

ITEM 6

GRANULAR BACKFILL

1.0 DESCRIPTION. The Contractor shall, under this item, furnish all labor, materials and equipment as described below to provide granular backfill and lightweight aggregate backfill where shown on the drawings, or as directed by the Engineer, for the proper completion of the work included under this Contract. In general, this work shall include the removal of excavated materials from the site of the work and the furnishing of granular and lightweight aggregate backfill.

2.0 SUBMITTALS. The Contractor shall submit the following in accordance with the conditions of the Contract.

A. Reference Standards. This section is not applicable.

B. Shop Drawings. Shop drawings shall include but not be limited to all materials as listed in Section 6.03 below:

1. The Contractor shall provide one (1) electronic copy of all materials listed below for shop drawing approval.
2. Shop drawings shall be complete in details and indicate all granular backfill types, screen sizes and general construction utilizing the listed materials as specified herein.
3. Manufacturer's catalog or general web-site information will not be sufficient to fulfill shop-drawing requirements.
4. After examination of such drawings by the Engineer and the return thereof, the Contractor shall make such correction to the drawings as have been indicated and shall furnish the Engineer with electronic corrections.

C. Calculations. This section is not applicable.

D. Certifications. This section is not applicable.

3.0 MATERIALS.

A. Granular Backfill.

1. Granular backfill material shall be sound, hard, and be free from loam, clay, organic matter or other injurious impurities. Materials shall be Type 1 or Type 2 Structural Backfill as specified in Item 703.11 (including gradation and material requirements of Item 304 therein) of the latest edition of the State of Ohio, Department of Transportation, Construction and Materials Specifications, or the latest revision

thereof. Slag or Recycled Portland Cement Concrete (RPCC) are not acceptable for use as granular backfill material.

B. Lightweight Aggregate Backfill.

1. Lightweight aggregate material shall be rotary kiln expanded shale, clay or slate, or approved equal. The loose volume unit weight shall not exceed 55 pounds per cubic foot. The aggregate shall be graded in accordance with ASTM C-330 for $\frac{3}{4}$ inch to No. 4.

4.0 EXECUTION.

A. Removal of Unsatisfactory Excavated Materials.

1. All excavated materials for which granular and/or lightweight aggregate backfill materials are substituted, must be disposed of as provided for in Item No. 1.
2. All materials deemed to be unsatisfactory shall be in accordance with all detail drawings or as indicated by the engineer.

B. Placement of Approved Backfill.

1. Granular backfill shall be placed as specified in SCMSD Specification Item 1 and payment for such placing shall be included under other applicable items in the Contract.
2. Lightweight aggregate backfill shall be placed when shown on the contract drawings. Backfill shall be compacted to the requirements of Item 1 of the specifications.
3. Whenever granular backfill is required within the excavation limits, the entire excavation shall be backfilled with granular material. If the trench line is within the zone of influence in relation to the edge of pavement the Contractor shall provide granular material to the highest point in the zone (See Standard Detail Drawing No.1).

5.0 ELECTRICAL. This section is not applicable.

6.0 QUALITY ASSURANCE. This section is not applicable.

7.0 MEASUREMENT. This section is not applicable.

8.0 PAYMENT. Material used for pipe bedding, foundation cushion, or foundation material, trench topping, or that specifically called for under some other item, will not be paid for under this Item.

No separate payment shall be made for backfill installation as specified in this item. All materials, labor, tools and equipment to complete the work as called for on the drawings and as specified herein shall be included in the bid price for gravity sewer, storm sewer, catch basin, manhole and conduit installation.

END OF SECTION