

## **Construction Specifications**

Lapwai Creek Reach 14 Floodplain and Habitat  
Restoration  
Nez Perce County, Idaho

*for*  
**Nez Perce Tribe**

August 31, 2021

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**Lapwai Creek Reach 14 Floodplain and**  
**Habitat Restoration**  
**Nez Perce County, Idaho**

File No. 0571-022-00

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Prepared for:

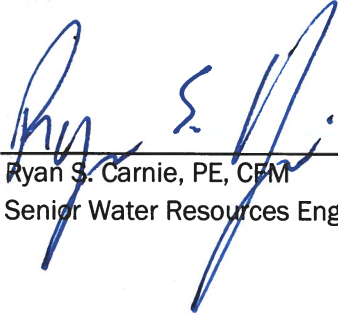
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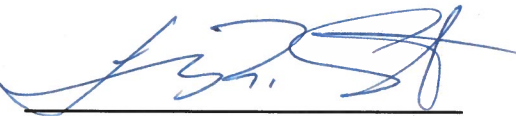
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**DIVISION 2**  
**General Site Management**

## **SECTION 210 MOBILIZATION AND DEMOBILIZATION**

### **Part 1 General**

#### **1.01 Scope**

- A. Mobilization consists of operations and preparatory work necessary to become ready to perform the work or an item of work. Mobilization includes and is not limited to:
  - A.01 Mobilizing equipment, personnel, supplies, and incidentals to the identified project and staging sites,
  - A.02 Establishment of necessary facilities for the Contractor's operation, and
  - A.03 Securing bonds, insurance and permits necessary to do the work as stated in the contract and/or agreement.
- B. Demobilization includes the removal and transport off site of excess construction materials, equipment, personnel, and facilities that were necessary to do the work.
- C. Nothing in this Section shall relieve the Contractor from full responsibility for compliance with permit requirements. Work shall not commence until Contracting Officer has approved.

#### **1.02 Payment**

- A. Payment will be made at the Bid Schedule lump sum amount for the item, "Mobilization and Demobilization."
- B. Includes costs associated with all labor, materials, equipment, and permits required to perform scope.

### **Part 2 Products**

- A. Standard, incidental materials, products and equipment required to perform scope.

### **Part 3 Execution**

- A. The Contractor shall dispose of Materials and debris, including, without limitation, forms, falsework, scaffolding, and rubbish resulting from clearing, grubbing, trimming, clean-up, removal, and other Work. These Materials and debris become the property of the Contractor.
- B. Where the Work has impacted existing facilities or devices, the Contractor shall restore or replace those facilities to their pre-existing condition.

**END OF SECTION**

## **SECTION 280 EROSION AND SEDIMENT CONTROL**

### **Part 1 General**

#### **1.01 Scope**

- A. Controlling soil erosion by wind, water, or other means, and preventing eroded sediments and other construction-generated pollutants from moving off the Project Site in order to comply with:
  - 1. Applicable local, state, and federal laws, orders, regulations, and Water Quality Standards concerning control and abatement of water pollution air pollution and fish and wildlife protection.
  - 2. Permits applicable to the project.
- B. Preparation of a Stormwater Pollution Prevention Plan (SWPPP) including a site plan depicting the Erosion and Sediment Control Plan (ESCP) and submit for a Construction General Permit
- C. Designate and provide a representative as the Erosion and Sediment Control Manager to:
  - 1. Manage and ensure proper implementation of the Erosion and ESCP.
  - 2. Accompany the contracting officer during field review of the ESCP prior to construction activities.
  - 3. Monitor rainfall on and in the vicinity of the Project Site.
  - 4. Inspect Erosion and Sediment Control materials (ESC) on active construction sites weekly for effective functioning.
  - 5. Inspect ESC on inactive sites every week for effective functioning.
  - 6. Ensure that ESC are regularly cleaned and maintained.
  - 7. Mobilize crews to make immediate repairs to ESC if not effectively functioning.
  - 8. Record actions taken to clean up significant amounts of sediment.
  - 9. Report potential permit violations to the Contracting Officer in a timely manner.

#### **1.02 Payment**

- A. Payment will be made at the Bid Schedule lump sum amount for the item, "Erosion and Sediment Control. "
- B. Payment will be payment in full for furnishing and placing all materials, and for furnishing all equipment, labor, and incidentals necessary to complete the work as specified. Payment includes:
  - 1. providing the Erosion and Sediment Control Manager
  - 2. developing, revising, and documenting the SWPPP including the ESCP
  - 3. monitoring activities to maintain effective functioning
  - 4. furnishing, stockpiling, protecting, restocking, and removing emergency materials
  - 5. preparing project for a period of extended non-activity
  - 6. inspecting, maintaining, and removing erosion control devices

- C. Costs for damages and work stoppage resulting from failure to adequately implement proper environmental controls are the Contractor's responsibility.

### **1.03 Submittals**

- A. The Contractor shall prepare and submit the Stormwater Pollution Prevention Plan (SWPPP) under the Construction Stormwater General Permit. The Contractor shall submit a copy of the SWPPP and the Notice of Intent (NOI) to the Contracting Officer and permit issuing authority. Failure to accept all or part of any SWPPP will not make NPT liable to the Contractor for any Work delays.
- B. The Contractor shall provide a schedule for SWPPP implementation and incorporate it into the Contractor's progress schedule. The Contractor's SWPPP shall conform to all requirements of the current edition of the Idaho Department of Environmental Quality's (IDEQ) *Catalog of Stormwater Best Management Practices for Idaho Cities and Counties*. The SWPPP shall include an ESCP that covers all areas that may be affected inside and outside the limits of the project (including all Contracting Agency provided sources, disposal sites, and haul roads, and all nearby land, streams, and other bodies of water).
- C. The Contractor shall provide all other submittals required by the project permits for the Contractor's work on the project.

### **1.04 Regulatory Requirements**

- A. The Contractor shall comply with all permit conditions and be responsible for notifying the Contracting Officer prior to implementing any changes, modifications, or deviations from the specifications and designs provided to the Contractor previously reviewed by permit agencies as the basis for their approval.
- B. This project shall be constructed in accordance with all HIP IV General Aquatic Conservation Measures. Best management practices (BMPs) shall be incorporated into all installations, and work sites, as required, to minimize impacts to fish, wildlife, and habitat in the immediate area. Contractor shall comply with all specific mitigation measures that are required on this project listed in the project environmental permits.

### **1.05 Contractor Violations**

- A. If noncompliance occurs, report noncompliance to the Contracting Officer immediately (orally), with specific information submitted in writing within 2 calendar days.
- B. Nonconformance with applicable local, state, and federal laws, orders, regulations, or Water Quality Standards may result in the Contracting Officer stopping all site activity until compliance is ensured.
- C. The Contractor shall not be entitled to any extension of time, claim for damage, or additional compensation by reason of such a work stoppage.
- D. Corrective measures required to bring activities into compliance shall be at the Contractor's expense.
- E. The Contractor shall be solely responsible for any and all fines, penalties or additional permit fees resulting from non-compliance with any applicable local, state and federal laws, orders, regulations or Water Quality Standards.



- F. Contractor shall be responsible for damages resulting from dust or spills originating from contractor operations.
- G. The Contracting Officer may stop any construction activity in violation of local, state, and federal laws and additional expenses resulting from work stoppage will be responsibility of Contractor.

## **Part 2 Products**

- A. Standard, incidental materials, products and equipment required to perform scope.
- B. BMP materials, including but not limited to silt fence, straw wattles, impermeable membranes and diversion structures as indicated on the Design Drawings and the current edition of the IDEQ's *Catalog of Stormwater Best Management Practices for Idaho Cities and Counties*.

## **Part 3 Execution**

### **3.01 Installation**

- A. Install ESC best management practices (BMPs) as shown and according to the ESCP before clearing, grading or other land-altering activities. Ensure effective functioning of BMPs such that sediment does not leave the Project boundaries, enter drainage systems or waterways.
- B. Modify BMPs so they are effective if necessary and update the ESCP as necessary.

### **3.02 Work Restrictions**

- A. Disturbance Limits—Delineate all construction site clearing limits with high visibility markings and do not disturb areas outside of the clearing limits.
- B. Perimeter Controls—Install all appropriate perimeter controls before beginning any ground-disturbing activities.
- C. Wet Season Work and Temporary Work Suspension—Update the ESCP and schedule for work proposed during the wet season to ensure all appropriate controls, including ESC during work suspensions, are implemented and maintained.

### **3.02 Stabilization**

- A. Stabilize all areas disturbed within 7 days of exposure with methods that do not solely rely on germination.
- B. Temporary stabilization every 14 days or more frequently as needed, a minimum of one day before expected rain events and at the end of each day during wet periods.
- C. Permanent stabilization as indicated on the project seeding and planting plans.

**END OF SECTION**

## **SECTION 290 ENVIRONMENTAL PROTECTIONS**

### **Part 1 General**

#### **1.02 Scope**

- A. Perform construction operations in such a manner to comply, and ensure subcontractors comply, with:
  - 1. Applicable local, state, and federal laws, orders, regulations, and Water Quality Standards concerning control and abatement of water pollution air pollution and fish and wildlife protection.
  - 2. Terms and conditions of applicable permits issued by permit issuing authority. If conflict occurs between local, state, and federal laws, regulations and requirements, the most stringent shall apply.
- B. Locate staging and disposal sites as identified on the Drawings, on improved or disturbed sites such as the roadway pullout.
- C. Minimize the use of water by maintaining equipment, immediately fixing water line and container leaks, ensuring water valves are turned off promptly, and using recycled water when feasible.
- D. Comply with all applicable federal, state and local laws, as well as those defined in the SWPPP (Section 280) as they pertain to the storage, handling, management, transportation, disposal, and documentation of waste, hazardous waste, and hazardous substances.
  - 1. Clean fill becomes the property of the Contractor at the place of origin.
  - 2. Waste materials become the property of the Contractor at the place of origin.
  - 3. Woody matter shall be disposed of on site and used as slash material in the Large Woody Material structures according to the Drawings.

#### **1.02 Payment**

- A. Payment will be made at the lump sum amount indicated on the Bid Schedule item, "Environmental Protections".
- B. Payment will be payment in full for furnishing and placing all materials, and for furnishing all equipment, labor, and incidentals necessary to complete the work as specified.
- C. Costs for damages and work stoppage resulting from failure to adequately implement proper environmental controls are the Contractor's responsibility.

#### **1.04 Regulatory Requirements**

- A. The Contractor shall comply with all permit conditions and be responsible for notifying the Contracting Officer prior to implementing any changes, modifications, or deviations from the specifications and designs provided to the Contractor previously reviewed by permit agencies as the basis for their approval.
- B. This project shall be constructed in accordance with all HIP IV General Aquatic Conservation Measures. BMPs shall be incorporated into all installations, and work sites, as required, to minimize impacts to fish, wildlife, and habitat in the immediate area. Contractor shall comply with

all specific mitigation measures that are required on this project listed in the project environmental permits.

### **1.05 Contractor Violations**

- A. If noncompliance occurs, report noncompliance to the Contracting Officer immediately (orally), with specific information submitted in writing to the Contracting Officer within 2 calendar days.
- B. Nonconformance with applicable local, state, and federal laws, orders, regulations, or Water Quality Standards may result in the Contracting Officer stopping all site activity until compliance is achieved and ensured.
- C. The Contractor shall not be entitled to any extension of time, claim for damage, or additional compensation by reason of such a noncompliance work stoppage.
- D. Corrective measures required to bring activities into compliance shall be at the Contractor's expense.
- E. The Contractor shall be solely responsible for any and all fines, penalties or additional permit fees resulting from noncompliance with any applicable local, state and federal laws, orders, regulations or Water Quality Standards.
- F. Contractor shall be responsible for damages resulting from dust or spills originating from contractor operations.
- G. The Contracting Officer may stop any construction activity in violation of local, state, and federal laws. Additional expenses resulting from such a work stoppage will be responsibility of Contractor.

## **Part 2 Products**

- A. Standard, incidental materials, products and equipment required to perform scope.

## **Part 3 Execution**

### **3.01 Pollution Controls**

- A. Control pollutants by use of sediment and erosion controls, wastewater and stormwater management controls, construction site management practices, and other controls including State and local control requirements as included in the Construction General Permit. The Construction General Permit shall include a detailed description of the following:
  - 1. Construction Site Management
  - 2. Construction equipment
- B. Follow the most stringent of noise restrictions whether in permits, State or local regulations.

### **3.02 Preservation and Restoration**

- A. Preserve and restore native soil materials for site rehabilitation.
- B. If materials are moved, damaged or destroyed, replace them with a functional equivalent during site rehabilitation.
- C. Restore temporary construction access to original contours as approved by the Contracting Officer.

### **3.03 Protection of Wildlife and Wildlife Habitat**

- A. Comply with the laws of the Idaho Department of Fish and Game, NOAA Fisheries, and the U.S. Fish and Wildlife Service. Conduct operations to avoid any hazards to the safety and propagation of wildlife.
- B. Comply with and require that all the Contractor's employees, agents, and Subcontractors on the Project Site comply with the following:
  - 1. Clean Water Act Section 404
  - 2. IDAPA 58.02.02
- C. Contractor shall immediately cease operation if a sick, injured, or dead specimen of a threatened or endangered species is found in association with project activities. Care shall be taken in handling and storage of dead specimens to preserve biological material in the best possible condition for later analysis of cause of death. The handling of threatened or endangered species shall be done in accordance with applicable environmental permits.
- D. Comply with all laws governing preservation of cultural resources as depicted in the project cultural resource report and determinations.

### **3.03 Waste, Hazardous Waste, and Hazardous Substances**

- A. Comply with all applicable federal, State, and local Laws as they pertain to the storage, handling, management, transportation, disposal, and documentation of waste, hazardous waste, and hazardous substances.
- B. Store fuel according to the current edition of the International Fire Code and all applicable federal, State, and local Laws. If total fuel and petroleum storage, in containers 55 gallons or larger, exceeds 1,320 gallons, comply with the applicable spill prevention control and countermeasures (SPCC) requirements of 40 CFR 112. If applicable, submit the professional engineer stamped SPCC plan, 10 days before the preconstruction conference. Comply with the plan and keep a copy on site and readily available. The SPCC plan may be combined with the Pollution Control Plan.
- C. Dispose of waste at an energy recovery facility with a DEQ or LRAPA Stationary Source Permit, at a permitted landfill, or at other waste disposal facilities as required depending on the type of waste.
- D. If, during construction, unanticipated hazardous substances are discovered that threaten the health and safety of workers, the public, or the environment, do the following:
  - 1. Immediately remove all affected employees and secure the area to prevent access.
  - 2. Notify the Contracting Officer immediately and provide written notification within 24 hours, setting forth a description of the hazardous substances encountered.
- E. The Contracting Officer will attempt to resolve the unanticipated situation expeditiously.

### **3.04 Protection of Cultural Resources**

- A. Comply with all Laws governing preservation of cultural resources. Cultural resources may include, but are not limited to, dwellings, bridges, trails, fossils, and artifacts.
- B. If cultural resources are encountered on the project area or in material sources, do the following:

1. Immediately discontinue operations or move to another area of the project site or material source.
  2. Protect the cultural resource from disturbance or damage.
  3. Notify the Contracting Officer.
- C. If cultural resources are encountered on the Project area or in material sources, the Contracting Officer will do the following:
1. Arrange immediate investigations.
  2. Arrange for disposition of the cultural resources.
  3. Notify the Contractor when to begin or resume construction operations in the affected area.

### **3.04 Protection of Sensitive Cultural Sites**

- A. Comply with and require that all the Contractor's employees, agents, and Subcontractors on the Project Site comply with all Laws applicable to the preservation and protection of sensitive cultural sites. The existence of any sensitive cultural sites affecting the project, and the mandatory preservation and protection measures applicable to the sites, are determined according to the Laws including, but not limited to, the following:
1. National Historic Preservation Act (NHPA) of 1966, Section 106, codified in 36 CFR Part 800 (Protection of Historic Properties).
- B. Ensure protection for sensitive cultural sites according to the following:
1. Except as authorized by the Contracting Officer for the purpose of installing or maintaining approved sensitive cultural site protective measures, keep all persons, equipment, and materials off known sensitive cultural sites.
  2. Install all sensitive cultural site protection required by the drawings prior to staging Equipment or starting Work near the sites.
  3. Instruct all Contractor and Subcontractor personnel to regard the locations of these sites and their contents as confidential.
- C. The Contracting Officer has the authority to bar from the project any person entering a protected site other than for the purpose of installing or maintaining protective measures.

**END OF SECTION**

**DIVISION 3**  
**Site Work**

## **SECTION 310 TEMPORARY STREAM DIVERSION**

### **Part 1 General**

#### **1.01 Scope**

- A. Includes installation, operation, maintenance and removal of temporary diversion structures and soil plugs during installation of wood structures, rock and habitat structures and channel excavation as indicated on the Drawings and as directed by the Contracting Officer.
- B. Includes downtime to accommodate fish removal and handling while installing diversion structures.
- C. Excludes actual physical netting and removal of fish, which will be performed by the NPT or other qualified fisheries professional.
- D. Nothing in this Section shall relieve the Contractor from full responsibility for the adequacy of protective works and compliance with permit requirements. All work shall be approved by the Contracting Officer prior to commencement of work.

#### **1.02 Payment**

- A. Payment will be made at the Bid Schedule total bid amount for the item, "Temporary Stream Diversion."
- B. Includes costs associated with all labor, materials, equipment and permits required to perform scope.

### **Part 2 Products**

#### **2.01 Incidentals**

- A. Standard, incidental materials, products and equipment required to perform scope.

#### **2.02 Diversion Structures and Soil Plugs**

- A. Diversion Structures may consist of seclusion fencing, floating booms, sand bags, ecology blocks, inflatable bladders and/or other suitable means. Type of diversion structures and details pertaining to the installation, operation, maintenance and removal of diversion structures shall be submitted to Contracting Officer for approval prior to construction.
- B. Soil plugs may consist of In-situ material to block excavated channels from active flowing water.
- C. Diversion structures and soil plugs should include plastic liner or fine mesh silt fence to reduce the amount of fines entering the free-flowing portion of the river.

### **Part 3 Execution**

#### **3.01 General Execution**

- A. Installation, operation, maintenance and removal of diversion structures shall be performed in accordance with the Construction Sequencing and Dewatering Plans and General Aquatic Conservation Measures included in the Drawings. Said work shall commence at the downstream end of the project and proceed upstream unless otherwise approved by the Contracting Officer.

- B. Install a diversion structure in the stream along the bank as a work isolation structure and in the main channel as a diversion structure. Diversion structure is intended to isolate the existing main channel and to meter water into the proposed main channel during plug removal. It is not intended to fully dry up construction zones.
- C. Establish and maintain temporary construction access to the stream from the bank in a manner that minimizes disturbance.
- D. Meter flow into proposed channel as indicated on the Drawings unless otherwise instructed by the Contracting Officer.
- E. Remove diversion structures and soil plugs as indicated on the Drawings and after segment is constructed.

**END OF SECTION**



## **SECTION 320 CLEARING AND GRUBBING**

### **Part 1 General**

#### **1.01 Scope**

- A. Clearing, grubbing, stockpile and disposal of trees, snags, logs, stumps, brush, shrubs, and rubbish from designated areas as instructed by Contracting Officer.
- B. Legally dispose of unsuitable, undesirable cleared material.
- C. Avoid injuring vegetation or other natural materials outside grading limits shown on the drawings and as directed by Contracting Officer. Confine operations that may injure vegetation or other natural materials to the work area, or to areas that have already been cleared.
- D. Nothing in this Section shall relieve the Contractor from full responsibility for the adequacy of protective works and compliance with permit requirements. Work shall not commence until Contracting Officer has approved.

#### **1.02 Payment**

- A. Payment will be made at the Bid Schedule total bid amount for the item, "Clearing and Grubbing."
- B. No field measurement or related unit cost of cleared acreage will be conducted or awarded during or after construction.
- C. Includes costs associated with all labor, materials, equipment, and permits required to perform scope.
- D. No separate or additional payment will be made for work zone fencing.

### **Part 2 Products**

- A. Standard, incidental materials, products and equipment required to perform scope.

### **Part 3 Execution**

#### **3.01 Clearing**

- A. Remove trees, shrubs, brush, stumps, roots, rootwads, downed timber, branches, grass, weeds, vegetation, rubbish, riprap, rocks, and other objectionable material.
- B. Woody matter shall be disposed of on site and used as slash material in the Large Woody Material structures according to the Drawings.
- C. Trees with roots shall be knocked over with rootwads attached using an excavator or other suitable means and be removed, replanted, or disposed of as directed by the Contracting Officer.

#### **3.02 Grubbing**

- A. Grubbing is defined as removal of stumps, roots, vegetative matter, and other unsuitable materials.
- B. Grub around surfaces to be under proposed fill; areas to be excavated; and surfaces to be regraded.
- C. Perform grubbing in advance of topsoil stripping, excavation, and grading operations.

### **3.03 Salvage Stockpiling**

- A. As shown or directed, salvage and stockpile plants, rocks, down timber, and other natural materials for use in site restoration. Do not salvage material dominated by weedy species, as directed. If shown, salvage conifer trees that are greater than 18-inch-diameter at breast height (DBH) with root wad intact. Store salvaged material in a clean and dry place until site restoration, or as directed.
- B. Create separate stockpiles for materials to be reused and materials to be disposed. Stockpiled material shall be organized in similar piles and in a fashion and location that enables efficient reuse and/or disposal of stockpiled materials.

**END OF SECTION**

## **SECTION 330 EXCAVATION**

### **Part 1 General**

#### **1.01 Scope**

- A. Excavate proposed channel and floodplain to the lines, grades, and cross sections shown on drawings and as directed by Contracting Officer.
- B. The NPT makes no guarantee or representation by implication or otherwise, that any material available on the Project site is suitable for incorporation into any portion of the Project. No material will be considered unsuitable on the sole basis that special or additional processing or handling is required to make it suitable for incorporation into the project.
- C. Haul and disposal of unsuitable material.
- D. The term "earthwork" will be used as a general term to designate the work included within the scope of this section.
- E. Nothing in this Section shall relieve the Contractor from full responsibility for the adequacy of protective works and compliance with permit requirements. Work shall not commence until Contracting Officer has approved.

#### **1.02 Payment**

- A. Payment will be made at the Bid Schedule total bid amount for the items, "Excavation."
- B. No field measurement of excavated and stockpiled material quantities will be conducted during construction.
- C. Includes costs associated with all labor, materials, equipment, and permits required to perform scope.

### **Part 2 Products**

- A. Standard, incidental materials, products and equipment required to perform scope.

### **Part 3 Execution**

#### **3.01 General Execution**

- A. Perform all operations involved in excavating, hauling, and placing of earthwork materials so no damage or detriment to the completed or partially completed work results. At all times provide sufficient drainage of completed or partially completed earthwork to prevent damage or loss due to rainfall, surface water or any other cause.
- B. In all cases, take proper precautions to ensure that embankment construction and filling do not move, endanger, or cause undue strain or stress to any Structure or adjacent ground.
- C. Immediately before completing the earthwork:
  - 1. Blend the tops of cutbanks with the adjacent terrain.
  - 2. Remove all litter, debris, and obstructions.

**END OF SECTION**

## **SECTION 340 DEWATERING**

### **Part 1 General**

#### **1.01 Scope**

- A. Furnish, install, maintain and operate all necessary pumping and other equipment for removal of water from the project site to keep the work site free from water as required for constructing each part of the work.
- B. Nothing in this Section shall relieve the Contractor from full responsibility for the adequacy of protective works and compliance with permit requirements. All work shall be approved by the Contracting Officer prior to commencement of work.

#### **1.02 Definitions**

- A. Dewatering
  - 1. Temporary damming and pumping the stream discharge at the upstream limits of work isolation areas and discharging downstream of the downstream limits of work isolation areas.
  - 2. Removal and control of groundwater from pores or other open spaces in soil or rock formations to allow construction activities to proceed free of water, and relief of groundwater uplift pressures.
  - 3. Control and removal of ponding, seeping, or flowing surface water, emerging subsurface water from excavated surfaces, and from precipitation within and adjacent to excavations and construction zones using channels, ditches, gravel drains, gravel blankets, pipes, sumps, pumps and discharge lines.

#### **1.03 Payment**

- A. Payment for Dewatering is incidental to Section 310, "Temporary Stream Diversion."
- B. Includes costs associated with all labor, materials, equipment and permits required to perform scope.

### **Part 2 Products**

#### **2.01 Incidentals**

- A. Pumps, pipes, associated erosion and sedimentation controls and standard, incidental materials, products and equipment required to perform scope.

### **Part 3 Execution**

#### **3.01 Dewatering**

- A. Fish exclusion shall occur prior to pumping and dewatering. Contractor shall provide a minimum 48-hour notice to the NPT prior to dewatering efforts to allow the NPT to perform fish exclusion.
- B. Pump water into the adjacent floodplain with sufficient separation from the active channel to settle sediments and turbidity of the active work zones in a manner that maintains a relatively dewatered, safe active work zone.

- C. Pumps shall pump from areas free of fish and/or be appropriately screened to prevent fish from being pumped. Fish screens shall meet the National Marine Fisheries Service (NMFS) requirements for opening size (maximum diameter of 3/32 of an inch).
- D. Provide, maintain and operate necessary pumps and other equipment for removal of water from the site and to keep other parts of the work free from water as required for constructing each part.
- E. Accomplish dewatering by use of pumps with adequate lift capacity, discharge piping, hoses and pipelines, valves, and intakes.
- F. Monitor and control discharge in accordance with the HIP IV and Construction General Permit and other project permitting requirements.

### **3.02 Cleanup**

- A. Remove temporary pump works for dewatering in a manner that meets the requirements of the permits and as approved by the Contracting Officer.

**END OF SECTION**

**DIVISION 4 AND 5**  
**Channel Enhancement**

## **SECTION 410 PLACEMENT OF STOCKPILED MATERIAL**

### **Part 1 General**

#### **1.01 Scope**

- A. Isolate and divert Lapwai Creek for the proposed work area per Section 310 as shown in the Drawings.
- B. Import riffle cobbles per section 420 and streambed boulders for boulder cluster and rock weir installation per sections 430 and 440 as required to meet channel gradation identified in the Drawings.
- C. Install stockpiled material under dewatered or otherwise dry channel conditions.
- D. Nothing in this Section shall relieve the Contractor from full responsibility for the adequacy of protective works and compliance with permit requirements. Work shall not commence until Contracting Officer has approved.

#### **1.02 Payment**

- A. Payment will be made at the Bid Schedule total bid amount for the items, "Placement of Stockpiled Material."
- B. No field measurement of material placement quantities will be conducted during construction.
- C. Includes costs associated with all labor, materials, equipment, and permits required to perform scope.
- D. Payment under separate bid items will be made for:
  - 1. Excavation (Section 330)
  - 2. Sorting and screening of materials (Section 330)
  - 3. Riffle cobbles (Section 420), rock weirs (Section 430) and boulder clusters (Section 440)

### **Part 2 Products**

#### **2.01 General**

- A. Standard, incidental materials, products and equipment required to perform scope
- B. Stockpiled native materials shall be free of organic matter
- C. Riffle cobbles and boulders shall conform to the requirements of Sections 420, 430 and 440

### **Part 3 Execution**

#### **3.01 General Execution**

- A. Stockpiled material shall be placed to the lines and grades shown on the Drawings and in such a way as to prevent material segregation. Stockpiled material shall be placed in lifts no thicker than 12 inches.
- B. Stockpiled material shall be combined with Riffle Cobbles (Section 420) in proposed constructed riffle locations to provide a well graded mix of Stockpiled Material and Riffle Cobbles.

- C. Placement of stockpiled material within the proposed channel shall be completed to ensure that low stream flows are conveyed above the finished channel. The Contractor shall apply water to each placed layer to facilitate filling the interstitial voids of the Stockpiled Material with fines. The voids are satisfactorily filled when water equivalent to the flow rate of the stream does not go subsurface and there is visual acceptance by the Contracting Officer.
- D. Boulders shall be placed according to Sections 430 and 440.

**END OF SECTION**



## SECTION 420 RIFFLE COBBLES

### Part 1 General

#### 1.01 Scope

- A. Import and stockpile Riffle Cobbles required for constructed riffles as shown on the Drawings.
- B. Install Riffle Cobbles within the constructed riffle areas shown on the Drawings and as described in Section 410, Placement of Stockpiled Material
- C. Nothing in this Section shall relieve the Contractor from full responsibility for the adequacy of protective works and compliance with permit requirements. Work shall not commence until Contracting Officer has approved.

#### 1.02 Payment

- A. Payment will be made at the Bid Schedule total bid amount for the items, "Riffle Cobbles (10-in-12-in)."
- B. No field measurement of material placement quantities will be conducted during construction.
- C. Includes costs associated with all labor, materials, equipment, and permits required to perform scope.

### Part 2 Products

#### 2.01 General

- A. Standard, incidental materials, products and equipment required to perform scope.
- B. Riffle cobbles shall be rounded.
- C. Riffle cobbles shall have a well-graded distribution of cobble sizes between 10-inch and 12-inch in diameter.
- D. Approximate size can be determined by taking the average dimension of the three axes of the rock, Length, Width, and Thickness, by use of the following calculation:

$$\frac{Length + Width + Thickness}{3} = Approximate\ Size$$

Length is the longest axis, width is the second longest axis, and thickness is the shortest axis.

- E. The grading of the cobbles shall be determined by the Contracting Officer by visual inspection of the load before it is dumped into place, or, if so ordered by the Contracting Officer, by dumping individual loads on a flat surface and sorting and measuring the individual rocks contained in the load.

### Part 3 Execution

#### 3.01 General Execution

- A. Import and store riffle cobbles on site in stockpile areas previously approved by the Contracting Officer.
- B. Cobbles shall be placed as described in Section 410, Placement of Stockpiled Material.

**END OF SECTION**

## SECTION 430 ROCK WEIRS

### Part 1 General

#### 1.01 Scope

- A. Import and stockpile streambed boulders.
- B. Installation of streambed boulders as rock weirs as shown on the Drawings.
- C. Nothing in this Section shall relieve the Contractor from full responsibility for the adequacy of protective works and compliance with permit requirements. Work shall not commence until Contracting Officer has approved.

#### 1.02 Payment

- A. Payment will be made at the Bid Schedule total bid amount for the item, "Rock Weirs."
- B. No field measurement of material placement quantities will be conducted during construction.
- C. Includes costs associated with all labor, materials, equipment, and permits required to perform scope.

### Part 2 Products

#### 2.01 General

- A. Standard, incidental materials, products and equipment required to perform scope.
- B. Streambed boulders shall be hard, sound, and durable material, free from seams, cracks, and other defects tending to destroy its resistance to weather.

Approximate Percentage of Rock Weir	Approximate Size (in)
20	12-18
30	18-28
50	28-36 <sup>1</sup>

Notes:

<sup>1</sup> Header boulders shall be between 28 and 36 inches.:

### Part 3 Execution

- A. Import and store streambed boulders in stockpile areas previously approved by the Contracting Officer.
- B. Place footer boulders in excavated stream channel and backfill with stockpiled excavated material to with 12-inch lifts until the footer boulders are buried to 2/3 their diameter.
- C. Place header boulders securely on top of footer boulders.
- D. Backfill header boulders to a depth of approximately 2/3 their diameter as shown on the Drawings.

**END OF SECTION**

## SECTION 440 BOULDER CLUSTERS

### Part 1 General

#### 1.01 Scope

- A. Import and stockpile streambed boulders.
- B. Installation of streambed boulders boulder clusters as shown on the Drawings.
- C. Nothing in this Section shall relieve the Contractor from full responsibility for the adequacy of protective works and compliance with permit requirements. Work shall not commence until Contracting Officer has approved.

#### 1.02 Payment

- A. Payment will be made at the Bid Schedule total bid amount for the item, "Boulder Clusters."
- B. No field measurement of material placement quantities will be conducted during construction.
- C. Includes costs associated with all labor, materials, equipment, and permits required to perform scope.

### Part 2 Products

#### 2.01 General

- A. Standard, incidental materials, products and equipment required to perform scope.
- B. Streambed boulders shall be hard, sound, and durable material, free from seams, cracks, and other defects tending to destroy its resistance to weather.

Approximate Percentage of Rock Weir	Approximate Size (in)
100	28-36

### Part 3 Execution

- A. Import and store streambed boulders in stockpile areas previously approved by the Contracting Officer.
- B. Place boulders in excavated stream channel and backfill with stockpiled excavated material to with 12-inch lifts until the boulders are buried to 2/3 their diameter as shown on the Drawings.

**END OF SECTION**

## SECTION 510 LARGE WOODY MATERIAL

### Part 1 General

#### 1.01 Scope

- A. Installation of large woody material (LWM) structures in the stream, as well as in the banks of the stream, as indicated on the Drawings and as directed by the Contracting Officer.
- B. Includes excavation and stockpiling.
- C. Excavation shall be performed in accordance with Sections 280 and 290, "Erosion and Sediment Control and Environmental Protections."
- D. Installation shall be performed under dewatered or otherwise dry channel conditions for the main channel and side channels.
- E. Includes the procurement of wood materials.
- F. Nothing in this Section shall relieve the Contractor from full responsibility for the adequacy of protective works and compliance with permit requirements. Work shall not commence until Contracting Officer has approved.

#### 1.02 Payment

- A. Payment will be made at the Bid Schedule total bid amount for the items, "LWM Structure - \_\_\_\_\_."
- B. No field measurement of material placement quantities will be conducted during construction.
- C. Includes costs associated with all labor, materials, equipment, and permits required to perform scope.
- D. Includes costs associated with excavation, backfill and bank restoration.

### Part 2 Products

#### 2.01 Incidentals

- A. Standard, incidental materials, products and equipment required to perform scope.

#### 2.02 Trees and Wood

- A. The type, size, and number of the trees/wood for the proposed structures shall be in accordance with those set forth in the Drawings.
- B. Acceptable conifer species include Ponderosa Pine (*Pinus ponderosa*) and Douglas Fir (*Pseudotsuga menziesii*). Additional conifer species shall be reviewed and may be accepted by the Contracting Officer.
- C. Rootwads shall be attached for the structures as indicated on the Drawings. Rootwads shall be a minimum of two times the diameter at breast height (DBH) of the tree.
- D. Slash materials may be sourced on site or imported.
- E. Acceptable vertical piles shall be coniferous species (Douglas fir and ponderosa pine) and shall meet the diameter and length identified on the Drawings).

### **Part 3 Execution**

- A. LWM Structures shall be installed as indicated above, on the Drawings and/or as guided by the Contracting Officer or their designated representative. LWM Structure installation requires on-site guidance by the Contracting Officer or their designated representative.
- B. Members shall be installed in trenches, rather than in wholesale bank excavation, to the extent possible, to promote greater resistance to flow.
- C. Piles shall be driven or augured to the depth indicated on the Drawings.
- D. Racking members can be installed in and amongst the larger trees/logs.
- E. Structures shall be backfilled and compacted as each layer is installed, where there are multiple layers. The backfill will consist of the material excavated from the receiving hole and shall be compacted with construction equipment. Excess excavated material shall be removed from structure location and either placed on Project site at locations indicated on the Drawings and approved by the Contracting Officer. Structures shall be constructed, backfilled, and graded to appear natural.

**END OF SECTION**

**DIVISION 6**  
**Revegetation**

## **SECTION 610 PERMANENT SEEDING, FERTILIZING, MULCHING AND WEED CONTROL**

### **Part 1 General**

#### **1.01 Scope**

- A. Includes furnishing all labor, materials and equipment to establish ground cover and grass as noted on the Drawings and in the plant list. Any substantive variance to this specification due to unforeseen conditions encountered on the site, weather conditions, plant availability, other construction activities, etc. must be approved by the Contracting Officer.
- B. All areas disturbed by construction shall be seeded and/or planted.
- C. The Contracting officer shall approve type of mulch and application method prior to use.
- D. Nothing in this Section shall relieve the Contractor from full responsibility for the adequacy of protective works and compliance with permit requirements. All work shall be approved by the Contracting Officer prior to commencement of work.

#### **1.03 Payment**

- A. Payment will be made at the Bid Schedule total bid amount for the item "Seeding."
- B. No field measurement of seeding acreage quantities will be conducted during construction.
- C. Includes costs associated with all labor, materials, equipment, and permits required to perform scope.

#### **1.01 Submittals**

- A. Submit certification before application of pesticide Work begins, that when chemical weed control is used, that each applicator possesses an Idaho Commercial Pesticide Applicator's License held in the individual's name. Submit a certification each time a new applicator begins application Work on the Project.
- B. Submit seed, mulch, and pesticide product information prior to arrival of materials on site.

### **Part 2 Products**

#### **2.01 Seed**

- A. All seed shall conform to the current rules and regulations of the State of Idaho and shall be from the latest crop available. It shall meet or exceed the standard for purity and germination listed below.
- B. Seed shall conform to the standards for "Certified" grade seed. Mulch must be certified as weed-free. A local NRCS Extension Agent may be consulted for an approved erosion control seed mix and sources of certified weed-free mulch.
- C. Seed shall be labeled in accordance with the state laws and the U.S. Department of Agriculture rules and regulations under the Federal Seed Act in effect on the date of invitations for offers. Bag tag figures are evidence of purity and germination. No seed will be accepted with a test date of more than 9 months before the delivery date to the site.
- D. Seed that has become wet, moldy, or otherwise damaged in transit or storage will not be accepted. The percent of noxious weed seed allowable shall be as defined in the current State laws relating

to agricultural seeds. Each type of seed shall be delivered in separate sealed containers and fully tagged unless exception is granted in writing by the Contracting Officer.

E. Seed mixture:

1. Purity: 90 percent minimum.
2. Germination:
  - a. 85 percent minimum.
  - b. Germination test less than 1 year old at time of seeding.
  - c. Uniform mixture as recommended for the area by local Extension Service or other approved source and as approved by the Contracting Officer.
3. Seeding Rate: 35 pounds live seed per acre

**2.02.1 Straw Mulch Material**

- A. Straw mulch for non-hydroseeding applications from bentgrass, bluegrass, fescue, or ryegrass singly or in combination. Cereal grain straw from barley, oat or wheat may be allowed upon approval of the Contracting Officer. Provide straw that is not moldy, caked, decayed or of otherwise low quality. Submit certification from the Supplier that the straw is free of noxious weed seeds or plant parts. Acceptable documentation is any one of the following:
1. The straw source is an "Idaho Certified Seed" field.
  2. The straw is certified by a recognized program accepted by the Idaho Department of Agriculture as being weed free.
  3. Seed lab test results of seed harvested from the straw meet minimum Idaho Certified Seed quality for weed seed content.

**2.03 Water and Hydroseeding**

- A. Water shall be the responsibility of Contractor, unless otherwise noted. Water shall not contain elements toxic to plant life.
- B. Use of a broadcast spreader for spreading seed capable of uniformly distributing the material at the Manufacturer's specified rate for that product.
- C. Hydromulch from Cellulose, Wood, or Straw Fiber—Cellulose fiber produced from virgin wood, straw, or paper fiber product from the QPL. Furnish wood or straw mulch processed so the fibers remain uniformly suspended under agitation in water and the fibers have moisture absorption and percolation properties. Ship hydromulch in packages of uniform weight,  $\pm$  5 percent, and labeled with the manufacturer's name and air-dry weight. Include enough green dye tracer so applied mulch is easily visible.

**2.04 Pesticides**

- A. Submit proposed pesticides and receive approval before using.
- B. Submit a copy of the manufacturer's federal registered label and, if requested, a Material Safety Data Sheet.
- C. The NPT reserves the right to restrict chemicals from being used on sensitive areas.



## **Part 3 Execution**

### **3.01 Date of Seeding**

- A. Areas disturbed by construction will be seeded at the end of the project prior to the onset of cold weather. Contracting Officer shall approve seeding dates.
- B. Seeding dates shall be selected to maximize growth. Seeding shall only be completed from August 15 until December 1, preferably between October and November, or as directed by the Contracting Officer.

### **3.02 Seedbed Preparation and Treatment**

- A. Areas to be treated shall be dressed to a smooth, firm surface. On sites where equipment can operate on slopes safely, the seedbed shall be adequately loosened (4 to 6 inches deep) and smoothed. Where equipment cannot operate safely, the seedbed shall be prepared by hand methods by scarifying to provide a roughened soil surface so that broadcast seed will remain in place.
- B. If seeding is to be accomplished immediately following construction operations, seedbed preparation may not be required, as approved by the Contracting Officer, except on a compacted, polished, or freshly cut soil surface.
- C. Seedbed preparation shall be discontinued when soil moisture conditions are not suitable for the preparation of a satisfactory seedbed as determined by the Contracting Officer.

### **3.03 Seeding, Mulching and Stabilizing**

- A. All seeding operations shall be performed in such a manner that the seed is applied in the specified quantities uniformly in the designated areas. Unless otherwise specified, seeding shall be accomplished within two days after final grading is completed and approved.
- B. Long-fibered mulch (wood and/or straw) with an appropriate tackifier to form a bonded fiber matrix applied at a rate of 3,000 pounds/acre is preferred.
- C. Seeding shall not commence until Contracting Officer has accepted the condition of the prepared areas.
- D. Seeding operations shall not be permitted when wind velocities exceed 15 miles per hour.
- E. Seed shall be sown only when the soil is moist and in proper condition to induce growth. No seeding shall be done when the ground is unduly wet, or otherwise not in a tillable condition.

### **3.04 Acceptance**

- A. Contractor retains all ownership and responsibility for seeding until written acceptance by Contracting Officer. Contracting Officer will accept the seeding when:
  - 1. The application or installation is complete;
  - 2. Documentation is complete;
  - 3. Verification of the adequacy of all repairs, including associated vegetation, is complete; and
  - 4. The required written seed certification documents have been received by Contracting Officer.

**END OF SECTION**

## **SECTION 620 PLANTING**

### **Part 1 General**

#### **1.01 Scope**

- A. Work in this section consists of furnishing all labor and equipment to store, provide care for construct trenches and plant shrub cuttings as noted on the Drawings. Any substantive variance to this specification due to unforeseen conditions encountered on the site, weather conditions, plant availability, other construction activities, etc. must be approved by Contracting Officer.
- B. Nothing in this Section shall relieve the Contractor from full responsibility for the adequacy of protective works and compliance with permit requirements. All work shall be approved by the Contracting Officer prior to commencement of work.

#### **1.03 Delivery Inspection, Storage and Handling**

- A. The Contractor shall provide all planting equipment, hand tools, bags, and other necessary tools to perform planting and quality control. Heavy equipment utilized will be subject to an inspection prior to entry to the project site to ensure that it is clean and free of noxious weed seeds. Hand planting tools shall be long enough and wide enough to accommodate planting the specified size of native plants in a satisfactory manner. Planting bags shall be deep enough and in a condition to provide for the care and protection of the native plants.
- B. The care and protection of native plants during the periods of transportation, handling and planting is extremely important. Care shall be taken to adhere to the following requirements any time trees and/or shrubs are in the Contractor's possession. Noncompliance with these requirements may be grounds for termination of the contract.
  - 1. Native plants shall be protected from drying, heating, smothering, freezing, crushing, bending, drowning, abrasion, rapid temperature fluctuations, or contact with injurious substances.
  - 2. Contractor shall take precautions to keep roots and/or stems moist during the planting operation and throughout the period that plants are stored on-site. Shipping containers containing native plants shall be opened only in full shade and shall not be exposed to direct sunlight.
  - 3. Native plants that are frozen shall not be handled until completely thawed. They shall be thawed in accordance with direction from the Contracting Officer.
  - 4. Native plants carried in trailers and/or planting bags shall not exceed the amount that can be carried and removed without injury, or which can be planted before critical heating or drying occur.
  - 5. When weather or unsuitable planting conditions prevent the contractor from planting the native plants promptly after receipt, the Contractor shall store the native plants in a manner that will ensure their survival. The Contractor shall install plants within one week of delivery to the project site unless written approval is granted by the Contracting Officer.
- C. Contractor shall coordinate the delivery schedule with the Contracting Officer.
- D. Plants will be inspected on-site by a NPT representative and possibly rejected for not meeting specification must be removed immediately from site or red-tagged and removed as soon as possible.

#### **1.04 Payment**

- A. Payment will be made at the Bid Schedule total bid amount for the item "Planting."
- B. No field measurement of material placement quantities will be conducted during construction.
- C. Includes costs associated with all labor, materials, equipment and permits required to perform scope.

### **Part 2 Products**

#### **2.01 Incidentals**

- A. Standard, incidental materials, products and equipment required to perform scope.

#### **2.02 Plant Materials**

- A. Plants shall be native plants purchased from a Wildlife Habitat Nursery meeting species and size as indicated on the Drawings.
- B. Plants shall be true to species and variety or subspecies. No cultivars or named varieties shall be used.
- C. Plant species and size shall conform to those listed in the Drawings or otherwise approved by the contracting officer.
- D. Live Stakes:
  - 1. Cutting stock shall be gathered during the dormant period and installed within 7 calendar days of harvest or as authorized by the contracting officer. Cuttings shall not be gathered if temperatures are below 32°F (0°C).
  - 2. Cuttings shall be protected from sun, wind, freezing, drying or injury before and during planting. Cuttings shall be stored upright in water immediately after harvesting up until they are installed. Stored material shall be examined frequently for signs of disease and planted before dormant bud development.
  - 3. Cuttings shall be a minimum of 24 inches long (as specified in the plant lists) making the bottom cut slanted and below a dormant bud, and the top cut straight, ½ to 1 inch above a dormant bud. The diameter of pieces reserved for planting shall not be less than 1/2 inch thick.
  - 4. Cuttings shall be installed such that stems intercept groundwater during low-water periods.
- E. Deciduous Trees
  - 1. Plants shall be of typical form for the specified species. Height of branching shall bear a relationship to the size and species of tree specified and with the crown in good balance with the trunk. The trees shall not be "poled" or the leader removed.

### **Part 3 Execution**

#### **3.01 Planting Time and Conditions**

- A. Deciduous plant material shall be installed from October 15 to November 30.
- B. Cutting plant material shall be gathered and installed from October 15 to November 30.

- C. When drought, excessive moisture, frozen ground, expected freezing air temperatures or other unsatisfactory conditions prevail, planting installation shall be discontinued or as otherwise directed by the contracting officer.

### **3.02 Planting**

- A. Plant layout shall be done as indicated on the Drawings and as guided by the Contracting Officer.
- B. When obstructions below ground affect the work, Contractor shall propose adjustments to plant material location, type of plant and planting method for review and approval by the Owner's Representative.
- C. Materials excavated shall be stockpiled on the side of the trench away from the stream. Trenches shall be backfilled by hand to minimize root/stem damage and to limit air pockets near the roots.
- D. All plant material shall be set plumb and held in position until sufficient soil has been firmly placed around root system or ball. The base of the plant shall be level with the surrounding ground.

### **3.03 Maintenance and Irrigation/Watering**

- A. Plant material installed in the initial phase of planting shall be maintained in a healthy growing condition during installation. Installed plants shall be maintained to foster establishment and growth. The maintenance includes watering and adjusting plant position to counteract settling.
- B. At least one site visit should occur within two weeks of planting to make any adjustments to plant material. Additional visits may be required for watering and plant replacement.
- C. When settling occurs to the backfill soil mixture, additional backfill soil shall be added to the plant pit or plant bed until the backfill level is equal to the surrounding grade. Serious settling that affects the setting of the plant in relation to the maximum depth at which it was grown requires replanting.

**END OF SECTION**

