NOTES:

B.L.T.
V.Z.

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DETAILS

DRAIN CASTING ASSEMBLY

B-101-G

STEEL FOR BRACKETS SHALL BE ASTM A36, GALVANIZED.
TAPPED OVERSIZE IN ACCORDANCE WITH ASTM A563.
CONCRETE INSERTS AND BOLT HOLES IN DRAIN CASTINGS SHALL BE ASTM A48, CLASS 35B.
DRAIN CASTINGS SHALL BE GRAY IRON CASTINGS IN ACCORDANCE WITH AND SHALL BE LOCATED 6" ABOVE THE BOTTOM FLANGE OF GIRDER.
A BRACKET SHALL BE USED WHEN GIRDER DEPTH IS 42" OR GREATER OR GIRDER.
BOTTOM OF DOWNSPOUT SHALL BE 6" BELOW BOTTOM FLANGE OF BEAM OR GIRDER.
A BRACKET SHALL BE USED WHEN GIRDER DEPTH IS 42" OR GREATER AND SHALL BE LOCATED 6" ABOVE THE BOTTOM FLANGE OF GIRDER.
DRAIN CASTINGS SHALL BE GRAY IRON CASTINGS IN ACCORDANCE WITH ASTM A48, CLASS 35B.
POLYETHYLENE PLASTIC PIPE MUST MEET THE REQUIREMENTS OF ASTM F714, PE4710, DR26 OR DR17.
FIBERGLASS PIPE AND FITTINGS SHALL BE REINFORCED THERMOSETTING RESIN PIPE QUALIFYING FOR A 30,000 PSI MINIMUM SHORT TERM RUPTURE STRENGTH HOOPS TENSILE STRESS. THE PIPE SHALL BE IN ACCORDANCE TO ASTM D2996.
STEEL FOR BRACKETS SHALL BE ASTM A36, GALVANIZED.
FASTENERS SHALL MEET THE REQUIREMENTS OF ASTM A307, GALVANIZED OR STAINLESS STEEL TYPE 304.
WASHERS SHALL MEET THE REQUIREMENTS OF ASTM F436, GALVANIZED OR STAINLESS STEEL TYPE 304.

DRAINS CASTINGS SHALL BE PLACED WITH SLOTS AS SHOWN ON PLANS. NO ROTATION OF DRAIN CASTINGS WILL BE PERMITTED.
BOTTOM OF DOWNSPOUT SHALL BE 6" BELOW BOTTOM FLANGE OF BEAM OR GIRDER.
A BRACKET SHALL BE USED WHEN GIRDER DEPTH IS 42" OR GREATER AND SHALL BE LOCATED 6" ABOVE THE BOTTOM FLANGE OF GIRDER.
DRAIN CASTINGS SHALL BE GRAY IRON CASTINGS IN ACCORDANCE WITH ASTM A48, CLASS 35B.
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WASHERS SHALL MEET THE REQUIREMENTS OF ASTM F436, GALVANIZED OR STAINLESS STEEL TYPE 304.

GALVANIZING SHALL BE BY THE HOT DIP PROCESS IN ACCORDANCE WITH 707.03.C.17 OF THE STANDARD SPECIFICATIONS. ALL FABRICATION SHALL BE COMPLETED BEFORE GALVANIZING.
CONCRETE INSERTS AND BOLT HOLES IN DRAIN CASTINGS SHALL BE TAPPED OVERSIZE IN ACCORDANCE WITH ASTM A563.

PLAN OF DRAIN CASTING

SECTION C-C
SECTION B-B
(ANCHORED TO STEEL BEAM WEB)

1/4" BOLT WITH WASHER
2" X 1/4" BARS

CONCRETE BEAM WEB

DETAIL A

DETAIL B

PLAN VIEW OF BRACKET
(ANCHORED TO CONCRETE BEAM WEB)

BRACKET DETAILS
(FOR CONCRETE OR STEEL BEAMS)

MICHIGAN DEPARTMENT OF TRANSPORTATION
BUREAU OF DEVELOPMENT STANDARD PLAN FOR
DRAIN CASTING ASSEMBLY
DETAILS

F.H.W.A. APPROVAL 7-26-2018
B-101-G SHEET 2 OF 2