Talbott Springs Elementary School Utility Relocation
Howard County Public School System
HCPSS Bid 035.20.B4

general contracting
construction management
design/build

To: All Plan Holders
Project: Talbott Springs Elementary School Utility Relocation
Columbia, Maryland
Re: Addendum #2

Ladies and Gentleman:

Enclosed herein, please find Addendum #2, dated 2/12/20.

To the Contract Drawings and Specifications for the referenced project as stated below, as prepared by TCA Architects, LLC in conjunction with Dustin Construction, Inc., this addendum includes changes and clarifications to the Contract Documents as follows:

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Including this cover, Addendum #2 consists of eighty-seven (87) pages. Advise this office at once if any attachments are missing.

Enclosures:
Addendum #2

cc. Daniel Lubeley – Howard County Public School System
Daniel Hagan – Howard County Public School System
Betsy Zentz – Howard County Public School System
Douglas Pindell – Howard County Public School System
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Robyn Toth – TCA Architects
Kelly Kopp – Dustin Construction
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File

**PART 2 – 02B SITE WORK – UTILITIES SPECIFIC SCOPE OF WORK**

1. Contractor has reviewed and understands the Contract Package / Specification Cross Reference listed under this Section.

2. Contractor includes General Scope of Work listed under Part 1 of Section 011113.

3. Contractor shall provide all labor, material, equipment, and supervision necessary for and reasonably incidental to the completion of the Site Work in accordance with the complete set of Contract Documents.

**Earthwork and Utilities Specific Scope:**

1. The 02B Contractor shall remove all trees, shrubs, grass, and other vegetation, improvements, or obstructions, as required, to permit installation of new construction and as described in the Contract Documents. Site clearing and grubbing, including removal and disposal, shall be as indicated on the plans. The Contractor shall acknowledge locations of all protected foliage per the plans and specifications prior to the start of any work, and shall be responsible for installation, root pruning, signage, etc. and maintenance of this protection while Contractor is on the project.

2. The 02B Contractor shall provide and install all forest conservation requirements to include, but is not limited to, all arborist reports, root pruning, tree pruning, tree protection fence & signs, deep-root fertilization, crown reduction, watering, vertical mulching, and all other items as required. This includes all work necessary for access to the site.

3. The 02B Contractor shall provide all required cut/fill operations in accordance with Contract Documents to bring site to final design elevations. The 02B Contractor shall carefully examine site prior to commencing operations. The 02B Contractor shall be responsible for all excavation down to design subgrade elevation regardless of material being excavated, including rock, at no cost to the Owner. If material excavated exceeds the optimum moisture content, the 02B Contractor shall dry the material prior to reuse and/or stockpile and spread for reuse in another area. If drying cannot be achieved in a timeframe within schedule constraints or within coordination of work with other trades, the 02B Contractor shall remove and legally dispose of offsite and haul in suitable material as part of base bid cost. In the event the material excavated to design subgrade elevation is found to be unsuitable, the 02B Contractor shall remove and legally dispose of unsuitable material offsite and haul in suitable material as part of base bid cost. Proof roll the area prior to placing fill to verify acceptability of substrate.

4. The 02B Contractor shall furnish, install, maintain and remove at the direction of the Construction Manager and/or any governing agency all temporary sediment and erosion control measures and devices, and stabilized construction entrances. For all permanent storm water management areas & permanent sediment traps required by the Contract Documents, the 02B Contractor is responsible for bulk excavation, grading, shaping, safety fencing, stabilization, and pipework. At temporary traps, the same scope as permanent applies, and the 02B Contractor has mucking, backfill, fill and compaction, back to subgrade. Permanent landscaping is by the 02B Contractor.

5. The 02B Contractor is responsible for all temporary seeding required for the site stabilization during construction. All disturbed areas shall be permanently stabilized with sod at the completion of the project ***as directed on the sodding plans and related specifications.***[2] All maintenance and watering as required per the specifications shall be included.

6. The 02B Contractor is responsible for removal of all spoil stockpiles generated by the work.

7. The 02B Contractor is responsible for all dust control on site until project completion, inclusive of providing watering trucks daily to eliminate Construction Activity Dust Pollutants for the duration of the project.

8. The 02B Contractor is responsible for all sheeting and shoring requirements as well as temporary bracing of existing poles, structures etc. to perform this scope of work if required. Contractor to include temporary

barriers, fences, wire rope railings and angles at all locations for safety reasons. Contractor to include jersey barriers at areas of construction traffic roadways. 02B Contractor shall furnish, install and maintain orange safety fence around the entire perimeter of all storm water management facilities. Orange safety fence shall be installed as required while the work is being performed or as directed by the Construction Manager. Orange fence is in addition to the required perimeter fencing.

9. The 02B Contractor shall provide for all site demolition shown or implied on the drawings, but is not limited to, the demolition, removal, and disposal of existing curb & gutter, asphalt paving & sub-base, concrete paving & sub-base, concrete sidewalks, concrete foundations, concrete pads, fencing, underground utilities, inlets, fire hydrants, playground equipment, mulch play areas, signs, plants, trees and the like. The 02B Contractor shall be responsible for salvage, protection, storage and relocations of existing site items as indicated and/or specified. In the event there are items not called for removal on the Contract Documents which need to be removed due to the close proximity of the new utilities to be installed or the existing to be demolished, these items shall be replaced in kind. The 02B Contractor shall be responsible for salvage, protection, storage and relocations of existing site items as indicated and/or specified. All demolished items shall be removed and legally disposed of off-site by this Contractor.

10. ***Due to the BGE Gas Line design not being complete at time of bid, the 02B Contractor shall be responsible for all saw-cutting, demolition, excavation, backfill, spoils removal and site restoration as required for the new Gas Line work as part of the base bid costs. In short, BGE will only provide and install the gas line per the Contract Documents. The 02B Contractor to coordinate with BGE and only excavate what BGE can install and what the 02B Contractor can backfill in a single day. 02B Contractor to assume 3' wide by 3' deep trench.[2]***

11. The 02B Contractor shall, with the assistance of the CM, coordinate with all public utilities for the removal of the underground existing services. With approval of the Utility Company(s) it is the 02B Contractor's responsibility to either abandon in place (after grouting) or remove from the site as indicated. Cutting, capping, and or filling when abandoning in place as directed by the contract documents, is the responsibility of the 02B Contractor. There will be no support from 15A and 16A Contractors as these contracts will not be active. All connections to existing utilities are to be inspected by authorities having jurisdiction. 02B Contractor is responsible for scheduling all inspections and notifying the Owner and the Construction Manager.

12. The 02B Contractor shall saw cut, remove, and dispose of existing asphalt & concrete to complete work under this package. Contractor shall provide all temporary protection requirements of these areas (steel plates, temporary patch, etc.) as required by the governing authority until the permanent infill can be completed by the 02B Contractor.

13. The 02B Contractor shall provide temporary patching of existing asphalt and or concrete in existing roads, driveways, parking lots, curb & gutter and sidewalks as needed for the connection of utilities and to provide continued access over the installed utilities. The 02B Contractor shall saw cut, remove, and dispose of temporary patches for the utilities and replace in kind before completion of the project. It shall be the responsibility of the 02B Contractor to furnish and install the permanent concrete or asphalt requirements at these location at the time and direction provided by the Construction Manager and approved by AHJ.

14. The 02B Contractor shall neatly sawcut and remove site paving items, timber ties, etc. which are to be replaced in kind to their original condition by the 02B Contractor at the completion of the project.

15. The 02B Contractor understands that the construction entrance(s) may have to be removed, altered, repaired, and / or replaced in order for the permanent storm system & water system, to be installed. It shall be the 02B Contractor's responsibility to remove, alter, repair and / or replace and consistently maintain any and all aspects of the construction entrances for these systems to be installed. The 02B Contractor shall prioritize its work as to eliminate impact to site access and / or the project schedule.

16. The 02B Contractor shall grade all backfill so that water runs away from any structure.

17. The 02B Contactor shall furnish, install, and maintain suitable temporary construction access roads as shown on the site utilization plan. The Contractor shall remove the temporary roads and perform all necessary re-grading and restoration upon receipt of direction from the Construction Manager. Roads shall be adequate to support all construction traffic and equipment. The roads at a minimum shall be constructed of stabilizing cloth and 6" of #2 stone, free from any foreign substances. Damming of water shall not be tolerated, any temporary piping to allow drainage across roadways is considered incidental and part of base bid costs. In the event that the stabilized area is installed at, around, or near any existing or future utilities that may need to be removed, repaired, and / or installed, this Contractor shall remove, adjust, and / or repair sections of these stabilized areas as necessary at no additional cost to Owner or Construction Manager. Asphalt millings and or "crusher run" shall not be accepted at any roadways.

18. The 02B Contractor shall close or cover all subgrade or excavation at the end of each work day unless exempted by Construction Manager's representative. Any unsuitable conditions caused as a result of Contractor's failure to protect exposed subgrades shall be remedied at Contractor's sole expense and at no cost to the Owner or Construction Manager.

19. During site grading operations, if contaminated soils are encountered, the 02B Contractor is to excavate and centrally locate a contaminated spoil stock pile onsite. The 02B Contractor shall then be reimbursed via unit rates in the contract to either transfer suitable material onsite, or if directed, bring in new from offsite. All contaminated soil removal from site shall be by the 02B Contractor and reimbursed at cost per established unit prices in Specification 003000.

20. The 02B Contractor shall furnish, install and maintain all stabilized construction entrances and wash racks. This system is to include water source, power source, pumps and hoses, and other necessary appurtenances. The 02B Contractor shall provide labor to wash vehicle tires at all times, at all wash racks, as part of base bid. If hydrants are used, the 02B Contractor must procure, pay for, and utilize a water meter and backflow preventer. The 02B Contractor includes relocation and removal as necessary and directed by the Construction Manager.

21. The 02B Contractor is responsible for keeping the streets clean of construction debris, mud, dirt etc. if caused by this Contractor's failure to properly maintain the construction entrances, stoned roadways, access roads, wash rack, etc. The 02B Contractor shall provide two (2) adequately sized pressure washers and an operator (for each wash rack) who shall be present during all working hours, for the duration of the project, to clean sediment from all vehicles leaving the site regardless of who owns the vehicle. As an option to the manned pressure washers, the Contractor may implement automatic washers in their place. Contractor shall provide all water, power, fuel, equipment, etc. for a complete working system. Contractor shall properly control water run-off in accordance with local and state regulations or as directed by the Construction Manager.

22. The 02B Contractor is solely responsible for own fire protection and safety while onsite. This includes but is not limited to signage, barricades, fire extinguishers, covers, etc.

23. The 02B Contractor shall engage the services of a private utility locating company and shall test pit to further locate existing utilities prior to commencing with work under this contract package. Contractor shall hand dig whenever close to existing utilities. Contractor to protect existing lines by all means necessary.

24. ~~***Contractor shall strip, screen, stockpile, protect, test, amend and stabilize all topsoil as required by the Contract Documents and governing jurisdiction having authority requirements.***~~ ***The 02B Contractor shall re-spread topsoil in all areas provided the topsoil meets project standards as indicated on drawings.*** ~~***All topsoil shall be screened utilizing a ½" x ½" screen prior to placement.***~~ Topsoil shall be spread over all areas to be planted, sodded, or seeded such that compaction shall bring settled depth to 6". The 02B Contractor shall ***supply and spread*** tested, screened, amended topsoil from offsite ~~***if and / or when the onsite quantities are insufficient.***~~ ***per the Contract Documents. Contractor is responsible for disposing of existing topsoil offsite.***[2]

25. The 02B Contractor shall furnish and install a complete water system outside the building in accordance with local codes consisting of all piping, manholes, laterals, valves, vaults, cleanouts, thrust blocks, hydrants, yard hydrants,

standpipes and all related fittings as required. 02B Contractor to coordinate all inspections with Owner and AHJ during installation prior to backfill. Fire hydrant flushing is the responsibility of the 02B Contractor. All layout and surveying is the responsibility of the 02B Contractor. All as-builts of system must and shall be performed by 02B and shall be signed and stamped/sealed by a licensed surveyor in Maryland. As-builts are to include line and grade.

26. The 02B Contractor shall furnish and install all outside site utilities systems (both Public and Private) completely including all testing and proper connection to the appropriate system outside the building.

27. The 02B Contractor is responsible for the relocation of all utilities as shown on the drawings, with the exception of gas, which is to be provided by others. Contractor to provide conduit and duct banks for telecom and electrical lines as required. Old gas and telecom lines, after abandoned shall be removed under a separate phase.

28. The 02B Contractor is responsible for the flushing of the water line to achieve a passing test for chlorination.

29. The 02B Contractor shall furnish and install all storm water management facilities complete.

30. The 02B Contractor shall furnish and install all temporary utilities (storm, water) as required.

31. The 02B Contractor shall furnish, install, and maintain all structures, manholes, clean outs, and the like associated with its work as required by the Contract Documents for the entire duration of the project.

32. The 02B Contractor shall furnish, install, and maintain all concrete, reinforcing, rip-rap, stone and filter cloth related to this work for the entire duration of the project.

33. The 02B Contractor shall furnish, install, and maintain all required protection of inlets, structures, and any other erosion and sediment control device that is shown, implied, or required for the entire duration of the project at the Construction Manager's and/or governing agency's direction. The 02B Contractor shall remove and properly dispose of all protection after site is stabilized with approvals of Local Authorities, Owner and Construction Manager.

34. The 02B Contractor shall supply and install all plugs shown or required at all utilities that are removed. The 02B Contractor is responsible for own excavation and backfill to complete this work.

35. The 02B Contractor includes steel plates or other means needed to be utilized to ensure traffic flow in and out of school site at all times as well as when working in public streets to allow continuous traffic flow.

36. The 02B Contractor shall furnish and install a complete storm water drainage system including, but not limited to, all pipes, inlets, manholes, laterals, cleanouts, rip rap, geotextile fabric, observation wells, granite blocks, pipe anchors, gratings, bedding materials, foundations, cut off walls with rip rap outlets, trash racks, and all related devices as required. The 02B Contractor shall flush the entire storm water drainage system at the direction of the Construction Manager and/or any governing agency, if required. All layout and surveying for this work is the responsibility of the 02B Contractor. All as-builts of system must be performed during the course of construction. The 02B Contractor to include costs to perform this service with base bid. As-builts are to include line and grade.

37. The 02B Contractor shall note that all work at Holly Court shall be expedited and shall be continuous from start to finish with no disruption to Holly Court traffic. 02B Contractor includes any and all traffic control measures as required to complete this work. Contractor shall meticulously clean the streets every day. If the streets are not kept clean to the Construction Managers/Owners satisfaction, the CM will perform the cleaning at the Contractor's expense. Additionally, the Contractor will be back charged ~~at a rate of five hundred dollars ($500) per occurrence~~ ***for actual damages incurred by HCPSS.***[1]

38. The 02B Contractor is responsible for protection of utility piping, manholes, manhole covers, cleanouts, drains, trench drains, inlets, etc. being furnished and installed under this package. Protection to be either steel plates or adequate wood dunnage.

39. 02B Contractor shall hold all valve boxes flush with the base asphalt surface, to prevent damage during construction of the building, until the top layer of asphalt is applied. When surface paving commences, valve boxes are to be adjusted to match the finish paving.

40. The 02B Contractor shall close or cover all utility excavation at the end of each work day unless exempted by Construction Manager's representative. Any unsuitable conditions caused as a result of Contractor's failure to protect trenches or exposed subgrades shall be remedied at Contractor's sole expense and at no cost to the Owner or Construction Manager.

41. The 02B shall fill all islands in parking areas, etc. immediately after curbs are in place. Fill to form a crown, a minimum of 12" above the curb, to allow water to pass freely over the top of the curb so as to prevent ponding of water. Contractor is to maintain this fill.

42. Temporary construction fencing around the perimeter of the site will be provided by the CM. The 02B Contractor shall be required to repair/replace any fence damaged by this Contractor during construction.

43. The 02B Contractor shall provide all fine grading and proof rolling as necessary prior to the installation of the sub-base course at asphalt and site concrete areas.

44. The 02B Contractor is responsible to protect sub-base for concrete and asphalt work from weather, to ensure construction activities proceed on schedule.

45. The 02B Contractor shall will be responsible for any damage to existing roads, adjacent surfaces, curb and/or gutter damaged by the 02B operations.

46. The 02B Contractor shall prepare subgrade including furnishing and installing stone as required to tie in new asphalt and or concrete to existing at all required locations.

47. The 02B Contractor shall provide all fine grading and proof rolling as necessary prior to the installation of the sub-base course at asphalt areas.

48. The 02B Contractor shall provide all fine grading and proof rolling as necessary prior to the installation of concrete curb, gutter and flatwork.

49. The 02B Contractor shall furnish and install all stone under all flatwork concrete. Stone to be installed immediately prior to placement of concrete.

50. The 02B Contractor shall furnish and place stone subgrade as required to establish proper elevations prior to asphalt paving.

51. 02B Contractor must anticipate and include under base bid costs to perform project at pace of baseline schedule.

52. Should the 02B contractor require water for construction, this Contractor shall be required to provide all rental and usage fees associate with obtaining the water meter and using the water.

53. The 02B Contractor will close or cover all subgrade or excavation at the end of each work day unless exempted by Construction Manager's representative. Any unsuitable conditions caused as a result of contractor's failure to protect exposed subgrades will be remedied at contractor's sole expense and at no cost to the Owner or Construction Manager.

54. Any shut downs to existing utilities shall take place on the weekend and shall be coordinated with the CM and Owner.

**Site Concrete Specific Scope:**

1. The 02B Contractor shall provide all necessary permits, fees, and coordination with inspections that may be required.

2. The 02B Contractor includes all bonds for Right of Way Work. Contractor shall comply with all MDOT rules and regulations for the work within Public Right of Way required for work being completed under this package.

3. The 02B Contractor shall furnish and install all saw cutting to connect with existing curbing and concrete as required by the Contract Documents.

4. The 02B Contractor shall patch and repair any damage to existing roads, adjacent surfaces, and curb and gutter damaged by the 02B operations.

5. The 02B Contractor shall provide layout and surveying to allow furnishing and installation of all concrete, reinforcing, formwork, excavation, backfilling, fine grading, fill, gravel(including granular backfill where called out), weep holes, water stops, perforated PVC under drains at its work (including stone and filter fabric), bio-barriers (where called out), support chairs, concrete pumping, control joints, expansion joints (zip cap type), expansion filler, weld wire mesh, scoring joints, hot/cold weather protection and the like for all of the following site concrete items:

    a) curb and gutter,
    b) sidewalks,
    c) concrete paving,
    d) concrete collars at exterior cleanouts in greenspaces,
    e) temporary dumpster pad
    f) and any other site concrete item called out within the drawings and specifications unless noted otherwise

6. The 02B Contractor includes all aggregate base as required as part of its work.

7. The 02B Contractor shall seal all exterior concrete called out to be sealed per the contract documents. The 02B Contractor shall provide one additional coat which will be applied just prior to substantial completion as directed by the Construction Manager.

8. The 02B Contractor shall install and protect threaded and / or embedded items to prevent bending, deformation and corrosion. The 02B Contractor shall repair or restore all damaged threaded and / or embedded items prior to commencement of installation on these embedded items.

9. The 02B Contractor to protect adjacent finishes from splashing caused by concrete placement. If concrete splashes on adjacent finishes, then the 02B Contractor shall be responsible for the removal of the splashed concrete.

10. The 02B Contractor shall furnish and install all moisture retaining covers and curing compounds as required to complete own work.

11. The 02B Contractor includes installation of zip cap expansion joint material, and all associated caulking of own work, inclusive of removing plastic cap and proper preparation prior to application of sealant.

12. The 02B Contractor will provide all winter and summer concrete measures, if necessary, for concrete for this scope of work.

13. The 02B Contractor shall provide and install all curb and gutter "inlet throats" as required.

14. The 02B Contractor includes broom sweep and power washing as necessary within one week prior to substantial completion of all concrete installed under this package.

15. The 02B Contractor shall furnish and install cast in place Tile detectable warning surfaces at all handicap ramps. Color shall be safety yellow if not specified elsewhere.

**Site Asphalt Paving Specific Scope:**

1. The 02B Contractor shall provide all necessary permits, fees, and coordination with inspections that may be required.

2. The 02B Contractor includes all bonds for Right of Way Work. Contractor shall comply with all MDOT rules and regulations for the work within Public Right of Way required for work being completed under this package.

3. The 02B Contractor shall clean off all utility covers, curbs, sidewalks, and any other installed items of asphalt products in the paved areas.

4. The 02B Contractor shall furnish and install all, asphalt base (binder) courses, tack coats, overlay binder coats, overlay protective membranes, overlay protective membrane strips, asphalt surface courses, bitumastic sealant, and or rubber sealants.

5. The 02B Contractor includes all aggregate base as required as part of its work.

6. The 02B Contractor includes all milling and tie in as required.

7. The 02B Contractor shall furnish and install all saw cutting, wedging, and leveling to connect with existing paving as required by the Contract Documents.

8. The 02B Contractor shall patch and repair any damage to existing roads, adjacent surfaces, and curb and gutter damaged by the 02B operations.

9. Construction Manager reserves the right to schedule the installation of the base course of asphalt paving and then the surface course of asphalt paving as two separate construction events.

10. The 02B Contractor shall prepare and provide for all means required to tie in new asphalt to existing asphalt at all required locations.

11. The 02B Contractor includes patching of all utility trenches as required per MDOT requirements and restoration of existing striping as necessary.

12. Asphalt Binder Escalation: No adjustments will be made to the final Contract Sum if the price of asphalt binder fluctuates from the prevailing price as quoted here to the actual price on the date of placement.

13. The 02B Contractor acknowledges that the new parking spaces at the existing school are to be installed prior to taking over the existing parking area to the West of the existing school. ***Contractor understands that all ADA access must be uninterrupted.***[1]

**Road and Parking Accessories Specific Scope:**

1. The 02B Contractor shall adhere to all Maryland Department of Transportation State Highway Administration's current Standard Specifications for Construction Materials and the ANSI D6.1-1971 Manual on Uniform Traffic Control Devices for Streets and Highways.

2. The 02B Contractor shall adhere to the product delivery, storage, handling, project conditions, products/materials, surface preparation, application, protection, and restoration requirements outlined within the project specifications and drawings.

3. The 02B Contractor shall coordinate and work with the Construction Manager with regard to the Fire Marshal's requirements.

4. The 02B Contractor shall adhere to the sign location and installation requirements outlined within the project specifications and drawings.

5. The 02B Contractor shall layout and paint all parking lot striping to include, but is not limited to all parking spaces, regular handicapped spaces, van accessible spaces, parahatch areas at handicapped spaces, and pedestrian crosswalks. The 02B Contractor includes all temporary striping and signage installation and removal as required.

6. The 02B Contractor shall furnish and install all concrete wheel stops and fire lane curbing paint and associated stenciling.

7. The 02B Contractor shall layout and paint all site stenciled markings. This includes any play area markings damaged during construction.

8. The 02B Contractor shall furnish and install all posts and signs for site as required. This includes all concrete footings as required.

9. The 02B Contractor includes any and all thermoplastic markings as required.

10. The 02B Contractor shall perform any existing striping removal as required.

11. The 02B Contractor shall provide all traffic control for their work.

**Lawns Specific Scope:**

1. The 02B Contractor to test and make all amendments to bring material within project specifications (topsoil amendments, sand (if required), organic matter, planting soil mix, anti-desiccant, tree paint, herbicide, etc.). It is the Contractor's responsibility to submit test results to Construction Manager for approval with required recommendations to bring material within project specifications, prior to the start of any topsoil work. This requires the Contractor to hire a third party independent testing agency.

2. The 02B Contractor is to maintain grass cutting, tree and shrub trimming, and general landscaping, throughout the duration of the construction project within the LOD.

3. The 02B Contractor shall furnish water and necessary temporary irrigation equipment per the specifications.

4. The 02B Contractor shall provide and install all seeding and sod to include, but is not limited to, guarantees, certificates, submittals, delivery, seed mixtures, sod types, mulch, hydraulic seeding, sod stakes, water, protection, restoration, cleaning, maintenance, turf inspections / reviews by a qualified turf agronomist, and the like to complete all seeding and sod shown or reasonably implied within the drawings and specifications.

5. The 02B Contractor shall provide and install all maintenance requirements to include, but is not limited to, maintaining all turf in a healthy condition. Contractor shall provide for all cutting, watering, fertilizing, cultivating, weeding, and furnishing / applying sprays and other items as necessary to keep the lawns free of insects and disease and in a thriving condition. Maintenance shall begin immediately after lawns are completed and shall continue for a period as specified following substantial completion.

6. The 02B Contractor includes replacement of all mulch play areas.

7. The 02B Contractor shall furnish and install permanent seed and sod with stabilization as required including curlex or erosion control matting at severe slopped areas.

8. At the completion of the project the 02B Contractor shall power wash all hard surface areas within the LOD and the entire site.

**MISCELLANEOUS SCOPE:**

1. Contractor shall relocate tetherball poles as required.

2. Contractor shall furnish and install all solar powered light fixtures as required.

3. Contractor to coordinate with BGE, Verizon and Comcast for demo and relocation work and provide all infrastructure as necessary. Coordinate removal of utilities with respective utility companies.

4. Contractor realizes that he is the one and only Trade Contractor for the Summer work and that he is responsible for all work shown on the drawings and as specified.

5. Contractor shall restore all existing areas to their original condition or better upon completion of the work.

6. Contractor is responsible for providing dumpsters for own work. Construction Manager will not provide any dumpsters.

**PART 3 – ALTERNATE SCOPE OF WORK**

1. Contractor has reviewed the Alternates scope of work listed elsewhere within the specifications and has included all costs in the event the Owner elects to proceed in whole or in part.

2. Contractor has reviewed the Unit Prices scope of work listed elsewhere within the specifications and has included all costs in the event the Owner elects to proceed in whole or in part.

**PART 4 – ALLOWANCES**

~~***1. There are no allowances in this scope of work.***~~[1]

***1. Contractor includes 40 labor hours (to be assumed as a general laborer) to be used at the discretion of the Construction Manager. The Construction Manager will track and verify hours. The contractor will be required to include a line item in their schedule of values for this allowance. Any unused hours will be credited back via deduct change order at the conclusion of the project.***[1]

**END OF 02B SECTION**

SECTION 015000

CONSTRUCTION FACILITIES AND TEMPORARY CONTROLS

REV ADD. 2

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provision of the Contract, including the General Conditions and Division 01 Specification Sections, apply to this Section.

1. 2 SUMMARY

A. This Section includes requirements for construction facilities and temporary controls, including temporary utilities, support facilities, and security and protection.

B. The Contractors are advised that the existing School will remain in use during construction, and that they are to make every accommodation to ensure that services are uninterrupted during operating hours.

C. Temporary utilities include, but are not limited to, the following:
1. Water service and distribution.
2. Sanitary facilities.

D. Support facilities include, but are not limited to, the following:
1. Temporary enclosures.
2. Hoists.
3. Temporary project identification sign.
4. Waste disposal services.
5. Construction aids and miscellaneous services and facilities.
6. Access roads/staging areas.

E. Security and protection facilities include, but are not limited to, the following:
1. Temporary fire protection.
2. Barricades, warning signs, and lights.
3. Environmental protection.

1. 3 QUALITY ASSURANCE

A. Regulations: Comply with industry standards and applicable laws and regulations of authorities having jurisdiction including, but not limited to, the following:
1. Building code requirements.
2. Health and safety regulations.
3. Utility company regulations.
4. Police, fire department, and rescue squad rules.
5. Environmental protection regulations.

B. Standards: Comply with NFPA 241 “Standard for Safeguarding Construction, Alterations, and Demolition Operations,” ANSI A10 Series standards for “Safety Requirements for Construction and Demolition,” and NECA Electrical Design Library “Temporary Electrical Facilities.”

C. Inspections: Arrange for authorities having jurisdiction to inspect and test each temporary utility before use.
1. Obtain required certifications and permits.

1.4 PROJECT CONDITIONS

A. Temporary Utilities: At earliest feasible time, when acceptable to the Owner, change over from use of temporary service to use of permanent service.

B. Conditions of Use:
   1. Keep temporary services and facilities clean and neat in appearance.
   2. Operate in safe and efficient manner.
   3. Relocate temporary services and facilities as work progresses.
   4. Do not overload facilities or permit them to interfere with progress.
   5. Take necessary fire-prevention measures.
   6. Do not allow hazardous, dangerous, or unsanitary conditions, or public nuisances to develop or persist on-site.

## PART 2 - PRODUCTS

### 2.1 MATERIALS

A. General: Provide new materials. If acceptable to the Architect, the Contractor may use undamaged, previously used materials in serviceable condition. Provide materials suitable for use intended.

B. Lumber and Plywood: Comply with requirements in Section 061000 - Rough Carpentry.
   1. For job-built temporary offices, shops, and sheds within construction area, provide UL-labeled, fire-treated lumber and plywood for framing, sheathing, and siding.
   2. For signs and directory boards, provide exterior-type, Grade B-B high-density concrete form overlay plywood of sizes and thicknesses indicated.

C. Tarpaulins: Provide waterproof, fire-resistant, UL-labeled tarpaulins with flame-spread rating of 15 or less.
   1. For temporary enclosures, provide translucent, nylon-reinforced, laminated polyethylene or polyvinyl chloride, fire-retardant tarpaulins.

D. Water: Provide potable water approved by local health authorities.

### 2. 2 EQUIPMENT

A. General:
   1. Provide new equipment.
      a. If acceptable to the Architect, the Contractor may use undamaged, previously used equipment in serviceable condition.
   2. Provide equipment suitable for use intended.

B. Water Hoses:
   1. Provide 3/4-inch, heavy-duty, abrasion-resistant, flexible rubber hoses 100 feet long, with pressure rating greater than maximum pressure of water distribution system.
   2. Provide adjustable shutoff nozzles at hose discharge.

C. Temporary Offices (Not Used)

D. Temporary Toilet Units:
   1. Provide self-contained, single-occupant toilet units of chemical, aerated recirculation, or combustion type.
   2. Provide units properly vented and fully enclosed with glass-fiber-reinforced polyester shell or similar nonabsorbent material.

E. Fire Extinguishers:
   1. Provide hand-carried, portable, UL-rated, Class A fire extinguishers for temporary offices and similar spaces.
      a. In other locations, provide hand-carried, portable, UL-rated, Class ABC, dry-chemical extinguishers or a combination of extinguishers of NFPA-

recommended classes for the exposures.

2. Comply with NFPA 10 and NFPA 241 for classification, extinguishing agent, and size required by location and class of fire exposure.

F. Access Roads/Staging Areas: As shown on Site Utilization Plan.

G. Temporary Erosion and Sediment Control as required.

H. Waste Disposal Facilities:
1. Containers shall be provided by the 02~~A~~***AB²*** Contractor to handle waste from construction activities.
2. The Contractors are required to containerize and clearly label hazardous, dangerous, or unsanitary waste materials separately from salvageable and recycled waste materials.
3. Comply with Section 015050 - Construction Waste Management for required procedures.

## PART 3 - EXECUTION

### 3.1 INSTALLATION

A. Use qualified personnel for installation of the Temporary Facilities.
1. Locate the Facilities where they will serve the Project adequately and result in minimum interference of construction operations.
2. Relocate and modify the Facilities as required.

B. Provide each Facility ready for use when needed to avoid delay.
1. Maintain and modify as required.
2. Do not remove until the Facilities are no longer needed or are replaced by authorized use of completed permanent facilities.

### 3. 2 TEMPORARY UTILITY INSTALLATION

A. General: Install temporary service or connect to existing service. Where company provides only part of service, provide remainder with matching, compatible materials and equipment. Comply with company recommendations.
1. Arrange with the Owner for time when service can be interrupted, if necessary, to make connections for temporary services.
2. Provide adequate capacity at each stage of construction.
3. Use Charges: Cost of some use charges for temporary facilities may not be chargeable to the Owner.

B. Water Service: The Contractor shall provide water service as required for completion of the Work from existing system or portable system as indicated.

C. Temporary Electric Power Service: (Not Used)

D. Temporary Lighting: (Not Used)

E. Temporary Heat/Cooling: (Not Used)

F. Toilets:
1. The Construction Manager will provide temporary toilets for trades use.

G. Drinking Water Facilities: Each Contractor will make its own provisions for bottled drinking water units, including paper supply.

H. Provide earthen embankments and similar barriers in and around excavations and subgrade construction, sufficient to prevent flooding by runoff of storm water from heavy rains.

3.3 SUPPORT FACILITIES INSTALLATION

A. Locate field offices, storage sheds, and other temporary construction and support facilities for easy access.
   1. Maintain support facilities until near time of Substantial Completion.
   2. Remove prior to Substantial Completion.
   3. Personnel remaining after Substantial Completion will be permitted to use permanent facilities, under certain conditions, with approval by the Owner.

B. Provide incombustible construction for offices, shops, and sheds located within construction area, or within 30 feet of the Building lines.
   1. Comply with requirements of NFPA 241.

C. Storage and Fabrication Sheds:
   1. Install storage and fabrication sheds sized, furnished, and equipped to accommodate materials and equipment involved, including temporary utility service.
   2. Sheds may be open shelters or fully enclosed spaces within the Building or elsewhere on the Site.

D. Temporary Enclosures: (Not Used)

H. Temporary Lifts and Hoists:
   1. Provide facilities for hoisting materials and employees.
   2. Truck cranes and similar devices used for hoisting materials are considered “tools and equipment” and not temporary facilities.

I. Project Identification and Temporary Signs:
   1. Furnish and install the Project Identification Sign in accordance with the IAC Administrative Procedures Guide (APG), Appendix E. See attachment at end of this Section.
      a. Size: 6 feet high by 8 feet wide.
      b. Sign Information:

The State of Maryland
and
The Howard County Board of Education
are
**New Talbott Springs Elementary School**

**Architect: TCA Architects**
**Construction Manager: Dustin Construction, Inc.**

      c. Sign Shop: Maryland Correctional Enterprises (MCE)
MCE Sign Plant
c/o Patuxent Institution
Attn: Charles Behnke, Plant Manager
7555 Waterloo Road
Jessup, MD 20794
Phone: (410) 799-5102/5103
Fax: (410) 799-7911

   2. Install signs where indicated to inform the Public and persons seeking entrance to the Project.
   3. Support on posts or framing of preservative-treated wood or steel.
   4. Do not permit installation of unauthorized signs.
   5. No sign or advertisement shall be displayed without the Owner’s/Construction Manager approval.
   6. Obtain all sign permits, as required by the Local Authorities.
   7. The Contractor to install County and State signs in locations directed by the Owner within one month of the Contract Award Date.
   8. Temporary Signs: Prepare signs to provide directional information to construction

personnel and visitors.

J. Temporary Exterior Lighting: (Not Used)

K. Collection and Disposal of Waste:
1. Collect waste from construction areas and elsewhere daily.
2. Comply with requirements of NFPA 241 for removal of combustible waste material and debris. Enforce requirements strictly.
3. Do not hold materials more than 7 days during normal weather or 3 days when temperature is expected to rise above 80 deg F.
4. Handle hazardous, dangerous, or unsanitary waste materials separately from other waste by containerizing properly.
5. Dispose of material lawfully and as specified in Section 017419 - Construction Waste Management.

L. The Contractor will build, maintain, remove, and restore access roads and staging areas for use of all Contractors that are shown on the Contract Documents, as indicated in the Bid Packages Section. If other roads are needed, they are the responsibility of the Contractor requiring access.

1. 4 SECURITY AND PROTECTION FACILITIES INSTALLATION

A. Except for use of permanent fire protection as soon as available, do not change over from use of temporary security and protection facilities to permanent facilities at each phase until time of Substantial Completion.

B. Temporary Fire Protection: Until fire protection needs are supplied by permanent facilities, install and maintain temporary fire protection facilities of types needed to protect against reasonably predictable and controllable fire losses.
1. Comply with NFPA 10 “Standard for Portable Fire Extinguishers” and NFPA 241 “Standard for Safeguarding Construction, Alterations, and Demolition Operations”.

C. Permanent Fire Protection: (Not Used)

D. Barricades, Warning Signs, and Lights:
1. Comply with standards and code requirements for erection of structurally adequate barricades.
2. Paint with appropriate colors, graphics, and warning signs to inform personnel and the Public of hazard being protected against.
3. Where appropriate and needed, provide lighting, including flashing red or amber lights.

E. Security Enclosure and Lockup:
1. Install substantial temporary enclosure of partially completed areas of construction.
   a. Provide locking entrances to prevent unauthorized entrance, vandalism, theft, and similar violations of security.
2. Where the Materials and Equipment must be stored, and are of value or attractive for theft, provide secure lockup.
3. Enforce discipline in connection with installation and release of the Materials to minimize opportunity for theft and vandalism.
4. Each Contractor is responsible for its own security.
5. The Construction Manager will install chain link fence around the LOD, where indicated in the Contract Documents.

F. Environmental Protection: Provide protection, operate the Temporary Facilities, and conduct construction in ways and by methods that comply with environmental regulations, and minimize possibility that air, waterways, and subsoil might be contaminated or polluted or that other undesirable effects might result. Avoid use of tools and equipment that produce harmful noise. Restrict use of noise-making tools and equipment to hours that will minimize complaints from persons or firms near the Site.

## 3. 5 OPERATION, TERMINATION, AND REMOVAL

A. Supervision: Enforce strict discipline in use of the Temporary Facilities. Limit availability of the Temporary Facilities to essential and intended uses to minimize waste and abuse.

B. Maintenance: Maintain the Facilities in good operating condition until removal. Protect from damage by freezing temperatures and similar elements.
   1. Maintain operation of temporary enclosures, heating, cooling, humidity control, ventilation, and similar facilities on 24-hour basis where required to achieve indicated results and to avoid possibility of damage.
   2. Protection: Prevent water-filled piping from freezing. Maintain markers for underground lines. Protect from damage during excavation operations.

C. Termination and Removal:
   1. Unless the Architect and/or Construction Manager request that it be maintained longer, remove each Temporary Facility when need has ended, when replaced by authorized use of permanent facility, or no later than time of Substantial Completion.
   2. Complete or, if necessary, restore permanent construction that may have been delayed because of interference with the Temporary Facility.
   3. Repair any damaged work, clean exposed surfaces, and replace construction that cannot be satisfactorily repaired.
   4. Materials and facilities that constitute the Temporary Facilities are the Contractor’s property.
      a. The Owner reserves right to take possession of the Project Identification Signs.
   5. Remove temporary paving not intended for or acceptable for integration into permanent paving.
      a. Where area is intended for landscape development, remove soil and aggregate fill that do not comply with requirements for fill or subsoil in area.
      b. Remove materials contaminated with road oil, asphalt, and other petrochemical compounds, and other substances that might impair growth of plant materials or lawns, repair or replace street paving, curbs, and sidewalks at temporary entrances, as required by the Governing Authority.

END OF SECTION

tca architects
1369 Generals Highway | Crownsville, MD 21032 | 410.266.7722 | www.tca-architects.com

12 February 2020

# Addendum No. 2

## Talbott Springs Elementary School
## Summer Utility Relocation

Howard County Public School System
Bid Number: 035.20.B4

The following is intended to clarify, correct, revise, and restate various parts of the Drawings and Specifications all of which shall form part of this Contract.

Acknowledge receipt of this Addendum in the space provided on the Bid Form. Failure to do so may subject the Bid to be considered as non-responsive.

**CHANGES TO SPECIFICATIONS**:

01 1000 SUMMARY OF WORK

**REVISE** line item in 1.03 Contract Method

From:

A. Construction of the Work will be performed under a Single Prime Contract as follows:

Contract 2A – Site.

To:

A. Construction of the Work will be performed under a Single Prime Contract as follows:

Contract 2B – Site.

01 1113 CONTRACT PACKAGES

**REVISE** Part 2 – 02B Site Work – Utilities Specific Scope of Work – Earthwork and Utilities Specific Scope:

From:

5. The 02B Contractor is responsible for all temporary seeding required for the site stabilization during construction. All disturbed areas shall be permanently stabilized with sod at the completion of the project. All maintenance and watering as required per the specifications shall be included.

To:

5. The 02B Contractor is responsible for all temporary seeding required for the site stabilization during construction. All disturbed areas shall be permanently stabilized at the completion of the project as directed on the sodding plans and related specs. All maintenance and watering as required per the specifications shall be included.

31 2000 EARTH MOVING

**REVISE** line item in 2.05 Scope

From:

If on-site topsoil is not acceptable on this project imported topsoil is required.

To:

On-site topsoil is not acceptable on this project. Provide imported topsoil is required.

33 0000 ON-SITE AND OFF-SITE UTILITIES

**REVISE** line item in 2.05 Manholes - B

From:

Manhole Frames and Covers: ASTM A 536, Grade 60, heavy-duty ductile iron. Include 32-inch (minimum) inside diameter by 6-inch riser with 4-inch minimum width flange, and 30-inch diameter cover. Include indented top design with lettering, equivalent to the following, cast into cover:

To:

Manhole Frames and Covers: ASTM A 536, Grade 60, heavy-duty ductile iron. Include 32-inch (minimum) inside diameter by 6-inch riser with 4-inch minimum width flange, and 24-inch diameter cover. Include indented top design with lettering, equivalent to the following, cast into cover:

**REVISE** line item in 2.05 Manholes - C

From:

Manhole Coating: All structures and non-structures shall be water-tight and interior wall coated with a Howard County approved sewer structural coating.

To:

Manhole Coating: All structures and non-structures shall be water-tight and interior wall coated with a Howard County approved sewer structural coating if required.

**CHANGES TO DRAWINGS**:

C-4 UTILITY RELOCATION PLAN

**ADD** 2 LED solar light pole fixtures and a detail for the fixture and pole.

**REMOVE** solar light.

**REMOVE** 18" HDPE (148') label

C-12 WATER MAIN EXTENSIONS CHARTS & PROFILES

**ADD** SHEET C-12 – proposed future grade line.

**END OF ADDENDUM NO. 2**

Attachments:

**Specification Sections**

| | |
|---|---|
| 01 1000 | Summary of Work |
| 01 1113 | Contract Packages - Part 2 - 02B Site Work – Utilities Specific Scope of Work |
| 31 2000 | Earth Moving |
| 33 0000 | On-Site and Off-Site Utilities |

**Sketches**

ADD_2_C-4 (1)

ADD_2_C-4(2)

ADD_2_C-4(3)

ADD_2_C-12(1)

## 1.00 GENERAL

### 1.01 Related documents

Drawings and general provisions of the Contract, including the General Conditions and Division 01 Specification Sections, apply to this Section.

### 1.02 Work under the contracts

The Contract Documents show and specify the Work of the Contracts and related provisions. The Work shall include - but is not limited to - all work necessary for construction of the Project, including all of the civil/site, architectural, structural, mechanical, plumbing and electrical Work indicated on the Contract Documents.

### 1.03 Contract Method

A. Construction of the Work will be performed under a Single Prime Contract as follows:

Contract 2B – Site.

### 1.04 Permits, fees, and notices

A. The Owner will obtain the Sediment Control and Grading Permit.

1. Each Contractor shall obtain and pay for all other permits required by law or the Contract Documents for execution of the Work, unless noted otherwise.

2. The Owner will reimburse the Contractor for actual permit costs (no mark-up).

B. The Contractor shall give all notices and comply with all laws, ordinances, rules, regulations and lawful order of any Public Authority bearing on performance of the Work.

C. The Contractor shall pay legally required sales, consumer and use taxes.

### 1.05 Reference standards

A. For the Products specified with association or trade standards, comply with requirements of the Standards, except when more rigid requirements are specified or required by applicable codes.

B. Comply with the Standards in effect as of the Bid Date, except when specific date is specified.

C. Obtain copy of each Standard identified in the Contract Documents.

1. Maintain copy on the Project site during progress of the applicable Work.

1.06 Special requirements

A. Fire Protection; each Contractor shall:

1. Provide and maintain approved portable 15 lb/20 BC-rated fire extinguishers at all storage locations and all appropriate locations during construction.

2. Avoid accumulation of flammable debris and waste within the Building and vicinity. Avoid large and unnecessary accumulations of combustible forms and form lumber.

3. Store flammable or volatile liquids in open or in small detached structure or trailers.

a. Handle liquids with low flash points that are to be used within the Building in approved safety cans.

b. Supervise closely storage of paint materials and other combustible finishing and cleaning products.

c. Do not permit oily rags to be stored in closets or other tight permanent spaces.

4. Prohibit smoking in vicinity of hazardous operations and locations.

a. Post suitable "No Smoking" signs in these areas.

5. Closely supervise welding and torch cutting operations near combustible materials.

6. Use only fire-resistant building paper, plastic sheet, and tarpaulins for temporary protection.

7. Do not store combustible materials outdoors within 10 feet of the Building structure.

8. Do not use gasoline for cleaning within the building under any circumstances.

9. Do not burn any trash or other material on the Project site.

10. Take other precautions suitable for hazardous conditions on the Site to prevent fire.

B. Accident Prevention and Safety; each Contractor shall:

1. Comply with all applicable laws, ordinances, rules, regulations and orders of the governing Authorities Having Jurisdiction for safety of persons and property; to protect them from damage, injury or loss.

2. Provide safety and protection, including fences, railings, barricades, lighting, posting of danger signs and other warnings against hazards.

3. Be solely responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with its Contract.

4. Cooperate fully with Indoor Air Quality requirements.

5. Comply fully with latest Environmental Protection Agency 40 CFR Part 745 Lead Renovation, Repair and Painting Regulations.

a. All testing required for presence of lead base paint will be done by the Owner.

b. Required notification and cleaning verification will be done by the Owner.

C. Hours of Work: Each Contractor shall furnish sufficient forces to ensure completion of the Work within time/date stated in the Contract.

2.00 PRODUCTS

(Not used)

3.00 EXECUTION

(Not used)

END OF SECTION

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## 1.00 GENERAL

### 1.01 Description

Excavating, filling and grading for this work includes, but is not necessarily limited to:

A. Excavation is non-classified to design subgrade.

B. Preparation of subgrade for building slabs, walks and pavement.

C. Installation of granular base beneath slabs.

D. Excavating and backfilling for footings, pits and trenches.

E. Excavating and backfilling for underground utilities, structures and appurtenances, including trenches within the building lines.

F. All rough and finish grading of the site (and off-site areas, if indicated).

G. Acquisition, placement and spreading of imported structural fill material, as necessary to attain indicated grades. Imported fill material shall be furnished at no additional cost to the Owner.

H. Removal of excess soil and fill material, as necessary to attain indicated grades. Removal and disposition of cut soils shall be completed at no additional cost to Owner.

I. Removal of existing unsuitable materials, as determined by the Soils Engineer, from site areas where excavation is required to achieve the work indicated and replacement with approved structural fill material.

J. Use of existing topsoil is not allowed. Screening and spreading of imported topsoil as required to achieve thickness indicated. Excess topsoil shall be removed from site at no additional cost to the Owner.

K. Installation and maintenance of temporary dewatering system.

L. Installation, maintenance and eventual removal of sediment control measures including temporary stabilized construction entrances and temporary stabilization.

M. Manipulation and drying of soils or the application of soil drying agents to approved fill materials if required to reduce moisture content to acceptable levels.

N. Removal of sediment from stormwater management facilities during construction if directed by sediment control inspector.

### 1.02 Related work specified in other Sections

Cooperate as necessary with all other trades to ensure proper installation of work described in this Section. The following operations are described in the Sections indicated. However, all such work shall be performed in strict accordance with the provisions of this Section.

A. Clearing of site is described in Section 02 4113 / SELECTIVE SITE DEMOLITION.

B. Installation of all site utilities in accordance with Section 33 0000 / ON-SITE and OFF-SITE UTILITIES.

### 1.03 Definitions

For the purpose of this Work, the following definitions are established for the terms used:

A. Structural fill is all material placed to raise the grade of the site or to backfill excavations upon which the Soils Engineer has made sufficient tests and observations to enable him to issue a

written statement that, in his opinion, the fill has been placed and compacted in accordance with the requirements of these Specifications.

B. On-site material is material obtained from the required excavation on the site.

C. Import material is material hauled in from off-site borrow areas, when sufficient acceptable on-site material is not available.

D. ASTM Specifications are those contained in the latest edition of the standards of the American Society for Testing and Materials.

E. Non-classified excavation is the complete removal of materials encountered during excavation including rocks, organic materials, slabs, debris, concrete, paving, etc. All excavation is non-classified to design subgrade.

F. Design subgrade is the subgrade elevation that the contractor must attain to commence and/or complete the scope of work. It is the required surface of subsoil, borrow fill or compacted fill. Surface is immediately beneath site improvements, including but not limited to, specially dimensioned fill, paving, loam or other surfacing material as well as the following:

1. Fill areas: Grades that exist after topsoil has been removed.
2. Cut areas: Subgrade elevations shown on the drawings.
3. Footing excavations: Bottom of footing elevation
4. Utility Trenches: Bottom of trench excavation as required to properly install the utilitiy in accordance with the Contract Documents.
5. See section 32 9300 / PLANTS for landscaped areas.

G. Trench is an excavation having vertical sides of any length in which width is not more than 10-feet.

H. Finished grade is the final grade elevations indicated. Spot elevations shall be given uniformed slopes between points for which finished grades are indicated or between such points and existing established grades.

1.04 Requirements of regulatory agencies

Perform all work in accordance with all applicable codes, laws, and ordinances, and applicable sediment control guidelines and regulations. Contractor shall give all required notices.

1.05 Subsurface conditions

A. "Report of Geotechnical Study" – dated March 7, 2018 with Addendum No.1 issued October 1, 2019.

B. Note that the proposed finish floor elevation used in the geotechnical study may differ from the Contract Documents.

C. The Contractor is responsible for visiting the site and becoming familiar with site conditions. Prior to bidding, the Contractor may make his own subsurface investigation at his own expense to satisfy himself with site and subsurface conditions. If such an investigation is made, prior notice shall be given to the Owner and Construction Manager and all borings and pits shall be filled immediately upon completion.

D. A Soils Engineer will be retained by the Owner to observe the performance of all work under this Section. If, in the opinion of the Soils Engineer, any work performed under this Section does not meet the technical or design requirements stipulated for the work, make all necessary readjustments to his approval at no additional cost to the Owner. The presence of the Soils Engineer on site does not relieve the Contractor of the responsibility to provide work in accordance with the Contract Documents. Make no deviations from the Contract Documents without specific and written approval of the Architect or Construction Manager. Payment for the services of the Soils Engineer will be made by the Owner.

E. The Soils Engineer's review of the Contractor's performance does not include review of the Contractor's safety measures in, on, or near the job site or connected in any way with the performance of this Section.

1.06 Project conditions

A. Take all measures necessary to control dust on and near the work. These measures shall include wetting of ground surfaces as often as required to prevent the spread of dust during excavating and grading operations. Wet down ground surfaces as often as required to prevent dust being a nuisance to the public, neighbors, and the concurrent performance of other work on the site.

B. Locate all active utilities traversing the site or areas of off-site work and determine the requirements for protection. Obtain utilities location verification from local "Miss Utility" service and private utility locating firm and provide whatever additional investigation is necessary to verify utility locations before starting any excavation.

C. Use of explosives is not permitted.

D. Burning on site is not permitted.

E. Take all measures necessary to protect structures, utilities, power and utility poles, signs, fencing, curbs, paving, trees, and vegetation which are indicated to remain, or are beyond the "Limit of Grading Disturbance" (L.O.D.), and other facilities in areas of work from damage before, during, and after installation and to protect the installed work of other trades. Any damage to the above shall be repaired to a "like new" condition or replaced at the Owner's discretion at no additional cost. Barricade open excavations and provide warning lights from dusk to dawn each day.

1.07 Sediment and erosion control

Contractor shall take necessary precautions indicated or required to keep sedimentation or mud from entering public ways, roads, driveways, waterways, or adjacent properties in accordance with applicable codes. Conform to Contract Documents and with applicable sediment and erosion control regulations. Contractor shall remove all sediment from sediment control traps prior to placement of fill material in these areas.

1.08 Submittals

Submittals shall be completed in accordance with Section 01 3300 / SUBMITTAL PROCEDURES.

A. Test Results: Submit test results from Maryland Cooperative Extension Service to certify that topsoil meets all specification requirements. Testing shall be completed for all on-site and imported topsoil. Samples and testing shall be taken for each 100 cubic yards of topsoil.

B. Product Literature: Submit descriptive literature for each product or material specified showing compliance with specified requirements.

C. Stormwater As-Builts: Provide Architect with a complete copy of the stormwater as-built submission referenced in paragraph 1.10 below.

1.09 Stormwater As-Built Requirements

When final grading and full stabilization has been completed for all bioretention facilities, the following is required to be completed:

A. Contractor shall prepare two [2 each] sets of the County Site Development Plans (SDP16-013) red lining the sheets to show the bioretention facilities in plan and their associated profiles and details. Two sets shall be signed and sealed by a Professional Engineer, registered in the State of Maryland.

B. Contractor shall assemble and provide two [2 each] geotechnical reports for the bioretention facility construction.

C. Contractor shall forward signed and sealed as-built drawings and the geotechnical reports to [provide copies of complete submittal package to Construction Manager, Architect and Owner - see Submittals above]:

Howard County Department of Public Works

Construction/Inspection Division

7125 Riverwood Drive, Suite B

Columbia, MD 21046

D. Upon the Authorities' having jurisdiction approval of the as-built drawings, the Contractor shall secure and arrange for the original mylars of the County signed Site Development Plans to be revised to reflect the as-built data. Contractor's Maryland Registered Professional Engineer shall complete the revisions and affix seal and signature on the original mylars.

E. Contractor is required to complete the above process through to final acceptance by the Authorities having jurisdiction. Failure to complete this process will result in delay or withholding of final payment.

## 2.00 PRODUCTS

### 2.01 On-site fill material

On-site excavated soils of acceptable moisture contents which are free from organic and other deleterious components and contain no rocks greater than 4" in diameter, can be reused as general site fill when approved by the Soils Engineer. Backfill material at below grade walls shall be classified as SM or more granular. Clay soils (CL) or micaceous silts (ML) shall not be used as wall backfill material. On-site soils may require manipulation, aeration and/or blending with drier soils to achieve sufficient backfill compaction. Groundwater levels may fluctuate due to seasonal variations in precipitation. The action of heavy construction activity may create a general deterioration of on-site materials if conducted in the presence of water. Soils Engineer will evaluate these conditions as work progresses and may require that wet or soft soils be removed and replaced. No extra costs will be allowed for such removal and replacement. Contractor shall fully note these conditions in the preparation of his bid.

### 2.02 Imported fill material

All imported fill material shall meet Unified Soil Classification System designation SM or more granular and shall meet the requirements specified for on-site fill material. The liquid limit and plasticity index of the import material shall not exceed 40 and 20 respectively. The moisture content of the import material shall be within 2% of optimum at time of placement and compaction. If required, imported fill material shall be obtained from an off-site borrow area approved by the Soils Engineer.

### 2.03 Granular base beneath slabs and walks

A minimum 6" (six inch) lift of clean angular granular material such as graded course aggregate (MSHA no. 57) or dense graded aggregate (MSHA CR-6 or GA S/B) with aggregate size no greater than 1½", fines less than 12% by total weight, and passing a no. 200 sieve, shall be placed below all interior floor slabs as a moisture barrier. Granular base material will require acquisition from an off-site source. Granular base in depth indicated shall be placed beneath exterior slabs and walks where indicated. Prior to placing granular base, slab subgrade shall be proofrolled to approval of Soils Engineer and shall be free of standing water or mud.

### 2.04 Filter fabric (also noted as filter cloth)

At site details and where otherwise indicated, shall be Typar 3301 by Fiberweb, Mirafi 140N by Tencate Geosynthetics or Amoco ProPex 4551 by Amoco Fabrics and Filters Company non-woven geotextile filter fabric. For sediment control devices, comply with specific requirements of details.

### 2.05 Topsoil

A. All topsoil shall be screened utilizing a ½" screen prior to placement. All topsoil shall be free of glass or metal fragments, regardless of size.

B. On-site topsoil is not acceptable on this project. Provide imported topsoil is required.

C. Off-site imported topsoil shall consist of a natural friable loam of uniform composition, obtained from an area which has never been stripped, possessing characteristics of the best soils of the vicinity which produce heavy growths of crops, grass, and other vegetation.

D. All imported topsoil shall be of uniform composition with no subsoil, clay lumps, stones, stumps, roots or similar objects. All imported topsoil shall be free of glass, metal fragments or any parts (seed, rhizomes, roots, etc.) of Johnson grass, Canada Thistle, Bermuda grass, poison ivy or other noxious weeds, and litter or any other material or substances which may be harmful to plant growth, or a hindrance to planting or maintenance operations. All topsoil shall contain 50-75% sand, 15-25% silt and 10-20% clay. All imported topsoil shall have a pH value between 5.8 and 7.0 and shall contain not less than 2.0% or more than 5% organic matter by weight, in accordance with MSMT 603. Soluble salts shall not exceed 500 ppm. Contractor shall have all imported topsoil tested by the recognized approved soil lab from the Maryland Department of Agriculture. Testing certification shall attest that tested samples of topsoil meet all specification requirements. Test samples shall be taken for each 100 cu. Yards of topsoil. Cost of testing topsoil shall be paid by the Contractor. Add organic matter if required by test results. Contractor shall deliver one cubic yard of proposed imported topsoil to the site for Owners approval and location where the topsoil is coming from before starting of spreading. Owner's evaluation of suitability of imported topsoil shall be final.

E. Imported topsoil that does not meet this criteria will not be acceptable.

F. Amendment process to incorporate soil additives [sand, silt, etc.] shall be completed prior to soil placement to ensure a homogenous blend of materials meeting the project specifications for the entire specified depth of topsoil.

2.06 Bedding for pipes

Unless otherwise noted on site drawings, bedding for pipes shall consist of granular fill material, sufficiently loosened and approved by Soils Engineer. Use approved imported granular material such as coarse aggregate, size 57 or 67, meeting ASTM C-33 where required by code authorities.

2.07 Stabilization matting

Stabilization matting for use on all slopes of 3:1 or steeper and where indicated on sediment control details shall be Curlex I Blankets as manufactured by American Excelsior Co. (800-777-7645). Stabilization matting shall be 4' wide bio-degradable extruded plastic mesh over a mat of curled wood excelsior. Attach matting to slope with manufacturer's 6" long staples at approximately 6'-0" on center at each side and at center of matting. Matting shall be bio-degradable within a period of ninety (90) days after installation.

2.08 Soil drying agent

Soil drying agent shall be quick lime, non-expansive fly ash, or cement kiln dust obtained from off-site sources approved by the Soils Engineer. Apply at rate as determined by the Soils Engineer, which is typically 4.9% to 8% by weight as required to reduce moisture content. Testing during application to approved fill materials will determine the exact percentage required.

## 3.00 EXECUTION

### 3.01 General

A. Prior to all work of this Section, become thoroughly familiar with all site conditions. In the event any discrepancies are found, notify the Construction Manager in writing as to the nature and extent of the differing conditions prior to receipt of bids.

B. Do not allow or cause any of the work performed or installed to be covered up or enclosed prior to all required inspections, tests, and approvals. Shall any of the work be enclosed or covered up before it has been approved, uncover all such work at no additional cost to the Owner. After the work has been completely inspected, tested, and approved, make all repairs necessary to restore the work of other trades to the condition in which it was found at the time of uncovering, and at no additional cost to the Owner.

C. If uncovered by excavation, Contractor shall be permitted to place extremely hard inorganic material or "rock" by any definition in non-structural locations and in arrangement as directed by Construction Manager and Soils Engineer where finish grades indicated on site development plans allow for at least four feet of fill material cover.

D. Seasonal variations in precipitation may influence site groundwater levels. Actual water levels may be different from those noted in the "Subsurface Exploration and Geotechnical Evaluation". On-site "ML" soils and the micaceous silt component of "SM" soils are very moisture sensitive and will require the use of good construction practices to prevent degradation of those materials. Every effort shall be made to keep these soils drained and free of ponded water.

E. Contractor shall immediately notify Soils Engineer if ground water seepage becomes apparent during rough grading operations. Soils Engineer will determine if any permanent under drains are required or if condition only requires temporary dewatering system.

### 3.02 Inspection and testing

All earthwork procedures shall be performed in the presence of the Soils Engineer to the extent to which the Owner's contract with the Soils Engineer permits. Give Soils Engineer at least 24 hours notice when services are required. Contractor shall request inspection by Owner's representative after topsoil placement is complete to determine if quality, spreading, and thickness of topsoil installed is acceptable.

The Soils Engineer's duties may include, but not be limited to, the following:

A. Observation of proof-rolling and testing of subgrade after stripping operations and prior to fill placement to verify removal of topsoil and unsuitable materials. Scope includes making related tests to verify that stripped topsoil does not contain subsoil contaminants and meets the requirements of this specification Section.

B. Observation of procedures and making of all tests related to excavating, filling and grading. Extent and type of test shall be as determined by Soils Engineer. All fill lifts shall be tested and at least one density test shall be made per 2500 square feet, but not fewer than two tests per lift.

C. Observation, testing, and approval of subgrade and reinforcement for footings before placement of concrete.

D. Observation and approval of floor subgrade and fill placement before placement of under floor granular base.

E. Testing of proposed imported fill material and verification of correlation of the imported material to laboratory test samples.

F. Performing required number of in-place density tests in pavement areas after these areas are at grade to verify pavement design.

G. Verification of removal of sediment from sediment control traps and testing of subgrade in traps prior to fill placement or conversion to stormwater management facility.

H. Verify topsoil placement to determine if spreading thickness of topsoil installed is acceptable.

3.03 Temporary dewatering system

A. Any shallow groundwater encountered may result from perched water conditions and/or surface water infiltration and shall be managed by minor dewatering techniques.

B. Contractor shall be responsible for providing and maintaining a construction phase dewatering system, including a temporary system of sumps, pumps, and drainage ditches, as required to remove water from any source, including groundwater, and maintaining dry workable conditions in areas of work.

C. No claims will be considered for delays related to wet conditions or deteriorated subgrade resulting from the lack of proper maintenance of an effective temporary dewatering system, disturbance of the subgrade due to poor construction procedures, or from construction work during unfavorable weather conditions.

3.04 Site stripping and preparation

A. After clearing operations are complete, prepare the site for construction by tilling and removing any remaining vegetation and all organic, soft, loose, frozen or unsuitable materials within the limits of filling, grading, and construction operations. Tree stumps shall be removed in their entirety. Stockpile all topsoil on site for later use at location approved by Construction Manager. The entire area which has been so stripped and excavated shall be proofrolled utilizing a tandem axle dump truck having an axle weight of at least 20 tons or another pneumatic-tired vehicle of similar size and weight in the presence of the Soils Engineer to locate any isolated areas of soft or loose soils requiring improvements or replacement. Proofrolling shall not be performed during or following wet weather conditions. Relatively soft materials may be improved for supporting new on-site fill materials by deeply discing, aerating and recompacting if approved by the Soils Engineer. Any unsuitable materials shall be removed and replaced as directed by the Soils Engineer. Contractor shall be prepared to overexcavate soft or yielding materials which may exist at direction of Soils Engineer at no additional cost to the Owner.

B. Surface runoff shall be drained away from excavations and not allowed to pond. If on-site materials exhibit excessive moisture content during construction activities, Soils Engineer may require their removal and replacement with suitable fill materials. Such removal shall be included within the scope of the contract. No extra costs will be allowed for any such removal and replacement.

C. Do not stockpile near excavations or within the drip line of trees indicated to remain.

D. Any existing, unsuitable materials below design subgrade resulting from site stripping, and on-site materials not approved for use as structural fill or approved for stockpiling as topsoil shall be removed from the site and disposed of in an approved and lawful manner.

3.05 Excavating

A. General

Excavate materials encountered to subgrade elevations indicated or specified. Excavation is non-classified to design subgrade. Excavate materials regardless of character of the materials encountered, at no increase to the Contract Sum. The contract price is understood to cover the removal of all such materials including all debris and foreign objects of any type to the depth and extent required by the drawings and specifications, and "rock" by any definition. Rock removal shall be at no additional expense to Owner. Areas containing moisture sensitive fine-grained materials (silts and clays) may require dicing, aeration and/or manipulation to attain the specified level of compaction. Existing site areas exhibiting poor drainage characteristics shall be expected to display high moisture contents prior to drying. Apply soil drying agents where approved by Soils Engineer to reduce moisture content of approved fill materials. Do not apply drying agents during windy conditions, when subgrade is frozen or when temperature is below 32° F.

Where fill materials are placed on slopes greater than 5:1, bank shall be stepped or benched at direction of Soils Engineer to prevent the formation of any slip surfaces and to facilitate the placement of fill in horizontal layers. Stepped vertical benches shall not exceed two feet in height.

Contractor shall immediately notify Soils Engineer if groundwater is found during grading operations. Such groundwater may require the installation of under drains to protect the integrity of the fill slopes.

B. Footings

The drawings show predetermined elevations for tops of footings. Side forms for footings may be omitted when excavations for footings are cut accurately and sides are firm; however, all trenches and excavations must be properly braced and supported in strict accordance with all pertinent codes and regulations. Excavate to design subgrade at elevations and dimensions indicated, allowing ample space for construction operations. Take care to minimize disturbance of bearing soils. Footings shall be excavated to design subgrade and poured the same day. If footings are not poured on the day of excavation and original inspection, mud mats are to be provided and a reinspection will be required. Unsuitable, disturbed, frozen or softened soils shall be removed prior to placement of concrete. Footing subgrades shall be free of water for the final inspection and during placement of concrete. Surface runoff shall be drained away from footing excavations and not allowed to pond. If soft or loose pockets of fill are encountered, the existing, unsuitable materials shall be removed and the footings shall be located at a lower elevation at no additional cost to the Owner. If acceptable to Soils Engineer, existing, unsuitable materials may be removed and replaced with approved structural fill or lean concrete (2000 psi).

C. Depressions resulting from removal of obstructions

Where depressions result from, or have resulted from, the removal of surface obstructions and demolition operations, open the depression to equipment working width and remove all debris and soft material as directed by the Soils Engineer, with additional soft material and debris removed as directed prior to the placement of structural fill.

D. Over-excavation

Backfill and compact all over-excavated areas as specified for structural fill and at no additional cost to the Owner. If acceptable to Soils Engineer, over-excavated areas of footings or column bases may be backfilled with approved lean concrete (2000 psi) or MSHA no. 57 granular base, properly compacted.

3.06 Unfavorable weather and water control

A. Unfavorable weather

Do not place, spread, or roll any fill material during unfavorable weather conditions. Do not resume operations until moisture content and in-place density are satisfactory to the Soils Engineer. Do not place fill on frozen subgrade.

B. Maintain permanent or provide temporary roof or structure drainage measures to minimize or eliminate storm water ponding and storm water run-off from entering excavation areas, stockpile areas, or other active or inactive construction areas. All costs associated with providing temporary measures to prevent wet soils, erosion, or flooding shall be completed at no cost to the Owner.

C. Flooding

The site shall be properly graded and berms or channels constructed during construction to direct surface runoff and seepage away from the construction area and prevent flooding of subgrade. At the end of each work day, exposed subgrade shall be rolled and sealed. Promptly remove all water collection in depressions or excavations.

D. Softened subgrade

Where soil has been softened or eroded by flooding or by placement during unfavorable weather conditions, remove all damaged areas and recompact as described for fill and compaction. On-site fine-grained soils may be sensitive to moisture content increases. This general sensitivity to water will influence foundation, slab, and engineered fill construction, since subgrade support capacities may deteriorate when these general soil types become wet. As such, every effort shall be made to keep soils drained and free of ponded water. In addition, trafficking of the site with heavy equipment shall be avoided when the on-site soils are wet.

E. Frost protection

When freezing temperatures may be expected, do not excavate to the full depth indicated unless the footings or slabs are to be poured immediately after the excavation has been completed. If placing of concrete is delayed, protect the bottoms of excavations from frost until concrete is placed.

If interior footings are placed when freezing temperatures can be expected, they shall either be lowered to adequate depth for frost protection or heated and insulated to the satisfaction of the Soils Engineer until building is adequately heated.

3.07 Trenching

A. Dimensions

Make all trenches of open vertical construction with sufficient width to provide free working space at both sides of the trench and around pipes or conduit as required for caulking, joining, and backfilling and compacting. Where invert elevations are not shown, trench to a sufficient depth to give a minimum of 18 inches of fill above the top of exterior pipe measured from the adjoining finish grade.

B. Correction of faulty grades

Where trench excavation is inadvertently carried below proper elevations, backfill with graded coarse aggregate, MSHA no. 57, meeting ASTM C-33 or controlled compacted fill material to provide a firm and unyielding subgrade and/or foundation to the approval of the Soils Engineer and at no additional cost to the Owner.

C. Trench and excavation bracing

Properly support all trenches and excavations in strict accordance with all pertinent codes and regulations. Brace, sheet, and support all excavation faces in such a manner that they will be safe and that the ground alongside the excavation will not slide or settle, and that all existing improvements of every kind, either on public or private property, will be fully protected from damage. In the event of damage, immediately make all repairs necessary to the approval of the Architect and at no additional cost to the Owner. Arrange all bracing, sheeting, and shoring so as to not place stress on any portion of the completed work until the general construction of these parts has proceeded far enough to provide ample strength.

Exercise care in the drawing or removal of sheeting, shoring, bracing and timbering to prevent collapse or caving of the excavated faces being supported.

3.08 Compaction of fill material

A. Scarify the existing subgrades to a depth of 6" prior to placement of new fill materials so that a weak plane will not be formed between new fill materials and the existing subgrade.

B. After subgrade has been approved by the Soils Engineer, spread the specified fill material in loose lifts not to exceed 8 inches in loose thickness.

C. Water or aerate the fill material, as necessary, and thoroughly mix to obtain a moisture content which will permit proper compaction but remain within ±2% of the optimum moisture content as determined by ASTM Specification D-698.

D. Fill within the area of the building and extending a distance of 10 feet beyond the building perimeter shall consist of approved on-site soils compacted to at least 95% of the Standard Proctor maximum dry density per ASTM D-698.

E. Fill within the area to be paved (concrete and asphalt) and extending a distance 10 feet beyond pavement areas shall consist of approved on-site soils compacted to at least 95% of the Standard Proctor maximum dry density per ASTM D-698. Soils with liquid limits in excess of 40 and/or plasticity index above 20 and with soaked CBR of less than 2½% shall not be used in the top 18" of subgrade under paved areas. These soils shall be replaced with more granular, less plastic on-site materials at direction of Soils Engineer.

F. Approved on-site soils in playfields and landscape areas and where otherwise indicated shall be compacted to at least 90% of the Standard Proctor maximum dry density per ASTM D-698.

3.09 Soil Engineer's approval of fill material

A. All fill material shall be subject to the approval of the Soils Engineer.

B. Samples representative of the entire volume of materials proposed for use as structural fill shall be submitted to the Soils Engineer for laboratory classification and compaction testing. If the use of more than one source of imported material is anticipated, representative samples of each soil must be submitted for testing. All samples shall be submitted to the Soils Engineer at least ten days before the use of those materials on the project, to allow time for proper testing and evaluation of these materials for use in construction of the fill. Soil Engineer's decision on the acceptability of the material shall be final and binding.

C. Size of sample shall be a minimum of 75 lbs. in a sealed bag or container.

D. Should the proposed imported fill materials delivered to the site, in the opinion of the Soils Engineer, vary from those submitted and tested by the Soils Engineer, the Contractor shall stop hauling and remove such material from the site at no additional cost to the Owner.

3.10 Backfill against foundation and below grade walls

A. Backfill against foundation walls only after placement, where applicable, of dampproofing and waterproofing, and after approval of Architect and Structural Engineer has been obtained. Place and compact backfill so as to avoid damage to walls, waterproofing and other work in place. Place backfill in equal depths on both sides of foundation walls so as to raise grades simultaneously where wall is not designed as a retaining wall. Compact backfill material as specified.

B. Compactors exceeding three thousand (3000) pound static weight shall not be used adjacent to walls to avoid overloading and damaging walls.

C. Heavy earthwork equipment shall maintain a minimum horizontal distance away from the below-grade walls of one foot per vertical foot of wall height. Lighter earthwork equipment shall, as much as practical, work perpendicular to the below-grade walls.

3.11 Grading

Rough grade and finish grade the entire site to the elevations indicated on the drawings. In all cases, grading shall produce positive water runoff. Grade to at least the following tolerances:

A. Rough grade

Building, paving and sidewalk areas.....Plus or minus 0.2 foot

Landscaped areas.....Plus or minus 0.3 foot

B. Finish grade

Building, paving and sidewalk areas.....Plus or minus 0.1 foot

Landscaped areas.....Plus or minus 0.1 foot

Ballfields and playfields shall be motor-graded.

In areas such as parking islands, provide slope of one inch per one foot for runoff.

3.12 Utilities

A. See applicable sections in Divisions 22, 23 and 26 for requirements relating to utility installation within the building footprint.

B. Excavate utility trenches sufficiently wide to provide a minimum of 9" clearance on both sides of utility. Where "rock" by any definition is encountered, excavate 6" below required elevation and backfill with 6" layer of crushed stone or gravel prior to utility installation at no additional cost to the Owner. Remove any ground water that may accumulate. Grade the trench bottom to provide a smooth, firm and stable foundation at every point throughout the length of the pipe.

C. Unless otherwise indicated on site drawings, place pipe barrel on a minimum of 6 inches of bedding material meeting the requirements of this Section of these Specifications.

D. In areas where soft, unsuitable materials are encountered at the surface upon which the bedding material is to be placed, remove the unsuitable material and replace with material approved by the Soils Engineer. Provide sufficient depth to develop a firm foundation for the pipe as approved by the Soils Engineer.

E. At each joint in the pipe, recess the bottom of the bedding as required in such a manner as to relieve the bell of the pipe of all load and to ensure continuous bearing of the pipe barrel on the firm foundation.

F. Accurately shape the pipe subgrade and fit the bottom of the pipe to the excavation. Use a drag template shaped to conform to the outer surface of the pipe if other methods do not produce satisfactory results.

G. Do not backfill utility trenches until all required tests and inspections of utilities have been completed.

H. Place material meeting the requirements of this Section of these Specifications in the trench simultaneously on each side of the pipe for the full width of the trench to depths indicated on Site drawings for storm, sewer, and water piping. After obtaining approval of the Soils Engineer, densify the bedding material after placing by carefully hand tamping. Take special care to provide a firm bedding support on the underside of the pipe and fittings for the full length of the pipe. Place additional lifts as required to extend the bedding material 12 inches above the top of the outside diameter of the pipe barrel.

I. Other bedding procedures and materials may be used if prior written approval has been obtained from the Soils Engineer.

J. After the pipe has been properly bedded and covered, spread approved on-site or imported fill material in 8" lifts and compact as specified in this Section of these Specifications. Repeat the spreading and compacting procedure until adjacent grade level is attained.

3.13 Remedial measures

Damage to subgrade, compacted areas or at-grade natural materials by heavy equipment or construction procedures shall be corrected by remedial measures recommended by Soils Engineer at no additional cost to the Owner.

3.14 Placing topsoil

A. Topsoil testing and any required amendment processes shall take place prior to start of placing soil.

B. Topsoil shall not be placed when either the subgrade or the topsoil is wet or frozen enough to cause clodding. Scarify subgrade beneath areas designated to receive topsoil to a depth of two (2) inches prior to placement of topsoil. Import topsoil from approved off-site sources if required to attain thickness indicated.

C. Topsoil shall be spread over all areas to be planted, sodded, or seeded such that compaction shall bring settled depth to six (6) inches. Make small test sections to determine depth of loose spread to obtain compacted thicknesses.

D. Work all areas of the compacted topsoil, including existing on-site topsoil, until topsoil is free of any objects larger than ½" in any direction and is smooth and true to the grades within the maximum tolerances specified.

E. Install stabilization matting to hold topsoil in place on slopes of 3:1 or steeper until seeding has been established.

3.15 Debris and excess material

Completely remove from the site and dispose of in a legal manner all debris and excess material resulting from the work of this Section.

3.16 Maintenance

A. Repair and reestablish grades in settled, eroded, and damaged areas to specified density and tolerances.

B. Where settling is measurable or observable at excavated or graded areas during project warranty period, remove surface treatment (paving, sidewalk, lawn or other finish), add specified fill material, compact to specified density, and replace surface treatment. Restore appearance, quality, and condition of surface or finish to match adjacent work. Eliminate evidence of restoration to maximum extent possible.

END OF SECTION

## 1.00 GENERAL

### 1.01 Description

Provide all labor, materials, equipment, and services required for the installation of utility lines, structures and connections as indicated on site, off site, and in the public right-of-way. Contractor shall insure that installation of site utilities does not interfere with any existing utilities which need to remain active at all times.

### 1.02 Related work specified in other Sections

Cooperate as necessary with all other trades to ensure proper installation of work described in this Section. Refer to the following Sections:

02 4113 / SELECTIVE SITE DEMOLITION

03 3000 / CAST IN PLACE CONCRETE

31 2000 / EARTH MOVING

32 1216 / ASPHALT PAVING

### 1.03 Codes and standards

Work shall be performed in compliance with all applicable codes and standards and with the requirements of public utilities having jurisdiction.

### 1.04 Permits and bonds

Obtain all permits and post all bonds required before starting work. Give all required notices.

### 1.05 Project conditions

Site Information: Verify that survey benchmark and intended elevations for the Work are as shown on the Drawings, research public utility records, utilize private utility location services, and verify existing utility locations. Adjustments or removal of existing utilities such as vaults, meters, valves, telephone poles, power poles, overhead lines, hydrants, etc. that are necessary for the construction of this project will be considered as part of the Contract and will not justify a change in Contract Price or additional cost to the Owner.

### 1.06 Submittals

Submittals shall be completed in accordance with Section 01 3300 / SUBMITTAL PROCEDURES.

A. Shop drawings: Prepare and submit shop drawings for pre-cast concrete manholes, cast-in-place concrete or field-erected manholes, and other structures. Include frames and covers.

B. Product data: Submit copies of manufacturer's descriptive literature for all products specified.

C. Mix designs: Submit reports and calculations for design mixes for each class of cast-in-place concrete.

D. Coordination drawings: Where required by utility congestion, prepare coordination drawings showing manholes and other structures, pipe sizes, locations, elevations, grades and other utilities. Include details of underground structures and connections. Show other piping in same trench and clearances from sewerage system piping. Indicate interface and spatial relationship between piping and proximate structures, invert elevations and pipe sizes at manholes, and rim elevations of structures.

E. Reports: Inspection and test reports specified in the "Field Quality Control" Article and any testing, certification, or reporting required by the authority having jurisdiction.

1.07 Delivery, storage and handling

A. Do not store plastic structures in direct sunlight.

B. Do not store plastic pipe or fittings in direct sunlight.

C. Protect pipe, pipe fittings, and seals from dirt and damage.

D. Handle pre-cast concrete manholes and other structures according to Manufacturer's rigging instructions.

E. In the event of damage, immediately make all repairs necessary to the approval of the authority having jurisdiction and to the approval of the Architect and Owner. Repair work shall be done at no additional cost to the Owner.

1.08 Quality assurance

A. Environmental Agency Compliance: Comply with regulations pertaining to sanitary sewerage potable water systems.

B. Utility Compliance: Comply with regulations pertaining to sanitary sewerage systems. Include standards of water and other utilities where appropriate.

C. Product Options: Drawings indicate sizes, profiles, connections, and dimensional requirements of system components and may be based on specific Manufacturer types indicated.

1.09 Protection

Protect structures, utilities, curbs, paving, planting, and other items in areas of work. Where work is indicated or required in wooded areas to remain, remove minimum number of trees required to safely complete work. Barricade open excavations and incomplete work and provide warning lights from dusk to dawn and as otherwise required. Provide flagman and other measures as required by governing regulations. Provide all overtime work required by authority having jurisdiction to complete work in public right-of-way.

1.10 Sequencing and scheduling

A. Coordinate water and sanitary sewer connections with Howard County DPW Bureau of Utilities.

B. Coordinate with other utility and earthwork.

C. Coordinate installation with all utility inspections required by authorities having jurisdiction.

1.11 Tests

Perform all tests required by the project specifications and governing regulations.

## 2.00 PRODUCTS

2.01 Materials

All materials shall be as indicated on the drawings or as required to match existing materials and shall be in accordance with the standards of the authority having jurisdiction.

2.02 Pipes and fittings

Polyvinyl Chloride (PVC) Pressure Pipe and Fittings for water and fire mains: CLASS 150 pipe, AWWA C 900 DR18, for integral bell and spigot joints. Blue Brute or equal for underground water lines. Class 200 pipe, AWWA C900 for fire line, schedule 40 PVC for pipe sizes less than 4 inches.

2.03 Special pipe couplings and fittings

Ductile-Iron, Flexible Expansion Joints: Compound fitting with a combination of flanged and mechanical-joint ends conforming to AWWA C110 or AWWA C153. Include 2 gasketed ball-joint sections and 1 or more gasketed sleeve sections, rated for 250-psig minimum working pressure and FDA-approved epoxy interior coating for offset and expansion indicated. Include polyethylene (PE) film encasement.

2.04 Pipe encasement

Include AWWA C105, polyethylene film tube and sheet, 8-mil (0.2-mm) thickness for the following:

A. Cast-iron soil pipe and fittings.

B. Ductile-iron piping.

C. Pressure-type pipe couplings.

D. Ductile-iron, special pipe fittings.

2.05 Manholes

A. Pre-cast Concrete Manholes: ASTM C 478, pre-cast, reinforced concrete, of depth indicated, with provision for rubber gasket joints. See also Howard County Design Manual IV, details G-5.12 through G-5.51 for additional guidelines.

1. Ballast: Increase thickness of pre-cast concrete sections or add concrete to base section, as required to prevent floatation.

2. Base Section: Six (6) inch minimum thickness for floor slab and four (4) inch minimum thickness for walls and base riser section and having a separate base slab or base section with integral floor.

3. Riser Sections: five (5) inch minimum thickness, forty-eight (48) inch diameter, and lengths to provide depth indicated.

4. Top Section: Concentric cone or flat-slab-top type as indicated. Top of cone of size that matches grade rings.

5. Gaskets: ASTM C 443 (ASTM C 443M), rubber.

6. Grade Rings: Include two (2) or three (3) reinforced-concrete rings, of 6- to 9-inch total thickness, that match a twenty four (24) inch- diameter frame and cover.

7. Steps: Fiber glass, individual steps or ladder. Include a width that allows a worker to place both feet on one step and is designed to prevent lateral slippage off the step. Cast steps or anchor ladder into base, riser, and top section sidewalls at twelve (12) to sixteen (16) inch intervals. Steps will be included in all manholes and structures that are a minimum of five (5) feet deep, whether shown on Drawings or not.

8. Pipe Connectors: ASTM C 923 (ASTM C 923M), resilient, of size required, for each pipe connecting to base section.

B. Manhole Frames and Covers: ASTM A 536, Grade 60, heavy-duty ductile iron. Include 32-inch (minimum) inside diameter by 6-inch riser with 4-inch minimum width flange, and 24-inch diameter cover. Include indented top design with lettering, equivalent to the following, cast into cover:

Sanitary Sewerage Piping Systems: HOWARD COUNTY SANITARY SEWER

Storm Sewerage Piping Systems: HOWARD COUNTY STORM SEWER

Provide manhole ring and cover with concrete ring encasement as per Howard County requirements.

C. Manhole Coating: All structures and non-structures shall be water-tight and interior wall coated with a Howard County approved sewer structural coating if required.

2.06 Concrete

A. General: Cast-in-place concrete according to ACI 318, ACI 350R, and the following:

Cement: ASTM C 150, Type II.

Fine Aggregate: ASTM C 33, sand.

Coarse Aggregate: ASTM C 33, crushed gravel.

Water: Potable.

Structures: Portland-cement design mix, 4000 psi (27.6 MPa) minimum, with 0.45 maximum water cement ratio.

Reinforcement Fabric: ASTM A 185, steel, welded wire fabric, plain.

Reinforcement Bars: ASTM A 615, Grade 60, deformed steel.

Structure Channels and Benches: Factory or field formed from concrete. Portland-cement design mix, 4000 psi minimum, with 0.45 maximum water-cement ratio.

Include channels and benches in sanitary sewerage manholes.

Manhole Channels: Concrete invert, formed to same width as connected piping, with height of the vertical sides to ¾ of the pipe diameter. Form curved channels with smooth, uniform radius and slope.

2.07 Protective coatings

General: Include factory-or field-applied protective coatings to structures and appurtenances according to the following:

A. Coating: 2-coat, coal-tar epoxy, 15-mil minimum thickness, except where otherwise indicated.

1. Manholes: On exterior surface.

2. Trench Plates and Covers: On exterior surface.

3. All exposed metal surfaces: On exterior surfaces.

2.08 Cleanouts

A. Description: ASME A112.36.2M, round, cast-iron housing with clamping device and round, secured, scoriated, cast-iron cover. Include cast-iron ferrule with inside calk or spigot connection and countersunk, tapered-thread, brass closure plug. Use units with top-loading classifications according to the following applications:

Secure with cast iron Box with Locking Cover.

Light Duty: In earth or grass, foot-traffic areas.

Medium Duty: In paved, foot-traffic areas.

Heavy Duty: In vehicle-traffic service areas.

B. Sewer Pipe Fitting and Riser to Cleanout: ASTM A 74, service class, cast-iron soil pipe and fittings.

2.09 Safety barricades

Barricades and warning lights shall be of the type and number required by the governing regulations. Do not interfere with traffic flow adjacent streets or the access drive in front of the neighboring Middle School without prior approval of the authority having jurisdiction.

3.00 EXECUTION

3.01 Scheduling

Schedule and execute all work as required for orderly progress of the work and with all necessary consideration for the public and for adjoining properties. Do not interfere with the use of adjoining property, buildings, facilities, driveways, and roads. Provide alternate routes around closed or obstructed traffic ways as required by governing regulations.

3.02 Existing conditions

Locate all active utility lines on site and in areas of work off site and determine the requirements for protection. All utilities, including cable television lines, may not be indicated on drawings. Contact local utility companies or local "Miss Utility" service or equivalent for location of utilities in advance of excavation. Contractor shall dig test pits by hand at existing utilities at least five days prior to starting work to verify location and elevation. Preserve all active utilities in operating condition. Protect all property outside limit of work and on-site items indicated to remain including, but not necessarily limited to, mains, manholes, catch basins, valve boxes, poles, guys, and other appurtenances. Do not interfere with storm drainage flow.

3.03 Demolition

Remove paving, curbs, planting material, and all other items as indicated or required for work. Saw cut paving in straight lines so that patching will be as neat as possible.

3.04 Identification

Arrange for installation of color coded warning tapes directly over piping and at all above ground temporary markers.

Use detectable warning tape over nonferrous piping and over edges of underground structures.

3.05 Installation - general

A. General Locations and Arrangements: Drawings (plans and details) indicate the general location and arrangement of underground sewerage and water systems piping. Location and arrangement of piping layout take into account many design considerations. Install piping as indicated, to extent practical.

B. Install piping beginning at low point of systems, true to grades and alignment indicated with unbroken continuity of invert. Place bell ends of piping facing upstream. Install gaskets, seals, sleeves, and couplings according to Manufacturer's Recommendations for use of lubricants, cements, and other installation requirements. Maintain swab or drag in line and pull past each joint as it is completed.

C. Use the manholes for changes in direction, except where fittings are indicated. Use fittings for branch connections, except where direct tap into existing sewer is indicated.

D. Use proper size increasers, reducers, and transition couplings, where different sizes or materials of pipes and fittings are connected. Reduction of the size of piping in the direction of flow is prohibited.

E. Install gravity-flow-systems piping at constant slope between points and elevations indicated. Install straight piping runs at constant slope, not less than that specified, where slope is not indicated.

F. Extend utility piping five (5) feet and cap five (5) feet from the new buildings of sizes and in locations indicated. Terminate piping as indicated on Drawings.

G. Install sewerage piping pitched down in direction of flow, at minimum slope of one (1) percent (1:50) and thirty-six (36)-inch minimum cover, except where otherwise indicated.

3.06 Pipe joint construction and installation

Join and install pipe and fittings according to the following:

A. Hub-and-Spigot, Cast-Iron Soil Pipe and Fittings: With rubber compression gaskets according to CISPI "Cast Iron Soil Pipe and Fittings Handbook," Volume I. Use gaskets that match class of pipe and fittings.

1. Install polyethylene film encasement over cast-iron soil pipe and fittings according to ASTM A 674 or AWWA C105.

B. Ductile-Iron Pipe with Ductile-Iron or Cast-Iron Fittings: With push-on-joint, rubber gaskets according to AWWA C600.

1. Install polyethylene film encasement over ductile-iron pipe and ductile- and cast-iron fittings according to ASTM A 674 or AWWA C105.

C. Polyethylene (PE) Plastic Pipe and Fittings: As follows:

1. Join pipe, tubing, and fittings with couplings for soil-tight joints according to AASHTO "Standard Specifications for Highway Bridges," Division II, Section 26.4.2.4 "Joint Properties" and manufacturer's written instructions.

2. Join pipe, tubing, and gasketed fittings with elastomeric seals for watertight joints according to ASTM D 2321 and Manufacturer's written instructions.

3. Install according to ASTM D 2321 and manufacturer's written instructions.

D. Polyvinyl Chloride (PVC) Plastic Pipe and Fittings: As follows:

1. Join solvent-cement-joint pipe and fittings with solvent cement according to ASTM D 2855 and ASTM F 402.

2. Join pipe and gasketed fittings with elastomeric seals according to ASTM D 2321.

3. Join profile sewer pipe and ribbed drain pipe and gasketed fittings with elastomeric seals according to ASTM D 2321 and Manufacturer's written instruction.

4. Install according to ASTM D 2321.

E. Before being placed in position, all pipe, fittings and equipment shall be cleaned carefully. All materials and equipment shall be maintained in a clean condition and upon completion of final tests and acceptance shall be left in a clean condition.

F. Unions shall be installed in piping where necessary for easy dismantling of the piping and apparatus.

G. Pipe fittings shall be free of fins and burrs prior to installation. No bushings will be allowed in any piping.

H. All piping shall be made up straight and true at proper grades.

3.07 Concrete placement

Place cast-in-place concrete according to ACI 318, ACI 350R, where indicated.

3.08 Cleanout installation

A. Install cleanouts and riser extension from sewer pipe to cleanout at grade. Use cast-iron soil pipe fittings in sewer pipes at branches for cleanouts and cast-iron soil pipe for riser extensions to cleanouts. Install piping so cleanouts open in direction of flow in sewer pipe.

B. Set cleanout frames and covers in earth in a cast-in-place concrete frame, 24"x24"x6" deep or as shown on Drawings. Set with tops flush with surrounding earth grade.

C. Set cleanout frames and covers in concrete paving with tops flush with surface of paving.

3.09 Field quality control

A. Clear interior of piping and structures of dirt and superfluous material as the Work progresses. Maintain swab or drag in piping and pull past each joint as it is completed.

1. Place plug in end of incomplete piping at end of day and whenever Work stops.

2. Flush piping between manholes and other structures, if required by authorities having jurisdiction, to remove collected debris.

B. Inspect interior of piping to determine whether line displacement or other damage has occurred. Inspect after approximately 24 inches (600 mm) of backfill is in place, and again at completion of the Project.

1. Submit separate reports for each system inspection.

2. Defects requiring correction include the following:

a. Alignment: Less than full diameter of inside of pipe is visual between structures.

b. Deflection: Flexible piping with deflection that prevents passage of a ball or cylinder of a size not less than 92.5 percent of piping diameter.

3. Crushed, broken, cracked, or otherwise damaged piping.

4. Infiltration: Water leakage into piping.

5. Exfiltration: Water leakage from or around piping.

6. Replace defective piping using new materials and repeat inspections until defects are within allowances specified.

7. Reinspect and repeat procedure until results are satisfactory.

C. Test new piping systems and parts of existing systems that have been altered, extended, or repaired for leaks and defects per Howard County Volume IV Design Manual / Standard Specifications.

1. Do not enclose, cover, or put into service before inspection and approval.

2. Test completed piping systems according to authorities having jurisdiction.

3. Schedule tests, and their inspections by authorities having jurisdiction, with at least 24 hours' advance notice.

4. Submit separate reports for each test.

5. Where authorities having jurisdiction do not have published procedures, perform tests as follows:

   a. Sanitary Sewerage: Perform hydrostatic test.

   b. Close openings in system and fill with water.

   c. Purge air and refill with water.

   d. Disconnect water supply.

   e. Test and inspect joints for leaks.

   f. Leaks and loss in test pressure constitute defects that must be repaired.

   g. Replace leaking piping using new materials and repeat testing until leakage is within industry standard allowances.

3.10 Repair

Return paving, curbs, planting, lawns, and all other items to original condition at completion of the on-site and off-site utility work. All materials and products shall match existing.

END OF SECTION

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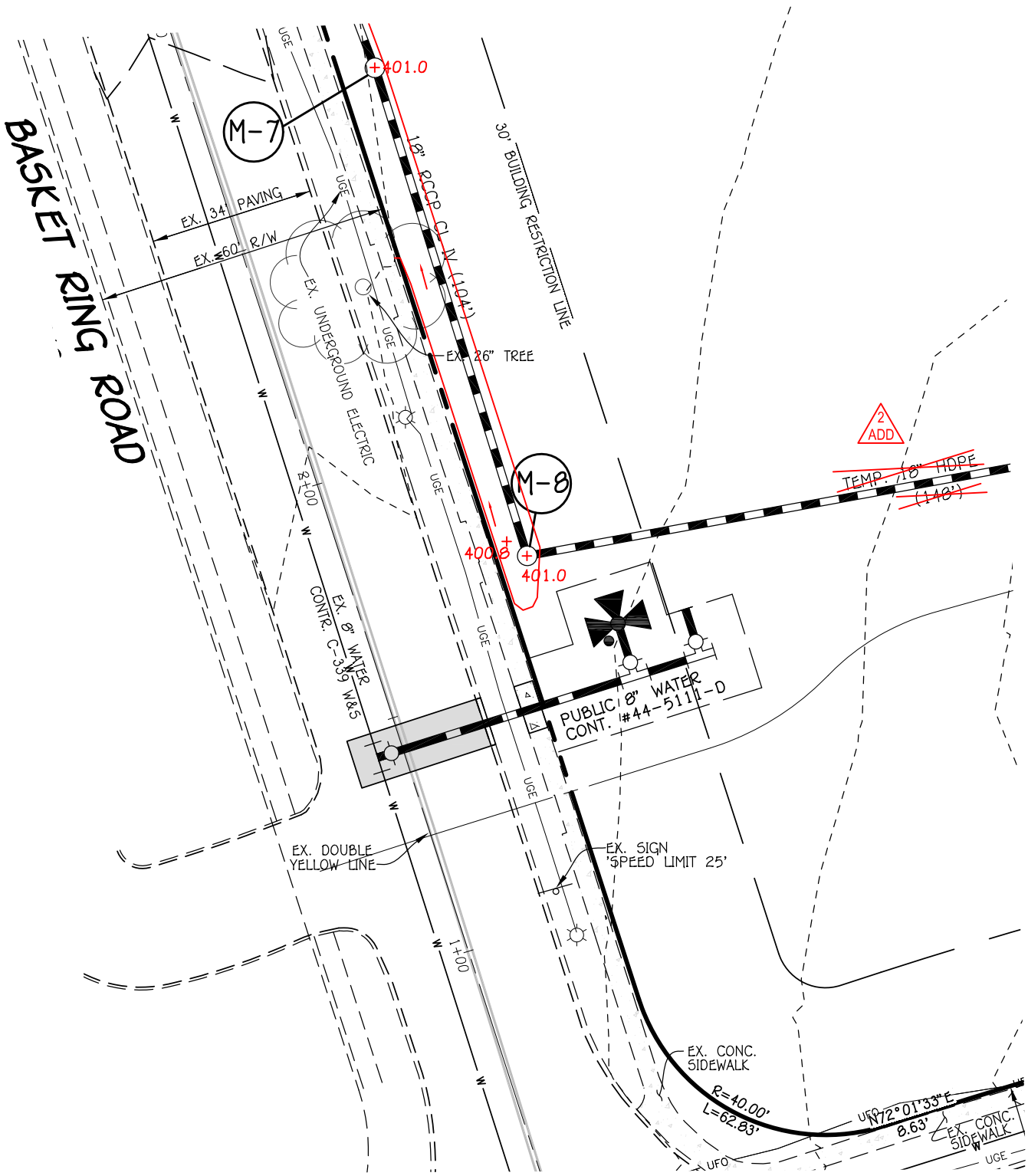



# TALBOTT SPRINGS ELEMENTARY SCHOOL
# SUMMER UTILITY RELOCATION

**COLUMBIA, MARYLAND**

**HOWARD COUNTY PUBLIC SCHOOL SYSTEM**

tca|architects

13369 Generals Highway • Crownsville, Maryland 21032

**date** 11 FEB 20

**dwg** ADD_2_C-4(1)

# TALBOTT SPRINGS ELEMENTARY SCHOOL
# SUMMER UTILITY RELOCATION

**COLUMBIA, MARYLAND**

**HOWARD COUNTY PUBLIC SCHOOL SYSTEM**


tca|architects

13169 Generals Highway • Crownsville, Maryland 21032


**date** 11 FEB 20

**dwg** ADD_2_C-4(2)

NOTES

A. FOUNDATION SHALL BE PLUMB AND POURED ON UNDISTURBED SOIL. CONCRETE SHALL NOT BE POURED BELOW 40°F ON A FALLING TEMPERATURE. CONCRETE SHALL BE ONE CONTINUOUS POUR. MECHANICALLY VIBRATE POURED CONCRETE TO PREVENT VOIDS.

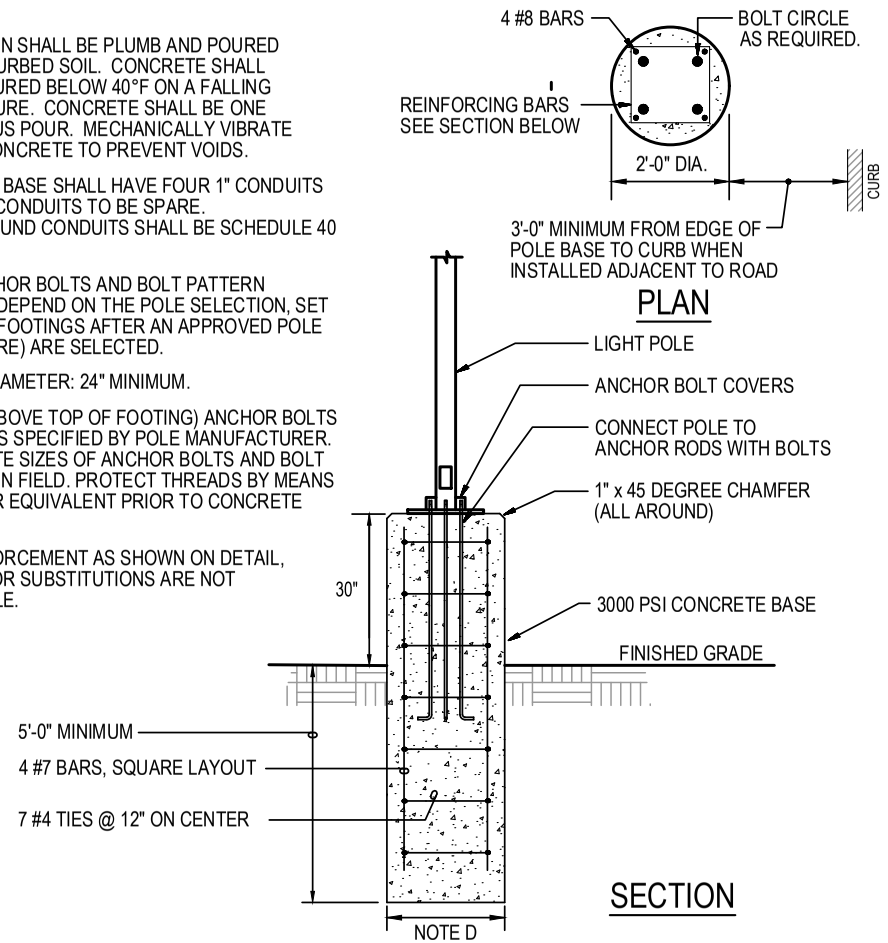
B. EACH POLE BASE SHALL HAVE FOUR 1" CONDUITS WITH TWO CONDUITS TO BE SPARE. UNDERGROUND CONDUITS SHALL BE SCHEDULE 40 PVC.

C. SINCE ANCHOR BOLTS AND BOLT PATTERN TEMPLATE DEPEND ON THE POLE SELECTION, SET AND POUR FOOTINGS AFTER AN APPROVED POLE (AND FIXTURE) ARE SELECTED.

D. FOOTING DIAMETER: 24" MINIMUM.

E. STUB UP (ABOVE TOP OF FOOTING) ANCHOR BOLTS AT LENGTHS SPECIFIED BY POLE MANUFACTURER. COORDINATE SIZES OF ANCHOR BOLTS AND BOLT PATTERNS IN FIELD. PROTECT THREADS BY MEANS OF TAPE OR EQUIVALENT PRIOR TO CONCRETE POUR.

F. USE REINFORCEMENT AS SHOWN ON DETAIL, CHANGES OR SUBSTITUTIONS ARE NOT ACCEPTABLE.




# DETAIL OF SOLAR LIGHT POLE

**NOT TO SCALE**

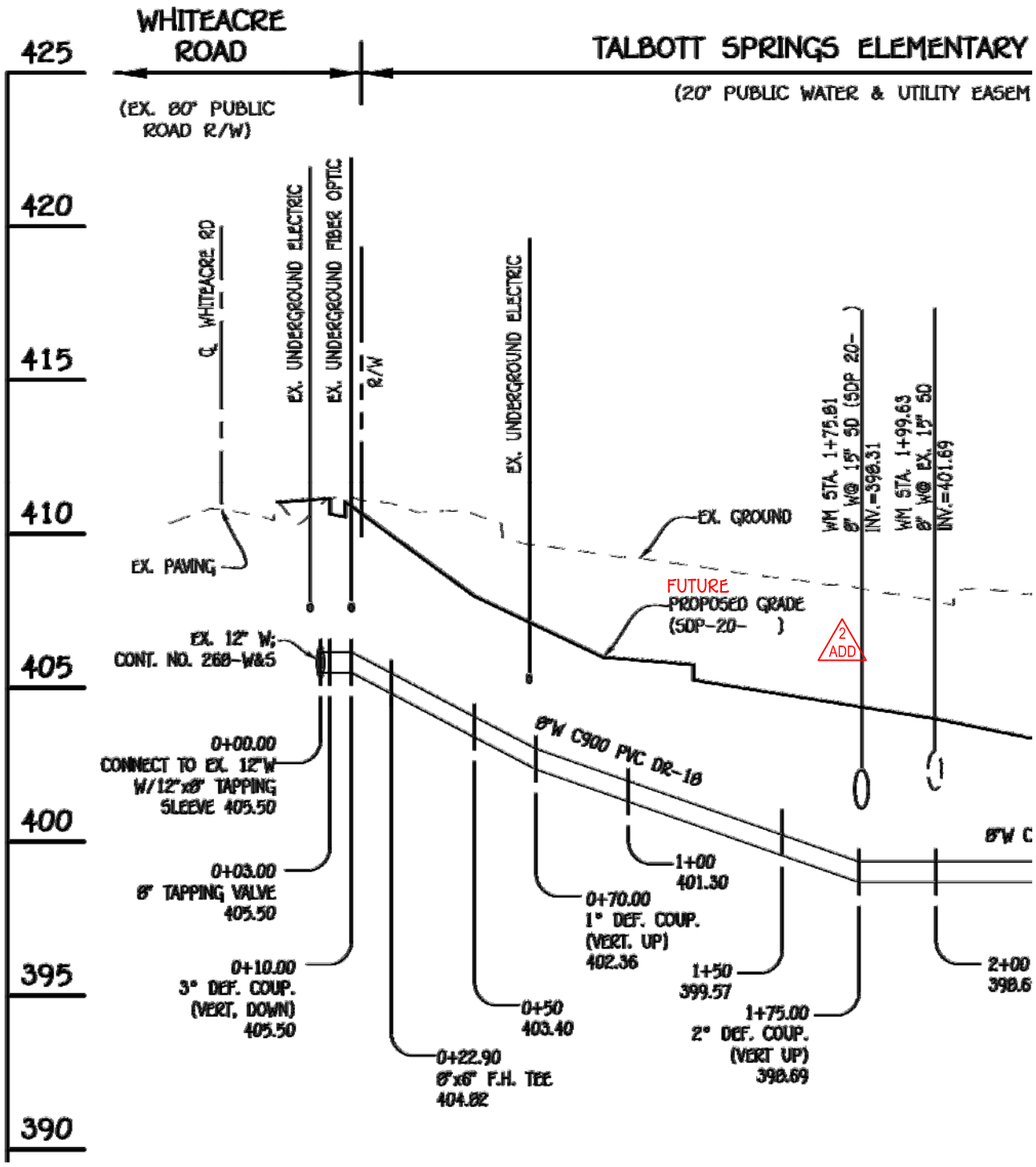
2 ADD

date 11 FEB 20

dwg ADD_2_C-4(3)

tca architects
1369 Generals Highway • Crownsville, Maryland 21032

**TALBOTT SPRINGS ELEMENTARY SCHOOL**
**SUMMER UTILITY RELOCATION**
**COLUMBIA, MARYLAND**
**HOWARD COUNTY PUBLIC SCHOOL SYSTEM**




**TALBOTT SPRINGS ELEMENTARY SCHOOL**
**SUMMER UTILITY RELOCATION**
**COLUMBIA, MARYLAND**
**HOWARD COUNTY PUBLIC SCHOOL SYSTEM**

tca|architects
1369 Generals Highway • Crownsville, Maryland 21032

**date** 11 FEB 20

**dwg** ADD_2_C-12(1)

# RFI Summary Log

Grouped by Trade Contractor

**Talbott Springs Elementary School** **Project # 147** **Dustin Construction, Inc.**

| RFI # | Subject | Date Submitted | Date Req'd | Date Resp | Days Late |
|---|---|---|---|---|---|
| 000.PB S018 | Gas Line Abandonment | 2/10/2020 | 2/17/2020 | 2/12/2020 | -5 |
| 000.PB S019 | Electric Line Work | 2/10/2020 | 2/17/2020 | 2/12/2020 | -5 |
| 000.PB S020 | School Access | 2/10/2020 | 2/17/2020 | 2/12/2020 | -5 |
| **Harland Shoemaker** | | | | | |
| 000.PB S001 | 02B Scope Item 3 | 2/7/2020 | 2/14/2020 | 2/10/2020 | -4 |
| 000.PB S002 | 02B Scope Item 4 | 2/7/2020 | 2/14/2020 | 2/10/2020 | -4 |
| 000.PB S003 | 02B Scope Item 8 | 2/7/2020 | 2/14/2020 | 2/10/2020 | -4 |
| 000.PB S004 | 02B Scope Item 16 | 2/7/2020 | 2/14/2020 | 2/10/2020 | -4 |
| 000.PB S005 | 02B Scope Item 23 | 2/7/2020 | 2/14/2020 | 2/10/2020 | -4 |
| 000.PB S006 | BG&E Coordination | 2/7/2020 | 2/14/2020 | 2/12/2020 | -2 |
| 000.PB S007 | 02B Scope Item 28 | 2/7/2020 | 2/14/2020 | 2/10/2020 | -4 |
| 000.PB S008 | 02B Scope Item 41 | 2/7/2020 | 2/14/2020 | 2/10/2020 | -4 |
| 000.PB S009 | 02B Scope Item 4 | 2/7/2020 | 2/14/2020 | 2/10/2020 | -4 |
| **P&J Contracting** | | | | | |
| 000.PB S012 | Unit Prices | 2/7/2020 | 2/14/2020 | 2/10/2020 | -4 |
| 000.PB S013 | Solar Light Fixtures | 2/7/2020 | 2/14/2020 | 2/12/2020 | -2 |
| 000.PB S014 | Wage Scale | 2/7/2020 | 2/14/2020 | 2/10/2020 | -4 |
| 000.PB S015 | Trench Backfill | 2/7/2020 | 2/14/2020 | 2/10/2020 | -4 |
| 000.PB S016 | Gas Work | 2/7/2020 | 2/14/2020 | 2/12/2020 | -2 |
| 000.PB S017 | Construction Fence | 2/7/2020 | 2/14/2020 | 2/10/2020 | -4 |
| **Urban Zink** | | | | | |
| 000.PB S010 | Storm Line Sizing | 2/7/2020 | 2/14/2020 | 2/12/2020 | -2 |
| 000.PB S011 | Solar Light Pole | 2/7/2020 | 2/14/2020 | 2/12/2020 | -2 |

**RFI Summary Log**
Grouped by Trade Contractor

| RFI # | Subject | Date Submitted | Date Req'd | Date Resp | Days Late |
|---|---|---|---|---|---|
| **Utilities Unlimited, Inc.** | | | | | |
| 000.PB S021 | Solar Light Poles | 2/10/2020 | 2/17/2020 | 2/12/2020 | -5 |
| 000.PB S022 | Construction Access Roads | 2/10/2020 | 2/17/2020 | 2/12/2020 | -5 |
| 000.PB S023 | Specification Section 015000 | 2/10/2020 | 2/17/2020 | 2/12/2020 | -5 |
| 000.PB S024 | Limits of Sod | 2/10/2020 | 2/17/2020 | 2/12/2020 | -5 |
| 000.PB S025 | Sod Installation | 2/10/2020 | 2/17/2020 | 2/12/2020 | -5 |
| 000.PB S026 | Structure M-7/M-8 Top Elevations | 2/10/2020 | 2/17/2020 | 2/12/2020 | -5 |
| 000.PB S027 | Proposed Grades at Water Main | 2/10/2020 | 2/17/2020 | 2/12/2020 | -5 |
| 000.PB S028 | Private 8" Water Line | 2/10/2020 | 2/17/2020 | 2/12/2020 | -5 |
| 000.PB S029 | Existing Topsoil | 2/10/2020 | 2/17/2020 | 2/12/2020 | -5 |
| 000.PB S030 | Manhole Frame Size | 2/10/2020 | 2/17/2020 | 2/12/2020 | -5 |
| 000.PB S031 | Manhole Interior Coating | 2/10/2020 | 2/17/2020 | 2/12/2020 | -5 |
| 000.PB S032 | Manhole Exterior Coating | 2/10/2020 | 2/17/2020 | 2/12/2020 | -5 |
| 000.PB S033 | Blasting | 2/10/2020 | 2/17/2020 | 2/12/2020 | -5 |

# Request for Information 000.PBS001

Detailed RFI

**Talbott Springs Elementary School**
9550 Basket Ring Road
Columbia, MD 21045

**Project # 147**

**Dustin Construction, Inc.**

**RFI #: 000.PBS001** **Date Submitted: 2/7/2020**

| Answer Company | Answered By | Author Company |
|---|---|---|
| Dustin Construction, Inc.<br>2510 Urbana Pike, Suite 201<br>Ijamsville, MD 21754 | Lloyd Hill | Harland J. Shoemaker<br>12081 Old National Pike, PO Box 733<br>New Market, Maryland 21774 |

**Author RFI Number**

1

**Subject**

02B Scope Item 3

**Trade Contractor**

Harland Shoemaker

| Cc: | Company Name | Contact Name | Copies | Notes |
|---|---|---|---|---|

**Question** **Date Required: 2/14/2020**

Item 3 states the “Contractor shall provide all required cut/fill operations in accordance with Contract Documents to bring site to final design elevations”. A grading plan was not provided in the bid set of plans. The utility relocation only require restoration, changing of grades isn’t required. The plans show addition of some asphalt parking and drive isle but no proposed elevations are shown, is this what item 3 is referring to?

**Suggestion**

**Answer** **Date Answered: 2/10/2020**

Contractor is to include all cut/fill/grading as required by the contract drawings and as necessary to complete their scope of work. Contractor to restore all grades as necessary and to provide all grades as necessary for site concrete and asphalt paving work.

# Request for Information 000.PBS002

Detailed RFI

**Talbott Springs Elementary School**
9550 Basket Ring Road
Columbia, MD 21045

**Project # 147**

**Dustin Construction, Inc.**

**RFI #: 000.PBS002** **Date Submitted: 2/7/2020**

| Answer Company | Answered By | Author Company |
|---|---|---|
| Dustin Construction, Inc.<br>2510 Urbana Pike, Suite 201<br>Ijamsville, MD 21754 | Lloyd Hill | Harland J. Shoemaker<br>12081 Old National Pike, PO Box 733<br>New Market, Maryland 21774 |

**Author RFI Number**

2

**Subject**

02B Scope Item 4

**Trade Contractor**

Harland Shoemaker

| Cc: | Company Name | Contact Name | Copies | Notes |
|---|---|---|---|---|

**Question** **Date Required: 2/14/2020**

Item 4 states “For all permanent stormwater management areas & permanent sediment traps required by the contract documents, the 02B Contractor is responsible for bulk excavation, grading, shaping, safety fencing, stabilization and pipe work. At temporary traps, the same scope as permanent applies, and the 02B Contractor has mucking, backfill and compaction back to subgrade. Permanent Landscaping is by the 02B Contractor.” There are no permanent or temporary stormwater management areas or permanent/temporary sediment traps shown on the plans. Is this note from a scope from another project that just wasn’t removed from this scope? Please clarify. Also there is not any permanent landscaping shown on the plans only some sod around added asphalt areas. Please confirm there are no landscape plantings.

**Suggestion**

**Answer** **Date Answered: 2/10/2020**

If no permanent or temporary stormwater management areas or sediment traps are shown on the contract documents, then none are required. Permanent landscaping is limited to sodding as required.

# Request for Information 000.PBS003

Detailed RFI

**Talbott Springs Elementary School**
9550 Basket Ring Road
Columbia, MD 21045

**Project # 147**

**Dustin Construction, Inc.**

**RFI #: 000.PBS003** **Date Submitted: 2/7/2020**

| Answer Company | Answered By | Author Company |
|---|---|---|
| Dustin Construction, Inc.<br>2510 Urbana Pike, Suite 201<br>Ijamsville, MD 21754 | Lloyd Hill | Harland J. Shoemaker<br>12081 Old National Pike, PO Box 733<br>New Market, Maryland 21774 |

**Author RFI Number**

3

**Subject**

02B Scope Item 8

**Trade Contractor**

Harland Shoemaker

| Cc: | Company Name | Contact Name | Copies | Notes |
|---|---|---|---|---|

**Question** **Date Required: 2/14/2020**

Item 8 states “02B Contractor shall furnish, install and maintain orange safety fence around the entire perimeter of all stormwater management facilities.” Again, there are no stormwater management facilities shown on the plans. Please confirm that this does not pertain to this scope.

**Suggestion**

**Answer** **Date Answered: 2/10/2020**

If orange safety fence is not shown on the contract documents or required to be installed by any local AHJ, it is not required.

# Request for Information 000.PBS004

Detailed RFI

**Talbott Springs Elementary School**
9550 Basket Ring Road
Columbia, MD 21045

**Project # 147**

**Dustin Construction, Inc.**

**RFI #: 000.PBS004** **Date Submitted: 2/7/2020**

| Answer Company | Answered By | Author Company |
|---|---|---|
| Dustin Construction, Inc.<br>2510 Urbana Pike, Suite 201<br>Ijamsville, MD 21754 | Lloyd Hill | Harland J. Shoemaker<br>12081 Old National Pike, PO Box 733<br>New Market, Maryland 21774 |

**Author RFI Number**

4

**Subject**

02B Scope Item 16

**Trade Contractor**

Harland Shoemaker

| Cc: | Company Name | Contact Name | Copies | Notes |
|---|---|---|---|---|

**Question** **Date Required: 2/14/2020**

Item 16 states “The 02B Contractor shall furnish, install and maintain suitable temporary construction access roads as shown on the site utilization plan. The Contractor shall remove the temporary roads and perform all necessary re-grading and restoration upon receipt of direction from the Construction Manager. Roads shall be adequate to support all construction traffic and equipment. The roads at a minimum shall be constructed of stabilizing cloth and 6” of #2 stone, free from any foreign substances. Damming of water shall not be tolerated, any temporary piping to allow drainage across roadways is considered incidental and part of base bid costs. In the event that the stabilized area is installed at, around, or near any existing or future utilities that may need to be removed, repaired, and / or installed, this Contractor shall remove, adjust, and / or repair sections of these stabilized areas as necessary at no additional cost to Owner or Construction Manager. Asphalt millings and or crusher run shall not be accepted at any roadways.” A Site Utilization plan was not included in the bid set of plans provided. Please confirm this item does not pertain to this scope or clarify the extent of the access road required.

**Suggestion**

**Answer** **Date Answered: 2/10/2020**

Access roads other than the SCE from White Acre road are not anticipated, however, Contractor is responsible for all means and methods required to access and complete their work and restore disturbed areas to their pre-construction conditions.

# Request for Information 000.PBS005

Detailed RFI

**Talbott Springs Elementary School**
9550 Basket Ring Road
Columbia, MD 21045

**Project # 147**

**Dustin Construction, Inc.**

**RFI #: 000.PBS005** **Date Submitted: 2/7/2020**

| Answer Company | Answered By | Author Company |
|---|---|---|
| Dustin Construction, Inc.<br>2510 Urbana Pike, Suite 201<br>Ijamsville, MD 21754 | Lloyd Hill | Harland J. Shoemaker<br>12081 Old National Pike, PO Box 733<br>New Market, Maryland 21774 |

**Author RFI Number**

5

**Subject**

02B Scope Item 23

**Trade Contractor**

Harland Shoemaker

| Cc: | Company Name | Contact Name | Copies | Notes |
|---|---|---|---|---|

**Question** **Date Required: 2/14/2020**

Item 23 states " Contractor shall strip, screen, stockpile, protect, test amend and stabilize all topsoil as required by the Contract Documents and governing jurisdiction having authority requirements. The 02B Contractor shall re-spread topsoil in all areas provided the topsoil meets project standards as indicated on drawings. All topsoil shall be screened utilizing a ½" x ½" screen prior to placement. Topsoil shall be spread over all areas to be planted, sodded or seeded such that compaction shall bring settled depth to 6". The 02B contractor shall supply tested, screened, amended topsoil from off-site if and / or when the onsite quantities are insufficient." We will only be stripping topsoil in the areas of utility relocation and new pavement areas. Are we to stockpile topsoil onsite for re-use? If so where is our stockpile to be located? A stockpile location is not shown on the plans. Are we to haul topsoil offsite and import new later? If we are to stockpile onsite will we be required to screen the topsoil before placement?

**Suggestion**

**Answer** **Date Answered: 2/10/2020**

Existing topsoil is not allowed to be used. See addendum #2 for revised specification 312000 Earth Moving.

# Request for Information 000.PBS006

Detailed RFI

**Talbott Springs Elementary School**
9550 Basket Ring Road
Columbia, MD 21045

**Project # 147**

**Dustin Construction, Inc.**

**RFI #: 000.PBS006** **Date Submitted: 2/7/2020**

| Answer Company | Answered By | Author Company |
|---|---|---|
| TCA Architects<br>1369 Generals Highway<br>Crownsville, MD 21032 | Robyn Toth | Harland J. Shoemaker<br>12081 Old National Pike, PO Box 733<br>New Market, Maryland 21774 |

**Author RFI Number**

6

**Subject**

BG&E Coordination

**Trade Contractor**

Harland Shoemaker

| Cc: | Company Name | Contact Name | Copies | Notes |
|---|---|---|---|---|

**Question** **Date Required: 2/14/2020**

Please confirm that the gas line work is to be provided by others (BGE). Has any coordination occurred with BGE regarding the project and the fast track schedule required? BGE generally isn't known to be super responsive and they tend to take a long time to get work completed. If delays occur due to BGE deficiencies please confirm that we will not be held responsible for delays.

**Suggestion**

**Answer** **Date Answered:**

TCA / JPA Response: A service application has been submitted to BGE for relocation of the existing gas service September 2019. The application This application resulted in an onsite meeting with BGE that took place on the morning of October 4, 2019. Based on this meeting, a new BGE gas main will extend from White Acre Rd and be positioned adjacent to the new water main. In addition, the capacity of the new gas service will match the existing. It was confirmed that BGE would proceed forward with design based on this information and that no additional information was needed from the design team.

The BGE Work Order # is 16153275 - 9550 BASKET RING RD - GAS RELOCATION

Dustin Response: Furnish and installation of gas line is by BG&E. This contractor is responsible for all coordination as required. Existing gas line serving the existing school will be abandoned in place pending removal in a future phase.

See Revised 02B Scope for additional information

# Request for Information 000.PBS007

Detailed RFI

**Talbott Springs Elementary School** | **Project # 147** | **Dustin Construction, Inc.**
9550 Basket Ring Road
Columbia, MD 21045

**RFI #: 000.PBS007** **Date Submitted: 2/7/2020**

| Answer Company | Answered By | Author Company |
|---|---|---|
| Dustin Construction, Inc.<br>2510 Urbana Pike, Suite 201<br>Ijamsville, MD 21754 | Lloyd Hill | Harland J. Shoemaker<br>12081 Old National Pike, PO Box 733<br>New Market, Maryland 21774 |

**Author RFI Number**
7

**Subject**
02B Scope Item 28

**Trade Contractor**
Harland Shoemaker

| Cc: | Company Name | Contact Name | Copies | Notes |
|---|---|---|---|---|

**Question** **Date Required: 2/14/2020**

Item 28 states “The 02B contractor shall furnish and install all stormwater management facilities complete.” There are no stormwater management facilities shown on the plans. Please confirm this item does not pertain to this scope.

**Suggestion**

**Answer** **Date Answered: 2/10/2020**

Duplicate question, refer to PBS002

# Request for Information 000.PBS008

Detailed RFI

**Talbott Springs Elementary School**
9550 Basket Ring Road
Columbia, MD 21045

**Project # 147**

**Dustin Construction, Inc.**

**RFI #: 000.PBS008** **Date Submitted: 2/7/2020**

| Answer Company | Answered By | Author Company |
|---|---|---|
| Dustin Construction, Inc.<br>2510 Urbana Pike, Suite 201<br>Ijamsville, MD 21754 | Lloyd Hill | Harland J. Shoemaker<br>12081 Old National Pike, PO Box 733<br>New Market, Maryland 21774 |

**Author RFI Number**

8

**Subject**

02B Scope Item 41

**Trade Contractor**

Harland Shoemaker

| Cc: | Company Name | Contact Name | Copies | Notes |
|---|---|---|---|---|

**Question** **Date Required: 2/14/2020**

Item 41 states “Temporary construction fencing around the perimeter of the site will be provided by the CM. The 02B Contractor shall be required to repair/replace any fence damaged by this Contractor during construction.” In the email received from Dustin on 1/27/2020 it stated that Construction Fence was to be installed under this contract. Please clarify if installation of Temporary construction fence is part of the 02B Contractors work.

**Suggestion**

**Answer** **Date Answered: 2/10/2020**

Temporary Construction fence will be provided by the Construction Manager. Any damage due to this contractor's operations will be repaired by this contractor at no cost to the Owner or Construction Manager.

# Request for Information 000.PBS009

Detailed RFI

**Talbott Springs Elementary School**
9550 Basket Ring Road
Columbia, MD 21045

**Project # 147**

**Dustin Construction, Inc.**

**RFI #: 000.PBS009** **Date Submitted: 2/7/2020**

| Answer Company | Answered By | Author Company |
|---|---|---|
| Dustin Construction, Inc.<br>2510 Urbana Pike, Suite 201<br>Ijamsville, MD 21754 | Lloyd Hill | Harland J. Shoemaker<br>12081 Old National Pike, PO Box 733<br>New Market, Maryland 21774 |

**Author RFI Number**

9

**Subject**

02B Scope Item 4

**Trade Contractor**

Harland Shoemaker

| Cc: | Company Name | Contact Name | Copies | Notes |
|---|---|---|---|---|

**Question** **Date Required: 2/14/2020**

Per Item 4 - Sediment control items are to be installed, maintained and removed as a part of the 02B Contract as shown on the plans. We know the utility relocations are proactive for the 02A Scope to follow the 02B Scope. Are we to figure removing the sediment control items we install or are we to maintain until the 02A Contactor takes over? At what point can we figure 02A Contractor will take over the Sediment Control, How long should we figure maintaining the Sediment Controls?

**Suggestion**

**Answer** **Date Answered: 2/10/2020**

Contractor to assume removal of all sediment and erosion control items prior to substantial completion of this package with the exception of the SF/SSF along Holly Court and Basket Ring Road. Contractor will be responsible for maintenance of sediment and erosion control items until substantial completion as part of base bid. Any additional maintenance will be covered as part of the labor hour allowance added to the 02B scope as a part of Addendum #1.

# Request for Information 000.PBS010

Detailed RFI

**Talbott Springs Elementary School**
9550 Basket Ring Road
Columbia, MD 21045

**Project # 147**

**Dustin Construction, Inc.**

**RFI #: 000.PBS010** **Date Submitted: 2/7/2020**

| Answer Company | Answered By | Author Company |
|---|---|---|
| Fisher Colins & Carter, Inc.<br>10272 Baltimore National Pike<br>Ellicott City, MD 21042 | Stephanie Tuite | Urban N. Zink, Contractor, Inc.<br>PO Box S<br>Chase, MD 21027 |

**Author RFI Number**

1

| Subject | Trade Contractor |
|---|---|
| Storm Line Sizing | Urban Zink |

| Cc: | Company Name | Contact Name | Copies | Notes |
|---|---|---|---|---|

**Question** **Date Required: 2/14/2020**

Sheet C-5, the run of Temp 15” HDPE. Please advise where to switch to Temp 18” HDPE. The lengths called out on the sheet indicate that the 15” HDPE runs the full length from Temp I-1 out to M-8.

**Suggestion**

**Answer** **Date Answered:**

Temporary pipe from I-1 to M-8 is 15" HDPE. The 18" label and length should be ignored, it is in error. 02/11/2020

# Request for Information 000.PBS011

Detailed RFI

**Talbott Springs Elementary School**
9550 Basket Ring Road
Columbia, MD 21045

**Project # 147**

**Dustin Construction, Inc.**

**RFI #: 000.PBS011** **Date Submitted: 2/7/2020**

| Answer Company | Answered By | Author Company |
|---|---|---|
| TCA Architects<br>1369 Generals Highway<br>Crownsville, MD 21032 | Robyn Toth | Urban N. Zink, Contractor, Inc.<br>PO Box S<br>Chase, MD 21027 |

**Author RFI Number**

2

**Subject**

Solar Light Pole

**Trade Contractor**

Urban Zink

| Cc: | Company Name | Contact Name | Copies | Notes |
|---|---|---|---|---|

**Question** **Date Required: 2/14/2020**

Please provide specs and details on the Solar Light Pole on C-4.

**Suggestion**

**Answer** **Date Answered:**

See addendum #2 for solar light pole detail and location.

Fixture specification is as follows:
Solar Lighting equal to Hubbell/SEPCO SEPA300-HS-WP960-Type II-MPPT24-ST5-PZ7
Distribution: Type II
Finish: Dark Bronze
Fixture Head Height: 20'-0" above grade.
Base: Refer to base detail.

# Request for Information 000.PBS012

Detailed RFI

**Talbott Springs Elementary School**
9550 Basket Ring Road
Columbia, MD 21045

**Project # 147**

**Dustin Construction, Inc.**

**RFI #: 000.PBS012** **Date Submitted: 2/7/2020**

| Answer Company | Answered By | Author Company |
|---|---|---|
| Dustin Construction, Inc.<br>2510 Urbana Pike, Suite 201<br>Ijamsville, MD 21754 | Lloyd Hill | P&J Contracting Company, Inc.<br>3010 Ridgewood Avenue<br>Baltimore, MD 21215 |

**Author RFI Number**

1

| Subject | Trade Contractor |
|---|---|
| Unit Prices | P&J Contracting |

| Cc: | Company Name | Contact Name | Copies | Notes |
|---|---|---|---|---|

**Question** **Date Required: 2/14/2020**

Unit prices in documents are very low and outdated,can we submit our own unit prices?

**Suggestion**

**Answer** **Date Answered: 2/10/2020**

Project is not wage scale, and unit prices are in line with what other LEAs are allowing. If contractor takes exception with a specific unit price, provide data substantiating the concern.

# Request for Information 000.PBS013

Detailed RFI

**Talbott Springs Elementary School**
9550 Basket Ring Road
Columbia, MD 21045

**Project # 147**

**Dustin Construction, Inc.**

**RFI #: 000.PBS013** **Date Submitted: 2/7/2020**

| Answer Company | Answered By | Author Company |
|---|---|---|
| Fisher Colins & Carter, Inc.<br>10272 Baltimore National Pike<br>Ellicott City, MD 21042 | Stephanie Tuite | P&J Contracting Company, Inc.<br>3010 Ridgewood Avenue<br>Baltimore, MD 21215 |

**Author RFI Number**

2

**Subject**

Solar Light Fixtures

**Trade Contractor**

P&J Contracting

| Cc: | Company Name | Contact Name | Copies | Notes |
|---|---|---|---|---|

**Question** **Date Required: 2/14/2020**

In scope of work Misc. paragraph,we have to provide solar power light fixtures,but in plans,not shown where and how many.

**Suggestion**

**Answer** **Date Answered:**

Solar light is shown along the 10 space group of parking spaces next to the portables. 02/11/2020
Only one is proposed. A detail will be added to the plan for the fixture. See Addendum #2 for detail.

# Request for Information 000.PBS014

Detailed RFI

**Talbott Springs Elementary School**
9550 Basket Ring Road
Columbia, MD 21045

**Project # 147**

**Dustin Construction, Inc.**

**RFI #: 000.PBS014** **Date Submitted: 2/7/2020**

| Answer Company | Answered By | Author Company |
|---|---|---|
| Dustin Construction, Inc.<br>2510 Urbana Pike, Suite 201<br>Ijamsville, MD 21754 | Lloyd Hill | P&J Contracting Company, Inc.<br>3010 Ridgewood Avenue<br>Baltimore, MD 21215 |

**Author RFI Number**

3

**Subject**

Wage Scale

**Trade Contractor**

P&J Contracting

| Cc: | Company Name | Contact Name | Copies | Notes |
|---|---|---|---|---|

**Question** **Date Required: 2/14/2020**

Are there any wage rates?

**Suggestion**

**Answer** **Date Answered: 2/10/2020**

There are no prevailing wage rates applicable to this project.

# Request for Information 000.PBS015

Detailed RFI

**Talbott Springs Elementary School**
9550 Basket Ring Road
Columbia, MD 21045

**Project # 147**

**Dustin Construction, Inc.**

**RFI #: 000.PBS015** **Date Submitted: 2/7/2020**

| Answer Company | Answered By | Author Company |
|---|---|---|
| Dustin Construction, Inc.<br>2510 Urbana Pike, Suite 201<br>Ijamsville, MD 21754 | Lloyd Hill | P&J Contracting Company, Inc.<br>3010 Ridgewood Avenue<br>Baltimore, MD 21215 |

**Author RFI Number**

4

**Subject**

Trench Backfill

**Trade Contractor**

P&J Contracting

| Cc: | Company Name | Contact Name | Copies | Notes |
|---|---|---|---|---|

**Question** **Date Required: 2/14/2020**

Can we use excavated materials from trenches to put back and backfill?or we have to haul out and haul in suitable? any unit prices will be used.Please clarify

**Suggestion**

**Answer** **Date Answered: 2/10/2020**

Project is unclassified to design subgrade, Contractor may use any fill material so long as it is in accordance with the project specifications. Unit prices will be utilized in accordance with the Contract Documents.

# Request for Information 000.PBS016

Detailed RFI

**Talbott Springs Elementary School**
9550 Basket Ring Road
Columbia, MD 21045

**Project # 147**

**Dustin Construction, Inc.**

**RFI #: 000.PBS016** **Date Submitted: 2/7/2020**

| Answer Company | Answered By | Author Company |
|---|---|---|
| Dustin Construction, Inc.<br>2510 Urbana Pike, Suite 201<br>Ijamsville, MD 21754 | Lloyd Hill | P&J Contracting Company, Inc.<br>3010 Ridgewood Avenue<br>Baltimore, MD 21215 |

**Author RFI Number**

5

**Subject**

Gas Work

**Trade Contractor**

P&J Contracting

| Cc: | Company Name | Contact Name | Copies | Notes |
|---|---|---|---|---|

**Question** **Date Required: 2/14/2020**

It seems like BGE will replace all the gas work,we have to coordinate,only part of our work is to provide duct bank,do we have to connect on each end?

**Suggestion**

**Answer** **Date Answered: 2/12/2020**

BG&E will provide furnish and install the new gas line complete. 02B Contractor to provide all coordination with BG&E as necessary.

02B Contractor to furnish and install the telecom duct bank and junction boxes required as per the Contract Documents.

See Revised 02B Scope for additional information

# Request for Information 000.PBS017

Detailed RFI

**Talbott Springs Elementary School**
9550 Basket Ring Road
Columbia, MD 21045

**Project # 147**

**Dustin Construction, Inc.**

**RFI #: 000.PBS017** **Date Submitted: 2/7/2020**

| Answer Company | Answered By | Author Company |
|---|---|---|
| Dustin Construction, Inc.<br>2510 Urbana Pike, Suite 201<br>Ijamsville, MD 21754 | Lloyd Hill | P&J Contracting Company, Inc.<br>3010 Ridgewood Avenue<br>Baltimore, MD 21215 |

**Author RFI Number**

6

**Subject**

Construction Fence

**Trade Contractor**

P&J Contracting

| Cc: | Company Name | Contact Name | Copies | Notes |
|---|---|---|---|---|

**Question** **Date Required: 2/14/2020**

How high construction fence we have to use for post driven fence?

**Suggestion**

**Answer** **Date Answered: 2/10/2020**

Construction security fencing will be provided by the Construction Manager

# Request for Information 000.PBS018

Detailed RFI

**Talbott Springs Elementary School**
9550 Basket Ring Road
Columbia, MD 21045

**Project # 147**

**Dustin Construction, Inc.**

**RFI #: 000.PBS018** **Date Submitted: 2/10/2020**

| Answer Company | Answered By | Author Company |
|---|---|---|
| Dustin Construction, Inc.<br>2510 Urbana Pike, Suite 201<br>Ijamsville, MD 21754 | Lloyd Hill | Dustin Construction, Inc.<br>2510 Urbana Pike, Suite 201<br>Ijamsville, MD 21754 |

**Author RFI Number**

**Subject**

Gas Line Abandonment

**Trade Contractor**

| Cc: | Company Name | Contact Name | Copies | Notes |
|---|---|---|---|---|

**Question** **Date Required: 2/17/2020**

Is the existing gas line to be abandoned in place?

**Suggestion**

**Answer** **Date Answered: 2/12/2020**

Existing gas line is to be abandoned in place and removed by others at a later date.

# Request for Information 000.PBS019

Detailed RFI

**Talbott Springs Elementary School**
9550 Basket Ring Road
Columbia, MD 21045

**Project # 147**

**Dustin Construction, Inc.**

**RFI #: 000.PBS019** **Date Submitted: 2/10/2020**

| Answer Company | Answered By | Author Company |
|---|---|---|
| Dustin Construction, Inc.<br>2510 Urbana Pike, Suite 201<br>Ijamsville, MD 21754 | Lloyd Hill | Dustin Construction, Inc.<br>2510 Urbana Pike, Suite 201<br>Ijamsville, MD 21754 |

**Author RFI Number**

**Subject** **Trade Contractor**

Electric Line Work

| Cc: | Company Name | Contact Name | Copies | Notes |
|---|---|---|---|---|

**Question** **Date Required: 2/17/2020**

What is the scope of the underground electric work?

**Suggestion**

**Answer** **Date Answered: 2/12/2020**

Contractor is remove all underground electric lines as detailed in the Contract Documents, including all cut, cap, and make safe as required. Any electric lines that are not specifically shown to be removed shall not be disturbed. Contractor shall immediately repair any damage caused by this Contractor to lines that are existing to remain.

Any required electrical outages shall be coordinated with the Construction Manager and shall occur as to not disrupt the operations of the existing school building or the community.

# Request for Information 000.PBS020

Detailed RFI

**Talbott Springs Elementary School**
9550 Basket Ring Road
Columbia, MD 21045

**Project # 147**

**Dustin Construction, Inc.**

**RFI #: 000.PBS020** **Date Submitted: 2/10/2020**

| Answer Company | Answered By | Author Company |
|---|---|---|
| Dustin Construction, Inc.<br>2510 Urbana Pike, Suite 201<br>Ijamsville, MD 21754 | Lloyd Hill | Dustin Construction, Inc.<br>2510 Urbana Pike, Suite 201<br>Ijamsville, MD 21754 |

**Author RFI Number**

**Subject** **Trade Contractor**

School Access

| Cc: | Company Name | Contact Name | Copies | Notes |
|---|---|---|---|---|

**Question** **Date Required: 2/17/2020**

What are the requirements for access to the existing school during construction?

**Suggestion**

**Answer** **Date Answered: 2/12/2020**

Access, including vehicular, pedestrian, and delivery/service access, to the school shall not be impeded during normal school operating hours. Contractor is responsible for all traffic control, signage, etc. as required to maintain access.

# Request for Information 000.PBS021

Detailed RFI

**Talbott Springs Elementary School**
9550 Basket Ring Road
Columbia, MD 21045

**Project # 147**

**Dustin Construction, Inc.**

**RFI #: 000.PBS021** **Date Submitted: 2/10/2020**

| Answer Company | Answered By | Author Company |
|---|---|---|
| Dustin Construction, Inc.<br>2510 Urbana Pike, Suite 201<br>Ijamsville, MD 21754 | Lloyd Hill | Utilities Unlimited, Inc.<br>1771 Underwood Road<br>Sykesville, Maryland 21784 |

**Author RFI Number**

1

**Subject**

Solar Light Poles

**Trade Contractor**

Utilities Unlimited, Inc.

| Cc: | Company Name | Contact Name | Copies | Notes |
|---|---|---|---|---|

**Question** **Date Required: 2/17/2020**

A solar light pole is noted for this project yet not details or specifications have been provided. Please provide details and specs.

**Suggestion**

**Answer** **Date Answered: 2/12/2020**

Duplicate question, refer to the answer to RFI PBS011 and PBS013

# Request for Information 000.PBS022

Detailed RFI

**Talbott Springs Elementary School**
9550 Basket Ring Road
Columbia, MD 21045

**Project # 147**

**Dustin Construction, Inc.**

**RFI #: 000.PBS022** **Date Submitted: 2/10/2020**

| Answer Company | Answered By | Author Company |
|---|---|---|
| Dustin Construction, Inc.<br>2510 Urbana Pike, Suite 201<br>Ijamsville, MD 21754 | Lloyd Hill | Utilities Unlimited, Inc.<br>1771 Underwood Road<br>Sykesville, Maryland 21784 |

**Author RFI Number**

2

**Subject**

Construction Access Roads

**Trade Contractor**

Utilities Unlimited, Inc.

| Cc: | Company Name | Contact Name | Copies | Notes |
|---|---|---|---|---|

**Question** **Date Required: 2/17/2020**

Pg 011113-2B-2, Item #16 – Temporary construction access roads are detailed to be installed per the site utilization plan.
Please provide the site utilization plan.

**Suggestion**

**Answer** **Date Answered: 2/12/2020**

Duplicate question, refer to RFI PBS004

# Request for Information 000.PBS023

Detailed RFI

**Talbott Springs Elementary School**
9550 Basket Ring Road
Columbia, MD 21045

**Project # 147**

**Dustin Construction, Inc.**

**RFI #: 000.PBS023** **Date Submitted: 2/10/2020**

| Answer Company | Answered By | Author Company |
|---|---|---|
| Dustin Construction, Inc.<br>2510 Urbana Pike, Suite 201<br>Ijamsville, MD 21754 | Lloyd Hill | Utilities Unlimited, Inc.<br>1771 Underwood Road<br>Sykesville, Maryland 21784 |

**Author RFI Number**

3

**Subject**

Specification Section 015000

**Trade Contractor**

Utilities Unlimited, Inc.

| Cc: | Company Name | Contact Name | Copies | Notes |
|---|---|---|---|---|

**Question** **Date Required: 2/17/2020**

Spec 015000 – There are quite a few items not applicable to this project, and additional items to be provided by the CM. Please confirm exactly which temporary items will be required for the 02B contractor.

**Suggestion**

**Answer** **Date Answered: 2/12/2020**

The Construction Manager will be providing temporary toilets and security fencing as per this specification section. Any and all other items required to complete this project that are specified in Specification Section 015000 shall be provided by the 02B Contractor.

# Request for Information 000.PBS024

Detailed RFI

**Talbott Springs Elementary School**
9550 Basket Ring Road
Columbia, MD 21045

**Project # 147**

**Dustin Construction, Inc.**

**RFI #: 000.PBS024** **Date Submitted: 2/10/2020**

| Answer Company | Answered By | Author Company |
|---|---|---|
| Fisher Colins & Carter, Inc.<br>10272 Baltimore National Pike<br>Ellicott City, MD 21042 | Stephanie Tuite | Utilities Unlimited, Inc.<br>1771 Underwood Road<br>Sykesville, Maryland 21784 |

**Author RFI Number**

4

| Subject | Trade Contractor |
|---|---|
| Limits of Sod | Utilities Unlimited, Inc. |

| Cc: | Company Name | Contact Name | Copies | Notes |
|---|---|---|---|---|

**Question** **Date Required: 2/17/2020**

Pg 011113-2B-1 item #5 – All disturbed areas are to be sodded. In addition, a sodding plan is provided (C-9) that does not account for all of the areas disturbed, like portions of the site demolition as well as the entire storm drain outfall. Please clarify the limits of sod required for this project.

**Suggestion**

**Answer** **Date Answered:**

Specification Item #5 will be modified. Only those areas shown are to be sodded since shortly after summer work construction, construction of the new school building will begin.
See addendum #2.

02/11/2020

# Request for Information 000.PBS025

Detailed RFI

**Talbott Springs Elementary School**
9550 Basket Ring Road
Columbia, MD 21045

**Project # 147**

**Dustin Construction, Inc.**

**RFI #: 000.PBS025** **Date Submitted: 2/10/2020**

| Answer Company | Answered By | Author Company |
|---|---|---|
| TCA Architects<br>1369 Generals Highway<br>Crownsville, MD 21032 | Robyn Toth | Utilities Unlimited, Inc.<br>1771 Underwood Road<br>Sykesville, Maryland 21784 |

**Author RFI Number**

5

**Subject**

Sod Installation

**Trade Contractor**

Utilities Unlimited, Inc.

| Cc: | Company Name | Contact Name | Copies | Notes |
|---|---|---|---|---|

**Question** **Date Required: 2/17/2020**

Spec 32 9219 Item 1.04 – Specific timeframes are provided for both seed and sod installation that conflict with the August 6th date noted in the construction schedule. Please confirm the owner will accept the risks associated with out-of-season seeding/sodding.

**Suggestion**

**Answer** **Date Answered:**

Risk of seeding / sodding shall be assumed by the contractor.

# Request for Information 000.PBS026

Detailed RFI

**Talbott Springs Elementary School**
9550 Basket Ring Road
Columbia, MD 21045

**Project # 147**

**Dustin Construction, Inc.**

**RFI #: 000.PBS026** **Date Submitted: 2/10/2020**

| Answer Company | Answered By | Author Company |
|---|---|---|
| Fisher Colins & Carter, Inc.<br>10272 Baltimore National Pike<br>Ellicott City, MD 21042 | Stephanie Tuite | Utilities Unlimited, Inc.<br>1771 Underwood Road<br>Sykesville, Maryland 21784 |

**Author RFI Number**

6

| Subject | Trade Contractor |
|---|---|
| Structure M-7/M-8 Top Elevations | Utilities Unlimited, Inc. |

| Cc: | Company Name | Contact Name | Copies | Notes |
|---|---|---|---|---|

**Question** **Date Required: 2/17/2020**

Please confirm the top elevations provided in the structure schedule for M-7 & M-8. They do not align with the profile provided on C-7.

**Suggestion**

**Answer** **Date Answered:**

Proposed grade shown is for the new school construction. A small portion around MH8 will be shown to be graded to lower grade to the final grade. 02/11/2020

# Request for Information 000.PBS027

Detailed RFI

**Talbott Springs Elementary School**
9550 Basket Ring Road
Columbia, MD 21045

**Project # 147**

**Dustin Construction, Inc.**

**RFI #: 000.PBS027** **Date Submitted: 2/10/2020**

| Answer Company | Answered By | Author Company |
|---|---|---|
| Fisher Colins & Carter, Inc.<br>10272 Baltimore National Pike<br>Ellicott City, MD 21042 | Stephanie Tuite | Utilities Unlimited, Inc.<br>1771 Underwood Road<br>Sykesville, Maryland 21784 |

**Author RFI Number**

7

**Subject**

Proposed Grades at Water Main

**Trade Contractor**

Utilities Unlimited, Inc.

| Cc: | Company Name | Contact Name | Copies | Notes |
|---|---|---|---|---|

**Question** **Date Required: 2/17/2020**

Per sheet C-12, the proposed grades over the new watermain indicate a significant cut, yet no mass earthwork is anticipated for this bid. Please confirm the proposed grades do not apply to this project and that the watermain for this project will be installed from existing grade.

**Suggestion**

**Answer** **Date Answered:**

Proposed grades are for the final construction associated with the new school. Proposed grade line will be clarified. Waterline is to be installed from existing grade, you are correct. 02/11/2020

# Request for Information 000.PBS028

Detailed RFI

**Talbott Springs Elementary School**
9550 Basket Ring Road
Columbia, MD 21045

**Project # 147**

**Dustin Construction, Inc.**

**RFI #: 000.PBS028** **Date Submitted: 2/10/2020**

| Answer Company | Answered By | Author Company |
|---|---|---|
| Fisher Colins & Carter, Inc.<br>10272 Baltimore National Pike<br>Ellicott City, MD 21042 | Stephanie Tuite | Utilities Unlimited, Inc.<br>1771 Underwood Road<br>Sykesville, Maryland 21784 |

**Author RFI Number**

8

| Subject | Trade Contractor |
|---|---|
| Private 8" Water Line | Utilities Unlimited, Inc. |

| Cc: | Company Name | Contact Name | Copies | Notes |
|---|---|---|---|---|

**Question** **Date Required: 2/17/2020**

There is a portion of Private 8" watermain shown on sht C-5 & C-11, yet no profiles are provided. Is this portion of watermain to be included with this bid, or will it be completed with the future school construction? If the private watermain is to be included, then please provide profiles.

**Suggestion**

**Answer** **Date Answered:**

C-5 only shows the existing water lines, one of which is already abandoned and the other is to be partially connected to the new waterline. C-11 does show a private portion that will be installed at time of school construction. 02/11/2020

# Request for Information 000.PBS029

Detailed RFI

**Talbott Springs Elementary School**
9550 Basket Ring Road
Columbia, MD 21045

**Project # 147**

**Dustin Construction, Inc.**

**RFI #: 000.PBS029** **Date Submitted: 2/10/2020**

| Answer Company | Answered By | Author Company |
|---|---|---|
| TCA Architects<br>1369 Generals Highway<br>Crownsville, MD 21032 | Robyn Toth | Utilities Unlimited, Inc.<br>1771 Underwood Road<br>Sykesville, Maryland 21784 |

**Author RFI Number**

9

**Subject**

Existing Topsoil

**Trade Contractor**

Utilities Unlimited, Inc.

| Cc: | Company Name | Contact Name | Copies | Notes |
|---|---|---|---|---|

**Question** **Date Required: 2/17/2020**

Spec 312000 Item 1.01.J – Existing topsoil is not allowed to be used, yet item #2.05 (and SOW #24) notes that Imported topsoil is permitted only if the existing topsoil is not acceptable. Please clarify if the existing topsoil will be permitted.

**Suggestion**

**Answer** **Date Answered:**

TCA Response: Existing topsoil is not allowed to be used.
See addendum #2 for revised specification 312000 Earth Moving.

# Request for Information 000.PBS030

Detailed RFI

**Talbott Springs Elementary School**
9550 Basket Ring Road
Columbia, MD 21045

**Project # 147**

**Dustin Construction, Inc.**

**RFI #: 000.PBS030** **Date Submitted: 2/10/2020**

| Answer Company | Answered By | Author Company |
|---|---|---|
| TCA Architects<br>1369 Generals Highway<br>Crownsville, MD 21032 | Robyn Toth | Utilities Unlimited, Inc.<br>1771 Underwood Road<br>Sykesville, Maryland 21784 |

**Author RFI Number**

10

| Subject | Trade Contractor |
|---|---|
| Manhole Frame Size | Utilities Unlimited, Inc. |

| Cc: | Company Name | Contact Name | Copies | Notes |
|---|---|---|---|---|

**Question** **Date Required: 2/17/2020**

Spec 330000 Item 2.05.B – Manhole frame & covers are spec'd to be 30" diameter, whereas Howard County requires 24".
Please advise.

**Suggestion**

**Answer** **Date Answered:**

Specification will be revised to meet the Howard County requirement of 24". See Addendum #2.

# Request for Information 000.PBS031

Detailed RFI

**Talbott Springs Elementary School**
9550 Basket Ring Road
Columbia, MD 21045

**Project # 147**

**Dustin Construction, Inc.**

**RFI #: 000.PBS031** **Date Submitted: 2/10/2020**

| Answer Company | Answered By | Author Company |
|---|---|---|
| Fisher Colins & Carter, Inc.<br>10272 Baltimore National Pike<br>Ellicott City, MD 21042 | Stephanie Tuite | Utilities Unlimited, Inc.<br>1771 Underwood Road<br>Sykesville, Maryland 21784 |

**Author RFI Number**

11

**Subject**

Manhole Interior Coating

**Trade Contractor**

Utilities Unlimited, Inc.

| Cc: | Company Name | Contact Name | Copies | Notes |
|---|---|---|---|---|

**Question** **Date Required: 2/17/2020**

Spec 330000 Item 2.05.C – Interior coating is spec'd for manholes, which is not a typical requirement for Howard County. Howard County typically requires interior coatings only with force main sewer transition manholes. Please confirm storm drain manholes for this project will not require interior coatings. If they will require interior coating, then please provide specifications.

**Suggestion**

**Answer** **Date Answered:**

Interior coating will not be required. 02/11/2020

# Request for Information 000.PBS032

Detailed RFI

**Talbott Springs Elementary School**
9550 Basket Ring Road
Columbia, MD 21045

**Project # 147**

**Dustin Construction, Inc.**

**RFI #: 000.PBS032** **Date Submitted: 2/10/2020**

| Answer Company | Answered By | Author Company |
|---|---|---|
| Fisher Colins & Carter, Inc.<br>10272 Baltimore National Pike<br>Ellicott City, MD 21042 | Stephanie Tuite | Utilities Unlimited, Inc.<br>1771 Underwood Road<br>Sykesville, Maryland 21784 |

**Author RFI Number**

12

| Subject | Trade Contractor |
|---|---|
| Manhole Exterior Coating | Utilities Unlimited, Inc. |

| Cc: | Company Name | Contact Name | Copies | Notes |
|---|---|---|---|---|

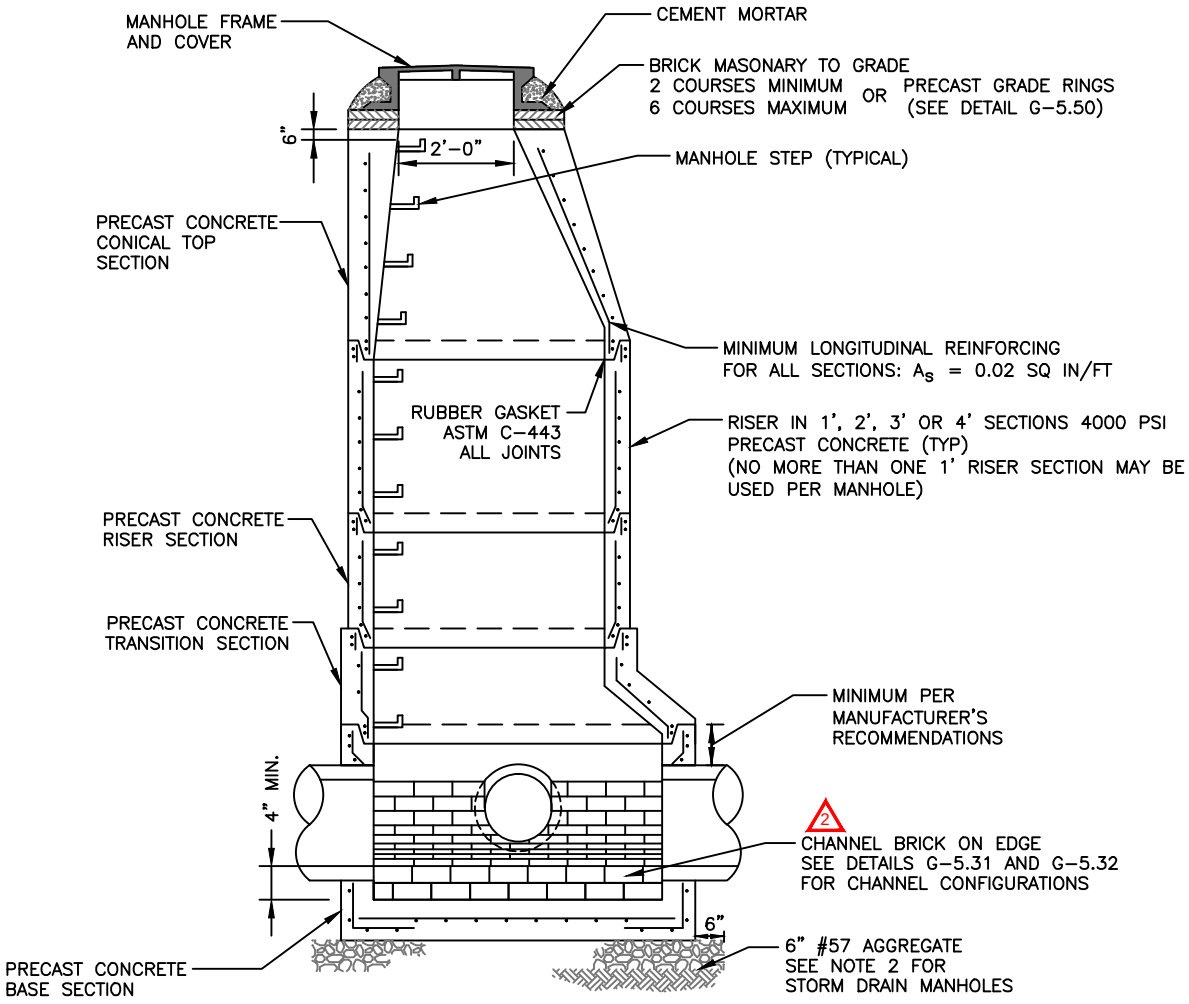
**Question** **Date Required: 2/17/2020**

Spec 330000 Item 2.07.A – Exterior coating is spec'd for manholes, which is not a requirement for Howard County storm drain. Please confirm storm drain manholes for this project will not require an exterior coating.

**Suggestion**

**Answer** **Date Answered:**

Coating is referenced on the county detail for county manhole. The detail has been attached. 02/11/2020




## 2 SECTION

## GENERAL NOTES APPLICABLE TO ALL PRECAST MANHOLES

1. MANHOLE BASE SECTION SHALL BE BEDDED ON 6-INCH #57 AGGREGATE ON FIRM SUBGRADE.
2. #57 AGGREGATE MATERIAL SHALL BE EXTENDED FROM 6-INCHES UNDERNEATH BOTTOM OF STRUCTURE TO SUBGRADE (STORM ONLY).
3. CONNECTION BETWEEN MANHOLE WALL AND PIPE BE NON-SHRINK GROUT (STORM) OR COMPRESSION TYPE RUBBER GASKET (SANITARY SEWER).
4. MANHOLE STEPS SHALL BE AS INDICATED ON DETAIL G-5.21.
5. MANHOLE COVER SHALL BE AS SPECIFIED ON DETAIL G-5.51, G-5.52, & G-5.53.
6. PROVIDE TWO APPLICATIONS OF BITUMINOUS MATERIAL (MINIMUM 16 MILS DFT) COATING ON EXTERIOR SURFACE OF MANHOLES (SANITARY SEWER ONLY).
2. 7. MANHOLE CHANNELS SHALL BE FORMED TO PROVIDE A SMOOTH HYDRAULIC TRANSITION BETWEEN PIPES. BENCH SHALL BE TO TOP OF PIPE OR AS SHOWN ON CONTRACT DOCUMENTS. SANITARY SEWER MANHOLE CHANNEL AND BENCH SHALL BE PRECAST OR FORMED FROM SEWER BRICK SET ON EDGE. STORM DRAIN MANHOLE CHANNELS SHALL BE SEWER BRICK SET ON EDGE.
8. MANHOLE SHALL BE IN ACCORDANCE WITH ASTM C-478 EXCEPT AS INDICATED.
2. 9. MAXIMUM SANITARY SEWER INVERT DIFFERENTIAL IS 6 INCHES WITHOUT A DROP CONNECTION. SEE DETAIL S-1.32 FOR DROP CONNECTION DETAILS.
10. THE MINIMUM DISTANCE BETWEEN PIPE OPENINGS IN THE WALL OF THE MANHOLE SHALL BE 12 INCHES.
11. A MINIMUM OF 4" SHALL BE PROVIDED BETWEEN MANHOLE FLOOR AND LOWEST PIPE INVERT.
12. PRECAST RINGS MAY BE SUPPLIED IN PLACE OF BRICK MASONRY COURSES. SEE DETAIL G-5.50.
13. MANHOLE INTERMEDIATE LANDINGS SHALL BE AS INDICATED ON DETAIL G-5.16.
2. 14. SEE DETAIL D-4.01 FOR GRANITE BOTTOM WHEN INVERT DIFFERENTIAL IS EQUAL OR GREATER THAN 6' FOR STORM DRAIN MANHOLES.

| | | | |
|---|---|---|---|
| 2 5/30/2017 Revised<br>5/1/2014 Revised<br>5/7/2007 Approved | Howard County, Maryland<br>Department of Public Works<br>Approved: Thomas E. Butler<br>Chief, Bureau of Engineering | PRECAST MANHOLE<br>Notes | Detail<br>G-5.11 |

# Request for Information 000.PBS033

Detailed RFI

**Talbott Springs Elementary School**
9550 Basket Ring Road
Columbia, MD 21045

**Project # 147**

**Dustin Construction, Inc.**

**RFI #: 000.PBS033** **Date Submitted: 2/10/2020**

| Answer Company | Answered By | Author Company |
|---|---|---|
| Dustin Construction, Inc.<br>2510 Urbana Pike, Suite 201<br>Ijamsville, MD 21754 | Lloyd Hill | Utilities Unlimited, Inc.<br>1771 Underwood Road<br>Sykesville, Maryland 21784 |

**Author RFI Number**

13

**Subject**

Blasting

**Trade Contractor**

Utilities Unlimited, Inc.

| Cc: | Company Name | Contact Name | Copies | Notes |
|---|---|---|---|---|

**Question** **Date Required: 2/17/2020**

The borings indicate the likelihood that rock will be encountered during utility installation, which could severely impact the construction schedule. Please confirm rock blasting will not be permitted.

**Suggestion**

**Answer** **Date Answered: 2/12/2020**

Blasting shall not be permitted. Contractor is responsible for all staffing as required to meet the listed substantial completion date.