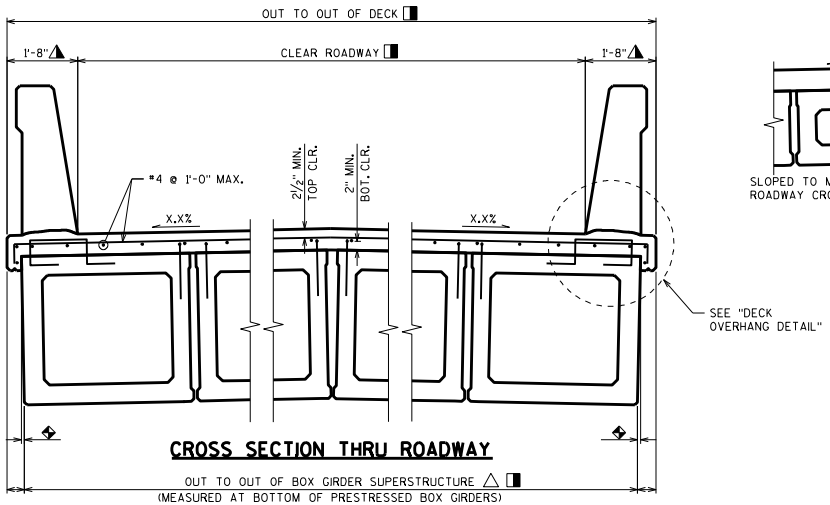
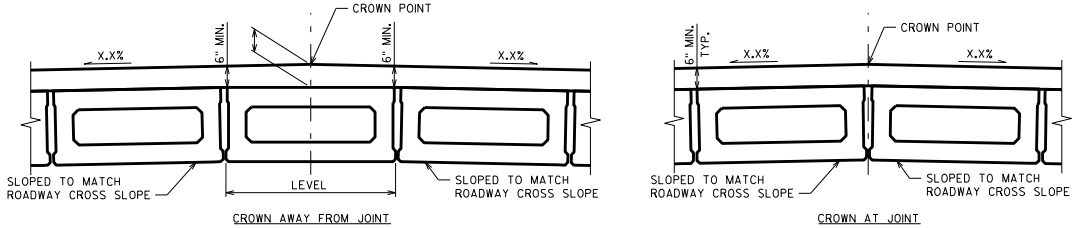


CROSS SECTION THRU ROADWAY

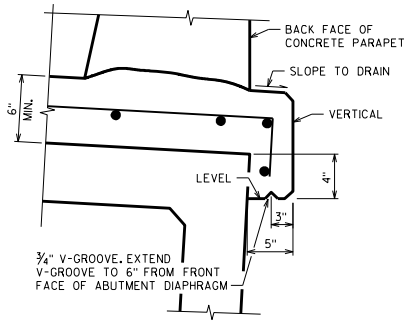


CROWN DETAIL AT LOCATION OF MIN. DECK THICKNESS

NUMBER OF SECTIONS

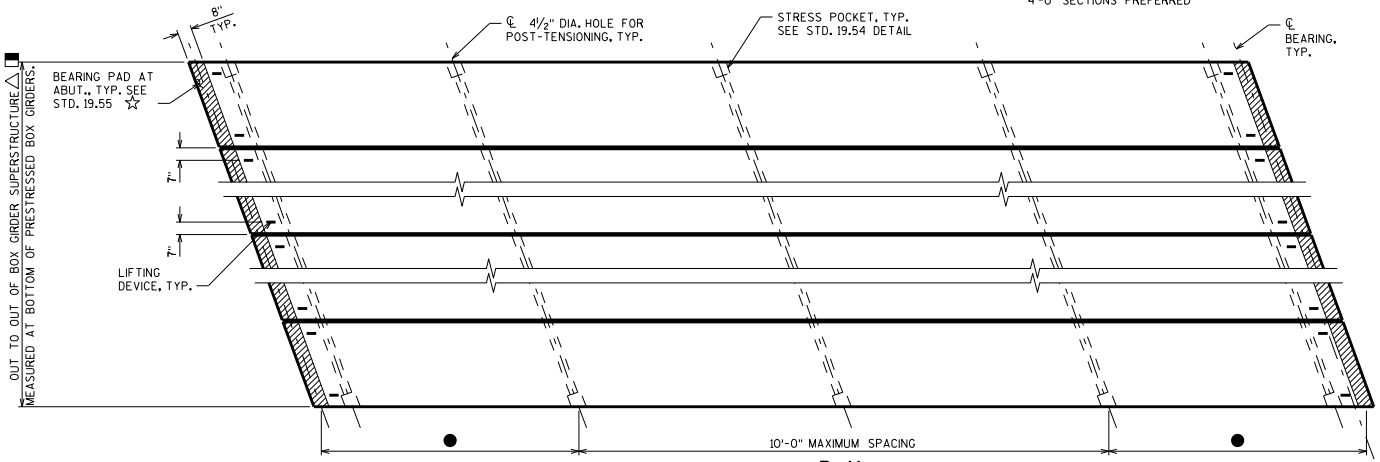
CLEAR ROADWAY	3'-0" SECTION	4'-0"* SECTION
26'-0"	10	7
30'-0"	11	8
36'-0"	13	10
40'-0"	14	11
44'-0"	16	12

* 4'-0" SECTIONS PREFERRED

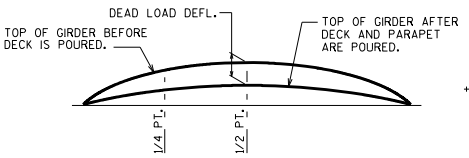


DECK OVERHANG DETAIL

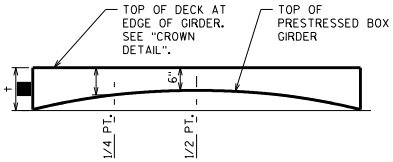
SEE STANDARD 19.56 FOR ADDITIONAL DETAILS



PLAN



DEAD LOAD DEFLECTION DIAGRAM



DECK THICKNESS DIAGRAM

DESIGNER NOTES

△ ACCOUNT FOR NUMBER OF PRESTRESSED BOX GIRDERS, NUMBER OF JOINTS (AT 1" NORMAL TO ℄ GIRDER), AND ROADWAY CROSS SLOPE.

◆ DIMENSION IS HORIZONTAL DISTANCE FROM TOP OF PRESTRESSED BOX GIRDER TO BOTTOM OF PRESTRESSED BOX GIRDER.

DECK THICKNESS DETERMINATION PROCEDURE IS BASED ON TANGENT PROFILE GRADE LINE. STRUCTURES WITH VERTICAL CURVE PROFILE GRADE LINES MAY REQUIRE ADDITIONAL INVESTIGATION.

NOTES

NOTE: AN AVERAGE DECK THICKNESS OF _____ WAS USED IN THE QUANTITY "CONCRETE MASONRY BRIDGES".

VARIATIONS TO THE GRADE LINE OVER 1/4" MUST BE SUBMITTED BY THE FIELD ENGINEER TO THE STRUCTURES DESIGN SECTION FOR REVIEW.

LEGEND

☆ BEARING PAD NOT REQUIRED FOR GRS ABUTMENTS.

● 1/4 SPAN FOR SPANS UP TO 80'-0".
1/5 SPAN FOR SPANS OVER 80'-0".

◨ DIMENSION ASSUMES 1" JOINT WIDTH. JOINT WIDTH DIMENSIONS MAY VARY DUE TO ±1/4" JOINT TOLERANCES.

◭ MAY BE REDUCED TO 1'-7" TO MAINTAIN ROADWAY CLEAR WIDTH.

■ TO DETERMINE DECK THICKNESS AT GIRDER ENDS FOLLOW THIS PROCESS:

6" MIN. DECK SLAB THICKNESS
\+ FIELD MEASURED GIRDER CAMBER (AT MID SPAN)
\- DEADLOAD DEFLECTION (AT MIDSPAN)
= DECK THICKNESS, †

NOTE: PLAN DECK THICKNESS BASED ON THEORETICAL INITIAL CAMBER VALUE. 1/4 PT. MAY BE INTERPOLATED. USE FIELD MEASURED GIRDER CAMBER FOR ACTUAL DECK THICKNESS. THE 1/4 PT. IS INTERPOLATED BETWEEN DECK THICKNESS AT THE END OF DECK AND MIDSPAN.

** THE THEORETICAL INITIAL CAMBER VALUE AT THE TIME OF STRAND RELEASE AT MIDSPAN MULTIPLIED BY A FACTOR OF 1.4 TO ACCOUNT FOR CAMBER GROWTH FROM THE TIME OF STRAND RELEASE TO JOBSITE PLACEMENT.

SPAN	CAMBER (IN.) **
1	

THESE VALUES ARE NOT TO BE USED IN DETERMINING '†'. USE FIELD MEASURED GIRDER CAMBER.

THESE VALUES ARE FOR INFORMATIONAL PURPOSES ONLY.

GIRDER DATA

SPAN	GIRDER	GIRDER LENGTH "L"	DEAD LOAD DEFL. (IN.)		CONC. STRGTH. f'c (p.s.i.)	DIA. OF STRAND (IN.)	UNDRAPED PATTERN	
			1/4 PT.	1/2 PT.			TOTAL NO. OF STRANDS	f'ci (P.S.I.) *
1								

* MINIMUM CYLINDER STRENGTH OF CONCRETE @ TIME OF TRANSFER OF PRESTRESS FORCE.

PRESTRESSED BOX GIRDER DETAILS 2

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DEVELOPMENT SECTION

APPROVED: Bill Oliva

DATE: 7-16

STANDARD 19.53