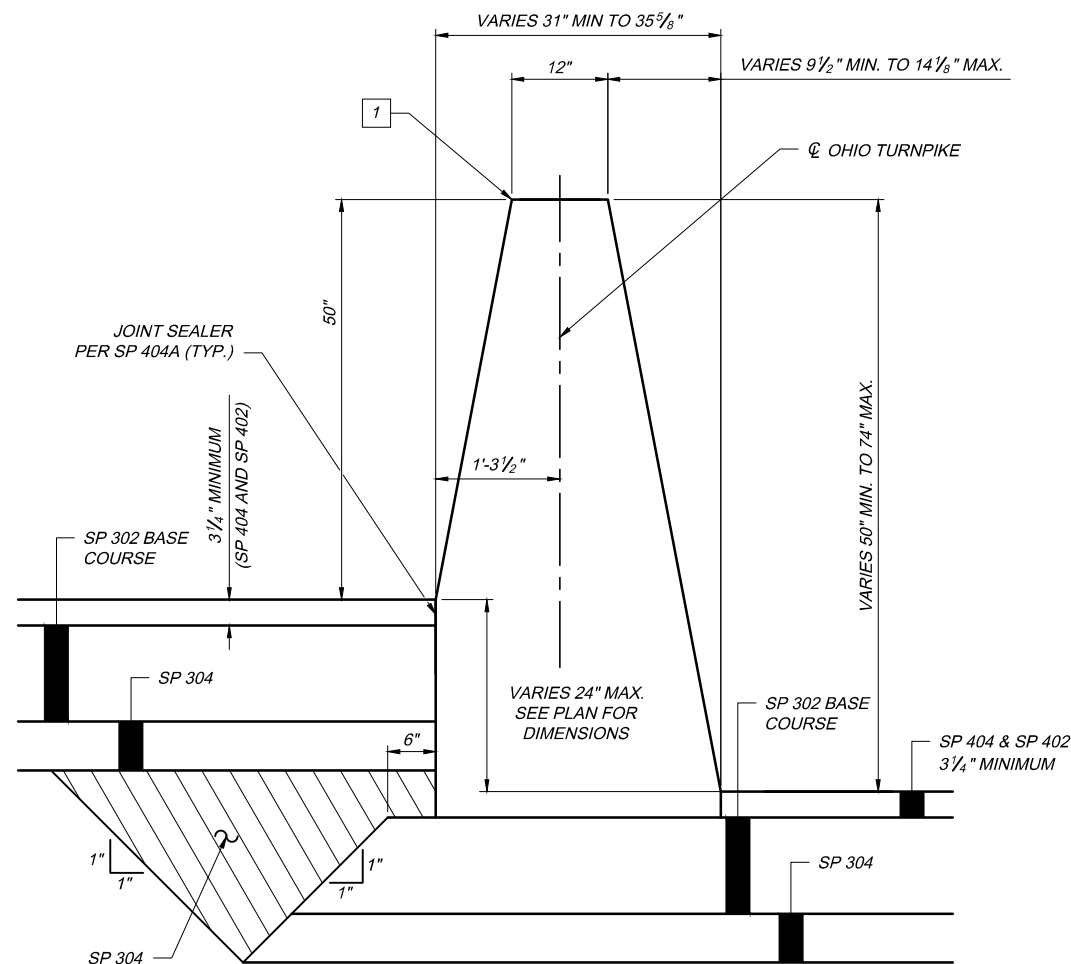
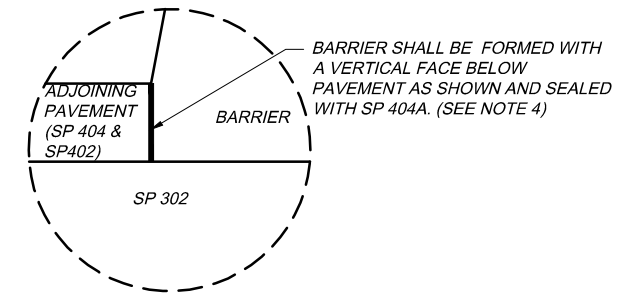


**ITEM 622-CONCRETE BARRIER, SINGLE SLOPE,
TYPE B-50, AS PER PLAN**



**ITEM 622-CONCRETE BARRIER, SINGLE SLOPE,
TYPE C-50, AS PER PLAN**



TOE DETAIL

NOTES:

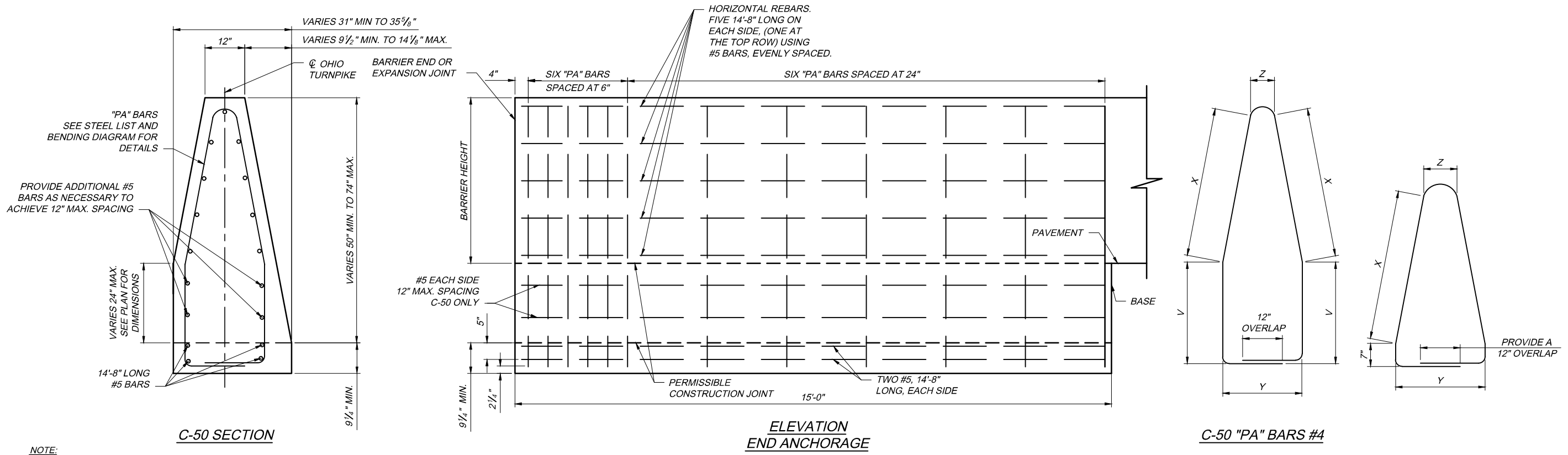
- CONCRETE BARRIER, SINGLE SLOPE, MAY BE CAST IN PLACE OR SLIP FORMED AND SHALL BE BUILT IN LOCATIONS SPECIFIED IN THE PLANS. WHERE A BRIDGE FALLS WITHIN THE LIMITS OF THE CONCRETE BARRIER, THE BARRIER HEIGHT AND WIDTH SHALL BE ADJUSTED ON THE APPROACH SLAB, TO MATCH THE HEIGHT, WIDTH, AND SHAPE OF THE PROPOSED BARRIER ON THE ABUTMENT OR BRIDGE. FOR DETAILS, REFER TO OTIC STANDARD DRAWING AS-1.
- MATERIALS: CONSTRUCT USING CONCRETE WITH A MINIMUM DESIGN STRENGTH OF 4000 PSI CONFORMING TO THE REQUIREMENTS OF SECTION 499 OF THE CMS. CONSTRUCT TOP AND END EDGES WITH EITHER A 1" RADIUS OR 3/4" CHAMFER, EXCEPT AT LIGHT POLE FOUNDATIONS.
- JOINTS: UNSEALED CONTRACTION JOINTS SPACED AT 20 FEET ON-CENTER (MAXIMUM SPACING) FOR CONCRETE BARRIER EXCEPT THAT EXPANSION JOINTS SHALL BE USED AT THE CENTER LINE OF AND AROUND EACH BRIDGE PIER COLUMN AND ON EITHER SIDE OF OVERHEAD SIGN SUPPORTS, INLETS, LIGHT POLE FOUNDATIONS, CHANGES IN MEDIAN BARRIER TYPE OR DIMENSIONS, AND AT APPROACH SLABS. IF THE INLET TOP IS SLIP FORMED, THE EXPANSION JOINTS ADJACENT TO IT MAY BE OMITTED.
- CONTRACTION JOINTS MAY BE CONSTRUCTED WITH METAL INSERTS INSIDE THE FORMS, PREFORMED FULL WIDTH JOINT FILLER, A GROOVING TOOL, OR BY SAWING. INSERTS, TOOLED JOINTS, AND SAWED JOINTS SHALL HAVE A 3 INCH MINIMUM DEPTH. ALL JOINTS SHALL BE CONSTRUCTED FOR THE FULL HEIGHT OF THE BARRIER INCLUDING THE FOOTING. SAWING SHALL BE DONE AS SOON AS CURING WILL ALLOW, TO PREVENT SPALLING.
- SEALING JOINTS: THE VERTICAL BARRIER WALL OR BARRIER FOOTING SHALL BE SPRAYED WITH SP 404A SEALING MATERIAL ADJACENT TO SP 404 AND SP 402 LAYERS. SEALING MATERIAL SHALL BE IN ACCORDANCE WITH SP 404A.
- CONSTRUCTION JOINTS: BARRIER RUNS WITH ABUTTING VERTICAL SURFACES AT EITHER REQUIRED OR PERMISSIBLE CONSTRUCTION JOINTS ARE TO BE DOWELED TO EACH OTHER BY USE OF 3/4" DIA. BY 18" LONG EPOXY COATED DEFORMED DOWEL BARS AS PER CMS 622.02. BARS ARE TO BE PLACED AS SHOWN ON THE B-50 OR C-50 DOWEL BAR PLACEMENT DETAILS ON SHEET 3 OF 3. PROVIDE A 4" CLEARANCE TO BARRIER SURFACES AND TO ANY RACEWAYS.
- CURING AND SEALING: IN LIEU OF THE CURING COMPOUNDS SPECIFIED IN CMS 622.07, THE CONCRETE BARRIER SHALL BE CURED AND SEALED BY CMS 511.14 METHOD B, MEMBRANE CURING UTILIZING CHEMMASTERS SILENCURE-A OR AN APPROVED EQUAL. MATERIAL APPLICATION SHALL BE AS PER THE RECOMMENDATIONS OF THE MANUFACTURER. ALL OTHER PROVISIONS OF SECTION 622 OF THE CMS SHALL APPLY.
- TRANSITIONS: MAKE LINEAR TRANSITIONS BETWEEN THE DIFFERENT TYPES OF BARRIER WITHIN A 20' LENGTH.
- BARRIER REFLECTORS: BARRIER REFLECTORS SHALL BE INSTALLED AND PAID FOR IN ACCORDANCE WITH SP 626.
- MEASUREMENT: ITEM 622 - CONCRETE BARRIER, SINGLE SLOPE, TYPE B-50 OR C-50, AS PER PLAN, INCLUDING TRANSITIONS AND PIER SECTIONS AS DETAILED ON SHEET 2 OF 3 ARE PAID FOR AT THE UNIT PRICE BID PER FOOT, WITH APPROPRIATE DEDUCTIONS FOR OTHER ITEMS SUCH AS:

SP 611	MEDIAN INLET	20 FEET
ITEM 630	OVERHEAD SIGN SUPPORT FOUNDATION	10 FEET
ITEM 630	BARRIER WALL ASSEMBLY	10 FEET
- BASIS OF PAYMENT: ITEM 622 - CONCRETE BARRIER, SINGLE SLOPE, TYPE B-50 OR C-50, AS PER PLAN, SHALL BE CONSTRUCTED IN ACCORDANCE WITH THIS OTIC STANDARD DRAWINGS AND SECTION 622 OF THE CMS.
- PAYMENT FOR ANY REINFORCED END ANCHORS, AS SHOWN ON THE END ANCHORAGE DETAILS SHOWN ON SHEET 3 OF 3, WILL BE MADE AT THE UNIT PRICE BID PER EACH FOR ITEM 622 - CONCRETE BARRIER, END ANCHORAGE, REINFORCED. THIS INCLUDES ALL MATERIALS, LABOR, AND OTHER INCIDENTALS NECESSARY TO CONSTRUCT THIS ANCHOR.

LEGEND:

- 1 1 INCH RADIUS OR 3/4" CHAMFER

CBR-2 2018.09.26.dwg: 1/28/19 - 1:51pm



NOTE:
ADDITIONAL BARS SHOULD BE ADDED WITH RESPECT TO THE HEIGHT.

DIMENSIONS FOR "PA" BARS					
BARRIER TYPE	V	X	Y	Z	LENGTH
B-50	-	45 3/8"	24"	8"	12'-7"
C-50	VARIES 7" TO 31"	45 3/8"	24"	8"	VARIES 12'-7" TO 16'-6"

DIMENSIONS FOR C-50 REBAR VARIES, THE CONTRACTOR SHALL USE THE CORRECT REBAR FOR THE ACTUAL C-50 HEIGHT.

NOTES:

- CONSTRUCTION JOINTS: BARRIER RUNS WITH ABUTTING VERTICAL SURFACES AT EITHER REQUIRED OR PERMISSIBLE CONSTRUCTION JOINTS ARE TO BE DOWELED TO EACH OTHER BY USE OF 3/4" DIA. BY 18" LONG EPOXY COATED DEFORMED DOWEL BARS AS PER CMS 622.02. BARS ARE TO BE PLACED AS SHOWN ON THE DOWEL BAR PLACEMENT DETAIL ON THIS SHEET. IF THE CONTRACTOR ELECTS TO DRILL DOWELS, THE WORK SHALL BE COMPLETED PER SECTION 510 OF THE CMS. GROUT SHALL BE NON-SHRINK, NON-METALLIC PER CMS 705.20. THIS WORK SHALL BE INCIDENTAL TO ITEM 622 PAY ITEMS.
- PAYMENT FOR ALL REINFORCEMENT, CONCRETE FOOTING, AND ANY INCIDENTAL ITEMS REQUIRED TO CONSTRUCT THE CONCRETE BARRIER, END ANCHORAGE, REINFORCED AS SHOWN ON THIS SHEET WILL BE MADE AT THE UNIT PRICE BID PER EACH FOR ITEM 622 - CONCRETE BARRIER, END ANCHORAGE, REINFORCED. THIS INCLUDES ALL MATERIALS, LABOR, AND OTHER INCIDENTALS NECESSARY TO CONSTRUCT THIS ANCHOR. IN ADDITION TO THE ANCHORAGE PAYMENT, THE CONTRACTOR WILL BE COMPENSATED FOR 15' OF ITEM 622 - CONCRETE BARRIER, SINGLE SLOPE, TYPE B-50 OR C-50, AS PER PLAN.
- REINFORCED END ANCHORAGES ARE REQUIRED AT THE ENDS OF CONCRETE BARRIER RUNS AND AT INTERRUPTIONS IN BARRIER CAUSED BY EXPANSION JOINTS. WHEN BARRIER DOES NOT ABUT ANOTHER BARRIER RUN, CONSTRUCT THE LAST 15' USING THE END ANCHORAGE DETAIL AS SHOWN HERE.
- AT EXPANSION JOINTS, CONSTRUCT AN END ANCHORAGE ON BOTH SIDES OF JOINT, WITH A MAXIMUM GAP OF 2" FOR THE OPEN JOINT. THE MAXIMUM EXPANSION JOINT SPACING SHALL BE 800'. THIS ANCHORAGE IS NOT NEEDED AT CONSTRUCTION JOINTS, PROVIDE DOWEL BAR CONNECTIONS INSTEAD. SEE CONSTRUCTION JOINT NOTE ON THIS SHEET FOR DOWELING DETAILS.
- AT MAINTENANCE CROSSOVERS, PROVIDE A HINGE BAR PLACEMENT PER OTIC STANDARD DRAWING XV-3.
- GROUT INSTALLATION SHALL BE DONE IN ACCORDANCE WITH CMS 705.20 NON-SHRINK, NON-METALLIC MATERIAL. THE COST SHALL BE INCIDENTAL TO THIS STANDARD DRAWING.
- FOR ADDITIONAL NOTES, SEE SHEETS 1 AND 2 OF 3.

