

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT				1. CONTRACT ID CODE	PAGE 1 OF PAGES 1
2. AMENDMENT/MODIFICATION NO. Amendment 0001		3. EFFECTIVE DATE 06/18/2015	4. REQUISITION/PURCHASE REQ. NO. n/a	5. PROJECT NO. (If applicable)	
6. ISSUED BY Department of Transportation Federal Highway Administration - WFLHD 610 East Fifth Street Vancouver, WA 98661		CODE	7. ADMINISTERED BY (If other than Item 6)		CODE
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)			(✓)	9A. AMENDMENT OF SOLICITATION NO. DTFH7015Q00039	
			✓	9B. DATED (SEE ITEM 11) 06/08/2015	
				10A. MODIFICATION OF CONTRACT/ORDER NO.	
				10B. DATED (SEE ITEM 13)	
CODE		FACILITY CODE			

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers is extended, is not extended.

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods:

(a) By completing Items 8 and 15, and returning 1 copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)

N/A

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

(✓)	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
	D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor is not, is required to sign this document and return _____ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

Amendment 0001 Makes Changes to SOW and the Table of Boring

This modification removes language about Test Pits, excavator requirement, and access using a skid rig. See attached pages for changed requirements. Changes are indicated in red, and slashed through text.

The RFQ is extended until 06/24/2015, 12:00 PM Pacific Time

In consideration of the modification agreed to herein as complete equitable adjustments for the changes detailed herein, the contractor hereby releases the government from any and all liability under this contract attributable to the facts or circumstances giving rise to, arising from, or relating to, this modification.

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)	
		N/A	
15B. CONTRACTOR/OFFEROR	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA	16C. DATE SIGNED
(Signature of person authorized to sign)		BY (Signature of Contracting Officer)	

Statement of Work

MT Sweetgrass 210(1) Main Boulder Road

2015 Geotechnical Investigation Plan

I. INTRODUCTION

A. Project Summary

The Western Federal Lands Highway Division (WFLHD) of the Federal Highway Administration is conducting a geotechnical subsurface investigation at several sites along the Main Boulder River Road southwest of Big Timber, Montana. There is a total of 26 borings and approximately 683 feet of drilling. Boring depths range from a minimum of 4 to an estimated maximum of 100 feet. It is anticipated that drilling methods will include hollow stem augers, casing advancer, and coring, ~~and test pits~~. Borings are located off-road and on the existing road. It is anticipated that a truck-mounted drill and portable drill and/or skid drill may be required to access the boring locations.

B. Project Location

The project is shown on the attached vicinity map. The general locations for drilling include:

- 1) Subgrade borings spaced at approximate 0.5 mile intervals the length of the 6.7 mile long project.
- 2) Bridge foundation investigation borings at two bridge replacement sites, Two Mile Creek Bridge and Miller Creek Bridge.
- 3) Culvert foundation investigation and Blakley Creek.
- 4) Beaver Pond and other wall foundation investigation for grade raise
- 5) Chippy Hill and other slope cuts for moderation of steep grade. Drilling may be required on slopes as steep as approximately 1V:1H and approximately 30 feet above the existing dirt road.

The project is located in Gallatin National Forest in Park and Sweet Grass counties.

II. SCOPE OF WORK FOR DRILLING

All boring locations contained within this statement of work are shown on the attached Table of Borings. Boring locations are also provided on the attached Boring Location maps. All borings

will be marked in the field with stakes or 4-foot lath with flagging and offsets if needed prior to contractor drilling start date.

Contractor shall provide a truck-mounted drill rig, portable drill rig, ~~an excavator,~~ and if necessary a skid drill to complete the work. Provide additional drill rigs as necessary to perform the specified work. The anticipated drill type is listed on the Table of Borings based on FHWA's interpretation of the most practical means to access the Boring location. The selection of drill type for each boring is up to the drill contractor, based on the conditions encountered in the field. The drill contractor will supply all necessary equipment to drill all planned borings. Equipment shall include an 8-inch OD hollow stem auger system, standard SPT (2 inch), 2.5 inch and 3 inch split spoon (oversized) samplers, thin wall (Shelby) tube samplers (minimum 3 inch diameter by minimum 2 feet long), and HQ or NQ wireline core drilling system. NQ wireline core system will only be allowed for portable rigs, HQ is the preferred method of coring for all rig types. Contractor will not, in selection process, be evaluated on drilling system. A casing advancer system may be used where necessary to advance the boring through coarse material. Furnish core boxes and wood separator blocks.

All borings will be drilled in accordance with this Statement of Work (SOW). Advance holes using the drilling methods listed on the Table of Borings and collect samples at the intervals provided. Drill holes to the *Estimated Total Depth* indicated on the attached Table of Borings, or a minimum of 20 feet into competent bedrock if encountered prior to the *Estimated Total Depth*. Do not terminate holes below the *Possible Minimum Depth* listed. Additional depth may be required as directed by the drill inspector or COR up to the *Possible Maximum Depth* listed. The total cumulative depths of drilling under this contract will be no less than the sum total of *Possible Minimum Depths* and no greater than the sum total of *Possible Maximum Depths* indicated in the Table of Borings.

Collect drive samples using the standard SPT sampler unless otherwise directed by the drill inspector or COR. Use 2.5 inch and/or 3 inch samplers in gravelly material where sample recovery with the standard SPT sampler is poor. Replace the driving shoe on the split barrel samplers if it becomes dented or distorted or has excessive wear. Use split barrel samplers with a ball check and vent. Furnish metal or plastic sample catchers in the split barrel samplers.

Collect Shelby tube samples as indicated or where a soft layer is encountered. Additional Shelby tube samples may also be required as directed by the drill inspector or by the COR. The total number of samples under this contract will be no greater than the sum total of all possible samples indicated on the attached Table of Borings.

When coring or augering in rock, if the material is characterized as highly weathered, weak rock, take SPT samples to get some idea of how strong the rock is.

A. Access - Subgrade borings

A total of 13 borings will be primarily for subgrade characterization and will range from 4 to 15 feet in depth with the deeper borings for material characterization. These borings will be accessible along the dirt road with a truck-mounted drill. All test boring locations are shown on the attached Boring Location Maps. Final locations may deviate up to 100 feet from the planned

location depending on surface conditions at the time of drilling. Approximate GPS coordinates are provided in the Table of Borings.

B. Access – Retaining Wall and Culvert Borings

A total of 5 retaining wall and 1 culvert drill holes are required at potential wall/culvert locations along the downslope edge of the roadway. All drill locations are shown on the attached Boring Location Maps. GPS coordinates are provided in the Table of Borings. Use a truck-mounted drill to access the boring locations specified. The hole locations can be accessed within the existing road surface. No off road access will be needed. Refer to the comments in the Table of Borings and the Boring Location Maps for more site specific information.

C. Access – Chippy Hill Grade Moderation

Drill one 40-foot deep boring on an existing talus slope up to approximately 1V:1H at a height up to approximately 30 feet above the roadway (boring MB15-11 at road station 1868+50). Construct bench or other platform to safely support the drill equipment, crew, and engineer/geologist. It is anticipated that this location will require a portable drill and boom truck or crane to place the drill in position. Construction of a temporary roadway up to the bench will not be allowed. A water truck or tank will be required for coring.

D. Access – Two Mile Bridge Site

A total of 4 drill holes are required, two at each abutment. The planned abutment locations are on steep gravelly alluvial slopes with cobbles and boulders. A portable drill and boom truck or crane will be required to place the drill at the planned boring locations. Since a water truck or tank will be needed at other sites, the same means for supplying water for the drill can be used at this bridge site. It is unknown if water can be drawn from the Main Boulder River with or without a permit and therefore the contractors responsibility to complete due diligence for any permit requirements. The borings at the Eastern abutment are behind a fence belonging to the Double Diamond Ranch, see Figure 1. Sections of the fence may need to be removed to access the two boring locations. If the sections of the fence need to be removed, they will need to be repaired after the borings are completed.

E. Access – Miller Creek Bridge Site

A total of two drill holes are required, one at or near each abutment. The stream, a tributary to Boulder River, flows intermittently so a water truck/tank will be required. The new bridge will be just downstream from the existing bridge. ~~A truck-mounted drill could access one abutment but not the other.~~ A truck-mounted drill would set up on the downhill shoulder of the road for drilling of both abutments.

F. Pre-Drill Meeting

Hold a pre-drill meeting on site with the WFLHD Engineering Geologist or Geotechnical Engineer contact prior to starting drilling. At the pre-drill meeting the WFLHD contact will review all boring locations on site with the drill contractor. At that time boring locations may be modified slightly based on site conditions and to address safety hazards. The borings should be drilled as close to the marked locations as possible. Do not offset boring locations more than 5

Boring #	Purpose	Site	Station	Offset* (ft)	Alignment Referenced	Latitude (deg N)	Longitude (deg E)	Estimated Feet of Auger	Estimated Maximum Feet of Auger	Estimated Feet of Casing Advancer	Estimated Maximum Feet of Casing Advancer	Estimated Feet of HQ/NQ Core	Estimated Maximum Feet of HQ/NQ Core	Max. Hole Diameter (in)	Expected No. of SPTs	Possible Addit. SPTs	Expected No. of Bulk Samples	Possible Shelby Samples	Comments: Drill Type, Access, Instruments, Etc.
MB15-04	Two Mile Ck Bridge Abutment	Main Boulder River Rd	1651+90	10' R	Proposed CL	45.487439°	-110.216845°	-		40	90	20	25	8	11	8	-	1	Limited access / platform rig.
MB15-05	Retaining Wall (Fill)	Main Boulder River Rd	1715+50	10' R	Proposed CL	45.474650°	-110.203255°	15	20	-		-		8	6	1	-	-	Truck-mounted rig.
MB15-06	Retaining Wall (Fill)	Main Boulder River Rd	1716+50	10' R	Proposed CL	45.474446°	-110.202993°	15	20	-		-		8	6	1	-	-	Truck-mounted rig.
MB15-07	Retaining Wall (Fill)	Main Boulder River Rd	1724+50	10' R	Proposed CL	45.472882°	-110.200821°	15	20	-		-		8	6	1	-	-	Truck-mounted rig.
MB15-08	Retaining Wall	Main Boulder River Rd	1744+50	11' R	Proposed CL	45.468163°	-110.197385°	15	20	-		-		8	6	1	-	-	Truck-mounted rig. Close to buried phone line?
MB15-09	Retaining Wall (Fill)	Main Boulder River Rd	1862+75	10' R	Proposed CL	45.440123°	-110.190053°	15	20	-		-		8	6	1	-	-	Truck-mounted rig.
MB15-10	Retaining Wall (Fill)	Main Boulder River Rd	1864+25	10' R	Proposed CL	45.439752°	-110.189844°	15	20	-		-		8	6	1	-	-	Truck-mounted rig.
MB15-11	Chippy Hill Slope Cut	Main Boulder River Rd	1868+50	40' L	Proposed CL	45.438696°	-110.189036°	-		40	60	20	25	8	11	2	-	-	Platform boring on slope cut. Need boom truck.
MB15-12	Miller Ck Bridge Abutment	Main Boulder River Rd	1994+80	5' L	Proposed CL	45.406228°	-110.189833°	-		80	150	20	25	8	11	16	-	2	truck rig close to downhill shoulder of existing road
MB15-13	Miller Ck Bridge Abutment	Main Boulder River Rd	1995+30	5' L	Proposed CL	45.406119°	-110.189927°	-		40	90	20	25	8	11	8	-	1	truck rig close to downhill shoulder of existing road
MB15-14	Blakely Creek	Main Boulder River Rd	1792+50	5' R	Proposed CL	45.457067°	-110.196833°	-		20	30	10	10	8	7	1	-	-	Truck-mounted rig.
TOTALS								163	208	420	810	150	185	TOTALS	130	81	11	9	

Notes: * R = right side of road when driving from Start of Project (north end) to End of Project (south end)
L = Left side of road when driving from Start of Project (north end) to End of Project (south end)
Offset from proposed CL.