February 6, 2020

Addendum #1 - Engineers Responses to Questions and Comments
Palisade Plunge Phase II Project
IFB-20-03146-0302

This addendum to the Invitation for Bids for the above reference project supersedes all contrary and conflicting information which is hereby supplemented or revised in certain particulars as follows:

Questions:

- There is significant terminology in the IFB Instructions to Bidders that indicates the bidder should be familiar with the site via site inspection. Due to the time of the year and levels of snow pack on the mesa currently, how is the prospective bidder expected to perform due diligence to inspect the site to facilitate the submittal of a best practice and ethically sound bid?

  The original Forest Service notes from this section of trail, over 50 videos, and 10 pictures are available under the “Forest Service Survey Videos” link to familiarize oneself with the expected ground conditions. There are also 20 photographs of the “Otto Trail” portion of the project in the “Otto Wall Photos Posted 01-27-2019” folder for the existing trail conditions at this location.

- There is terminology that indicates the contractor will not be able to access the site until June or July. There is also terminology that indicates significant restrictions due to biologic and habitat concerns. Will the county be amendable to change orders for schedule of work completion dates, i.e., changes to forecast schedule of work and extension of completion dates into Spring of 2021 given worst case scenarios of weather, bio, and habitat issues?

  Article 4 on page 36 and Article 6, paragraph “Change of the Contract Time” on page 38 all relate to being able to change the proposed contract date based upon weather, wildlife, or other unforeseen acts of God beyond the contractor or county’s control. Not having enough crews to complete the work within the designated time frame would not be considered a valid reason for extending the proposed completion date.

- Will any of the stream crossings require bridges?

  No, they will just require armoring of the bank and stream bed with native nearby materials.

- Will a wildlife survey be completed prior to beginning trail construction?

  Yes, a wildlife survey will be completed by MC’s consultant in the areas identified in the EA as having potential wildlife conflicts prior to beginning trail building activities in those areas.
• Will the Forest Service be on site coordinating the re-construction of the “Otto Trail” portion of the project?

No, they will not be on site to coordinate the reconstruction of the rock wall. However, the Forest Service will be used in providing advice on how to best stabilize the wall once the existing site conditions are revealed.

• Is the detail on Sheet 8 of the plans the proposed design of the MSE wall discussed on page 77 of the IFB’s “Project Specials”?

Yes.

• Any information on the size of the proposed epoxy anchors to be used for the “Otto Trail” MSE wall construction?

Yes. It is anticipated that ½” diameter 10” long anchors will need to be used to stabilize the MSE wall along this portion of the trail. This is what should be used to estimate the cost to build the MSE wall. However, if it is determined that another anchor is more appropriate after exposing the existing soil and rock conditions at this location, an alternative anchor may be specified by field order. See attached “Reqd. Geogrid Lengths and Alternative Anchoring Details” sheet for additional information.

• MSE backfill (Otto's Wall) - Can this material potentially be sourced and screened at the project site?

Yes. The plan is to source all materials (rocks and backfill) for the construction of the MSE wall from the immediate trail location. If material is required to be imported it will be from an approved Forest Service site.

• MSE backfill & Class 5 aggregate base course material – Are there compaction requirements?

Yes. See “Retaining Wall Construction Notes” on sheet 8 of 12 for MSE backfill compaction requirements. Although not specifically listed, the Class 5 roadside bike pads, will also need to meet the “no visible displacement” compaction requirements.

• Plan Set page 12 - The Class 5 aggregate base course material requirements are not called out on the Bid Schedule. Please advise.

Page 76 of the IFB for “Mountain Bike Trail Construction (Machine or Hand Dig)” in paragraph four states that the level landing pads constructed on both sides of the road at trail crossings shall be considered incidental to trail construction.

• Epoxy rock anchors – Can you provide estimate/additional sizing and materials specifications?

See answer provided above regarding WSE wall clarifications.
• Bid schedule item #11 Road Sign Panel - Is this line item meant to fulfill the MUTCD sign requirements listed on Plan Set page 12?

Yes.

• Can you provide a list of contractors who have submitted interest and/or other questions for this project?

Mesa County does not track who downloads the bid documents from our website. The sign-in sheet from the non-mandatory pre-bid meeting is now posted on the website.

• Looking at page 101 of the IFB document is the Category 4 line-item budget for Project Manager-Trail Construction a budget estimate to cover McEngineering's oversight or is this potentially a budget line item that can be included within the broader trail construction budget?

The grant line items do not correspond directly with the project bid line items. Category 4 covers Mesa County’s project manager of the trail construction.

Clarifications:

• Both Class 5 and Class 6 are listed as approved material for the level bike pads at trail road crossings.

   Either material, or an approved equal, can be used for construction of the level bike pads.

• A rock anchor installation detail and geogrid specifications.

   Are included with this addendum. The rock anchor unit price shall include the plates, nuts, epoxy, welding, and anything else required for a complete assembly.

Please note that all addenda must be acknowledged on page 17 in the bid documents. Bids will be rejected if they do not follow the instructions provide in the IFB.

Specifically note that failing to completing the Bid form starting on page 18 of the Invitation for Bids, and or not providing a Bid Bond at the Bid Opening, and or failing to acknowledge the addendums, will be reasons for disqualification of the submitted bid.

All remaining requirements of the Invitation for Bids remain unchanged.

Provided By:

L. Scott Samuels, PE
Senior Engineer
From the USFS Construction Specs.

**994.03 Geogrids.** Use geogrids made from polypropylene or coated polyester that meets the following critical physical properties.

(a) Polymer Type .............................. HDPE, Polypropylene, or Polyester with Acrylic or PVC coating

(b) Mass per Unit Area, ASTM D5261-92... 175 g/m² min.

(c) Maximum Aperture Size
   (1) Direction (MD) ....................... 100 mm
   (2) Cross-Direction (XD) ............... 75 mm

(d) Wide-Width Strip Tensile Strength
   at 5 percent Strain, ASTM D4595-86
   (1) Machine Direction (MD) ........... 8 kN/m min.
   (2) Cross-Direction (XD) .............. 6 kN/m max.
## REQUIRED GEOGRID LENGTHS

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<th>WALL HEIGHT (FT)</th>
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### Notes:

1. Anchors shall be installed in areas where bedrock is encountered in a location such that the design geogrid length ("L") Req'd) cannot be installed.

2. Anchors shall be grouted using a non-shrink Five Star Instant Grout or approved equal.

3. Steel plate shall have the following minimum dimensions:
   - **Length** = 12", **Width** = 2", **Thickness** = \( \frac{1}{2} \)". Plate shall be placed with the length horizontal across the slope.

4. Rebar pin shall be attached to the plate using a continuous weld, top surface only.

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### Alternate Method of Excavation & Installation

**Existing Cross Section (Varies)**

**"L" Req'd**

- **6" X 6" Treated Timbers**
- **Insert Each Course "L"**

**6" Cover**

**Wrap Geogrid**

**See Pin Anchor Detail**

**L" Required - "L" Installed**

**"L" Installed**

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### Anchor Spacing for Geogrid Layers, 0, 1, 2, 3, and 4 Ft. Above Base of Wall

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### Anchor Spacing for Geogrid Layers, 5, 6, 7, 8, and 9 Ft. Above Base of Wall

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**Please Note:** This project is using local rock material and not treated timbers as shown here.