



SUPPLEMENTAL SPECIFICATION

SECTION 643 - JACKING OR BORING WELDED STEEL PIPE

643.01, DESCRIPTION. This work shall consist of furnishing and installing, by means of jacking or boring, welded steel pipe of the size, thickness, and grade called for on the Plans in reasonably close conformity to the dimensions, elevations, and at the location indicated on the Plans, or as ordered by the Engineer.

643.02, MATERIALS. Materials shall meet the requirements of the following subsections of Division 700 - Materials.

Steel Pipe 714.11

CONSTRUCTION REQUIREMENTS

643.03, GENERAL. The Contractor's work shall be performed in such a manner that the roadway, appurtenances, and highway traffic will be safeguarded. The Contractor shall keep the roadway clear of obstructions at all times.

The Contractor must furnish detailed plans of his procedure for doing the work for approval of the Engineer prior to installation.

All work shall be performed and completed to the full satisfaction of the Engineer.

643.04, EXCAVATION. Jacking or boring pits shall be excavated, starting not closer than 1.5m from the point of shoulder and traversing down on a maximum slope of 1 on 1.

Depth of pit shall be such that the casing, when completed, shall have an elevation and grade as stated on the Plans.

Care shall be taken during excavation and jacking or boring operations to ensure that the casing pipe remains true to line and grade within the tolerances permitted as follows:

TABLE 643.04A - TOLERANCES

Size of Pipe	Maximum Tolerance - Percent of Length
100mm - 300mm	2%
350mm - 450mm	1.50%
500mm - 600mm	1%

Each section of steel casing pipe shall be butt-welded together for at least 80% of the pipe circumference. All welding shall be done in accordance with the current requirements of the American Welding Society for the type of work being performed.

643.05, BACKFILLING. The backfilling of jacking or boring pits shall be made in accordance with Section 601.08, Backfilling. Selected material from excavation or approved material shall be placed in layers not exceeding 150mm in compacted thickness, using air or mechanical tampers. Each layer shall be thoroughly compacted.

643.06, METHOD OF MEASUREMENT. The quantity of pipe to be measured for payment will be the number of meters shown on the Plans or ordered by the Engineer of the size and type specified complete in place in the accepted work.

643.07, BASIS OF PAYMENT. The accepted quantities of the type, size, and grade of pipe will be paid for at the Contract unit price per meter, which price shall be full compensation for furnishing, transporting, handling and placing the required pipe, and shall include all excavation, backfill, topsoil, or similar materials as may be needed for grading and seeding, and the furnishing of all labor, tools, equipment, and incidentals necessary to complete the work.

Payment will be made under:

<u>Pay Item</u>	<u>Pay Unit</u>
643.20 Jacking or Boring Welded Steel Pipe	METER