SPECIAL DESIGN INLET

CITY OF COLORADO SPRINGS, COLORADO

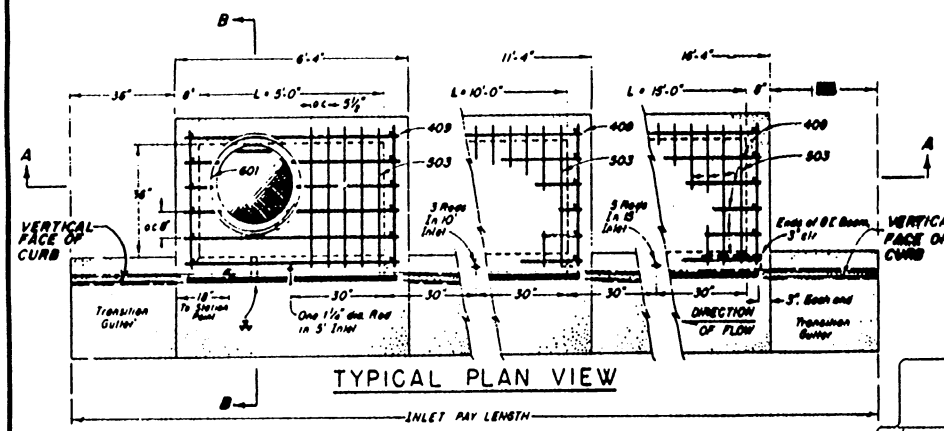
COLORADO DEPARTMENT OF HIGHWAYS
CURB INLET TYPE R (MODIFIED)

APPROVED BY: Gary R. Haynes BRR
CITY ENGINEER

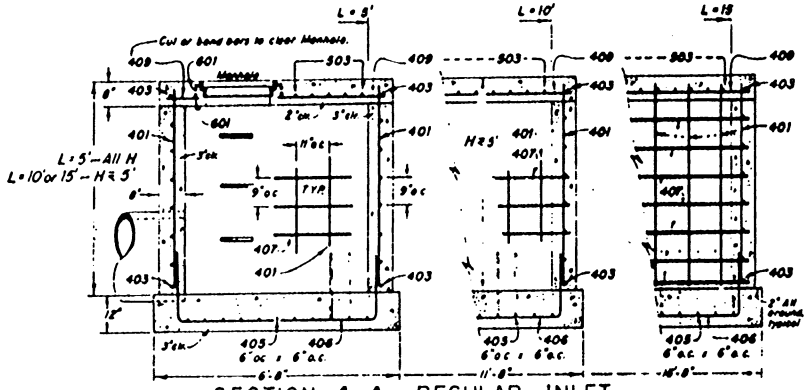
SCALE	DATE	DWN. BY	
AS SHOWN	REV. 1/88	JLO	D-19A SHT. 1 OF 2

* 3 3/4" IF 6" VERTICAL CURB & GUTTER,
6 1/4" IF 8" VERTICAL CURB & GUTTER

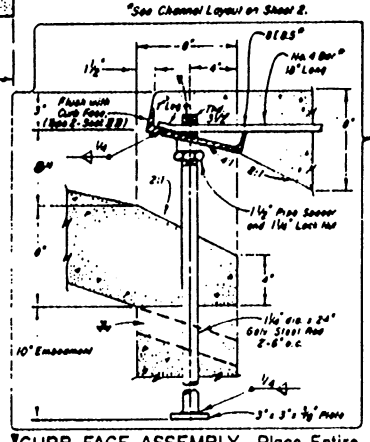
■ NOTE:
FOR ALL INLETS ON A CONTINUOUS GRADE, THE UPSTREAM TRANSITION GUTTER LENGTH SHALL BE 10 FEET. FOR ALL OTHER LOCATIONS, TRANSITION LENGTHS SHALL BE 3 FEET MINIMUM. ADDITIONAL 10 FEET TRANSITION NEEDED IF NORMAL RAMP CURB & GUTTER.



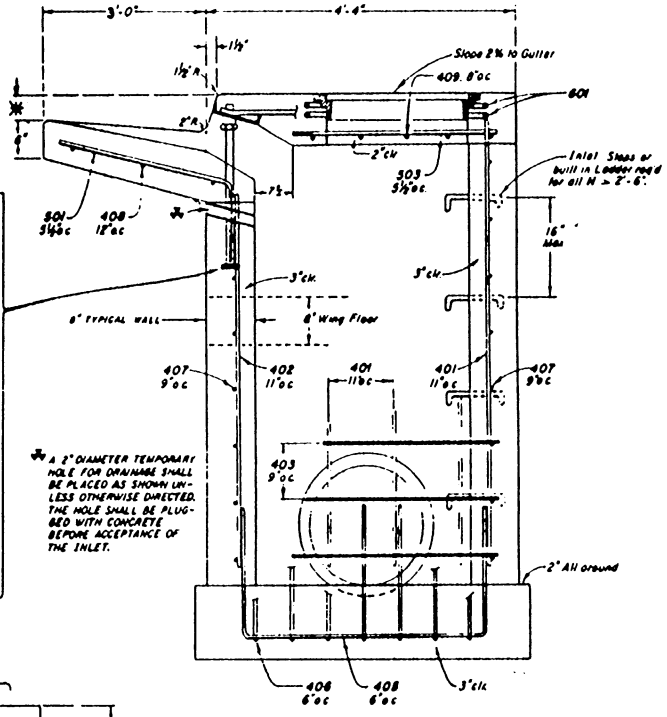
TYPICAL PLAN VIEW



SECTION A-A REGULAR INLET



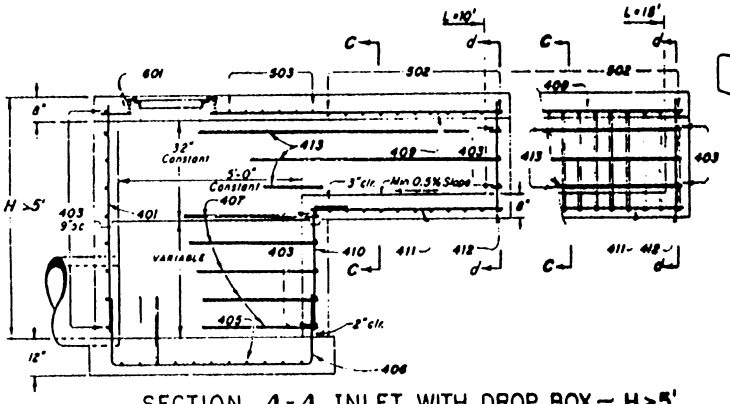
*CURB FACE ASSEMBLY, Place Entire Assembly Before Pouring Concrete.



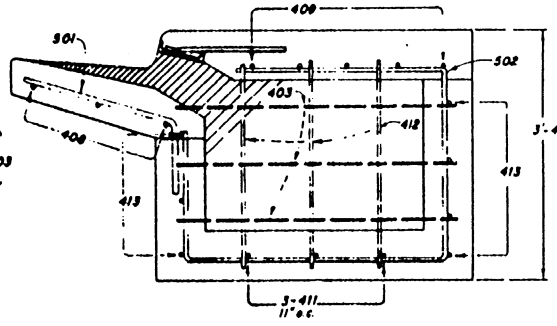
* A 2" DIAMETER TEMPORARY HOLE FOR DRAINAGE SHALL BE PLACED AS SHOWN UNLESS OTHERWISE DIRECTED. THE HOLE SHALL BE PLUGGED WITH CONCRETE BEFORE ACCEPTANCE OF THE INLET.

SECTION B-B
TYPICAL END VIEW

NOTE: MANHOLE RING & COVER, STATION POINT AND OUTFLOW PIPE ARE TO BE LOCATED AT THE SAME END OF THE INLET.



SECTION A-A INLET WITH DROP BOX — H>5'



(Dotted Bars are in Section d-d)

SECTIONS C-C & d-d

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REVISED JAN'89 PLB SPECIAL DESIGN INLET

TABLE ONE – BAR LIST FOR CURB INLETS, TYPE R

MARK	DIA in	o.c. Spacing	TYPE	ALL INLETS L = 5' No. Req'd	Length	INLETS, H ≥ 5' 10' No. Req'd	Length	15' No. Req'd	Length	INLETS, H > 5' 10' No. Req'd	Length	15' No. Req'd	Length
401		11"	II	15	#	21	#	26	#	11	#	11	#
402		11"	II	7	#	13	#	18	#	7	#	7	#
403		9"	II	#	4'-0"	#	4'-0"	#	4'-0"	#	4'-0"	#	4'-0"
405		6"	VI	11	6'-10"	21	6'-10"	31	6'-10"	11	6'-10"	11	6'-10
406		6"	VIII	7	8'-10"	7	13'-10"	7	18'-10"	7	8'-10"	7	8'-10"
407	1/4"	9"	II	#	5'-10"	#	10'-10	#	15'-10"	#	5'-10"	#	5'-10"
408		12"	II	3	6'-0"	3	11'-0"	3	16'-0"	3	11'-0"	3	16'-0"
409		8"	II	6	5'-10"	6	10'-10"	6	15'-10"	6	10'-10"	6	15'-10"
410		11"	VII							3	#	3	#
411		11"	II							3	5'-2"	3	10'-2"
412		11"	II							3	2'-9"	3	2'-9"
413		9	II							7	10'-10"	7	15'-10"
501		5½"	IV	11	4'-4"	22	4'-4"	33	4'-4"	22	4'-4"	33	4'-4"
502	3/8"	5½"	III							11	11'-5"	22	11'-5"
503		5½"	II	5	3'-6"	16	3'-6	27	3'-6"	6	3'-6"	6	3'-6"
601	1/4"	2½"	V	2	8'-10"	2	8'-10"	2	8'-10"	2	8'-10"	2	8'-10"
BEAM	—	—	—	1	5'-10	1	10'-10"	1	15'-10"	1	10'-10"	1	15'-10"
F				2 Bars, 1 Rod	—	4 Bars, 3 Rods	—	4 Bars, 3 Rods	—	4 Bars, 3 Rods	—	4 Bars, 3 Rods	—

H Variable, refer to Table TWO.
@ Include 18' No 4 Bars (See Channel Layout Detail).
F See Curb Face Assembly on Sheet 1 and Channel Layout Details on this sheet

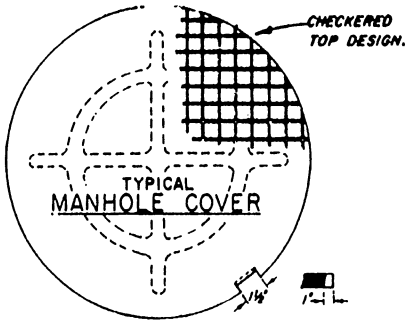
REGULAR INLETS

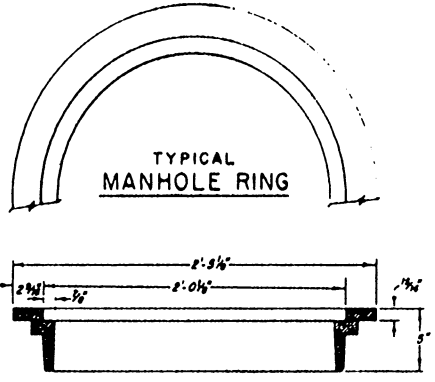
DROP BOX INLETS

TABLE TWO – BARS AND QUANTITIES VARIABLE WITH H

H	Length 401	402	410	No Req'd Regular 403	407	No Req'd Drop Box 403	407	L = 5' Cu Yd Conc	Lb Steel	L = 10' Cu Yd Conc	Lb Steel	L = 15' Cu Yd Conc	Lb Steel
3'-0"	2'-8"	1'-8"		10	7			3.2	285	5.3	497	7.4	706
3'-6"	3'-2"	2'-2"		10	7			3.4	305	5.7	528	7.9	747
4'-0"	3'-8"	2'-8"		12	9			3.7	326	6.0	559	8.4	786
4'-6"	4'-2"	3'-2"		12	9			3.9	334	6.4	571	8.8	803
5'-0"	4'-8"	3'-8"		14	11			4.1	354	6.7	602	9.3	844
5'-6"	5'-2"	4'-2"	3'-5"	16	13	15	6	4.4	375	6.0	607	7.5	840
6'-0"	5'-8"	4'-8"	3'-11"	16	13	16	6	4.6	382	6.2	616	7.7	850
6'-6"	6'-2"	5'-2"	4'-5"	18	15	18	8	4.8	402	6.4	637	7.9	870
7'-0"	6'-8"	5'-8"	4'-11"	20	17	19	10	5.0	423	6.6	654	8.1	887
7'-6"	7'-2"	6'-2"	5'-5"	20	17	20	10	5.3	430	6.9	664	8.4	897
8'-0"	7'-8"	6'-8"	5'-11"	22	19	22	12	5.5	451	7.1	684	8.6	917
8'-6"	8'-2"	7'-2"	6'-5"	24	21	23	14	5.7	471	7.3	702	8.8	934
9'-0"	8'-8"	7'-8"	6'-11"	24	21	24	14	6.0	479	7.6	711	9.1	944
9'-6"	9'-2"	8'-2"	7'-5"	26	23	26	16	6.2	499	7.8	732	9.3	964
10'-0"	9'-8"	8'-8"	7'-11"	28	25	27	18	6.4	520	8.0	749	9.5	982
10'-6"	10'-2"	9'-2"	8'-5"	28	25	28	18	6.7	527	8.3	759	9.8	991
11'-0"	10'-8"	9'-8"	8'-11"	30	27	30	20	6.9	547	8.5	779	10.0	1012

NOTE: For L=5', L=10 and L=15'.
REGULAR INLETS: Total quantities needed are OUTSIDE of the heavy black line.
DROP BOX INLETS: Total quantities needed are INSIDE of the heavy black line.
STEEL WEIGHTS DO NOT INCLUDE STRUCTURAL STEEL.

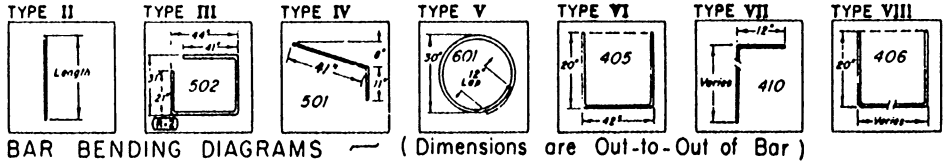




Approximate Weights:

Cover	= 125 lbs.
Ring	= 135 lbs.
TOTAL	= 260 lbs.

BAR BENDING DIAGRAMS – (Dimensions are Out-to-Out of Bar)



NOTE: FOR ALL INLETS, WHERE A 10' UPSTREAM TRANSITION GUTTER IS USED, THE CONCRETE QUANTY SHALL BE APPROX. 0.4 C.Y. MORE THAN THAT SHOWN.

GENERAL NOTES

All work shall be done in accordance with the Standard Specifications applicable to the project.

All concrete shall be Class A or B (CDOH).

Concrete walls shall be formed on both sides and shall be 8" thick.

Inlet steps shall be as shown on the applicable (CDOH) Division "M" Standard.

Curb face assembly shall be galvanized after welding.

Exposed concrete corners shall be beveled to a 1-1/2" face. Curb and gutter corners shall be finished to match the existing curb and gutter beyond the transition gutter.

All reinforcing bars shall be tagged with bar designation and station number.

Reinforcing bars shall be deformed and shall be of intermediate grade steel.

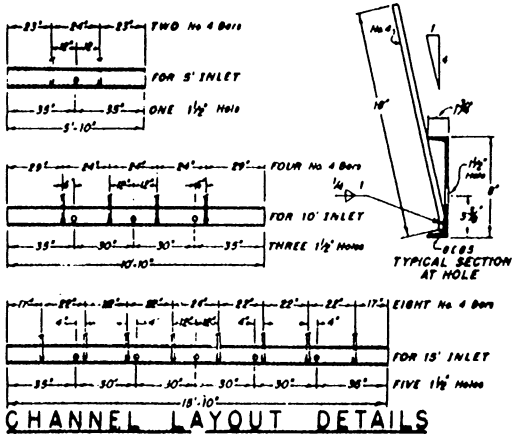
Dimensions and weights of typical manhole ring and cover are nominal.

All bars shall be a minimum 2" clear.

Since pipe entries into the inlet are variable, the dimensions shown are typical. Actual dimensions and quantities for concrete and reinforcement shall be as required in the work.

Quantities include volumes occupied by pipes.

Structural steel shall be galvanized and shall conform to the requirements of Section 509 (CDOH).



CHANNEL LAYOUT DETAILS

SPECIAL DESIGN INLET

CITY OF COLORADO SPRINGS, COLORADO.

COLORADO DEPARTMENT OF HIGHWAYS
CURB INLET TYPE R (MODIFIED)

APPROVED BY: Gary R Haynes BAT
CITY ENGINEER

SCALE	DATE	DWN. BY	D-19B
AS SHOWN	SEPT. 87	JLO	SHT. 2 OF 2

REVISED JAN '89 PLB SPECIAL DESIGN I

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