



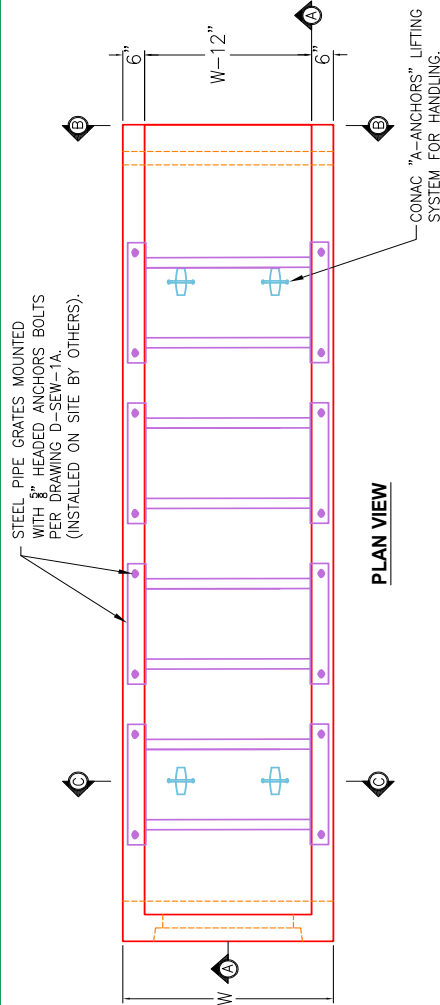
Structure ID: S4-5 HW

P1 HWTDOT6-1SA18

18" - HW TDOT 6:1 Type Safety Side Drain Endwall F/F

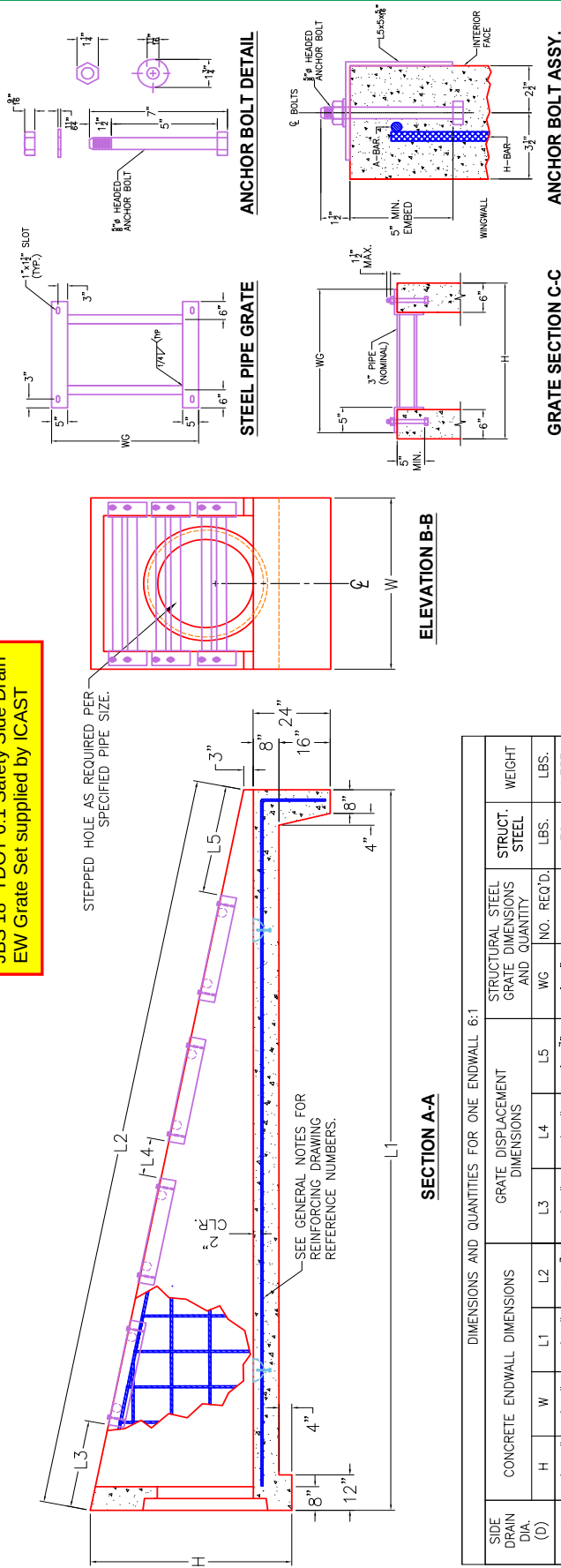
GENERAL NOTES

1. DRAWING TO BE USED FOR ALL 15" THROUGH 48" SIDE DRAIN CONCRETE ENDWALLS. MANUFACTURING, FOR CROSS DRAINS ONLY.
2. CONCRETE: $F_c = 4,500$ PSI @ 28 DAYS.
3. REINFORCING STEEL: ASTM A615, $F_y = 60,000$ PSI. SEE STD. DWGS. D-PE-15A, D-PE-18, D-PE-24A, D-PE-30A, D-PE-36A, D-PE-42A & D-PE-48A FOR BILL OF STEEL.
4. SPLICING OF REINFORCEMENT IS ACCEPTABLE PROVIDED THAT A MINIMUM 21" SPLICE LENGTH IS USED.
5. APPROPRIATE SIZING AND LOCATIONS OF THE LIFTING INSERTS WILL BE THE RESPONSIBILITY OF INFRASTRUCTURE PRECAST, INC.
6. LIFTING INSERT POCKETS SHALL BE GROUTED ON SITE BY THE CONTRACTOR AFTER THE ENDWALL IS SET AS PER TDOT REQUIREMENTS.
7. DIMENSIONAL AND REINFORCING TOLERANCES WILL BE AS SHOWN IN STANDARD OPERATING PROCEDURE (SOP) 5-3.
8. PIPE OPENINGS FOR HEADWALLS ARE BASED ON REINFORCED CONCRETE PIPE WITH TYPE "B" WALL AS PER AMERICAN CONCRETE PIPE ASSOCIATION (ACPA). OUTSIDE DIAMETER + 3"-4". TOE WALL BACK SLOPE MAY BE CONSTRUCTED VARIABLE FROM VERTICAL UP TO 15°.
9. VARIABLE FROM VERTICAL UP TO 15°.



PLAN VIEW

NOTE:
JBS 18" TDOT 6:1 Safety Side Drain
EW Grate Set supplied by ICAST



ANCHOR BOLT DETAIL

STEEL PIPE GRATE

ANCHOR BOLT ASSY.

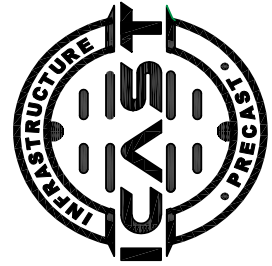
GRATE SECTION C-C

ELEVATION B-B

SECTION A-A

DIMENSIONS AND QUANTITIES FOR ONE ENDWALL 6:1											
SIDE DRAIN DIA. (D)	CONCRETE ENDWALL DIMENSIONS				GRATE DISPLACEMENT DIMENSIONS				STRUCTURAL STEEL GRATE DIMENSIONS AND QUANTITY		WEIGHT LBS.
	H	W	L1	L2	L3	L4	L5	WG	NO. REQ'D.	LBS.	
15"	2'-11"	2'-8"	11'-2"	11'-3 3/8"	2'-2"	1'-0"	2'-1 7/8"	2'-5"	2	172	4,737
18"	3'-2"	2'-11"	12'-8"	12'-10 3/8"	10 3/8"	1'-0"	1'-0"	2'-8"	3	269	5,833
24"	3'-9"	3'-6"	16'-2"	16'-4 3/8"	2'-2"	1'-0"	3'-2 5/8"	3'-3"	3	296	8,848
30"	4'-5"	4'-1"	20'-2"	20'-5 3/8"	2'-2"	1'-0"	3'-3 3/8"	3'-10"	4	694	12,880
36"	5'-0"	4'-8"	23'-8"	23'-1 7/8"	2'-2"	1'-0"	2'-9 3/8"	4'-5"	5	975	17,186
42"	5'-6"	5'-3"	26'-8"	27'-0 3/8"	2'-2"	1'-0"	1'-10 3/8"	5'-0"	6	1,300	21,532
48"	6'-1"	5'-10"	30'-2"	30'-7 3/8"	2'-2"	1'-0"	1'-5"	5'-7"	7	1,669	27,092

DIMENSIONS AND QUANTITIES FOR ONE ENDWALL 12:1												
PIPE CULV. DIA.	CONCRETE ENDWALL DIMENSIONS						STRUCTURAL STEEL GRATE DIMENSIONS AND QUANTITY		STEEL BAR REINFORC.	WEIGHT LBS.		
	H	W	L1	L2	L3	L4	WG	NO.			REQ'D	LBS.
18"	3'-11"	3'-1"	26'-0"	24'-1"	2'-1"	3'-0"	2'-10"	5	480	256	11,119	



INFRASTRUCTURE PRECAST, INC.
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TDOT TYPE "SAFETY" SIDE DRAIN ENDWALL WITH STEEL PIPE GRATES FOR 15" THROUGH 48" PIPES (6:1 & 12:1 SLOPES)
DRAWING NO.: ET-TDOT-200 DATE: 10-02-25
REVIEWED BY: J.H. ROSS, PE DRAWN BY: N. RICHARDS
WEB: WWW.ICASTINC.COM SCALE: NTS