

**NATURAL RESOURCES CONSERVATION SERVICE  
CONSERVATION PRACTICE SPECIFICATION  
STRUCTURE FOR WATER CONTROL**

**CODE 587**

**1. SITE PREPARATION**

- a. Make all excavation to planned lines and grades to adequately allow proper placement and installation of the structure.
- b. Remove water as necessary to construct the project under dry and stable conditions.

**2. STRUCTURE REMOVAL**

- a. Scope: The work shall consist of the removal, salvage, and disposal of structures (including fences) from the designated areas.
- b. Marking: Each structure unit to be removed will be marked by means of stakes, flags, painted markers, or other suitable methods.
- c. Removal: All structures designated for removal shall be removed to the specified extent and depth.
- d. Salvage: Structures designated to be salvaged shall be carefully removed and neatly placed in the specified storage areas. Material from fences to be salvaged shall be placed outside the work area on the property from which it was removed. Wire shall be rolled into uniform rolls of convenient size. Posts and rails shall be neatly piled.
- e. Disposal of Refuse Materials: Refuse materials resulting from structure removal shall be burned or buried at locations approved by the Engineer, or otherwise disposed of as specified or as approved by the Engineer.

**3. REMOVAL OF WATER**

- a. Scope: The work shall consist of the removal of surface water and groundwater as required to construct the works in accordance with these specifications. It will include but is not limited to: (1) building and maintaining all necessary temporary impounding works, channels, or

diversions; (2) furnishing, installing, and operating all pumps, piping, and other facilities and equipment required for those purposes; and (3) removing all such temporary works and equipment after they have served their purposes.

- b. Diverting Surface Water: The Contractor shall build, maintain, and operate all cofferdams, channels, flumes, sumps, and other temporary diversion and protective works needed to divert streamflow and other surface water through or around the construction site and away from the construction work while construction is in progress. Unless otherwise specified, a diversion must discharge into the same natural drainageway in which its headworks are located.
- c. Dewatering the Construction Site: Foundations, cutoff trenches, and other parts of the construction site shall be dewatered and kept free of standing water or excessively muddy conditions as needed for proper execution of the construction work. The Contractor shall furnish, install, operate, and maintain all drains, sumps, pumps, casings, wellpoints, and other equipment needed to perform the dewatering as specified. Dewatering of foundations shall be accomplished by methods that will prevent loss of fines from the foundation materials.
- d. Dewatering Borrow Areas: The Contractor shall maintain the borrow areas in drainable condition or otherwise provide for timely and effective removal of surface waters that accumulate, for any reason, within the borrow areas.
- e. Erosion and Pollution Control: Removal of water from the construction site, including the borrow areas, shall be accomplished in such a manner that erosion and the transmission of sediment and other

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pollutants are minimized.

- f. Removal of Temporary Works: After the temporary works have served their purposes, the Contractor shall remove them or level and grade them to the extent required to present a slightly appearance and to prevent any obstruction to the flow of water or any other interference with the operation or access to the permanent works.

#### **4. MATERIALS**

All structural materials shall conform to the requirements as shown on the drawings and in the applicable specification. All structural timber and lumber shall be free from decay, excessive checks, knots, cracks, or other defects which would impair usefulness or durability.

The timber or lumber specified for pressure treatment shall be treated with a chromated copper arsenate mixture in accordance with Federal Specification TT-W-571. Penetration of the chromated copper arsenate treatment shall be 0.4 inches and the retention of the chromated copper arsenate treatment shall be 0.4 pounds per cubic foot.

Where field cutting of pressure treated timbers is required, the cut area shall be treated with a compound furnished and approved by the company that performed the original pressure treatment on the timbers. Any perforations of the wood, to include the area around connectors, shall also be treated.

Any timbers and lumber specified to be field treated, and not pressure treated, shall be coated with a solution containing copper naphthenate, in accordance with Federal Specification TT-W-572.

#### **5. BACKFILL**

Backfill shall be placed carefully against all indicated portions of the structure so as not to disturb the finished structure. No backfill or other load will be placed around block structures prior to 72 hours after placing the blocks. Compaction will be by hand tamping, hand operated mechanical tamper, or other methods approved by the Engineer. Material, when placed, shall contain sufficient moisture

so that a sample when taken in the hand and squeezed shall remain intact when released. Backfill shall be placed in horizontal layers not exceeding 6 inches in thickness before compaction. Maximum size of rock in the backfill shall not exceed 2 inches.

#### **6. WORKMANSHIP**

Construction shall be carried out in such a manner that erosion and air and water pollution are minimized. Upon completion of the work, the Contractor shall remove from the work site and adjacent areas all unused materials, forms, debris, and any material resulting from structural removal. The completed job shall present a workmanlike finish.

#### **7. GENERAL**

Any deviation in construction plans or specifications requires written approval of the Engineer.