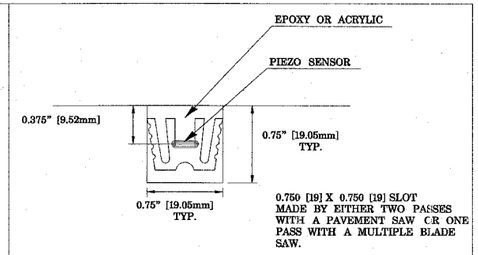
CONTRACT NO. 76944

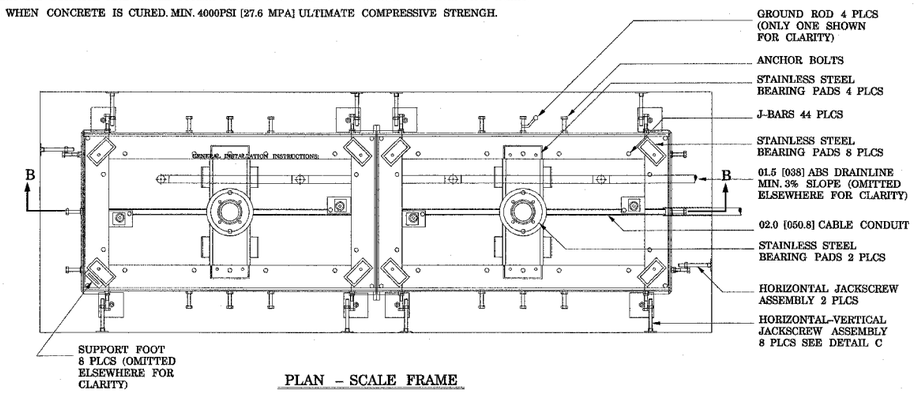
FAI ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
70	60-8-1WS	MADISON	11	11
STA.	TO STA.			
EXISTING CONDITIONS:				

GENERAL INSTALLATION INSTRUCTIONS

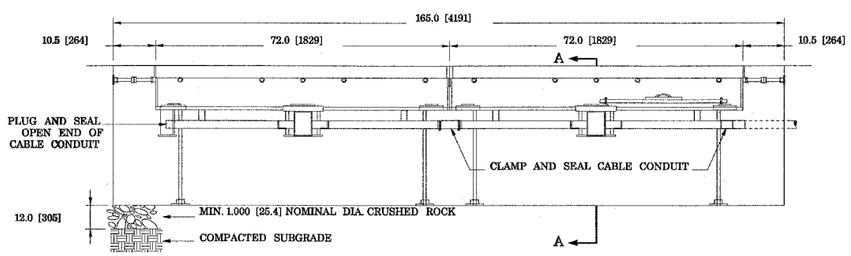
1. SHIPMENT INCLUDES: FRAMES, J-BARS, O-RINGS, GROUND ROD CONNECTORS, 2-10'[3658] LENGTHS OF DRAIN PIPE - 3 TEES AND 1 ELBOW, ALL NECESSARY CONCRETE ANCHOR BOLTS, JACK SCREWS, LOCATING SCREWS, SUPPORT PADS, CONDUIT CONNECTING HOSE AND CLAMPS, AND GROUND RODS.
2. INSTALL CONCRETE ANCHOR BOLTS, JACK SCREWS AND J-BARS ONTO SCALE FRAMES.
3. EXCAVATE SCALE VAULT TO DEPTH OF 40"[1016] AND COMPACT PIT BOTTOM.
4. PLACE 12"[305] OF 1"[25.4] NOMINAL CRUSHED ROCK AND VIBRATE COMPACT.
5. SET FRAME IN PREPARED PIT WITH NECESSARY REBAR CAGE IN PLACE.
6. INSTALL DRAIN PIPES AND CONDUITS. SEAL ALL CONNECTIONS. DRAINAGE AT EDGE OF ROADWAY MUST ALLOW FREE FLOW AWAY FROM THE OUTLET OF DRAIN PIPE. THE OUTLET MUST BE WELL ABOVE THE HIGH WATER LEVEL OF THE DITCH OR MANHOLE. THE FLOW ALONG THE DRAIN AND AWAY FROM THE OUTLET MUST BE MAINTAINED AT ALL TIMES.
7. USE JACK SCREWS TO POSITION FRAME PROPERLY - HORIZONTALLY AND VERTICALLY.
8. INSTALL GROUND CLAMPS AND GROUND RODS.
9. LOCATE THE EDGE OF THE SCALE FRAME FLUSH WITH THE SURROUNDING ROAD SURFACE USING A STRING LINE FROM THE ROADWAY ACROSS THE CORNERS OF THE SCALE FRAME.
10. FINAL SET OF THE SCALE USING A MACHINISTS LEVEL MOUNTED ON AN ADJUSTABLE SUPPORT, SPANNING ACROSS ADJACENT SCALE BEARING PADS TO ENSURE THAT ALL FRAME EDGES ARE PARALLEL AND THERE IS NO TWIST IN THE SCALE FRAME.
11. WET PIT WALLS.
12. POUR AND VIBRATE CONCRETE AROUND FRAME. CONCRETE SHOULD HAVE MAX. SLUMP OF 3"[76.2].
13. SLOPE AND FINISH PIT SURFACE AND SCALE FRAME FLOOR FOR PROPER DRAINAGE TO DRAINPIPE INLET.
14. INSTALL SCALES WHEN CONCRETE IS CURED. MIN. 4000PSI [27.6 MPA] ULTIMATE COMPRESSIVE STRENGH.



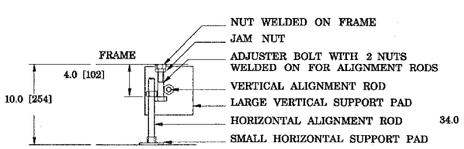
PIEZO SENSOR DETAIL



PLAN - SCALE FRAME

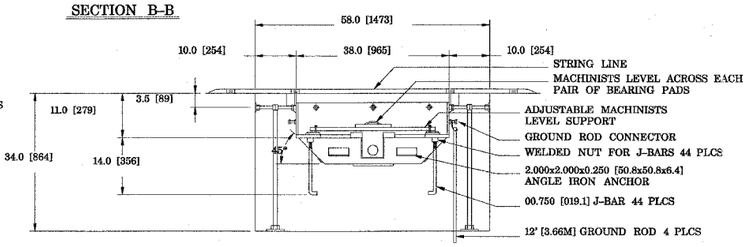


SECTION B-B



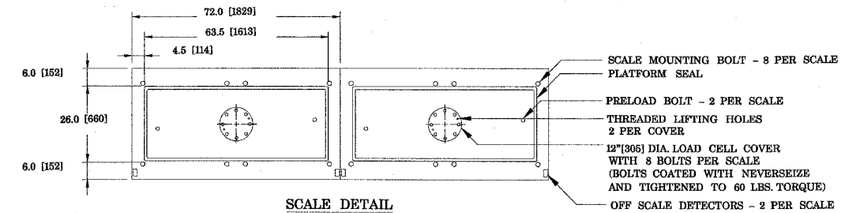
PLAN OF FRAME ALIGNMENT

JACK SCREWS - DETAIL C

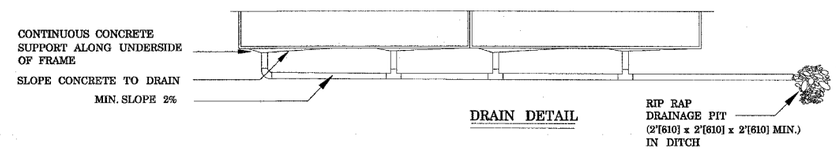


SECTION A-A

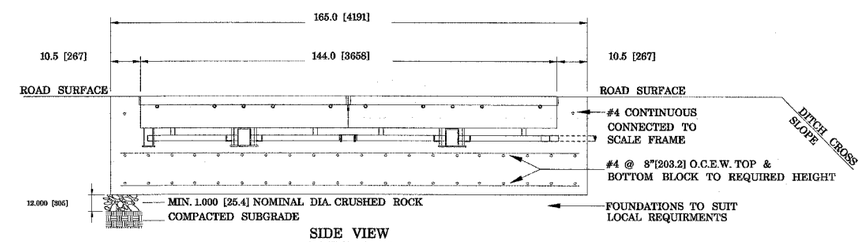
SCALE FRAME DETAIL



SCALE DETAIL

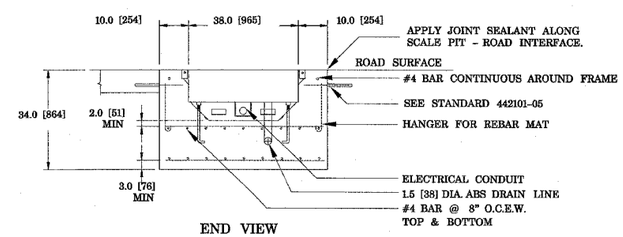


DRAIN DETAIL



SIDE VIEW

DRAIN AND J-BARS OMITTED FOR CLARITY



END VIEW

SCALE REINFORCING AND DRAIN DETAIL

NOTES:

1 REINFORCEMENTS AND DOWELS AS SHOWN ARE MINIMUM REQUIREMENTS AND MAY BE SUPERCEDED BY STATE CONSTRUCTION CODES.

2 FOR PCC PAVEMENT INSTALL 5/8" X 16" EPOXY COATED DOWELS IN 34" X 8" DEEP HOLE @ 16" O.C. SECURE DOWEL INTO HOLE WITH EPOXY. ENSURE DOWELS ARE EXACTLY 90° TO LONGITUDINAL PAVEMENT DIRECTION BOTH VERTICALLY AND HORIZONTALLY.

3 THESE DETAILS ARE FOR A TYPICAL WEIGH-IN-MOTION (WIM) SCALE SYSTEM TO GIVE A GENERAL INDICATION OF THESE WORK ITEM'S SCOPE. THE ATUAL WIM SCALE SYSTEM SHALL BE FURNISHED AND INSTALLED PER THE SPECIAL PROVISION, "FURNISHING AND INSTALLING WEIGH-IN-MOTION COMPONENTS" .

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

I-55/70 MARYVILLE WEIGH STATION HIGH SPEED WEIGH IN MOTION SINGLE LOAD CELL SCALE DETAILS

FAI 70
SECTION 60-8-1WS
MADISON COUNTY

DRAWN BY:

PLOT DATE: •DATE-TIME•

PLAN	SURVEYED		DATE
	PLOTTED		
	NOTE BOOK	ALIGNMENT CHECKED	
		DESIGN CHECKED	
	NO.	CADD FILE NAME	

BY

•$DATE$•
•DATE-TIME•
•CONTSPEC•
•REF•
•REF•