

# NOTES

**GRATES:** Two required. For details, see **SCD CB-2.2**. Grate "V" shall be provided unless the plans specifically require the diagonal grate. If the diagonal grate is specified, it shall be placed so that the diagonal bars direct drainage flow toward the curb.

If necessary, bicycle safe grates shall be specified in the plans. Bicycle safe grates shall be Neenah No. R-4859-C or East Jordan No. 5110 Type M2 or approved equals.

**CASTINGS:** The design shall be essentially the same and equally as strong as shown, or meets AASHTO M 306. Minimum weight [mass]:

- Curb Casting . . . . . 305 lbs. [138 kg]
- Two Grates . . . . . 254 lbs. [115 kg],
- Frame . . . . . 590 lbs. [267 kg], and
- Two Grate "V" . . . . . 210 lbs. [95 kg].

**BEARING AREAS:** The frame and grate shall be so fitted and finished as to provide a firm and even seat. No projections shall exist on bearing areas and the grate shall seat in its frame without rocking.

**WALLS:** When used in place of concrete, brick side walls shall be 8" [200] nominal thickness.

**PRECAST CONSTRUCTION:** Permitted, except for the apron. Concrete shall meet requirements of CMS 706.13 with a minimum of 4% entrained air in the hardened concrete. Precast walls shall have a minimum thickness of 6" [150] and reinforcing shall be sufficient to permit shipping and placement without damage. The wall thickness reduction shall be from the outside.

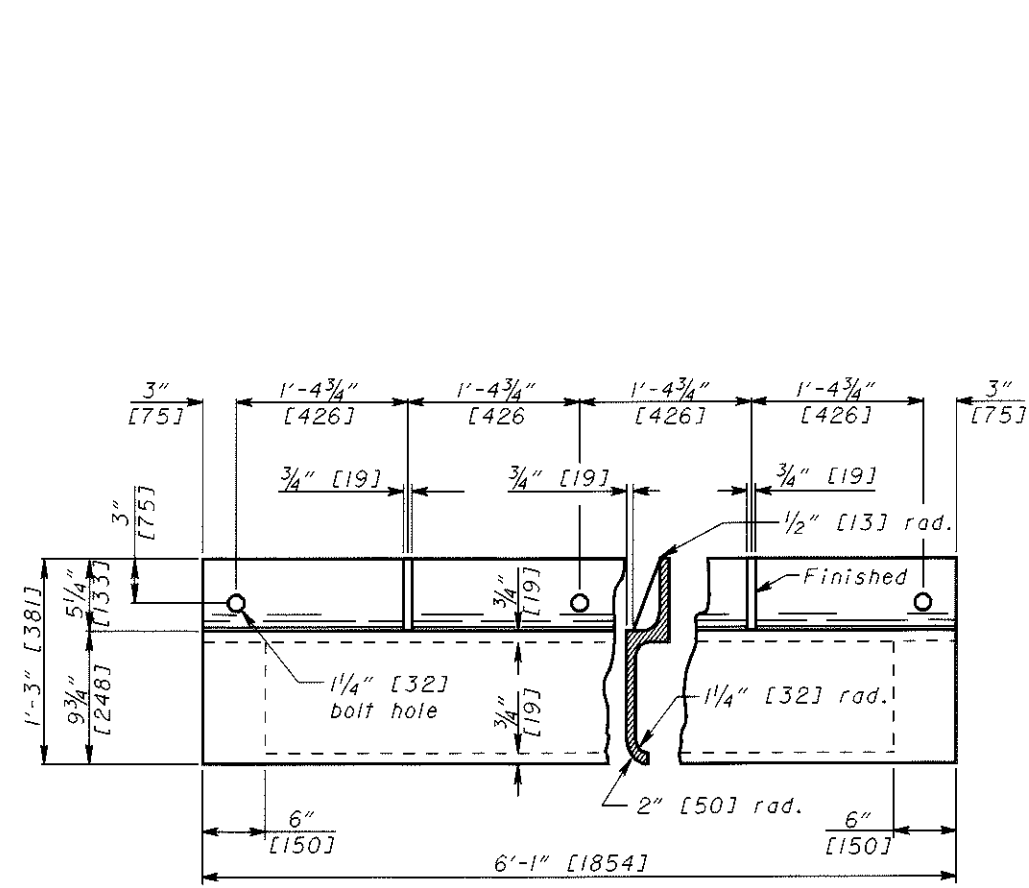
**MINIMUM DEPTH:** The minimum depth is per the cover requirements for that pipe type.

**OPENINGS:** The maximum pipe opening shall be the O.D. of the pipe being supplied plus 2" [50] when fabricated or field cut. The interstitial space shall be filled with grout per CMS 601.

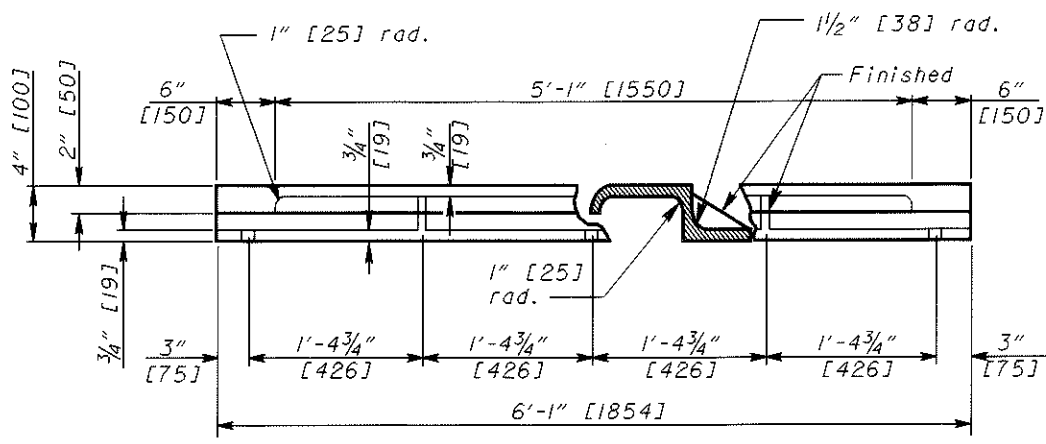
**DOWELS:** Four 1"x18" [25x450] dowels are required for concrete pavement or gutter blockout. See **SCD BP-2.2** for dowel details.

**BLOCKOUT:** Blockouts shall be paved with Class C concrete in PCC pavement or gutter and paid for as part of the pavement or gutter with no deduction in pavement, curb or gutter quantities because of castings. A Class C concrete apron the size of the 2'-0" [600] gutter blockout shall be cast-in-place in asphalt pavement (no dowels required) with the cost included in the catch basin bid price. No deduction to be made in curb quantities.

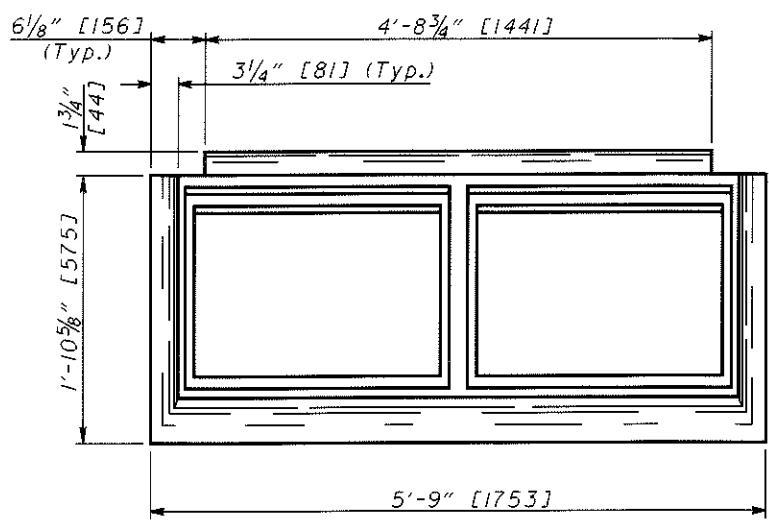
**PAYMENT:** All materials and labor, including excavation and backfilling, shall be paid for under **Item 604 - Catch Basin, No. 3**.



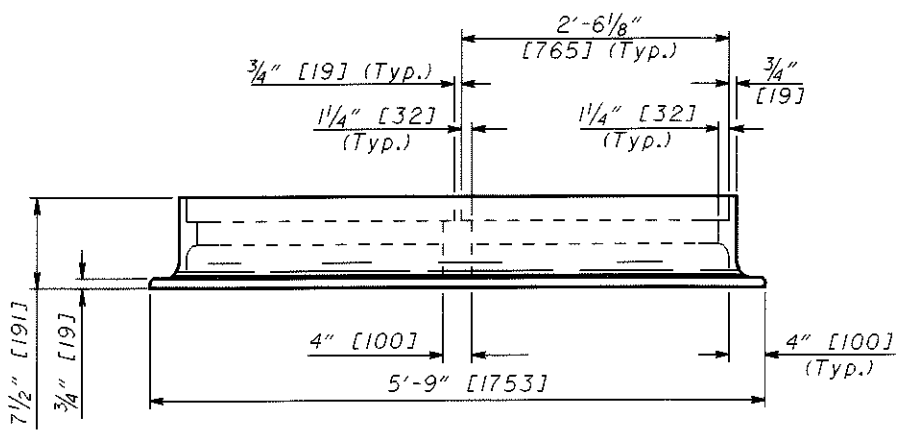
PLAN & SECTION



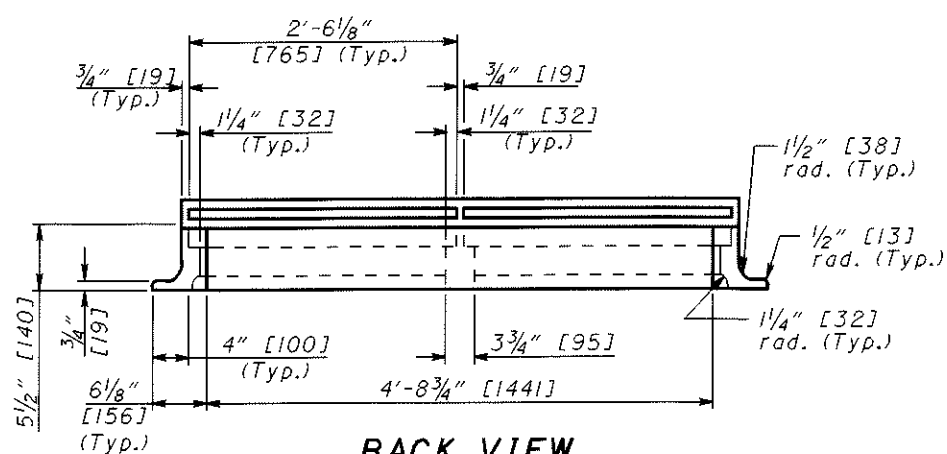
FRONT VIEW & SECTION  
CURB CASTING



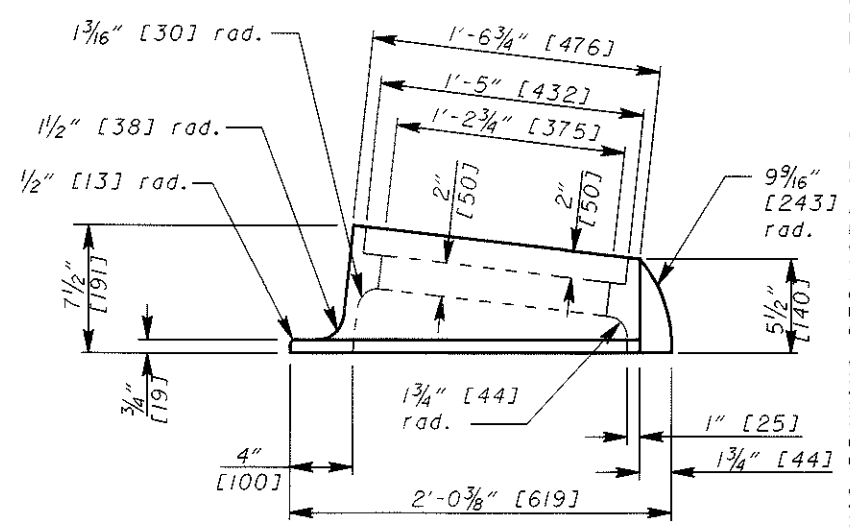
PLAN



FRONT VIEW



BACK VIEW  
FRAME



END VIEW FRAME

THIS DRAWING REPLACES CB-2.IM DATED 7-12-95.  
 STANDARD ROADWAY CONSTRUCTION DRAWING  
 ROADWAY ENGINEERING SERVICES  
 CATCH BASIN No. 3  
 CB-2.1  
 2/2  
 ALL metric dimensions (in brackets [ ]) are in millimeters unless otherwise noted.  
 STDS. ENGR. D. Focke  
 REVISIONS  
 TRANSPORTATION  
 OHIO DEPARTMENT OF HIGHWAY DESIGN ENGINEER  
 DATE