

**STATE OF OHIO  
DEPARTMENT OF TRANSPORTATION  
SUPPLEMENTAL SPECIFICATION 837  
LINER PIPE**

**April 20, 2007**

**837.01 Description**

**837.02 Material**

**837.03 Installation**

**837.04 Method of Measurement**

**837.05 Basis of Payment**

**837.01 Description.** This work consists of furnishing, installing and grouting liner pipe into existing conduits shown on the plans.

**837.02 Material.** The following pipe types are permitted for liner pipe: 707.12, 707.24, 707.33, 707.42, 707.43, 748.06 or Supplemental Specification 937, with the following additions:

When using 707.12 conduit, the following additional sizes may be furnished:

Pipe Diameter (in)	Wall Thickness (in)	Pipe Diameter (mm)	Wall Thickness (mm)
96	0.138	2400	3.51
102	0.138	2550	3.51
108	0.138	2700	3.51
114	0.138	2850	3.51
120	0.138	3000	3.51

707.33 – Ensure the joint does not protrude on the inside of the pipe nor increase the outside diameter of the pipe.

707.42 – Ensure the joint does not protrude on the inside of the pipe nor increase the outside diameter of the pipe.

707.43 - Furnish pipe with smooth interior and exterior walls. Internal sleeve joints may be permitted. Ensure the joint does not increase the outside diameter of the pipe. When using 707.43 conduit, the following additional sizes may be furnished:

Nominal Diameter (in)	Outside Diameter (in)	Inside Diameter (in)	Nominal Diameter (mm)	Outside Diameter (mm)	Inside Diameter (mm)
54	57.000	53.500	1370	1450	1360
60	63.350	59.500	1520	1610	1510

748.06 - Ensure casing pipe is joined together with internal sleeves or a full circumferential weld per 513.21. Hydrostatic testing is not required.

SS937 – Ensure the joint does not protrude on the inside of the pipe nor increase the outside diameter of the pipe.

**837.03 Installation.** Install the liner pipe and fittings per the manufacturer's recommendations with the following additions:

- A. Remove all debris or obstructions from the existing pipe prior to inserting the liner pipe. Push or pull the liner pipe into the existing pipe by a method that will not damage the existing drainage structure or the proposed liner pipe. Furnish pipe joints that maintain integrity during installation.
- B. Completely fill the void around the outside of the liner pipe with a fill material consisting of flowable grout, low strength mortar backfill or as approved by the Office of Structural Engineering. Ensure the maximum pressure developed by the fill material does not exceed the manufacturer's recommendation for the maximum allowable external pressure for the liner pipe.
- C. Ensure the liner pipe maintains the designed line and grade while fill material is placed in uniform lifts. A maximum 5 percent change in diameter of the liner pipe across any section is permissible. Construct bulkheads at the existing conduit ends to contain the fill material.

**837.04 Method of Measurement.** The length of liner pipe to be paid for will be the actual number of linear feet (meters) measured between ends.

The estimated plan quantity of fill material is shown on the plans. If the quantity of backfill used exceeds or is less than the plan quantity, compute the amount of backfill from the nominal volume of each batch and the number of batches used. Compensation for the additional amount will be at the unit price bid for Item 837-Backfill for Liner Pipe.

**837.05 Basis of Payment.** The payment for furnishing the liner pipe, fill material, labor, debris removal and equipment needed to complete this item of work will be made at the contract prices for:

Item	Unit	Description
837	Foot (Meter)	____”(____mm) Liner pipe, (supplemental description)
837	Cubic Yard (Cubic Meter)	Backfill for liner pipe

**Designer Note:** Must also list Supplemental Specification 937