to these other parcels is expected.

This road is in an area with 15-30% slopes just above the road. Graveling and proper drainage shaping will reduce the potential for road-related sediment delivery into the unnamed tributary located on the property and down to the South Fork of the Eel River.

Permanent impacts to existing native channel bed, channel, watercourse banks, and associated riparian habitat will be negligible and avoided. Incidental destruction of small areas of riparian habitat growing on existing road fill is expected but will be minimized at the proposed site during remediation. No loss of trees is expected.

AVENUE OF THE GIANTS FARM

APN: 211-384-013

1550 CATHEY ROAD MIRANDA, CA 95553

AG BUILDING	USE	YEAR	SIZE
SHOP	HAREVST PRODUCT STORAGE, PEST AND CHEM STORAGE	1989	20′ x 25′ SQFT
SHED			4′ x10′ SQFT
GREENHOUSE #4	PROPOGATION AREA	PROPOSED	82 x 24′ SQ FT
GREENHOUSE #1	CULTIVATION/STORAGE AREA	PROPOSED	100′ x 30′ SQ FT
GREENHOUSE #2	CULTIVATION/STORAGE AREA	PROPOSED	100′ x 30′ SQ FT
GREENHOUSE #3	CULTIVATION/STORAGE AREA	PROPOSED	100′ x 30′ SQ FT

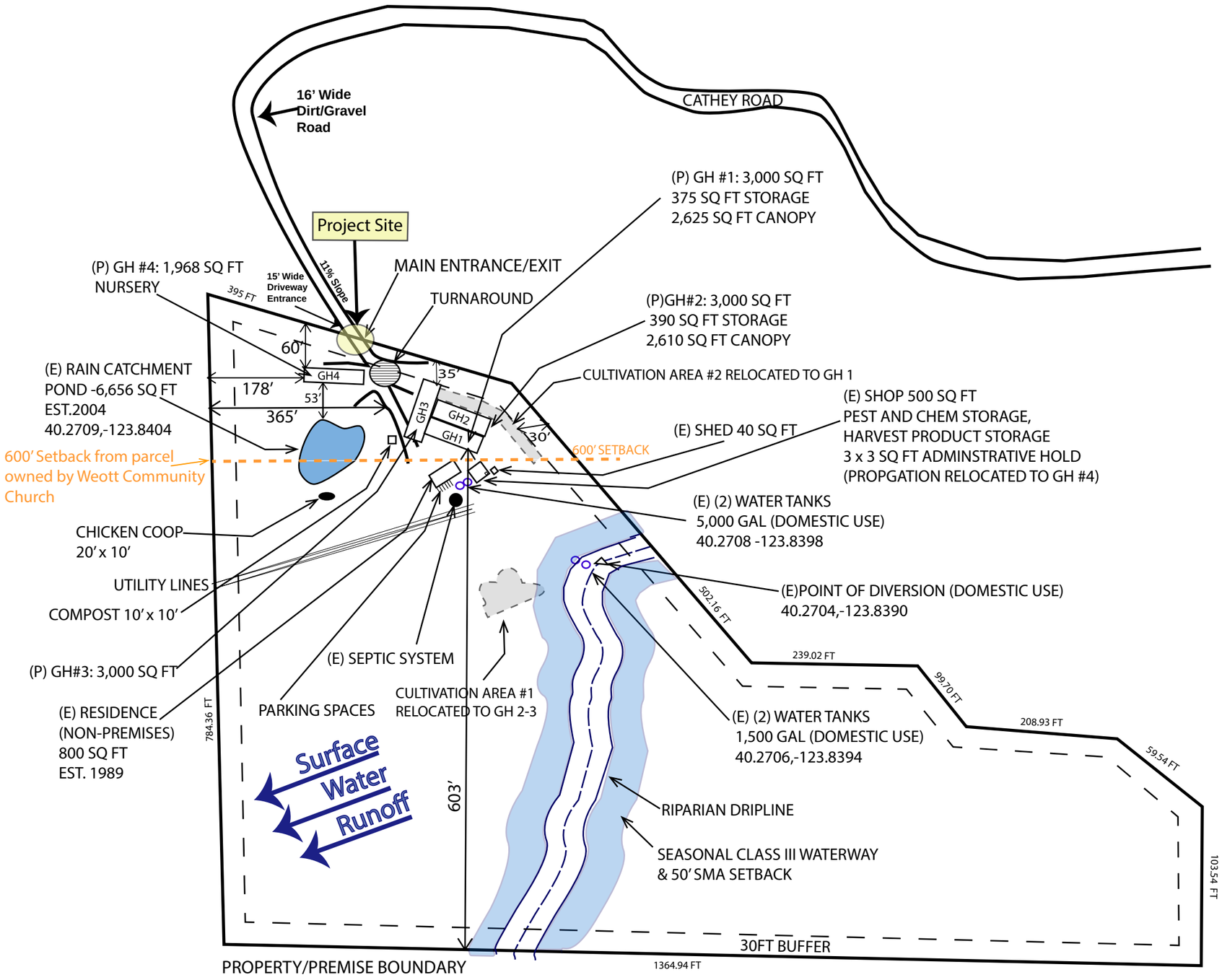
DOMESTIC BUILDING	USE	YEAR	SIZE
RESIDENCE	PLACE OF LIVING	1989	800 SQ FT

TYPE	QTY	LOCATION	YEAR	SIZE
TANK (DOMESTIC)	2	40.2708, -123.8398	2000	5,000 GAL

WATER SOURCE	LOCATION
RAINCATCHMENT POND (IRRIGATION & DOMESTIC USE)	40.2709, -123.8404
POD (DOMESTIC USE)	40.2704,-123.8390

POWER SOURCE

PG&E



LEGEND

- PROPERTY LINE
- 30 FT SET BACK FROM PROPERTY LINE
- SPRING DIVERSION
- TANKS
- TURNAROUND
- PARKING SPACES
- PRE-EXISTING AREA
- WATER WAYS
- <P> PROPOSED
- <E> EXISTING
- 600′ SETBACK FROM PARCEL OWNED BY WEOTT COMMUNITY CHURCH

N

1 100′ SCALE

REV. 10/30/2022

PLOT PLAN AND TENTATIVE MAP CHECKLIST

The following information must be shown on your plot plan or tentative map. Please check ✓ the box to the left of the items shown on the plot plan or tentative map. If any item is <u>not</u> on your site to your knowledge, write "N/A" next to the box. Plot plans shall be drawn on a minimum size sheet of 8-1/2" x 11", and tentative subdivision maps on a minimum size sheet of 18" x 26". ***<u>Note:</u> This Checklist must be completed by the applicant and submitted with your application.***

Applicant's Name Fole□a Road I□pro□e□ents APN 211-3□4-□13 _____

FOR ALL PROJECTS

□		1.	Name of applicant(s)
□		2.	Location or vicinity map (on or attached to the plot plan)
□		3.	The subject parcel (show entire parcel with dimensions)
□		4.	Date, north arrow and scale
□		5.	Name, County road numbers, and width of all existing and proposed access roadways adjacent to or within the subject parcel (indicate width of traveled way, grade (in % slope), and surface)
□		6.	Existing <u>and</u> proposed improvements (label as "existing" and "proposed" with dimensions and distance to nearest two (2) property lines)
	□	a.	Structures and buildings (include floor area, height and proposed use)
	□	b.	Driveways and turnaround areas (indicate width, grade (in % slope) and surface)
	□	c.	Utility lines (electric, gas, telephone, sewer, water, and cable TV)
	□	d.	Septic tanks and leachfields (label primary/reserve areas and test holes)
□□A	□	e.	Wells
	□	f.	Parking and loading areas (show individual parking spaces, including handicapped parking and ramps)
□□A	□	g.	Storm drains, curbs and gutters
	□	h.	Emergency water storage tanks and fire hydrants
□□A	□	i.	Landscaped areas (include proposed exterior lighting)
□□A	□	j.	Major vegetation (identify mature trees (12" dbh or larger) to be removed)
□□A	□	k.	Diked areas
□□A	□	l.	Proposed grading and fill (estimate volume)
□□A	□	m.	Signs (indicate size, illuminated, and design (e.g., monument, pylon, etc.))
□□A	□	n.	Other - specify _____ _____
□		7.	Direction of surface water runoff
□	□□A	8.	Location and width of all existing and proposed easements of record
□	□□A	9.	Hazardous areas (indicate on map if on the project site <u>or</u> within 400 feet of the project site):
□□A	□	a.	Areas subject to inundation or flooding
□□A	□	b.	Steep or unstable slopes
□□A	□	c.	Expansive (clay) soils
□□A	□	d.	Earthquake faults
□□A	□	e.	Hazardous waste or substance sites
	□	f.	Other - specify _____
□		10.	Sensitive habitat areas (indicate on map if on project site <u>or</u> within 400 feet of the project site):
	□	a.	Creeks, rivers, sloughs and other drainage courses
	□	b.	Lakes, ponds, marshes, or "wet" meadows
	□	c.	Beaches
□□A	□	d.	Sand dunes
	□	e.	Other - specify _____
□	□□A	11.	Historical buildings or known archaeological or paleontological resources
□		12.	Land use and buildings on adjacent parcels, and approximate distances to closest property lines

FOR LOT LINE ADJUSTMENT PLOT PLANS ONLY

□	□□A	13.	Proposed new lines and lines to be eliminated (show lines to be eliminated as dashed)
□	□□A	14.	Areas (in square footage or acreage) of the initial and resulting parcels

FOR TENTATIVE SUBDIVISION MAPS ONLY

□	□□A	16.	Approximate dimensions and areas of all proposed lots
□	□□A	17.	A statement that "All easements of record are shown on the tentative map and will appear on the recorded subdivision map"
□	□□A	18.	Contour lines (at _____ intervals)
□	□□A	19.	For major subdivisions (5 or more parcels): proposed drainage improvements, details of any grading to be performed, approximate radii of all roadway curves, areas for public use, and typical sections of all streets, highways, ways and alleys
□	□□A	20.	Names and assessor's parcel numbers of all contiguous ownerships

NOTE: THE SUBMITTAL OF INCOMPLETE OR ILLEGIBLE PLOT PLANS OR TENTATIVE MAPS WILL CAUSE DELAYS IN THE PROCESSING OF YOUR APPLICATION

Project: Foleva Road Improvement

Applicant: Ave of the Giants LLC

Contact: Sonya Foleva

APN: 211-384-013

Grant Funding Requested: $33,787.00

Project Status: Shovel-ready

Scope of Work

The project is to resurface the roadway and rock eroded drainage ditches along the sides. The recommended repair is described in the applicant's Water Resource Protection Plan(WRPP) and County Compliance Agreement, and is summarized as follows:

WRPP Section 1e. Erosion was observed on the roadway. The roadway and drainage should be reinforced with rock to prevent further erosion.

County Compliance Agreement Item #14. Applicant shall complete and implement all corrective actions detailed in the Water Resource Protection Plan, under the North Coast Regional Water Quality Control Board's Tier 2 enrollment requirements.

A supply of rock and related materials will be used to stabilize the road from further erosion. Estimated completion of the project will require two (2) days of labor. The work requires heavy equipment and will be completed by Pimentel Paving Inc. As this is a private road, and no waterways will be directly impacted, the project is shovel-ready as soon as funding is made available and the contractor is scheduled.

Margro Advisors will work with the applicant on maintaining compliance with local and State regulations, and provide support for the project's grant administration and reporting, as needed.

Project: Foleva Road Improvements

Applicant: Avenue of the Giants Farm, LLC

Contact: Sonya Foleva

APN: 211-384-013

Grant Funding Requested: $33,787.00

Mitigation and Remediation Fund
Schedule for Completion

Milestone	Start Date	End Date
Final Project Design	April 1, 2023	April 30, 2023
Bidding and Contracting	May 1, 2023	May 31, 2023
Project Ground-Breaking	June 1, 2023	
Project Completion		August 1, 2023
Monitoring	August 1, 2023	Ongoing

Project: Foleva Road Improvement

Applicant: Ave of the Giants LLC

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Grant Funding Requested: $33,787.00

Erosion Control and Monitoring Plan

To protect nearby watershed areas and nearby habitat the site is managed to meet standard conditions and follow best practices in accordance with guidelines provided by the North Coast Regional Water Quality Control Board (NCRWQCB). These practices address erosion control and drainage features, spoils management, water storage and use, irrigation runoff, fertilizers and pesticides, and stream and wetland buffers when applicable.

Best practice steps for this site can include:

- Moderate road shaping and ditch-relief used to optimize drainage to stable areas
- Out-sloping maintained to ensure proper capture and capacity of seasonal flow
- Usage of vegetative ground cover and gravel for added sediment control
- Application of straw mulch to exposed soils to minimize erosion
- Careful irrigation, with immediate oversight, to reduce the possibility of irrigation runoff

Applicant will maintain driveways and access roads to eliminate erosion or runoff during storms. Prior to the winter season and significant storm events, roads and cultivation sites will be inspected and monitored to ensure that runoff is prevented. Culverts will be inspected to ensure armoring is maintained and any debris or sediment has been removed..

If potential issues are discovered during or immediately following a storm event, they will be corrected as soon as possible to ensure minimal impact and prevent sediment flow in the future. This will include proper ditching and vegetation buffers, and as needed, straw, seed, wattles, jute cloth, riprap, or other industry standards used to prevent and eliminate runoff.

Project: Foleva Road Improvement

Applicant: Avenue of the Giants LLC

Contact: Sonya Foleva

APN: 211-384-013

Grant Funding Requested: $33,787.00

Total Budget: $33,787.00

Project Budget

Item	Grant Funds	Other Funds (Source)
Consultant and Professional Fees		
Margro Advisors	$1,912.00	
*Materials, Equipment and Labor**		
Pimental Paving	$31,875.00	
Totals	**$33,787.00**	**$0.00**

*See attached bid

PIMENTEL PAVING INC., 3647 MELCON LANE, SANTA ROSA, CA 95407
*707-588-8402 * 415-491-4912 * 707-226-1139*
Pimentelpaving@gmail.com
LICENSE# 589875 ** Since 1990
WWW.PIMENTELPAVING.COM
OVER 32 YEARS LICENSED OVER 38 YEARS EXPERIENCE

MEMBERS OF THE BBB SINCE 1997,A+ RATING
http://youtu.be/aP0jfgaksRc -BBB Video, "Door Knocker" Contractors

Kamen
1550 Cathey Road
Miranda Ca
kamen.aquasafe2@gmail.com

BASE ROCK INSTALLATION: Area measuring approximately 4,250 sq.ft., light grading and compaction will be done to existing surface. Install and compact 4" base rock.
CHIP SEAL: Area measuring approximately 4,250 sq.ft., prepare area as needed for chip seal (broom and or blower). Apply One coat of oil and lay out one coat of 3/8" Gray Chips to surface and compact with roller. Apply a second layer of oil and a second coat of 3/8" Gray Chips.
Price $ 31,875.00
Project will take 2 days to complete.

Loose chips will remain unless otherwise scheduled to be removed. Dust may form after a short time of driving, as chips begin to wear and breakdown. Maintenance should be done every 3 to 5 years.

TERMS AND CONDITIONS

1. CHANGES IN THE WORK: Should the owner, construction lender, or any public body or inspector direct any modification or addition to the work covered by this contract, the contract price shall be adjusted accordingly. Modification or additional work shall be executed only upon written change orders. A Change in the contractor's actual cost of all labor, equipment, subcontracts and materials, plus contractor's fee will result in a change in the Contract Price. The Change Order may also increase the time within which the contract is to be completed. Any Change Order or Extra Work shall be incorporated in, and become a part of the contract.
2. RESPONSIBILITIES OF THE PARTIES: The Owner shall furnish surveys describing physical characteristics, legal limitations and utility locations for the site of the Project, and a legal description of the

site. The Contractor shall be entitled to rely on the accuracy of information furnished by the Owner but shall exercise proper precautions relating to the safe performance of the Work. Owner shall pay for any expense incurred due to such conditions as added work.

The Owner is responsible to supply WATER and electrical utilities (if needed) unless otherwise agreed to in writing. Water to the site is necessary for roller and tamper operation, even with the water shortage, water is a necessity to the integrity of the project. Please inform us if there is no water usage prior to project beginning.
The Owner agrees to allow and provide contractor and his equipment access to the property.
The Owner is responsible to remove or protect any poles, fences, mailboxes, landscaping, etc.
The Owner is responsible to remove or protect any personal property and contractor is not responsible for it or for any carpets, drapes, furniture, driveways, lawns, shrubs, etc.
The Owner will point out and warrant the property lines to Pimentel Paving Inc..
The Owner shall supply all permits, unless otherwise provided.
Pimentel Paving Inc., or officers or employees' will not be responsible for the following unless specified above in writing:

- **Damage made to surfaces traveling to and from project, if damage is caused by heavy trucks and equipment on surface not made to handle large trucks and equipment. (specifically private roads, non maintained roads.**
- **If the sub grade is compromised, it can lead to failure of base rock and asphalt installation. For instance, if ADOBE soil is present in the sub grade of the job site, further action should be taken to ensure its' stability. A soils engineer report should be done prior to any work so that we can properly address any necessary actions that need to be taken before project is started. If one is not provided, Pimentel Paving Inc., nor its officers or employees will not be held responsible.**
- **Asphalt and or seal emits an "oil"odor and may remain for several days after application.**
- **Cracking, sinking, and/or drainage if the sub-base is installed and/or compacted by another person or contractor.**
- **Drainage problems that were not mentioned or disclosed in writing by Owner before the day paving has commenced.**
- **Sinking or cracking caused by heavy vehicles on asphalt.**
- **Oil and/or gasoline will deteriorate asphalt.**
- **SEAL may or may not be blotching at first (depends if it is hot and the seal dries quickly this cause's blotchiness, however the seal is not compromised)**
- **Seal does not prevent cracks from reappearing.**
- **Seal is wet, please do not walk or drive on surface until seal is completely dry. Wet seal will ruin or damage any clothing, vehicles, shoes, etc, that is comes in contact with.**
- **Removal and/or cutting back tree roots may result in damage or death of tree.**
- **Remaining asphalt in "Patch" area (s) may have marks left in asphalt due to equipment used during the "Patch" process.**

- Pimentel Paving Inc., & Officers or Employee's will not be held responsible for damage to underground utilities, or structures unless areas are clearly located and marked by Owner prior to commencement of work.

*Owner is advised that Pimentel Paving Inc., has not determined the stability of the sub-base and/or soils located at the site. It is recommended that Owner obtain a report by a licensed soils and/or civil engineer regarding the stability of all sub-base and/or soils located at the site prior to the time Pimentel Paving Inc., commences its work.

3. DELAYS: Pimentel Paving Inc., agrees to start and diligently pursue work through to completion, but shall not be responsible for any of the following reasons: failure of the issuance of all necessary building permits within a reasonable length of time, funding of loans, disbursement of funds into funding control or escrow, acts of neglect or omission of Owner or Owner's employees or Owner's agent, acts of God, stormy or inclement weather, strikes, lockouts, boycotts, or other labor union activities, extra work ordered by Owner, acts of public

enemy, riots or civil commotion, inability to secure material through regular recognized channels, imposition of Government priority or allocation of materials, failure of Owner to make payment when due, or delays caused by inspection or changes ordered by the inspectors of authorized governmental bodies, or for acts of independent contractors, or holidays, or other causes beyond Pimentel Paving Inc., reasonable control, then the Contract Time shall be extended for such reasonable time as Pimentel Paving Inc, may determine.

4. PLANS & SPECIFICATIONS: If plans and specifications are prepared for this job, they shall be attached to and become a part of the agreement.

5. SUBCONTRACTS: Pimentel Paving Inc., may subcontract portions of this work to properly licensed subcontractors (striping etc) but not without the permission from the Owner prior to work. Work by sub-contractor if any will be included in this contract.

6. FEES, TAXES, AND ASSESSMENTS: Owner will pay for taxes and assessments of all descriptions. Owner will pay assessments and charges required by public bodies and utilities for financing or repaying the cost of sewers, storm drains, water service, schools and school facilities, other utilities, hook-up charges and any fees, permits, engineering, soil testing, inspections, licenses and items not specified in writing.

7. INSURANCE AND DEPOSITS: Owner will procure at his own expense and before the commencement of any work hereunder, fire insurance with course of construction, vandalism and malicious mischief clauses attached, such insurance to be a sum at least equal to the contract price with loss for such materials, equipment, etc (homeowners ins or other liability ins.)

If the project is destroyed or damaged by accident, the Owner as extra work shall pay any work done by the contractor in restoring the project due to disaster or calamity, such as fire, storm, earthquake, flood, landslide, or by theft or vandalism (contractor will not be held responsible otherwise).

*Pimentel Paving Inc., will carry WORKER'S COMPENSATION insurance for our employees only.

*Pimentel Paving Inc., will carry GENERAL LIABILITY insurance (copies of insurance's are available).

Owner shall obtain and pay of insurance against injury to his own employees and persons under Owner's direction and persons on the job site at Owner's invitation.

8. RIGHT TO STOP WORK: Pimentel Paving Inc., shall have the right to stop work if any payment shall not be made, to contractor under this Agreement; contractor may keep the job idle until all payments due are received. This remedy is in addition to any other right or remedy that the contractor may have under the law or hereunder. Such failure to make payment, when due, is a material breach of this Agreement. Owner acknowledges that the additional costs for the delay in stopping and starting the project shall be treated as an extra and allows contractor additional costs in accordance with paragraph one hereof.

9. CLEAN-UP: Pimentel Paving Inc., will remove from Owner's property debris and surplus material created by his operation.

10. LIMITATIONS: No action of any character arising from or related to this contract, or the performance thereof shall be commenced by either party against the other more than two years after completion of the project or cessation of work under this contract.

11. ARBITRATION OF DISPUTES-VALIDITY-DAMAGES: ANY CONTROVERSY OR CLAIM ARISING OUT OF OR RELATED TO THIS CONTRACT, OR THE BREACH THEREOF, SHALL BE SETTLED BY ARBITRATION IN ACCORDANCE WITH THE CONSTRUCTION INDUSTRY ARBITRATION RULES OF THE AMERICAN ARBITRATION ASSOCIATION, AND JUDGMENT UPON THE AWARD RENDERED BY THE ARBITRATOR (S) MAY BE ENTERED IN ANY COURT HAVING JURISDICTION THEREOF. CLAIM WITHIN THE MONETARY LIMIT OF THE SMALL CLAIMS COURT SHALL BE LITIGATED IN SUCH COURT AT THE REQUEST OF EITHER PARTY, SO LONG AS BOTH PARTIES LIMIT THEIR RIGHT TO RECOVERY TO THE JURISDICTION OF THE SMALL CLAIMS COURT. ANY CLAIM FILED IN SMALL CLAIMS COURT SHALL NOT BE DEEMED TO BE A WAIVER OF THE RIGHT TO ARBITRATE AND IF A COUNTER CLAIM IN EXCESS OF THE JURISDICTION OF THE

SMALL CLAIMS COURT IS FILED IN THE MUNICIPAL OR SUPERIOR COURT, THEN THE PARTY FILING IN SMALL CLAIMS COURT MAY DEMAND ARBITRATION PURSUANT IN THIS PARAGRAPH.

IN CASE OF MORE OF THE PROVISIONS OF THIS AGREEMENT OF ANY APPLICATION THEREOF SHALL BE INVALID, UNENFORCEABLE OR ILLEGAL, THE VALIDITY, ENFORCEABILITY AND LEGALITY OF THE REMAINING PROVISIONS AND ANY OTHER APPLICATION SHALL NOT IN ANY WAY BE IMPAIRED THEREBY. ANY DAMAGES FOR WHICH CONTRACTOR MAY BE LIABLE TO OWNER SHALL NOT, IN ANY EVENT, EXCEED THE CASH PRICE OF THIS CONTRACT. NOTICE: BY SIGNING THIS AGREEMENT YOU ARE AGREEING TO HAVE ANY DISPUTE ARISING OUT OF THE MATTERS INCLUDED IN THE "ARBITRATION OF DISPUTES" PROVISION DECIDED BY NEUTRAL ARBITRATION AS PROVIDED BY CALIFORNIA LAW AND YOU ARE GIVING UP ANY RIGHTS YOU MIGHT POSSESS TO HAVE THE DISPUTE LITIGATED IN A COURT OR JURY TRIAL. BY SIGNING BELOW YOU ARE GIVING UP JUDICIAL RIGHTS TO DISCOVERY AND APPEAL, UNLESS THOSE RIGHTS ARE SPECIFICALLY INCLUDED IN THE "ARBITRATION OF DISPUTES" PROVISION. IF YOU REFUSE TO SUBMIT TO ARBITRATION AFTER AGREEING TO THIS PROVISION, YOU MAY BE COMPELLED TO ARBITRATE UNDER THE AUTHORITY OF THE BUSINESS AND PROFESSIONS CODE OR OTHER APPLICABLE LAWS. YOUR AGREEMENT TO THIS ARBITRATION PROVISION IS VOLUNTARY.

12. NOTICE TO OWNER: Under the Mechanic's lien Law (California Civil Code 3082-3268) any contractor, subcontractor, laborer, supplier, or other person who helps to improve Owner's property but is not paid for his work or supplies, has a right to enforce a claim against Owners property. This means that, after a court hearing. Owner's property can be sold by a court officer and proceeds of the sale used to satisfy the indebtedness. This can happen even if Owner has paid his own Contractor in full, if the subcontractor, laborer or supplier remains unpaid, under the law, Owner may protect himself against such claims by filing before commencement of the work an original or modified contract for the work of improvement in the office of the county recorder of the county where the property is situated, and by requiring that a Contractor's payment bond be recorded in the same office. This bond shall be in an amount not less than fifty percent (50%) of the contract price and shall, in addition to any conditions for the performance of the contract. be conditioned for the payment in full of the claims of all persons furnishing labor, services, equipment, or materials for the work described in this contract.

13. ASBESTOS AND HAZARDOUS WASTE: Unless the contract specifically calls for the removal, disturbance, or transportation of asbestos or other hazardous substances, the parties acknowledge that such work requires special procedure, precautions, and/or licenses. Therefore, unless the contract specifically calls for it, if contractor encounters such substances, contractor shall immediately stop work and allow the owner to obtain a duly qualified asbestos and/or hazardous material contractor to perform the work. Said work will be treated as an extra under this contract.

14. ATTORNEYS FEES: In the event the parties hereto become involved in litigation arising out of this contract, prevailing party shall be entitled to recover reasonable costs, expenses and attorneys fees.

15. INDEMNIFICATION: Owner shall Indemnify and hold Pimentel Paving Inc., & Officers or Employee's harmless against all claims for damages to persons or to property arising out of Owner's execution of the work covered by this contract and any and all costs, expenses, attorney's fees, and liability incurred by Contractor in defending against such claims, whether the same proceed to judgment or not.

In addition, Owner shall indemnify, defend and hold Pimentel Paving Inc., & Officers or Employee's harmless against any and all liability, losses, costs (including reasonable attorneys' fees and costs of suit) and damages which Pimentel Paving Inc., & Officers or Employee's may sustain or incur by reason of Owner's breach or default of any covenant or agreement contained in this contract.

16. PERFORMANCE BOND: Performance bond shall not be required unless otherwise agreed in writing.

Pimentel Paving Inc., is required by law to be licensed and regulated by the Contractor's State License Board, which has Jurisdiction to investigate complaints against contractors if a complaint is filed within three years of the date of the alleged violation. Any questions concerning a contractor may be referred to the Registrar, Contractors' State License Board, P.O. Box 26000, Sacramento, Ca 95826.

Note: we may withdraw this contract if not accepted within 15 days. REFERRAL LISTS AVAILABLE UPON REQUEST. Any modifications, handwritten or otherwise, are to be initialed by both parties for this contract to remain valid.
Payment: Owner/Buyer agrees to pay Pimentel Paving Inc., a total price of $ 31,875.00
Prices subject to change after 30 days or if not completed within 30 days. **NOTE: Surcharge's (if any) on asphalt products will be passed onto you as a written change order.

Payment to be made as follows (unless pre-authorized): Full payment due the day of completion.
No retention will be withheld. Balance not paid will bear an interest amount of 1.5% monthly; if net is not paid upon day work is complete.

ACCEPTANCE OF CONTRACT

The above prices, specifications and conditions are satisfactory and ALL pages are hereby accepted. Pimentel Paving Inc. is authorized to do the work as specified. Payment will be made as outlined above.

_____ _____

Pimentel Paving Inc. Owner/Buyer

date:

VICINITY MAP

APN: 211-384-013-000

Property Boundary

Figure 1 - Vicinity Map

Foleva Topo Map

Humboldt County Planning and Building Department

Printed: October 25, 2022 Web AppBuilder 2.0 for ArcGIS

Map Disclaimer:
While every effort has been made to assure the accuracy of this information, it should be understood that it does not have the force & effect of law, rule, or regulation. Should any difference or error occur, the law will take precedence.

Highways and Roads
- Principal Arterials
- Minor Arterials
- Major Collectors
- Minor Collectors
- Local Roads
- Private or Unclassified
- Major River or Stream

Blue Line Streams
- Perennial 1-3
- Perennial >4
- Intermittent
- Subsurface
- City Boundary
- Counties
- Parcels (no APN labels)

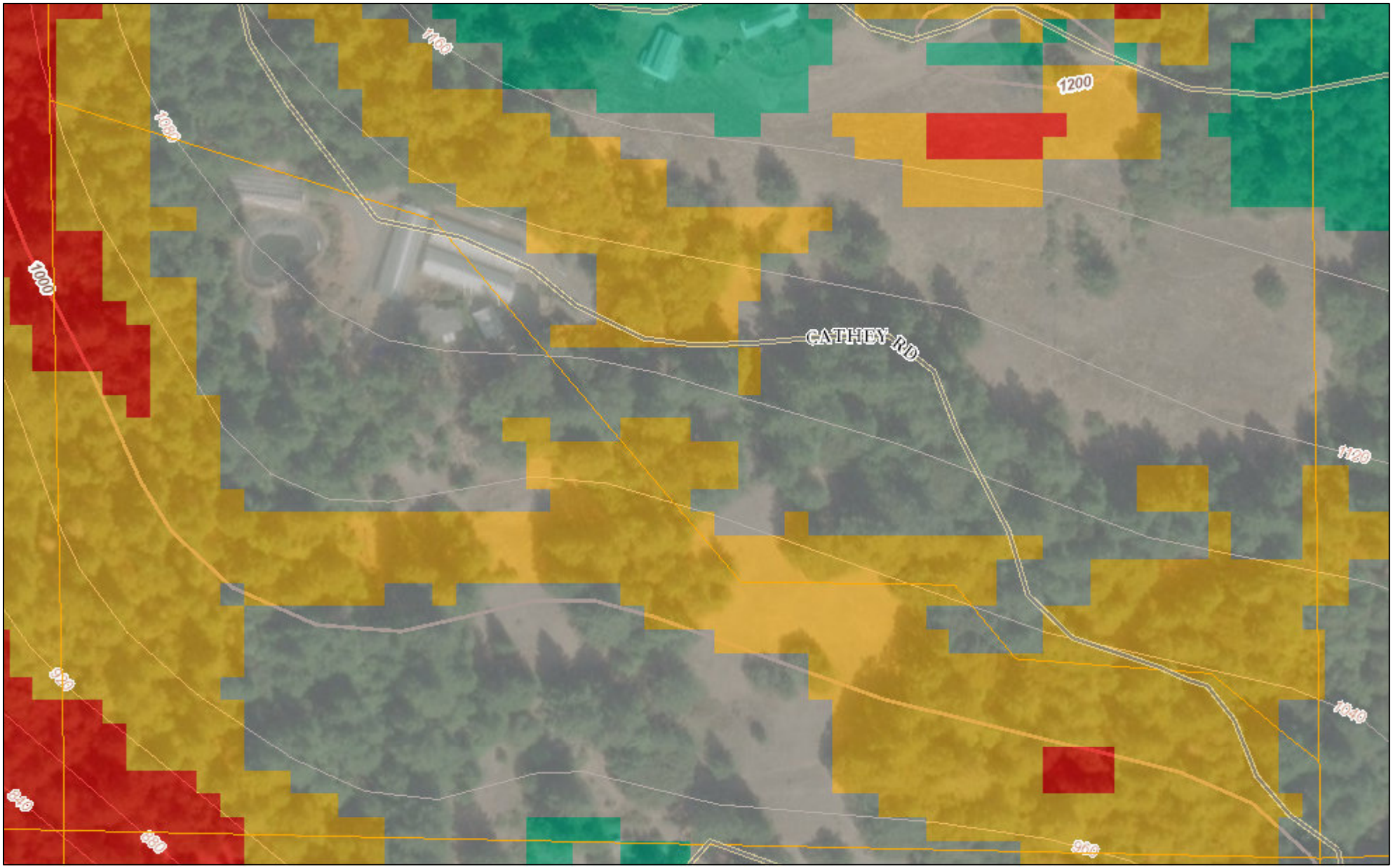
Topographic Contours 40ft
- Minor Interval
- Major Interval

0 87.5 175 350 Feet
0 0.015 0.03 0.06 Miles
RF= 1:2,257 1 in = 188 ft

N W E S

Sources: Humboldt County GIS
Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community
FRAP, FEMA. USGS. ESA, CGS
Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

Figure 2 - Topo Map



Foleva Slope Map

Humboldt County Planning and Building Department

Printed: October 25, 2022 Web AppBuilder 2.0 for ArcGIS

Map Disclaimer:
While every effort has been made to assure the accuracy of this information, it should be understood that it does not have the force & effect of law, rule, or regulation. Should any difference or error occur, the law will take precedence.

Highways and Roads
- Principal Arterials
- Minor Arterials
- Major Collectors
- Minor Collectors
- Local Roads
- Private or Unclassified

- Major River or Stream

Blue Line Streams
- Perennial 1-3
- Perennial >4
- Intermittent
- Subsurface
- City Boundary
- Counties
- Parcels (no APN labels)

Slope USGS
- 15-30%
- 30 - 50%
- +50%

Slope less than 15%
- <15%

0 87.5 175 350 Feet
0 0.015 0.03 0.06 Miles
RF= 1:2,257 1 in = 188 ft

N W E S

Sources: Humboldt County GIS
Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community
FRAP, FEMA. USGS. ESA, CGS
Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

Figure 3 - Slope Map

Distance to Nearst Adjoining Parcel Stuctures & Adjoing Parcel Use Code Descriptions

Foleva Parcel Map

Humboldt County Planning and Building Department

0 180 360 720 Feet

0 0.0325 0.065 0.13 Miles

RF= 1:4,514 1 in = 376 ft

N W E S

Printed: October 31, 2022 Web AppBuilder 2.0 for ArcGIS

Map Disclaimer:
While every effort has been made to assure the accuracy of this information, it should be understood that it does not have the force & effect of law, rule, or regulation. Should any difference or error occur, the law will take precedence.

Source: Humboldt County GIS, Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community, Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

Highways and Roads
- Principal Arterials
- Minor Arterials
- Major Collectors
- Minor Collectors
- Local Roads

- Private or Unclassified
- Major River or Stream

Blue Line Streams
- Perennial 1-3
- Perennial >4

- Intermittent
- Subsurface
- City Boundary
- Counties
- Parcels
- Parcels (no APN labels)

Figure 4 - Adjacent Parcels