

HIP4

PROJECT COMPLETION FORM

HIP III No: 2021015

Project Title:	Wallowa River Tamkaliks Side Channel and Wetland Complex		
Date of Submittal:	3/15/2022		
BPA Project #:	1992-026-01	Contract #:	74017-51 (CR-325254)

Project Activity Start and End Dates:

Work Element	Project Activities	Start Date	End Date
E	Realign, Connect, and/or Create Channel – Excavate and create new side channel habitat	1/22/2021	8/15/2021
F	Increase Aquatic and/or Floodplain Complexity – Install structures & place wood to form pools and promote habitat development & complexity	2/12/2021	8/15/2021
G	Create, Restore, and/or Enhance Wetland – Increase floodplain connectivity and wetland enhancement	1/15/2021	3/25/2021
H	Plant Vegetation – Establish Riparian and Floodplain Plant Community to Promote Roughness & Function	2/11/2021	11/30/2021

Fish Capture Reporting

The BPA will report the following information for all projects that involve work area isolation with associated fish capture and relocation. When available, provide a tally of ESA-listed salmonids by species (salmon or steelhead) and life stage.

Fish Capture Lead (name, contact info)	Montana Pagano – montanap@nezperce.org (541) 432-2507
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	Interior Columbia Basin	Lower Columbia (Hood River downstream)	Bull Trout
Captured	6	N/A	0
Killed	0	N/A	0

Turbidity Reporting

The Project Sponsor shall complete and record the following water quality observations to ensure that any increase in suspended sediment is not exceeding the limit for HIP compliance.

Monitoring Lead (name, contact info)	Eli Childs, Bo Thompson
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Work Element	Date					COMMENTS -- if turbidity was visible at interim checks, how was work modified to reduce turbidity? What special circumstances led to exceedance?
		+4 hrs	+8 hrs	+ 12 hrs	+16 hrs	
		Observed Turbidity (NTUs) or (Yes/No) for observed difference.				
E	7/27/21	15.72	11.6			
E/F	8/2/21	22.3	8.54			Working in isolation. Visible plum observed.
E/F	8/4/21	10.21				
E/F	8/5/21	13.19				
E/F	8/9/21	9.01				

Instructions: Establish your visual observation points. First one approximately 100 ft up-stream in undisturbed water. The second one down stream of work site at the following distances from the project area.

- 50 feet in streams that are 30 feet wide or less.
- 100 feet in streams between 30 and 100 feet wide.
- 200 feet in streams greater than 100 feet wide.
- 300 feet for areas subject to tidal or coastal scour.

Upon the start of the project, if the downstream observed turbidity visibly exceeds background levels modify/add BMPs and continue to monitor every 4 hours. If exceedance continues for second monitoring interval (2 intervals in a row, 8 hours) STOP WORK until turbidity resumes to background. Work may resume once turbidity reaches background levels.

Narrative Assessment

Provide a narrative assessment of the project sponsor's success in meeting all HIP requirements. Please include:

- Photos of habitat conditions before, during, and after action completion.

See attached photo points (Exhibit 1) for before and after photos.

- Evidence of compliance with fish screen criteria, for any pump used in fish-bearing waters.

No pumps were deemed necessary and therefore not utilized within the excavated channel network or main channel isolated work areas during the IWWW due to low flow and low turbidity conditions, and use of adequate isolation BMPs. The following narrative and photos document instances where fish screened pumps were used for water management prior to mainstem/live water connection.

Beginning on 1/21/21, prior to connecting the side channels with the mainstem, a fish screened pump and 6" hose collected excess water within side channel 1 downstream of the alcove node feature (Figure 1). Water was discharged into the road adjacent ditch area and absorbed into the floodplain prior to reaching the mainstem. No erosion was observed.



Figure 1. Fish screened pump and 6" hose pulling water out of side channel 1 below alcove node on 1/29/21.

Beginning on 2/11/21, also prior to connection with the mainstem, two fish screened pumps (one with a 4" hose and one with a 6" hose) were used intermittently for dewatering localized work areas for riffle construction (Figure 2 and 3). Water was initially pumped upstream of the work site onto the floodplain, and then was moved to adjacent side channel sections where work was not taking place.



Figure 2. Fish screened pump and hose dewatering alcove area in side channel 1 and discharging pumped water upstream on the floodplain on 2/11/21.



Figure 3. A fish screened pump is shown pulling water out of side channel 1 during downstream riffle construction on 2/11/21.

- A summary of the results of pollution and erosion control inspections, including any erosion control failure, turbidity in exceedance of HIP standards, contaminant release, and correction effort.

Silt fencing was placed at the downstream end of the side channel complex between the alcove and the earthen plug during the winter construction phase to prevent turbid water from leaching into the Wallowa River (Figure 4). An additional silt fence was also installed at this time, below the confluence of side channels 1 and 3 to contain turbid water above the downstream alcove (Figure 5). These silt fences were left in place over the spring and removed during the second phase of construction in the summer upon connection to the main channel.



Figure 4. Silt fence placement between excavated alcove and earthen plug/river (3/8/21).



Figure 5. Silt fence placed downstream of side channel 1 and 3 confluence, upstream of alcove (3/2/21).

During the summer IWWW phase, the project sponsor inspected the pollution and erosion control measures implemented on site by the contractor during and following installation. Cofferdams/work isolation areas within the mainstem Wallowa River were achieved using tightly placed super sacks and plastic sheeting (Figure 6). Adjustments were made to the super sack placement and sufficient sealing with sheet plastic was accomplished by the contractor to the satisfaction of the project sponsor.



Figure 6. Super sack/sheet plastic work isolation area at channel 1 inlet and Wallowa River mainstem (8/3/21).

A spill kit was also located on-site for the purpose of pollution control, however, it was not needed. The contractor's turbidity monitoring practices/protocols were also observed to ensure compliance with HIPIII standards. No turbidity exceedances occurred during the implementation of this project.

- A description of the post-project condition of any riparian area cleared within 150 feet of Ordinary High Water.

Very little existing riparian vegetation was removed within 150 feet of OHW. Given that the project area is located within a former hay field, mature riparian vegetation was sparse. Channel inlets/outlet locations were intentionally designed and placed where openings occurred within the narrow (~30 feet wide) willow, alder, and cottonwood dominated riparian corridor. Slight adjustments in the downstream side channel alignment were made, per the engineer's authorization, to avoid existing mature trees and vegetation. The upstream-most standalone alcove was deleted for the purpose of salvaging mature vegetation. 30 individual 20 linear feet willow trenches were planted throughout the roughened floodplain, as well as willow cuttings installed at one stake/linear foot in >1,000 linear feet of brush bank treatments throughout the side channels. Over 12,000 10-cubic inch wetland plugs were planted within and around wetland graded areas. As of fall 2021, all planted vegetation was exhibiting above average survival.

- A description of site restoration completed and future site restoration plans.

Following the winter/spring construction phase, ending in April 2021, the contractor did an initial seeding of disturbed areas with upland and riparian/wetland specific seed mixes to keep invasive weed infestation to a minimum. Following the summer IWWW construction phase, all access roads were ripped, graded, and/or modified, and all disturbed soil and staging/storage areas were reseeded and straw mulched to the satisfaction of both the landowner and the project sponsor.

The project sponsor is actively working with a camas specialist with the Nez Perce National Historic Park to develop a plan to seed, transplant and/or out-plant nursery stock and/or locally propagated camas within identified micro sites throughout the project site. The project sponsor will also assess presence of invasive weeds and will hire an independent spraying contractor to spot treat the site as needed. The project sponsor will continue to work with the landowner to ensure their satisfaction with site revegetation and will address additional planting and weed treatments on an as needed annual basis.

- A description of any project activities that were not implemented or differ from what was proposed.

As mentioned above, the standalone alcove feature to be excavated upstream of the bridge was not implemented to avoid disturbance to existing mature cottonwood trees within the river riparian corridor. Due to existence of shallow bedrock, mainstem inlet/outlet structures were modified to account for a lack of excavation depth. Instead, these wood structures were field fit onsite by the design engineer to maximize function and minimize risk. Several pool depths were not excavated to the full extent depicted on the final designs also due to bedrock elevations. All field fit changes are documented in the attached overview plan sheet with engineer call outs in Exhibit 2.

- Any issues that were encountered during implementation or lessons learned.

As mentioned, and anticipated going into construction, presence of moderately shallow bedrock throughout the project area proved to be the greatest challenge to work around. The results of these modifications are not believed to have compromised the overall function of the side channel or LWD structures.

To limit unnecessary ground disturbance, the project sponsor planned for the majority of excavation work occur in the winter months, when freezing temperatures would prevail. However, due to mild/warmer than usual winter conditions, some intermittent cessations in construction occurred. Fortunately, given the contractors exceptional efficiency, using highly precise GPS equipped machinery and their extensive restoration experience, they were able to successfully complete the project within the provided time limits while avoiding unnecessary damage to the site.

EXHIBIT 1:

Photo Points and Photo Point Map

**Tamkaliks Side Channel and Wetland Complex – OWEB Grant Agreement Exhibit B, 1.
(a) Pre Project Photos & (b) Map**

Photo Point 1



Photo Point 2



Photo Point 3



Photo Point 4



Corresponding Photo Point Map



Tamkaliks Side Channel and Wetland Complex – OWEB

219-5026-126857 Post Project Photo Points



Photo Point 1



Photo Point 2



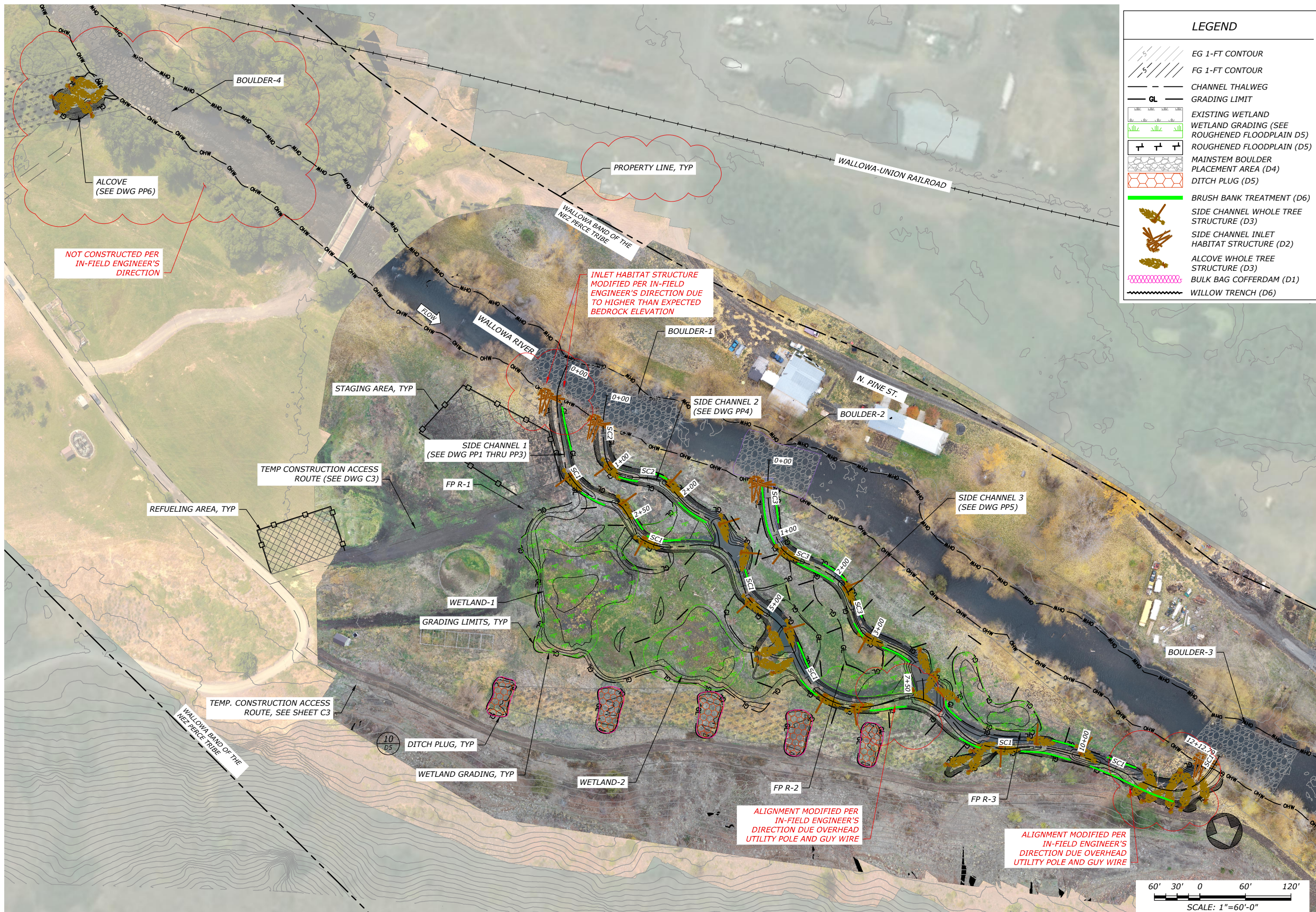
Photo point 3



Photo point 4

EXHIBIT 1:

Engineer Field Fit Design Modifications



LEGEND

	EG 1-FT CONTOUR
	FG 1-FT CONTOUR
	CHANNEL THALWEG
	GL GRADING LIMIT
	EXISTING WETLAND
	WETLAND GRADING (SEE ROUGHENED FLOODPLAIN D5)
	ROUGHENED FLOODPLAIN (D5)
	MAINSTEM BOULDER PLACEMENT AREA (D4)
	DITCH PLUG (D5)
	BRUSH BANK TREATMENT (D6)
	SIDE CHANNEL WHOLE TREE STRUCTURE (D3)
	SIDE CHANNEL INLET HABITAT STRUCTURE (D2)
	ALCOVE WHOLE TREE STRUCTURE (D3)
	BULK BAG COFFERDAM (D1)
	WILLOW TRENCH (D6)

TAMKALIKS SIDE CHANNEL AND FLOODPLAIN RESTORATION PROJECT
CONSTRUCTION DRAWINGS
 FOR NEZ PERCE TRIBE DEPARTMENT OF FISHERIES RESOURCES MANAGEMENT
 WALLOWA RIVER
 WALLOWA COUNTY, OR

NO.	REVISION
1	AS-BUILT DRAWING FEATURES, PROPERTY LINE & POST CONSTRUCTION AERIAL
DATE	12/13/21

DATE: SEPTEMBER 9, 2020
 DESIGNED: ML
 APPROVED: JF

DRAWING NAME
PROPOSED CONDITIONS
 OVERVIEW

FILE:R:\PROJECTS\WALLOWA_HUC1411\TAMKALIKS_SIDE_CHANNEL\CD\PRODUCTION\TAMKALIKS_PROPOSEDCONDITIONS.DWG_PLOT DATE:12/15/2021 9:19 AM