

Division 2: Undercut Excavation

- 2.01 SCOPE:** Undercut Excavation shall consist of all materials, labor, and equipment necessary to remove material determined by the Engineer to be unsuitable and replacement with Select Borrow II from off-site sources including compaction at the location and depth specified by the Engineer unless an alternate method is approved by the Engineer. Payment for undercut excavation will not be approved in roadway areas in which the existing material properties are represented by the boring logs.
- 2.02 MATERIALS:** Select Borrow II minimum CBR 15 will be used to replace the unsuitable in-place material.
- 2.03 EXECUTION:** Undercut Excavation must conform to the following requirements for removal, disposal, replacement and compaction of select material:
- A. When unsuitable material must be removed from an area of the project where undercut is not shown on the plans, unsuitable material removed after regular excavation will be measured as undercut excavation. Payment for undercut excavation will not be approved in roadway areas where materials encountered are consistent with properties reflected in the soil borings.
 - B. Unsuitable material shall be disposed of at off-site locations. The Contractor shall be responsible for obtaining the necessary rights and permits to property upon which to deposit the unsuitable material.
 - C. The select Borrow II used to replace the unsuitable excavated material will be placed in uniform layers and must be mechanically compacted to a minimum density of ninety-five percent (95%) of its theoretical maximum density as per the plans and VTM-1 within the right-of-way at plus or minus twenty percent (20%) of its optimum moisture.
 - D. Compaction Tests: The City, or its authorized representatives, reserve the right to perform compaction tests on any or all portion(s) of backfill placed at no costs to the Contractor. However, in the event the compaction of this backfill is not in compliance with the above requirements, the Contractor shall take corrective measures at no costs to the City to bring the backfill within the limits of these Specifications. The Contractor shall then be responsible for reimbursing the City all costs associated with the performance of compaction test(s) in those sections of the backfill that failed the compaction test(s).

MEASUREMENT AND PAYMENT: All undercut excavation will be measured and paid for as the cubic yards in place based on the cubic yard volume of the hole. Quantities will be calculated using the average end area method for each cross section provided with the plan or taken in the field. Cost of furnishing, placing and compacting select Borrow II to replace the unsuitable material will be incidental to the contract price per cubic yard for undercut excavation as specified in the Unit Price Table.

