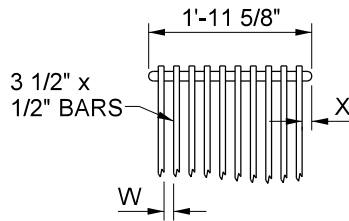
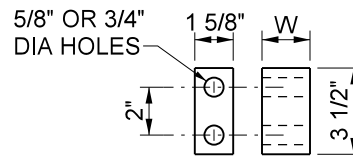


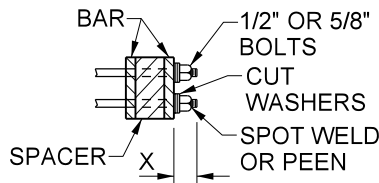
GRATE DETAILS
(SEE TABLE BELOW)



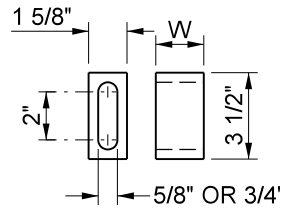
BOLTED END BLOCK



BAR SPACER



BOLTING DETAIL



ALTERNATIVE SPACER

ALTERNATIVE BOLTED GRATE

TYPE	NO. BARS	" W "	" X "	GRATE OPEN AREA	USAGE
24 - 9	9	2"	1 9/16"	5.21 SqFt	USE IN LOCATIONS OFF THE ROADBED
24 - 12X	12	1 1/2"	1 5/16"	4.91 SqFt	USE WITHIN THE ROADBED

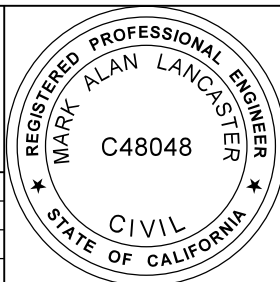
NOT TO SCALE

PREPARED UNDER THE SUPERVISION OF:

Mark Lancaster

11/30/22
DATE

DIRECTOR OF TRANSPORTATION
MARK LANCASTER, P.E.

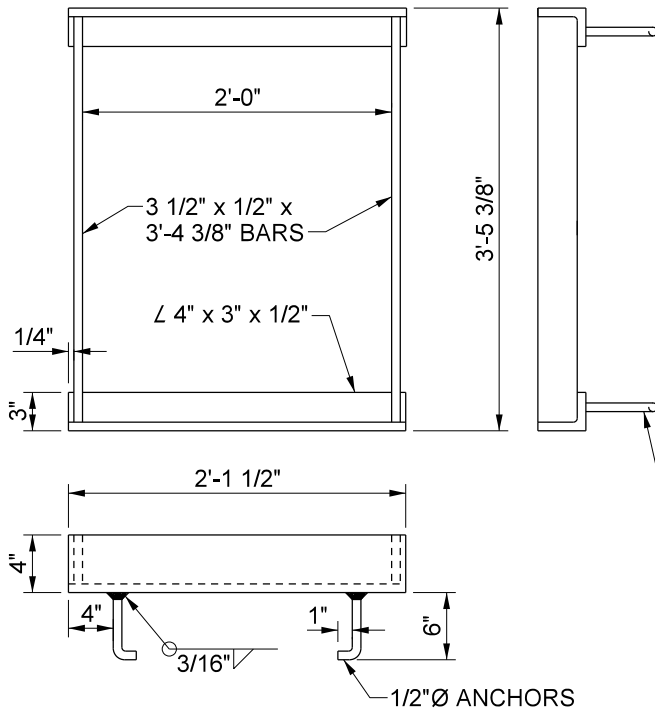


COUNTY OF RIVERSIDE

GRATE AND FRAME DETAIL

STANDARD No. 305 (1 OF 2)

REVISION	DESCRIPTION	MARK	DATE	APPROVED



WEIGHTS		
TYPE	WELDED	BOLTED
24 -9	200	230
24 -12X	258	286
24" FRAME	90	-

OMIT ANCHOR
IF WF BEAM
SUPPORT IS USED

FRAME DETAILS

NOTES:

1. GRATE TYPE NUMBER REFERS TO WIDTH OF GRATE IN INCHES AND NUMBER OF BARS RESPECTIVELY.
2. CONTRACTOR HAS THE OPTION OF USING WELDED OR BOLTED GRATES.
3. ROUNDED TOP OF BARS OPTIONAL ON ALL GRATES.
4. GRATE SHALL BE PLACED SO THAT BARS ARE PARALLEL TO DIRECTION OF PRINCIPAL SURFACE FLOW.
5. GRATE AND FRAME SHALL BE HOT-DIP GALVANIZED.

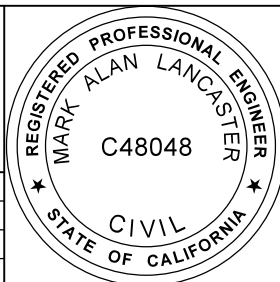
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COUNTY OF RIVERSIDE

GRATE AND FRAME DETAIL

STANDARD No. 305 (2 OF 2)

REVISION	DESCRIPTION	MARK	DATE	APPROVED