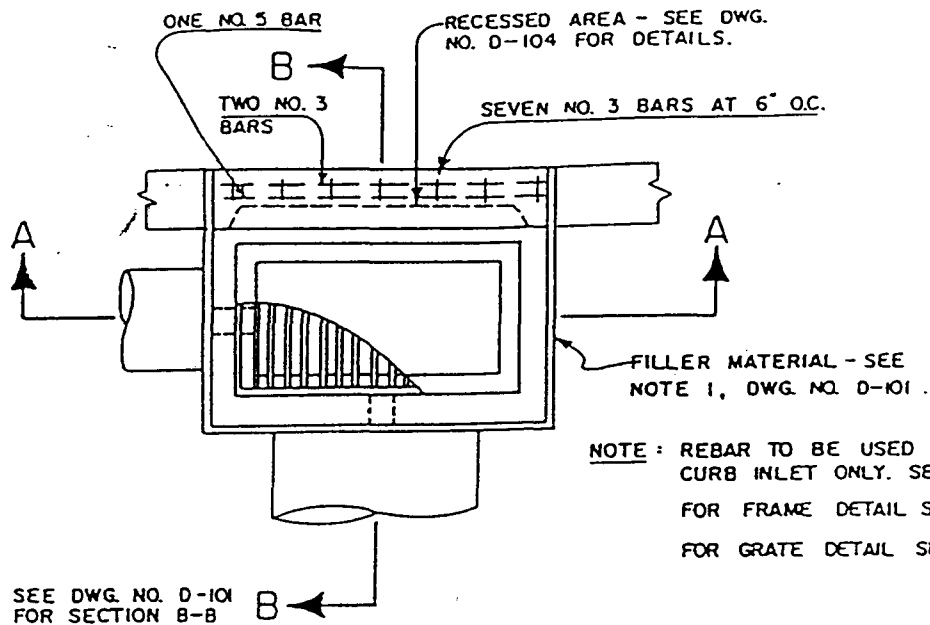


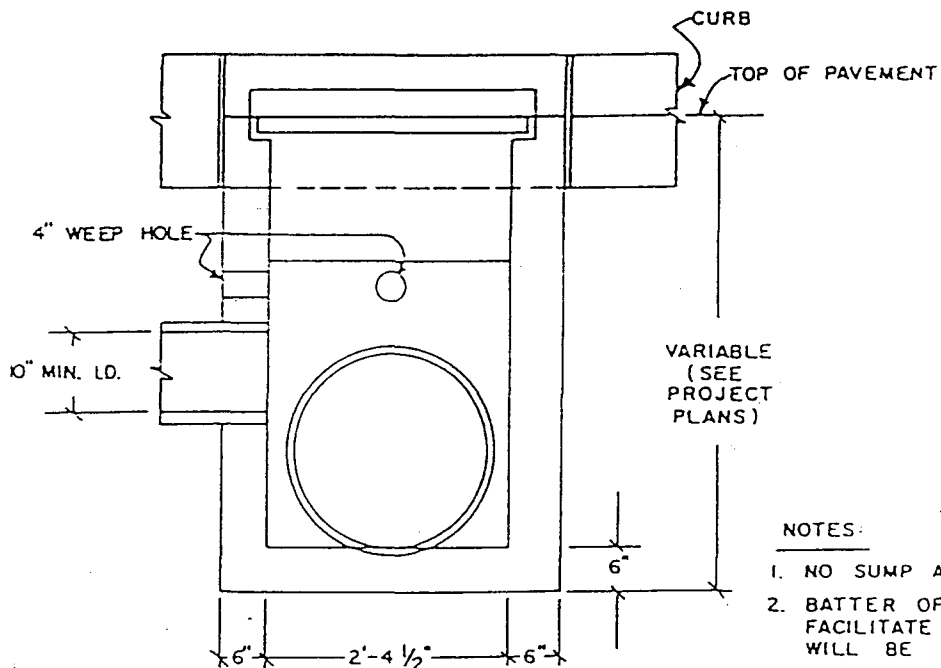
CHAPTER VII

STANDARD DRAWINGS

The Standard Drawings of this section are to be used as a guide for design of public improvements. If a standard drawing of a certain facility or structure is not included in this section, Standard Drawings as prepared by the Oregon Department of Transportation shall be used. These drawings and the drawings from the Oregon Department of Transportation may be revised periodically without further approval of the Columbia County Board of Commissioners.



PLAN



SECTION A-A

NOTES:

1. NO SUMP ALLOWED.
2. BATTER OF 1/4" TO 1" TO FACILITATE FORM REMOVAL WILL BE ALLOWED.
3. TOP OF WEEP HOLE AT SUBGRADE.

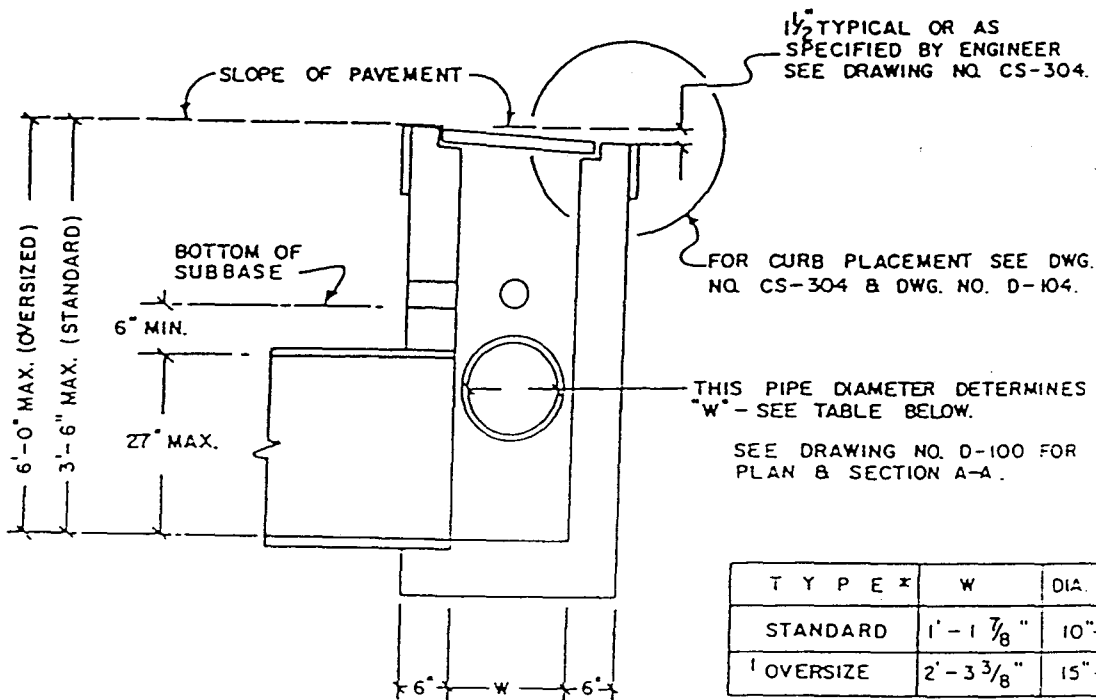
COLUMBIA COUNTY

Catch Basin
also see Dwg. No.
D-101 & Dwg. No. 104

Col. Cty. Standard
Drawing No. D-100

NOTES:

1. 3/4" PREFORMED JOINT FILLER MATERIAL TO BE USED AS SPECIFIED BY ENGINEER ONLY IN CONC. PAVEMENT OR GUTTER, AND TO EXTEND THROUGH THICKNESS OF CONCRETE.
2. CONST. CATCH BASIN PER DETAIL, BUT WITH DIMENSION "W" TO ACCOMMODATE LARGEST PIPE DIA. SPECIFIED.
3. CONCRETE SHALL ATTAIN A MINIMUM COMPRESSIVE STRENGTH OF 3000 P.S.I. IN 28 DAYS.
4. IF APPROVED BY ENGINEER, WALLS MAY BE POURED AGAINST UNOISTURBED EARTH, EXCEPT FOR THE TOP 8", WHICH SHALL BE FORMED.
5. BACKFILL SHALL BE COMPACTED TO 95% DENSITY THROUGHOUT.
6. OVERSIZE CATCH BASINS: STEPS ARE REQUIRED FOR DEPTH GREATER THAN 4 FEET. INSTALL 2 FT. FROM TOP TO WITHIN 1 FT. OF BOTTOM.



SECTION B-B

T Y P E *	W	DIA. PIPE
STANDARD	1' - 1 7/8"	10" - 12"
OVERSIZE	2' - 3 3/8"	15" - 27"

FOR GRATE TYPE, SEE DWG. NO. D-103

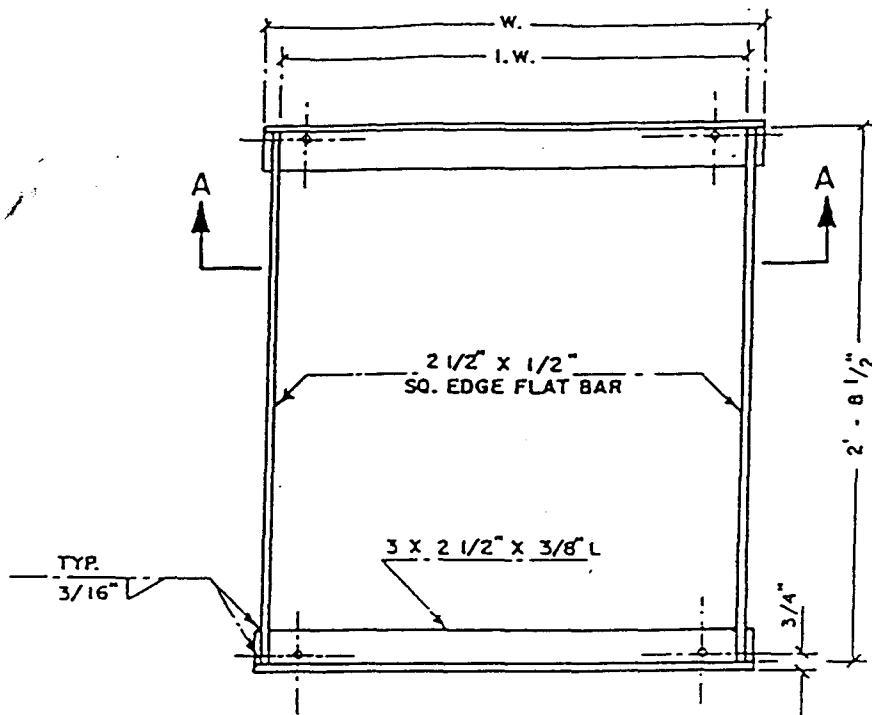
REQUIRES TWO GRATES. SEE DRAWING NO. D-102.

* "STANDARD" & "OVERSIZE" ARE Columbia CO. DESIGNATIONS.

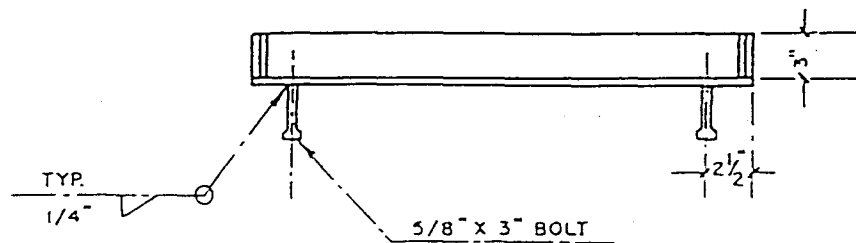
COLUMBIA COUNTY

Catch Basin
also see Dwg. No.
D-100 & Dwg. No. D-104

Col. Cty. Standard
Drawing No. D-101



PLAN



SECTION A-A

* TYPE	DIA. PIPE	W.	L.W.
STANDARD	10" - 12"	1' - 3 1/4"	1' - 1 7/8"
¹ OVERSIZE	15" - 27"	2' - 4 3/4"	2' - 3 3/8"

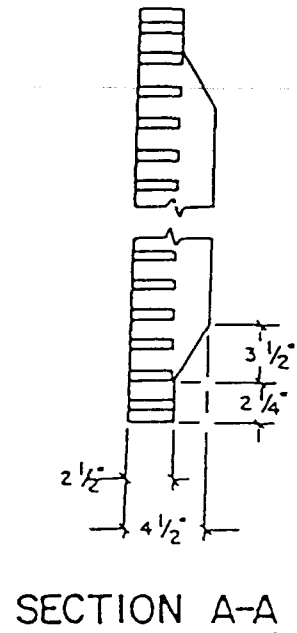
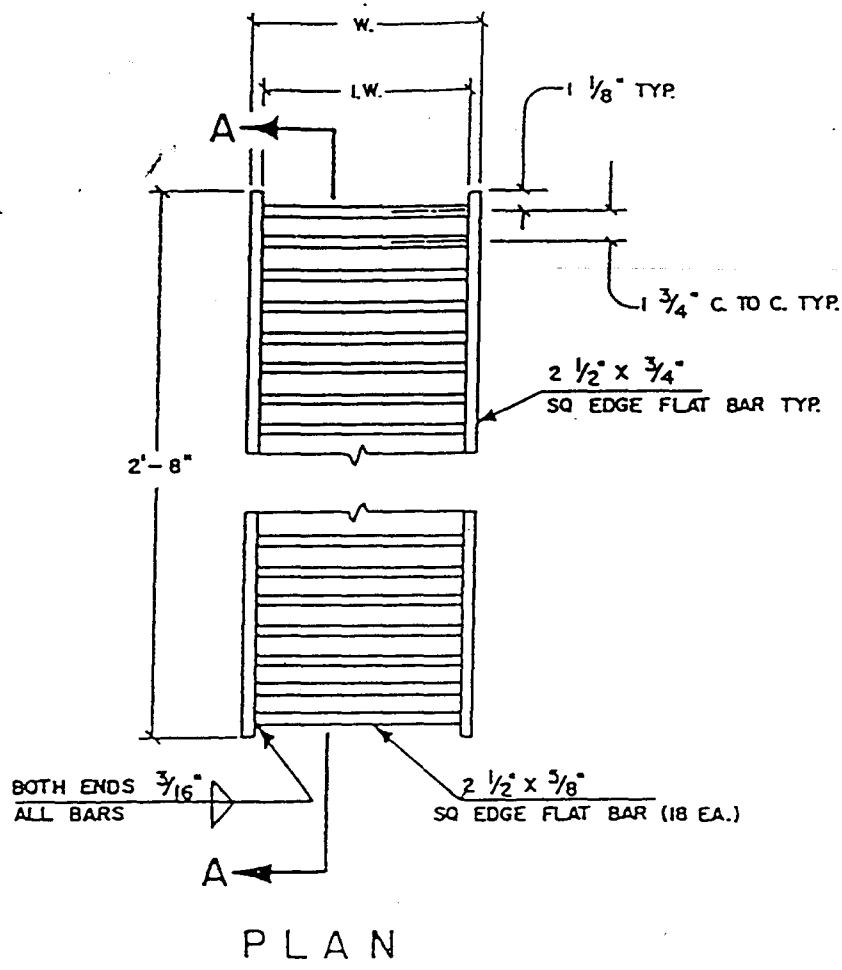
¹ REQUIRES TWO GRATES

* STANDARD & OVERSIZE ARE Col. CO. DESIGNATIONS

COLUMBIA COUNTY

Frame

Col. Cty. Standard
Drawing No. D-102



T Y P E *	W.	L.W.
STANDARD	1' - 1 1/2"	1' - 0"
1 OVERSIZE	1' - 1 1/2"	1' - 0"

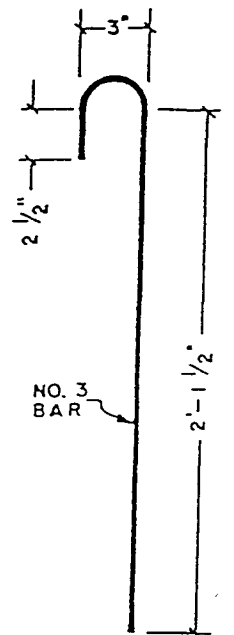
1 REQUIRES 2 GRATES.

* "STANDARD" AND "OVERSIZE" ARE Columbia COUNTY DESIGNATIONS.

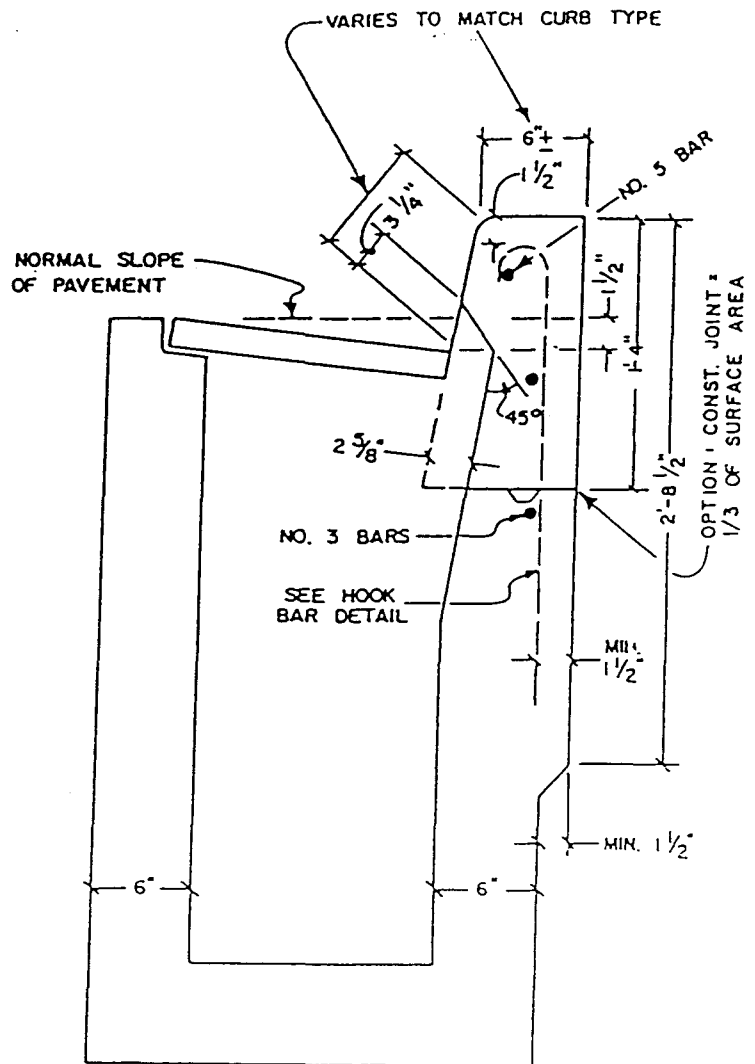
COLUMBIA COUNTY

Grate

Col. Cty. Standard
Drawing No. D-103



HOOK BAR
DETAIL



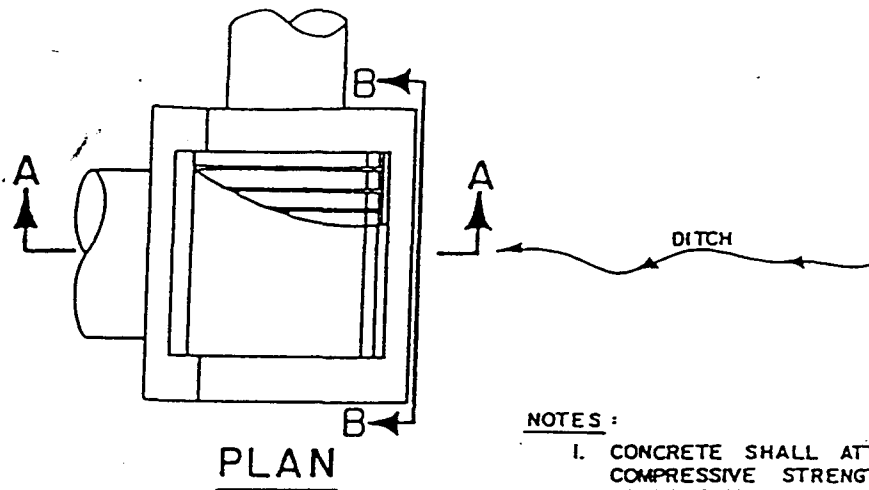
SECTION B-B

NOTE: FOR PLAN & ELEVATION SEE
DWG. NO. D-100 & D-101.

COLUMBIA COUNTY

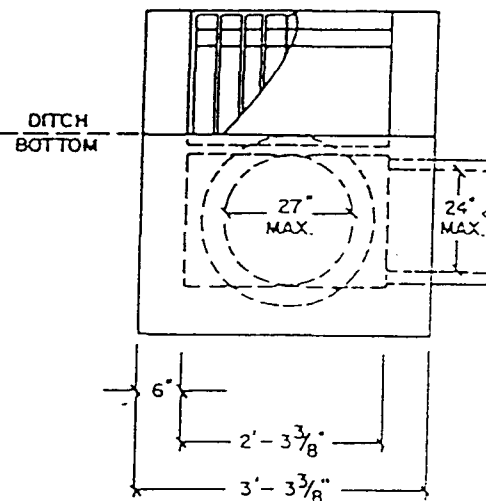
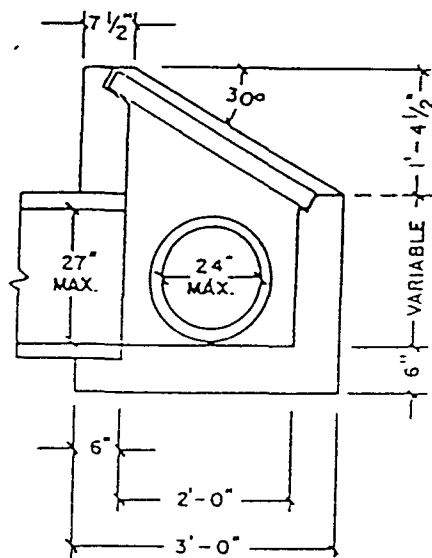
Recessed Curb Inlet

Col. Cty. Standard
Drawing No. D-104



NOTES :

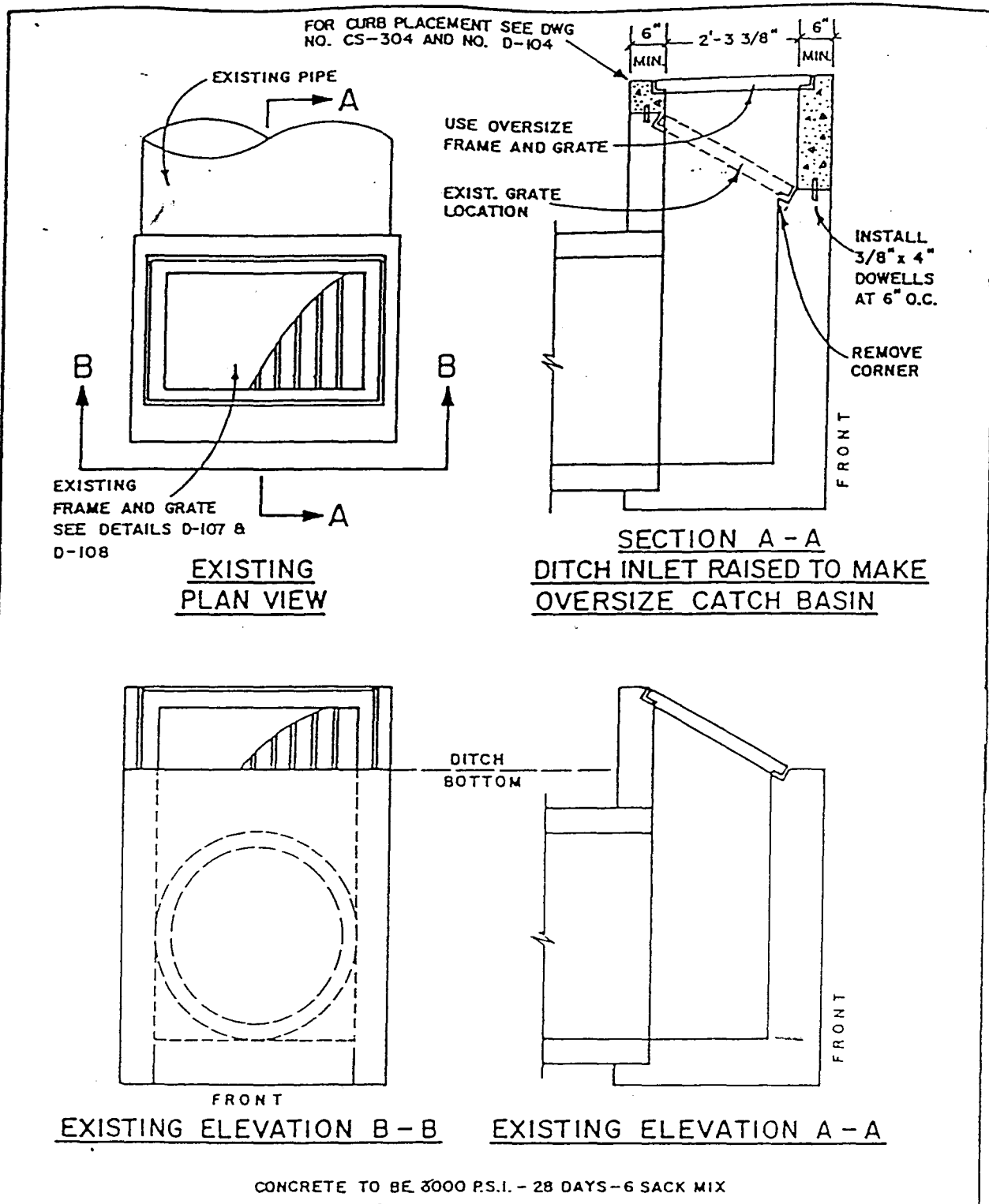
1. CONCRETE SHALL ATTAIN A MINIMUM COMPRESSIVE STRENGTH OF 3000 P.S.I. IN 28 DAYS.
2. FOR FRAME DETAIL, SEE DWG. NO. D-107.
3. FOR GRATE DETAIL, SEE DWG. NO. D-108.



COLUMBIA COUNTY

Area Drain, Type II

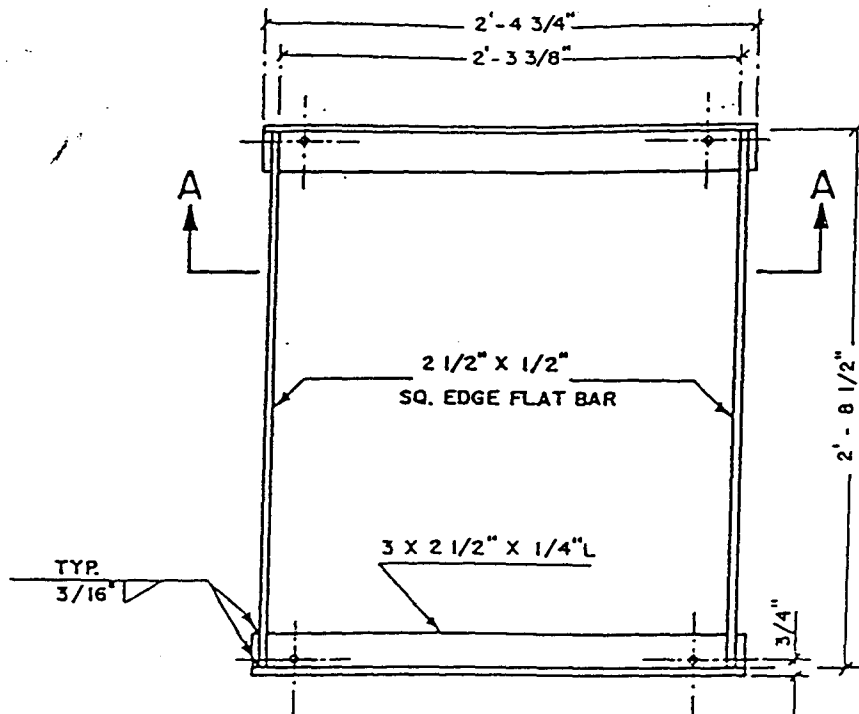
Col. Cty. Standard
Drawing No. D-105



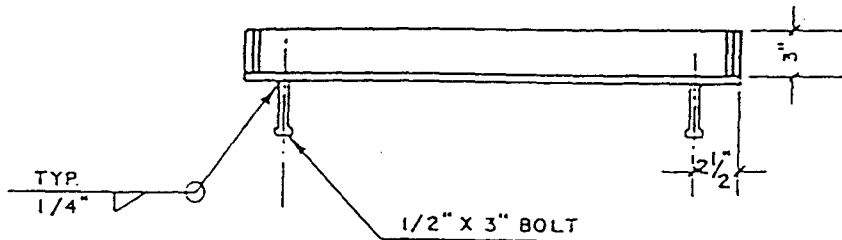
COLUMBIA COUNTY

Raised Area Drain

Col. Cty. Standard
Drawing No. D-106



PLAN

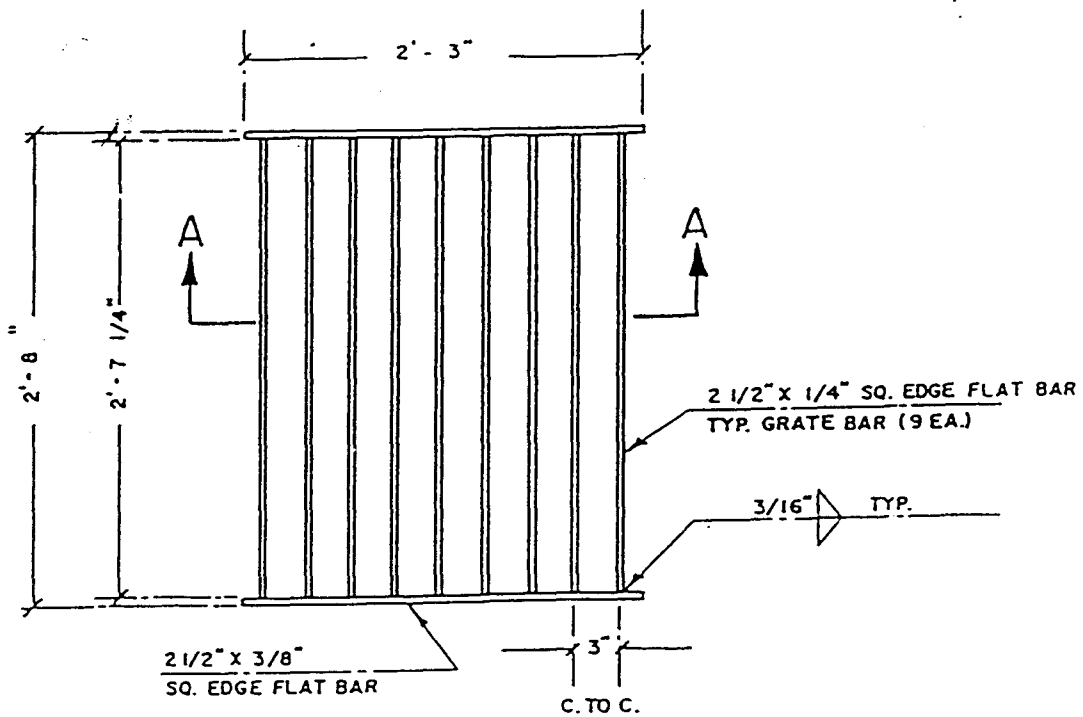


SECTION A-A

COLUMBIA COUNTY

Frame Area Drain, Type II

Col. Cty. Standard
Drawing No. D-107



PLAN

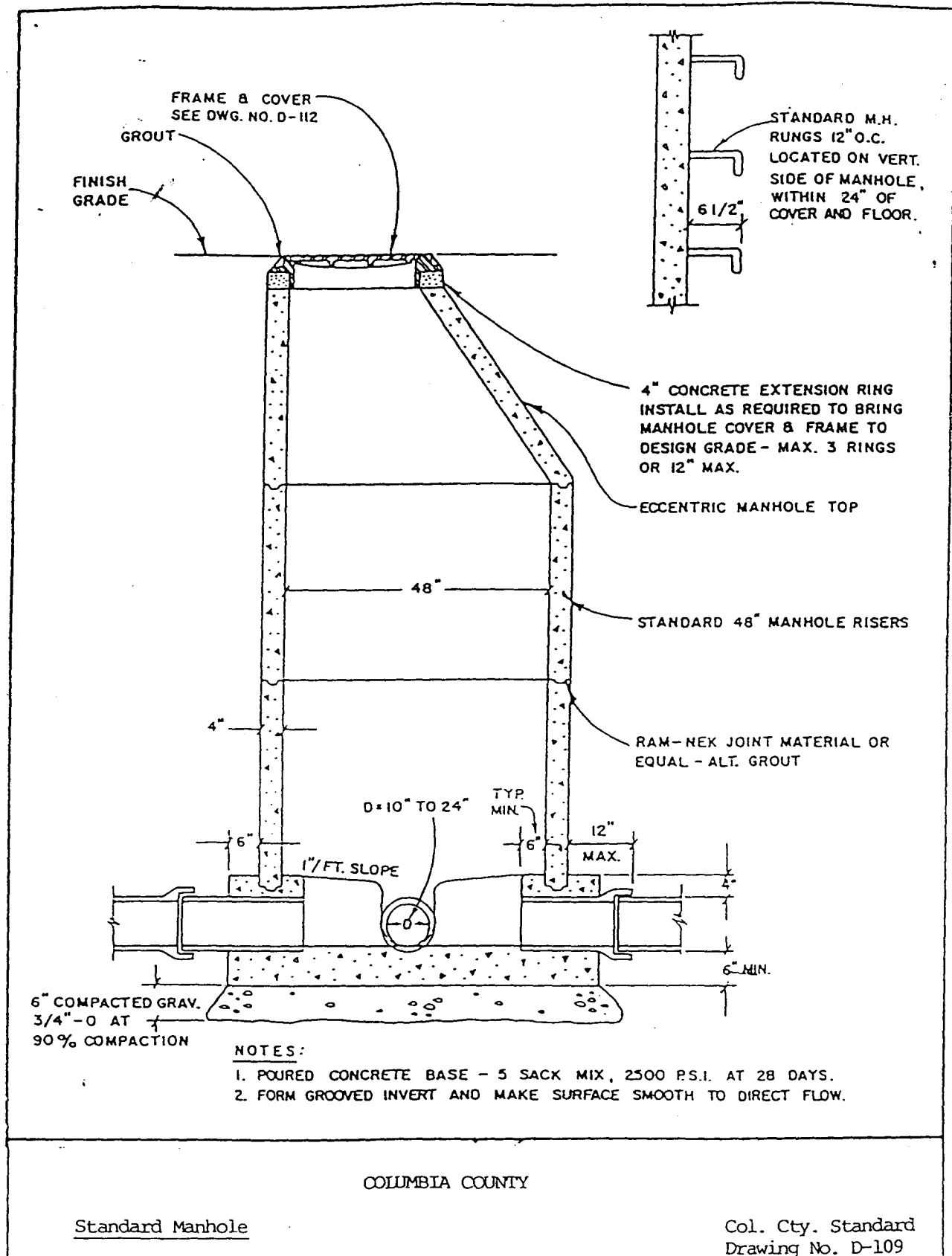


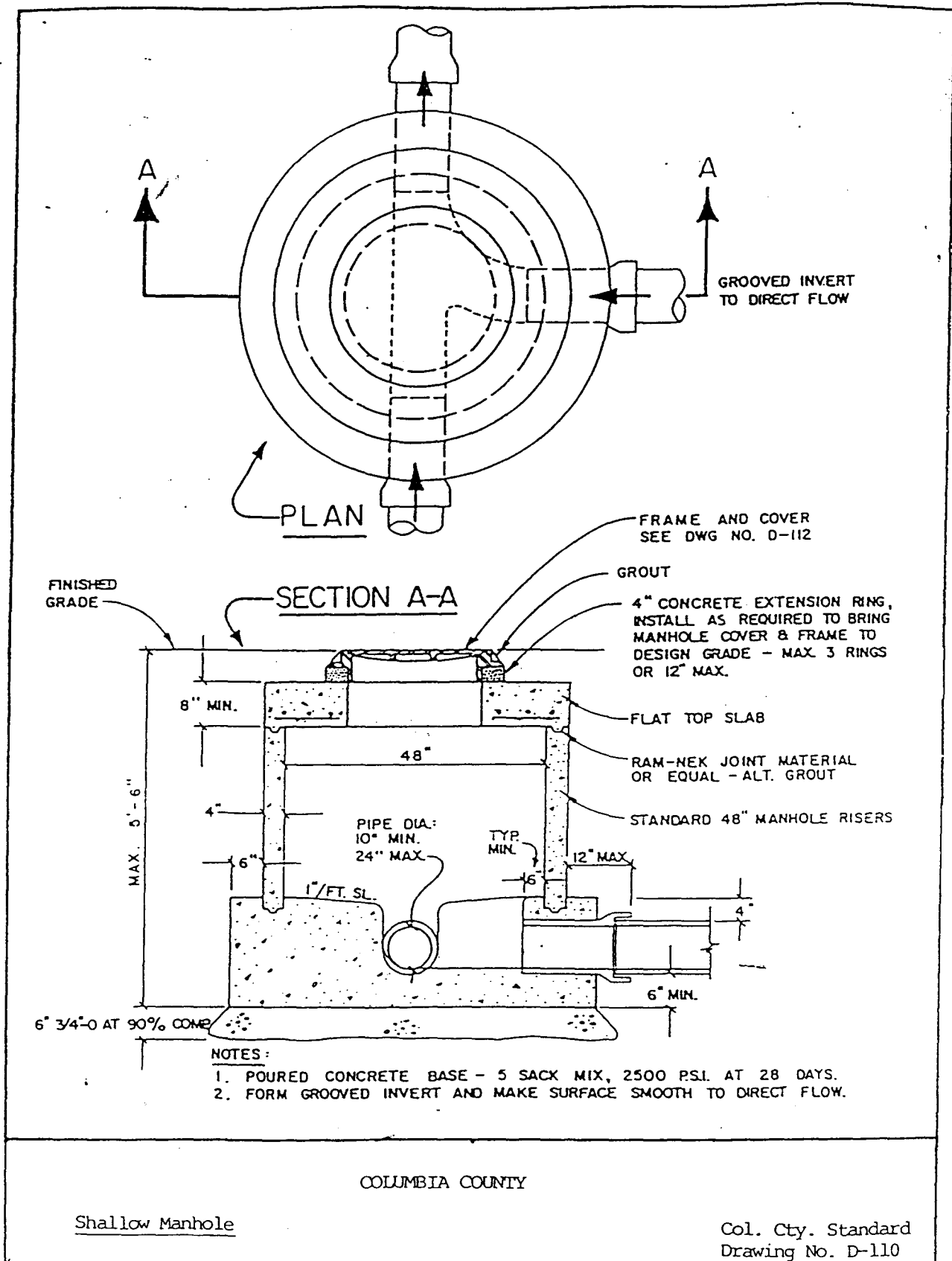
SECTION A - A

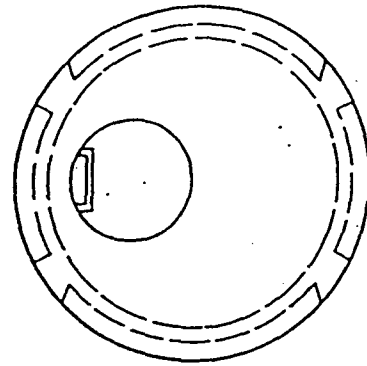
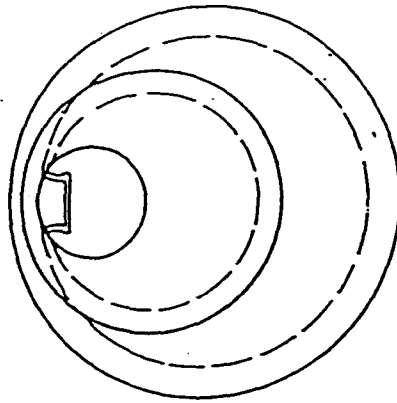
COLUMBIA COUNTY

Grate Area Drain, Type II

Col. Cty. Standard
Drawing No. D-108

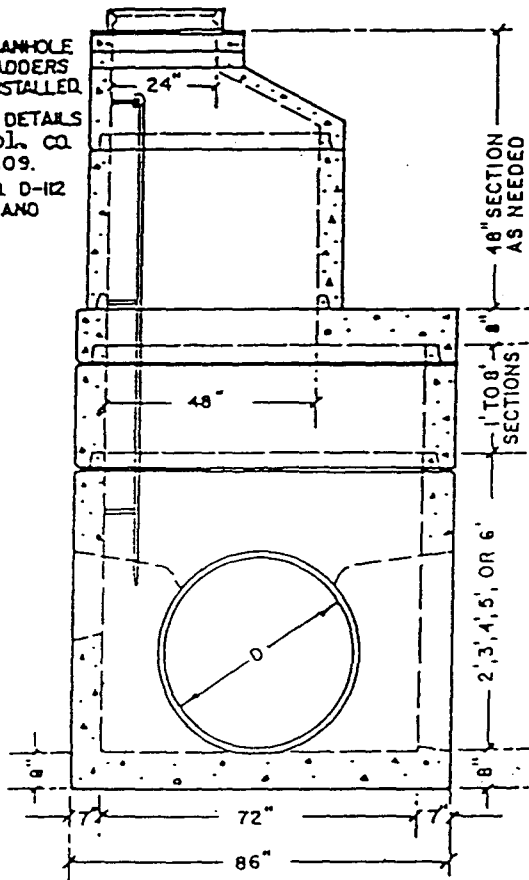






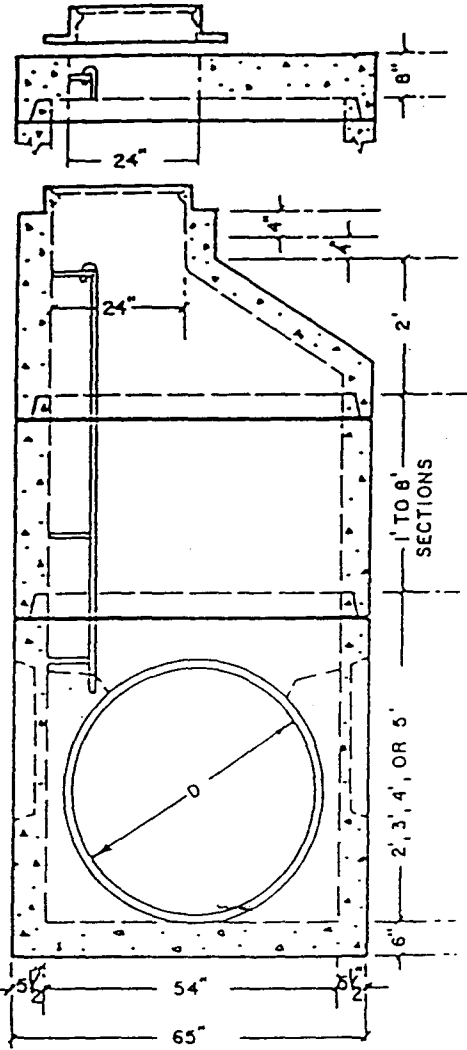
NOTES:

1. STANDARD MANHOLE STEPS OR LADDERS SHALL BE INSTALLED.
2. FOR OTHER DETAILS REFER TO COL. CO. DWG. NO. D-109.
3. SEE DWG. NO. D-112 FOR FRAME AND COVER.



72" MANHOLE

FOR 42" DIAMETER OR SMALLER PIPE



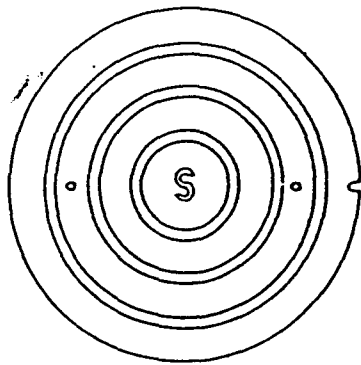
54" MANHOLE

FOR 36" DIAMETER OR SMALLER PIPE

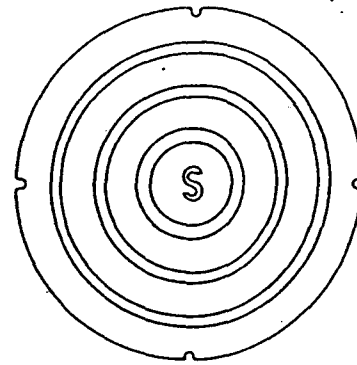
COLUMBIA COUNTY

Special Oversize Manhole

Col. Cty. Standard
Drawing No. D-111

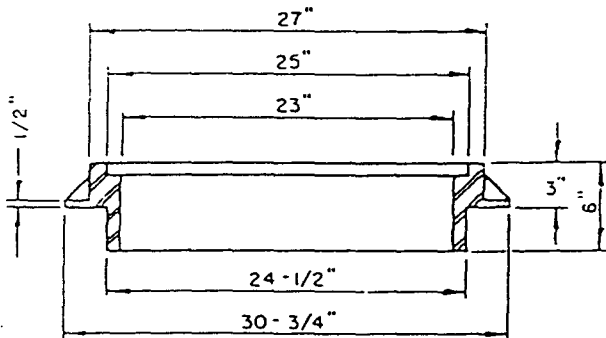
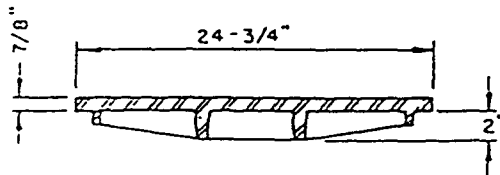


STANDARD COVER
PLAN VIEW

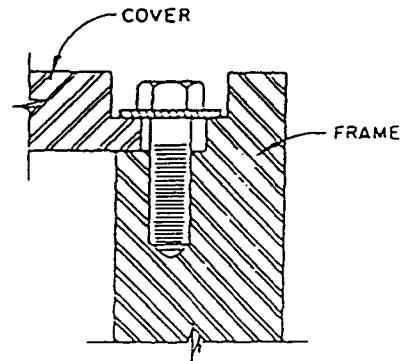


WATERTIGHT COVER
PLAN VIEW

NOTE: LID CENTER MARKING SHALL BE "W" IF USED FOR WATER



FRAME & COVER
SECTION



CAPSCREW
4 REQ'D - 1/2" x 1-1/2"
CADMIUM PL.
HEX HEAD

WATERTIGHT
FRAME & COVER DETAIL

COLUMBIA COUNTY

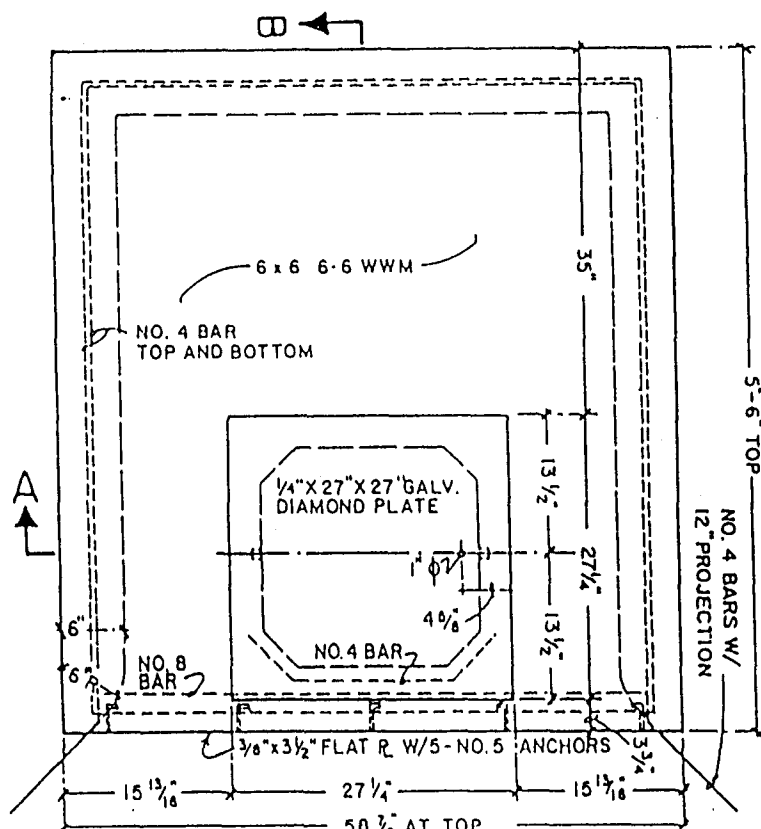
Manhole Frame & Cover

Col. Cty. Standard
Drawing No. D-112

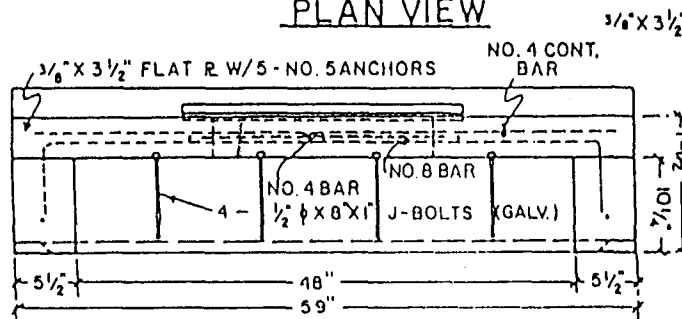
Gutter Inlet - 4A

COLUMBIA COUNTY

Col. Cty. Standard
Drawing No. D-113

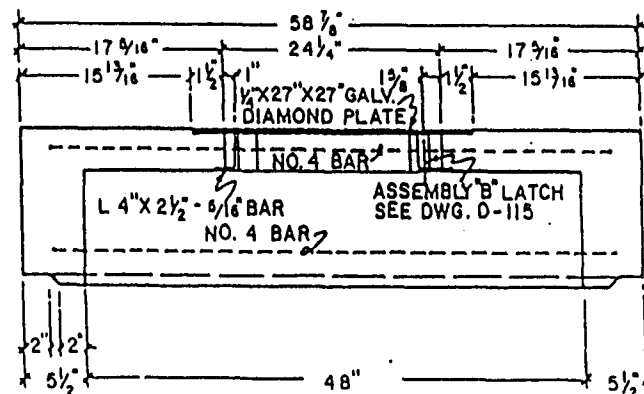


PLAN VIEW

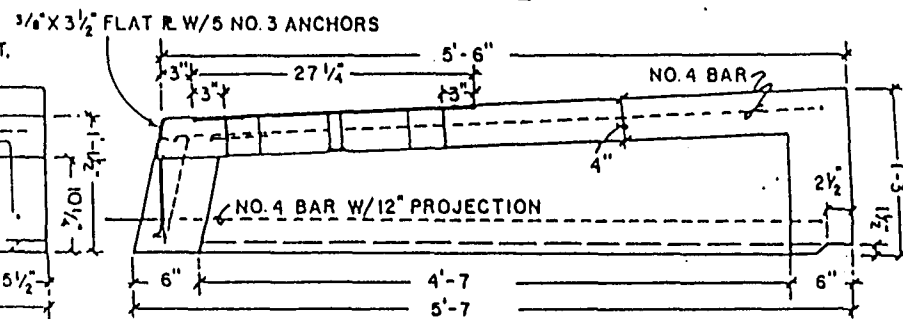


FRONT ELEVATION

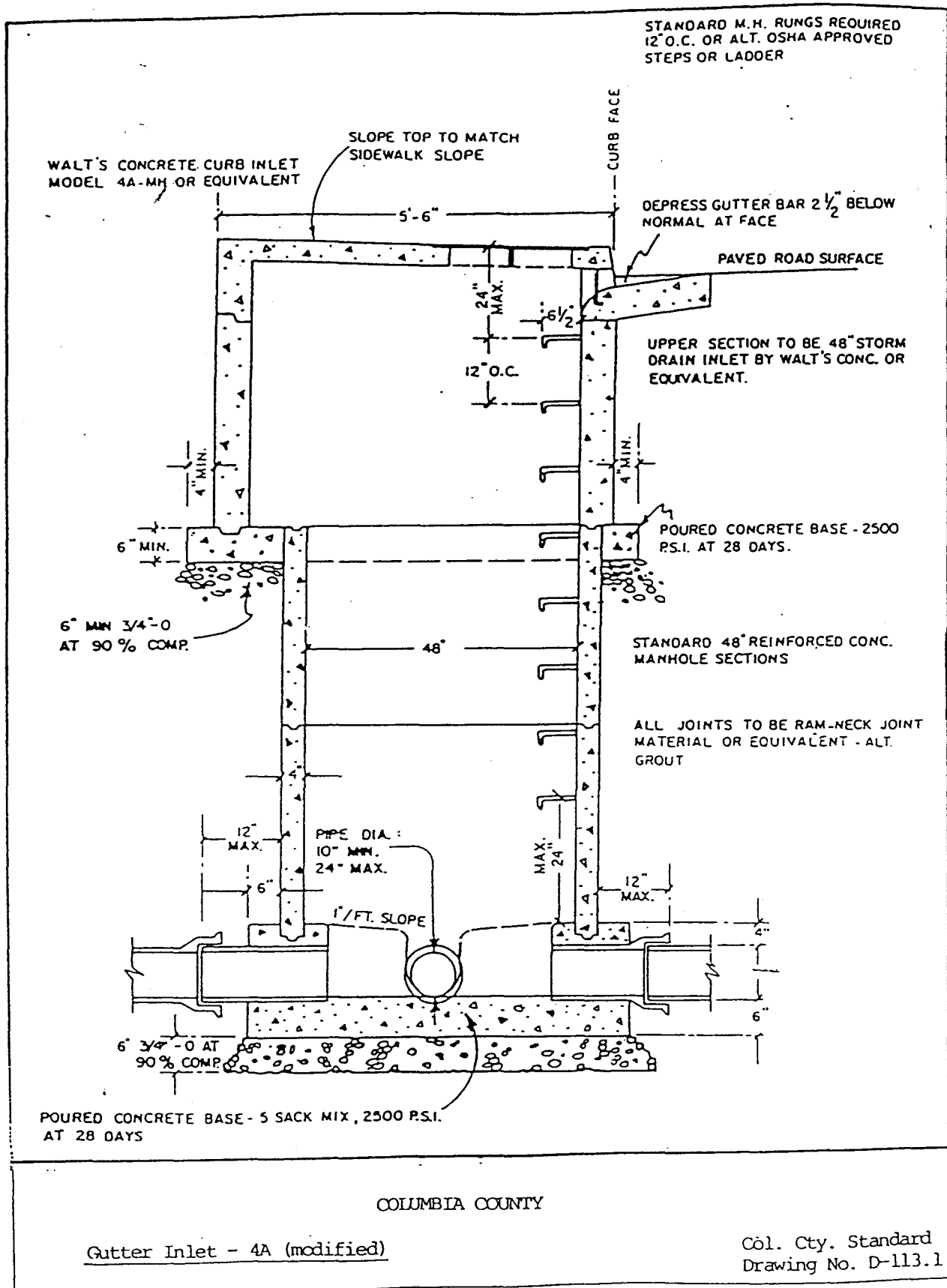
NOTE: ALL CONC. MIN. 3500 P.S.I. AT 28 DAY TEST



SECTION - A



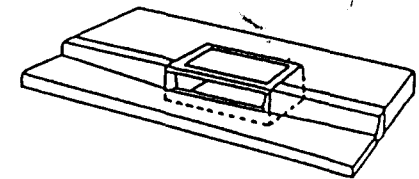
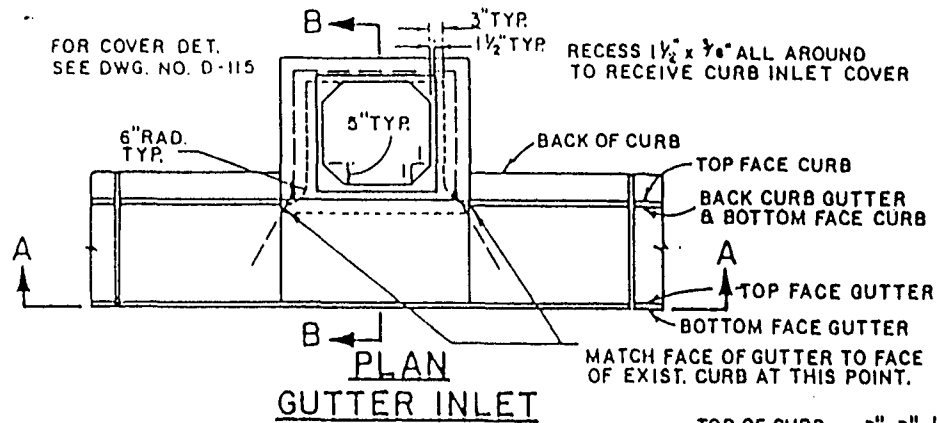
SECTION - B



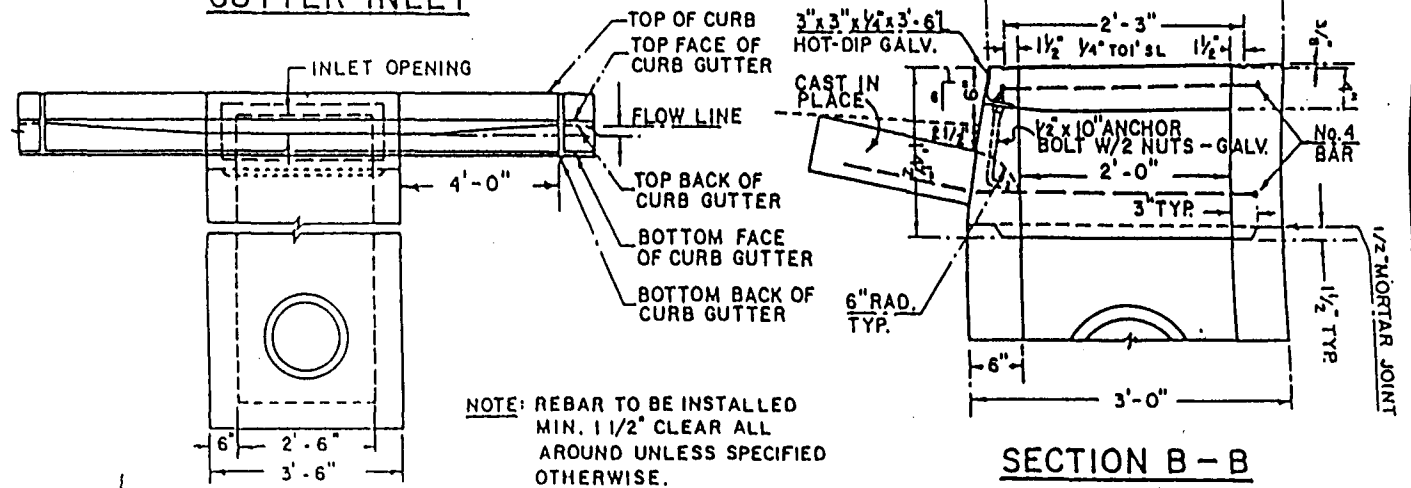
Gutter Inlet - 2-1/2A

COLUMBIA COUNTY

Col. Cty. Standard
Drawing No. D-114



ISOMETRIC VIEW



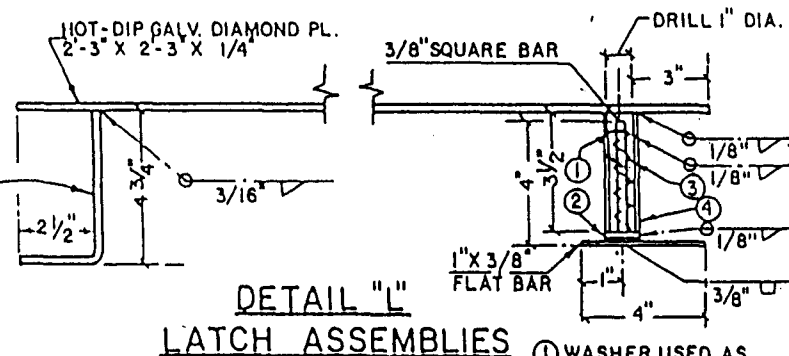
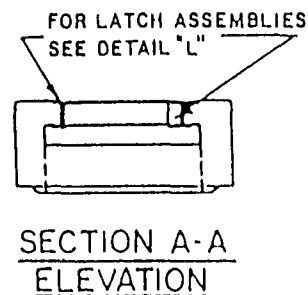
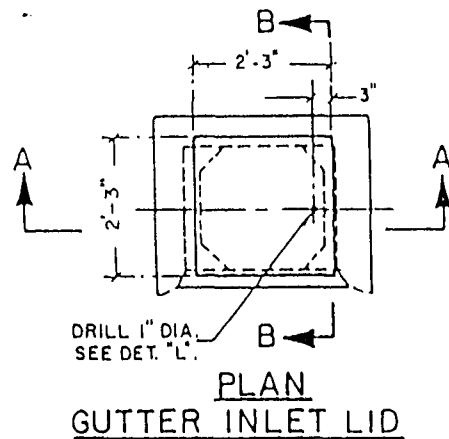
ELEVATION

A-A

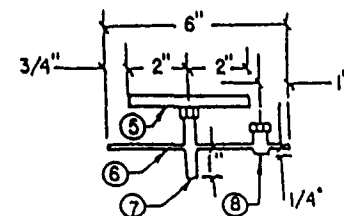
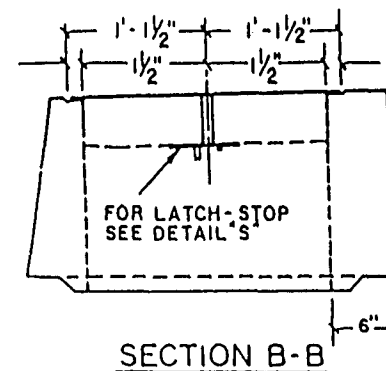
Gutter Inlet Cover

COLUMBIA COUNTY

Col. Cty. Standard
Drawing No. D-115



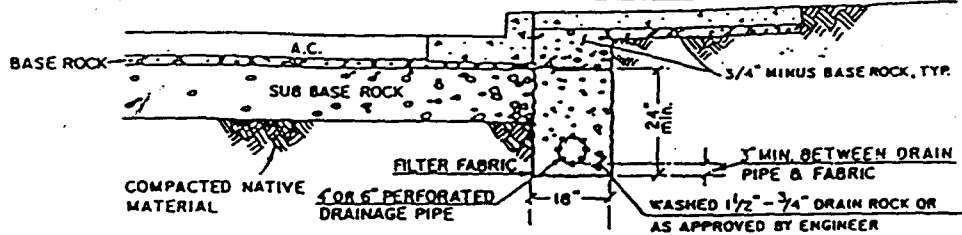
- ① WASHER USED AS SPRING STOP. WELD WASHER TO 3/8" SQ. BAR, 3/8" FROM END.
- ② 1/4" DIA. WASHER USED AS TUBE PLUG. WELD TO PIPE.
- ③ 50 LB. COMP. SPRING
- ④ 1/4" I.D. TUBING



- ⑤ 3/8" DIA. ROD, WELD TO BOLT.
- ⑥ 1" FLAT BAR, PLACE FLUSH W/ BOTTOM EDGE OF CONCRETE.
- ⑦ 3/8" X 2" HEX. HEAD BOLT, WELD TO Q OF FLAT BAR.
- ⑧ 3/8" X 3/4" HEX. HEAD BOLT, WELD TO Q OF FLAT BAR.

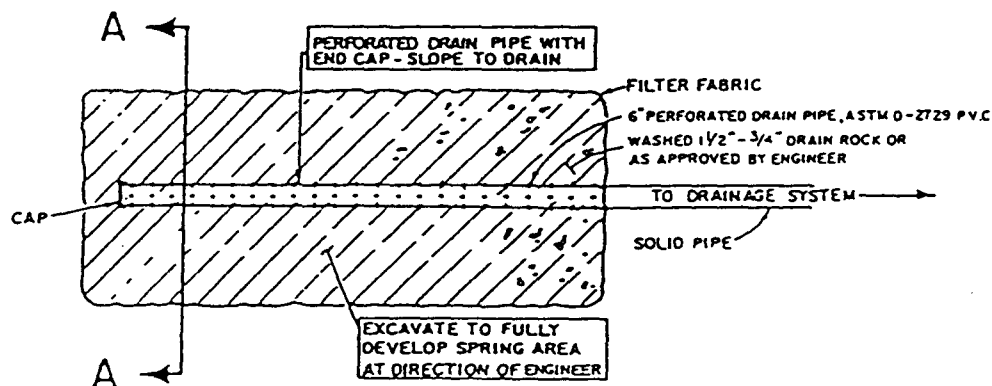
NOTE: ALL FABRICATED METAL PARTS
SHALL BE HOT-DIPPED GALVANIZED
AFTER FABRICATION.

- NOTES: 1.) PROVIDE DIRECT DRAINAGE CONTACT BETWEEN BASE ROCK, SUB BASE ROCK & SUBGRADE DRAIN.
 2.) LOCATE SUBGRADE DRAIN ON UPHILL SIDE OF ROAD OR AS DIRECTED BY ENGINEER
 3.) SHOW PROPOSED LOCATION ON PLANS
 4.) USE ASTM D-2729 PERFORATED P.V.C.

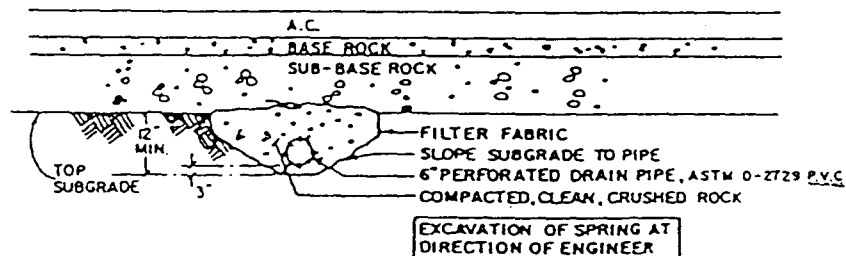


TYPICAL SUBGRADE DRAIN

SPRING CATCHMENT DETAIL



PLAN

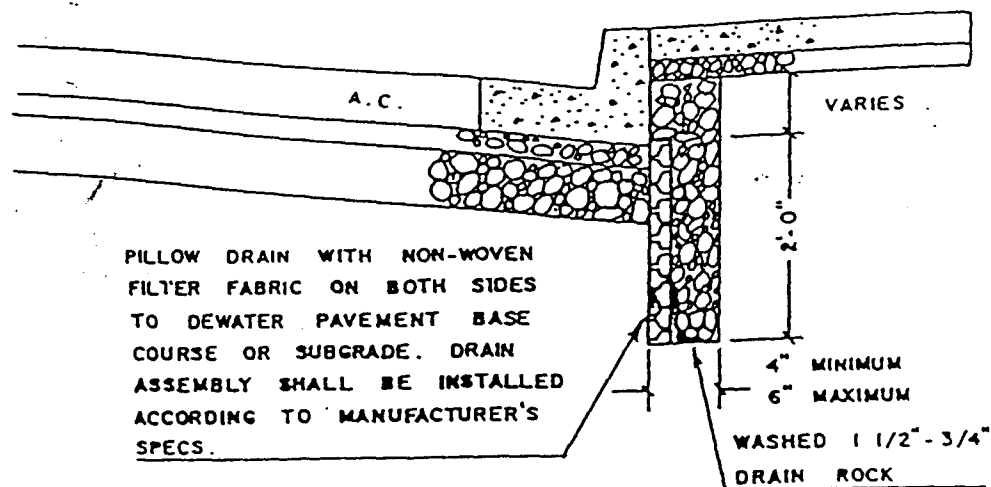


SECTION A-A

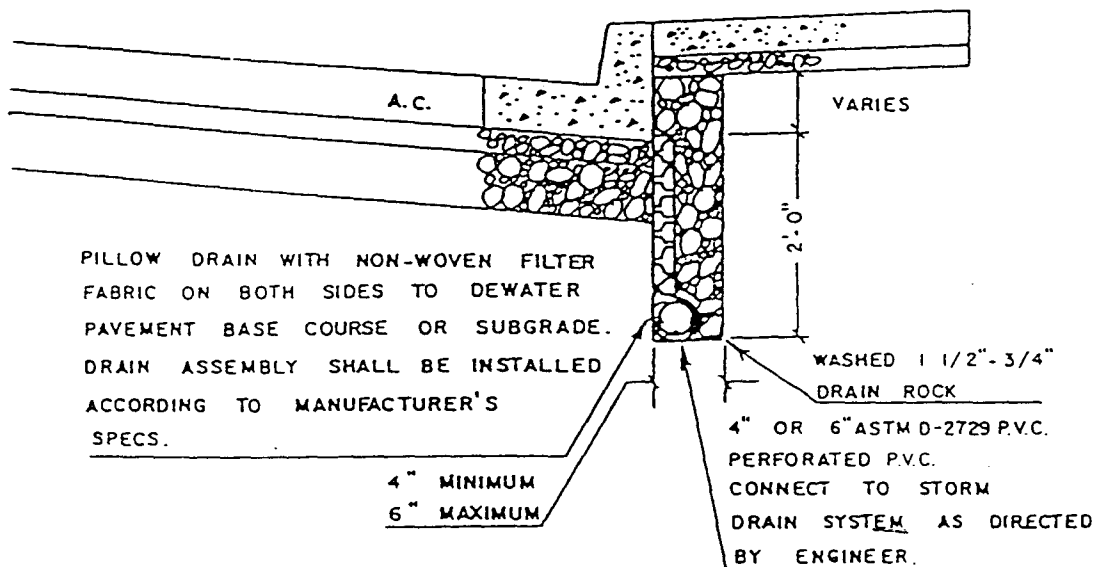
COLUMBIA COUNTY

Subgrade & Spring Catchment Drain

Col. Cty. Standard
 Drawing No. D-116



WITHOUT DRAIN PIPE

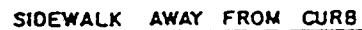


WITH DRAIN PIPE

COLUMBIA COUNTY

Atlemate Subgrade Drain

Col. Cty. Standard
Drawing D-117

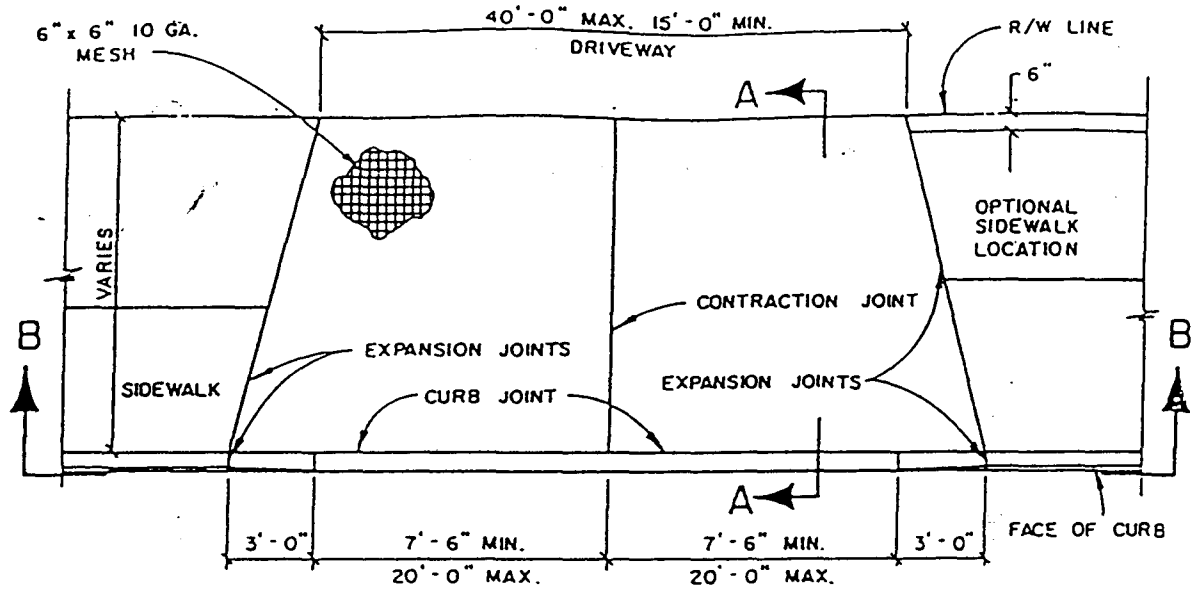


USE EXISTING EXPANSION
JOINT OR SAWCUT AND
PLACE COLD JOINT.
SEE DWG. NO. CS-306.

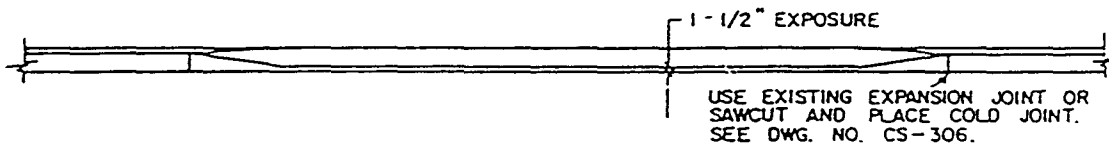


1. CONCRETE SHALL HAVE A MINIMUM BREAKING STRENGTH OF 3000 P.S.I. AFTER 28 DAYS, 6 SACK MIX.
2. CURB JOINT SHALL BE A TROWELED JOINT WITH A MINIMUM 1/2" RADIUS ALONG BACK OF CURB.
3. EXPANSION JOINTS SHALL BE 1/2" PREMOLDED ASPHALT IMPREGNATED MATERIAL OR EQUAL, EXTENDING FROM SUBGRADE TO FINISHED GRADE.
4. SEE DWG. NO. CS-300 AND NO. CS-305.

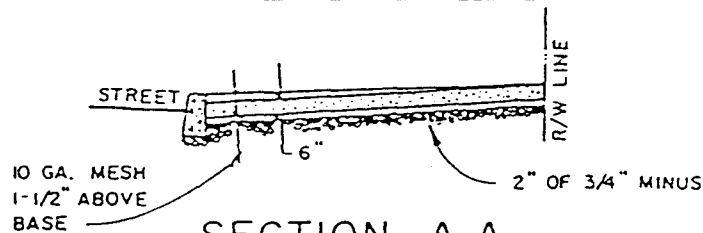
Col. Cty. Standard
Drawing No. D-1-200



PLAN



ELEVATION B-B



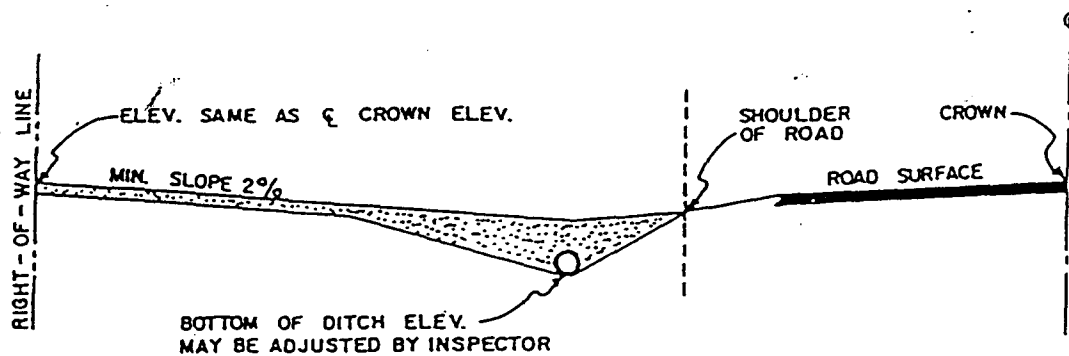
SECTION A-A

1. CONCRETE SHALL HAVE A MINIMUM BREAKING STRENGTH OF 3000 P.S.I. AFTER 28 DAYS, 6 SACK MIX.
2. CURB JOINT SHALL BE A TROWELED JOINT WITH A MINIMUM 1/2" RADIUS ALONG BACK OF CURB.
3. EXPANSION JOINTS SHALL BE 1/2" PREMOLDED ASPHALT IMPREGNATED MATERIAL OR EQUAL, EXTENDING FROM SUBGRADE TO FINISHED GRADE.
4. SEE DWG. NO. CS-300 AND NO. CS-305.

COLUMBIA COUNTY

Commercial Driveway

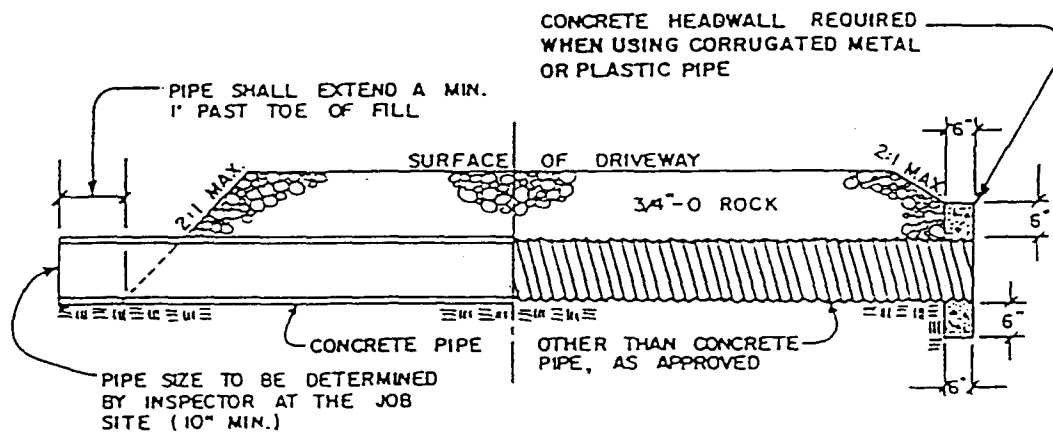
Col. Cty. Standard
Drawing No. D7-201



NOTES:

1. SEE DWG. NO. 205 FOR ALTERNATIVE
2. IF AC DRIVEWAY IS TO BE CONSTRUCTED, USE 2" OF CLASS "C" MIX ON APPROVED BASE

PROFILE



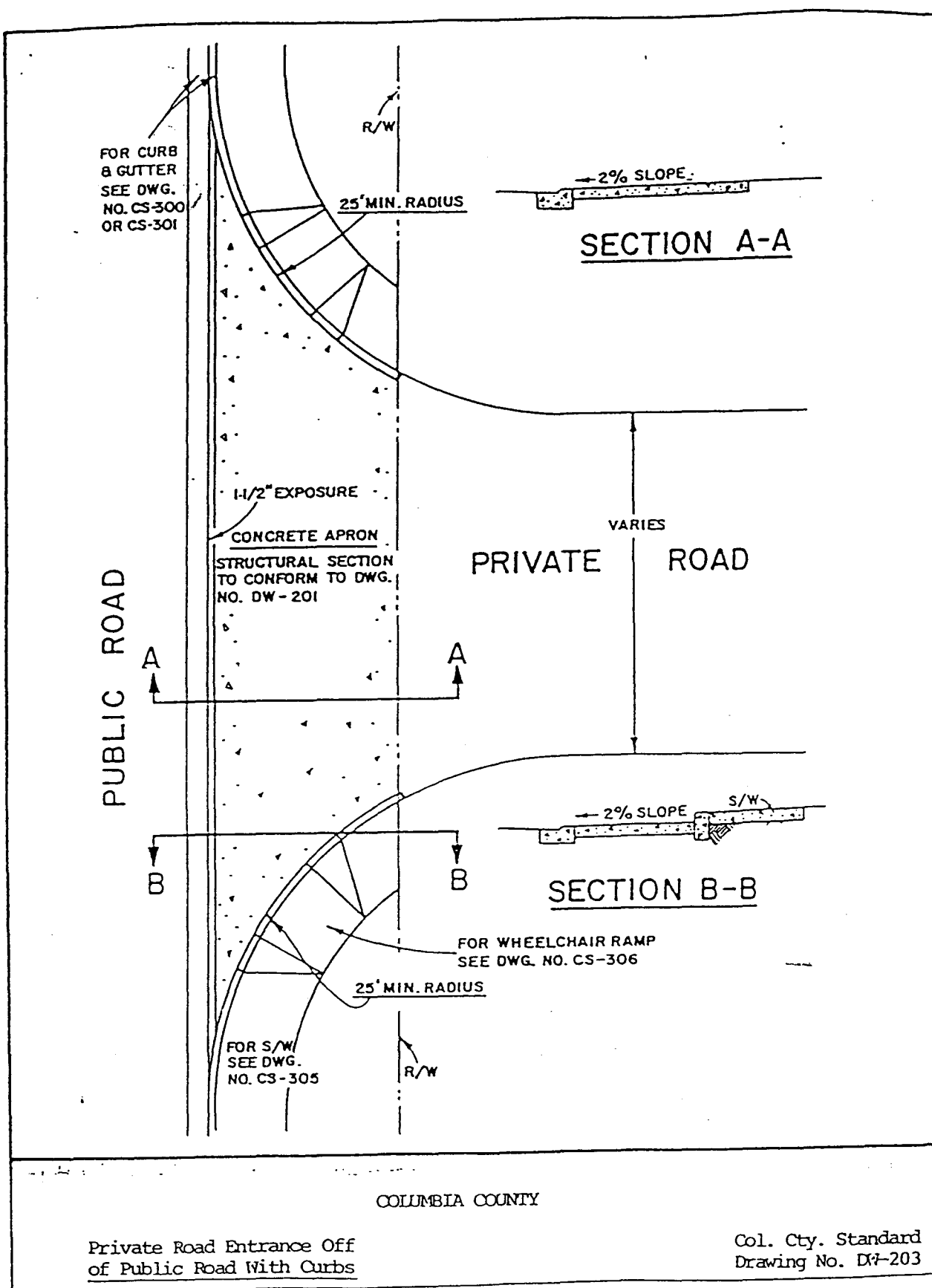
PIPE TO BE LAYED AT EXISTING GRADE OF DITCH - NO SLUMPS

CROSS-SECTION

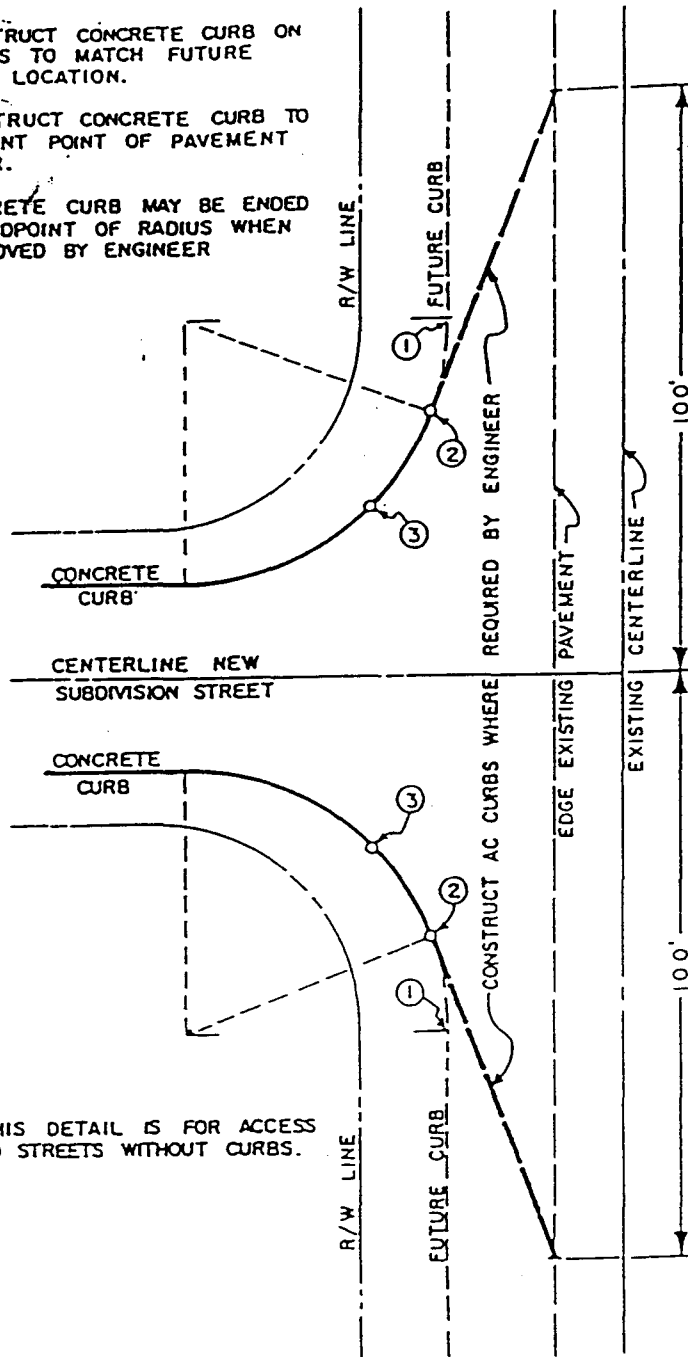
COLUMBIA COUNTY

Driveway for Streets
Without Curbs

Col. Cty. Standard
Drawing No. DV-202



- ① CONSTRUCT CONCRETE CURB ON RADIUS TO MATCH FUTURE CURB LOCATION.
- ② CONSTRUCT CONCRETE CURB TO TANGENT POINT OF PAVEMENT TAPER.
- ③ CONCRETE CURB MAY BE ENDED AT MIDPOINT OF RADIUS WHEN APPROVED BY ENGINEER

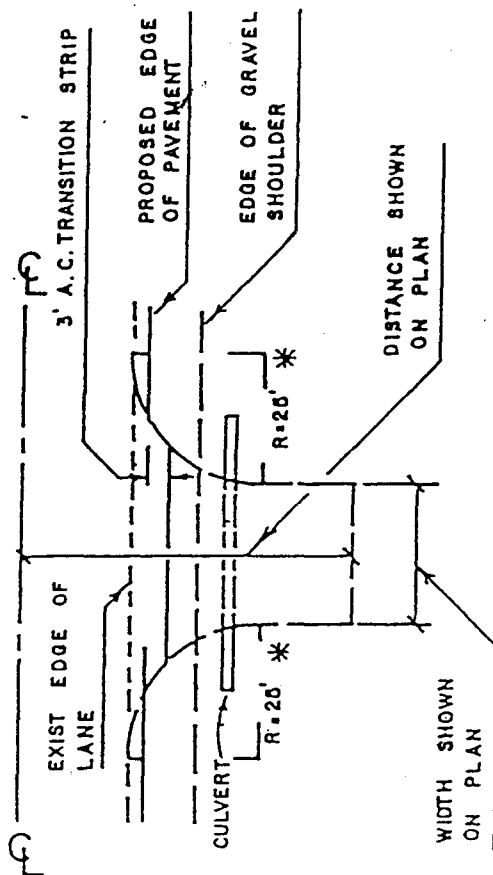


NOTE : THIS DETAIL IS FOR ACCESS TO STREETS WITHOUT CURBS.

COLUMBIA COUNTY

Temporary Entrance

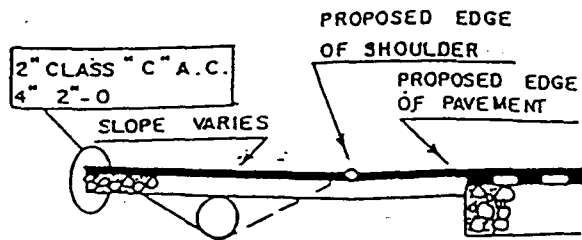
Col. Cty. Standard
Drawing No. D-7-204



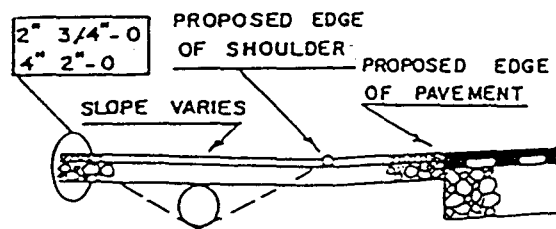
TYPICAL PLAN
A.C. OR GRAVEL DRIVEWAY

*UNLESS OTHERWISE NOTED

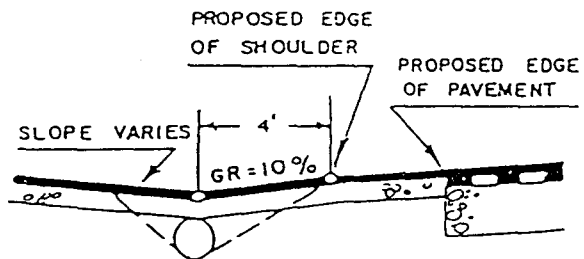
SEE DWG. NO. DW-202



TYPICAL SECTION
A.C. DRIVEWAY



TYPICAL SECTION
GRAVEL DRIVEWAY

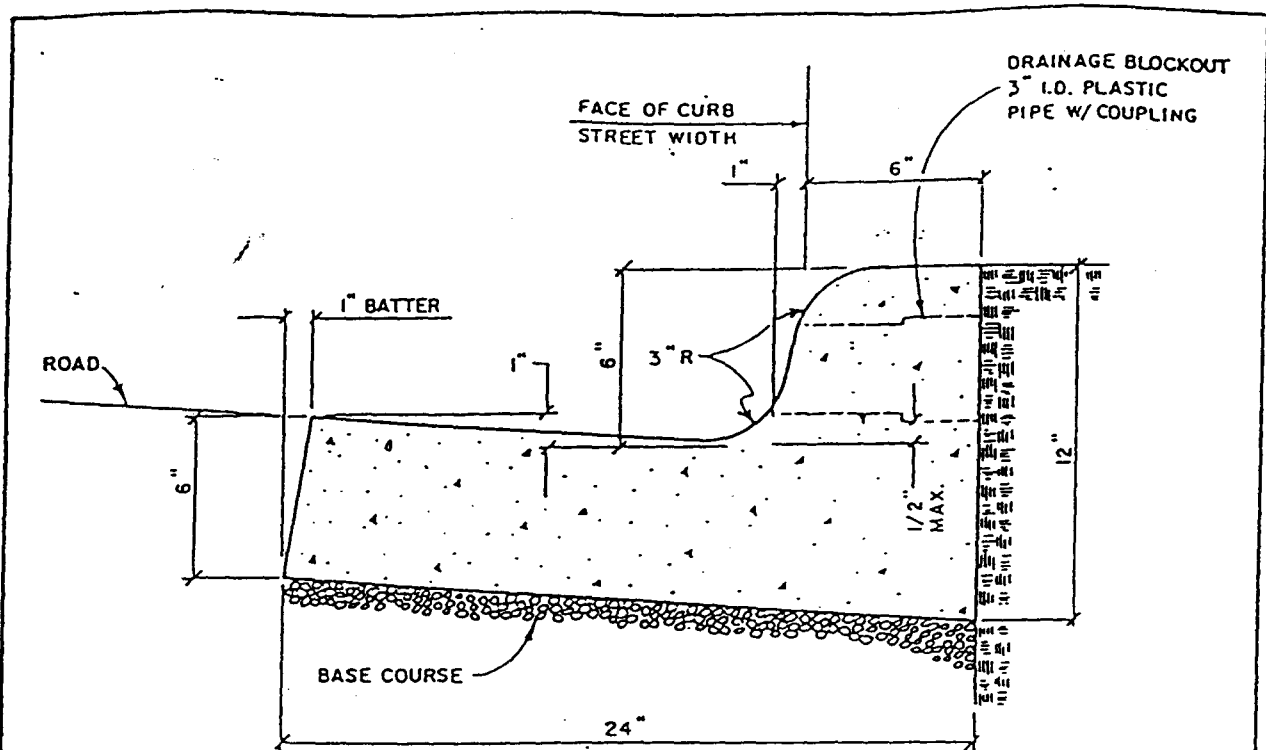


TYPICAL SECTION
ALTERNATE

Columbia County

Driveway Details for
Non-Curbed Areas

Col. Cty. Standard
Drawing No. DX-205

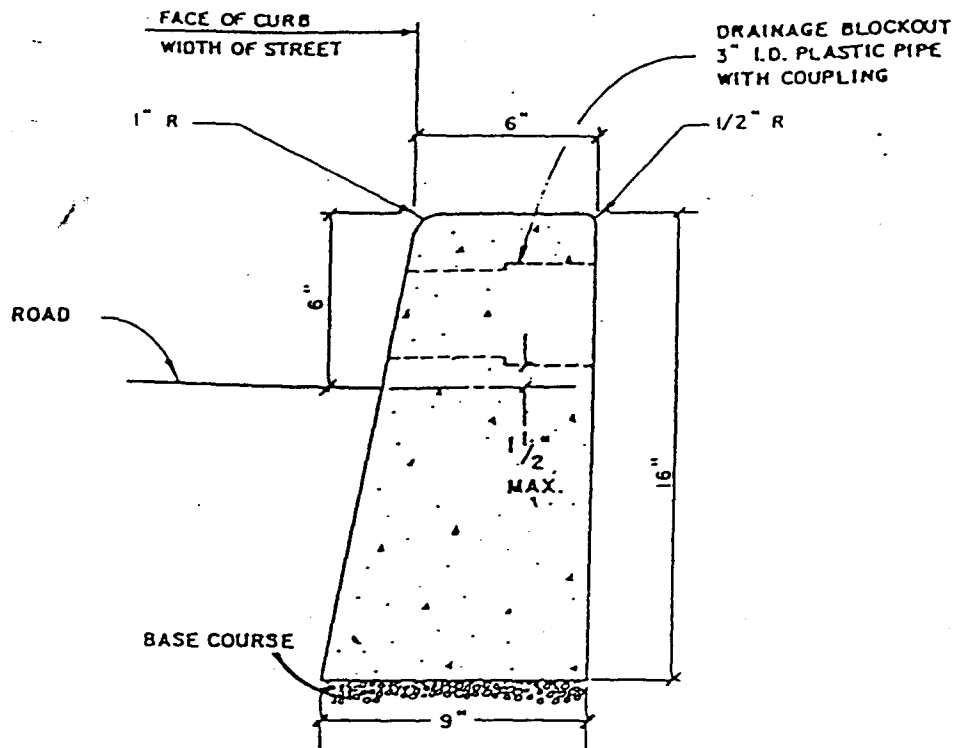


1. FOR USE ALONG MEDIANS, GUTTERS MAY BE REDUCED WITH PRIOR APPROVAL FROM THE ROAD ENGINEER.
2. CONCRETE TO HAVE A BREAKING STRENGTH OF 3000 P.S.I. AFTER 28 DAYS.
3. EXPANSION JOINTS
 - A. TO BE PROVIDED:
 - 1) AT EACH POINT OF TANGENCY OF THE CURB.
 - 2) AT EACH COLD JOINT.
 - 3) AT EACH SIDE OF INLET STRUCTURES.
 - 4) AT EACH END OF DRIVEWAYS.
 - 5) AT LOCATIONS NECESSARY TO LIMIT SPACING TO 45 FEET.
 - B. MATERIAL TO BE PRE-MOLDED, ASPHALT IMPREGNATED, NON EXTRUDING, WITH A THICKNESS OF 1/2 INCH.
4. CONTRACTION JOINTS
 - A. SPACING TO BE NOT MORE THAN 15 FEET.
 - B. THE DEPTH OF THE JOINT SHALL BE AT LEAST 1 1/2 INCHES.
5. BASE ROCK - 2"-0 OR 3/4"-0, 95 % COMPACTION. BASE ROCK SHALL BE TO SUBGRADE OF STREET STRUCTURE OR 4" IN DEPTH, WHICHEVER IS GREATER.
6. DRAINAGE BLOCKOUT - 3" DIAMETER PLASTIC PIPE
 - A. I.D. PLASTIC PIPE WITH COUPLING
 - B. DRAINAGE ACCESS THROUGH EXISTING CURBS SHALL BE CORE DRILLED OR CURB SAW CUT VERTICALLY 18" EACH SIDE OF DRAIN AND REPOURED TO FULL DEPTH OF CURB.

COLUMBIA COUNTY

Curb & Gutter Emergency Mountable

Col. Cty. Standard
Drawing No. CS-300



1. FOR DESIGN SPEEDS GREATER THAN 40 MPH THE EMERGENCY MOUNTABLE CURB CS-300 SHALL BE USED.
2. CONCRETE TO HAVE A BREAKING STRENGTH OF 3000 P.S.I. AFTER 28 DAYS.

EXPANSION JOINTS.

A. TO BE PROVIDED :

- 1) AT EACH POINT OF TANGENCY OF THE CURB .
- 2) AT EACH COLD JOINT .
- 3) AT EACH SIDE OF INLET STRUCTURES.
- 4) AT EACH END OF DRIVEWAYS .
- 5) AT LOCATIONS NECESSARY TO LIMIT SPACING TO 45 FEET .

B. MATERIAL TO BE PRE - MOLDED, ASPHALT IMPREGNATED, NON-EXTRUDING, WITH A THICKNESS OF 1/2 INCH.

3. CONTRACTION JOINTS .

A. SPACING TO BE NOT MORE THAN 15 FEET .

B. THE DEPTH OF THE JOINT SHALL BE AT LEAST 1 1/2" INCHES .

4. BASE ROCK - 2"-0 OR 3/4"-0 , 95 % COMPACTION. BASE ROCK SHALL BE TO SUBGRADE OF STREET STRUCTURE OR 4" IN DEPTH, WHICHEVER IS GREATER .

5. DRAINAGE BLOCKOUT - 3" DIA. PLASTIC PIPE .

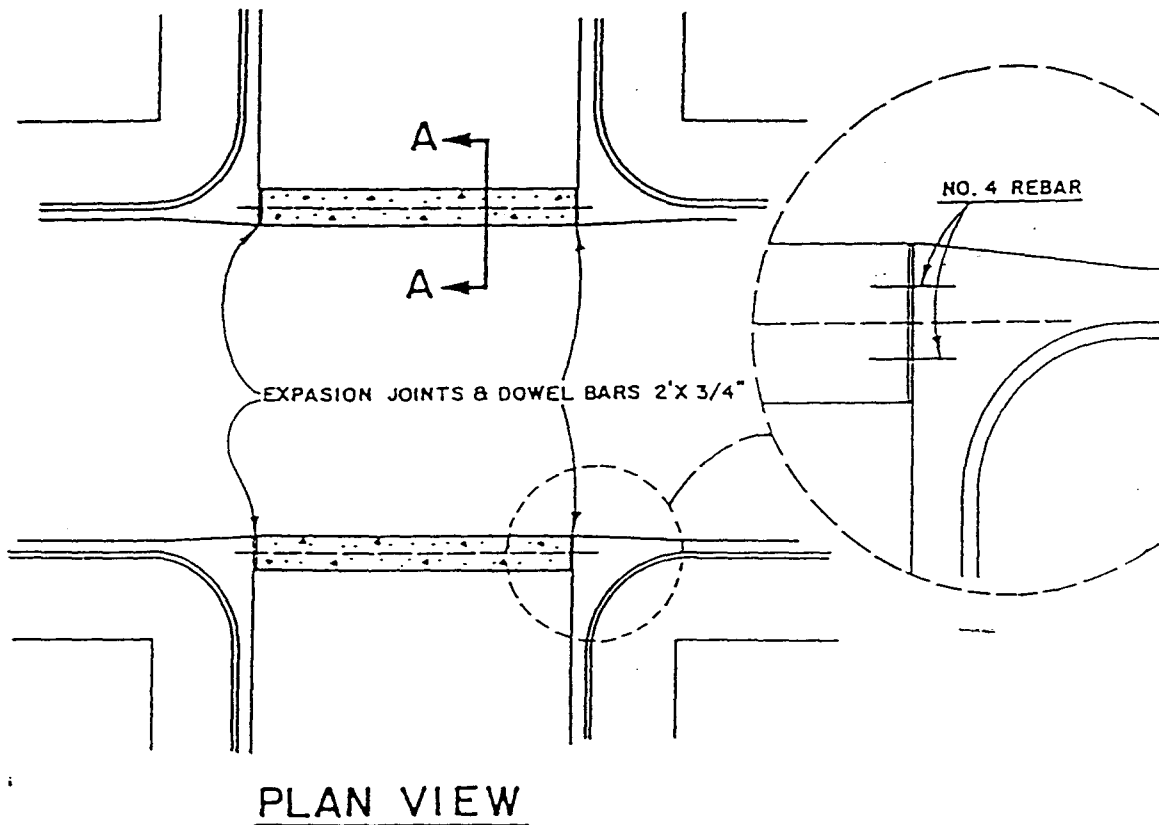
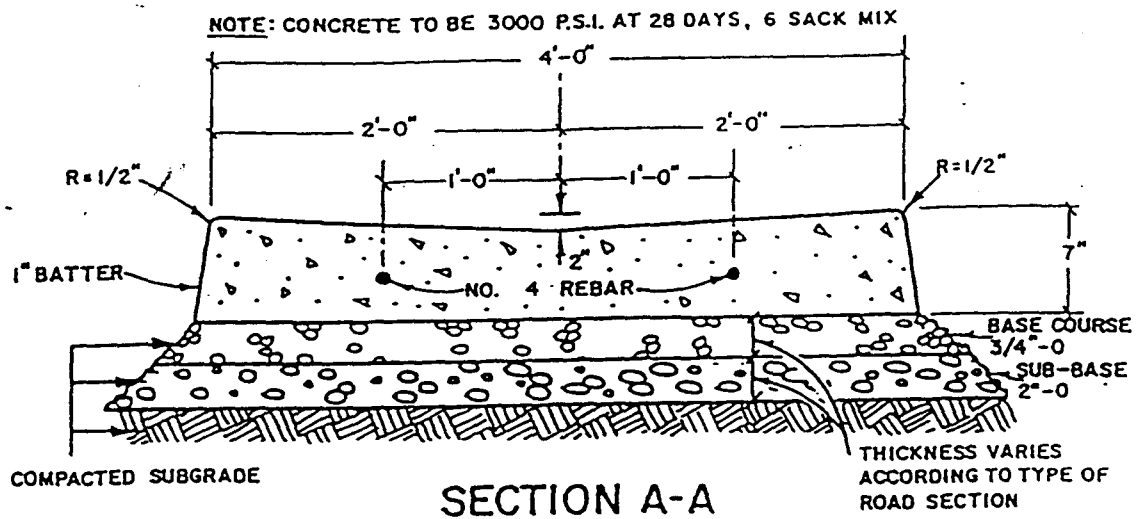
A. I.D. PLASTIC PIPE WITH COUPLING.

B. DRAINAGE ACCESS THROUGH EXISTING CURBS SHALL BE CORE DRILLED OR CURB SAW CUT VERTICALLY 18" EACH SIDE OF DRAIN & REPOURED TO FULL DEPTH OF CURB.

COLUMBIA COUNTY

Curb Non-Mountable for
Use on Medians

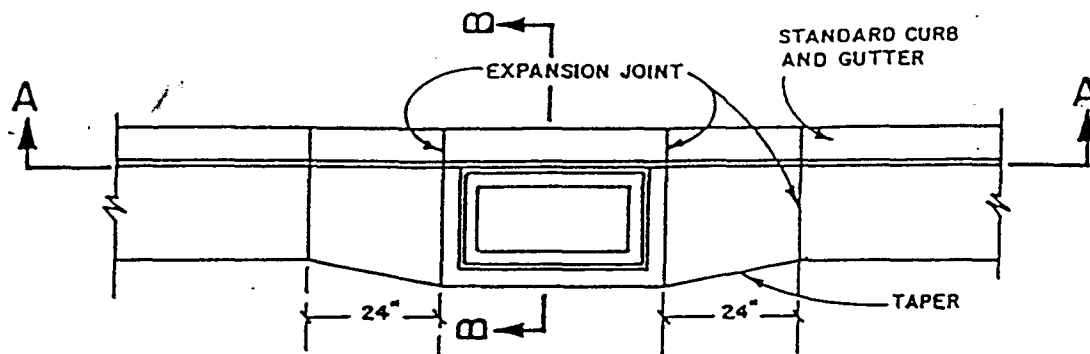
Col. Cty. Standard
Drawing No. CS-301



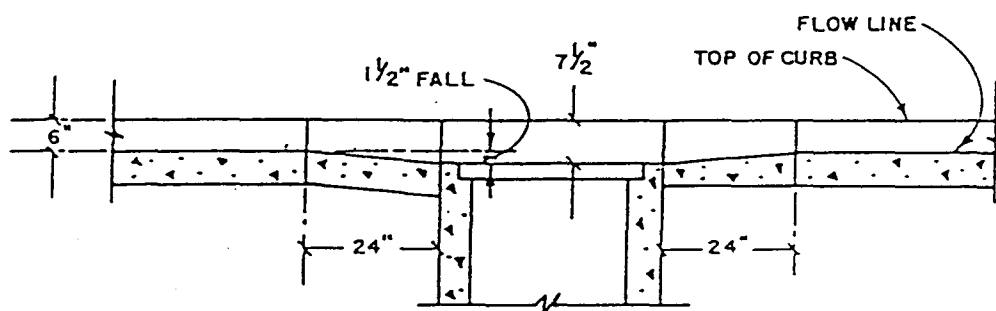
COLUMBIA COUNTY

Cross Gutter

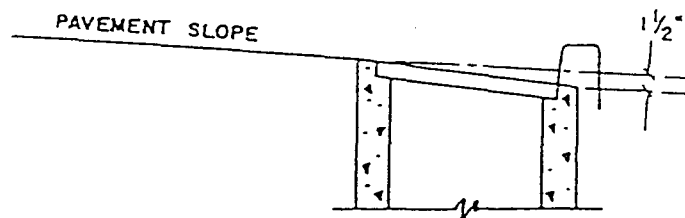
Col. Cty. Standard
Drawing No. CS-303



PLAN VIEW - STANDARD CURB & GUTTER



SECTION A - A

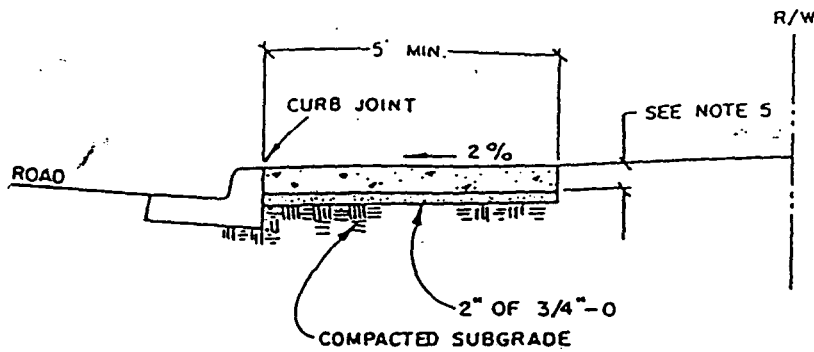


SECTION B - B

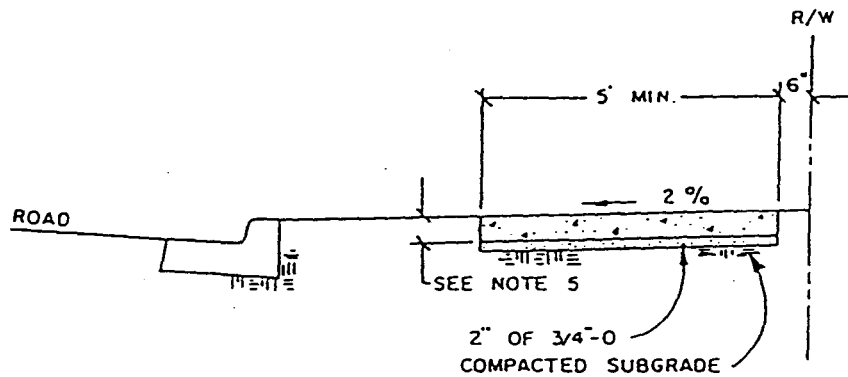
COLUMBIA COUNTY

Catch Basin - Pavement Taper

Col. Cty. Standard
Drawing No. CS-304



SIDEWALK ADJACENT TO CURB



SIDEWALK AWAY FROM CURB

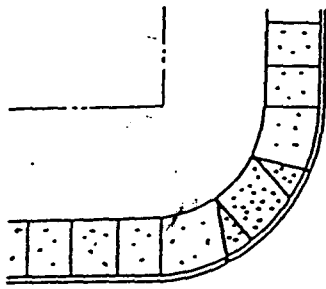
NOTES :

1. CONCRETE SHALL BE 3000 P.S.I. AT 28 DAYS , 6 SACK MIX , SLUMP RANGE OF 1 1/2" TO 3"
2. PANELS TO BE 5 FEET LONG
3. EXPANSION JOINTS TO BE PLACED AT SIDES OF DRIVEWAY APPROACHES , UTILITY VAULTS , WHEELCHAIR RAMPS , & AT SPACING NOT TO EXCEED 45 FT.
4. FOR SIDEWALKS ADJACENT TO THE CURB & POURED AT THE SAME TIME AS THE CURB, THE JOINT BETWEEN THEM SHALL BE A TROWELED JOINT WITH A MIN. 1/2" RADIUS.
5. SIDEWALK SHALL HAVE A MINIMUM THICKNESS OF 6 INCHES IF MOUNTABLE CURB IS USED OR IF SIDEWALK IS INTENDED AS PORTION OF DRIVEWAY . OTHERWISE SIDEWALK SHALL HAVE A MINIMUM THICKNESS OF 4 INCHES .
6. DRAIN BLOCKOUTS IN CURBS SHALL BE EXTENDED TO BACK OF SIDEWALK WITH 3" DIA. PLASTIC PIPE AT 2 % SLOPE . CONTRACTION JOINT TO BE PLACED OVER PIPE.

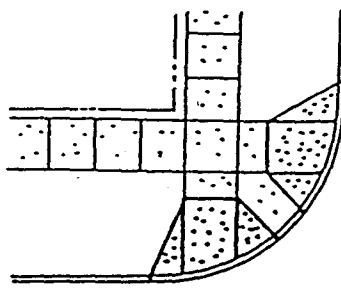
COLUMBIA COUNTY

Concrete Sidewalk

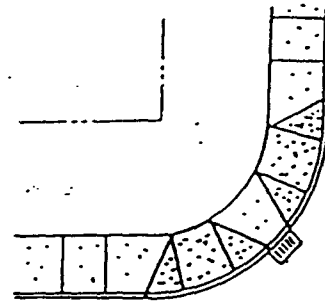
Col. Cty. Standard
Drawing No. CS-305



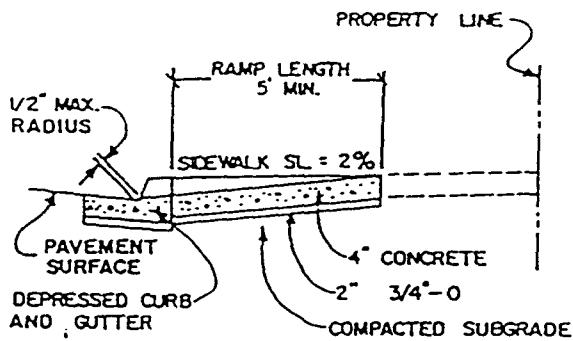
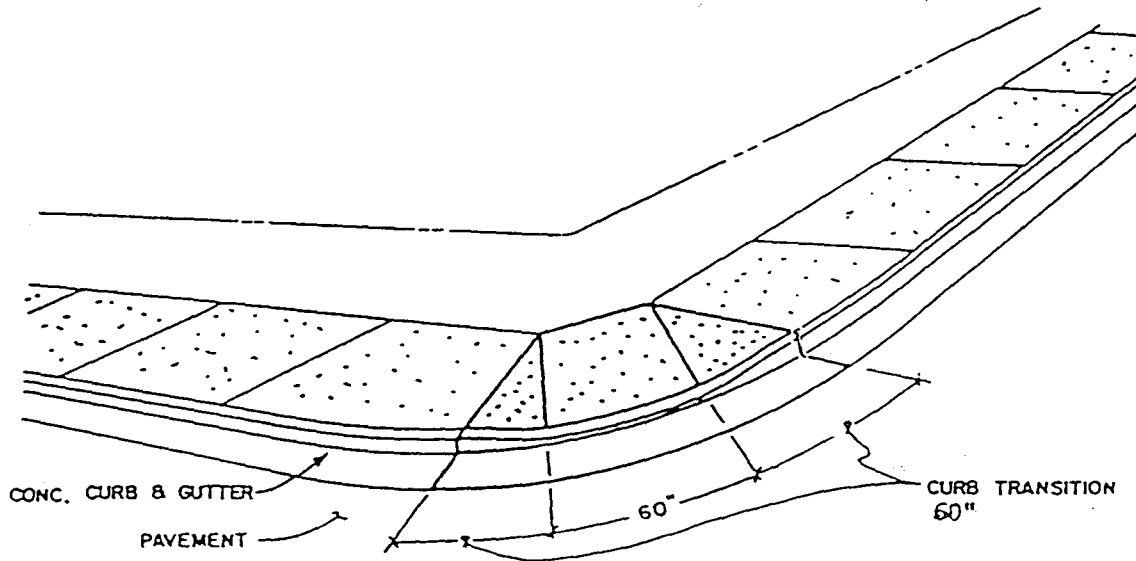
CENTER RAMP
(CURB LINE WALKS)



END RAMPS
(PROPERTY LINE WALKS)



SIDE RAMPS
(WHERE CATCH BASIN
IS WITHIN RADIUS)



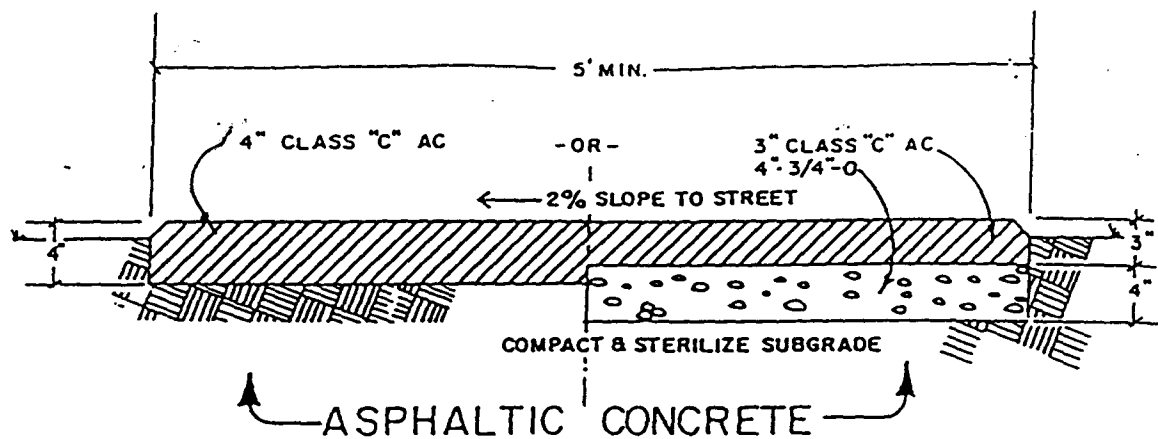
NOTES

1. FOR SIDEWALK DETAIL, SEE DWG. NO. CS-305.
2. SEE DWG. NO. CS-300 FOR CURB AND GUTTER DETAIL, OR SEE DWG. NO. CS-301 FOR CURB DETAIL.
3. RAMP WIDTH SHALL BE AS SHOWN HEREON UNLESS OTHERWISE APPROVED BY THE ENGINEER.
4. CONCRETE SHALL BE 3000 P.S.I. AT 28 DAYS, 6 SACK MIX, SLUMP RANGE 1-1/2" TO 3".
5. PROVIDE EXPANSION JOINT ON EACH SIDE OF RAMP.

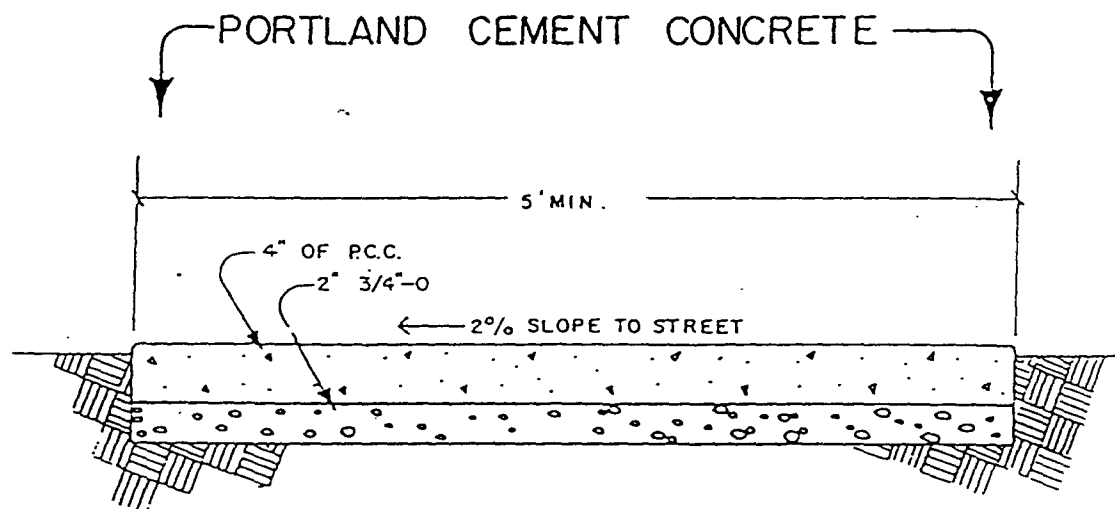
COLUMBIA COUNTY

Sidewalk Ramp

Col. Cty. Standard
Drawing No. CS-306



OR



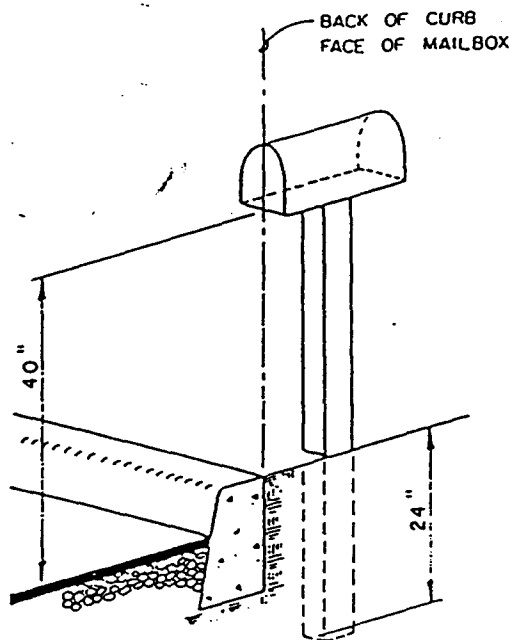
NOTES:

1. CONCRETE SHALL BE 3000 P.S.I. AT 28 DAYS, SIX SAC MIX, SLUMP RANGE OF 1 1/2" - 3"
2. SIDEWALK PANELS SHALL BE SQUARE, 3/4" DEEP SCRIBES AT JOINTS 5 FEET APART, EDGED ON 4 SIDES & HAVE A LIGHT BROOM FINISH.

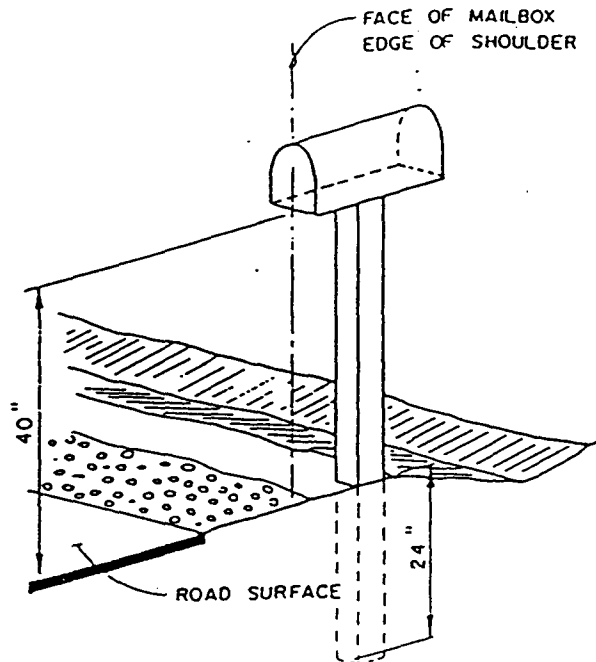
COLUMBIA COUNTY

Pedestrian Path or Bikeway

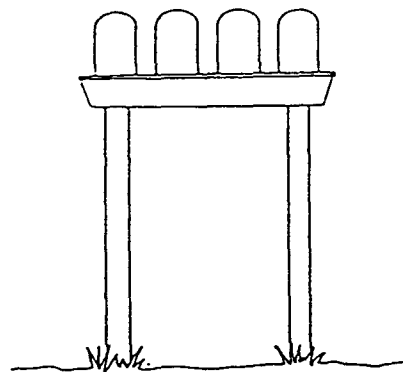
Col. Cty. Standard
Drawing No. CS-307



STREETS WITH CURBS



STREETS WITHOUT CURBS



GROUP BOXES

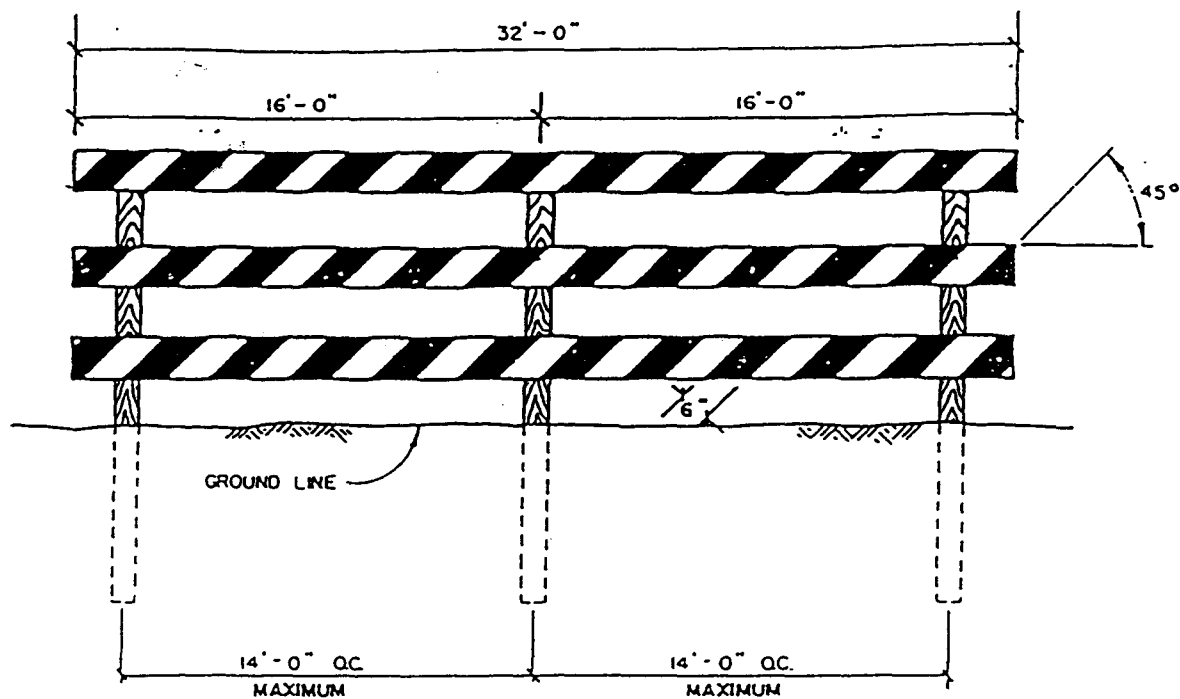
NOTE :

1. BOX NUMBER AND NAMES SHALL BE NOT LESS THAN ONE INCH HIGH.
2. POSTS MUST BE NEAT AND OF ADEQUATE STRENGTH AND SIZE.
3. ALL MAILBOX LOCATIONS AND CLUSTERS MUST CONFORM TO REQUIREMENTS OF THE UNITED STATES POSTAL SERVICE

COLUMBIA COUNTY

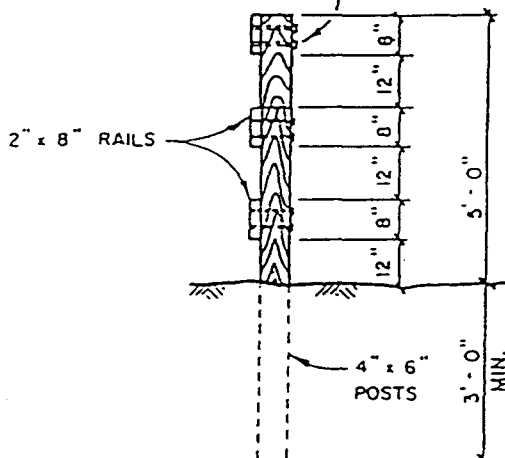
Mailbox Location

Col. Cty. Standard
Drawing No. M-400



ELEVATION

5/8" GALVANIZED SQ. HD.
MACHINE BOLTS / WASHERS



END VIEW

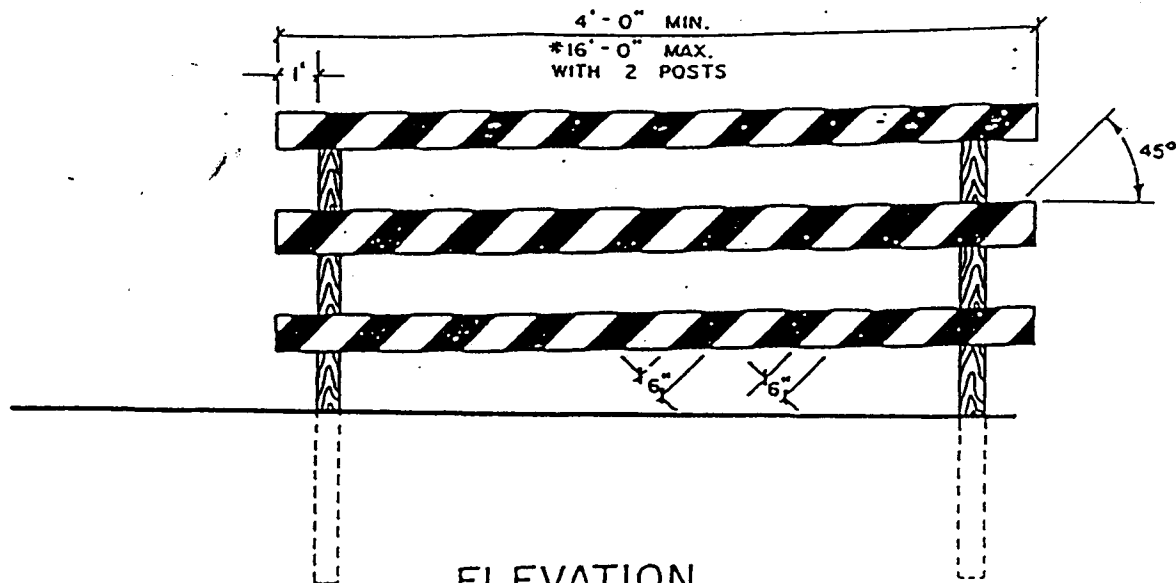
NOTES:

1. RAILS TO BE PAINTED BLACK WITH WHITE STRIPES. THE WHITE STRIPES SHALL BE REFLECTORIZED
- * FOR WIDER APPLICATIONS, MULTIPLE SECTIONS AS SHOWN SHALL BE USED.
2. SEE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS AND THE OREGON SUPPLEMENT.
- 3F-1 BARRICADES
- 6C-8 BARRICADE DESIGN
- 6C-9 BARRICADE APPLICATION
3. ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE CURRENT STATE OF OREGON STANDARD SPECIFICATIONS FOR HWY. CONSTRUCTION.

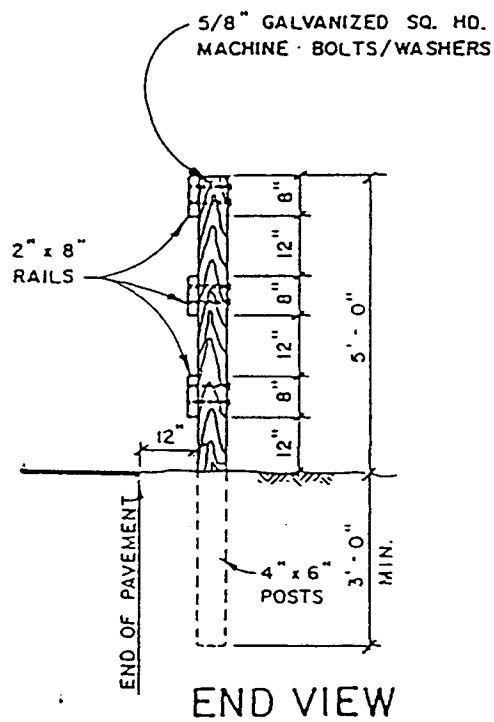
COLUMBIA COUNTY

Street Barricade - Type III

Col. Cty. Standard
Drawing No. M-401



ELEVATION



END VIEW

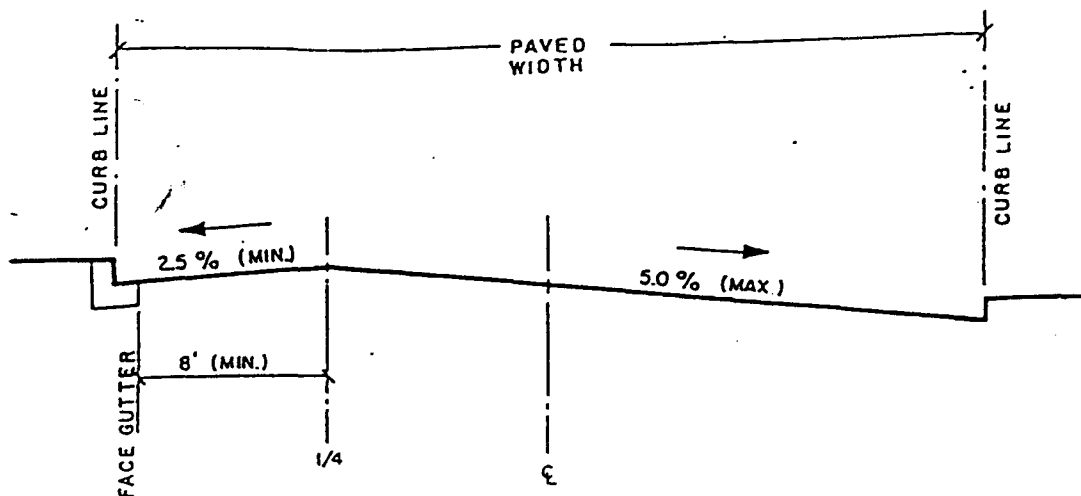
NOTES:

1. RAILS TO BE PAINTED BLACK WITH WHITE STRIPES
THE WHITE STRIPES SHALL BE REFLECTORIZED
* FOR WIDER APPLICATIONS, MULTIPLE SECTIONS AS
SHOWN SHALL BE USED.
2. SEE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES
FOR STREETS AND HIGHWAYS AND THE OREGON
SUPPLEMENT.
3F-1 BARRICADES
6C-8 BARRICADE DESIGN
6C-9 BARRICADE APPLICATION
3. ALL MATERIALS AND WORKMANSHIP SHALL BE IN
ACCORDANCE WITH THE CURRENT STATE OF OREGON
STANDARD SPECIFICATIONS FOR HWY. CONSTRUCTION.

COLUMBIA COUNTY

Street Barricade - Type III
at Width Transitions

Col. Cty. Standard
Drawing No. M-402



NOTES:

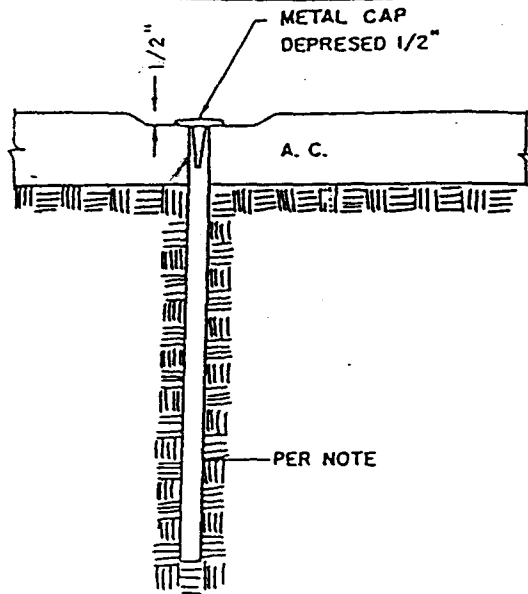
1. OFFSET CROWN CROSS-SECTIONS MAY BE USED IN AREAS OF SUBSTANTIAL CROSS SLOPE, AT THE DISCRETION OF THE ENGINEER.
2. OFFSET CROWN CROSS-SECTIONS SHALL NOT BE USED TO INCREASE DESIGN SPEED IN HORIZONTAL CURVES. SUPERELEVATION SECTIONS SHALL BE USED FOR THAT PURPOSE.
3. MAXIMUM ELEVATION DIFFERENCE OF CURBS (OR EDGE OF PAVEMENT) IS DETERMINED BY CROSS-SLOPES AND WIDTH OF STREET

COLUMBIA COUNTY

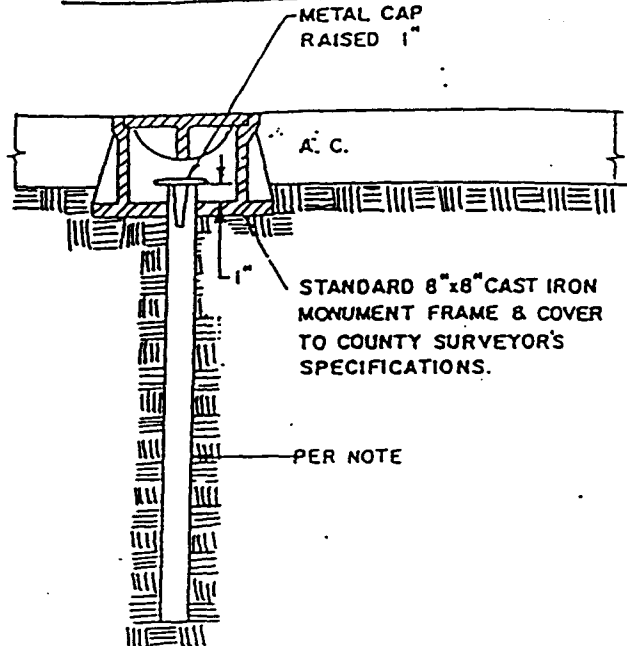
Offset Crown

Col. Cty. Standard
Drawing No. M-403

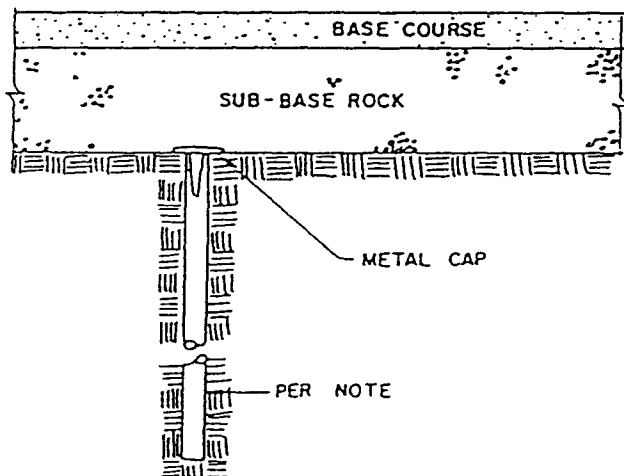
A. FOR USE IN PAVED ROADS



B. FOR USE IN PAVED ROADS



C. FOR USE IN GRAVEL ROADS

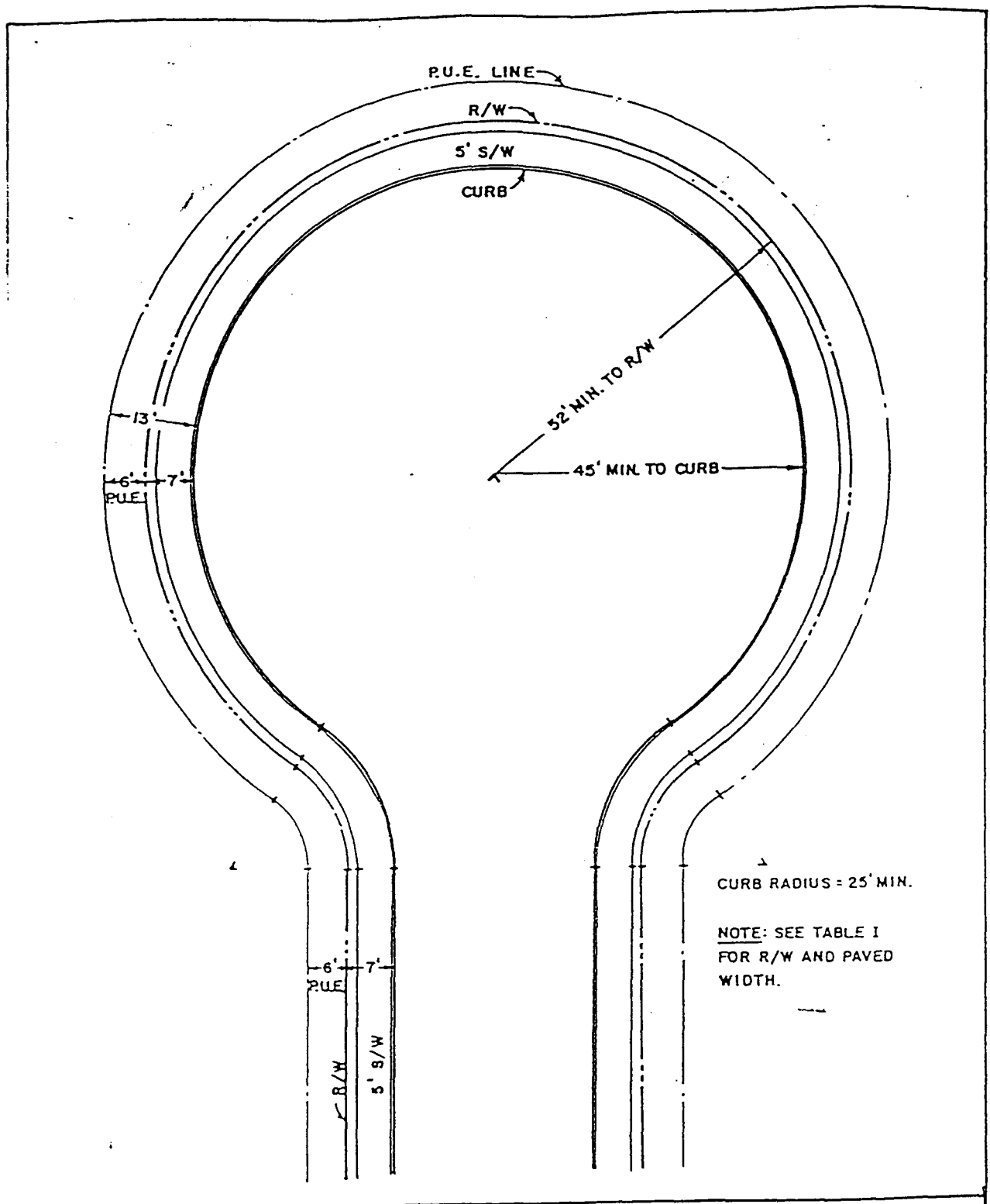


NOTE: ALL MONUMENTS SHALL USE EITHER
5/8" DIA. X 30" LONG IRON ROD OR
3/4" I. DIA. X 30" LONG IRON PIPE.
ALL MONUMENTS SHALL BE IN
ACCORDANCE WITH ORS 209.250(4).

COLUMBIA COUNTY

Centerline Survey Monuments

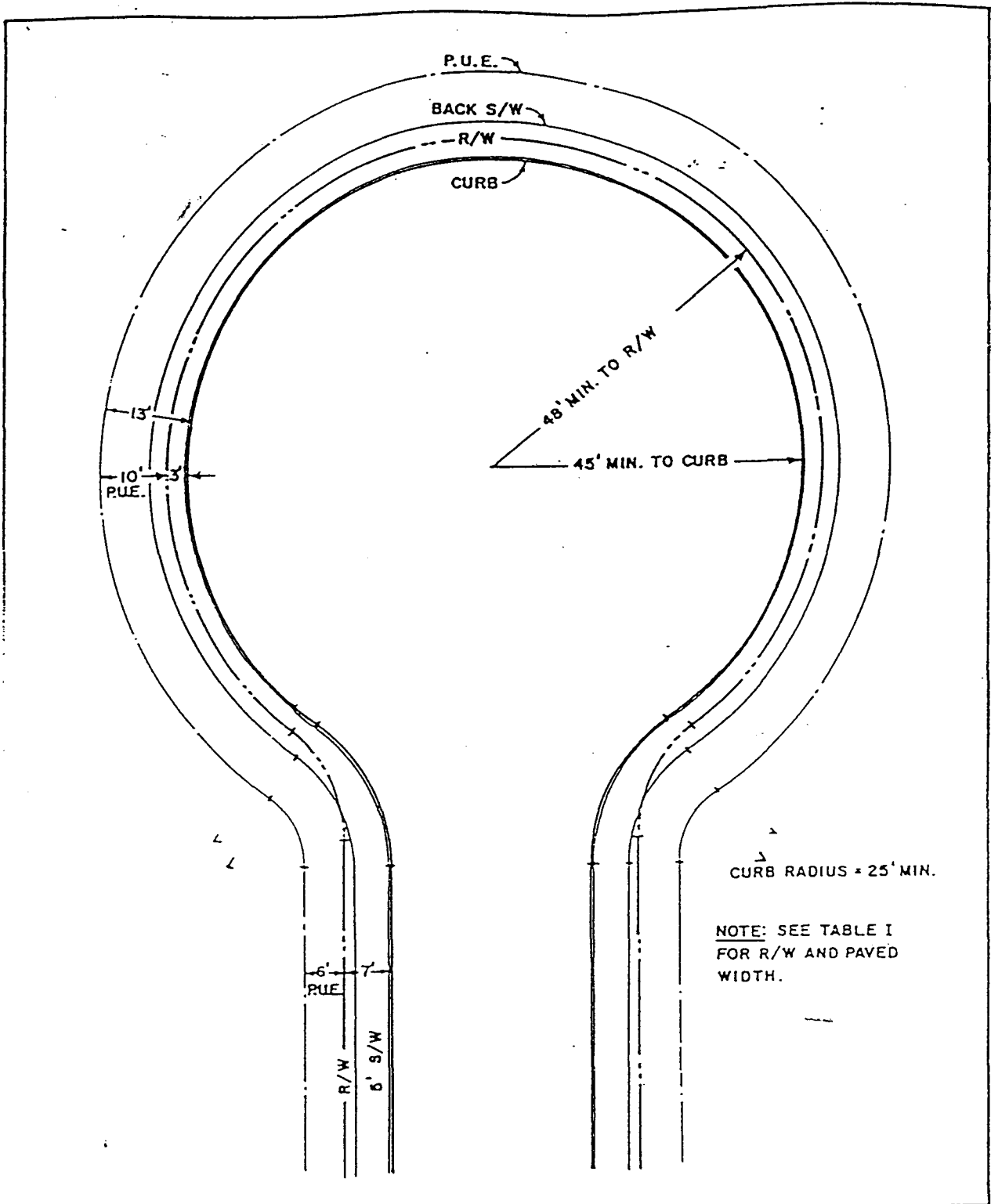
Col. Cty. Standard
Drawing No. M-404



COLUMBIA COUNTY

Standard Cul-De-Sac

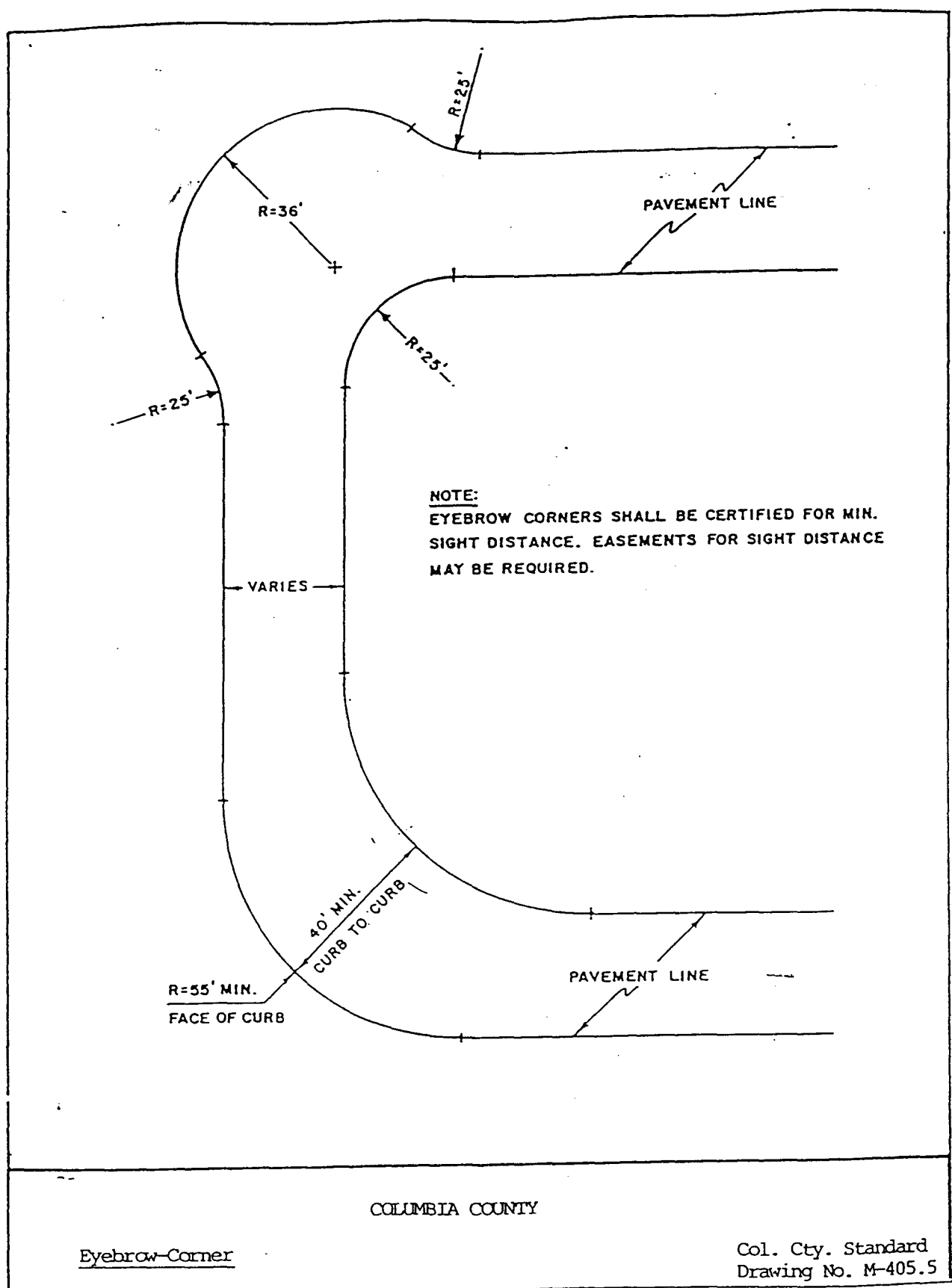
Col. Cty. Standard
Drawing No. M-405

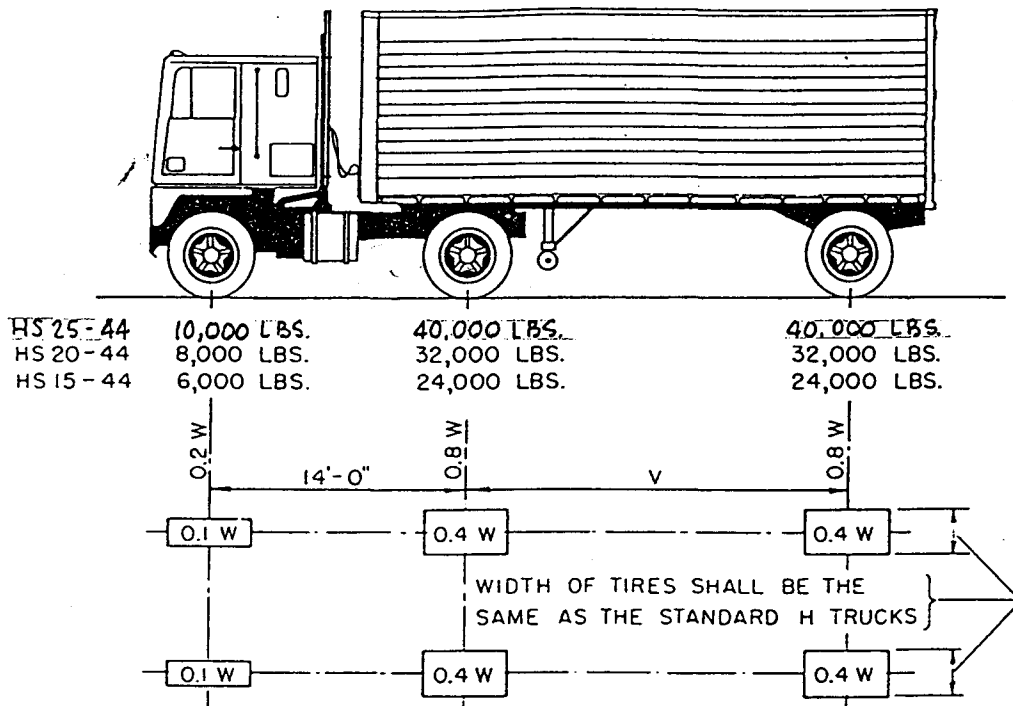


COLUMBIA COUNTY

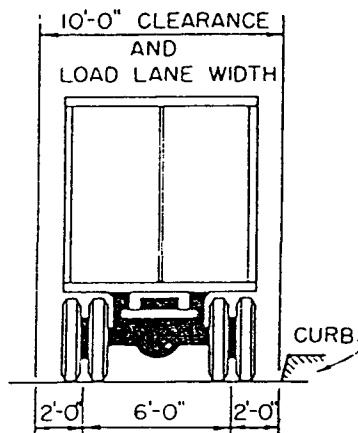
Optional Cul-De-Sac

Col. Cty. Standard
Drawing No. M-405.1





W = COMBINED WEIGHT ON THE FIRST TWO AXLES WHICH IS THE SAME AS FOR THE CORRESPONDING H TRUCK.
 V = VARIABLE SPACING - 14 FEET TO 30 FEET INCLUSIVE. SPACING TO BE USED IS THAT WHICH PRODUCES MAXIMUM STRESSES.



STANDARD HS TRUCKS

COLUMBIA COUNTY

HS Loading

Col. Cty. Standard
 Drawing No. HS 25