



Humboldt County Resource Conservation District

5630 South Broadway Eureka, CA 95503
(707) 442-6058 Ext. 5 | info@hcrd.org

ADDENDUM #1

RELEASE DATE: December 16, 2024

PROJECT TITLE: "Greater Willow Creek Wildfire Resilience Project - Shaded Fuel Break Phase 1"

The purpose of this Addendum is to modify the Contract Documents for the subject project. This Addendum shall become part of said Contract Documents.

THE FOLLOWING ITEM REFERS TO THE SCHEDULE

Item 1. REVISION: Replace the Schedule on pages 1 and 2 of the Request for Proposals dated November 15, 2024 with the following:

The HCRCD will conduct a non-mandatory pre-proposal meeting of the Project Areas on ~~November 22~~ December 6, 2024 at 10:30 a.m. The meeting will commence at the Bigfoot Museum parking lot at 38949 Hwy. 299 in Willow Creek, CA. Please contact the HCRCD for detailed directions. All interested parties are requested to R.S.V.P to Program Manager, Katrina Henderson by email at katrina@hcrd.org. Final questions need to be submitted no later than December 11, 2022 at ~~4:00 p.m.~~ **5:00 p.m.** in email format to katrina@hcrd.org. Responses from the pre-proposal meeting to all questions submitted via email will be posted as an addendum to the RFP at the HCRCD website (www.humboldtrcd.org) no later than December 16, 2024 at ~~4:00 p.m.~~ **5:00 p.m.**

THE FOLLOWING ITEMS REFER TO THE SCOPE OF WORK

Item 2. DELETION: Remove the following from Scope of Work on page 3 of the Request for Proposals dated November 15, 2024 as indicated by ~~strike through~~. The section now reads as:

There may also be downed logs that are still merchantable and will require treatment. These treatments include but are not limited to: manufacturing commercial sawlogs, manufacturing firewood logs ~~or cut rounds~~, loading logs onto transportation, contracting transportation, documenting and reporting transportation of material to the HCRCD. In addition to the treatment of slash and cutting of trees, fuels reduction activities will also require removal of ladder fuels, pruning of live trees, rehabilitation of disturbed areas to comply with state standards and laws such as installation of erosion control measures including but not limited to water bars, rolling dips, straw mulch, waddles, slash packing, etc.

Item 3. REVISION: Replace the Tree Felling and Yarding on page 4 of the Request for Proposals dated November 15, 2024 with the following:

1. Tree Felling and Yarding

This includes cutting of live standing trees, fallen dead trees, brush etc. so as to comply with the applicable CALFIRE exemptions that are being utilized for this unit. This also includes yarding of large woody material 4" and larger in diameter to a central designated landing location. Yarding may be accomplished by ground-based tractor methods on slopes less than ~~50%~~ **40%**, or with cable/winchng/manual-based methods on steeper terrain. Ground based mechanical operations may

be conducted on stable roads that have adjacent slopes over ~~50%~~ 40% as directed by the RPF and HCRCO representatives. This also includes manufacturing of saw or firewood logs so that they can be transported to a mill or firewood operation/customer. This also includes all road maintenance such as water barring, erosion control installation, grading and repairing of roads that are excessively damaged by operations.

Item 4. REVISION: Replace Loading and Transportation on page 5 of the Request for Proposals dated November 15, 2024 with the following:

4. Loading and Transportation

This involves the loading of large woody debris in the form of logs, firewood ~~rounds~~-logs etc. onto transportation.

All state laws and regulations such as the Forest Practice Rules, Fire Protection, Water Quality and Wildlife protections, as well as HCRCO stated BMPs shall be followed during conducting of operations on this project.

THE FOLLOWING ITEM REFER TO SCHEDULE OF ITEMS

Item 5. DELETION: Delete the third treatment type from Project Units 1 and 3 from the Schedule of Items on page 15 of the Request for Proposals dated November 15, 2024 as indicated by ~~striketrough~~. The section now reads as:

ITEM NO.	TREATMENT	QUANTITY	UNIT	UNIT PRICE	TOTAL PRICE
1	Patterson Road Shaded Fuel Break Phase 1 - 10 Acres (Figure 1)				
	Felling/Yarding	10	Acres		
	Slash Treatment	10	Acres		
	Herbicide	10	Acres		
	Loading	TBD	Hours		Undetermined
	Transportation	TBD	Hours		Undetermined
2	Kimtu Ridge Shaded Fuel Break Phase 1 - 22 Acres (Figure 2)				
	Felling/Yarding	22	Acres		
	Slash Treatment	22	Acres		
	Herbicide	22	Acres		
	Loading	TBD	Hours		Undetermined
	Transportation	TBD	Hours		Undetermined
3	Bigfoot Subdivision Shaded Fuel Break Phase 1 - 13 Acres (Figure 3)				
	Felling/Yarding	13	Acres		
	Slash Treatment	13	Acres		
	Herbicide	13	Acres		
	Loading	TBD	Hours		Undetermined
	Transportation	TBD	Hours		Undetermined
Total Cost					

Item 6. ADDITION: Add an Addendum Acknowledgement below the Schedule of Items on page 15 of the Request for Proposals dated November 15, 2024 as shown below:

Receipt of the following Addendum is acknowledged:

Addendum #1 issued December 16, 2024: _____.

CONTRACTOR signature

Addendum #1

Greater Willow Creek Wildfire Resilience Project - Shaded Fuel Break Phase 1 RFP

THE FOLLOWING ITEMS ARE INTENDED FOR INFORMATIONAL PURPOSES:

Item 7. BIDDERS' QUESTIONS AND HCRCD RESPONSES:

Timber

1) Will it be clear where merchantable timber is within each project area?

Yes, all material over 6" in diameter will be considered merchantable material.

2) Who owns the timber?

The landowners relinquished ownership of all affected commercial forest products created during the project. HCRCD owns the forest products.

3) What length logs are being hauled to be milled? (different price for various lengths, perhaps put in bid for more than one length)

For conifers, sawlogs typically take 2 foot multiples, not any specific lengths (12'6"-41"). Long logs are ideal (37'-41'). Any preferred lengths for sawlogs, depending on the final location, will be communicated to the CONTRACTOR during the project.

Hardwood lengths will be determined by the equipment used by CONTRACTOR, trucks used to haul, and destination requests.

4) Where can logs be decked in each project area?

Please see specifications on page 5 of the Request For Proposals dated November 15, 2024 regarding Loading and Transportation.

5) Is conifer removal negotiable (such as leaving larger trees and taking smaller DBH)?

No. Please see specifications on page 4 of the Request For Proposals dated November 15, 2024 regarding Shaded Fuel Break Treatment.

6) Will all take trees be marked, or only sample marked per project area?

Please see specifications on page 4 of the Request For Proposals dated November 15, 2024 regarding Shaded Fuel Break Treatment.

7) What happens to the stumps? Can CONTRACTOR remove them? Up to what size?

Do not remove any stumps unless necessary for safety.

8) Should the bid price also include the transportation of large woody debris, or just the loading onto transportation?

Please see specifications on page 14 of the Request For Proposals dated November 15, 2024 regarding Cost Proposal.

9) Will the Resource Conservation District approve an addendum for out-of-scope costs for removal of timber?

No.

10) Variables for distance to the sawmill and associated costs are difficult to predict. How should we include these costs in our bid? Can you provide the estimated board feet and the proposed location of the saw mill?

Please see specifications on page 14 of the Request For Proposals dated November 15, 2024 regarding Cost Proposal. No accurate estimate of board feet can be given at this time. Loading and transportation are to be bid at an hourly rate. The potential locations are: saw logs- Samoa, Eureka, Korbek, and Weaverville; and firewood- Samoa, Willow Creek, Hawkins Bar, Hoopa, Weitchpec, and Eureka.

Slash

11) Can slash treatment be passed off to the landowner?

No. Please see specifications on page 6 of the Request For Proposals dated November 15, 2024 regarding Slash Treatment.

12) Are chip piles also required to be a maximum depth of 18”?

Slash depth, including chip piles, is limited to 18” deep on average over the project area.

13) What measures need to be in place to ensure safety during storage and burning of slash piles on public and private land?

Please see specifications on page 6 of the Request For Proposals dated November 15, 2024 regarding Best Management Practices.

Firewood

14) Can larger tanoaks be left for firewood?

Please see specifications on page 4 of the Request For Proposals dated November 15, 2024 regarding Tree Felling and Yarding. A portion of the firewood will be left on the Patterson and Bigfoot Subdivision units for the landowner. The amount to remain on site will be communicated with the CONTRACTOR.

15) Should firewood be cut into rounds or left in lengths? If lengths, how long?

Kimtu Ridge unit: the log length will depend on the equipment the CONTRACTOR provides and landowner specifications which will be determined during the project.
Patterson unit: the maximum log length will be 30’, and logs will be separated by tree species.

Bigfoot Subdivision unit: the maximum length of log will be 15’ and no separation of tree species is necessary.

Refer to Item 2 on page 1 of Addendum dated December 16, 2024 regarding Deletion in Scope of Work.

16) Does CONTRACTOR need to haul firewood logs to an alternative location?

Please see specifications on page 5 of the Request For Proposals dated November 15, 2024 regarding Loading and Transportation.

17) Under CALFIRE exemptions, certain diameter logs cannot be left on the ground, so is the CONTRACTOR exempt from this when leaving firewood logs?

This is not a requirement on the CALFIRE Forest Fire Prevention Exemption. Please see specifications on page 4 of the Request For Proposals dated November 15, 2024 regarding Scope of Work.

18) Could the CONTRACTOR purchase the firewood?

Yes.

19) Do all firewood logs need to be consolidated into one area within the project unit?

No. Patterson and Bigfoot Subdivision units: there can be multiple log decks as long as they are accessible. Kimtu Ridge unit: all firewood must be transported to a different location.

Permits/Exemptions

20) Can the Forest Fire Prevention Exemption permit be extended or renewed?

No, it can be resubmitted for areas that were not initiated or completed. Any areas that work has begun must be completed by the expiration date with exception of pile burning as slash treatment. CONTRACTOR has until the following April or one year following completion of operations to complete burning, whichever is sooner.

21) Can other exemptions be used besides CALFIRE to avoid the merchantable timber aspect?

No.

22) Can this work be done without a permit?

No.

23) What permits will the Resource Conservation District coordinate for this project?

Forest Fire Prevention Exemption, Burn Permits and Smoke Management Plans, and Encroachment Permits for activities impacting county roads.

24) What is a realistic timeline for submission and approval of the exemptions?

March 2025: RPF to submit exemption paperwork and show log buyers the wood.

End March-Start April 2025: Begin operations.

Begin September-End October 2025: Complete operations.

March 2026: project completion date.

This plan is subject to change depending on weather.

25) If the conditions of the permit conditions change the scope of work for the project, or the schedule, will the Resource Conservation District approve an addendum to the contract to reflect the fiscal impact of those changes?

No.

26) Stream channels and surface water are protected by State and federal law. Who is responsible for preparation of the Stormwater Management Plan, and installation and monitoring of BMPs on and adjacent to each proposed site?

Please see specifications on page 4 of the Request For Proposals dated November 15, 2024 regarding Shaded Fuel Break Treatment and the limitations and requirements on the Forest Fire Prevention Exemption.

Herbicide

27) Is there a preferred/recommended brand and application type?

Please see specifications on page 5 of the Request For Proposals dated November 15, 2024 regarding Herbicide.

28) Is herbicide required or will we be acting at the discrepancy of the landowner?

Herbicide is a potential treatment used on the Kimtu Ridge unit. See Item 5 on page 3 of the Addendum dated December 16, 2024.

29) Please provide more details on the hack and spray treatment at the Kimtu Park site. Is a Qualified Applicator License required to perform this work? If so, what category of QAL?

Yes, a Qualified Applicator License is required. CONTRACTOR can subcontract this work if herbicide is prescribed.

30) Could you explain in more detail what the RCD had in mind for treatment? If the trees are to be felled what is being hacked? Is the herbicide applied to the stumps?

Please see specifications on page 5 of the Request For Proposals dated November 15, 2024 regarding Herbicide.

Operations

31) Are flaggers required?

If County roads traffic lanes are closed or impacted, then flaggers are required.

32) Is pile burning an option?

Please see specifications on page 4 of the Request For Proposals dated November 15, 2024 regarding Slash Treatment.

33) Is the CONTRACTOR responsible for getting the burn permits?

No, Able Forestry Consultants will acquire burn permits and smoke management plans.

34) What is the concern of erosion on hillsides?

Please see specifications on page 6 of the Request For Proposals dated November 15, 2024 regarding Best Management Practices.

35) Does slope percentage determine whether to use mechanical versus manual treatment?

Please see specifications on page 4 of the Request For Proposals dated November 15, 2024 regarding Tree Felling and Yarding. No tracks on slopes over 50% but winching or long lining can be used.

36) What do Forest Practice Rules state as maximum slope percentage?

Please see Item 3 revision, above, replacing the Scope of Work on page 3 of the Request For Proposals dated November 15, 2024.

37) Do rolling dips need to be installed where they should be or just fix pre-existing erosion control measures?

Please see specifications on page 4 of the Request For Proposals dated November 15, 2024 regarding Tree Felling and Yarding.

38) Can skid roads be reopened? What does rehabilitation of roads look like with CALFIRE?

Yes. No rehab necessary; only erosion control measures. Please see specifications on page 4 of the Request For Proposals dated November 15, 2024 regarding Tree Felling and Yarding.

39) Will work be curtailed during the bird nesting period?

Refer to the limitations and requirements listed on the Forest Fire Prevention Exemption.

LTO-A/Licensing

40) Is there a license requirement for CONTRACTOR bidding on this?

Please see specifications on page 2 of the Request For Proposals dated November 15, 2024 regarding Project Summary.

41) Is a general engineering license or a CA State Contractor's License adequate for this job?

No. An LTO-A is required. Please see specifications on page 2 of the Request For Proposals dated November 15, 2024 regarding Project Summary.

42) In what capacity does the LTO need to be involved with the proposal?

Please see specifications on page 2 of the Request For Proposals dated November 15, 2024 regarding Project Summary.

43) Can an LTO-A hire a manual treatment crew? If so, would they be liable for that crew?

Please see specifications on page 2 of the Request For Proposals dated November 15, 2024 regarding Project Summary. The CONTRACTOR will be liable for the crew. Check with CONTRACTOR's insurance company for specifications. It is required for the CONTRACTOR and the SUBCONTRACTOR to have a contract.

Landowner(s)

44) What is protecting the LTO from the landowner changing the prescription?

HCRC and LANDOWNER have a landowner agreement binding them to the terms and conditions of the project.

45) Will CONTRACTOR receive landowner contact information?

No.

Bidding

46) Is the RCD contracting with more than one CONTRACTOR? (per unit or for specific units)

No, one CONTRACTOR will be hired for all 3 units listed in the RFP.

47) Is this a lowest bidder project?

No, CONTRACTOR will be selected based on a variety of criteria and considerations relevant to the work.

Other Questions

48) Is there a plan for maintenance in the future?

Yes.

49) Are there boundary flags or will there be?

Yes.

50) Does the grant money not spent within these project areas roll over into others?

Yes. The funding will be used for future project treatments.

51) After these three units are treated, will the work be continuous going into Phase 2?

Yes. HCRC anticipates releasing future solicitations for future work.

52) Are there any county roads within the project areas?

County roads are directly adjacent to the project areas.

53) Is this project subject to prevailing wage?

This type of fuel reduction work is not currently considered a public works project under Labor Code 1720; therefore, this project is not considered a Public Works project and not subject to prevailing wage requirements.

54) Will the RCD provide Avenza PDFs for the operator?

Yes.

55) Are there known archeological sites on the project sites?

Consultation with a cultural resource advisor will likely be required on one or more units. Inadvertent discovery protocol will be followed.

Site Specific

Kimtu Ridge:

56) Can the skid road on the ridge be used?

The skid road on the top of the ridge can only be used within the property boundary. Avenza Maps will be provided to the CONTRACTOR.

57) Is it necessary to only load on the pavement?

No, loading can occur anywhere that saturated soil conditions do not exist.

58) Would the CONTRACTOR be required to cut blackberry brush?

Yes. Please see specifications on page 3 of the Request For Proposals dated November 15, 2024 regarding Scope of Work.

59) Will CONTRACTOR be required to remove hazard trees?

Yes.

60) Is it possible to negotiate some of the more difficult areas, where danger levels are elevated due to limited access and roll potential, out of the contract?

It is the CONTRACTOR's responsibility to define what treatment methods will be utilized to complete the project. Manual treatments should be used where mechanical treatments are unfeasible.

61) Can the large downed windfall logs be left on the ground? Or is the CONTRACTOR required to remove them?

Please see specifications on page 3 of the Request For Proposals dated November 15, 2024 regarding Scope of Work. The work will include removing windfall logs.

62) It seems like too many trees are marked and the white paint is coming off. Will this unit be re-marked?

Yes, the Kimtu unit will be re-marked with blue spray paint.

Patterson:

63) Does the access road to the water storage tank need to be accessible at all times, or can it be closed intermittently?

No, the access road does not need to be open at all times. The tank is checked once per month, and CONTRACTOR will be notified beforehand.

64) Will maps of utilities such as water, power, and sewer/septic be provided to CONTRACTOR?

All maps will be provided to CONTRACTOR after Notice of Award.

65) Where does the waterline go from the water storage tank on the Patterson unit?

See map below.



FOREST FIRE PREVENTION EXEMPTION

Valid for one year from the date of receipt by CAL FIRE

Timber Operations pursuant to the notice of exemption may not commence for ten (10) working days from the date of the Directors receipt of the notice unless this delay is waived by the director. If the Director does not act within ten (10) working days of receipt of the notice of exemption, Timber Operations may commence. 14 CCR § 1038.3(v)

The Director of the Department of Forestry and Fire Protection (CAL FIRE) is hereby notified of timber operations under the requirements of 14 CCR § 1038.3 for the purpose of cutting and removing of trees to eliminate the vertical continuity of vegetative fuels and the horizontal continuity of tree crowns for the purpose of reducing flammable materials to reduce fire spread, duration, and intensity, fuel ignitability, or ignition of tree crowns. Complete all Items on this notice, when responses do not fit in the space provided, so state, and add additional pages as necessary.

NOTES:

- This Notice of Exemption shall only be used on Timberlands that are within the most recent version of the Departments Fire Hazard Severity Zone Map, located at the Departments website at: <https://osfm.fire.ca.gov/divisions/wildfire-prevention-planning-engineering/wildland-hazards-building-codes/fire-hazard-severity-zones-maps/> which shows the exemption is located in areas determined to be moderate, high, or very high fire threat. 14 CCR § 1038.3(b)
- Harvest Area shall not exceed three hundred (300) acres. 14 CCR § 1038.3(c)
- Only trees less than 30 inches outside bark stump diameter 8 inches above ground level may be harvested. 14 CCR § 1038.3(h)
- Road Construction and Reconstruction:
 - No tree larger than 36 inches in diameter at stump height, measured 8 inches above ground level, may be removed for the purpose of road construction or reconstruction. 14 CCR § 1038.3(e)(5)(F)
 - Trees between 30 and 36 inches in stump diameter at stump height, measured 8 inches above the ground may be removed for the purpose of road construction and reconstruction, when no other feasible option exists for road activities. 14 CCR § 1038.3(e)(5)(F)

The Notice of Exemption shall be prepared, signed and submitted by a Registered Professional Forester (RPF).

The RPF shall be retained to oversee all construction of Roads and Landings and provide for necessary mitigation to avoid potential impacts. 14 CCR § 1038.3(s)

1. REGISTERED PROFESSIONAL FORESTER

Name: _____ Lic. No.: _____ Phone: _____

Mailing Address: _____ City: _____ State: _____ Zip: _____

Email Address: _____

Signature: _____ Date: _____

I acknowledge the responsibilities as the Registered Professional Forester (RPF)

I, the RPF, certify the post-harvest slash treatment and stand conditions will lead to more moderate fire behavior [ref. 14 CCR § 1038.3(t)(7)], and the level of residual stocking shall be consistent with maximum sustained production of high-quality timber products [ref. 14 CCR § 1038.3(u)(1)], and affirm that the construction or reconstruction of Temporary Roads is necessary to provide access to Harvest Areas when no other feasible alternatives exist. [ref. 14 CCR § 1038.3(u)(2)]

Exemption Number: _____

Date Received: _____

Date Approved: _____

Date Expires: _____

Per 14 CCR § 1038.3(f) The RPF responsible for submission of the Notice of Exemption shall designate Temporary Road locations, Landing locations, Tractor Road crossings of Class III Watercourses, Unstable Areas, or Connected Headwall Swales on the ground prior to submission of the notice of exemption.

Per 14 CCR § 1038.3(m) the RPF shall comply with 14 CCR § 1035.2 relating to the interaction between LTO and RPF. After approval of the Plan preparation process but before commencement of Timber Operations by each LTO assigned to the Plan, the responsible RPF or Supervised Designee, shall meet with either the LTO, or their representative, who will be on the ground and directly responsible for Timber Operation. The purpose of the meeting shall be for the RPF to familiarize the LTO with the Plan, the Plan area, and specific applicable requirements of the Plan. The meeting shall be on-site if requested by either the RPF or LTO. An on-site meeting is required between the RPF or supervised designee familiar with on-site conditions and LTO to discuss protection of any archaeological or historical sites requiring protection if any such sites exist within the Site Survey Area pursuant to 14 CCR § 929.2[949.2,969.2](b).

2. LICENSED TIMBER OPERATOR(S) When more than one LTO is on the Plan, please provide a detailed description of timber operation responsibilities for each.

Name: _____ Lic. No.: _____ Phone: _____

Address: _____ City: _____ State: _____ Zip: _____

Email: (optional) _____

3. TIMBERLAND OWNER(S) OF RECORD

Name: _____ Phone: _____

Address: _____ City: _____ State: _____ Zip: _____

Email: (optional) _____

I certify, under penalty of perjury, that I have read and understand the information on this form and that I am the Timberland Owner of record.

Signature: _____ Date: _____

4. TIMBER OWNER(S) OF RECORD

Name: _____ Phone: _____

Address: _____ City: _____ State: _____ Zip: _____

Email: (optional) _____

TIMBER TAX NOTICE: The **TIMBER OWNER** is responsible for payment of a yield tax.

For timber yield tax information or for assistance with these questions call 1-800-400-7115, or write: Timber Tax Section, MIC: 88, California Department of Tax and Fee Administration, P.O. Box 942879, Sacramento, CA 94279-0088; or see the CDTFA at <https://www.cdtfa.ca.gov>.

Some small or low-value harvests may be exempt from the Timber Yield Tax per Revenue and Taxation Code Section 38116. Timber Owners may be considered exempt if the value of the harvesting operations does not exceed \$3,000 dollars within a quarter, according to CDTFA's Timber Tax Harvest Value Schedules.

If the Timber Owner believes harvesting may be exempt (according to the timber tax exemption language above for low-value harvests) please complete the volume and species information below. Otherwise, proceed to the next item.

Final determination of tax-exempt status will be made by the Timber Tax Section of the California Department of Tax and Fee Administration.

If the CDTFA timber tax section is to be considered a tax exemption based on projected harvest, please complete the information below.

A. Select the best estimate of total volume for this harvest, in thousands of board feet (mbf-Net Scribner short log):

- Under 8 mbf
- 8 – 15 mbf
- 16 – 25 mbf
- Over 25 mbf

B. Estimate the percentage of timber to be removed during this harvest: (percentages should equal 100%)

- Redwood _____%
- Ponderosa/Sugar Pine _____%
- Douglas-Fir _____%
- Other Conifer _____%
- Cedar _____%
- Port-Orford Cedar _____%
- Fir _____%
- Other Hardwoods _____%

C. Fuelwood over 150 cords? Yes No

D. Christmas trees over 3,000 lineal feet? Yes No

5. Per 14 CCR § 1038.1(c)(12), No timber harvesting is permitted within the standard width of a Watercourse or Lake Protection Zone (WLPZ) per 14 CCR § 916.4 [936.4, 956.4](b) (exceptions apply - see below) or within a WLPZ in a watershed identified as Anadromous Salmonids Planning watersheds (ASP) per 14 CCR § 916.9 [936.9, 956.9](s), unless the harvesting in an ASP WLPZ is recommended in writing by CDFW to address specifically identified forest conditions, 14 CCR § 916.9(s)(6) (optional)

➤ Two exceptions are permitted in WLPZs outside of an ASP watershed. Indicate if trees meeting the exception identified below are anticipated to be harvested. (If not, leave blank)

- Sanitation-Salvage harvesting per 14 CCR § 913.3 [933.3, 953.3] or
- for the removal of DEAD or DYING trees per 14 CCR § 1038.1(c)(12) Exception in WLPZ of ASP Watersheds 14 CCR § 916.9(s)

➤ Will harvesting occur within a WLPZ of an ASP watershed based on written recommendation from CDFW?

- Yes No

If “Yes”, then provide a copy of the written recommendation from CDFW identifying the specific reason for the recommended harvesting.

NOTE: Trees to be harvested shall be marked by a RPF or a supervised designee of the RPF, prior to timber operations.

6. Per 14 CCR § 1038.3(p) No Timber Operations are allowed on any site that satisfies the criteria listed in 14 CCR § 895.1 for a Significant Archaeological or Historical Site (information on some of these sites may be available from the Information Centers of the California Historical Resources Information System within the Department of Parks and Recreation):

Per 14 CCR § 1038.3(o) upon submission of the Notice of Exemption, a Confidential Archaeological Letter pursuant to 14 CCR § 929.1 [949.1, 969.1] must be provided to the Director.

Per 14 CCR § 1038.3(o) upon submission of the Notice of Exemption the RPF shall send a copy of the Notice of Exemption to the current list of Native Americans as defined in 14 CCR § 895.1.

➤ Has the RPF sent a copy of the Notice of Exemption to the Native Americans on the current Contact List as defined in 14 CCR § 895.1?

- Yes No
- Date Notice of Exemption was mailed: _____

If “No” Do not submit Notice of Exemption until the notice has been sent to the appropriate Native American Contact

7. Description of the preharvest stand structure is required per 14 CCR § 1038.3(t)(6): (Consider including in the description: species, basal area, and diameter distributions. Add additional pages as needed.)

Preharvest stand structure estimates:

Description		
Species	Basal Area	Diameter Distribution

8. QMD of trees 8 inches dbh or greater in the pre-harvest stand shall be increased in the post-harvest stand. The submitted notice of exemption shall report the expected post-harvest increase in QMD **as required per 14 CCR § 1038.3(g)**. [ref. 14 CCR § 1038.3(t)(7)]

➤ Pre-harvest QMD: _____ Post-harvest QMD: _____ Expected Post-harvest QMD Increase: _____

9. **Timber Marking per 14 CCR § 1038.3(i)** All trees that are harvested or all trees that are retained shall be marked or sample marked by, or under the supervision of a RPF before felling operations.

- Completed by: RPF Supervised Designee Both
- Trees marked: Leave trees Harvest trees Both
- Harvest area marked: Entire area
 Sample area 10% up to 20 acres per stand type Both

NOTE: Sample marking shall be limited to homogeneous forest stand conditions typical of plantations.

When trees are sample marked, the prescription for unmarked areas shall be in writing per 14 CCR 1038.3(i). The RPF shall provide written prescription describing how trees will be designated in the unmarked areas.

➤ RPF Prescription for unmarked areas: (Add additional pages as needed.)

10. **Provide the selection criteria for the trees to be removed or the trees to be retained as required per 14 CCR § 1038.3(u)(3)**. The RPF shall consider retaining elements, where feasible, including, but not limited to ground level cover necessary for the long-term management of local wildlife populations. Selection criteria shall specify how the trees to be removed, or how the trees to be retained, will be designated.

➤ Describe how trees will be designated for removal or retention: (Add additional pages as needed.)

11. Post-harvest canopy stocking levels as required per 14 CCR § 1038.3(u)(1) in the residual stand shall consist primarily of healthy and vigorous Dominants and Codominants from the preharvest stand. Trees retained to meet the Basal Area stocking standards shall be selected from the largest trees available on the project area prior to harvest. In no case, shall stocking be reduced below the standards found within 14 CCR § 913.3 [933.3, 953.3](a).

➤ Will stocking be met where the pre-harvest dominant and codominant crown canopy is occupied primarily by trees?
 Yes No

➤ Specify the dominant and codominant crown canopy which will be occupied by the following tree sizes:

- Greater than 14 inches dbh Less than 14 inches dbh
- Coastal Forest District Northern Forest District Southern Forest District

12. Site Classification: Site I Site II Site III Site IV Site V

13. Forest Type: Mixed Conifer Pine East Side Pine Conifer Coast Redwood Douglas Fir

NOTE: Basal area stocking standard requirements may change based on Forest District Site Classification, and Forest Type per 14 CCR § 913.3 [933.3, 953.3](a).

14. Post-Harvest Canopy Closure Requirements per 14 CCR § 1038.3(j): if the preharvest crown canopy of Dominants and Codominants is occupied by trees less than 14 inches in dbh, a minimum of 100 trees over 4 inches in dbh shall be retained per acre for Site I, II, and III lands and a minimum of 75 trees over 4 inches in dbh shall be retained per acre for Site IV and V lands. 14 CCR § 1038.3(j)

➤ Select the description of the site:

- Trees less than 14 inches dbh for Site I, II, and III lands (100 trees per acre)
- Trees less than 14 inches dbh for site IV and V lands (75 trees per acre)

Per 14 CCR § 1038.3(k)(1)-(2) reference 14 CCR § 1052.4(d)(3)(A) Minimum post treatment canopy closure of dominant and codominant trees shall be:

- 40% east side pine forest types.
- 50% for Coastal Redwood and Douglas-fir forest types in or adjacent to communities and legal structures per 14 CCR § 1052.4(c)(1)-(2)
- 60% for Coastal Redwood and Douglas-fit types outside of communities and legal structures per 14 CCR § 1052.4(c)(1)-(2)
- 50% for mixed conifer and all forest types.
- Canopy closure requirements change based on forest type and proximity to legally permitted structures within or adjacent to communities at risk identified by the “California Fire Alliance List of Communities at Risk.”
- Post-harvest treatment stand shall contain no more than 200 trees per acre over 3 inches in dbh. 14 CCR § 1038.3(k)(2)
- Vertical spacing shall be achieved by treating dead fuels excluding dead branches on the tree retained for stocking, to a minimum clearance distance of 8 feet measured from the base of the live crown of the post-harvest Dominants and Codominants to the top of the dead surface or ladder fuels, whichever is taller. 14 CCR § 1038.3(k)(3)

15. Fuel Treatment requirements per 14 CCR § 1038.3(d)(1)-(4):

- All logging slash created by the timber operations shall be treated to achieve a maximum post-harvest depth of 18” inches above the ground except within 150 feet from any point of a legally permitted structure that complies with the California Standards Building Code. 14 CCR § 1038.3(d)(1)
- All surface fuels within 150 feet of an Approved and Legally Permitted Structure, which could promote the spread of wildfire, SHALL be chipped, burned, or removed within 45 days from the start of Timber Operations. 14 CCR § 1038.3(d)(2)
- All fuel treatments SHALL be completed within 1 year from the date the Director receives the Notice. This does not apply to burning, which instead shall be completed within 2 years from the date the Director receives the notice. 14 CCR § 1038.3(d)(3)
- The requirements of this subsection shall not supersede the requirements of PRC § 4291

➤ Will any timber operations be within 150 feet of an Approved and Legally Permitted Structure? Yes No

➤ Select proposed fuel treatment method:

- Chipping
- Removing
- Burning
- Other (describe):

16. The construction or reconstruction of temporary roads on slopes of 30% or less per 14 CCR § 1038.3(e)(5) shall be allowed if all of the following conditions are meet:

- Temporary Roads or Landings SHALL NOT be located on unstable areas. 14 CCR § 1038.3(e)(1)
- Temporary Roads SHALL BE single lane in width. 14 CCR § 1038.3(e)(2)
- Temporary Roads SHALL NOT be located across a Connected Headwall Swale. 14 CCR § 1038.3(e)(3)
- Construction or reconstruction of Temporary Roads, Landings or Watercourse crossings SHALL NOT occur during the winter period. 14 CCR § 1038.3(e)(4)
- NO operations SHALL BE permitted on roads that are not subject to Hydrological Disconnection or exhibit Saturated Soil Conditions. 14 CCR § 1038.3(e)(4)(A)
- NO Logging Road or Landing construction, or re-construction, activities shall occur within 200 feet of a Class I and II watercourse. 14 CCR § 1038.3(e)(4)(D)
- NO Logging Road or Landing Construction, or re-construction, activities shall occur within 50 feet of a Class III watercourse. 14 CCR § 1038.3(e)(4)(D)

Temporary Road construction or re-construction, shall be limited to no more than two (2) miles of road per ownership within a single Planning Watershed (CALWATER 2.2) per any five (5) year period.

- Has temporary road construction or reconstruction within the planning watershed occurred within the last 5 years under a Forest Fire Prevention Exemption? Yes No

If "Yes" provide how many feet/miles: _____

NOTE: If total is greater than 2 miles, within the previous 5 years no additional road construction may occur.

17. Temporary road construction and/or reconstruction shall not exceed: (select criteria to be applied to this Exemption and list the total length of temporary road(s) to be constructed or reconstructed per 14 CCR § 1038.3(e)(5)(A)-(C).

Description	Selection	Feet
Exemptions Less than 40 acres with cumulative length of 300 feet	<input type="checkbox"/>	
Exemptions between 40 and 80 acres <u>not</u> to exceed 300 to 600 feet determined on a pro rata basis by total acreage affected by exemption.	<input type="checkbox"/>	
Exemptions over 80 acres shall <u>not</u> exceed 600 feet	<input type="checkbox"/>	

- Will any temporary roads constructed or reconstructed be connected to other temporary roads construction under previous or subsequent exemptions filed pursuant of this section 14 CCR § 1038.3(e)(5)(D)? Yes No

If "Yes", then no additional road construction may occur.

- Prior to the completion of Timber Operations, all Temporary Roads constructed or reconstructed under this section shall undergo Abandonment in a manner which uses protective measures that will effectively remove them from the Permanent Road Network, as defined in 14 CCR § 895.1. 14 CCR § 1038.3(e)(5)(E)
- The RPF responsible for submission of the Notice of Exemption shall designate Temporary Road locations, Landing locations, Tractor Road crossings of Class III Watercourses, Unstable Areas, or Connected Headwall Swales on the ground prior to submission of the Notice of Exemption. 14 CCR § 1038.3(f)

18. Tentative Commencement Date of Timber Operations as required per 14 CCR § 1038.3(t)(4): _____

Before beginning Timber Operations, the RPF responsible for submittal of the Notice of Exemption shall notify the Department, the appropriate RWQCB, the CDFW, and the CGS of the actual commencement date of operations. The notification, by telephone, mail, or email, shall be directed to the appropriate agency personnel and contact information for the appropriate agency personnel shall be provided by the Department on the notice of exemption form (see Below). If the notification is provided by mail, Timber Operations may not commence for three (3) days after the postmark date of notification.

Region	Email	Region	Email	Region	Email
CDFW		CRWQB		CGS	
1-Inland	r1inland.timber@wildlife.ca.gov	1	RB1-Timber@waterboards.ca.gov	Sacramento	CGSTHP.Sacramento@conservation.ca.gov
1-Coast	ctp@wildlife.ca.gov	5	RB5R-Timber@waterboards.ca.gov	Eureka	CGSTHP.Eureka@conservation.ca.gov
2	R2Timber@wildlife.ca.gov	6	RB6-Timber@waterboards.ca.gov	Redding	CGSTHP.Redding@conservation.ca.gov
3	R3Timber@wildlife.ca.gov			Santa Rosa	CGSTHP.SantaRosa@conservation.ca.gov
4	R4Timber@wildlife.ca.gov				

19. Check all Yarding methods to be utilized per 14 CCR § 1038.2:

	GROUND - BASED		CABLE		OTHER
<input type="checkbox"/>	Tractor, including end/long lining	<input type="checkbox"/>	Cable, ground lead	<input type="checkbox"/>	Hand thinning and removing
<input type="checkbox"/>	Rubber tire skidder, forwarder	<input type="checkbox"/>	Cable, high lead	<input type="checkbox"/>	Other (describe below)
<input type="checkbox"/>	Feller buncher	<input type="checkbox"/>	Cable, skyline		
<input type="checkbox"/>	Shovel yarding				
<input type="checkbox"/>	Tethered operations				

NOTE: If more than one method is selected these must be identified on accompanying maps.

20. Provide the legal land description of the location of the Timber Operation as required per 14 CCR § 1038.3(t)(3). Attach a USGS 7.5-minute quadrangle map or equivalent map showing the location of:

- Boundaries of logging areas 14 CCR § 1038.4(a)
- Boundaries of Yarding (logging) systems, if more than one system is used. 14 CCR § 1038.4(b)
- Location of all roads to be used for, or potentially impacted by, Timber Operations. 14 CCR § 1038.4(c)
 - Classification of ALL roads as Proposed, Permanent, Seasonal, Temporary, Deactivated, or Proposed. 14 CCR § 1038.4(c)(1)
 - Roads and Landings located in Watercourses, Lakes, WLPZs, Marshes, Wet Meadows and other Wet Areas, other than at road Watercourse crossings. 14 CCR § 1038.4(c)(2)
 - Logging Roads that provide access to rock pits and water drafting sites, and the location of water drafting sites. 14 CCR § 1038.4(c)(3)
 - Public Roads within one-quarter (1/4) mile of the Harvest Area. 14 CCR § 1038.4(c)(4)
 - The location of Significant or Existing Potential Erosion Sites on all Roads and Landings pursuant to 14 CCR § 923.1 (e). 14 CCR § 1038.4(c)(5)
- For all constructed and reconstructed Logging Roads and Landings, the following shall be mapped: 14 CCR § 1038.4(d)
 - Location of Logging Road grades greater than fifteen (15) percent for over two-hundred (200) continuous feet or Logging Roads grades exceeding twenty (20) percent. 14 CCR § 1038.4(d)(1)
 - Location of Road Failures on existing Logging Roads to be Reconstructed. 14 CCR § 1038.4(d)(2)
 - Location of Landings, specifying those that require substantial excavation and those in excess of one-quarter acre in size. 14 CCR § 1038.4(d)(3)
 - Location of excess material disposal sites on slopes greater than forty (40) percent or on active Unstable Areas. 14 CCR § 1038.4(d)(4)
- Location of all Tractor Road Watercourse crossings of classified Watercourses. 14 CCR § 1038.4(e)
 - Location of Erosion Hazard Ratings, if more than one rating exists. 14 CCR § 1038.4(f)
 - Location of Watercourses and Lakes with Class I, II, III, or IV waters. 14 CCR § 1038.4(g)
 - Location of known Unstable Areas. 14 CCR § 1038.4(h)
 - Location of understocked areas prior to Timber Operations, and other areas not normally bearing timber to at least a 20-acre minimum, or as specified in the district rules. 14 CCR § 1038.4(i)
 - Location of boundaries of timber-site classes needed for determination of Stocking Standards to be applied, down to at least a twenty (20) acre minimum, or as specified in the Forest Practice District Rules. 14 CCR § 1038.4(j)
 - Location of any Special Treatment Areas. 14 CCR § 1038.4(k)
- Appurtenant Roads may be shown on a separate map which may be planimetric with a scale as small as one-half inch equals one mile. Color coding may not be used. 14 CCR § 1038.4

Additional maps, which may be topographic or planimetric, may be used to provide additional information, to show details, and improve map clarity. **A legend shall be included indicating the meaning of the symbols used.** Describe the access route to the timber operation so that it can be easily located, and/or include an assessor's parcel map for small areas. Attach additional supporting pages as necessary.

Baseline Meridian	Township	Range	Section	County	Acreage*	Assessor's Parcel # (optional)

*Acres are estimated and are for the Logging Area

CA STATE PLANNING WATERSHED - CALWATER		
Watershed Name	Watershed Identification Number	CALWATER Version

The following are limitations or requirements for timber operations conducted under a Notice of Exemption for the cutting and removing of trees to eliminate the vertical continuity of vegetative fuels and the horizontal continuity of tree crowns for the purpose of reducing flammable materials to reduce fire spread, duration, intensity, fuel ignitability, or ignition of tree crowns:

1. This Notice of Exemption shall be prepared, signed, and submitted to the Department by a Registered Professional Forester (RPF) 14 CCR § 1038.3(s) and received by CAL FIRE at the appropriate office listed below prior to the commencement of timber operations.
 - **Coastal Special Treatment Areas and Marin County** the Director shall have ten calendar days from date of receipt to accept or reject the Notice of Timber Operations.
2. 14 CCR § 1038.3(a)-(t) places certain limits on the harvesting. These limits need to be reviewed to assure compliance.
3. 14 CCR § 1038.3 Timber operations conducted under this notice shall comply with all operational provisions of the Forest Practice Act and District Forest Practice Rules applicable to "Timber Harvest Plan," "THP," and "plan." The requirements to submit a completion and stocking report normally do not apply. **However, Completion and Stocking reports are required for areas when operations occur within COASTAL SPECIAL TREATMENT AREAS and / or MARIN COUNTY.** The landowner shall submit to CAL FIRE a RM-71 Completion and Stocking report, per PRC 4585 and PRC 4587. The requirements for environmental review under the California Environmental Quality Act (See 14 CCR § 15300.1) do not apply.
4. There are special requirements for timber operations conducted in Coastal Commission Special Treatment Areas and in counties with special rules adopted by the Board of Forestry and Fire Protection. These rules should be reviewed prior to submitting this notice to CAL FIRE. 14 CCR § 1038.1(c)(6)
5. All timber operations conducted in the Lake Tahoe Region must have a valid Tahoe Basin Tree Removal Permit, as defined by the Tahoe Regional Planning Agency (TRPA), or shall be conducted under a valid TRPA Memorandum of Understanding, when such a permit is required by TRPA, 14 CCR § 1038.3(n)
6. Harvesting under this Notice of Exemption is limited to those trees that eliminate the vertical continuity of vegetative fuels and the horizontal continuity of tree crowns, for the purpose of reducing the rate of fire spread, duration intensity, fuel ignitability, or ignition of tree crowns. 14 CCR § 1038.
7. The logging area shall not exceed 300 acres in size. 14 CCR § 1038.3(c) and tree harvesting shall decrease fuel continuity and increase the quadratic mean diameter (QMD) of trees greater than eight (8) inches dbh in the Harvest Area. 14 CCR § 1038.3(g)
8. Except within constructed or reconstructed Temporary Road prisms, only trees less than thirty (30) inches in stump diameter, measured eight (8) inches above ground level may be removed for commercial purposes. 14 CCR § 1038.3(h)
9. 14 CCR § 1038.3(u)(1) The residual stand shall consist primarily of healthy and vigorous Dominants and Codominants from the preharvest stand. Trees retained to meet the Basal Area stocking standards shall be selected from the largest trees available on the project area prior to harvest. In no case shall stocking be reduced below the standards found within 14 CCR § 913.3 [933.3, 953.3] (a).
10. Road Construction and Reconstruction:
 - No tree larger than 36 inches in diameter at stump height, measured 8 inches above ground level, may be removed for the purpose of road construction or reconstruction. 14 CCR § 1038.3(e)(5)(F)
 - Trees between 30 and 36 inches in stump diameter at stump height, measured 8 inches above the ground may be removed for the purpose of road construction and reconstruction, WHEN NO OTHER FEASIBLE OPTION EXISTS FOR ROAD ACTIVITIES. 14 CCR § 1038.3(e)(5)(F)
11. Timber Operations conducted during the Winter Period shall comply with the applicable Rule sections under 14 CCR § 923 [943, 963] et seq. 14 CCR § 1038.3(e)(4)(B)
12. Use of Temporary Roads shall comply with the operational provisions of 14 CCR § 923 [943, 963] et seq. 14 CCR § 1038.3(e)(4)(C)
13. Per 14 CCR 1038.3(f) The RPF responsible for submission of the Notice of Exemption shall designate Temporary Road locations, Landing locations, Tractor Road crossings of Class III Watercourses, Unstable Areas, or Connected Headwall Swales on the ground prior to submission of the Notice of Exemption.
14. No helicopter yarding shall be allowed 14 CCR § 1038.3(l)
15. 14 CCR § 1038.3(d)(1-3) Slash and Woody Debris shall be treated to achieve a maximum post-harvest depth of eighteen (18) inches above the ground except within one-hundred-fifty (150) feet from any point of an approved and legally permitted structure that complies with the California Standards Building Code.
 - All surface fuels within one-hundred-fifty (150) feet of an Approved and Legally Permitted Structure, which could promote the spread of wildfire, shall be chipped, burned, or removed within forty-five (45) days from the start of Timber Operations.
 - All fuel treatments shall be completed within one (1) year from the date the Director receives the notice. This requirement does not apply to burning, which instead shall be completed within two (2) years from the date the Director receives the notice.
16. No tractor or heavy equipment operations on slopes greater than 50%. 14 CCR § 1038.1(c)(5)
17. No construction of new tractor roads on slopes greater than 40%. 14 CCR § 1038.1(c)(5)
18. No tractor or heavy equipment operations on known Unstable Areas. 14 CCR § 1038.1(c)(7)
19. **No timber harvesting within the standard width of a watercourse or lake protection zone**, as defined in 14 CCR § 916.4 [936.4, 956.4](b), except Sanitation-Salvage harvesting, as defined in 14 CCR § 913.3 [933.3,953.3], where immediately after completion of operations, the area shall meet the stocking standards of 14 CCR § 912.7 [932.7,952.7](b)(2), or, except the removal of dead or dying trees where consistent with 14 CCR § 916.4 [936.4,956.4](b). **Trees to be harvested within a WLPZ shall be marked by, or under the supervision of, a RPF prior to timber operations.** 14 CCR § 1038.1(c)(12)
20. **ASP watersheds** – No timber operations are allowed in a WLPZ, or within any ELZ or EEZ designated for watercourse or lake

protection, under exemption notices except **(1)** Hauling on existing roads **(2)** Road maintenance **(3)** Operations conducted for public safety **(4)** Construction or reconstruction of approved watercourse crossings **(5)** Temporary crossings of dry Class III watercourses that do not require notification under Fish and Game Code §1600 et seq. **(6)** Harvesting recommended in writing by CDFW to address specifically identified forest conditions. 14 CCR § 916.9(s)

21. If a Notice of Exemption has been accepted by the Director and will use pesticides or herbicides on the Harvest Area within one (1) calendar year of the date of acceptance, the timberland owner shall notify the appropriate Regional Water Quality Control Board within ten (10) days prior to application of pesticides or herbicides. 14 CCR § 1038.3(q)
22. Subsequent to the completion of Timber Operations operating under this section, the Department shall conduct an onsite inspection to determine compliance with this section. The Department shall notify the appropriate RWQCB, the CDFW, and the CGS seven (7) days prior to conducting the onsite inspection. 14 CCR § 1038.3(r)
23. Operations conducted under a Notice of Exemption are NOT permitted in known sites of rare, candidate, threatened or endangered plants and animals if the sites will be disturbed or damaged. NO timber operations may occur within a buffer zone of a listed, or sensitive species defined by 14 CCR § 895.1. 14 CCR § 1038.1(c)(10)-(11)
24. If any activities related to timber operations, as defined by PRC 4527, are to include any of the following activities in any river, stream or lake, including episodic and perennial waterways, a notification to the California Department Fish and Wildlife is required pursuant to Fish and Game Code §1602: 1) A substantial alteration of the bed, bank, or channel; 2) A substantial diversion (i.e. water drafting) or obstruction of the natural flow; or 3) use of material from or deposit of material into the watercourse. Information on the Lake and Streambed Alteration Program, as well as notification forms, may be found at the following link: <https://www.wildlife.ca.gov/conservation/lisa>.
25. All activities conducted pursuant to this Notice of Exemption occur within the most recent version of the Department’s “Fire Hazard Severity Zone Map in moderate, high, and very high fire threat zones. 14 CCR § 1038.3(b)
26. The requirements to submit a completion and stocking report do not normally apply. **Completion and Stocking reports are required for areas when operations occur within COAST, SPECIAL TREATMENT AREAS and / or MARIN COUNTY.** The landowner shall submit to CAL FIRE form RM-71 Completion and Stocking report. Per PRC 4585 and PRC 4587.
27. A Licensed Timber Operator must be designated upon submission of this notice. 14 CCR § 1038.3(t)(1)
28. RPF shall include a Confidential Archaeological Letter (CAL) with the exemption notice submitted to the Director. The CAL shall include all information required by 14 CCR § 929.1 [949.1, 969.1](c)(2), (7)-(11), including site records, if required pursuant to 14 CCR §§ 929.1 [949.1, 969.1](g) and 929.5. The discovery of human remains requires immediate notification to appropriate agencies. 14 CCR § 929.3 [949.3, 969.3] requires notification to CAL FIRE. The area must not be further disturbed, and any area reasonably suspected to overlie adjacent human remains, until an evaluation is completed by the County Coroner pursuant to Health and Safety Code § 7050.5. If the human remains are determined to be Native American, the Native American Heritage Commission must also be notified pursuant to Public Resources Code § 5097.98.

The following suggestions may help ensure compliance with the Forest Practice Rules:

1. Timber Owners, Timberland owners and Timber Operators should obtain and review copies of the Forest Practice Rules pertaining to the Notice of Emergency. Copies may be obtained from Barclays Law Publishers, P.O. Box 2006, San Francisco, CA 94126, CAL FIRE, Forest Practice, P.O. Box 944246, Sacramento, CA 94244-2460; or CAL FIRE’s Web Page at <http://www.fire.ca.gov>.
2. Contact the CAL FIRE office listed below for questions regarding the use of this notice.

File this notice online with CalTREES (<https://caltreesplans.resources.ca.gov/caltrees/>) or send to the CAL FIRE Forest Practice Manager at the office below for the county in which the operation will occur:

Alameda, Colusa, Contra Costa, Del Norte Humboldt, Lake, Marin, Mendocino, Napa, San Mateo, Santa Clara, Santa Cruz, Solano, Sonoma, western Trinity and Yolo Counties.	135 Ridgway Avenue Santa Rosa, CA 95401 santarosareviewteam@fire.ca.gov (707) 576-2959
Butte, Glenn, Lassen, Modoc, Nevada, Placer, Plumas, Shasta, Sierra, Siskiyou, Sutter, Tehama, eastern Trinity and Yuba Counties.	6105 Airport Road Redding, CA 96002 reddingreviewinbox@fire.ca.gov (530) 224-2445
Alpine, Amador, Calaveras, El Dorado, Fresno, Imperial, Inyo, Kern, Los Angeles, Madera, Mariposa, Merced, Mono, Monterey, Orange, Riverside, San Benito, San Bernardino, San Diego, San Luis Obispo, Santa Barbara, Stanislaus, Tuolumne, Tulare, and Ventura Counties.	1234 East Shaw Avenue Fresno, CA 93710 fresnoreviewinbox@fire.ca.gov (559) 243-4107



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

Public Works Building
 Second & L St., Eureka
 Fax 445-7409

Clark Complex
 Harris & H St., Eureka
 Fax 445-7388

On-line
 Web: humboldt.gov.org

Administration	445-7491	Natural Resources	445-7741
Business	445-7652	Natural Resource Planning	267-9542
Engineering	445-7377	Parks	445-7651
Facility Management	445-7621	Roads	445-7421

Land Use 445-7205

ENCROACHMENT PERMIT

PERMITTEE: HUMBOLDT COUNTY RESOURCE
ADDRESS: CONSERVATION DISTRICT
 % KATRINA HENDERSON
 5630 SOUTH BROADWAY
 EUREKA, CA 95503

In response to your project request received and subject to all the terms, conditions, and restrictions written below or printed as general or special provisions on any part of this form and/or attachments, permission is hereby granted, as per the attached special and general provisions and the Humboldt County Code Title IV, Division 1, pertaining to the protection and control of County roads, to perform the following work:

If any conflicts occur between this permit and the submitted plans, the conditions of this permit shall prevail.

***ALL WORK AUTHORIZED BY THIS PERMIT SHALL BE PERFORMED BY
 AN "A" or APPROPRIATELY LICENSED CONTRACTOR***

This permit is revocable, at the discretion of the Department of Public Works, upon written notice by US mail to the address of Permittee subject to nonconformance of this permit.

In accordance with the California Streets and Highways Code, §1463: All Permits are revocable on five (5) days' notice and the encroachment must be removed or relocated as may be specified by the road commissioner in the notice revoking the permit and within a reasonable time specified by the road commissioner unless the permit provides a specified time.

SPECIFIC REQUIREMENTS:

Permittee shall be responsible for contacting the Department of Public Works for the scheduling of all required inspections (i.e. concrete forms, driveways and trenches prior to (re)surfacing, trench backfill) or as specifically stated within this permit. Permittee shall provide notification of project completion to the Department.

- (1) This permit is to be strictly complied with and no work other than that specifically mentioned is authorized hereby.**
- (2) During vegetation removal, roadways shall be periodically cleaned of mud, soil, rock, and debris. No construction materials or debris shall be placed within County right of way during the project.**

(3) Permittee shall be responsible to correct any involved drainage problems to the satisfaction of the Department of Public Works.

(4) Permittee shall clean and shape existing drainage ditch line upon completion of project, if disturbed.

(5) Permittee shall be responsible for all traffic control and safety at all work locations in a manner satisfactory to the Department of Public Works. Traffic control operations shall conform to **California Manual on Uniform Traffic Control Devices for Streets and Highways** (FHWA's MUTCD 2014 Edition, as amended for use in California), January 11, 2024, or latest edition, and to the satisfaction of the Department of Public Works. Warning and flagging of motorists at work locations shall be conducted **AT ALL TIMES** by properly trained personnel.

- Permittee shall use Caltrans 2023 Standard Plan T13 with T9 for a traffic control plan, when applicable, for closing one traffic lane, see attachment.
- Permittee shall use CAMUTCD Figure 6H-6, Titled "Shoulder Work with Minor Encroachment (TA-6)", when applicable, for working outside of the travelway and not affecting normal vehicle traffic, see attachment.
- Conditions requiring a traffic control plan other than Caltrans T13 with T9 or Fig 6H-6 will require submittal and Public Works approval of a traffic control plan prepared by a Registered Civil Engineer (or Traffic Engineer).

(6) Only one (1) lane of traffic shall be closed at any time during construction or installation. **NO COMPLETE ROAD CLOSURE** is authorized under this permit.

(7) No work is authorized under this permit during wet weather periods, as determined by the Department of Public Works, without submittal and approval by the Department of Public Works of an erosion and sediment control plan. The plan shall be implemented for construction activities conducted between October 15 and April 15. It shall be at the discretion of the Department of Public Works to authorize work within County right of way during said period of time.

(8) PERMITTEE is responsible for preservation and/or perpetuation of all existing monuments which control subdivisions, tracts, boundaries, streets, highways, or other rights-of-way, easements or provide survey control which will be disturbed or removed due to PERMITTEE'S work. PERMITTEE shall provide a minimum of ten (10) working days notice to project engineer/surveyor prior to possible disturbance or removal of existing monuments. PERMITTEE shall coordinate with Project engineer/surveyor to reset monuments or provide permanent witness monuments and file the required documentation with the County Surveyor pursuant Business and Professions Code Section 8771.

If any work is closer than seven feet (7') from monument, PERMITTEE shall call COUNTY Surveyor (445-7205). PERMITTEE may be required to consult with a licensed surveyor to set reference points and file a Corner Record.

(9) All affected utilities shall be contacted prior to any excavation work. Permittee shall notify U.S.A. - Underground Service Alert - at 1-800-227-2600. **Any utility conflicts shall be forwarded to the project engineer and this office for review prior to construction commencing.**

Note that the County does not participate in the U.S.A. program. Therefore, Permittee is responsible to research, locate, and protect any County maintained facilities that may be within the work area. Contact Public Works - Roads Division (445-7421) for assistance locating County maintained facilities. Typically, these facilities include, but are not limited to, storm drain structures, traffic signal loop detectors, and traffic signal conduit.

(10) Permittee and/or contractor shall contact this department at 445-7205 to schedule an on-site meeting prior to construction of the above mentioned improvements.

(11) Permittee shall contact this office at 445-7205 to schedule an on-site inspection when all work has been completed and this permit is ready to final.

(12) Any damage to existing County road improvements (i.e., adjacent curb and gutter, drainage structures, road surface, etc.) shall be repaired or replaced by Permittee to the satisfaction of the Department of Public Works. Damages will be reported promptly to the Department of Public Works.

(13) This permit may be extended for a fee not less than the Board of Supervisors latest adopted ordinance for charges of service. Please contact this office prior to the expiration date of the current permit.

(14) Permittee shall comply with Permit General Provisions and Public Safety attachments.

(15) This permit shall not be executed by the Department of Public Works until certificates or other sufficient proof that these insurance provisions have been complied with are received by the Department of Public Works.

(16) Permittee is responsible to obtain and comply with any other permits necessary for the project. Such permits may include, but are not limited to, those issued by County of Humboldt, Community Development Services - Planning Division; County of Humboldt, Community Development Services - Building Division; California Department of Fish and Game; State of California Department of Transportation (Caltrans); Army Corps of Engineers; etc.

(17) Humboldt County staff are not responsible for the review of vesting or title to property or any easements associated with the subject property, nor do staff review survey information or provide opinions or legal advice about boundaries or soundness of title. If title to property or boundaries are misrepresented to staff, permits may be revoked or a stop work order issued.

(18) This permit is not valid until all other permits for the project have been issued. The Department of Public Works will issue a stop work order if work commences without all other required permits properly issued.

(19) Permittee, the land owner or an authorized agent of the land owner for which this permit is issued, hereby recognizes and accepts the terms of this permit by authorized signature below.

COUNTY OF HUMBOLDT BY:



Tony Ye Engineering Technician
Land Use Division
3015 H Street
Eureka, CA 95501
(707) 445-7205

PERMITTEE:

Katrina
Henderson

Digitally signed by Katrina
Henderson
Date: 2024.09.17 08:29:39
-07'00'

Authorized signature

Katrina Henderson

Print name

Date 09/17/2024

CC: Russell Coleman, Road Crew Supervisor, Steve Finch, Road Division Superintendent
Roads Dispatch; Deputy Director-Roads

***\$320 fee required, per 2023-2024 Humboldt County Fee Schedule Paid Check# 11285**

Attachments: -General Provisions, Public Safety, Hold Harmless/Indemnification,
Caltrans 2023 Standard Plans T9, T13, and 2014 CAMUTCD Figure 6H-6

INSURANCE REQUIREMENTS

THIS PERMIT SHALL NOT BE EXECUTED BY COUNTY and PERMITTEE/CONTRACTOR are not entitled to any rights, unless certificates of insurance, or other sufficient proof that the following provisions have been complied with, and such certificate(s) are filed with the Clerk of the Humboldt County Board of Supervisors.

Without limiting PERMITTEE/CONTRACTOR'S indemnification provided herein, PERMITTEE/CONTRACTOR shall and shall require any of its subcontractors to take out and maintain, throughout the period of this permit, the following policies of insurance placed with insurers with a current A.M. Bests rating of no less than A:VII or its equivalent against injury/death to persons or damage to property which may arise from or in connection with the activities hereunder of PERMITTEE/CONTRACTOR, its agents, employees, or subcontractors:

1. Comprehensive or Commercial General Liability Insurance at least as broad as Insurance Services Office Commercial General Liability coverage (occurrence form CG0001), in an amount of \$2,000,000 per occurrence. If work involves explosive, underground or collapse risks, XCU must be included. If a general aggregate limit is used, either the general aggregate limit shall apply separately to this project or the general aggregate shall be twice the required occurrence limit. Said policy shall contain, or be endorsed with, the following provisions:

a. COUNTY, its officers, employees, and agents, are covered as additional insured for liability arising out of the operations performed by or on behalf of PERMITTEE/CONTRACTOR. The coverage shall contain no special limitations on the scope of protection afforded to COUNTY, its officers, agents, and employees.

b. The policy shall not be canceled or materially reduced in coverage without thirty (30) days prior written notice (10 days for non-payment of the premium) to COUNTY by certified mail.

c. The inclusion of more than one insured shall not operate to impair the rights of one insured against another insured, and the coverage afforded shall apply as though separate policies had been issued to each insured, but the inclusion of more than one insured shall not operate to increase the limits of the insurer's liability.

d. For claims related to this project, PERMITTEE/CONTRACTOR'S insurance is primary coverage to COUNTY, and any insurance or self-insurance programs maintained by COUNTY are excess to PERMITTEE/CONTRACTOR'S insurance and will not be called upon to contribute with it.

2. Any failure to comply with reporting or other provisions of the parties, including breach of warranties, shall not affect coverage provided to COUNTY, its officers, employees and agents. PERMITTEE/CONTRACTOR shall furnish COUNTY with certificates and original endorsements effecting the required coverage prior to execution of this permit by COUNTY. The endorsements shall be on forms as approved by the County Risk Manager or County Counsel. Any deductible or self-insured retention over \$100,000 shall be disclosed to and approved by COUNTY. If PERMITTEE/CONTRACTOR does not keep all required policies in full force and effect, COUNTY may, in addition to other remedies under this permit, take out the necessary insurance, and PERMITTEE/CONTRACTOR agree to pay the cost of said insurance. All coverage shall be with insurance carriers licensed and admitted to do business in California. All coverage shall be with insurance carriers acceptable to COUNTY.

Questions concerning insurance requirements shall be directed to the County Risk Manager at 707-268-3669.

GENERAL PROVISIONS

DEFINITION - This permit is issued in accordance with the Encroachment Permit Ordinance #896 and any amendments thereof. This permit is revocable on notice by the Director of Public Works.

ACCEPTANCE OF PROVISIONS - It is understood and agreed by the Permittee that the doing of any work under this permit shall constitute an acceptance of the conditions and provisions relative to the permit.

NO PRECEDENT ESTABLISHED - This permit is granted with the understanding that this action is not to be considered as establishing any precedent on the question of the expediency of permitting any certain kind of encroachment to be erected within right of way of County highways.

NOTICE PRIOR TO STARTING WORK - The Department of Public Works shall be notified 24 hours in advance of pouring concrete to permit inspection of subgrade and forms.

KEEP PERMIT ON SITE - This permit shall be kept at the work site and must be shown to any representative of the Grantor or any law enforcement officer on demand.

PROTECTION OF TRAFFIC - Adequate provision shall be made for the protection of the traveling public. Barricades shall be placed with amber lights at night, also flagmen employed, all as may be required by the County for the particular work in progress.

MINIMUM INTERFERENCE WITH TRAFFIC - All work shall be planned and carried out so that there will be the least possible inconvenience to the traveling public.

STORAGE OF MATERIAL - No material shall be stored within 8 feet from the edge of pavement or graveled way or within the shoulder line when the shoulders are wider than 8 feet, unless specifically authorized by this permit.

CLEAN UP - Upon completion of the work, all brush, timber, scraps, and materials shall be entirely removed and the right of way left in as presentable a condition as before work started.

STANDARDS OF CONSTRUCTION - All work shall conform to the State of California Standard Specifications and County standards.

FUTURE MOVING OF INSTALLATION - It is understood by the Permittee that the installation authorized herein shall, upon demand of the Director of Public Works, be relocated by and at the sole expense of the Permittee whenever construction, reconstruction, or maintenance on the highway may require such relocation. The Permittee must complete such relocation within the time specified in said demand.

CARE OF DRAINAGE - Permittee shall undertake such measures to prevent interference with established drainage as may be required by the Director of Public Works.

EXCAVATION - All excavation shall comply with the provisions of Chapter 3, Article 2, Section 320, of the Encroachment Permit Ordinance #896.

BACKFILL - Backfill in all trenches shall comply with the provisions of Chapter 3, Article 2, Section 321, of the Encroachment Permit Ordinance #896.

LOCATION - The shallowest portion of any pipeline or other facility shall be installed not less than 30 inches below the roadway surface, or one foot below the flow line of any drainage structure, pipe, ditch, or creek.

CURB, GUTTERS, AND SIDEWALK - Shall comply with the provisions of Chapter 3, Article 3, of Encroachment Permit Ordinance #896 and any amendments thereof.

DEFAULT OF PERMITTEE - By applying for and obtaining a permit, the Permittee agrees that if the Permittee fails to comply with the terms of the Permit, the County may elect to perform and complete the work by any method the Director deems appropriate. The Permittee shall reimburse the County for the full cost of the work at the then current Associated General Contractor's Cost Schedule for such work.

SPECIAL PROVISIONS

1. In constructing the driveway, no equipment that will damage the surface of the roadway shall be used.
2. The driveway shall be located at least 3 feet from the side property line and at least 3 feet from the centerline of any utility facility such as fire hydrants, power poles, etc.
3. The driveway(s) shall intersect the County road at a 90 degree angle. Driveway grade shall not exceed two percent (2%) for the first 25 feet commencing from the edge of the traveled way of the County road, shall have a minimum of 4 inches of aggregate base, and shall be surfaced by means of a seal coat or 2 inches of Type B asphalt concrete surfacing.
4. The driveway approach shall conform to the enclosed typical section for private driveway intersections.
5. Other conditions regarding Public Safety and Liability are included in the attached exhibits.

PUBLIC SAFETY

1. The Permittee in the conduct of work shall provide, erect, or maintain the lights, barriers, warning signs, and other safeguards necessary to protect the traveling public in accordance with Section 21406 of the California Vehicle Code. If at any time the Director of Public Works finds that suitable safeguards are not being provided, the County shall provide, erect, and/or maintain the safeguards deemed necessary. The Permittee shall reimburse the County for all expenses incurred by County providing, erecting, and maintaining the safeguards deemed necessary by the Director of Public Works.
2. All work shall be planned and carried out so that there will be the least possible inconvenience to the traveling public. Permittee is authorized to place flagmen to stop and warn traffic for necessary protection to public safety, but traffic shall not be unreasonably delayed. Complete closure of the road shall not be permitted unless authorized in writing by the Director of Public Works.

HOLD HARMLESS/INDEMNIFICATION

The Permittee shall agree to indemnify and hold harmless the County and each of its officers and employees from any liability or responsibility for accident, loss, or damage to persons or property arising by reason of the work done by the Permittee, or its agents, employees, or representatives. The Permittee shall, at its own expense, cost, and risk, defend any and all actions, suits, or other legal proceedings that may be brought or instituted against the County, its officers, or employees and pay or satisfy any judgment that may be rendered against the County and its officers or employees in any such action, suit, or legal proceedings arising by reason of the work done by the Permittee, its agents, employees, or representatives.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL NO. SHEETS

REGISTERED CIVIL ENGINEER
Ch. P. Sanchez
 No. CA 0029
 Exp. 3-31-24
 STATE OF CALIFORNIA

PROFESSIONAL ENGINEER
 No. CA 0029
 Exp. 3-31-24
 STATE OF CALIFORNIA

DATE: MAY 1, 2023
 THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ANY INFORMATION CONTAINED HEREIN UNLESS IT IS SHOWN OTHERWISE ON THIS PLAN SHEET.

TABLE 3

ROAD TYPE	DISTANCE BETWEEN SIGNS *		
	A	B	C
URBAN - 25 mph OR LESS	100	100	100
URBAN - MORE THAN 25 mph TO 40 mph	250	250	250
URBAN - MORE THAN 40 mph	350	350	350
RURAL	500	500	500
EXPRESSWAY / FREEWAY	1000	1500	2640

* - The distances are approximate, are intended for guidance purposes only, and should be applied with engineering judgment. These distances should be adjusted by the Engineer for field conditions, if necessary, by increasing or decreasing the recommended distances.

TABLE 2

SPEED *	Min D **	DOWNGRADE Min D ***		
		-3%	-6%	-9%
20	115	116	120	126
25	155	158	165	173
30	200	205	215	227
35	250	257	271	287
40	305	315	333	354
45	360	378	400	427
50	425	446	474	507
55	495	520	553	593
60	570	598	638	686
65	645	682	728	785
70	730	771	825	891
75	820	866	927	1003

* - Speed is posted speed limit, off-peak 85th-percentile speed prior to work starting, or the anticipated operating speed in mph
 ** - Longitudinal buffer space or flagger station spacing and longer than 1 mile.
 *** - Use on sustained downgrade steeper than -3 percent

TABLE 1

SPEED (S)	TAPER LENGTH CRITERIA AND CHANNELLIZING DEVICE SPACING									
	MINIMUM TAPER LENGTH * FOR WIDTH OF OFFSET 12 FEET (W)					MAXIMUM CHANNELLIZING DEVICE SPACING				
	TANGENT 2L	MERGING L	SHIFTING L/2	SHOULDER L/3	TAPER	X	Y	Z	CONFLICT	**
20	160	80	40	27	20	40	10	10	10	10
25	250	125	63	42	25	50	12	12	12	12
30	360	180	90	60	30	60	15	15	15	15
35	490	245	123	82	35	70	17	17	17	17
40	640	320	160	107	40	80	20	20	20	20
45	1080	540	270	180	45	90	22	22	22	22
50	1200	600	300	200	50	100	25	25	25	25
55	1320	660	330	220	50	100	25	25	25	25
60	1440	720	360	240	50	100	25	25	25	25
65	1560	780	390	260	50	100	25	25	25	25
70	1680	840	420	280	50	100	25	25	25	25
75	1800	900	450	300	50	100	25	25	25	25

* - For other offsets, use the following merging taper length formula for L:
 For speed or 40 mph or less, $L = WS^2/60$
 For speed or 45 mph or more, $L = WS$
 Where: L = Taper length in feet
 W = Width of offset in feet
 S = Posted speed limit, off-peak 85th-percentile speed prior to work starting, or the anticipated operating speed in mph
 ** - Use for taper and tangent sections where there are no pavement markings or where there is a conflict between existing pavement markings and channelizers (CA).

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
**TRAFFIC CONTROL SYSTEM TABLES
 FOR LANE AND RAMP CLOSURES**

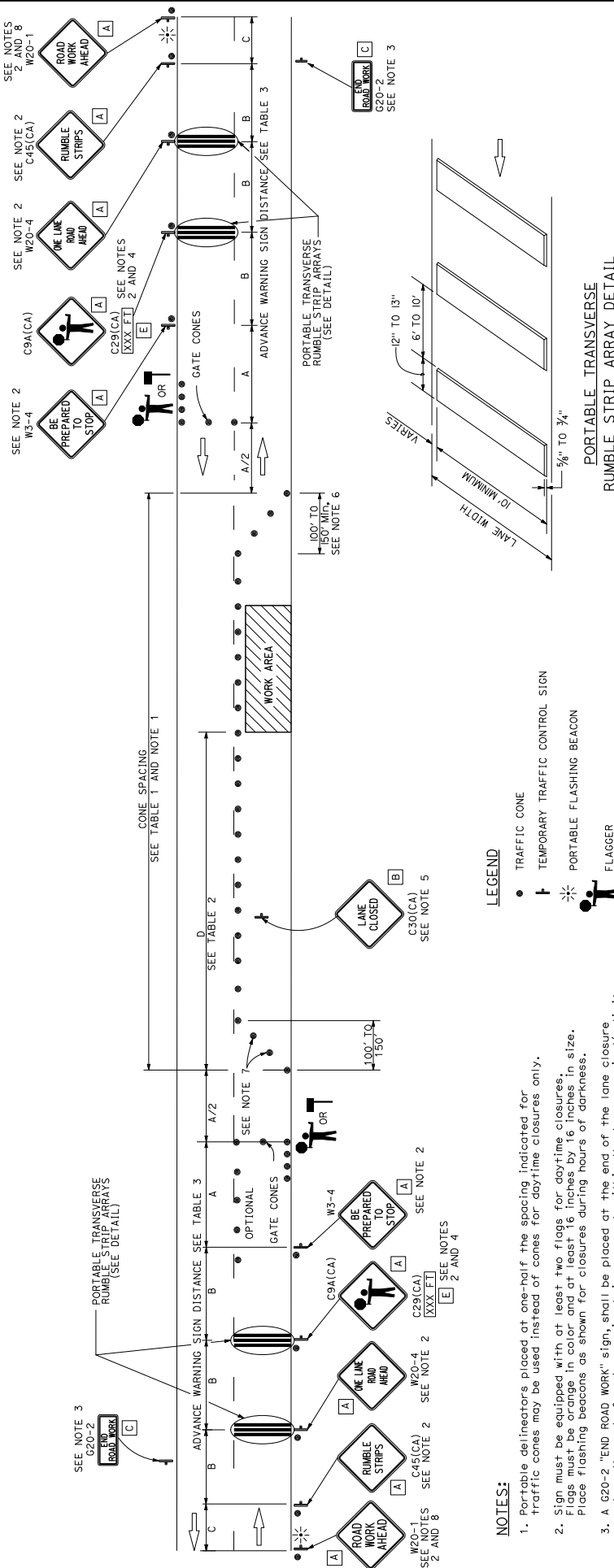
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL NO. SHEETS

REGISTERED CIVIL ENGINEER
 PROFESSIONAL ENGINEER
 No. CA0209
 Exp. 3-31-24
 STATE OF CALIFORNIA
 DIVISION OF CALIFORNIA HIGHWAY PATROL
 THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF THIS PLAN SHEET.

SIGN PANEL SIZE (Min)

- A 48" x 48"
- B 30" x 30"
- C 36" x 18"
- D 36" x 42"
- E 20" x 7"

NOTES:
 See Standard Plan T9 for tables.
 Use cone spacing X for taper segment, Y for tangent segment or Z for conflict situations, as appropriate, per Table 1, unless X, Y, or Z cone spacing is shown on this sheet.
 Provide at least one person to continuously maintain traffic control devices for lane closures.



- NOTES:**
- Portable delineators placed at one-half the spacing indicated for. Traffic cones may be used instead of cones for daytime closures only.
 - Sign must be equipped with at least two flags for daytime closures. Flags must be orange in color and at least 16 inches in size. Place flashing beacons as shown for closures during hours of darkness.
 - A G20-2 "END ROAD WORK" sign, shall be placed at the end of the lane closure unless the end of work area is obvious or ends within the larger project's limits.
 - An optional C29(CA) sign may be placed below the C9A(CA) sign.
 - Place C30(CA) "LANE CLOSED" sign at 500' to 1000' intervals throughout extended work area. They are optional if the work area is visible from the flagger station.
 - Length may be reduced by the Engineer to address site conditions.
 - Either traffic cones or barricades shall be placed on the taper. Barricades shall be Type I, II, or III.
 - If C45(CA) is not used, measure distance C from W20-4.

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
**TRAFFIC CONTROL SYSTEM
 WITH REVERSIBLE CONTROL ON
 TWO LANE CONVENTIONAL HIGHWAYS**
 NO SCALE

T13

Notes for Figure 6H-6—Typical Application 6 Shoulder Work with Minor Encroachment

Guidance:

1. All lanes should be a minimum of 10 feet in width as measured to the near face of the channelizing devices.
2. The treatment shown should be used on a minor road having low speeds. For higher-speed traffic conditions, a lane closure should be used.

Option:

3. For short-term use on low-volume, low-speed roadways with vehicular traffic that does not include longer and wider heavy commercial vehicles, a minimum lane width of 9 feet may be used.
4. Where the opposite shoulder is suitable for carrying vehicular traffic and of adequate width, lanes may be shifted by use of closely spaced channelizing devices, provided that the minimum lane width of 10 feet is maintained.
5. Additional advance warning may be appropriate, such as a ROAD NARROWS sign.
6. Temporary traffic barriers may be used along the work space.
7. The shadow vehicle may be omitted if a taper and channelizing devices are used.
8. A truck-mounted attenuator may be used on the shadow vehicle.
9. For short-duration work, the taper and channelizing devices may be omitted if a shadow vehicle with activated high-intensity rotating, flashing, oscillating, or strobe lights is used.
10. Vehicle hazard warning signals may be used to supplement high intensity rotating, flashing, oscillating, or strobe lights.

Standard:

11. **Vehicle-mounted signs shall be mounted in a manner such that they are not obscured by equipment or supplies. Sign legends on vehicle-mounted signs shall be covered or turned from view when work is not in progress.**
12. **Shadow and work vehicles shall display high intensity rotating, flashing, oscillating, or strobe lights.**
13. **Vehicle hazard warning signals shall not be used instead of the vehicle's high intensity rotating, flashing, oscillating, or strobe lights.**

Guidance:

14. All advance warning signs should be placed so that the path of travel for bicycles is not blocked, while maintaining visibility for road users.
15. When existing accommodations for bicycle travel are disrupted or closed in a long-term duration project (see Section 6G.02) and the roadway width is inadequate for allowing bicyclists and motor vehicles to travel side by side, the Bicycle Warning (W11-1) sign and the SHARE THE ROAD (W16-1P) plaque should be used to advise motorists of the presence of bicyclists in the travel way lanes.
16. Except for short durations and mobile operations, when a highway shoulder is occupied and bicyclists would be sharing a lane with vehicular traffic, as a result of the TTC zone, speed reduction countermeasures should be used to reduce traffic speeds in the TTC zone. Refer to Sections 6C.01 and 6D.03.
17. Except for short durations and mobile operations, when a highway shoulder is occupied and bicyclists would be sharing a lane with vehicular traffic, as a result of the TTC zone, before narrowing the outside lane other measures such as widening the outside shoulder to allow bicyclists and motor vehicles to travel side by side through the TTC zone should be considered.
18. If traffic volumes make it feasible, the two left lanes should be merged into one lane to avoid using the shoulder as a traveled way lane and allowing continued use for emergency purposes and bicycle travel.
19. When existing accommodations for bicycle travel are disrupted or closed in a long-term duration project (see Section 6G.02) and the roadway width is inadequate for allowing bicyclists and motor vehicles to travel side by side, a separate path should be considered for bicyclists.

Figure 6H-6. Shoulder Work with Minor Encroachment (TA-6)

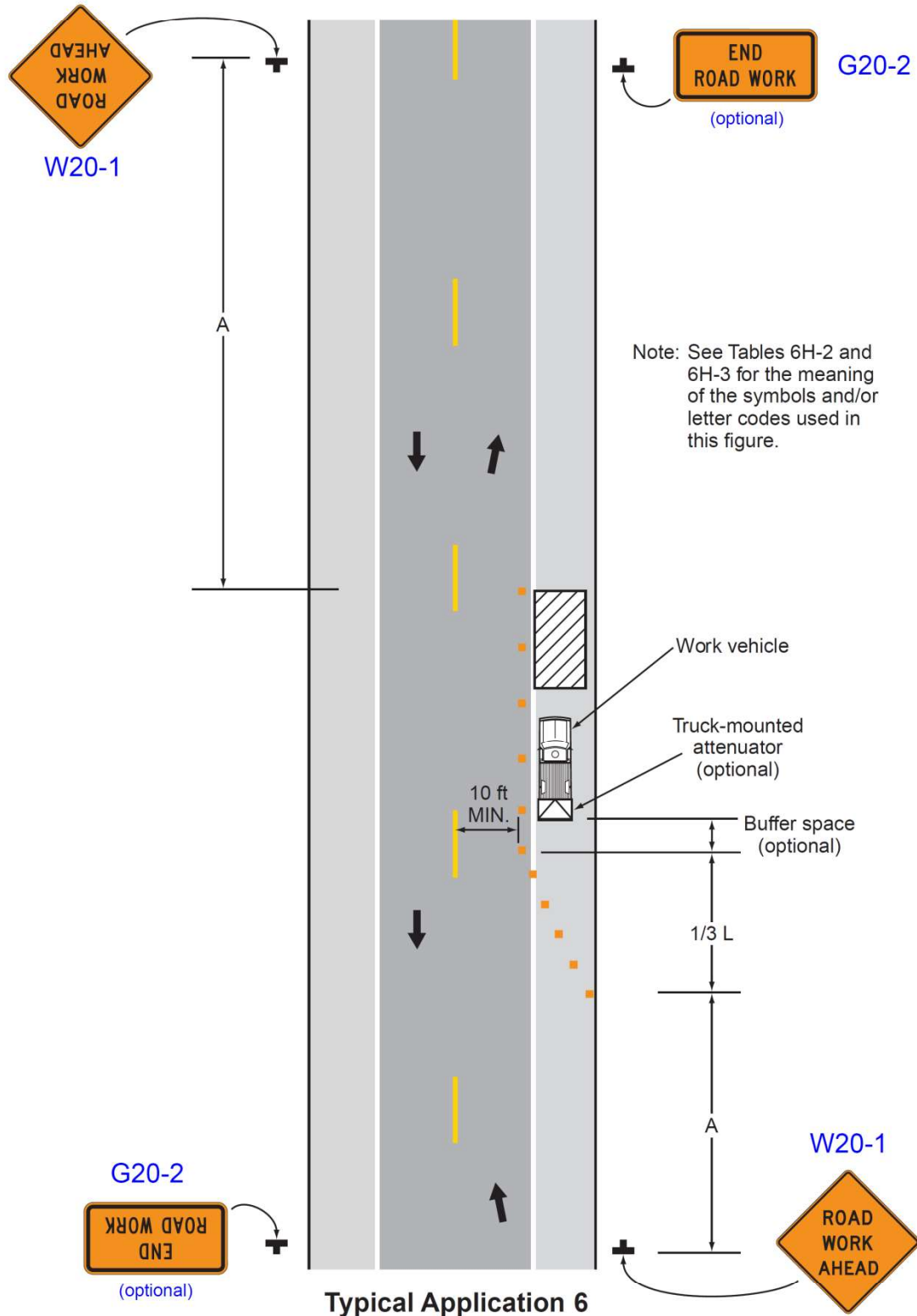


Table 6H-1(CA). Index to Typical Applications

Typical Application Description	Typical Application Number
Work affecting Pedestrian and Bicycle Facilities (see Section 6G.05)	
Shoulder Closure on Urban (Low Speed) Locations to Accommodate Bicyclists	TA-101(CA)
Lane Closure on Freeway, Expressway, Rural and Urban (High Speed) Locations to Accommodate Bicyclists	TA-102(CA)
Detour for Bike Lane on Roads with Closure of One Travel Direction	TA-103(CA)
Right Lane and Bike Lane Closure on Far Side of Intersection	TA-104(CA)
Work Within the Traveled Way of a Two-Lane Highway (see Section 6G.10)	
Lane Shift on Road with Low Traffic Volumes	TA-105(CA)
Work Within the Traveled Way of a Roundabout (see Section 6G.13)	
Partial Closure in a Single-Lane Roundabout	TA-106(CA)
Inside Lane Closure on a Multi-Lane Roundabout	TA-107(CA)

Table 6H-2. Meaning of Symbols on Typical Application Diagrams


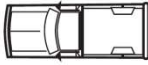



















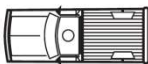

	Arrow board		Shadow vehicle
	Arrow board support or trailer (shown facing down)		Sign (shown facing left)
	Changeable message sign or support trailer		Surveyor
	Channelizing device		Temporary barrier
	Crash cushion		Temporary barrier with warning light
	Direction of temporary traffic detour		Traffic or pedestrian signal
	Direction of traffic		Truck-mounted attenuator
	Flagger		Type 3 barricade
	High-level warning device (Flag tree)		Warning light
	Longitudinal channelizing device		Work space
	Luminaire		Work vehicle
	Pavement markings that should be removed for a long-term project		

Table 6H-3. Recommended Advance Warning Sign ~~Minimum~~ Spacing

Road Type	Distance Between Signs**		
	A	B	C
Urban (low speed) - 25 mph or less***	100 feet	100 feet	100 feet
Urban - more than 25 mph to 40 mph***	250 feet	250 feet	250 feet
Urban (high speed) - more than 40 mph***	350 feet	350 feet	350 feet
Rural	500 feet	500 feet	500 feet
Expressway / Freeway	1,000 feet	1,500 feet	2,640 feet

- * ~~Speed category to be determined by the highway agency.~~
- ** The column headings A, B, and C are the dimensions shown in Figures 6H-1 through 6H-46. The A dimension is the distance from the transition or point of restriction to the first sign. The B dimension is the distance between the first and second signs. The C dimension is the distance between the second and third signs. (The "first sign" is the sign in a three-sign series that is closest to the TTC zone. The "third sign" is the sign that is furthest upstream from the TTC zone.)
- *** Posted speed limit, off-peak 85th-percentile speed prior to work starting, or other anticipated operating speed in mph.

Table 6H-4. Formulas for Determining Taper Length

Speed (S)	Taper Length (L) in feet
40 mph or less	$L = \frac{WS^2}{60}$
45 mph or more	$L = WS$

Where: L = taper length in feet
 W = width of offset in feet
 S = posted speed limit, or off-peak 85th-percentile speed prior to work starting, or the anticipated operating speed in mph

**Table 6H-4(CA). Taper Length Criteria for Temporary Traffic Control Zones
 (for 12 feet Offset Width)**

Speed [*] S (mph)	Minimum Taper Length ^{**} for Width of Offset 12 feet (W)			
	Merging L (feet)	Shifting L/2 (feet)	Shoulder L/3 (feet)	Down Stream (feet) ^{***}
20	80	40	27	50
25	125	63	42	50
30	180	90	60	50
35	245	123	82	50
40	320	160	107	50
45	540	270	180	50
50	600	300	200	50
55	660	330	220	50
60	720	360	240	50
65	780	390	260	50
70	840	420	280	50
75	900	450	300	50

* - Posted speed limit, off-peak 85th-percentile speed prior to work starting, or the anticipated operating speed in mph.

** - For other offsets use the following merging taper length formula for L:

For speeds of 40 mph or less, $L=WS^2/60$

For speeds of 45 mph or more, $L=WS$

Where: L = taper length in feet
 W = width of offset in feet
 S = posted speed limit, off-peak 85th-percentile speed prior to work starting, or the anticipated operating speed in mph

*** - Maximum downstream taper length is 100 feet. See Section 6C.08.