

CURB OPENING 'D' (10'-9')

ADDITIONAL CURB OPENINGS-

ADDITIONAL OPENINGS

MAXIMUM OF FOUR (10'-9")

'C'

CURB OPENING \*C\* (8' Ø-3/4")

CURB OPENING "B" (5' 4-1/2")

W6 X 15.5

SECTION 'A-A

ALL REBAR IN WALLS # 4 @ 12 CTRS EA WAY (TYPICAL)

CURB OPENING

-1/2" X 12" MACH. BOLTS AND 2 - NUTS

3'-10'

		Q	UANTIT!	ES FOR IN	NLETS		
INLET	CURB OPENING	CLASS 'A' CONCRETE	INLET		INLET FRAME AND GRATE	CAST IRON CURB INLET	MH FRAME AND COVER
DESIGN	DESIGNATION	CU. YD.	BASE AM'T.	ADD'L.C.F. PER VERT.FT.	EACH	EACH	EACH
1 WITH SMALL JUNCT. BOX		1.50	43.56	15.84	1	1	1
	'A'	1.60	47.34	17.43	1	2	1
	•B•	1.73	55.44	21.03	1	3	1
	'C'	1.86	62.26	24.63	1	4	1
	.D.	1.99	68.03	28.23	1	5	1
		1.70	47.84	17.40	2	2	1
2	.a.	1.83	57.01	21.00	2	3	1
WITH SMALL JUNCT.	•B•	1.96	64.86	5 24.60 2 4		4	1
	.c.	2.08	71.70	28.20	2	5	1
BOX	.D.	2.21	77.28	31.80	2	6	1
		2.11	50.44	18.34	1	1	1
1	.a.	2.21	54.22	19.93	1	2	1
WITH LARGE JUNCT. BOX	•B•	2.34	62.32	23.53	1	3	1
	.c.	2.47	69.14	27.13	1	4	1
	.D.	2.60	74.91	30.73	1	5	1
		2.31	54.72	19.90	2	2	1
2 WITH LARGE JUNCT. BOX	'A'	2.43	63.89	23.50	2	3	1
	•B•	2.57	71.74	27.10	2	4	1
	.c.	2.69	78.58	30.70	2	5	1
	.D.	2.82	84.16	34.30	2	6	1

3'-6"

S = 1/4 PER FT.

FACE OF CURB

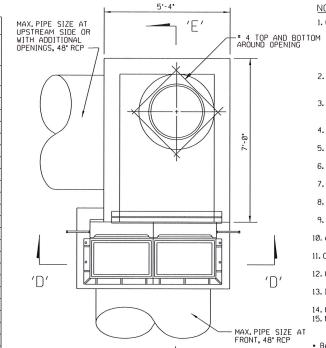
2'-1" 8"

3'-5"

TOP OF CURB ELEV. AT

-ALL REBAR, "4 AT 9°C/C, TRANS. AND LONG. FOR TOP AND BOTTOM SLABS

4 GRATE OR GRATES



## NOTES:

- 1. (a) WHEN THE INLET IS BUILT IN EXISTING PAVEMENT, THE APRON AROUND THE INLET SHALL BE OF THE SIZE SHOWN IN THE PLAN ON THIS SHEET, AND BUILT OF
- P.C. CONCRETE TO A MINIMUM 8 THICKNESS.

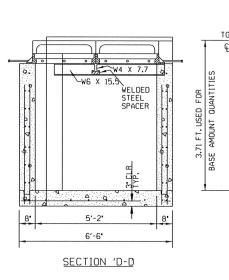
  (b) THERE WILL BE NO DEDUCTION OF PAYMENT FOR CONCRETE CURB AND GUTTER FOR THE LENGTH OR AREA OCCUPIED BY THE CONSTRUCTION OF CAST IRON CURB
- INLETS OR CAST IRON CURB INLET FRAME AND GRATE. 2. RUBBER COATED REINFORCED STEEL STEPS SHALL BE PLACED AT THE HEADERS IN ALL INLETS 4' OR MORE IN DEPTH. COST OF STEPS SHALL BE INCLUDED
- IN THE PRICE BID FOR INLET. 3. GRATING AND FRAMES TO BE USED IN THIS INLET ARE SHOWN ON THE STANDARD DRAWINGS STD 765, STD 766, DESIGNATED AS 'STANDARD STORM SEWER GRATES
- AND FRAMES. 4. THE STANDARD DRAWING DESIGNATION NO., DESIGN NO., AND NUMBER OF
- ADDITIONAL OPENINGS SHALL BE INDICATED ON THE PLANS.
  5. COST OF STRUCTURAL STEEL I-BEAMS AND ANGLE IRON TO BE INCLUDED IN THE
- PRICE BID FOR INLET. ANGLE IRON SHALL CONFORM TO ASTM-A7 OR A36.
  6. CASTING SHALL CONFORM TO ASTM SPECIFICATION FOR GREY IRON CASTINGS. SERIAL DESIGNATION A-48-CLASS 20.
- 7. NO WORDING OR MARKING OF ANY KIND OTHER THAN THOSE SHOWN ON THE
- PLANS WILL BE PERMITTED ON THESE CASTINGS.
- 8. ALL NUTS AND BOLTS REQUIRED FOR THESE STRUCTURES SHALL BE CADMIUM PLATED OR GALVANIZED.
- 9. CAST IRON CURBS TO BE USED ON THIS INLET ARE SHOWN ON STANDARD DRAWING DESIGNATED AS 'STANDARD CAST IRON CURB.'
- 10. ALL MORTAR JOINTS TO BE 3/8 MAXIMUM, EVERY FIFTH COURSE OF BRICK MASONRY TO BE HEADER COURSE.
- 11. CURB INLETS SHALL BE PLACED ON UPSTREAM SIDE OF GRATE INLETS FOR TYPICAL INSTALLATIONS.
- 12. CONCRETE TROUGH FOR CURB INLETS AND STORM SEWER INLETS SHALL BE
- CONSTRUCTED AS ONE UNIT.

  13. IF PRECAST INLET IS USED, FLOWABLE FILL MUST BE USED AS BACKFILL AROUND

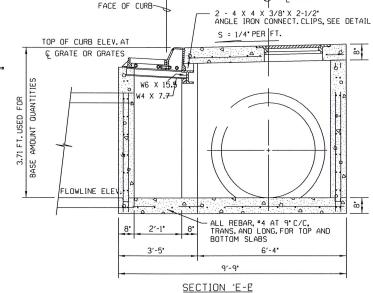
-Ç PIPE

- THE ENTIRE INLET.

  14. USE MANHOLE FRAME AND LID AS SHOWN ON STANDARD DRAWING NO. 754
- 15. MANHOLE FRAME AND LID MUST BE FLUSH WITH TOP OF THE SURROUNDING CONCRETE SLAB.
- \* BASES TO BE FORMED WITH 1 X 6 FORMS AND POURED IN PLACE.



<u>PLAN</u>



DOUBLE GRATE CURB INLET WITH JUNCTION BOX

(DESIGN 2 WITH LARGE JUNCTION BOX SHOWN) 18" THRU 30" LONGITUDINAL PIPE REQUIRES SMALL JUNCTION BOX ALL REBAR IN WALLS # 4 @ 12 CTRS EA WAY (TYPICAL)



1/2" X 12" MACH. BOLTS AND 2 - NUTS

AND 2

3/4" X 12" MACH. BOLTS AND 2 - NUTS-7

1'-11"

SECTION 'C-C

-3/4" X 5" MACH. BOLT AND NUTS (FRAME TO FRAME) 1/2" X 5-1/2" MACH. BOLTS

7' 10-1/2"

SECTION 'B-B

4' 5-1/2"

3/4" X 4-1/2" MACH. BOLTS AND NUTS (FRAME TO CURB INLET)

FRAME AND CURB DETAILS



ADDITIONAL CURB OPENING DETAILS

-WELDED STEEL SPACER

I-BEAM CONNECTION DETAIL FOR DOUBLE GRATE

ANGLE IRO	IN LENGTHS
OPENING	LENGTH
"A"	2' 5-3/8'
•B•	5' 1-5/8"
.c.	7′ 9-7/8•
.D.	10' 6-1/8"

C.I. CURB HEIGHTS				
TYPE	.V.	•B•		
4' MOUNTABLE	4-1/2"	9-1/2"		
6" MOUNTABLE	6-1/2"	11-1/2"		
6" BARRIER	6-1/2"	11-1/2"		
8" BARRIER	8-1/2"	13-1/2"		

	BASIS	OF	PAYMENT	
ITEM NO.		ITEM		UNIT
6 11.06 (E)	INLET			EA.
6 11.06 (F)	ADDITION	AL DEF	TH IN INLET	VERT. FT.
6 11.06 (G)	INLET FR	AME A	ND GRATE	EA.
6 11.06 (D)	MANHOLE	FRAME	AND COVER	EA.
6 11.06 (K)	CAST IRO	N CUR	RINIFTS	FΔ

REVISION

J	Milorit	1
	CITY ENGINEER	C
ATE		

CITY OF TULSA, OKLAHOMA ENGINEERING SERVICES DEPARTMENT

STANDARD INLETS AND GRATES W/ACCESS MANHOLE BACK OF CURB

DESIGN MANAGER

STD, 761 DATE: MARCH 2022