

Critical Areas Report

I-90 Wilson Creek Bridge Deck Rehabilitation Project

Kittitas County, Washington

RECEIVED
DEC 07 2023

Kittitas County CDS

Prepared by:

WSDOT South Central Region Environmental

December 2023



1 LIST OF ACRONYMS

- CAO**----- Critical Areas Ordinance
- CFR**----Code of Federal Regulations
- CSWGP**---- Construction Stormwater General Permit
- DCH**-----Designated Critical Habitat
- DNR**---- Department of Natural Resources
- DOE**---- Department of Ecology
- DPS**---- Distinct Population Segments
- EFH**----- Essential Fish Habitat
- GIS**----Geographic Information Systems
- HPA**----- Hydraulic Project Approval
- KCC**----Kittitas County Code
- NEPA**----National Environmental Policy Act
- NMFS**----National Marine Fisheries Service
- OHWM**----- Ordinary High-Water Mark
- PHS**----- Priority Habitat and Species
- SCR**----- South Central Region
- SEPA**----- State Environmental Policy Act
- TESC**----Temporary Erosion and Sediment Control Plan
- UHPC**-----Ultra High-Performance Concrete
- USFWS**----United States Fish and Wildlife Service
- WAC**----Washington Administrative Code
- WDFW**---- WA Department of Fish and Wildlife
- WSDOT**----- WA Department of Transportation

2 CONTENTS

1	List of Acronyms.....	1
3	Author Qualifications.....	3
4	introduction.....	4
4.1	Purpose.....	4
4.2	Project Narrative.....	4
4.3	Methods.....	4
4.3.1	Desk Audit.....	4
4.3.2	Field Review.....	4
5	Project Area Setting.....	5
5.1	Site Map.....	6
6	Findings.....	7
6.1	Wilson Creek Impact Assessment.....	7
6.1.1	Aquatic Species.....	7
6.1.2	Terrestrial Species.....	7
6.2	Buffer Zone Impact Assessment.....	8
6.2.1	15-foot building setback.....	8
6.2.2	100-foot buffer zone.....	8
7	Regulatory Requirements.....	8
7.1	ESA Consultation.....	8
7.2	Ecology Construction Stormwater General Permit (CSWGP).....	8
7.3	WDFW Hydraulic Project Approval (HPA).....	8
7.4	Kittitas County Critical Areas Ordinance.....	9
8	Mitigation.....	9
8.1	Mitigation Approach.....	9
8.2	Mitigation Proposal.....	9
8.2.1	Performance Standards.....	10
8.2.2	Monitoring Period.....	10
8.2.3	Adaptive Management.....	11
9	References.....	12
10	Appendices.....	13

Author Qualifications

This report was prepared by Kelsey Cogar (WSDOT Environmental Documentation Coordinator) and Kevin White (WSDOT Biologist).

Kelsey Cogar

Bachelor of Science, Central Washington University. *Environmental Science*

Master of Science, University of Washington. *Sustainable Transportation*

Kelsey is an environmental documentation coordinator with two years of experience preparing environmental reports in support of WSDOT projects in the South-Central Region.

Relevant coursework included: plant biology, environmental management, geomorphologic processes, wildlife ecology, technical writing, and field sampling techniques.

Kevin White

Bachelor of Science, Washington State University. *Natural Resource Sciences*

Master of Science, Washington State University. *Wildlife Ecology*

Kevin is a Certified Wildlife Biologist through the National Wildlife Society and has over 15 years of experience in the field of Natural Resource and Wildlife Management. He has worked in the private sector and for state agencies. He possesses extensive experience in evaluating the potential effects of projects on the habitats of fish and wildlife and creating practical strategies to reduce or prevent these impacts. He has one year of experience working as a Biologist for WSDOT on road construction projects, consulting with the US Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS) to minimize project effects on Threatened and Endangered species and their critical habitats.

Relevant coursework included: advanced wildlife management, advanced GIS, natural resource field sampling techniques, ecology, plant identification, plant biology.

Statement of Accuracy

This report is based upon information collected in the field and obtained from resources provided by Federal, State and Local agencies available at the time of the report. Conclusions are the professional opinion of the authors and are subject to approval by the appropriate agencies.

3 INTRODUCTION

3.1 PURPOSE

This Critical Areas Report has been created in support of the Kittitas County Critical Areas Public Agency Exception application to identify existing site conditions at Wilson Creek, a type F stream, and its associated 100-foot buffer and 15-foot building setback. This report also identifies potential impacts to the listed critical area and post-construction mitigation procedures.

3.2 PROJECT NARRATIVE

The Washington State Department of Transportation (WSDOT) South Central Region is proposing to repair and rehabilitate the existing westbound bridge over Wilson Creek (MP 109.13-109.15) on Interstate-90 near Ellensburg, WA. The work will remove the existing bridge deck overlay, repair the decking as needed and then resurface the decks using an ultra-high-performance concrete (UHPC). Additionally, structural repairs are needed to repair the bridge superstructure on the east-bound bridge at Wilson Creek that will require scaffolding placed above the Ordinary High-Water Mark (OHWM). Construction will require the installation of a median detour to divert traffic away from the work-zone while the bridges are being rehabilitated. A temporary bridge spanning Wilson Creek will be installed between the existing bridges to shift traffic around the work zone. The bridge will clear span Wilson Creek and will be supported on piles driven in the dry 15 feet above the OHWM. No piles will be installed in the water or below the OHWM and no in-water work will occur. The temporary bridge is expected to remain in place for 60-90 days while the westbound bridge deck is repaired. Utilization of the UHPC allows for a faster cure time and therefore less time in the detour configuration. Construction is expected to begin in April of 2024 and continue through October 2024 (~135 working days). Post-construction, the temporary bridge and median detour will be removed, and any disturbed areas will be re-seeded in a manner consistent with WSDOT Roadside Restoration Policies. Bridge piles will be removed and backfilled. See Appendix A-2 for project plans.

3.3 METHODS

3.3.1 Desk Audit

The authors completed a comprehensive review of site conditions using WSDOT GIS data and applicable reports associated with the project area including but not limited to watershed characteristics and species and habitat designations prior to fieldwork. Resources include those available from Washington Local agencies, Department of Fish and Wildlife (WDFW), Washington Department of Ecology (WDOE) and the Washington Department of Natural Resources (DNR). A WDFW habitat biologist (Jennifer Nelson) was also contacted for site-specific recommendations and background information.

3.3.2 Field Review

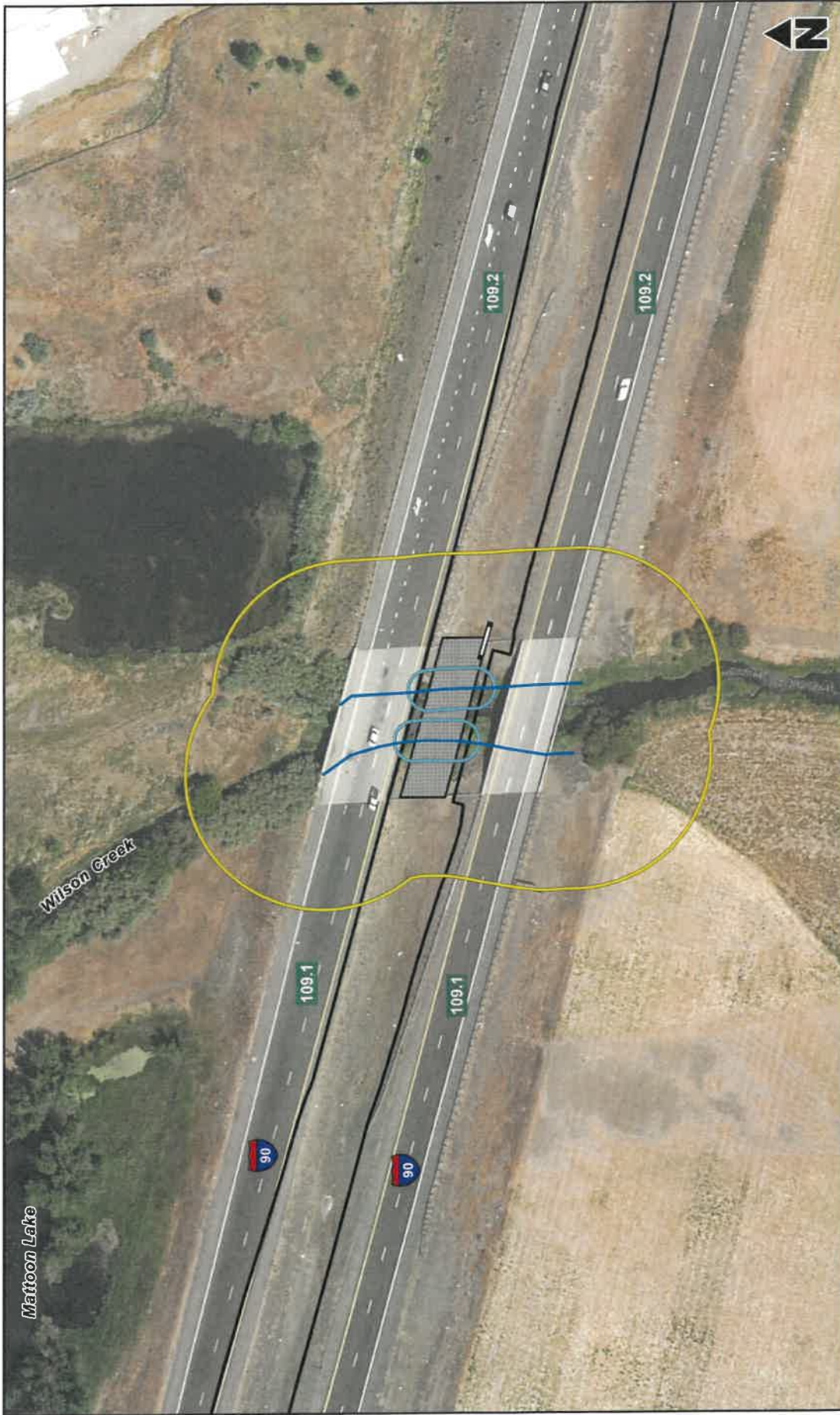
A site visit was conducted on August 9, 2023, by Kelsey Cogar and Kevin White. This visit consisted of a visual observation of site conditions, plant and animal identification, and OHWM data collection.

4 PROJECT AREA SETTING

This portion of Wilson Creek bisects Interstate 90 at Milepost 109. The existing east-bound and west-bound bridges are supported by multiple columns, all of which extend into the stream bed below (*Figures 2-4*). There is riprap lining the sides of the stream channel surrounding the bridge piers and columns, likely installed as scour protection for the bridge footings. The I-90 median is composed of highway fill material and roadside grasses and shrubs (*Figure 6*). Guardrails run parallel to the creek on either side above the creek channel (*Figure 7*). Land use in the project vicinity consists of agricultural land, low-density rural residential and commercial properties. Wilson Creek flows generally north to south and serves as a major left-bank tributary for the Yakima River. Historically, streams in the Wilson Creek system have been rerouted and channelized for irrigation and agricultural use within the Kittitas Valley and as a result have removed many fish habitat features such as pools, large wood and riparian cover (Kittitas County Community Development Services, 2013). However, the stream is classified as a Type F stream¹ which indicates it has the potential for fish use.

Geographical coordinates: 46.97461900 / -120.54652400 to 46.97453800 / -120.54607100

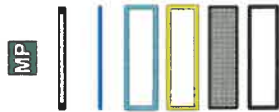
¹ Segments of natural waters other than Type S Waters, which are within the bankfull widths of defined channels and periodically inundated area of their associated wetlands, or within lakes, ponds, or impoundments having a surface area of 0.5 acre or greater at seasonal low water and which in any case contain fish habitat



I-90 Wilson Creek Bridge Deck Rehabilitation



- MP
- Milepost Marker
- Existing Culvert
- Ordinary High Water Mark (OHWM)
- 15 ft Building Set Back
- Critical Areas Buffer-100 ft
- Detour Bridge
- Detour Limits



5 FINDINGS

5.1 WILSON CREEK IMPACT ASSESSMENT

Reed canary grass and cattails extend over small undercut banks, which do provide some security cover for fish. However, this reach of Wilson Creek is not considered optimal fish habitat because it lacks side channels, large boulders, and wood. These components of a creek provide security and foraging habitat for juvenile fish, especially salmonids. Despite the lack of these habitat elements in the project reach, juvenile salmonid species have been documented nearby in Wilson Creek, so it is assumed that spawning, rearing, and migration habitats exist nearby.

Approximately 0.06 acres of the creek itself, and 0.04 acres of adjacent riparian vegetation, primarily Reed canary grass and red-osier dogwood, will be shaded for up to 3 months. There will be no riparian vegetation removal or direct physical impacts to the streambed and benthic community. The shading may affect the distribution of insects within the aquatic action area, thus potentially reducing fish food availability. However, the project is not likely to adversely affect aquatic species in Wilson Creek because 1) the shading effects will be temporary, lasting 3 months or less, 2) there will be no in-water work contributing to increased turbidity or impacts to the streambed and benthic community, and 3) any species within the small aquatic action area can move approximately 60 feet upstream or downstream into non-shaded similar habitats. Additionally, bridge and scaffolding containment measures will be implemented to avoid discharge of hazardous substances to the surface waters.

A Priority Habitat and Species (PHS) report and associated map was gathered from the WDFW website on August 3, 2023. The full report can be found in Appendix A-3.

5.1.1 Aquatic Species

No aquatic species were observed at the time of investigation. Though the following species are known to exist in this reach of Wilson Creek: Middle Columbia River Steelhead (Threatened), Rainbow Trout, and Spring Chinook Salmon. No in-water work will occur, so the project is not required to follow WDFW's timing restriction ("fish window").

5.1.2 Terrestrial Species

The PHS report indicates that this is a sensitive location for Little Brown Bat (*myotis lucifigus*) and Yuma myotis (*myotis yumanensis*), however due to the proximity of I-90, species in the project area may be deterred from roosting due to highway noise. No evidence of bats, roosts, or guano was seen in the project area at the time of observation.

Small mammal droppings were seen interspersed in the rip rap area along the stream banks. Marmots, racoons, or other small mammals may be utilizing this under bridge crossing as a way to avoid interstate traffic.

Barn and Cliff swallow nests were observed beneath the bridge decks on both eastbound and westbound lanes (*Figure 8*). Swallows are protected under the Migratory Bird Treaty Act and therefore subject to additional protections. WSDOT encounters swallows on many bridge projects and provides

contractors with project-specific recommendations for bird exclusion that prevent “take²”. Additionally, all projects with the potential for MBTA conflicts are required to submit a bird protection and monitoring plan consistent with WSDOT Standard Specifications.

5.2 BUFFER ZONE IMPACT ASSESSMENT

5.2.1 15-foot building setback

There will be no structural elements within the 15-foot building setback zone. This setback also serves as a contingency should the project delay into seasons with higher flows and prevents encroachment of scaffolding below the OHWM.

5.2.2 100-foot buffer zone

The 100-foot buffer zone is composed of the existing I-90 road prism with no impacted critical habitat features. The bridge will create temporary shading effects as described in section 4.1. The historic highway alignment pre-dated Critical Area buffers, therefore, the buffer beyond the stream channel is comprised of highway fill and serves no critical area function.

6 REGULATORY REQUIREMENTS

This project has received federal funding and is therefore required to comply with the National Environmental Policy Act (NEPA) as well as State and Local environmental regulations.

6.1 ESA CONSULTATION

WSDOT consults Federal Agencies with jurisdiction (USFWS and NMFS) to identify threatened and endangered species and critical habitats that may be present in the project area and to ensure project activities minimize impacts to them. WSDOT received project concurrence from NMFS on October 18, 2023, and USFWS concurrence on October 25, 2023.

6.2 ECOLOGY CONSTRUCTION STORMWATER GENERAL PERMIT (CSWGP)

Due to the proximity to surface water and the acreage of disturbance from median detour crossovers, this project will require CSWGP coverage. The permit requires compliance with the provisions of Chapter 90.48 Revised Code of Washington (State of Washington Water Pollution Control Act) and Title 33 United States Code, Section 1251 of the Federal Water Pollution Control Act (The Clean Water Act).

6.3 WDFW HYDRAULIC PROJECT APPROVAL (HPA)

The temporary bridge installation over Wilson Creek requires permit coordination with the WDFW. Washington State law (RCW 77.55) requires agencies planning hydraulic projects in or near state waters to get a HPA from WDFW. An HPA ensures that construction is done in a manner that protects fish and their aquatic habitats.

² “Take” is defined as to attempt or successfully “pursue, hunt, shoot, wound, kill, trap, capture” (50 CFR 10.12).

6.4 KITTITAS COUNTY CRITICAL AREAS ORDINANCE

As required by the Growth Management Act, Kittitas County regulates critical areas under KCC 17A, the Type F stream located at the Wilson Creek project site holds a 100-foot buffer with an additional 15-foot building setback. Impacts to Type F streams require a Public Agency Use Exemption Application to gain relief from the provisions of title 17A.

7 MITIGATION

7.1 MITIGATION APPROACH

The WSDOT design process places an emphasis on avoidance of impacts to critical areas wherever feasible. In this instance, a temporary bridge is necessary to minimize travel impacts to I-90 and reduce traffic conflicts with contractors in the work zone. Best efforts to minimize impacts that cannot be completely avoided include keeping work above the OHWM, no removal or disturbance to riparian vegetation, installing BMP's as needed, and keeping the temporary bridge in place for the shortest duration possible. Post-construction remediation efforts are required per WSDOT Roadside Restoration policies, CSWGP close-out requirements and HPA permit conditions. No critical area functions are expected to be lost because of this work. See appendix A-4 for seeding specifications.

7.2 MITIGATION PROPOSAL

Mitigation Goal	Required by:	Method
Stabilize soils in disturbed areas	<ul style="list-style-type: none"> - Ecology CSWGP - WSDOT Roadside Restoration Policy - WDFW Hydraulic Project Approval (HPA) 	<p><i>During construction</i></p> <ul style="list-style-type: none"> - Temporary Erosion and Sediment Control Best Management Practices (TESC BMPs) (See A-2 for plan sheets) <p><i>Post construction</i></p> <ul style="list-style-type: none"> - Seed exposed soils with an approved native plant mix designated by a WSDOT Landscape Architect (See A-4) - Monitor site to ensure seed take and survival - Remove any nonbiodegradable BMP's
Replant disturbed area with native species	<ul style="list-style-type: none"> - Ecology CSWGP - WSDOT Roadside Restoration Policy - WDFW HPA 	<p><i>During construction</i></p> <ul style="list-style-type: none"> - Best efforts will be made to limit disturbance to native/riparian vegetation

		<p><i>Post construction</i></p> <ul style="list-style-type: none"> - Seed exposed soils with an approved native plant mix designated by a WSDOT Landscape Architect - Monitor site to ensure seed take and survival
<p>Protect water quality and fish habitat</p>	<ul style="list-style-type: none"> - WDFW HPA - Ecology CSWGP - WAC 173-201A-310 	<p><i>During construction</i></p> <ul style="list-style-type: none"> - TESC BMP's (See A-2) - Weekly water quality monitoring as outlined by the CSWGP - Any permit conditions as outlined by the HPA - Secondary containment system for soffit structure work to prevent material from entering Wilson Creek (i.e., critical area). <p><i>Post construction</i></p> <ul style="list-style-type: none"> - Seed exposed soils with an approved native plant mix designated by a WSDOT Landscape Architect - Remove non-biodegradable BMP's

7.2.1 Performance Standards

The disturbed area functions as an infiltration zone for highway runoff. The soil amendments prescribed by the WSDOT landscape architect will ensure the median provides adequate infiltration rates. WSDOT maintenance teams ensure proper sediment accumulation, weed control, erosion control and debris removal. Should any riparian vegetation be damaged or removed over the project duration, it will be replanted at a ratio of 1:1.

7.2.2 Monitoring Period

Post-construction, WSDOT standard specifications require the contractor to perform all necessary work to ensure the resumption and continued growth of transplanted material during the one-year plant establishment period. This work may include applying water, removing foreign, dead or rejected plant material, maintaining all planting areas in a weed-free area and other adaptive management methods listed in Section 7.2.3. At the end of the plant establishment period, plants that do not show normal growth shall be replaced.

7.2.3 Adaptive Management

Should mitigation efforts not perform on a trajectory to meet WSDOT performance measures, adaptive management may include, but is not limited to,

1. Re-application of seed and seed cover
2. Modified weed control methods
3. Other corrective measures

8 REFERENCES

- U.S. Fish and Wildlife Service. (2023, August 8). Information for Planning and Consultation.
- Dept. of Ecology. (2021, January 1). Regulations and Permits. *Construction Stormwater General Permit*.
- Kittitas County Community Development Services. (2013, May). *Kittitas County Shoreline Inventory and Characterization Report*. Retrieved from Kittitas County Community Development Services: <https://www.co.kittitas.wa.us/cds/smp/maps.aspx>
- Kittitas County Community Development Services. (2023). *Kittitas County Critical Areas Code*. Retrieved from Title 17A Critical Areas: <https://www.co.kittitas.wa.us/boc/countycode/title17a.aspx>
- WA Department of Natural Resources. (2023). *WA DNR GIS Open Data*. Retrieved from DNR Hydrography- Watercourses: <https://data-wadnr.opendata.arcgis.com/datasets/816586b10c6c4954883b236f9fff208f/explore>
- WA State Legislature. (2022, March 22). Water Quality Standards for Surface Waters of the State of Washington. *Chapter 173-201A WAC*.
- WSDOT. (2022, May). *Roadside Policy Manual*. Retrieved from <https://wsdot.wa.gov/engineering-standards/all-manuals-and-standards/manuals/roadside-manual>

9 APPENDICES

A-1 Site Photos

A-2 Site Plans

A-3 PHS Report

A-4 Seeding Specifications

A-5 Environmental Documentation

APPENDIX A-1: SITE PHOTOS



Figure 1: Rip rap beneath EB Wilson Creek bridge. Note submerged pier columns and OHHM.



Figure 2: View of EB Wilson Creek facing southwest. Note soffit spalling to be repaired.



Figure 3: View of WB Wilson Creek Bridge facing northeast.



Figure 4: Stormwater outfall pipe in median with evidence of small mammal use.

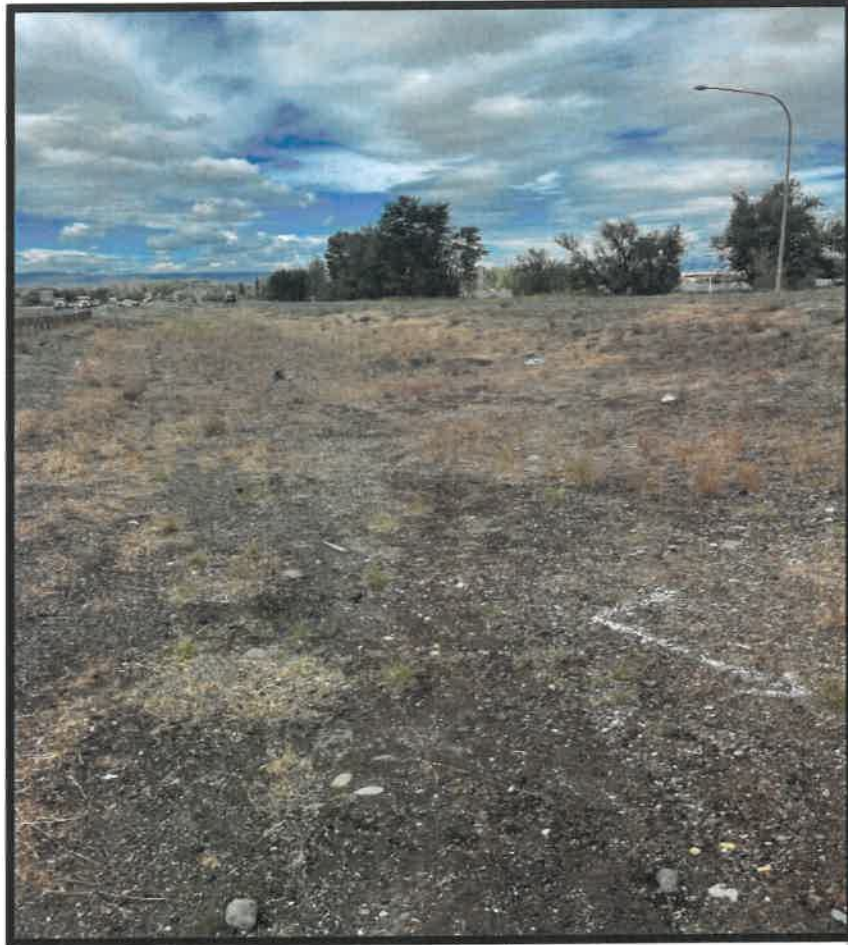


Figure 5: Detour Lane location at existing I-90 median facing west.



Figure 7: View from I-90 median facing east.

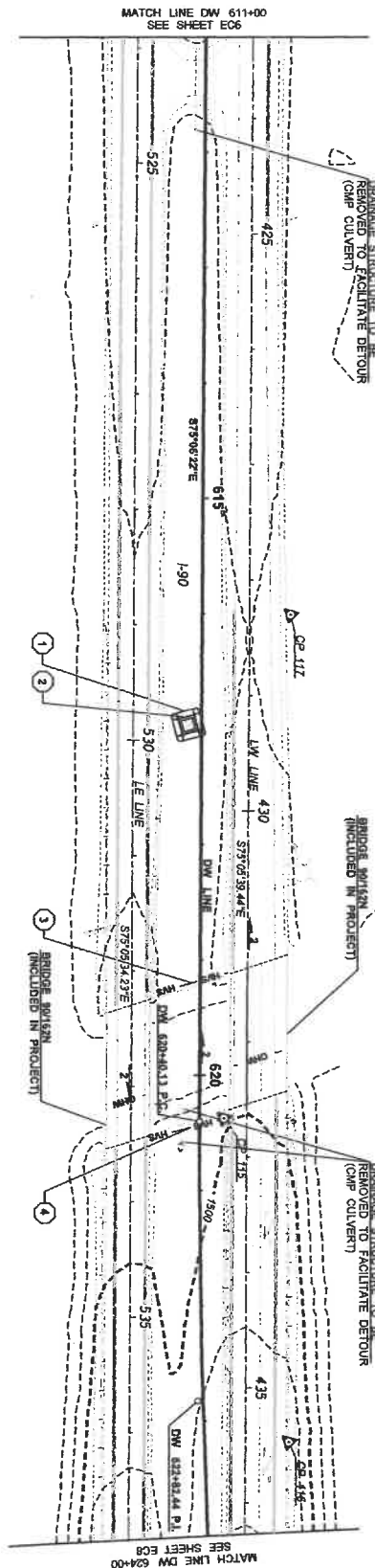


Figure 8: Inactive mud swallow nest beneath the WB Wilson Creek bridge.

APPENDIX A-2: SITE PLANS

RECEIVED
DEC 07 2023

Kittitas County CDS



GENERAL NOTES
1. UTILITY LOCATIONS ARE APPROXIMATE. CONTRACTOR TO VERIFY LOCATIONS PER SECTION 1-07.17 UTILITIES AND SIMILAR FACILITIES.



FILE NAME	C:\pwworking\code-americas\10411817\TULSKA_IB_EC7.dwg
DATE	10/27/23
PLOTTED BY	Victoria.Vasquez@ctba.com
DESIGNED BY	JACOBS GEC
CHECKED BY	JACOBS GEC
PROJ. ENGR.	K. KING P.E.
REGIONAL ADM.	B. WHITE P.E.

REVISION	DATE	BY

ISSUE NO.	10
CONTRACT NO.	XL6364
LOCATION NO.	

FED AID PROJ. NO.	
STATE	WA
SECTION NO.	
DATE	
SECTION NO.	
DATE	
Washington State Department of Transportation	
1-90 WILSON CREEK BRIDGE WB & WEST SIDE CANAL BRIDGE EB - DECK REHAB	
TESC PLAN	
PLAN NO. EC7	
SHEET OF 3	

LEGEND

— HW —	HIGH VARIABILITY SILT FENCE
—	COMPOST SOCK
—	BILET PROTECTION
—	EXISTING FILL LINE
—	EXISTING DITCH BOTTOM
—	EXISTING STREAM EDGE
—	EXISTING THALWEG
—	EXISTING BANK TOP
—	EXISTING BANK BOTTOM
—	EXISTING CONTOUR
—	EXISTING RUMBLE STRIP
—	EXISTING GUARDRAIL
—	EXISTING EDGE OF PAVEMENT
—	EXISTING CULVERT
—	EXISTING CENTER LINE
—	EXISTING GRATE INLET
—	EXISTING SIGN
—	EXISTING LIGHT STRUCTURE
—	QUANTITY TABULATION NOTE (SEE QUANTITY TABULATION SHEET)

APPENDIX A-3: PHS REPORT



Priority Habitats and Species on the Web



Buffer radius: 100 Feet

Report Date: 08/03/2023

User Comments/Notes:

Location of temporary bridge with 100-ft buffer.

RECEIVED
DEC 07 2023

Kittitas County CDS

PHS Species/Habitats Overview:

Occurrence Name	Federal Status	State Status	Sensitive Location
Steelhead	Threatened	N/A	No
Rainbow Trout	N/A	N/A	No
Spring Chinook	N/A	N/A	No
Chinook	Not Warranted	N/A	No
Summer Steelhead	N/A	N/A	No
Little Brown Bat	N/A	N/A	Yes
Yuma myotis	N/A	N/A	Yes

PHS Species/Habitats Details:

Steelhead	
Scientific Name	<i>Oncorhynchus mykiss</i>
Priority Area	Occurrence
Site Name	Wilson Creek
Accuracy	NA
Notes	LLID: 1204996469262, Stock Name: Upper Yakima Summer Steelhead, Run: Summer, Status: Unknown
Source Record	6894
Source Dataset	SASI
Source Name	Not Given
Source Entity	WDFW Fish Program
Federal Status	Threatened
State Status	N/A
PHS Listing Status	PHS Listed Occurrence
Sensitive	N
SGCN	N
Display Resolution	AS MAPPED
More Info	http://wdfw.wa.gov/wlm/diversty/soc/soc.htm
Geometry Type	Lines

Rainbow Trout	
Scientific Name	<i>Oncorhynchus mykiss</i>
Priority Area	Occurrence/Migration
Site Name	Wilson Creek
Accuracy	NA
Notes	LLID: 1204996469262, Fish Name: Rainbow Trout, Run Time: Unknown or not Applicable, Life History: Resident
Source Record	4458
Source Dataset	SWIFD
Federal Status	N/A
State Status	N/A

PHS Listing Status	PHS Listed Occurrence
Sensitive	N
SGCN	N
Display Resolution	AS MAPPED
More Info	http://wdfw.wa.gov/wlm/diversty/soc/soc.htm
Geometry Type	Lines

Spring Chinook

Scientific Name	<i>Oncorhynchus tshawytscha</i>
Priority Area	Breeding Area
Site Name	Wilson Creek
Accuracy	NA
Notes	LLID: 1204996469262, Fish Name: Chinook Salmon, Run Time: Spring, Life History: Anadromous
Source Record	4453
Source Dataset	SWIFD
Federal Status	N/A
State Status	N/A
PHS Listing Status	PHS Listed Occurrence
Sensitive	N
SGCN	N
Display Resolution	AS MAPPED
More Info	http://wdfw.wa.gov/wlm/diversty/soc/soc.htm
Geometry Type	Lines

Chinook

Scientific Name	<i>Oncorhynchus tshawytscha</i>
Priority Area	Occurrence
Site Name	Wilson Creek
Accuracy	NA
Notes	LLID: 1204996469262, Stock Name: Upper Yakima River Spring Chinook, Run: Spring, Status: Depressed
Source Record	1747
Source Dataset	SASI
Source Name	Not Given
Source Entity	WDFW Fish Program
Federal Status	Not Warranted
State Status	N/A
PHS Listing Status	PHS Listed Occurrence
Sensitive	N
SGCN	N
Display Resolution	AS MAPPED
More Info	http://wdfw.wa.gov/wlm/diversty/soc/soc.htm
Geometry Type	Lines

Summer Steelhead	
Scientific Name	<i>Oncorhynchus mykiss</i>
Priority Area	Occurrence/Migration
Site Name	Wilson Creek
Accuracy	NA
Notes	LLID: 1204996469262, Fish Name: Steelhead Trout, Run Time: Summer, Life History: Anadromous
Source Record	4459
Source Dataset	SWIFD
Federal Status	N/A
State Status	N/A
PHS Listing Status	PHS Listed Occurrence
Sensitive	N
SGCN	N
Display Resolution	AS MAPPED
More Info	http://wdfw.wa.gov/wlm/diversty/soc/soc.htm
Geometry Type	Lines

Little Brown Bat	
Scientific Name	<i>Myotis lucifugus</i>
Notes	This polygon mask represents one or more records of the above species or habitat occurrence. Contact PHS Data Release at phsproducts@dfw.wa.gov for obtaining information about masked sensitive species and habitats.
PHS Listing Status	PHS Listed Occurrence
Sensitive	Y
Display Resolution	TOWNSHIP
ManagementRecommendations	http://wdfw.wa.gov/publications/pub.php?id=00605

Yuma myotis	
Scientific Name	<i>Myotis yumanensis</i>
Notes	This polygon mask represents one or more records of the above species or habitat occurrence. Contact PHS Data Release at phsproducts@dfw.wa.gov for obtaining information about masked sensitive species and habitats.
PHS Listing Status	PHS Listed Occurrence
Sensitive	Y
Display Resolution	TOWNSHIP
ManagementRecommendations	http://wdfw.wa.gov/publications/pub.php?id=00605

DISCLAIMER. This report includes information that the Washington Department of Fish and Wildlife (WDFW) maintains in a central computer database. It is not an attempt to provide you with an official agency response as to the impacts of your project on fish and wildlife. This information only documents the location of fish and wildlife resources to the best of our knowledge. It is not a complete inventory and it is important to note that fish and wildlife resources may occur in areas not currently known to WDFW biologists, or in areas for which comprehensive surveys have not been conducted. Site specific surveys are frequently necessary to rule out the presence of priority resources. Locations of fish and wildlife resources are subject to variation caused by disturbance, changes in season and weather, and other factors. WDFW does not recommend using reports more than six months old.

APPENDIX A-4: SEEDING SPECIFICATIONS

Seed of the following mix, rate, and analysis shall be applied at the rates shown below on all areas requiring erosion control seeding within the project:

SEED BY COMMON NAME, (BOTANICAL NAME)	POUNDS PURE LIVE SEED (PLS) PER ACRE
Bluebunch Wheatgrass (<i>Pseudoroegneria spicata</i>)	7.0
Idaho Fescue (<i>Festuca idahoensis</i>)	6.0
Slender Wheatgrass (<i>Elymus trachycaulus</i>)	5.0
Prairie Junegrass (<i>Koeleria cristata</i>)	3.0
Mountain Brome (<i>Bromus marginatus</i>)	6.0
Sandberg Bluegrass (<i>Poa Sandbergii</i>)	3.0
Western Yarrow (<i>Achillea millefolium</i>)	0.5
<i>Total Pounds live seed per acre</i>	36.0

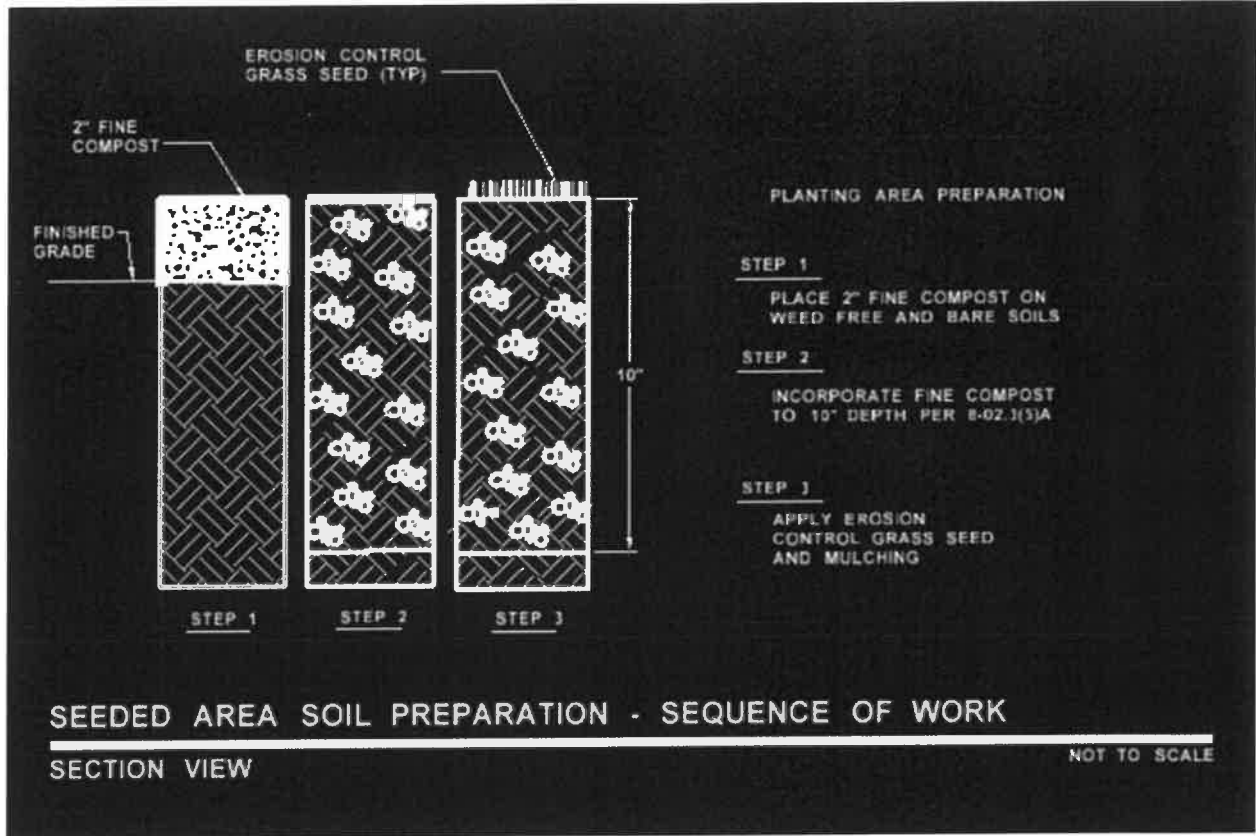
Source Identified seed shall be generation four or less.

Seed shall meet or exceed Washington State Department of Agriculture Certified Seed Standards and be from within the appropriate genetic zones of the Columbia Plateau, Blue Mountains, or Northern Rockies Ecoregion(s) as defined by the US Environmental Protection Agency (EPA).

The seed certification class shall be Certified (blue tag) in accordance with WAC 16-302 and meet the following requirements:

Prohibited Weed	0% max.
Noxious Weed	0% max.
Other Weed	0.20% max.
Other Crop	0.40% max.

The Contractor shall document all Source Identified seed by providing the Association of Official Seed Certifying Agents (AOSCA) yellow seed label for each species in the mix. Site Identification Logs can be supplied for collections where the AOSCA yellow label is not available. Digital photos of seed tags, or original seed tags, both Source Identified and non-source identified shall be supplied to WSDOT prior to seed acceptance. Upon notice by the Contractor and after confirmation by the Engineer, if a specified seed type is not available, a Contractor proposed substitution of seed type and proportioning, determined to be equal or better by the Engineer, may be approved. HECF Long Term Mulch shall be hydraulically applied at the rate of 3500 pounds per acre with no more than 2000 pounds applied in any single lift. HECF mulch shall not be used within the OHWM.



APPENDIX A-5: ENVIRONMENTAL DOCUMENTATION
