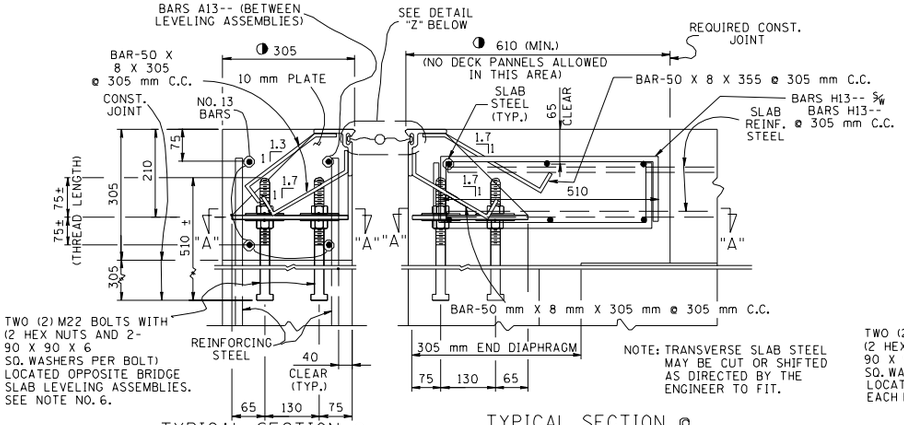
PROJECT NO.	YEAR	SHEET NO.
	1996	

REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION
M/R 1	6-10-96	BRB	NEW METRIC STANDARD

◑ DENOTES: TO BE POURED AFTER ALL OTHER DECK CONCRETE IS POURED AND EXPANSION BROUGHT TO PROPER GRADE AND SLOPE.



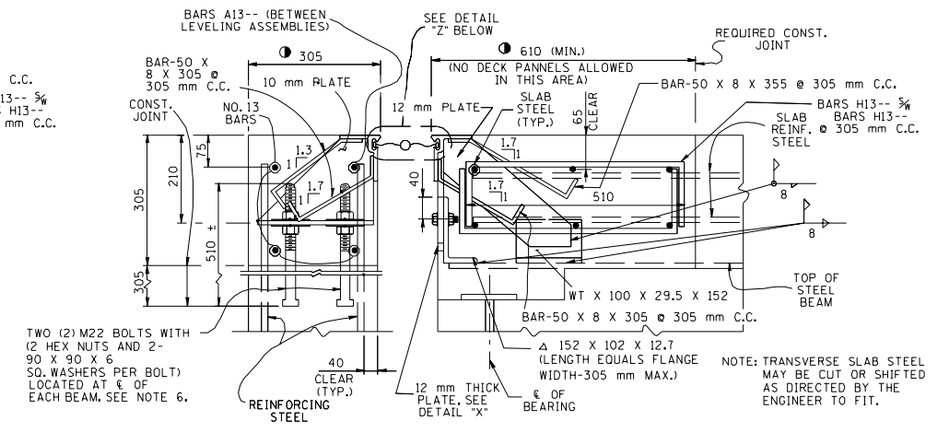
TYPICAL SECTION @ ABUTMENT BACKWALL

TYPICAL SECTION @ END OF BRIDGE SLAB

EXPANSION JOINT DETAIL - CONCRETE BRIDGES

BID UNDER ITEM 604M11.-- EXPANSION DEVICE

◑ DENOTES: TO BE POURED AFTER ALL OTHER DECK CONCRETE IS POURED AND EXPANSION BROUGHT TO PROPER GRADE AND SLOPE.

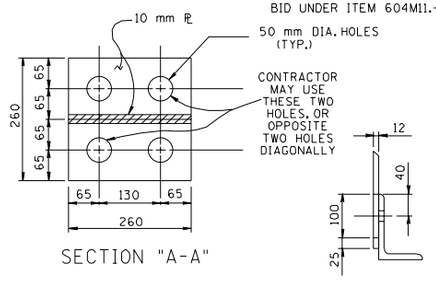


TYPICAL SECTION @ ABUTMENT BACKWALL

TYPICAL SECTION @ END OF BRIDGE SLAB

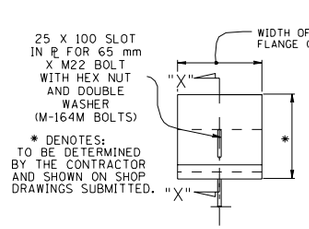
EXPANSION JOINT DETAILS-STEEL BRIDGES

BID UNDER ITEM NO. 604M11.-- EXPANSION DEVICE

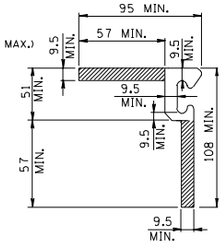


SECTION "A-A"

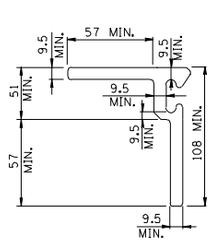
SECTION "X-X"



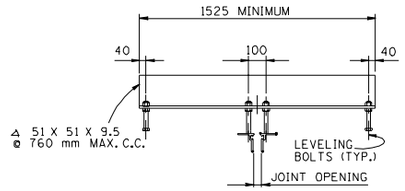
DETAIL "X"



MEMBRANE RETAINER (ALTERNATE 1)

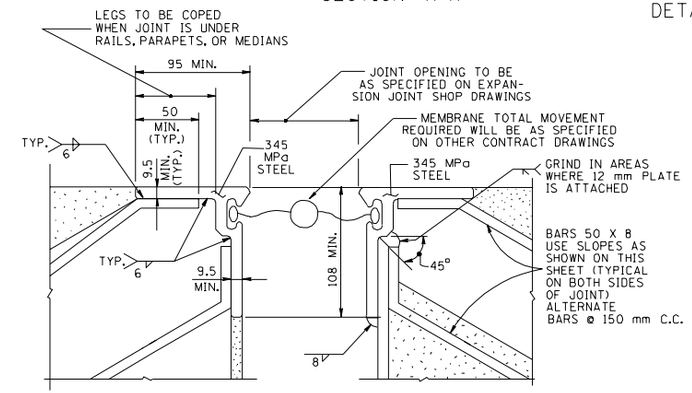


MEMBRANE RETAINER (ALTERNATE 2)

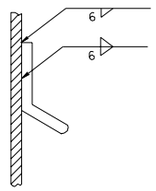


DETAIL SHOWING ALIGNMENT GUIDE ANGLES
(SPACING NOT TO EXCEED 760 mm)

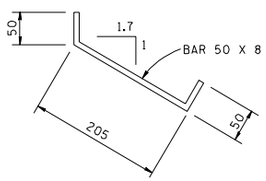
NOTE: IN THE ABOVE ALTERNATE MEMBRANE RETAINERS, THE AREA DENOTED BY SINGLE HATCHING SHALL BE MADE WITH LOW ALLOY GRADE 345 STEEL PLATES AND WELDED TO THE RETAINER WITH FULL PENETRATION BEVEL WELDS. SEE SPECIAL PROVISION NO. 6045 REGARDING STRIPSEAL EXPANSION JOINTS. THE CONTRACTOR SHALL HAVE THE OPTION OF SUPPLYING ALTERNATE 1 OR ALTERNATE 2 MEMBRANE RETAINERS. ALSO SEE NOTE 2.

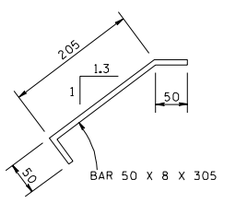


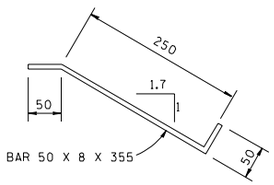
DETAIL "Z"
(ALL MINIMUM DIMENSIONS SHOWN ABOVE SHALL BE MAINTAINED)



TYPICAL ANCHOR STRAP TO MEMBRANE RETAINER CONNECTION







ANCHOR STRAP DETAILS

GENERAL NOTES

1. ROADWAY EXPANSION DEVICES SHALL BE FABRICATED TO MATCH CROSS SLOPE, SKEW AND GRADE OF EXISTING BRIDGE DECK. SEE SPECIAL PROVISION 604S.
2. THE ELASTOMERIC MEMBRANE MUST BE CONTINUOUS WITH NO FIELD SPLICES AND NO FIELD CUTTING. THE RETAINER THAT HOLDS THE MEMBRANE MAY BE AN EXTRUSION OR ROLLED SHAPE AND SHALL BE 345 MPa STEEL. THE REMAINDER OF THE EXPANSION JOINT SHALL BE GRADE 250 STEEL.
3. ALL STRUCTURAL STEEL JOINT MEMBERS AND ANCHORAGE HARDWARE SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A123, AFTER FABRICATION IS COMPLETE. COST OF GALVANIZING TO BE INCLUDED IN THE UNIT PRICE BID FOR THE EXPANSION JOINT.
4. THE SHOP DRAWINGS SHALL PROVIDE INFORMATION REGARDING MATERIAL SPECIFICATIONS, GEOMETRY, A TABLE OF VARIABLE TEMPERATURES WITH CORRESPONDING SETTINGS AND A BILL OF MATERIALS.
5. WELDING SHALL CONFORM TO AASHTO SPECIFICATIONS FOR BRIDGES, CURRENT EDITION, AND PERFORMED BY CERTIFIED WELDERS. FABRICATORS SHALL BE CERTIFIED UNDER THE AISC QUALITY CERTIFICATION CATEGORY I, CONVENTIONAL STEEL STRUCTURES.
6. LEVELING BOLT ASSEMBLIES SHALL BE LOCATED OPPOSITE BEAM CONNECTIONS ON STEEL BRIDGES EXCEPT WHEN DISTANCE BETWEEN ASSEMBLIES EXCEEDS 3050 mm. ADDITIONAL CONNECTIONS SHALL THEN BE MADE TO END DIAPHRAGMS WITH CORRESPONDING BOLT ASSEMBLIES IN BACKWALL, SPACING NOT TO EXCEED 3050 mm. LEVELING BOLT ASSEMBLIES ON CONCRETE BRIDGES SHALL BE LOCATED IN THE END DIAPHRAGMS BETWEEN GIRDERS WITH CORRESPONDING ASSEMBLIES IN THE BACKWALL AT A SPACING NOT TO EXCEED 3050 mm. LEVELING BOLT ASSEMBLIES SHALL BE LOCATED IN THE FIELD BASED UPON DIMENSIONS TAKEN FROM SHOP DRAWINGS.
7. MAXIMUM OPENING OF FULLY EXTENDED JOINT SHALL NOT EXCEED 100 mm.
8. JOINTS SHALL BE SHIPPED FROM THE MANUFACTURER WITH ALIGNMENT GUIDE ANGLES SIMILAR TO THOSE SHOWN ON THIS SHEET.
9. ANY REINFORCING BARS ADDED OR DIFFERENT FROM THAT SHOWN ON THE CONTRACT DRAWINGS DUE TO THE TYPE OF STRIPSEAL BEING USED SHALL BE EPOXY COATED AND LISTED IN THE BILL OF MATERIAL ON THE SHOP DRAWING.

ALL UNITS ARE IN MILLIMETERS UNLESS NOTED OTHERWISE.

M/R MINOR REVISION - FHWA APPROVAL NOT REQUIRED

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

STRIPSEAL EXPANSION JOINT NEW CONSTRUCTION 1996

DESIGNED BY _____ DATE _____
DRAWN BY D. HAMPTON DATE 6-88
SUPERVISED BY _____ DATE _____
CHECKED BY _____ DATE _____

CORRECT, Edward P. Wasserman
ENGINEER OF STRUCTURES

DIVISION OF METRIC

SHEET 1 OF 2
STDM-3-1