

5560200 JACK AND BORE
COMMENTS FROM INTERNAL/INDUSTRY REVIEW

Bob Burleson for Bruce Kershner
FTBA
850-942-1404

Comments: (8-30-11, Internal)

1. 556-2.1(a) Steel Pipe Casing and Welds: (add the highlighted sentence.)

(a) The size of the steel casing must be at least 6 inches larger than the largest outside diameter of the carrier. **Casing size must accommodate for pressure pipe/carrier pipe joint restraints.**

Response: Agree. The 6" oversize (which is to include the diameter of the restrained joint) is to provide enough room for leaking material to escape in the annular space without damaging FDOT facilities.

2. 556-2.1(c) Steel Pipe Casing and Welds:

(c) All steel pipe may be bare inside and out, with the manufacturer's recommended minimum nominal wall thicknesses to meet the greater of either installation, loading or carrier requirements.

Where will this information be provided?

Response: The information is to be contained in the owner's engineering documentation that will assure FDOT that the thickness meets the spec.

3. 556-2.1(d) Steel Pipe Casing and Welds:

(a). Second paragraph

(d) All steel casing pipe must be square cut and have dead-even lengths which are compatible with the J&B equipment.

Use steel pipe casings and welds meeting or exceeding the thickness requirements to achieve the service life requirements noted in the Department Drainage Manual Chapter 6. For purposes of determining service life, ensure that casings installed under roadways meet or exceed **cross drain** requirements and casings under driveways meet or exceed **side drain** pipe requirements.

What cross drain and side drain requirements are being referred to above?

Response: By the nature of the operation, pipe that is jacked will be thicker than necessary to withstand even the most corrosive environment.

Cross drains are to be engineered to last 100 years and side drains are to be engineered to last 25 years. See FDOT's Optional Pipe Handbook for further guidance and examples.

(b). Second paragraph, 4th sentence:

Ensure that steel pipe casing of insufficient length achieves the required length through fully welded joints.

Not really sure what is meant by this statement.

Response: If the casing needs to be lengthened, ensure that the splice is fully welded where it is attached and throughout.

(c). Second paragraph, 5th sentence:

Ensure that joints are **air-tight** and continuous over the entire circumference of the pipe with a bead equal to or exceeding the minimum of either that required to meet the thickness criteria of the pipe wall for jacking and loading or service life.

(How does one insure joints are air-tight? Is testing pressure testing now required for all casings?)

Response: There are various methods to pressure test a casing, and will not be identified in the specification. Pressure testing has always been required; this is not a new requirement.

(c). Second paragraph, 6th sentence:

A qualified welder must perform all welding.

Define “qualified welder”.

Response: The certification/qualification of the welder is to correspond to the intended usage of the casing.
