

Projects

April 2025

Prepared by Transportation Planning
Missouri Department of Transportation

Girder on Pile Construction



Description and Benefit

The girder on pile construction method places the steel girder directly on top of the steel pile before the abutment is formed. The girders are then welded to the pile to hold them in place while the abutment is formed. After the abutment and diaphragm are formed, they are poured with concrete simultaneously, prior to pouring the deck. Placing the girders directly on the piles allows the abutment and diaphragm to be formed and poured together and eliminates the bearing pads and foam filler. This makes forming the two more efficient and eliminates an entire concrete pour.

For More Information Contact

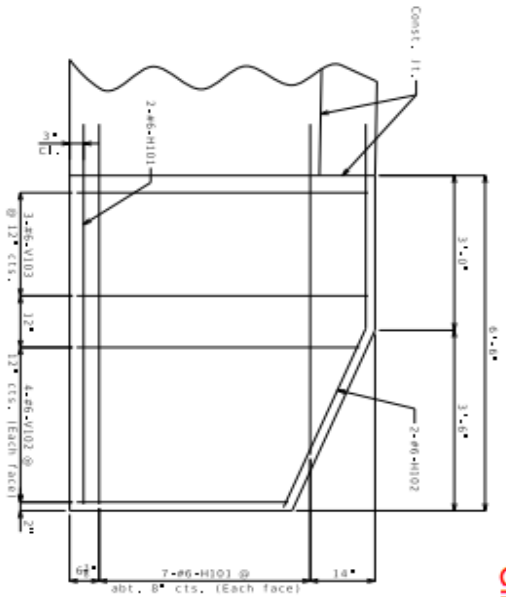
Northwest District – Maintenance

Michael Marriott at Michael.Marriott@modot.mo.gov or 816-262-1797.

Central Office Bridge Division

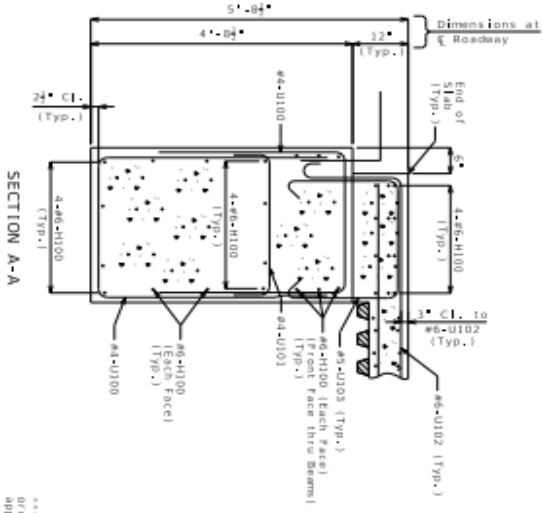
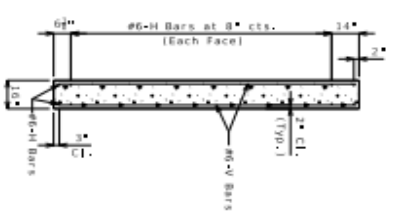
Chris Shanks at Christopher.Shanks@modot.mo.gov or 573-522-1627.

Girder on Pile Construction

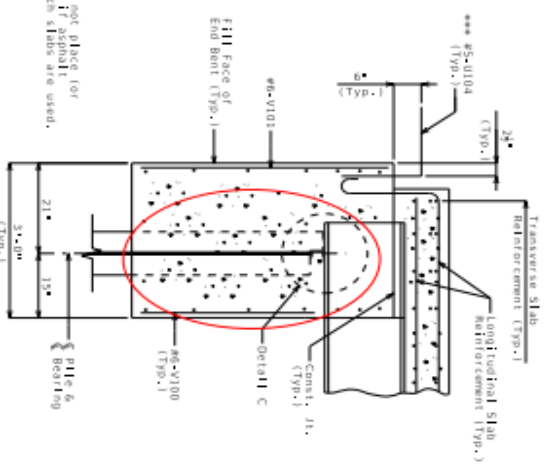


TYPICAL ELEVATION OF WING

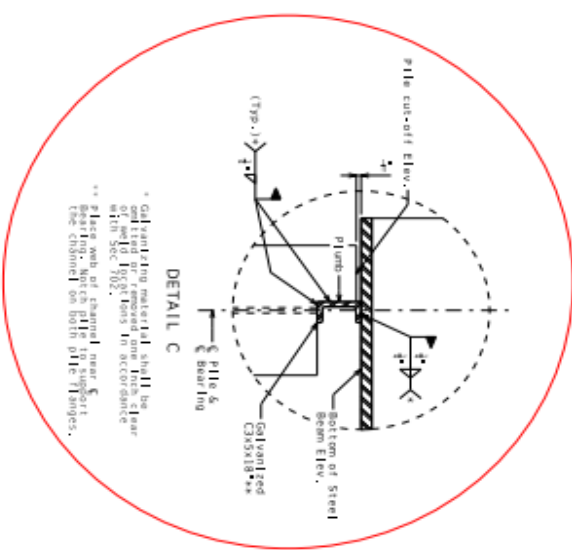
TYPICAL SECTION THRU WING



SECTION A-A



SECTION B-B



DETAIL C

Notes:
 * Galvanizing material shall be omitted or removed one inch clear of the 100% zinc coating in accordance with ASTM A123 and Sec 1000.
 ** Place ends of channel over bearing. Use pile to support the channel on both pile flanges.
 *** Do not place for order of asphalt approach slabs are used.
 For location of Sections A-A and B-B, see Sheet No. 4.
 For Details of Approach Slab, see Sheet No. 18.
 Bar Marks for End Bent No. 1 (see 100 series), End Bent No. 4 (see 100 series).

Drawn: NOV 2024
 Detail: NOV 2024
 Checked: JUN 2024

Note: This drawing is not to scale. Follow dimensions.

DETAILS OF END BENTS NO. 1 & 4

Sheet No. 5 of 22

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DATE	DESCRIPTION
10/10/2024	RELEASED FOR CONSTRUCTION
PROJECT NO.	2333400
CONTRACT NO.	A9510
DESIGNER	JHW0026
CHECKER	CARROLL
DATE	MO
10/10/2024	MO
BR	5
BR	5
BR	5

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NORTHWEST BRIDGE BUNDLE