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AMERICAN SOCIETY FOR TESTING AND MATERIALS  
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# Standard Practice for Inspection of Underground Precast Concrete Utility Structures<sup>1</sup>

This standard is issued under the fixed designation C 1037; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon ( $\epsilon$ ) indicates an editorial change since the last revision or reapproval.

## 1. Scope

1.1 This practice covers the inspection of underground precast concrete utility structures designed and manufactured in accordance with Practice C 857 and Specification C 858.

1.2 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.*

## 2. Referenced Documents

### 2.1 ASTM Standards:

- C 31 Practice for Making and Curing Concrete Test Specimens in the Field<sup>2</sup>
- C 39 Test Method for Compressive Strength of Cylindrical Concrete Specimens<sup>2</sup>
- C 857 Practice for Minimum Structural Design Loading for Underground Precast Concrete Utility Structures<sup>3</sup>
- C 858 Specification for Underground Precast Concrete Utility Structures<sup>3</sup>

## 3. Terminology

### 3.1 Description of Term Specific to This Standard:

3.1.1 *inspector*—as used in this practice, an individual assigned by the manufacturer or by the purchaser to perform an inspection.

## 4. Manufacturer's Responsibility

4.1 The manufacturer shall develop and use an effective quality control program that shall include material controls, tests, and inspections as agreed upon between manufacturer and purchaser throughout the fabrication process.

4.2 The manufacturer's inspection records and associated test data shall be made available to the inspector.

4.3 The manufacturer shall notify the inspector of any changes in material, method of fabrication, or quality control procedure.

<sup>1</sup> This practice is under the jurisdiction of ASTM Committee C-27 on Precast Concrete Products and is the direct responsibility of Subcommittee C27.10 on Utility Structures.

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<sup>2</sup> Annual Book of ASTM Standards, Vol 04.02.

<sup>3</sup> Annual Book of ASTM Standards, Vol 04.05.

4.4 The manufacturer shall designate an individual as liaison to the inspector. He will sign the inspection activity reports, and when necessary, will be available to the inspector to discuss matters pertaining to inspection, fabrication, and quality control.

4.5 The manufacturer shall prepare sufficient concrete test cylinders to meet the purchaser's requirements for compressive strength. Test cylinders shall be prepared in accordance with Practice C 31 and tested in accordance with Test Method C 39. Results shall be entered in an inspection activity report.

4.6 The manufacturer, upon request, shall assemble (without grout) selected concrete component sections to form a complete structure assembly to determine that fit-up requirements are as specified.

4.7 The manufacturer shall provide marking according to purchaser requirements or according to Specification C 858.

## 5. Inspector's Responsibility

5.1 The inspector shall familiarize himself with the manufacturer's quality control program.

5.2 The inspector shall determine that the fabrication of the precast units complies with drawings approved by the purchaser, including hardware and general requirements.

5.3 The inspector shall immediately report to the purchaser and manufacturer any component parts, complete structures, etc., not in compliance.

5.4 The inspector shall clearly indicate on the inspection activity report any fabrication problems encountered and solutions utilized.

## 6. Inspection Procedure

6.1 The inspector shall inspect forms, materials, and fabricated parts used in the product.

6.2 During each inspection, the inspector shall examine complete units for all specified features that can be determined by visual observation.

6.3 The first section of each type of precast structure from any set of forms shall be assembled by the manufacturer without grout and the inspector shall check that fit-up requirements are as specified.

6.4 The inspector shall check that all materials conform to requirements of Specification C 858.

## 7. Fabrication Inspection

### 7.1 Reinforcing Steel: