

Natural Resources Conservation Service DESIGN AND CHECK DATA REQUIREMENTS POND (Code 378)

The following items should be addressed in the design folder for the Pond.

FIELD DATA and SURVEY NOTES

1. Plan view.
2. Profiles and cross sections.
3. Soils or foundation considerations with test pits.

DESIGN DATA

1. Identification of client needs (this is an element of the SOW)
2. Pa One Call
3. Consider need for any permits
4. Design Calculations
5. Survey data, sediment and detention storage volumes.
6. Hydrology and hydraulics and outlet stability.
7. Soils/foundation design data, including investigations at least 2' deeper than the embankment cutoff trench, lab data, liner calculations if appropriate.
8. Design specifications with additional conditions, including pipe sizes, types, strengths, gate information, concrete strength, cement type, reinforcing steel grade, concrete admixtures, curing compound requirements, preformed expansion joint filler, waterstop, metal work specs, wood details, geotextiles type, fasteners details, drainage/bedding requirements, etc.
9. For extensive concrete work, consider using the 313 Pa construction specification.
10. Structural limitations and restrictions including fill/compaction requirements, spoil locations, foundation/drainage requirements.
11. Design drawings with applicable dimensions, work limits, excavation/fill limits, finished grades and elevations.
12. Identification of borrow, spoil, rock excavation, depth limitations, drainage, construction limits as appropriate.
13. Quantities
14. E&S control and revegetation Plan
15. Environmental considerations
16. Safety considerations
17. O&M Plan
18. Quality Assurance Plan

CONSTRUCTION CHECK DATA (Verify and document with red line as built and quantities)

1. Record of site visits
2. Overall project certification statement with signatures

3. Final quantities
4. Drawings, sketches, survey check notes and/or measurements to show completed work
5. Materials certifications and or manufacturer's data sheets
6. Photos