

STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS

REFER TO THE FOLLOWING STANDARD BRIDGE DRAWING(S):

AS-1-15 DATED 1/20/23
CPA-1-08 (REVISED) 1/19/24
CPP-1-08 (REVISED) 7/21/17
CS-1-24 (REVISED) 7/19/24
DS-1-92 (REVISED) 7/15/22
TST-2-21 (REVISED) 1/17/25

DESIGN SPECIFICATIONS

THIS STRUCTURE CONFORMS TO THE "LRFD BRIDGE DESIGN SPECIFICATIONS" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 9TH EDITION, INCLUDING THE INTERIM SPECIFICATIONS AND THE ODOT BRIDGE DESIGN MANUAL, 2020.

OPERATIONAL IMPORTANCE

A LOAD MODIFIER OF 1.0 HAS BEEN ASSUMED FOR THE DESIGN OF THIS STRUCTURE IN ACCORDANCE WITH THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, ARTICLE 1.3.5 AND THE ODOT BRIDGE DESIGN MANUAL.

DESIGN LOADING

DESIGN LOADING INCLUDES:
VEHICULAR LIVE LOAD: HL-93
FUTURE WEARING SURFACE: 0.060 KIPS/SF

DESIGN DATA

CONCRETE CLASS QC2
-COMPRESSIVE STRENGTH 4.5 KSI (SUPERSTRUCTURE)

CONCRETE CLASS QC1
-COMPRESSIVE STRENGTH 4.0 KSI (SUBSTRUCTURE)

CONCRETE REINFORCEMENT
-EPOXY COATED STEEL REINFORCEMENT - MINIMUM YIELD STRENGTH 60-KSI (APPROACH SLABS, ABUTMENT, PIER CAPS, PILES)
-GALVANIZED STEEL REINFORCEMENT - MINIMUM YIELD STRENGTH 60-KSI (BRIDGE SLAB)

STEEL CIP PILES - ASTM A252 GRADE 3 - YIELD STRENGTH 45 KSI

DECK PROTECTION METHOD

2½" CONCRETE COVER
STEEL DRIP STRIP

MONOLITHIC WEARING SURFACE

MONOLITHIC WEARING SURFACE IS ASSUMED, FOR DESIGN PURPOSES, TO BE 1 INCH THICK.

BRIDGE SCOUR

SCOUR ELEVATIONS: THE DESIGN FLOOD AND CHECK FLOOD SCOUR ELEVATIONS ARE PROVIDED BELOW:

	REAR ABUTMENT	PIER 1	PIER 2	FORWARD ABUTMENT
DESIGN FLOOD	906.0	895.0	895.0	905.5
CHECK FLOOD	904.5	893.0	893.0	904.0

PILE DESIGN LOADS (ULTIMATE BEARING VALUE)

THE ULTIMATE BEARING VALUE IS 166 KIPS PER PILE FOR THE ABUTMENT PILES. THE ULTIMATE BEARING VALUE IS 308 KIPS PER PILE FOR THE PIER PILES.

ABUTMENT PILES:
12-IN DIAMETER PILES, 40 FEET LONG ORDER LENGTH
1 DYNAMIC LOAD TESTING ITEM

PIER PILES:
16-IN DIAMETER PILES, 55 FEET LONG ORDER LENGTH
1 DYNAMIC LOAD TESTING ITEM

PROVIDE PLAIN CYLINDRICAL CASINGS WITH A MINIMUM PILE WALL THICKNESS OF 0.250 INCH FOR THE CAST-IN-PLACE REINFORCED CONCRETE PILES.

ITEM 507 - 16" CAST-IN-PLACE REINFORCED PILES, FURNISHED, AS PER PLAN

ALL REINFORCING STEEL IS TO BE PAID SEPARATELY UNDER ITEM 509 - EPOXY COATED STEEL REINFORCEMENT.

ITEM 511 - CLASS QC2 CONCRETE WITH QC/QA, SUPERSTRUCTURE

THE ALTERNATE CURING METHOD USING E5 INTERNAL CURE AND LIQUID FLY ASH (ODOT OMM CONSTRUCTION MEMORANDUM) WILL NOT BE APPROVED FOR THIS PROJECT. CONTRACTOR IS ADVISED TO BID THE PROJECT PER C&MS 511 ONLY.

ITEM 516 - 2" DEEP JOINT SEALER, AS PER PLAN

A 2" DEEP X 1" WIDE STRIP SHALL BE SAWCUT OUT OF THE ASPHALT ABUTTING CONCRETE AS DETAILED IN THE PLANS. IN LIEU OF SAWCUTTING AFTER CONSTRUCTION, THIS JOINT MAY BE FORMED DURING CONSTRUCTION. JOINT SEALER AS PER 705.04 SHALL BE USED TO SEAL THE JOINT CREATED.

ITEM 526 - REINFORCED CONCRETE APPROACH SLABS WITH QC/QA (T= 13"), AS PER PLAN

ALL APPROACH SLAB CONCRETE SHALL BE PLACED SEPARATELY FROM THE SUPERSTRUCTURE CONCRETE.


ALL REINFORCING STEEL IS TO BE PAID SEPARATELY UNDER ITEM 509 - EPOXY COATED STEEL REINFORCEMENT.

STRUCTURE NOTES

BRIDGE NO.: AUG-219-0927
SR 219 OVER MUDDY CREEK

SFN
0603310

DESIGN AGENCY



DISTRICT 7
ENGINEERING

DESIGNER
LCG

CHECKER
DHG

REVIEWER
MRB 01/13/25

PROJECT ID
110148

SUBSET
2

TOTAL
11

SHEET
P.14

TOTAL
31