

Q1. 01_45_29-7, 3.1.C. It requires a test every 50 CY of fill. This is highly excessive above normal WVDOT requirements. At an estimated 3000 CY per day, this would be 60 tests, and be nearly 6000 total tests.

A1. The testing shall be accomplished once for every 1000 CY of fill.

Q2. Who is responsible for the QAQC testing? The specs indicate for the contractor to employ a professional geo-technical engineer to monitor quality control for the work. This will be very expensive for a project that is already monitored daily by VA Engineering and has been professionally designed already. It is felt that should be a third party employed by VA.

A2. The contractor shall be responsible for testing and laboratory work by a qualified firm. All test reports shall be submitted to the COR. Should any groundwater seeps be encountered during site grading operations, the project geotechnical engineer should be notified through the COR. The contractor will not be required to have a geotechnical engineer on site throughout construction.

Delete 31 20 00 3.2 A.5.

Replace "VA Testing Laboratory" with "Contractor's testing laboratory" in 31 20 00 3.2 H.

Q3. 01_00_00 1.1.D is ambiguous with the testing and laboratory spec. Who does the testing and lab work VA or contractor?

A3. See A2 above. Delete 01 00 00 1.1.D

Q4. Can you provide the geotechnical report and boring logs?

A4. The geotechnical report and borings are being provided with this addendum.

Q5. Specs indicate blasting is a possibility if the proper procedures are in place. Can blasting materials be stored within the construction limits or will it have to be removed daily?

A5. Storage and security of blasting materials are the responsibility of the Contractor and may be stored within the construction limits. All State and Federal requirements must be followed in storing blasting materials.

Q6. Is there a specific place where the 33,000 CY of wet soil is located, at or was a percentage assumed? The total yardage for project is approx. 261,028, and of that does it include the 33,000 CY? How do we isolate that with 94,000 CY+/- of under-cut?

A6. The 33,000 cy of material is an estimated amount based on the Geotechnical Engineering Report and discussions with the Geotechnical Engineer. This amount is dispersed throughout the project and is located along old landslide areas. These areas are highlighted in the Geotechnical Engineering Report. The 33,000 cy of material that can be amended through drying or lime application is included in the overall excavation quantity (261,028 cy) for the project. Also, the undercut quantity is included in the overall excavation quantity for the project.

Q7. 31_20_00, 2.1.b If the cut and fill mainly balances out, does that include removing the big rock from the site, or do you expect a series of crushers to be able to meet the 9" loose fill and 6" compaction lift requirement? This is not practical and economical and consider using applicable WVDOT specs.

A7. It is intended that the rock that is excavated be utilized on site. Soil fill material shall be placed in 9" loose lifts with a maximum particle size of 6". However, rock fill materials, containing 35% or less of soil materials, can be placed in larger lifts as detailed below. The rock fill lifts shall be thoroughly compacted using a minimum 20 ton applied force vibratory roller. The compaction of each lift shall be verified by the proof roll method. It is recommended in the Geotechnical Engineering report that the rock fill materials generated from the cut areas be used in the lowermost portions of the fill slopes, particularly in the highest fill embankments.

Replace

"Fills: Material in compliance with ASTM D2487 Soil Classification Groups GW, GP, GM, SW, SP, SM, SC, and ML, or any combination of these groups; free of rock or gravel larger than 6 inches in any dimension, debris, waste, frozen materials, vegetation, and other deleterious matter. Material approved from on site or off site sources having a minimum dry density of 1760 kg/m³ (110 pcf), a maximum Plasticity Index of 15, and a maximum Liquid Limit of 40."

in 31 20 00 2.1.b with

"Fills:

1. Soil Fills: Material in compliance with ASTM D2487 Soil Classification Groups GW, GP, GM, SW, SP, SM, SC, and ML, or any combination of these groups; free of rock or gravel larger than 6 inches in any dimension, debris, waste, frozen materials, vegetation, and other deleterious matter. Material approved from on site or off site sources having a minimum dry density of 1760 kg/m³ (110 pcf), a maximum Plasticity Index of 15, and a maximum Liquid Limit of 40. Soil fills include soft shale fills as well as amended soils to meet the soil fill requirements.
2. Hard Shale Fills: When suitable random soil material is to be mixed with hard shale, this mixture shall be placed in the embankment in lift thicknesses as prescribed. Mixtures which contain 66 percent or more of suitable random material shall be placed in lifts not to exceed 6 inches (150 mm) in thickness after compaction. Mixtures which contain 35 to 65 percent (by visual inspection) of suitable random material shall be placed in lifts not to exceed 12 inches (300 mm) before compaction. Mixtures which contain from zero to 35 percent (by visual inspection) of suitable random material shall be placed in lifts not to exceed 24 inches (600 mm). The lift thickness shall be as thin as the excavated material will permit.
3. Rock Fills: This material shall be placed in the embankment in layers of thickness as prescribed. Mixtures which contain 66 percent or more (by visual inspection) of suitable random material shall be placed in lifts not to exceed 6 inches (150 mm) after compaction. Mixtures which contain 35 to 65 percent (by visual inspection) of suitable random material shall be placed in lifts not to exceed 12 in (300 mm) before compaction. Mixtures which contain zero to 35 percent (by visual inspection) of suitable random material shall be placed in lifts not to exceed 36 in (900 mm). The lift thickness shall be as thin as the excavated material will permit."

Add the following definitions to 31 20 00 1.2 DEFINITIONS:

S. Soft Shale: Soft shale shall be considered as any of the shales, weak sandstone, weak limestone, claystones or siltstones that break down using the following roller test. Rock which break down under three complete passes with a steel drum roller, meeting the following requirement, shall be classified as soft shale. Smooth drum rollers shall provide a minimum 1.5 tons per linear foot of roller width and drum rollers with any type of feet (sheep's foot, tamping foot, and etc.) shall provide the same minimum of 1.5 tons per linear foot of roller drum width. This criterion applies to single and multiple drum rollers as well as vibratory rollers with the vibration set to maximum. This criterion shall be calculated for each roller and test combination by dividing the operating weight of the roller in tons by the total measured width of the drum in feet, or the total of all drums if more than one drum. This calculation shall be provided to the COR in writing prior to the test. The contractor shall provide the roller or rollers and any other necessary equipment for this test without additional compensation.

T. Hard Shale: Material that meets the description of Soft Shale except that it does not break down under the hardness test shall be considered as hard shale when used as embankment material.

U. Rock: Rock is defined as sandstone, limestone, or concrete that cannot be incorporated in a 6 inch compacted lift and shall be medium hard or harder.

Q8. 31_20_00, 3.1G. Can you clarify the burning, it says no burning in spec, but another indicates it can be accomplished with appropriate permit, what can we burn? Can tree tops be cut and rolled to boundary lines and/or utilize a chipper to eliminate it?

A8. Delete "Burning is not permitted on the job site." from 01 57 19 1.5 E. Burning is permitted with a permit from the WVDEP Division of Air Quality. Burning of trunks, limbs, and stumps less than 8" in diameter is allowed. Larger portions may be allowed to be burned if authorized by the WVDEP. Tree tops shall not be rolled to boundary line and left to rot. A chipper can be used to eliminate tree tops.

Q9. Is a secure gate needed at Spring Valley Drive to keep people from gaining access to the site during construction?

A9. Add 01 00 00 1.4 F. Job Site Security: It is the responsibility of the contractor to maintain a secure worksite including a temporary access gate at Spring Valley Drive.

Q10. What do we do with the existing chain link fence near the top of the hill during and after work?

A10. Remove and reuse existing chain link fencing as directed by the COR. Replace, along with new poles, as shown on GS18 in relocated position. Existing fence near 58+75 shall be removed as needed for construction and replaced in same location up to within 10 feet of shoulder. See Attachment A.

Q11. Is the contractor required to pre-split the 1/2 and 1/1 slopes?

A11. Pre-splitting is required on slopes steeper than 1:1.

Q12. Has the appropriate permits been applied as this could affect the schedule? What permits are required and who pays for it?

A12. Permit applications will be provided to the contractor for submittal. Those applications include the NPDES permit through the WVDEP, an entrance permit with the WVDOH, a Stream Activity Permit through the WVDNR, and a Department of the Army Permit through the US Corps of Engineers. A \$20,000 allowance shall be made by the contractor for the application of these permits. The contractor is responsible for a county building permit along with the associated fees.

Q13. Is there a waste site for unsuitable material either on site or is there one known off site nearby?

A13. Should unsuitable material be encountered that cannot be amended through drying or lime application, or should the contractor opt to not amend those soils and bring in off-site material, it is the responsibility of the contractor to locate off-site waste or borrow areas.

Q14. Will bench marks and control be provided?

A14. Temporary bench mark and control point locations are shown on GS7.

Q15. Will centerline be staked by owner at least once? If not, can the CAD file on the road be provided?

A15. The CAD files will be provided to the Contractor after the bidding phase.

Q16. Will contractor have available parking for employees?

A16. No parking on the VA property will be allowed. All parking and use of facilities will be within the construction limits and provided by the contractor.

Q17. Are there utility fees required to be paid by contractor?

A17. According to 01 00 00 1.22, the Contractor is responsible for all utility fees associated with the construction project.

Q18. Is there liquidated damages?

A18. There are no liquidated damages.

Q19. Will the owner/engineer do any final cross-section work?

A19. According to 01 00 00 1.15, as-built drawings are to be provided by the contractor. The owner reserves the right to verify the constructed project through the use of aerial mapping, surveyed cross sections, or other means.

Q20. Regarding Bid Item 2, do we delete the concrete pull boxes as well?

A20. No, it is considered part of the conduit system.

Q21. 26_56_00 Indicates for aluminum square poles, drawings indicate steel square poles. There is no information on pole type at all, and neither match what VA has.

A21. Poles shall be 25' round tapered aluminum poles. Delete "square" and replace with "round" in 26 56 00 2.2 B. 1. Delete 26 56 00 2.2 B. 2. Fixtures, as shown on GS25, shall have textured natural aluminum finish.

Q22. On 606020-001, aggregate filled underdrain. What type of stone and size, what is typical? On the ditch checks and weir rock Dwg. GS23, what is the min and max stone size?

A22. According to detail on GS2, stone for underdrains shall be AASHTO #57 course aggregate. Ditch checks shall be constructed with a minimum 4" and maximum 8" stone. The weir rock has a d50 of 6".

Q23. Dwg GS19 references Shamrock Lane what is this?

A23. Shamrock Lane is the name provided on online maps (which is in error). However, it really has no name. The VA refers to it as West Drive.

Q24. Dwg GS23 what size is the riser in the sediment pond?

A24. The riser pipe is an 18" pipe.

Q25. Will WVDEP add additional items for erosion and siltation after permits are approved, will contractor be compensated?

A25. The contractor is responsible for keeping silt and sediment out of the streams. Silt fence, sediment traps, ditch checks, etc. are shown on the drawings for such purposes. No additional compensation will be provided.

Q26. The wage rates seem to be for building construction and not heavy highway. Will this be updated as well with addendum?

A26. Highway Construction Wage determination WV80 dtd 1/6/17 shall be used in lieu of WV48 dtd 7/28/17.