



US Army Corps  
of Engineers  
Seattle District

# Public Notice of Application for Permit

**US Army Corps of Engineers**  
Regulatory Branch  
4735 E. Marginal Way S., Bldg 1202  
Seattle, WA 98134-2388  
Telephone: (206) 348-3999  
ATTN: Danette L. Guy,  
Biologist/Sr. Project Manager

**Public Notice Date: April 28, 2025**  
**Expiration Date: May 5, 2025**

**Reference No.: NWS-2024-23**  
**Name: Northwest Pipeline, LLC**

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Interested parties are hereby notified that the following request associated with Northwest Pipeline, LLC has been submitted for a Department of the Army (DA) under the provisions of Section 404 of the Clean Water Act, as amended. In Executive Order (EO) 14156 the President declared a national emergency under the National Emergencies Act (50 U.S.C. 1621) based upon the finding that the United States' insufficient energy production, transportation, refining, and generation constitutes an unusual and extraordinary threat to our Nation's economy, national security, and foreign policy. The U.S. Army Corps of Engineers (Corps), Seattle District has found that this permit request meets the terms of EO 14156 and is therefore subject to emergency permitting procedures to address an energy supply situation which would result in an unacceptable hazard to life, a significant loss of property, or an immediate, unforeseen, and significant economic hardship if corrective action requiring a permit is not undertaken within a time period less than the normal time needed to process the application under standard procedures. The Seattle District will implement the special processing procedures approved by Northwestern Division in accordance with 33 CFR § 325.2(e)(4).

**APPLICANT:** Northwest Pipeline, LLC  
Attention: Halli Baumann  
650 Main Street, Suite 300  
Salt Lake City, Utah 84101  
Telephone: (385) 315-7555

**AGENT:** Arcadis U.S., Inc.  
Attention: Dana West  
1420 5<sup>th</sup> Avenue, Suite 2400  
Seattle, Washington 98101  
Telephone: (206) 726-4759

**LOCATION:** In an unnamed tributary to Gosnell Creek, near Shelton, Mason County, Washington. Lat: 47.154006° N, Long: -123.123078° W.

WORK: Remediate pipeline exposure and further protect utility line infrastructure through channel realignment of the stream with grading designed to mimic natural channel geometries and grades while creating additional riparian floodplain. Work includes removal of existing log weirs and placement of large woody structures, regrading areas along the bankline, and adding wood and rock to the channel bed to mimic existing wood and boulder forced pools.

Up to 597 sq-ft (31 cubic yards (CY)) of existing channel would be filled and 681 sq-ft (84 CY) of new channel would be created as part of the channel realignment. Discharges below the OHWM would be up to 87 CY, of which 31 CY would consist of the excavated native material filling the former stream channel for realignment; 50 CY of fill within the retained channel portion of excavated native material; and the remaining 56 CY would consist of imported woody material, boulders, cobbles, and streambed sediment. The 56 CY of imported materials within the stream would be 16 CY of WSDOT streambed sediment, 16 CY of cobbles, 4 CY of boulders, and 20 CY of woody material.

ADDITIONAL INFORMATION: Of the 2,130 sq-ft of total impacts below the Ordinary High-Water Mark, 1,533 sq-ft of the retained portion of the stream would be excavated, graded, and filled as part of the stream enhancement. The proposed project would result in a net loss of approximately 6 linear feet of stream length, however an 84 sq-ft net gain in stream area would occur. The proposed streambed material would be supplemented with 12- to 18-inch boulders to add roughness throughout the steeper reach. Several larger, single habitat boulders (up to 36-inch diameter) would also be placed to add additional habitat complexity. No more than 5 CY of temporary discharge from sandbags would be used to isolate the work area. The project includes re-planting of native riparian buffer consisting of herbaceous, shrub, and tree vegetation. Appropriate native seed mixes would also be planted in all disturbed areas.

PURPOSE: To protect utility infrastructure.

Copies of this public notice which have been mailed or otherwise physically distributed feature project drawings in black and white. The electronic version features those drawings in color, which we think more accurately communicates the scope of project impacts. To access the electronic version of this public notice, go to the Seattle District's web page at <http://www.nws.usace.army.mil/> and under the heading Open Public Comment Periods select Regulatory Public Notices. Recently issued public notices are listed in chronological order of the date of issuance. Select and view the listing for this project.

The wetland boundaries and/or location of the ordinary high water mark shown on the project drawings have not yet been verified by the U.S. Army Corps of Engineers (Corps). If the Corps determines the boundaries of the wetland/waters are substantially inaccurate a new public notice may be published.

MITIGATION: No mitigation is proposed.

ENDANGERED SPECIES: The Endangered Species Act (ESA) requires federal agencies to consult with the National Marine Fisheries Service (NMFS) and/or U.S. Fish and Wildlife Service (USFWS) pursuant to Section 7 of the ESA on all actions that may affect a species listed (or proposed for listing) under the ESA as threatened or endangered or any designated critical habitat. If the Corps determines the project may affect a species listed (or proposed for listing) under the ESA as threatened or endangered or any designated critical habitat the Corps would consult with NMFS and USFWS in accordance with the special processing procedures approved by Northwestern Division, under 50 CFR Part 402.05 in accordance with Section 7 of the Endangered Species Act.

ESSENTIAL FISH HABITAT: If the U.S. Army Corps of Engineers (Corps) determines that the proposed action may adversely affect EFH for federally managed fisheries in Washington waters the Corps will coordinate with NMFS in accordance with the special processing procedures approved by Northwestern Division.

CULTURAL RESOURCES: If the U.S. Army Corps of Engineers (Corps) determines that the proposed action requires Section 106 consultation under the National Historic Preservation Act. The Corps would initiate Section 106 consultation in accordance with the special processing procedures approved by Northwestern Division, under 36 CFR Part 800.12 in accordance with Section 106 of the National Historic Preservation Act.

EVALUATION: This application will be reviewed in accordance with 33 CFR Parts 320-332 and the decision whether to issue a permit will be based on an evaluation of the probable impacts, including cumulative impacts, of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefits, which reasonably may be expected to accrue from the proposal, must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered, including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership, and, in general, the needs and welfare of the people. The Washington Department of Ecology has or will evaluate the proposed project in accordance with Section 401 of the Clean Water Act and for consistency with the Coastal Zone Management Act.

The U.S. Army Corps of Engineers is soliciting comments from the public; Native American Nations or tribal governments; Federal, State, and local agencies and officials; and other interested parties in order to consider and evaluate the impacts of this activity. Any comments received will be considered by the Corps to determine whether to issue, modify, condition or deny a permit for the work. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National

NWS-2024-23; Northwest Pipeline, LLC

Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the activity.

The described discharge will be evaluated for compliance with guidelines promulgated by the Environmental Protection Agency under authority of Section 404(b)(1) of the CWA. These guidelines require an alternatives analysis for any proposed discharge of dredged or fill material into waters of the United States.

SOURCE OF FILL MATERIAL: The source of the fill material would be native material and obtained from local sources, such as local landscaping supply companies.

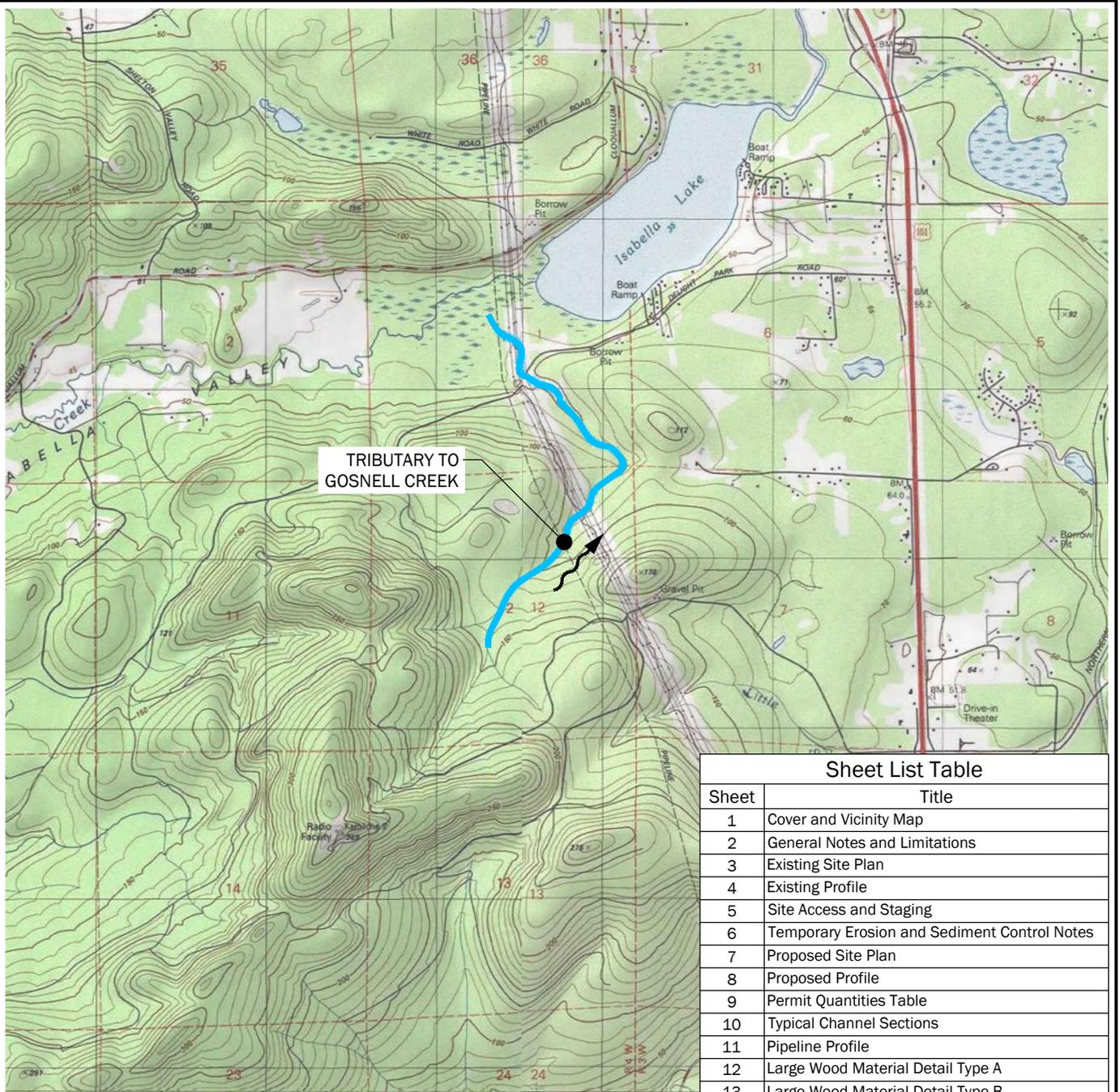
COMMENT AND REVIEW PERIOD: Conventional mail or e-mail comments on this public notice will be accepted and made part of the record and will be considered in determining whether authorizing the work would not be contrary to the public interest. In order to be accepted, e-mail comments must originate from the author's e-mail account and must include on the subject line of the e-mail message the permit applicant's name and reference number as shown below. All e-mail comments should be sent to [danette.l.guy@usace.army.mil](mailto:danette.l.guy@usace.army.mil). Either conventional mail or e-mail comments must include the permit applicant's name and reference number, as shown below, and the commenter's name, address, and phone number. All comments received will become part of the administrative record and are subject to public release under the Freedom of Information Act including any personally identifiable information such as names, phone numbers, and addresses. All comments whether conventional mail or e-mail must reach this office, no later than the expiration date of this public notice to ensure consideration.

You may also now submit project specific comments to the Corps through the new Regulatory Request System (RRS) through this link: <https://rrs.usace.army.mil/rrs> ; Click Public Notices and filter to Washington State to see all current Seattle District Public Notices, including this notice. You may submit your comments directly through this portal.

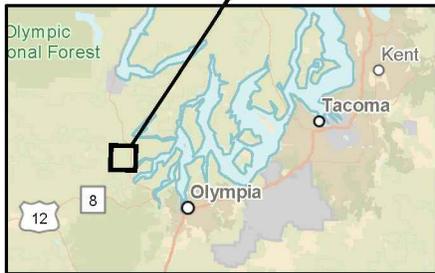
Conventional mail comments should be sent to:  
U.S. Army Corps of Engineers, Regulatory Branch,  
Attention: Danette L. Guy  
4735 E. Marginal Way S, Bldg 1202  
Seattle, Washington, 98134-2388.

To ensure proper consideration of all comments, responders must include the following name and reference number in the text of their comments: Northwest Pipeline, LLC; NWS-2024-23.

Encl: Figures (23)

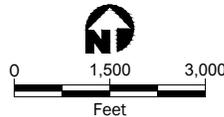


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6	Temporary Erosion and Sediment Control Notes
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Data Source:  
ESRI, USGS

Projection: NAD83 Washington  
State Planes, South Zone, US Foot.



**Cover And Vicinity Map**

**Applicant:** Williams Northwest Pipeline, LLC

**Reference Number:**

**Adjacent Property Owners:**  
See JARPA Application  
1. Parcel #1462824255

**Location:** 8" Shelton Pipeline (2433) M.P. 25.5

**Lat/Long:** 47.153819°N, -123.123028°W

**Sect/Town/Range:** S12, T19N, R4W

**Datum:** Horizontal = WA State Plane South, NAD83  
Vertical = NAVD 88

**Sheet:** 1 of 21      **Date:** 01/30/2025

**Proposed Project:**  
Tributary to Gosnell Creek

**In:** Unnamed Tributary to Gosnell Creek

**Near/At:**

**County:** Mason County

**State:** WA

**GENERAL NOTES AND LIMITATIONS:**

1. THESE DESIGNS AND DRAWINGS HAVE BEEN PREPARED FOR THE EXCLUSIVE USE OF WILLIAMS AND THEIR AUTHORIZED AGENTS. NO OTHER PARTY MAY RELY ON THE PRODUCT OF OUR SERVICES UNLESS GEOENGINEERS INC. (GEOENGINEERS) AGREES IN WRITING IN ADVANCE OF SUCH USE.
2. THE DRAWINGS CONTAINED WITHIN SHOULD NOT BE APPLIED FOR ANY PURPOSE OR PROJECT EXCEPT THE LATERAL PIPELINE EXPOSURE MITIGATION DESIGN AS SHOWN IN THE PROJECT AREA LOCATED ON SHEET 1.
3. THESE DESIGNS AND DRAWINGS ARE COPYRIGHTED BY GEOENGINEERS, INC. ANY USE, ALTERATION, DELETION, OR EDITING OF THIS DOCUMENT WITHOUT EXPLICIT WRITTEN PERMISSION FROM GEOENGINEERS, INC. IS STRICTLY PROHIBITED. ANY OTHER UNAUTHORIZED USE OF THIS DOCUMENT IS PROHIBITED.
4. WILLIAMS IS ADVISED TO CONTACT AND TO OBTAIN THE NECESSARY PERMITS AND APPROVALS FROM ALL APPROPRIATE REGULATORY AGENCIES (LOCAL, STATE, AND FEDERAL) PRIOR TO CONSTRUCTION.
5. GEOMORPHIC CONDITIONS CAN CHANGE AND THESE DESIGNS ARE BASED ON CONDITIONS THAT EXISTED AT THE TIME THE DESIGN WAS PERFORMED. THE RESULTS OF THESE DESIGNS MAY BE AFFECTED BY THE PASSAGE OF TIME, BY MANMADE EVENTS SUCH AS CONSTRUCTION ON OR ADJACENT TO THE SITE, OR BY NATURAL EVENTS SUCH AS FLOODS, EARTHQUAKES, SLOPE INSTABILITY OR GROUNDWATER FLUCTUATIONS. ALWAYS CONTACT GEOENGINEERS BEFORE APPLYING THESE DESIGNS TO DETERMINE IF THEY REMAIN APPLICABLE.
6. ALL RIVERS, STREAMS, ROCKS AND FISH PASSAGE STRUCTURES ARE POTENTIALLY DANGEROUS. THESE PROPOSED STREAM IMPROVEMENTS ARE INTENDED TO ADDRESS FISH HABITAT. THESE STRUCTURES ARE INHERENTLY DANGEROUS TO PEOPLE IN OR AROUND THEM. WILLIAMS AND THE PROPERTY OWNER SHOULD ADDRESS SAFETY CONCERNS APPROPRIATELY.
7. IN GENERAL, THE PROPOSED ENHANCEMENTS ARE INTENDED TO RESULT IN MORE STABLE STREAMBEDS, BANKS AND FLOODPLAINS. HOWEVER, CHANNEL EROSION, CHANNEL MIGRATION AND/OR AVULSIONS CAN BE EXPECTED TO OCCUR OVER TIME. THESE CHANNEL PROCESSES ARE NATURAL AND APPROPRIATE FOR THESE STREAM SYSTEMS.
8. DESIGN SPECIFICS FOR STRUCTURES SHALL BE CONFIRMED AND/OR VERIFIED BY A QUALIFIED GEOENGINEERS STAFF MEMBER PRIOR TO OR DURING CONSTRUCTION AT EACH PROPOSED STRUCTURE LOCATION.
9. THESE FIGURES WERE ORIGINALLY PRODUCED IN COLOR.
10. BACKGROUND, SURVEY POINTS AND EXISTING TOPOGRAPHY FROM EASTSIDE CONSULTANTS, INC., COLLECTED DECEMBER 2022.

Item #	Item Description	Units	Total	Below OHWM	Above / Outside OHWM
1	Environmental Controls - Permit Compliance-Best Management Practices	LS	1	n/a	n/a
2	Construction Staking	Day	2	n/a	n/a
3	Mobilization and Demobilization	LS	1	n/a	n/a
4	Clearing, Grubbing, Stockpile and Disposal	AC	1	0	1
5	Work Area Isolation	LS	1	1	0
6	Excavation and Stockpile Native Material	CY	86	2	84
7	Import and Place WSDOT Streambed Sediment	CY	47	16	31
8	Import and Place WSDOT 10-inch Cobbles	CY	47	16	31
9	Import and Place 12 to 18-inch Streambed Boulders	CY	6	4	2
10	Fill Existing Channel with Native Material	CY	31	31	0
11	Dispose Excess Native Material on Site (outside/above OHWM)	CY	55	0	55
12	Import and Place Woody Material (Logs with Rootwads, 15 ft length, 12 to 18 inches dia.)	EA	14	14	0
13	Import and Place Woody Material (Logs no Rootwads, 10 to 15 ft length, 9 to 12 inches dia.)	EA	27	27	0
14	Import and Place Woody Material (Logs with Rootwads, 20 ft length, 14 to 18 inches dia.)	EA	4	4	0
15	Seeding	AC	1	0	1
16	Planting	LS	1	n/a	n/a

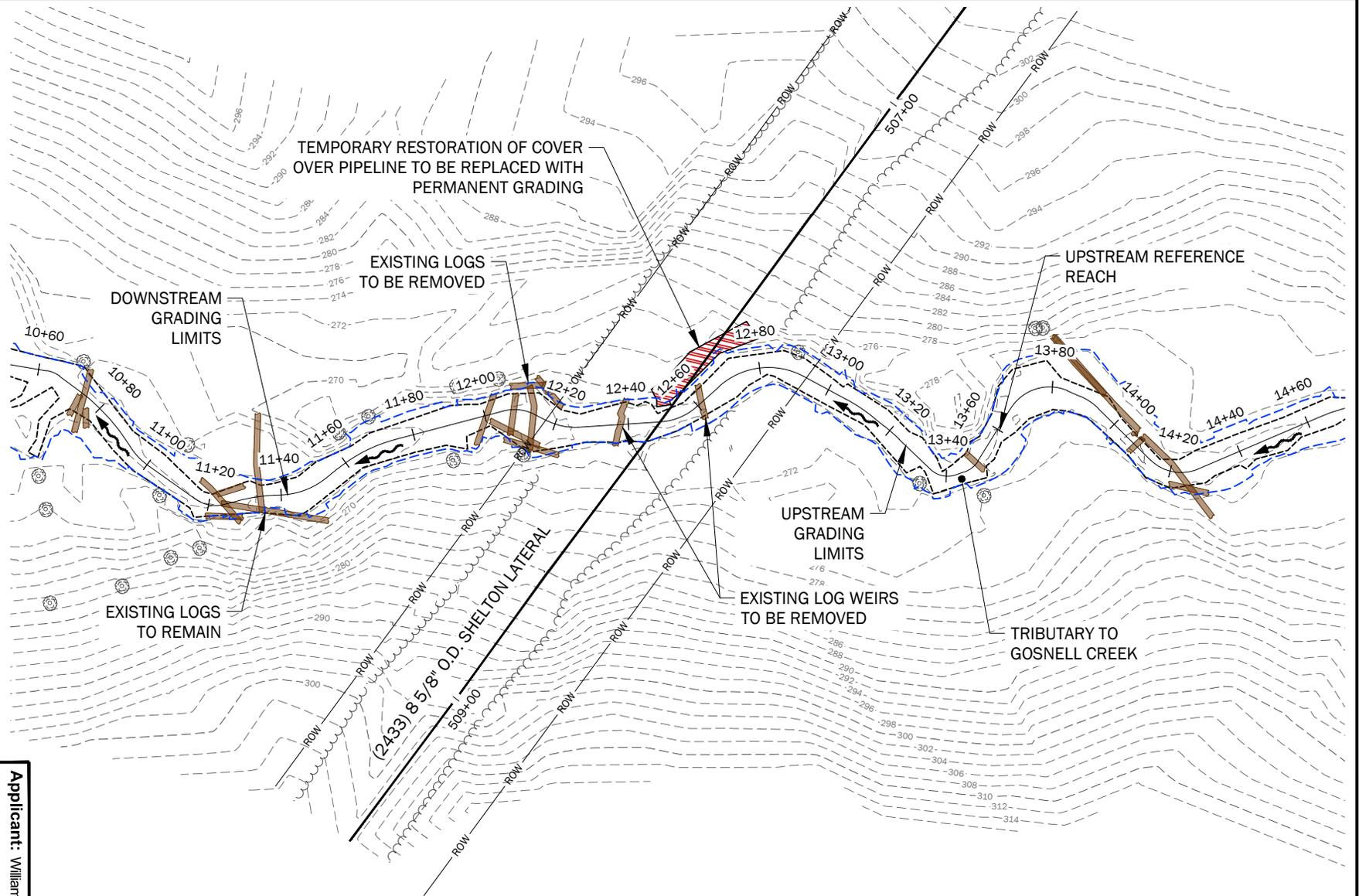
General Notes And Limitations

**Applicant:** Williams Northwest Pipeline, LLC  
**Reference Number:**  
**Proposed Project:** Tributary to Gosnell Creek  
**Location:** 8<sup>th</sup> Shelton Pipeline (2433) M.P. 25.5  
**Sheet:** 2 of 21 **Date:** 01/30/2025

DESIGN STREAMBED MATERIAL 1 - UPSTREAM OF PIPELINE	
PERCENT PASSING	PARTICLE SIZE (INCHES)
D16	0.2
D50	1.8
D84	6.0
D100	10.0

DESIGN STREAMBED MATERIAL 2 - DOWNSTREAM OF PIPELINE	
PERCENT PASSING	PARTICLE SIZE (INCHES)
D16	0.2
D50	2.1
D84	8.7
D100	18.0

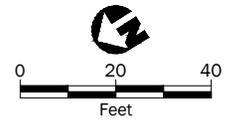
Existing Site Plan

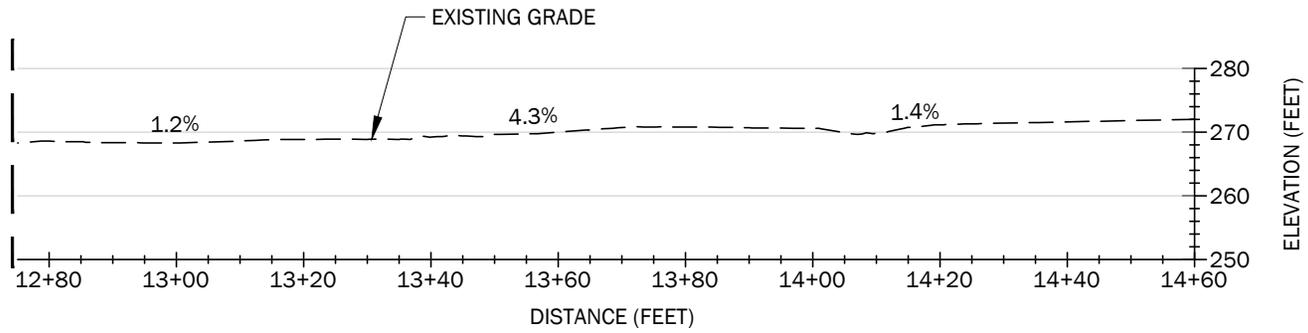
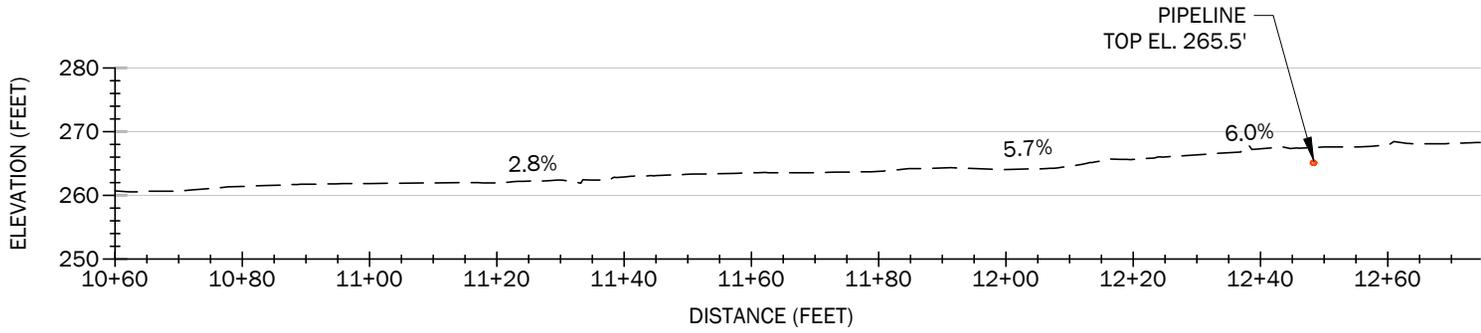


Legend

- EXISTING MAJOR (10-FT) CONTOUR LINE
- EXISTING MINOR (2-FT) CONTOUR LINE
- TRIBUTARY TO GOSNELL CREEK ALIGNMENT
- PIPELINE RIGHT OF WAY
- EXISTING EDGE OF WATER
- EXISTING TREE LINE
- EXISTING OHWM
- EXISTING LOG/WOOD DEBRIS
- TEMPORARY RESTORATION OF COVER
- EXISTING TREE
- FLOW DIRECTION

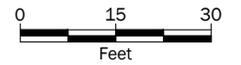
**Applicant:** Williams Northwest Pipeline, LLC  
**Reference Number:**  
**Proposed Project:**  
 Tributary to Gosnell Creek  
**Location:** 8" Shelton Pipeline (2433)  
 M.P. 25.5  
**Sheet:** 3 of 21    **Date:** 01/30/2025

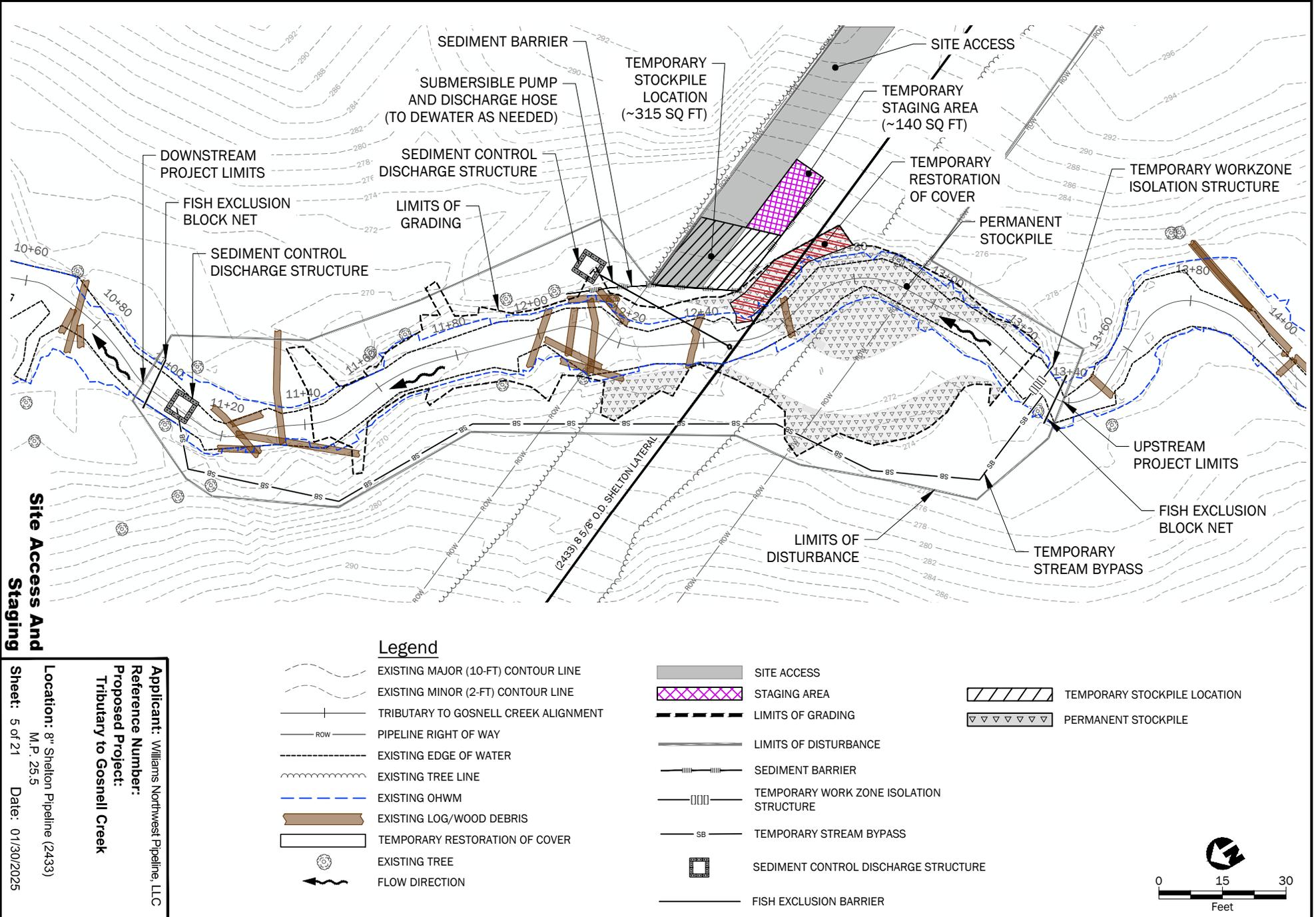




**Existing Profile**

**Applicant:** Williams Northwest Pipeline, LLC  
**Reference Number:**  
**Proposed Project:** Tributary to Gosnell Creek  
**Location:** 8" Shelton Pipeline (2433)  
M.P. 25.5  
**Sheet:** 4 of 21 **Date:** 01/30/2025



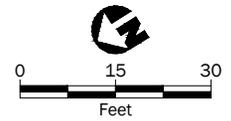


**Site Access And Staging**

**Applicant:** Williams Northwest Pipeline, LLC  
**Reference Number:**  
**Proposed Project:** Tributary to Gosnell Creek  
**Location:** 8" Shelton Pipeline (2433) M.P. 25.5  
**Sheet:** 5 of 21 **Date:** 01/30/2025

**Legend**

- |  |                                      |  |   |  |   |  |                              |
|--|--------------------------------------|--|---|--|---|--|------------------------------|
|  | EXISTING MAJOR (10-FT) CONTOUR LINE  |  | SITE ACCESS                             |  | STAGING AREA                            |  | TEMPORARY STOCKPILE LOCATION |
|  | EXISTING MINOR (2-FT) CONTOUR LINE   |  | STAGING AREA                            |  | TEMPORARY STOCKPILE LOCATION            |  | PERMANENT STOCKPILE          |
|  | TRIBUTARY TO GOSNELL CREEK ALIGNMENT |  | LIMITS OF GRADING                       |  | LIMITS OF DISTURBANCE                   |  | SEDIMENT BARRIER             |
|  | PIPELINE RIGHT OF WAY                |  | SEDIMENT BARRIER                        |  | TEMPORARY WORK ZONE ISOLATION STRUCTURE |  | TEMPORARY STREAM BYPASS      |
|  | EXISTING EDGE OF WATER               |  | TEMPORARY WORK ZONE ISOLATION STRUCTURE |  | SEDIMENT CONTROL DISCHARGE STRUCTURE    |  | FISH EXCLUSION BARRIER       |
|  | EXISTING TREE LINE                   |  | TEMPORARY STREAM BYPASS                 |  | FLOW DIRECTION                          |  |                              |
|  | EXISTING OHWM                        |  |   |  |   |  |                              |
|  | EXISTING LOG/WOOD DEBRIS             |  |   |  |   |  |                              |
|  | TEMPORARY RESTORATION OF COVER       |  |   |  |   |  |                              |
|  | EXISTING TREE                        |  |   |  |   |  |                              |
|  | FLOW DIRECTION                       |  |   |  |   |  |                              |

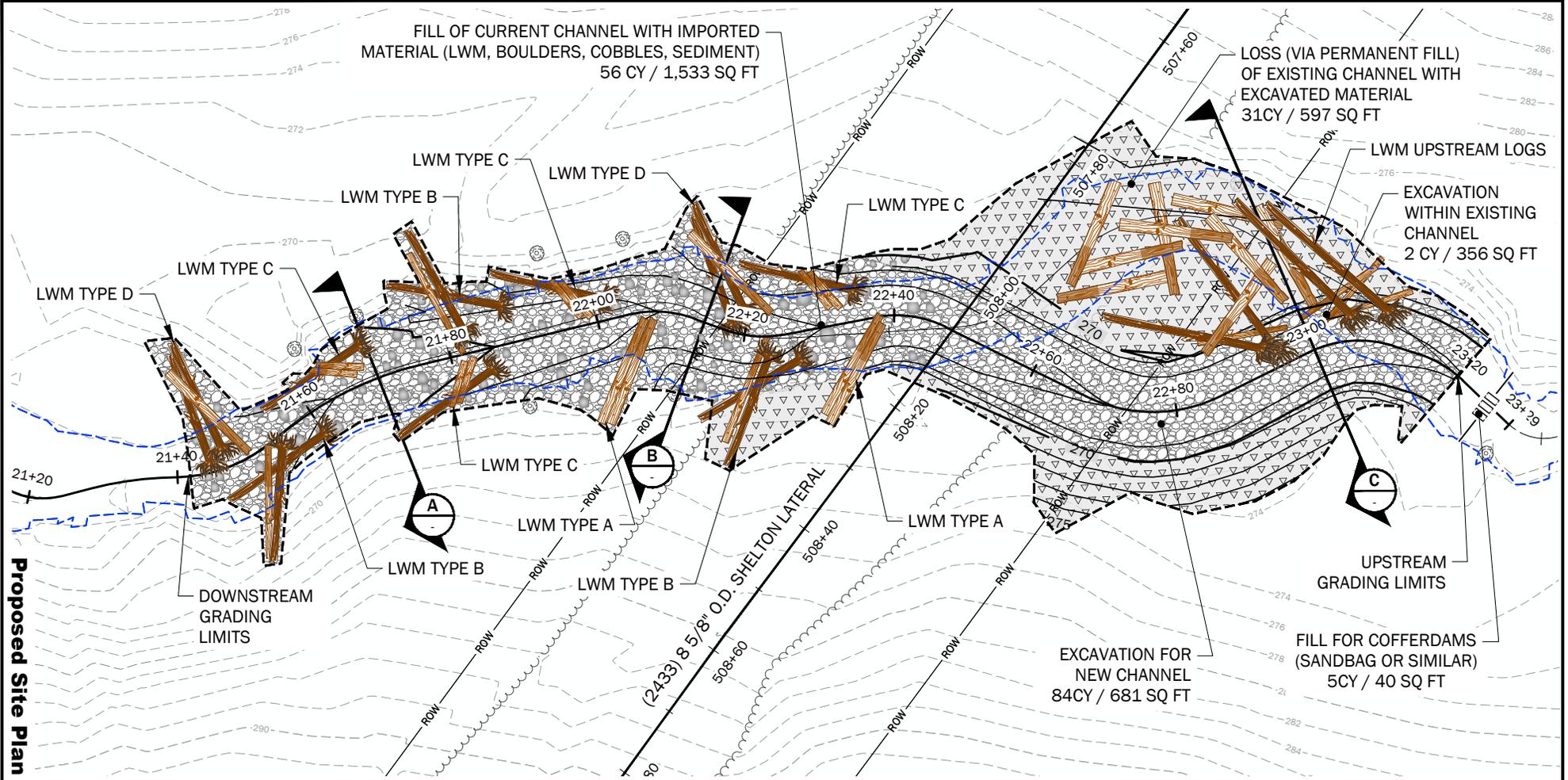


**TESC NOTES**

1. THESE TEMPORARY EROSION AND SEDIMENT CONTROL NOTES ARE FROM THE ECOLOGY STORMWATER MANAGEMENT MANUAL OF WESTERN WASHINGTON, VOL. II (2024).
2. APPROVAL OF THE TESC PLAN DOES NOT CONSTITUTE AN APPROVAL OF PERMANENT ROAD OR DRAINAGE DESIGN (E.G. SIZE AND LOCATION OF ROADS, PIPES, RESTRICTORS, CHANNELS, RETENTION FACILITIES, UTILITIES, ETC.)
3. THE IMPLEMENTATION OF THE TESC PLANS AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT, AND UPGRADING OF THESE TESC FACILITIES IS THE RESPONSIBILITY OF THE APPLICANT/TESC SUPERVISOR UNTIL ALL CONSTRUCTION IS APPROVED.
4. ALL CLEARING LIMITS, STOCKPILES, STAGING AREA, AND TREES TO BE PRESERVED SHALL BE CLEARLY MARKED PRIOR TO COMMENCING CONSTRUCTION ACTIVITIES WITHIN THE PROJECT LIMITS, ALL ENVIRONMENTALLY SENSITIVE AREAS INCLUDING, BUT NOT LIMITED TO, WETLAND, WETLAND BUFFERS, GEOLOGIC HAZARDS, AND GEOLOGIC HAZARD BUFFERS, SHALL BE FENCED WITH HIGH VISIBILITY CONSTRUCTION FENCE (HVF) PRIOR TO COMMENCING CONSTRUCTION ACTIVITIES (EQUIPMENT STAGING, MATERIALS STORAGE, AND WORK VEHICLE PARKING). DURING THE CONSTRUCTION PERIOD, NO DISTURBANCE BEYOND THE CLEARING LIMITS SHALL BE PERMITTED. THE CLEARING LIMITS SHALL BE MAINTAINED BY THE APPLICANT/TESC SUPERVISOR FROM THE DURATION OF CONSTRUCTION.
5. THE TESC FACILITIES SHOWN MUST BE CONSTRUCTED PRIOR TO OR IN CONJUNCTION WITH ALL CLEARING AND GRADING SO AS TO ENSURE THAT THE TRANSPORT OF SEDIMENT TO SURFACE WATERS, DRAINAGE SYSTEMS, AND ADJACENT PROPERTIES IS MINIMIZED.
6. THE TESC FACILITIES SHOWN ON THIS PLAN ARE THE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITION. DURING THE CONSTRUCTION PERIOD, THESE TESC FACILITIES SHALL BE UPGRADED AS NEEDED FOR UNEXPECTED STORM EVENTS AND MODIFIED TO ACCOUNT FOR CHANGING SITE CONDITIONS (E.G. ADDITIONAL COVER MEASURES, ADDITIONAL SUMP PUMPS, AND SILT FENCES, PERIMETER PROTECTION ETC.) AS DIRECTED BY WILLIAMS.
7. THE CONTRACTOR SHALL MAINTAIN ALL PUBLIC ROADWAYS AND PREVENT SEDIMENT TRACKOUT.
8. THE TESC FACILITIES SHALL BE INSPECTED DAILY BY THE TESC SUPERVISOR AND MAINTAINED TO ENSURE CONTINUED PROPER FUNCTION.
9. ANY AREAS OF EXPOSED SOILS THAT WILL NOT BE DISTURBED FOR TWO CONSECUTIVE DAYS DURING THE WET SEASON OR SEVEN DAYS DURING THE DRY SEASON SHALL BE IMMEDIATELY STABILIZED WITH THE APPROVED TESC METHODS (E.G. SEEDING, MULCHING, PLASTIC COVERING, ETC.).
10. ANY AREA NEEDING TESC MEASURES THAT DO NOT REQUIRE IMMEDIATE ATTENTION SHALL BE ADDRESSED WITHIN SEVEN DAYS.
11. MATERIAL THAT MAY BE TEMPORARILY STORED FOR USE IN PROJECT ACTIVITIES SHALL BE COVERED WITH PLASTIC OR OTHER IMPERVIOUS MATERIAL AND PROTECTED BY APPROPRIATE BMPS TO PREVENT SEDIMENTS FROM BEING WASHED FROM THE STORAGE AREA TO SURFACE WATERS.
12. COVER MEASURES WILL BE APPLIED IN CONFORMANCE WITH THE ECOLOGY STORMWATER MANAGEMENT MANUAL OF WESTERN WASHINGTON, VOL. II (2024).
13. ALL TESC BMPS WILL BE REMOVED UPON PROJECT COMPLETION.
14. CONSTRUCTION, DE-WATERING ACTIVITIES AND DISCHARGE OF WATER ARE TO COMPLY WITH ECOLOGY GUIDELINES. TURBID DE-WATERING WATER ASSOCIATED WITH IN-WATER WORK SHALL NOT BE DISCHARGED DIRECTLY TO TRIB TO GOSNELL CREEK. TURBID DE-WATERING WATER SHALL BE ROUTED INTO AN UPLAND AREA AND DISCHARGED THROUGH A SEDIMENT BAG FOR INFILTRATION.
15. FOR TESC DETAILS, SEE EROSION AND SEDIMENT CONTROL DETAILS SHEETS.

**Temporary Erosion  
And Sediment  
Control Notes**

<p><b>Applicant:</b> Williams Northwest Pipeline, LLC</p> <p><b>Reference Number:</b></p> <p><b>Proposed Project:</b> Tributary to Gosnell Creek</p> <p><b>Location:</b> 8<sup>th</sup> Shelton Pipeline (2433) M.P. 25.5</p> <p><b>Sheet:</b> 6 of 21      <b>Date:</b> 01/30/2025</p>
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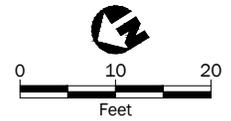


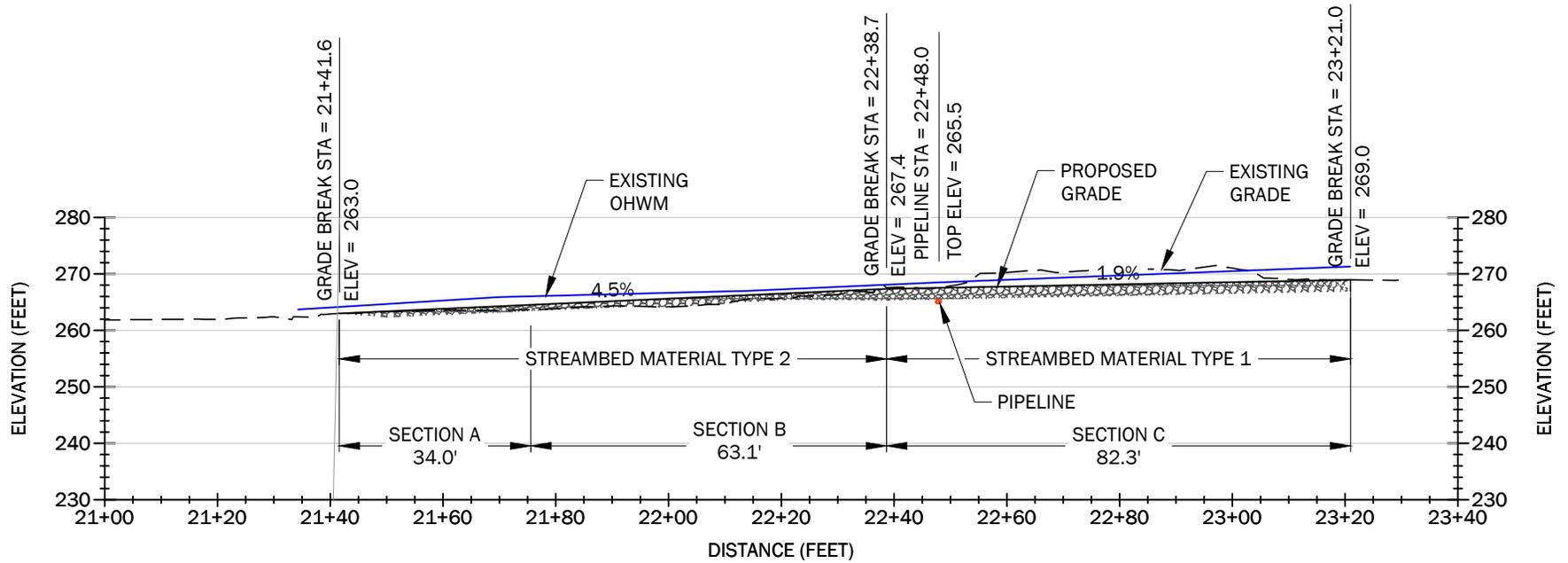
**Proposed Site Plan**

**Applicant:** Williams Northwest Pipeline, LLC  
**Reference Number:**  
**Proposed Project:** Tributary to Gosnell Creek  
**Location:** 8" Shelton Pipeline (2433) M.P. 25.5  
**Sheet:** 7 of 21 **Date:** 01/30/2025

**Legend**

- |  |   |  |                                    |
|--|---|--|------------------------------------|
|  | EXISTING MAJOR (10-FT) CONTOUR LINE           |  | PROPOSED MAJOR (5-FT) CONTOUR LINE |
|  | EXISTING MINOR (2-FT) CONTOUR LINE            |  | PROPOSED MINOR (1-FT) CONTOUR LINE |
|  | EXISTING TRIBUTARY TO GOSNELL CREEK ALIGNMENT |  | PROPOSED CHANNEL ALIGNMENT         |
|  | PIPELINE RIGHT OF WAY                         |  | EXCAVATION LIMITS                  |
|  | EXISTING TREE LINE                            |  | PROPOSED STREAMBED MATERIAL        |
|  | EXISTING OHWM                                 |  | PROPOSED GENERAL BACKFILL          |
|  | EXISTING TREE                                 |  | LOG                                |
|  |   |  | STREAMBED BOULDER                  |



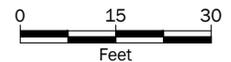


**Proposed Profile**

**Applicant:** Williams Northwest Pipeline, LLC  
**Reference Number:**  
**Proposed Project:** Tributary to Gosnell Creek  
**Location:** 8" Shelton Pipeline (2433)  
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**Sheet:** 8 of 21 **Date:** 01/30/2025

**NOTE:**

1. PROPOSED CHANNEL ALIGNMENT STATIONING DOES NOT MATCH EXISTING CHANNEL ALIGNMENT STATIONING.
2. PROPOSED CHANNEL LENGTH IS APPROXIMATELY 6 FEET LESS THAN EXISTING CHANNEL LENGTH.

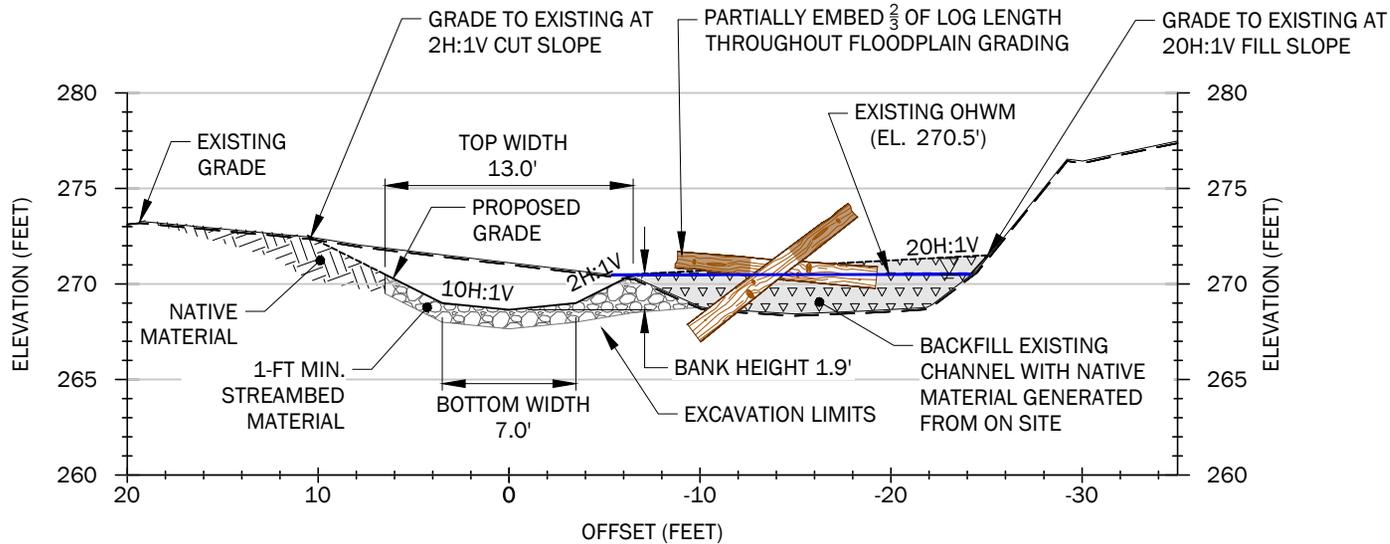
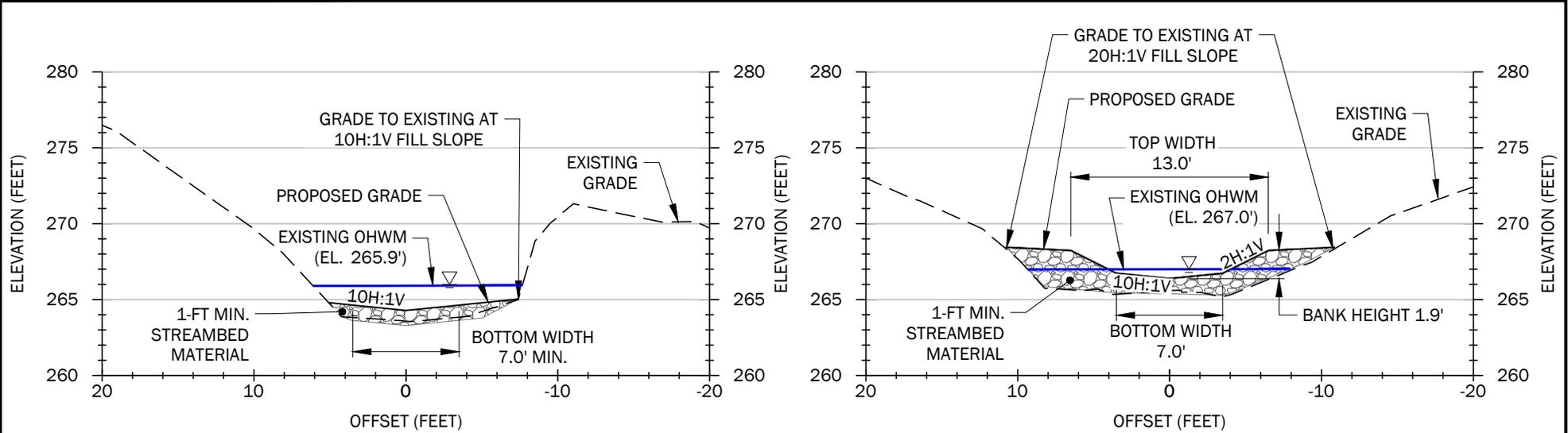


**PERMIT QUANTITIES TABLE**

Activity	Waterbody name	Impact location	Duration of impact	Amount of material placed in or removed	Area of waterbody affected
Excavation for new channel	UNT to Gosnell Creek (S01)	Above OHWM	Permanent	84 cubic yards	681 sq. ft. / 50 lin. ft.
Excavation within existing channel		Below OHWM	Permanent	2 cubic yards	356 sq. ft. / 30 lin. ft.
Loss (via permanent fill) of existing channel with excavated material		Below OHWM	Permanent	31 cubic yards	597 sq. ft. / 54 lin. ft.
Fill of existing channel with imported material (LWM, boulders, cobbles, sediment)		Below OHWM	Permanent	56 cubic yards	1533 sq. ft. / 112 lin. ft.
LWM		Below OHWM	Permanent	20 cubic yards	-
Boulders		Below OHWM	Permanent	4 cubic yards	-
Cobbles		Below OHWM	Permanent	16 cubic yards	-
Sediment		Below OHWM	Permanent	16 cubic yards	-
Fill for Cofferdams (sandbags or similar)		Below OHWM	~4 weeks	5 cubic yards	40 sq. ft. / 4 lin. ft.

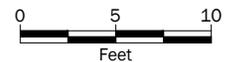
**Permit Quantities Table**

**Applicant:** Williams Northwest Pipeline, LLC  
**Reference Number:**  
**Proposed Project:** Tributary to Gosnell Creek  
**Location:** 8" Shelton Pipeline (2433)  
 M.P. 25.5  
**Sheet:** 9 of 21 **Date:** 01/30/2025



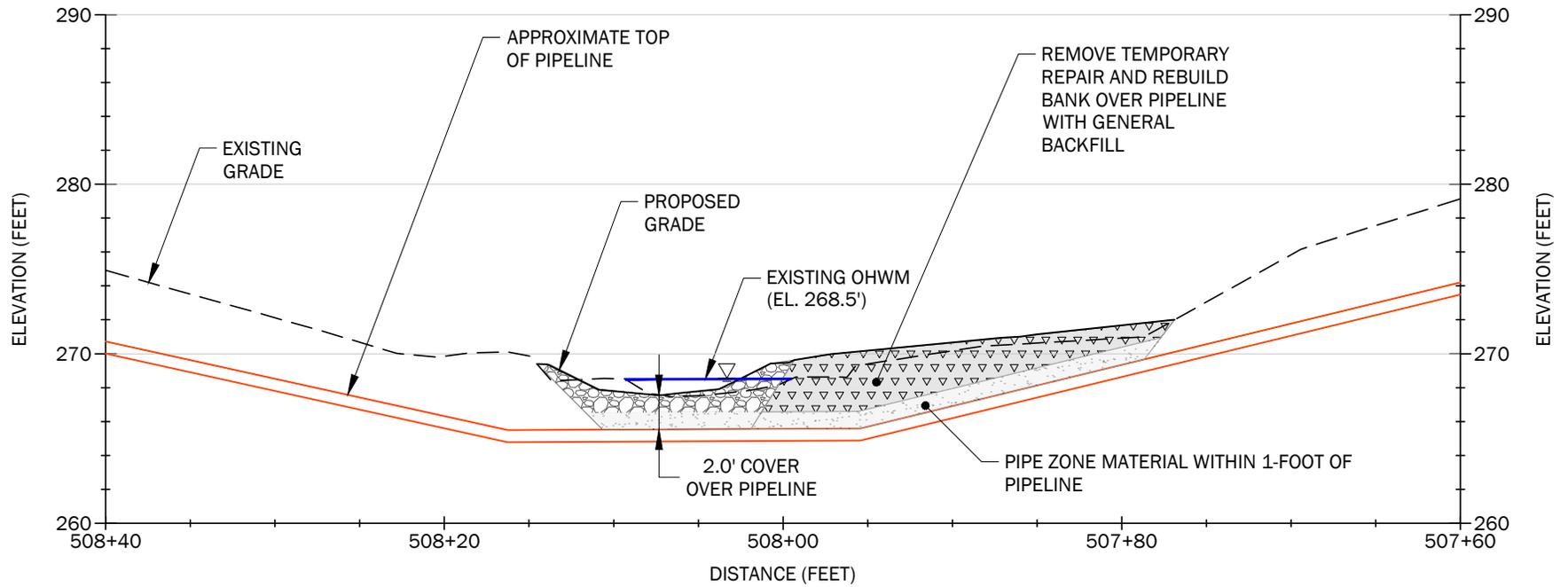
NOTES:

1. CROSS SECTIONS FACE DOWNSTREAM.
2. STREAMBED MATERIAL IS INTENDED TO BE SIMILAR GRADATION AS EXISTING.



Typical Channel Sections

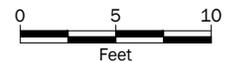
**Applicant:** Williams Northwest Pipeline, LLC  
**Reference Number:**  
**Proposed Project:** Tributary to Gosnell Creek  
**Location:** 8" Shelton Pipeline (2433)  
 M.P. 25.5  
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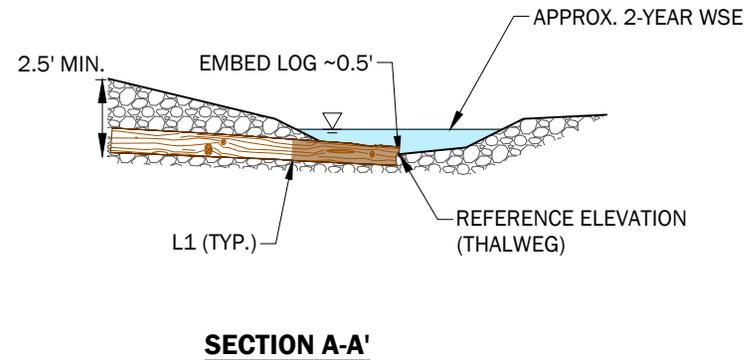
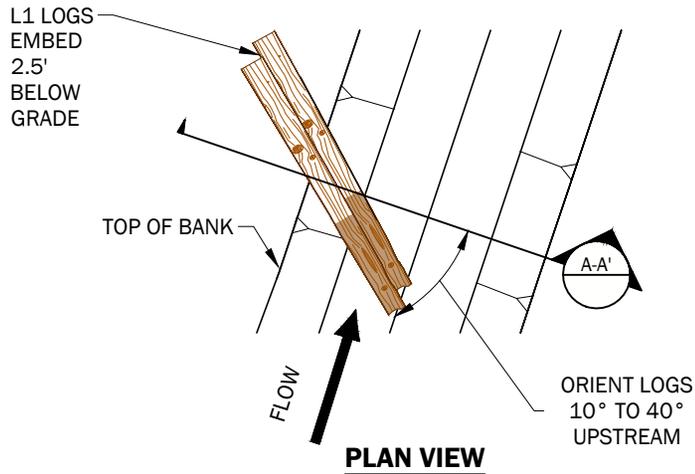


**Pipeline Profile**

**Applicant:** Williams Northwest Pipeline, LLC  
**Reference Number:**  
**Proposed Project:** Tributary to Gosnell Creek  
**Location:** 8" Shelton Pipeline (2433)  
 M.P. 25.5  
**Sheet:** 11 of 21 **Date:** 01/30/2025

- NOTES:  
 1. SEE PROPOSED SITE PLAN FOR PIPELINE STATIONS.





**CONSTRUCTION SEQUENCING:**

1. ESTABLISH REFERENCE ELEVATION (THALWEG) PRIOR TO CONSTRUCTION AND CONFIRM WITH HYDRAULIC ENGINEER.
2. PLACE TWO TYPE 1 LOGS SO THAT THE END OF THE LOGS EXTEND TO THE THALWEG AND EMBED HALF THE LOG DIAMETER. THE TRUNK OF THE LOG SHOULD EXTEND INTO THE BANK. ORIENT ROOTWAD UPSTREAM BETWEEN 10° AND 40° AS SHOWN IN THE PLAN VIEW. THE BURIED END OF THE LOG SHALL BE 2.5' MIN. EMBEDDED.
3. BACKFILL THE STRUCTURE AND REBUILD THE BANK WITH DESIGNATED COBBLES AND GRAVEL. PLACE BACKFILL IN 1.0' LIFTS AND COMPACT WITH EXCAVATOR BUCKET OR SIMILAR METHOD BETWEEN LIFTS.

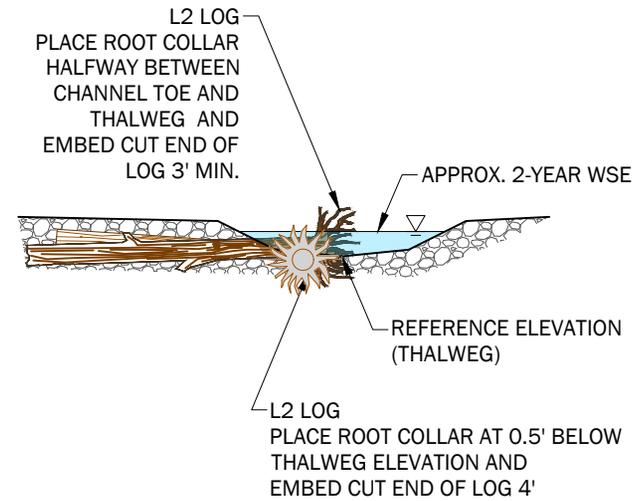
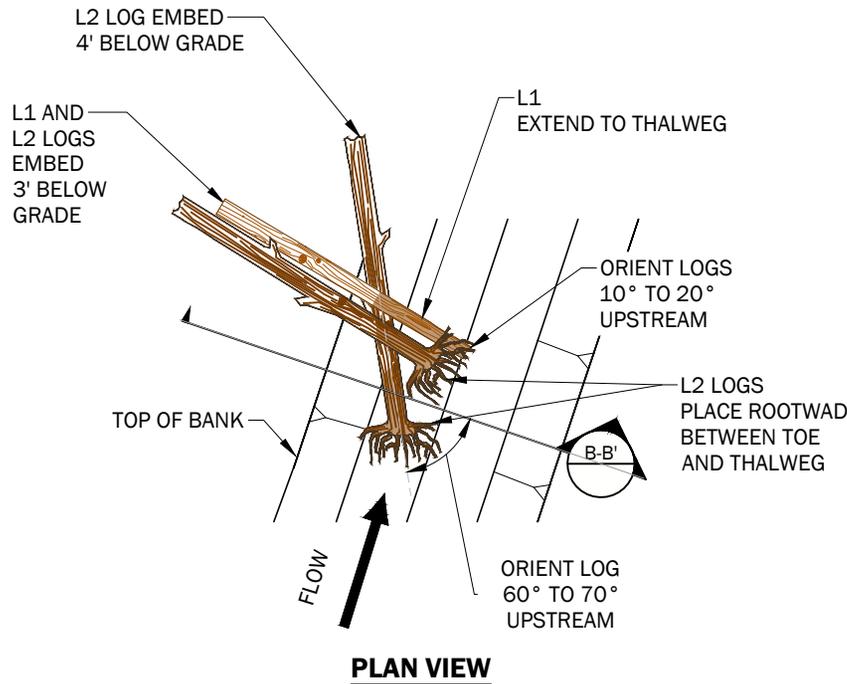
**NOTES:**

- LOGS MAY BE PLACED INDEPENDENTLY OR INCORPORATED INTO OTHER LARGE WOOD STRUCTURES.
- TREES WITH BRANCHES OR MULTIPLE TRUNKS PREFERRED.
- THE DESIGN ENGINEER SHALL MAINTAIN THE ABILITY TO MAKE ADJUSTMENT TO THE PROPOSED STRUCTURE IF SITE CONDITIONS WARRANT.
- SEE TABLE FOR MATERIAL SIZES AND QUANTITIES

STRUCTURE QUANTITIES	
LOG TYPE 1 (L1)	
15' LOG LENGTH, 9 TO 12" DIA.	
	<b>2</b>

**Large Wood Material Detail Type A**

**Applicant:** Williams Northwest Pipeline, LLC  
**Reference Number:**  
**Proposed Project:** Tributary to Gosnell Creek  
**Location:** 8<sup>th</sup> Shelton Pipeline (2433) M.P. 25.5  
**Sheet:** 12 of 21 **Date:** 01/30/2025



**PLAN VIEW**

**SECTION B-B'**

**CONSTRUCTION SEQUENCING:**

1. ESTABLISH REFERENCE ELEVATION (THALWEG) PRIOR TO CONSTRUCTION AND CONFIRM WITH HYDRAULIC ENGINEER.
2. PLACE THE UPSTREAM MOST TYPE 2 LOG SO THE ROOTWAD IS LOCATED HALFWAY BETWEEN CHANNEL TOE AND THALWEG AND ORIENTED BETWEEN 60° AND 70° UPSTREAM AS SHOWN ON THE PLAN VIEW. THE BOTTOM OF THE ROOT COLLAR SHOULD BE BURIED 0.5' BELOW THE THALWEG ELEVATION. THE BOTTOM OF THE CUT END SHALL BE EMBEDDED 4' BELOW GRADE.
2. PLACE THE SECOND TYPE 2 LOG SO THAT THE ROOTWAD EXTENDS TO THE THALWEG, AND SET ROOTWAD COLLAR AT THE THALWEG ELEVATION AND PARTIALLY EMBED THE ROOTWAD. ORIENT THE ROOTWAD SLIGHTLY UPSTREAM BETWEEN 10° AND 20° AS SHOWN IN THE PLAN VIEW. THE BURIED END OF THE LOG SHALL BE 3' MIN. EMBEDDED.
2. PLACE THE TYPE 1 LOG SO THAT THE LOG EXTENDS TO THE THALWEG AND EMBED HALF THE LOG DIAMETER. THE LOG SHALL BE ORIENTED PARALLEL TO THE ADJACENT TYPE 2 LOG AND THE BURIED END OF THE LOG SHALL BE 3' MIN. EMBEDDED.
3. BACKFILL THE STRUCTURE AND REBUILD THE BANK WITH DESIGNATED COBBLES AND GRAVEL. PLACE BACKFILL IN 1.0' LIFTS AND COMPACT WITH EXCAVATOR BUCKET OR SIMILAR METHOD BETWEEN LIFTS.

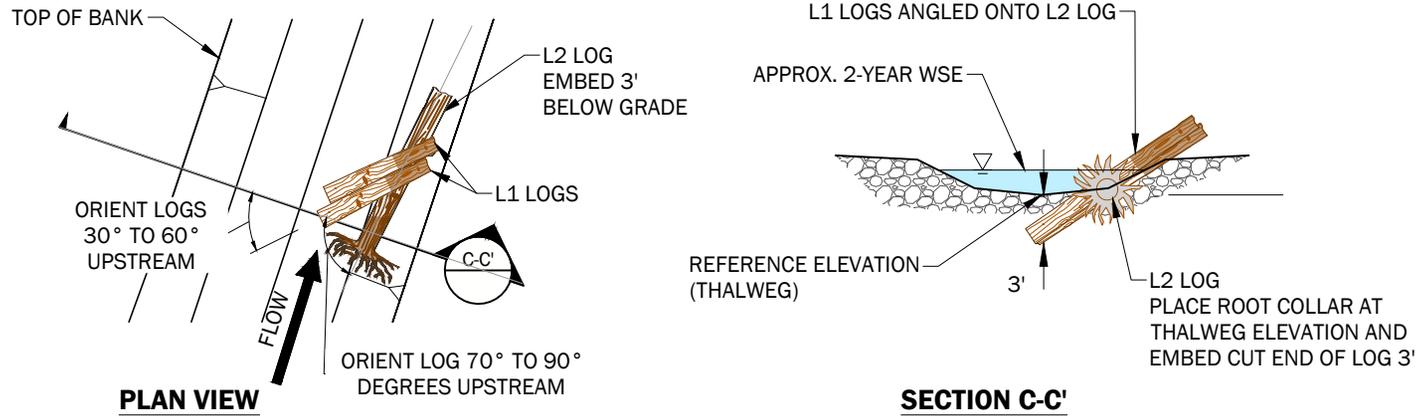
**NOTES:**

- LOGS MAY BE PLACED INDEPENDENTLY OR INCORPORATED INTO OTHER LARGE WOOD STRUCTURES.
- TREES WITH BRANCHES OR MULTIPLE TRUNKS PREFERRED.
- THE DESIGN ENGINEER SHALL MAINTAIN THE ABILITY TO MAKE ADJUSTMENT TO THE PROPOSED STRUCTURE IF SITE CONDITIONS WARRANT.
- SEE TABLE FOR MATERIAL SIZES AND QUANTITIES

STRUCTURE QUANTITIES	
LOG TYPE 1 (L1)	LOG TYPE 2 (L2)
15' LOG POLE - 9 TO 12" DIA.	15' LOG WITH ROOTWAD - 9 TO 12" DBH
<b>1</b>	<b>2</b>

**Large Wood Material Detail Type B**

**Applicant:** Williams Northwest Pipeline, LLC  
**Reference Number:**  
**Proposed Project:** Tributary to Gosnell Creek  
**Location:** 8" Shelton Pipeline (2433) M.P. 25.5  
**Sheet:** 13 of 21 **Date:** 01/30/2025



**CONSTRUCTION SEQUENCING:**

1. ESTABLISH REFERENCE ELEVATION (THALWEG) PRIOR TO CONSTRUCTION AND CONFIRM WITH HYDRAULIC ENGINEER.
2. PLACE TYPE 2 LOG SO THE BOTTOM OF THE ROOT COLLAR IS AT THE TOE OF THE BANK AND EMBEDDED TO THE THALWEG ELEVATION. THE ROOTWAD SHOULD BE ORIENTED UPSTREAM BETWEEN 70° AND 90° AS SHOWN IN THE PLAN VIEW. THE BURIED END OF THE LOG SHALL EXTEND INTO THE BANK AND BE 3' MIN. EMBEDDED.
3. PLACE TWO TYPE 1 LOGS SO THAT ONE END IS WITHIN 2' OF THE THALWEG LATERALLY AND 3' BELOW THE THALWEG ELEVATION. EACH TYPE 1 LOG SHOULD BE IN CONTACT WITH THE TYPE 2 LOG.
4. BACKFILL THE STRUCTURE AND REBUILD THE BANK WITH DESIGNATED COBBLES AND GRAVEL. PLACE BACKFILL IN 1.0' LIFTS AND COMPACT WITH EXCAVATOR BUCKET OR SIMILAR METHOD BETWEEN LIFTS.

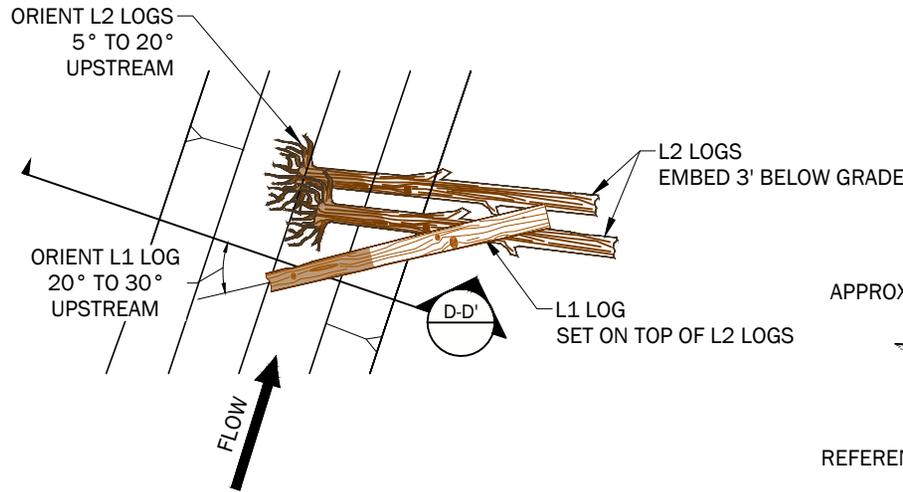
**NOTES:**

- LOGS MAY BE PLACED INDEPENDENTLY OR INCORPORATED INTO OTHER LARGE WOOD STRUCTURES.
- TREES WITH BRANCHES OR MULTIPLE TRUNKS PREFERRED.
- THE DESIGN ENGINEER SHALL MAINTAIN THE ABILITY TO MAKE ADJUSTMENT TO THE PROPOSED STRUCTURE IF SITE CONDITIONS WARRANT.
- SEE TABLE FOR MATERIAL SIZES AND QUANTITIES

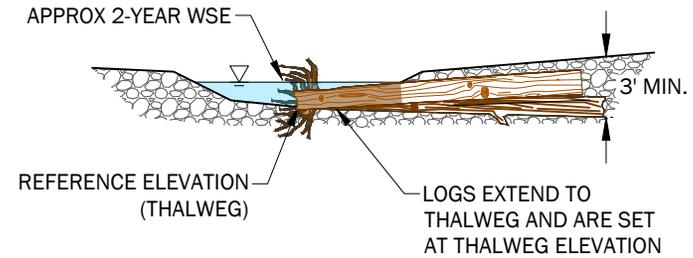
STRUCTURE QUANTITIES	
LOG TYPE 1 (L1)	LOG TYPE 2 (L2)
10' LOG POLE - 9 TO 12" DIA.	15' LOG WITH ROOTWAD - 9 TO 12" DBH
<b>2</b>	<b>1</b>

**Large Wood Material Detail Type C**

**Applicant:** Williams Northwest Pipeline, LLC  
**Reference Number:**  
**Proposed Project:** Tributary to Gosnell Creek  
**Location:** 8" Shelton Pipeline (2433) M.P. 25.5  
**Sheet:** 14 of 21 **Date:** 01/30/2025



**PLAN VIEW**



**SECTION D-D'**

**CONSTRUCTION SEQUENCING:**

1. ESTABLISH REFERENCE ELEVATION (THALWEG) PRIOR TO CONSTRUCTION AND CONFIRM WITH HYDRAULIC ENGINEER.
2. PLACE TWO LOG TYPE 2 LOGS EXTENDING TO THE THALWEG AND ORIENTED SLIGHTLY UPSTREAM BETWEEN 5° AND 20°. SET ROOT COLLAR AT THALWEG ELEVATION AND EMBED CUT END OF THE LOGS 3' MIN.
3. PLACE LOG TYPE 1 UPSTREAM OF THE LOGS WITH ROOTWADS AND ORIENT UPSTREAM BETWEEN 20° AND 30°. PLACE ONE END OF THE LOG AT THE CHANNEL THALWEG AND SET THE OTHER END ON TOP OF THE BURIED LOGS.
4. BACKFILL THE STRUCTURE AND REBUILD THE BANK WITH DESIGNATED COBBLES AND GRAVEL. PLACE BACKFILL IN 1.0' LIFTS AND COMPACT WITH EXCAVATOR BUCKET OR SIMILAR METHOD BETWEEN LIFTS.

**NOTES:**

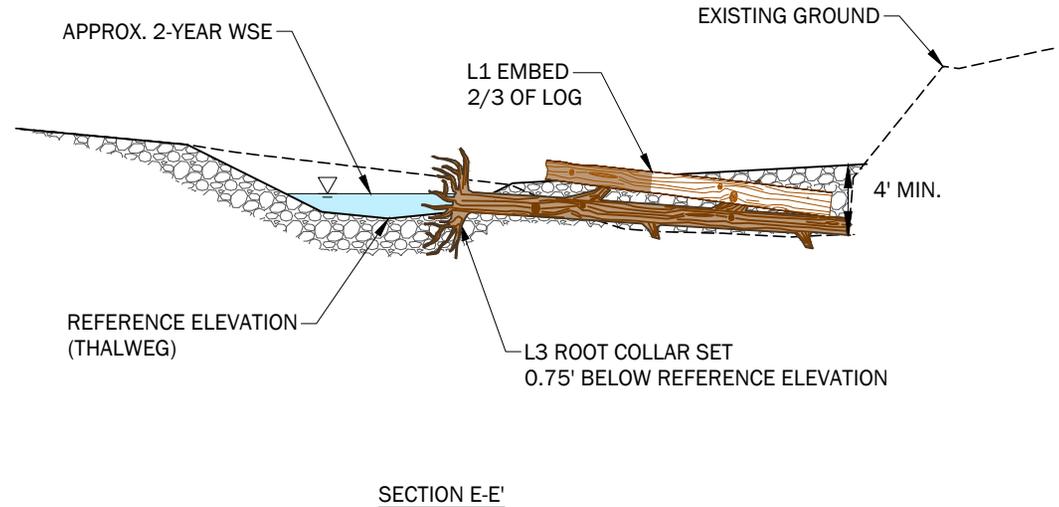
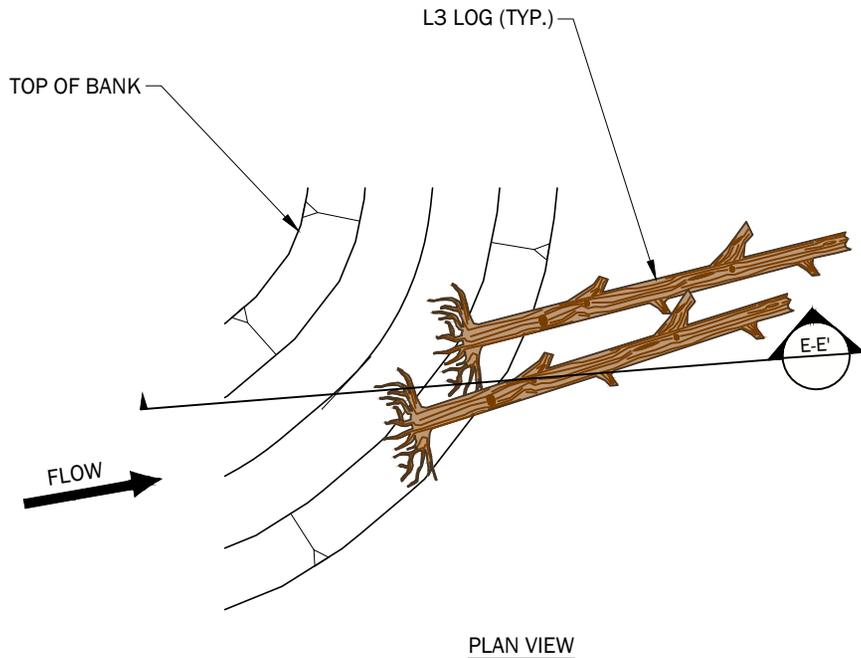
- LOGS MAY BE PLACED INDEPENDENTLY OR INCORPORATED INTO OTHER LARGE WOOD STRUCTURES.
- TREES WITH BRANCHES OR MULTIPLE TRUNKS PREFERRED.
- THE DESIGN ENGINEER SHALL MAINTAIN THE ABILITY TO MAKE ADJUSTMENT TO THE PROPOSED STRUCTURE IF SITE CONDITIONS WARRANT.
- SEE TABLE FOR MATERIAL SIZES AND QUANTITIES

**STRUCTURE QUANTITIES**

LOG TYPE 1 (L1)	LOG TYPE 2 (L2)
15' LOG POLE - 9 TO 12" DIA.	15' LOG WITH ROOTWAD - 9 TO 12" DBH
<b>1</b>	<b>2</b>

**Large Wood  
Material Detail  
Type D**

**Applicant:** Williams Northwest Pipeline, LLC  
**Reference Number:**  
**Proposed Project:** Tributary to Gosnell Creek  
**Location:** 8<sup>th</sup> Shelton Pipeline (2433)  
 M.P. 25.5  
**Sheet:** 15 of 21     **Date:** 01/30/2025



**Large Wood  
Material Detail  
Upstream Logs**

**CONSTRUCTION SEQUENCING:**

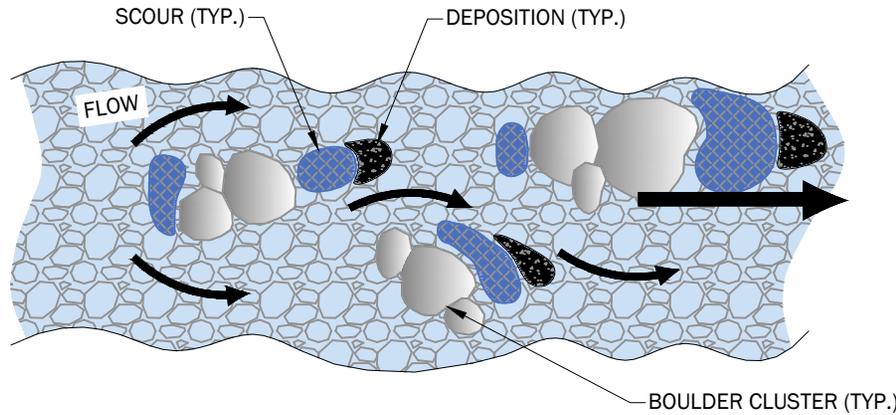
1. ESTABLISH REFERENCE ELEVATION (THALWEG) PRIOR TO CONSTRUCTION AND CONFIRM WITH HYDRAULIC ENGINEER.
2. PLACE TYPE 3 LOGS SO THE BOTTOM OF THE ROOT COLLAR IS UP TO 0.75' BELOW THALWEG ELEVATION. EMBED CUT END OF LOG 4' MIN. ORIENT ROOTWAD UPSTREAM AS DIRECTED BY THE HYDRAULIC ENGINEER.
3. PLACE TYPE 1 LOGS AS DIRECTED BY HYDRAULIC ENGINEER. LOGS MAY BE  $\frac{2}{3}$  BURIED OR PLACED WITHIN THE BANK AND SECURED BETWEEN BURIED LOGS.
4. BACKFILL THE STRUCTURE AND REBUILD THE BANK WITH DESIGNATED COBBLES AND GRAVEL. PLACE BACKFILL IN 1.0' LIFTS AND COMPACT WITH EXCAVATOR BUCKET OR SIMILAR METHOD BETWEEN LIFTS.

**NOTES:**

- LOGS MAY BE PLACED INDEPENDENTLY OR INCORPORATED INTO OTHER LARGE WOOD STRUCTURES.
- TREES WITH BRANCHES OR MULTIPLE TRUNKS PREFERRED.
- THE DESIGN ENGINEER SHALL MAINTAIN THE ABILITY TO MAKE ADJUSTMENT TO THE PROPOSED STRUCTURE IF SITE CONDITIONS WARRANT.
- SEE TABLE FOR MATERIAL SIZES AND QUANTITIES

STRUCTURE QUANTITIES	
LOG TYPE 3 (L3)	LOG TYPE 1 (L1)
20' LOG WITH ROOTWAD - 14 TO 18" DBH	15' LOG POLE - 9 TO 12" DIA.
<b>4</b>	<b>10</b>

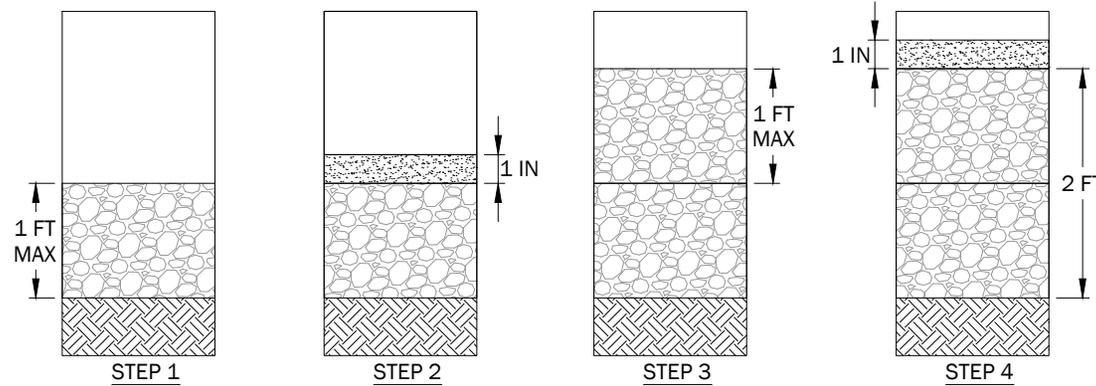
**Applicant:** Williams Northwest Pipeline, LLC  
**Reference Number:**  
**Proposed Project:** Tributary to Gosnell Creek  
**Location:** 8<sup>th</sup> Shelton Pipeline (2433) M.P. 25.5  
**Sheet:** 16 of 21 **Date:** 01/30/2025



BOULDER CLUSTER DETAIL

NOTES:

- BOULDER DIAMETERS VARY 12 TO 18 INCHES
- EMBED BOULDERS 1/2 TO 2/3 OF DIAMETER IN CHANNEL BED
- PLACE THROUGHOUT THE CROSS SECTION.
- PLACE CLUSTERS OF ONE TO FOUR BOULDERS CREATING A LOW FLOW CHANNEL BETWEEN BOULDERS.

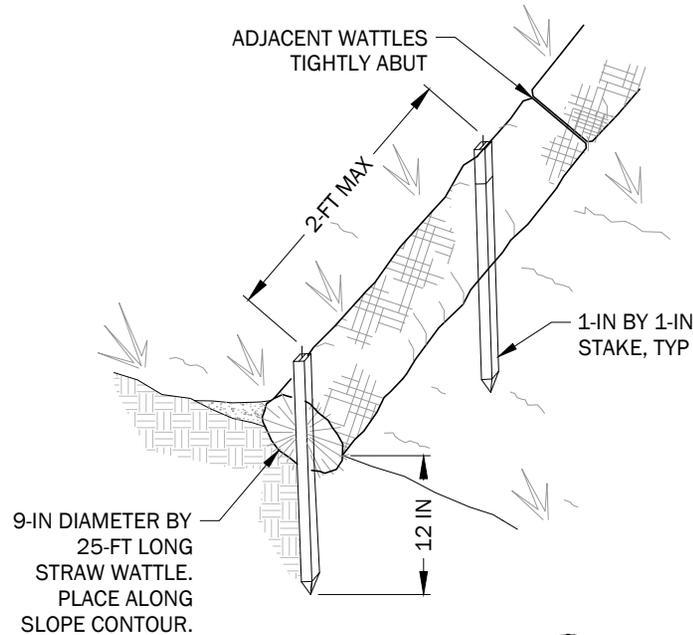


STREAMBED CHANNEL PREPARATION NOTES:

- STEP 1. EXCAVATE CHANNEL TO ACCOMMODATE STREAMBED MATERIAL. PLACE UP TO A 1 FT (MAX) LIFT OF STREAMBED MATERIAL.
- STEP 2. PLACE 1 IN OF NATIVE STREAMBED SEDIMENT UNIFORMLY OVER STREAMBED MATERIAL. APPLY WATER TO WASH IN NATIVE STREAMBED SEDIMENT. PLACE STREAMBED BOULDERS. SEE BOULDER CLUSTER DETAIL.
- STEP 3. PLACE ADDITIONAL 1 FT (MAX.) LIFTS OF STREAMBED MATERIAL WHERE REQUIRED TO MEET FINAL GRADE.
- STEP 4. PLACE 1 IN OF NATIVE STREAMBED SEDIMENT UNIFORMLY OVER STREAMBED MATERIAL. APPLY WATER TO WASH IN STREAMBED FINE SEDIMENT.

Streambed Preparation Detail

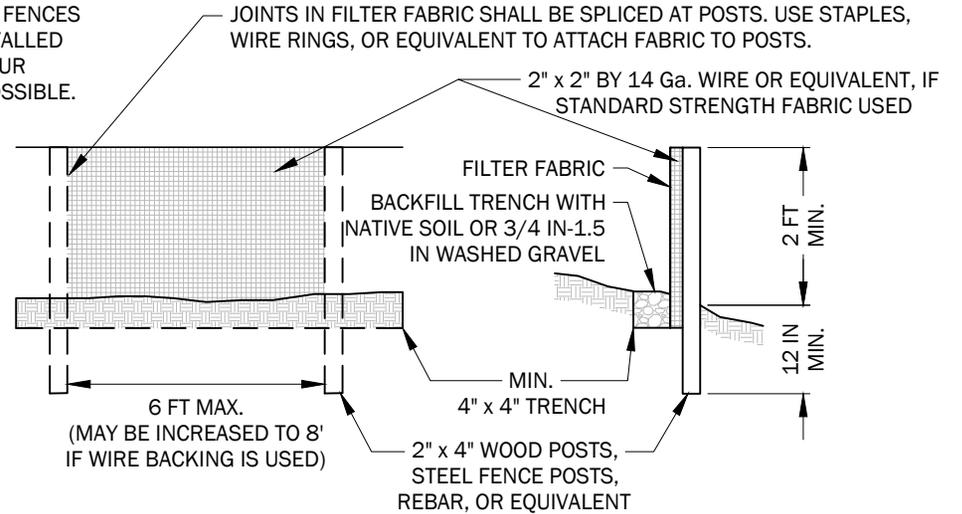
**Applicant:** Williams Northwest Pipeline, LLC  
**Reference Number:**  
**Proposed Project:** Tributary to Gosnell Creek  
**Location:** 8" Shelton Pipeline (2433)  
 M.P. 25.5  
**Sheet:** 17 of 21 **Date:** 01/30/2025



**STRAW WATTLE** 1  
SCALE: NOT TO SCALE

**NOTE:**

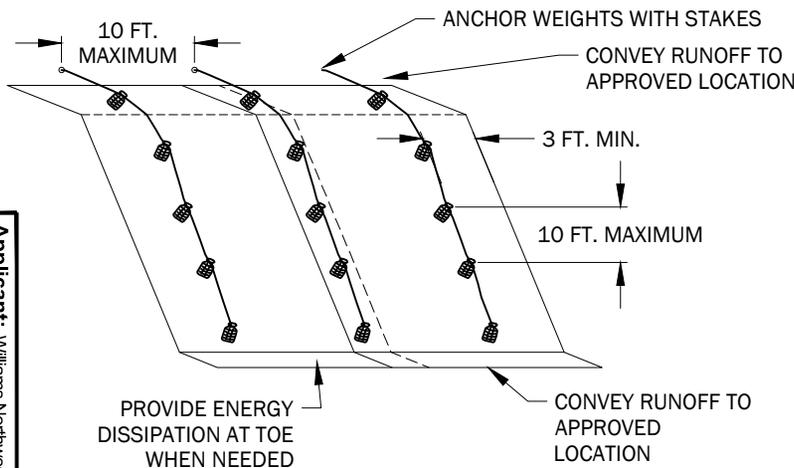
1. FILTER FABRIC FENCES SHALL BE INSTALLED ALONG CONTOUR WHENEVER POSSIBLE.



**NOTES:**

1. SEDIMENT FENCE TO HAVE STITCHED LOOPS AROUND 2" x 2" POSTS.
2. BURY BOTTOM OF FILTER FABRIC 6" VERTICALLY BELOW FINISHED GRADE.
3. 3" MIN x 2" x 2" FIR, PINE OR STEEL FENCE POSTS.
4. POSTS TO BE INSTALLED ON UPHILL SIDE OF SLOPE.
5. COMPACT BOTH SIDES OF FILTER FABRIC TRENCH.

**SEDIMENT FENCE DETAIL** 2  
SCALE: NOT TO SCALE



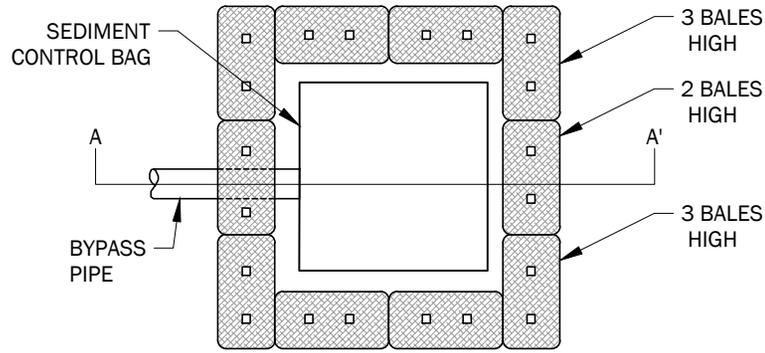
**PLASTIC COVERING FOR STOCKPILES** 3  
SCALE: NOT TO SCALE

**NOTES:**

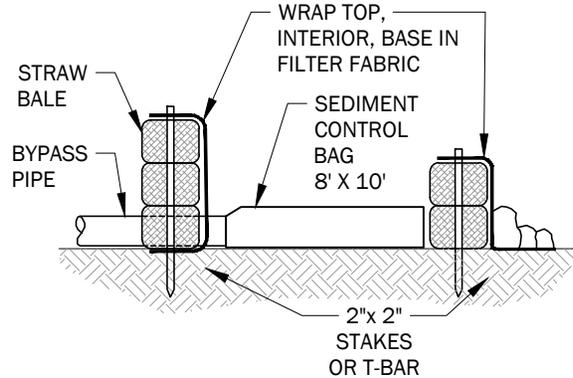
1. SANDBAGS OR EQUIVALENT MAY BE USED TO WEIGHT PLASTIC SHEETING.
2. SEAMS BETWEEN SHEETS MUST OVERLAP A MINIMUM OF 12 INCHES AND BE WEIGHTED OR TAPED.
3. PLASTIC SHEETING SHALL HAVE A MINIMUM THICKNESS OF 6 MIL.
4. DUE TO RAPID RUNOFF CAUSED BY PLASTIC SHEETING, THIS METHOD SHALL NOT BE USED UPSLOPE OF AREAS THAT MIGHT BE ADVERSELY IMPACTED BY CONCENTRATED RUNOFF.

**Erosion And Settlement Control Details**

**Applicant:** Williams Northwest Pipeline, LLC  
**Reference Number:**  
**Proposed Project:** Tributary to Gosnell Creek  
**Location:** 8<sup>th</sup> Shelton Pipeline (2433) M.P. 25.5  
**Sheet:** 18 of 21 **Date:** 01/30/2025



PLAN



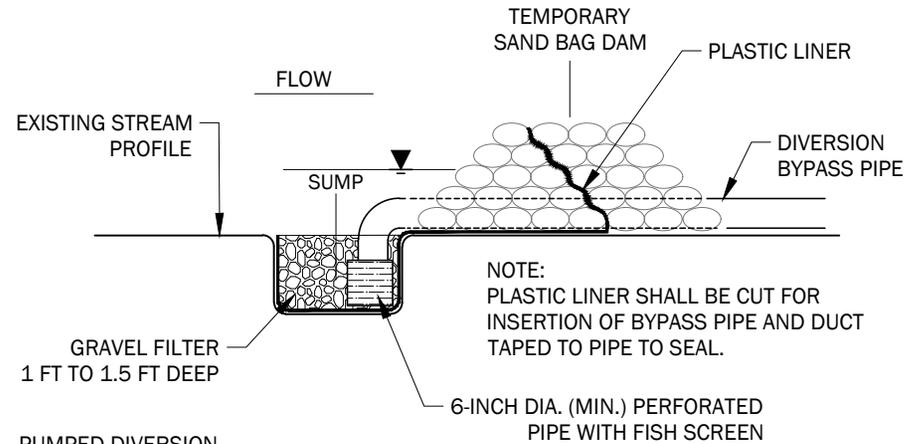
SECTION A-A'

**SEDIMENT CONTROL DISCHARGE STRUCTURE 4**

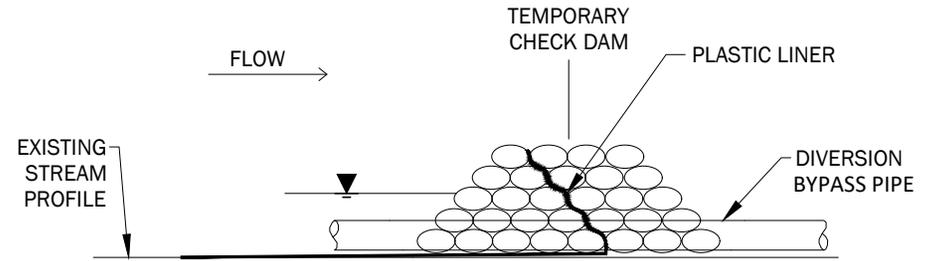
SCALE: NOT TO SCALE

**NOTES:**

1. DO NOT PLACE DISCHARGE STRUCTURE ON STEEP SLOPES OR WHERE SATURATED SOIL CONDITIONS MAY CAUSE SOIL INSTABILITY.
2. INSTALL ON A MILD SLOPE TO ALLOW WATER TO DRAIN THROUGH THE BAG.
3. MONITOR THE SEDIMENT CONTROL STRUCTURE THROUGHOUT USE. REPLACE BAG WHEN IT CAN NO LONGER FILTER SEDIMENT OR PASS WATER.
4. SIZE AND MAINTENANCE OF THE SEDIMENT CONTROL STRUCTURE IS DEPENDENT ON THE PUMP SIZE AND FLOW RATE.
5. INSTALL OUTSIDE OF OHWM.



**PUMPED DIVERSION**



**GRAVITY DIVERSION**

**WORK ZONE ISOLATION STRUCTURE 5**

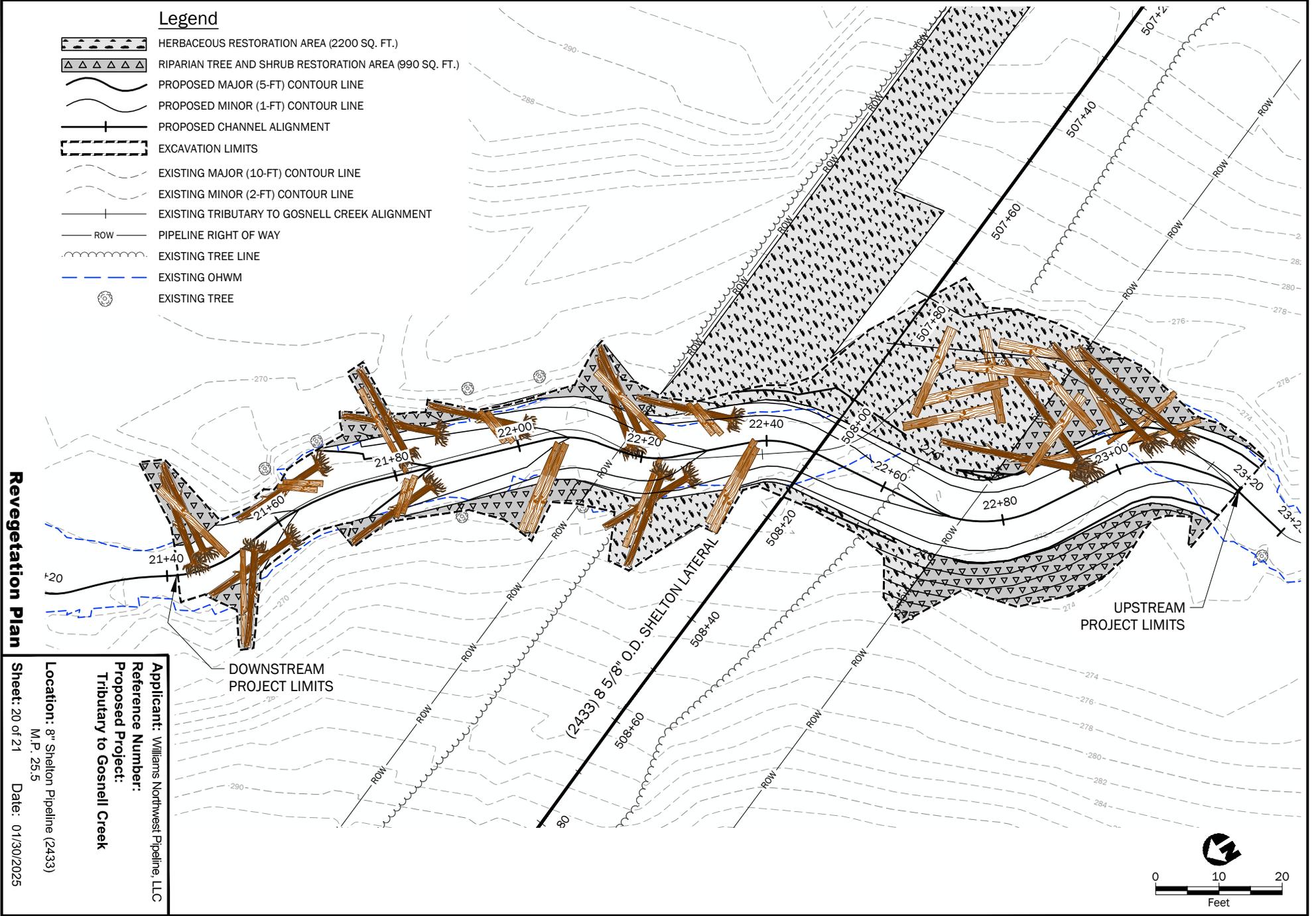
SCALE: NOT TO SCALE

**NOTES:**

1. FLOW MAY BE DIVERTED FROM WORK ZONE WITH GRAVITY OR PUMPED STRUCTURE.
2. THE DIMENSION OF THE STRUCTURE MAY BE REVISED IN THE FIELD BASED UPON SITE CONDITIONS. AN ADDITIONAL DISCHARGE STRUCTURE MAY BE ATTACHED IN PARALLEL, IF NECESSARY.
3. PLASTIC LINER SHALL BE CUT FOR INSERTION OF BYPASS PIPE AND SEALED.
4. PUMPED DISCHARGE RATES SHALL BE LIMITED SUCH THAT WATER WILL NOT OVERFLOW THE TOP OF THE STRUCTURE.
5. SEDIMENT CONTROL DISCHARGE STRUCTURE SHALL BE USED AS AN ENERGY DISSIPATOR FOR BYPASS PIPE AND PUMP OUTLET.
6. REMOVE TRAPPED SEDIMENT FROM STRUCTURE WHEN REMOVING STRUCTURE. PLACE CAPTURED SEDIMENT WELL BEYOND STREAM.

**Erosion And Settlement Control Details**

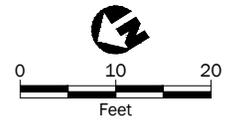
**Applicant:** Williams Northwest Pipeline, LLC  
**Reference Number:**  
**Proposed Project:** Tributary to Gosnell Creek  
**Location:** 8" Shelton Pipeline (2433) M.P. 25.5  
**Sheet:** 19 of 21 **Date:** 01/30/2025



Revegetation Plan

**Applicant:** Williams Northwest Pipeline, LLC  
**Reference Number:**  
**Proposed Project:** Tributary to Gosnell Creek

**Location:** 8" Shelton Pipeline (2433)  
 M.P. 25.5  
 Sheet: 20 of 21 Date: 01/30/2025



Proposed Herbaceous Restoration Area Seeding Details				
Mix	Scientific Name	Common Name	Site Placement	Total Amount
Grasses	<i>Deschampsia cespitosa</i>	Tufted hairgrass	Herbaceous Restoration Area	3 lbs./acre
	<i>Festuca rubra var. rubra</i>	Red fescue		10 lbs./acre
	<i>Hordeum brachyantherum</i>	Meadow barley		10 lbs./acre
	<i>Elymus glaucus</i>	Blue wildrye		20 lbs./acre

HERBACEOUS PLANTING NOTES:

1. RED FESCUE SHALL BE THE NATIVE SPECIES (NOT A CULTIVAR).
2. SPECIFIED SEED MIXTURES APPLICATION RATE ARE BASED ON A TARGETED 300 TO 600 SEEDS PER SQUARE FOOT FOR CRITICAL AREA PLANTINGS DEPENDING ON SEED SIZE, AS RECOMMENDED BY THE NRCS FOR CRITICAL AREA PLANTINGS. THE RATE ASSUMES A PLS OF 85 PERCENT (SEED GERMINATION X SEED PURITY) FOR EACH SPECIES. IF PLS IS LESS THAN 85%, EITHER INCREASE SEEDING RATE BY DIFFERENCE OR USE A DIFFERENT SEED LOT.
3. THESE SPECIES WILL BE INCLUDED IN THE SEED MIXTURE IF THEY ARE READILY AVAILABLE FROM A COMMERCIAL SEED SUPPLIER. NATIVE SEED SHOULD BE FROM WEST OF CASCADES SOURCES WHERE AVAILABLE. WILLIAMS WILL APPROVE FINAL SEED MIXTURE AND SUBSTITUTES.

Proposed Riparian Tree and Shrub Restoration Area Planting Details					
Stratum	Scientific Name	Common Name	Site Placement	Planting Type	Plantings per 100 sq. ft.
Sapling / Shrubs	<i>Acer macrophyllum</i>	Bigleaf maple	Riparian Tree and Shrub Restoration Area	Bare root	1
	<i>Thuja plicata</i>	Western Red Cedar		Bare root	1
	<i>Acer circinatum</i>	Vine maple		Bare root	3
	<i>Rubus spectabilis</i>	Salmonberry		Bare root	7
	<i>Salix sp.</i>	Willow		Stake	25

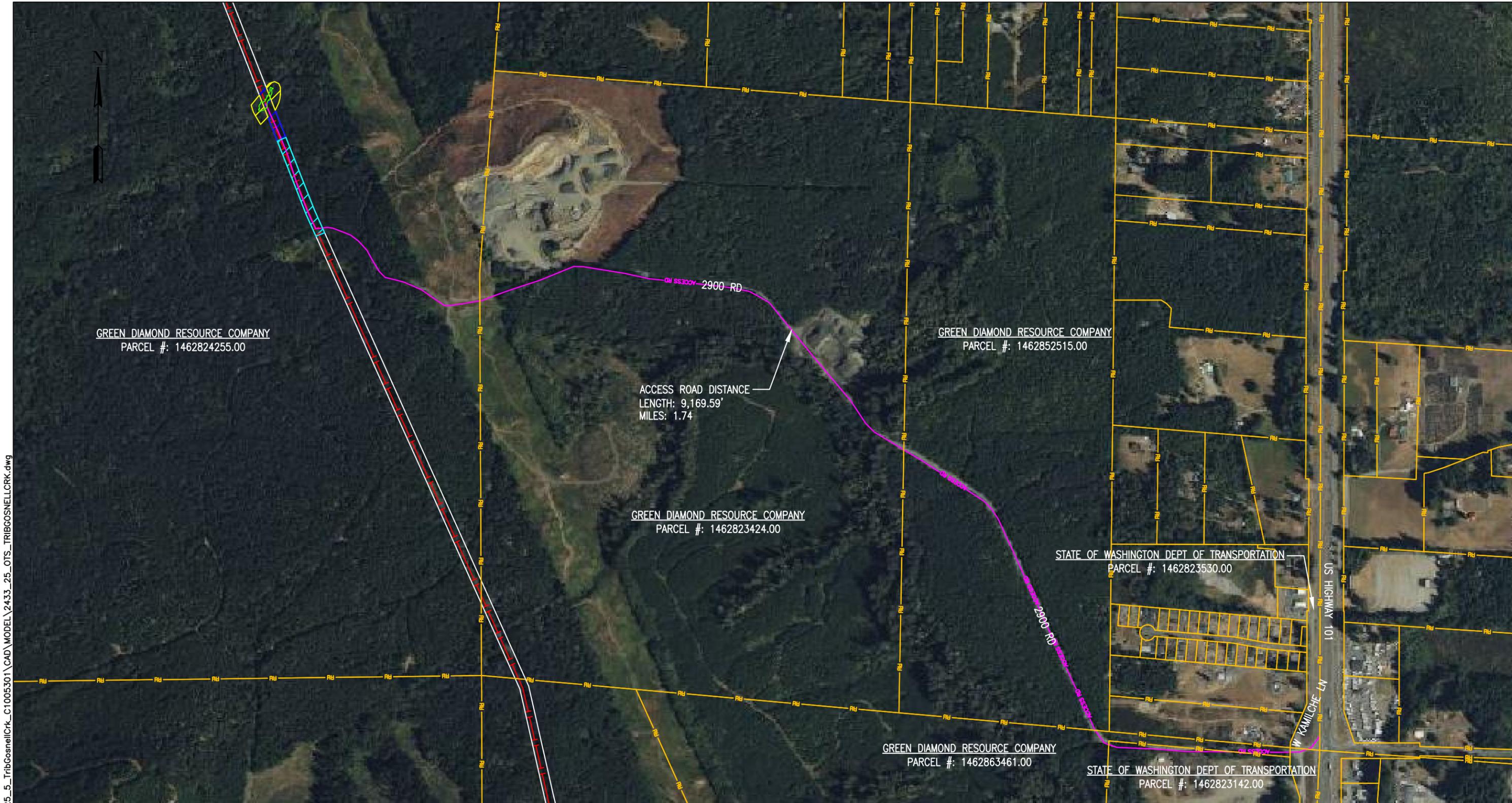
RIPARIAN PLANTING NOTE:

1. SAPLING / SHRUB BARE ROOT OR CONTAINER PLANTINGS MAY BE USED FOR THIS PROJECT DEPENDENT ON AVAILABILITY.
2. PLANT STAKES IN DISTURBED BANKS BEHIND AND AROUND LOGS.

Revegetation Notes

**Applicant:** Williams Northwest Pipeline, LLC  
**Reference Number:**  
**Proposed Project:** Tributary to Gosnell Creek  
**Location:** 8" Shelton Pipeline (2433) M.P. 25.5  
**Sheet:** 21 of 21 **Date:** 01/30/2025

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LEGEND	
	Pipeline Centerline
	Permanent Right-of-Way
	Access Road
	Property Line
	Temporary Extra Work Area
	STAGING AREA
	Existing Easement Work Area

**APPROVED FOR PERMITTING**  
 BY: TM DATE: 12/17/2024

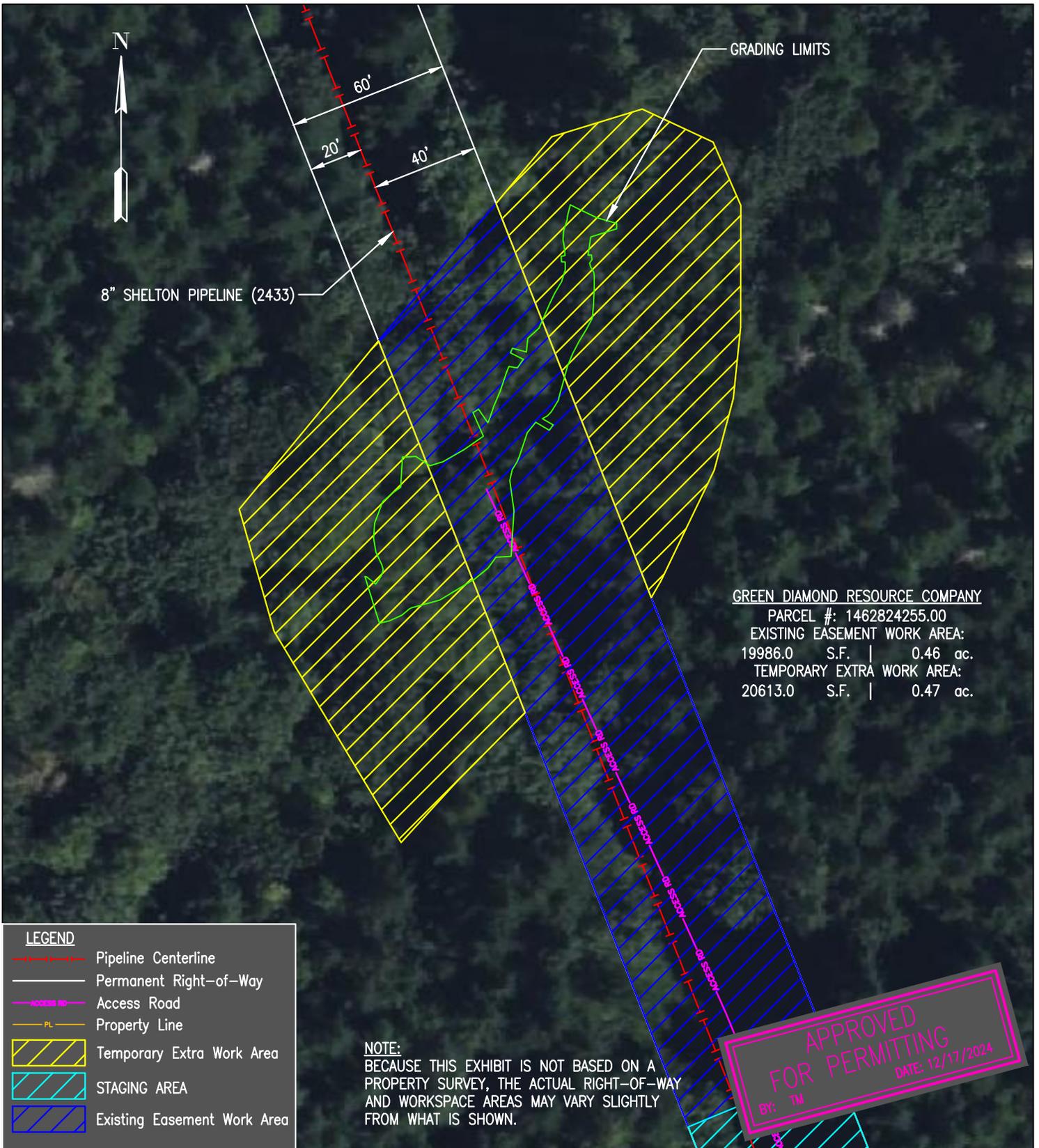
REVISIONS					
#	DATE	BY	DESCRIPTION	W.O.	CHK/APP
A	10/26/2023	FF	PRELIMINARY	C1005301	
B	12/17/2024	FF	APPROVED FOR PERMITTING	C1005301	

NORTHWEST PIPELINE LLC  
 TRIBUTARY TO GOSNELL CREEK REMEDIATION  
 8" SHELTON PIPELINE (2433)  
 M.P. 25.5  
 T-19-N, R-4-W, S-12  
 MASON COUNTY, WASHINGTON



REFERENCE DRAWINGS	
DRAWING NUMBER	DESCRIPTION
2433.0-10	AS-BUILT ALIGNMENT SHEET

DRAWN: FF	DATE: 10/26/2023	 SCALE IN FEET
CHECK: PB	DATE: 10/26/2023	
APPRV:	DATE:	
DRAWING NUMBER: 91_78_2433_AR_25		



8" SHELTON PIPELINE (2433)

GRADING LIMITS

GREEN DIAMOND RESOURCE COMPANY

PARCEL #: 1462824255.00  
 EXISTING EASEMENT WORK AREA:  
 19986.0 S.F. | 0.46 ac.  
 TEMPORARY EXTRA WORK AREA:  
 20613.0 S.F. | 0.47 ac.

**LEGEND**

- Pipeline Centerline
- Permanent Right-of-Way
- Access Road
- Property Line
- Temporary Extra Work Area
- STAGING AREA
- Existing Easement Work Area

**NOTE:**  
 BECAUSE THIS EXHIBIT IS NOT BASED ON A  
 PROPERTY SURVEY, THE ACTUAL RIGHT-OF-WAY  
 AND WORKSPACE AREAS MAY VARY SLIGHTLY  
 FROM WHAT IS SHOWN.

APPROVED  
 FOR PERMITTING  
 BY: TM  
 DATE: 12/17/2024

**REVISIONS**

#	DATE	BY	DESCRIPTION	W.O.	CHK	APP
A	10/26/2023	FF	PRELIMINARY	C1005301		
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2433.0-10	AS-BUILT ALIGNMENT SHEET

DRAWN: FF	DATE: 10/26/2023
CHECK: PB	DATE: 10/26/2023
APPRV:	DATE:

0      25      50      100
SCALE IN FEET
DRAWING NUMBER: 91_78_2433_LC_25_1