

**SECTION 02012****TEST PITS****02012.01 GENERAL****A. Description**

1. Test pits shall include, but not necessarily be limited to, excavation to determine the exact location and/or elevation of underground structures, utilities, and other obstructions; the backfill and compaction of the excavation; and the stabilization of the surface in accordance with the Contract Documents.
2. Test pits shall be performed by vacuum excavation unless otherwise noted in the Contract Documents, or where vacuum excavation is not practical due to depth or groundwater, or where a larger mechanical excavation is required to obtain the desired data.
3. It is the County's policy to test pit existing underground utilities at their point of crossing with proposed utilities for design purposes. When this is done, the information obtained is shown on the Plans. However, should there be a location(s) where crossings of existing and proposed utilities occur and a test pit(s) was not performed, it shall be the Contractor's responsibility to establish the location and/or elevation of the existing utility.

**B. Related Work Included Elsewhere**

1. Maintenance of traffic; Sections 01410 through 01470.
2. Protection of the environment; Section 01500.
3. Adjusting and replacing fences, shrubs, hedges, etc.; Section 02130.
4. Adjusting existing utilities to finished grade; Section 02140.
5. Removal of existing pavement, sidewalk, curb, and combination curb and gutter; Section 02160.
6. Borrow excavation; Section 02240.
7. Trench excavation, backfill, and compaction; Section 02250.
8. Tamped fill; Section 02265.
9. Excavation support; Section 02400.
10. Dewatering; Section 02512.

11. Aggregate base and subbase courses; Section 02621.
12. Patching paving; Section 02680.

**C. Quality Assurance****1. Materials**

It is intended that all materials removed from the test pit excavation, exclusive of paving materials, be used for backfill. The Engineer will inspect all material prior to its use as backfill to determine the material's suitability for use as backfill.

**2. Field Tests**

The Engineer may, at his discretion, arrange for in-place moisture/density testing of the material used to backfill the test pit excavation, after its compaction. The Contractor shall be governed by the requirements of Section 02250.01, Article C.

**D. Submittals**

None.

**02012.02 MATERIALS****A. Materials furnished by the County**

None.

**B. Contractor's Options**

Not applicable.

**C. Detailed Material Requirements****1. Use of Excavated Material**

All suitable material excavated from test pits shall be used, as far as practicable, for backfilling the excavation. The Contractor shall properly store or stockpile and protect all materials that are to be reused in the work. The Contractor shall replace, at his own expense, material that was suitable when excavated, which has subsequently become unsuitable because of careless, neglectful, wasteful, or unprotected storage. The Contractor shall have no property right of any material retrieved from any excavation, and no excavated material shall be wasted or otherwise removed from the project site without permission of the Engineer. All unsuitable material shall be removed from the excavation and disposed of off-site by and at the expense of the Contractor.

**2. Borrow**

Borrow material for test pit backfill shall meet the requirements of Section 02240.02.

**3. Graded Aggregate Subbase**

Graded aggregate subbase for test pit backfill shall meet the gradation requirements specified in Section 02621.02.

**02012.03 EXECUTION****A. General**

It shall be the Contractor's responsibility to determine the location and/or elevation of underground structures and utilities by the use of test pit excavation prior to initiating excavation operations for the installation of the proposed facility. Test pits shall be of the size, depth and location as approved by the Engineer. Should the location and/or elevation be determined to be different from that shown on the Plans, the Contractor shall promptly furnish the correct information to the Engineer so that the impact on the Project may be determined.

**B. Test Pits**

1. Surface preparation, excavation, backfill, compaction, and maintenance of the backfilled excavation shall be as specified in Section 02250.03 for trenches except that the limits of the work shall be as approved by the Engineer.
2. Restoration shall be as specified in Section 02250.03 unless otherwise specified or directed by the Engineer. Test pits in roadways shall be restored per the requirements of the agency providing the test pit permit.

**02012.04 METHOD OF MEASUREMENT**

1. Measurement for mechanically excavated test pits will be made on the basis of the volume of material actually removed from within the limits specified by the Engineer.
2. Measurement for vacuum excavated test pits will be made per vertical feet of excavation depth.

**02012.05 BASIS OF PAYMENT**

Payment for test pits will be made at contingent prices established in the bid proposal. The price bid shall include furnishing all labor, material, equipment, and incidentals necessary to perform the excavation, backfill, compaction, and surface stabilization or pavement or concrete patch for the test pit as specified in Sections 02250.05 and 02680.05.

Payment for test pits will only be made for those specifically called for on the plans or where otherwise authorized by the Engineer. No payment will be made for test pit excavation performed to establish the location of existing utilities shown on the Plans where they cross proposed utilities.

END OF SECTION