5. Nooning Creek Grant Application

Project ranking criteria for (Project Title):_____

1. Does proposed project include one or more stream crossings and corrective grading within and close to a stream channel?

   ☐ Yes ☐ No

   If yes: Number of stream crossings:_____

   Corrective grading within and close to a stream channel:_____

2. Are improvements to roads in priority sub watersheds?

   ☐ Yes ☐ No

   If yes: Which priority sub watershed:_____

   ☐ Refuge sub watershed ☐ Critical sub watershed

3. Is the proposed project maintained by a Road Maintenance Association?

   ☐ Yes ☐ No

   If yes: Name of Road Maintenance Association:_____

   Is the proposed project a cultivation sites approved under the 2016 Commercial Medical Marijuana Land Use Ordinance (CMMLUO) AND will the improvements bring the road into compliance with the standards?

   ☐ Yes ☐ No

   If yes: What are the required standards/Conditions of Approval: _____

4. Is the proposed project located in an area of highly erodible soils, steep slopes, proximity to a watercourse(s), and have the presence of impacted fisheries?

   ☐ Yes ☐ No

   If yes, check all that apply:

   ☐ Highly erodible soils ☐ Steep slopes
   ☐ Proximity to a watercourse ☐ Presence of impacted fisheries

   Provide additional notes, if needed, based on boxes checked above:_____

   _____

   _____

After evaluating the above, provide the following points (not to exceed one hundred total) based on the proposed project's:

• Project Design and Expected Outcomes – up to a total of 80 Points, based upon the project's alignment with the Program requirements and criteria set forth in these Guidelines.

Total score:_____

• Project Budget – up to a total of 10 Points, based on the applicant's ability to perform the work necessary to implement the project in a cost-efficient manner.

Total score:_____

• Experience and Capacity – up to 10 Points, based on the applicant's experience and capacity to perform the work necessary to implement the project.

Total score:_____

Total Final Ranking Score (out of 100 points):_____

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: Nooning Creek Road Improvements Date of Application: 10/31/2021

Applicant Name: Jennifer Markman Project APN: 108-161-033

Contact Person Name and Title: Jennifer Markman, Owner

Contact Phone: (707) 499-2883 Contact Email: infiniteblessings@asis.com

Contact Address: P.O. Box 369, Garberville, CA 95542

Amount Requested: $51,816.00 Total Budget: $51,816.00

Project Timeline: Start Date: July 30, 2022 End Date: August 30, 2022

Signature of Applicant: Jennifer Markman

Nooning Creek Improvements
Jennifer Markman

Project Description

The project is located at 1301 Shelter Cove Road (APN 108-161-033). The commercial cannabis operation consists of 3,000 sf of permitted outdoor cultivation. The property is located in the Headwaters Mattole River subwatershed, a refuge watershed. The road is accessed by several other private parcels.

The project involves one existing 24-inch culvert that requires rock armoring (Crossing #2) and and one 18 inch diameter culvert (Crossing #3) that needs to be replaced with 80 feet of 36-inch diameter culvert pursuant to the applicant's Lake and Streambed Alteration Notification dated September 27, 2019. The culvert is approximately 12' deep.

GIS indicates that the parcel is in an area of low to moderate slope instability. The area around the Mattole River is in a 100 year flood zone. The property is not in an earthquake hazard zone. The subject parcel is heavily forested and the residences and cultivation site are confined to the northeast corner of the parcel. The culvert replacement project is located on Nooning Creek Road, above the residence and cultivation area to the west. Nooning Creek Road is not maintained by a road maintenance association. The subject property is surrounded by other rural improved parcels. No impact on these surrounding properties is anticipated.

These upgraded watercourse crossings will bring the property into compliance with State Water Resources Control Board Order WQ 2019-0001-DWQ, will achieve 100-year flood requirements and reduce sediment deposits into the streams that are connected to the Mattole River, protecting water quality and aquatic ecosystems and limiting impact on downstream resources.

Jennifer Markman
APN: 108-161-033
Nooning Creek Road Improvements
Plot Plan

Project Site/ Area for tree removal

Light-Deprivation
(E) (4) 4x40 Garden Beds
640 Sq Ft;
(P) Propagation Area

(E) Non-Premises Guest House 1 28'x34'

(E) Non-Premises Primary Residence 32'x30'

(E) Non-Premises Guesthouse 2 16'x24'

(8) Planned Water Tanks

(E) Compost 8'x6'

Mixed-Light
(E) Greenhouse 25'x70' 1,750 Sq Ft

(E) Hoop House 9'x34' 306 Sq Ft

Storage Shed 12'x20'

(P) Pump

(E) Yurt 30' Dia Propagation

24' Wide Road

Propagation 20'x20'

Storage Shed 8'x12'

(E) Hoop House 9'x55' 495 Sq Ft

(E) Hoop Houses 9'x55' 495 Sq Ft

30' Wide Driveway Crossing

Fire Suppression Water Tank

Utility Lines

18' Wide Driveway

(E) Non-Premises Guest House 3

26' Wide Driveway Entrance

Storage Shed 8'x12'

27% Slope

Project Site

Storage Shed 8'x12'

Main Entrance/Exit
(P) Gate
-Used For Property/Premises

20% Slope

Nooning Creek Road

24' Wide Dirt&Gravel Road

Mattole River

+/-951.5'

+/-850.0'

30' Buffer

+/-1,164.2'

+/-135.0'

+/-154.5'

+/-163.9'

+/-249.0'

+/-306.3'

+/-70.0'

198 FT.

96.2 FT.

57 FT.

235 FT.

260 FT.

140 FT.

173 FT.

392 FT.

203 FT.

5 FT.

N

40 feet
Scale

SHELTER COVE RD

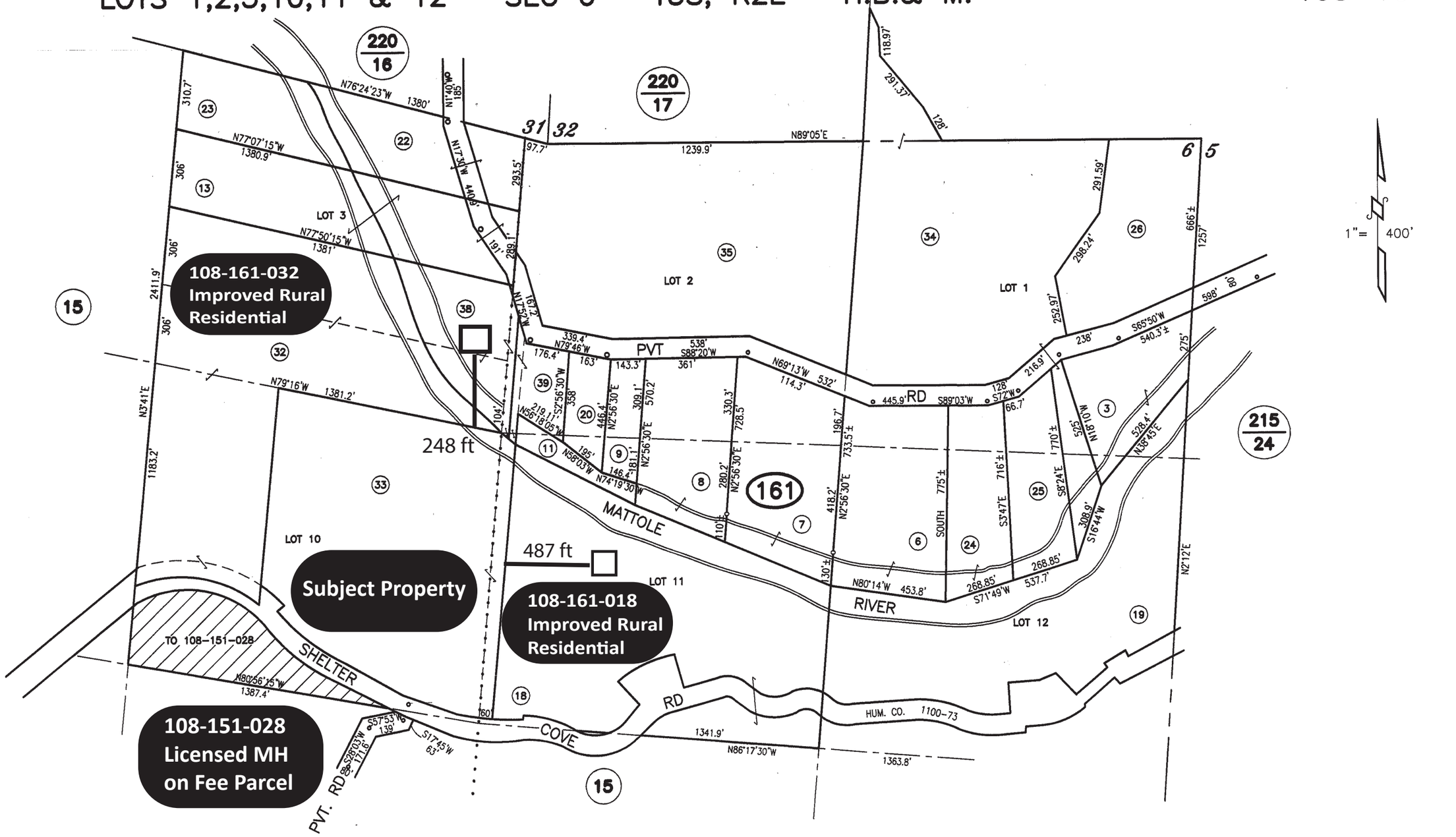
Surface Water Runoff

Note: The Property And Premises Share The Same Boundaries. The Property And Premise Will Share All Access Gate's AND/OR Access Road's.

Legend

- Cultivation Area
- Water Tanks
- Storage Shed
- Non-Premises
- Soils Spoils Area
- Roads
- Class I Watercourse
- Class II Watercourse
- Class III Watercourse
- Culvert
- Irrigation Lines
- Septic and Leach Lines
- (E) Existing
- (P) Proposed
- Water Pump

LOTS 1,2,3,10,11 & 12 SEC 6 T5S, R2E H.B.& M.



ASSESSOR'S PARCEL MAP
1. THIS MAP WAS PREPARED FOR ASSESSMENT PURPOSES ONLY.
2. NO LIABILITY IS ASSUMED FOR THE ACCURACY OF THE DATA SHOWN.
3. ASSESSOR'S PARCELS MAY NOT COMPLY WITH LOCAL LOT–SPLIT OR BUILDING SITE ORDINANCES.

LS, Bk 21 of surveys, Pg 96
LS, Bk 22 of surveys, Pgs 29,30,38 & 64
LS, Bk 30 of surveys, Pg 69
RS, Bk 53 of surveys, Pg 5
RS, Bk 56 of surveys, Pgs 135–136
RS, Bk 57 of surveys, Pg 26

Jennifer Markman
Nooning Creek Road Improvement
Adjacent Parcels

NOTE – See Index map of book 108 for township and section orientation.

NOTE – Assessor's Block Numbers Shown in Ellipses
Assessor's Parcel Numbers Shown in Circles.

Assessor's Map Bk.108, Pg.16
County of Humboldt, CA.

100' 200' 400'

Feb 16, 2010

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)
  - ☐ 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
  - ☐ 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)
  - ☐ 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):
  - ☐ 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
  - ☐ 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

Nooning Creek Improvements
APN 108-161-033
Jennifer Markman
Scope of Work

The work will be completed by Ray Wilcox, Wilcox GR Enterprises Inc., Contractors State License Board #665454 between June 15 and October 1, 2022. The work will take approximately two weeks.

Crossing #2: Existing 24-inch diameter culvert comprised of .5 inch thick iron on a Class II watercourse. The culvert is adequately sized but not to grade and slightly shot-gunned. Rock armor the inlet and outlet per engineering specifications. Will require approximately 5-10 yards of rip-rap, ranging in size from 1/16 to ¼ ton, to be placed at the inlet and outlet. The total disturbed area for purposes of quantifying remediation area is approximately 100 square feet.

Crossing #3: Existing 18-inch diameter culvert located on Nooning Creek Road on a Class III watercourse. The culvert is undersized for the 100-year storm and is rusted. The crossing shall be removed and replaced with a 36-inch diameter culvert long enough that it extends lengthwise completely beyond the toe of the fill. The culvert shall be installed per engineering specifications. The culvert upgrade will result in the loss of a 15 dbh tanoak, a 10 inch dbh Douglas fir, a 21 inch dbh Douglas fir, and local forbs and grasses.

All work will be completed according to general specifications provided by Timberland Resource Consultants (attached). An excavator, dump truck, tractor and grader may be used during the project. The project will require a 401 Certification from the Regional Water Quality Control Board.

Nooning Creek Road Improvements
APN 108-161-033
Applicant: Jennifer Markman
Schedule for Completion

Milestone	Start Date	End Date
401 Certification	March 15, 2022	May 1, 2022
Detailed Project Scoping	May 15, 2022	May 30, 2022
Bidding and Contracting	June 1, 2022	June 15, 2022
Project Ground-Breaking	July 30, 2022	
Project Completion		August 30, 2022
Monitoring	July 30, 2022	Ongoing

Five-Year Erosion Control Plan

Project Management

Before and during the project best practices will be applied to ensure minimal disturbance to the waterway and local habitat.

- Work will be completed prior to the start of any rain that causes overland flow across or along the disturbed surface.
- Within 100 feet of a watercourse or lake, the traveled surface of roads will be treated to prevent waterborne transport of sediment and concentration of runoff that results from operations.
- The treatment for disturbed areas within 100 feet of a watercourse including (1) areas exceeding 100 contiguous square feet where operations have exposed bare soil, (2) road cut banks and fills, and (3) any other area of disturbed soil that threatens to discharge sediment into waters in amounts that will negatively affect 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.
- Care will be taken not to unnecessarily disturb the native channel outside of the identified areas.
- Fill to be permanently removed will be stored in designated locations with no risk of sediment delivery.
- All disturbed areas where sediment delivery from surface erosion processes is feasible will be seeded and mulched to reduce surface erosion and transport processes.
- All disturbance associated with this project will be limited to the road and immediately adjacent channel reaches as necessary to improve road drainage, stormproof the crossings, and prevent sediment delivery to watercourses.
- Any spoils generated during construction will be used for road treatments, such as shaping, or stored in a stable location and mulched to prevent surface erosion.
- The stream crossing will be treated according to standards provided in the “Handbook for Forest, Ranch and Rural Roads” (Weaver, Weppener and Hagans, 2015) and the California Salmonid Stream Habitat Manual, Part X (Weaver, Hagans and Weppner, 2006).

Roads

- 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.

- 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 (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.

Streamside Management Area

- Within 100 feet of a watercourse, 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 and timed as above.
- Except for culvert repairs and maintenance, no driving or operating of vehicles or equipment will occur within the riparian setbacks or within waters of the state unless authorized.

Maintenance

- Work will only occur during the period of June 15 through October 15 (or first significant rainfall) 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.
- All disturbed areas capable of delivering sediment to a watercourse will be seeded with barley or wheat based erosion control seed not containing Annual or Perennial Ryegrass and mulched with weed free straw at a rate no less than 50 lb/acre of seed and 4,000 lb/acre of straw.

Monitoring

To avoid risk of future stream diversions and erosion, monitoring will be implemented to reduce the risk of stream crossing failures caused by excessive flow, culvert plugging, overtopping, washout and stream diversion.

- Regular, periodic, and storm inspections and maintenance, including removal of debris.
- Ongoing monitoring for proper drainage during the rainy season.
- Installation of debris barriers.
- Monitor culverts for rusting, leaking, separated or other signs of impending failure.
- Look for evidence of plugging and overtopping, such as depositional terraces or a delta of sediment upstream of the pipe inlet.
- Look for ponding, damage to inlets, including crushed or ripped inlets.
- Monitor crossing for slope failure from one or both sides of the channel.

Nooning Creek Road Improvements
APN 108-161-033
Project Budget

Budget Item	**Grant**	**Other Funds**
Permit Fees		
401 Certification	$ 2,066.00	
Consultant and Professional Fees	$ 7,000.00	
Materials	$ 17,150.00	
Equipment	$ 20,600.00	
Labor	$ 5,000.00	
Total	$ 51,816.00	

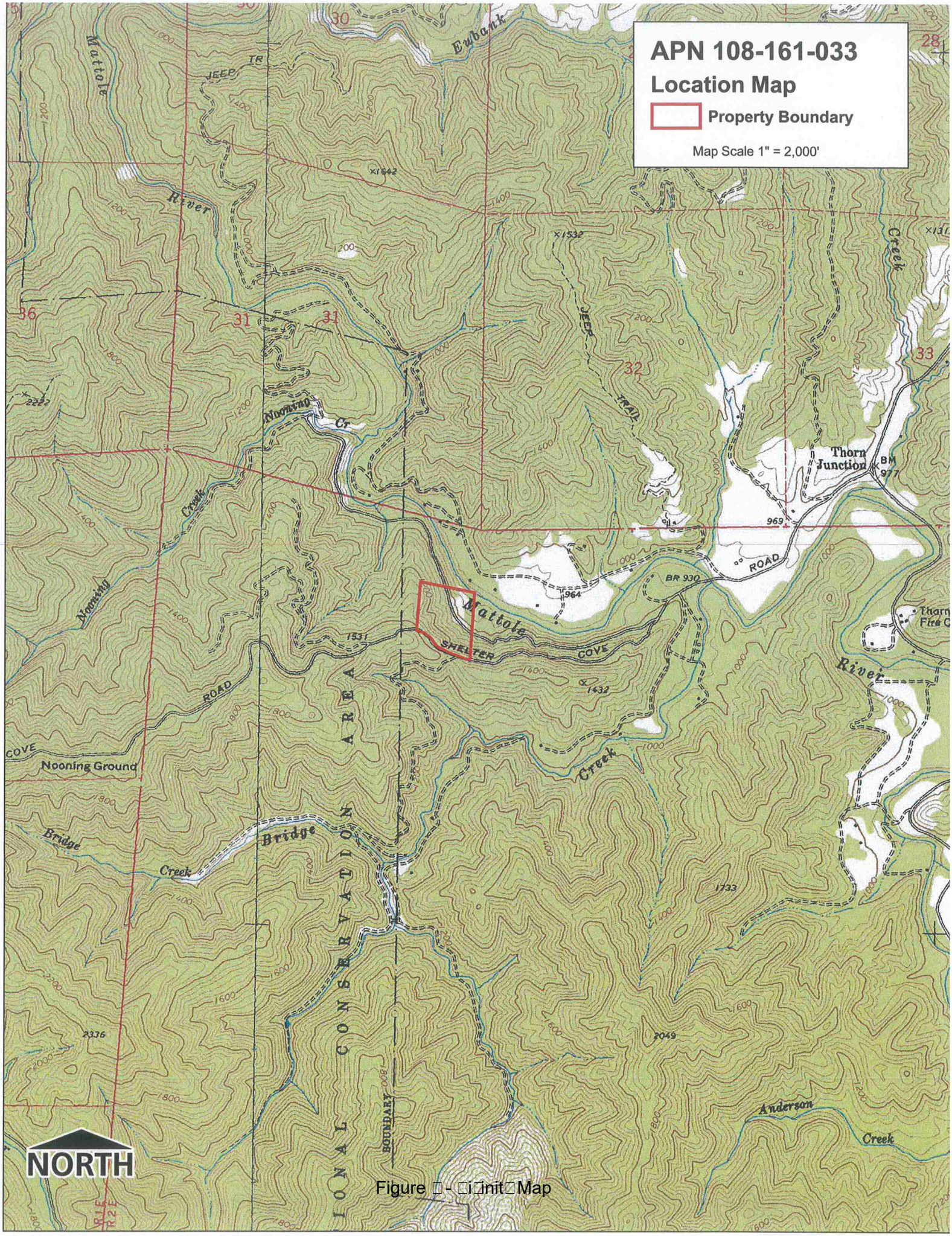


Figure □ - □i□init□ Map

Markman 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)

Slope LiDAR - Elk/Fresh...
- 15-30%
- 30 - 50%
- +50%

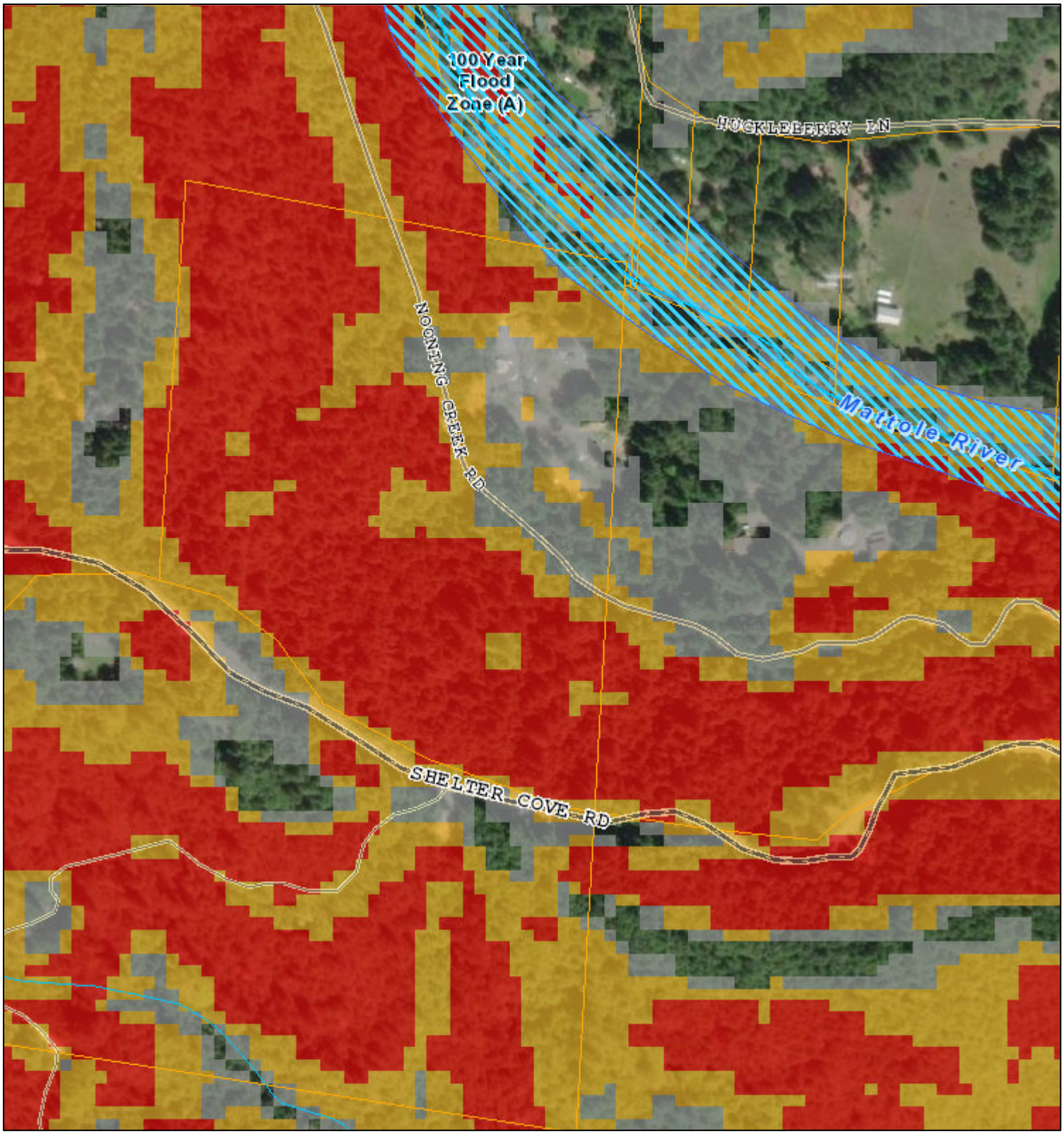
Slope less than 15%
- <15%

Printed: October 11, 2021 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: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community, Humboldt County GIS, Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community, FRAP, FEMA, USGS, ESA, CGS

Figure □ Topo □ith Slope □ □5%



Markman Slope/Flood 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 11, 2021 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: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community, Humboldt County GIS, Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community, FRAP, FEMA, USGS, ESA, CGS

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)
- Awareness Floodplain

Figure □ - Slope and Flood Map

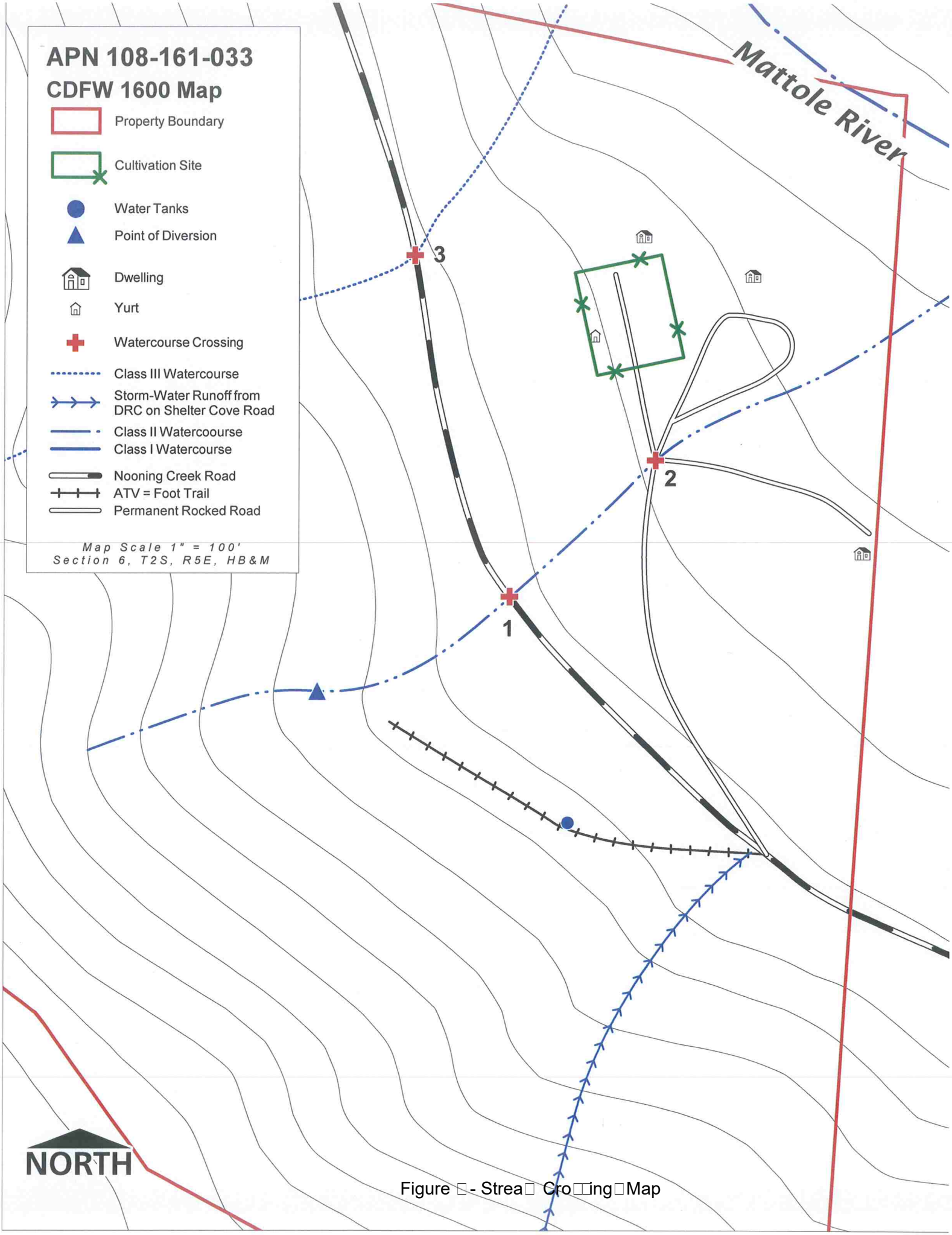


Figure □- Strea□ Cro□□ing□Map

Addendum 10 – Pictures

Picture 7: Inlet of Crossing #2. Photo date 8-13-2019

Addendum 10 – Pictures

Picture 8: Outlet of Crossing #2. Photo date 8-13-2019

Figure 5B

Addendum 10 – Pictures (Cont.)

Picture 9: Inlet of Crossing #3. Photo date 8-13-2019

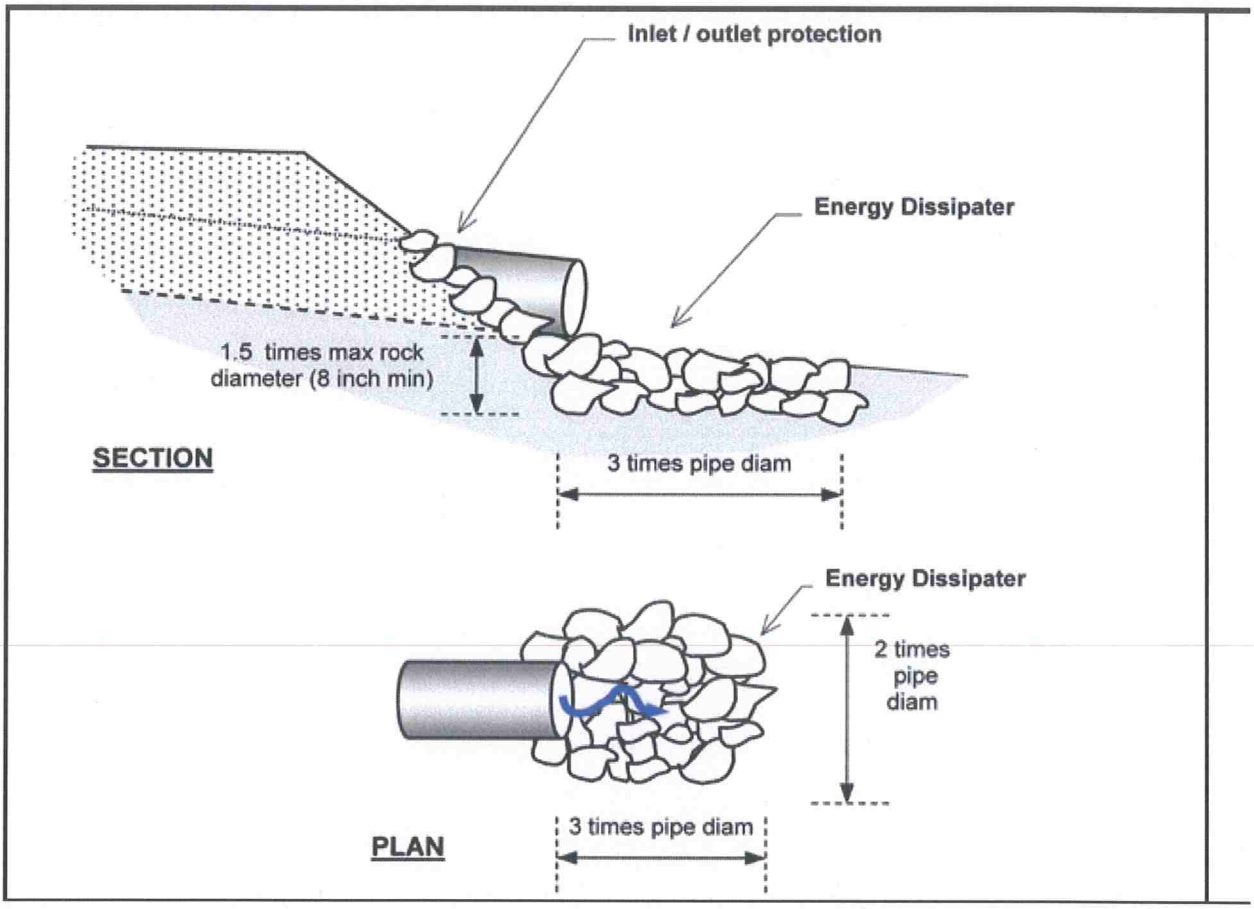
Addendum 10 – Pictures (Cont.)

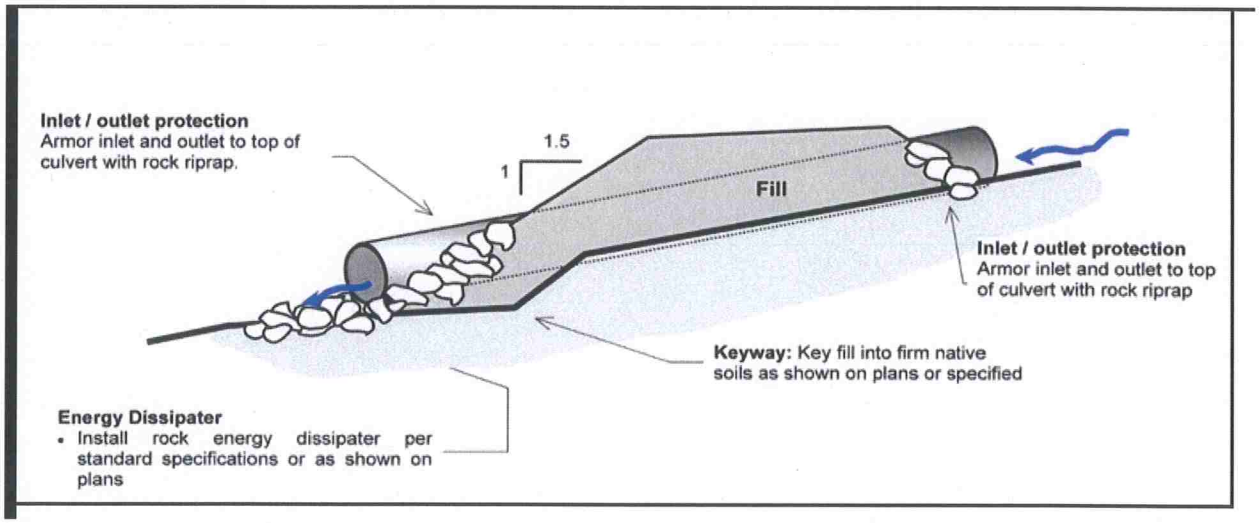
Picture 10: Inlet of Crossing #3. Photo date 8-13-2019

Addendum 10 – Pictures (Cont.)

Picture 11: Outlet of Crossing #3. Photo date 8-13-2019

Culvert Installation Specifications

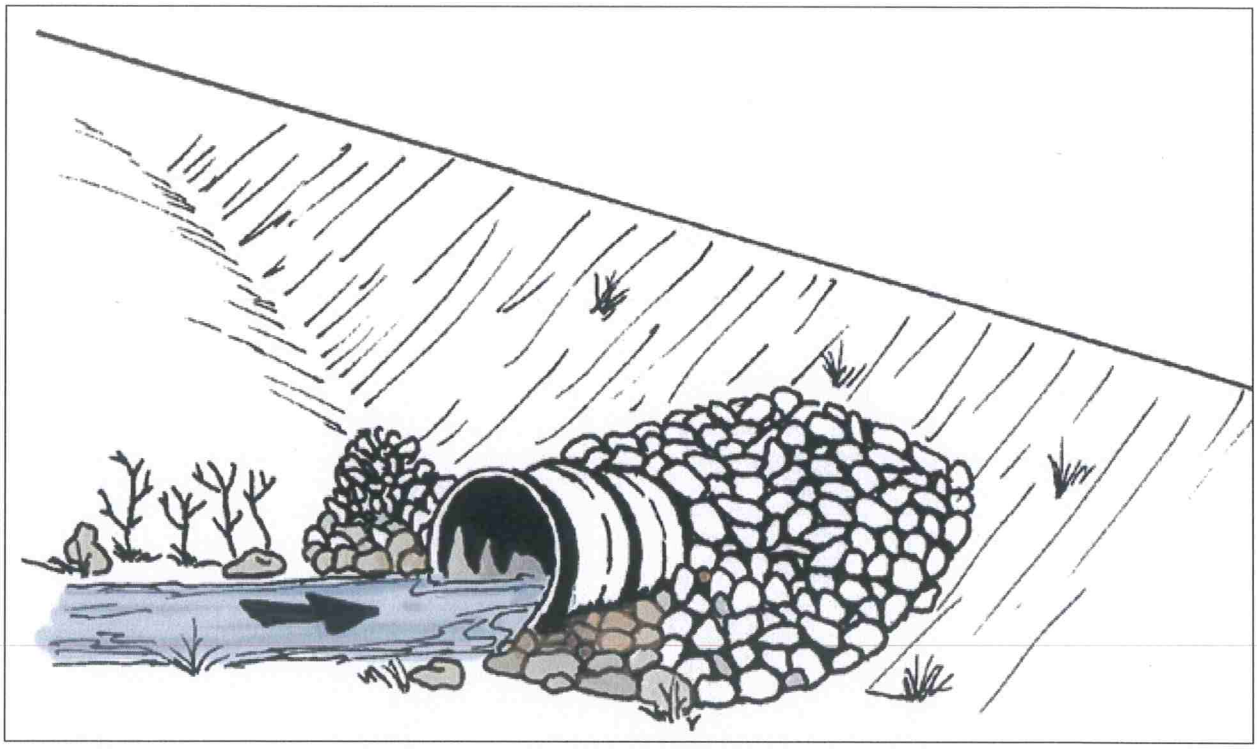




Riprap installed to protect the inlet and outlet of a stream crossing culvert from erosion or for energy dissipation should be keyed into the natural channel bed and banks to an approximate depth of about 1.5x the maximum rock thickness. Riprap should be placed at least up to the top of the culvert at 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 6A

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 serve 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.

Figure 6B

From:	Jessica
To:	Adler, Elanah; Richardson, Michael
Cc:	Margro Advisors
Subject:	Jennifer Markman - Mitigation and Remediation Grant Fund Proposal
Date:	Friday, October 29, 2021 1:20:41 PM
Attachments:	Mitigation Fund Application - Nooning Creek_Markman.pdf Markman Maps_Figures.pdf

---

Dear Michael and Elanah,

I am pleased to present the attached grant proposal on behalf of Jennifer Markman.

Please feel free to reach out to me with questions or comments.

Thank you,

Jessica

--
Jessica
Project Manager
Margro Advisors

1-707-500-2420