

**NATURAL RESOURCES CONSERVATION SERVICE**  
**Wyoming**  
**CONSTRUCTION SPECIFICATIONS**  
**FOR**  
**WATER HARVESTING CATCHMENT**

(Owner/Operator)	(Project Title)
<p><b>GENERAL</b></p> <p>Installation shall be in accordance with an approved plan. Details of construction shown on the drawings but not include herein are considered as part of these specifications. Construction activities shall be in accordance with applicable OSHA regulations.</p> <p><b>EXCAVATION</b></p> <p>The foundation area will be cleared of all roots, brush, sod and debris. The base materials for the trough shall be placed on a firm foundation. Unsuitable materials shall be removed.</p> <p><b>MATERIALS</b></p> <p>The water harvesting catchment shall be constructed of the materials as specified on the drawings.</p> <p>The catchment (collection) surface is made of impervious surfacing materials such as corrugated metal sheeting, UV protected plastic sheeting, fiberglass sheeting, asphalt paving, or other materials as specified on the drawings. Catchment surfaces can be constructed on the ground surface or elevated with a support structure.</p> <p>Tanks shall be set into the ground to the extent that all wildlife, of concern, shall</p>	<p>be able to water from the tank. Below-ground tanks should be constructed of corrosion resistant materials such as plastic, fiberglass, or painted metal. Above-ground tanks are constructed of UV protected plastic, galvanized metal or similar weather resistant materials.</p> <p><b>WOOD ITEMS</b></p> <p>Unless otherwise specified on the drawings, all timber and lumber shall not be less than select merchantable boards, construction grade beams or timbers.</p> <p><b>METAL ITEMS</b></p> <p>Steel used in tanks or troughs shall be a minimum thickness of 20 gauge. Steel used in catchment surface shall be a minimum of 26 gauge. All metal items with the exception of galvanized or aluminum shall be painted with two coats of synthetic primer paint and one coat of aluminum paint or equivalent protective coatings. All metal surfaces, that require surface protection, shall be prepared for painting by removing all visible oil, grease, soil, drawing and cutting compounds, and other soluble contaminants from surfaces with solvents or commercial cleaners using various methods of cleaning, such as wiping, dipping, steam cleaning, or vapor degreasing. After degreasing is completed, sand or grit blasting shall be</p>

## ADDITIONAL SPECIFICATIONS

performed to remove all dirt, rust, mill scale, and other foreign material or residue. After cleaning, the metal surfaces shall be painted with two coats of coal tar epoxy at a dry-film thickness of 8 mils per coat. The coal tar epoxy shall have a minimum of 75 percent solids, by volume, and conform to the requirements of Specification No. 16, Type 1, Class II, of the Steel Structures Painting Council. (Note: Galvanized surfaces require a pretreatment vinyl acid wash primer before applying paint. Sandblasting of aged galvanized surfaces does not require a vinyl wash treatment.).

### COMMERCIAL STRUCTURES

Commercial frost-free stock tank and catchment aprons may be used when specified on the drawings. The manufacturer's installation instruction shall be followed. However the piping, foundation, site preparation shall also meet the minimum requirements of this specification.

### RUBBER TIRE TROUGHS

Large rubber tires or rubber tire bladders with concrete floors may be used when specified on the drawings and meet the requirements of Standard 614 (Watering Facility).

### CLEAN UP

The site shall be cleared of all unused materials, forms, etc., needed for the construction. Waste earth material shall be smoothed and seeded.