

9. **Granular Material:** Granular material shall be non-plastic and siliceous material, and shall comply with the following gradation:

<u>Sieve Size</u>	<u>Percent Passing</u>
1/2 inch	100
No. 10	75-100
No. 200	0-10

- b. **General:** The Contractor shall notify the Engineer of the source of each material. At the request of the Engineer, the Contractor shall furnish for testing and approval a representative sample of each material weighing approximately fifty (50) pounds, at least ten (10) calendar days prior to the date of anticipated use of such material.

Select materials shall be furnished as required from approved off-site sources and hauled to the site. Disposal of unsuitable material is specified in Section 801-7.

- c. **Structural Fill:** Structural fill shall be used below spread footing foundations, slab-on-grade floors, and other portions of structures. Structural fill material shall be as defined on the drawings. If not defined elsewhere in the Contract Documents acceptable structural fill materials are non-expansive clay with a Plasticity Index between 10 and 25, a maximum Liquid Limit of 45, less than 5% organics, and free of degradable material or debris. Well-graded crushed stone aggregate such as an ASTM D1241 gradation C stone may also be acceptable.

Any structural fill material encountered during the excavation may be stored in segregated stockpiles for reuse. All material that, in the opinion of the Engineer, is not suitable for reuse shall be handled as specified herein for disposal of unsuitable materials.

- d. **Trench Backfill:** Backfill methods for trenches, as shown on the Contract Documents, are classified into three zones, bedding, initial backfill, and secondary backfill. Bedding and initial backfill material shall be the sand-aggregate mixture as described in Section 801-3.a.1. Secondary backfill material shall be as follows:

In locations where any part of the trench pay limit (as defined on the Contract Documents) falls under existing asphaltic or PCC roadways and/or existing parking lots, the secondary backfill shall be:

1. #610 Stone material in dry trenches,
2. #57 Stone in wet trenches or in wet trench bottoms,
3. #610 Stone material above the groundwater line in wet trenches,
4. CLSM when shown on the Contract Documents or as directed by the Engineer.

In locations where any part of the trench pay limit (as defined on the Contract Documents) falls within 10 feet of an existing major structure foundation, the edge of an existing road/shoulder/back of curb, or under the limits of a future asphaltic or PCC roadway/parking lot to be constructed subsequent to sanitary sewer installation; the secondary backfill shall be the sand-aggregate mixture as described in Section 801-3.a.1. In these situations the sand-aggregate material shall be placed and compacted to within 3.5 feet of the surrounding grade, and usable excavated soils or select imported fill shall be placed and compacted for the remainder of the backfill to surrounding or specified grade.

- e. In areas outside those described above, secondary backfill material shall consist of