**Add Section 208.10 - Permanent Water Quality (PWQ) to the CDOT Construction Manual via this Construction Bulletin**

The procedure for final acceptance and certification of a Permanent Water Quality feature is outlined below.

1. The Contractor shall present a clean Permanent Water Quality Control Measure for the PWQ Survey, the final walkthrough, and final acceptance by the PWQ Program Manager(s).
2. The Project Engineer will receive the as-constructed survey from the Contractor before payment for and final acceptance of any items required to construct the PWQ features. The electronic as-constructed survey shall conform to the requirements of Section 625, use Terrain Modeling Survey System (TMOSS) codes, and shall include all information per Specification 208.10 (b).
3. The Project Engineer will submit the as-constructed survey, including field survey data, survey report, and electronic model files as a complete package, with a signed CDOT Project Engineer Certification - Permanent Water Quality1, to the Hydraulic Engineer completing the Hydraulic Engineer Pond Information Certification2 - Permanent Water Quality.
	1. The project will retain the PWQ Control Measure Design Engineer to complete the Pond Information Certification, compare the as-constructed survey to the approved design plan, and update the as-builts and O&M plans as needed.
	2. The project will budget to ensure an Operations & Maintenance Plan3 is completed using the PWQ Program template.
4. Within 10 working days of receipt from the Project Engineer, the Hydraulic Engineer (Design Hydraulic Engineer of Record, or Region-designated Hydraulic Engineer) will review the as-constructed survey to confirm that the PWQ control measures conform to the location, configuration, grade, and volume shown on the plans, using the Hydraulic Engineer Pond Information Certification- Permanent Water Quality2.
5. If the field survey data, survey report or electronic model files indicate the control measure was incorrectly constructed, the Hydraulic Engineer will inform the Project Engineer.
	1. The Project Engineer will direct the Contractor to perform necessary corrective work to the PWQ Control Measure to ensure compliance with the design, at no additional cost to the project.
		1. The Project Engineer will ensure the corrective work, revised as-constructed survey, revised field survey report, revised electronic model files, and new signed CDOT Project Engineer Certification - Permanent Water Quality are submitted to the Hydraulic Engineer.
		2. Payment will not be made for any PWQ items until corrections have been made and another survey has been completed, compared, and accepted, and corrections are made to the as-builts and O&M Plan.
6. Using the PWQ Checklist4, the Project Engineer will
	1. Submit the approved final field survey data, final survey report, final electronic model files, and Hydraulic Engineer Pond Certification - Permanent Water Quality, to the HQ PWQ Manager(s) for review and acceptance.
	2. Schedule a final walkthrough with the CDOT Region Hydraulic Engineer, Headquarters Permanent Water Quality Manager, and Headquarters and Region Maintenance staff (and local agency Maintenance staff as appropriate) to confirm conformance to material requirements, locations, and dimensions.
7. Within 10 working days of receipt from the Project Engineer, the PWQ Program Manager(s) will review the final field survey data, final survey report, final electronic model files, and Hydraulic Engineer Pond Certification - Permanent Water Quality.
	1. Inform the Project Engineer when the PWQ Control Measure has attained final acceptance, i.e. when GIS attributes for the Control Measure have been entered into PWQ inventory, per the PWQ Checklist4.

**Documents**

1. **CDOT Project Engineer Certification - Permanent Water Quality** <https://www.codot.gov/programs/environmental/water-quality/stormwater-programs/pwq-permanent-water-quality/assets/permanent-water-quality-cdot-project-engineer-certification.pdf>
2. **Hydraulic Engineer Pond Certification - Permanent Water Quality** <https://www.codot.gov/programs/environmental/water-quality/stormwater-programs/pwq-permanent-water-quality/assets/permanent-water-quality_hydraulic-engineer-pond-information-certification.pdf>
3. **Operations & Maintenance Plan**

<https://www.codot.gov/programs/environmental/water-quality/stormwater-programs/pwq-permanent-water-quality/assets/example-pwq-cm-maintenance-plan-2019>

1. **PWQ Checklist**

<https://www.codot.gov/programs/environmental/water-quality/stormwater-programs/pwq-permanent-water-quality/assets/pwq-cm-checklist-final-20190718>

**Operations & Maintenance Plan Development Guidance**

<https://www.codot.gov/programs/environmental/water-quality/stormwater-programs/pwq-permanent-water-quality/assets/o-m-plan-development-guidance-2019>

**Operations & Maintenance Plan Notes** <https://www.codot.gov/programs/environmental/water-quality/stormwater-programs/pwq-permanent-water-quality/assets/example-pwq-cm-maintenance-notes-2019>

**References:**

Please print a copy of this bulletin and keep it with your copy of the Construction Manual.

The Construction Manual and Construction Bulletins can be found on the Design and Construction Project Support web page at: <https://www.codot.gov/business/designsupport/bulletins_manuals>.

Please contact Keith Wakefield at keith.wakefield@state.co.us for any construction manual questions.