

**NATURAL RESOURCES CONSERVATION SERVICE
CONSERVATION PRACTICE GENERAL SPECIFICATIONS**

ACCESS ROAD

(No.)

CODE 560

SCOPE

The work shall consist of furnishing all materials and completing all construction operations for the installation of an established access road for equipment and vehicles, as specified.

Construction operations shall be carried out in such a manner that erosion and air and water pollution are minimized and held within legal limits. State and local laws concerning pollution abatement must be followed. The completed job shall present a workmanlike finish and shall conform to the lines, grades, and elevations shown in the drawings and as staked in the field.

All operations shall be carried out in a safe and skillful manner. Safety and health regulations shall be observed and appropriate safety measures used.

PUBLIC AND PRIVATE UTILITIES

Utilities are defined to be public or private, overhead and underground power or communication lines, and any pipelines. The landowner/operator/contractor shall conduct their own search and discovery for utilities in order to lessen or avoid potential damages, injuries or loss of life. Prior to construction, the landowner/operator should complete an OK-ENG-45 UTILITIES INVENTORY FORM to document known utilities in order to comply with State law prior to any ground disturbance and return it to a USDA-NRCS representative.

QUALITY CONTROL

Quality Control of all materials and construction procedures is the responsibility of the landowner/operator and contractor. NRCS will make periodic review(s) of the work for the benefit of the agency which will include the final construction check.

SITE PREPARATION

All trees, stumps, roots, brush, weeds, and other objectionable material shall be removed from the work area, including side approaches and inlet and outlet ditches, and disposed of as directed. All unsuitable materials shall be excavated or otherwise removed from the roadbed area prior to placing fill or placing surfacing materials. The topsoil and sod shall be stockpiled during construction and spread on disturbed areas not treated with a surfacing material after construction is complete.

Foundation surfaces, including stream channels in the foundation area, shall be sloped no steeper than a ratio of 2 horizontal to 1 vertical. The foundation area shall be prepared to adequate moisture content and density, and the surface shall be thoroughly scarified, to allow for proper compaction and bonding of the first layer of fill material to the foundation.

Foundation areas shall be kept free of standing water when fill is placed on them.

EXCAVATION

Excavation of the ditches, side approaches, channel banks, and other areas will be completed to the required elevations. Excavated slopes shall be as shown on the drawings or flatter. Suitable material from the required excavations shall be used as fill material. Additional material required for fill material

will be obtained from designated borrow locations. Unsuitable materials from required excavations or the borrow area will be placed in designated waste areas or in exhausted borrow locations.

Borrow locations shall be as shown on the drawings. Unless otherwise shown on the drawings, all borrow areas shall be graded and left so they are well drained, protected from erosion, or seeded. Borrow area cut slopes shall be 3:1 or flatter unless otherwise shown on the drawings.

EARTHFILL

The material placed in the fill shall be free of detrimental amounts of sod, roots, frozen soil, stones more than 6 inches in diameter (except for rock fills), and other objectionable material.

The distribution and gradation of materials shall be such that no lenses, pockets, streaks, or layers of material shall differ substantially in texture or gradation from the surrounding material. If it is necessary to use materials of varying texture and gradation, the more impervious material shall be placed in the center and upstream parts of the fill. If zoned fills of substantially differing materials are specified, the zones shall be placed according to lines and grades shown on the drawings. The complete work shall conform to the lines, grades, and elevations shown on the drawings.

Moisture Control. The moisture content of the fill material shall be adequate for obtaining the required compaction. Material that is too wet shall be dried to meet this requirement, and material that is too dry shall be wetted and mixed until the requirement is met. To the greatest extent possible, mechanically compacted soils (hand or power tamped) shall have equivalent moisture content as that of adjoining soils placed by equipment.

As a minimum, the fill material shall contain enough moisture to be able to form a ball when squeezed in the hand that will not separate when tapped with a pencil. Dry foundation materials shall have moisture added to the top six inches to meet that required for fill material prior to placement of the first layer of fill.

Compaction. Construction equipment shall be operated over each layer of fill to insure that the required compaction is obtained. Special equipment shall be used if needed to obtain the required compaction. If a minimum required density is specified, each layer of fill shall be compacted as necessary to obtain that density.

Foundation areas shall be dewatered and kept free of standing water prior to fill placement. Fill material shall be placed and spread beginning at the lowest point of the foundation and then bringing it up in 10 inch uniform layers properly compacted, with the equipment routed to give the best compaction practical. Materials placed by dumping in piles or windrows shall be spread uniformly to not more than the specified thickness before being compacted. Where dozer equipment is used, the fill material shall be compacted by running the equipment lengthwise of the dam at intervals. This should be done (in addition to ordinary equipment routing over the 10 inch lifts) at least once for each 20 to 30 inch lift. Other methods that will give equivalent compaction will be satisfactory.

Around Drainage Structures. Fill located adjacent to drainage structures, pipe conduits, and in areas inaccessible to heavy equipment shall be compacted to a density equivalent to that of the surrounding fill by means of hand tamping or by using manually directed power tampers or plate vibrators. Fill that is placed adjacent to concrete structures shall not be compacted until the concrete has had time to gain enough strength to support the load, a minimum of 24 hours.

Foundation preparation for metal conduits shall conform to one of the following:

- (1) If the conduit has at least 2 feet of compacted fill beneath the conduit, a minimum of 6 inches with a maximum of 8 inches below the grade line of the conduit shall be pulverized for a width of 2 conduit diameters.
- (2) If the conduit has less than 2 feet of compacted fill beneath the conduit or less than 2 feet of excavation as measured from natural ground to grade line of the conduit, the area beneath the conduit shall be excavated a minimum width of 2 conduit diameters to a depth of 2 feet below gradeline of the conduit and replaced with compacted fill. A minimum of 6 inches with a

maximum of 8 inches below the gradeline of the conduit shall be pulverized for a width of 2 conduit diameters.

- (3) If the conduit has at least 2 feet of excavation as measured from natural groundline to gradeline of the conduit, a minimum of 6 inches with a maximum of 8 inches below the gradeline of the conduit shall be pulverized for a width of 2 conduit diameters.

After the conduit is seated into the pulverized bed, the bed shall be watered until it is thoroughly wetted.

Fill within 2 feet of conduit risers and within 2 feet of conduit barrels (except the foundation) shall contain no particles larger than 1/4 inch and shall be hand compacted or compacted with manually directed power tampers. The fill shall be placed in layers not more than 4 inches thick before compaction.

Fill within 3 inches of the conduit shall be placed at a moisture content which permits ease of compaction around the conduit and into the corrugations of corrugated conduit. Each layer of the portion of fill that is within 3 inches of the conduit, and below the springline shall be thoroughly rodded or tamped around the conduit and into each corrugation by hand using a tamping bar.

Fill outside the 3-inch limits but within the 2-foot limits described above shall be at the moisture content specified for the remainder of the fill and shall be compacted to a density equal to the remainder of the fill.

SURFACING

Surfacing materials shall be required as shown on the drawings. Aggregate for surfacing materials will be dense, sound, and free of deleterious materials, and of such quality that it bind readily to form a stable subbase to the lines, grades, and cross section shown on the drawings. Geotextile may be used for subbase stability. The gradation of the surfacing materials will be as shown on the drawings.

Surfacing materials will be placed or spread to a uniform thickness as required by the drawings. No compaction of the surfacing materials is required beyond that accomplished by the placing and spreading equipment, unless otherwise specified on the drawings.

VEGETATION

A protective cover of vegetation shall be established on all exposed disturbed areas, including earthfill areas, excavated areas, spoil areas, and borrow areas, according to the guidelines in Conservation Practice Standard 342, *Critical Area Planting* and/ or the *Oklahoma Plant Materials Technical Note 21*. Vegetation must be in accordance with the recommendations documented in the Vegetative Data Worksheet (OK-ECS-4) for the given field location and conservation plan, or according to specifications developed for the project.

ADDITIONAL CONSTRUCTION DETAILS

Refer to the appropriate approved design plans for site specific additional items of work and construction details.