

SECTION 02954**CONTINGENT BACKFILL
GRADED AGGREGATE, SELECTED, BORROW, EMBANKMENT****02954.01 GENERAL****A. Description**

Contingent materials for roadway, structure, or trench backfill shall be furnished and/or placed only where, when, and in the amounts directed by the Engineer. The work shall include furnishing, and/or placing, and compacting graded aggregate, selected, borrow, or embankment materials for backfill in accordance with the Contract Documents.

B. Related Work Included Elsewhere

1. Protection of environment; Section 01500.
2. Trench excavation, backfill, and compaction; Section 02250.
3. Tamped fill; Section 02265.
4. Excavation support; Section 02400.

C. Quality Assurance

1. Materials
 - a. Quality assurance for graded aggregate subbase shall be as specified in Section 02621.01.
 - b. Quality assurance for selected backfill shall be as specified in Section 02245.01.
 - c. Quality assurance for borrow shall be as specified in Section 02240.01.
 - d. Quality assurance for embankment shall be as specified in Section 02260.01.
2. Field Tests

The Engineer may make field density tests of each layer of backfill placed in accordance with the following:

- a. Roadway - Section 02260.01, 02265.01, or 02621.01
- b. Structure - Section 02220.01, or 02265.01
- c. Trench - Section 02250.01

D. Submittals

Certificates of compliance shall be submitted as specified in the “General Provisions” for materials obtained off-site stating that the material furnished meets the requirements contained in the following Sections:

1. Graded aggregate - Section 02621.02
2. Selected backfill - Section 02245.02
3. Borrow - Section 02240.02

02954.02 MATERIALS**A. Materials Furnished by the County**

The County will not furnish any materials for backfill.

B. Contractor's Options

If a size or type of material is not specified on the Proposal Form, the Contractor may furnish any size or type which meets the general requirements for selected backfill or borrow.

C. Detailed Material Requirements

1. Detailed material requirements for graded aggregate subbase shall be as specified in Section 02621.02.
2. Detailed material requirements for selected backfill shall be as specified in Section 02245.02.
3. Detailed material requirements for borrow shall be as specified in Section 02240.02.
4. Existing materials obtained from on-site excavations may, when specified, be used for backfill provided it meets the detailed material requirements for embankment as specified in Section 02260.02.

02954.03 EXECUTION**A. Roadway Backfill**

1. Graded aggregate subbase shall be placed and compacted as specified in Section 02621.03.
2. Embankments shall be constructed as specified in Section 02260.03 or 02265.03.

B. Structure Backfill

Structure backfill shall be placed and compacted as specified in Section 02220.03.

C. Trench Backfill

Trench backfill shall be as placed and compacted as specified in Section 02250.03.

02954.04 METHOD OF MEASUREMENT

Measurement for contingent backfill will be made of the amount of material furnished and placed within the limits shown on the Standard Details, as detailed in the Contract Documents, or as directed by the Engineer, except that no measurement will be made for backfill of abandoned excavations beyond the limit shown on the Standard Details and/or the Plans. When agreed upon in writing before the work is begun, the quantity of backfill material accepted and satisfactorily placed may be measured by converting its certified scale weight to volume on the basis of an agreed upon density or unit weight for the particular material used.

A. Graded Aggregate Subbase

Measurement for graded aggregate subbase backfill will be made on the basis of the volume of material furnished and placed.

B. Selected Backfill

Measurement for selected backfill will be made on the basis of the volume of material furnished and placed.

C. Borrow

Measurement for borrow backfill will be made on the basis of the volume of material furnished and placed.

D. Embankment

Measurement will be made as specified in Section 02260.04.

02954.05 BASIS OF PAYMENT**A. General**

1. Payment will be made at the bid or fixed prices stipulated in the Proposal. The payments will include and cover furnishing all labor, tools, equipment, and materials necessary to complete the work as directed and accepted by the Engineer in accordance with the Contract Documents.

2. Payments will be made only for materials furnished and placed to the limits directed by the Engineer. No payment will be made for backfill material which is installed beyond the limits shown on the Standard Details and/or on the Plans. Payments will include handling, depositing, and compacting material in place.
3. Items for contingent backfill will, when appropriate, specify on the Proposal Form the intended use; i.e., for roadway, structural, or trench backfill; and the type or gradation of material to be used for the backfill.

B. Graded Aggregate Subbase

Payment for graded aggregate subbase backfill will be made per cubic yard.

C. Selected Backfill

Payment for selected backfill will be made per cubic yard.

D. Borrow

1. Payment for borrow backfill will be made per cubic yard for the type of borrow material furnished and placed.
2. When a Proposal quantity is provided for an item of Contingent Borrow as a supplement to a specified excavation item, payment for the Contingent Borrow will be based on the quantity of Contingent Borrow in excess of 125 percent of the applicable Proposal excavation item. Payment for quantities up to and including 125 percent of the Proposal item will be made under the specified excavation item.

E. Embankment

Payment for embankment material will be made per cubic yard.