

## BILL OF MATERIALS

(For Information Only)

SHAPE	DESCRIPTION	UNIT	QUANTITY	
	Concrete Box Culverts	Cu. Yd.	19.2	
	Reinforcement Bars	LBS	3,000	
—	4" I.D. Galv. Steel Pipe	30	18'-7"	
		60	23'-4"	
1	4" Galv. Pipe Caps	Each	12	
	<sup>1</sup> <sub>4</sub> " Galv. Steel Plate (9" Nominal)	Each	6	
	<sup>1</sup> <sub>2</sub> " x 4" x 15" Galv. Steel Plate	Each	6	
	<sup>5</sup> <sub>8</sub> " x 10" Galv. Steel Bolts	Each	18	
	<sup>1</sup> 2" Dia. Galv. Expansion Bolts	Each	12	
	L4 <sup>1</sup> 2X4 <sup>1</sup> 2X <sup>3</sup> 8 X 3" Long	Each	12	
	<sup>5</sup> 8"¢ Anchor Rods	Each	12	
	2'2" x 2'2" x <sup>5</sup> 16" P Washer	Each	12	
	<sup>3</sup> <sub>4</sub> "\$ x 7" A307 Bolt	Each	6	

\* Only required with precast end section. Weight not included in Reinforcement Bars quantity.

## GENERAL NOTES

This work shall be paid for at the contract unit price per Each for Box Culvert End Section, Culvert No. 8.

This work shall be done in accordance with the applicable portion of sections 503, 508, and 540 of the Standard Specifications.

Steel pipes shall conform to ASTM A-53 (Type E or S) Grade B, Schedule 40, and shall be galvanized conforming to ASTM A-53. Contractor shall field verify pipe lengths.

Exposed edges shall be beveled  ${}^{3}_{4}$ ".

The contract unit price "EACH" for Box Culvert End Section, Culvert No. 8 shall include the Bolts, Galvanized pipe. Nuts, Washers, Anchor Rods, pipe caps, Steel Plates, Reinforcement Bars, and Concrete Box Culverts.

The Contractor has the option of using precast construction for the end section. If used, the concrete collar will also be included in the cost of Box Culvert End Section, Culvert No. 8.

Contractor shall provide galvanizing for holes, threads, etc. for field fabricated grate assembly.

The cost of earth excavation, where required, and necessary grading to fit the inlet as shown in the cross sections or to the slope is included in the cost of Box Culvert End Section, Culvert No. 8.

Reinforcement bars shall conform to the requirements of ASTM

A706 Gr. 60 (IL Modified). See Special Provisions.

Steel Plates shall conform to AASHTO M-270 Grade 36 and shall be galvanized conforming to AASHTO M-111.

Bolts, Nuts, Washers, and Anchor Rods shall be done in accordance with article 505 of the Standard Specifications and shall be galvanized.

See Plan and Profile Sheet for more information.

See Cross Section Sheet for more information.

		F.A.P RTE	SE	CTION	COUNTY	TOTAL SHEETS	SHEET NO.
N NO. 8		742	37	R-4	OGLE	867	184
					CONTRACT	NO. 6	54E17
STA.	TO STA.	FED. R	OAD DIST. NO.	ILLINOIS FED.	AID PROJECT		