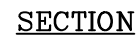
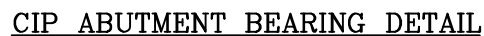


- 1) CONTECH ENGINEERED SOLUTIONS HAS AISI QUALITY CERTIFIED BRIDGE FABRICATION – ADVANCED (MAJOR) WITH A FRACTURE CRITICAL AND SOPHISTICATED PAINT ENDORSEMENT.
- 2) DESIGN IS IN ACCORDANCE WITH THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS AND CAN BE DESIGNED TO MEET ANY SITE-SPECIFIC REQUIREMENTS.
- 3) MATERIALS (UNLESS NOTED OTHERWISE):
 - a) STRUCTURAL STEEL: ASTM A588, A992 OR A709 GRADE 50W OR 50S
 - b) BRIDGE PLANK: ASTM A653 GRADE 50 CLASS 1 (GALV)
 - c) STRUCTURAL BOLTS: ASTM F3125 GRADE A325 (GALV)
 - d) GUARDRAIL BOLTS: ASTM A307 (GALV)
 - e) SHEET PILING: ASTM A929 (GALV)
- 4) DESIGN LOADINGS:
 - a) BRIDGE DEAD LOAD PLUS 80 PSF TOTAL WEARING SURFACE (CUSTOM LOADING CAN BE SPECIFIED AS REQUIRED).
 - b) VEHICLE LIVE LOAD: HL-93 (SITE-SPECIFIC VEHICLES CAN BE SPECIFIED AS REQUIRED, FOR OWNER SPECIFIED VEHICLES SEE SECTION c BELOW)
 - CUSTOMER SHOULD SPECIFY AVERAGE DAILY TRUCK TRAFFIC (ADTT). IF ADTT IS NOT SPECIFIED, CONTECH WILL PROVIDE THE MAXIMUM ALLOWED.
 - CUSTOMER SHOULD SPECIFY LL DEFLECTION REQUIREMENTS (IF ANY). PER AASHTO SECTION 2.5.2.6.2 LL DEFLECTION REQUIREMENTS ARE OPTIONAL, CONTECH WILL USE L/500 IF NOT SPECIFIED.
 - c) OWNER SPECIFIC VEHICLES CAN BE SPECIFIED AS REQUIRED.
 - d) WIND LOADING PER AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS SECTION 3.8.
 - e) SEISMIC LOADING PER AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS SECTION 3.10.
- 5) BRIDGE RAIL DESIGNED FOR TL-1 OR TL-2 LOADING IN ACCORDANCE WITH AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS APPENDIX A13.2 OR ONLY USED AS A GUIDE RAIL (RAIL HAS NOT BEEN CRASH TESTED). SEE TYPICAL DRAWING FOR NON-CRASH TESTED GIRDER AND DECK MOUNTED BRIDGE RAILS FOR RAIL OPTIONS. BRIDGE CAN BE DESIGNED TO MEET TL-3 RAILS OR OTHER SITE-SPECIFIC RAILS AS REQUIRED.
- 6) BRIDGE TO BE BUILT TO THE REQUIREMENTS OF AWS D1.5.
- 7) ALL SURFACES OF STRUCTURAL STEEL TO BE PREPARED AND FINISHED PER THE PROJECT REQUIREMENTS. TYPICAL FINISHES ARE PLAIN WEATHERING STEEL, PAINTED STEEL, GALVANIZED STEEL OR METALIZED STEEL.
- 8) MAINTENANCE NOTE: CONTECH RECOMMENDS NOT APPLYING DE-ICING OR DUST PROHIBITIVE CHEMICALS OR SALTS TO ANY PART OF THE BRIDGE STRUCTURE. IF DE-ICING OR DUST PROHIBITIVE CHEMICALS OR SALTS ARE APPLIED TO ANY PART OF THE BRIDGE STRUCTURE, CONTECH WILL NOT BE RESPONSIBLE FOR ANY RESULTANT ACCELERATED CORROSION.
- 9) CUSTOMER SHOULD SPECIFY BEARING DESIGN REQUIREMENTS, IF USING STANDARD PRECAST SILLS LEVELING PADS ARE TYPICALLY SPECIFIED AND MAY NOT MEET AASHTO DESIGN REQUIREMENTS FOR BEARING PADS.
- 10) 12" X 4-1/4" BRIDGE PLANKS ARE SHOP WELDED TO THE GIRDERS AND ARE THE STRUCTURAL DECKING SYSTEM. THE WEARING SURFACE IS ONLY TO PROVIDE A SMOOTH RUNNING SURFACE AND NOT REQUIRED STRUCTURALLY.
- 11) DECK MAY BE FINISHED WITH GRAVEL, ASPHALT, CONCRETE, WOOD OR ANY OTHER SUITABLE WEARING SURFACE MATERIAL AT THE OWNERS DISCRETION. TYPICAL WEARING SURFACE LOAD OF 80 PSF WILL ACCOMMODATE UP TO 5 1/4" OF GRAVEL BASE (130 PSF) OR 4 1/4" OF CONCRETE OR ASPHALT (150 PCF) SURFACING ABOVE THE BRIDGE PLANK CORRUGATIONS. FOR CONCRETE WEARING SURFACES CONTECH RECOMMENDS USING CRACK CONTROL REINFORCING AND IF LATERAL SHIFTING OR UPLIFT OF THE CONCRETE WEARING SURFACE IS A CONCERN, CONTECH RECOMMENDS ATTACHING HEADED ANCHOR STUDS IN THE VALLEYS OF THE CORRUGATIONS.
- 12) TYPICAL DETAILS ARE SHOWN FOR BRIDGES 30' TO 80' LONG. BRIDGES SHORTER THAN 30' WILL OFTEN REQUIRE NON-TYPICAL DIAPHRAGMS, POST BLOCK AND RAIL DESIGNS. BRIDGES LONGER THAN 80' WILL OFTEN REQUIRE GIRDERS TO BE SPLICED.



The design and information shown on this drawing is provided as a service to the project owner, engineer and contractor by Contech Engineered Systems, LLC ("Contech"). Neither this drawing, nor any part thereof, shall be used for any purpose other than that intended without the prior written consent of Contech. Failure to comply with the provisions of this disclaimer expressly disclaims any liability or responsibility for such use.

[illegible]

TYPICAL DRAWING
BIG R SITE-SPECIFIC MODULAR
ROLLED GIRDER BRIDGE WITH
12" X 4-1/4" BRIDGE PLANK DECK

CONTECH.
ENGINEERED SOLUTIONS LLC
www.ContechES.com
4025 Centre Pointe Dr., Suite 400, West Chester, OH 45689
800-338-1122 513-645-7000 513-645-7993 FAX



DATE: 7/14/2020

DESIGNED: S.I.	DRAWN: S.I.
-------------------	----------------

CHECKED:	APPROVED:
S. J.	S. J.

PROJECT No.:	SEQUENCE No.:
N/A	N/A

SHEET:

