

**NATURAL RESOURCES CONSERVATION SERVICE
DOCUMENTATION AND CERTIFICATION**

**WATERING FACILITY
Code 614**

The items below shall be recorded in the conservation plan, conservation notes or an approved form as minimum documentation requirements for a practice.

1. Location and Site Investigation

Environmental Checklist Form (CB-EVC-2)

Form CB-ENG-PLNG-1, Engineering Planning Consideration Checklist and Guide

Location Map (Topographic Quadrangles)

Aerial Photos

Surveying Plat (Property Limits)

Flooding Maps (FEMA)

SHPO - Cultural Resources Inventory

Maps from Utilities Co. Providers

References:

- TR-1, Form CB-ENG-PLNG-1, Engineering Planning Consideration Checklist and Guide
- NRCS, GM 420, Part 401, Cultural Resources
- USGS Topographic Quadrangles
- Conservation Plan Map

2. Soils/Geology Investigation

Geologic Maps

Soil Boring - Form CB-ENG-016, Site Investigation Log Sheet

Conservation Plan Map

References:

- NRCS Area Soil Survey
- TR-1, Form CB-ENG-016, Site Investigation Log Sheet
- Unified Soil Classification Chart

3. Engineering Survey

Form SCS-ENG-28

Form SCS-ENG-29

Surveying Computer Programs

References:

- 210-VI-TR-62, Engineering Layout, Notes, Staking and Calculations
- 210-VI-NEH-650.01, NEH Chapter 1, Engineering Survey

4. Engineering Criteria

CB Standard Drawings for Troughs

CB Standard Drawings for Tanks

References:

- CB FOTG Sec. IV, Code 614, Watering Facility
- CB FOTG Sec. IV, Code 516, Pipeline
- 210-VI-NEH-650.12, EFH Chapter 12, Springs and Wells
- 210-VI-NEH-650.14, EFH Chapter 14, Water Management (Drainage)
- 210-VI-NEH-650, Engineering Field Handbook
- TR-1, Section – Water Facility
- AISC, Manual of Steel Construction
- NRCS National Engineering Manual
- Timber, National Design Specification for Wood, American Forest and Paper Association
- Concrete - ACI 318, American Concrete Institute
- Masonry, Building Code Requirement for Masonry Structures – ACI 530, American Concrete Institute
- CB FOTG Sec. IV, Code 561, Heavy Use Protection Area

5. Drafting and Drawings

Drafting Computer Programs Output

Sketches and Drawings

References:

- 210-VI-NEH-650.05, EFH Chapter 5, Preparation of Engineering Plans
- 210-VI-TR-73, Computer Aided Design and Drafting (CADD) Standards

6. Engineering Cost Estimates

References:

- CB FOTG Section I, Cost Data
- Local Suppliers Material Cost Lists

7. O&M and Safety

Operation and Maintenance Plan

References:

- OSHA Reference Manuals
- Manufacturer's Recommendations

8. Construction Materials and Specifications

References:

- 210-VI-NEH-650.17, EFH Chapter 17, Construction and Construction Materials

- 210-VI-NEH - Part 642, Specifications for Construction Contracts
- ASTM Standard Specifications

9. Installation and Certification

Certification that application meets NRCS standards and specifications

Reference:

- 210-VI-NEH-19, Section 19, Construction Inspection