

DESCRIPTION

Under this Item, the Contractor shall provide all labor, material, and equipment necessary to furnish and install steel casing pipe, wall thickness of 3/8", including installation of casing spacers placed around carrier pipe as shown on the Contract plans.

MATERIALS**CASING PIPE**

Casing pipe shall be bar steel casing pipe API 5L Grade B seamless or electric welded pipe, or approved equal. Furnish finished lengths of pipe with beveled cut ends to facilitate proper welding of transverse joints.

Casing pipe must be new pipe that has smooth surfaces that are uniform and free of bulges, dents or warping throughout entire length.

Minimum casing pipe diameter is 24", with a minimum wall thickness of 3/8". If the jacking/boring operation requires a larger diameter or heavier wall thickness, it shall be furnished and installed by the Contractor under this Item, at no additional cost.

Shop coat all surfaces (exterior and interior) of the pipe (except for a one-inch wide circumferential band at ends of pipe lengths which are to be jointed by field welding) with one coat of Koppers Bitumastic Super Service Black, Tnemec Heavy Duty Black 46-449, Mobil 35-J-10 or approved equal. Remove all scale and rust with a wire brush. Wipe clean and dry all surfaces prior to painting. Clean greasy or oily surfaces with benzene or mineral spirits. Paint field weld areas with one coat of bitumastic.

CASING PIPE SPACERS

Casing spacer constructed of 14 gauge carbon steel clamp coated with corrosion resistant enamel paint with PVC liner and a minimum of four (4), 1 1/2" wide, minimum. UHMW polymer runners or glass reinforced plastic runners spaced equally around the circumference to maintain bell clearance on all sides. Runners to be equal length so that carrier pipe is centered in casing pipe. Grade five steel bolts, nuts and washers to be provided with spacers.

INSTALLATION

Place pipe onto ground within right-of-way or easements or other approved locations by means of machinery using slings or other approved methods. Do not dump pipe from trucks.

Install casing pipe as indicated on the Contract plans.

Install restrained joint ductile iron water main by joining and sliding ahead each pipe length by length into casing. Furnish all necessary casing spacers, shims, concrete leveling

courses, guide tracks, tools, and other equipment which are required to place pipe into casing true to grade and line. Adequately support water main with casing spacers installed within casing to prevent any possible deflection or damage during and after installation. Water main shall be inspected for alignment and grade. Restrained joint water main shall extend a minimum of 5' beyond each end of casing pipe, before the installation of any fittings.

METHOD OF MEASUREMENT

Unit price per linear foot.

BASIS OF PAYMENT

The quantity for which payment will be made shall be the total linear feet of steel casing pipe as measured by the Engineer along the centerline of the pipe and includes all labor, equipment and material necessary to complete the work.

Payment will be made under:

| <u>Item No.</u> | <u>Item</u> | <u>Pay Unit</u> |
|------------------------|--|------------------------|
| C660.0401 M | 24" Steel Casing Pipe (for 6", 8", and 12" DI Restrained Joint Pipe) | LF |
| C660.0402 M | 30" Steel Casing Pipe (for 16" DI Restrained Joint Pipe) | LF |
| C660.0403 M | 36" Steel Casing Pipe (for 20" DI Restrained Joint Pipe) | LF |