
Instructions for use

Construction Specifications 99—Conduit Abandonment

1. Applicability

Construction specification 99 is applicable to filling an existing conduit with cellular concrete to prevent flow through the conduit and to support the earth above the conduit should the conduit deteriorate.

When abandoning a conduit, it may be necessary to remove an inlet structure, an outlet structure, some sections of pipe or other appurtenances. Construction specification 99 does not address structural removal.

2. Construction specifications

Construction Specification 3, Structural Removal, must be included with construction specification 99 if there are portions of the conduit or other appurtenances that are to be removed as part of the conduit abandonment.

Construction Specification 94, Contractor Quality Control, must be included with construction specification 99.

3. Material specifications

The following material specifications complement construction specification 85:

Admixtures—Material Specification 533,
Chemical Admixtures for Concrete

Fly ash—Material Specification 532, Supple-
mentary Cementitious Materials

Portland cement—Material Specification 531,
Portland Cement

4. Included items

Items to be included in contract specifications and drawings follow:

- a. Complete engineering detail drawings showing the conduit and limits of grouting. Identify any portions of the conduit or other appurtenances that are to be removed. Ensure the work limits are adequate to transport and stockpile materials and to produce and pump the grout.

- b. In section Section 2, Materials, specify the class of fly ash and type of Portland cement to be used or state that the contractor may choose the class or type. Class of fly ash and type of Portland cement are independent properties and each one may be specified or selected by the contractor.
- c. In section 8, specify the allowable maximum grouting pressure. Consider the condition of the conduit. Four pounds per square inch is suggested if the conduit is not watertight. Higher pressures may be allowed if the pressure for failure of the conduit and bulkhead can be estimated and the specified pressure is well below the failure pressure.
- d. Depending on the grade of the conduit, it may be necessary to grout in stages to control grouting pressure. Where applicable, include a statement similar to “Cease grouting before the specified maximum is attained; allow installed grout to set before continuing grout installation.”

5. Methods

No methods are outlined in the specification.

6. Items of work and construction details

Starting at the top of page 99–5, prepare and outline job specific "Items of work and construction details" in accordance with these instructions.

