

NATURAL RESOURCES CONSERVATION SERVICE
Wyoming
CONSTRUCTION SPECIFICATIONS
for
WASTE TRANSFER
EARTH CHANNEL

(Owner/Operator)

(Project Title)

GENERAL

Installation shall be accordance with an approved design and plan. Details of construction shown on the drawings but not included herein are considered as a part of this specification.

Construction operations shall be carried out in a manner to ensure that erosion and air and water pollution are minimized and are less than legal limits. Construction activities shall be in accordance with U. S. Department of Labor, Occupational Safety and Health Administration requirements.

FOUNDATION PREPARATION

The foundation area for all ditch embankments and/or ditch pads shall be cleared of all trees, weeds, roots, sod, loose rock or other materials not suitable for the subgrade.

DITCH PADS/EMBANKMENTS

Fill materials shall be free of brush, roots, sod, large rocks or other material not suited for making compacted fills. The moisture content and methods of placing the material shall be such that a firm, stable ditch pad will result. The fill materials shall be placed in horizontal lifts of such thickness that compaction density of fills is similar to adjacent undisturbed earth materials. However, prior to compaction the thickness of individual layers being compacted by mechanical equipment shall not exceed 8 inches.

EXCAVATION

Excavations for ditch linings shall be to the neatlines of the specified cross section and finished with a smooth, firm surface. Over excavated areas shall be backfilled with moist soil compacted to the density of the surrounding soil materials.

COMPACTED EARTHFILL LINER

Material for liners shall be obtained from approved sources. Materials shall meet minimum requirements as noted on the drawings or in additional specifications.

Moisture – The moisture content of fill material shall be maintained at or above optimum water content for compaction, within the limits required to prevent the adherence of the fill material to the treads and tracks of equipment, and ensure the crushing and blending of the soil clods.

As far as practicable the material shall be brought to the proper water content in the borrow pit before excavation. Supplemental water, when required, may be applied by sprinkling the materials on the fill. Uniform distribution of the moisture shall be obtained by discing, blading, or other approved method prior to compaction.

Compaction Methods – Compaction shall meet the requirements of the method designated and described below unless otherwise specified on the drawings or described under **ADDITIONAL SPECIFICATIONS**.

1. Sheepsfoot roller – The maximum layer thickness shall be eight (8) inches before compaction. The roller shall have staggered, uniformly spaced tamping feet and be equipped with suitable cleaners. The weight of the roller shall be not less than 2,500 pounds per foot of width. The maximum speed of the compaction equipment shall be 3 miles per hour. The entire surface of each layer placed should receive six passes of this equipment to attain the necessary compaction. Adjustment in the number of passes may be necessary during construction.

2. Pneumatic tired equipment – The maximum layer thickness before compaction shall be six (6) inches. The hauling and spreading equipment shall be routed over the fill area so the wheels of this equipment pass over all of the surface of each lift before a new lift is placed.

Compaction Checking – Compliance with compaction requirements will be determined by observation of performance for Methods 1 and 2.

Fill not meeting the specified requirements shall be reworked or removed and replaced with acceptable fill.

EQUIPMENT OPERATION

Heavy compaction equipment shall not be operated within two (2) feet of any structure. Hand directed tampers or compactors shall be used on areas not accessible to heavy compaction equipment and within two (2) feet of any structure. Fills compacted in this manner shall be placed in layers not greater than four (4) inches in thickness before compaction and shall meet the same density requirements as for adjacent areas.

Passage of heavy equipment will not be allowed over any type of conduit until the compacted backfill has been placed over the top surface of the structure equal to one-half the clear span width of the structure or pipe, or two (2) feet, whichever is greater.

Compaction of backfill adjacent to structures shall not be started until after the expiration of the following minimum time interval after placement of concrete.

Vertical or near vertical walls with earth loading on one side only	14 days
Walls backfilled on both sides simultaneously	7 days
Slabs on grade, cast in place	3 days

ADDITIONAL SPECIFICATIONS
