

CITY OF ODESSA
STANDARD SPECIFICATIONS

ITEM 11
STREET AND ROADWAY EXCAVATION

11.1 DESCRIPTION

Street and roadway excavations shall consist of required excavation within the limits of the street or roadway (except excavations otherwise classified, such as excavation for structures, sewers, water lines, channels, etc.), the removal and proper utilization or disposal of all excavated materials, and the constructing, shaping, and finishing of all earthwork on the entire length of street or roadway and approaches to same in conformity with the required lines, grades, and typical cross section and in accordance with specifications and requirements herein outlined.

11.2 CLASSIFICATION

All authorized street or roadway excavation will be classified or unclassified as indicated on the plans.

A. Unclassified street and roadway excavation

If no classification is indicated on the plans, unclassified street and roadway excavation shall include all materials encountered regardless of their nature or the manner in which they are removed.

If classification is made, one of the following methods shall be employed:

B. Rock street and road excavation, special street and road excavation, and common street and road excavation.

1. Rock street and road excavation will include all masses which cannot be removed without blasting and all detached rock or boulders measuring more than $\frac{1}{4}$ cubic yard each in volume. In areas where blasting is not permitted, materials of rock character which require use of mechanically operated drills for removal will be classified as rock street and road excavation.
2. Special street and road excavation will include all boulders and loose stone of less than $\frac{1}{4}$ cubic yard in volume and all materials in masses (such as caliche, iron ore, conglomerate, slate, shale, etc.), which cannot be removed efficiently with the usual earthmoving equipment, but which it is possible to move with pick or bar without blasting, even though the Contractor may elect to employ blasting.
3. Common street and road excavation will include all other materials excavated.

C. Rock street and road excavation and common and special street and road excavation.

1. Rock street and road excavation will include all masses which cannot be removed without blasting and all detached rock or boulders measuring more than ¼ cubic yard, each in volume, in areas where blasting is not permitted, materials of rock character which require use of mechanically operated drills for removal will be classified as "rock street and road excavation".
2. "Common and special street and road excavation" will include all other materials encountered.

When, in the Contractor's opinion, materials encountered are other than as shown on the plans, the Engineer shall be notified prior to removal of any such materials in order to permit classification and measurement.

Objections on the part of the Contractor to the Engineer's classification of excavation shall be filed in writing with the Engineer within 15 calendar days of receipt of the partial estimate which includes the particular objectionable classification. Failure on the part of the Contractor to file such objections as outlined above will be construed as his concurrence with the classifications made.

11.3 CONSTRUCTION METHODS

All street and roadway excavation corresponding embankment construction shall be performed as specified herein, and the completed roadway shall conform to the established alignment, grades, and cross sections.

All suitable excavated materials shall be utilized, insofar as practicable, in constructing the required roadway sections. Unsuitable excavation and required excavation in excess of that needed for construction of required street or roadway sections shall be known as "waste". Where indicated on plans or directed, suitable waste shall be used to uniformly widen embankments, flatten slopes, etc.; otherwise, waste shall be removed and disposed of at designated points in such manner as to present a neat appearance and not to obstruct proper drainage or cause injury to street or road improvements or to abutting property, unless otherwise provided, waste deposits shall be manipulated as required for embankments below, except that the loose depth of each layer shall not exceed 2 feet.

"Waste" will not be permitted unless specifically indicated on plans or required by written order of the Engineer.

"Embankments" shall be constructed of materials obtained from street and roadway excavation to the lines and grades shown on the plans or otherwise established by the Engineer. The surface of the ground on which embankment is to be placed shall be restored to approximately its original slope by blading or other methods, and where indicated on the plans or required by the Engineer, the ground surface thus prepared shall be compacted by sprinkling and rolling. All embankments shall be constructed in uniform layers approximately parallel to the finished grade

of the street or roadbed.

Embankment shall be constructed in successive layers for the full width of the cross sections and in such lengths as are suited to the sprinkling and compaction methods utilized. Prior to compaction the layers shall not exceed 6" in depth where pneumatic tire rolling is to be used and shall not exceed 8" in depth for rolling with tamping rollers. Clods or lumps of material shall be broken and the embankment material mixed by blading until a uniform material is secured in each layer. Water required to bring the material to the moisture content necessary for maximum compaction shall be evenly applied and it shall be the responsibility of the Contractor to secure a uniform moisture content throughout each layer. Each layer shall then be compacted until there is no evidence of further compaction. Prior to and in conjunction with the rolling operation, each layer shall be kept leveled with suitable equipment to insure uniform compaction over the entire layer.

Payment will not be allowed for unauthorized excavation.

During construction the streetbed, roadbed and/or ditches shall be maintained in such conditions as to insure proper drainage at all times, and ditches and channels shall be so constructed and maintained as to avoid damage to the street or roadway section.

All slopes, except the solid rock or other materials, which in the judgement of the Engineer, require variation, shall be accurately shaped, and care shall be taken that no material is loosened below the required slopes. All breakage and slides shall be removed and disposed of as directed.

11.4 SELECTION OF MATERIAL

Where shown on plans, selected materials shall be utilized to improve the roadbed, in which case the work shall be performed in such manner and sequence that suitable materials may be selected, removed separately and deposited in the street or roadway within limits and at elevations required.

11.5 MEASUREMENT

All accepted street and roadway excavation will be measured by the square yard of street or roadbed surface from over which material was excavated. Payment for unauthorized work will not be made. Measurement will be made over the full width indicated on the plans for the length over which excavation occurs.

When so indicated on the plans and/or the proposal form, "sprinkling" shall be measured by the 1,000 gallons as delivered on the work and "rolling" shall be measured by the actual hours the roller unit works as ordered by the Engineer. When not so indicated on the plans and/or proposal forms, sprinkling and rolling shall be considered as subsidiary and required items of excavation.

11.6 PAYMENT

All work performed as required herein and measured as provided under "measurement", will be paid for at the unit price bid for "unclassified street and road excavation", or as "rock street and road excavation". "Special street and road excavation" and "common and special street and road excavation"; as the case may be for "sprinkling" and for "rolling", which prices shall each be full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to complete the work.

All work required for utilizing or disposing of waste will not be paid for directly but shall be considered as subsidiary work pertaining to the various contract items and such costs shall be included in the unit prices bid for these items.

ADDENDA FOR ASSESSMENT PAVING PROJECTS ONLY

MEASUREMENT

Street and roadway excavation will be separated into two parts on assessment paving projects as follows: that occurring under the pavement between vertical planes passing through the faces of the gutters and that occurring elsewhere within the street or road right of way; unless there is a specific contrary provision for separate or special measurement.

PAYMENT

For "street and roadway excavation" occurring under the pavement between faces of gutters, shall be included in the unit price bid for "pavement". Payment for all other excavation not specifically expected shall be included in the unit price bid for "concrete curb and gutter". Specifically excepted or separated "street and roadway excavation" shall be paid for at the unit price bid for such specific items.