

# AS-BUILT SUBMISSION CHECKLIST

Maryland Department of the Environment

Dam Safety Program

Project File Number \_\_\_\_\_ Date \_\_\_\_\_

Applicant \_\_\_\_\_

Project Name \_\_\_\_\_

Designer \_\_\_\_\_

PLEASE NOTE THAT PLANS SUBMITTED WITHOUT A COMPLETED CHECKLIST MAY BE RETURNED WITHOUT REVIEW

## GENERAL

*Submission Item*

*Engineer-  
In-Charge*      *MDE  
Reviewer*

Signed and Sealed copy of Form 1: Project Completion Report

One (1) electronic copy of the as-built plans with the as-built information shown in red or green. The plans must be marked with a red or green "as-built" title.

One (1) sealed geotechnical report certifying that the soil type, compaction, moisture content, concrete test results, and other items were inspected by the geotechnical engineer in accordance with project specifications

One (1) sealed copy of the basis of design report updated as necessary.

One (1) copy of all construction inspection reports.

One (1) copy of all material spec sheets, delivery tickets, product manuals and warranties.

One (1) copy of all RFIs, submittals and shop drawings.

For projects located within the FEMA 100-year floodplain, provide the FEMA Letter of Map Amendment or Revision.

## CONSTRUCTION INSPECTION REPORTS

Construction reports prepared by the Engineer-in-Charge must be provided for the following stages of construction (at a minimum):

    Upon completion of excavation to sub-foundation

    Upon completion of cutoff trench excavation (Note, cutoff trench must tie into impervious stratum)

    Construction of inlet and outlet structures, spillway pipes or weirs, filter diaphragms, and watertight connectors on pipes

    During placement of cutoff trench, impervious core, embankment fill, structural fill and concrete structures

    Upon completion of final grading and establishment of permanent stabilization.

Construction reports shall include, at a minimum, description of work completed, soil compaction and moisture test results, laboratory test results, gradation and/or USCS soil classification of embankment and impervious core/cutoff materials, gradation of filter diaphragm material, and photographs of the work.

Provide updated Pond Summary Sheet to reflect as-built conditions.

Provide video inspection of all pipes 48 inches or less in diameter.

Provide the as-built submittal package within 60 days of construction completion.

## AS-BUILT PLANS

### General

Show location of all easements, provide Liber and folio.

Provide name and contact information of engineer/land surveyors that prepared the as-built surveys.

# AS-BUILT SUBMISSION CHECKLIST

## Elevations

As-built survey elevations must be provided to the nearest 0.1 foot.

A check mark may be made beside values on the plans if the as-built constructed value is the same as the approved value. If the as-built value is different than the approved value, the approved value must be lined out in red or green and replaced with the constructed value.

Must have proper relationship between principal spillway crest, emergency spillway crest, and top of dam. (All elevations must be equal to the design elevations or relative to each other and the required volumes.)

## Certifications

A completed and signed As-Built Certification by a Professional Engineer.

**I hereby certify that the facility was constructed as shown on this "As-built" plan and meets or exceeds the requirements of COMAR 26.17.04.05 and the approved pond plans and specifications.**

Certify means to state or declare a professional opinion based upon onsite inspections and material tests which are conducted during construction. The onsite inspections and material tests are those inspections and tests deemed sufficient and appropriate by commonly accepted engineering standards. Certify does not mean or imply a guarantee by the engineer nor does an engineer's certification relieve any other party from meeting requirements imposed by contract, employment, or other means, including meeting commonly accepted industry practices.

A completed and signed Geotechnical Certification by a Geotechnical Engineer. The certification must indicate that the unified soil classes, compaction, moisture content, concrete test results and other material inspected by the geotechnical meet or exceed the project specifications. Attach the Geotechnical Engineers Certification letter into the As-Built Plan.

## Plan View Drawings

A graphic scale and north arrow shall be shown on each as-built plan.

Length, width, and depth of pool area so that design volume can be verified.

As-built elevation contours of the embankment.

The location of trees, shrubs, and other woody vegetation must be shown in green. No trees, shrubs, or woody vegetation is allowed within 25 ft. of the inlet structure, on the fill embankment, and within 15 ft. of the fill embankment.

Location, top elevation, lengths, widths, inverts, pipe sizes, pipe materials, and flow directions of all drainage structures must be provided, including but not limited to inlets, manholes, risers, weirs, end sections, end walls, risers, and weirs.

Location and dimensions of rip rap inflow and outfall protections.

## Profile Along Centerline of Embankment

Profile along the top of embankment

Top elevation of the impervious core.

Bottom elevation, dimensions and side slopes of the cut-off trench.

Principal spillway location; station and elevation must be shown.

Emergency spillway; location, bottom width, and side slopes must be shown.

## Profile of Embankment Through Principal Spillway

Top of embankment with side slopes; should be equal to or flatter than approved design. As-built survey must extend at least 100 feet downstream of the fill, or to the end of the outfall, whichever is greater.

Emergency spillway crest elevation.

# AS-BUILT SUBMISSION CHECKLIST

## **Profile of Embankment Through Principal Spillway**

Top of embankment with side slopes; should be equal to or flatter than approved design. As-built survey must extend at least 100 feet downstream of the fill, or to the end of the outfall, whichever is greater.

Emergency spillway crest elevation.

Top elevation, width, and slopes of impervious core embankment.

Bottom elevation, width, and slopes of cut-off trench.

As-built water surface elevations for the 2, 10, and ultimate 100-year storm events.

Riser material, size, type, and weir crest elevation.

Size and type of anti-vortex and trash rack device on riser weir.

Low flow state orifice(s) size, materials, and invert location

Low flow stage trash rack size, material, and dimensions.

Low flow stage drain pipe size, type, length, invert elevation.

Pond drain pipe size, length, invert elevation, valve type.

Principal spillway barrel size, type, corrugation size, gauge, inlet and outlet invert elevations, length, concrete pipe classification.

Concrete cradle dimensions.

Phreatic line (drawn from the as-built 10-year water surface elevation).

Sand filter diaphragm location, size, material, and drains.

Outfall protection type, material size, dimension, filter cloth.

## **Profile of Emergency Spillway**

Minimum twenty-five (25) foot level section and elevation.

Slope protection type, material size, dimensions, filter cloth.

Slope of spillway. Emergency spillway may be 1-2% steeper, but no flatter than design, and no narrower than design. Spillway is located and aligned as shown on approved plans.

## **Section of Emergency Spillway**

Width of level section.

Dimensions, side slopes, material size.

## **Drainage Area Map**

Provide drainage area map.

## **VEGETATION**

Provide photographs demonstrating that the approved landscaping plan has been successfully established and all disturbed areas are stabilized with at least 95% vegetative coverage.