



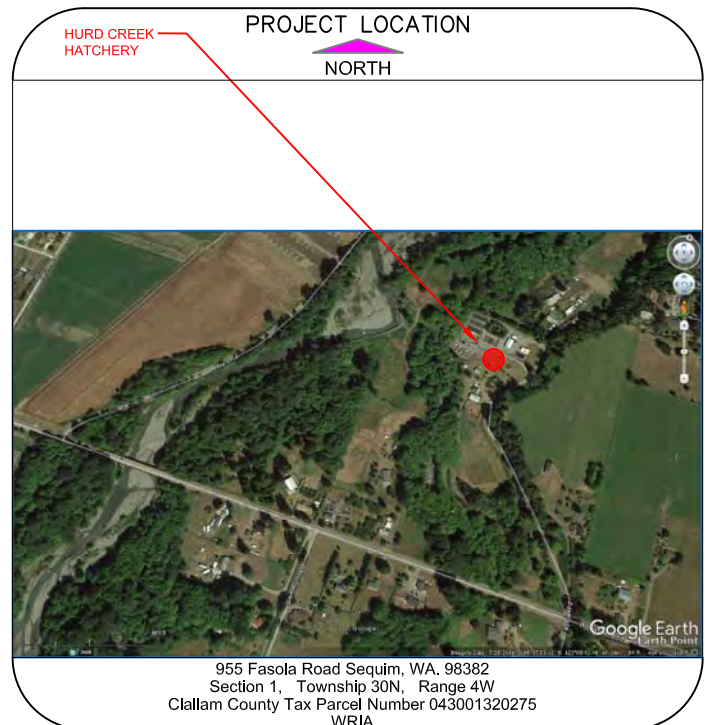
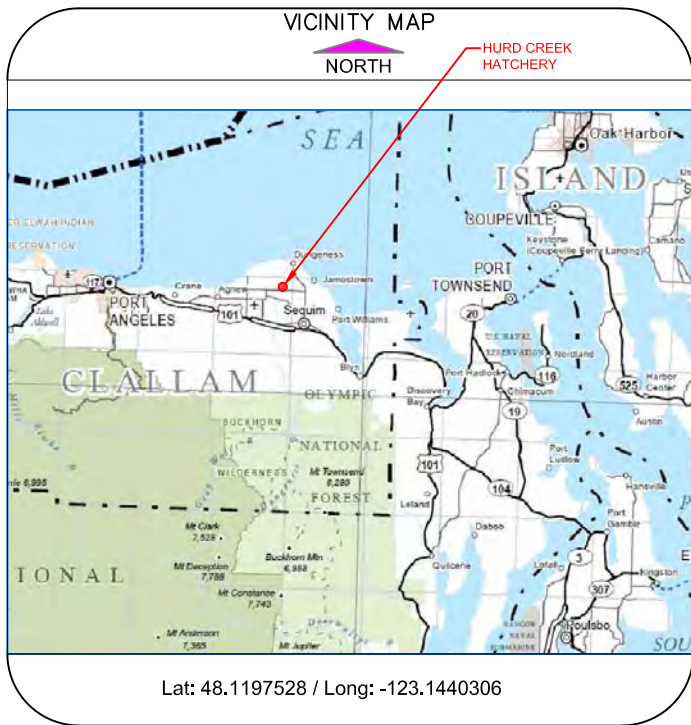
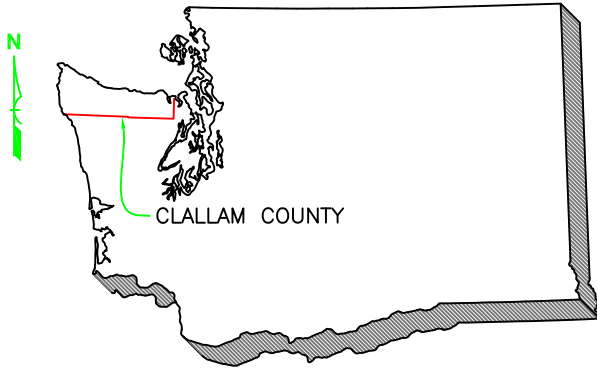
# HURD CREEK HATCHERY FLOOD PROTECTION

## SITE DIRECTIONS:

Highway 101, take Sequim exit, North on S. Sequim Avenue, continue on N. Sequim Avenue, Left on Woodcock Road, Right on Fasola Road follow to the end.

## SURVEY DISCLAIMER

This is not a boundary survey. Elevations shown are based on an assumed datum. Topographic information was gathered under direction of the engineer for the sole purpose of design and construction of this project. Property lines, easements, and right of way locations displayed are approximate based on information obtained from recorded documents, for reference purposes only.



## PROJECT DESCRIPTION:

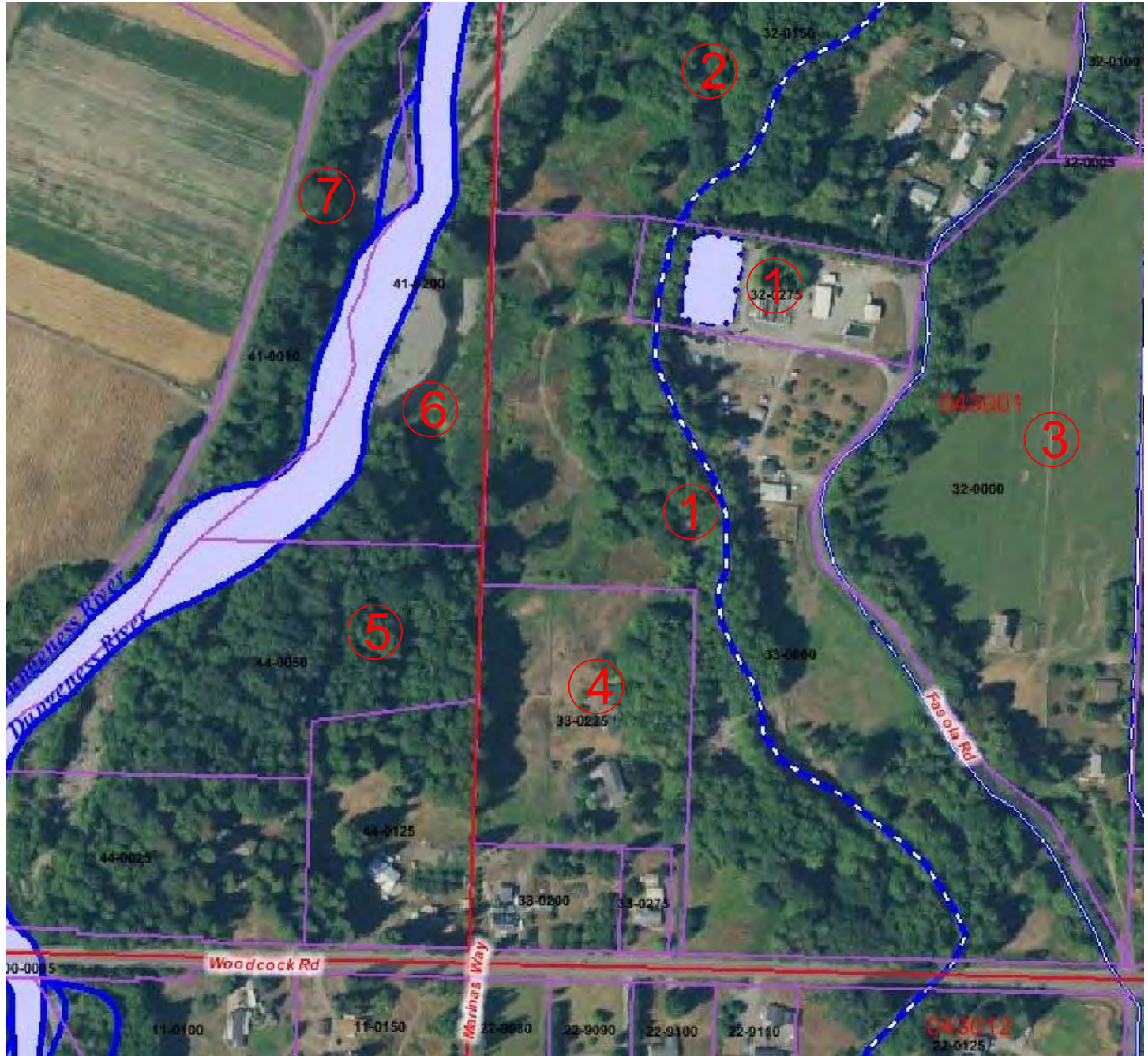
The proposed project is for flood protection for the existing Hurd Creek Fish Hatchery. Rip Rap will be removed from the existing Dungeness River bank and placed along the existing hatchery for scour protection. An earthened berm will be built along the ecology blocks (2ft wide x 2ft tall x 6ft long) and will function as a coffer dam during Dungeness River high flow. logs, stumps, plantings and seeding on the margins of the River and the Creek to enhance floodplain habitat and complete the project.

## COVER SHEET

PURPOSE: HURD CK. HATCHERY FLOOD PROTECTION		REFERENCE NO:
PROPOSAL: SEE NOTE THIS SHEET		APPLICANT: WDFW
LOCATION: 955 FASOLA RD. SEQUIM, WA.		COUNTY: CLALLAM COUNTY
DATUM: ASSUMED	WATER BODY: TRIB. TO STRAIT OF JUAN DE FUCA	
ADJ PROPERTY OWNERS: SEE SHEET 2	DATE: MARCH 2017	

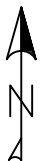


# HURD CREEK HATCHERY FLOOD PROTECTION



NOTE:  
SEE SHEET 3 FOR  
OWNERS INFORMATION

## ADJACENT PROPERTY OWNERS MAP



PURPOSE:  
HURD CK. HATCHERY FLOOD PROTECTION

REFERENCE NO:  
APPLICANT: WDFW

PROPOSAL: SEE NOTE SHEET 1

COUNTY: CLALLAM COUNTY

LOCATION: 955 FASOLA RD. SEQUIM, WA.

NEAR: SEQUIM, WA.

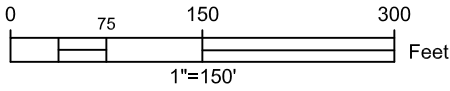
DATUM: ASSUMED

WATER BODY: TRIB. TO STRAIT OF JUAN DE FUCA

ADJ PROPERTY OWNERS: SHEET 2 & 3

DATE: MARCH 2017





# HURD CREEK HATCHERY FLOOD PROTECTION

INSTALL DRIVEWAY  
CULVERT IF THERE IS  
A ROADSIDE DITCH  
PRESENT

DRIVEWAY SHALL MEET  
THE REQUIREMENTS OF  
THE PERMITTING AGENCY.

IT IS RECOMMENDED THAT THE  
ENTRANCE BE CROWNED SO  
THAT RUNOFF DRAINS OFF PAD

GEOTEXTILE  
FABRIC

4" - 8" QUARRY  
SPALLS

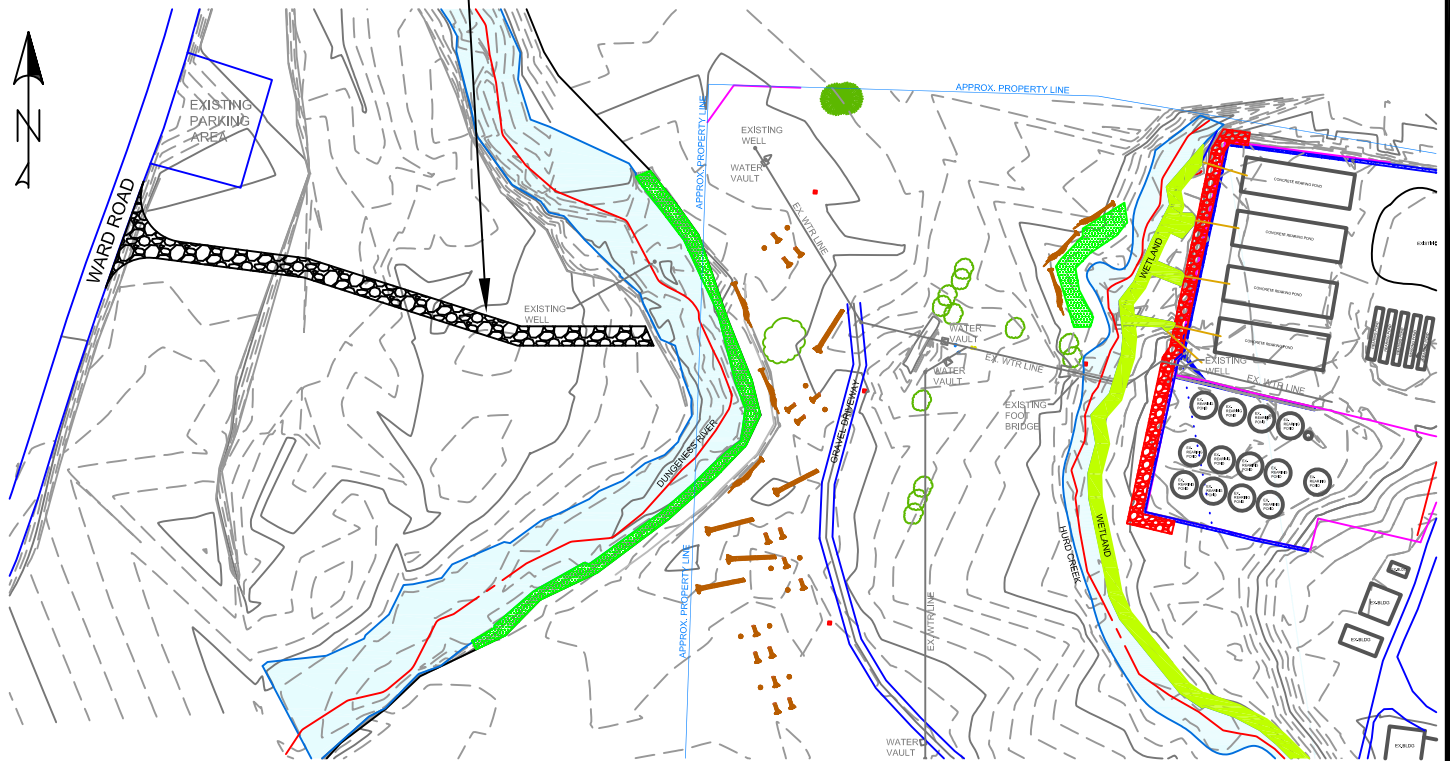
12" MIN.  
THICKNESS

15' MIN.

## TEMPORARY CONSTRUCTION ACCESS DETAIL

Not to Scale

TEMPORARY CONSTRUCTION  
ACCESS. TO BE REMOVED  
WHEN CONSTRUCTION IS  
COMPLETED



## TEMPORARY CONSTRUCTION ACCESS

PURPOSE:  
HURD CK. HATCHERY FLOOD PROTECTION

REFERENCE NO:  
APPLICANT: WDFW

PROPOSAL: SEE NOTE SHEET 1

COUNTY: CLALLAM COUNTY

LOCATION: 955 FASOLA RD. SEQUIM, WA.

NEAR: SEQUIM, WA.

DATUM: ASSUMED

WATER BODY: TRIB. TO STRAIT OF JUAN DE FUCA

ADJ PROPERTY OWNERS: SHEET 2 & 3

DATE: MARCH 2017





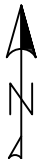
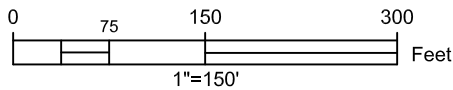
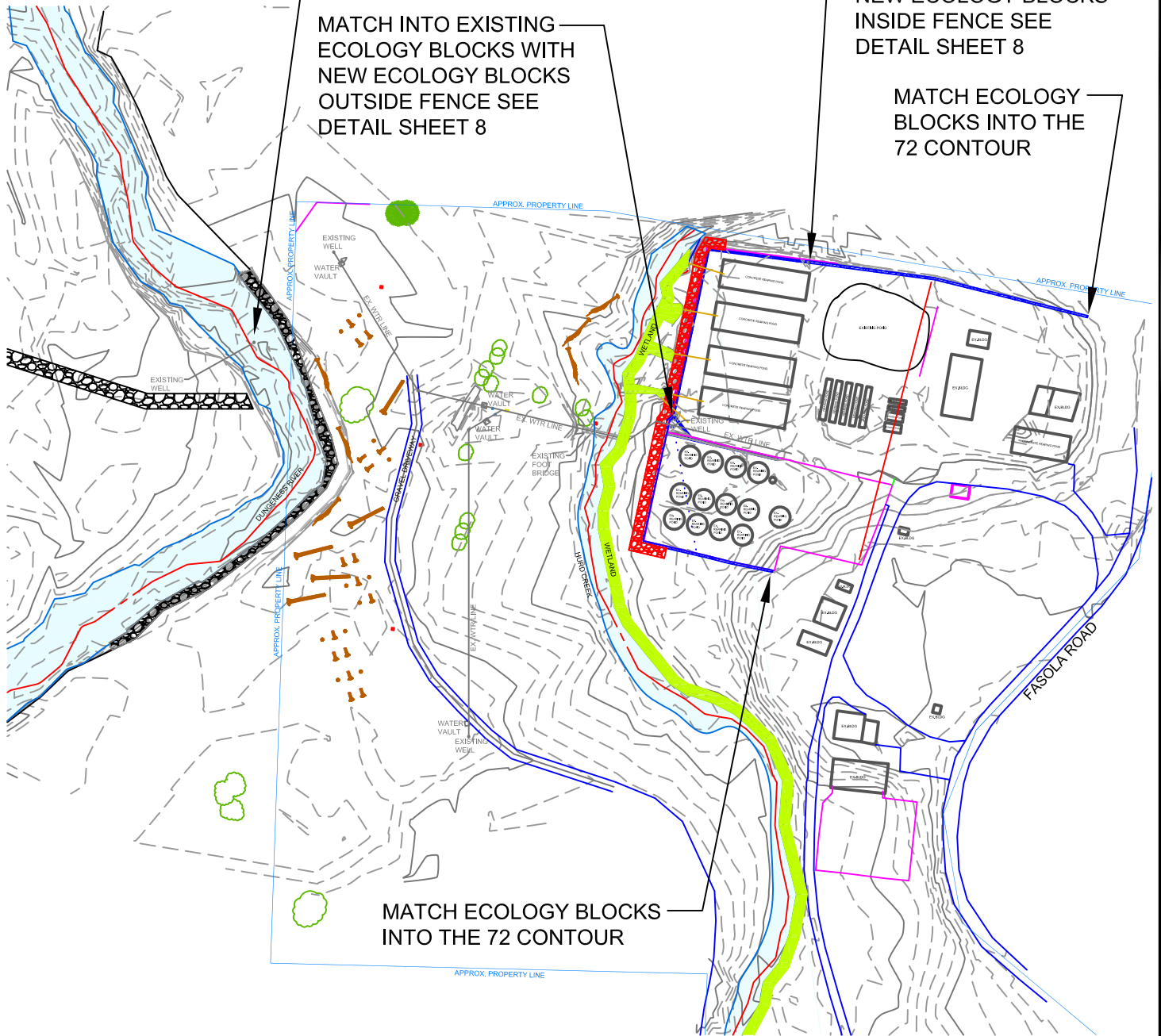
EXISTING WELL TO BE ABANDONED AS PER STATE AND LOCAL RULES AND REGULATIONS

# HURD CREEK HATCHERY FLOOD PROTECTION

END EXISTING ECOLOGY BLOCKS MATCH WITH NEW ECOLOGY BLOCKS INSIDE FENCE SEE DETAIL SHEET 8

MATCH INTO EXISTING ECOLOGY BLOCKS WITH NEW ECOLOGY BLOCKS OUTSIDE FENCE SEE DETAIL SHEET 8

MATCH ECOLOGY BLOCKS INTO THE 72 CONTOUR



## OVERALL HATCHERY FLOOD PROTECTION PLAN

PURPOSE:  
HURD CK. HATCHERY FLOOD PROTECTION

REFERENCE NO:  
APPLICANT: WDFW

PROPOSAL: SEE NOTE SHEET 1

COUNTY: CLALLAM COUNTY

LOCATION: 955 FASOLA RD. SEQUIM, WA.

NEAR: SEQUIM, WA.

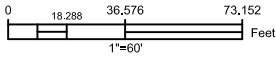
DATUM: ASSUMED

WATER BODY: TRIB. TO STRAIT OF JUAN DE FUCA

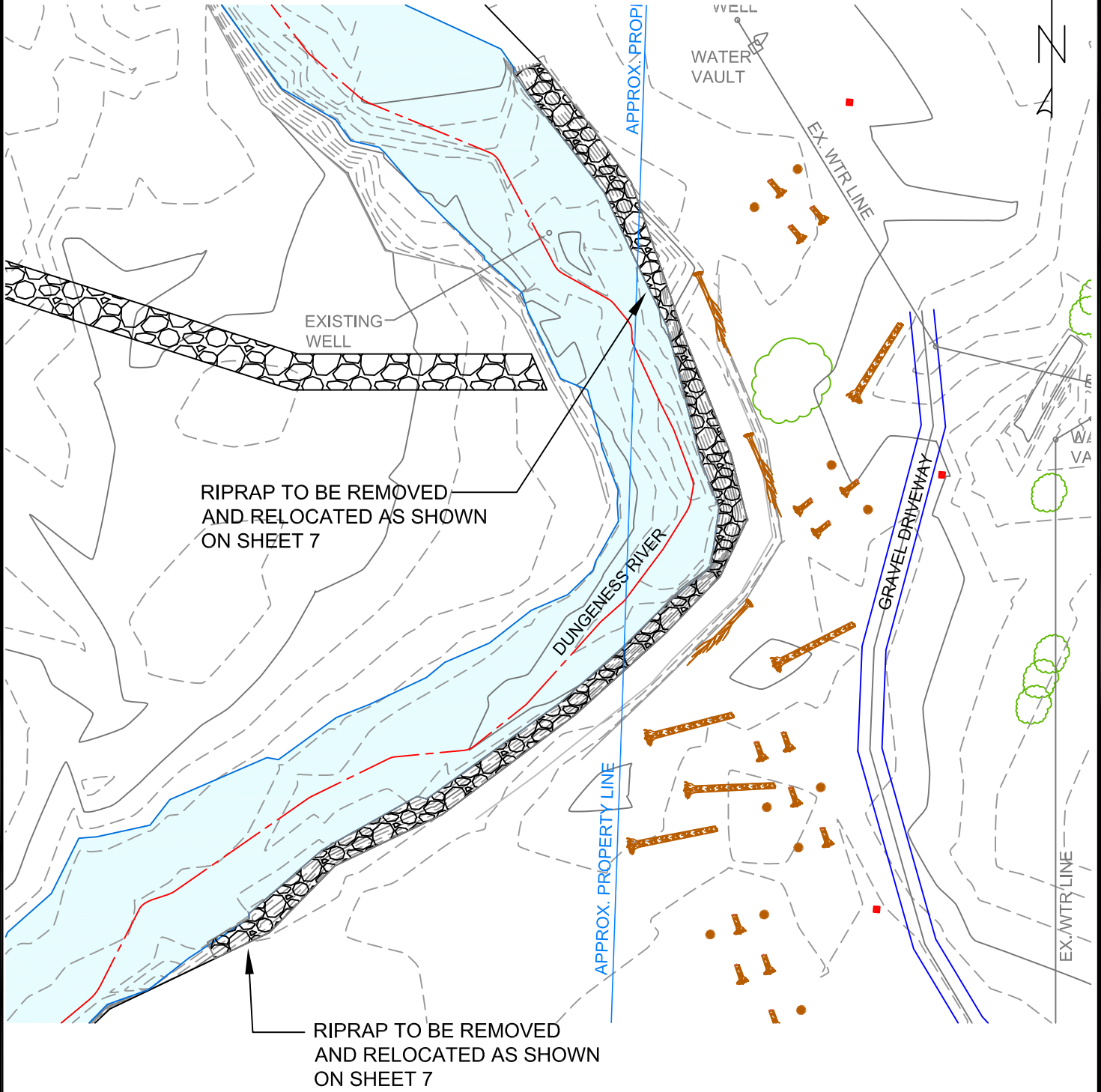
ADJ PROPERTY OWNERS: SHEET 2 & 3

DATE: MARCH 2017





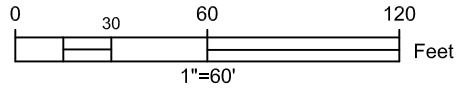
# HURD CREEK HATCHERY FLOOD PROTECTION



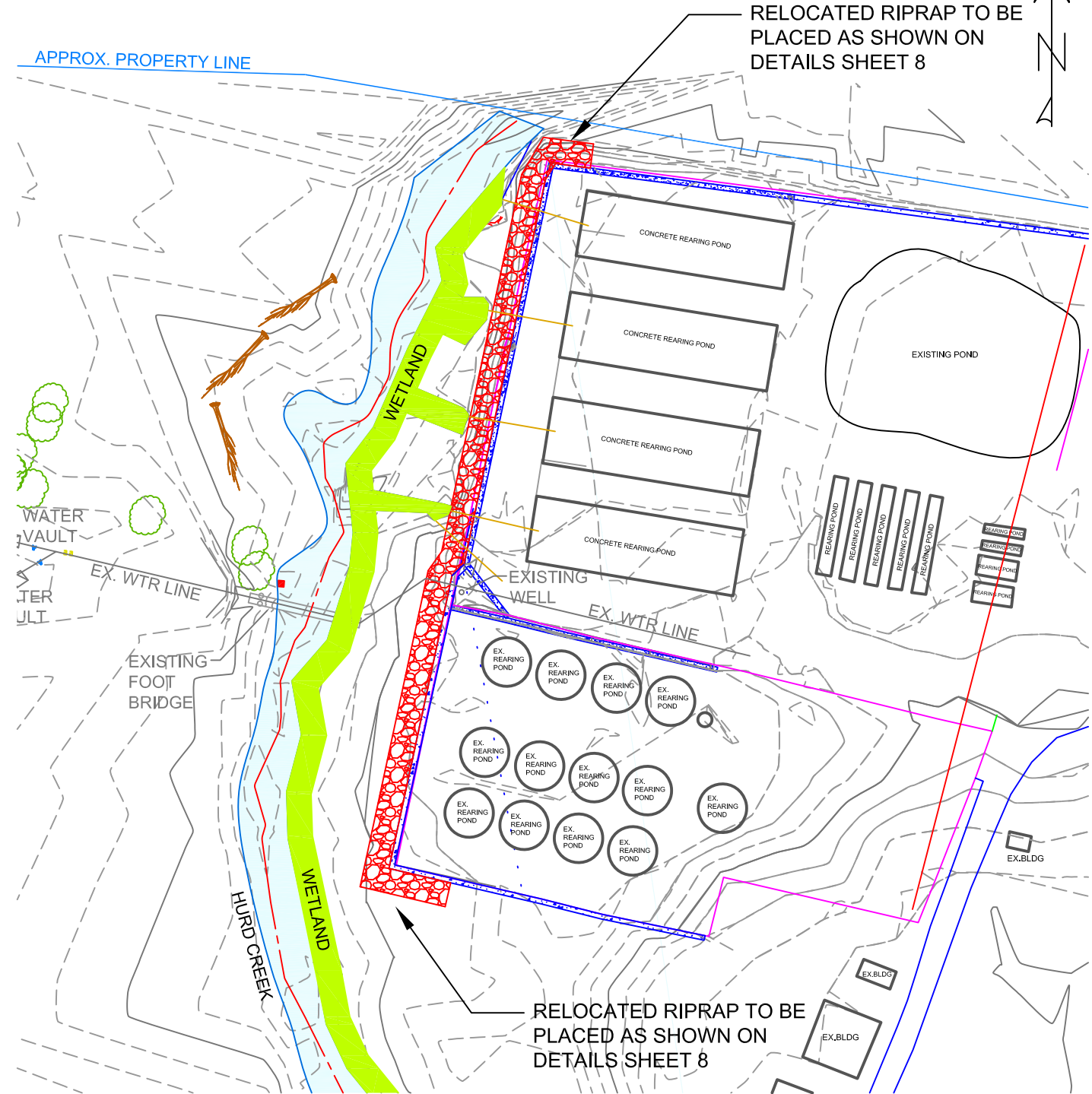
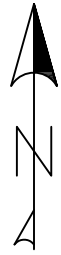
## HATCHERY FLOOD PROTECTION PLAN II

PURPOSE: HURD CK. HATCHERY FLOOD PROTECTION		REFERENCE NO:
PROPOSAL: SEE NOTE SHEET 1		APPLICANT: WDFW
LOCATION: 955 FASOLA RD. SEQUIM, WA.		COUNTY: CLALLAM COUNTY
DATUM: ASSUMED		NEAR: SEQUIM, WA.
ADJ PROPERTY OWNERS: SHEET 2 & 3		WATER BODY: TRIB. TO STRAIT OF JUAN DE FUCA
		DATE: MARCH 2017





# HURD CREEK HATCHERY FLOOD PROTECTION



## HATCHERY FLOOD PROTECTION PLAN III

PURPOSE:  
HURD CK. HATCHERY FLOOD PROTECTION

REFERENCE NO:  
APPLICANT: WDFW

PROPOSAL: SEE NOTE SHEET 1

COUNTY: CLALLAM COUNTY

LOCATION: 955 FASOLA RD. SEQUIM, WA.

NEAR: SEQUIM, WA.

DATUM: ASSUMED

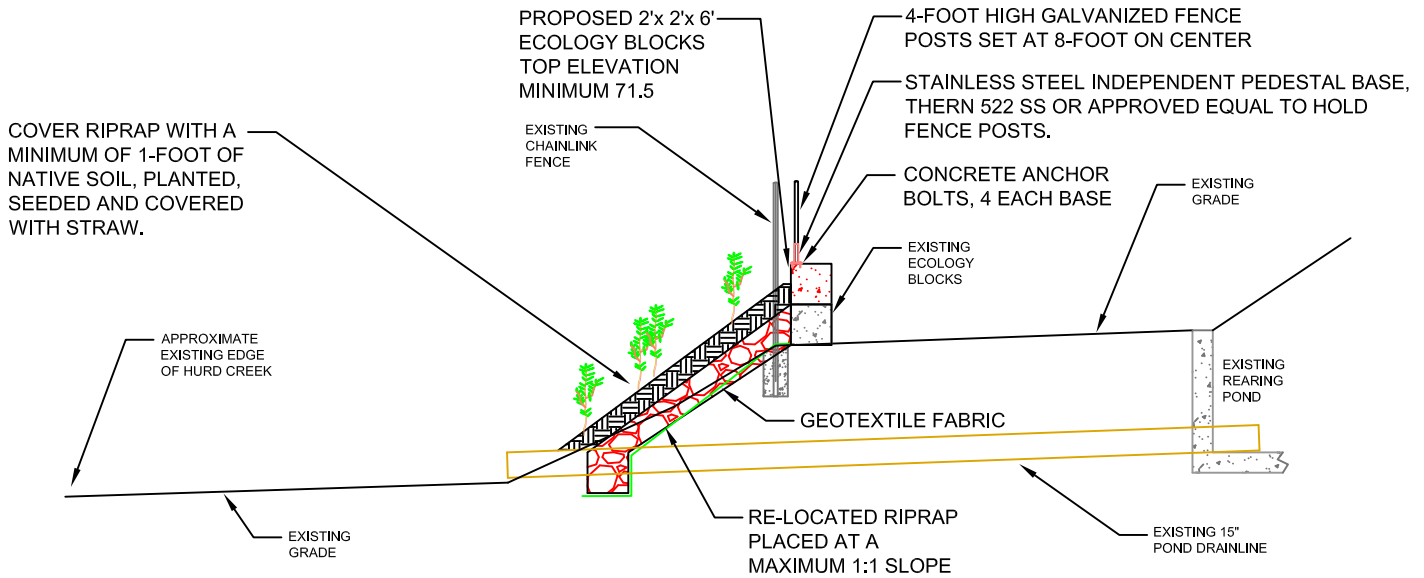
WATER BODY: TRIB. TO STRAIT OF JUAN DE FUCA

ADJ PROPERTY OWNERS: SHEET 2 & 3

DATE: MARCH 2017

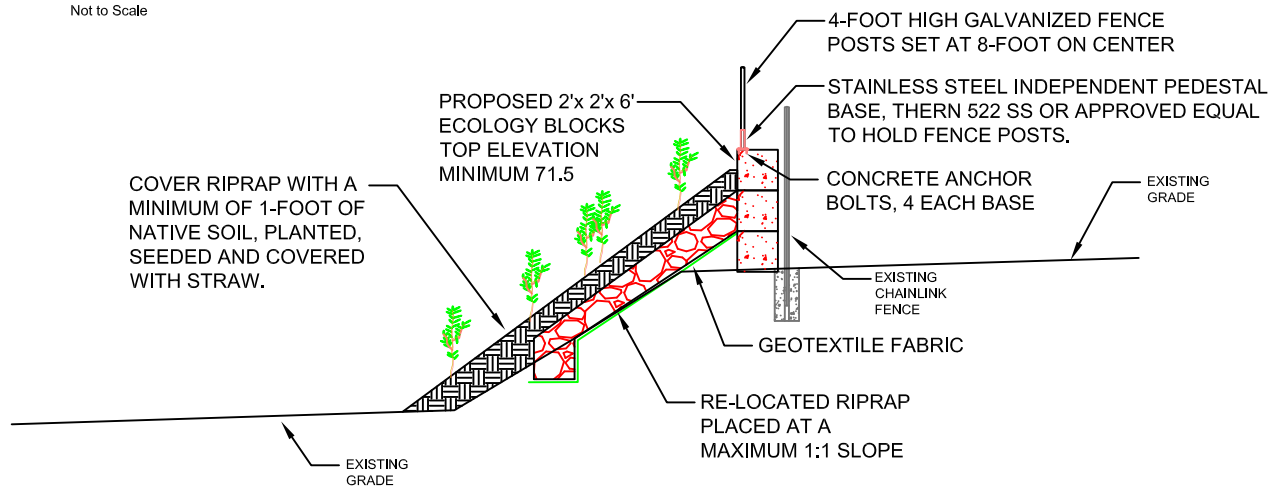


# HURD CREEK HATCHERY FLOOD PROTECTION



## RIPRAP AND ECOLOGY BLOCK CROSS-SECTION INSIDE FENCE

Not to Scale



## RIPRAP AND ECOLOGY BLOCK CROSS-SECTION OUTSIDE FENCE

Not to Scale

### NOTES:

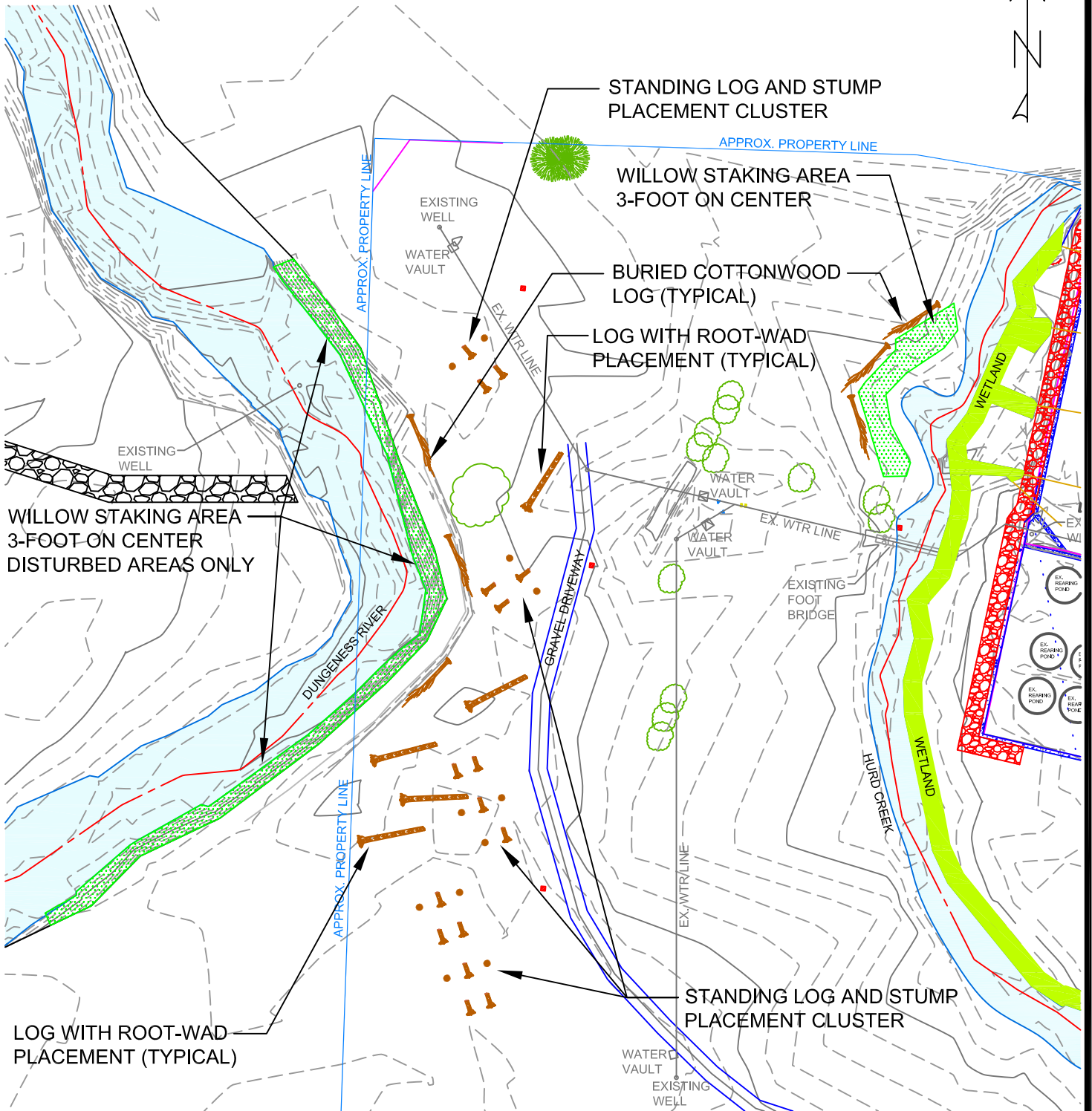
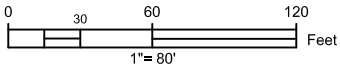
- 1.) NO TREES SHALL BE FELLED AS PART OF THIS PROJECT.
- 2.) FILL FOR SUPPORT OF ECOLOGY BLOCKS SHALL BE COMPACTED TO 85% MINIMUM DENSITY.
- 3.) NO PERMITTED ENTRY OR DELIVERY TO WETLANDS OR STREAM.
- 4.) PROTECT AND PRESERVE POND DRAINLINES. DRAINLINES MAY NEED TO BE EXTENDED. DAMAGE OR BLOCKAGE TO THE LINES SHALL BE REPAIRED AT THE CONTRACTORS EXPENSE.
- 5.) FENCING REMOVED OR DAMAGED DURING CONSTRUCTION SHALL BE REPLACED WITH A SIMILAR PRODUCT.
- 6.) ZERO DROP HEIGHT FOR RIPRAP INSTALLATION. SHALL BE STACKED ON EACH OTHER IN A SOUND, NON-SHIFTING FINAL CONFIGURATION.

## FLOOD PROTECTION NOTES AND DETAILS

PURPOSE: HURD CK. HATCHERY FLOOD PROTECTION		REFERENCE NO:
PROPOSAL: SEE NOTE SHEET 1		APPLICANT: WDFW
LOCATION: 955 FASOLA RD. SEQUIM, WA.		COUNTY: CLALLAM COUNTY
DATUM: ASSUMED	WATER BODY: TRIB. TO STRAIT OF JUAN DE FUCA	
ADJ PROPERTY OWNERS: SHEET 2 & 3	DATE: MARCH 2017	



# HURD CREEK HATCHERY FLOOD PROTECTION



## PLANTING AND LANDSCAPE PLAN

PURPOSE:  
HURD CK. HATCHERY FLOOD PROTECTION

REFERENCE NO:  
APPLICANT: WDFW

PROPOSAL: SEE NOTE SHEET 1

COUNTY: CLALLAM COUNTY

LOCATION: 955 FASOLA RD. SEQUIM, WA.

NEAR: SEQUIM, WA.

DATUM: ASSUMED

WATER BODY: TRIB. TO STRAIT OF JUAN DE FUCA

ADJ PROPERTY OWNERS: SHEET 2 & 3

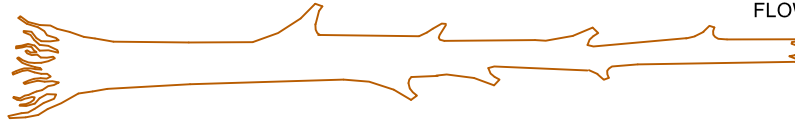
DATE: MARCH 2017



# HURD CREEK HATCHERY FLOOD PROTECTION

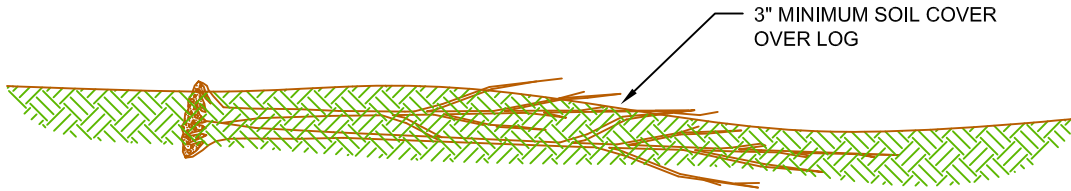
TREES SHALL BE PLACED ANGLE  
TO OVBANK AND FLOODPLAIN  
FLOWS WITH ROOTS UPSTREAM

OVERLAND FLOW  
DIRECTION



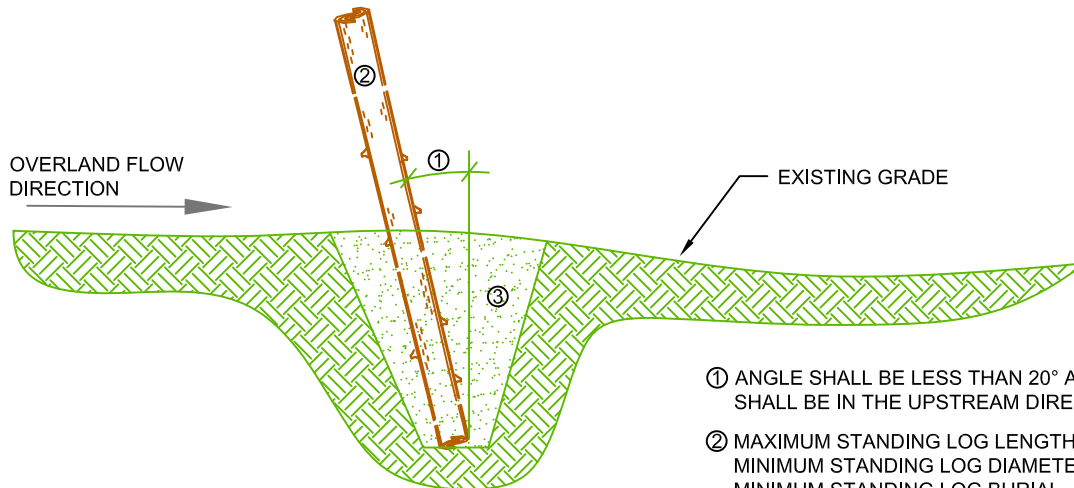
## TREE WITH ROOTBALL PLACEMENT

Not to Scale



## BURIED COTTONWOOD LOG DETAIL

Not to Scale



- ① ANGLE SHALL BE LESS THAN 20° AND SHALL BE IN THE UPSTREAM DIRECTION
- ② MAXIMUM STANDING LOG LENGTH = 12'  
MINIMUM STANDING LOG DIAMETER = 12"  
MINIMUM STANDING LOG BURIAL = 6'
- ③ SOILS BACKFILLED AROUND LOG SHALL BE COMPACTED BY BOOM MOUNTED VIBRATORY COMPACTOR

## LOG STANDING PARTIALLY BURIED DETAIL

Not to Scale

## PLANTING AND LANDSCAPE DETAILS

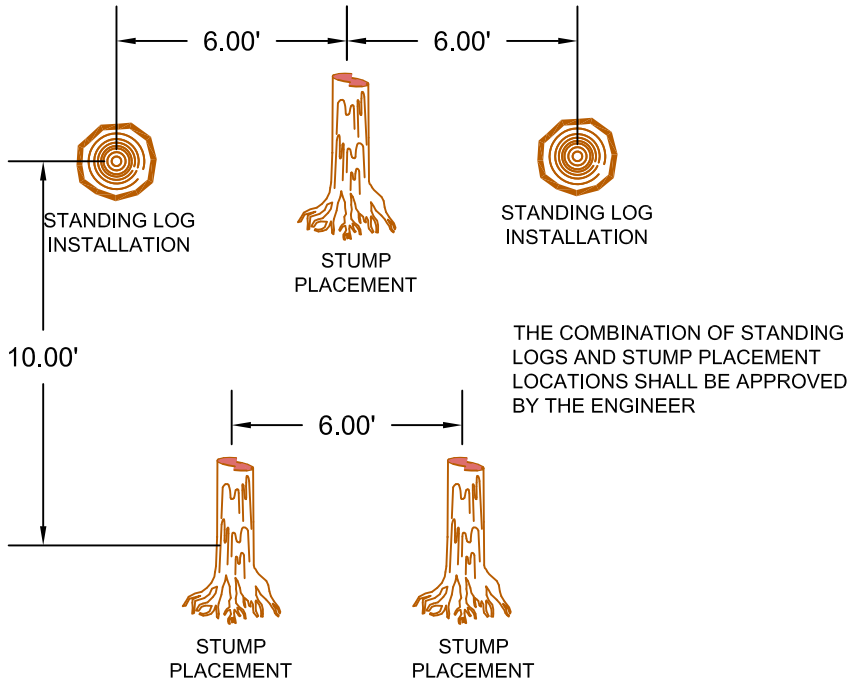
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LOCATION: 955 FASOLA RD. SEQUIM, WA.		COUNTY: CLALLAM COUNTY
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# HURD CREEK HATCHERY FLOOD PROTECTION

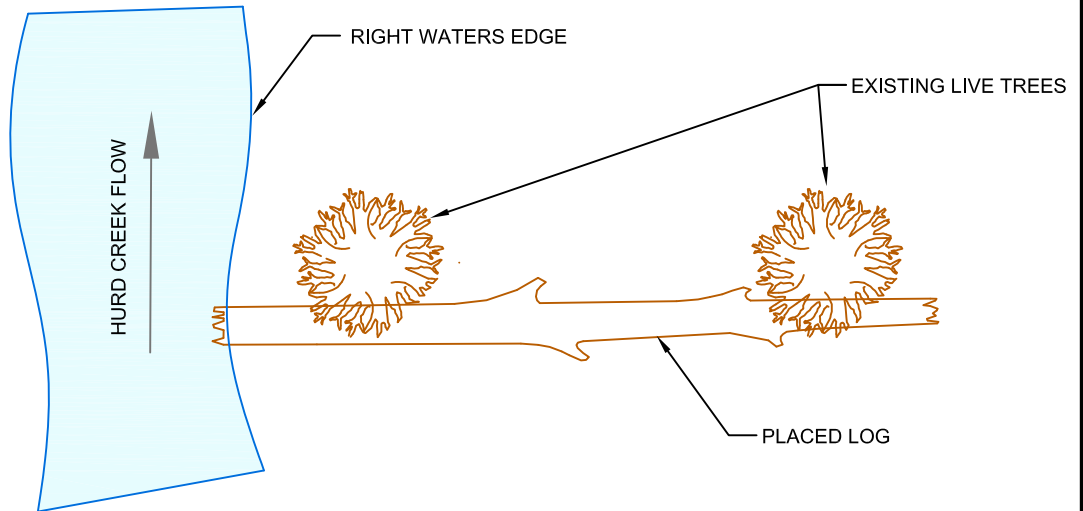
**GENERAL NOTES:**

- 1.) SEED AND STRAW ALL DISTURBED SOILS.
- 2.) PROTECT ALL LIVE STANDING TREES.
- 3.) LOGS PLACED TO ADJACENT HURD CREEK SHALL NOT DELIVER SEDIMENT TO LIVE WATER. LOGS SHALL BE PLACED/ORIENTED UPSTREAM AND BE BACKED BY LIVE STANDING TREES.
- 4.) BURIED COTTONWOOD LOGS SHALL HAVE 3-INCHES OF SOIL COVER OVER THE TOP OF THE LOG AND BE BURIED PARALLEL WITH THE BANK.
- 5.) WILLOWS SHALL BE PLANTED WITHIN 12-INCHES VERTICALLY OF LIVE WATER SURFACE ELEVATION.



## STANDING LOGS AND STUMP PLACEMENT DETAIL

Not to Scale



## PLACED LOG DETAIL

Not to Scale

**NOTE:**

LOG SHALL BE PLACED ON THE UPSTREAM SIDE OF A MINIMUM OF TWO LIVE STANDING TREES AND ORIENTED UPSTREAM MAXIMUM 45° ANGLE DOWN TO PERPENDICULAR WITH FLOW. LOG MAY EXTEND OVER WATER BUT NO SOILS SHOULD BE DELIVERED TO THE WATER.

## PLANTING AND LANDSCAPE DETAILS II

PURPOSE: HURD CK. HATCHERY FLOOD PROTECTION		REFERENCE NO:
PROPOSAL: SEE NOTE SHEET 1		APPLICANT: WDFW
LOCATION: 955 FASOLA RD. SEQUIM, WA.		COUNTY: CLALLAM COUNTY
DATUM: ASSUMED	WATER BODY: TRIB. TO STRAIT OF JUAN DE FUCA	
ADJ PROPERTY OWNERS: SHEET 2 & 3		DATE: MARCH 2017

