COUNTY OF HUMBOLDT
PLANNING AND BUILDING DEPARTMENT
CURRENT PLANNING DIVISION

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Phone: (707)445-7541 Fax: (707) 268-3792

Hearing Date: November 4, 2021

To: Humboldt County Planning Commission

From: John H. Ford, Director of Planning and Building Department

Subject: **Georgi Stoyanov, Conditional Use Permit and Special Permit**
Record Number: PLN-11816-CUP
Assessor's Parcel Number (APN): 221-201-007
Section 6 of Township 04 South, Range 02 East, H.B.&M., Ettersburg area

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Please contact Cameron Purchio, Assigned Planner, at 707-443-5054 or by email at marruffom@lacoassociates.com, if you have any questions about the scheduled public hearing item.

AGENDA ITEM TRANSMITTAL

Hearing Date	Subject	Contact
November 4, 2021	Conditional Use Permit and Special Permit	Cameron Purchio

Project Description: A Conditional Use Permit for an existing 11,600 square feet (SF) of outdoor cannabis cultivation grown utilizing light deprivation techniques. Propagation up to 1,200 SF will occur within existing greenhouses. Irrigation water is sourced from an existing, permitted well and three registered stream diversions. Estimated annual water use is 164,100 gallons. There is 65,000 gallons of water storage in various hard-sided tanks. Bucking and drying will occur onsite, while other processing will occur offsite at a licensed processing or manufacturing facility. Power is provided by Pacific Gas and Electric Company (PG&E). The applicant also seeks a Special Permit for development within the Streamside Management Area for the continued use and maintenance of the points of diversion.

Project Location: The project is located in the Ettersburg area, on the east and west side of Dutyville Road, approximately 0.5 miles north from the intersection Dutyville Road and Ettersburg Honeydew Road, on the property known to be in Section 06 of Township 04 South, Range 02 East, Humboldt Base & Meridian, and known as 1677 Dutyville Road.

Present Plan Land Use Designations: Residential Agriculture (RA40) Density: 40 acres per dwelling unit, Slope Stability: Moderate instability (2).

Present Zoning: Forestry Recreation (FR-B-5(40))

Record Number: PLN-11816-CUP

Assessor's Parcel Number: 221-201-007

Applicant	Owner	Agent
Georgi Stoyanov P.O. Box 476 Garberville, CA 95542	Georgi Stoyanov P.O. Box 476 Garberville, CA 95542	Green Road Consulting Kaylie Saxon 1650 Central Ave, Suite C McKinleyville, CA 95519

Environmental Review: An Addendum to a previously adopted Mitigated Negative Declaration has been prepared for consideration per §15164 of the State CEQA Guidelines.

State Appeal Status: Project is NOT appealable to the California Coastal Commission.

Major Issues: None.

Georgi Stoyanov
Record Number: PLN-11816-CUP
Assessor's Parcel Number: 221-207-007

Recommended Planning Commission Action:
1. Describe the application as part a public hearing;
2. Request that staff present the project;
3. Open the public hearing and receive testimony; and
4. Close the hearing and take the following action to approve the application:

Adopt the Resolution to 1) find that the Commission has considered the Addendum to the adopted Mitigated Negative Declaration for the Commercial Medical Marijuana Land Use Ordinance (CMMLUO) pursuant to Section §15164 of the State CEQA Guidelines, 2) make all of the required findings for approval of the Conditional Use Permit and Special Permit, and 3) approve the Georgi Stoyanov project as recommended by staff subject to the recommended conditions.

Executive Summary: Georgi Stoyanov seeks a Conditional Use Permit to allow the continued cultivation of 11,600 square feet (SF) of outdoor cannabis in accordance with Humboldt County Code Section 314-55.4 of Chapter 4 of Division I of Title III, Commercial Medical Marijuana Land Use Ordinance (CMMLUO). The applicant also seeks a Special Permit for development within the Streamside Management Area (SMA) for continued use and maintenance of the points of diversion (see Water Resources discussion below for additional information). The site is designated as Residential Agriculture (RA40) in the Humboldt County 2017 General Plan Update and zoned Forestry Recreation with a minimum 40-acre building site (FR-B-5(40)). Cultivation takes place in one (1) area within the southeastern portion of the parcel within three (3) greenhouses utilizing light deprivation techniques. No separate ancillary propagation areas will be utilized and any ancillary propagation up to 1,200 SF will occur within existing greenhouses. Two (2) harvests are anticipated annually for the light deprivation greenhouses for a growing season that extends from April through October.

Drying and bucking occurs onsite within a 1,750-foot agriculture accessory structure; all other processing will occur offsite at a licensed processing or manufacturing facility. A maximum of three (3) people will be onsite during peak operations. Power is provided by Pacific Gas and Electric Company (PG&E). The operation is secured behind a gated access, and product and storage areas are locked.

Timber Conversion
A review of available satellite imagery dating back to 2004 shows that a total of five (5) trees were removed during the development of the cultivation areas between 2010 - 2012. The project is conditioned to require the property be evaluated by a Registered Professional Forester (RPF) to determine the amount of timber conversion that occurred and submit a Timber Conversion Report address previously unpermitted timber conversion. It does not appear any timber removal occurred after January 1, 2016. The applicant is required to adhere to and implement any recommendations by the RFP once the tree removal is evaluated.

Water Resource
Estimated annual water usage is 164,100 gallons (14.14 gal/SF) with peak demand occurring in July and August at approximately 36,000 gallons. Onsite available water storage is 65,000 gallons in various hard-sided tanks, which constitutes 39.61% of the annual water demand. Water for irrigation is provided by a permitted groundwater well (Permit No. 18/19-1053; Attachment 3) and three (3) registered points of diversion (Certificate No. H100939) (Attachment 3). The applicant also seeks a Special Permit for development within the Streamside Management Area (SMA) for the continued use and maintenance of the points of diversion. As depicted on the Site Plan, the project site contains several Class III watercourses and is directly adjacent to the Mattole River, a Class I waterway, which makes up a portion of the western boundary of the parcel.

A Final Streambed Alteration Agreement (FSAA) was issued by the California Department of Fish and Wildlife (CDFW; Notification No. 1600-2017-0156-R1) in September 2017 (Attachment 3) for the existing stream diversions, including use and maintenance of the water diversion infrastructure. Per the FSAA, the applicant is required to forebear from May 15 to October 15 annually; however, the applicant is permitted to divert up to 150 gallons per day during this period for domestic use only. The applicant has obtained a Right to Divert and Use Water from the State Water Resources Control Board (SWRCB), which allows for 97,775 gallons of water to be diverted annual from the three PODs and up to 48,878 gallons can be diverted to storage. The groundwater well produces the additional 66,375 gallons to meet the water demand. Additionally, the project is conditioned to implement all terms and conditions of the FSAA and the Right to Divert and Use Water. By adhering to the terms and conditions of these documents, which limit the diversion amount and duration in addition to the specifying the use of intake structures that will not impact aquatic species, Planning staff determined that impacts to the watershed are minimized allowing the use of point diversion pursuant to a Special Permit.

The project also utilizes a permitted groundwater well that is registered with the California Department of Water Resources (Permit No. 18/19-1053, WCR2019-010444). According to the Plot Plan, the well is located to the northwest of the cultivation area, approximately 35 feet southwest and on grade with the nearest SMA. The Well Completion Report states the well is 240 feet deep and drilled through clay, sandstone, and shale. Water is found at 68 feet, and a blank is installed for the first 60 feet of depth and a screen installed from 60 to 240 feet. According to the well completion report, the well produces 4 gallons per minutes, which should produce sufficient water for irrigation. Based on the distance from the nearest watercourse, Planning staff determined the well has the potential to be hydrologically connected to surface waters. Conditions of approval require that prior to use of the well for cultivation activities outside of the forbearance period, the applicant must submit a report from an appropriate professional documenting evidence showing the well is likely not hydrologically connected to surface waters. Until such time, and/or if it cannot be shown the well is not likely to be hydrologically connected to surface waters it shall require additional water rights from the State Water Resources Control Board and be subject to forbearance or water storage requirements. The applicant is also required to increase water storage by 99,100 gallons should the well be hydrologically connected to surface water to ensure there is sufficient water storage to meet annual water demand. Conditions of approval require the applicant to monitor water use from the stream and the groundwater well to demonstrate there is sufficient water available to meet operational needs and that water diverted to storage complies with the Right to Use and Divert Water.

A Water Resources Protection Plan (WRPP) was prepared by Timberland Resource Consultants in September 2017 and revised in July 2018 (Attachment 3) for the subject site, pursuant to North Coast Regional Quality Control Board (NCRWQCB) Order No. R1-2015-0023. The WRPP identified twenty-three (23) places onsite requiring corrective actions, including: rock armor spillways, install erosion control measures, upgrade and maintain culverts, provide secondary containment for fuel tanks, regrading of roads to prevent discharge, and relocate all storage areas outside of the SMA. The project is conditioned to implement all remaining corrective actions detailed in the WRPP.

In addition, the Cultivation plan states that consolidation of cultivation areas has taken place. This relocation was performed to centralize cultivation activities in an environmentally superior location to decrease the potential for runoff, reduce the overall cultivation footprint, and reduce vehicle travel onsite. The project is conditioned to provide, within 90 days, an updated site plan depicting all onsite structures and decommissioned cultivations areas, as well as a Remediation Plan detailing any remediation efforts that have occurred and/or are proposed for the decommissioned areas. Conditions of approval also require the applicant to comply with the State Water Resources Control Board Cannabis Cultivation Policy, which includes development of a Site Management Plan.

Biological Resources

Per review of CDFW's California Natural Diversity Database (CNDDB) in October 2021, the Mattole River, which makes up the western edge of the parcel, is habitat for summer-run steelhead (*Oncorhynchus* mykiss) and the nearest NSO activity center is located approximately 3.20 miles from the nearest

cultivation area, with the nearest NSO sighting located approximately 2.10 miles away. Per the Cultivation and Operations Plan, power is sourced from PG&E. The project is conditioned to ensure the combination of background, generator and greenhouse fan, or other operational equipment created noise, meets the noise level threshold of a maximum of 50 decibels at the property line. Conformance will be evaluated using current auditory disturbance guidance prepared by the United States Fish and Wildlife Service (USFWS). Additional conditions of approval require the applicant to refrain from using synthetic netting, ensure refuse is contained in wildlife proof storage, refrain from using anticoagulant rodenticides, and prepare and implement various erosion and sediment control measures to further protect wildlife. As proposed and conditioned, the project is consistent with CMMLUO performance standards and CDFW guidance and will not negatively impact NSO or other sensitive species.

Access

Access to the site is via an access road from Dutyville Road (a private road) from Ettersburg Honeydew Road, a County maintained category 4 roadway. A Road Evaluation Report for a 0.7-mile segment of Dutyville Road to the subject property was prepared by the applicant in January 2020 (Attachment 3), which indicates that the roadway is developed to the equivalent of a road Category 4 standard or better. The submitted road evaluation included sufficient photographic evidence to verify the roadway condition as described, including roadway width and line of sight.

Additionally, due to the number of cultivation projects along Dutyville Road, both approved and pending, conditions of approval require the applicant to take steps to form or join a Road Maintenance Association for the maintenance of Dutyville Road. The necessary steps include sending notices to all road users of the requirement to form a Road Maintenance Association and conducting a meeting with the users of the road, especially those engaged in commercial cannabis activities to discuss formation of the Road Maintenance Association. The applicant shall provide evidence, including notice, meeting minutes, and the decision as to whether a Road Maintenance Association is being formed to show this effort. In the event the applicant is unable to coordinate formation a Road Maintenance Association, the applicant shall pay fair-share cost for maintenance of the road to any road user engaged in maintaining the road.

Approval of this project is consistent with Humboldt County Board of Supervisors Resolution No. 18-43 which established a limit on the number of permits and acres which may be approved in each of the County's Planning Watersheds. The project site is located in the Cape Mendocino Planning Watershed, which under Resolution 18-43 is limited to 650 permits and 223 acres of cultivation. With the approval of this project the total approved permits in this Planning Watershed would be 196 permits and the total approved acres would be approximately 69 acres of cultivation.

Environmental review for this project was conducted and based on the results of that analysis, staff finds that all aspects of the project have been considered in a previously adopted Mitigated Negative Declaration that was adopted for the Commercial Medical Marijuana Land Use Ordinance and has prepared an addendum to this document for consideration by the Planning Commission (See Attachment 2 for more information).

Based on a review of Planning Division reference sources and comments from all involved referral agencies, Planning staff believes that the applicant has submitted evidence in support of making all of the required findings for approval of the Conditional Use Permit (CUP) and Special Permit (SP).

ALTERNATIVES: The Planning Commission could elect not to approve the project, or to require the applicant to submit further evidence, or modify the project. If modifications may cause potentially significant impacts, additional CEQA analysis and findings may be required. These alternatives could be implemented if the Commission is unable to make all of the required findings. Planning staff has stated that the required findings in support of the proposal have been made. Consequently, Planning staff does not recommend further consideration of any alternative.

The Planning Commission could also decide the project may have environmental impacts that would require further environmental review pursuant to CEQA. Staff did not identify any potential impacts. As the lead agency, the Department has determined that the project is consistent with the MND for the CMMLUO as stated above. However, the Commission may reach a different conclusion. In that case, the Commission should continue the item to a future date at least two months later to give staff the time to complete further environmental review.

RESOLUTION OF THE PLANNING COMMISSION
OF THE COUNTY OF HUMBOLDT
Resolution Number: 21-
Record Number: PLN-11816-CUP
Assessor's Parcel Number: 221-201-007

Resolution by the Planning Commission of the County of Humboldt certifying compliance with the California Environmental Quality Act and conditionally approves the Georgi Stoyanov Conditional Use Permit and Special Permit request.

WHEREAS, Georgi Stoyanov**,** submitted an application and evidence in support of approving a Conditional Use Permit for an existing 11,600 square feet (SF) of outdoor cannabis cultivation grown utilizing light deprivation techniques. Propagation up to 1,200 SF will occur within existing greenhouses. Irrigation water is sourced from an existing, permitted well and three registered stream diversions. Estimated annual water use is 164,100 gallons. There is 65,000 gallons of water storage in various hard-sided tanks. Bucking and drying will occur onsite, while other processing will occur offsite at a licensed processing or manufacturing facility. A maximum of three (3) people will be onsite during peak operations. Power is provided by Pacific Gas and Electric Company (PG&E). The applicant also seeks a Special Permit for development within the Streamside Management Area for the continued use and maintenance of the points of diversion.; and

WHEREAS, the County Planning Division, the lead agency, prepared an Addendum to the Final Mitigated Negative Declaration (MND) prepared for the Commercial Medical Marijuana Land Use Ordinance (CMMLUO) adopted by the Humboldt County Board of Supervisors on January 26, 2016. The proposed project does not present substantial changes that would require major revisions to the previous Mitigated Negative Declaration. No new information of substantial importance that was not known and could not be known at the time was presented as described by §15162(c) of CEQA Guidelines; and

WHEREAS, the Humboldt County Planning Commission held a duly-noticed public hearing on November 4, 2021, and reviewed, considered, and discussed the application for a Conditional Use Permit and Special Permit, and reviewed and considered all evidence and testimony presented at the hearing.

Now, THEREFORE BE IT RESOLVED, that the Planning Commission makes all the following findings:

1. **FINDING:** **Project Description:** The application is a Conditional Use Permit for an existing 11,600 square feet (SF) of outdoor cannabis cultivation grown utilizing light deprivation techniques. Propagation up to 1,200 SF will occur within existing greenhouses. Irrigation water is sourced from an existing, permitted well and three registered stream diversions. Estimated annual water use is 164,100 gallons. There is 65,000 gallons of water storage in various hard-sided tanks. Bucking and drying will occur onsite, while other processing will occur offsite at a licensed processing or manufacturing facility. A maximum of three (3) people will be onsite during peak operations. Power is provided by Pacific Gas and Electric Company (PG&E). The applicant also seeks a Special Permit for development within the Streamside Management Area for the continued use and maintenance of the points of diversion.

   EVIDENCE: a) Project File: PLN-11816-CUP.

2. **FINDING:** **CEQA.** The requirements of the California Environmental Quality Act have been complied with. The Humboldt County Planning Commission has

considered the Addendum to and the Mitigated Negative Declaration (MND) prepared for the Commercial Medical Marijuana Land Use Ordinance (CMMLUO) adopted by the Humboldt County Board of Supervisors on January 26, 2016.

EVIDENCE:

a) Addendum prepared for the proposed project.

b) The proposed project does not present substantial changes that would require major revisions to the previous MND. No new information of substantial importance that was not known and could not be known at the time was presented as described by §15162(c) of CEQA Guidelines.

c) A Water Resources Protection Plan (WRPP) was prepared by the Timberland Resource Consultants to show compliance with the Regional Water Board and State Water Board Cannabis General Order for Waste Discharge. The project is conditioned to prepare and submit a Site Management Plan (SMP) and maintain enrollment in the State Water Board Cannabis Cultivation Program.

d) California Department of Fish and Wildlife Resource Maps indicate summer-run steelhead (*Oncorhyncus* mykiss) have the potential to be present in the Mattole River, which is adjacent to the subject parcel and makes up a portion of its western boundary. The project is located outside of required SMA buffers and all water diversions are permitted by CDFW and the State Water Board, therefore, unlikely to adversely impact summer-run steelhead. A review of the California Natural Diversity Database (CNDDB) Spotted Owl Observation Database in October 2021 showed that Northern Spotted Owl habitat exists in the vicinity and the nearest positive sighting is 2.10 miles from the project area, with the nearest activity center located approximately 3.20 miles from the project area. Conditions of approval will require noise to be at below 50 decibels at 100 feet which is below the guidance established by the California Department of Fish and Wildlife for protection of the species. Conditions of approval also require implementation of measures from the WRPP, LSA, and Right to Divert and Use Water which will prevent sediment discharge and prevent any impact to the Mattole River.

e) No net loss of timberland after the environmental baseline of December 31, 2015, would occur under the project. A review of available satellite imagery shows that a total of five (5) trees were removed during the development of the cultivation areas between 2010 - 2012. The project is conditioned to require the property be evaluated by a Registered Professional Forester (RPF) to determine the amount of timber conversion that occurred and submit a Timber Conversion Report from a RPF and/or a Less Than Three Acre Conversion Exemption or Timber Conversion Permit from CalFire, as determined necessary by the RPF, to address previously unpermitted timber conversion. The applicant is required to adhere to and implement any recommendations made by the RPF.

f) The Cultural Resources referral process carried out by staff concluded that the proposed project will not result in any adverse changes to historical or archaeological resources and recommended Inadvertent Discoveries Protocol based on correspondence with the Bear River Tribe of the Rohnerville Rancheria.

g) A Road Evaluation Report for a 0.7-mile segment of Dutyville Road to the subject property was prepared by the applicant in January 2020 (Attachment 3), which indicates that the roadway is developed to the

equivalent of a road Category 4 standard or better. The submitted road evaluation included sufficient photographic evidence to verify the roadway condition as described, including roadway width and line of sight. As conditioned, the access roads are suitable for safe access to a from the project site.

FINDINGS FOR CONDITIONAL USE PERMIT AND SPECIAL PERMIT

3. FINDING The proposed development is in conformance with the County General Plan, Open Space Plan, and the Open Space Action Program.

EVIDENCE

a) General agriculture is a use type permitted in the Residential Agriculture (RA) land use designation. The proposed cannabis cultivation, an agricultural product, is within land planned and zoned for agricultural purposes, consistent with the use of Open Space land for managed production of resources. The use of an agricultural parcel for commercial agriculture is consistent with the Open Space Plan and Open Space Action Program. Therefore, the project is consistent with and complimentary to the Open Space Plan and its Open Space Action Program.

4. FINDING The proposed development is consistent with the purposes of the existing FR zone in which the site is located.

EVIDENCE

a) The Forestry Recreation or FR Zone is intended to be applied to areas of the County in which timber production and recreation are the desirable predominant uses and agriculture is the secondary use.

b) All general agricultural uses are principally permitted in the FR zone.

c) Humboldt County Code section 314-55.4.8.2.2 allows cultivation of up to 43,560 square feet of existing outdoor cannabis and up to 22,000 square feet of existing mixed-light cannabis on a parcel over 1 acre subject to approval of a Conditional Use Permit and a determination that the cultivation was in existence prior to January 1, 2016. The application for 11,600 square feet of outdoor cultivation on a 40-acre parcel is consistent with this and with the cultivation area verification prepared by the County.

d) Conditions of approval require the applicant to adhere to and implement the projects and recommendations contained in the Final SAA and provide evidence to the Planning Department that the projects included in the Final SAA are completed to the satisfaction of CDFW. By adhering to the terms and conditions of the FSAA, which limits the diversion amount and duration in addition to the specifying the use of intake structures that will not impact aquatic species, impacts to the SMA are minimized.

5. FINDING The proposed development is consistent with the requirements of the CMMLUO Provisions of the Zoning Ordinance.

EVIDENCE

a) The CMMLUO allows existing cannabis cultivation to be permitted in areas zoned FR (HCC 314-55.4.8.2.2).

b) The parcel was created in compliance with all applicable state and local subdivision regulations, as it was created in its current configuration by Creation Deed (1911-18120) dated received December 30, 1971.

c) Water for irrigation is provided by a permitted groundwater well and three (3) registered stream diversions on a class III unnamed stream, tributary to Blue Slide Creek, tributary to the Mattole River. The applicant has obtained a Right to Divert and Use Water from the State Water Resources Control

Board (SWRCB) which documents the timing and quantity of water available to be diverted. Conditions of approval require the applicant to monitor water use from the stream to demonstrate there is sufficient water available to meet operational needs. Additionally, the project is conditioned to implement all terms and conditions of the FSAA and the Right to Divert and Use Water.

The well is located to the northwest of the cultivation area, approximately 35 feet southwest and on grade with the nearest SMA. The Well Completion Report states the well is 240 feet deep and drilled through clay, sandstone, and shale. Water is found at 68 feet, and a blank is installed for the first 60 feet of depth and a screen installed from 60 to 240 feet. According to the well completion report, the well produces 4 gallons per minutes, which should produce sufficient water for irrigation. Based on the distance from the nearest watercourse, Planning staff determined the well may be hydrologically connected to surface waters. Conditions of approval require that prior to use of the well for cultivation activities outside of the forbearance period, the applicant must submit a report from an appropriate professional documenting evidence showing the well is likely not hydrologically connected to surface waters. Until such time, and/or if it cannot be shown the well is not likely to be hydrologically connected to surface waters it shall require additional water rights from the State Water Resources Control Board and be subject to forbearance or water storage requirements. The applicant is also required to increase water storage by 99,100 gallons should the well be hydrologically connected to surface water to ensure there is sufficient water storage to meet annual water demand.

d) A Road Evaluation Report for a 0.7-mile segment of Dutyville Road from Ettersburg Honeydew Road to the subject property was prepared by the applicant in January 2020 which indicates that the roadway is developed to the equivalent of a road Category 4 standard or better. The submitted road evaluation included sufficient photographic evidence to verify the roadway condition as described, including roadway width and line of sight. As conditioned, the access roads will be functionally appropriate for the expected traffic. Additionally, due to the number of cannabis projects along Dutyville Road, the applicant to take steps to form or join a Road Maintenance Association for the maintenance of Dutyville Road. The necessary steps include sending notices to all road users of the requirement to form a Road Maintenance Association and conducting a meeting with the users of the road, especially those engaged in commercial cannabis activities to discuss formation of the Road Maintenance Association. The applicant shall provide evidence, including notice, meeting minutes, and the decision as to whether a Road Maintenance Association is being formed to show this effort. In the event the applicant is unable to coordinate formation a Road Maintenance Association, the applicant shall pay fair-share cost for maintenance of the road to any road user engaged in maintaining the road.

e) The slope of the land where cannabis will be cultivated is less than 5% as described by the Water Resources Protection Plan prepared by Timberland Resource Consultants revised July 12, 2018.

f) The cultivation of cannabis will not result in the net conversion of timberland. A review of available satellite imagery shows that a total of five (5) trees were removed during the development of the cultivation areas. The project is conditioned to require the property be evaluated by a Registered

Professional Forester (RPF) to determine the amount of timber conversion that occurred and submit a Timber Conversion Report from a RPF and/or a Less Than Three Acre Conversion Exemption or Timber Conversion Permit from CalFire, as determined necessary by the RPF, to address previously unpermitted timber conversion. The applicant is required to adhere to and implement any recommendations made by the RPF.

g) The location of the cultivation complies with all setbacks required in Section 314-55.4.11.d. It is more than 30 from any property line, more than 300 feet from any off-site residence, more than 600 feet from any school, church, public park or Tribal Cultural Resource.

6. FINDING The cultivation of 11,600 square feet of cannabis cultivation and the conditions under which it may be operated or maintained will not be detrimental to the public health, safety, or welfare or materially injurious to properties or improvements in the vicinity.

EVIDENCE

a) The site is located on road that has been certified to safely accommodate the amount of traffic generated by the proposed cannabis cultivation.

b) The site is in a rural part of the County where the typical parcel size is over 40 acres and many of the land holdings are very large. The proposed cannabis will not be in a location where there is an established neighborhood or other sensitive receptor such as a school, church, park or other use which may be sensitive to cannabis cultivation. Approving cultivation on this site and the other sites which have been approved or are in the application process will not change the character of the area due to the large parcel sized in the area.

c) The location of the proposed cannabis cultivation is more than 300 feet from the nearest off-site residence.

d) Irrigation water will come from a permitted groundwater well and three (3) stream diversions that have been registered with the State Water Resources Control Board (SWRCB) and California Department of Fish and Wildlife (CDFW). As a condition of approval, the applicant shall maintain a Right to Divert and Use Water from the SWRCB should the well be hydrologically connected to surface waters. Additionally, conditions of the approval require the applicant to provide storage for an additional 99,100 gallons of water to meet annual water demand during the forbearance period if the well is found to be hydrologically connected.

e) Provisions have been made in the applicant's proposal to protect water quality and thus runoff to adjacent property and infiltration of water to groundwater resources will not be affected.

f) In order to mitigate for impacts to the SMA, the project is conditioned to retain a Registered Professional Forester (RPF) to evaluate the portion of the conversion area that occurred within the SMA and prepare a Restocking Plan monitoring plan for three (3) years which includes performance evaluations, performance standards, and contingency measures should performance standards not be met.

7. FINDING The proposed development does not reduce the residential density for any parcel below that utilized by the Department of Housing and Community Development in determining compliance with housing element law.

EVIDENCE

a) The parcel was not included in the housing inventory of Humboldt County's

2019 Housing Element but is currently developed with an existing residence. The approval of cannabis cultivation on this parcel will not conflict with the ability for the existing residence to continue to be utilized on this parcel.

8. FINDING Approval of this project is consistent with Humboldt County Board of Supervisors Resolution No. 18-43 which established a limit on the number of permits and acres which may be approved in each of the County's Planning Watersheds.

EVIDENCE a) The project site is located in the Cape Mendocino Planning Watershed, which under Resolution 18-43 is limited to 650 permits and 223 acres of cultivation. With the approval of this project the total approved permits in this Planning Watershed would be 196 permits and the total approved acres would be approximately 69 acres of cultivation.

DECISION

NOW, THEREFORE, based on the above findings and evidence, the Humboldt County Planning Commission does hereby:

- Adopt the findings set forth in this resolution; and
- Conditionally approves the Conditional Use Permit and Special Permit for Georgi Stoyanov, based upon the Findings and Evidence and subject to the conditions of approval attached hereto as Attachment 1 and incorporated herein by reference; and

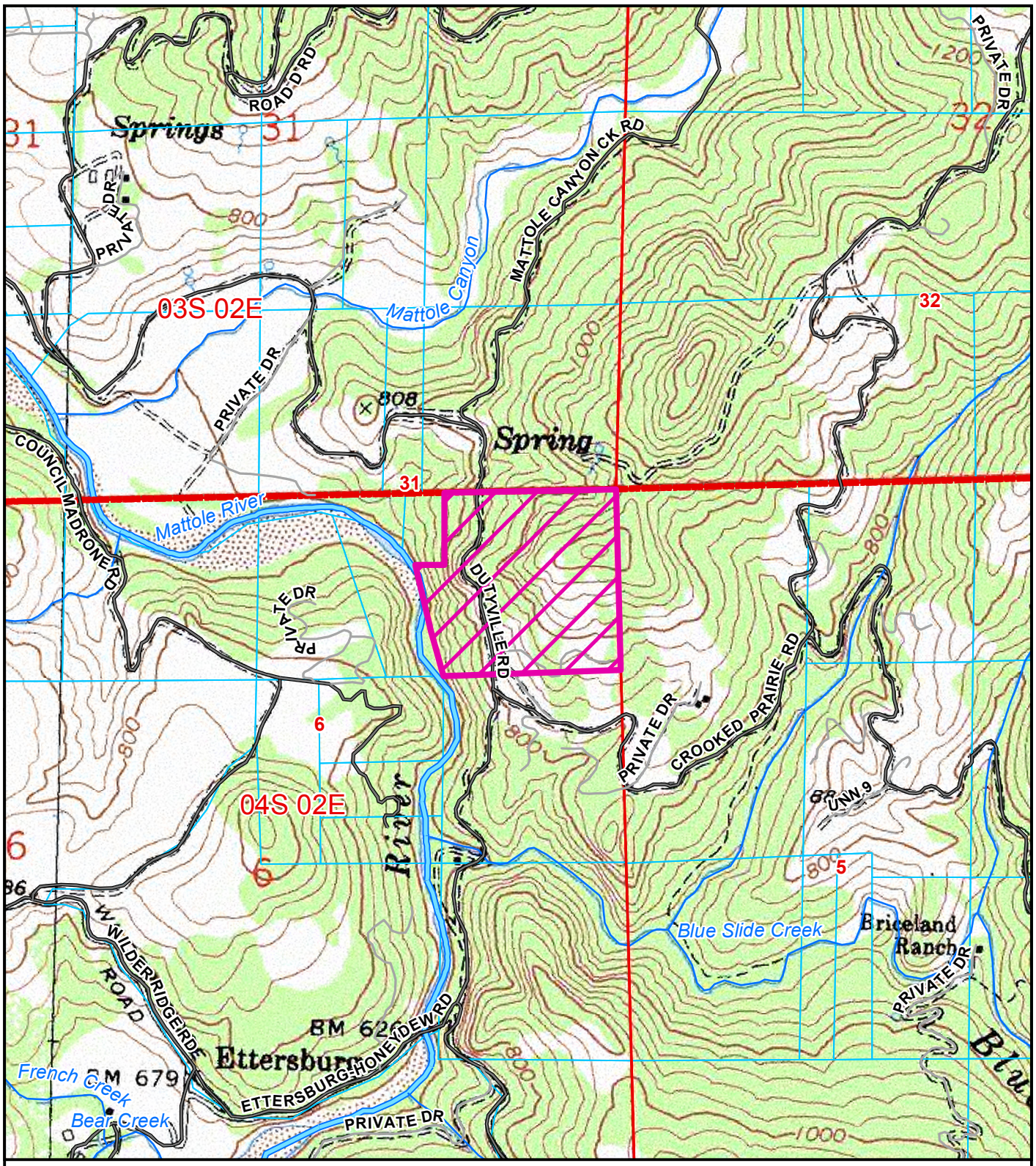
Adopted after review and consideration of all the evidence on November 4, 2021.

The motion was made by COMMISSIONER _____and second by COMMISSIONER _____ and the following ROLL CALL vote:

AYES: COMMISSIONERS:
NOES: COMMISSIONERS:
ABSENT: COMMISSIONERS:
ABSTAIN: COMMISSIONERS:
DECISION:

I, John Ford, Secretary to the Planning Commission of the County of Humboldt, do hereby certify the foregoing to be a true and correct record of the action taken on the above entitled matter by said Commission at a meeting held on the date noted above.

_____
John Ford, Director
Planning and Building Department



TOPO MAP
PROPOSED JOHN M WOOD
ETTERSBURG AREA
CUP-16-398
APN: 221-201-007-000
T04S R02E S6 HB&M (ETTERSBURG)

Project Area =

N

This map is intended for display purposes and should not be used for precise measurement or navigation. Data has not been completely checked for accuracy.

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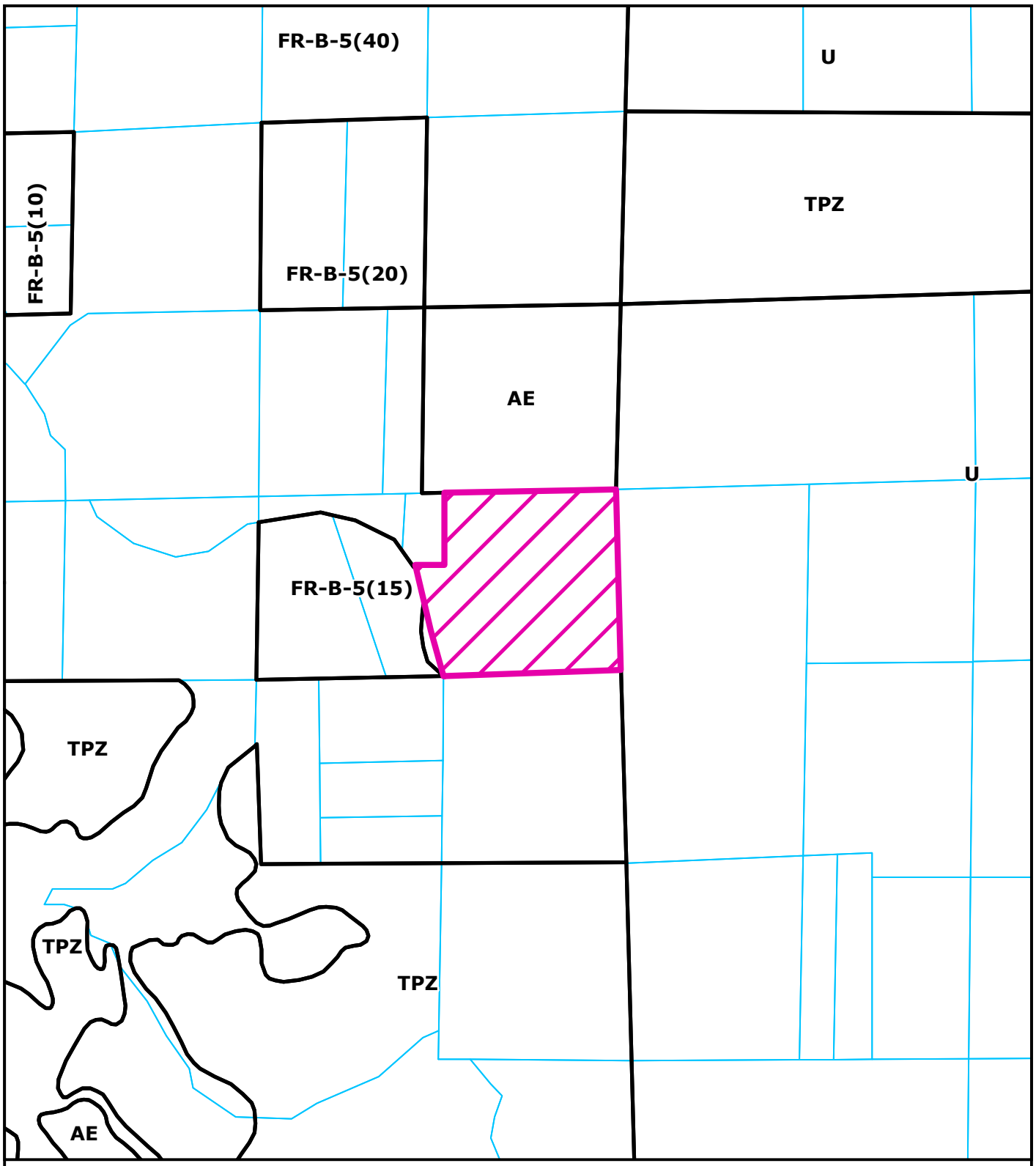

ZONING MAP
PROPOSED JOHN M WOOD
ETTERSBURG AREA
CUP-16-398
APN: 221-201-007-000
T04S R02E S6 HB&M (ETTERSBURG)

Project Area =

N

This map is intended for display purposes and should not be used for precise measurement or navigation. Data has not been completely checked for accuracy.

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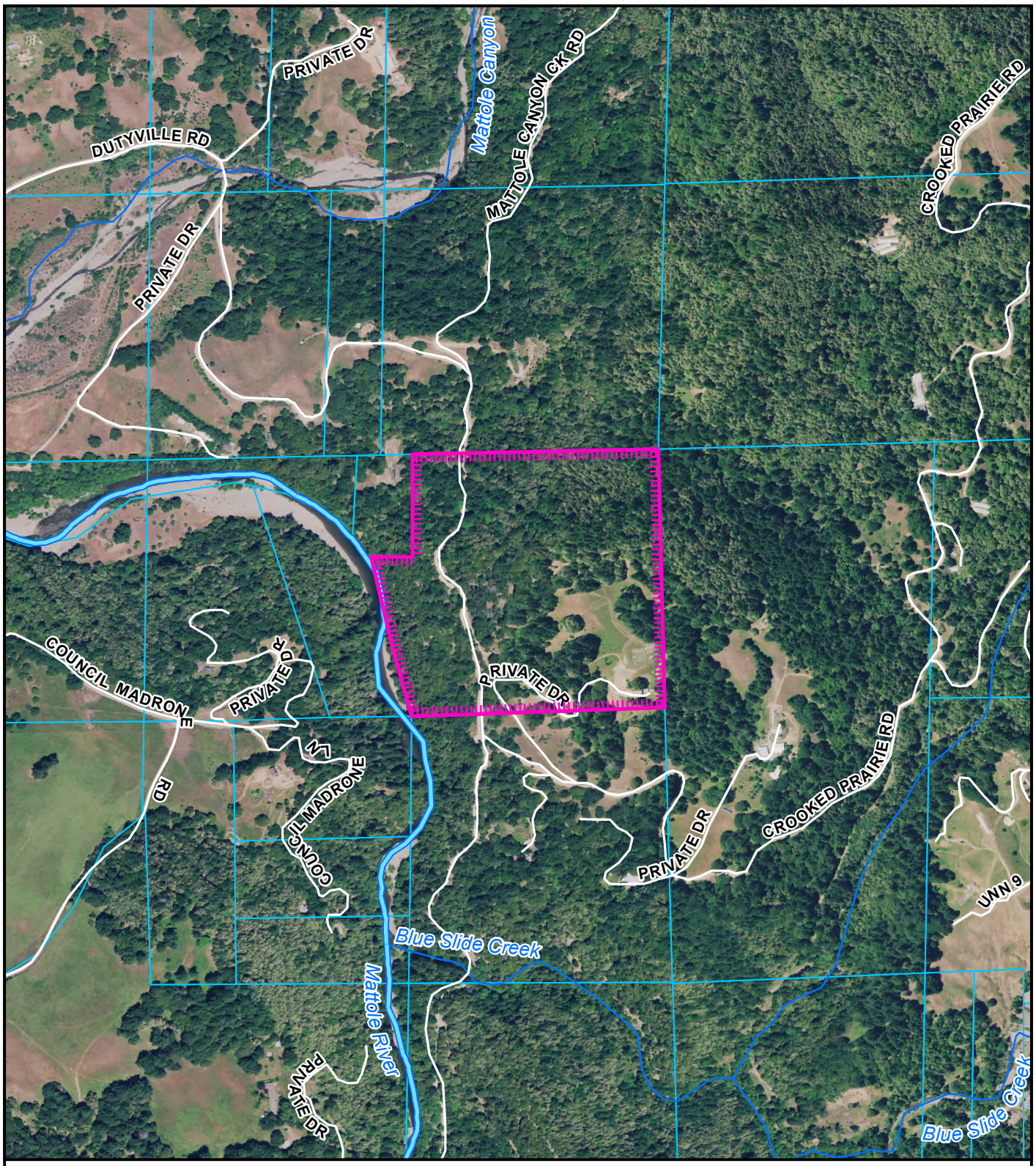


AERIAL MAP
PROPOSED JOHN M WOOD
ETTERSBURG AREA
CUP-16-398
APN: 221-201-007-000
T04S R02E S6 HB&M (ETTERSBURG)

Project Area =

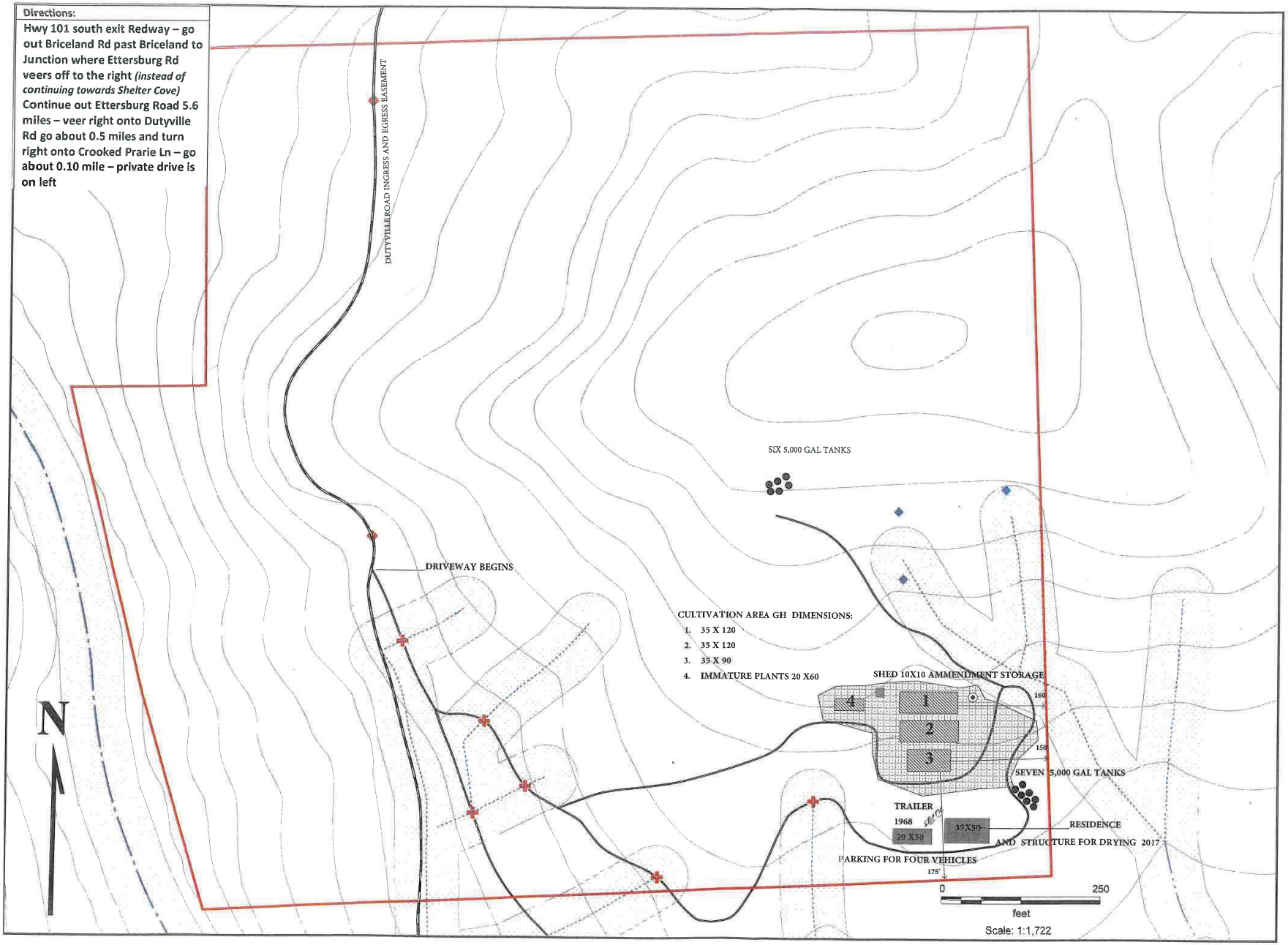
N

This map is intended for display purposes and should not be used for precise measurement or navigation. Data has not been completely checked for accuracy.

0 900 1,800 Feet

Directions:

Hwy 101 south exit Redway – go out Briceland Rd past Briceland to Junction where Ettersburg Rd veers off to the right *(instead of continuing towards Shelter Cove)* Continue out Ettersburg Road 5.6 miles – veer right onto Dutyville Rd go about 0.5 miles and turn right onto Crooked Prarie Ln – go about 0.10 mile – private drive is on left



- CULTIVATION AREA
- PROPERTY BOUNDARY
- STRUCTURE
- WATER STOARGE TANKS
- CLASS III WATER COURSE
- CLASS 1 WATERCOURSE
- CLASS 11 WATER COURSE
- POINT OF DIVERSION
- SMA 50 FT
- WELL
- PRIVATE ROAD
- DUTYVILLE ROAD
- GRADED FLAT
- CULVERT WATER CROSSING

PROJECT INFORMATION	
APPS: / APN	11816 / 221-201-007
APPLICANT	Georgi Stoyanov
OWNER	Georgi Stoyanov
PARCEL SIZE	41 acres
ZONING	FR-B-5(40)
CULTIVATION	11,600 ft² Outdoor

Notes:

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 Area.

November 4, 2021

PLN-11816-CUP Georgi Stoyanov

ATTACHMENT 1

RECOMMENDED CONDITIONS OF APPROVAL

APPROVAL OF THE CONDITIONAL USE PERMIT IS CONDITIONED ON THE FOLLOWING TERMS AND REQUIREMENTS WHICH MUST BE SATISFIED BEFORE THE PROVISIONAL CANNABIS CULTIVATION PERMIT CAN BE FINALIZED.

A. General Conditions

1. The applicant is responsible for obtaining all necessary County and State permits and licenses, and for meeting all requirements set forth by other regulatory agencies.

2. The applicant is required to pay for permit processing on a time and material basis as set forth in the schedule of fees and charges as adopted by ordinance of the Humboldt County Board of Supervisors. The Planning and Building Department will provide a bill to the applicant after the decision. Any and all outstanding planning fees to cover the processing of the application to decision by the Hearing Officer shall be paid to the Humboldt County Planning Division, 3015 "H" Street, Eureka.

3. The applicant is responsible for costs for post-approval review for determining project conformance with conditions. A deposit is collected to cover this staff review. Permit conformance with conditions must be demonstrated prior to release of building permit or initiation of use and at time of annual inspection. A conformance review deposit as set forth in the schedule of fees and charges as adopted by ordinance of the Humboldt County Board of Supervisors (currently $750) shall be paid within sixty (60) days of the effective date of the permit or upon filing of the Compliance Agreement (where applicable), whichever occurs first. Payment shall be made to the Humboldt County Planning Division, 3015 "H" Street, Eureka.

4. A Notice of Determination (NOD) will be prepared and filed with the County Clerk for this project in accordance with the State CEQA Guidelines. The Department will file the NOD and will charge this cost to the project.

5. Within 60 days of the effective date of permit approval, the applicant shall submit a revised plot plan showing the following, in addition to what is shown:
    a. All structures currently located onsite, including but not limited to the existing residence.
    b. Show the drying and curing ag shed.
    c. Decommissioned cultivation areas.
    d. Any grading that has occurred.

6. Within 60 days of the effective date of permit approval, the applicant shall submit a Remediation Plan detailing any remediation efforts that have occurred and/or are proposed for the decommissioned areas. Any proposed remediation efforts shall occur within a period of 6 months from project approval. A sign-off from the Planning Department will satisfy this condition.

7. Within 60 days of the effective date of permit approval, the applicant shall execute a Compliance Agreement with the Humboldt County Planning and Building Department detailing all necessary permits and infrastructure improvements described under Conditions of Approval #8 through 15. The agreement shall provide a timeline for completing all outstanding items. All activities detailed under the agreement must be completed to the satisfaction of the Planning and Building Department before the permit may be finalized and no longer considered provisional.

8. Prior to the 2022 cultivation season, the applicant shall submit a report from an appropriate professional documenting evidence showing the well is not hydrologically connected to surface waters. Until such time, and/or if it cannot be shown the well is not likely to be hydrologically

connected to surface waters the well shall be subject for forbearance and water storage requirements. The applicant shall add 99,100 gallons of additional water storage to meet forbearance requirements prior to the 2023 cultivation season. The applicant shall provide evidence of installation of the water storage to the Planning Department. Alternatively, the applicant could contact the Planning Department to schedule a site visit to verify this condition is met. A sign-off from the Planning Department will satisfy this condition.

9. The applicant shall secure building permits for all structures related to the cannabis cultivation and other commercial cannabis activity, including but not limited to, existing and proposed greenhouses, water tanks over 5,000 gallons, existing and proposed structures associated with drying and storage, or any activity with a nexus to cannabis, and any noise containment structures as necessary. The plans submitted for building permit approval shall be consistent with the project description and the approved project site plan. A letter or similar communication from the Building Division verifying that all structures related to the cannabis cultivation are permitted will satisfy this condition.

10. The applicant shall retain a Registered Professional Forester (RPF) to evaluate if timber removal was completed in conformance with the Forest Practice Rules. As applicable, the report shall include recommendations for improvements, including, but not limited to restocking. The report shall also include reporting and monitoring requirements that shall be prepared by RPF that shall be submitted annually to the Planning and Building Department until the restocking is complete as indicated by the monitoring report. A sign-off from the Planning Department will satisfy this condition.

11. The applicant shall implement any corrective actions included in the Water Resource Protection Plan (WRPP), prepared by Timber Resource Consultants in August 2016, including rock armoring spillways, install erosion control measures, upgrade, and maintain culverts, provide secondary containment for fuel tanks, regrading of roads to prevent discharge, and relocate all storage areas outside of the SMA. The applicant shall submit evidence (e.g., a letter from a qualified professional and photographs) that the corrective actions were completed as described by the WRPP. Alternatively, the applicant may request a site inspection from the Planning and Building Department to review the corrective actions. A sign-off from the Planning Department will satisfy the condition.

12. The applicant to submit copies of all documents filed with the State Water Resources Control Board, including, but not limited to, a Notice of Availability and Site Management Plan. The applicant is required to adhere to and implement the requirements contained in the SWRCB's Cannabis Cultivation Policy, the General Order, the Site Management Plan and the Notice of Applicability. A copy of the reporting form portion of the Mitigation and Reporting Program (MRP) shall be submitted annually to the Planning and Building Department concurrent with the submittal to the SWRCB.

13. The applicant shall adhere to and implement the Final Streambed Alteration Agreement issued by CDFW in May 2016 (Notification No. 1600-2017-0156-R1). Reporting requirements shall be submitted to the Planning Department and the California Department of Fish and Wildlife at 619 Second Street, Eureka, CA 95501, no later than December 31 of each year.

14. The applicant shall maintain their Right to Divert and Use Water from the State Water Resources Control Board (SWRCB) for use of the existing points of diversion or provide evidence of an existing water right. The applicant shall adhere to and implement the requirements of the Right to Use and Divert Water for the life of the project and reporting to the SWRCB available during the annual inspection. A sign-off from the Planning Department will satisfy this condition.

15. The applicant shall secure permits and install an on-site sewage disposal systems and restroom facilities prior to processing on-site. Portable toilet and handwashing facilities may not be utilized during the construction of these improvements. The applicant shall furnish receipts or other documentation to the DEH for the continual use of portable toilets for employees until a permanent septic system is installed to their satisfaction. A letter or similar communication from DEH verifying that all their requirements have been met will satisfy this condition.

16. For the life of the project, the applicant shall maintain fan and dehumidifier noise at or below 50 decibels at the edge of the clearing or 100 feet, whichever distance is closer. This will satisfy the auditory disturbance guidance prepared by the U.S. Fish and Wildlife (USFS), California Fish and Wildlife (CDFW) and Department Policy Statement No. 16-005 to minimize impacts to the Northern Spotted Owl and Marbled murrelet. All generators must be located on stable surfaces with a minimum 200–foot buffer from Class I and Class II streams, per the requirements of CDFW.

17. For the life of the project, all artificial lighting including security and propagation area lighting shall comply with International Dark Sky Association standards for Lighting Zone 0 and Lighting Zone 1 and be designed to regulate light spillage onto neighboring properties resulting from backlight, up light, or glare (BUG). International Dark Sky Association standards exceed the requirements of Scenic Resources Standard SR-S4, Light and Glare, that lighting be fully shielded, and designed and installed to minimize off-site lighting and direct light within the property boundaries.

18. The applicant shall not use any erosion control measures that contain synthetic (e.g. plastic or nylon) monofilament netting, including photo- or biodegradable plastic netting, on a regular and on-going basis. Geotextiles, fiber rolls, and other erosion control measures shall be made of loose-weave mesh, such as jute, hemp, coconut (coir) fiber, or other products without weaves.

19. All refuse shall be contained in wildlife proof containers, at all times, and relocated to an authorized waste management facility, in compliance with State and local laws, on a regular and on-going basis.

20. The applicant shall install and utilize a water meter to demonstrate that there is sufficient water supply to meet the demands of the project from the groundwater well and points of diversion. Each source shall be separately metered. The water use for cultivation is limited to the use of the water diversions, groundwater well, and amount of water available in storage tanks and shall be provided annually prior to or during the annual inspection.

21. The applicant shall cause to be recorded an "ACKNOWLEDGMENT OF NO AVAILABLE EMERGENCY RESPONSE AND FIRE SUPPRESSION SERVICES" for the parcel(s) on a form provided by the Humboldt County Planning Division. Document review fees as set forth in the schedule of fees and charges as adopted by ordinance of the Humboldt County Board of Supervisors will be required.

22. The applicant shall be compliant with the County of Humboldt's Certified Unified Program Agency (CUPA) requirements regarding hazardous materials. A written verification of compliance shall be required before any provisional permits may be finalized. Ongoing proof of compliance with this condition shall be required at each annual inspection in order to keep the permit valid.

23. The applicant shall execute and file with the Planning Division the statement titled, "Notice and Acknowledgment regarding Agricultural Activities in Humboldt County," ("Right to Farm" ordinance) as required by the HCC and available at the Planning Division.

B. Ongoing Requirements/Development Restrictions Which Must be Satisfied for the Life of the Project:

1. The combination of background, generator and greenhouse fan or other operational equipment created noise must not result in the harassment of Northern Spotted Owl species as required to meet the performance standards for noise set by Department Policy Statement No. 16-005 clarifying CMMLUO Section 55.4.11 (o) requirements. The combined noise levels measured at 100 feet or the edge of habitat, whichever is closer, shall be at or below 50 decibels. Conformance will be evaluated using current auditory disturbance guidance prepared by the United State Fish and Wildlife Service, and further consultation where necessary. A building permit shall be obtained should any structures be necessary for noise attenuation.

2. All artificial lighting shall be fully contained within structures such that no light escapes (e.g., through blackout curtains). Structures shall be enclosed between 30 minutes prior to sunset and 30 minutes after sunrise to prevent disruption to crepuscular wildlife. Security lighting shall be motion activated and comply with the International Dark-Sky Association standards and Fixture Seal of Approval Program; see: https://www.darksky.org/our-work/lighting/lighting-for-citizens/lighting-basics/. Standards include but are not limited to the following, 1) light shall be shielded and downward facing, 2) shall consist of Low Pressure Sodium (LPS) light or low spectrum Light Emitting Diodes (LED) with a color temperature of 3000 kelvins or less and 3) only placed where needed.

3. Should the Humboldt County Planning Division receive complaints that the lighting or noise is not complying with the standards listed above in items B.1. and B.2., within ten (10) working days of receiving written notification that a complaint has been filed, the applicant shall submit written verification that the lights' shielding and alignment, and noise levels have been repaired, inspected, and corrected as necessary.

4. Prohibition on use of synthetic netting. To minimize the risk of wildlife entrapment, Permittee shall not use any erosion control and/or cultivation materials that contain synthetic (e.g., plastic or nylon) netting, including photo- or biodegradable plastic netting. Geotextiles, fiber rolls, and other erosion control measures shall be made of loose-weave mesh, such as jute, hemp, coconut (coir) fiber, or other products without welded weaves.

5. All refuse shall be contained in wildlife proof storage containers, at all times, and disposed of at an authorized waste management facility.

6. Should any wildlife be encountered during work activities, the wildlife shall not be disturbed and be allowed to leave the work site unharmed.

7. The use of anticoagulant rodenticide is prohibited.

8. The operator shall provide information to all employees about the potential health impacts of cannabis use on children. Information shall be provided by posting the brochures from the Department of Health and Human Services titled "Cannabis Palm Card" and "Cannabis Rack Card." This information shall also be provided to all employees as part of the employee orientation.

9. All components of project shall be developed, operated, and maintained in conformance with the Project Description, the approved Site Plan, the Plan of Operations, and these conditions of approval. Changes shall require modification of this permit except where consistent with Humboldt County Code Section 312-11.1, Minor Deviations to Approved Plot Plan. If offsite processing is chosen to be the preferred method of processing, this permit shall be modified to identify the offsite licensed facility.

10. Cannabis cultivation and other commercial cannabis activity shall be conducted in compliance with all laws and regulations as set forth in the CMMLUO and MAUCRSA, as applicable to the permit type.

11. If operating pursuant to a written approved compliance agreement, permittee shall abate or cure violations at the earliest feasible date, but in no event no more than two (2) years from the date of issuance of a provisional clearance or permit. Permittee shall provide plans for curing such violations to the Planning and Building Department within one (1) year of issuance of the provisional clearance or permit. If good faith effort toward compliance can be shown within the two years following the issuance of the provisional clearance or permit, the Department may, at the discretion of the Director, provide for extensions of the provisional permit to allow additional time to meet the outstanding requirements.

12. Possession of a current, valid required license, or licenses, issued by any agency of the State of California in accordance with the MAUCRSA, and regulations promulgated thereunder, as soon as such licenses become available.

13. Compliance with all statutes, regulations, and requirements of the California State Water Resources Control Board and the Division of Water Rights, at a minimum to include a statement of diversion of surface water from a stream, river, underground stream, or other watercourse required by Water Code Section 5101, or other applicable permit, license, or registration, as applicable.

14. Confinement of the area of cannabis cultivation, processing, manufacture, or distribution to the locations depicted on the approved site plan. The commercial cannabis activity shall be set back at least 30 feet from any property line, and 600 feet from any school, school bus stop, church or other place of religious worship, or tribal cultural resources, except where a reduction to this setback has been approved pursuant to Section 55.4.11(d).

15. Maintain enrollment in Tier 1, 2, or 3, certification with North Coast Regional Water Quality Control Board (RWQCB) Order No. R1-2015-0023, if applicable, or any substantially equivalent rule that may be subsequently adopted by the County of Humboldt or other responsible agency.

16. Comply with the terms of the Final Lake and Streambed Alteration Agreement (1600-2017-0156-R1), as well as any subsequent amendments, obtained from the California Department of Fish and Wildlife (CDFW).

17. Comply with the terms of a less-than-3-acre conversion exemption or timberland conversion permit, approved by the California Department of Forestry and Fire Protection (Cal Fire), if applicable.

18. Consent to an annual on-site compliance inspection, with at least 24 hours prior notice, to be conducted by appropriate County officials during regular business hours (Monday through Friday, 9:00 a.m. to 5:00 p.m., excluding holidays).

19. Refrain from the improper storage or use of any fuels, fertilizer, pesticide, fungicide, rodenticide, or herbicide.

20. Pay all applicable application, review for conformance with conditions and annual inspection fees.

21. Fuel shall be stored and handled in compliance with applicable state and local laws and regulations, including the County of Humboldt's Certified Unified Program Agency (CUPA) program, and in such a way that no spillage occurs.

22. The master log books maintained by the applicant to track production and sales shall be maintained for inspection by the County.

23. Pay all applicable taxes as required by the Humboldt County Commercial Marijuana Cultivation Tax Ordinance (Humboldt County Code Section 719-1 et seq.).

<u>Performance Standards for Cultivation and Processing Operations</u>

24. Pursuant to the MCRSA, Health and Safety Code Section 19322(a)(9), an applicant seeking a cultivation license shall "provide a statement declaring the applicant is an 'agricultural employer,' as defined in the Alatorre-Zenovich-Dunlap-Berman Agricultural Labor Relations Act of 1975 (Part 3.5 commencing with Section 1140) of Division 2 of the Labor Code), to the extent not prohibited by law."

25. Cultivators shall comply with all applicable federal, state, and local laws and regulations governing California Agricultural Employers, which may include federal and state wage and hour laws, Cal/OSHA, OSHA, the California Agricultural Labor Relations Act, and the Humboldt County Code (including the Building Code).

26. Cultivators engaged in processing shall comply with the following Processing Practices:
    a. Processing operations must be maintained in a clean and sanitary condition including all work surfaces and equipment.
    b. Processing operations must implement protocols which prevent processing contamination and mold and mildew growth on cannabis.
    c. Employees handling cannabis in processing operations must have access to facemasks and gloves in good operable condition as applicable to their job function.
    d. Employees must wash hands sufficiently when handling cannabis or use gloves.

27. All persons hiring employees to engage in commercial cannabis cultivation and processing shall comply with the following Employee Safety Practices:

a. Cultivation operations and processing operations must implement safety protocols and provide all employees with adequate safety training relevant to their specific job functions, which may include:
    (1) Emergency action response planning as necessary;
    (2) Employee accident reporting and investigation policies;
    (3) Fire prevention;
    (4) Hazard communication policies, including maintenance of material safety data sheets (MSDS);
    (5) Materials handling policies;
    (6) Job hazard analyses; and
    (7) Personal protective equipment policies, including respiratory protection.

b. Cultivation operations and processing operations must visibly post and maintain an emergency contact list which includes at a minimum:
    (1) Operation manager contacts;
    (2) Emergency responder contacts; and
    (3) Poison control contacts.

c. At all times, employees shall have access to safe drinking water and toilets and handwashing facilities that comply with applicable federal, state, and local laws and regulations. Plumbing facilities and water source must be capable of handling increased usage without adverse consequences to neighboring properties or the environment.

d. On site-housing provided to employees shall comply with all applicable federal, state, and local laws and regulations.

28. All cultivators shall comply with the approved processing plan as to the following:
    a. Processing practices
    b. Location where processing will occur
    c. Number of employees, if any
    d. Employee Safety Practices
    e. Toilet and handwashing facilities
    f. Plumbing and/or septic system and whether or not the system is capable of handling increased usage
    g. Drinking water for employees
    h. Plan to minimize impact from increased road use resulting from processing
    i. On-site housing, if any

29. Term of Commercial Cannabis Activity Special Permit. Any Commercial Cannabis Cultivation SP issued pursuant to the CMMLUO shall expire one (1) year after date of issuance, and on the anniversary date of such issuance each year thereafter, unless an annual compliance inspection

has been conducted and the permittees and the permitted site have been found to comply with all conditions of approval.

30. If the inspector or other County official determines that the permittees or site do not comply with the conditions of approval, the inspector shall serve the permit holder with a written statement identifying the items not in compliance, and the action that the permit holder may take to cure the noncompliance, or file an appeal within ten (10) days of the date that the written statement is delivered to the permit holder. Personal delivery or mailing the written statement to the mailing address listed on the application by regular mail, plus three (3) days after date of mailing, shall constitute delivery. The permit holder may request a reinspection to determine whether or not the permit holder has cured all issues of noncompliance. Failure to request reinspection or to cure any items of noncompliance shall terminate the Special Permit, immediately upon the expiration of any appeal period, or final determination of the appeal if an appeal has been timely filed pursuant to Section 55.4.13.

31. Permit Renewals to Comply with Updated Laws and Regulations. Permit renewal is subject to the laws and regulations effective at the time of renewal, which may be substantially different than the regulations currently in place and may require the submittal of additional information to ensure that new standards are met.

32. Acknowledgements to Remain in Full Force and Effect. Permittee acknowledges that the County reserves the right to reduce the size of the area allowed for cultivation under any clearance or permit issued in accordance with this section in the event that environmental conditions, such as a sustained drought or low flows in the watershed in which the cultivation area is located, will not support diversions for irrigation.

33. Transfers. Transfer of any leases or permits approved by this project is subject to the review and approval of the Planning Director for conformance with CMMLUO eligibility requirements and agreement to permit terms and acknowledgments. The fee for required permit transfer review shall accompany the request. The request shall include the following information:

a. Identifying information for the new owner(s) and management as required in an initial permit application;
b. A written acknowledgment by the new owner in accordance as required for the initial permit application;
c. The specific date on which the transfer is to occur;
d. Acknowledgement of full responsibility for complying with the existing permit; and
e. Execution of an Affidavit of Non-diversion of Medical Cannabis.

34. Inspections. The permit holder and subject property owner are to permit the County or representative(s) or designee(s) to make inspections at any reasonable time deemed necessary to assure that the activities being performed under the authority of this permit are in accordance with the terms and conditions prescribed herein.

Informational Notes:

1. Pursuant to Section 314-55.4.11(a) of the CMMLUO, if upon inspection for the initial application, violations of any building or other health, safety, or other state or county statute, ordinance, or regulation are discovered, the Planning and Building Department may issue a provisional clearance or permit with a written approved Compliance Agreement. By signing the agreement, the permittee agrees to abate or cure the violations at the earliest opportunity but in no event more than two (2) years after the date of issuance of the provisional clearance or permit. Plans for curing the violations shall be submitted to the Planning and Building Department by the permittee within one (1) year of the issuance of the provisional certificate or permit. The terms of the compliance agreement may be appealed pursuant to Section 314-55.4.13 of the CMMLUO.

2. This provisional permit approval shall expire and become null and void at the expiration of one (1) year after all appeal periods have lapsed (see "Effective Date"), except where the Compliance Agreement has been executed and the corrective actions pursuant to the agreement are being undertaken. Once building permits have been secured and/or the use initiated pursuant to the terms of the agreement, the use is subject to the Permit Duration and Renewal provisions set forth in Conditions of Approval #29 and 31 of the Ongoing Requirements/Development Restrictions, above.

3. If cultural resources are encountered during construction activities, the contractor on-site shall cease all work in the immediate area and within a 50-foot buffer of the discovery location. A qualified archaeologist and the appropriate Tribal Historic Preservation Officer(s) are to be contacted to evaluate the discovery and, in consultation with the applicant and the lead agency, develop a treatment plan in any instance where significant impacts cannot be avoided.

   Prehistoric materials may include obsidian or chert flakes, tools, locally darkened midden soils, groundstone artifacts, shellfish or faunal remains, and human burials. If human remains are found, California Health and Safety Code 7050.5 requires that the County Coroner be contacted immediately at 707-445-7242. If the Coroner determines the remains to be Native American, the Native American Heritage Commission will then be contacted by the Coroner to determine appropriate treatment of the remains pursuant to Public Resources Code (PRC) Section 5097.98. Violators shall be prosecuted in accordance with PRC Section 5097.99.

ATTACHMENT 2

CEQA ADDENDUM TO THE MITIGATED NEGATIVE DECLARATION FOR THE COMMERCIAL MEDICIAL MARIJUANA LAND USE ORDINANCE

Commercial Medical Marijuana Land Use Ordinance Mitigated Negative Declaration (MND) (State Clearinghouse # 2015102005), January 2016

APN 221-201-007; Section 06 of Township 04 South, Range 02 East, H.B.&M., Ettersburg area County of Humboldt

Prepared By
Humboldt County Planning and Building Department
3015 H Street, Eureka, CA 95501

November 2021

Background

Modified Project Description and Project History – The Commercial Medical Marijuana Land Use Ordinance (CMMLUO) established specific regulations for commercial cannabis operations in Humboldt County. These regulations were developed in concert with the Mitigated Negative Declaration (MND) that was adopted for the ordinance in order to implement the mitigation measures of the MND. The MND addressed the broad environmental impacts that could be expected to occur from the adoption and implementation of the ordinance. The MND specified that the regulations established in the CMMLUO would mitigate the impacts of existing cannabis operations by establishing regulations for an existing unregulated land use to help prevent and reduce environmental impacts that are known to result from unpermitted baseline cultivation operations. Commercial cannabis cultivation in existence as of December 31, 2015 was included in the environmental baseline for the MND and the MND states that "Bringing existing operations into compliance will help to attenuate potential environmental effects from existing cultivation activities, including aesthetic impacts resulting from improper operation or poor siting." The current project was contemplated by the MND and compliance with the provisions of the CMMLUO will fully mitigate all environmental impacts of the project to a less than significant level.

The modified project involves a Conditional Use Permit for an existing 11,600 square foot (SF) cannabis cultivation. Irrigation water is sourced from a permitted well and three (3) stream diversions on the subject parcel. Existing available water storage is 65,000 gallons in a series of hard-sided tanks. Estimated annual water usage is 164,100 gallons. Drying and bucking occurs onsite within a 1,750-foot structure, all other processing will occur offsite at a licensed facility. Up to three (3) persons may be utilized onsite during peak operations. Power is provided by PG&E. The applicant also seeks a Special Permit for development within the Streamside Management Area for the use and maintenance of the point of diversion.

The project site contains riparian habitat associated with several unnamed Class III watercourses, which traverse the eastern and southern portions of the subject property, respectively. All approved cannabis cultivation activities would occur outside of the required stream setbacks and on slopes less than 50%. The Nearest Northern Spotted Owl (NSO) activity center is located approximately 3.20 miles from the nearest cultivation area, with the nearest NSO sighting located approximately 2.10 miles away. Conditions of approval require the applicant use light and noise attenuation to ensure the project has a Less the Significant Impact on NSO. A condition of project approval is inadvertent discovery protocols for cultural resources consistent with the recommendation of the Bear River Band of the Rohnerville Rancheria.

The modified project is consistent with the adopted MND for the CMMLUO because it complies with all standards of the CMMLUO which were intended to mitigate impacts of existing cultivation. These include ensuring supplemental lighting and security lighting adheres to Dark Sky Association standards and ensuring project related noise does not harass nearby wildlife which will limit impacts to biological resources as a result of light and noise.

Purpose - Section 15164 of the California Environmental Quality Act (CEQA) provides that the lead agency shall prepare an addendum to a previously certified Mitigated Negative Declaration (MND) if some changes or additions are necessary but none of the conditions described in Section 15162 calling for a subsequent EIR or Negative Declaration have occurred. Section 15162 states that when an EIR has been certified for a project, no subsequent EIR shall be prepared for that project unless the lead agency determines, on the basis of substantial evidence in the light of the whole record, one or more of the following:

1. Substantial changes are proposed in the project which require major revisions of the previous MND due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;

2. Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous MND due to the involvement of new significant

environmental effects or a substantial increase in the severity of previously identified significant effects; or

3. New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous MND was certified as complete, shows any of the following: A) the project will have one or more significant effects not discussed in the previous MND; B) significant effect previously examined will be substantially more severe than shown in the previous MND; C) mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or D) mitigation measures or alternatives which are considerably different from those analyzed in the previous MND would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

Summary of Significant Project Effects and Mitigation Recommended

No changes are proposed for the original MND recommended mitigations. The proposal to authorize the continued operation of an existing cannabis cultivation site consisting of 14,810 square feet of outdoor cultivation with ancillary propagation and processing activities is fully consistent with the impacts identified and adequately mitigated in the original MND. The project as conditioned to implement responsible agency recommendations, results in no significantly adverse environmental effects beyond those identified in the MND. Compliance with the CMMLUO ensures consistency with the adopted MND and provides for mitigation of all project related impacts to a less than significant level.

In reviewing the application for consistency with the adopted MND, the County considered the following information and studies, among other documents (see Attachment 3 for a complete listing of document):

- Plot Plan prepared by the applicant, received 1/14/20
- Cultivation and Operations Plan prepared by the applicant, received 1/14/20.
- Streambed Alteration Agreement (Notification No. 1600-2017-0156-R1) issued by the California Department of Fish and Wildlife, received 9/18/17.
- Right to Divert and Use Water (Certificate H100399) issued by the State Water Resources Control Board, received 1/14/20.
- Water Resource Protection Plan (WDID 1B171719CHUM) prepared by Timberland Resource Consultants, received 1/14/20 for the North Coast Regional Water Quality Control Board (NCRWQCB) Order No. R1-2015-0023 Waiver of Waste Discharge Requirements and General Water Quality Certification for Discharges of Waste Resulting from Cannabis Cultivation and Associated Activities or Operations with Similar Environmental Effects In the North Coast Region (Order).
- Well Completion Report, prepared by Fisch Drilling, received 1/14/20.
- Road Evaluation Report for Dutyville Road prepared by the applicant, received 1/14/20.

Other CEQA Considerations

Staff suggests no changes for the revised project.

EXPLANATION OF DECISION NOT TO PREPARE A SUPPLEMENTAL MITIGATED NEGATIVE DECLARATION OR ENVIRONMENTAL IMPACT REPORT

See **Purpose** statement above.

In every impact category analyzed in this review, the projected consequences of the current project proposal are either the same or less than significantly increased than the initial project for which the MND was adopted. Based upon this review, the following findings are supported:

FINDINGS

1. The proposed project will permit an existing cannabis operation and bring the operation into compliance with county and state requirements intended to adequately mitigate environmental impacts.

2. The circumstances under which the project was approved have not changed substantially. There are no new significant environmental effects and no substantial increases in the severity of previously identified effects.

3. For the current proposed project, there has been no new information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous MND was adopted as complete.

CONCLUSION

Based on these findings it is concluded that an Addendum to the certified MND is appropriate to address the requirements under CEQA for the current project proposal. All of the findings, mitigation requirements, and mitigation and monitoring program of the MND, remain in full force and effect on the original project.

ATTACHMENT 3

Applicant's Evidence in Support of the Required Findings

Attachment 3 includes a listing of all written evidence which has been submitted by the applicant in support of making the required findings. The following materials are on file with the Planning Division:

1. The name, contact address, and phone number(s) of the applicant. (Application form on file)

2. If the applicant is not the record title owner of parcel, written consent of the owner for the application with original signature and notary acknowledgement. (Not Applicable)

3. Site plan showing the entire parcel, including easements, streams, springs, ponds and other surface water features, and the location and area for cultivation on the parcel with dimensions of the area for cultivation and setbacks from property lines. The site plan shall also include all areas of ground disturbance or surface water disturbance associated with cultivation activities, including access roads, water diversions, culverts, ponds, dams, graded flats, and other related features. If the area for cultivation is within one-quarter mile (1,320 feet) of a school, school bus stop, church or other place of religious worship, public park, or tribal cultural resource, the site plan shall include dimensions showing that the distance from the location of such features to the nearest point of the cultivation area is at least 600 feet. (**Attached** - Plot Plan prepared by the applicant, received 1/14/20)

4. A cultivation and operations plan that meets or exceeds minimum legal standards for water storage, conservation and use; drainage, runoff and erosion control; watershed and habitat protection; proper storage of fertilizers, pesticides, and other regulated products to be used on the parcel; and a description of cultivation activities (outdoor, indoor, mixed light), the approximate date(s) cannabis cultivation activities have been conducted on the parcel prior to the effective date of this ordinance, if applicable, and schedule of activities during each month of the growing and harvesting season. (**Attached** - Cultivation and Operations Plan prepared by the applicant, received 1/14/20)

5. Copy of the statement of water diversion, or other permit, license or registration filed with the State Water Resources Control Board, Division of Water Rights, if applicable. (Right to Diver and Use Water, received 1/14/20)

6. Description of water source, storage, irrigation plan, and projected water usage. (Included in Cultivation Operations Plan (item 4. above) and Water Resource Protection Plan prepared for the North Coast Regional Water Quality Board Order No. 2015-0023 (item 7. below)

7. Copy of Notice of Intent and Monitoring Self-Certification and other documents filed with the North Coast Regional Water Quality Control Board demonstrating enrollment in Tier 1, 2 or 3, North Coast Regional Water Quality Control Board Order No. 2015-0023, or any substantially equivalent rule that may be subsequently adopted by the County of Humboldt or other responsible agency. (**Attached** - NOI and reporting, and Water Resource Protection Plan prepared by Timberland Resource Consultants, received 1/14/20)

8. If any on-site or off-site component of the cultivation facility, including access roads, water supply, grading or terracing, impacts the bed or bank of any stream or other watercourse, a copy of the Streambed Alteration Permit obtained from the California Department of Fish and Wildlife. (**Attached** – Final Streambed Alteration Agreement issued by the California Department of Fish and Wildlife (Notification No. 1600-20117-0156-R1))

9. If the source of water is a well, a copy of the County well permit, if available. (**Attached** – Copy of Well Completion Report).

10. If the parcel is zoned FR, U or TPZ, or involves the conversion of timberland as defined under Section 4526 of the Public Resources Code, a copy of a less-than-3-acre conversion exemption or timberland conversion permit, approved by the California Department of Forestry and Fire Protection (Cal Fire). Alternately, for existing operations occupying sites created through prior unauthorized conversion of timberland, evidence may be provided showing that the landowner has completed a civil or criminal process and/or entered into a negotiated settlement with Cal Fire. (Condition of approval)

11. Consent for on-site inspection of the parcel by County officials at prearranged date and time in consultation with the applicant prior to issuance of any clearance or permit, and once annually thereafter. (On file)

12. For indoor cultivation facilities, identify the source of electrical power and how it will meet with the energy requirements in Section 55.4.8.2.3, and plan for compliance with applicable building codes. (Not applicable)

13. Acknowledge that the County reserves the right to reduce the size of the area allowed for cultivation under any clearance or permit issued in accordance with this Section in the event that environmental conditions, such as a sustained drought or low flows in the watershed, will not support diversions for irrigation. (On file)

14. Acknowledge that the County reserves the right to engage with local tribes before consenting to the issuance of any clearance or permit, if cultivation operations occur within an Area of Traditional Tribal Cultural Affiliation, as defined herein. This process will follow current departmental referral protocol, including engagement with the tribe(s) through coordination with their Tribal Historic Preservation Officer (THPO) or other tribal representatives. This procedure shall be conducted similar to the protocols outlined under SB 18 (Burton) and AB 52 (Gatto), which describe "government to government" consultation, through tribal and local government officials and their designees. During this process, the tribe may request that operations associated with the clearance or permit be designed to avoid, minimize, or mitigate impacts to tribal cultural resources, as defined herein. Examples include, but are not limited to, conducting a site visit with the THPO or their designee to the existing or proposed cultivation site, requiring that a professional cultural resources survey be performed, or requiring that a tribal cultural monitor be retained during project-related ground disturbance within areas of sensitivity or concern. The County shall request that a records search be performed through the California Historical Resources Information System (CHRIS). (On file)

15. Road Evaluation Report for Dutyville Road prepared by the applicant, dated 1/14/20. (**Attached**)

16. Division of Environmental Health Attachment for Commercial Medical Marijuana (CMM) Clearances/ Permits (DEH Form). (On file)

APPS:11816

Revised CMMLUO SITE/OPERATIONS OVERVIEW

APN: 221-201-007

Project Description: The applicant is seeking approval under the Humboldt County CMMLUO to allow continued **outdoor cannabis cultivation up to 11,600 ft²** (as described Interim Permit) and development of appurtenant support infrastructure/facilities on the subject parcel.

The applicant acknowledges that the commercial cannabis activity approval being sought under the aforementioned conditional use permit, pursuant to CMMLUO, is subject to compliance with all other applicable Humboldt County zoning and land use regulations, as well as other applicable provisions of the Humboldt County Code and applicable state laws. Determination of compliance will require multi-agency review of proposed activity/development described in the aforementioned permit and, may also require site inspections by personnel from various governmental agencies.

If development and/or activities on the subject parcel are determined, for some reason, to be out of compliance with any applicable State or County code, regulation or policy, a compliance agreement can be formulated between the applicant and relevant agency or agencies, which includes a compliance timeline whereby operations may continue under a *"Provisional Clearance or Permit"* and corrective action is initiated to achieve compliance under agreed upon terms.

Parcel Information: The subject parcel (APN: 221-201-007) It is approximately 41 acres and zoned FR-B-5(40)

Topography/Landscape: The subject parcel sets on a south- west facing hillside. Development on the parcel is situated on very gently sloped ground on the south-southeast section of the parcel with the remaining portion to the north-northwest covered by native tree species.

Surface Water Features: The Mattole River borders the south-west edge of the subject parcel with miscellaneous unnamed seasonal Class III watercourses located in the south portion of the parcel.

Roads/Stream Crossings/Easements: The subject parcel is accessed via Dutyville Road. Interior roads are classified as permanent (year-round usage) and seasonal. The main interior road is a permanent rocked road accessing the residence and cultivation area. Seasonal roads are adequately surfaced but exhibit some signs of concentrated runoff at two locations. Assessment of interior road conditions was completed as part of a Water Resources Protection Plan (WRPP) included with this submission. The assessment identified road deficiencies and corrective measures are prescribed in the "Mitigation Report" within the attached WRPP.

Three stream crossings are located on the subject parcel. Corrective measures addressing each are described in the "Mitigation Report" section of the WRPP included.

Easements related to the subject parcel are described in the deed; a copy of which is contained in the County file for this project - APPS: 11816

1

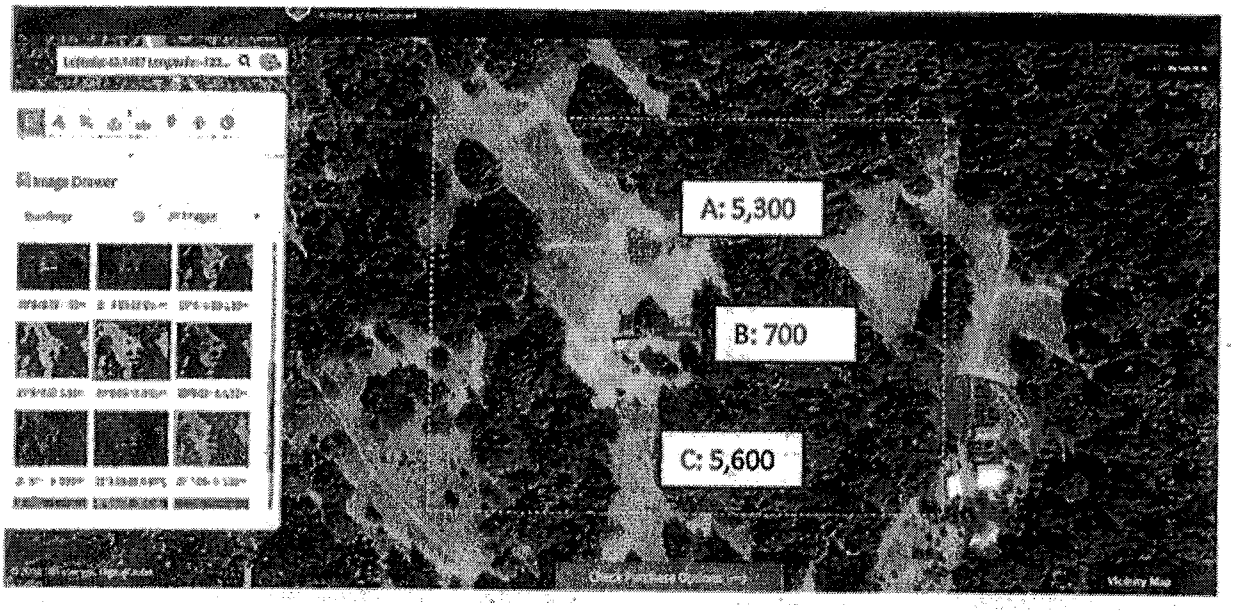
Utilities: Domestic and Irrigation water are sourced from a permitted water well and CDFW approved diversion(s) along the aforementioned class III watercourse. A copy of the 1600 Agreement is included with this submission. A conventional septic tank and leach-field serve the mobile home. Electric power is supplied from PG&E

Water Supply: Currently Domestic and Irrigation Water are sourced from a permitted well and the aforementioned diversion(s). All state and local documentation demonstrating the legal authorization for the ongoing use of the existing water source and/or other potential water sources shall be provided when available.

Water Storage: Currently consists of eight (13) 5,000-gallon HDPE tanks totaling approximately 65,000 gallons. Water storage will be adjusted as required by state and local requirements applicable to the activity/development proposed under the aforementioned conditional use permit application.

Other Structures/Facilities: The residence/dry barn (60' x 80') was constructed in 2017 and is used in part for drying plants and seasonal occupancy. A mobile home (20' x 40') was installed on the subject parcel in 1968 and is used for seasonal living quarters and domestic storage.

Figure 1: Evidence of existing on 9/18/2015. Cultivation totals 11,600 square feet outdoor.



Proposed cultivation consolidates square footage from areas B & C above with cultivation in area A to total 11,600 ft^2 of outdoor cultivation. The proposed square footage is distributed amongst three (3) greenhouses (totaling 11,550 ft^2) shown on the site plan having the following measurements:

(2) – 35' x 120' = 8,400 ft^2

(1) – 35' x 90' = 3,150 ft^2

A propagation area (1,200 ft^2) is proposed in conjunction with the aforementioned greenhouses.

The **relocation/consolidation** of cultivation areas B & C to a single site (encompassing area A) designed specifically for the proper placement of greenhouses is an **environmentally superior** cultivation option when weighed against the continuance of the cultivation configuration shown in Figure 1 above.

Area C shown on the figure above, sets on a hillside above a class III watercourse. No protective provisions were incorporated into this cultivation to address runoff/sediment transport. Continued trail usage to operate and service this cultivation area presents the potential for runoff and discharge into downslope watercourses. Abandonment of this cultivation area, which is situated near the apex of a ridge system, will increase an important wildlife corridor positioned between cool-weather resting sites and nearby water resources. Given the engineered design and location (natural grassland) proposed for cultivation relocation/consolidation, continuance of cultivation in the haphazardly placed cultivation area C is no longer warranted.

Cultivation occurring in area B shown above, was minimal and easily incorporated into the proposed relocation/consolidation area. A residence/barn structure currently occupies this area.

Remediation of Relocated Cultivation Area

All cultivation related materials shall be removed from area C (proposed for relocation/consolidation). This area shall remain undisturbed and provide significant ecological benefit over continued cultivation therein.

A review of historical aerial imagery going back 14 years, shows that the cultivation area C, currently proposed for relocation was sited within a narrow grassland clearing. There was **no tree removal** and/**or grading** employed to establish and operate this cultivation area.

Under these specific conditions, removal and proper disposal of all cultivation related materials will result in restoration of the landscape topography to pre-cultivation conditions. Once cultivation related materials are removed and properly disposed the area shall be remain undisturbed allowing for surrounding vegetation and wildlife to repopulate this area.

When assessed during the development of the WRPP, cultivation areas were found to be well maintained with no existing erosion features. The WRPP prescribed preventative measures to maintain favorable conditions. Preventative measures prescribed in the WRPP do not preclude the need for Cultivation Areas or other manmade features on the subject parcel to be brought into compliance with all applicable state and local grading, excavation and erosion/sediment control regulations and requirements.

Peak Water Demand: The projected peak water demand to maintain plant growth during the warm summer months is approximately 36,000 gallons per month. The "Monthly Water Use" Table below shows projected water use throughout the growing season. An inline totalizing flow meter shall be installed so that Water Use can be monitored and recorded in accordance with state requirements.

January-March: No Water Use

	*Cultivation **11,600 ft²***
April	*9,300*
May	*21,600*
June	*28,800*
July	*36,000*
August	*36,000*
September	*25,200*
October	*7,200*

Irrigation Method(s): Irrigation is accomplished by hand watering at agronomic rates. Water delivery throughout the system is carefully monitored on a regular basis to ensure optimal application and responsible water use. Mulch is carefully placed as a top dressing to optimize soil water retention.

Irrigation Runoff/Erosion control: Irrigation runoff from cultivation areas is minimized by carefully controlled hand watering; which prevents overwatering or residual discharge of nutrient solutions outside of the "targeted" root zone. In the unlikely event that residual discharge did occur, it would be absorbed upon contact with permeable soil surrounding the cultivation area. Cultivation activities are limited to the immediate area surrounding cultivation areas and conducted so materials are kept confined. The ground surface within and around the cultivation areas is formed and managed year-round to prevent any movement of entrained constituents such as fine sediment, fertilizer or other organic particles beyond the cultivation area.

Watershed Protection: The Cultivation Areas on the subject parcel me applicable setback requirements to watercourses, riparian zones or wetlands (see site plan). Sheet flow of rainwater or transport of cultivation byproducts over permeable, gently sloped soils in and around the cultivation area is unlikely. Vegetative buffers have been maintained at natural slope around the entire perimeter of cleared/developed area. **Watershed protection** will be ensured by adherence to measures prescribed in the Water Resources Protection Plan (WDID: 1B16404CHUM)) developed specifically for this parcel by Timberland Resource Consultants under Regional Water Quality Control Board WDR Order # R1-2015-0023 enrollment requirements. Included with this submittal is a signed copy of Appendix A, "Enrollment Notice of Intent".

Once enrolled under R1-2015-0023, participants are required to engage in ongoing monitoring, reporting and maintenance including periodic site inspections and reviews of operational practices to ensure regulatory requirements related to the following listed items are being met:

Site maintenance, erosion control, and drainage features	*Stream crossing maintenance*
Riparian and wetland protection and management	*Spoils management*
Water storage and use	*Irrigation runoff*
Fertilizers and soil amendments	*Pesticides and herbicides*
Petroleum products and other chemicals	*Cultivation-related wastes*
Refuse and human waste	

Additionally, participants ensure that management measures and controls are effectively protecting water resources, and that any newly developing problems representing a water quality concern are identified and corrected quickly.

Upon completion of seasonal cultivation, cover crops are planted for soil management/protection and areas surrounding cultivated sites are sown with grass seed to stabilize surface soil over winter.

Black-out tarps shall be employed to prevent light spillage from propagation greenhouse any time lights are in use from 1 hour prior to sunset through 30 minutes following sunrise.

Fertilizers, Pesticides, other Regulated products:
List and describe machinery and equipment used for cultivation and associated activities.

fans, dehumidifier,

Describe equipment service and maintenance; including where it is done.

n/a

List and describe compressed gases, cleaners, solvents and sanitizers used- indicate amounts normally stored and how/where they are stored.

Regular non-toxic household cleaners in original domestic-use containers and 1 quart rubbing alcohol stored on shelves in the Ag barn.

Fertilizers/Soil Amendments. Products are normally obtained and brought to the site at the start of the season. Mixing of products takes place near the point of use and if there is any products no used upon start-up they are stored in the Fert Storage Shed in original containers/packaging atop pallets.

The applicant acknowledges that the storage and/or use of certain materials in specified volumes and/or weights will be subject to regulation/inspection through **Humboldt County Division of Environmental Health CUPA** and may require: submittal of inventories for those materials, documentation of emergency and training procedures, maintenance of hazardous waste disposal records, obtaining an EPA generator ID number and be subject to **ongoing site inspections**.

Cultivation Related Wastes: Cultivation related wastes are sorted such that compostable materials are recycled/composted onsite within a small area equipped with perimeter and top containment to prevent unwanted movement of materials due to weather conditions or animals/pests. Other materials, unsuitable for composting, are stored in conventional lid trash containers along with domestic garbage and hauled to an approved transfer station/disposal facility as needed.

If necessary, exhausted soil is removed from cultivation beds and carefully mixed and spread over native soils on level ground at select locations to initiate microbial reconditioning and prevent unwanted constituent migration. Spent growth medium containing inorganic substances such as perlite, will be stored in weatherproof containers and hauled to an approved waste facility as needed.

Human Waste: Restroom facilities in the mobile-home/residence are located in close proximity to cultivation areas. A conventional septic tank and leach-field system serves the residence.

Cultivation Operations/Practices: Applicant anticipates two harvests during the grow season by use of light dep greenhouses. Up to three (3) individuals residing at the premises, in addition to the applicant may carry out operational activities.

January	*Monitor culverts and evaluate site maintenance requirements, plant cover crops*
February	*Ongoing site and infrastructure maintenance*
March	*General site maintenance and garden preparation.*
April	*Establish clones/seeds seed inside propagation greenhouse – generator use to add 3 hours of light at sundown, black-out tarps placed to prevent light spill.*
May	*Transplant young plants to appropriate containers, continue garden preparation and site maintenance, generator use to add 3 hours light at days end, black out tarps cover to prevent light spill.* *Generator/light usage ends.*
June	*Full term plants set, initiate 1st round light dep. – Ongoing garden care and site maintenance.*
July	*Ongoing garden care, monitor water supply, etc. Start harvest 1st round light dep*
August	*Ongoing garden care, monitor water supply, etc., utilize generator to run fans to facilitate drying 7-10 days*
September	*General garden care*
October	*Begin full term harvest, set plants to dry – generator for fans and dehumidifier, site cleanup*
November	*start site preparations for winter.*

Processing: Plants are periodically inspected to ensure that any indication of pests, molds, mildews or disease are immediately addressed and crop quality is maintained. When ready, individual plants are hand harvested, placed inside clean transport containers and immediately transferred to the Dry Barn where they are hung to dry. The drying area is cleaned thoroughly prior to placement of any harvested plants therein to minimize potential contaminant contact. Natural air flow may be supplemented with careful use of household fans/dehumidifiers to facilitate drying and maintain product quality control.

All equipment, surfaces and tools used in the harvesting/drying of cultivated product are used exclusively for that purpose. Equipment, surfaces and tools are visually inspected, washed and sanitized throughout the day. A Gentle detergent (such as *Simple Green or equivalent*) is used for cleaning followed by rinsing with potable water. Isopropyl Alcohol is applied as a sanitizer.

The applicant/operator is cognizant of potential mold and mildew problems associated with cultivation and product handling. Handwashing with potable water and soap occurs frequently throughout the day.

Any suspect plant matter which appears compromised for any reason is carefully removed and disposed of avoiding cross contaminant contact with other product, equipment or utensils. A separately designated green-waste stream is implemented to recycle plant waste.

The applicant/operator is well versed in the use/cleaning of equipment utilized throughout the operation. Cleaning materials are stored on shelves away from working surfaces. A fire extinguisher is readily available. The working space is kept clean and orderly.

Ample potable water for handwashing and restroom facilities are in close proximity to the Dry Barn. The restroom in the nearby residence is equipped with first aid kits and eye-wash kits for emergency use. Wastewater from the restroom is plumbed to a conventional septic system. Cultivation operations are carried out by no more than **three (3) individuals residing on the property**, not transient/temporary employees; therefore, the daily **wastewater flow** resulting will not increase above normal domestic usage and can be accommodated by the septic system described.

All processing/trimming is done off site by a licensed facility.

Security: Access to the parcel is restricted locking metal gates. The premises is normally occupied by the property owner and/or other individuals; there are also two dogs patrolling the premises.

STATE OF CALIFORNIA
CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY
STATE WATER RESOURCES CONTROL BOARD

DIVISION OF WATER RIGHTS

RIGHT TO DIVERT AND USE WATER

REGISTRATION *H504738* CERTIFICATE *H100399*

Right Holder: *Georgi Stoyanov*
PO Box 476
Garberville, CA 95542

The State Water Resources Control Board (State Water Board) authorizes the diversion and use of water by the right holder in accordance with the limitations and conditions herein SUBJECT TO PRIOR RIGHTS. The priority of this right dates from *12/06/2018*. This right is issued in accordance with the State Water Board delegation of authority to the Deputy Director for Water Rights (Resolution 2012-0029) and the Deputy Director for Water Rights redelegation of authority dated October 19, 2017.

The Deputy Director for Water Rights finds that this registration meets the requirements for registration of small irrigation use appropriation. (Wat. Code, § 1228 et seq.)

Right holder is hereby granted a right to divert and use water as follows:

1. Location of point*(s)* of diversion **(Coordinates in WGS 84)**

Name of Diversion	Source	Tributary To:	Thence	Latitude	Longitude	County	Assessor's Parcel Numbers (APN)
Primary POD	Unnamed Spring	Blue Slide Creek	Mattole River	40.148993	-123.986765	Humboldt	221-201-007
POD 1	Unnamed Stream	Blue Slide Creek	Mattole River	40.148562	-123.987280	Humboldt	221-201-007
POD 2	Unnamed Spring	Blue Slide Creek	Mattole River	40.148193	-123.987092	Humboldt	221-201-007

2. Purpose of Use and 3. Place of Use

2. Purpose of Use	3. Place of Use		
	County	Assessor's Parcel Numbers (APN)	Acres
Irrigation	Humboldt	221-201-007	0.26629936

Note: Assessor's Parcel Numbers provided are based on the user's entries in this portal on *01/02/2019*.
The place of use is shown on the map filed on *01/02/2019* with the State Water Board.

4. Quantity and Season:

The water appropriated shall be limited to the quantity which can be beneficially used and shall not exceed 0.15 **acre-feet per year** to be collected from 01/01 to 12/31 and as permitted in the diversion season specified in the current version of the State Water Board's Cannabis Policy, whichever is more restrictive. The total storage capacity shall not exceed 0.15 acre-feet. The rate of diversion to storage shall not exceed **42,000 gallons per day (gpd) or the diversion rate specified in the current version of the State Water Board's Cannabis Policy, whichever is more restrictive.**

5. No water shall be diverted or used under this right unless the water right holder is in compliance with all applicable conditions, including the numeric and narrative instream flow requirements, of the current version of the State Water Board's Cannabis Policy, except as follows:

Right holders enrolled under Regional Water Quality Control Board Order R1-2015-0023 or Order R5-2015-0113 shall comply at all times with requirements related to flow, diversion, storage, and similar requirements of Attachment A of the Cannabis Policy identified by the Division of Water Rights below in this condition. This condition remains in effect until July 1, 2019, or when the right holder enrolls under the statewide Cannabis General Order, whichever comes first, at which time right holders shall comply with all applicable conditions and requirements of Attachment A of the Cannabis Policy.

- Section 1 – Term Numbers 4, 15, 17, 24, 26, and 36.
- Section 2 – Term Numbers 23, 63, 64, 66, 69 – 78, 82 – 94, 96, and 98 – 103.
- Section 3 – All Instream Flow Requirements for Surface Water Diversions (Requirements 1 – 7) and the Gage Installation, Maintenance, and Operation Requirements.
- Section 4 – All requirements and conditions.

The current version of the State Water Board's *Cannabis Policy* is available online at: https://www.waterboards.ca.gov/water_issues/programs/cannabis/docs/policy.pdf.

6. No water shall be diverted or used under this right, and no construction related to such diversion shall commence, unless right holder has obtained and is in compliance with all necessary permits or other approvals required by other agencies.

7. Diversion works shall be constructed and water applied to beneficial use with due diligence.

8. No water shall be diverted under this right unless right holder complies with all lawful conditions required by the California Department of Fish and Wildlife. (Wat. Code, § 1228.6, subd. (a)(2).)

9. No water shall be diverted under this right unless it is diverted in accordance with the information set forth in the completed registration form as to source, location of point of diversion, purpose of use, place of use, quantity, and season of diversion. This information is reproduced as conditions 1 through 4 of this certificate.

10. No water shall be diverted under this right unless right holder complies with all applicable state, city, county, and local laws, regulations, ordinances, permits, and license requirements including, but not limited to those for cannabis cultivation, grading, construction, and building.

11. Pursuant to Water Code sections 100 and 275 and the common law public trust doctrine, all rights and privileges under this right, including method of diversion, method of use, and quantity of water diverted, are subject to the continuing authority of the State Water Board in accordance with law and in the interest of the public welfare to protect public trust uses and to prevent waste, unreasonable use, unreasonable method of use, or unreasonable method of diversion of said water.

12. The State Water Board reserves jurisdiction over this registration to change the season of diversion and rate of diversion based on later findings of the State Water Board concerning availability of water and the protection of beneficial uses. Any action to change the authorized season of diversion and rate of diversion will be taken only after notice to interested parties and opportunity for hearing.

13. Right holder shall grant, or secure authorization through right holder's right of access to property owned by another party, the staff of the State Water Board, and any other authorized representatives of the State Water Board the following:

a. Entry upon property where water is being diverted, stored, or used under a right issued by the State Water Board or where monitoring, samples and/or records must be collected under the conditions of this right;

b. Access to copy any records at reasonable times that are kept under the terms and conditions of a right or other order issued by the State Water Board;

c. Access to inspect at reasonable times any project covered by a right issued by the State Water Board, equipment (including monitoring and control equipment), practices, or operations regulated by or required under this right; and,

d. Access to photograph, sample, measure, and monitor at reasonable times for the purpose of ensuring compliance with a right or other order issued by the State Water Board, or as otherwise authorized by the Water Code.

14. Diversion of water under this right is subject to prior rights. Right holder may be required to curtail diversion or release water stored during the most recent collection season should diversion under this right result in injury to holders of legal downstream senior rights. If a reservoir is involved, right holder may be required to bypass or release water through, over, or around the dam. If release of stored water would not effectively satisfy downstream prior storage rights, right holder may be

required to otherwise compensate the holders of such rights for injury caused.

15. This right shall not be construed as conferring right of access to any lands or facilities not owned by right holder.

16. All rights are issued subject to available flows. Inasmuch as the source contains treated wastewater, imported water from another stream system, or return flow from other projects, there is no guarantee that such supply will continue.

17. If storage or diversion of water under this right is by means of a dam, right holder shall allow sufficient water at all times to pass through a fishway or, in the absence of a fishway, allow sufficient water to pass over, around, or through the dam to keep in good condition any fish that may be planted or exist below the dam; provided that, during a period of low flow in the stream, upon approval of the California Department of Fish and Wildlife, this requirement will be satisfied if sufficient water is passed through a culvert, waste gate, or over or around the dam to keep in good condition any fish that may be planted or exist below the dam if it is impracticable or detrimental to pass the water through a fishway. In the case of a reservoir, this provision shall not require the passage or release of water at a greater rate than the unimpaired natural inflow into the reservoir. (Fish & G. Code, § 5937.)

18. The facilities for diversion under this right shall include satisfactory means of measuring and bypassing sufficient water to satisfy downstream prior rights and any requirements of the California Department of Fish and Wildlife and the State Water Board's Cannabis Policy.

19. This right does not authorize any act which results in the taking of a threatened, endangered, or candidate species or any act which is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish and Game Code section 2050 et seq.) or the federal Endangered Species Act (16 U.S.C.A. section 1531 et seq.). If a "take" will result from any act authorized under this water right, the right holder shall obtain authorization for an incidental take prior to construction or operation of the project. Right holder shall be responsible for meeting all requirements of the state and Federal Endangered Species Acts for the project authorized under this right.

20. This right is subject to the submittal of an annual report of water use and satisfactory renewal, on forms to be furnished by the State Water Board, including payment of the then-current annual renewal fees. (Wat. Code, § 1228.5.)

21. This right shall be totally or partially forfeited for nonuse if the diversion is abandoned or if all or any part of the diversion is not beneficially used for a continuous period of five years.

22. This right is subject to enforcement, including but not limited to revocation, by the State Water Board if 1) the State Water Board finds that the right holder knowingly made any false statement, or knowingly concealed any material fact, in the right; 2) the right is not renewed as required by the conditions of this certificate; or 3) the State Water Board finds that the right holder is in violation of the conditions of this right. (Wat. Code, § 1228.4 et seq.)

23. The State Water Board intends to develop and implement a basin-wide program for real-time electronic monitoring and reporting of diversions, withdrawals, releases, and streamflow in a standardized format if and when resources become available. Such real-time reporting will be required upon a showing by the State Water Board that the program and the infrastructure are in place to accept real-time electronic reports. Implementation of the reporting requirements shall not necessitate amendment to this right.

STATE WATER RESOURCES CONTROL BOARD
DIVISION OF WATER RIGHTS

This certificate was issued automatically as a result of the registrant self-certifying submittal of a water right registration filing in substantial compliance with Water Code §1228.3.

Dated: 01/02/2019 09:53:20

State of California

Well Completion Report

Form DWR 188 Submitted 7/29/2019

WCR2019-010444

Owner's Well Number

Date Work Began 07/19/2019 Date Work Ended 07/26/2019

Local Permit Agency Humboldt County Department of Health & Human Services - Land Use Program

Secondary Permit Agency

Permit Number 18/19-1053 Permit Date 05/07/2019

Well Owner (must remain confidential pursuant to Water Code 13752)

Name Georgi Stoyanov

Mailing Address P.O. Box 476

City Garberville State CA Zip 95560

Planned Use and Activity

Activity New Well

Planned Use Water Supply Irrigation - Agriculture

Well Location

Address 1677 Dutyville RD APN 221-201-007

City Ettersburg Zip 95553 County Humboldt Township 04 S

Latitude 40 Deg. 8 Min. 52.8179 Sec. N Longitude -123 Deg. 59 Min. 12.8291 Sec. W Range 02 E

Section 06

Dec. Lat. 40.148005 Dec. Long. -123.986897 Baseline Meridian Humboldt

Vertical Datum Horizontal Datum WGS84 Ground Surface Elevation

Location Accuracy Location Determination Method Elevation Accuracy

Elevation Determination Method

Borehole Information

Orientation Vertical Specify

Drilling Method Direct Push Drilling Fluid Air

Total Depth of Boring 240 Feet

Total Depth of Completed Well 240 Feet

Water Level and Yield of Completed Well

Depth to first water 68 (Feet below surface)

Depth to Static Water Level 61 (Feet) Date Measured 07/26/2019

Estimated Yield* 4 (GPM) Test Type Air Lift

Test Length 4 (Hours) Total Drawdown 172 (feet)

*May not be representative of a well's long term yield.

Geologic Log - Free Form

Depth from Surface Feet to Feet		Description
0	3	top soil
3	28	brown clay
28	54	soft brown sandstone
54	157	blue sandstone
157	215	sandstone shale mix
215	240	shale

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Casings

Casing #	Depth from Surface Feet to Feet		Casing Type	Material	Casings Specificatons	Wall Thickness (inches)	Outside Diameter (inches)	Screen Type	Slot Size if any (inches)	Description
1	0	60	Blank	PVC	OD: 5.563 in. | SDR: 21 | Thickness: 0.265 in.	0.265	5.563			
1	60	240	Screen	PVC	OD: 5.563 in. | SDR: 21 | Thickness: 0.265 in.	0.265	5.563	Milled Slots	0.032	

Annular Material

Depth from Surface Feet to Feet		Fill	Fill Type Details	Filter Pack Size	Description
0	20	Bentonite	Other Bentonite		Sanitary Seal
20	240	Filter Pack	Other Gravel Pack	3/8 Inch	Pea Gravel

Other Observations:

Borehole Specifications

Depth from Surface Feet to Feet		Borehole Diameter (inches)
0	240	10

Certification Statement

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief

Name	FISCH DRILLING			
	Person, Firm or Corporation			
3150 JOHNSON ROAD		HYDESVILLE	CA	95547
Address		City	State	Zip
Signed	*electronic signature received*	07/29/2019	683865	
	C-57 Licensed Water Well Contractor	Date Signed	C-57 License Number	

Attachments

Scan.pdf - Location Map

DWR Use Only

CSG #	State Well Number	Site Code	Local Well Number

					N							W
Latitude Deg/Min/Sec						Longitude Deg/Min/Sec						

TRS:

APN:

Water Resource Protection Plan

WDID: 1B171719CHUM

APN(s): 221-201-007 (Humboldt)

Prepared by:

Timberland Resource Consultants

165 South Fortuna Blvd

Fortuna, California 95540

9/12/2017

Revised: 7/12/2018

Purpose

This Water Resource Protection Plan (WRPP) has been prepared on behalf of the property owner for the Humboldt county property identified as parcel numbers 221-201-007 by agreement and in response to the California Water Code Section 13260(a), which requires that any person discharging waste or proposing to discharge waste within any region that could affect the quality of the waters of the state, other than into a community sewer system, shall file with the appropriate regional water board a Report of Waste Discharge (ROWD) containing such information and data as may be required by the Regional Water Board. The Regional Water Board may waive the requirements of Water Code section 13260 for specific types of discharges if the waiver is consistent with the Basin Plan and in the public interest. Any waiver is conditional and may be terminated at any time. A waiver should include monitoring requirements to verify the adequacy and effectiveness of the waiver's conditions. Order R1-2015-0023 conditionally waives the requirement to file a ROWD for discharges and associated activities described in finding 4.

Scope of Report

Order No. R1-2015-0023 states that "Tier 2 Dischargers and Tier 3 Dischargers who intend to cultivate cannabis before, during, or following site cleanup activities shall develop and implement a Water Resource Protection Plan that contains the elements listed and addressed below. Dischargers must keep this plan on site, and produce it upon request by Regional Water Board staff. Management practices shall be properly designed and installed, and assessed periodically for effectiveness. If a management measure is found to be ineffective, the plan must be adapted and implemented to incorporate new or additional management practices to meet standard conditions. Dischargers shall certify annually to the Regional Water Board individually or through an approved third-party program that the plan is being implemented and is effectively protecting water quality, and report on progress in implementing site improvements intended to bring the site into compliance with all conditions of this Order.

Methods

The methods used to develop this WRPP include both field and office components. The office component consisted of aerial photography review and interpretation, existing USGS quad map review, GIS mapping of field data, review of on-site photography points, streamflow calculations, and general planning. The field component included identifying and accurately mapping all watercourses, wet areas, and wetlands located downstream of the cultivation areas, associated facilities, and all appurtenant roads accessing such areas. An accurate location of the Waters of the State is necessary to make an assessment of whether potential and existing erosion sites/pollution sites have the potential to discharge waste to an area that could affect waters of the State (including groundwater). Next, all cultivation areas, associated facilities, and all appurtenant roads accessing such areas were assessed for discharges and related controllable water quality factors from the activities listed in Order R1-2015-0023, Finding 4a-j. The field assessment also included an evaluation and determination of compliance with the Standard Conditions per Provision I.B of Order No. R1-2015-0023. The Water Resource Protection Plans required under Tier 2 are meant to describe the specific measures a discharger implements to achieve compliance with standard conditions. Therefore, all required components of the water resource protection plan per Provision I.B of Order No. R1-2015-0023 were physically inspected and evaluated. A comprehensive summary of each Standard Condition as it relates to the subject property is appended.

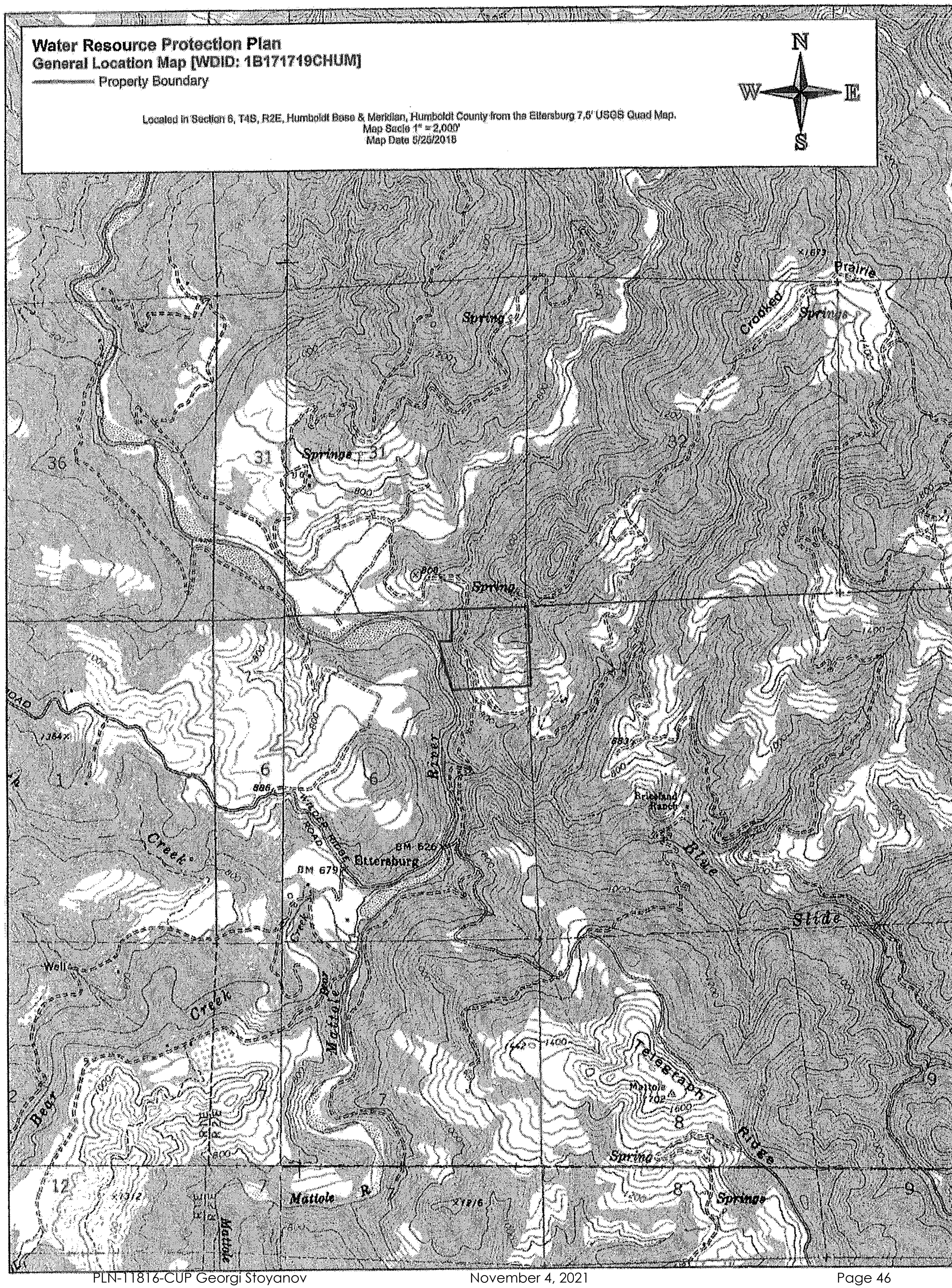
Property Description
The property assessed is approximately 46 acres, located in Section 6, T4S, R2E, Humboldt Base & Meridian, Humboldt County from the Ettersburg 7.5' USGS Quad Map. The property is located approximately 1-mile northwest of Ettersburg, California, and is accessed by Dutyville Road. The property has a southwest facing aspect with an elevation range of approximately 600' to 1,240' above sea level. The project area contains unnamed tributaries to Blue Side Creek and the Mattole River.

Project Description
There is currently one cultivation area located on the property. Cultivation Area A is approximately 21,770 sq. ft. and consists of potted plants within greenhouses on a graded flat. Total cultivation area on the property is approximately 21,770 sq. ft. All water used for irrigation and domestic uses is derived from three surface water diversions located on the property via a finalized agreement with California Department of Fish & Wildlife (CDFW). (Notification #1600-2017-0156-R1)

Monitoring Plan
Tier 2 Dischargers shall include a monitoring element in the Water Resource Protection Plan that at a minimum provides for periodic inspection of the site, checklist to confirm placement and efficacy of management measures, and document progress on any plan elements subject to a time schedule. Tier 2 Dischargers shall submit an annual report (Appendix C) by March 31 of each year that documents implementation and effectiveness of management measures during the previous year. Tier 2 annual reporting is a function that may be provided through an approved third-party program.

Monitoring of the site includes visual inspection and photographic documentation of each feature of interest listed on the site map, with new photographic documentation recorded with any notable changes to the feature of interest. At a minimum, all site features must be monitored annually, to provide the basis for completion of the annual re-certification process. Additionally, sites shall be monitored at the following times to ensure timely identification of changed site conditions and to determine whether implementation of additional management measures is necessary to iteratively prevent, minimize, and mitigate discharges of waste to surface water: 1) just prior to October 15 to evaluate site preparedness for storm events and storm water runoff, 2) following the accumulation of 3" total precipitation or by November 15, whichever is sooner, and 3) following any rainfall event with an intensity of 3" precipitation in 24 hours. Precipitation data can be obtained from the National Weather Service Forecast Office (e.g. by entering the zip code of the parcel location at http://www.srh.noaa.gov/forecast).

Monitoring Plan Reporting Requirements
Order No. R1-2015-0023, Appendix C must be submitted to the Regional Water Board or approved third party program upon initial enrollment in the Order (NOI) and annually thereafter by March 31. Forms submitted to the Regional Water Board shall be submitted electronically to northcoast@waterboards.ca.gov. If electronic submission is infeasible, hard copies can be submitted to: North Coast Regional Water Quality Control Board, 5550 Skylane Boulevard, Suite A, Santa Rosa, CA 95403.


Water Resource Protection Plan
General Location Map [WDID: 1B171719CHUM]
Property Boundary
Located in Section 6, T4S, R2E, Humboldt Base & Meridian, Humboldt County from the Ettersburg 7.5' USGS Quad Map.
Map Scale 1" = 2,000'
Map Date 5/25/2018
N
W
E
S
Spring
Prairie
Crooked
Springs
Springs
31
31
36
32
Spring
River
6
6
Briceland Ranch
Blue
Slide
Creek
BM 626
BM 679
Ettersburg
Well
Creek
Mattole
Bear
Telegraph
Ridge
Spring
12
Mattole
8
8
Springs
9
9

Assessment of the Standard Conditions

Assessment of Standard Conditions consisted of field examinations in the fall and winter of 2017. The examination evaluated areas near, and areas with the potential to directly impact, watercourses for sensitive conditions including, but not limited to, existing and proposed roads, skid trails and landings, unstable and erodible watercourse banks, unstable upslope areas, debris, jam potential, inadequate flow capacity, changeable channels, overflow channels, flood prone areas, and riparian zones. Field examinations also evaluated all roads and trails on the property, developed areas, cultivation sites, and any structures and facilities appurtenant to cultivation on the property. Anywhere the Standard Conditions are not met on the property, descriptions of the assessments and the prescribed treatments are outlined following each associated section below.

Summary of Standard Conditions Compliance

1. Site Maintenance, Erosion Control, and Drainage Features Y☐/N☒
2. Stream Crossing Maintenance Y☐/N☒
3. Riparian and Wetland Protection and Management Y☐/N☒
4. Spoils Management Y☐/N☒
5. Water Storage and Use Y☐/N☒
6. Irrigation Runoff Y☒/N☐
7. Fertilizers and Soil Amendments Y☐/N☒
8. Pesticides and Herbicides Y☒/N☐
9. Petroleum Products and other Chemicals Y☐/N☒
10. Cultivation-Related Wastes Y☐/N☒
11. Refuse and Human Waste Y☐/N☒

1. Site Maintenance, Erosion Control, and Drainage Features

Roads are being classified as "permanent" (being used year-round), and "seasonal" (being used primarily during summer months).

Permanent roads consist of a main access road to the residence and Cultivation Area A. Permanent roads are adequately surfaced with imported rock and in acceptable condition but with signs of concentrated surface runoff in several locations. Seasonal roads consist of access roads to the cultivation area and water infrastructure. Seasonal roads are adequately surfaced but show signs of concentrated surface runoff in two locations.

No unstable areas, nor evidence of the potential of road/surface related runoff to create unstable areas, was noted during the assessment of the property. Stockpiled construction materials are stored in locations that cannot be transported to receiving waters.

Summary of Standard Conditions Compliance (Cont.)

During inspection of the roads, cultivation areas, and watercourses, seven sites were identified where road surface runoff was not being adequately dispersed, drained, and/or erosion of the road surface was occurring. These sites require the installation or maintenance of drainage features. Further details can be found in the Mitigation Report to follow.

Cultivation Area A is located on a graded pad with slopes of less than 5% and adjoining natural hillslopes varying between 27% to 40%. Surrounding the cultivation area is timberland and savanna grassland with the nearest surface waters being a Class III watercourse approximately 60 feet to the northeast. No drainage or erosion issues were observed within the cultivation area or the graded pad it is on.

However, in the past there have been fillslope slumps and settling movements at Site 16. The section of fillslope at Site 16 was not treated with erosion control measures besides seeding, mulching, and the use of the berm along the edge of the landing. The rest of the fillslope of the landing was treated with erosion control measures including seeding, mulching, staked wattles, jute netting and the installation of the berm along the edge of the landing. The berm is preventing runoff from draining over the edge of the landing and encourages runoff to drain off of the landing via a french drain system installed around and in-between the greenhouses. This french drain system collects and drains into a 12-inch corrugated plastic pipe at Site 18 which drains into a Class III watercourse. Another issue at Site 18 is that a permanent road is located directly adjacent to a Class III watercourse for approximately 40-feet, with the cultivation area's parking area and a seasonal road located upgrade of the permanent road. Further details can be found in the Mitigation Report to follow.

2. Stream Crossing Maintenance

There are three stream crossings located on the property. All of the crossings have existing drainage structures or facilities and require either the installation, replacement, or modification of the existing drainage structure or facility. Further details can be found in the Mitigation Report to follow.

A Lake and Streambed Alteration Agreement with the California Department of Fish and Wildlife has been finalized for the replacement or installation of culverts and drainage facilities in watercourses. (Notification #1600-2017-0156-R1). Any additional guidelines, treatments, or restrictions set forth under the finalized Lake and Stream Agreement shall be followed.

ID#	Existing Culvert (D) Diameter (in)	Headwall (HW) Height (in)	HW/D (ratio)	Selected Discharge Method	Q100 (cfs)	Culvert Capacity (cfs)	Culvert is Undersized	Recommended Culvert Dia. (in)	Recommendation Based On
Site 04	18	0	0.0	RATIONAL	2	6		18	Q100
Site 06	12	0	0.0	RATIONAL	5	0	TRUE	18	Q100
Site 09	12	0	0.0	RATIONAL	8	0	TRUE	24	Q100

Summary of Standard Conditions Compliance (Cont.)

3. Riparian and Wetland Protection and Management
Assessment of the property concluded that cultivation areas are not located or occurring within 100' of any Class I or II watercourse or within 50' of any Class III watercourse or wetland, buffers maintain natural slopes with native vegetation, and buffers are of sufficient width to filter wastes from runoff discharging from production lands and associated facilities to all wetlands, streams, drainage ditches, or other conveyances.

However, per consultation and agreement with CDFW by the discharger, all of the water storage tanks and fertilizers mixing tanks associated with the Points of Diversions located along the Class III watercourse above Site 19 shall be removed and relocated to another location at least 50-feet from any Class III watercourse or 100-feet from any Class II watercourse.

4. Spoils Management
Currently, spoils are stored or placed in or where they can enter surface waters. A cultivation-related spoils pile is located at Site 14 where concentrated runoff from the cultivation area is draining along the edge and around the toe of the spoils pile. This concentrated runoff eventually disperses into a grass hillside downslope of Site 14. A cultivation-related spoils pile is also located at Site 20, where the spoils are being stored alongside a french drain system that drains into a watercourse. Further details can be found in the Mitigation Report to follow.

Any/all spoils shall be adequately contained or stabilized to prevent sediment delivery to surface waters. Any/all spoils generated through development or maintenance of roads, driveways, earthen fill pads, or other cleared or filled areas have not been sidecast in any location where they can enter or be transported to surface waters.

If any further spoiling material is required, such as from stream crossing installation or other grading, the discharger shall follow the BMPs in Appendix B of the Order, under Spoil Management. Spoil sites shall be located outside any standard width riparian area (50' for Class III and 100' for Class III) and shall be stabilized and contained as per the BMPs.

5. Water Storage and Use
All water used for irrigation and domestic uses is derived from three surface water diversions located on the property via a finalized agreement with California Department of Fish & Wildlife. (Notification #1600-2017-0156-R1)

Diversion intake infrastructure at Point of Diversion 1 consists of a screened 1-inch poly-pipe placed in a Class III watercourse. The poly-pipe conveys water to several water storage tanks downstream which are all located within the riparian buffer area of the watercourse. Because this watercourse dries up in late spring the diversion has been historically used for diversion to storage in the winter months.

Summary of Standard Conditions Compliance (Cont.)

Diversion intake infrastructure at Point of Diversion 2 consists of a screened 1-inch PVC placed in a spring upslope of a Class III tributary. The poly-pipe conveys water to several water storage tanks downstream which are all located within the riparian buffer area of the watercourse. Per consultation and agreement with CDFW by the discharger, this diversion is to be discontinued and all associated infrastructure removed.

Diversion intake infrastructure at Point of Diversion 3 consists of a 3/4-inch poly-pipe with a screened inlet placed in a spring upslope of a Class III tributary. The poly-pipe conveys water to several water storage tanks located downstream of Point of Diversions 1 & 2.

Per consultation and agreement with CDFW by the discharger, all of the water storage tanks associated with the Points of Diversion and located along the Class III watercourse shall be removed and relocated to another location at least 50-feet from any Class III watercourse or 100-feet from any Class II watercourse.

At this time, the discharger has 36,500 gallons of water tank storage installed. This volume of storage is insufficient to allow for full forbearance during the Forbearance Period. The discharger shall obtain adequate water storage so that stored water provides adequate water resources for the Forbearance Period.

It is estimated that the discharger uses approximately 140,400 gallons of water during the cultivation season for agricultural use. The discharger shall obtain approximately another 103,900 gallons of water storage installed and filled prior to the cultivation Forbearance Period from April 15th to October 15th, or otherwise determined by the Lake and Streambed Alteration Agreement with the California Department of Fish and Wildlife.

Water metering device(s) shall be installed in 2018 to meter water used for the irrigation of cannabis. Recorded water use data shall be used to determine remaining 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 next Forbearance Periods. A separate water meter shall be installed to record domestic water use from the diversions. The discharger shall also implement water conservation measures such as drip line irrigation, morning or evening watering, and mulch or cover cropping of cultivated top soils. Monthly water use estimates with the season total are as follows below.

	Jan	Feb	March	April (25%)	May (60%)	Jun (80%)	Jul (100%)	Aug (100%)	Sep (70%	Oct (20%)	Nov	Dec
Agriculture				9300	21600	28800	36000	36000	25200	7200		
Sq. ft. = 16,000							% = percent of peak usage					
									Total AG Water Use =	164100		

A Lake and Streambed Alteration Agreement with the California Department of Fish and Wildlife, as well as an Initial Statement of Water Diversion and Use with the California State Water Resource Control Board Division of Water Rights, has been finalized for the use of the surface water diversions. (Notification #1600-2017-0156-R1) Any additional guidelines, treatments, or restrictions set forth under the finalized Lake and Stream Alteration Agreement shall be followed.

Summary of Standard Conditions Compliance (Cont.)

6. Irrigation Runoff
During multiple visits to the property, no irrigation runoff, or evidence of such runoff, was observed at any of the cultivation sites.

7. Fertilizers and Soil Amendments
Liquid fertilizers and subsequent mixing tanks were found stored in an inadequate location directly on the banks of a Class III watercourse downstream from Point of Diversion 1, at Site 19. Further details can be found in the Mitigation Report to follow.

The discharger shall ensure that fertilizers, potting soils, compost, and other soils and soil amendments are stored in structures on the property in a manner in which they will not enter or be transported into surface waters and so that nutrients or other pollutants will not be leached into groundwater. Soil and amendment piles shall be either used or contained with staked wattles or earthen berms, yearly, prior to the wet season. Fertilizers and soil amendments shall be applied and used per the manufacturers guidelines.

8. Pesticides and Herbicides
Pesticides and fungicides are adequately stored alongside other fertilizers and soil amendments storage structures adjacent to the residence. The discharger shall ensure that all pesticide and herbicide products on the property are currently used, and stored in closed structures, to ensure that they do not enter or are released into surface or ground waters and that the use of pesticide products is consistent with product labeling.

9. Petroleum Products and Other Chemicals
Currently, there is bulk fuel storage present on the property. Two 500-gallon fuel tanks are located at Site 17. Currently they do not have adequate containment and cover over the secondary containment from precipitation. There are also sealed 5-gallon buckets of oil stored alongside the generator outside. Small quantities of fuel are also adequately stored in canisters within the structures adjacent to the residence, alongside fertilizers and soil amendments. Further details can be found in the Mitigation Report to follow.

All bulk fuel storage or petroleum products, any/all future petroleum products and other liquid chemicals, including but not limited to diesel, biodiesel, gasoline, and oils shall be stored so as to prevent their spillage, discharge, or seepage into receiving waters. Storage tanks and containers shall be of suitable material and construction to be compatible with the substance(s) stored and conditions of storage such as pressure and temperature. Above ground storage tanks and containers shall be provided with a secondary means of containment for the entire capacity of the largest single container and sufficient cover shall be provided to prevent any/all precipitation from entering said secondary containment vessel. Dischargers shall ensure that diked areas are sufficiently impervious to contain discharged chemicals. Discharger(s) shall implement spill prevention, control, and countermeasures (SPCC) and have appropriate cleanup materials available onsite if the volume of a fuel container is greater than 1,300 gallons. Underground storage tanks 110 gallons and larger shall be registered with the appropriate County Health Department and comply with State and local requirements for leak detection, spill overflow, corrosion protection, and insurance coverage.

Summary of Standard Conditions Compliance (Cont.)

10. Cultivation-Related Wastes
Organic cultivation-related wastes are collected from the cultivation areas and composted or burned in the winter. No organic cultivation-related wastes are stored or discarded in a location where these wastes can enter surface waters.

Non-organic cultivation-related wastes are stored in lidded trashcans and garbage bags adjacent to or in the residence, sheds, and cultivation areas and are disposed of regularly. However, non-organic cultivation related wastes are stored and have been discarded along a Class III watercourse at Site 18. Further details can be found in the Mitigation Report to follow. The discharger shall gather and dispose of these wastes and ensure that future wastes are properly, and immediately, contained from scavenging wildlife, concentrated runoff transporting the wastes, and/or from being windblown.

11. Refuse and Human Waste
Garbage and refuse is stored on the property within lidded trash cans and garbage bags and hauled away to a landfill transfer station periodically. However, refuse has been discarded and windblown around Site 18 where these wastes can enter surface waters. The discharger shall gather and dispose of these wastes and ensure that future wastes are properly, and immediately, contained from scavenging wildlife, concentrated runoff transporting the wastes, and/or from being windblown.

Human waste is managed by a septic system attached to the residence. It is the discharger's responsibility to ensure compliance of such action with the Humboldt County Department of Environmental Health and Human Services.

Summary of Standard Conditions Compliance (Cont.)

12. Remediation/Clean-up/Restoration

Currently, nine of the Standard Conditions are not being met; Site Maintenance, Erosion Control, and Drainage Features, Stream Crossing Maintenance, Riparian and Wetland Protection and Management, Spoils Management, Water Storage and Use, Fertilizers and Soil Amendments, Petroleum Products and Other Chemicals, Cultivation-Related Wastes, and Refuse and Human Waste. Sites will be treated in accordance with regulations, following approval of any and/or all necessary permits, and done in accordance with the BMP's listed in Appendix B of the Order and those included in this WRPP. Additionally, several other general recommendations have been made as follows:

General Recommendations

- ☐ Fertilizer, soil amendments, and pesticide use is to be recorded in such a manner that cumulative annual totals are recorded for annual reporting.
- ☐ 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.
- ☐ Frequent use of un-surfaced roads should be avoided, particularly when road surfaces are soft/saturated.
- ☐ All culverts should be inspected regularly during the winter months to check for plugging, blockage, or other issues.
- ☐ 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.
- ☐ Utilize spill trays when fueling portable generators or water pumps to prevent the potential for leeching, seepage or spillage.

Interim Measures

- ☐ Site 01: Interim measure: Clear the inside ditch of fill material as flagged in the field. Seed and mulch and apply jute netting to the failed cutbank and fillslope.
- ☐ Site 08: Clear the inlet of vegetation and debris.
- ☐ Site 11: Clear the inlet of vegetation and debris.
- ☐ Site 18: Install staked wattles along the edge of the road, above the outlet of the french drain culvert, for at least 20 feet on either side of the outlet.
- ☐ Site 19: Remove all fertilizers that are in-use, or stored by the mixing tanks, from the mixing tank area and move them to approximately 50-feet away from the watercourse or store them in structures on the property while they are not being used, returning them immediately to their storage location once they have been used. Remove all refuse and cultivation-related wastes within or alongside the watercourse down or upstream from this location.

STATEMENT OF CONTINGENT AND LIMITING CONDITIONS CONCERNING THE PREPARATION AND USE OF WATER RESOURCE PROTECTION PLAN

Prepared by Timberland Resource Consultants

1. This Water Resource Protection Plan has been prepared for the property within APN 221-201-007 in Humboldt County, at the request of the Client.

2. Timberland Resource Consultants does not assume any liability for the use or misuse of the information in this Water Resource Protection Plan.

3. The information is based upon conditions apparent to Timberland Resource Consultants at the time the inspection was conducted. Changes due to land use activities or environmental factors occurring after this inspection have not been considered in this Water Resource Protection Plan.

4. Maps, photos, and any other graphical information presented in this report are for illustrative purposes. Their scales are approximate, and they are not to be used for locating and establishing boundary lines.

5. The conditions presented in this Water Resource Protection Plan may differ from those made by others or from changes on the property occurring after the inspection was conducted. Timberland Resource Consultants does not guarantee this work against such differences.

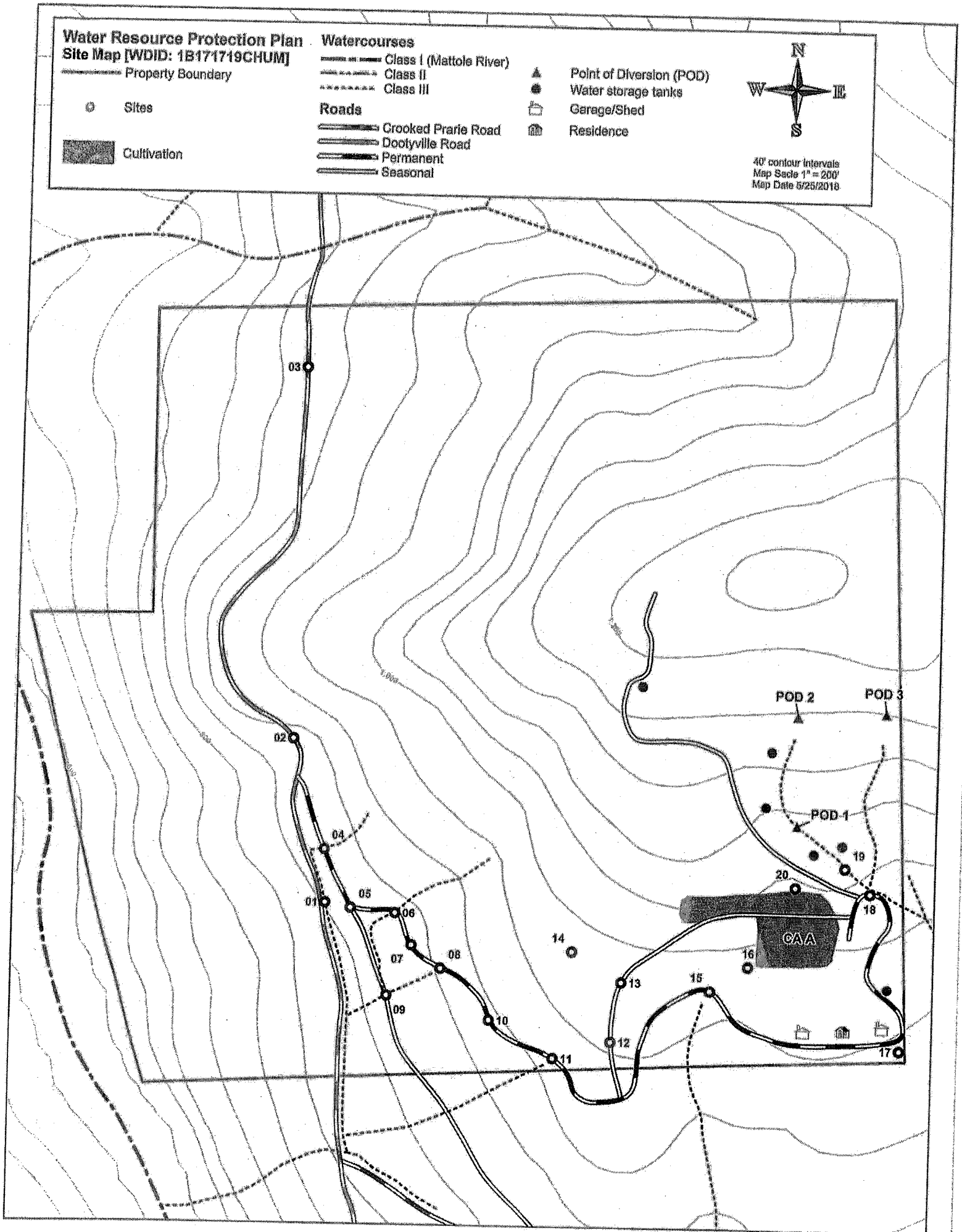
6. Timberland Resource Consultants did not conduct an investigation on a legal survey of the property.

7. Persons using this Water Resource Protection Plan are advised to contact Timberland Resource Consultants prior to such use.

8. Timberland Resource Consultants will not discuss this report or reproduce it for anyone other than the Client named in this report without authorization from the Client.

Forrest Hansen

Timberland Resource Consultants


Water Resource Protection Plan
Site Map [WDID: 1B171719CHUM]
Property Boundary
Sites
Cultivation
Watercourses
Class I (Mattole River)
Class II
Class III
Roads
Crooked Prarie Road
Dootyville Road
Permanent
Seasonal
Point of Diversion (POD)
Water storage tanks
Garage/Shed
Residence
N
W
E
S
40' contour intervals
Map Scale 1" = 200'
Map Date 5/25/2018
POD 1
POD 2
POD 3
CAA
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Water Resource Protection Plan
Site Map [WDID: 1B171719CHUM]
Property Boundary
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Class I (Mattole River)
Class II
Class III
Roads
Crooked Prarie Road
Dooryville Road
Permanent
Seasonal
Point of Diversion (POD)
Water storage tanks
Garage/Shed
Residence
N
W
E
S
2016 NAIP DOQ
Map Sacle 1" = 200'
Map Date 5/25/2018
POD 2
POD 3
POD 1
CAA
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Timberland Resource Consultants

WRPP - Mitigation Report

WDID# - 1B171719CHUM

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Standard Conditions	Treatment Priority	Date Completed
1	-123.989952 40.147713	Permanent	X	X	-	A.1.	Prior to 10/15/18	

Current Condition: Concentrated road surface runoff is draining over the cutbank and fillslope between roads. This runoff caused the saturation and failure of the cutbank and fillslope. The fill from this failure has plugged the inside ditch and remains in the inside ditch.

Prescribed Action: Interim measure: Clear the inside ditch of fill material as flagged in the field. Seed and mulch and apply jute netting to the failed cutbank and fillslope.
Permanent measures: See Sites 05 & 07.

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Standard Conditions	Treatment Priority	Date Completed
2	-123.990191 40.148497	Permanent	X	X	-	A.1.	Prior to 10/15/19	

Current Condition: Long undrained inside ditch without any drainage feature.

Prescribed Action: Install an 18-inch diameter culvert per attached specifications.

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Standard Conditions	Treatment Priority	Date Completed
3	-123.990198 40.150277	Permanent	X	X	-	A.1.	Prior to 10/15/19	

Current Condition: Long undrained inside ditch without any drainage feature.

Prescribed Action: Install an 18-inch diameter culvert per attached specifications.

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Standard Conditions	Treatment Priority	Date Completed
4	-123.989969 40.147969	Permanent	X	X	X	A.2.	Prior to 10/15/19	

Current Condition: Class III watercourse crossing consisting of an 18-inch diameter corrugated metal culvert. The culvert is adequately sized but is shot gunned and eroding at the outlet.

Prescribed Action: Rock armor the outlet per attached specifications.

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Standard Conditions	Treatment Priority	Date Completed
5	-123.989788 40.14769	Permanent	X	X	-	A.1.	Prior to 10/15/19	

Current Condition: Concentrated road surface runoff is draining onto a fillslope and cutbank in-between the two roads, resulting in their failure into an inside ditch.

Prescribed Action: Install an inside ditch from the inlet of the watercourse crossing at Site 04 to the gate up grade of Site 05. Inslope the road into the inside ditch from Site 04 to the gate up grade of Site 05.

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WDID# - 1B171719CHUM

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Standard Conditions	Treatment Priority	Date Completed
6	-123.98951 40.147671	Permanent	X	X	X	A.2.	Prior to 10/15/19	

Current Condition: Class III watercourse crossing consisting of a 12-inch corrugated metal pipe. The culvert is undersized, shot gunned, and is eroding at the outlet. Concentrated road surface runoff is also not being captured by the inside ditch, resulting in erosion of the road pad at this Site and the cutbank and fillslope failure at Site 05. The outlet of this watercourse crossing is also draining alongside and down the road downslope of the outlet into the outlet of the watercourse crossing at Site 09. Causing further erosion of the road pad and fillslope of the watercourse crossing at Site 09.

Prescribed Action: Install a 24-inch diameter culvert per attached specifications. Install an inside ditch to the rocked rolling dip to be installed upgrade at Site 07. Inslope the road into the inside ditch upgrade to the rocked rolling dip.

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Standard Conditions	Treatment Priority	Date Completed
7	-123.9894 40.147518	Seasonal	X	X	-	A.1.	Prior to 10/15/19	

Current Condition: Concentrated road surface runoff is not being captured by an inside ditch that has filled with road fill, resulting in erosion of the road pad further downgrade and causing a cutbank and fillslope failure at Site 01.

Prescribed Action: Install a rocked rolling dip that drains into the inside ditch per attached specifications.

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Standard Conditions	Treatment Priority	Date Completed
8	-123.989216 40.14741	Seasonal	X	X	-	A.1.	Prior to 10/15/19	

Current Condition: Ditch relief culvert consisting of a 12-inch corrugated metal pipe. The culvert inlet is blocked with vegetation and debris, the outlet is shot gunned and eroding, and the inside ditch draining to the inlet has filled with road fill. Concentrated road surface runoff is not being captured by the inside ditch resulting in the erosion of the road pad.

Prescribed Action: Interim measures: Clear the inlet of vegetation and debris.
Permanent measures: Rock armor the inlet and outlet per attached specifications. Install an inside ditch to the rocked rolling dip to be installed at Site 10. Inslope the road into the inside ditch to the rocked rolling dip.

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Standard Conditions	Treatment Priority	Date Completed
9	-123.989545 40.147273	Seasonal	X	X	X	A.2.	Prior to 10/15/20	

Current Condition: Watercourse crossing consisting of a 12-inch corrugated metal pipe. The culvert is undersized, plugged, shot gunned, and has failed with flows combining with flows from the watercourse connected to the crossing at Site 06, resulting in the erosion and downcutting of the crossing's fills prism.

Prescribed Action: Upgrade the existing culvert with a 24-inch diameter culvert per attached specifications. Install a rock lined drainage ditch that drains to the inlet of culvert at this site to the outlet of the watercourse crossing at Site 06, as flagged in the field and per the description in the Lake and Stream Alteration Agreement with CDFW.

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WDID# - 1B171719CHUM

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Standard Conditions	Treatment Priority	Date Completed
10	-123.988903 40.147168	Permanent	X	X	-	A.1.	Prior to 10/15/19	

Current Condition: Concentrated road surface runoff is bypassing and inside ditch and eroding the road pad.

Prescribed Action: Install a rocked rolling dip that drains into the inside ditch per attached specifications.

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Standard Conditions	Treatment Priority	Date Completed
11	-123.988495 40.146994	Permanent	X	X	-	A.1.	Interim measures immediately; Mitigation measures prior to 10/15/19 pending the approval of any required permits	

Current Condition: Ditch relief culvert consisting of a 12-inch corrugated metal pipe. The inside draining to inlet has filled with road fill and vegetation and jumps onto the road. Ditch flows either drain over the edge of the road or continue down the road pad resulting in erosion of the road pad.

Prescribed Action: Interim measures: Clear the inlet of vegetation and debris.
Permanent measures: Rock armor the inlet and outlet per attached specifications. Install an inside ditch and inslope the road into the inside ditch.

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Standard Conditions	Treatment Priority	Date Completed
12	-123.988138 40.14708	Seasonal	X	X	-	A.1.	Annually prior to 10/15	

Current Condition: Concentrated road surface runoff is eroding the road pad.

Prescribed Action: Interim measures: Install a waterbar per attached specifications.

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Standard Conditions	Treatment Priority	Date Completed
13	-123.988083 40.147367	Seasonal	X	X	-	A.1.	Annually prior to 10/15	

Current Condition: Concentrated road surface runoff is eroding the road pad.

Prescribed Action: Interim measures: Install a waterbar per attached specifications.

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Standard Conditions	Treatment Priority	Date Completed
14	-123.988399 40.147507	-	X	X	-	A.4.	Prior to 10/15/19	

Current Condition: A drainage ditch coming from the cultivation area is draining laterally alongside and around the toe of a large cultivation-related soil spoils pile. The flows from the drainage ditch are beginning to erode away at the soil spoils pile and transport soils and perlite away from the pile into the grassy hillside downslope, possibly reaching the road below and draining into a Class III watercourse at Site 06 or 08.

Prescribed Action: Remove the cultivation-related soil spoils from the flow path of the runoff channel. Pull the spoils approximately 5-feet away from the concentrated runoff. Install staked wattles around the downslope edges of the spoils pile, in-between the spoils and the concentrated runoff channel. Seed and mulch in-between the staked wattles and the runoff channel to create a filter strip of vegetation.

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WDID# - 1B171719CHUM

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Standard Conditions	Treatment Priority	Date Completed
15	-123.987531 40.147336	Permanent	X	X	-	A.1.	Prior to 10/15/19	

Current Condition: Ditch relief culvert consisting of a 12-inch corrugated metal pipe. The culvert inlet is blocked with vegetation and debris and the outlet is shot gunned and eroding.

Prescribed Action: Interim measures: Clear the inlet of vegetation and debris.
Permanent measures: Rock armor the inlet and outlet per attached specifications.

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Standard Conditions	Treatment Priority	Date Completed
16	-123.9873 40.147458	-	X	X	-	A.1.	Prior to 10/15/19	

Current Condition: The fillslope of the landing at this location is lacking erosion control measures and has failed due to runoff from the cultivation area draining over the fillslope. The discharger has installed a berm along the entire edge of the graded pad and a french drain system to drain runoff away from the fillslope. However, failed sections of the fillslope lack erosion control measures, that were used elsewhere on the landing such as jute netting and wattles, and are continuing to erode.

Prescribed Action: Install jute netting on the fillslope where jute netting and staked wattles have not been installed and erosion of the fillslope is occurring. Apply straw and grass seed underneath the jute netting to promote vegetation growth.

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Standard Conditions	Treatment Priority	Date Completed
17	-123.986336 40.147082	-	X	X	-	A.9.	Immediately	

Current Condition: Two 500-gallon fuel tanks do not have secondary containment or cover over the secondary containment from precipitation. Also, across the road from Site 17 is a generator with several 5-gallon buckets of used motor oil without containment.

Prescribed Action: Obtain secondary containment for both fuel tanks, equal in volume to the fuel stored in both tanks. Install cover over the fuel tanks from precipitation so that the secondary tanks do not fill with rainwater. Store the buckets of un-used and used motor oil within their own secondary containment consisting of plastic totes or within the secondary containment used for the fuel tanks.

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Standard Conditions	Treatment Priority	Date Completed
18	-123.98655 40.147831	Permanent	X	X	-	A.1.	Interim measures immediately; Mitigation measures prior to 10/15/19 pending the approval of any required permits	

Current Condition: French drain outlet consisting of a 12-inch corrugated plastic pipe. The outlet has been placed into a Class III watercourse and the adjacent road shoulder runs directly along the watercourse for approximately 40 feet. The road shoulder around french drain outlet, for approximately 15 feet, is uncompacted and in or along the watercourse. This uncompacted road shoulder lacks rock armoring and is exposed to watercourse flows. The road shoulder will be eroded away by the watercourse, from runoff coming from the adjacent and upslope roads, and the cultivation area's parking area.

Prescribed Action: Interim measure: Install staked wattles along the edge of the road, above the outlet of the french drain outlet, for approximately 20 feet on either side of the outlet.
Permanent measure: Rock armor the french drain outlet per attached ditch relief culvert specifications. Apply rock armoring to the entire shoulder of the road along and in the watercourse, approximately 10 feet on either side of the outlet. Apply rock surfacing to exposed ground in the parking area up grade of this site, along the eastern side of the greenhouses, and apply 30 feet of rock surfacing to the seasonal road to the northwest of this site in the direction of the Points of Diversion.

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WDID# - 1B171719CHUM

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Standard Conditions	Treatment Priority	Date Completed
19	-123.986713 40.147949	-	X	X	-	A.3., A.7., A.10.	Interim measures immediately; Mitigation measures prior to 10/15/19 pending the approval of any required permits	

Current Condition: Fertilizers, and their subsequent mixing tanks, were found stored and in-use in an inadequate location directly on the banks of a Class III watercourse. Refuse has also been discarded or windblown into the watercourse and there is a large amount of cultivation-related materials stored directly along side the watercourse.

Prescribed Action: Interim measures: Remove all fertilizers that are in-use, or stored by the mixing tanks, from the mixing tank area and move them to approximately 50-feet away from the watercourse or store them in structures on the property while they are not being used, returning them immediately to their storage location once they have been used. Remove all refuse and cultivation-related wastes within or alongside the watercourse down or upstream from this location.
Permanent measures: All fertilizer mixing tanks, located along the Class III watercourse at Site 19, shall be removed and relocated to another location at least 50-feet from any Class III watercourse or 100-feet from any Class II watercourse.

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Standard Conditions	Treatment Priority	Date Completed
20	-123.987017 40.147849	-	X	X	-	A.4.	Annually prior to 10/15	

Current Condition: Cultivation-related soil spoils are being stored alongside a french drain system that drains into a watercourse.

Prescribed Action: Install a staked wattle or a earthen berm along the entire toe of the cultivation-related soil spoils pile that connects up to the cutbank on either side of the pile.

Unique Point	Lat-Long NAD 83	Road Type	Mitigation Planned	Monitor	1600	Standard Conditions	Treatment Priority	Date Completed
POD 1, 2, & Site 19	-123.9870198 40.1481421	-	X	X	-	A.3.	Prior to 10/15/19	

Current Condition: Numerous water storage tanks and a fertilizer tank is located within the riparian buffer area or directly adjacent to a Class III watercourse.

Prescribed Action: All of the water storage tanks associated with the Points of Diversions, and the fertilizer mixing tanks, located along the Class III watercourse above Site 19 shall be removed and relocated to another location at least 50-feet from any Class III watercourse or 100-feet from any Class II watercourse.

BMP: General 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.

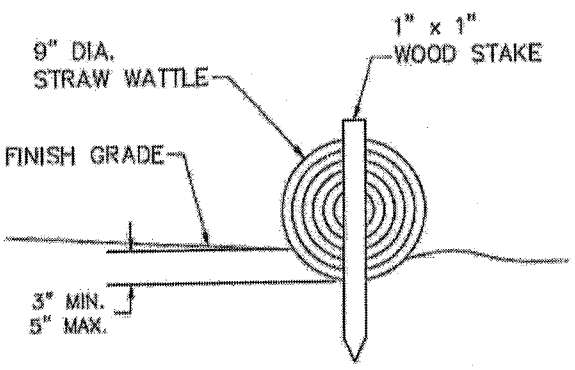
- Within 100 feet of a watercourse or lake, where the undisturbed natural ground cover cannot effectively protect beneficial uses of water from operations, the ground shall be treated with slope stabilization measures described in #3 above per timing described in #1 above.

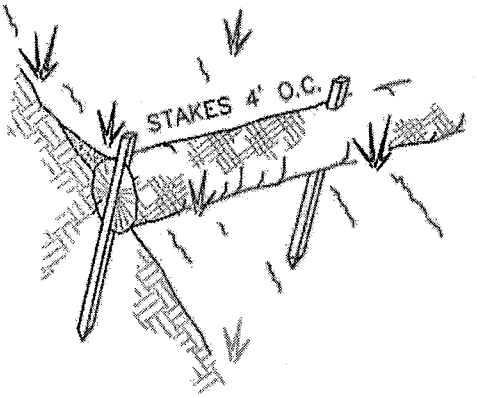
- Side cast or fill material extending more than 20 feet in slope distance from the outside edge of a landing which has access to a watercourse or lake shall be treated with slope stabilization measures described in #3 above. Timing shall occur per #1 above unless outside 100 feet of a watercourse or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

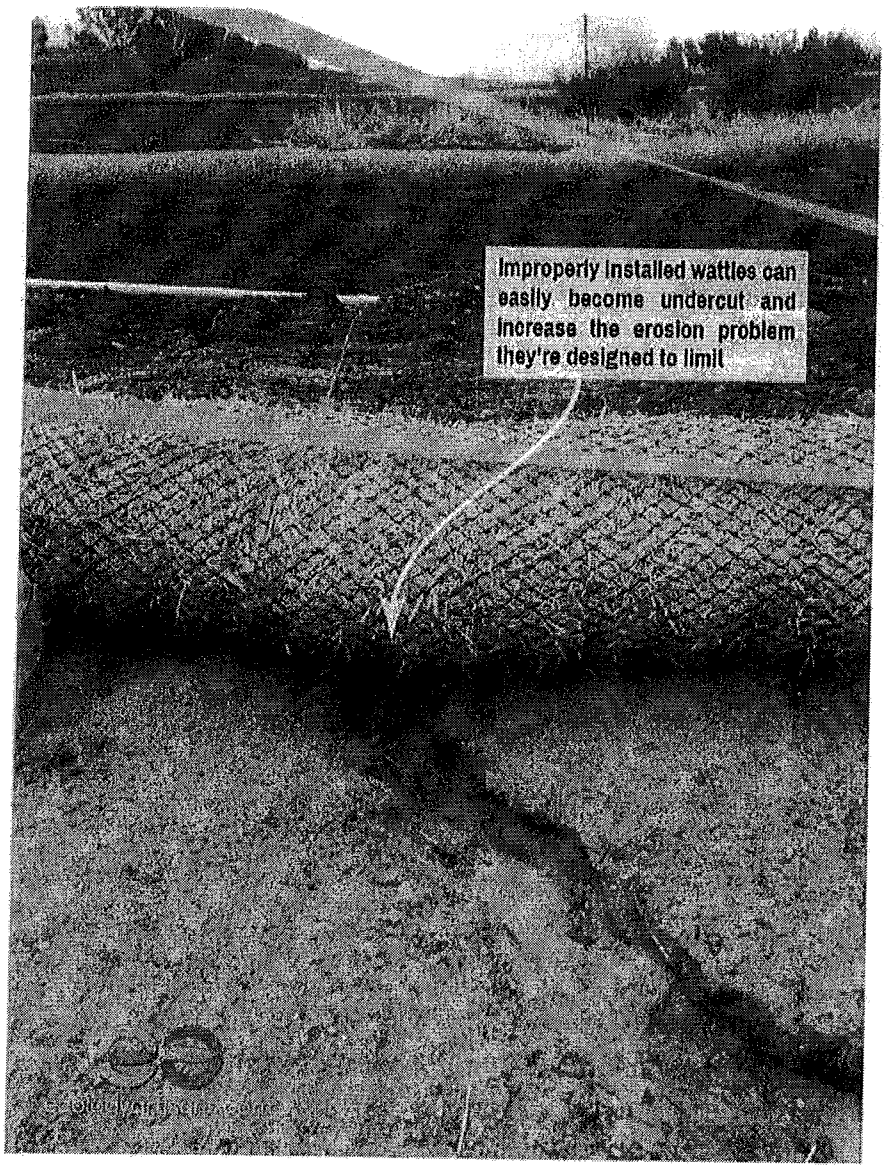
BMP: General Erosion Control (Cont.)

- 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.





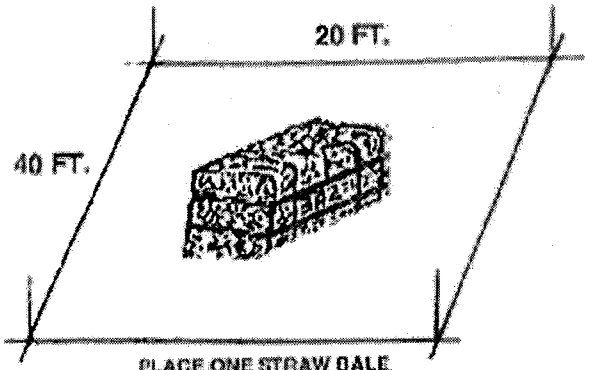
BMP: General Erosion Control (Cont.)



BMP: General Erosion Control (Cont.)

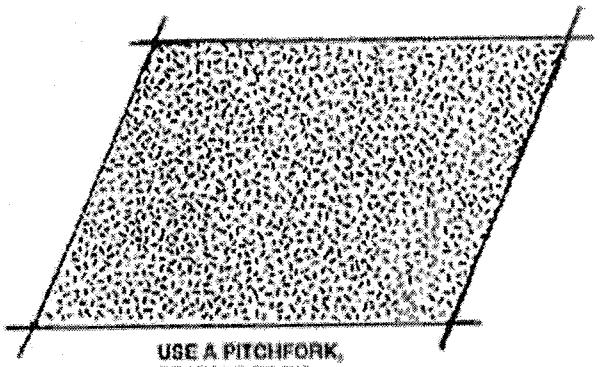
SPREAD THE STRAW

MARK OFF 800 SQ FT. PLOTS



PLACE ONE STRAW BALE PER PLOT (~74 POUNDS). THIS IS EQUIVALENT TO 2 TONS PER ACRE.

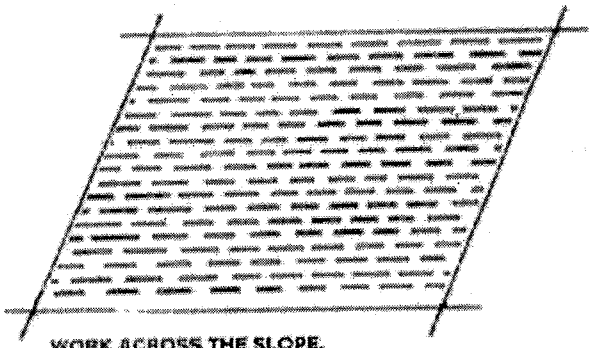
SPREAD EVENLY



USE A PITCHFORK, SPADING FORK, OR BY HAND

ANCHOR THE STRAW

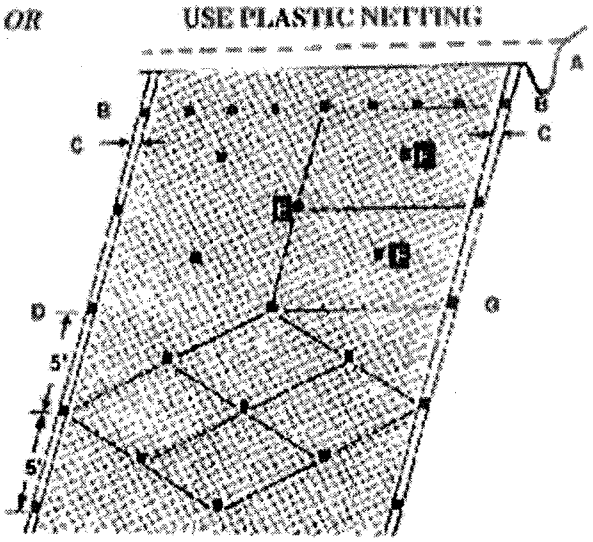
CRIMP BY HAND



WORK ACROSS THE SLOPE.
PUNCH STRAW 4 INCHES DEEP.
A SQUARE END SPADE WORKS WELL.
MAKE PUNCH EVERY 12 INCHES.

OR

USE PLASTIC NETTING



A. LAY BIRD CONTROL NETTING OR SIMILAR MATTING IN STRIPS DOWN THE SLOPE OVER THE STRAW. BURY UPPER END IN 6-8 INCH DEEP AND WIDE TRENCH.. MOST NETTING COMES IN 14 TO 17 FT. WIDE ROLLS.

B. SECURE THE UPPER END WITH STAKES EVERY 2 FEET.

C. OVERLAP SEAMS ON EACH SIDE 4-5 INCHES.

D. SECURE SEAMS WITH STAKES EVERY 5 FEET.

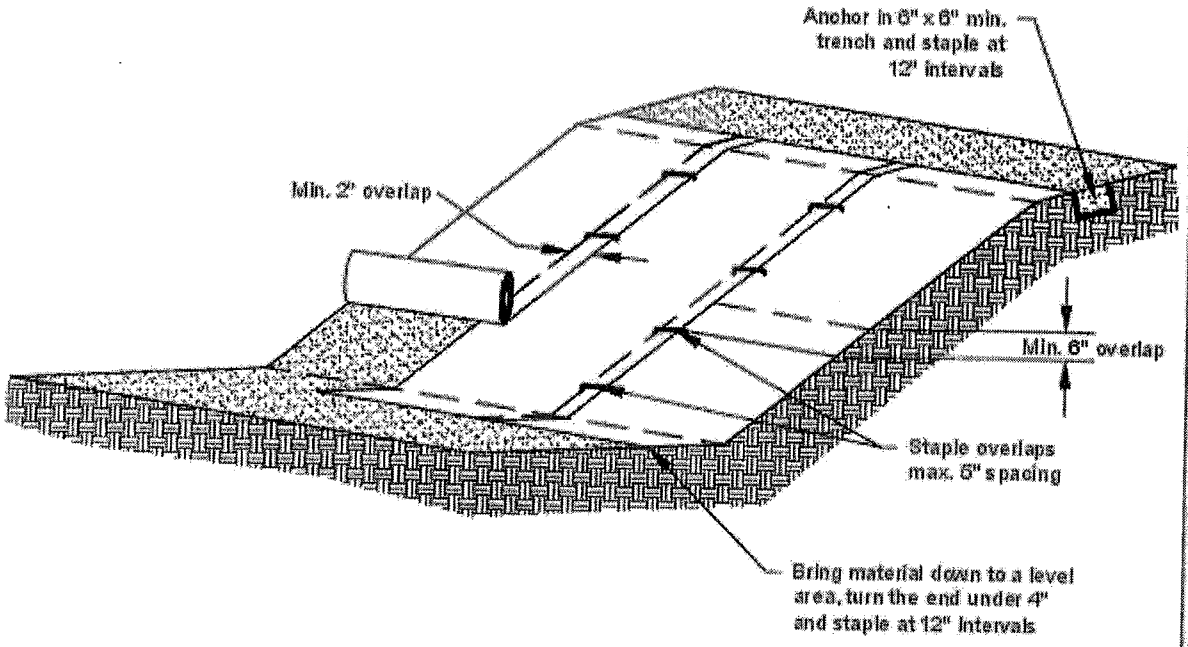
E. STAKE DOWN THE CENTER EVERY 5 FEET.

F. STAKE MIDDLES TO CREATE DIAMOND PAT TERN THAT PROVIDES STAKES SPACED 4-5 FEET APART.

G. USE POINTED 1X2 INCH STAKES 8 TO 9 INCHES LONG. LEAVE 1 TO 2 INCH TOP ABOVE NETTING, OR USE "U" SHAPED METAL PINS AT LEAST 9 INCHES LONG.

NOTE: WHEN JOINING TWO STRIPS, OVERLAP UPPER STRIP 3 FEET OVER LOWER STRIP AND SECURE WITH STAKES EVERY 2 FEET LIKE IN "B" ABOVE

BMP: General Erosion Control (Cont.)



Notes:

1. Slope surface shall be smooth before placement for proper soil contact.
2. Stapling pattern as per manufacturer's recommendations.
3. Do not stretch blankets/mattings tight - allow the rolls to mold to any irregularities.
4. For slopes less than 3H:1V, rolls may be placed in horizontal strips.
5. If there is a berm at the top of the slope, anchor upslope of the berm.
6. Lime, fertilize, and seed before installation. Planting of shrubs, trees, etc. should occur after installation.

NOT TO SCALE

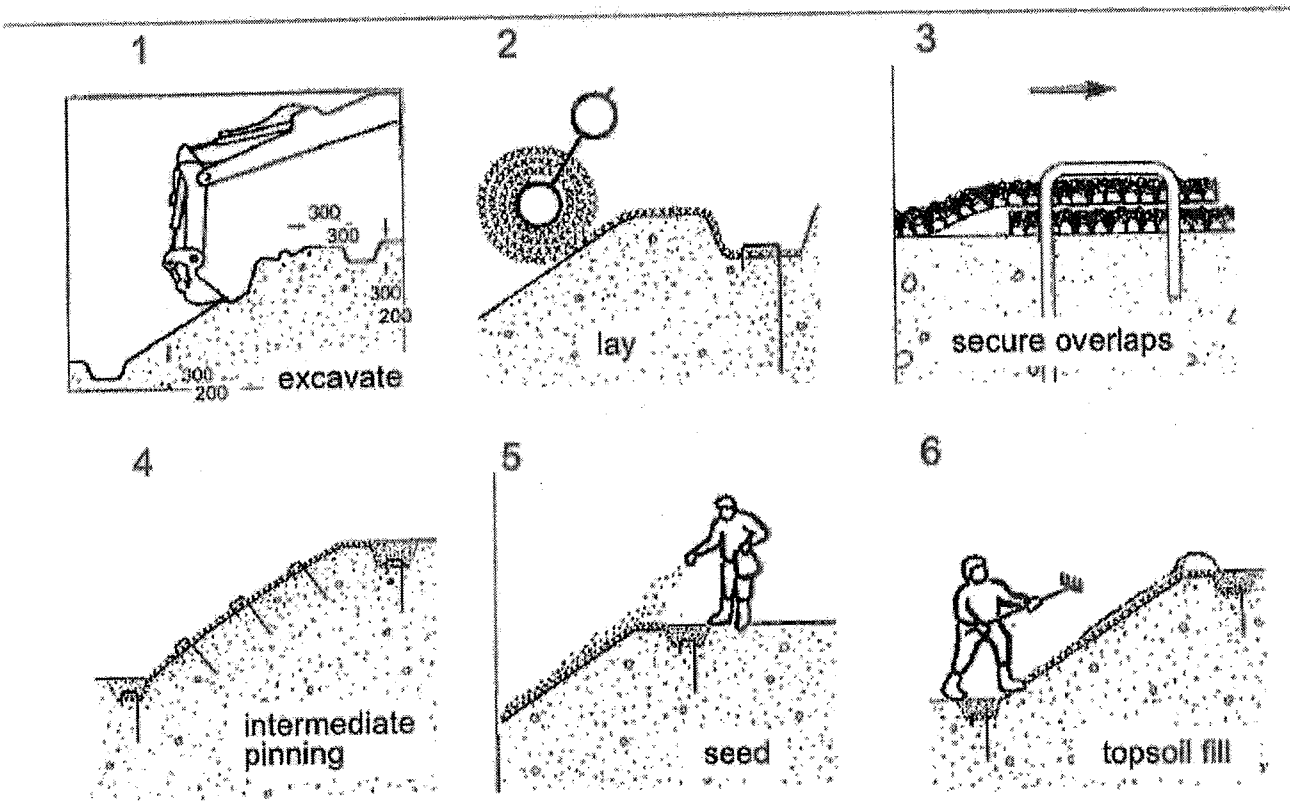
DEPARTMENT OF ECOLOGY
State of Washington

Slope Installation

Revised June 2016

BMP: General Erosion Control (Cont.)

Installation of a geosynthetics mat - Enkamat



BMP: General Erosion Control Techniques

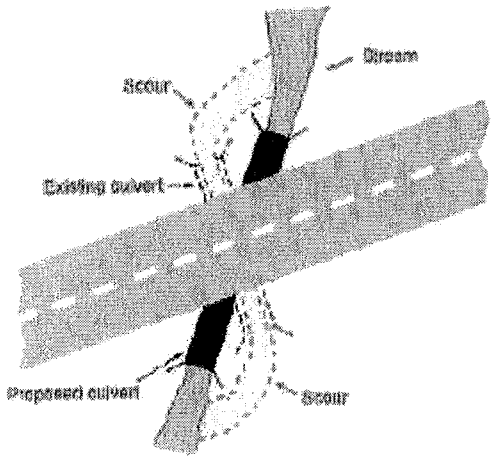
TABLE 34. Guidelines for erosion and sediment control application

Timing of application	Technique	Portion of road and construction area treated
Erosion control during construction	Hydromulching, hydroseeding	Road fill slopes, cut slopes, bare soil areas
	Dry seeding	Road fill slopes, cut slopes, bare soil areas
	Wood chip, straw, Excelsior or tackified mulch	Road fill slopes, cut slopes, bare soil areas
	Straw wattles	Road fill slopes and cut slopes
	Gravel surfacing	Road, landing and turnout surfaces
	Dust palliative	Road surfaces
	Minimize disturbance (soil and vegetation)	All areas peripheral to construction
Sediment control during construction	Sediment basin	Roadside ditches, turnouts and small stream crossings
	Sediment traps (e.g., silt fences, straw bales barriers, woody debris barriers)	Road fill slopes, cutbanks, bare soil areas and ditches
	Straw bale dams	Ditches and small streams
	Sumps and water pumps	Stream channels and stream crossings
	Streamflow diversions (e.g., temporary culverts, flex pipe, etc.)	Stream channels and stream crossings
	Surface diversion and dispersion devices (pipes, ditches, etc.)	All disturbed bare soil areas
Permanent erosion control	Road shaping	Road and landing surfaces
	Gravel surfacing	Road, landing and turnout surfaces
	Bituminous or asphalt surfacing	Road surface
	Rolling dips	Road surface
	Ditch relief culverts	Roadbed and road fill
	Downspouts and berm drains	Road fill slopes
	Waterbars	Road and landing surfaces
	Berms	Road surface and roadside areas
	Ditches	Road and landing surfaces
	Riprap	Road fill slopes, stream crossing fills, cutbanks, stream and lake banks
	Soil bioengineering	Road fill slopes, cut slopes, stream crossings, streambanks
	Tree planting	Road fill slopes, cutbanks, bare soil areas, stream crossings, streambanks

HANDBOOK FOR FOREST, RANCH AND RURAL ROADS

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.



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).*

BMPs and Diagrams

BMP: Permanent Culvert Crossing (Cont.)

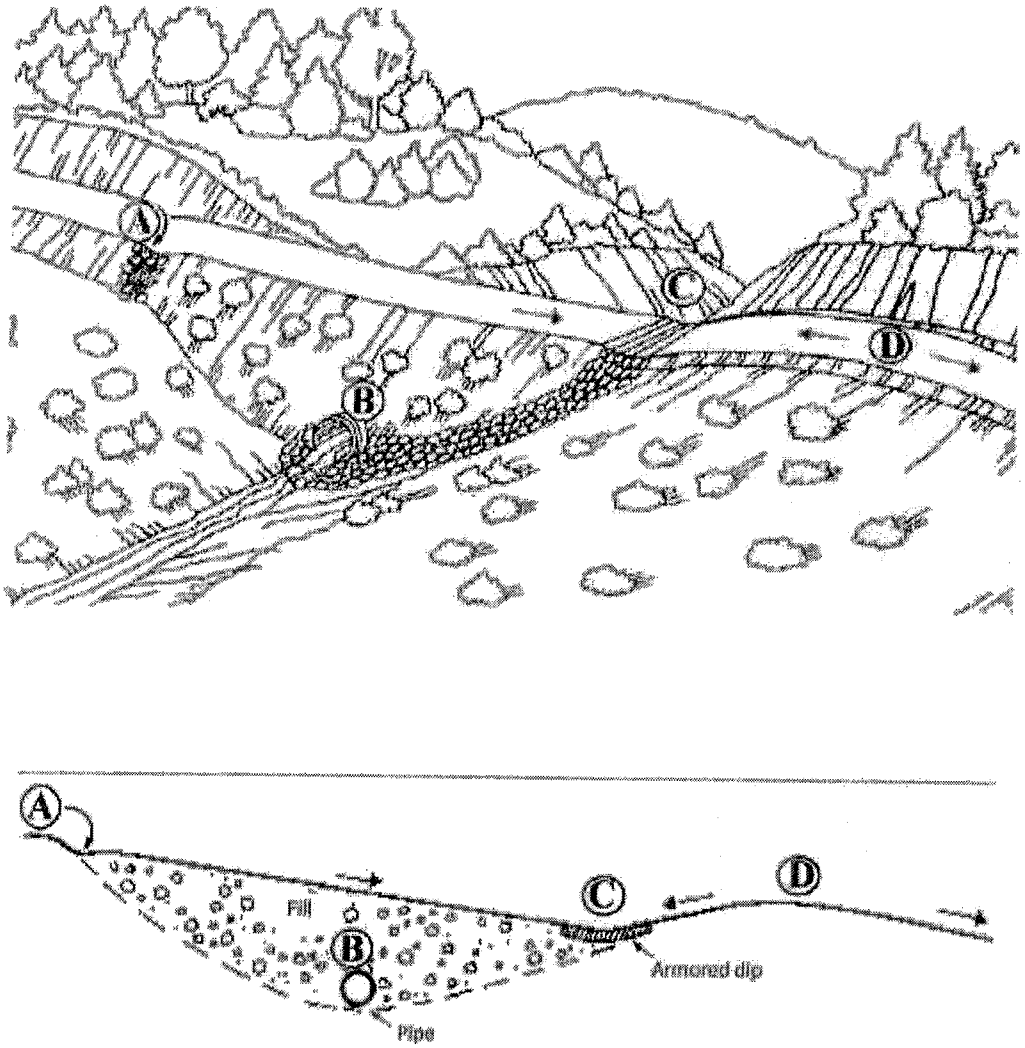


FIGURE 94. *Critical dips or dipped crossing fills should be centered near a stream crossing's down-road hingeline, not over the centerline of the crossing where overtopping could cause washout or severe erosion of the fill. If the stream crossing culvert (B) plugs, water will pond behind the fill until 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).*

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BMPs and Diagrams

BMP: Permanent Culvert Crossing (Cont.)

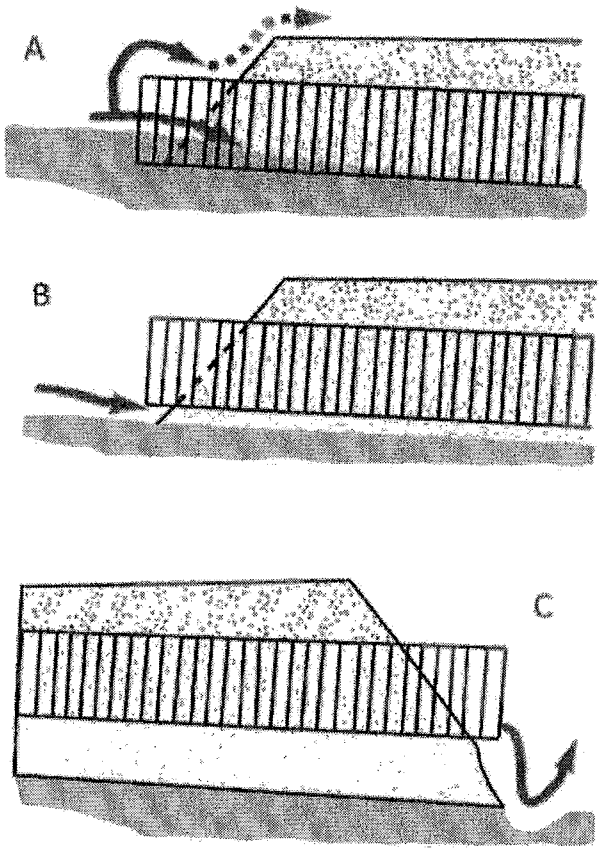

FIGURE 155. *Proper culvert installation involves correct culvert orientation, setting the pipe slightly below the bed of the original stream, and backfilling and compacting the fill as it is placed over the culvert. Installing the inlet too low in the stream (A) can lead to culvert plugging, yet if 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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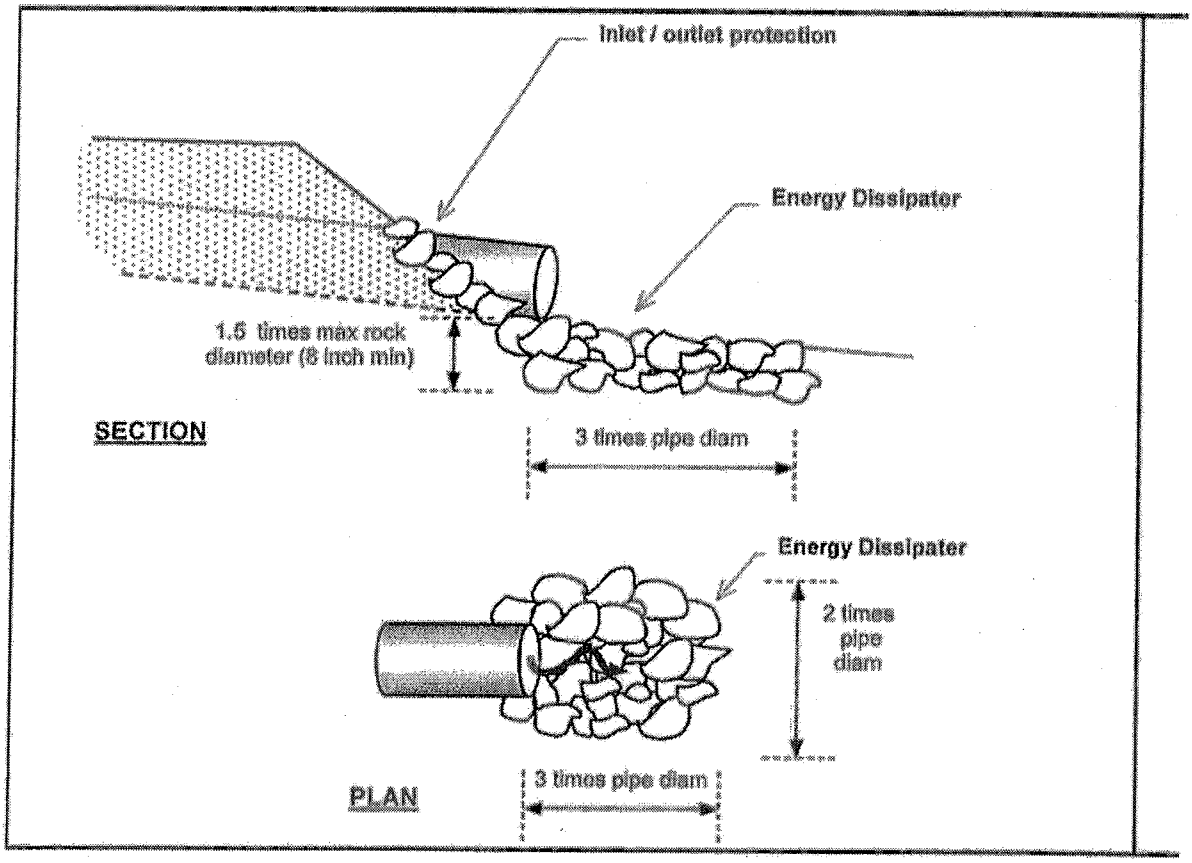
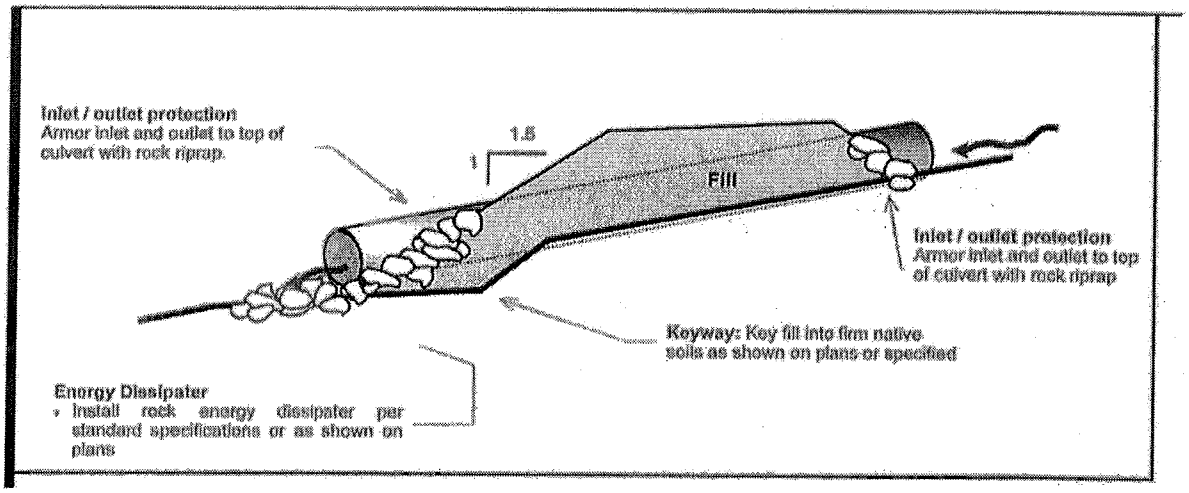
BMP: Culvert Rock Armoring Specifications





Riprap installed to protect the inlet and outlet of a stream crossing culvert from erosion or for energy dissipation should be keyed i the natural channel bed and banks to an approximate depth of about 1.5x the maximum rock thickness. Riprap should be placed at le 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 t newly constructed fill slope above.

BMP: Inlet and Outlet Armoring

- 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.

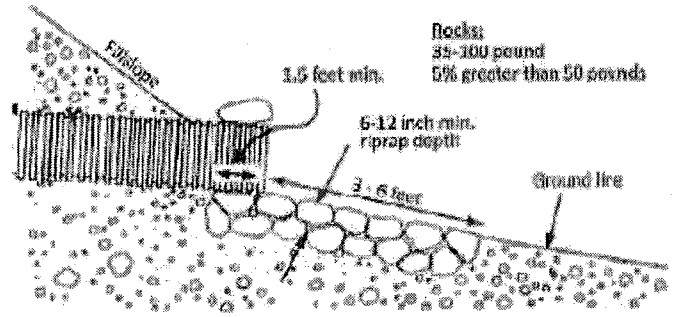


FIGURE 107A. *Riprap armor at culvert outlet (Modified from: Keller et al., 2011).*

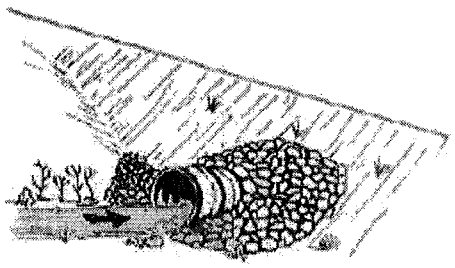


FIGURE 107B. *Riprap armor at culvert inlet (Keller and Sherar, 2003).*

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BMP: Stream Bank Armoring (Riprap)

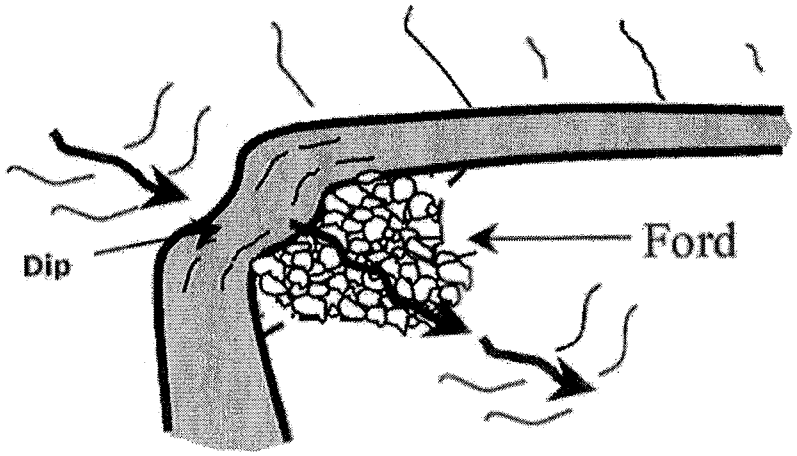
- Riprap should be installed on top of geotextile fabric or a clean mixture of coarse gravel and sand.
- The riprap should be keyed into the streambed and extend below the maximum expected scour depth with an adequately sized key base width at a thickness of a minimum of 2x the median (D50) rock diameter with the largest stone sizes placed at the base of the riprap structure.
- The armor should be set into the streambank so it does not significantly protrude into, or constrict, the natural channel, or otherwise reduce channel capacity.
- The riprap should extend along the length of unstable or over steepened bank and up the bank sufficiently to encompass the existing bank instability and/or design flood elevations.

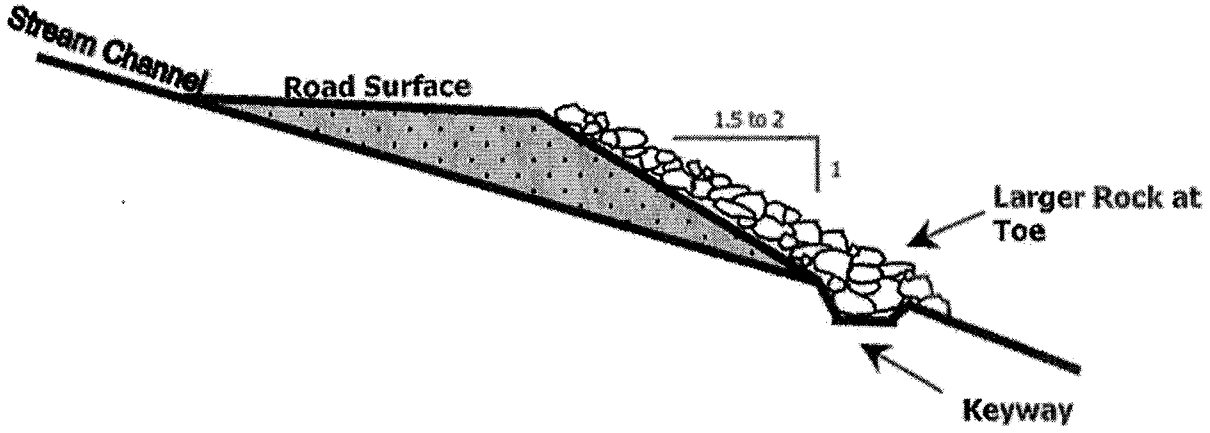
BMP: Rocked Ford

- Rocked fords are drainage structures designed to carry watercourses across roads with little to no erosion of the road surface or fill.
- Fords constructed in-channel shall be of appropriately sized material that shall withstand erosion or displacement by expected velocities and placed in a broad, 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.
- Road approaches to rocked fords shall be rock surfaced out to the first drainage structure (i.e. waterbar, rolling dip, 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.

BMP: Rocked Ford (Cont.)

FORD: A large dip is graded into the road at the axis of the stream channel. The outside fill face is dished out to form a spillway with large rock. On large watercourses, rock is keyed several feet into firm native soils. The road surface is rocked with 6" of minus rock .





BMP: Armored Ford/Fill

- Armored fords are watercourse crossing fills comprised primarily of rock and designed to carry watercourses across roads without erosion or displacement of installed fill material.
- Armored fords shall have a U-shaped channel to create a drivable crossing.
  - The road shall dip into and out of the armored 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 armored ford shall consist of rock small enough to be easily passable by vehicle, but large enough to not be transported during high flow storm events.
- The ford's inlet shall be rocked if a threat of head cutting exists.
  - *Excavate the keyway* - Excavate a one to three-foot-deep "bed" into the inboard edge of the road
  - *Armor the basal keyway* – place various sized rock in the constructed keyway to prevent head cutting. Use the largest rock armor to fill the keyway trench and create a buttress along the inboard edge of the road. This should have a "U" shape to it and it will define the inlet where flow leaves the natural channel and enters the road.
- 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.
- Road approaches to armored fords shall be surface rocked out to the first drainage structure (i.e. waterbar, rolling dip, or hydrologic divide) to prevent transport of sediment using rock.
- Bank and channel armoring may occur when appropriate to provide channel and bank stabilization.
- Armored ford armoring shall be reapplied following use as needed to maintain a permanent crossing.

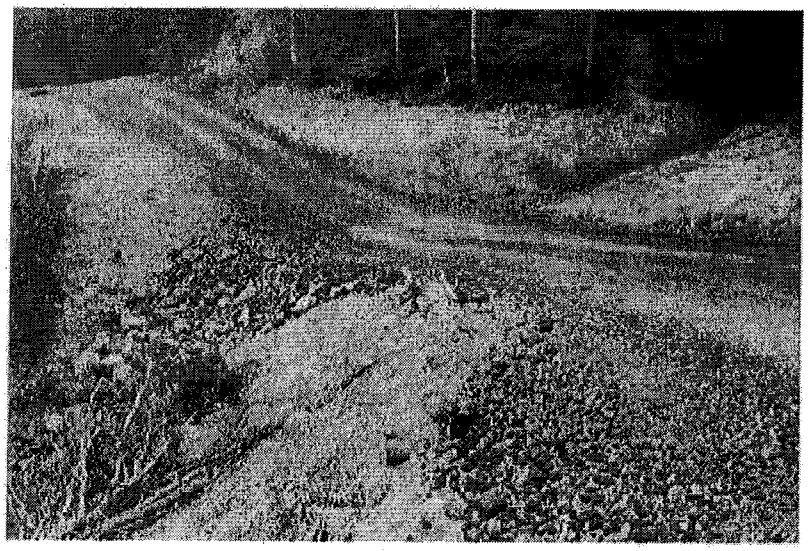


FIGURE 120. *This armored fill crossing of a steep, ephemeral stream was constructed to provide a low maintenance crossing. The crossing has been deeply dipped to reduce the volume of road fill and to eliminate the potential for stream diversion. The fill slope has been heavily armored through the axis of the crossing to contain flood flows and prevent down-cutting. Armored fills cannot be used on fish bearing streams.*

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BMPs and Diagrams

BMP: Armored Ford [Fill] (Cont.)

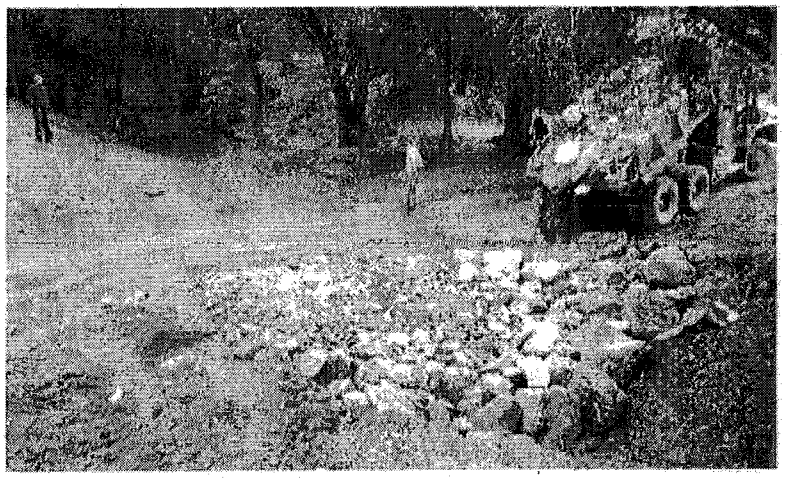
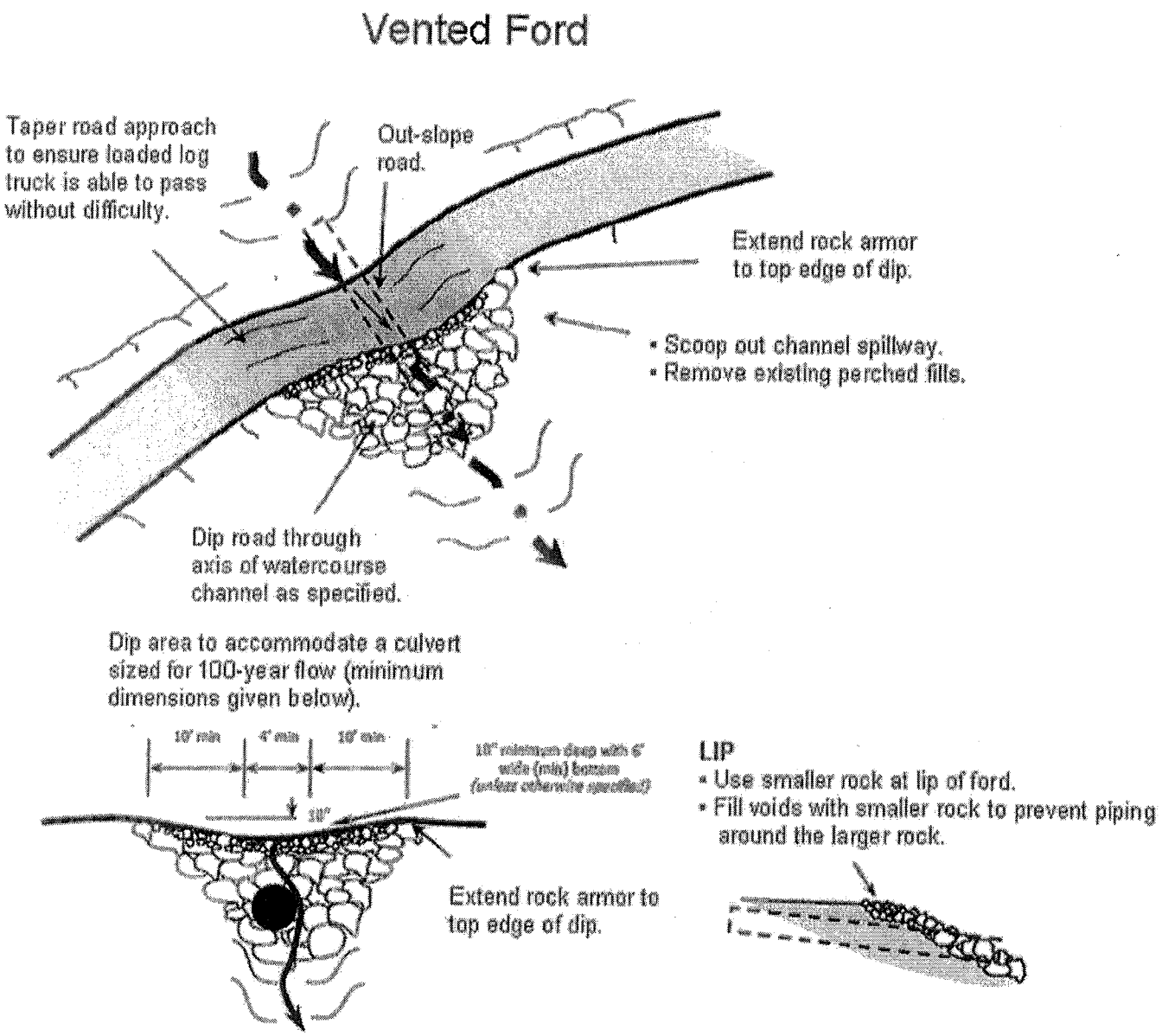


FIGURE 121D. *Well graded rock armor is then installed into the structure and spread across the breadth of the U-shaped stream crossing, and about one-third the way up the roadbed, so that streamflow will only flow over or come in contact with resistant armor material. The armor must be spread and compacted across the design width of the expected flood flow channel width so peak flows will not flank the armored structure.*

FIGURE 121E. *Two weeks after this armored fill was constructed, a storm flow event occurred and the structure maintained its function and integrity. The road approaches had not yet been compacted or surfaced with road rock.*

FIGURE 121F. *The same armored fill as it appeared after the first winter flood flows. No maintenance was required to reopen the road. It is also clear that no stream diversion is possible at this stream crossing site, and the volume of fill within the crossing has been reduced to the minimum amount needed to maintain a relatively smooth driving surface on this low volume road.*

BMP: Vented Ford



BMP: Permanent Crossing Decommissioning Specifications

- 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.
- 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.
- Bank and channel armoring may occur when appropriate to provide channel and bank stabilization.

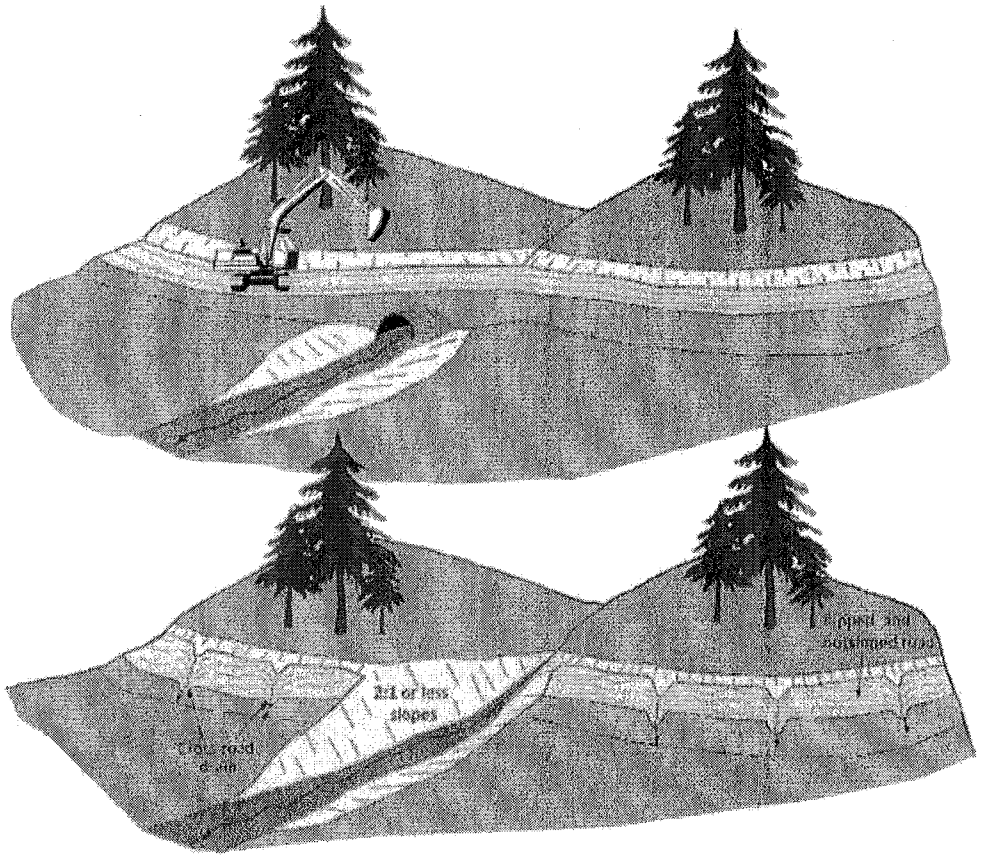


FIGURE 263. *On roads that are to be closed (decommissioned), all stream crossing culverts and fills should be removed. Stream crossing excavations are best performed using an excavator. The original channel should be excavated and exhumed down to the former streambed, with a channel width equal or greater 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 fall and enter the stream.*

BMP: 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 sideslopes 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 sideslopes.

BMP: Waterbar Construction

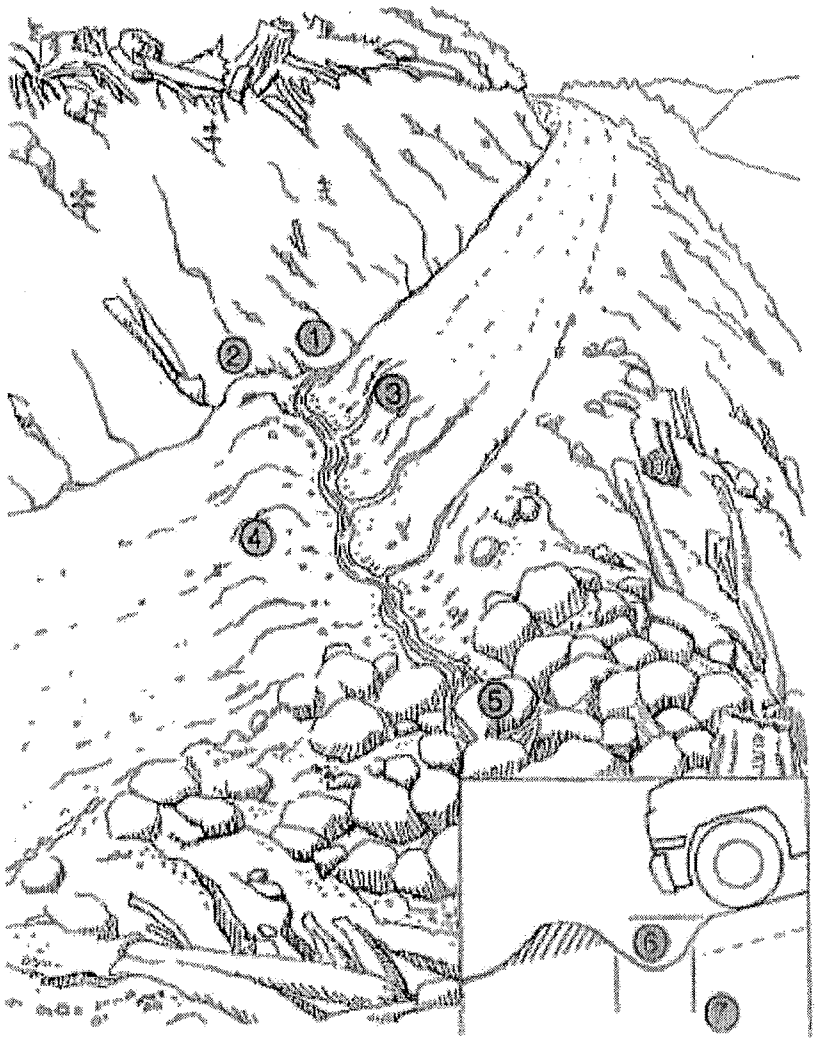


FIGURE 40. *Waterbars are constructed on unsurfaced forest and ranch roads that will have little or no traffic during the wet season. The waterbar should be extended to the cutbank to intercept all ditch flow (1) and extend beyond the shoulder of the road. A berm (2) must block and prevent ditch flow 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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BMP: Rolling Dip

- Rolling dips are drainage structures designed to capture and discharge surface water collected on road surfaces and in inside ditches at a specific location.
- The road shall dip into and out of the rolling dip to eliminate the possibility of water flowing along the road surface or in an inside ditch to bypass the dip structure.
- The rolling dip shall be constructed with clean native materials.
- The rolling dips outlet may be armored to resist downcutting and erosion.
- Do not discharge rolling dips into swales that show signs of instability or active landsliding.
- If the rolling dip is designed to divert both road surface and ditch runoff, block the down-road ditch with compacted fill.

BMP: Rocked Rolling Dip

- Rocked Rolling dips are drainage structures designed to capture and discharge surface water collected on road surfaces and in inside ditches at a specific location.
- The road shall dip into and out of the rolling dip to eliminate the possibility of water flowing along the road surface or in an inside ditch to bypass the dip structure.
- The rocked rolling dips inlet and outlet shall be armored to resist downcutting and erosion.
- The entire length of the rocked rolling dip shall be rock armored to a minimum of 5-feet from the centerline of the dip.
- If a keyway is necessary, the rocked rolling dip keyway shall be constructed at the base of the dip and shall be of sufficient size, depth, and length to support materials used in the rocked rolling dip construction back up to the road crossing interface.
- Do not discharge rolling dips into swales that show signs of instability or active landsliding.
- If the rolling dip is designed to divert both road surface and ditch runoff, block the down-road ditch with compacted fill.
- The rolling dip must be drivable and not significantly inhibit traffic and road use.

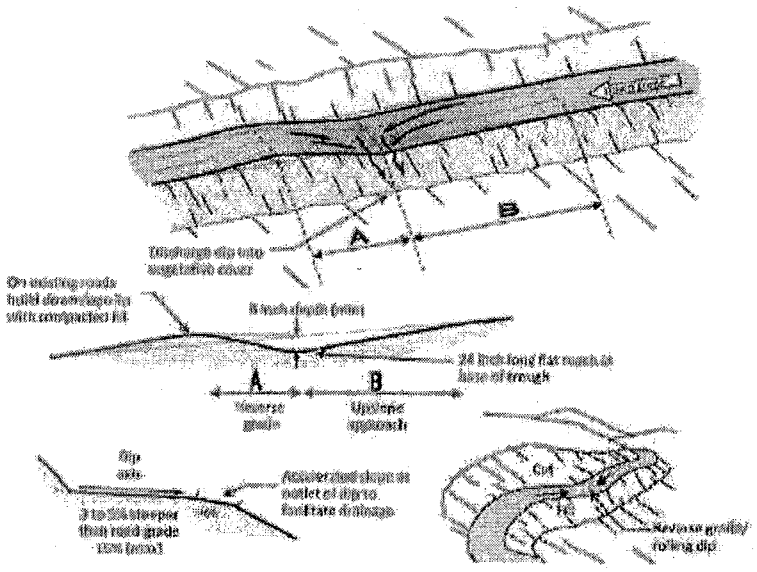

FIGURE 34. *A classic Type I rolling dip, where the excavated up-road approach (B) to the rolling dip is several percent steeper than the approaching road and extends for 60 to 80 feet to the dip axis. The lower side of the structure reverses grade (A) over approximately 10 feet or more, and then falls down to rejoin the original road grade. The dip must be deep enough that it is not obliterated by normal grading, but not so deep that it is difficult to negotiate or a hazard to normal traffic. The outward cross-slope of the dip axis should be 3% to 6% greater than the up-road grade (B) so it will drain properly. The dip axis should be out-sloped sufficiently to be self-cleaning, without triggering excessive downcutting or sediment deposition in the dip axis (Modified from: Best, 2013).*

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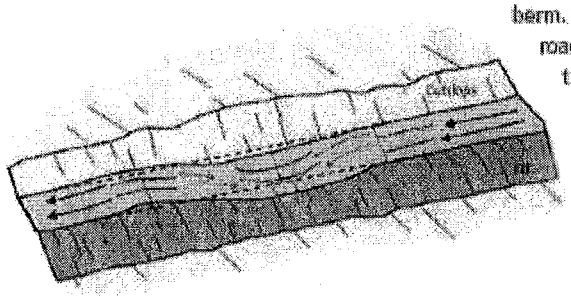
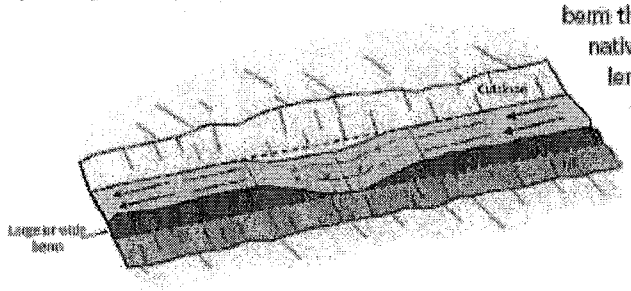
BMP: Rolling Dip and Rocked Rolling Dip (Cont.)

Type 1 Rolling Dip
(Standard)



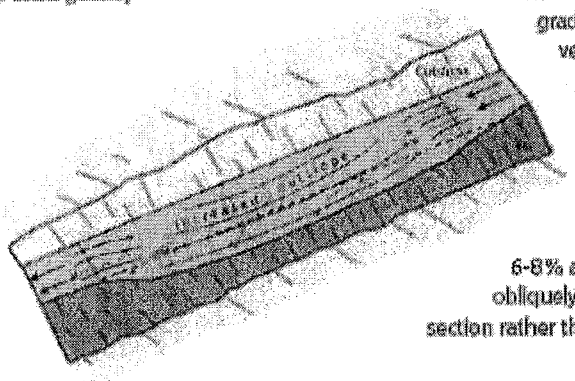
Type 1 rolling dips are used where road grades are less than about 12-14% and road runoff is not confined by a large through cut or berm. The axis of the dip should be perpendicular to the road alignment and sloped at 3-4% across the road tread. Steep roads will have longer and more abrupt dip dimensions to develop reverse grade through the dip axis. The road tread and/or the dip outlet can be rocked to protect against erosion, if needed.

Type 2 Rolling Dip
(Through-cut or thick berm road reaches)



Type 2 rolling dips are constructed on roads up to 12-14% grade where there is a through cut up to 3 feet tall, or a wide or tall berm that otherwise blocks road drainage. The berm or native through cut material should be removed for the length of the dip, or at least through the axis of the dip, to the extent needed to provide for uninterrupted drainage onto the adjacent slope. The berm and slope material can be excavated and endhauled, or the material can be sidecast onto native slopes up to 45%, provided it will not enter a stream.

Type 3 Rolling Dip
(Steep road grade)



Type 3 rolling dips are utilized where road grades are steeper than about 12% and it is not feasible to develop a reverse grade that will also allow passage of the design vehicle (steep road grades require more abrupt grade reversals that some vehicles may not be able to traverse without bottoming out).

Instead of relying on the dip's grade reversal to turn runoff off the roadbed, the road is built with an exaggerated outslope of 6-8% across the dip axis. Road runoff is deflected obliquely across the dip axis and is shed off the outsloped section rather than continuing down the steep road grade.

FIGURE 26. *Rolling dip types*

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BMP: Lead out ditch

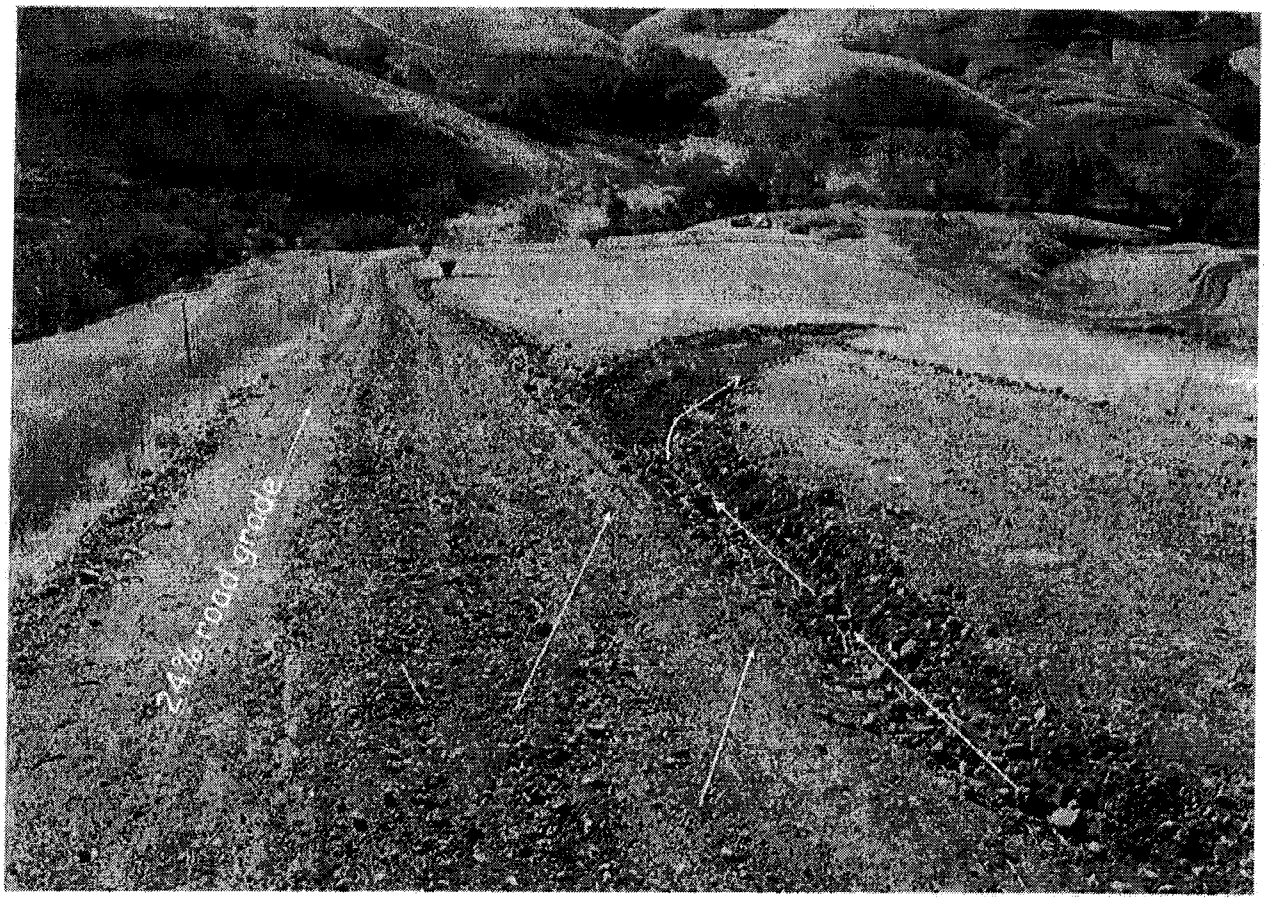

FIGURE 55. *Steep roads that go straight up or down a hillside are very difficult to drain. This steep, fall line road developed a through cut cross section that was drained using lead out ditches to direct runoff off the road and onto the adjacent, vegetated hillside. The road was "outsloped" to drain runoff to the right side, and the lead out ditch was built slightly steeper than the road grade, to be self-cleaning. Four lead out ditches have been constructed at 100-foot intervals to the bottom of the hillside.*

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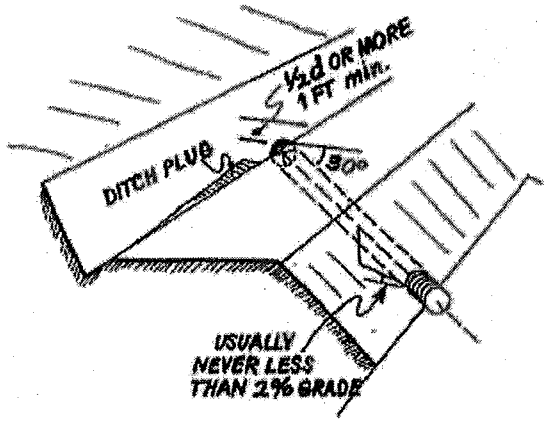
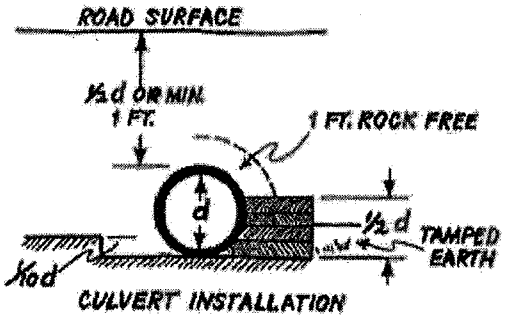
BMP: Ditch Relief Culvert

- Install ditch relief culverts at an oblique (typically 30 degree) angle to the road so that ditch flow is not forced 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 install a downspout on the outlet to carry the culverted flow to the base of the fillslope.
- Downspouts longer than 20 feet should be secured to the hillslope for stability.
- Ditch relief culverts should not carry excessive flow such that downcutting of the ditchline or gullying below the outlet occur.
- Do not discharge flows from ditch relief culverts onto unstable fill or active landslides.
- If the ditch is on an insloped or crowned road, consider using outsloping to drain the road surface. The ditch and the ditch relief culvert would then convey only spring flow from the cutbanks and hillslope runoff, and not turbid runoff from the road surface.





HANDBOOK FOR FOREST, RANCH AND RURAL ROADS

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: Ditch Relief Culvert (Cont.)

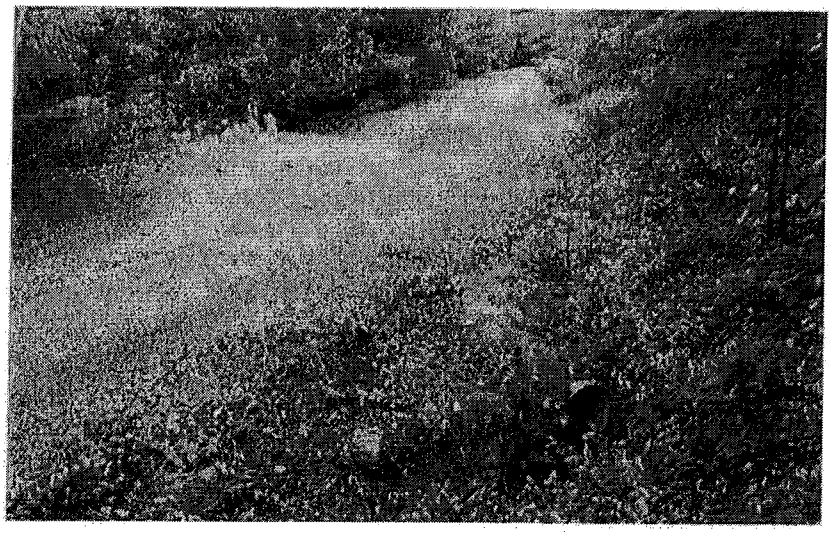


FIGURE 39.
Waterbars are often used to drain surface runoff from seasonal, unsurfaced roads. Because they are easily broken down by vehicles, waterbars are only used on unsurfaced roads where there is little or no wet weather traffic. In this photo, a waterbar and ditch relief culvert are used to drain all road surface and ditch runoff from the insloped road prism.

HANDBOOK FOR FOREST, RANCH AND RURAL ROADS

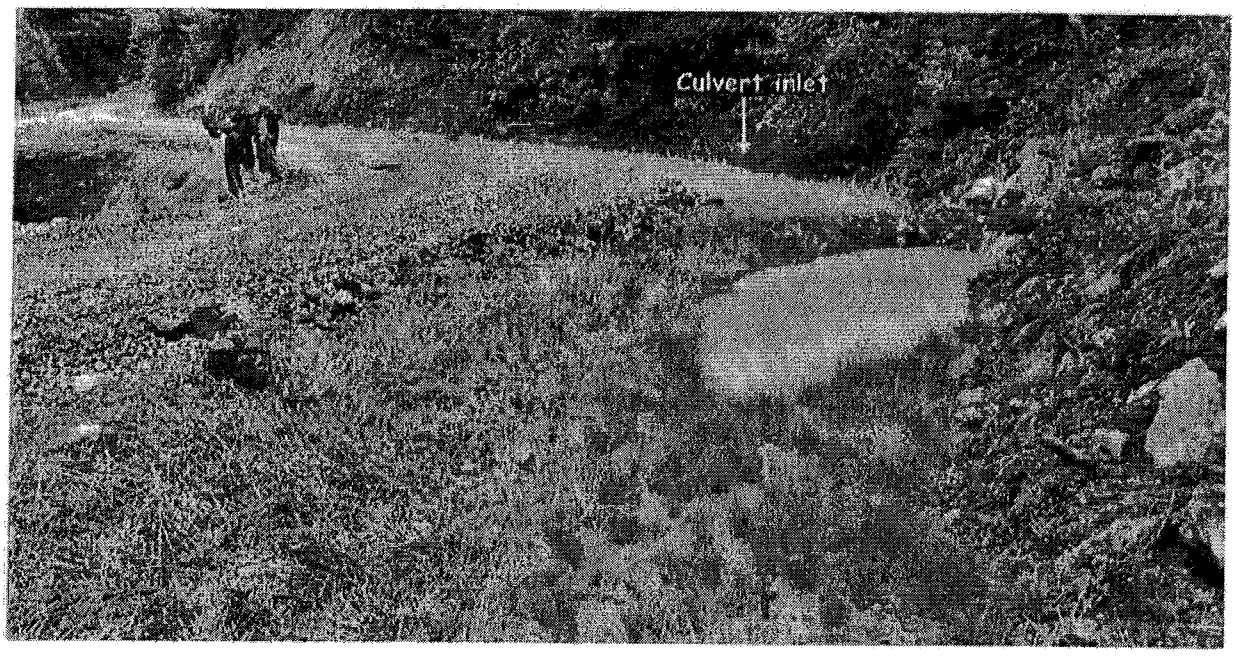


FIGURE 23B. *Traffic and surface runoff from graveled roads often produces surface erosion, turbid runoff and fine sediment transport that can be delivered to streams. Where ditches can't be eliminated, sediment traps and roadside settling basins can be installed to capture and remove most of the eroded sediment. This settling basin has been constructed along the inside ditch just before a stream crossing culvert inlet (see arrow). Eroded sediment from the road and ditch are deposited in the basin before flow is released to the stream. Fine sediments have filled about 1/3 of this basin and vegetation is now growing. Sediment basins require periodic maintenance to maintain their storage capacity.*

HANDBOOK FOR FOREST, RANCH AND RURAL ROADS

BMP: Storage Bladders

- Location for storage bladder must be sited and planned as to minimize the potential for impacts due to rolling and/or failure. Storage bladders should be stored on flat slopes where stability will not be affected.
- If bladders are stored on slopes the potential for rolling must be assessed and if necessary containment or anchors installed. Options to mitigate the potential for rolling may include a fence, dirt berm, or a tethered anchor.
- Secondary containment is recommended in the form of a dirt berm, containment pit or impermeable material with skeletal support. Dirt berms shall be sculpted to a maximum 1:2 slope ratio. The containment should be capable of holding the contents of the bladder. At the least, secondary containment should be designed to slow the initial force of a failure.
- Bladders should be monitored consistently throughout their use to prevent failure. Inspections for structural weaknesses and other risks that may cause failure should occur a minimum of once per month.

This is an example of a containment pit which will assist in mitigating the impacts if this storage bladder failed.

BMP: Cultivation Site Restoration

- Remove all cultivation and associated materials from designated cultivation site.
  - This includes plant mass, root balls, potting containers, cultivation medium and any materials associated with the preparation, cultivation, and harvest of commercial cannabis.
  - Cultivation medium removed from the site shall be stored/disposed of in compliance with Order conditions related to spoils management.
- All disturbed and/or unstable slopes shall be stabilized and returned to pre-project conditions.
  - Slopes shall be contoured as close as feasible to natural grade and aspect.
  - Temporary erosion control shall be applied to prevent sediment run-off.
- Soil exposed as a result of project work, soil above rock riprap, and interstitial spaces between rocks shall be revegetated with native species by live planting, seed casting, or hydroseeding prior to the rainy season of the year work is completed.
  - Native plants characteristic of the local habitat shall be used for revegetation when implementing and maintaining cleanup/restoration work in riparian and other sensitive areas.
  - Native forbes and gramminoids shall be planted to replace sediment stabilization, sediment filtration and nutrient filtration
  - Native trees and shrubs shall be planted to replace bank stabilization, inputs of large woody debris and temperature control within riparian areas.
  - Restoration of the quality/health of the riparian stand shall promote: 1) shade and microclimate controls; 2) delivery of wood to channels, 3) slope stability and erosion control, 4) ground cover, and 5) removal of excess nutrients.

CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE
REGION 1 – NORTHERN REGION
619 Second Street
Eureka, CA 95501

STREAMBED ALTERATION AGREEMENT
NOTIFICATION No. 1600-2017-0156-R1
Unnamed Tributaries to Blue Slide Creek, Tributary to the Mattole River and the Pacific Ocean

Mr. Georgi Stoyanov
Stoyanov Water Diversions and Stream Crossings Project
9 Encroachments

This Streambed Alteration Agreement (Agreement) is entered into and between the California Department of Fish and Wildlife (CDFW) and Mr. Georgi Stoyanov (Permittee).

RECITALS

WHEREAS, pursuant to Fish and Game Code (FGC) section 1602, the Permittee initially notified CDFW on March 23, 2017, that the Permittee intends to complete the project described herein.

WHEREAS, pursuant to FGC section 1603, CDFW has determined that the project could substantially adversely affect existing fish or wildlife resources and has included measures in the Agreement necessary to protect those resources.

WHEREAS, the Permittee has reviewed the Agreement and accept its terms and conditions, including the measures to protect fish and wildlife resources.

NOW THEREFORE, the Permittee agrees to complete the project in accordance with the Agreement.

PROJECT LOCATION

The project to be completed is located within the Blue Slide Creek watershed, approximately 1.1 miles northeast of the town of Ettersburg, County of Humboldt, State of California. The project is located in Section 6, T4S, R2E, Humboldt Base and Meridian; in the Ettersburg U.S. Geological Survey 7.5-minute quadrangle; Assessor's Parcel Number 221-201-07; latitude 40.149 N and longitude 123.989 W at the parcel center.

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.

MEASURES TO PROTECT FISH AND WILDLIFE RESOURCES

1. Administrative Measures

The Permittee shall meet each administrative requirement described below.

1.1 Documentation at Project Site. The Permittee shall make the Agreement, any extensions and amendments to the Agreement, and all related notification materials and California Environmental Quality Act (CEQA) documents, readily available at the project site at all times and shall be presented to CDFW personnel, or personnel from another state, federal, or local agency upon request.

1.2 Providing Agreement to Persons at Project Site. The Permittee shall provide copies of the Agreement and any extensions and amendments to the Agreement to all persons who will be working on the project at the project site on behalf of the Permittee, including but not limited to contractors, subcontractors, inspectors, and monitors.

1.3 Adherence to Existing Authorizations. All water diversion facilities that the Permittee owns, operates, or controls shall be operated and maintained in accordance with current law and applicable water rights.

1.4 Change of Conditions and Need to Cease Operations. If conditions arise, or change, in such a manner as to be considered deleterious by CDFW to the stream or wildlife, operations shall cease until corrective measures approved by CDFW

2.6 Water Management Plan. The Permittee shall submit a Water Management Plan that describes how forbearance will be achieved under this Agreement. The Water Management Plan shall include details on water storage, water conservation, or other relevant material to maintain irrigation needs in coordination with forbearance and bypass flow requirements. The Water Management Plan shall include a brief narrative describing water use on the property, photographs to support the narrative, and water use calculations to ensure compliance with this Agreement. The report shall be submitted to CDFW in accordance with the reporting measures described below.

2.7 Water Diversion Infrastructure.

2.7.1 Unauthorized materials. No polluting materials (e.g., particle board, plastic sheeting, bentonite) shall be used to construct or screen, or cover the diversion intake structure.

2.7.2 Intake Screening.

2.7.2.1 A water intake screen shall be securely attached (e.g., threaded or clamped) to any intake line and have a minimum wetted area of 0.25 square feet and a minimum open area of 27%.

2.7.2.2 A water intake screen with round openings shall not exceed 3/32-inch diameter; a screen with square openings shall not exceed 3/32-inch measured diagonally; and a screen with slotted openings shall not exceed 0.069 inches in width. Slots must be evenly distributed on the screen area.

2.7.2.3 The water intake screen may be constructed of any rigid material, perforated, woven, or slotted. Stainless steel or other corrosion-resistant material is recommended to reduce clogging due to corrosion.

2.8 Aquatic Species Passage. The water diversion structures shall be designed, constructed, and maintained such that they do not constitute a barrier to upstream or downstream movement of aquatic life.

2.9 Water Conservation. The Permittee shall make best efforts to minimize water use, and to follow best practices for water conservation and management.

2.10 Water Storage Maintenance. Storage tanks shall have a float valve to shut off the diversion when tanks are full to prevent overflow from being diverted when not needed. The Permittee shall install any other measures necessary to prevent overflow of tanks resulting in more water being diverted than is used.

2.17 Excavated Fill. Excavated fill material shall be placed in 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.

2.18 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.

2.19 Culvert Installation.

2.19.1 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.

2.19.2 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).

2.19.3 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.

2.19.4 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.

2.19.5 Permanent culverts shall be sized to accommodate the estimated 100-year flood flow [i.e. ≥1.0 times the width of the bankfull channel width or the 100-year flood size, whichever is greater], including debris, culvert embedding, and sediment loads.

To CDFW:

Department of Fish and Wildlife
Northern Region
619 Second Street
Eureka, California 95501
Attn: Lake and Streambed Alteration Program
Notification #1600-2017-0156-R1

LIABILITY

The Permittee shall be solely liable for any violation of the Agreement, whether committed by the Permittee or any person acting on behalf of the Permittee, including its officers, employees, representatives, agents or contractors and subcontractors, to complete the project or any activity related to it that the Agreement authorizes.

This Agreement does not constitute CDFW's endorsement of, or require the Permittee to proceed with the project. The decision to proceed with the project is the Permittee's alone.

SUSPENSION AND REVOCATION

CDFW may suspend or revoke in its entirety this Agreement if it determines that the Permittee or any person acting on behalf of the Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, is not in compliance with the Agreement.

Before CDFW suspends or revokes the Agreement, it shall provide the Permittee written notice by certified or registered mail that it intends to suspend or revoke. The notice shall state the reason(s) for the proposed suspension or revocation, provide the Permittee an opportunity to correct any deficiency before CDFW suspends or revokes the Agreement, and include instructions to the Permittee, if necessary, including but not limited to a directive to immediately cease the specific activity or activities that caused CDFW to issue the notice.

ENFORCEMENT

Nothing in the Agreement precludes CDFW from pursuing an enforcement action against the Permittee instead of, or in addition to, suspending or revoking the Agreement.

Nothing in the Agreement limits or otherwise affects CDFW's enforcement authority or that of its enforcement personnel.

EXTENSIONS

In accordance with FGC section 1605(b), the Permittee may request one extension of the Agreement, provided the request is made prior to the expiration of the Agreement's term. To request an extension, the Permittee shall submit to CDFW a completed CDFW "Request to Extend Lake or Streambed Alteration" form and include with the completed form payment of the extension fee identified in CDFW's current fee schedule (see Cal. Code Regs., tit. 14, § 699.5). CDFW shall process the extension request in accordance with FGC 1605(b) through (e).

If the Permittee fails to submit a request to extend the Agreement prior to its expiration, the Permittee must submit a new notification and notification fee before beginning or continuing the project the Agreement covers (FGC section 1605(f)).

EFFECTIVE DATE

The Agreement becomes effective on the date of CDFW's signature, which shall be: 1) after the Permittee signature; 2) after CDFW complies with all applicable requirements under the California Environmental Quality Act (CEQA); and 3) after payment of the applicable FGC section 711.4 filing fee listed at http://www.wildlife.ca.gov/habcon/ceqa/ceqa_changes.html.

TERM

This Agreement shall **expire five years** from date of execution, unless it is terminated or extended before then. All provisions in the Agreement shall remain in force throughout its term. The Permittee shall remain responsible for implementing any provisions specified herein to protect fish and wildlife resources after the Agreement expires or is terminated, as FGC section 1605(a)(2) requires.

AUTHORITY

If the person signing the Agreement (signatory) is doing so as a representative of the Permittee, the signatory hereby acknowledges that he or she is doing so on the Permittee's behalf and represents and warrants that he or she has the authority to legally bind the Permittee to the provisions herein.

AUTHORIZATION

This Agreement authorizes only the project described herein. If the Permittee begins or completes a project different from the project the Agreement authorizes, the Permittee may be subject to civil or criminal prosecution for failing to notify CDFW in accordance with FGC section 1602.

Water Management Plan

NOTIFICATION NO. 1600-2017-0156-R1

The Landowner currently has three points of diversions (POD), POD 1, POD 2 and POD 3. POD 1 is a concrete cistern located in an unnamed Class III watercourse tributary to Blue Side Creek. The water is plumbed through a 1-inch poly pipe and fed into storage tanks during the winter months. POD 2 was located in a spring upstream of a Class III watercourse, and use has been discontinued. POD 3 is located in a spring upstream of a Class III watercourse tributary to Blue Slide creek. Water is diverted through ¾ inch poly pipe to numerous storage tanks on the property.

The Landowner has two permitted surface diversions on the property (STREAMBED ALTERATION AGREEMENT NOTIFICATION NO. 1600-2017-0156-R1). The permit allows for a combined total of no more than 150 gallons of water per day at a maximum rate of 3 gallons per minute during the low flow season of May 15 to October 15.

The Landowner currently has 16,000 ft^2 of cannabis cultivation that they hand water at agronomic rates. The estimated water use annually is 210,000 gallons, and the total amount of water storage on the property is 50,000 gallons. The Landowner is currently unable to store enough water to comply with the Agreement and meet the requirements of the forbearance period. However, more storage tanks will be installed this year and the Landowner is planning on having enough storage to meet all requirement of their Agreement.

Addendum 8M – Coordinates (NAD 83 DECIMAL DEGREES)

POD #1: -123.9870362°; 40.14822798°
POD #2: -123.9871150°; 40.14863931° (Non-notification point)
POD #3: -123.9866317°; 40.14877521°
CROSSING 1: -123.9899629°; 40.14799132°
CROSSING 2: -123.9894944°; 40.14765213°
MAP POINT 3: -123.9895631°; 40.14748977°
CROSSING 4: -123.9895494°; 40.14725858°
CROSSING 5: -123.9892564°; 40.14737638°
CROSSING 6: -123.9885097°; 40.14699408°
CROSSING 7: -123.9876380°; 40.14733227°

Addendum 10

This notification consists of two Point of Diversions and seven existing stream crossing upgrades as described below. All notification points were visited and evaluated by CDFW (Scott Bauer and Ryan Bourque) on December 15, 2016. Please note that the property was purchased on January 23, 2017 and the Applicant has not diverted water from any of the PODs to date. Consequently, a Division of Water Rights Initial Statement of Water Diversion and Use per Water Code Sections 5100-5107 has *not* been filed for 2016.

POD #1: This POD is located in an unnamed Class III watercourse tributary to Blue Slide Creek. The diversion structure consists of a 12-inch diameter by 1-foot deep cylindrical concrete cistern placed directly in the stream channel. The cistern is presently plumbed with 1-inch ploy pipe feeding two 5,000, 2,500, 1,550, and 500 gallon water tanks. Because this stream dries up in late spring, the diversion has been historically used for diversion to storage in the winter months. This notification proposes diversion to storage for domestic and agricultural use October 16 through May 14 with a forbearance period of May 15-October 15 beginning in 2017. If the Applicant diverts and stores surface water from this POD per the conditions of an approved 1600 Agreement from CDFW, then he will pursue an appropriative water right in the form of a Small Irrigation Use Registration (once available). Per the CDFW pre-consultation, the Applicant shall remove all tanks, diversion infrastructure, and any other stored material located directly adjacent to the stream channel, and relocate outside of the SMA, or as far away from the stream channel as possible.

POD #2: This POD is located in spring located upslope of a Class III watercourse tributary to Blue Slide Creek. The diversion structure consists of a 1-inch PVC pipe with screened inlet. During the CDFW consultation, the Applicant agreed to discontinue the use of this diversion and remove all associated infrastructure, particularly the two downstream water tanks that are located approximately 100 feet south in a swale feature, which is tributary to the Class III watercourse.

POD #3: This POD is located in spring located upslope of a Class III watercourse tributary to Blue Slide Creek. The diversion structure consists of a 3/4-inch poly pipe with screened inlet. Water is diverted down to the numerous tanks mapped and pictured. This notification proposes direct diversion for domestic use at no more than 200 gallons of water per day.

Addendum 10 (Cont.)

Crossing #6: 12-inch diameter metal culvert draining the inside ditch that extends up to Crossing #7's inlet. This culvert is adequately sized but requires the inlet to be cleaned out, and the placement of 2-3 yards^3 of rip-rap at the outlet. If infeasible to adequately place the rock from the road, the culvert may be down-spouted past the base of the fillslope, but rock armoring at the outlet is still required for energy dissipation to minimize erosion of the stream channel. Overall disturbance is 35 ft^2 (7-feet length and 5 feet width).

Crossing #7: 12-inch diameter metal culvert draining the inside ditch that extends up to Applicant's house and developed area. This culvert is adequately sized but requires the inlet to be cleaned out, and the placement of 2-3 yards^3 of rip-rap at the outlet. If infeasible to adequately place the rock from the road, the culvert may be down-spouted past the base of the fillslope, but rock armoring at the outlet is still required for energy dissipation to minimize erosion of the stream channel. Overall disturbance is 35 ft^2 (7-feet length and 5 feet width).

All roads and developed sites were assessed for compliance with CDFW, which includes jurisdictional 1600 sites and potential California Fish and Game Code Section 5650 violations. The Applicant will be enrolling into *California Regional Water Quality Control Board North Coast Region Order No. 2015-0023, Waiver of Waste Discharge Requirements and General Water Quality Certification for Discharges of Waste Resulting from Cannabis Cultivation and Associated Activities or Operations with Similar Environmental Effects in the North Coast Region.* Following enrollment, TRC will be conducting a thorough field assessment to evaluate compliance with the Standard Conditions per Provision I.B of Order No. R1-2015-0023. Based upon my initial evaluation conducted in association with this notification, the assessment conducted for the preparation of the water resource protection plan is not expected to include any sites that are jurisdictional to CDFW per the California Fish and Game Code 1600 that should otherwise be included in this notification.

Remediation Plan

As described above, there are six watercourse crossings and a rocked lined ditch that are remediation. The combined disturbance to remediate these sites is 905 ft^2. Per Item II of Attachment E, the Applicant is in the process of preparing an application to be submitted to Humboldt County for Commercial Cultivation, Processing, Manufacturing and Distribution of Cannabis for medical use. Green Road Consulting is handling the Applicant's county permit, and TRC is preparing CDFW 1600 permit and Water Quality Waste Discharge permit. As of the date of submission of this notification, the Applicant has not enrolled in *California Regional Water Quality Control Board North Coast Region Order No. 2015-0023, Waiver of Waste Discharge Requirements and General Water Quality Certification for Discharges of Waste Resulting from Cannabis Cultivation and Associated Activities or Operations with Similar Environmental Effects in the North Coast Region*

Addendum 10 – Pictures

Picture 2: POD #1 looking upstream. Photo date 12-2-2016.

Addendum 10 – Pictures

Picture 4: POD #2. During the CDFW consultation, the Applicant agreed to discontinue the use of this diversion and remove all associated infrastructure. Photo date 12-2-2016.

Addendum 10 – Pictures

Picture 6: POD #2 looking downstream. Photo date 12-2-2016.

Addendum 10 – Pictures

Picture 8: POD #3 looking upstream. Photo date 12-2-2016.

Addendum 10 – Pictures (Cont.)

Picture 10: Inlet of Crossing #1. The small pond is in the foreground. Photo date 12-2-2016.

Addendum 10 – Pictures (Cont.)

Picture 12: Inlet of Crossing #2. Photo date 12-2-2016.

Addendum 10 – Pictures (Cont.)

Picture 14: Map Point #3. Picture taken from outlet of Crossing #2 looking southerly to the inlet of Crossing #4. The rock-lined ditch shall be constructed east (photo left) of the access road shown above. Photo date 12-2-2016.

Addendum 10 – Pictures (Cont.)

Picture 16: Crossing #4 inlet. The inlet of the 12-inch diameter metal culvert is partially buried and in nearly indiscernible in the lower left hand corner of photo. Photo date 12-16-2016.

Addendum 10 – Pictures (Cont.)

Picture 18: Crossing #5 inlet, which is nearly plugged with organic debris. Photo date 12-16-2016.

Addendum 10 – Pictures

Picture 20: Inlet of Crossing #6. Photo date 8-31-2016.

Addendum 10 – Pictures

Picture 21: Inlet of Crossing #7. Photo date 8-31-2016.

Addendum 10 – Pictures

Picture 23: 2,500, 1,550, and 500 gallon water tanks clustered near the Class III stream channel. CDFW recommends that the Applicant shall remove all tanks, diversion infrastructure, and any other stored material located directly adjacent to the stream channel, and relocate outside of the SMA, or as far away from the stream channel as possible. Photo date 12-2-2016.

Addendum 10 – Pictures

Picture 25: 5,000 and 1,350 gallon water tanks located approximately 100 feet south of POD #2. During the CDFW consultation, the Applicant agreed to discontinue the use of POD #2 and remove all associated infrastructure, particularly these two water tanks that are located in a swale feature, which is tributary to the Class III watercourse. Photo date 12-2-2016.

Addendum 10 – Pictures

Picture 27: Lower or southern cultivation site. Photo date 12-2-2016.

Addendum 11F – Hydrologic Study

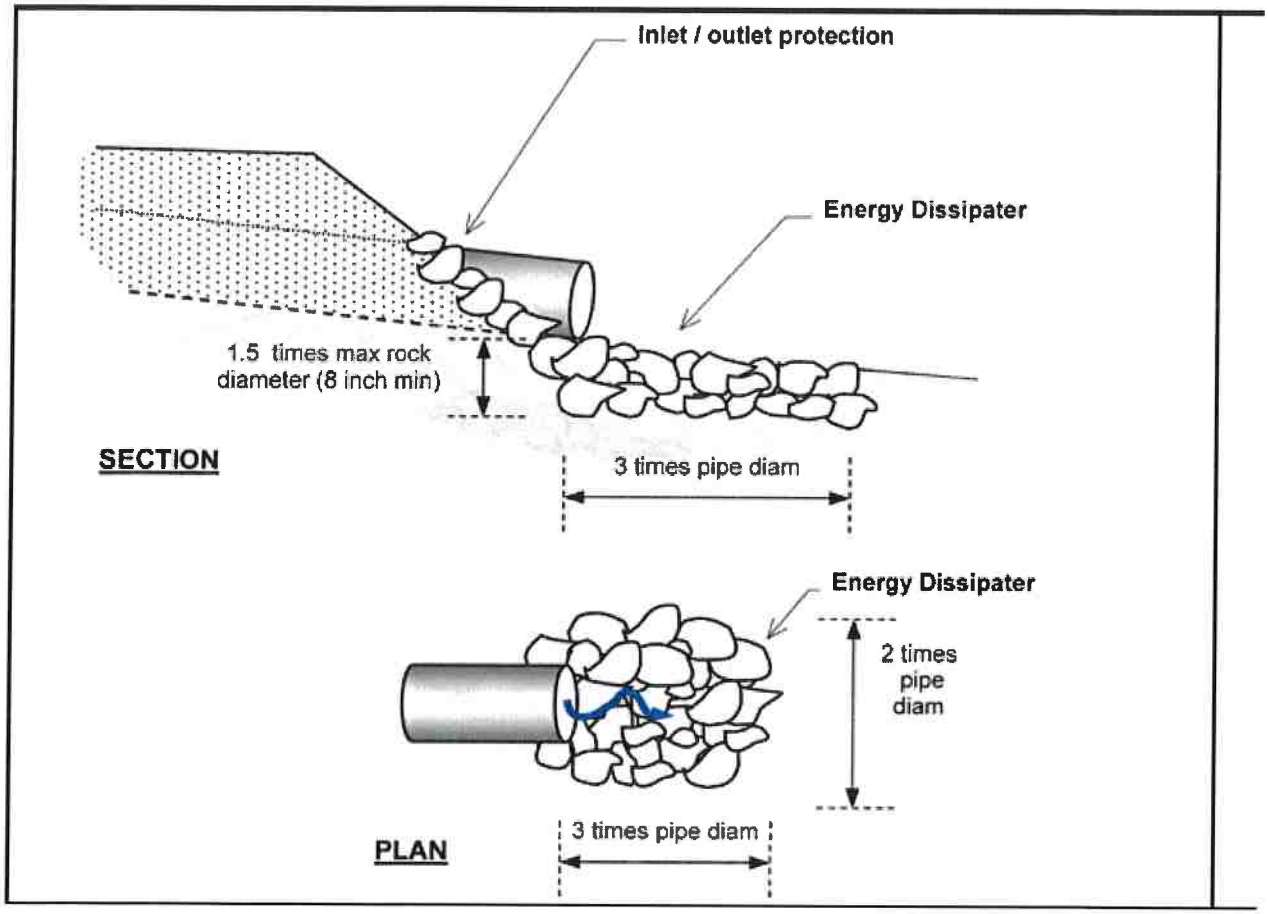
The permanent culvert upgrade has been sized for 100-year flood flow utilizing methods recommended in "*Designing Watercourse Crossings for Passage of 100-year Flood Flows, Wood, and Sediment*". 2004 Peter Cafferata, Thomas Spittler, Michael Wopat, Greg Bundros, and Sam Flanagan. This report recommends that the rational method be limited to watersheds less than 100 acres. The 100-year Return-Period precipitation data is from: http://hdsc.nws.noaa.gov/hdsc/pfds/pfds_map_cont.html?bkmrk=ca

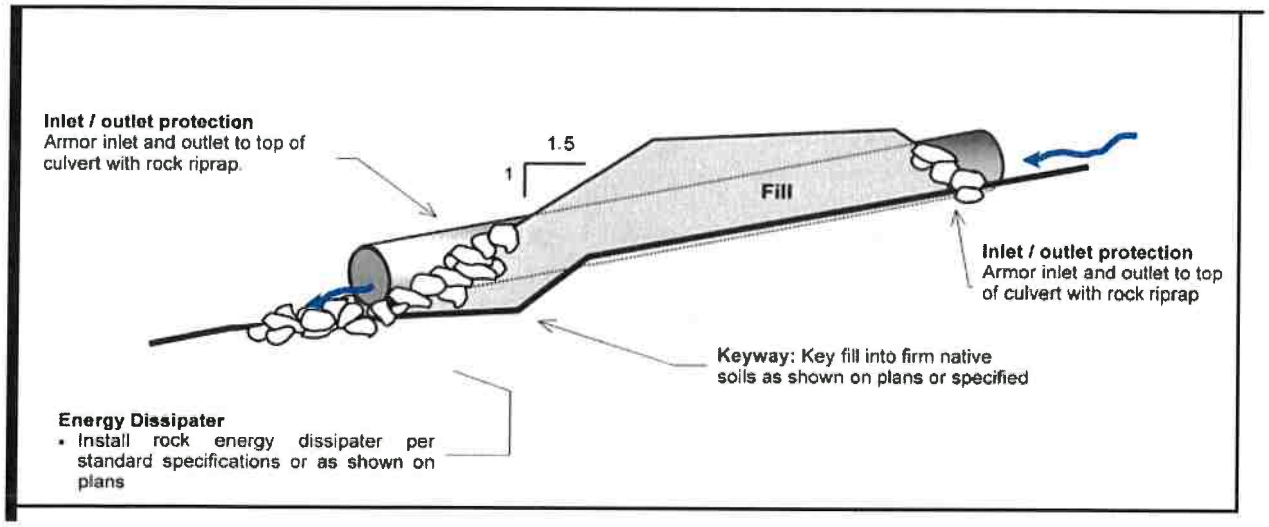
	$T_c = 60((11.9 \times L^3)/H)^{0.385}$				$Q_{100} = CIA$			
No.	Crossing	Channel length (to top of basin) (mi) L	Elevation difference (ft) H	Concentration time (min) Tc	Runoff coefficient C	100-year Return-Period Precipitation (in/hr) I*	Area (acres) A	100-yr flood flow (cfs) Q100
0	*1*				0.4	3.8	1	***1.5***
0	*2*				0.4	3.8	3	***4.6***
0								***0.0***
0	*4*				0.4	3.8	6	***9.1***
0	*5*				0.4	3.8	2	***3.0***
0	*6*				0.4	3.8	1	***1.5***
0	*7*				0.4	3.8	1	***1.5***

HW/D	CU18	CU24	CU30	CU36	CU42	CU48	CU54	CU60	CU72	CU84	CU96
1.0	**5.6**	**11.6**	**20**	**32**	**47**	**66**	**89**	**115**	**180**	**265**	**375**

The recommended minimum culvert size proposed in this notification are based on the premise that the culvert should pass a design flow without allowing the inlet to become submerged. Therefore, the proposed culvert size specified in this 1600 Notification is based upon a headwall height to diameter ratio of 1.

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

- 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.

ATTACHMENT 4

REFERRAL AGENCY COMMENTS AND RECOMMENDATIONS

The project was referred to the following referral agencies for review and comment. Those agencies that provided written comments are checked off.

Referral Agency	Response	Recommendation	Location
Building Inspection Division		No Response	
Division Environmental Health	✓	Approval	On file
Public Works, Land Use Division	✓	Conditional Approval	**Attached**
CAL FIRE	✓	No Comments	**Attached**
California Department of Fish & Wildlife		No Response	**Attached** – Planning staff request for comments
Northwest Information Center	✓	Further Study	On file and confidential
Bear River Band of Rohnerville Rancheria	✓	Conditional Approval	On file and confidential
Intertribal Sinkyone Wilderness Council		No Response	
Southern Humboldt Joint Unified School District		No Response	
North Coast Unified Air Quality Management District		No Response	
Telegraph Ridge Fire Protection District		No Response	
Humboldt County Sheriff	✓	Approved	On file
Humboldt County Agricultural Commissioner		No Response	
Humboldt County District Attorney		No Response	
North Coast Regional Water Quality Control Board		No Response	

DEPARTMENT OF PUBLIC WORKS
COUNTY OF HUMBOLDT
MAILING ADDRESS: 1106 SECOND STREET, EUREKA, CA 95501-0579
AREA CODE 707

ON-LINE
WEB: CO.HUMBOLDT.CA.US

PUBLIC WORKS BUILDING
SECOND & L ST., EUREKA
FAX 445-7409

ADMINISTRATION	445-7491	NATURAL RESOURCES	445-7741
BUSINESS	445-7652	NATURAL RESOURCES PLANNING	267-9540
ENGINEERING	445-7377	PARKS	445-7651
FACILITY MANAGEMENT	445-7493	ROADS	445-7421

CLARK COMPLEX
HARRIS & H ST., EUREKA
FAX 445-7388
LAND USE 445-7205

LAND USE DIVISION INTEROFFICE MEMORANDUM

TO: Liza Welsh, Planner, Planning & Building Department

FROM: Kenneth M. Freed, Assistant Engineer

DATE: 01/31/2020

RE:

Applicant Name	**GEORGE STOYANOV**
APN	**221-201-007**
APPS#	**PLN-11816-CUP**

The Department has reviewed the above project and has the following comments:

☒ The Department's recommended conditions of approval are attached as **Exhibit "A"**.

☐ Additional information identified on **Exhibit "B"** is required before the Department can review the project. **Please re-refer the project to the Department when all of the requested information has been provided.**

☐ Additional review is required by Planning & Building staff for the items on **Exhibit "C"**. **No re-refer is required.**

☐ *Road Evaluation Reports(s)* are required; See **Exhibit "D"**

Note: Prior to requesting an applicant to submit a road evaluation report, verify if the project is exempt from meeting road system performance standards under CCLUO v2.0 sections 313-55.4.6.5.1 and 314-55.4.6.5.1, even if this box is checked.

No re-refer is required.

*Note: Exhibits are attached as necessary.

Additional comments/notes:

Applicant has submitted a road evaluation report, dated 01/14/20 with Part A –Box 2 checked, certifying that the road is equivalent to a road Category 4 standard.

// END //

Exhibit "A"

Public Works Recommended Conditions of Approval

(All checked boxes apply) APPS # 11816

☐ **COUNTY ROADS- FENCES & ENCROACHMENTS:**
All fences and gates shall be relocated out of the County right of way. All gates shall be setback sufficiently from the County road so that vehicles will not block traffic when staging to open/close the gate. In addition, no materials shall be stored or placed in the County right of way.

This condition shall be completed to the satisfaction of the Department of Public Works prior to commencing operations, final sign-off for a building permit, or Public Works approval for a business license.

☐ **COUNTY ROADS- DRIVEWAY (PART 1):**
The submitted site plan is unclear and/or shows improvements that are inconsistent with County Code and/or Department of Public Works policies. The applicant is advised that these discrepancies will be addressed at the time that the applicant applies to the Department of Public Works for an Encroachment Permit. If the applicant wishes to resolve these issues prior to approval of the Planning & Building permit for this project, the applicant should contact the Department to discuss how to modify the site plan for conformance with County Code and or Department of Public Works policies. Notes:

_____

_____

☐ **COUNTY ROADS- DRIVEWAY (PART 2):**
Any existing or proposed driveways that will serve as access for the proposed project that connect to a county maintained road shall be improved to current standards for a commercial driveway. An encroachment permit shall be issued by the Department of Public Works prior to commencement of any work in the County maintained right of way. This also includes installing or replacing driveway culverts; minimum size is typically 18 inches.

- **If the County road has a paved surface at the location of the driveway, the driveway apron shall be paved for a minimum width of 18 feet and a length of 50 feet.**
- **If the County road has a gravel surface at the location of the driveway, the driveway apron shall be rocked for a minimum width of 18 feet and a length of 50 feet.**
- **If the County road is an urban road, frontage improvements (curb, gutter, and sidewalk) shall also be constructed to the satisfaction of the Department. Any existing curb, gutter or sidewalk that is damaged shall be replaced.**

The exact location and quantity of driveways shall be approved by the Department at the time the applicant applies to the Department of Public Works for an Encroachment Permit.

This condition shall be completed to the satisfaction of the Department of Public Works prior to commencing operations, final sign-off for a building permit, or Public Works approval for a business license.

☐ **COUNTY ROADS- DRIVEWAY (PART 3):**
The existing driveway will require substantial modification in order to comply with County Code. The applicant may wish to consider relocating the driveway apron if a more suitable location is available.

☐ **COUNTY ROADS-PARKING LOT- STORM WATER RUNOFF:**
Surfaced parking lots shall have an oil-water filtration system prior to discharge into any County maintained facility.

This condition shall be completed to the satisfaction of the Department of Public Works prior to commencing operations, final sign-off for a building permit, or Public Works approval for a business license.

☒ **COUNTY ROADS- DRIVEWAY & PRIVATE ROAD INTERSECTION VISIBILITY:**
All driveways and private road intersections onto the County Road shall be maintained in accordance with County Code Section 341-1 (Sight Visibility Ordinance).

This condition shall be completed to the satisfaction of the Department of Public Works prior to commencing operations, final sign-off for a building permit, or Public Works approval for a business license.

☒ **COUNTY ROADS- PRIVATE ROAD INTERSECTION: (AT COUNTY MAINTAINED RD)**
Any existing or proposed non-county maintained access roads that will serve as access for the proposed project that connect to a county maintained road shall be improved to current standards for a commercial driveway. An encroachment permit shall be issued by the Department of Public Works prior to commencement of any work in the County maintained right of way.

- **If the County road has a paved surface at the location of the access road, the access road shall be paved for a minimum width of 20 feet and a length of 50 feet where it intersects the County road.**
- **If the County road has a gravel surface at the location of the access road, the access road shall be rocked for a minimum width of 20 feet and a length of 50 feet where it intersects the County road.**

This condition shall be completed to the satisfaction of the Department of Public Works prior to commencing operations, final sign-off for a building permit, or Public Works approval for a business license.

☐ **COUNTY ROADS- ROAD EVALUATION REPORT(S):**
All recommendations in the *Road Evaluation Report(s)* for County maintained road(s) shall be constructed/implemented to the satisfaction of the Public Works Department prior to commencing operations, final sign-off for a building permit, or approval for a business license. An encroachment permit shall be issued by the Department of Public Works prior to commencement of any work in the County maintained right of way.

// END //

We have reviewed the above application and recommend the following (please check one):

- [x] The Department has no comment at this time.
- [ ] Suggested conditions attached.
- [ ] Applicant needs to submit additional information. List of Items attached.
- [ ] Recommend denial.
- [ ] Other comments.

Forester Comments: Date: 1/24/20 Name: Tim Meyers

1/24/2020
AP#11816
APN 221-201-007

Battalion Chief Comments: Date: Name:

Summary:

From:	Meghan Ryan
To:	"Van Hattem, Michael@Wildlife"
Cc:	"Johnson, Cliff"; Cameron R. Purchio
Subject:	APPS #11816 - Georgi Stoyanov - APN: 221-201-007: Hearing Date - November 4, 2021
Date:	Wednesday, October 20, 2021 6:27:00 PM
Attachments:	11816 LSAA 09.18.2017.pdf

Good evening, Michael – I hope al is well. I am reviewing APPS 11816 and I do not see any CDFW comments in the file. The project description is the following:

A Conditional Use Permit for an existing 11,600 square feet (SF) of outdoor cannabis cultivation grown utilizing light deprivation techniques. Propagation up to 1,200 SF will occur within existing greenhouses. Irrigation water is sourced from an existing, permitted well and three registered stream diversions. Estimated annual water use is 164,100 gallons. There is 65,000 gallons of water storage in various hard-sided tanks. Bucking and drying will occur onsite, while other processing will occur offsite at a licensed processing or manufacturing facility. A maximum of three (3) people will be onsite during peak operations. Power is provided by Pacific Gas and Electric Company (PG&E). The applicant also seeks a Special Permit for development within the Streamside Management Area for the continued use and maintenance of the points of diversion.

It appears a Final Agreement was issued for the subject parcel (attached for your reference).

Please let me know if CDFW has any comments or concerns with this project.

Best,
Meghan

Meghan Ryan
Planning Director
LACO Associates
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Advancing the quality of life for generations to come
707 443-5054
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