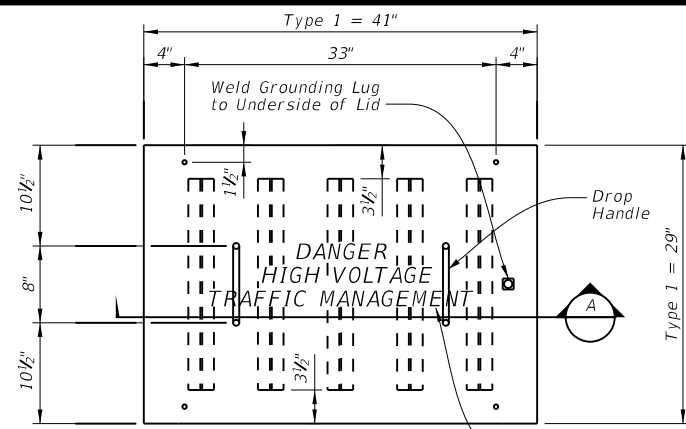
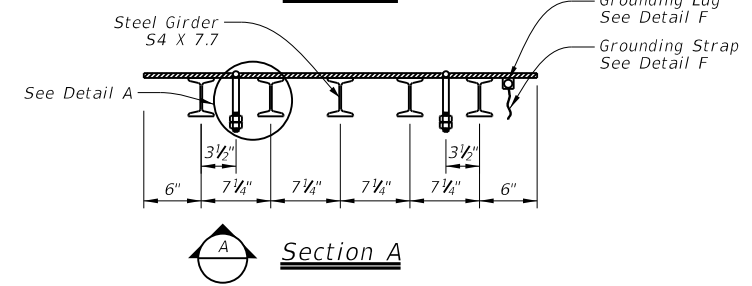


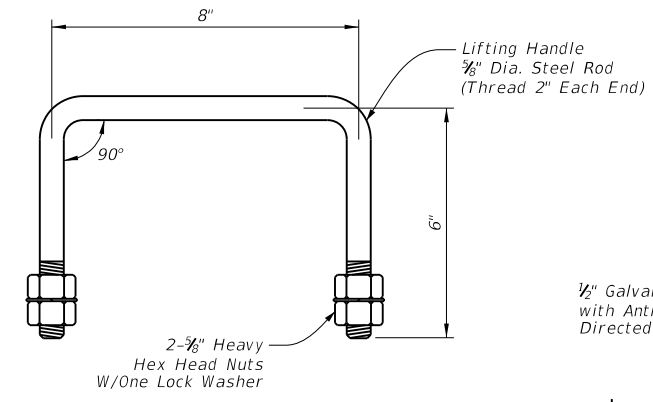
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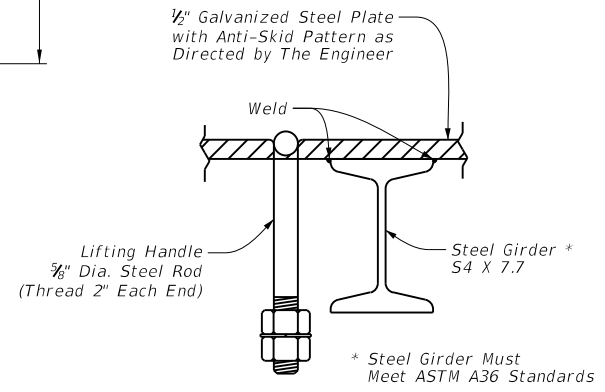
Type 1 Steel Cover Details
Top View



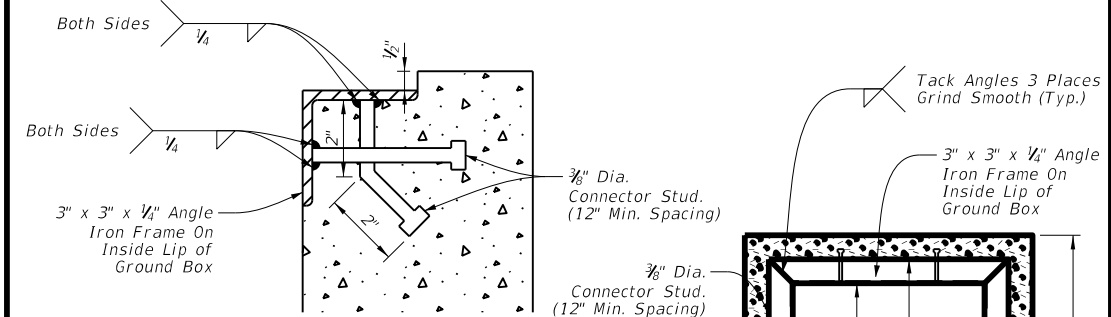
Section A



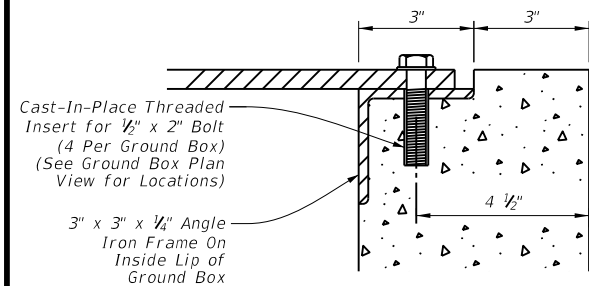
Drop Handle Detail



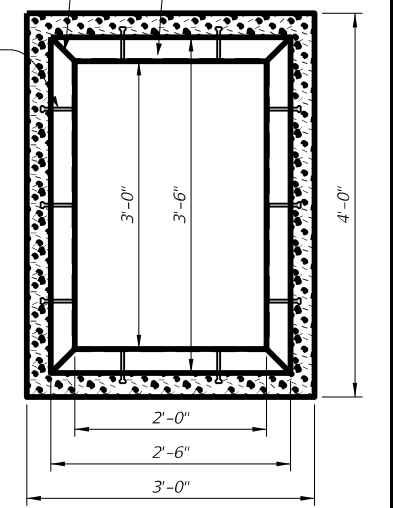
Detail A



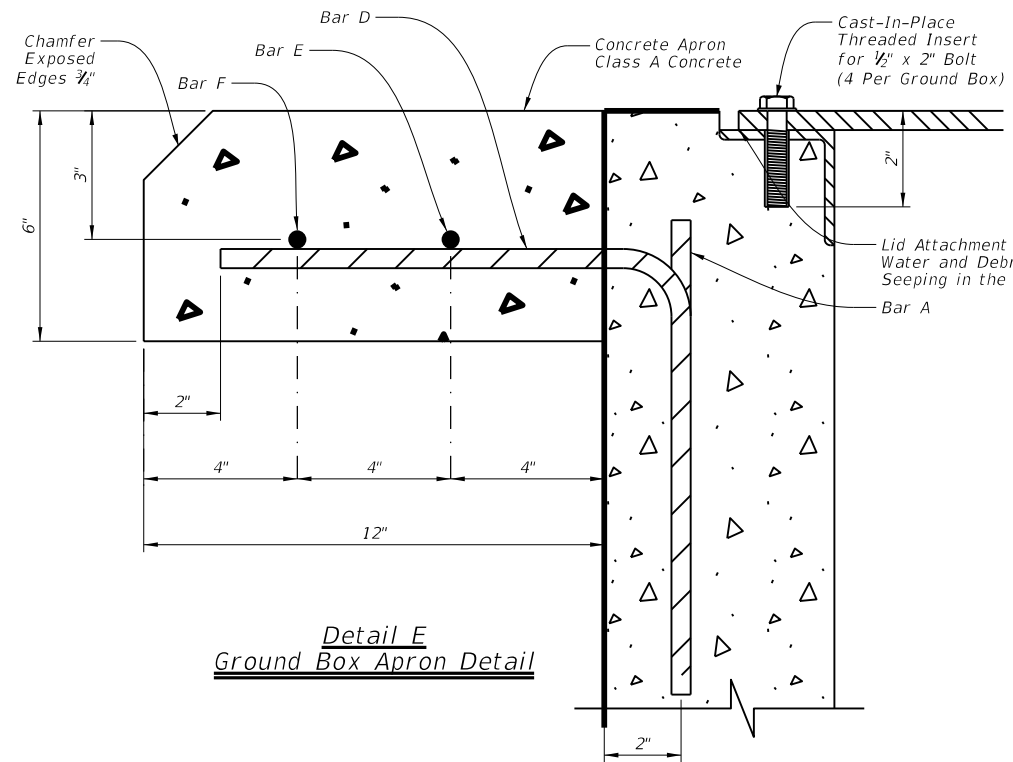
Detail B



Detail C
Lid Attachment Detail



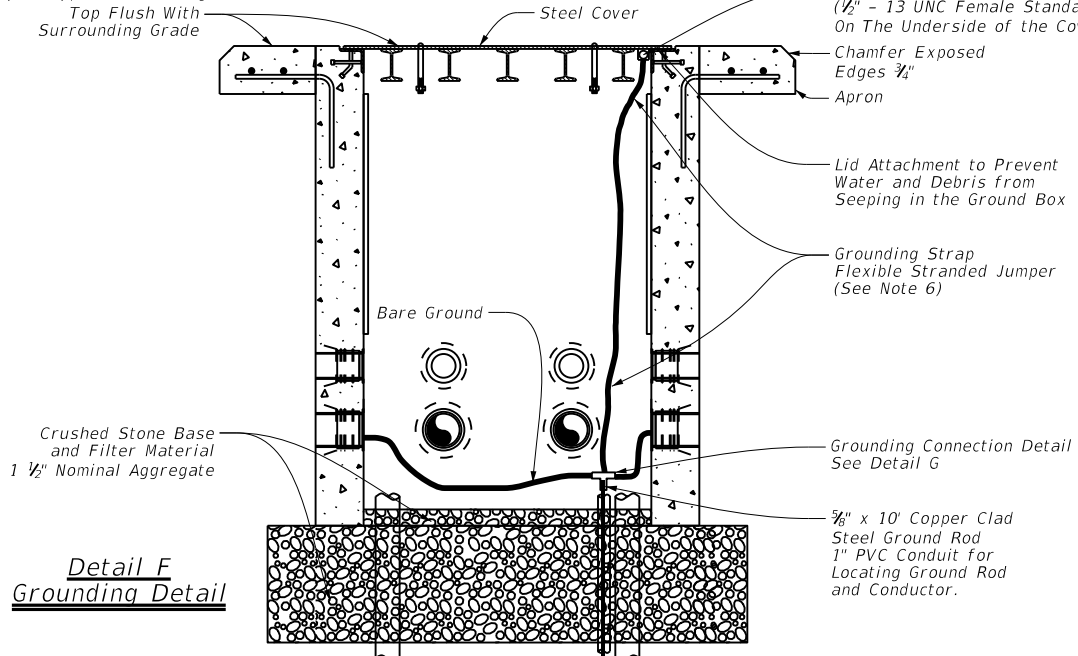
Detail D



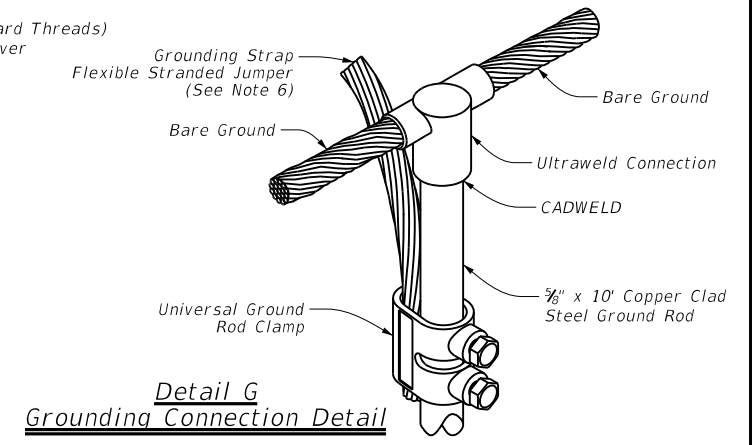
Detail E
Ground Box Apron Detail

Ground Box Type 1	BAR A					BAR B					BAR D					BAR E					BAR F					TOTALS	
	No.	Size	Ty.	Length	Weight	No.	Size	Ty.	Length	Weight	No.	Size	Ty.	Length	Weight	No.	Size	Ty.	Length	Weight	No.	Size	Ty.	Length	Weight	Steel * LBS.	Conc. * CY
36" Depth	22	#4	St.	2'-8"	39.3	5	#4	Bt.	13'-2"	44.1	8	#4	Bt.	2'-0"	10.7	1	#3	Bt.	17'-2"	6.5	1	#3	Bt.	19'-10"	7.5	108.1	.67
48" Depth	22	#4	St.	3'-8"	54.0	7	#4	Bt.	13'-2"	61.8	8	#4	Bt.	2'-0"	10.7	1	#3	Bt.	17'-2"	6.5	1	#3	Bt.	19'-10"	7.5	140.5	.89
60" Depth	22	#4	St.	4'-8"	68.8	8	#4	Bt.	13'-2"	70.6	8	#4	Bt.	2'-0"	10.7	1	#3	Bt.	17'-2"	6.5	1	#3	Bt.	19'-10"	7.5	164.1	1.11

* - For Contractors Information Only. Incidental to "ITS Ground Box".
Legend: Ty. = Type, St. = Straight, Bt. = Bent



Detail F
Grounding Detail



Detail G
Grounding Connection Detail

General Notes:

- See ITS(37) for additional Type "1" ground box details.
- Hot-dip galvanized steel covers after all welds are made.
- Label top of cover with the words "DANGER HIGH VOLTAGE TRAFFIC MANAGEMENT" using template-guided, hand-welded lettering at a height of 2 inches to ensure neatness.
- Provide all Type "1" ground boxes with a securable, tamper-proof cover equipped with a bolting system that positively secures the cover in place.
- Ground steel covers in accordance with the National Electrical Code.
- Ground covers to the grounding cable using a split-bolt kearney clamp, and a minimum 8-foot long flexible stranded jumper the same size as the grounding conductor. Terminate to metal ground box cover with a tank ground type lug as approved and directed by the Engineer.
- Provide Type "1" ground box and cover designed for heavy duty loading in accordance with AASHTO H20 loading when located where the box may experience deliberate, continuous vehicular traffic, such as near the shoulder or an auxiliary lane, or immediately adjacent to the unprotected edge of pavement.
- Provide a Type "1" ground box and cover tested by a laboratory independent of the manufacturer certifying loading requirements are met. Provide certification of such tests to the Engineer for approval.
- Provide a steel or cast iron cover in accordance with Item 471, Article 471.2, "Frames, Grates, Rings, and Covers." Provide covers with the number of drop handles shown. Provide Class "A" concrete for ground box construction and aprons.
- Fabricate cover so to fits properly on the ground box, and no undue noise results when traffic contacts the cover.

Sheet Details
Not to Scale

SHEET 2 OF 2



**ITS GROUND BOX DETAILS
TYPE "1" WITH STEEL COVER**

ITS(38)-17

FILE: its(38)-17.dgn	DWG: TxDOT	CHK: TxDOT	DES: TxDOT	CRK: TxDOT
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5-17	REVISIONS		DIST	COUNTY
			SHEET NO.	