

## **BIG THORNE STEWARDSHIP**

Thorne Bay Ranger District  
Tongass National Forest  
Improve Fish Passage/Road  
Maintenance

### **PROJECT SCOPE**

The purpose of this work is to maintain National Forest System Roads and improve fish passage.

The work includes, but is not limited to, the removal of existing culverts, installation of new culverts and bridges, and finish grading of the roadway at these sites.

1. Provide & install 73" x 55" x 34' corrugated metal arch pipe @ MP 0.283 and 73" x 55" x 40' corrugated metal arch pipe @ MP 0.586, road 3012000. This work will include but is not limited to: (1) dewatering of work site, if necessary, is incidental to installation (2) removal and disposal of existing 24" culvert (3) provide erosion control measures during construction (4) survey staking (5) install 73" x 55" corrugated metal arch pipe to alignment and grade as shown on plans, haul of 6" minus and crushed rock is incidental to installation (6) place 6" lift of crushed rock on disturbed roadway, construction tolerance class C, compaction method B, finish grading and rolling is incidental to installation (7) reseed cleared area with grasses after construction (8) end haul of unsuitable material, (9) and mobilization of equipment to perform the work.
2. Furnish and install 40' glulam slab bridge @ MP 0.739, road 3015000. This work will include but is not limited to: (1) dewatering of work site, if necessary, is incidental to installation (2) removal and disposal of existing 48" culvert (3) provide erosion control measures during construction (4) survey staking (5) install 40' glulam slab bridge and approach rails as shown on plans (6) place 6" lift of crushed rock on disturbed roadway, construction tolerance class C, compaction method B, finish grading and rolling is incidental to installation (7) reseed cleared area with grasses after construction (8) end haul of unsuitable and excess material, (9) and mobilization of equipment to perform the work.
3. Furnish and install 50' modular bridge @ MP 0.05, road 3030000. This work will include but is not limited to: (1) dewatering of work site, if necessary, is incidental to installation (2) removal and disposal of existing 8.5' x 11.5' culvert (3) provide erosion control measures during construction (4) survey staking (5) install 50' modular bridge and approach rails as shown on plans (6) place 6" lift of crushed rock on disturbed roadway, construction tolerance class C, compaction method B, finish grading and rolling is incidental to installation (7) reseed cleared area with grasses after construction (8) end haul of unsuitable and excess material, (9) and mobilization of equipment to perform the work.
4. Furnish and install 50' steel modular bridge @ MP 28.05, road 3000. This work will include but not limited to: (1) remove and dispose of existing 60"Ø metal culvert (2) remove 20' wooden slab bridge and store in Thorne Bay (3) install substructure and superstructure of modular bridge with steel guard rail (4) cap shotrock approaches with 6" of crushed rock (5)

install riprap stream bank protection (6) install approach guard rail on both ends of the bridge with warning signs (7) open original streambed up to minimum dimensions as shown on plans (8) realign new road as shown on plans, (9) and mobilization of equipment to perform the work.

5. The realignment of NFSR 3000000 at milepost 39.38. Specific work contained within the project scope will include, but is not limited to, the following:

- i. The obliteration and stockpiling of approximately 550' of existing roadbed.
- ii. The removal and disposal of an existing 48"x54' long corrugated metal pipe.
- iii. The construction of approximately 750' of new roadway alignment.
- iv. The installation of a 40' glue-laminated slab bridge.
- v. Mobilization of equipment to perform the work.

Metal and other manufactured products excavated will become the property of the contractor and disposed of by removing from Government-administered lands and properly disposing of. Included are metal culverts removed.

The intent of this contract is to provide for the complete construction of the project described in the contract. Unless otherwise provided, the Contractor shall furnish all labor, materials, equipment, tools, transportation, and supplies and perform all work required to complete the project in accordance with drawings, specifications, and provisions of the contract.

# PART I - SCHEDULE OF ITEMS

## SECTION B BIG THORNE STEWARDSHIP

Thorne Bay Ranger District

Tongass National Forest

### RD 3012, MP 0.283 & MP 0.586

Pay Item	Item Description	Estimated Quantity	Pay Unit
1.15101	Mobilization	1	Lump Sum
1.15702	Silt Fence	50	Lineal Foot
1.15204	Drainage structure survey and staking	2	Each
1.20352	Removal of culverts	2	Each
1.20429	End haul	85	Cubic Yard
1.30113	Aggregate surface course, government furnished, Type 3/4", compaction method B	98	Cubic Yard
1.20404	Unclassified borrow - cat finish, compaction D, finish method C	96	Cubic Yard
1.30103	Aggregate base, government furnished, Type 6" minus	9	Cubic Yard
1.6020173_1	Furnish and Install 73" x 55" corrugated metal pipe arch, method (C), 5 x 1" corrugations	1	Lump Sum
1.6020173_2	Furnish and Install 73" x 55" corrugated metal pipe arch, method (C), 5 x 1" corrugations	1	Lump Sum
1.62501	Seeding, dry method (without mulch)	1	Acre

**RD 3015, MP 0.793**

Pay Item	Item Description	Estimated Quantity	Pay Unit
2.15101	Mobilization	1	Lump Sum
2.15702	Silt Fence	25	Lineal Foot
2.15204	Drainage structure survey and staking	1	Each
2.20352	Removal of culverts	1	Each
2.20401	Excavation, Placement method 1	210	Cubic yard
2.20429	End haul	12	Cubic Yard
2.25101	Placed riprap, class 3, method A	26	Cubic Yard
2.30113	Aggregate surface course, government furnished, Type 3/4", compaction method B	10	Cubic Yard
2.57103	Prefabricated glulam slab bridge superstructure-design, approach rails and object markers, fabricate, deliver and install	1	Lump Sum
2.62501	Seeding, dry method (without mulch)	0.50	Acre

**RD 3030, MP 0.05**

Pay Item	Item Description	Estimated Quantity	Pay Unit
3.15101	Mobilization	1	Lump Sum
3.15702	Silt Fence	40	Lineal Foot
3.15204	Drainage structure survey and staking	1	Each
3.20352	Removal of culverts	1	Each
3.20401	Excavation, Placement method 1	485	Cubic yard
3.25101	Placed riprap, class 3, method A	42	Cubic Yard
3.30113	Aggregate surface course, government furnished, Type 3/4", compaction method B	18	Cubic Yard
3.57103	Furnish and Install 50' Modular Bridge, MP 0.05 Road 3030000	50	Lineal Foot
3.62501	Seeding, dry method (without mulch)	0.50	Acre

**SANDY BEACH ROAD BRIDGE REPLACEMENT**

Pay Item	Item Description	Estimated Quantity	Pay Unit
4.57101	Install 50' Steel Modular Bridge and Accompanying Road Work Road 3000, MP 28.05	1	Lump Sum
4.15101	Mobilization	1	Lump Sum

**NFSR 3000 MP 39.38**

Pay Item	Item Description	Estimated Quantity	Pay Unit
5.15201	Construction survey and Staking	1	Lump Sum
5.15701	Soil Erosion Control	1	Lump Sum
5.20101	Clearing and Grubbing	0.60	Acre
5.20304	Removal and Disposal of existing 48" x 54' Long Culvert	1	Lump Sum
5.20406	Roadway Excavation for Proposed Alignment	250	Cubic Yard
5.20410a	Roadway Embankment Construction, Subgrade, Compaction Method 'A', Finish Method 'A', Tolerance Class 'C'	1,650	Cubic Yard
5.20410b	Roadway Embankment Construction, Surface Course, Compaction Method 'A', Finish Method 'A', Tolerance Class 'C'	350	Cubic Yard
5.20410c	Bridge Embankment Construction, Subgrade, Compaction Method 'B', Finish Method 'A', Tolerance Class 'C'	60	Cubic Yard
5.20410d	Bridge Embankment Construction, Leveling Course, Compaction Method 'B', Finish Method 'A', Tolerance Class 'C'	10	Cubic Yard
5.20701	Earthwork Geotextile Type IV	1	Lump Sum
5.21101	Roadway Obliteration	1	Lump Sum
5.25101	Placed riprap, class 4, method A	34	Cubic Yard
5.57103	Prefabricated Glulam Slab Superstructure & Substructure, Approach Rails and Object Markers - Fabricate, Deliver, and Install	1	Lump Sum
5.63358	Installation of (2) Single Lane Bridge Warning Signs - Type W5-3	1	Lump Sum
5.15101	Mobilization	1	Lump Sum

## **SECTION H – SPECIAL CONTRACT REQUIREMENTS**

### **H.1 AGAR 452.236-73 ARCHAEOLOGICAL OR HISTORIC SITES (FEB. 1988)**

If a previously unidentified archaeological or historic site(s) is encountered, the Contractor shall discontinue work in the general area of the site(s) and notify the Contracting Officer immediately.

### **H. 2 ORDER OF PRECEDENCE - REQUIREMENTS, SPECIFICATIONS, DRAWINGS**

Resolve any inconsistencies in the Specifications of this solicitation and any resultant contract by giving precedence in the following order:

- (a) The Schedule ( Includes Section H)
- (b) Drawings
  1. Drawings, figured dimensions over scaled dimensions
  2. Drawings, large scale contract drawings over small scale contract drawings
  3. Schedules on contract drawings over any conflicting notations on contract drawings.
  4. Shop Drawings - (The term "Shop Drawings", includes drawings, diagrams, layouts, schematics, descriptive literature, illustrations, schedules, performance and test data, and similar materials furnished by the Contractor to explain in detail specific portions of the work required by the contract.)
- (c) Special Project Specifications (Latest date highest precedence)
  1. Tongass NF. Special Project Specifications
  2. Region 10 Special Project Specifications
- (d) Standard Specifications

### **H. 3 LANDSCAPE PRESERVATION**

- (a) Confine operations to within the clearing limits or other areas designated in contract documents, and prevent the depositing of rocks, excavated materials, stumps, or other debris outside of these limits. Unless otherwise agreed to by the CO, retrieve material which falls outside of these limits and either incorporate the material in the work or dispose of the material as directed by the CO.

- (b) Schedule and conduct operations to minimize erosion of soils and to prevent silting and muddying of streams, rivers, irrigation systems, and impoundments (lakes, reservoirs, etc.). Install silt fencing around areas immediately next to streams and ponds to mitigate suspended sediments when designated on the drawings.

Do not discharge pollutants such as raw sewage, and other harmful materials into or near rivers, streams, and impoundments or into natural or manmade channels leading thereto. Do not allow wash water or waste water from concrete or aggregate operations to enter live streams prior to treatment by filtration, settling, or other means sufficient to reduce the sediment content to not more than that of the stream into which it is discharged.

Collect and return waste motor oils, fuels, lubricants, bitumens and similar hydrocarbons to the supplier. Comply with the requirements of 40 CFR 279, Standards for the Management of Used Oil. Do not discharge hydrocarbon products on the ground, use them for road oiling, or bury them in a landfill.

Do not operate mechanized equipment in live streams without written approval of the Contracting Officer.

- (c) CREEK CROSSINGS: Schedule and conduct bridge and instream work to minimize disturbance to streams.

1. Do not cross streams without Contracting Officer approval.
2. Submit a written equipment crossing plan to the Contracting Officer for approval 14 calendar days before creek crossing is planned. See fish timing periods for approved stream work periods. Outside of this time period, no machine crossings will be permitted if fish eggs are present in the gravel or adult fish are present in the stream; otherwise two machine crossings will be permitted.
3. In stream work will only be allowed with the following schedule. Other timing must be requested from the CO.

Road	MP	Work Window
3012000	0.283	June 15 – Sept 1*
3012000	0.586	June 15 – Sept 1*
3015000	0.739	June 15 – Sept 1*
3030000	0.05	June 15 – Sept 1*
3000000	39.38	June 15 – Sept 1*

\*The work window is subject to Title 16 Concurrence. Actual work window dates may vary. Work may not proceed until concurrence has been granted.

Obtain necessary permits for floating camps, floats, shore ramps, and other appurtenances associated with project operations from the following State of Alaska and Federal Agencies:

1. ADNR - Alaska Department of Natural Resources.
2. ADEC - Alaska Department of Environmental Conservation.
3. ADGC – Alaska Department of Governmental Coordination.
4. EPA – US Environmental Protection Agency.
5. DA, COE – US Army Corps of Engineers.
6. USCG – US Coast Guard.

#### **H. 4 USE OF PREMISES**

- (a) Obtain written approval from the Contracting Officer before opening or operating on National Forest land or lands administered by the Forest Service any camp, quarry, borrow pit, storage area, detour, or bypass site, other than SHOWN ON THE DRAWINGS. A camp is interpreted to include the camp site or trailer parking area of any employee working on the project for the Contractor. Such approval, if granted, will be without charge to the Contractor.
- (b) Sanitation Facilities: Provide and maintain the following facilities for the work force at the camp, unless provided otherwise.
  1. Meet State of Alaska drinking water regulations 18 AAC 80 regarding potable water supplies for drinking, washing and cooking.
  2. Comply with State of Alaska wastewater disposal regulations 18 AAC 72 for domestic sewage.
  3. Ensure that the design, operation, and maintenance of all solid waste systems under Forest Service jurisdiction meet all Federal, State, and local requirements. Meet State of Alaska solid waste management regulations (18 AAC 60) and Federal regulations contained in 40 CFR 243, 40 CFR 245, 40 CFR 257, and 40 CFR 258. Remove solid wastes and/or residues and dispose of in approved commercial landfills.
  4. Meet the requirements of 40 CFR 112 (Oil Pollution Prevention) for fuel storage. Meet the requirements of 33 CFR 150 and 33 CFR 154 for facilities transferring oil or hazardous materials in bulk.
- (c) Do not begin any camp development, either land based or floating, until a plan for development, occupation, and cleanup is submitted and approved by the Contracting Officer. Include the following information on this plan:

1. Location and size of the proposed camp development, including a map.
2. Wastewater system.
3. Number of people who will use the site and proposed dates of occupancy.
4. Power supply system.
5. Water supply system.
6. Building layout, shop area, living quarters.
7. Road and trail layout.
8. Clearing limits and slash disposal locations.
9. Borrow areas.
10. Dock and access location.
11. Equipment and fuel storage area and Spill Prevention Control and Countermeasure (SPCC) plan.
12. Incinerator location and ash disposal plan.

Forest Service will review plan as submitted for completeness and applicability. Proposed modifications of Contractor's plans will be discussed with the Contractor prior to approval. Any modifications agreed upon will be incorporated in a revised set of plans.

#### **H. 5 CONTRACTOR'S USE AND MAINTENANCE OF EXISTING ROADS**

The Contractor is authorized to use roads in the immediate construction project area for performance of work under this contract. Such roads are those which are necessary for direct access to designated borrow sites, quarries, stockpile sites, waste areas, campsites, equipment unloading ramps, and other approved work areas. The roads authorized for use will be subject to the following general conditions:

- (a) Federal Regulations contained in 36 CFR 261.12; except vehicle weight will not exceed that of AASHTO HS20-44 and/or U80 Loading. Submit written requests to the CO for approval to use L90 and U102 overload Loadings on roads authorized for use. Regulations prohibit damaging a road or blocking a road open to use by others, except as otherwise provided in Special Project Specification 104.
- (b) The Government will not snowplow roads for the Contractor's use. The Contractor may snowplow any road designated for his use. A permit defining snowplowing requirements is required and will be issued by the District Ranger, upon request by the Contractor. Repair any damage to the road structure caused by snow removal operations. Vehicles, other than conventional over-the-snow vehicles (snowmobiles), will not be permitted to use roads when there is an average of more than 4" of snow unless the road has been snowplowed.

The Contractor is responsible for and will perform road maintenance on Forest Service roads in the construction area commensurate with his use. Perform road maintenance at such intervals that prevent deterioration of the roadway, or as directed by the Contracting Officer.

## **H. 6 ROAD MAINTENANCE REQUIREMENTS**

Perform road maintenance work on the required roads in accordance with the following:

- (a) Maintain existing roadbed by blading and shaping the traveled way and shoulders. Do not undercut banks. Maintain established drainage structures and/or berms, and place additional drainage structures/berms where necessary to protect embankments.
- (b) Perform all seasonal weather cleanup, including removal of bank sloughs, minor slides and fallen timber, which can be accomplished by a motor patrol grader equipped with a front end blade, or comparable equipment, and by the use of hand tools. Replace material eroded from fill slopes and clean out drainage ditches and culverts subject to the above equipment limitations.

Deposit the material removed from slides or other sources in locations approved by the Contracting Officer.

## **H. 7 EMERGENCY CONTROL**

- (a) Immediately extinguish without expense to the Government all fires on or in the vicinity of the project which are caused by the Contractor's employees, whether set directly or indirectly as a result of construction operations, with or without direction by the Forest Service. The Contractor may be held liable for all damages and costs of additional labor, subsistence, equipment, supplies, and transportation deemed necessary by the Government resulting from fires set or caused by Contractor's employees or resulting from construction operations.
- (b) Contractor's Responsibility for Controlling Other Emergencies - When requested by the Contracting Officer, allow the Forest Service to temporarily use employees and equipment for emergency control work. Payment will be made at not less than the current area rate established by the Forest Service.
- (c) Fire fighting equipment will be required during the fire season from May 10 to August 31, and during any other period of fire danger designated by the Contracting Officer.

Furnish rust-free fire tools to equip all workers employed in Contractor's operations at each separate work site. Maintain tools in serviceable condition and keep tools in one or more weather-tight fire tools boxes. Paint fire tools boxes red, mark "tools for Fire Only" with letters at least 3" high, and keep sealed. Post a list of the contents inside each fire tool box so as to be visible when opened.

Kind of Tool	No. of People Working in Area			
	<u>1-4</u>	<u>5-9</u>	<u>10-15</u>	<u>16-20</u>
Axe, d.b chopping, 32-inch min. handle	1	1	2	3
Shovels, L.H. R.P., No. 0 or larger	1	3	6	7
Pulaski, 32-inch min. handle	2	3	7	10
File, 10-inch mill bastard	1	1	1	2
Pumps, backpack cans, 5-gal filled with water	1	2	2	3

Equip each internal combustion engine with a spark arrester qualified and rated USDA-Forest Service, Standard 5100-1, unless it is:

- (a) Equipped with a turbine-driven exhaust supercharger such as the turbocharger. There shall be no exhaust bypass.
- (b) A multi-position engine, such as on a chain saw, which is equipped with screen arrester, as described in the Forest Service Spark Arrester guide.

A spark arrester, which does not meet the requirements in this guide may be approved upon submission of acceptable proof that the arrester is at least 80 percent efficient in retention, attrition, or destruction of carbon particles. Such arrester may be required to meet higher standards as improvements in design and efficiency are discovered.

- (c) A passenger-carrying vehicle or light truck intended primarily for use on roads, and equipped with a factory designed muffler and exhaust system.
- (d) A heavy duty truck, such as a dump or log truck, or other vehicle used for commercial hauling, used only on roads and equipped with a factory designed muffler and with a vertical stack exhaust system extending above the cab.

Properly install and constantly maintain in serviceable condition all exhaust equipment described in this Subsection, including spark arresters and mufflers.

Equip each unit of mobile or stationary power equipment, including trucks, with one shovel, and at least one fire extinguisher meeting one of the following specifications:

1. 2-1/2 pound size or larger dry chemical type.
2. 4-pound size or larger carbon dioxide type.

Test or check each extinguisher for proper functioning prior to the beginning of fire precautionary period.

Provide each gasoline power saw with one chemical-pressurized fire extinguisher of not less than 8-ounce capacity by weight. Maintain the extinguisher in good working order at all times.

Do not burn camp refuse, brush, slash, or debris such as that resulting from clearing around camps or on rights-of-way, without the written approval of the Contracting Officer. Submit written requests for burning to the Contracting Officer at least 48 hours in advance of intended burning. The Contracting Officer will approve routine camp refuse disposal incineration in the camp development proposal.

## **H. 8 CONSTRUCTION STAKES, LINES, AND GRADES**

Contractor's Responsibilities: {Roads }

Perform all construction staking in accordance with the requirements of Section 152 except for the following item(s):

The Government will mark the clearing limits around rock borrow sources on National Forest Land.

Contractor's Responsibilities: {Roads }

Perform all construction staking and grade establishment, except for the following item(s):

The Government will provide initial centerline and reference controls to establish road alignment and timber structures. Additional staking required by, and installed by, the Contractor will be incidental to the construction of the pay item.

## **H. 9 PROSECUTION OF WORK**

Areas of weak ground are crossed on this project. The initial embankment depth shall be as SHOWN ON THE DRAWINGS or determined by the Contracting Officer. Reestablish design centerline grade and alignment in accordance with Section 152 as construction progresses, and prior to the placement of borrow excavation. Reestablished design grades may be re-staked by the Contracting Officer to meet local conditions. Final grades may be at elevations other than those SHOWN ON THE DRAWINGS, but in no instance will they be lower than that of the surrounding ground elevations. When directed by the CO, return to previously constructed road or trail embankments and place additional borrow material where subsidence has occurred as a result of construction traffic displacing unstable or weak soil underlying the roadway.

Linear Grading reflects estimated borrow excavation volumes, based on previous designs including additional material for anticipated subsidence. The estimated quantities may vary locally depending on extent of subsidence or the condition of the existing road (ground for trail). Payment for additional material placed in areas of subsidence is included in the appropriate Borrow Excavation pay item in the Schedule of Items.

## **H. 10 DISPOSAL OF MERCHANTABLE TIMBER**

All timber meeting Forest Service merchantability standards logged during prosecution of this contract, remains the property of the Government. Deck logs in the immediate vicinity in accordance with Section 201 of the specifications.

Buck trees in various lengths to obtain the greatest utilization of material meeting the following utilization standards. The Minimum merchantable piece shall be 6” in diameter inside bark at small end, 12 feet in length, have a net scale of 33 1/3 percent of its gross scale for a sawlog or produce not less than 50 percent of its gross volume in firm usable pulp chips.

Trim allowance shall be a maximum of 12” for log lengths up to 40 foot. An additional 2” of trim shall be allowed for each 10 foot of log length over 40 foot.

Use humbolt undercut in felling merchantable timber. Buck all limbs flush with merchantable logs.

All dead trees which are sufficiently tall to reach the roadbed are designated for cutting. Fell other fire-dangerous dead trees or unstable live trees within 200 foot slope distance of the center line of the road, when marked by the Forest Service. Treat all timber under this subsection meeting utilization standards in accordance with Specification 201 Subsection 201.04, unless relieved in writing.

Cut and use timber designated by the Contracting Officer for construction, without charge.

## **H. 11 POTENTIAL LOCAL MATERIAL SOURCES**

Designated rock sources for this project are listed as follows:

Road 3012000, MP 0.79

Road 3015000, MP 0.1

Road 3000000, MP 41.68

Road 3000000, MP 43.98

Submit a development plan to the CO for approval prior to commencing any development activities.

## **H. 12 EQUIPMENT CLEANING**

Equipment cleaning is required under this contract. See FSSS Section 171.