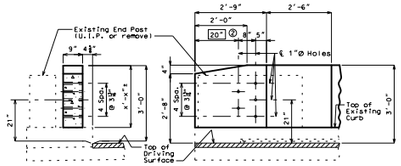
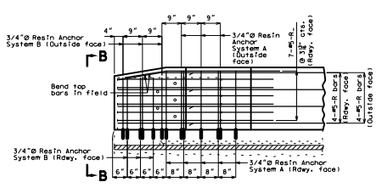
CBO_05-CurbRail-details.dgn Nawi Apr. 2020



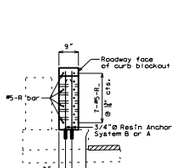
PART SECTION THRU END OF BLOCKOUT

PART ELEVATION SHOWING END OF BLOCKOUT

FREE FROM EXISTING END POST (3'-0")

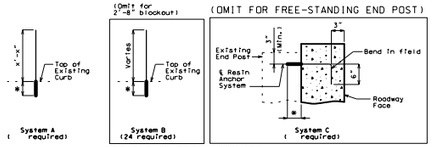


PART ELEVATION OF END OF BLOCKOUT SHOWING REINFORCEMENT



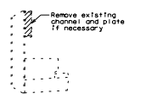
ELEVATION B-B

FREE STANDING



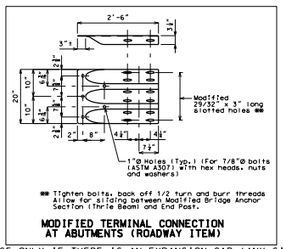
DETAILS OF RESIN ANCHORS

* Manufacturer's recommended embedment length (5" min.)



TYPICAL SECTION THRU RAILING SHOWING CHANNEL REMOVAL

Cost of channel removal will be considered completely covered by the contract unit price for Curb Blockout.



** Tighten bolts, back off 1/2 turn and burr threads. Allow for sliding between Modified Bridge Anchor Section (Thrie Beam) and End Post.

MODIFIED TERMINAL CONNECTION AT ABUTMENTS (ROADWAY ITEM)

USE ONLY IF THERE IS AN EXPANSION GAP (ANY SIZE) BETWEEN THE END POST AND THE FIRST RAIL POST OFF THE BRIDGE

Standard Drawing Guidance (Do not show on plans):

① May use 2'-8" if curb blockout is on a non-NHS route and sight distance or weight is an issue.

② Holes may be shifted 12" closer to the end (8" instead of 20°) to avoid attaching a rail post to the top of backwall. All other dimensions and reinforcement remain the same.

Use this sheet with CBO_03 or 04, & CBO_05.

Longitudinal R bars in front face shall lap 3'-1" minimum with horizontal R bars in end post.

These details may not cover all situations, and are intended as a starting point only. Modify as necessary.

Notes:

Work this sheet with Sheets No. & .

All curb blockout reinforcement shall be epoxy coated.

The contractor shall use one of the qualified resin anchor systems in accordance with Sec 1039.

The minimum embedment depth in concrete with f'c = 4,000 psi for the resin anchor system shall be that required to meet the minimum ultimate pullout strength in accordance with Sec 1039 but shall not be less than 5 inches.

An epoxy coated #6 Grade 60 reinforcing bar shall be substituted for the 3/4-inch diameter threaded rod.

Resin anchors shall be shifted or bent in field to clear one-inch diameter holes by at least 1/2 inch.

CURB BLOCKOUT

"THIS MEDIA SHOULD NOT BE CONSIDERED A CERTIFIED DOCUMENT."

DATE PREPARED 4/30/2020
ROUTE * STATE MO
DISTRICT BR SHEET NO. *
COUNTY *
JOB NO. *
CONTRACT ID.
PROJECT NO.
BRIDGE NO. CBO_05

DESCRIPTION	DATE

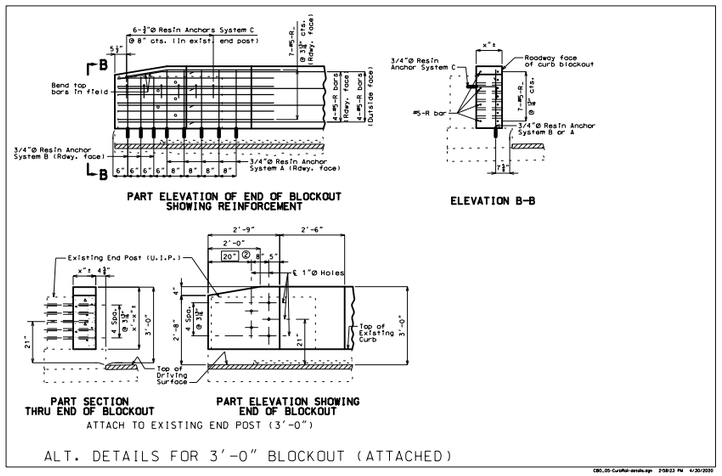
IF A SEAL IS PASTED ON THIS SHEET, IT HAS BEEN ELECTRONICALLY SEALED AND DATED

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION — MoDOT — JEFFERSON CITY, MO 65102 — 105 WEST CAPITOL — 1-888-275-6636

Detailed
Checked

Note: This drawing is not to scale. Follow dimensions. Sheet No. of

CBO_05-CurbRail-details.dgn 2:58:23 PM 4/30/2020



PART ELEVATION OF END OF BLOCKOUT SHOWING REINFORCEMENT

ELEVATION B-B

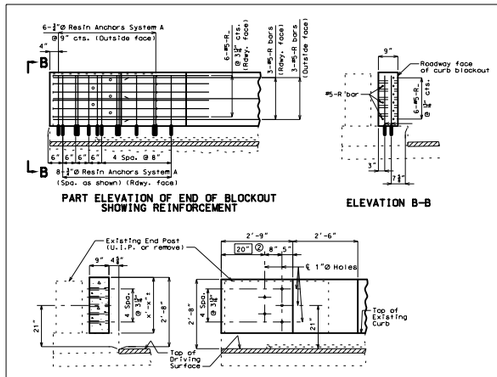
PART SECTION THRU END OF BLOCKOUT

PART ELEVATION SHOWING END OF BLOCKOUT

ATTACH TO EXISTING END POST (3'-0")

ALT. DETAILS FOR 3'-0" BLOCKOUT (ATTACHED)

CBO_05-CurbRail-details.dgn 2:58:23 PM 4/30/2020



PART ELEVATION OF END OF BLOCKOUT SHOWING REINFORCEMENT

ELEVATION B-B

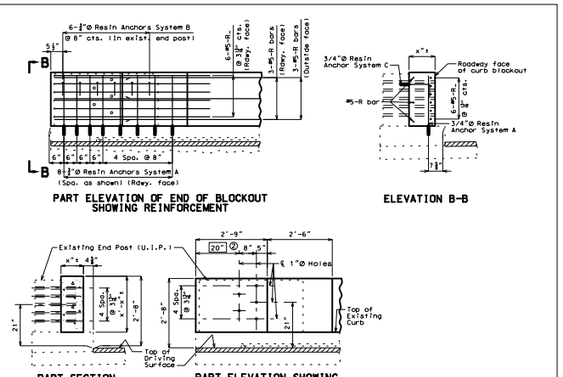
PART SECTION THRU END OF BLOCKOUT

PART ELEVATION SHOWING END OF BLOCKOUT

FREE FROM EXISTING END POST (2'-8")

ALT. DETAILS FOR 2'-8" BLOCKOUT (FREE STANDING) ①

CBO_05-CurbRail-details.dgn 2:58:23 PM 4/30/2020



PART ELEVATION OF END OF BLOCKOUT SHOWING REINFORCEMENT

ELEVATION B-B

PART SECTION THRU END OF BLOCKOUT

PART ELEVATION SHOWING END OF BLOCKOUT

ATTACH TO EXISTING END POST (2'-8")

ALT. DETAILS FOR 2'-8" BLOCKOUT (ATTACHED) ①

CBO_05-CurbRail-details.dgn 2:58:23 PM 4/30/2020