

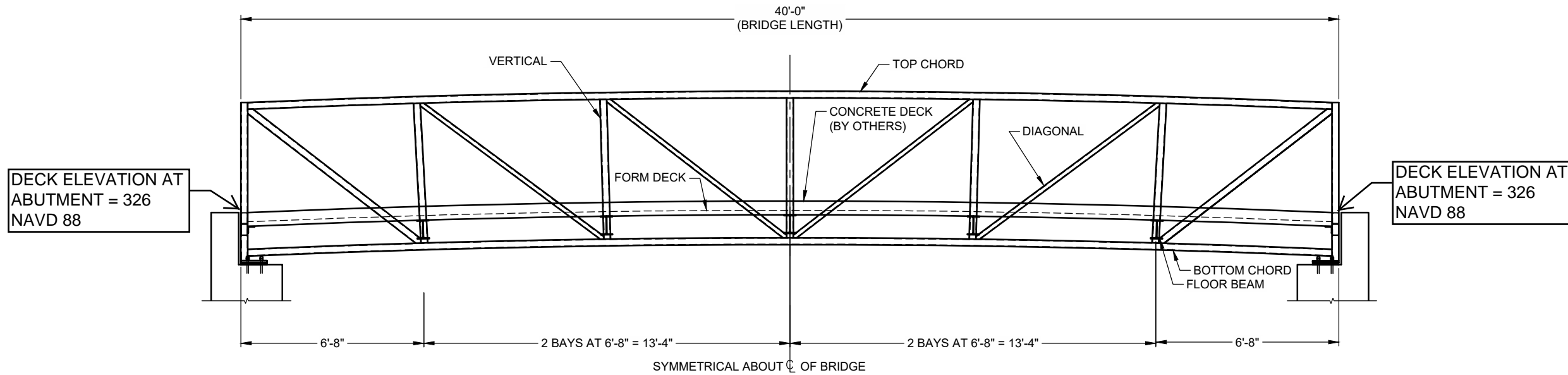
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MARK	DATE	REVISION DESCRIPTION	BY

40'-0" X 10'-0"
AASHTO EXPRESS
PEDESTRIAN BRIDGE
STANDARD CONCRETE DECK

CONTECH
ENGINEERED SOLUTIONS LLC
 www.conteches.com
 8301 State Highway 29 North, Alexandria, MN 56308
 800-329-2047 320-462-7500 320-462-7687 FAX
 pieexpress-[logo.jpg](#)

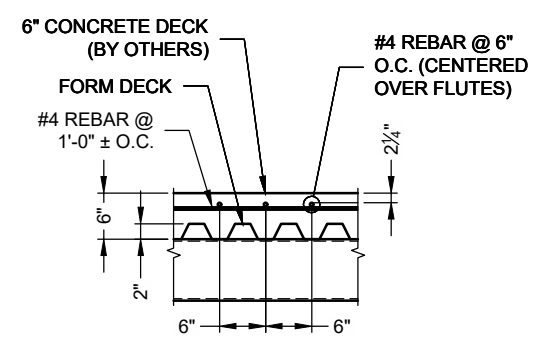
DATE:	9/9/2015		
DESIGNED:	XXX	DRAWN:	CLH
CHECKED:	XXX	APPROVED:	XXX
PROJECT No.:	SEQUENCE No.:		001
SHEET:	1 OF 1		



BRIDGE ELEVATION

GENERAL NOTES

- DESIGN STRESSES ARE IN ACCORDANCE WITH "STANDARD SPECIFICATION FOR HIGHWAY BRIDGES" & "GUIDE SPECIFICATIONS FOR DESIGN OF PEDESTRIAN BRIDGES" BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO), 2009.
- BRIDGE MEMBERS ARE FABRICATED FROM HIGH STRENGTH, LOW ALLOY, ENHANCED ATMOSPHERIC CORROSION RESISTANT ASTM A847 COLD-FORMED WELDED SQUARE AND RECTANGULAR TUBING, AND ASTM A588, ASTM A606, OR ASTM A242 PLATE AND STRUCTURAL SHAPES (Fy=50,000 PSI).
- CONCRETE DECK: GALVANIZED FORM DECK SUPPLIED BY CONTECH. CONCRETE, REINFORCING, AND EXPANSION MATERIAL SUPPLIED BY OTHERS. SEE CONCRETE DECK SHEET.
- THE GAS METAL ARC WELDING PROCESS OR FLUX CORED ARC WELDING PROCESS WILL BE USED. WELDING TO BE IN ACCORDANCE WITH AWS D1.1.
- ALL TOP AND BOTTOM CHORD SHOP SPLICES TO BE COMPLETE PENETRATION TYPE WELDS. WELD BETWEEN TOP CHORD AND END VERTICAL SHALL BE AS DETAILED.
- UNLESS OTHERWISE NOTED, WELDED CONNECTIONS SHALL BE FILLET WELDS (OR HAVE THE EFFECTIVE THROAT OF A FILLET WELD) OF A SIZE EQUAL TO THE THICKNESS OF THE LIGHTEST GAGE MEMBER IN THE CONNECTION. WELDS SHALL BE APPLIED AS FOLLOWS:
 - A. BOTH ENDS OF VERTICALS, DIAGONALS, AND FLOOR BEAMS SHALL BE WELDED ALL AROUND.
 - B. BRACE DIAGONALS WILL BE WELDED ALL AROUND.
 - C. MISCELLANEOUS NON-STRUCTURAL MEMBERS WILL BE STITCH WELDED TO THEIR SUPPORTING MEMBERS.
- BRIDGE DESIGN WAS ONLY BASED ON COMBINATIONS OF THE FOLLOWING LOADS WHICH WILL PRODUCE MAXIMUM CRITICAL MEMBER STRESSES.
 - A. 90 PSF UNIFORM LIVE LOADING ON THE FULL DECK AREA OR ONE 10,000 LB VEHICLE LOAD. THE LOAD SHALL BE DISTRIBUTED AS A FOUR-WHEEL VEHICLE WITH 80% OF THE LOAD ON THE REAR WHEELS. THE WHEEL TRACK WIDTH OF THE VEHICLE SHALL BE 6'-0" AND THE WHEEL BASE SHALL BE 10'-0". THE VEHICLE SHALL BE POSITIONED SO AS TO PRODUCE THE MAXIMUM STRESSES IN EACH MEMBER, INCLUDING DECKING.
 - B. 35 PSF WIND LOAD ON THE FULL HEIGHT OF THE BRIDGE, AS IF ENCLOSED.
 - C. 20 PSF UPWARD FORCE APPLIED AT THE WINDWARD QUARTER POINT OF THE TRANSVERSE BRIDGE WIDTH (AASHTO 3.15.3).
- CLEANING: ALL EXPOSED SURFACES OF STEEL SHALL BE CLEANED IN ACCORDANCE WITH STEEL STRUCTURES PAINTING COUNCIL SURFACES PREPARATION SPECIFICATIONS NO. 7 BRUSH-OFF BLAST CLEANING. SSPC-SP7-LATEST EDITION.
- MINIMUM MATERIAL THICKNESS OF 1/4" ON ALL STRUCTURAL MEMBERS.



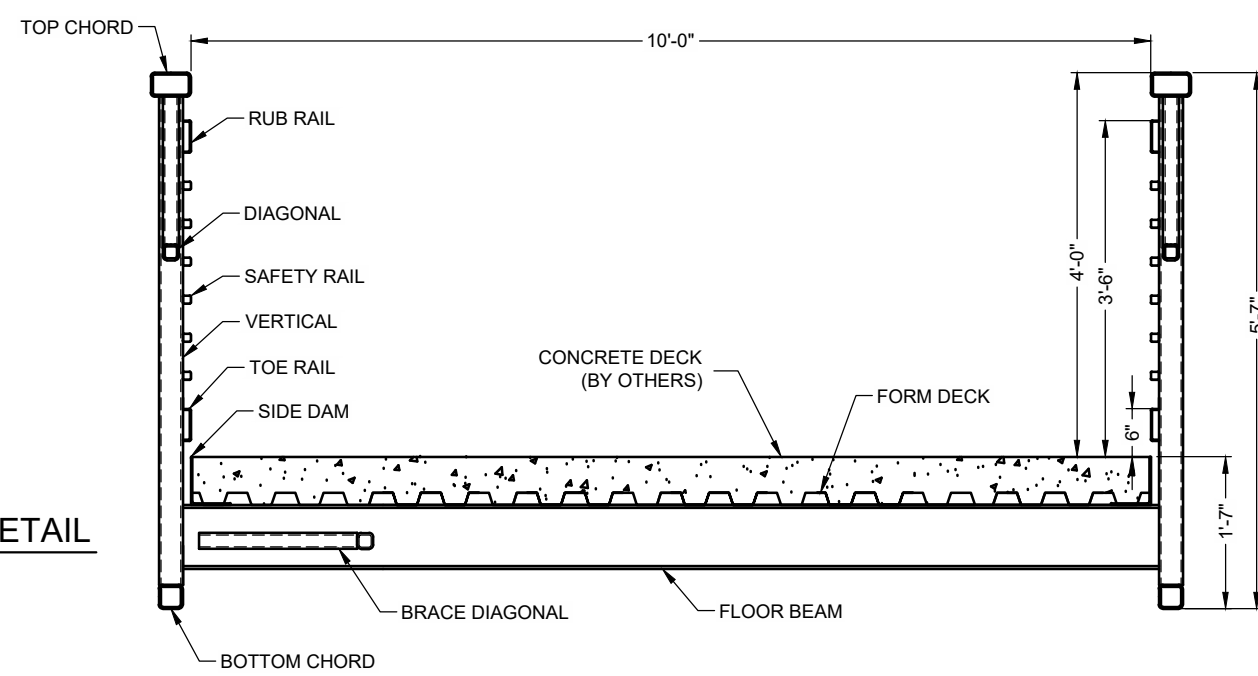
2 TYP SLAB REINFORCEMENT DETAIL
 1 f_c = 3,500 PSI (MINIMUM 28 DAY STRENGTH)
 GRADE 60 REINFORCING (f_y = 60,000 PSI)

COMBINE REACTIONS AS PER LOCAL OR GOVERNING BUILDING CODES AS REQUIRED

BRIDGE REACTIONS	+ DOWNWARD LOAD - UPWARD LOAD		
	P (LBS)	H (LBS)	L (LBS)
DEAD LOAD ②	8,300		
UNIFORM LIVE LOAD	9,000		
VEHICLE LOAD	5,000		
WIND UPLIFT 20 PSF	-3,150		
WINDWARD LEEWARD	-1,050		
WIND	±1,185	3,910	
THERMAL ②			1,245

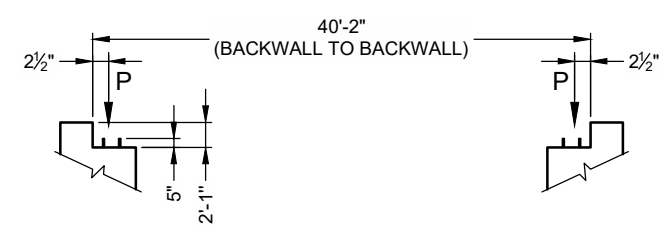
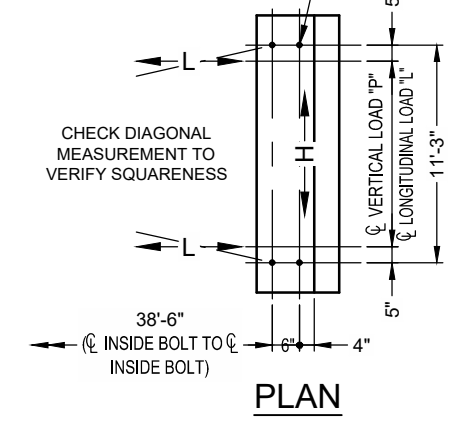
"P" - VERTICAL LOAD EACH BASE PLATE (4 PER BRIDGE)
 "H" - HORIZONTAL LOAD EACH FOOTING (2 PER BRIDGE)
 "L" - LONGITUDINAL LOAD EACH BASE PLATE (4 PER BRIDGE)

- ① BRIDGE LIFTING WEIGHT: 8,800 LBS
- ② BRIDGE FINAL WEIGHT: 33,200 LBS
- ① DOES NOT INCLUDE WEIGHT OF CONCRETE DECK
- ② INCLUDES WEIGHT OF CONCRETE DECK



1 BRIDGE SECTION

(8) Ø3/4" ASTM F1554 GRADE 36 GALV. ANCHOR RODS W/(2) NUTS AND (1) 2" O.D. WASHER EACH. (BY OTHERS)



ANCHOR BOLT ELEVATION

CONTECH
CONTRACT
 DRAWING



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