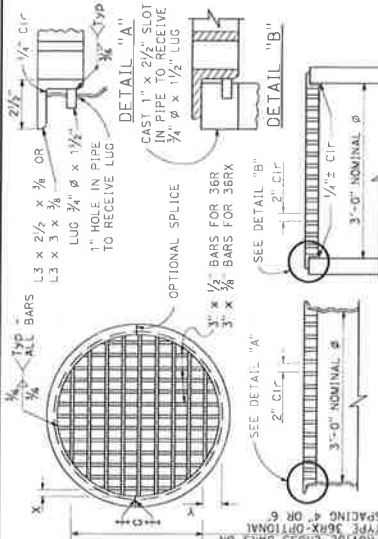


REGISTERED CIVIL ENGINEER
 May 31, 2018
 PROFESSIONAL SEAL
 No. 501257
 State of California
 Board of Professional Engineers, Architects, and Surveyors



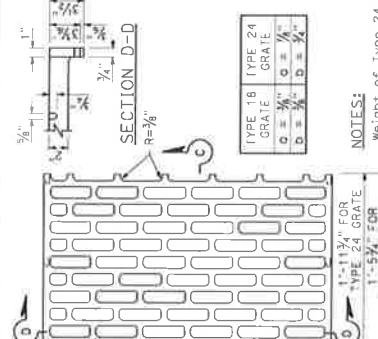
TYPE 36R AND 36RX GRATE DETAILS



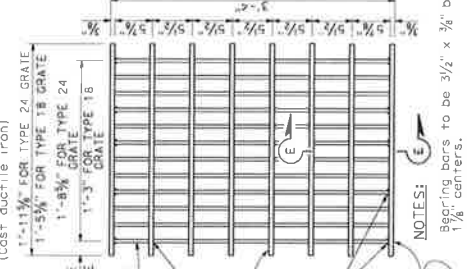
SECTION A-A
 ALTERNATIVE CAST DUCTILE
 IRON GRATE OR CAST CARBON
 STEEL GRATE TYPE 36R AND 36RX

BASIS FOR MISC IRON AND STEEL FINAL
 PAY WEIGHTS FOR DRAINAGE INLETS

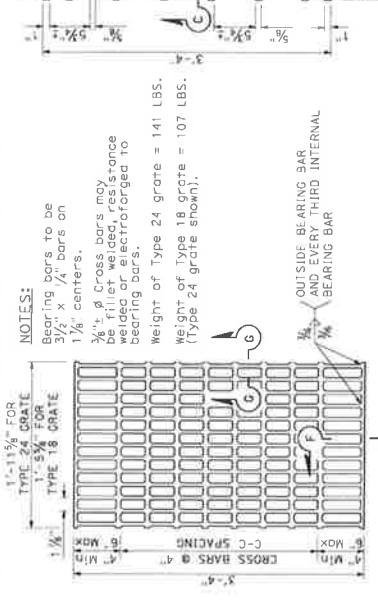
INLET TYPE	GRATE TYPE	NO. OF GRATES	WEIGHT LB.
G00	24-10C	2	391
(SEE NOTE 4)	24-10S	2	456
	24-12X	2	473
	24-13	2	374
G0, G01, G1, G2,	24-10C	1	202
(TYPE 24)	24-10S	1	239
	24-12X	1	259
	24-13	1	188
G4 (TYPE 18)	18-9X	1	187
	18-10	1	149
	18-65	2	374
	18-9X	2	374
	18-10	2	298
	24-10C	2	404
	24-10S	2	458
	24-12X	2	478
	24-13	2	376
ODI	36RX (Mod)	1	156
CMP, LCP, C/CP1	36RX	1	215
ODI	36R (Mod)	1	220
CMP, LCP, C/CP1	36R	1	236
TRASH RACK	36S	1	22
GRATE CHAIN			3



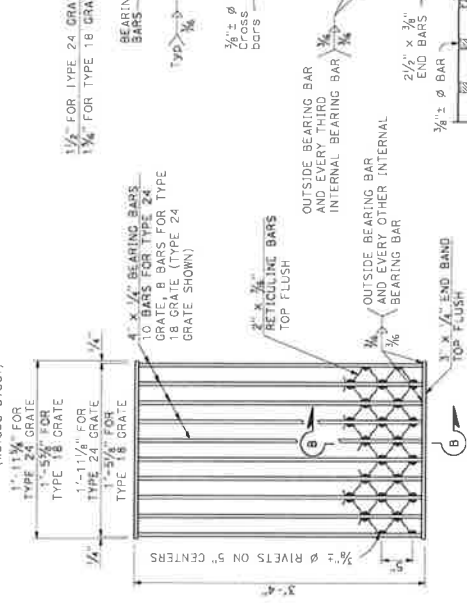
TYPE 18-8C AND 24-10C GRATE
 (Cast ductile iron)



TYPE 18-9X AND 24-12X GRATE
 (Welded Steel)



TYPE 18-10 AND 24-13 GRATE
 (Welded Steel)



TYPE 18-8S AND 24-10S GRATE
 (Welded Steel), Reticuline Type

GRATE BAR SPACING TABLE

TYPE	NO. OF BARS	CLEAR SPACING	X	Y	Z
36R	15	2"	2 1/4"	4"	6"
36RX (STEEL)	13	2"	2 1/4"	3 3/4"	5 1/2"
36RX (CAST)	13	2"	2 1/4"	3 3/4"	5 1/2"
36R Mod	12	2"	2 1/4"	3 3/4"	5 1/2"
36RX Mod (STEEL)	13	2"	2 1/4"	3 3/4"	5 1/2"
36RX Mod (CAST)	12	2"	2 1/4"	3 3/4"	5 1/2"

- NOTES:
- When alternative grates are allowed - Final pay based on alternative with the lesser weight.
 - Use frame shown on Standard Plan D74A, D74B or D77A as appropriate.
 - When Type 24-10S, 24-12X or 24-13 grates are used with G00 inlets, 3/4" x 3/2" x 3-4" steel bar shall be welded across the center of inlet frame to separate the individual grates.
 - See Standard Plan D77A for connecting chain to welded ductile iron grate, and frame. When chain is required, do not use cast ductile iron grate.