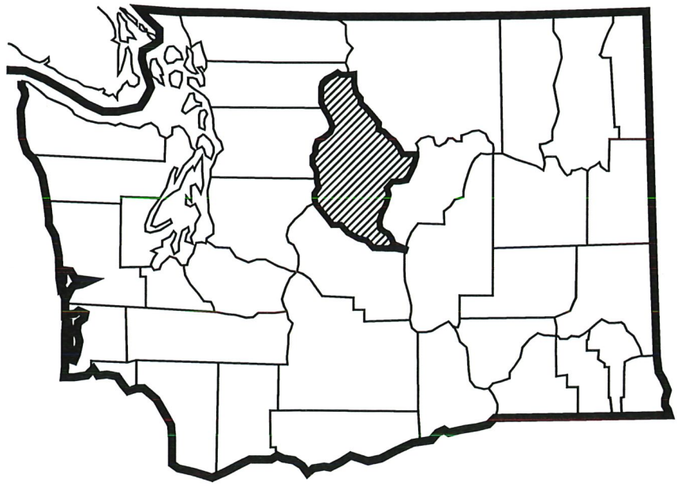
STEMILT BRIDGE #103

CHANNEL RESTORATION

C.R.P. 730

CHELAN COUNTY, WASHINGTON



Chelan County
Public Works Department
316 Washington Street, Suite 402
Wenatchee, Washington, 98801
509. 667. 6415
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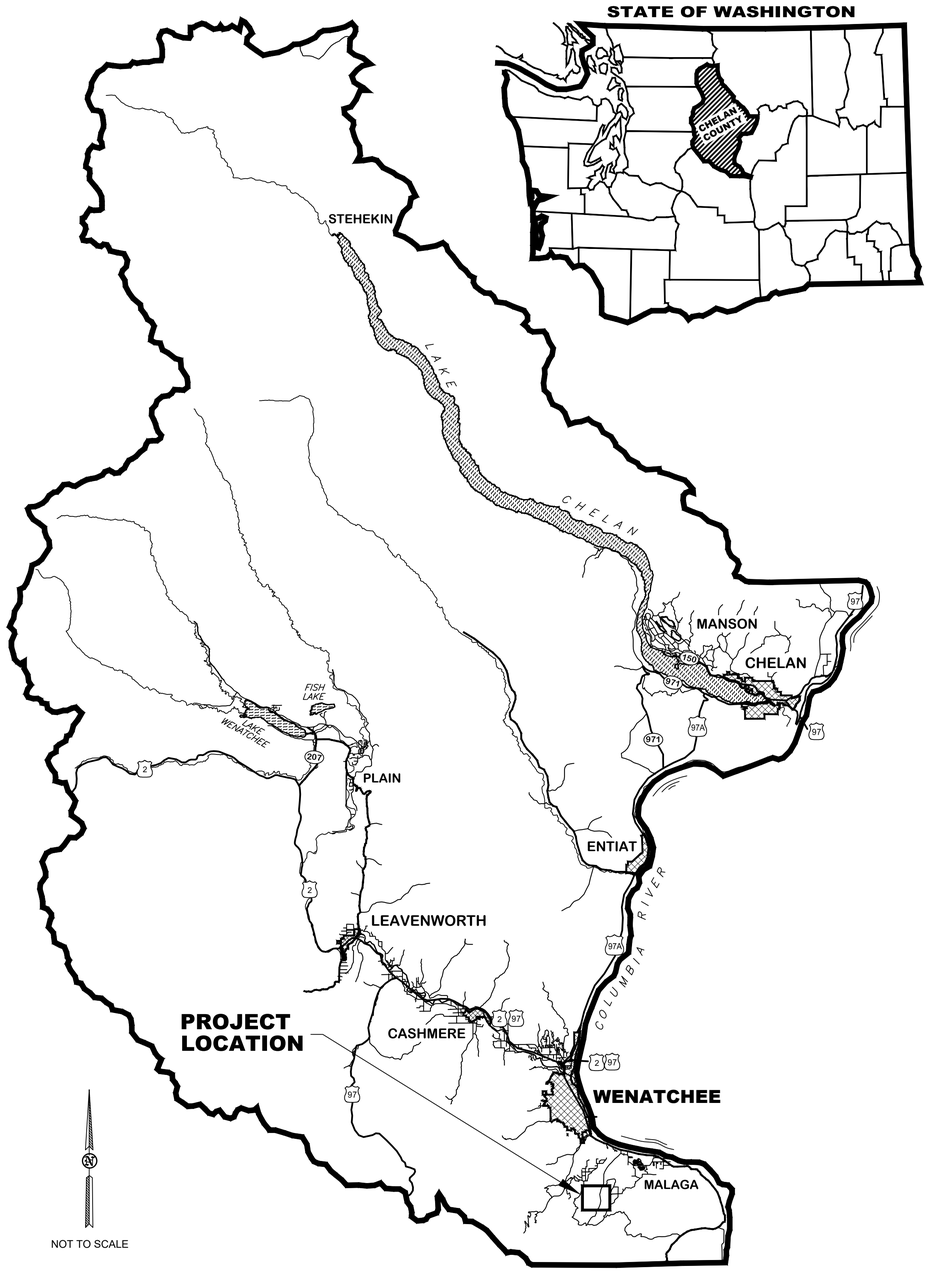
Approved Board of County Commissioners

3-5-25

Date



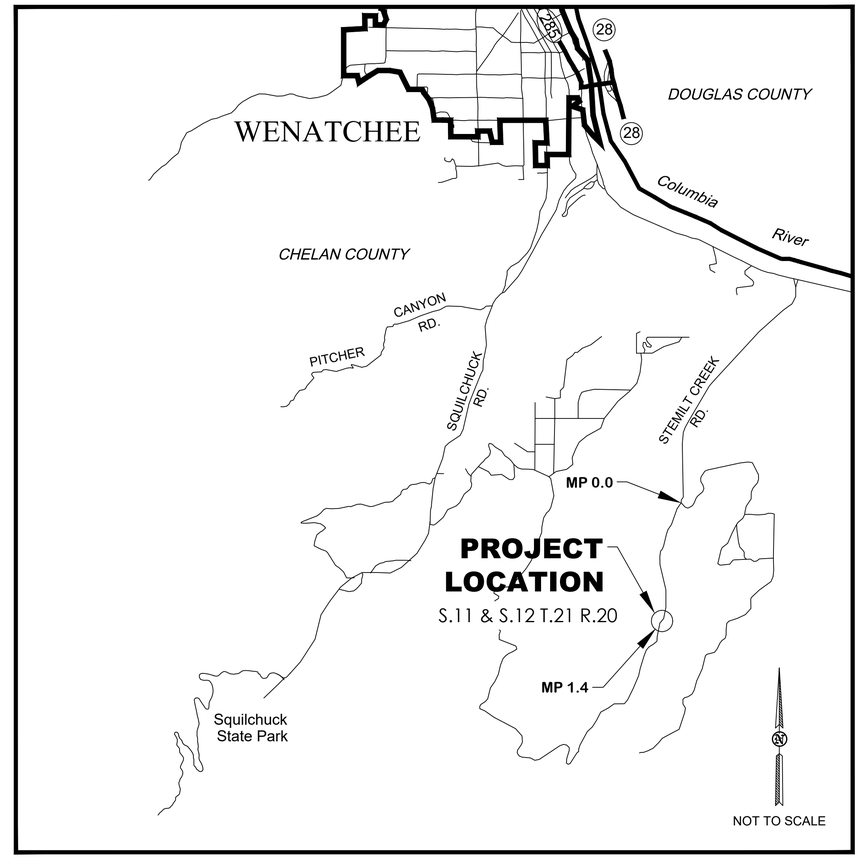
Established in 1899

CHELAN COUNTY

SHEET LIST

SHEET	DESCRIPTION
C1	COVER SHEET
C2	GENERAL NOTES & QUANTITIES
C3	SITE PREP, TESC, & DIVERSION PLAN
C4	STREAM PLAN I
C5	STREAM PLAN II
C6	STREAM SECTIONS
C7	STREAM PROFILE
C8	LANDSCAPE PLAN
UD1	UTILITY DETAILS
TC1	TRAFFIC CONTROL PLAN

Sec. 11& 12, T. 21 N., R. 20 E., W.M.



VICINITY MAP

STEMILT BRIDGE #103 CHANNEL RESTORATION

C.R.P. 730

FILE NAME: P:\WEN\P23\23462 CCPW Stemilt Creek Bridge and Channel Restoration\CAD\ENGINEERING\SHEETS\P23462_C1-C2 COVER-NOTES.dwg			
DESIGNED BY: *R. SHEEAN, PE*	REVISIONS	DATE	BY
REVIEWED BY: *A. RAPOZO, PE*			
DRAWN BY: *R. SHEEAN*			
PLOT DATE: 7/31/2025			

RYAN SHEEAN — STATE OF WASHINGTON — 23027146 — REGISTERED PROFESSIONAL ENGINEER — 7/31/25

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STEMILT BRIDGE #103
Channel Restoration
GENERAL NOTES & QUANTITIES

C.R.P. 730

Dwg. No.	Sheet No.
C1	1

GENERAL NOTES

1. LOCATIONS OF EXISTING BURIED UTILITIES ARE SHOWN FOR DESIGN PURPOSES AND MAY NOT BE ACCURATE OR COMPLETE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE, HAVE LOCATED BY THE APPROPRIATE COMPANIES, AND/OR POTHOLE ALL UTILITIES PRIOR TO BEGINNING CONSTRUCTION. CALL UNDERGROUND LOCATE AT 811 A MINIMUM OF 48 HOURS PRIOR TO ANY EXCAVATIONS.

2. ALL EXISTING UTILITY STRUCTURES MUST REMAIN ACCESSIBLE AT ALL TIMES.

BASEMAP NOTES

1. TOPOGRAPHIC SURVEY WAS COMPLETED BY CHELAN COUNTY PUBLIC WORKS.

IRRIGATION PIPE ABANDONMENT NOTES

1. WHERE EXISTING IRRIGATION PIPES ARE ENCOUNTERED DURING EXCAVATION OR CONSTRUCTION, CUT AND CAP EXISTING IRRIGATION PIPES AND DISPOSE OF REMOVED PIPE OFFSITE IN A SAFE AND LEGAL MANNER

SITE PREPARATION, TEMPORARY STREAM DIVERSION, AND TESC NOTES

1. FLOW OF STEMILT CREEK IN JULY TO AUGUST ESTIMATED TO BE APPROX. 5 CFS.
2. CONCEPTUAL TEMPORARY STREAM DIVERSION PROVIDED ON SHEET C4. THE TEMPORARY STREAM DIVERSION MAY BE PHASED IN ORDER TO UTILIZE THE EXISTING CHANNEL TO THE EXTENT FEASIBLE DURING CONSTRUCTION. THE CONTRACTOR MUST SUBMIT A TEMPORARY STREAM DIVERSION PLAN FOR APPROVAL PRIOR TO THE BEGINNING OF WORK.
3. FISH EXCLUSION AND FISH REMOVAL SHALL BE PERFORMED BEFORE IN-WATER WORK BY CHELAN COUNTY STAFF. CONTRACTOR SHALL COORDINATE WITH COUNTY STAFF WHO WILL INSTALL FISH SCREENS AND REMOVE FISH FROM WORK AREA PRIOR TO COMMENCING CONSTRUCTION. APPLICABLE STATE AND FEDERAL REGULATIONS SHALL BE FOLLOWED. SEE CONTRACT PROVISIONS.

PLACEMENT OF STREAMBED AGGREGATES

1. FILTER BLANKET MATERIAL SHALL BE PLACED AS SHOWN IN THE PLANS. AFTER PLACEMENT, THE BEDDING MATERIAL SHALL BE COMPACTED TO BE UNIFORMLY DENSE AND UNYIELDING.
2. STOCKPILING AGGREGATE – STREAMBED AGGREGATES, AS DESCRIBED ABOVE, SHALL BE BLENDED INTO SINGLE WELL GRADED STOCKPILES SEPARATE FROM OTHER AGGREGATES
3. PLACING BLENDED STREAMBED AGGREGATES IN STREAMBED – BLENDED STREAMBED AGGREGATE SHALL BE PLACED IN THE PREPARED CHANNEL EXCAVATION TO THE LINES AND GRADES SHOWN ON THE PLANS AND IN SUCH A WAY AS TO PREVENT MATERIAL SEGREGATION. BLENDED STREAMBED AGGREGATE SHALL BE PLACED IN LIFTS NO THICKER THAN 12 INCHES.
4. PLACEMENT OF BLENDED STREAMBED AGGREGATE SHALL BE CONSTRUCTED TO ENSURE THAT STREAM LOW FLOW RATE OF 30 GALLONS PER MINUTE IS CONVEYED ABOVE EACH CHANNEL LIFT. THE CONTRACTOR SHALL APPLY WATER AND STREAMBED SAND AT A RATE OF 30 GALLONS PER MINUTE TO EACH LIFT TO FACILITATE FILLING THE INTERSTITIAL VOIDS OF THE BLENDED STREAMBED AGGREGATE. ADJUSTMENT OF THE LOW FLOW RATE MAY BE REQUIRED TO ENSURE THAT THE VOIDS ARE SATISFACTORILY FILLED. THE VOIDS ARE SATISFACTORILY FILLED WHEN THE 30 GALLONS PER MINUTE FLOW RATE DOES NOT GO SUBSURFACE AND THERE IS NO PERCEIVABLE DIFFERENCE IN THE LOW FLOW RATE FROM UPSTREAM OF THE PROJECT LIMITS TO THE DOWNSTREAM OF PROJECT LIMITS. THE CONTRACTOR SHALL APPLY WATER AT THE 30 GALLONS PER MINUTE FLOW RATE TO THE STREAM CHANNEL FOR VISUAL ACCEPTANCE BY THE ENGINEER.
5. STREAMBED SEDIMENT AND/OR STREAMBED COBBLES MAY BE AVAILABLE FROM THE EXISTING STREAMBED EXCAVATION LIMITS AS SHOWN IN THE PLANS. COMPONENTS OF THE EXCAVATED STREAMBED WHICH MEET THE CRITERIA FOR THE SPECIFIC MATERIAL MAY BE USED TO SUPPLEMENT THE STREAMBED SEDIMENT AND/OR STREAMBED COBBLES AND WILL BE BASED UPON VISUAL ACCEPTANCE BY THE ENGINEER.

Stemilt Creek Bridge and Channel Restoration					
Item No.	**Std Item No.**	**Spec Section**	**Item Description**	**QTY**	**Unit**
DIVISION 1: General Requirements					
1	0001	1-09.7	Mobilization	1	LS
2	6971	1-10.4(1)	Project Temporary Traffic Control	1	LS
3	7736	1-07.15(1)	SPCC Plan	1	LS
DIVISION 2: Earthwork					
4	0025	2-01.4	Clearing and Grubbing	0.08	ACRE
5	0230	2-02.5	Remove Wire Fence	140	LF
6	1035	2-03.4	Channel Excavation Incl. Haul	313	CY
DIVISION 6: Structures					
7			Utility Hanger System	1	LS
DIVISION 8: Miscellaneous Construction					
8	6403	8-01.4	ESC Lead	5	DAY
9	6479	8-01.5	Wattle	180	LF
10	1069	8-15.3(7)	Filter Blanket	12	CY
11	6556	8-02.5	Live Stake Row	152	LF
12	6550	8-02.5	Plant Selection - Perennial Plug	60	EA
13	6429	8-02.5	Seeding and Fertilizing	700	SY
14		8-12.5	Wire Fence	140	LF
15	1095	8-30.5	Streambed Sediment	48	CY
16	0888	8-30.5	Streambed Cobbles 10-inch	81	CY
17	0906	8-30.5	Streambed Boulder - Type 1	32	CY
18	0908	8-30.5	Streambed Boulder - Type 3	5	EA
19	1090	8-30.5	Streambed Sand	35	TON
20	0923	09-13.4(2)	Rock for Erosion and Scour Protection Class B	82.6	TON
21	3075	8-31.5	Temproary Stream Diversion	1	LS
22	3077	8-31.5	Fish Exclusion Assistance	1	EST
23		8-31.5	Fish Block Net Maintenance	1	EST

CRP730 Datum

Coordinates / Bearings Datum:

- **Washington State Plane**, Zone North, NAD 83/ 2011 Geoid 12A, Epoch: 2010.00
- Project Combination Factor: 0.999948259037 (ground X factor = state plane)

Distance Datum:
Distances shown are measured grid values (not ground)

Elevation Datum:
Elevation datum is NAVD 88 based on average GPS-derived Orthometric heights.

CONTROL POINTS (WA State Plane):

300	118692.7840	1777353.5630	1827.326	Control
301	118424.5339	1777108.4210	1847.104	Control: RR Spike
302	119062.9548	1777351.1230	1805.432	Control: 5/8" rebar w/ control cap
303	119291.7970	1777375.4420	1792.412	Control: 5/8" rebar w/ control cap
304	118652.9762	1777144.9200	1854.822	Control: Hub and tack
305	118556.3659	1777192.2600	1836.758	Control: Hub and tack
306	119421.9031	1777402.1070	1784.702	Control: PK nail
307	118538.8081	1777249.2210	1834.824	Control: Hub and tack
308	118523.1581	1777232.5450	1830.457	Control: Hub and tack
309	118409.1597	1777204.0240	1841.565	Control: Hub and tack
310	118362.3195	1777207.8660	1843.984	Control: Hub and tack
311	118345.6193	1777286.5070	1839.243	Control: Hub and tack
312	118542.7202	1777230.0910	1828.906	Control: Hub and tack

LINE STYLES

EXISTING	PROPOSED	DESCRIPTION
		CENTER LINE
OHWM	OHWM	ORDINARY HIGH WATER MARK
100	100	INDEX CONTOUR
102	102	INTERMEDIATE CONTOUR
	CG	CLEARING & GRUB
	BR	BREAK LINE
		GRADE BREAK
	C	CUT
	F	FILL
		CHAIN LINK FENCE
		WOOD FENCE
		FENCE (UNSPECIFIED)
		HAND RAIL
		GUARD RAIL
TS	TS	OVERHEAD SIGNAL LINE
UTS	UTS	UNDERGROUND SIGNAL LINE
IRR	IRR	IRRIGATION
		DITCH/STREAM CENTERLINE/SWALE
	CG	CLEARING & GRADING LIMITS
		HIGH VISIBILITY SILT FENCE
		ORANGE FENCE
		SILT FENCE
		STRAW WATTLE
		DEMOLITION LINE
		TEMPORARY CONSTRUCTION EASEMENT

SYMBOLS

EXISTING	PROPOSED	DESCRIPTION
		IRR STANDPIPE
IRR	IRR	IRR VALVE
T	T	TELEPHONE VAULT
		CONIFER TREE
		DECIDUOUS TREE
		SIGN
		GATE/GENERAL VALVE
		STRAW BALE
		RIP RAP PAD
		TEMPORARY CONSTRUCTION ENTRANCE
		OBJECT TO BE REMOVED
		AREA TO BE DEMOLISHED
		ROCKERY
		ECOLOGY BLOCK
		SURFACE FLOW DIRECTION

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DESIGNED BY: *R. SHEEAN, PE*	REVISIONS	DATE	BY
REVIEWED BY: *A. RAPOZO, PE*			
DRAWN BY: *R. SHEEAN*			
PLOT DATE: 7/31/2025			

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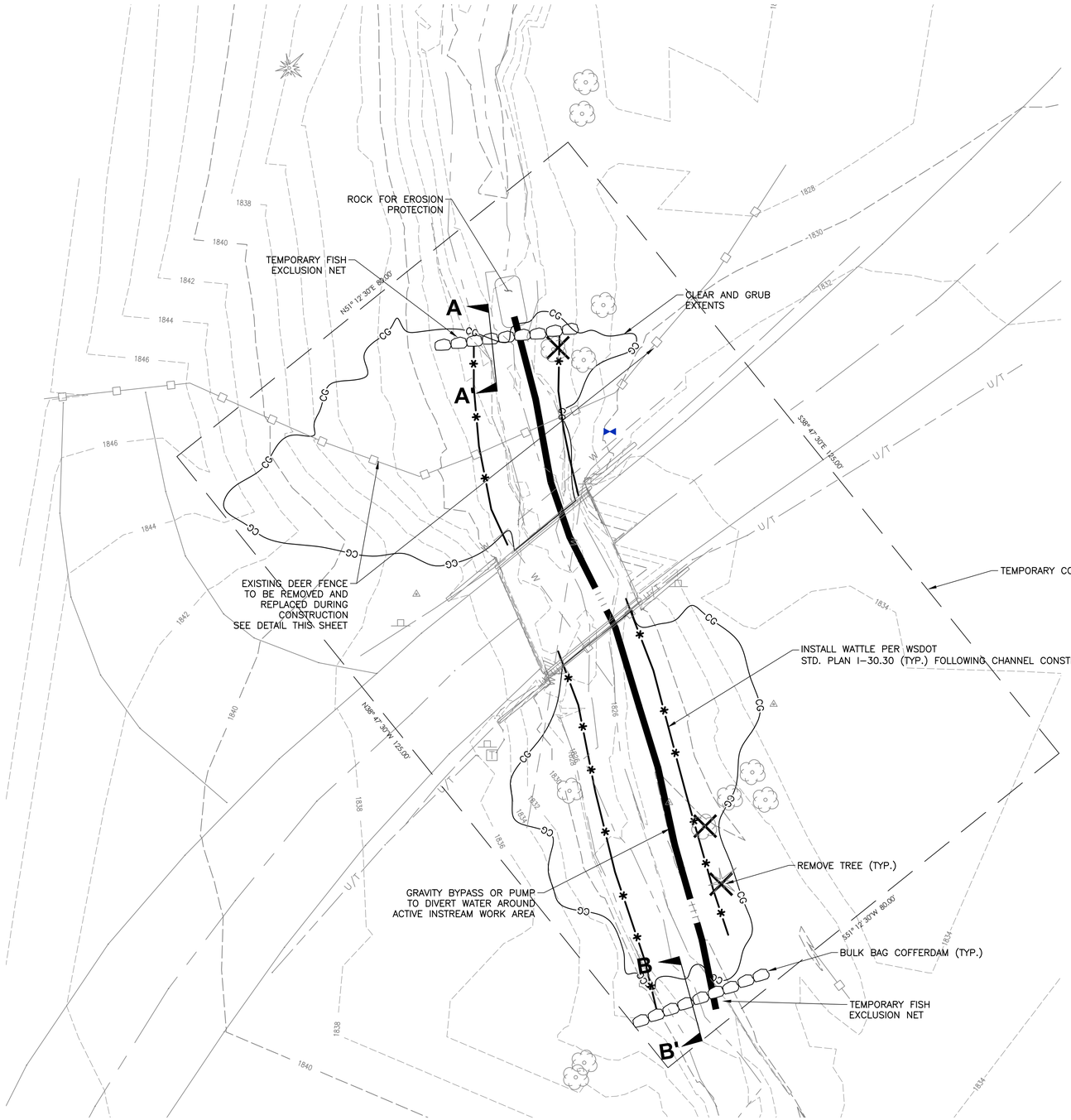
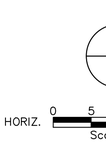
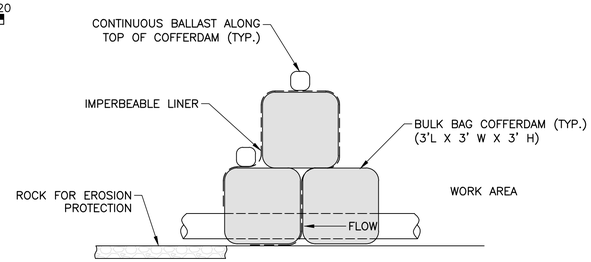
STEMILT BRIDGE #103
Channel Restoration
GENERAL NOTES & QUANTITIES

C.R.P. 730

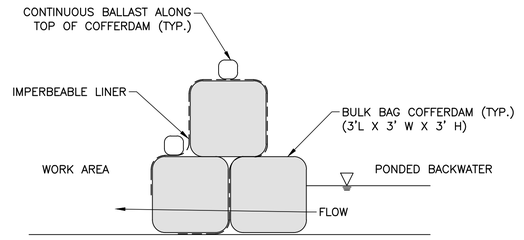
Dwg. No.	Sheet No.
C2	2



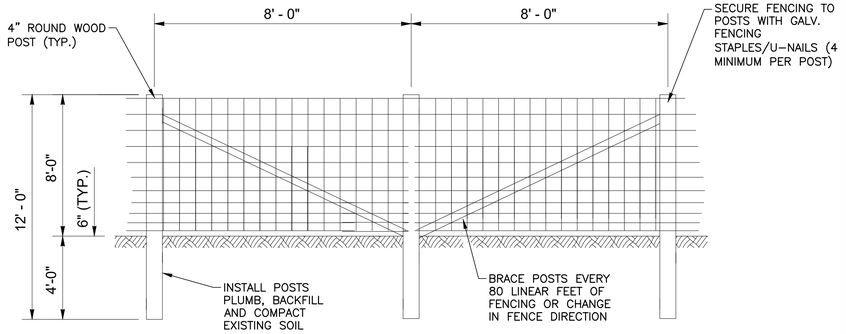




SECTION A-A'
FLOW BYPASS OUTLET
NTS



SECTION B-B'
FLOW BYPASS INLET
NTS



TYPICAL FENCE REPLACEMENT DETAIL
NTS

DESIGN INTENT ONLY. PRODUCT SUBMITTAL REQUIRED FOR REVIEW AND APPROVAL.

FILE NAME: P:\WEN\P23\23462 CCPW Stemilt Creek Bridge and Channel Restoration\CAD\ENGINEERING\SHEETS\P23462 C4 EXTG COND & ESC.dwg			
DESIGNED BY: *R. SHEEAN, PE*	REVISIONS	DATE	BY
REVIEWED BY: *A. RAPOZO, PE*			
DRAWN BY: *R. SHEEAN*			
PLOT DATE: 7/31/2025			

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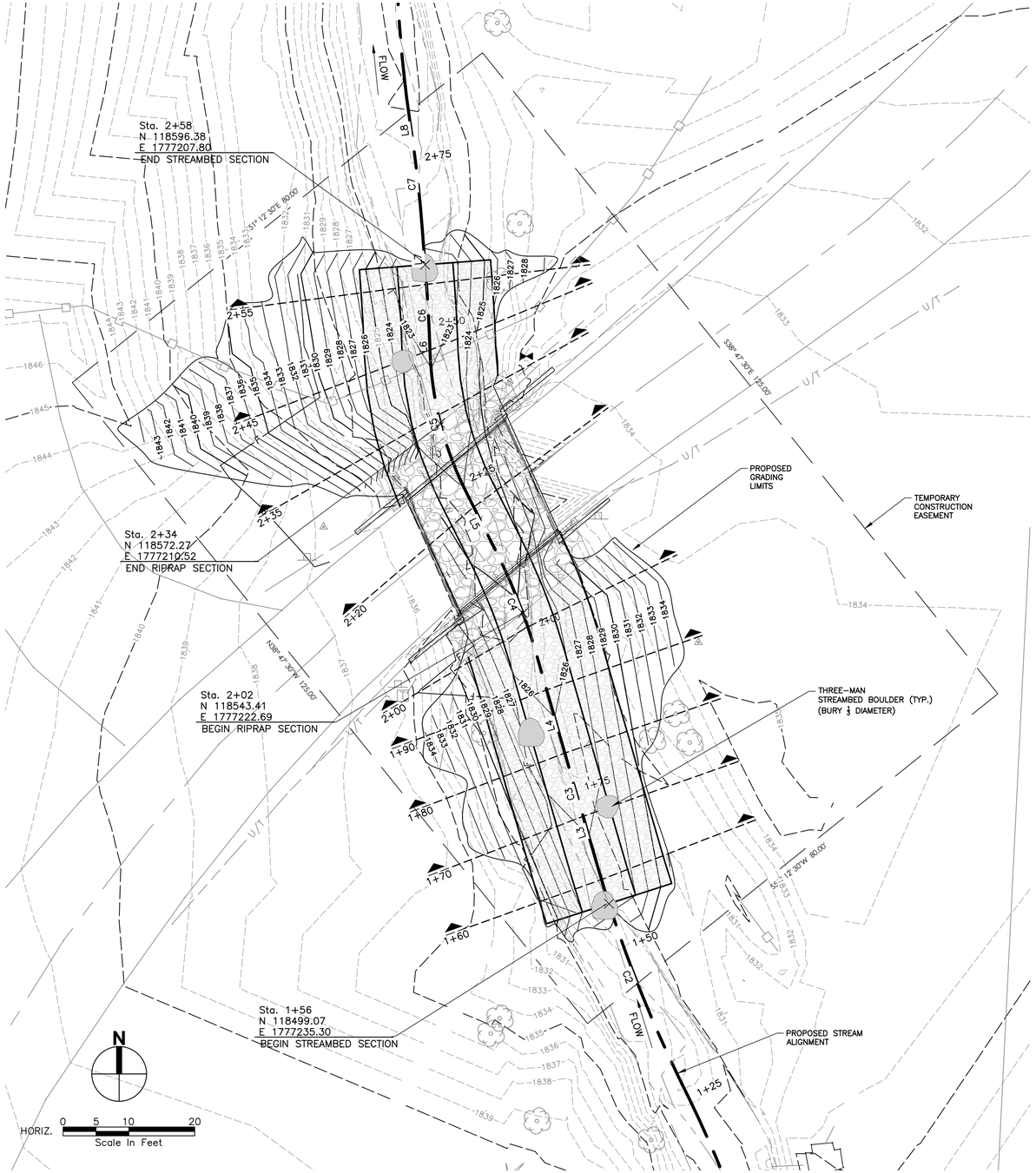
STEMILT BRIDGE #103
Channel Restoration
SITE PREPARATION, TEMPORARY STREAM DIVERSION, AND TESC

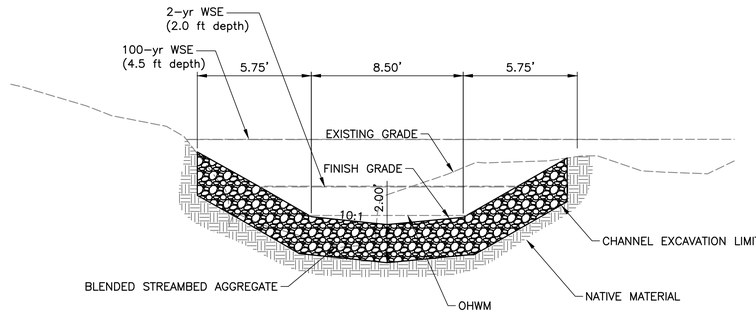
C.R.P. 730

Dwg. No.	Sheet No.
C3	3



ALIGNMENT TABLE

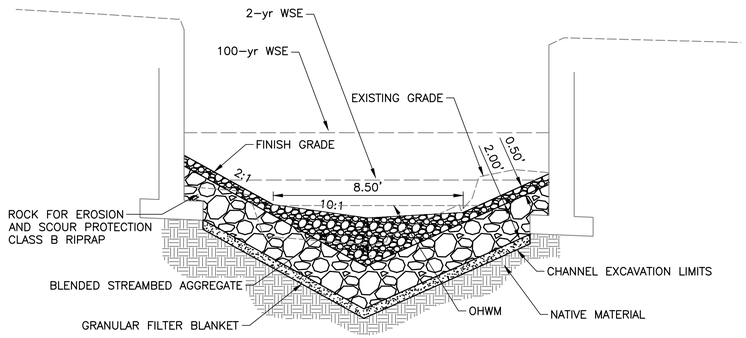
PROPOSED ALIGNMENT			
Number	Length	Radius	Line/Chord Direction
C2	33.962	200.000	N21° 05′ 08.50″W
L3	12.020		N16° 13′ 15.58″W
C3	0.176	55.210	N16° 07′ 46.64″W
L4	21.563		N16° 02′ 17.69″W
C4	17.057	91.775	N21° 21′ 45.88″W
L5	10.219		N26° 41′ 14.07″W
C5	22.043	51.147	N14° 20′ 27.36″W
L6	1.508		N01° 59′ 40.64″W
C6	8.026	200.000	N03° 08′ 39.41″W
L7	9.221		N04° 17′ 38.18″W
C7	13.726	200.000	N06° 15′ 36.12″W
L8	2.872		N08° 13′ 34.06″W



TYPICAL STREAMBED SECTION

NTS

NOTES
1. USE NATIVE MATERIAL FROM EXCAVATION TO SHAPE AND CONTOURTHE CHANNEL BOTTOM BELOW THE STREAMBED AGGREGATE IN THE STREAMBED SECTION



TYPICAL RIPRAP SECTION

NTS

FILE NAME: P:\WEN\P23\23462 CCPW Stemilt Creek Bridge and Channel Restoration\CAD\ENGINEERING\SHEETS\P23462 C5-C8 STREAM PLANS.dwg			
DESIGNED BY: *R. SHEEAN, PE*	REVISIONS	DATE	BY
REVIEWED BY: *A. RAPOZO, PE*			
DRAWN BY: *R. SHEEAN*			
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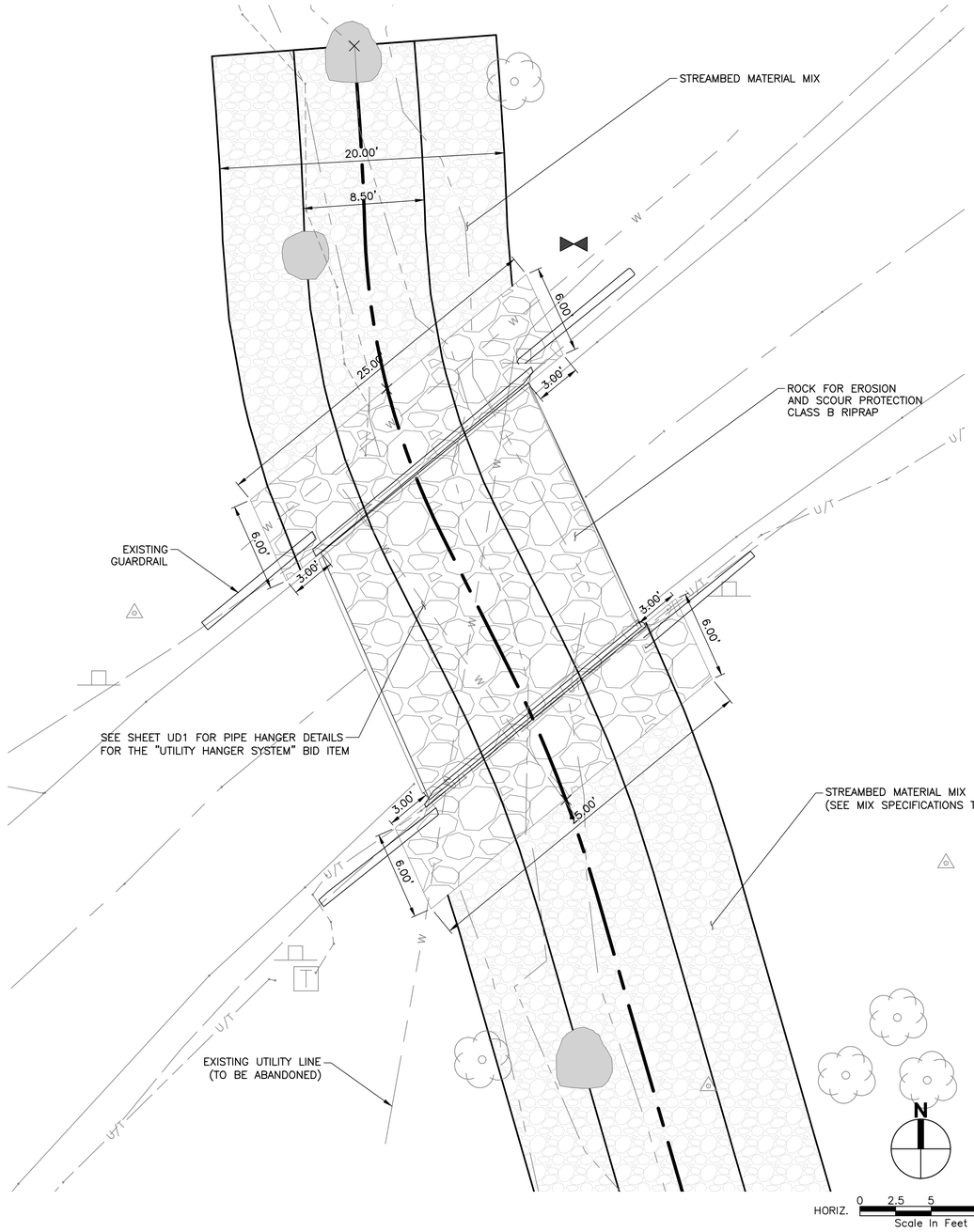
STEMILT BRIDGE #103

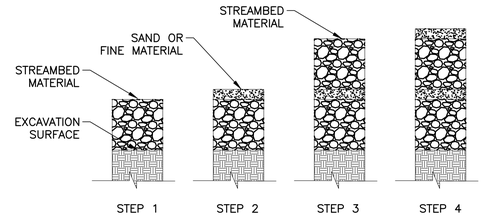
Channel Restoration

STREAM IMPROVEMENTS PLAN I

C.R.P. 730

Dwg. No.	Sheet No.
C4	4





STREAMBED CHANNEL PREPARATION

NTS

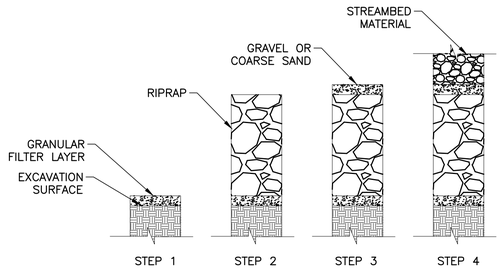
STEP 0: EXCAVATE CHANNEL TO ACCOMMODATE STREAMBED MATERIAL.

STEP 1: PLACE 12" LIFT OF STREAMBED MATERIAL

STEP 2: PLACE 1" OF FINE MATERIAL OR SAND UNIFORMLY OVER STREAMBED SEDIMENT. APPLY TURBID WATER TO WASH THE FINE MATERIAL INTO THE STREAMBED SEDIMENT.

STEP 3: PLACE AN ADDITIONAL 12" STREAMBED SEDIMENT UNIFORMLY OVER STREAMBED MATERIAL MIXTURE.

STEP 4: REPEAT STEP 2 AND STEP 3 UNTIL MINIMUM STREAMBED MATERIAL DEPTH AND FINISH GRADE IS MET.



RIPRAP PREPARATION

NTS

STEP 0: EXCAVATE CHANNEL TO ACCOMMODATE RIPRAP.

STEP 1: PLACE 6" LIFT OF GRANULAR FILTER LAYER.

STEP 2: PLACE 15" LIFT OF WSDOT CLASS B RIPRAP.

STEP 3: PLACE 1" OF GRAVEL OR COARSE SAND UNIFORMLY OVER RIPRAP. APPLY TURBID WATER TO WASH THE MATERIAL INTO RIPRAP.

STEP 4: PLACE ADDITIONAL LIFT(S) OF RIPRAP UNIFORMLY OVER RIPRAP MATERIAL MIXTURE.

STEP 5: REPEAT STEP 3 & 4 UNTIL MINIMUM DEPTH AND FINISH GRADE IS MET. PLACE STREAMBED MATERIAL OVER RIPRAP MIXTURE ACCORDING TO STREAMBED CHANNEL PREPARATION.

STREAMBED MIX SPECIFICATIONS

STREAMBED SEDIMENT	9-03.11(1)	30%
10-INCH STREAMBED COBBLE	9-03.11(4)	50%
TYPE 1 STREAMBED BOULDERS	9-03.11(5)	20%

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STREAM IMPROVEMENTS PLAN II

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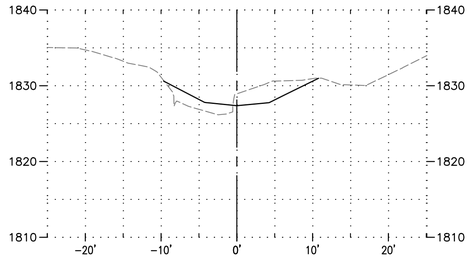
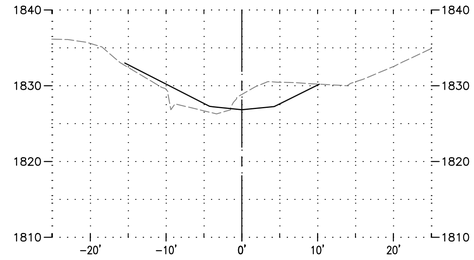
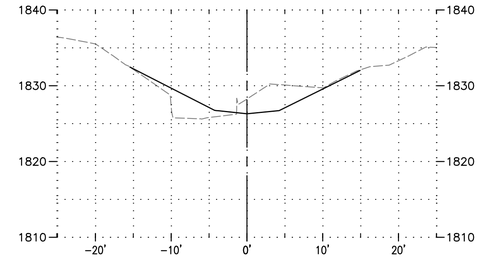
Dwg. No.	Sheet No.
C5	5



PROPOSED ALIGNMENT
1+60



PROPOSED ALIGNMENT
1+70



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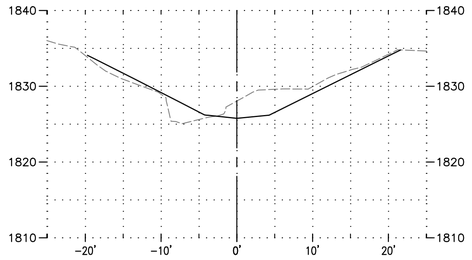

PROPOSED ALIGNMENT
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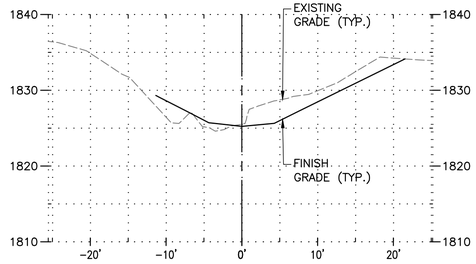
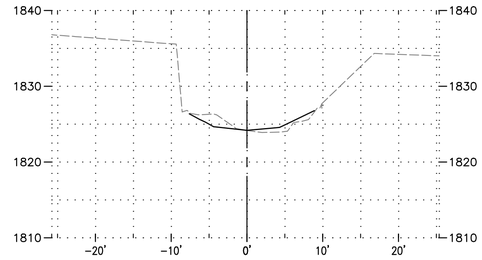
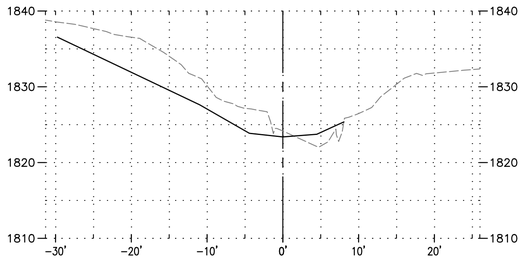


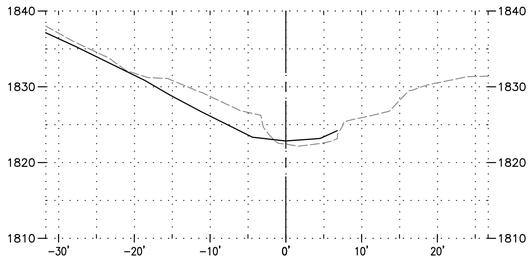
PROPOSED ALIGNMENT
2+00



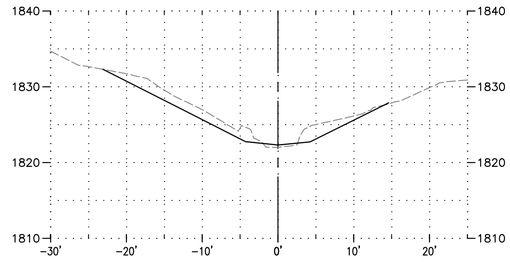
PROPOSED ALIGNMENT
2+20



PROPOSED ALIGNMENT
2+35



PROPOSED ALIGNMENT
2+45



PROPOSED ALIGNMENT
2+55

HORIZ. 0 5 10 20 Scale In Feet

VERT. 0 5 10 20 Scale In Feet

FILE NAME: P:\WEN\P23\23462 CCPW Stemilt Creek Bridge and Channel Restoration\CAD\ENGINEERING\SHEETS\P23462 C5-C8 STREAM PLANS.dwg

DESIGNED BY: *R. SHEEAN, PE*	REVISIONS	DATE	BY
REVIEWED BY: *A. RAPOZO, PE*			
DRAWN BY: *R. SHEEAN*			
PLOT DATE: 7/31/2025			

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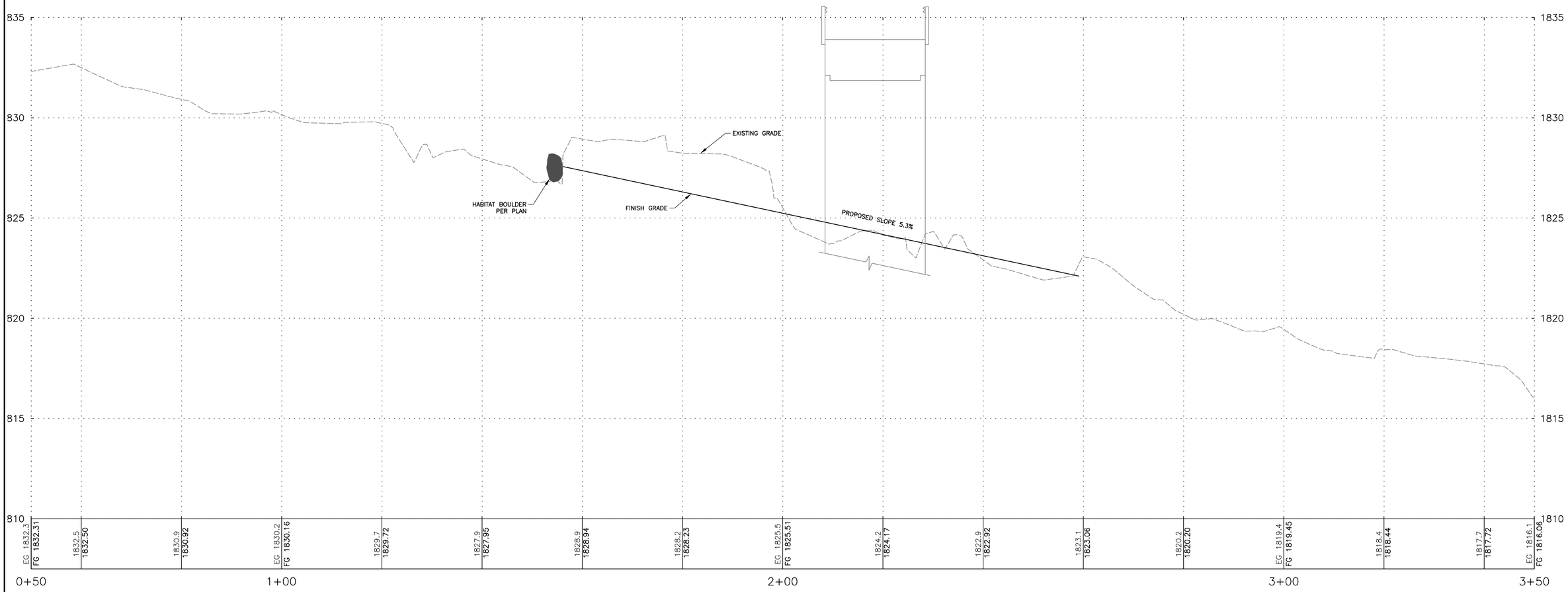
STEMILT BRIDGE #103

Channel Restoration

STREAM SECTIONS

C.R.P. 730

Dwg. No.	Sheet No.
C6	6



PROPOSED ALIGNMENT, STA: 0+50 - 3+50

FILE NAME: P:\WEN\P23\23462 CCPW Stemilt Creek Bridge and Channel Restoration\CAD\ENGINEERING\SHEETS\P23462 C5-C8 STREAM PLANS.dwg

DESIGNED BY: *R. SHEEAN, PE*	REVISIONS	DATE	BY
REVIEWED BY: *A. RAPOZO, PE*			
DRAWN BY: *R. SHEEAN*			
PLOT DATE: 7/31/2025			

RYAN SHEEAN — STATE OF WASHINGTON — 23027148 — REGISTERED PROFESSIONAL ENGINEER — 7/31/25

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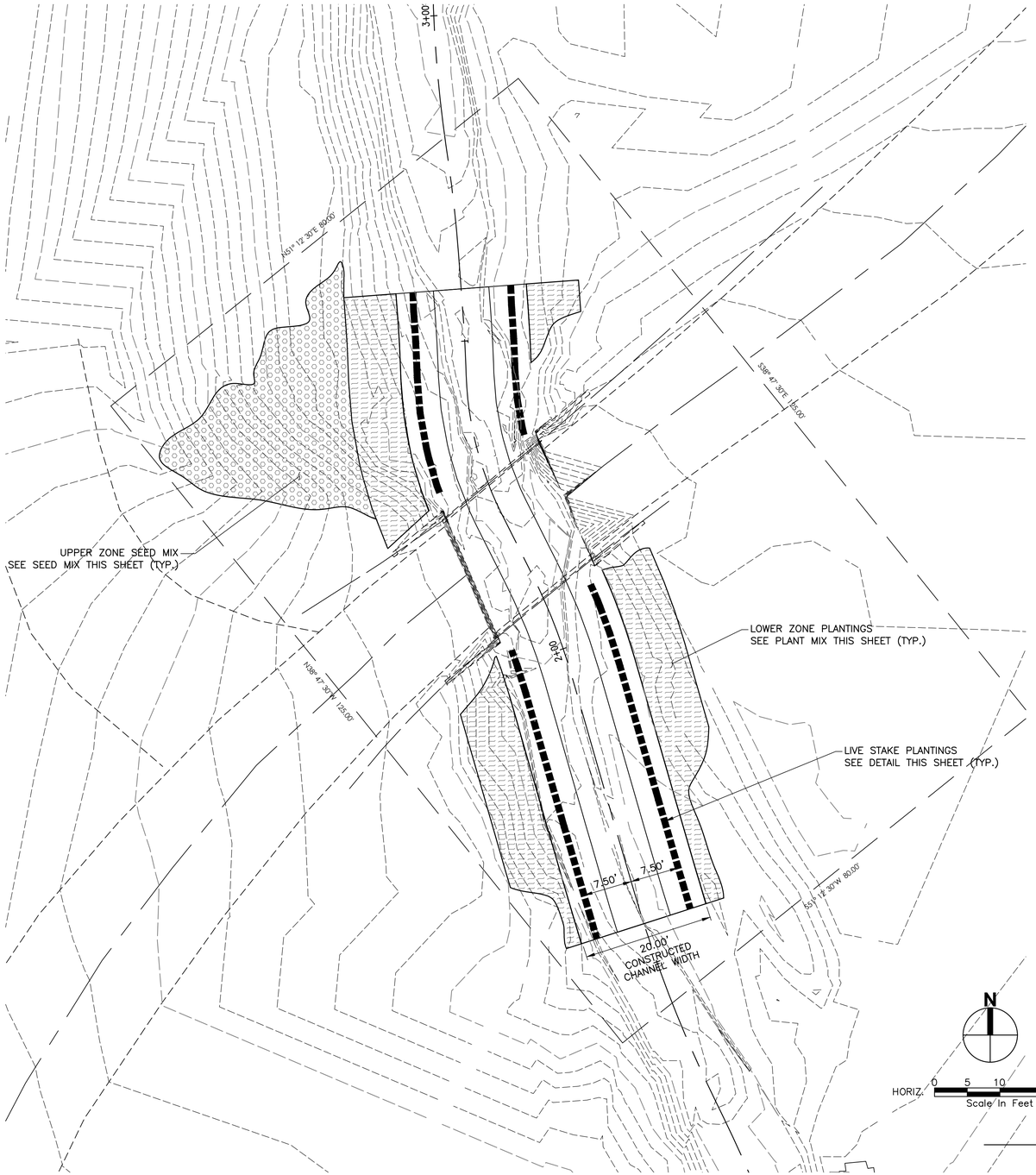
STEMILT BRIDGE #103

Channel Restoration

STREAM PROFILE

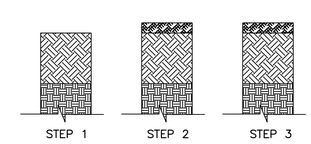
C.R.P. 730

Dwg. No.	Sheet No.
C7	7



630 SF	**UPPER ZONE - SEED MIX**	
	EAST SLOPE CASCADES MIX BY BFI NATIVE SEADS OR EQUIVALENT	
	LOWER ZONE - 4-INCH PERENNIAL PLUGS	
	BOTANICAL NAME	COMMON NAME
	JUNCUS ARCTICUSS LITORALIS	MOUNTAIN RUSH
	JUNCUS DUDLEYI WIEGAND	DUDLEY'S RUSH
950 SF	MENTHA ARVENSIS	WILD MINT
	POTENTILLA RAVALIS	BROOK CINQUEFOIL
	TYPHA LATIFOLIA	BROADLEAF CATTAIL
	VERONICA AMERICANA	AMERICAN SPEEDWELL
	VERBENA HASTATA	SWAMP VERBENA
152 LF	**LIVE STAKE PLANTINGS**	
	BOTANICAL NAME	COMMON NAME
	SALIX EXIGUA	NARROWLEAF WILLOW

NOTES:
INSTALL LIVE STAKES AT 3 FEET O.C. SPACING (APPROX 50 PCS)
INSTALL PLUGS AT 4 FEET O.C. SPACING IN STAGGERED ROWS (APPROX 60 PCS)



SEEDING AREA SOIL PREPARATION

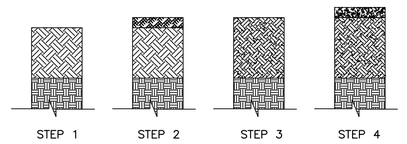
NTS

STEP 0: WEED FREE CONDITION. SEE WEED AND PEST CONTROL PLAN PER WSDOT STANDARD SPECIFICATION 8-02.3(2).

STEP 1: DECOMPACT EXISTING SOIL TO 10" DEPTH.

STEP 2: INSTALL 2" FINE COMPOST.

STEP 3: APPLY SEEDING AND FERTILIZING. SEE SEEDING SCHEDULE THIS SHEET.



PLANTING AREA SOIL PREPARATION

NTS

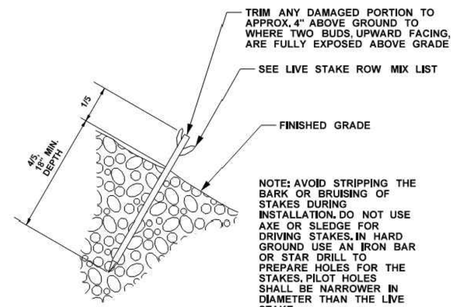
STEP 0: WEED FREE CONDITION. SEE WEED AND PEST CONTROL PLAN PER WSDOT STANDARD SPECIFICATION 8-02.3(2).

STEP 1: DECOMPACT EXISTING SOIL TO 18" DEPTH. IF SATURATED SOILS ARE ENCOUNTERED, NO DECOMPACTION OR INCORPORATION OF AMENDMENTS SHALL OCCUR.

STEP 2: INSTALL 4" FINE COMPOST.

STEP 3: INCORPORATE COMPOST INTO SOIL TO 12" DEPTH.

STEP 4: IN PLANTING AREAS WITH WOODY PLANTS OR PLUGS, INSTALL BARK OR WOOD CHIP MULCH TO 3" DEPTH, APPROX. 18" RADIUS HORIZONTAL. INSTALL PLANT AND FEATHER FEATHER MULCH AWAY FROM PLANT.



LIVE STAKE INSTALLATION

SECTION VIEW NOT TO SCALE

FILE NAME: P:\WEN\P23\23462 CCPW Stemilt Creek Bridge and Channel Restoration\CAD\ENGINEERING\SHEETS\P23462 C9 LANDSCAPE.dwg

DESIGNED BY: *R. SHEEAN, PE*	REVISIONS	DATE	BY
REVIEWED BY: *A. RAPOZO, PE*			
DRAWN BY: *R. SHEEAN*			
PLOT DATE: 7/31/2025			

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STEMILT BRIDGE #103

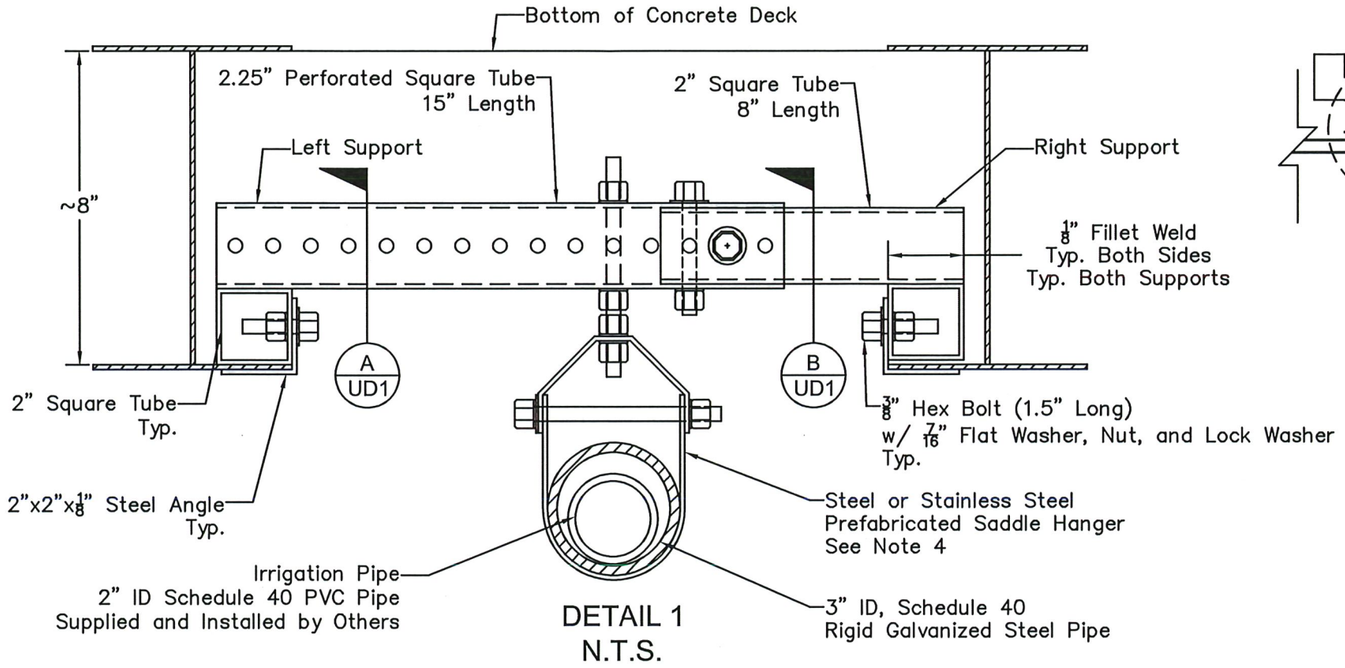
Channel Restoration

PLANTING PLAN

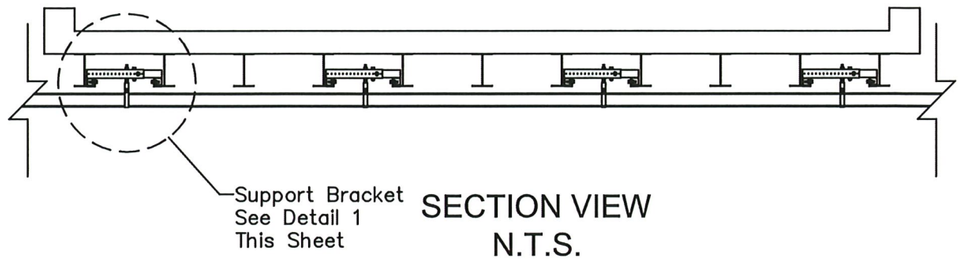
C.R.P. 730

Dwg. No. **C8**

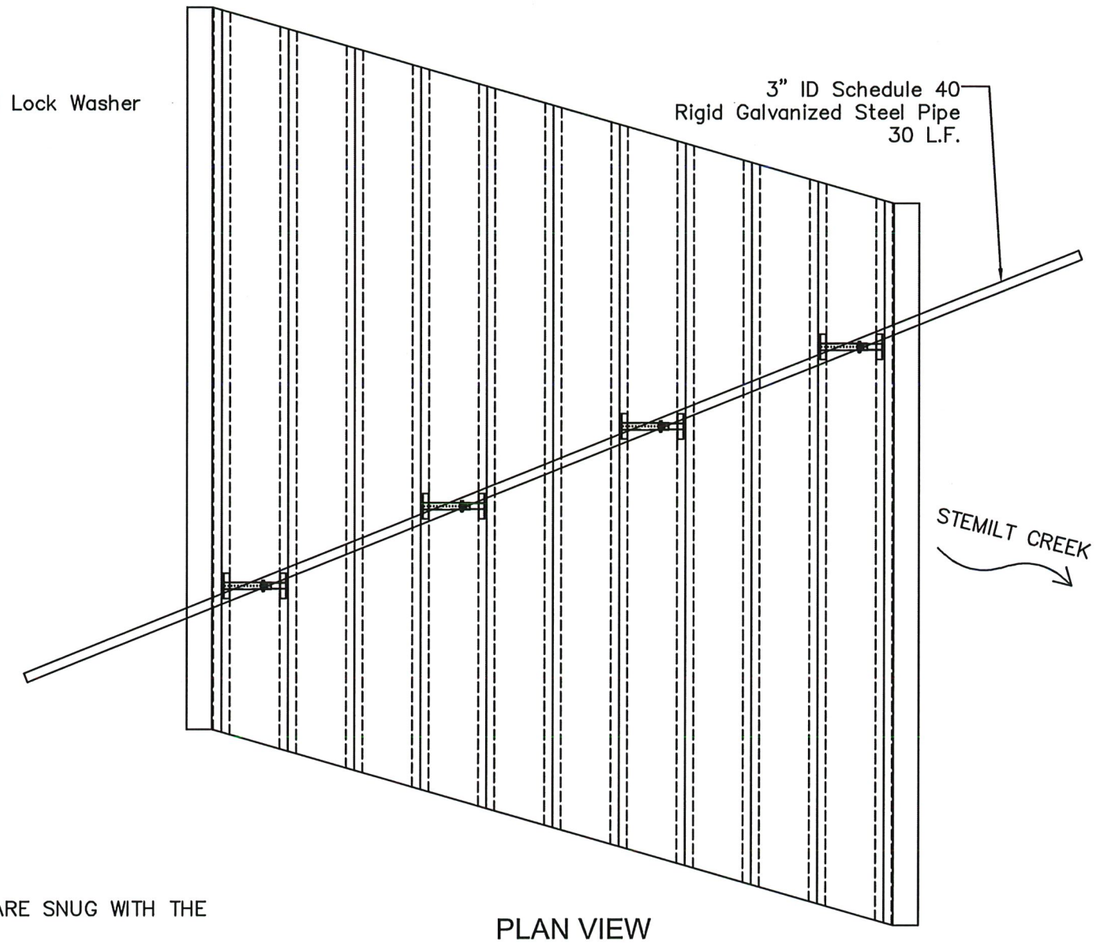
Sheet No. 8



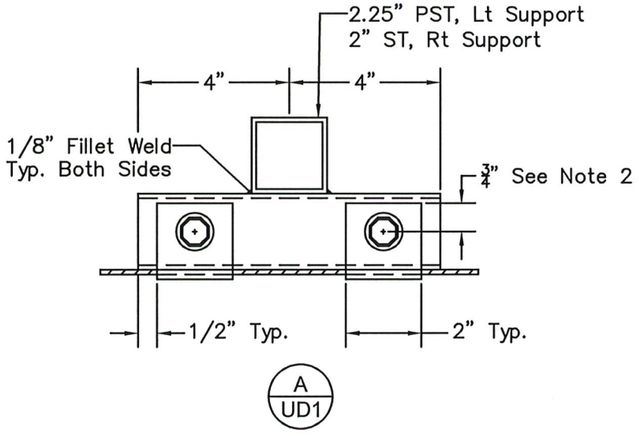
DETAIL 1
N.T.S.

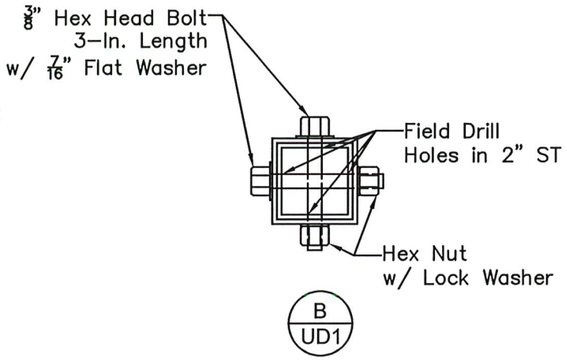


SECTION VIEW
N.T.S.



PLAN VIEW
N.T.S.





NOTES
1. ALL SQUARE TUBE SHALL BE 12 GAUGE GALVANIZED.
2. FIELD FIT/DRILL BOLT HOLES INTO LONGITUDINAL SQUARE TUBE SO THAT THE STEEL ANGLE TABS ARE SNUG WITH THE BOTTOM OF THE GIRDER FLANGE. BOLT HOLES IN STEEL ANGLES MAY BE PRE-DRILLED.
3. REFER TO SPECIAL PROVISION "UTILITY HANGER SYSTEM" FOR ADDITIONAL REQUIREMENTS.
4. THREADED ROD, BOLTS, NUTS, AND WASHERS SHALL BE SIZED PER THE MANUFACTURER OF THE SADDLE HANGER. FIELD RESIZING OF HOLES IN THE PERFORATED SQUARE TUBE FOR THE TRHEADED ROD MAY BE REQUIRED.
5. APPLY GALVANIZING REPAIR PAINT TO ALL WELDS AND FIELD DRILLED HOLES.
6. THE DISTANCE FROM BOTTOM OF GIRDER TO BOTTOM OF SADDLE SHALL BE MINIMIZED AS PRACTICLE.

FILE NAME: N:\Projects\CRP\CRP730 Stemilt Bridge 103, Chanel Rep\Design\Drawings\CCPW Plan Sheets.dwg

DESIGNED BY: S. Honeycutt, PE	REVISIONS	DATE	BY
REVIEWED BY: E. Pierson, PE			
J. Patrick, PE			
DRAWN BY: S. Honeycutt, PE			
PLOT DATE: 7/31/2025	AS-BUILT		

811 Know what's below. Call before you dig.

JOSE GORDON PACHECO — STATE OF WASHINGTON — 40409 — REGISTERED PROFESSIONAL ENGINEER — 7/31/25

SHAUN DAVID HANSCOM — STATE OF WASHINGTON — 50068 — REGISTERED PROFESSIONAL ENGINEER — 7/31/25

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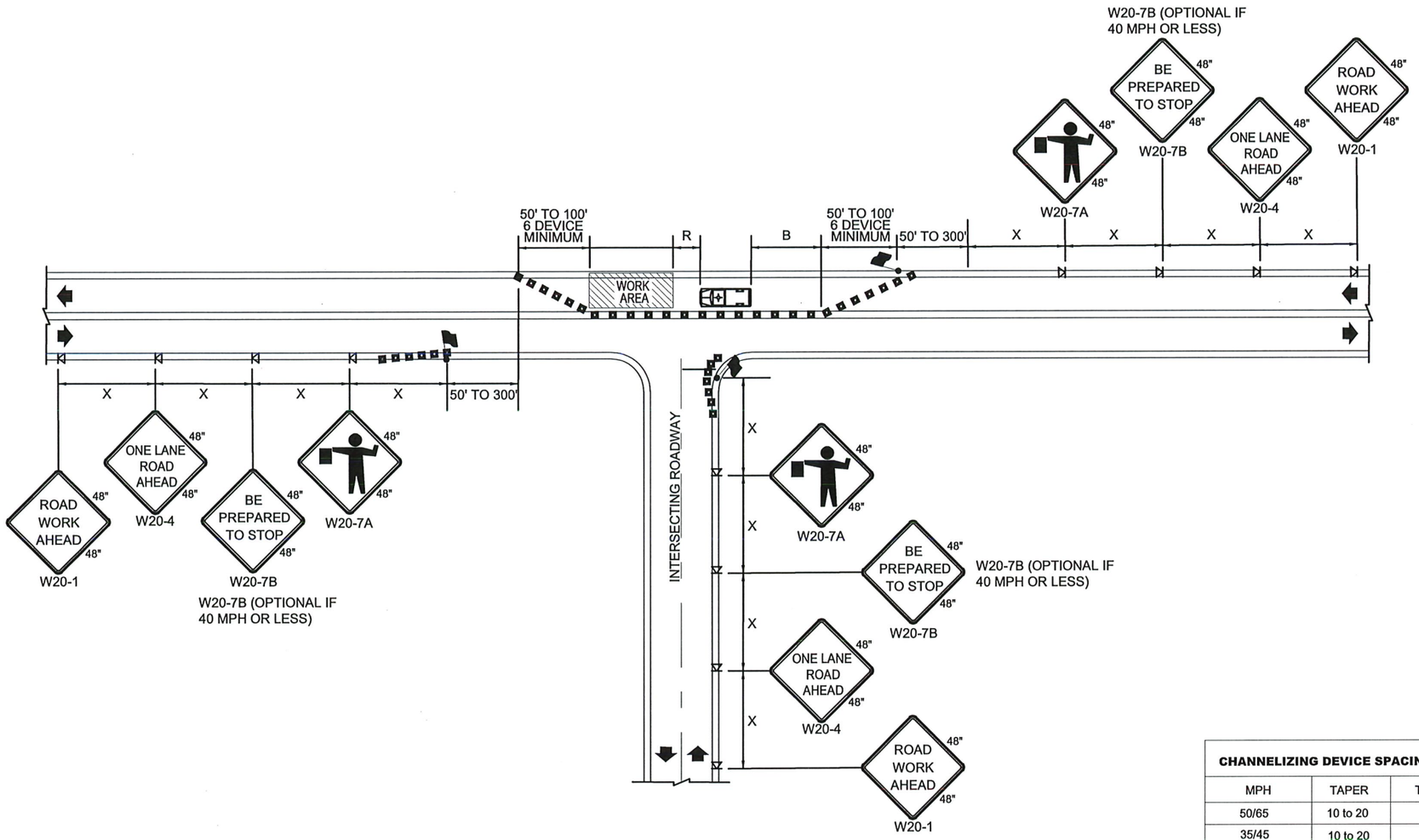
STEMILT BRIDGE #103
CHANNEL RESTORATION

UTILITY HANGER DETAILS

C.R.P. 730

Dwg. No. UD1

Sheet No. 9



SIGN SPACING = X (1)

Rural Highways	60 / 65 MPH	800'+-
Rural Roads	45 / 55 MPH	500'+-
Urban Arterials & Rural Roads	35 / 40 MPH	350'+-
Rural Roads, Urban Arterials, Residential & Business Districts	25 / 30 MPH	200'+- (2)
Urban Streets	25 MPH or Less	100'+- (2)

(1) All spacing may be adjusted to accommodate intersections and driveways.
(2) This spacing may be reduced in urban areas to fit roadway conditions.

BUFFER DATA

LONGITUDINAL BUFFER SPACE = B

SPEED (MPH)	25	30	35	40	45	50	55	60
LENGTH (feet)	155	200	250	305	360	425	495	570

TRANSPORTABLE ATTENUATOR ROLL AHEAD DISTANCE = R

TYPICAL VEHICLE LOADED WEIGHT (LBS)	POSTED SPEED (mph)	STATIONARY OPERATION (feet)
HOST VEHICLE 9,900 TO 22,000	< 45	100
	45-55	123
	> 55	172
HOST VEHICLE > 22,000	< 45	74
	45-55	100
	> 55	150

PROTECTIVE VEHICLE (WORK VEHICLE) = R (1)

(1) No specific distance for protective vehicle. Protective vehicle may be a work vehicle strategically positioned to shield the work area.

Pilot Car Operations

FOR PILOT CAR OPERATIONS THE FOLLOWING SIGNS SHALL BE REQUIRED TO SUPPLEMENT THE SIGNS SHOWN ON THIS PLAN (1)

G20-4
36" X 18"
BLACK ON ORANGE
PILOT CAR FOLLOW ME
(ON PILOT CAR)

G25-101 (1)
24" X 18"
BLACK ON WHITE
STOP WAIT FOR PILOT CAR
(FOR ROAD APPROACHES AND DRIVEWAYS)

(1) Pilot car shall be utilized when the work area exceeds 0.5 miles in length.
(2) Sign G25-101 is not required to be aluminum substrate and can be made of alternative materials

LEGEND

- CONSTRUCTION SIGN
- TEMPORARY TRAFFIC CONTROL DEVICES (1)
- FLAGGING STATION
- PROTECTIVE VEHICLE w/ WARNING BEACON

(1) TRAFFIC SAFETY DRUMS MAY BE USED AT LOCATIONS SHOWN AS TRAFFIC CONES.

ALTERNATING ONE-WAY TRAFFIC FLAGGER CONTROLLED OR PILOT CAR CONTROLLED

NOT TO SCALE

CHANNELIZING DEVICE SPACING (FEET)

MPH	TAPER	TANGENT
50/65	10 to 20	80
35/45	10 to 20	60
25/30	10 to 20	40

NOTES:

1. UNLESS OTHERWISE STATED, ALL SIGNS SHOWN ARE CONSTRUCTION SIGNS CLASS B WITH BLACK LEGEND ON ORANGE BACKGROUND.
2. EXTENDING THE CHANNELIZING DEVICE TAPER ACROSS SHOULDER IS RECOMMENDED.
3. CHANNELIZING DEVICES ARE REQUIRED AT ALL TAPERS.
4. CHANNELIZING DEVICES ARE REQUIRED TO SEPARATE TRAFFIC FROM THE WORK AREA.
5. CHANNELIZING DEVICES ARE RECOMMENDED TO SEPARATE TRAFFIC FROM THE WORK AREA WHEN A PILOT CAR IS USED.
6. A MINIMUM OF THREE (3) TRAFFIC CONES SHALL BE PLACED IN FRONT OF ALL FLAGGER LOCATIONS.
7. NIGHT WORK REQUIRES ADDITIONAL ROADWAY LIGHTING AT FLAGGING STATIONS. SEE THE **STANDARD SPECIFICATIONS** FOR ADDITIONAL REQUIREMENTS.
8. A PILOT CAR SHALL BE UTILIZED WHEN THE WORK AREA EXCEEDS 0.5 MILES IN LENGTH OR WHEN MULTIPLE WORK AREAS ARE USED CONCURRENTLY.

FILE NAME: N:\Projects\CRP\CRP730 Stemilt Bridge 103, Chanel Rep\Design\Drawings\CCPW Plan Sheets.dwg

DESIGNED BY: S. Honeycutt, PE	REVISIONS	DATE	BY
REVIEWED BY: E. Pierson, PE			
J. Patrick, PE			
DRAWN BY: S. Honeycutt, PE			
PLOT DATE: 7/31/2025	AS-BUILT		

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DAVID HONEYCUTT, STATE OF WASHINGTON, 60068, REGISTERED PROFESSIONAL ENGINEER — 7/31/25

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STEMILT BRIDGE #103
CHANNEL RESTORATION
TRAFFIC CONTROL PLAN

C.R.P. 730
Dwg. No. TC1
Sheet No. 10