

Colorado
Practice Documentation Requirements Checklist
for
587 – Structure for Water Control

Minimum documentation requirements for this practice are outlined below. Documentation for associated practices or system components shall follow the appropriate practice documentation requirements for those practices or components. Some items may not be applicable in all cases; mark "N/A" in the check box if such is the case.

Participant Name:	Address:
Project Name & Location:	

✓	By:	Date:
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RESOURCE INVENTORY

Purpose and objectives of practice clearly identified.			
Water source and water quantity determined.			
Available water rights verification on file.			
Soils identified (soil map, description, properties, etc.) and foundation investigation as needed.			
NRCS-CPA-52, Env. Effects Worksheet, & CO-SSC-1, Cult. Res. Survey Form, completed.			
Right of way easements, utility clearances, SHPO clearance, and applicable State and Federal permits are obtained.			
CO-ENG-13, Notice of Participant Responsibilities, has been reviewed with the cooperator, signed, and filed.			

SURVEY

Site topography or profiles & cross sections sufficient to establish structure dimensions and elevations.			
Profile & cross sections of conveyance adequate to establish water surface and control elevations. Note historic high water line, normal flow depth, etc.			
Location of physical features or underground utilities that may have an effect on design or construction.			
Drainage area, if required.			
Benchmarks set, if necessary.			
Soil resistivity survey, if necessary.			
Survey data plotted.			

DESIGN

Engineering Job Class determined and noted.			
Capacity requirements.			
Hydraulic analysis – structure and ditch or pipe.			
Design of appurtenances – trash rack, flow measurement, gates, etc.			
Structural design (not required if standard drawings are used for design).			
Material quantities and cost estimates determined.			
Design computations have been checked and approved by the appropriate person(s).			

PLANS AND SPECIFICATIONS

Construction drawings drawn on appropriately-sized standard drawing sheets. Include standard drawings as appropriate. Drawings and/or specifications to include the following:
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• Engineering Job Class.			
• Location map or description.			
• Scaled or dimensioned plan view of site, including ditches, outlets, pipelines, etc.			
• Profiles and cross sections, as needed.			
• Plan view of structure.			
• Structure details, including elevation views, isometric drawing, sections, details, etc.			
• Reinforcing steel details and bar schedules (for complex concrete structures).			
• Backfill requirements are noted.			
• Material quantities.			
• Construction notes and General notes as required.			
• Note on drawings to call the Utility Notification Center of Colorado (UNCC), 8-1-1 or 1-800-922-1987, prior to any excavation.			
Construction specifications prepared (Colorado FOTG Practice Specifications or other).			
Construction drawings and specifications have been checked and approved and drawings signed.			
O&M Plans prepared.			
Plans, specifications, and O&M plans have been reviewed with the cooperator.			
Preconstruction meeting with cooperator and contractor.			

CONSTRUCTION LAYOUT SURVEYS

Centerline and alignment location stakes.			
Reference stakes.			
Grade stakes.			

COMPLIANCE CHECKS & FINAL DOCUMENTATION

Construction surveys and measurements made during construction.			
Structure dimensions, dimensions, alignment, etc.			
Certification of reinforcing steel placement (for concrete structures).			
Appurtenances – type and material.			
Material certification.			
UNCC (Utility Notification) ticket number has been recorded.			
Construction inspection reports recorded.			
Changes in design are noted and approved by the landowner and the designer, and proper engineering review/approval is obtained.			
“As-Built” plans prepared and filed (Required if significant changes in design occur during construction and for Job Class V and above). If no significant changes, mark original plans “As-Built”.			
Practice completion certified on CO-ENG-1, CO-ENG-12, or checkout notes.			
Progress reported.			