REQUIREMENTS FOR CORRUGATED STEEL PIPE THICKNESS AND PROTECTION AT ABRASIVE SITES

pH	≤4.0	4.5	5.0	5.5	6.0	6.5	≥7.0	Steel Conduit Type
Thickness (in.) required for 50 year Design Service Life	X	X	X	0.168	0.168	0.138	0.109	Zinc Coated Corrugated Steel Pipe w/Paved Invert Zinc Coated Corrugated Steel Pipe-Arch w/Paved Invert Fully Bituminous Coated and Lined Corrugated Steel Pipe Fully Bituminous Coated and Lined Corrugated Steel Pipe-Arch
	X	X	0.138	0.109	0.109	0.079	0.064	Aluminum Coated Type 2 Corrugated Steel Pipe w/Paved Invert Aluminum Coated Type 2 Corrugated Steel Pipe-Arch w/Paved Invert
	0.109	0.109	0.079	0.064	0.064	0.064	0.064	Polymer Precoated Galvanized Corrugated Steel Pipe w/Paved Invert Polymer Precoated Galvanized Corrugated Steel Pipe-Arch w/Paved Invert Fiber Bonded Bituminous Coated Corrugated Steel Pipe w/Paved Invert Fiber Bonded Bituminous Coated Corrugated Steel Pipe-Arch w/Paved Invert
	X	X	X	0.170	0.111	0.111	0.111	Structural Plate Steel Pipe w/Concrete Field Paving Structural Plate Steel Pipe-Arch w/Concrete Field Paving

pH	≤4.0	4.5	5.0	5.5	6.0	6.5	≥7.0	Steel Conduit Type
Thickness (in.) required for 75 year Design Service Life	X	X	X	X	X	0.168	0.138	Zinc Coated Corrugated Steel Pipe w/Paved Invert Zinc Coated Corrugated Steel Pipe-Arch w/Paved Invert Fully Bituminous Coated and Lined Corrugated Steel Pipe Fully Bituminous Coated and Lined Corrugated Steel Pipe-Arch
	X	X	X	0.168	0.168	0.138	0.109	Aluminum Coated Type 2 Corrugated Steel Pipe w/Paved Invert Aluminum Coated Type 2 Corrugated Steel Pipe-Arch w/Paved Invert
	0.168	0.168	0.168	0.138	0.138	0.109	0.109	Polymer Precoated Galvanized Corrugated Steel Pipe w/Paved Invert Polymer Precoated Galvanized Corrugated Steel Pipe-Arch w/Paved Invert Fiber Bonded Bituminous Coated Corrugated Steel Pipe w/Paved Invert Fiber Bonded Bituminous Coated Corrugated Steel Pipe-Arch w/Paved Invert
	X	X	X	0.218	0.111	0.111	0.111	Structural Plate Steel Pipe w/Concrete Field Paving Structural Plate Steel Pipe-Arch w/Concrete Field Paving

Refer to Standard Drawing E 715-PSLC-03 for General Notes.

INDIANA DEPARTMENT OF TRANSPORTATION

PIPE SERVICE LIFE CRITERIA

SEPTEMBER 2002

STANDARD DRAWING NO. E 715-PSLC-02

RICHARD L. VanCLEAVE REGISTERED No. 9750 STATE OF INDIANA PROFESSIONAL ENGINEER

DESIGN STANDARDS ENGINEER

/s/ Richard L. VanCleave 9-03-02
DESIGN STANDARDS ENGINEER DATE

/s/ Richard K. Smutzer 9-03-02
CHIEF HIGHWAY ENGINEER DATE