ROCK ISLAND
ILLINOIS

Construction Standards

Engineering
1309 Mill Street
Rock Island, IL 61201
(309) 732-2200
www.rigov.org

Standard Number	Standard Name
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102	Transverse Joints, Headers, And Longitudinal Joints
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103B	Vertical Curb Section Details
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122	Bicycle Lane Markings
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307	Typical-Single Water Meter Installation
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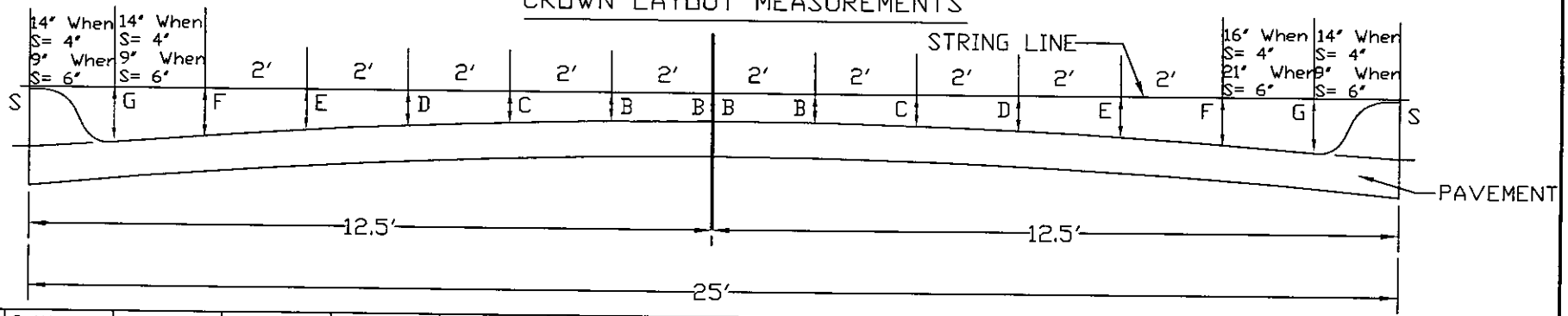
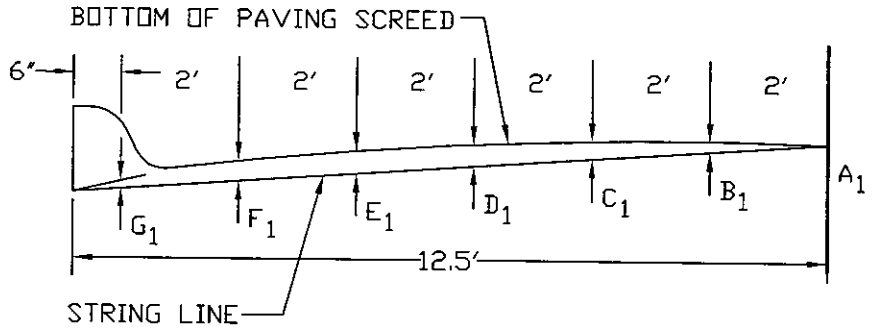
309	Watermain Blowoff and Sample Tap
401	Fabric Formed Concrete Revetment Mats
402	Inlet Filter for Inlet and Pipe Protection
403	Perimeter Erosion Barrier

CROWN LAYOUT MEASUREMENTS



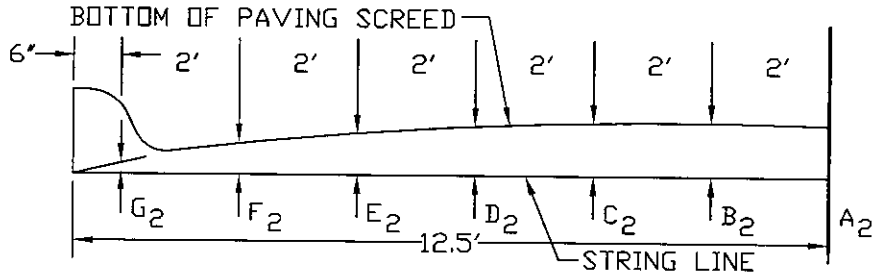
CROWN	S	G=11'-4" When S=4" G=11'-9" When S=6"	10' F	8' E	6' D	4' C	2' B	℄ A	2' B	4' C	6' D	8' E	10' F	G=11'-4" When S=4" G=11'-9" When S=6"	S	CROWN
3"	4"	3 7/16"	2 15/16"	2 1/4"	1 11/16"	1 5/16"	1 1/16"	1"	1 1/16"	1 5/16"	1 11/16"	2 1/4"	2 15/16"	3 7/16"	4"	3"
3"	6"	5 5/8"	4 15/16"	4 1/4"	3 11/16"	3 5/16"	3 1/16"	3"	3 1/16"	3 5/16"	3 11/16"	4 1/4"	4 15/16"	5 5/8"	6"	3"

CROWN MEASUREMENTS FOR BOTTOM OF PAVING SCREED - 1/2 WIDTH PAVING



12' G_1	10' F_1	8' E_1	6' D_1	4' C_1	2' B_1	℄ A_1
1/8"	1/2"	1/16"	3/4"	5/8"	3/8"	0

CROWN MEASUREMENTS FOR BOTTOM OF PAVING SCREED - FULL WIDTH PAVING



12' G_2	10' F_2	8' E_2	6' D_2	4' C_2	2' B_2	℄ A_2
1/4"	1 1/16"	1 3/4"	2 5/16"	2 11/16"	2 15/16"	3"

CROWN MEASUREMENTS FOR 25' STREET

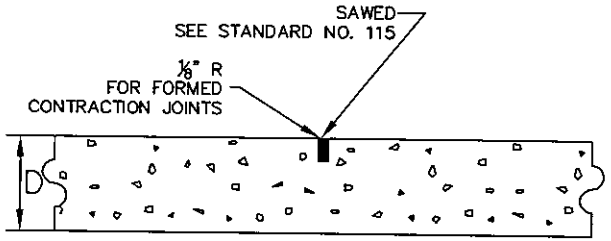
STANDARDIZED	PMCJ	09/07/94
REVISION	BY	DATE

NOT TO SCALE

CITY OF ROCK ISLAND ENGINEERING DIVISION	STANDARD NO. 101

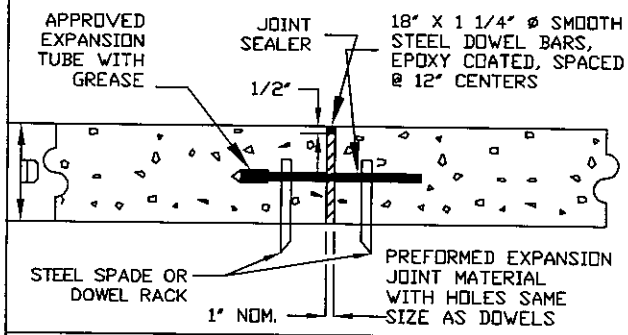
TRANSVERSE JOINTS

CONTRACTION JOINT (TYPE C & TYPE S)

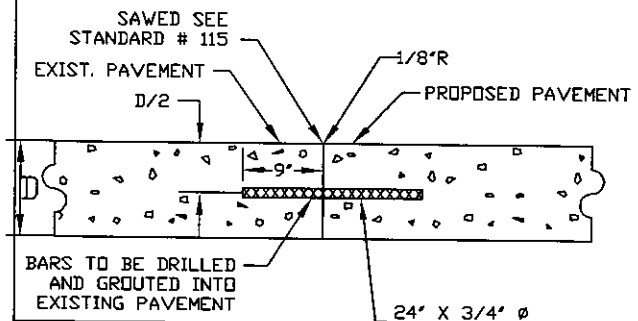


NOTE:
FORMED JOINTS LESS THAN D/3 MUST BE SAWED TO REQUIRED DEPTH

DOWELED EXPANSION JOINT (TYPE ED)



LONGITUDINAL JOINT ABUTTING EXISTING PAVEMENT

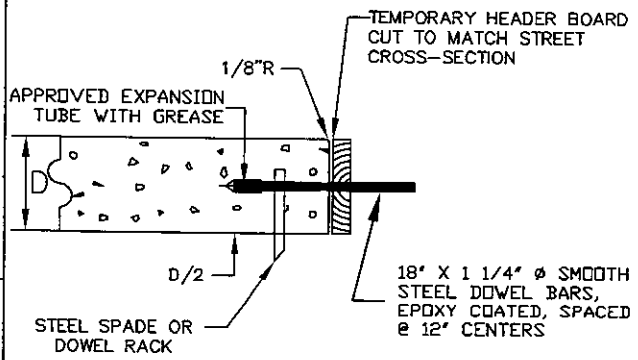


REVISION	BY	DATE
REVISED	MDW	03/31/05
REVISED	MDW	07/16/04
REVISED	MDW	04/06/00
METRIC	BJT	12/19/96
REVISED	CWE	06/27/91
STAND102.DWG	MDW	03/91

NOT TO SCALE

HEADERS

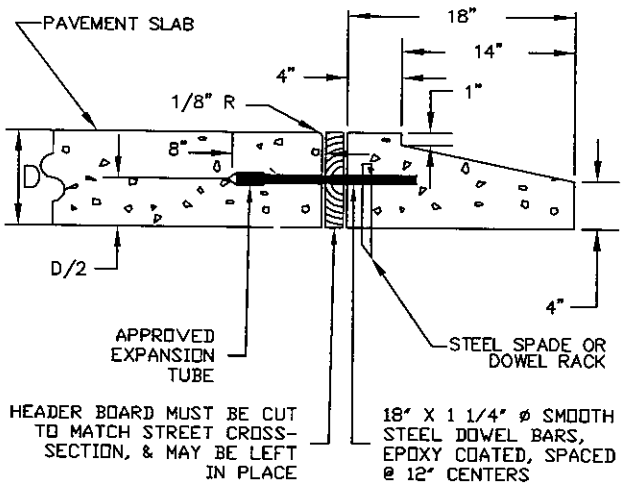
CONSTRUCTION JOINT OR EMERGENCY HEADER (TYPE D)



NOTE:

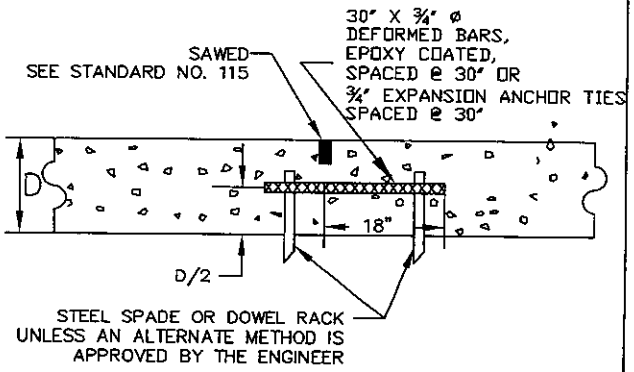
TO BE CONSTRUCTED AS A CONTRACTION JOINT WHEN CONSTRUCTION IS RESUMED

PERMANENT HEADER

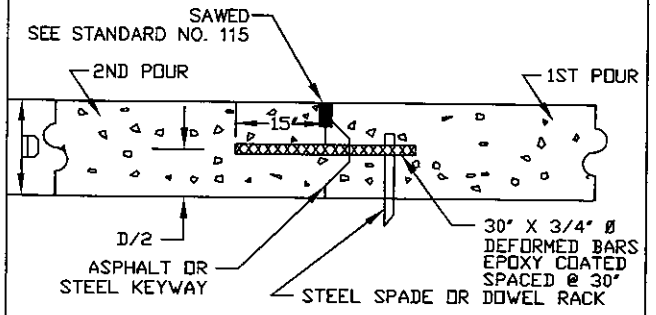


LONGITUDINAL JOINTS

LONGITUDINAL CONTRACTION JOINT WITH DEFORMED BARS TYPE L)



KEYED CONSTRUCTION JOINT (TYPE K) (FOR PAVEMENT >9")



TRANSVERSE JOINTS, HEADERS, AND LONGITUDINAL JOINTS

CITY OF ROCK ISLAND
ENGINEERING DIVISION

STANDARD NO. 102

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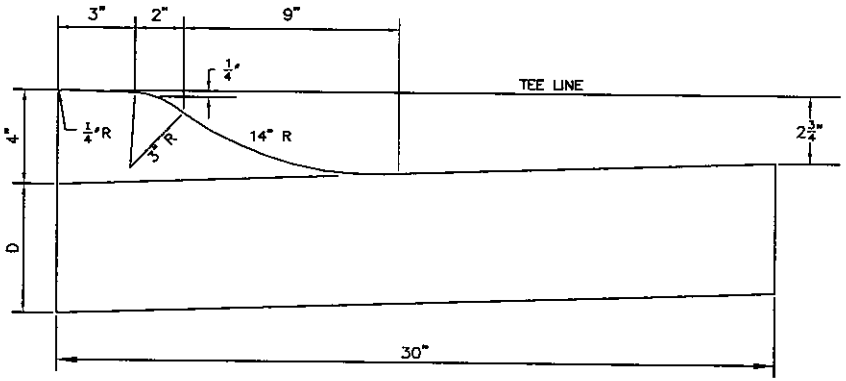
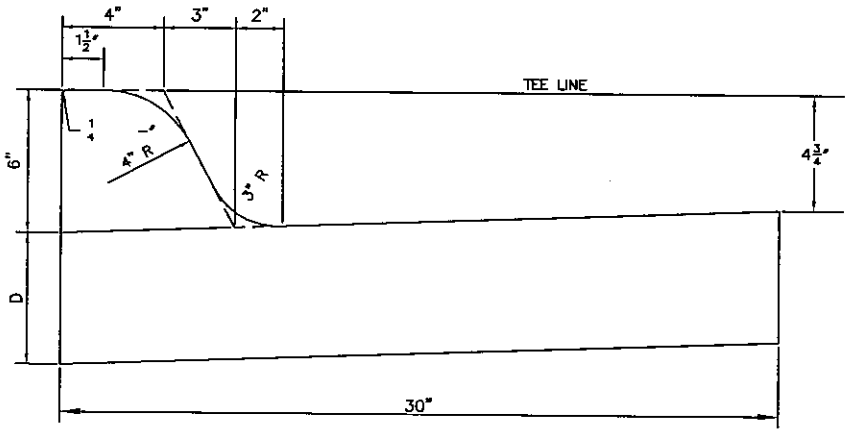


ROLL-OVER CURB



STANDARD CURB SECTION

NOT TO SCALE

METRIC	PMCJ	01/27/97
STAND103.DWG	CWE	08/03/92
REVISION	BY	DATE

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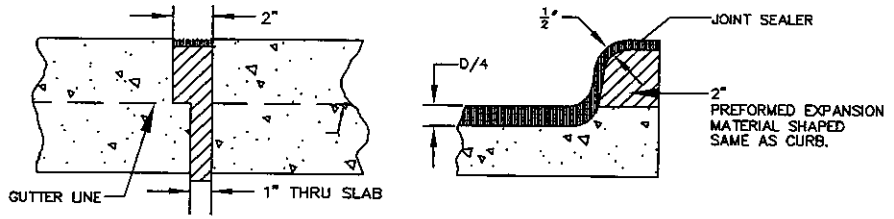
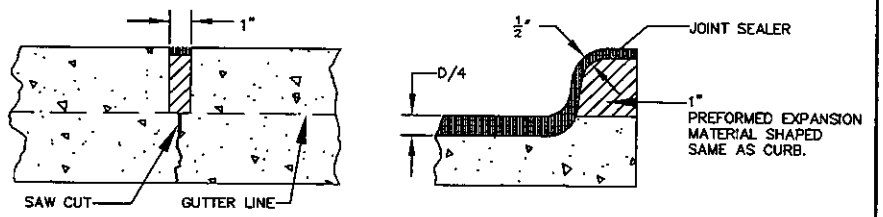


WITH EXPANSION JOINT

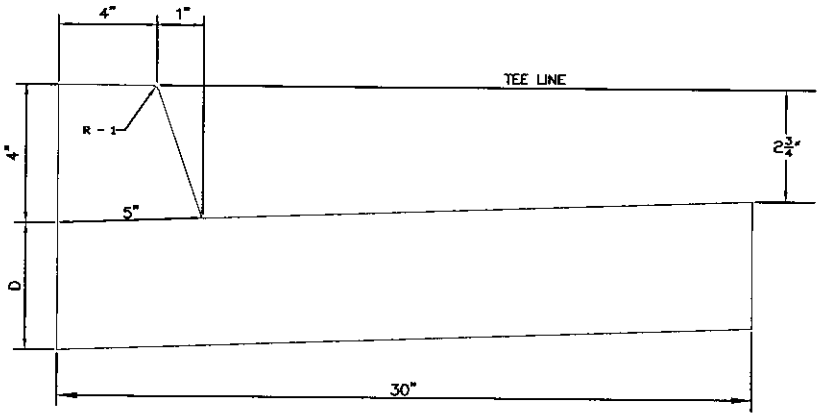


WITH TRANSVERSE CONTRACTION JOINT

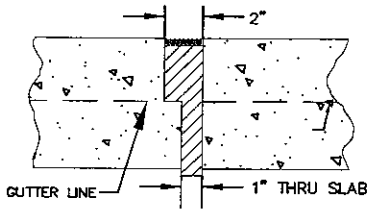
CURB JOINT – AT INTERSECTION RETURN

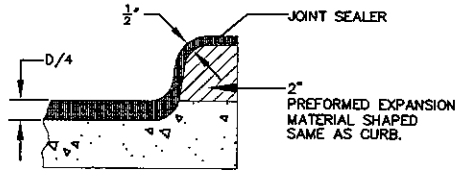
CURB SECTION & CURB JOINT DETAILS

CITY OF ROCK ISLAND ENGINEERING DIVISION	STANDARD NO. 103

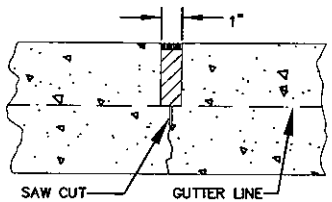


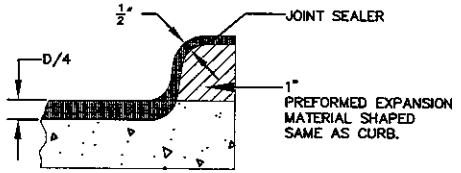
4" BARRIER CURB





WITH EXPANSION JOINT





WITH TRANSVERSE CONTRACTION JOINT

CURB JOINT – AT INTERSECTION RETURN

NOT TO SCALE

STAND103A.DWG	TAB	01/09/04
REVISION	BY	DATE

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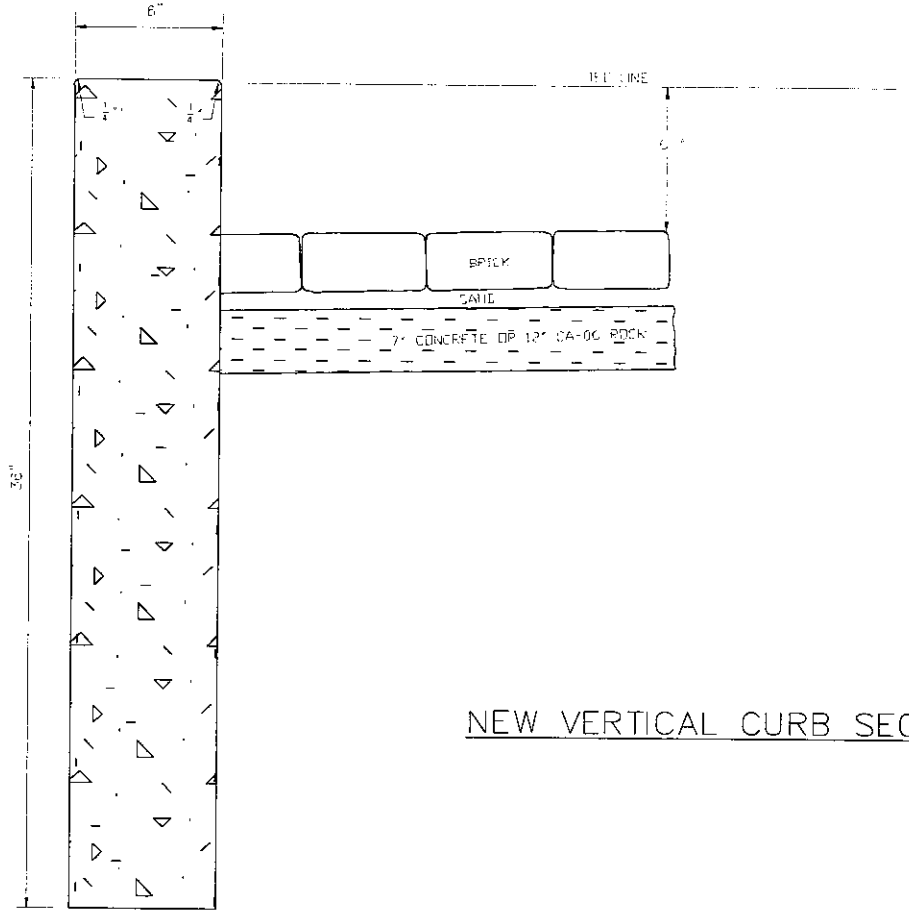
CURB SECTION & CURB JOINT DETAILS

CITY OF ROCK ISLAND
ENGINEERING DIVISION

STANDARD NO. 103A



NEW VERTICAL CURB SECTION

NOT TO SCALE

STANDD3B.DWG	JDP	01/15/14
REVISION	BY	DATE

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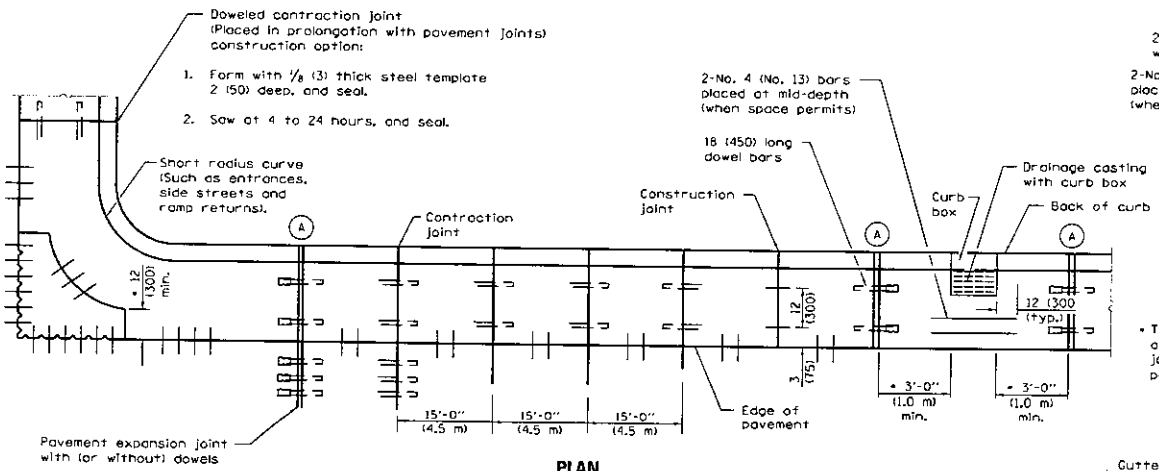
VERTICAL CURB SECTION DETAILS

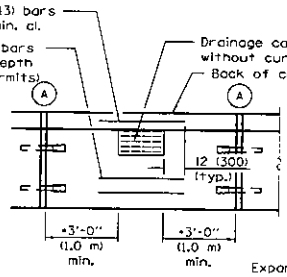
CITY OF ROCK ISLAND
ENGINEERING DIVISION

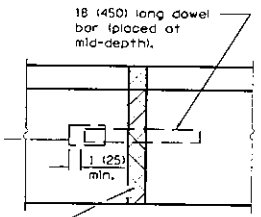
STANDARD NO. 103B



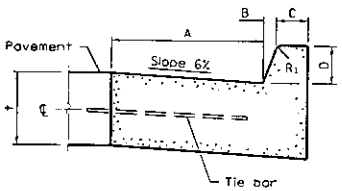
PLAN
ADJACENT TO PCC PAVEMENT OR PCC BASE COURSE

* This dimension shall be adjusted to align with joint on the adjacent pavement

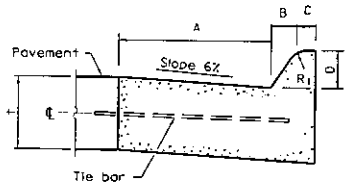




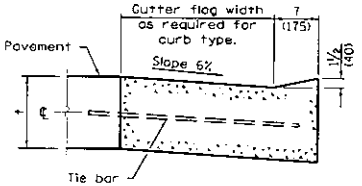
DETAIL (A)
EXPANSION JOINT



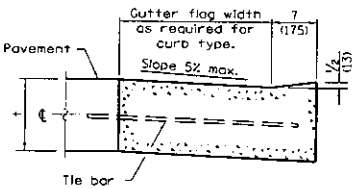
BARRIER CURB



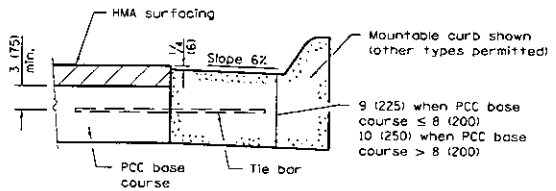
MOUNTABLE CURB



DEPRESSED CURB (TYPICAL)



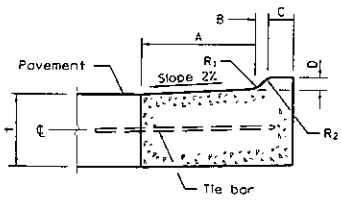
DEPRESSED CURB ADJACENT TO CURB RAMP ACCESSIBLE TO THE DISABLED



ADJACENT TO PCC BASE COURSE WITH HMA SURFACING

TABLE OF DIMENSIONS BARRIER CURB					
TYPE	A	B	C	D	R_1
B-6.12 (B-15.3)	12 (300)	1 (25)	6 (150)	6 (150)	1 (25)
B-6.18 (B-15.45)	18 (450)	1 (25)	6 (150)	6 (150)	1 (25)
B-6.24 (B-15.60)	24 (600)	1 (25)	6 (150)	6 (150)	1 (25)
B-9.12 (B-22.30)	12 (300)	2 (50)	5 (125)	9 (225)	1 (25)
B-9.18 (B-22.45)	18 (450)	2 (50)	5 (125)	9 (225)	1 (25)
B-9.24 (B-22.60)	24 (600)	2 (50)	5 (125)	9 (225)	1 (25)

TABLE OF DIMENSIONS MOUNTABLE CURB						
TYPE	A	B	C	D	R_1	R_2
M-2.06 (M-5.15)	6 (150)	2 (50)	4 (100)	2 (50)	3 (75)	2 (50)
M-2.12 (M-5.30)	12 (300)	2 (50)	4 (100)	2 (50)	3 (75)	2 (50)
M-4.06 (M-10.15)	6 (150)	4 (100)	3 (75)	4 (100)	3 (75)	NA
M-4.12 (M-10.30)	12 (300)	4 (100)	3 (75)	4 (100)	3 (75)	NA
M-4.18 (M-10.45)	18 (450)	4 (100)	3 (75)	4 (100)	3 (75)	NA
M-4.24 (M-10.60)	24 (600)	4 (100)	3 (75)	4 (100)	3 (75)	NA
M-6.06 (M-15.15)	6 (150)	6 (150)	2 (50)	6 (150)	2 (50)	NA
M-6.12 (M-15.30)	12 (300)	6 (150)	2 (50)	6 (150)	2 (50)	NA
M-6.18 (M-15.45)	18 (450)	6 (150)	2 (50)	6 (150)	2 (50)	NA
M-6.24 (M-15.60)	24 (600)	6 (150)	2 (50)	6 (150)	2 (50)	NA



M-2.06 (M-5.15) and M-2.12 (M-5.30)

GENERAL NOTES

The bottom slope of combination curb and gutter constructed adjacent to pcc pavement shall be the same slope as the subbase or 6% when subbase is omitted.

t = Thickness of pavement.

Longitudinal joint tie bars shall be No. 6 (No. 19) at 24 (600) centers in accordance with details for longitudinal construction joint shown on Standard 420001.

A minimum clearance of 2 (50) between the end of the tie bar and the back of the curb shall be maintained.

The dowel bars shown in contraction joints will only be required for monolithic construction.

All dimensions are in inches (millimeters) unless otherwise shown.

Illinois Department of Transportation

PASSED January 1, 2013
ENGINEER OF POLICY AND PROCEDURES

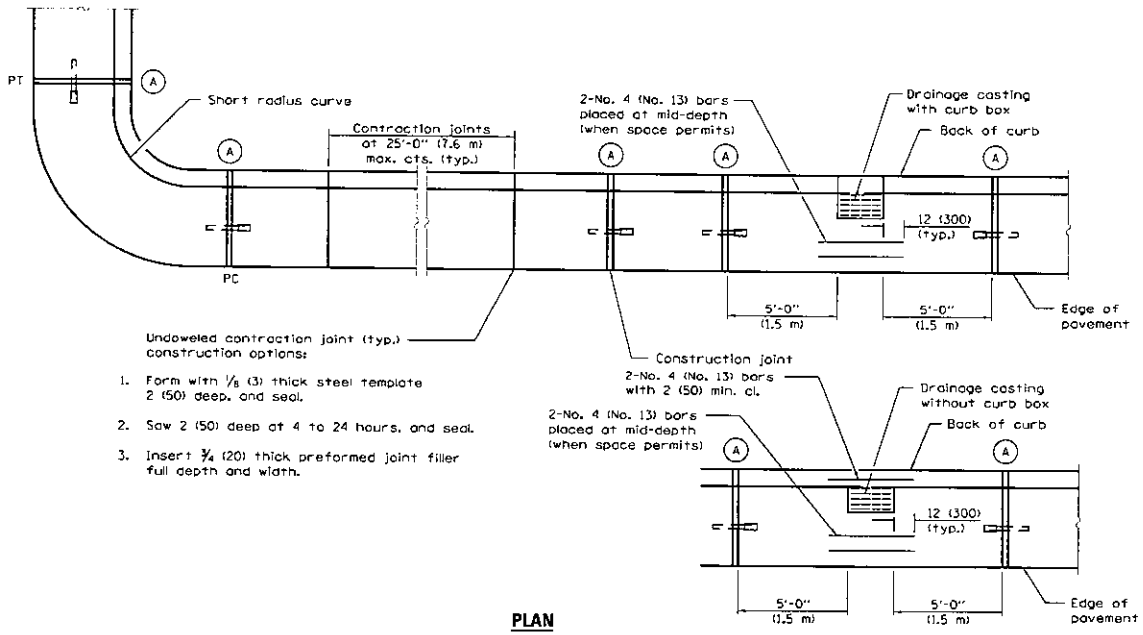
APPROVED January 1, 2013
ENGINEER OF DESIGN AND ENVIRONMENT

DATE	REVISIONS
1-1-13	Added general note regarding requirement for dowel bars.
1-1-09	Switched units to English (metric).

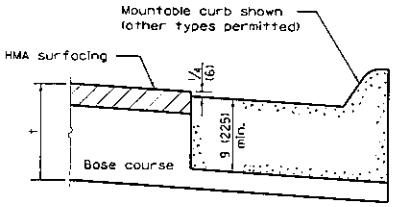
CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER

(Sheet 1 of 2)

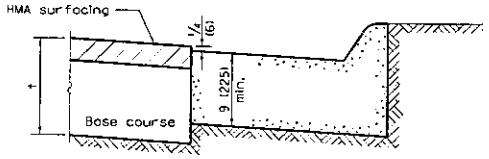
STANDARD 606001-05



PLAN

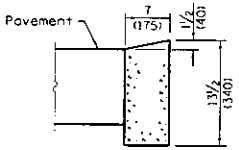


ON DISTURBED SUBGRADE

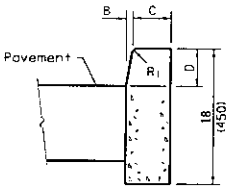


ON UNDISTURBED SUBGRADE

ADJACENT TO FLEXIBLE PAVEMENT

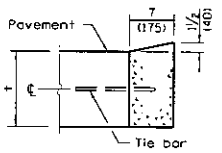


DEPRESSED CURB

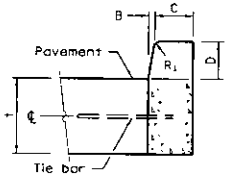


BARRIER CURB

ADJACENT TO FLEXIBLE PAVEMENT



DEPRESSED CURB



BARRIER CURB

ADJACENT TO PCC PAVEMENT OR PCC BASE COURSE

CONCRETE CURB TYPE B

Illinois Department of Transportation

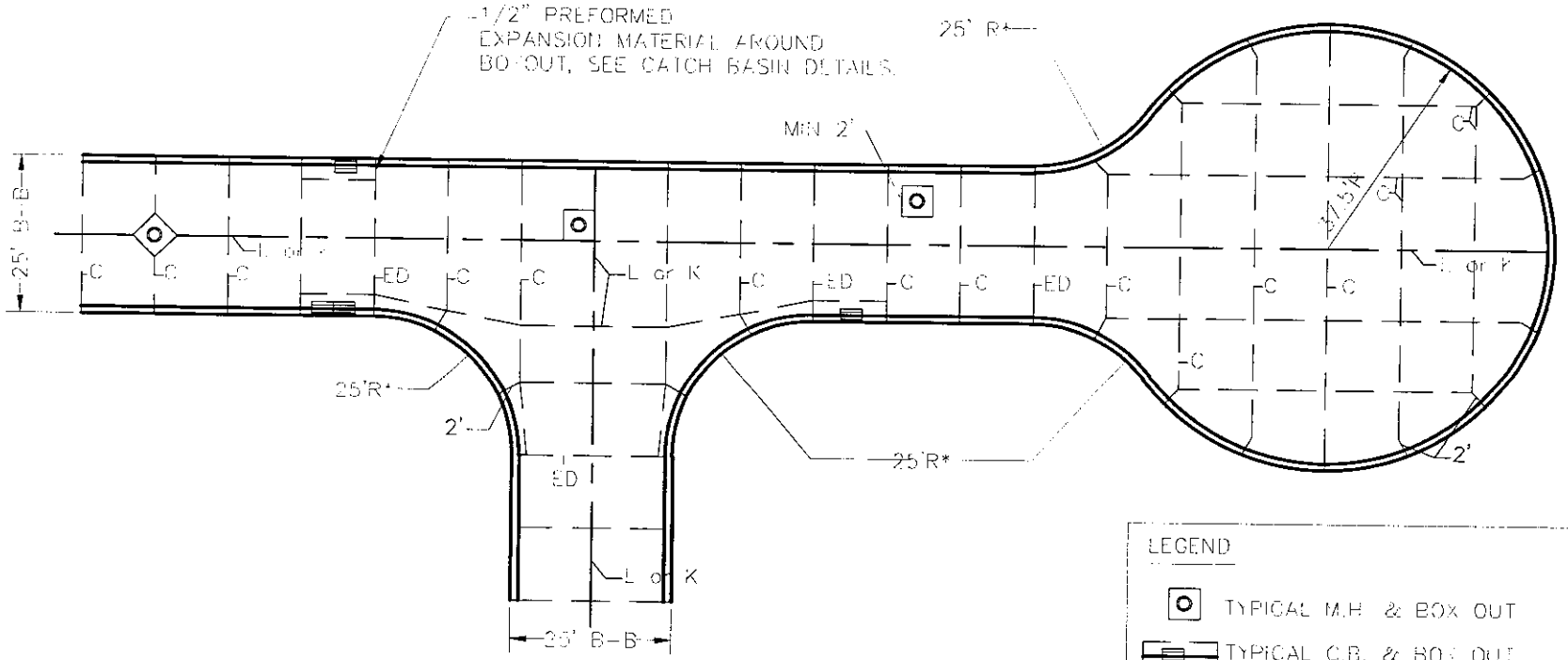
PASSED January 1, 2013
ENGINEER OF POLICY AND PROCEDURES
APPROVED January 1, 2013
ENGINEER OF DESIGN AND ENVIRONMENT

606001-05

CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER

(Sheet 2 of 2)

STANDARD 606001-05



LEGEND

- TYPICAL M.H. & BOX OUT
- TYPICAL C.B. & BOX OUT
- B-B BACK OF CURB TO BACK OF CURB
- C CONTRACTION JOINT
- L LONGITUDINAL CONTRACTION JOINT WITH DEFORMED BARS OR ¾" EXPANSION ANCHOR TIES
- K KEYED CONSTRUCTION JOINT (PAVEMENT >9")
- ED EXPANSION JOINT

*NOTES:

1. NO MASONITE TO BE USED FOR FORMS
2. EXPANSION MATERIAL SHALL NOT BE USED AS FORMS

NOT TO SCALE

REVISION	BY	DATE
UPDATED	MDW	07/16/04
REVISED	MJH	05/04/01
REVISED	PJK	01/10/2001
UPDATED	MDW	01/04/00
UPDATED	PMCJ	8/2/99
METRIC	PMCJ	01/20/97

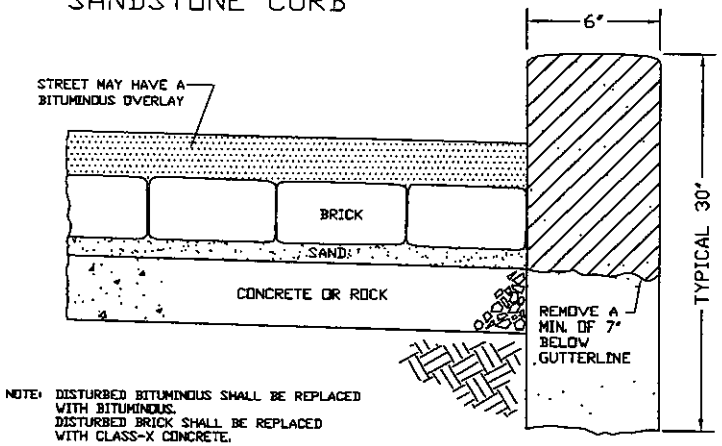
S:\...\MISC\STANDARD\CRI_STD\104.DWG

TYPICAL JOINT PATTERN FOR 25 FT. STREETS

CITY OF ROCK ISLAND
ENGINEERING DIVISION

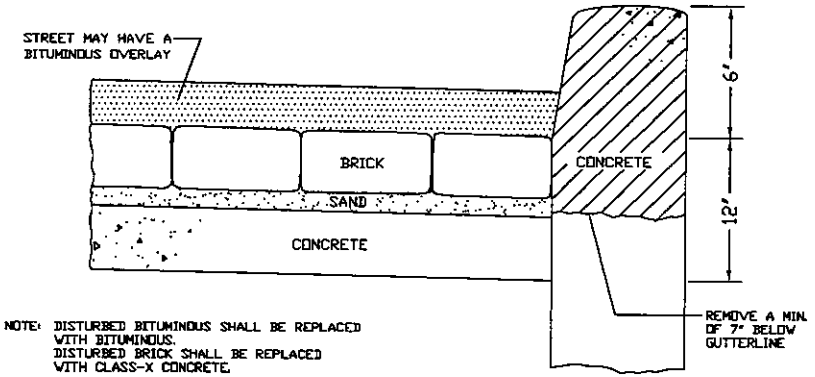
STANDARD NO. 104

SANDSTONE CURB



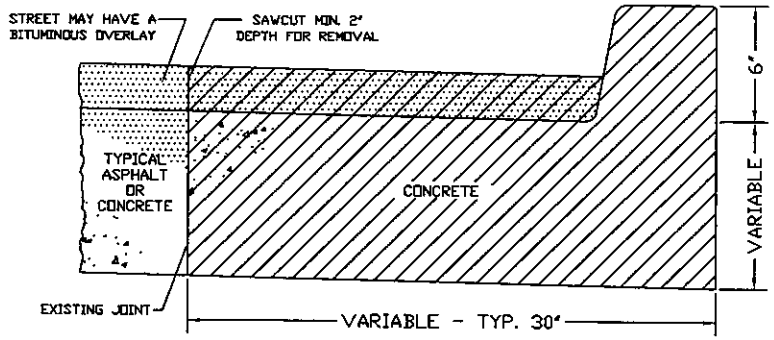
NOTE: DISTURBED BITUMINOUS SHALL BE REPLACED WITH BITUMINOUS.
DISTURBED BRICK SHALL BE REPLACED WITH CLASS-X CONCRETE.

CONCRETE CURB TYPE B



NOTE: DISTURBED BITUMINOUS SHALL BE REPLACED WITH BITUMINOUS.
DISTURBED BRICK SHALL BE REPLACED WITH CLASS-X CONCRETE.

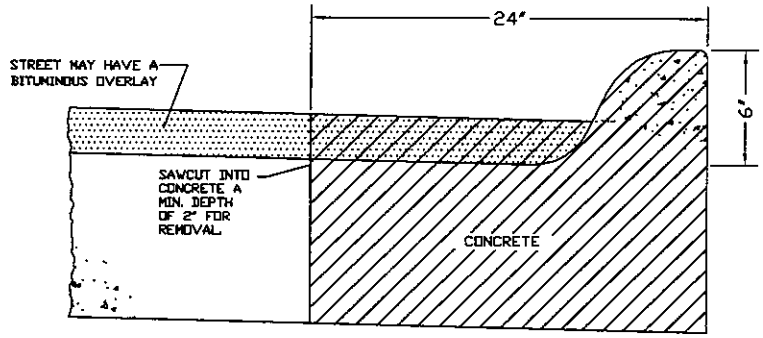
COMBINATION CONCRETE CURB & GUTTER TYPE A MODIFIED



LEGEND:

AREA OF STREET AND CURB REMOVAL AND REPLACEMENT WITH CLASS-X CONCRETE

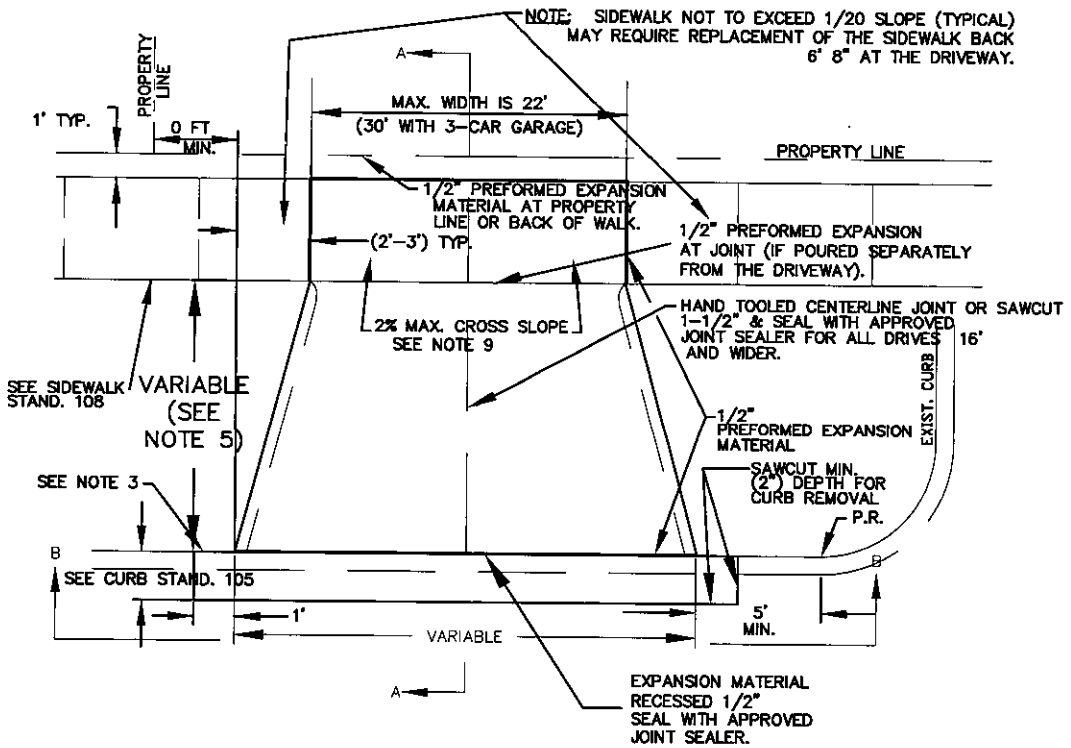
INTEGRAL CURB

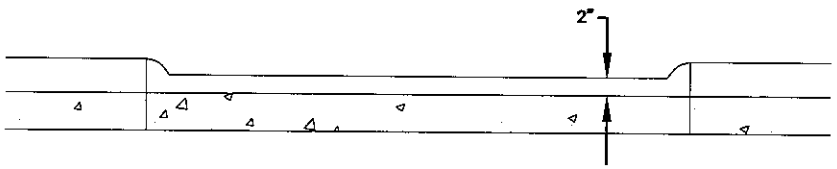


CURB CUT REQUIREMENTS FOR TYPICAL EXISTING CURBS

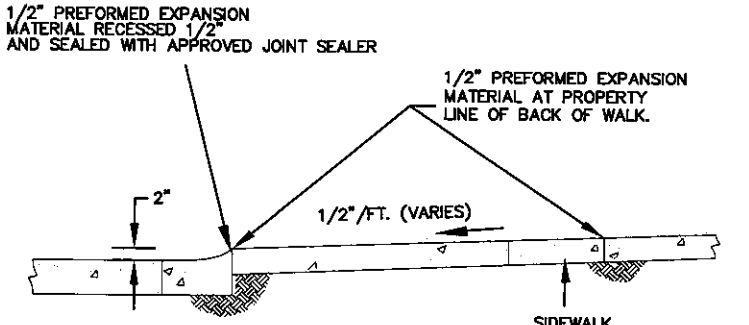
STAND105.DWG	MJH	05/02/01
STAND105.DWG	CWE	07/15/91
REVISION	BY	DATE

CITY OF ROCK ISLAND ENGINEERING DIVISION	STANDARD NO. 105





SECTION B-B



SECTION A-A

NOTES:

1. DRIVEWAY AND SIDEWALK THICKNESS:
   RESIDENTIAL - 6" (5" IF 42# MESH IS USED)
   COMMERCIAL - 7" (6" IF (42#) MESH IS USED)
2. DRIVEWAY AND CURB CUT PERMITS MUST BE OBTAINED FROM CITY ENGINEER PRIOR TO CONSTRUCTION.
3. IF AN EXISTING JOINT IS WITHIN 2' OF THE PROPOSED SAW CUT IN THE STREET, THEN ALL OF THE GUTTER SECTION SHOULD BE REMOVED & REPLACED WITH NEW PAVEMENT.
4. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE ROCK ISLAND STANDARD SPECIFICATIONS, THE MUNICIPAL CODE AND THE IDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
5. EXPANSION TO BE FLUSH WITH FACE OF BACK OF CURB SO A TIGHT, STRAIGHT JOINT IS ATTAINED, AND FULL DEPTH OF DRIVE.
6. IF THE DISTANCE FROM THE BACK OF CURB TO THE SIDEWALK IS LESS THAN 3', DELETE SIDEWALK THRU DRIVEWAY. (SEE CRI STANDARD NO. 107)
7. NO MASONITE TO BE USED AS FORMS
8. EXPANSION MATERIAL SHALL NOT BE USED AS FORMS
9. DRIVEWAY CROSS-SLOPE NOT TO EXCEED 2% (< .25" PER FOOT) WHERE THE PUBLIC USE SIDEWALK CROSSES THE DRIVEWAY.

NOT TO SCALE

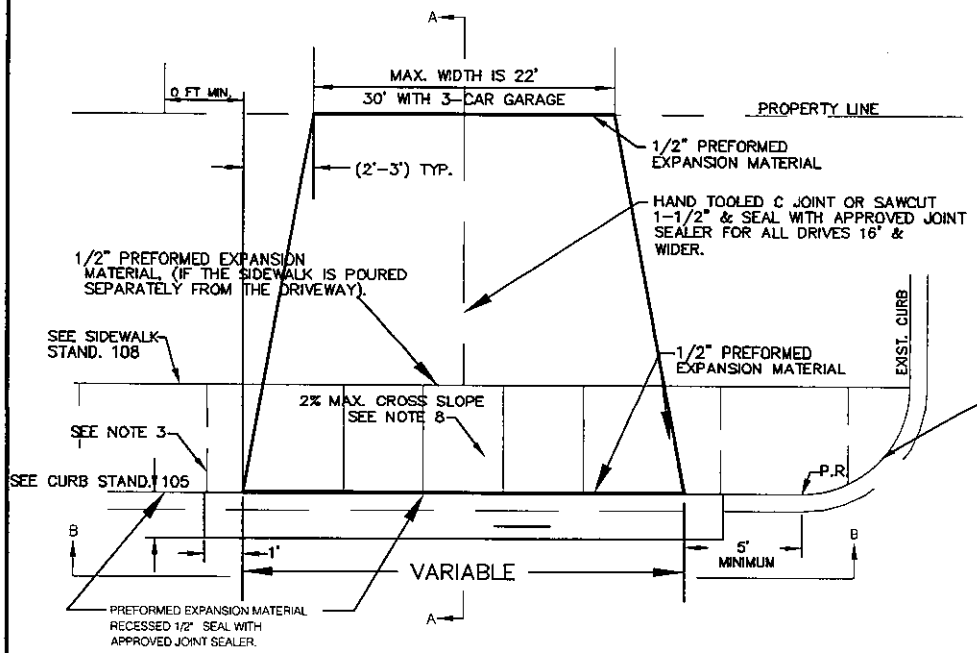
REVISION	BY	DATE
REVISED	JCP	01/30/12
REVISED	MJH	05/07/01
REVISED	PJK	01/10/01
REVISED	TAB	01/27/01
REVISED	PMCJ	08/02/99
REVISED	CAM	05/14/99
METRIC	BJT	12/20/97
REVISED	RDJ	07/19/95
REVISED	CWE	06/27/91

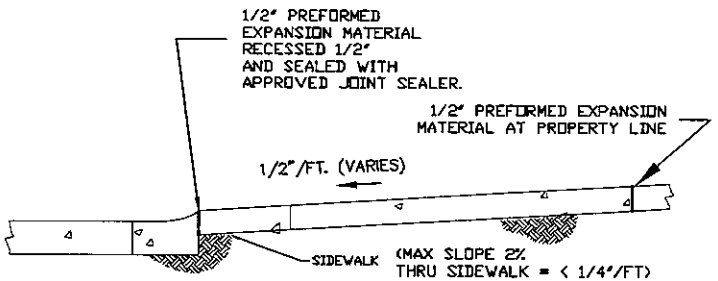
S:\...\MISC\STANDARD\CRI_STD\106.DWG

DRIVEWAY STANDARD
FOR DRIVES WITH SIDEWALKS 3 FEET OR MORE FROM BACK OF CURBS

CITY OF ROCK ISLAND
ENGINEERING DIVISION

STANDARD NO. 106

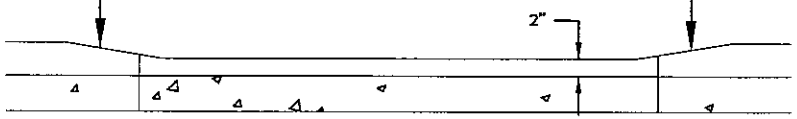




SECTION A-A

PREFORMED EXPANSION MATERIAL RECESSED 1/4" AND SEAL WITH APPROVED JOINT SEALER.

NOTE: SIDEWALK NOT TO EXCEED 1/20 SLOPE (TYPICAL) MAY REQUIRE CUTTING OR REPLACEMENT OF THE CURB, BACK 6' 8" OR MORE AT DRIVEWAY



SECTION B-B

NOTES:

1. DRIVEWAY AND SIDEWALK THICKNESS:
   RESIDENTIAL - 6" (5" IF 42# MESH IS USED)
   COMMERCIAL - 7" (6" IF 42# MESH IS USED)
2. DRIVEWAY AND CURB CUT PERMITS MUST BE OBTAINED FROM CITY ENGINEER PRIOR TO CONSTRUCTION.
3. IF AN EXISTING JOINT IS WITHIN 2' OF THE PROPOSED SAW CUT IN THE STREET, THEN ALL OF THE GUTTER SECTION SHOULD BE REMOVED & REPLACED WITH NEW PAVEMENT.
4. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE ROCK ISLAND STANDARD SPECIFICATIONS, THE MUNICIPAL CODE AND THE IDOT STANDARD SPEICIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
5. EXPANSION TO BE FLUSH WITH FACE OF BACK OF CURB SO A TIGHT, STRAIGHT JOINT IS ATTAINED.
6. NO MASONITE TO BE USED FOR FORMS
7. EXPANSION MATERIAL SHALL NOT BE USED AS FORMS
8. DRIVEWAY CROSS-SLOPE NOT TO EXCEED 2% WHERE THE PUBLIC USE SIDEWALK CROSSES THE DRIVEWAY FOR A MINIMUM 4 FOOT WIDTH.

NOT TO SCALE

REVISION	BY	DATE
REVISED	JCP	01/30/12
REVISED	MJH	05/03/01
REVISED	PJK	01/10/2001
REVISED	TAB	01/27/2000
REVISED	PMCJ	08/02/99
REVISED	CAM	05/14/99
METRIC	BJT	12/26/96
REVISED	RDJ	07/19/95
STANDARDIZED	CWE	06/28/91

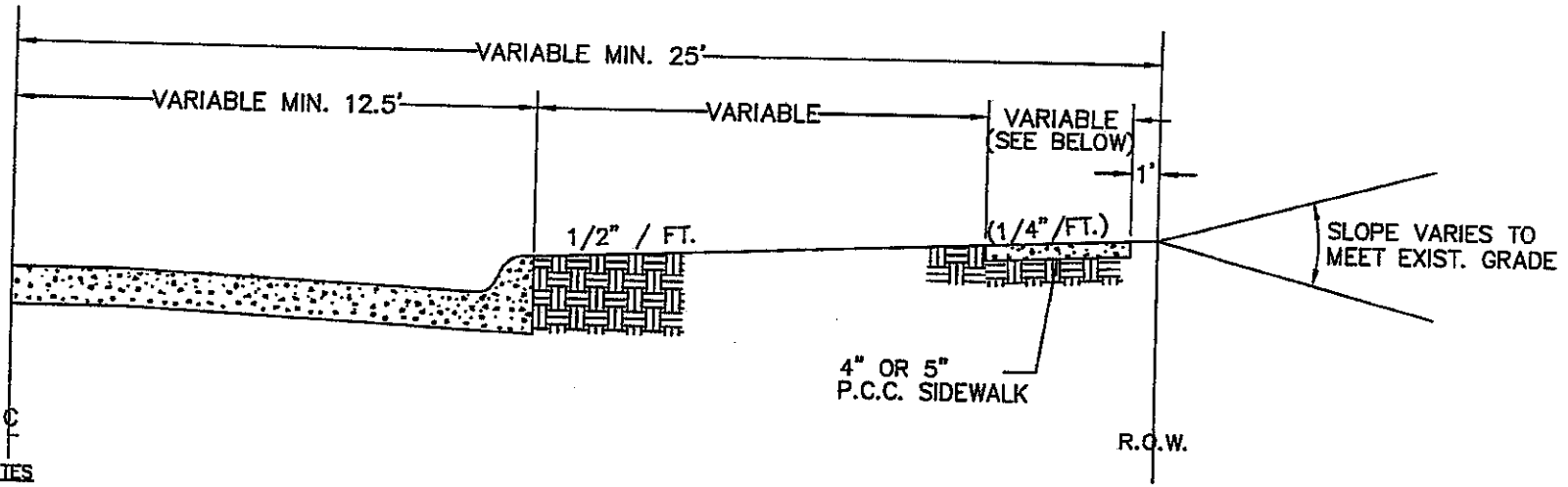
S:\...\MISC\STANDARD\CRI_STD\107.DWG

DRIVEWAY STANDARD

FOR DRIVES WITH SIDEWALK LOCATED AT BACK OF CURB

CITY OF ROCK ISLAND
ENGINEERING DIVISION

STANDARD NO. 107



NOTES

A. SIDEWALK PERMITS SHALL BE OBTAINED FROM THE CITY ENGINEER PRIOR TO CONSTRUCTION.

B. SIDEWALK JOINTS

1. EXPANSION JOINTS: A 1/2" X 4" OR 5" PREMOULDED BITUMINOUS EXPANSION JOINT SHALL BE INSTALLED FOR EVERY 100 FEET OF WALK, AND WHENEVER THE WALK ABUTS AGAINST A CURB, DRIVE APPROACH, FIRE HYDRANT, INTERSECTING SIDEWALK OR BUILDING. JOINTS AT CURBS SHALL BE SEALED WITH APPROVED JOINT SEALER.

2. CONTRACTION OR DUMMY JOINTS: THE SIDEWALK SURFACE SHALL BE DIVIDED BY GROOVES CONSTRUCTED AT RIGHT ANGLES TO THE CENTER LINE OF THE SIDEWALK. THESE GROOVES SHALL EXTEND TO 1/4" THE DEPTH OF THE SIDEWALK, AND SHALL BE SET NOT LESS THAN 1/8" AND NOT MORE THAN 1/4" IN WIDTH, AND SHALL BE EDGED WITH AN EDGING TOOL HAVING A 1/4" RADIUS. NO SLAB SHALL BE LONGER THAN 6', NOR LESS THAN 4', ON ANY ONE SIDE. THE EDGES OF ALL THE SLABS SHALL ALSO BE EDGED.

C. VARIANCE FROM STANDARD

1. ANY VARIANCE FROM THIS STANDARD SHALL BE SUBMITTED TO THE CITY ENGINEER IN WRITTEN FORM FOR APPROVAL PRIOR TO ISSUANCE OF SIDEWALK PERMIT.

D. NO MASONITE MATERIAL TO BE USED FOR FORMS.

E. EXPANSION MATERIAL SHALL NOT BE USED AS FORMS.

SIDEWALK SPECIFICATIONS		
AREA ZONING/LAND USE	WIDTH	THICKNESS
SINGLE FAMILY RESIDENCE	4'	4"or 5"
MULTIPLE FAMILY	5'	4"or 5"
COMMERCIAL OR BUSINESS	10'	5"

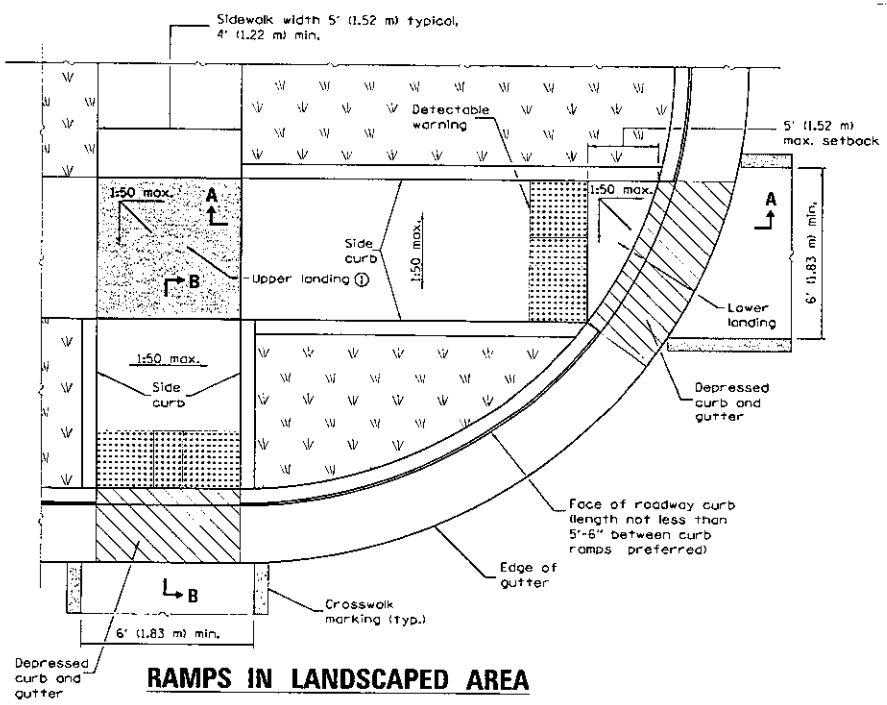
NOT TO SCALE

REVISION	BY	DATE
REVISED	MDW	03/25/08
REVISED	MJH	05/04/01
REVISED	PJK	01/15/2001
REVISED	CAM	05/14/99
METRIC	BJT	12/28/98

S:\...\MISC\STANDARD\CRI_STD\108.DWG

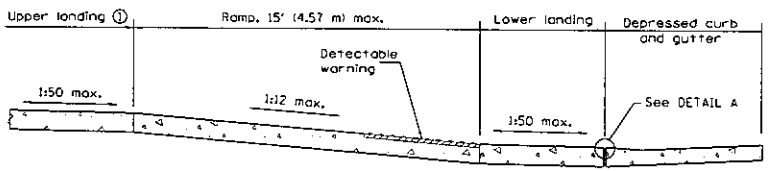
TYPICAL SIDEWALK AND GRADING PLAN

CITY OF ROCK ISLAND ENGINEERING DIVISION	STANDARD NO. 108



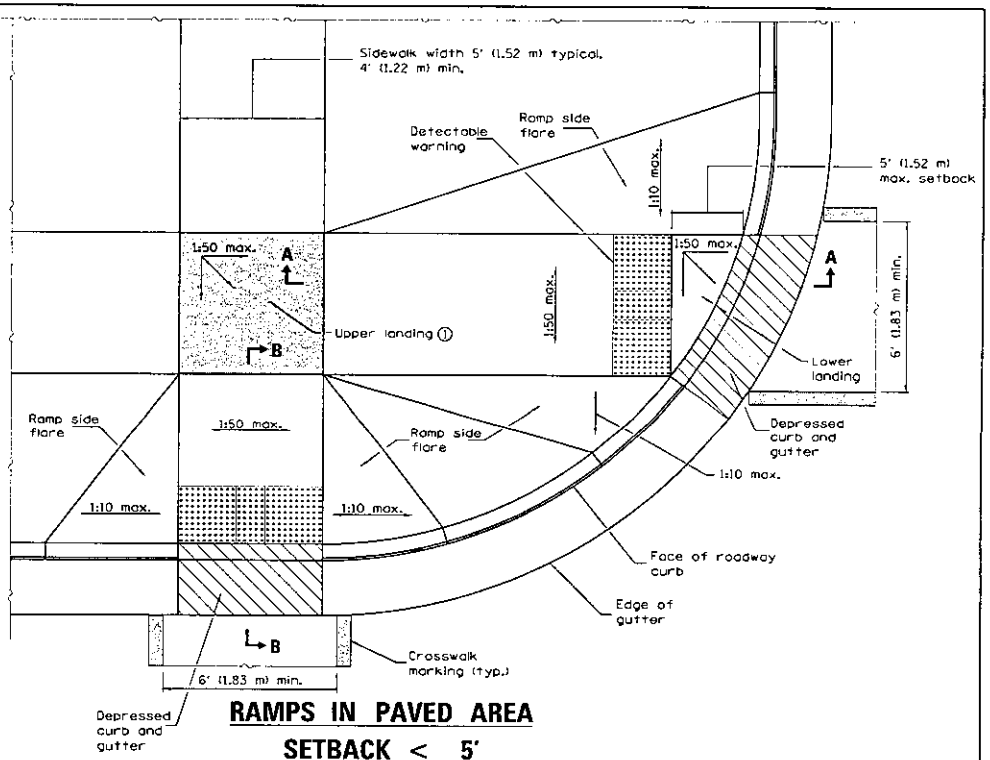
RAMPS IN LANDSCAPED AREA

SETBACK ≤ 5'



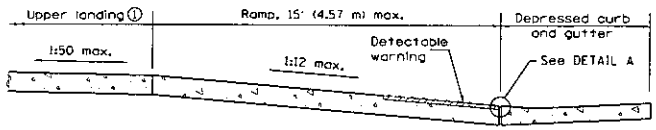
SECTION A–A

① Upper landing not required for ramp slopes flatter than 1:20.



RAMPS IN PAVED AREA

SETBACK ≤ 5'



SECTION B–B

① Upper landing not required for ramp slopes flatter than 1:20.

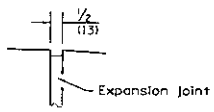
GENERAL NOTES

All slope ratios are expressed as units of vertical displacement to units of horizontal displacement (V:H).

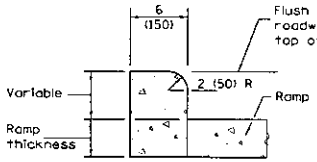
Where 1:50 maximum slope is shown, 1:64 is preferred.

See Standard 606001 for details of depressed curb adjacent to curb ramp.

All dimensions are in inches (millimeters) unless otherwise shown.



DETAIL A



SIDE CURB DETAIL

Illinois Department of Transportation

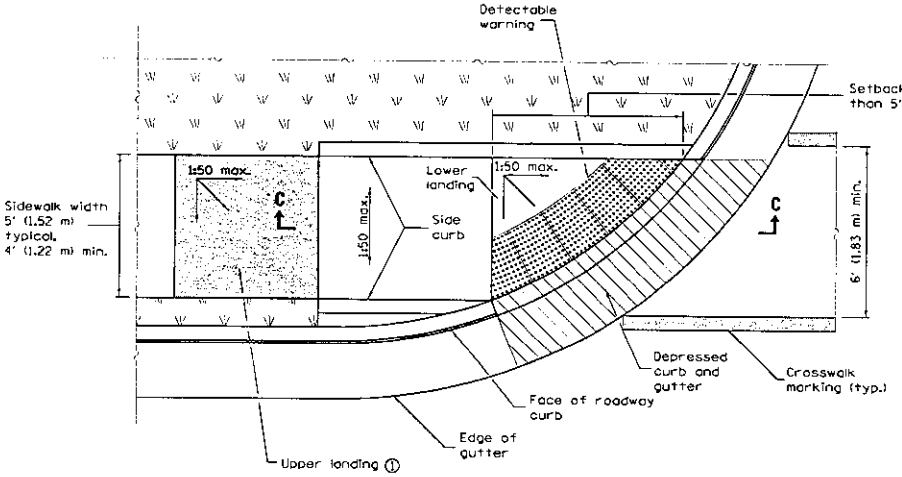
PASSED January 1, 2013
ENGINEER OF POLICY AND PROCEDURES
APPROVED January 1, 2013
ENGINEER OF DESIGN AND ENVIRONMENT

DATE	REVISIONS
1-1-13	Widened crosswalk markings
	to 6' (1.83 m) min. inside
	dimension. Rev. Gen. Notes.
1-1-12	Completely revised and
	renamed standard.

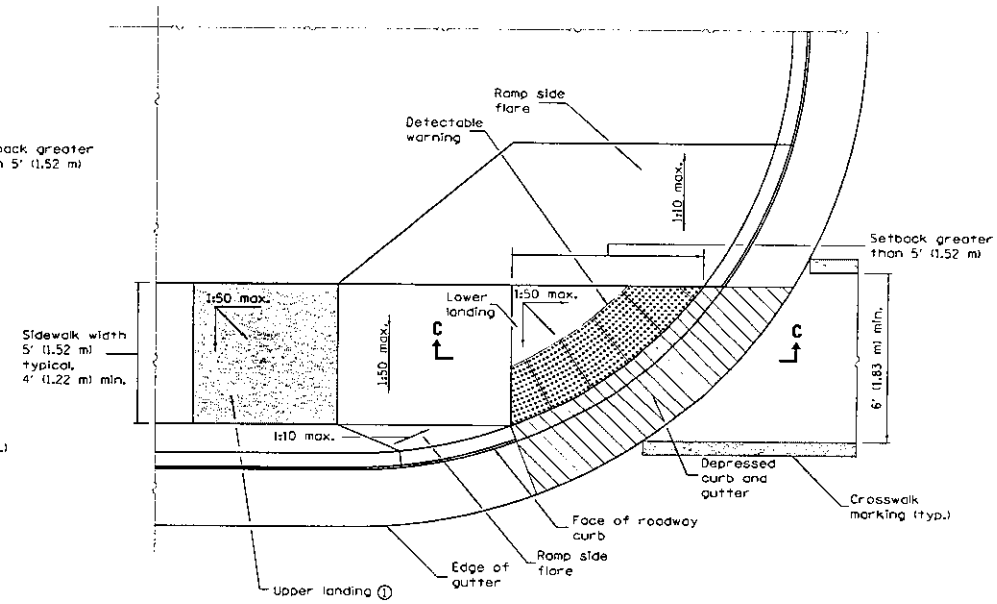
PERPENDICULAR CURB RAMPS FOR SIDEWALKS

(Sheet 1 of 2)

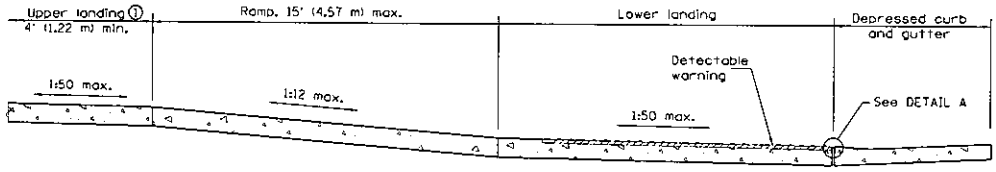
STANDARD 424001-07



RAMP IN LANDSCAPED AREA
SETBACK > 5'



RAMP IN PAVED AREA
SETBACK > 5'



SECTION C-C

① Upper landing not required for ramp slopes flatter than 1:20.

Illinois Department of Transportation

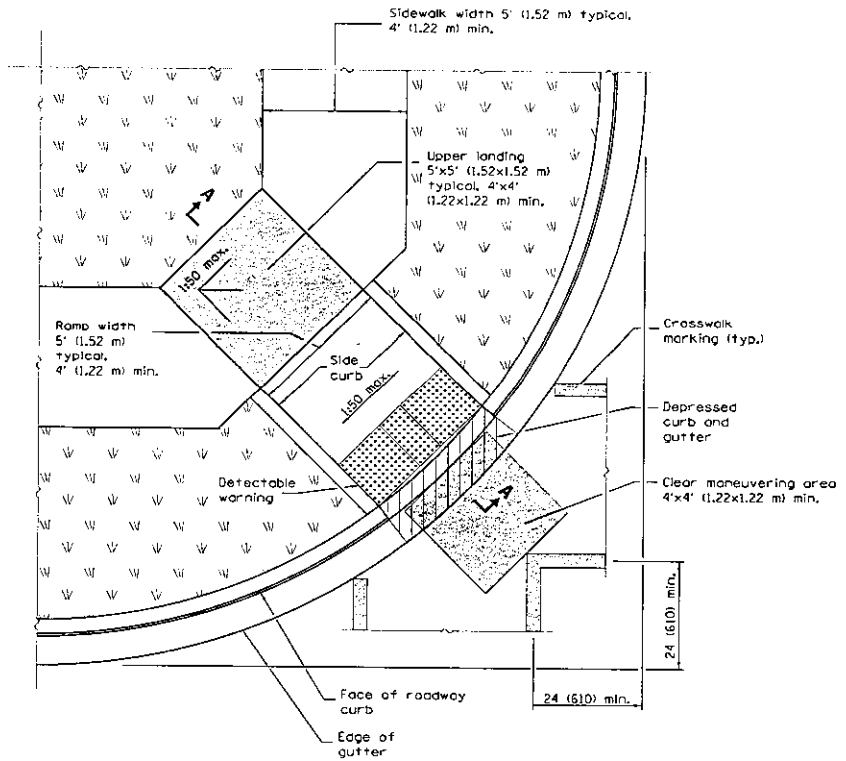
PASSED January 1, 2013
ENGINEER OF POLICY AND PROCEDURES
APPROVED January 1, 2013
ENGINEER OF DESIGN AND ENVIRONMENT

ISSUED 01-13

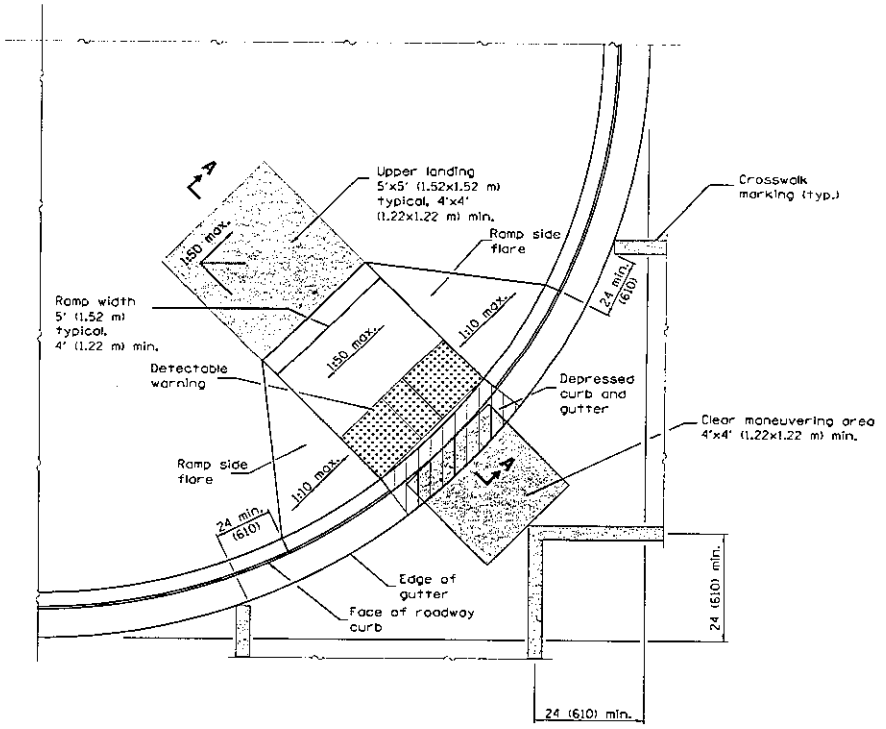
PERPENDICULAR CURB RAMPS FOR SIDEWALKS

(Sheet 2 of 2)

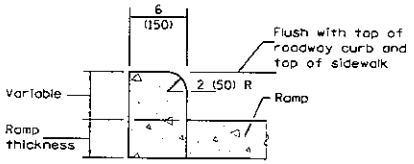
STANDARD 424001-07



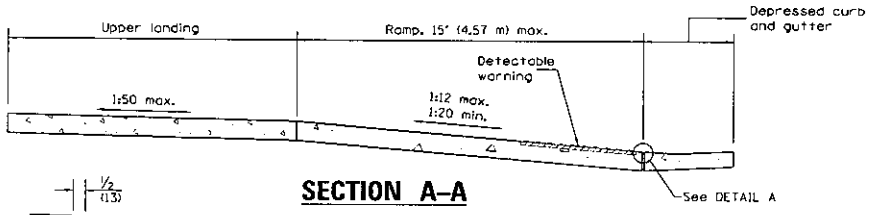
RAMP IN LANDSCAPED AREA



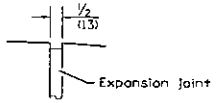
RAMP IN PAVED AREA



SIDE CURB DETAIL



SECTION A–A



DETAIL A

GENERAL NOTES

This Standard shall only be used for curb radii of 20 ft. (6.1 m) or greater.

Where 1:50 maximum slope is shown, 1:64 is preferred.

All slope ratios are expressed as units of vertical displacement to units of horizontal displacement (V:H).

See Standard 606001 for details of depressed curb adjacent to curb ramp.

All dimensions are in inches (millimeters) unless otherwise shown.

Illinois Department of Transportation

PASSED January 1, 2013
ENGINEER OF POLICY AND PROCEDURES

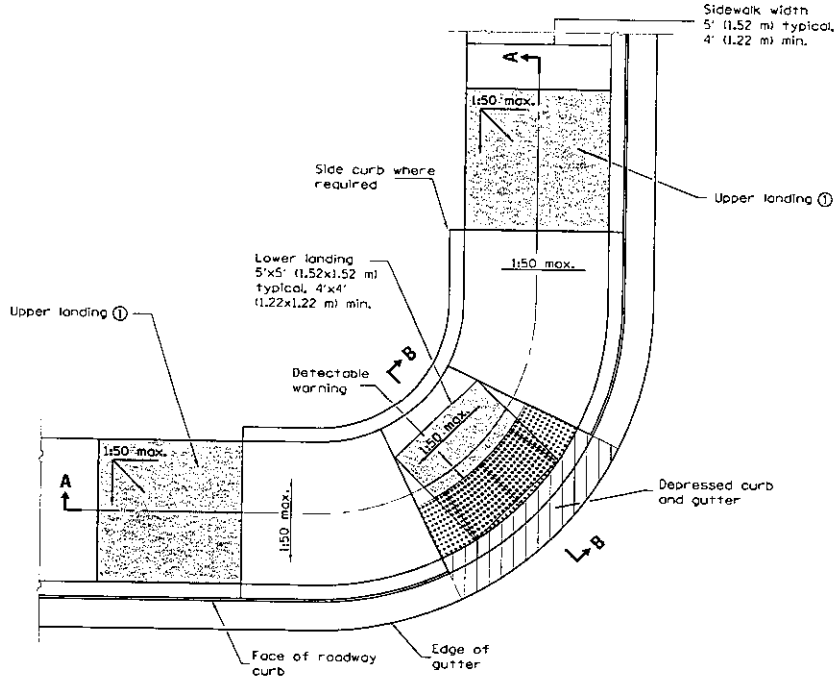
APPROVED January 1, 2013
ENGINEER OF DESIGN AND ENVIRONMENT

ISSUED 1-1-12

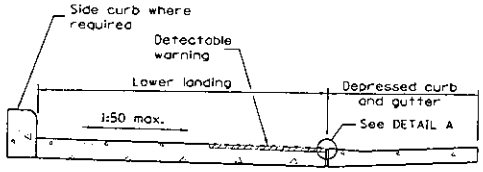
DATE	REVISIONS
1-1-13	Revised General Notes.
1-1-12	New standard.

DIAGONAL CURB RAMPS FOR SIDEWALKS

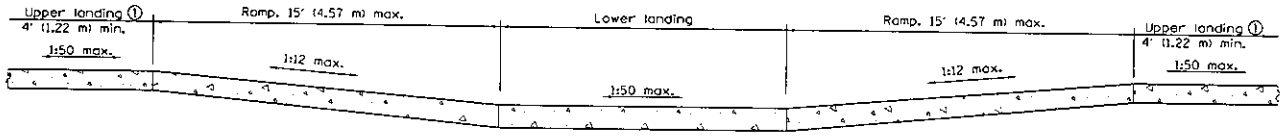
STANDARD 424006-01



CORNER PARALLEL CURB RAMP

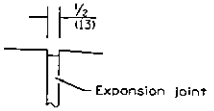


SECTION B–B

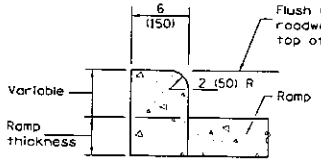


SECTION A–A

① Upper landing(s) not required for ramp slopes flatter than 1:20.



DETAIL A



SIDE CURB DETAIL

GENERAL NOTES

All slope ratios are expressed as units of vertical displacement to units of horizontal displacement (V:H).

Where 1:50 maximum slope is shown, 1:64 is preferred.

See Standard 606001 for details of depressed curb adjacent to curb ramp.

All dimensions are in inches (millimeters) unless otherwise shown.

Illinois Department of Transportation

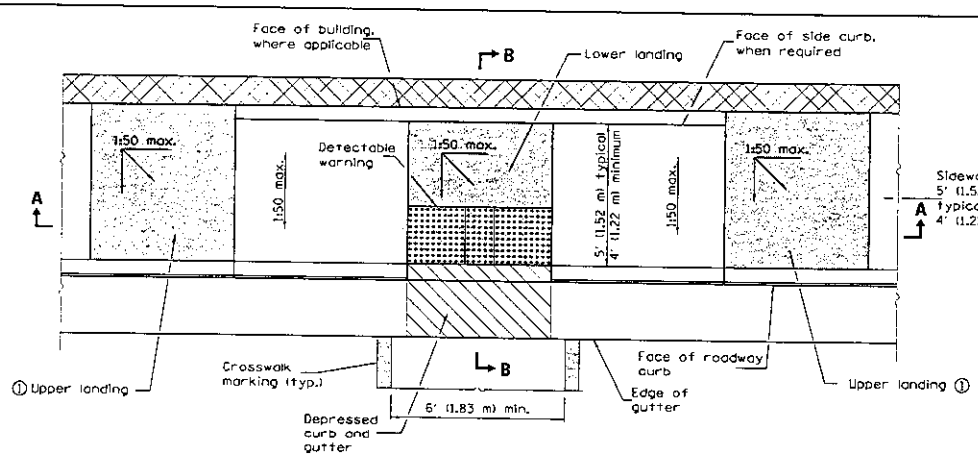
PASSED January 1, 2013
ENGINEER OF POLICY AND PROCEDURES
APPROVED January 1, 2013
ENGINEER OF DESIGN AND ENVIRONMENT

ISSUED 1-1-13

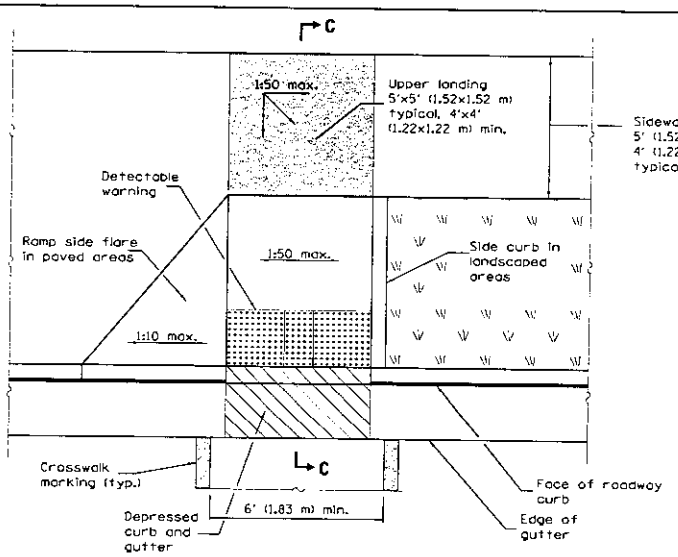
DATE	REVISIONS
1-1-13	Revised General Notes.
1-1-12	New standard.

CORNER PARALLEL CURB RAMPS FOR SIDEWALKS

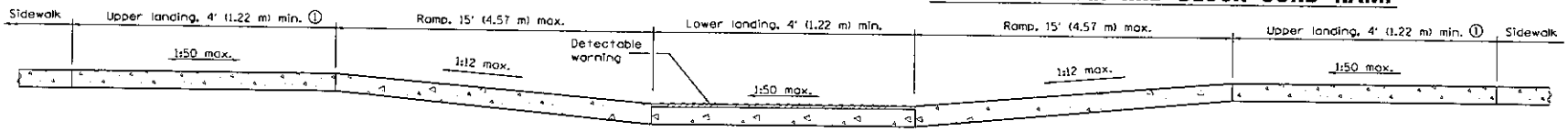
STANDARD 424011–01



PARALLEL MID–BLOCK CURB RAMP

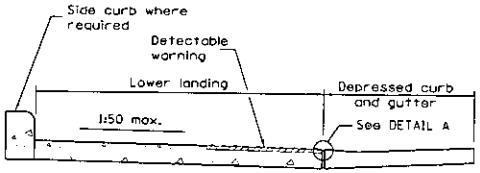


PERPENDICULAR MID–BLOCK CURB RAMP

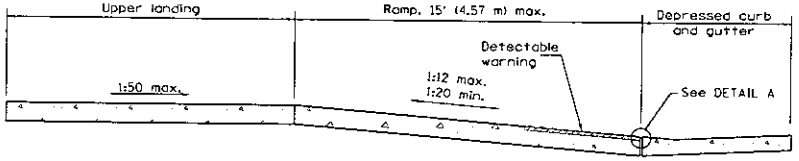


SECTION A–A

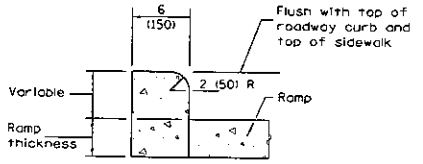
① Upper landing(s) not required for ramp slopes flatter than 1:20.



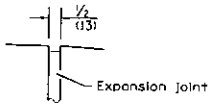
SECTION B–B



SECTION C–C



SIDE CURB DETAIL



DETAIL A

GENERAL NOTES

All slope ratios are expressed as units of vertical displacement to units of horizontal displacement (V:H).

Where 1:50 maximum slope is shown, 1:64 is preferred.

See Standard 606001 for details of depressed curb adjacent to curb ramp.

All dimensions are in inches (millimeters) unless otherwise shown.

Illinois Department of Transportation

PASSED January 1, 2013
ENGINEER OF POLICY AND PROCEDURES

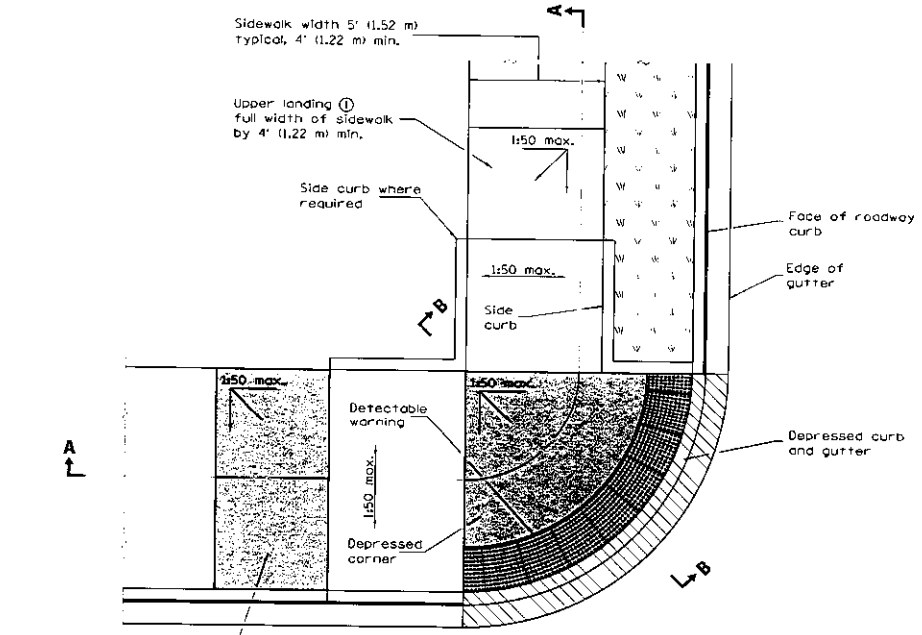
APPROVED January 1, 2013
ENGINEER OF DESIGN AND ENVIRONMENT

ISSUED: 01-1-13

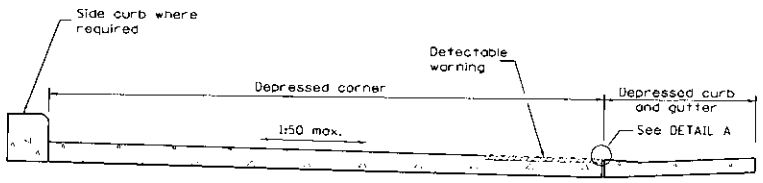
DATE	REVISIONS
1-1-15	Widened crosswalk markings
	to 6' (1.83 m) min. inside
	dimension. Rev. Gen. Notes.
1-1-12	New standard.

MID–BLOCK CURB RAMPS FOR SIDEWALKS

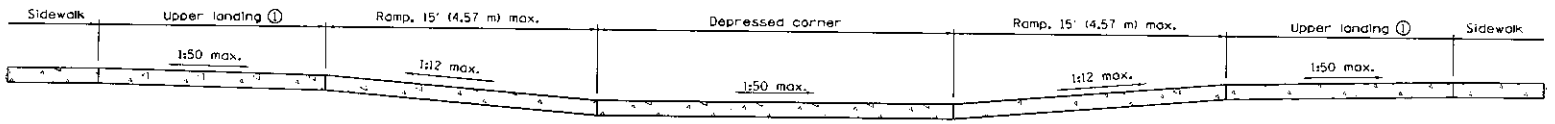
STANDARD 424016–01



DEPRESSED CORNER

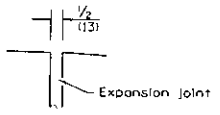


SECTION B–B

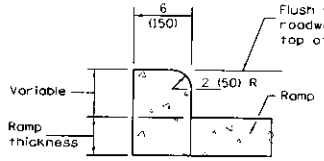


SECTION A–A

① Upper landing(s) not required for ramp slopes flatter than 1:20.



DETAIL A



SIDE CURB DETAIL

GENERAL NOTES

This standard shall only be used for curb radii of 6 ft. (1.83 m) or greater.

All slope ratios are expressed as units of vertical displacement to units of horizontal displacement (V:H).

Where 1:50 maximum slope is shown, 1:64 is preferred.

See Standard 606001 for details of depressed curb adjacent to curb ramp.

All dimensions are in inches (millimeters) unless otherwise shown.

DATE	REVISIONS
[illegible]	Revised sidewalk width.
	Revised gen. notes to "min."
	Curb radii to 6' (1.83 m) min.
[illegible]	Revised General Notes.

DEPRESSED CORNER FOR SIDEWALKS

STANDARD 424021–02

[illegible] Bureau [illegible] Engineering Policy

APPROVED [illegible] 2014

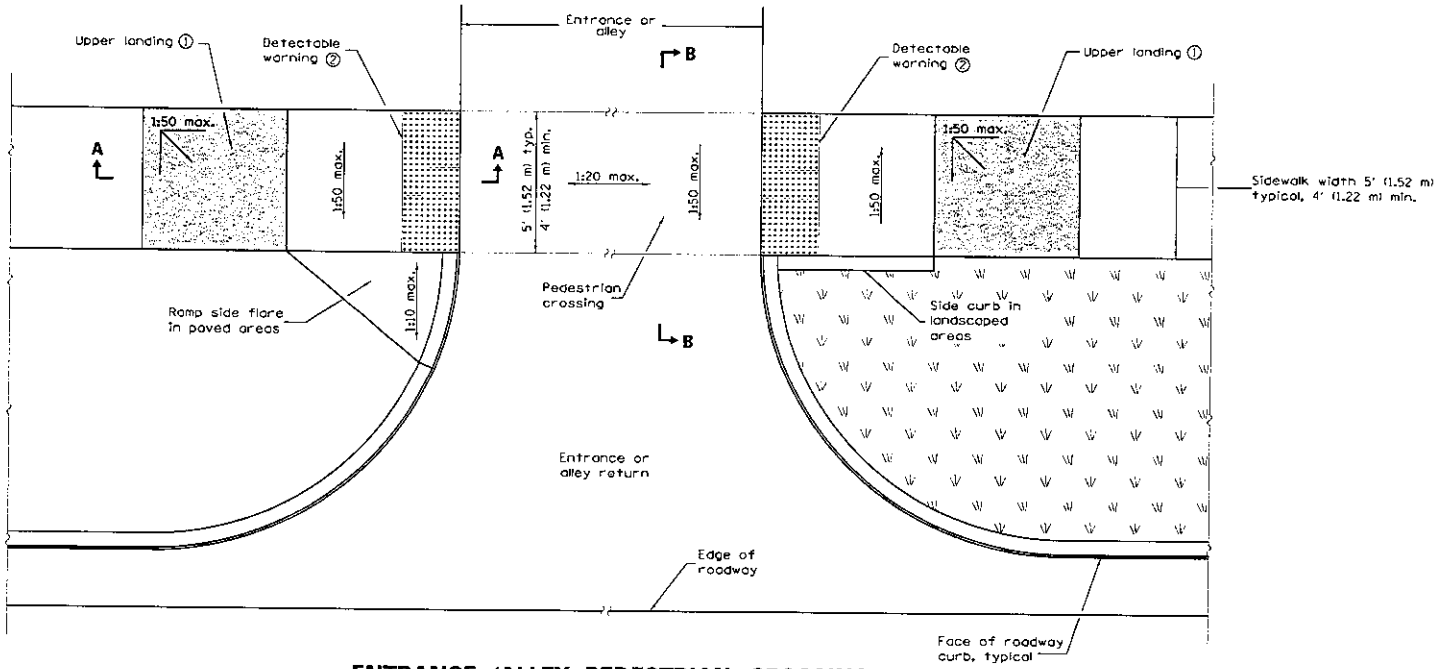
ENGINEER OF POLICY AND PROCEDURES

APPROVED [illegible] 2014

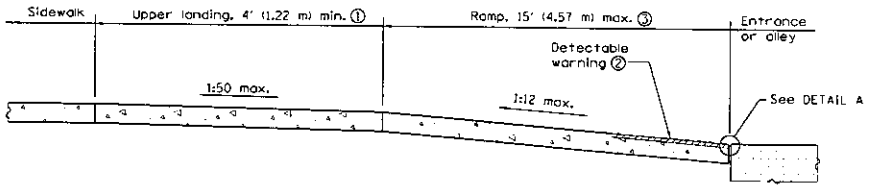
ENGINEER OF DESIGN AND ENVIRONMENT

② Detectable warning shall only be installed at entrances/alleys with permanent traffic control devices (i.e. stop signs, signals).

③ Where possible, maintain the grade of the sidewalk across the entrance/alley to avoid the need for ramps and upper landings.

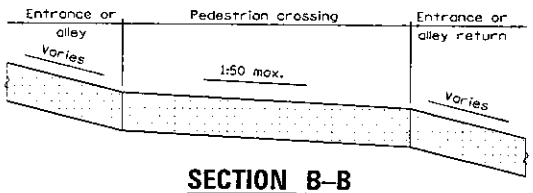


ENTRANCE /ALLEY PEDESTRIAN CROSSING

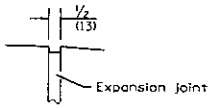


SECTION A–A

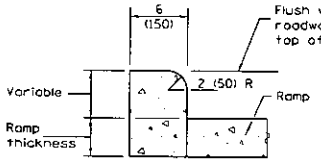
① Upper landing not required for ramp slopes flatter than 1:20.



SECTION B–B



DETAIL A



SIDE CURB DETAIL

GENERAL NOTES

All slope ratios are expressed as units of vertical displacement to units of horizontal displacement (V:H).

Where 1:50 maximum slope is shown, 1:64 is preferred.

All dimensions are in inches (millimeters) unless otherwise shown.

Illinois Department of Transportation

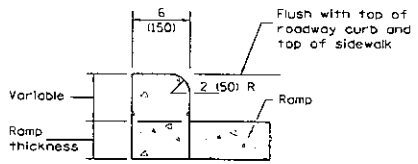
PASSED January 1, 2013
ENGINEER OF POLICY AND PROCEDURES

APPROVED January 1, 2013
ENGINEER OF DESIGN AND ENVIRONMENT

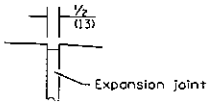
DATE	REVISIONS
1-1-13	Revised General Notes.
1-1-12	New standard.

ENTRANCE / ALLEY PEDESTRIAN CROSSINGS

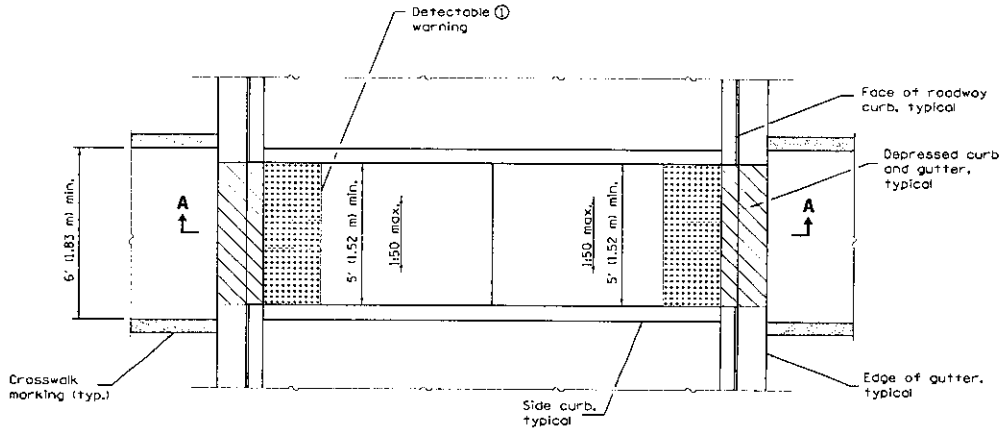
STANDARD 424026-01



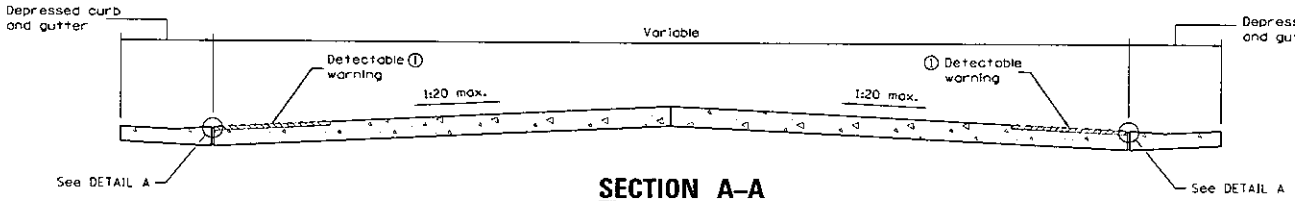
SIDE CURB DETAIL



DETAIL A



MEDIAN PEDESTRIAN CROSSING



SECTION A–A

① Omit detectable warnings when distance between back of curbs is less than 6' (1.83 m).

GENERAL NOTES

All slope ratios are expressed as units of vertical displacement to units of horizontal displacement (V:H).

Where 1:50 maximum slope is shown, 1:64 is preferred.

See Standard 606001 for details of depressed curb adjacent to curb ramp.

All dimensions are in inches (millimeters) unless otherwise shown.

Illinois Department of Transportation

PASSED January 1, 2013
ENGINEER OF POLICY AND PROCEDURES

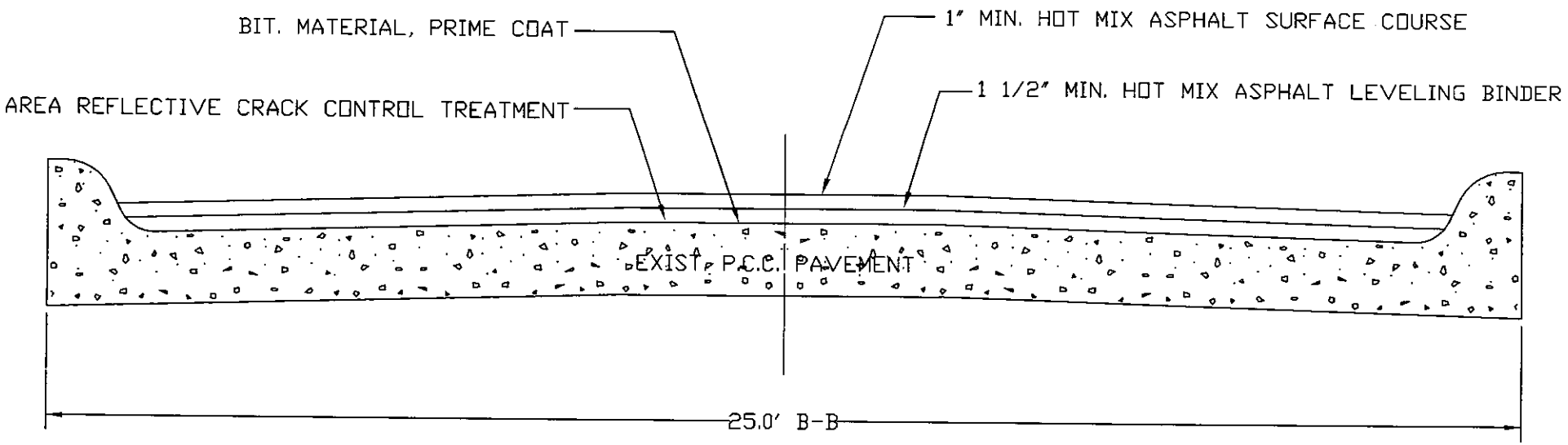
APPROVED January 1, 2013
ENGINEER OF DESIGN AND ENVIRONMENT

ISSUED 1-1-12

DATE	REVISIONS
1-1-12	Widened crosswalk to 6'
	(1.83 m) min. inside dimension.
	Revised General Notes.
1-1-12	New standard.

MEDIAN PEDESTRIAN CROSSINGS

STANDARD 424031-01



TYPICAL OVERLAY SECTION

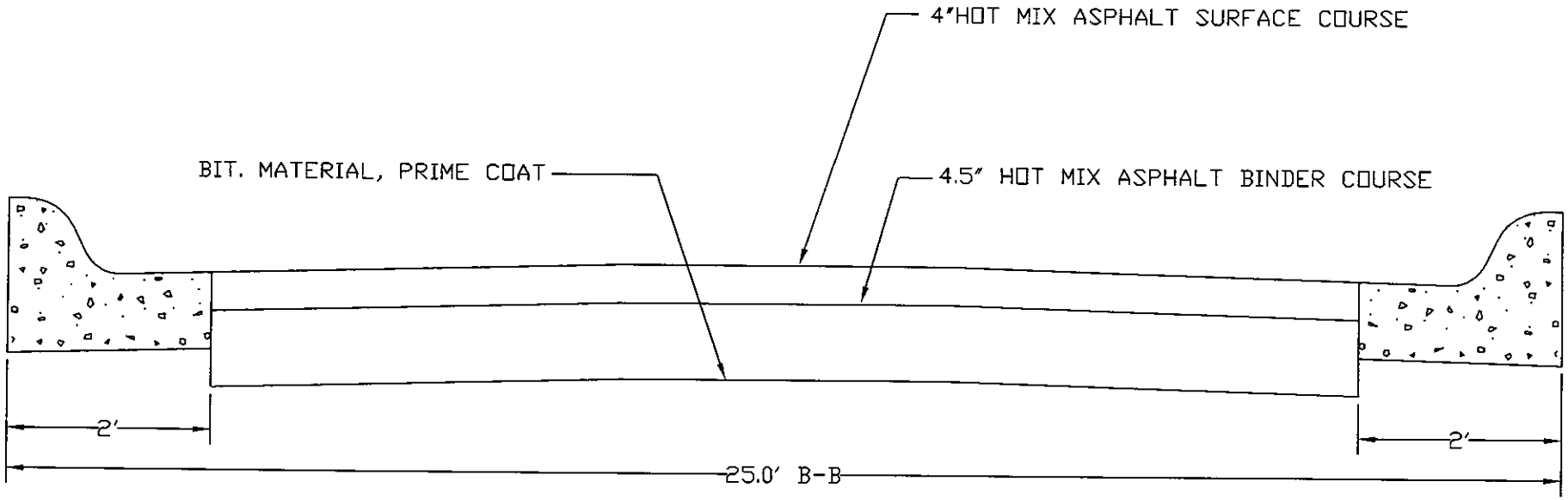
NOT TO SCALE

REVISION	MJH	05/07/01
STANDARDIZED	PMCJ	09/06/94
REVISION	BY	DATE

TYPICAL OVERLAY SECTION

CITY OF ROCK ISLAND
ENGINEERING DIVISION

STANDARD NO. 110



TYPICAL - FULL DEPTH BIT. CONC. SECTION

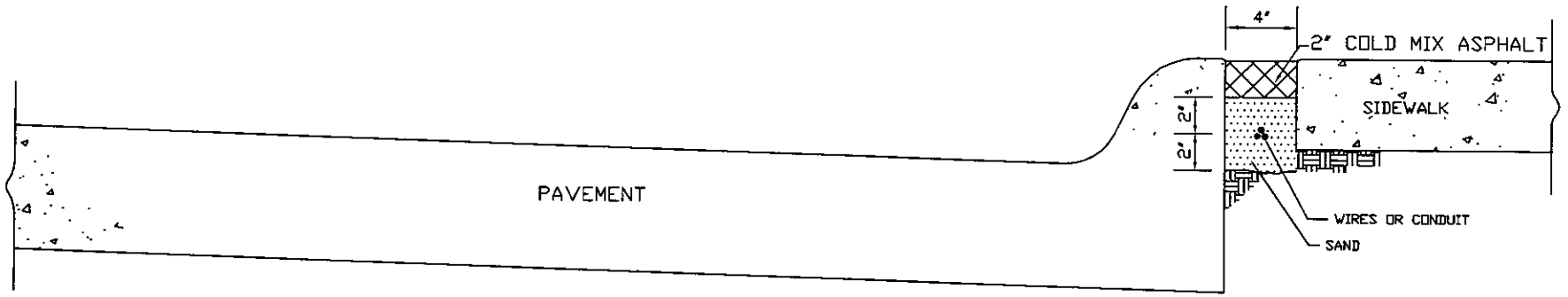
NOT TO SCALE

REVISION	MJH	05/07/01
STANDARDIZED	PMCJ	09/07/94
REVISION	BY	DATE

TYPICAL - FULL DEPTH BIT. CONC. SECTION

CITY OF ROCK ISLAND
ENGINEERING DIVISION

STANDARD NO. 111

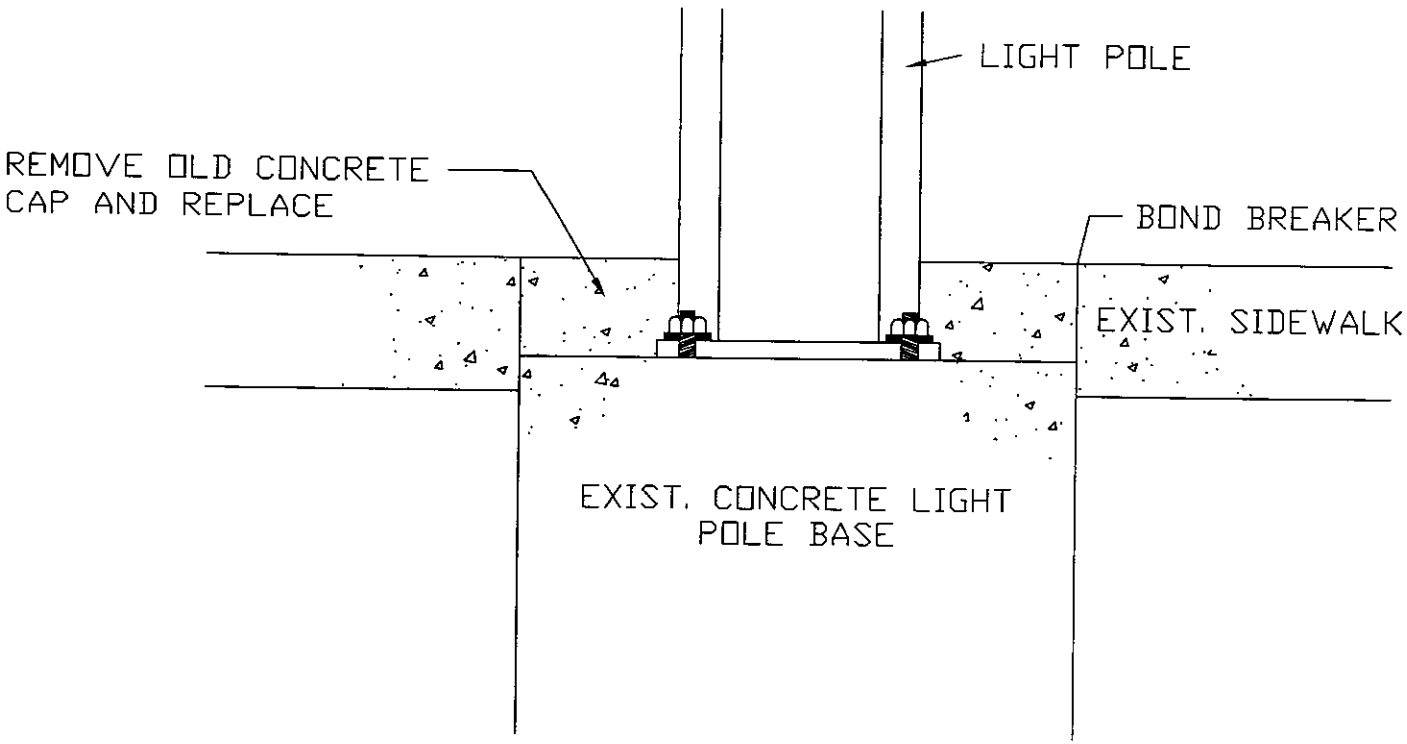


STANDARDIZED	CWE	06/28/91
STAND112.DWG	MDW	03/91
REVISION	BY	DATE

RACEWAY DETAIL

CITY OF ROCK ISLAND
ENGINEERING DIVISION

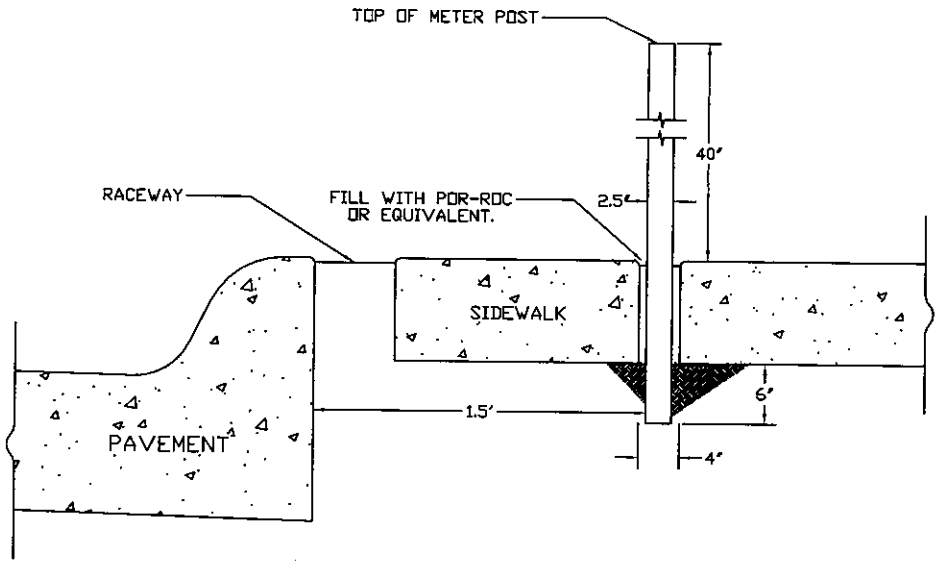
STANDARD NO. 112



STANDARDIZED	CWE	06/28/91
STAND113.DWG	MDM	03/91
REVISION	BY	DATE

SIDEWALK AT LIGHT POLE BASE

CITY OF ROCK ISLAND ENGINEERING DIVISION	STANDARD NO. 113

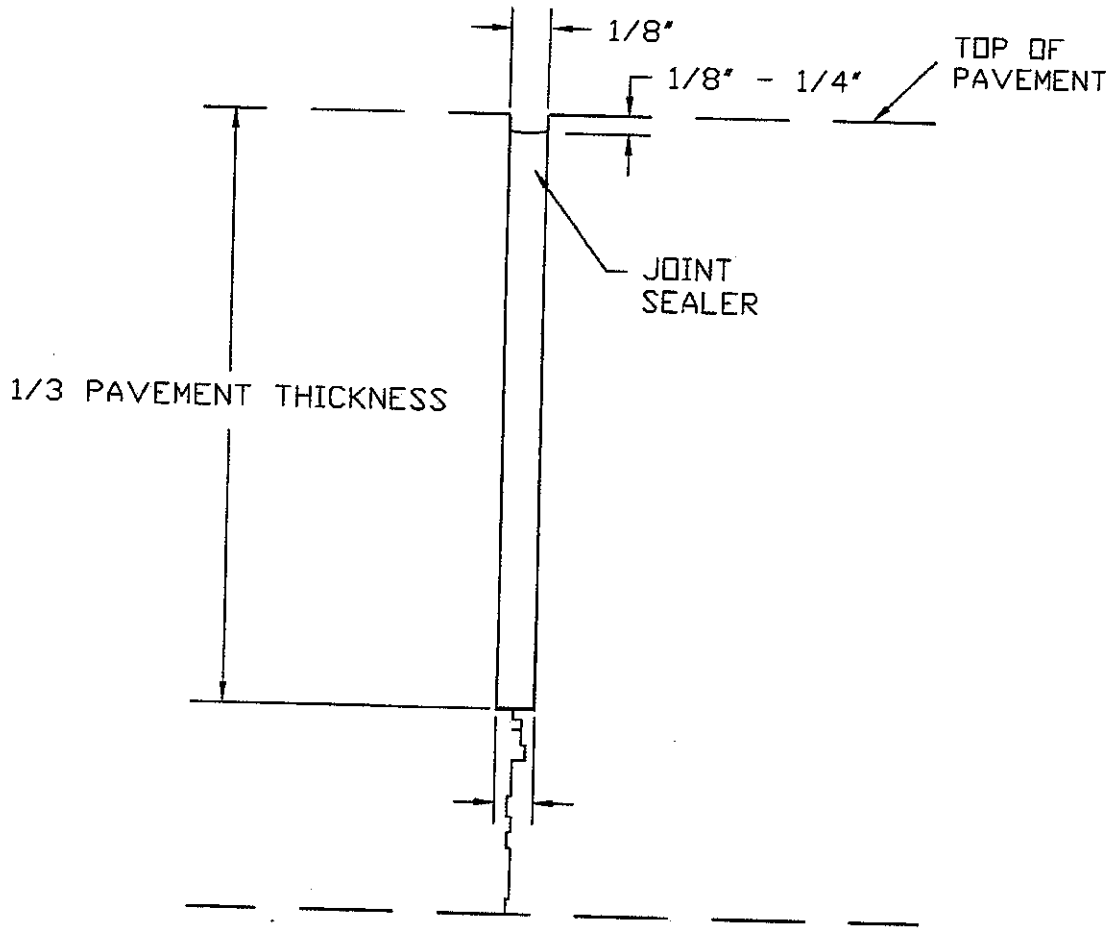


STANDARDIZED	CWE	06/28/91
STAND114.DWG	MDM	03/91
REVISION	BY	DATE

PARKING METER POST DETAIL

CITY OF ROCK ISLAND
ENGINEERING DIVISION

STANDARD NO. 114



1. AFTER SAWING, BLOW WITH OIL- AND WATER- FREE COMPRESSED AIR TO ELIMINATE DEBRIS AND WATER
2. SEAL WITH APPROVED JOINT SEALER

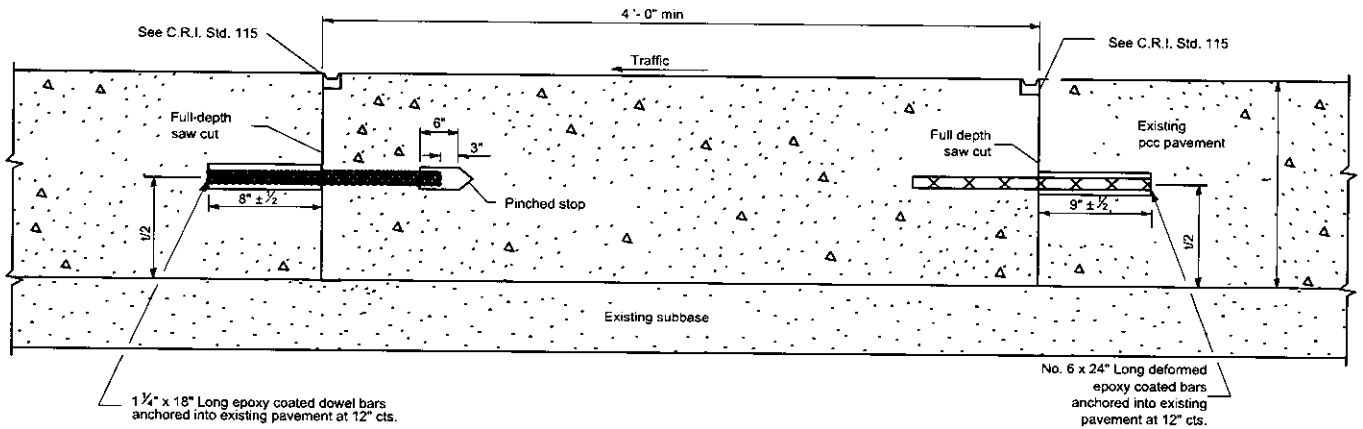
REVISION	BY	DATE
REVISED	MDW	03/26/08
REVISED	TAB	01/07/00
STANDARDIZED	CWE	06/28/91

DETAIL OF JOINT FILLER

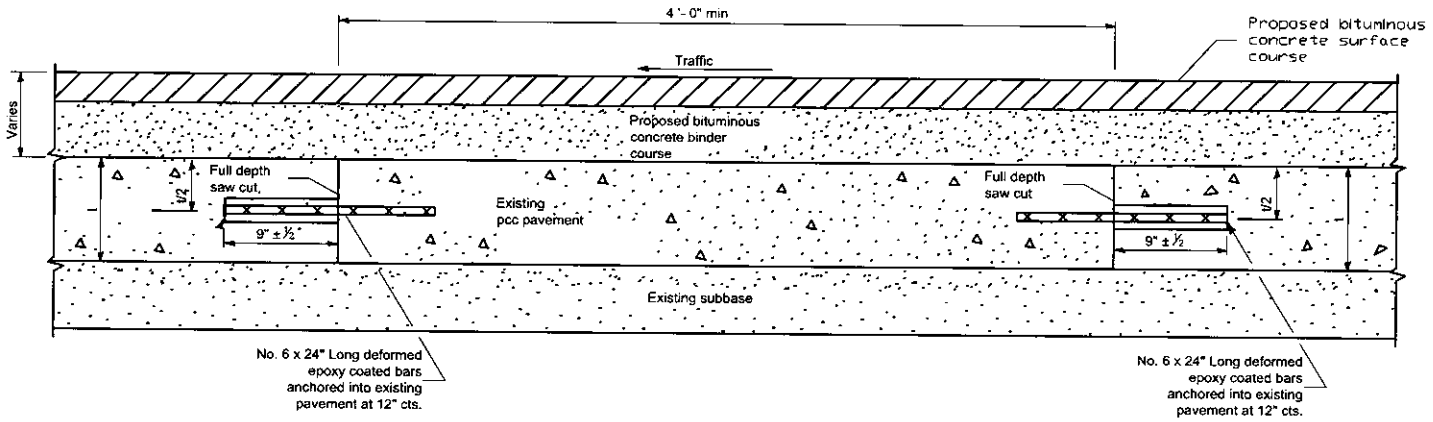
CITY OF ROCK ISLAND
ENGINEERING DIVISION

STANDARD NO. 115

TIE BARS ON CENTERLINE IN PATCHES > 10.0'



METHOD I
(NO RESURFACING)



METHOD II
(WITH RESURFACING)

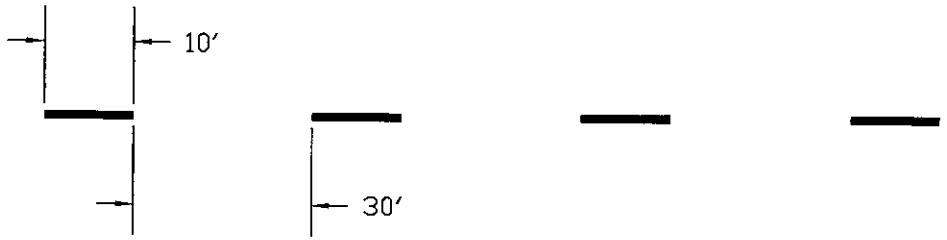
All dimensions are in inches unless otherwise shown.

REVISION	BY	DATE
REVISED	DGW	02/21/08
REVISED	WLC	03/21/07
REVISED	MDW	05/09/05
STANDARDIZED	WLC	04/01/05

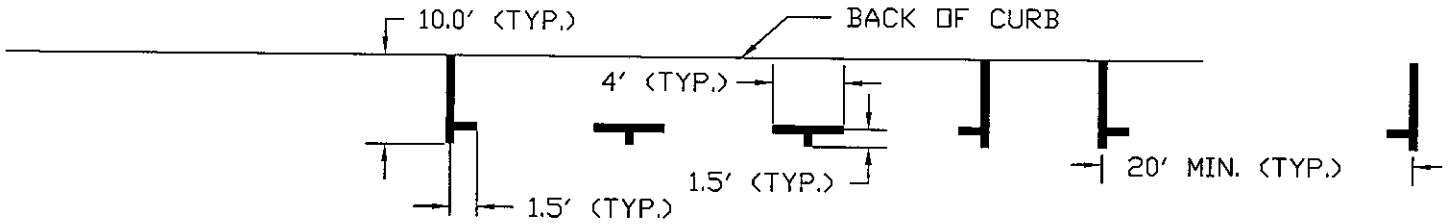
PATCH REINFORCEMENT STANDARD

CITY OF ROCK ISLAND ENGINEERING DIVISION	STANDARD NO. 116

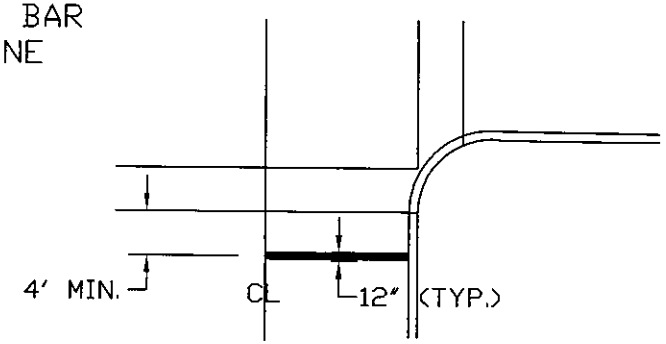
TYPICAL LANE MARKING
4"WIDE LINE



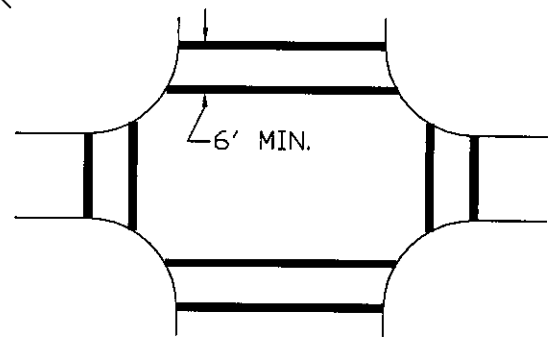
TYPICAL PARKING SPACE LIMIT MARKING
4" WIDE LINE



TYPICAL STOP BAR
12" WIDE LINE



TYPICAL CROSSWALK
6" WIDE LINE

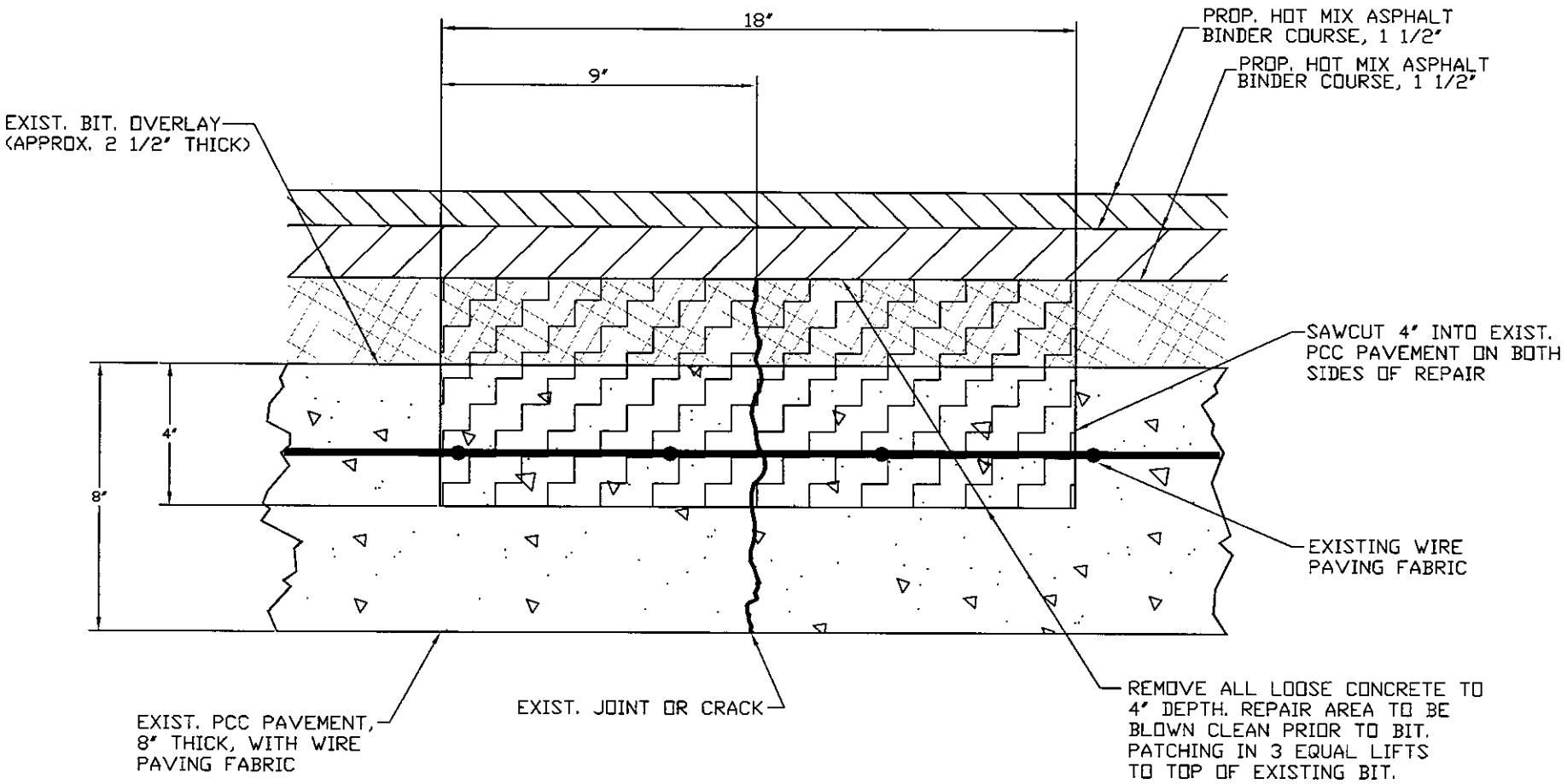


REVISION	BY	DATE
REVISED	GB	10/29/96
STANDARDIZED	CVE	06/28/91

TYPICAL PAVEMENT MARKINGS

CITY OF ROCK ISLAND
ENGINEERING DIVISION

STANDARD NO. 117

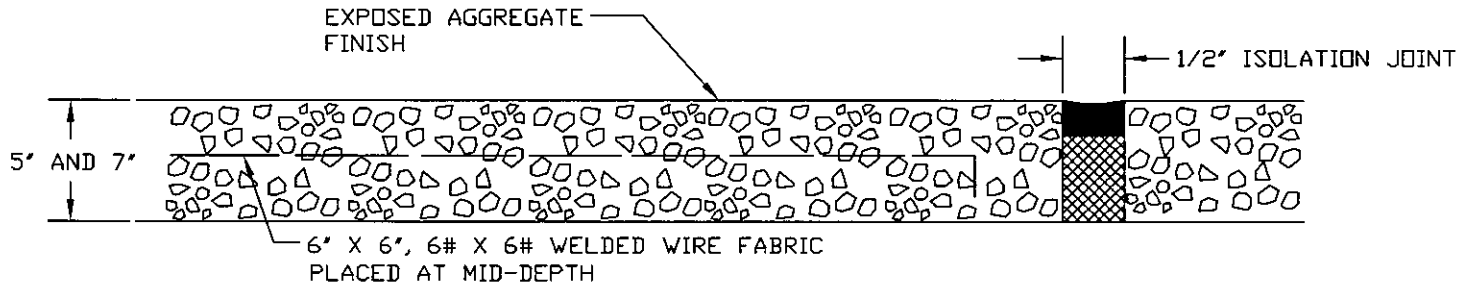


JOINT AND CRACK REPAIR

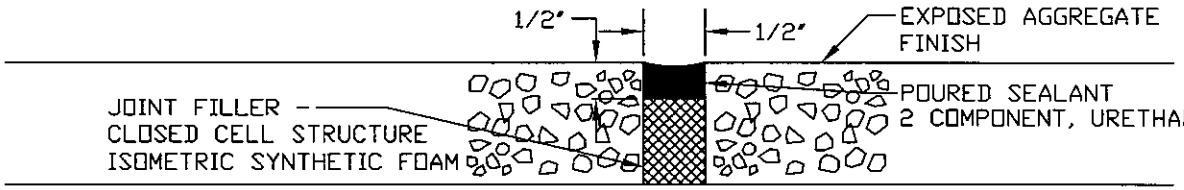
STAND103.DWG	RDJ	03/05/93
REVISION	BY	DATE

JOINT REPAIR DETAIL

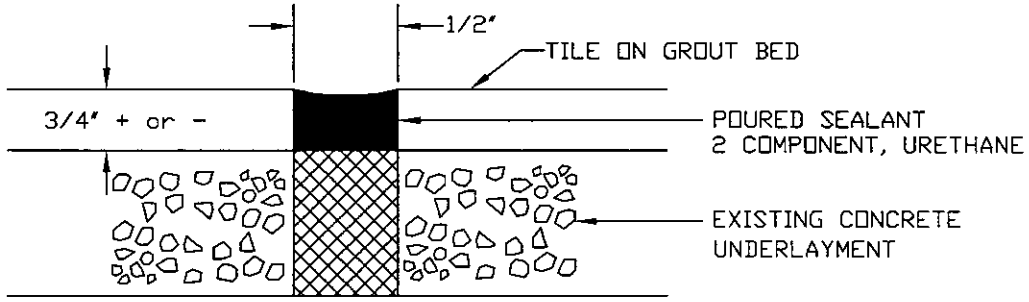
CITY OF ROCK ISLAND ENGINEERING DIVISION	STANDARD NO. 118



P.C.C. SIDEWALK WITH EXPOSED AGGREGATE FINISH



ISOLATION JOINT FOR EXPOSED AGGREGATE FINISH



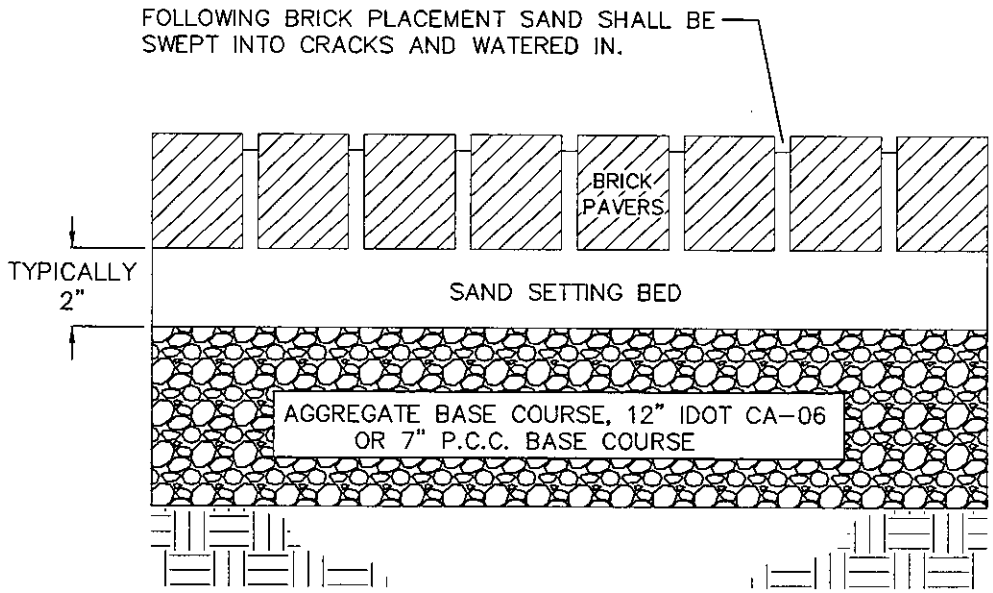
ISOLATION JOINT FOR TILE REPAIR

STANDARDIZED	PMCJ	03/16/94
REVISION	BY	DATE

JOINTS, SPECIAL

ISOLATION JONT FOR TILE REPAIR

CITY OF ROCK ISLAND ENGINEERING DIVISION	STANDARD NO. 119



NOTE:

1. WHERE POSSIBLE SALVAGED BRICK SHALL BE REUSED. IF ADDITIONAL BRICK IS NEEDED, THEY SHALL BE PURINGTON PAVERS, OR APPROVED EQUAL.

2. BRICK SHALL BE PLACED TO MATCH THE EXISTING PAVEMENT OR SIDEWALK PATTERN.

3. THE SAND SETTING BED SHALL MEET THE IDOT REQUIREMENTS FOR GRADATIONS FA-1, FA-2 OR FA-6 AS DESIGNATED IN SECTION 1003 OF THE STANDARD SPECIFICATIONS.

4. BRICK SIDEWALK SHALL HAVE AN AGGREGATE BASE COURSE, TYPE A (IDOT GRADATION CA-6) PLACED ACCORDING TO SECTION 351 OF THE STANDARD SPECIFICATIONS.

5. BRICK PAVEMENT SHALL HAVE A P.C.C. BASE COURSE OF 7" PLACED ACCORDING TO SECTION 353 OF THE STANDARD SPECIFICATIONS OR A 12" AGGREGATE BASE COURSE, TYPE A (IDOT CA-06)

NOT TO SCALE

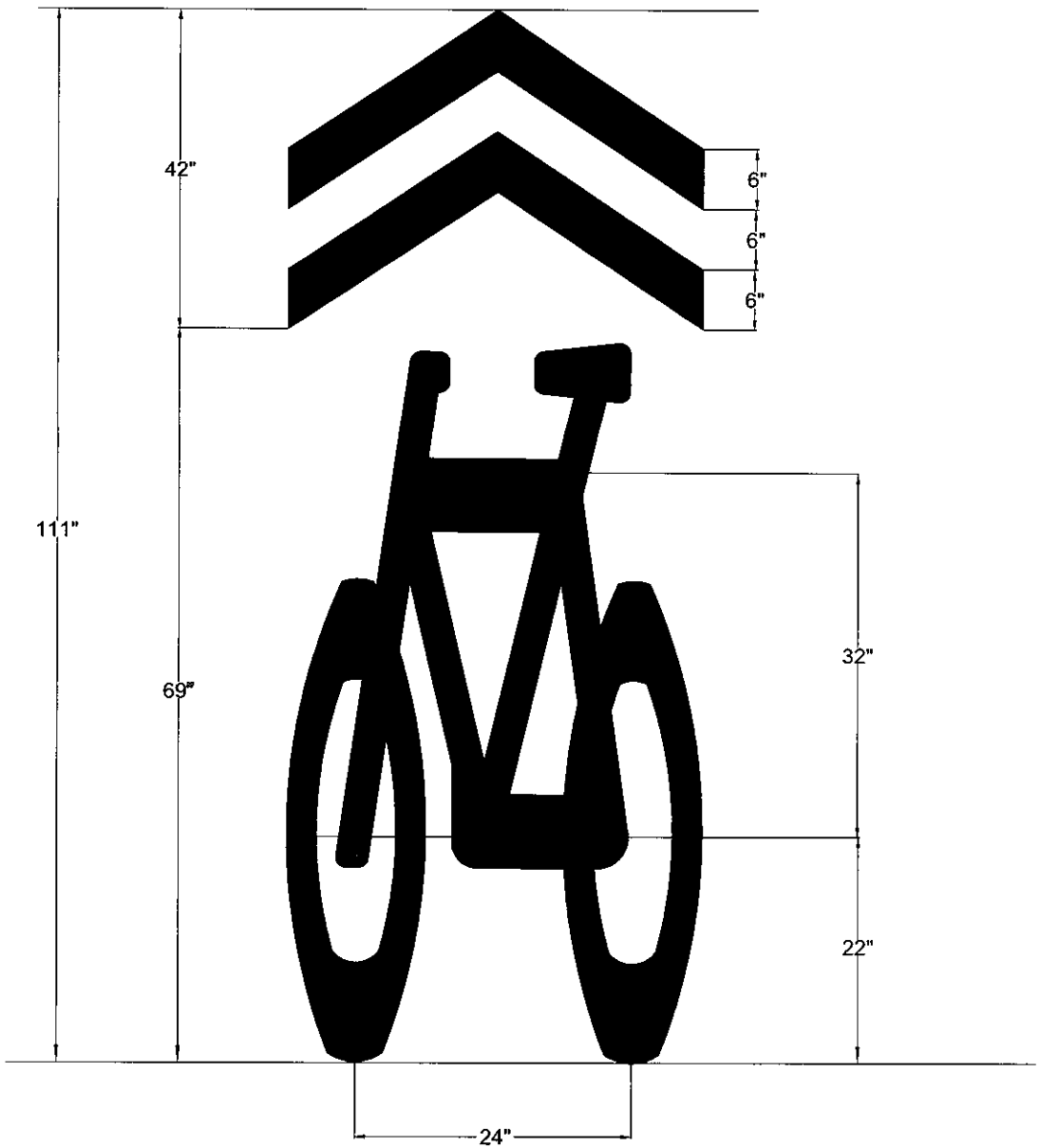
BRICK PAVEMENT AND SIDEWALK

BASE UPDATE	JCP	6/9/11
METRIC	BJT	12/30/96
STANDARDIZED	PMCJ	3/28/86
REVISION	BY	DATE

S:\...\MISC\STANDARD\CRI_STD\120.DWG

CITY OF ROCK ISLAND
ENGINEERING DIVISION

STANDARD NO. 120



NOT TO SCALE

NOTE:

1. PAINTING FOR THE "SHARROW" MARKINGS SHALL BE APPLIED IN ACCORDANCE WITH IDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, ARTICLE 780.06.

2. THERMOPLASTIC FOR THE "SHARROW" MARKINGS SHALL BE APPLIED IN ACCORDANCE WITH IDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, ARTICLE 780.05.

3. MARKINGS SHALL BE PLACED 4' FROM THE FACE OF THE CURB WHERE THE ROADWAY IS MARKED "NO PARKING".

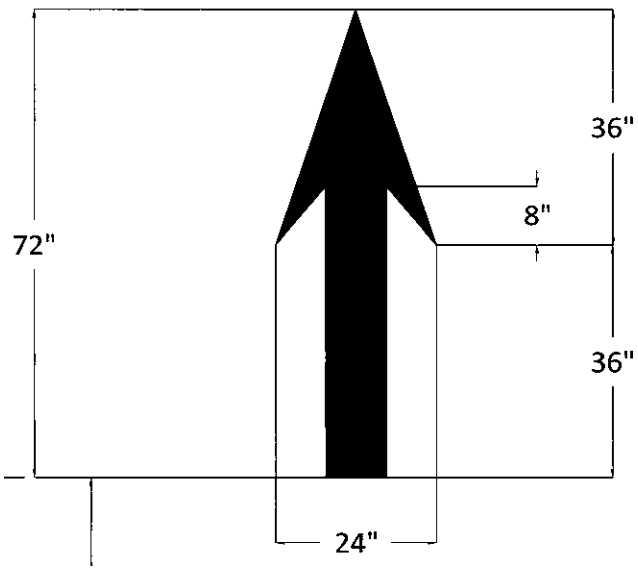
4. MARKINGS SHALL BE PLACED 11' FROM THE FACE OF THE CURB WHERE PARKING IS ALLOWED

BICYCLE SHARED LANE MARKINGS, "SHARROWS"

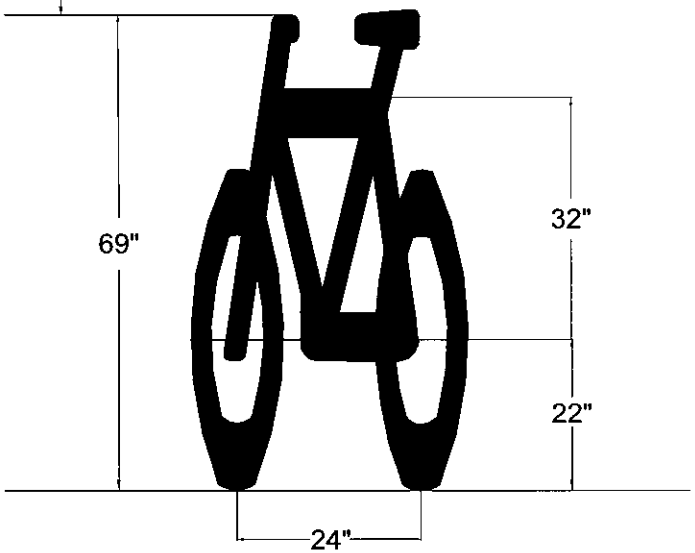
CITY OF ROCK ISLAND ENGINEERING DIVISION		STANDARD NO. 121

STANDARDIZED	JCP	7/30/12
REVISION	BY	DATE

S:\...\MISC\STANDARD\CRI_STD\121.DWG



72" (NTS)



NOT TO SCALE

NOTE:

1. PAINTING FOR THE "BIKE LANE" MARKINGS SHALL BE APPLIED IN ACCORDANCE WITH IDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, ARTICLE 780.06.

2. THERMOPLASTIC FOR THE "BIKE LANE" MARKINGS SHALL BE APPLIED IN ACCORDANCE WITH IDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, ARTICLE 780.05.

3. MARKINGS SHALL BE PLACED IN THE CENTER OF THE BIKE LANE.

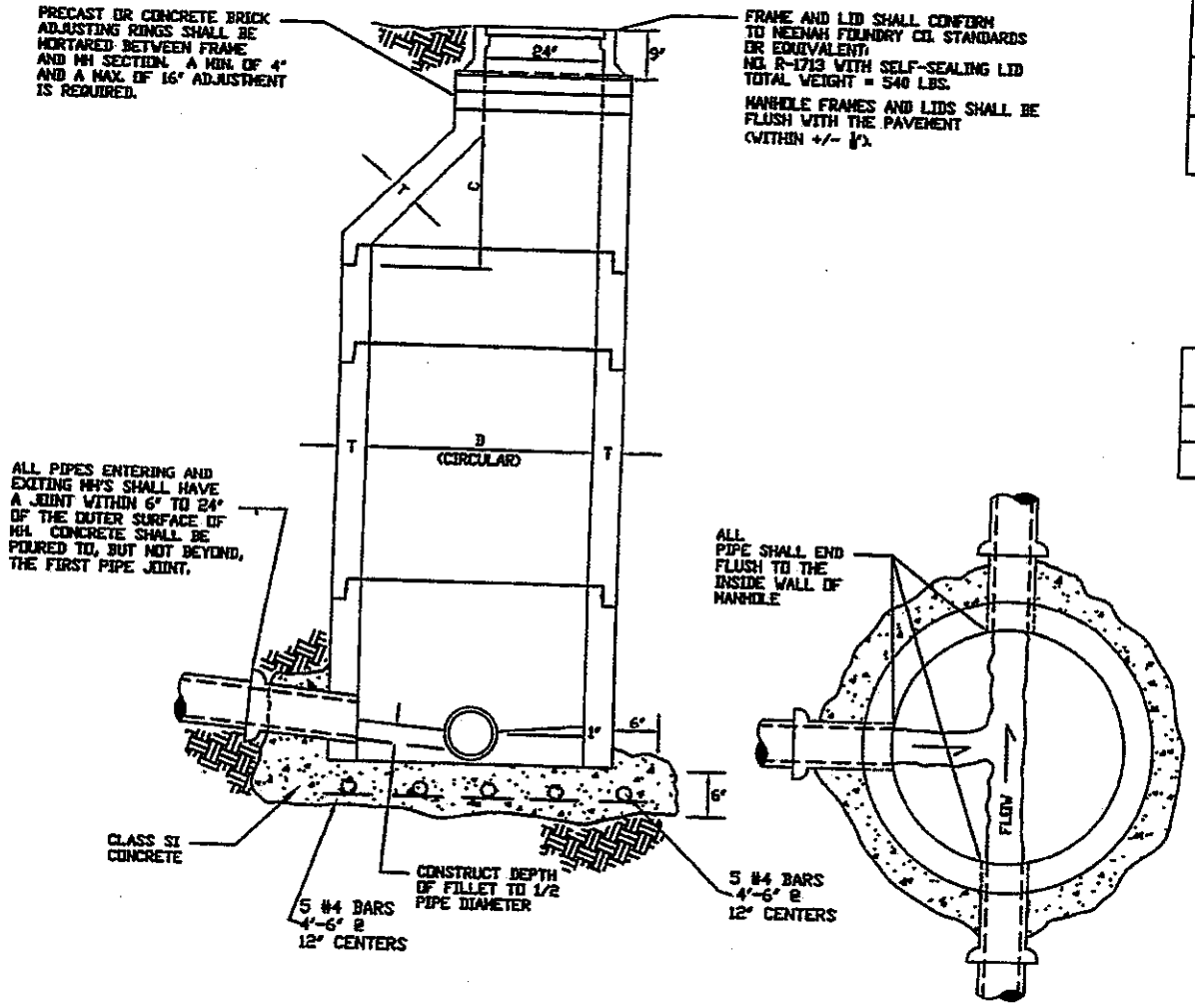
BICYCLE LANE MARKINGS

REVISED	MDW	3/4/14
STANDARDIZED	JCP	7/30/12
REVISION	BY	DATE

S: \...\MISC\STANDARD\CRI_STD\121.DWG

CITY OF ROCK ISLAND
ENGINEERING DIVISION

STANDARD NO. 122



ALTERNATE MATERIAL FOR WALLS	D	C	T
PRECAST SECTIONS	4'-0"	3'-0"	5"
	5'-0"	3'-0"	6"
POURED WALLS *	4'-0"	3'-0"	6"
	5'-0"	3'-0"	6"

* CLASS SI CONCRETE, VIBRATED, WITH FORMS RIDGED AND TRUE TO VERTICAL ALIGNMENT.

DIAMETER OF MAIN SEWER	D
21" AND UNDER	4'-0"
24" TO 36" INCLUSIVE	5'-0"

NOTES:

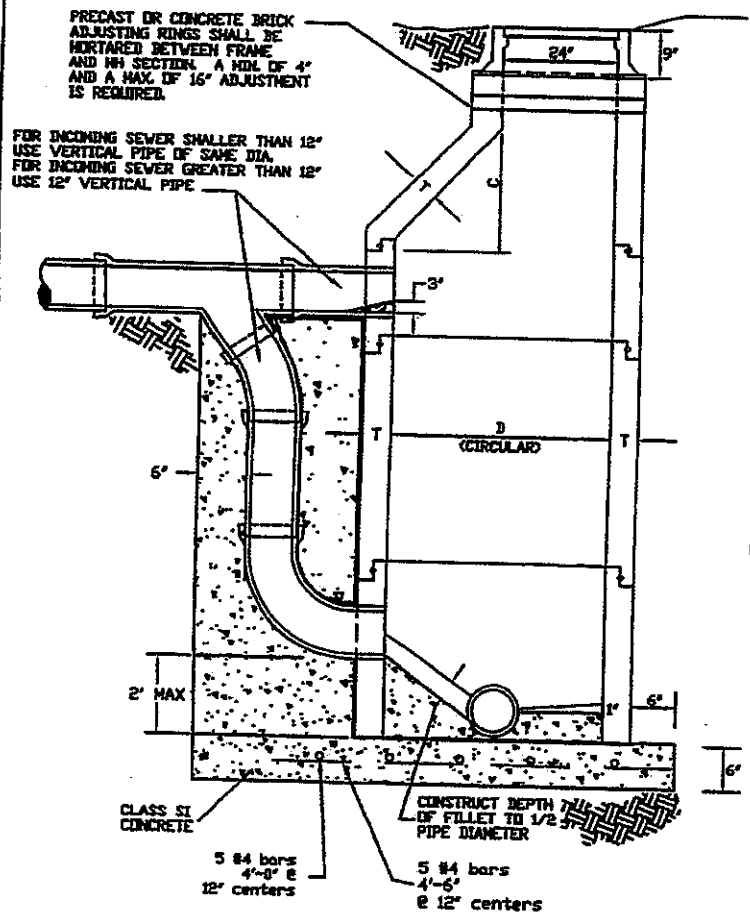
1. NO PIPE SHALL ENTER MANHOLE HIGHER THAN 2" FROM FILLET, UNLESS AN OUTSIDE DROP M.H. IS CONSTRUCTED.
2. ALL PRECAST MANHOLE JOINTS SHALL BE SEALED WITH AN O-RING RUBBER GASKET, MEETING ASTM C443.
3. PIPE CONNECTIONS ON M.H. WORK ARE INCIDENTAL, IF WITHIN 2' OF STRUCTURE.
4. PRECAST M.H. SECTIONS WITH A-LOCKS & PRECAST FILLETS SHALL NOT BE ALLOWED.
5. STEPS SHALL NOT BE INSTALLED IN MANHOLE.
6. USE SELF SEALING LIDS ON ALL SANITARY AND USE TYPE B ON ALL STORM.
7. MATCH 0.8 POINTS ON PIPE ENTERING MANHOLE

REVISION	BY	DATE
MH FRAME/GRATE ELEV.	J.C.P.	01/15/09
UPDATE ASTM ON NOTE 2	J.C.P.	01/05/09
CHANGE NOTE 6	L.E.P.	06/06/08
REMOVE STEPS	W.L.C.	07/31/01
O-RING JOINT / 3'-0"	CAH	01/28/09

STANDARD MANHOLE

CITY OF ROCK ISLAND
ENGINEERING DIVISION

STANDARD NO. 201



FRAME AND LID SHALL CONFORM TO NEENAH FOUNDRY CO. STANDARDS OR EQUIVALENT NO. R-1713 USE SELF-SEALING LID OUTSIDE PAVED AREAS TOTAL WEIGHT = 540 LBS.

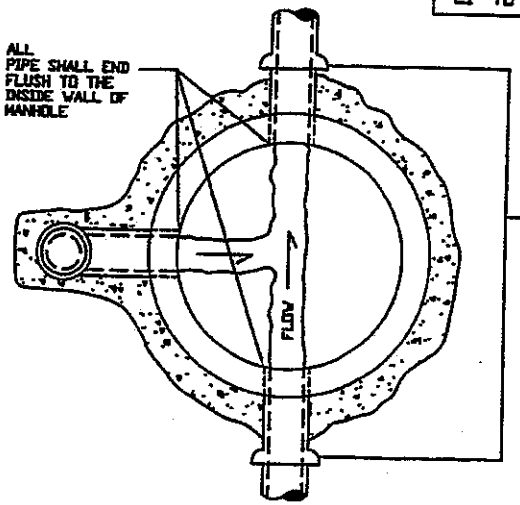
MANHOLE FRAMES AND LIDS SHALL BE FLUSH WITH THE PAVEMENT (WITHIN +/- ½").

USE SELF SEALING LIDS ON ALL SANITARY AND USE TYPE B ON ALL STORM.

ALTERNATE MATERIAL FOR WALLS	D	C	T
PRECAST SECTIONS	4'-0"	3'-0"	5"
	5'-0"	3'-0"	6"
POURED WALLS *	4'-0"	3'-0"	6"
	5'-0"	3'-0"	6"

* CLASS SI CONCRETE, VIBRATED, WITH FORMS RIDGED AND TRUE TO VERTICAL ALIGNMENT.

DIAMETER OF MAIN SEWER	D
18" AND UNDER	4'-0"
21" TO 42" INCLUSIVE	5'-0"



ALL PIPE SHALL END FLUSH TO THE INSIDE WALL OF MANHOLE

NOTE:
#1) ALL PRECAST MANHOLE JOINTS SHALL BE SEALED WITH AN "O"-RING, RUBBER GASKET MEETING ASTM C443.

#2) MANHOLES IN PAVED AREAS SHALL HAVE REBARS PLAYED AROUND CASTING AS PER CRI STANDARD 305.

ALL PIPES ENTERING AND EXITING MH'S SHALL HAVE A JOINT WITHIN 6" TO 24" OF THE OUTER SURFACE OF MH. CONCRETE SHALL BE POURED TO, BUT NOT BEYOND, THE FIRST PIPE JOINT.

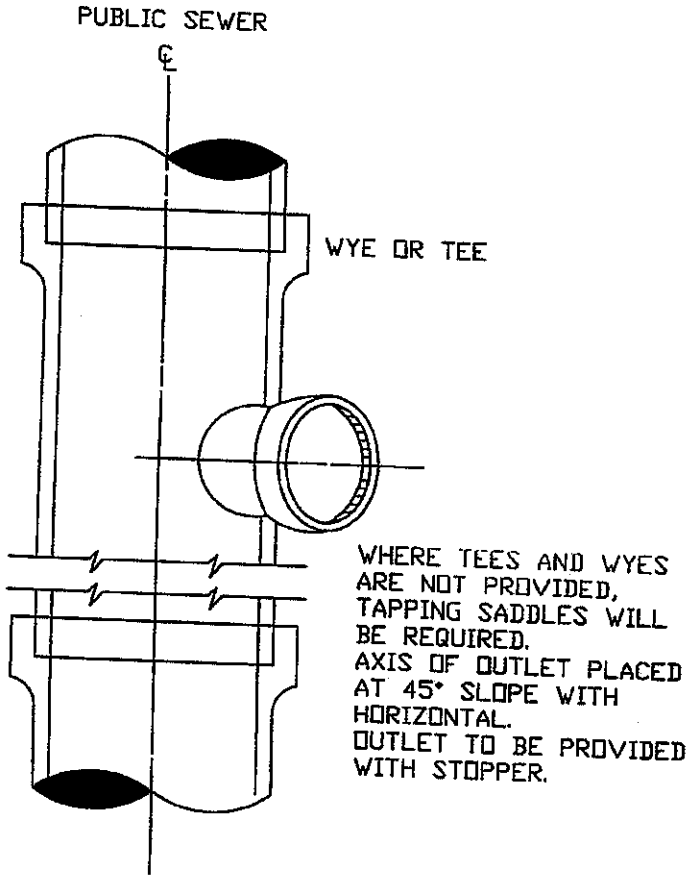
NOTE: THIS STANDARD APPLIES TO INCOMING SEWERS OF 18" DIA OR LESS

REVISION	BY	DATE
MH FRAME/GRATE ELEV.	JCP	01/15/09
SELF SEALING/TYPE B	LCP	06/06/08
VERTICAL PIPE DIA	VLC	07/20/03
CONC. ENCASEMENT	VLC	05/22/02
REVISED	CAN	1/28/99
"O"-RING JOINTS/ 3'-0"	DEC.	08/5/93

STANDARD DROP MANHOLE

CITY OF ROCK ISLAND ENGINEERING DIVISION	STANDARD NO. 202

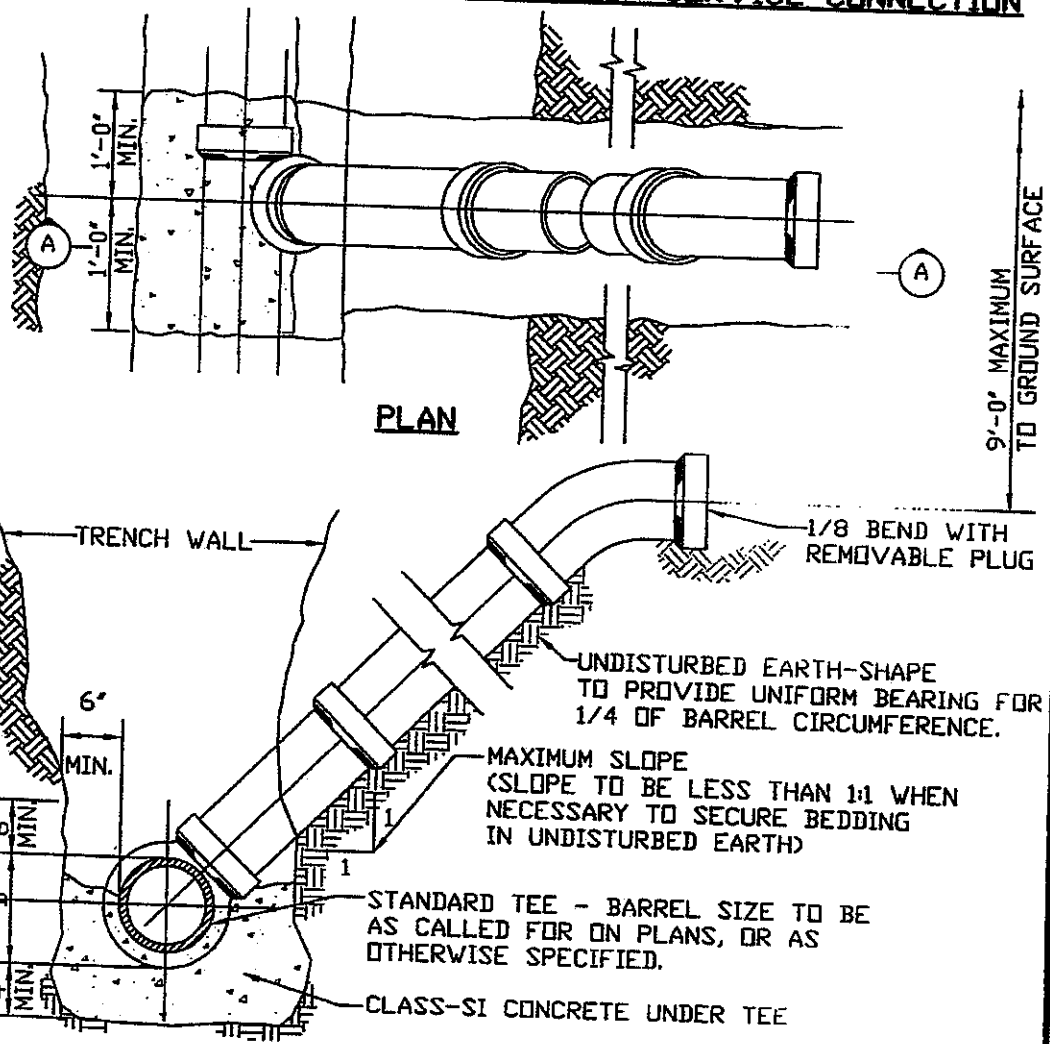
STANDARD SERVICE CONNECTIONS



NOT TO SCALE

CONCRETE	KDV	12/04/06
STANDARDIZED	PHCJ	09/07/94
REVISION	BY	DATE

STANDARD RISER FOR SERVICE CONNECTION



SECTION A-A

NOTES:

1. RISERS TO BE CONSTRUCTED WHERE SEWER DEPTH EXCEEDS 12'-0".
2. FOR PIPE MATERIAL AND CONCRETE, SEE STATE STANDARD SPECIFICATIONS FOR WATER & SEWER MAIN CONST.

STANDARD SERVICE CONNECTIONS

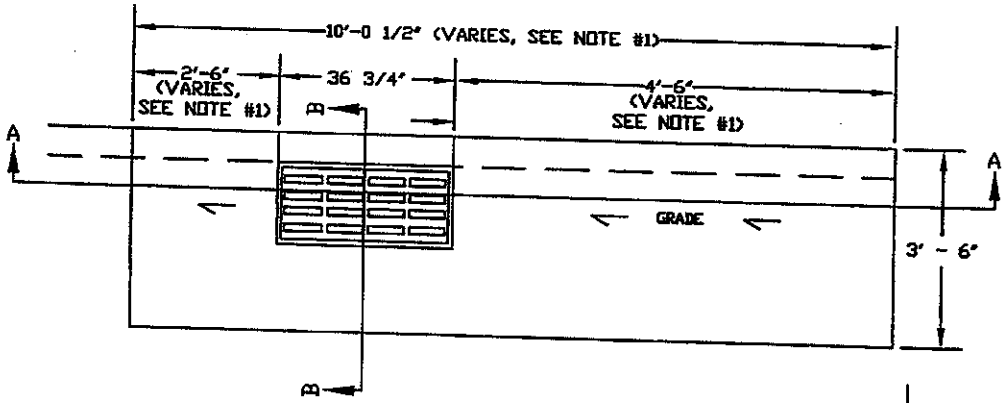
CITY OF ROCK ISLAND ENGINEERING DIVISION	STANDARD NO. 203

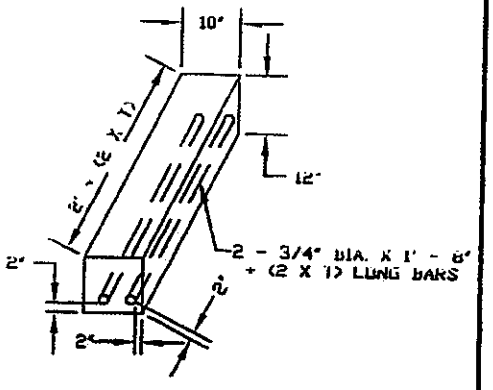
NOTE 1: MATCH EXISTING JOINTS AS IS PRACTICABLE. ON NEW PAVEMENT BEGIN JOINT PATTERN FROM EDGES OF BOX OUT.

NOTE 2: STEEL REBAR TO BE PLACED AS SHOWN WHETHER CATCH BASIN IS POURED INTEGRAL TO PAVEMENTOR IN A BOX OUT. MAINTAIN MINIMUM OF 2" CLEARANCE BETWEEN REBAR AND FACE OF CONCRETE.

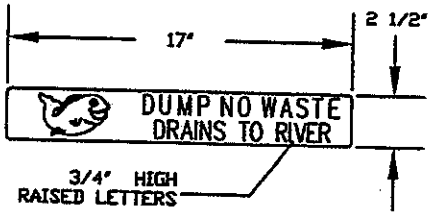
NOTE 3: IN AREAS WITH COMBINATION SEWERS, A 12" SUMP WILL BE INSTALLED IN PLACE OF FILET.

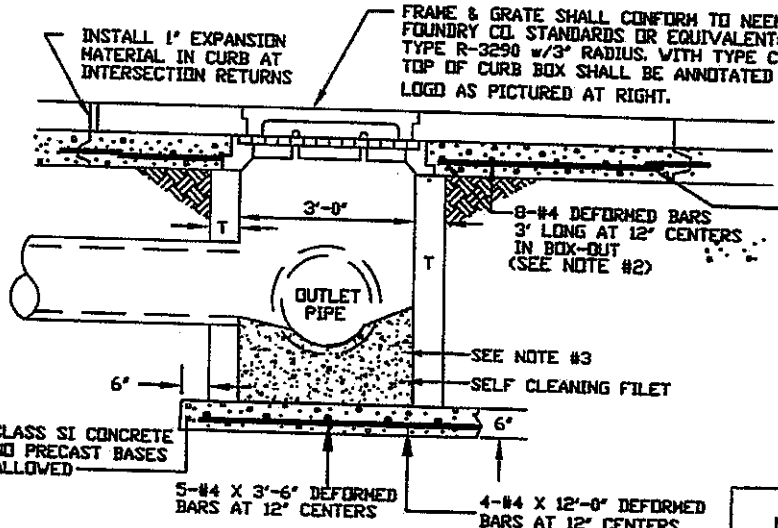
NOTE 4: DEPRESS CASTING 1" GUTTER LINE GRADE



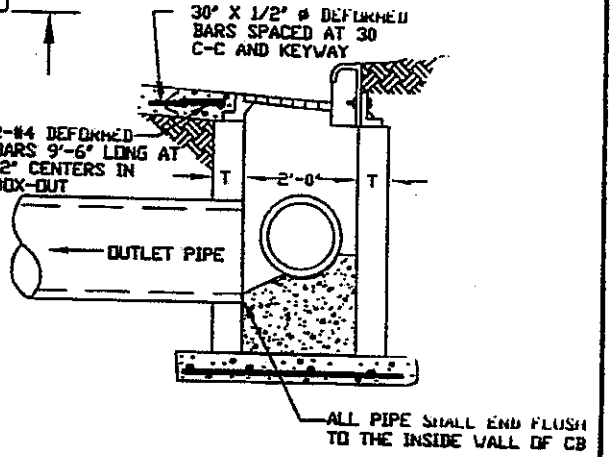


BEAM DETAIL





SECTION A-A



SECTION B-B

ALTERNATE MATERIAL FOR WALLS	T
PRECAST SECTIONS	5"
POURED WALLS *	6"

* CLASS SI CONCRETE, VIBRATED, WITH FORMS RIDGED AND TRUE TO VERTICAL ALIGNMENT.

NOT TO SCALE

REVISION	BY	DATE
REVISED	VLC	03/30/06
REVISED	KJH	05/03/01
REVISED	TAB	11/08/99
STAND204.DWG	PNCJ	6/1/93

SINGLE CATCH BASIN

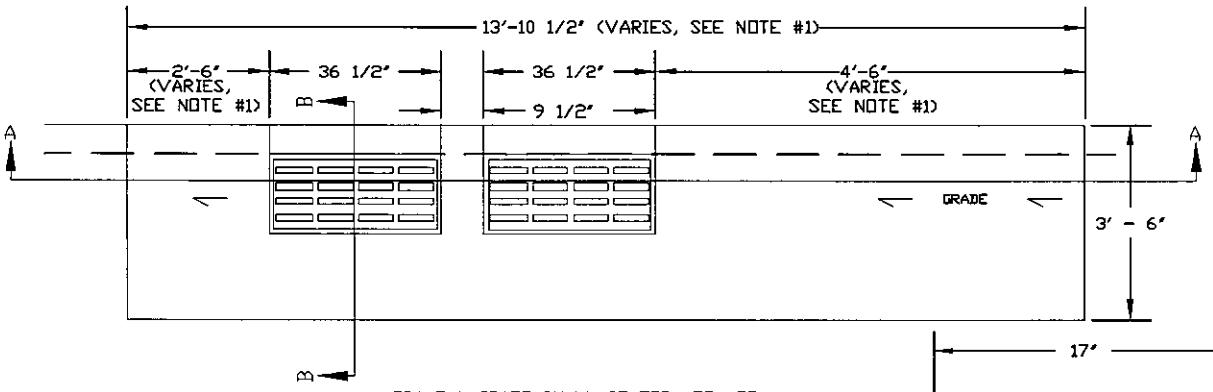
CITY OF ROCK ISLAND
ENGINEERING DIVISION

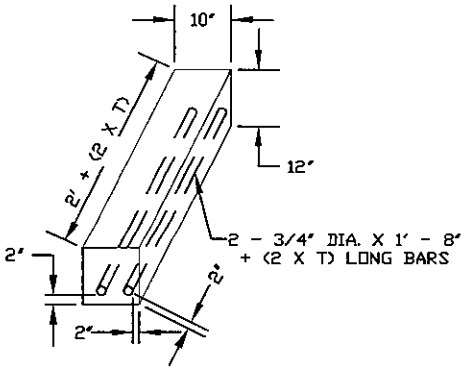
STANDARD NO. 204

NOTE 1: MATCH EXISTING JOINTS AS IS PRACTICABLE. ON NEW PAVEMENT BEGIN JOINT PATTERN FROM EDGES OF BOX OUT.

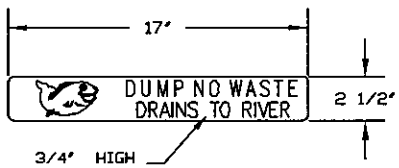
NOTE 2: STEEL REBAR TO BE PLACED AS SHOWN WHETHER CATCH BASIN IS POURED INTEGRAL TO PAVEMENT OR IN A BOX OUT. MAINTAIN MINIMUM OF 2" CLEARANCE BETWEEN REBAR AND FACE OF CONCRETE.

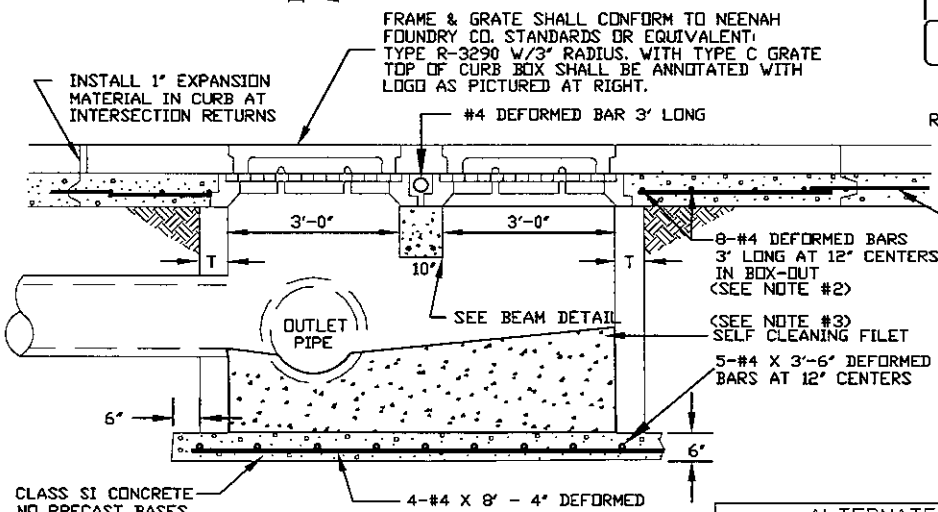
NOTE 3: IN AREAS WITH COMBINATION SEWERS. A 12" SUMP WILL BE INSTALLED IN PLACE OF SELF CLEANING FILET.



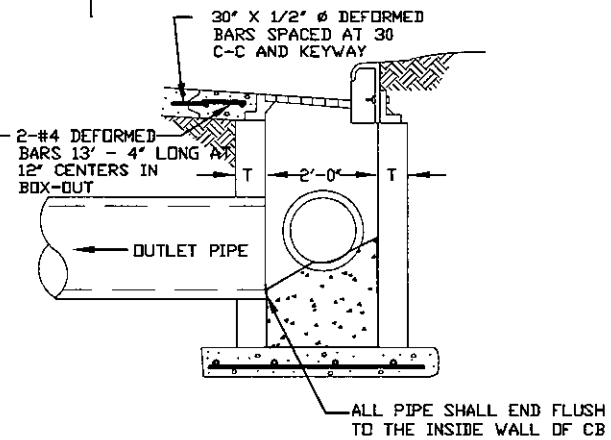


BEAM DETAIL





SECTION A-A



SECTION B-B

ALTERNATE MATERIAL FOR WALLS	T
PRECAST SECTIONS	5"
POURED WALLS *	6"

* CLASS SI CONCRETE, VIBRATED, WITH FORMS RIGID AND TRUE TO VERTICAL ALIGNMENT.

NOT TO SCALE

REVISION	BY	DATE
REVISED	WLC	03/30/06
REVISED	TAB	11/08/99
STAND205.DWG	PMCJ	6/1/95

DOUBLE CATCH BASIN

CITY OF ROCK ISLAND
ENGINEERING DIVISION

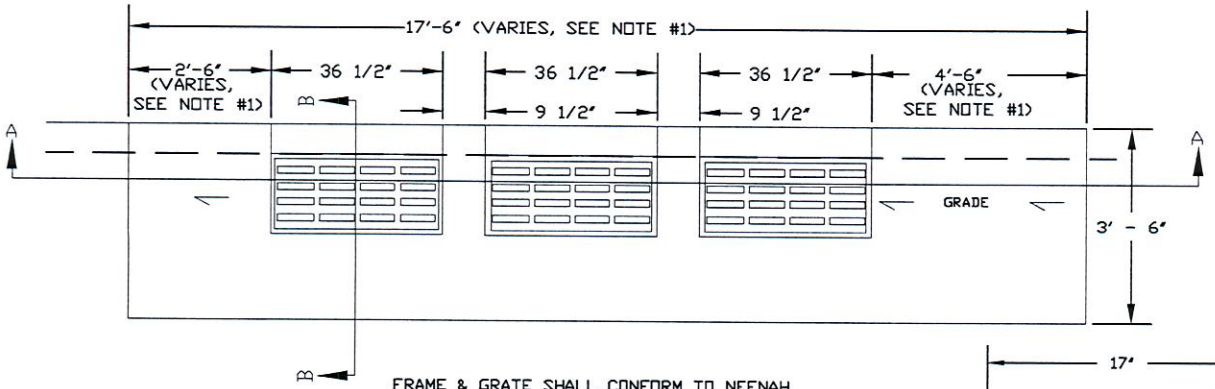
STANDARD NO. 205

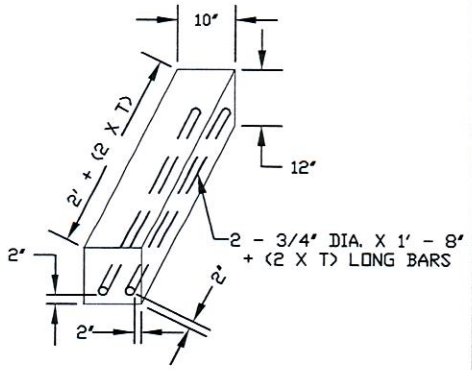
NOTE 1: MATCH EXISTING JOINTS AS IS PRACTICABLE. ON NEW PAVEMENT BEGIN JOINT PATTERN FROM EDGES OF BOX OUT.

NOTE 2: STEEL REBAR TO BE PLACED AS SHOWN WHETHER CATCH BASIN IS POURED INTEGRAL TO PAVEMENT OR IN A BOX OUT. MAINTAIN MINIMUM OF 2" CLEARANCE BETWEEN REBAR AND FACE OF CONCRETE.

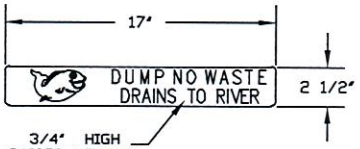
NOTE 3: IN AREAS WITH COMBINATION SEWERS, A 12" SUMP WILL BE INSTALLED IN PLACE OF SELF CLEANING FILET.

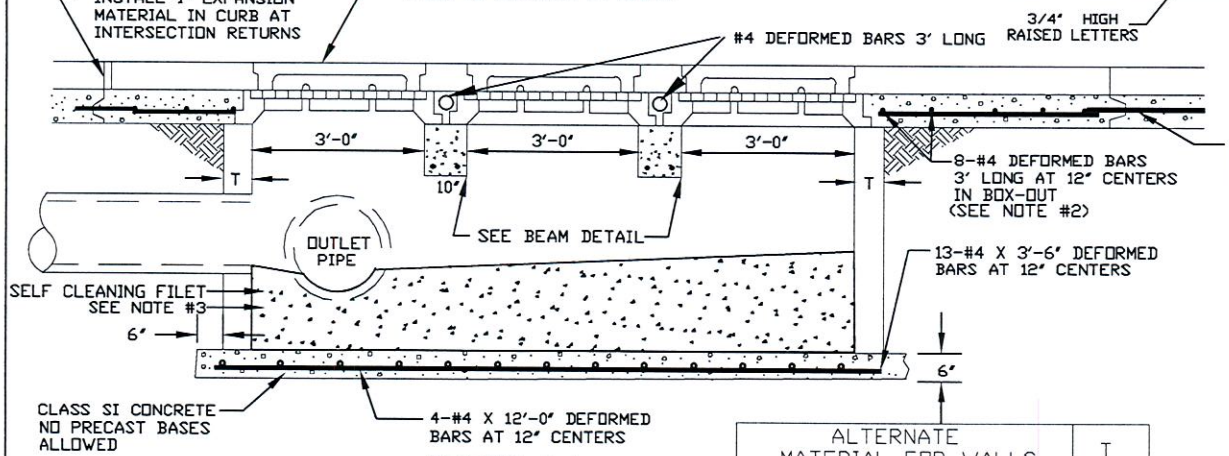
NOTE 4: DEPRESS CASTING 1" BELOW GUTTER LINE GRADE



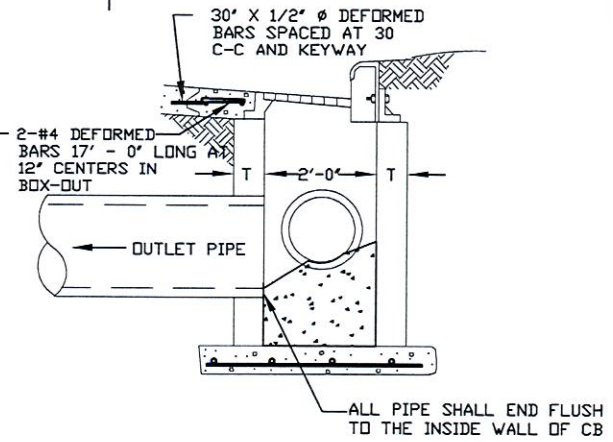


BEAM DETAIL





SECTION A-A



SECTION B-B

ALTERNATE MATERIAL FOR WALLS	T
PRECAST SECTIONS	5"
POURED WALLS *	6"

* CLASS SI CONCRETE, VIBRATED, WITH FORMS RIGID AND TRUE TO VERTICAL ALIGNMENT.

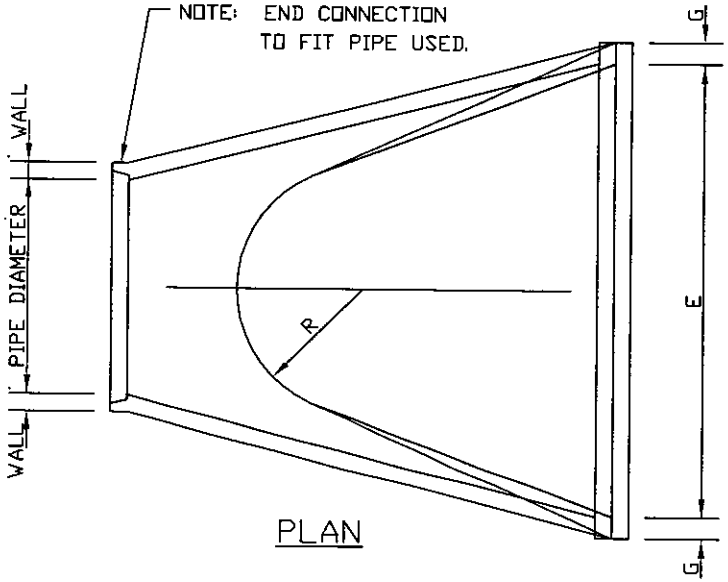
NOT TO SCALE

REVISION	WLC	03/30/06
REVISION	NJH	05/04/01
STAND206.DWG	PMCJ	6/1/95
REVISION	BY	DATE

TRIPLE CATCH BASIN

CITY OF ROCK ISLAND
ENGINEERING DIVISION

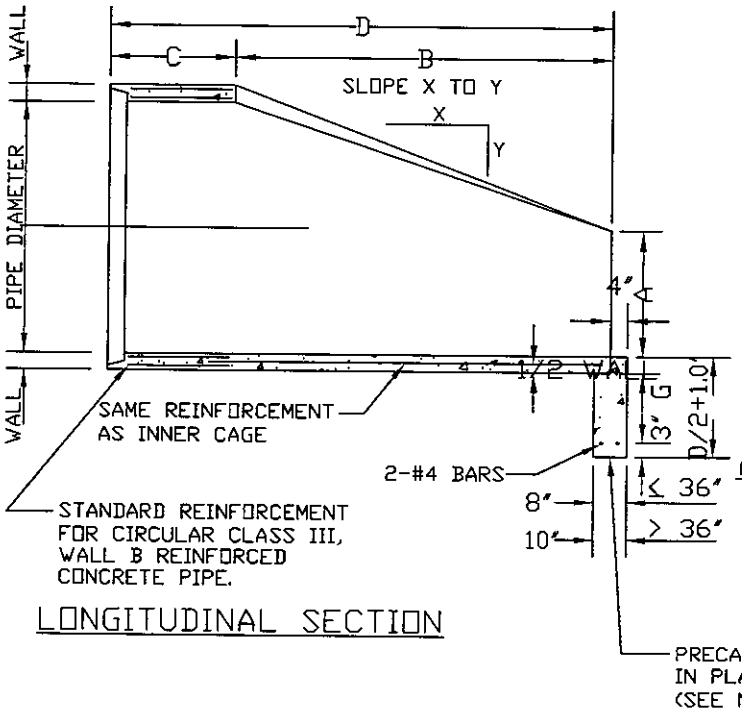
STANDARD NO. 206



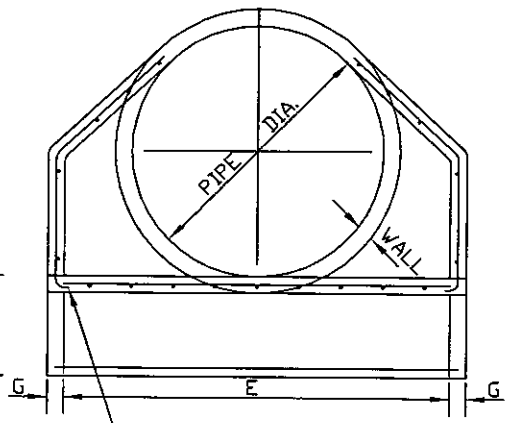
PLAN

PIPE DIA.	APPROX. WT (lbs)	WALL	A	B	C	D	E	G	R	SLOPE
12"	530	2"	4"	2'-0"	4'-0 7/8"	6'-0 7/8"	2'-0"	2"	9"	3:1
15"	740	2 1/4"	6"	2'-3"	3'-10"	6'-1"	2'-6"	2 1/4"	11"	3:1
18"	990	2 1/2"	9"	2'-3"	3'-10"	6'-1"	3'-0"	2 1/2"	12"	3:1
21"	1280	2 3/4"	9"	2'-11"	3'-2"	6'-1"	3'-6"	2 3/4"	13"	3:1
24"	1520	3"	9 1/2"	3'-7 1/2"	2'-6"	6'-1 1/2"	4'-0"	3"	14"	3:1
27"	1930	3 1/4"	10 1/2"	4'-0"	2'-1 1/2"	6'-1 1/2"	4'-6"	3 1/4"	14 1/2"	3:1
30"	2190	3 1/2"	1'-0"	4'-6"	1'-7 3/4"	6'-1 3/4"	5'-0"	3 1/2"	15"	3:1
33"	3200	3 3/4"	1'-1 1/2"	4'-10 1/2"	3-3 1/4"	8'-1 3/4"	5'-6"	3 3/4"	17 1/2"	3:1
36"	4100	4"	1'-3"	5'-3"	2'-10 3/4"	8'-1 3/4"	6'-0"	4"	20"	3:1
42"	5380	4 1/2"	1'-9"	5'-3"	2'-11"	8'-2"	6'-6"	4 1/2"	22"	3:1
48"	6550	5"	2'-0"	6'-0"	2'-2"	8'-2"	7'-0"	5"	22"	3:1
54"	8240	5 1/2"	2'-3"	5'-5"	2'-11"	8'-4"	7'-6"	5 1/2"	24"	2.4:1
60"	8730	6"	2'-11"	5'-0"	2'-3"	8'-3"	8'-0"	5"	*	2:1
66"	10710	6 1/2"	2'-6"	6'-0"	2'-3"	8'-3"	8'-6"	5 1/2"	*	2:1
72"	12520	7"	3'-0"	6'-6"	1'-9"	8'-3"	9'-0"	6"	*	1.86:1
78"	14770	7 1/2"	3'-0"	7'-6"	1'-9"	9'-3"	9'-6"	6 1/2"	*	1.82:1
84"	18160	8"	3'-0"	7'-6 1/2"	1'-9"	9'-3 1/2"	10'-0"	6 1/2"	*	1.5:1

* RADIUS AS FURNISHED BY MANUFACTURER



LONGITUDINAL SECTION



END VIEW

OPTIONAL 24" DIA. SPLICE MINIMUM

PRECAST OR CAST IN PLACE END BLOCK. (SEE NOTE 3)

NOTES:

1. PRECAST CONCRETE FLARED END SECTIONS SHALL CONFORM TO THE APPLICABLE REQUIREMENTS OF AASHTO M-170 CLASS III, WALL B REINFORCED CONCRETE PIPE.
2. PRECAST CONCRETE FLARED END SECTION FOR PIPE DIAMETER REQUIRED SHALL BE AS INDICATED ON DETAIL PLAN FOR EACH INDIVIDUAL INSTALLATION.
3. THE END BLOCK SHALL BE PLACED PRIOR TO THE INSTALLATION OF THE FLARED END SECTION. THE END BLOCK SHALL BE BACKFILLED IN ACCORDANCE WITH ART. 502.11 OF THE STATE OF ILLINOIS STANDARD SPECIFICATIONS, COST INCIDENTAL TO END SECTION.

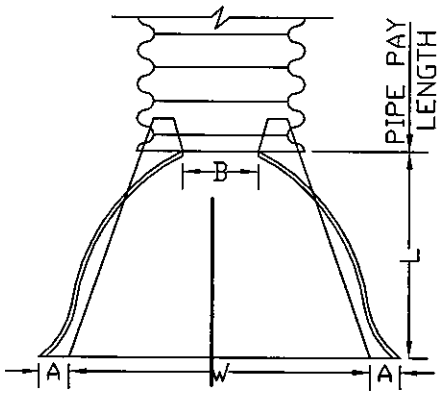
PRECAST REINFORCED CONCRETE FLARED END SECTION

REVISED	JCP	03/09/05
STANDARDIZED	PMCJ	09/13/94
REVISION	BY	DATE

NOT TO SCALE

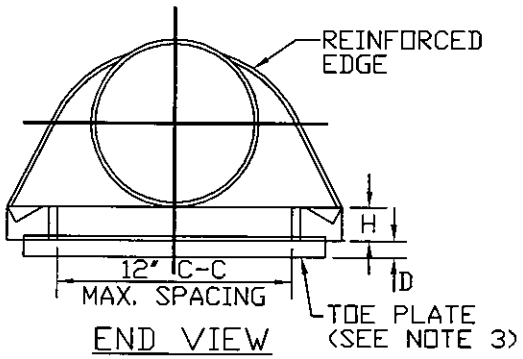
CITY OF ROCK ISLAND
ENGINEERING DIVISION

STANDARD NO. 207



PLAN VIEW

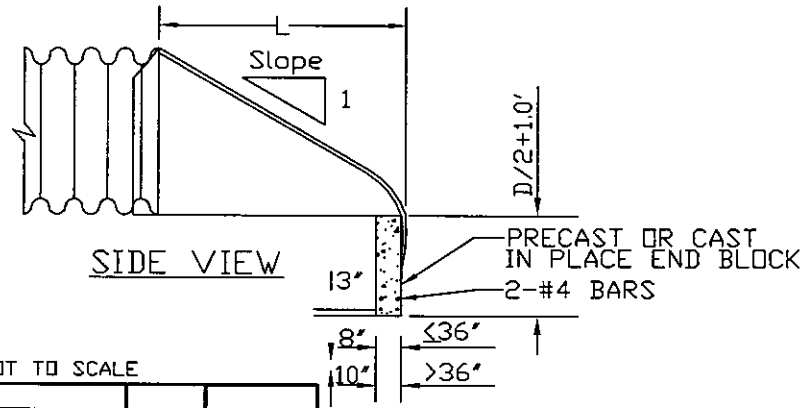
PIPE DIA.	THICKNESS INCHES	DIMENSIONS A (1" ±)	B Max.	H (1" ±)	L (1-1/2" ±)	W (2" ±)	SLOPE (Approx.)	BODY
12"	0.064	6	6	6	21	24	2 1/2	1 PC.
15"	0.064	7	8	6	26	30	2 1/2	1 PC.
18"	0.064	8	10	6	31	36	2 1/2	1 PC.
21"	0.064	9	12	6	36	42	2 1/2	1 PC.
24"	0.064	10	13	6	41	48	2 1/2	1 PC.
30"	0.079	12	16	8	51	60	2 1/2	1 PC.
36"	0.079	16	19	9	60	72	2 1/2	2 PC.
42"	0.019	18	22	11	69	84	2 1/2	2 PC.
48"	0.019	18	27	12	78	90	2 1/4	2 PC.
54"	0.019	18	30	12	84	102	2	2 PC.
60"	0.019	18	33	12	87	114	1 3/4	3 PC.
66"	0.019	18	36	12	87	120	1 1/2	3 PC.
72"	0.019	18	39	12	87	126	1 1/3	3 PC.
78"	0.019	18	42	12	87	132	1 1/4	3 PC.
84"	0.019	18	45	12	87	138	1 1/6	3 PC.



END VIEW

NOTES:

1. ALL 3 PIECE BODIES SHALL HAVE 0.019 INCH SIDES AND 0.138 INCH CENTER PANELS. WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20% OF THE PIPE PERIPHERY. MULTIPLE PANEL BODIES SHALL HAVE LAP SEAMS WHICH SHALL BE TIGHTLY JOINTED WITH 3/8" Ø RIVETS OR BOLTS.
2. FOR 60" THRU 84" SIZES, REINFORCED EDGES SHALL BE SUPPLEMENTED WITH STIFFENER ANGLES. THE ANGLES SHALL BE 2" X 2" X 1/4" FOR 60" THRU 72" Ø AND 2 1/2" X 2 1/2" X 1/4" FOR 78" AND 84" Ø. THE ANGLES SHALL BE ATTACHED BY 3/8" Ø RIVETS OR BOLTS.
3. THE TOE PLATE SHALL BE THE SAME THICKNESS METAL AS THE END SECTION.

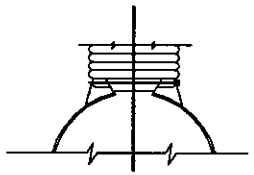


SIDE VIEW

NOT TO SCALE

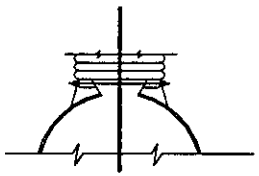
STANDARDIZED	PMCJ	10/25/94
REVISION	BY	DATE

CONNECTIONS OF END SECTIONS



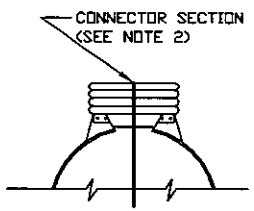
TYPE #1

(FOR 12" THRU 24" ONLY) (SEE NOTE 1)



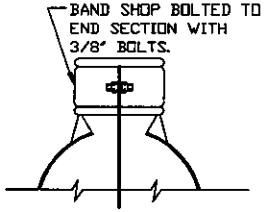
TYPE #2

(FOR 30" AND 36" ONLY) (SEE NOTE 1)



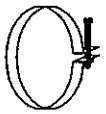
TYPE #3

(SEE NOTE 2)



TYPE #4

(SEE NOTE 3)



1" WIDE, 0.019" THICK STRAP WITH STANDARD 6" X 1/2" BAND BOLT AND NUT.

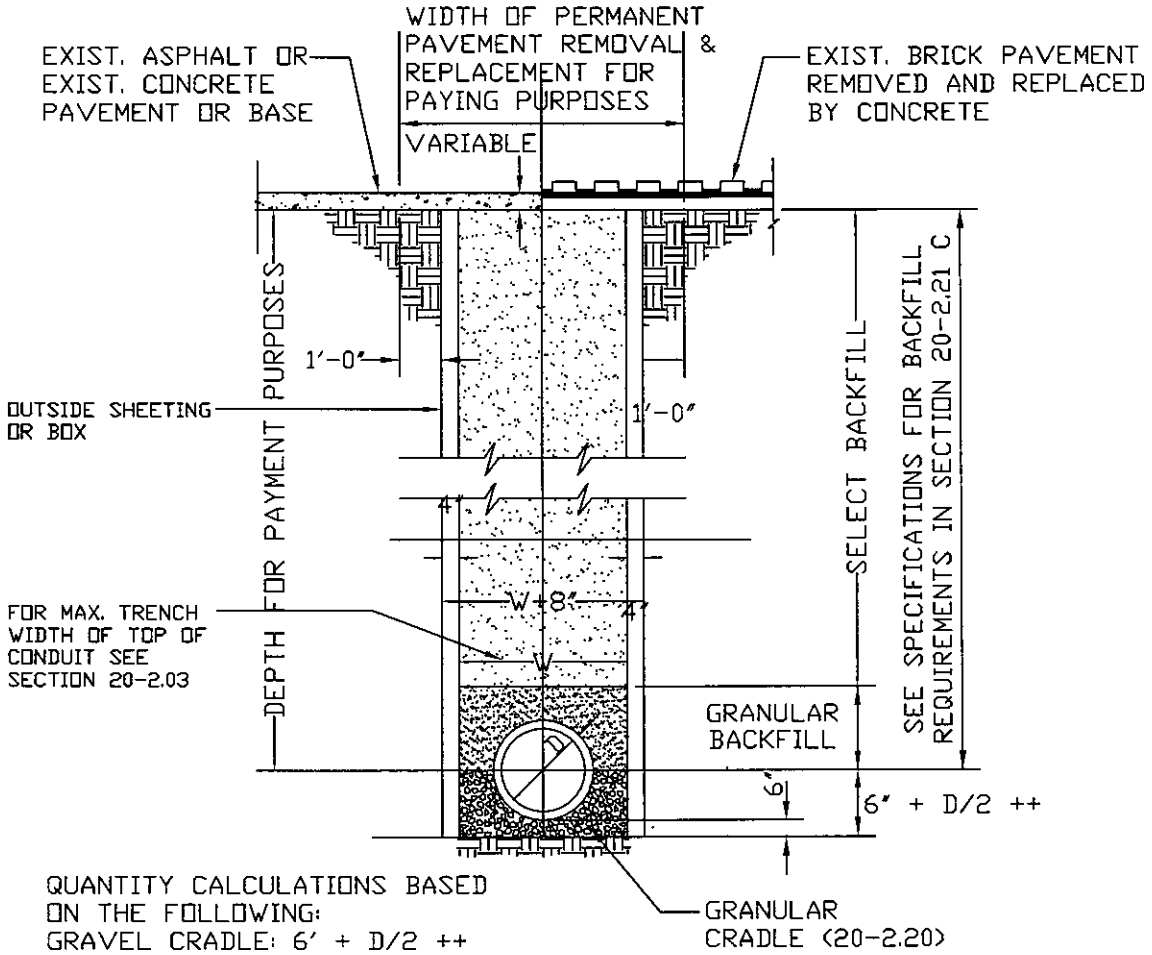
NOTES:

1. TYPES #1 & #2 FOR PIPES WITH ANNULAR ENDS ONLY.
2. TYPE #3 CONNECTION CAN BE USED FOR ALL PIPE SIZES AND INCLUDES 1 FOOT OF THE PIPE LENGTH. THE CONNECTOR SECTION SHALL BE ATTACHED TO THE END SECTION BY RIVETS OR BOLTS AND SHALL BE THE SAME METAL THICKNESS AS THE END SECTION. STUB TO BE EITHER 2 2/3" PITCH X 1/2" DEPTH OR 3" PITCH X 1" DEPTH ANNULAR CORRUGATED PIPE.
3. TYPE 4 CONNECTION CAN BE USED FOR ALL PIPE SIZES. COUPLER SHALL BE 2 2/3" X 1/2" DIMPLE, HUGER, OR ANNULAR BAND OR 3" X 1" ANNULAR BAND. THE DIMPLE, HUGGER, OR ANNULAR BAND MAY BE USED WITH CORRUGATED METAL PIPES HAVING ANNULAR ENDS. FOR CORRUGATED METAL PIPES HAVING HELICAL ENDS, ONLY THE DIMPLE BAND WILL BE ALLOWED.
4. WHEN THE PIPE IS BITUMINOUS COATED, IT WILL NOT BE NECESSARY TO COAT END SECTIONS OR CONNECTOR SECTIONS.

METAL END SECTION FOR PIPE CULVERTS

CITY OF ROCK ISLAND
ENGINEERING DIVISION

STANDARD NO. 208



QUANTITY CALCULATIONS BASED ON THE FOLLOWING:
GRAVEL CRADLE: 6' + D/2 ++

NOTES:

LIMITS FOR EXCAVATING FOR PAYMENT PURPOSES ARE AS SHOWN, SEE TABLE I AT RIGHT. ANY FLARE OR EXCAVATION BEYOND THESE LIMITS WILL BE BACKFILLED WITH SELECT GRANULAR BACKFILL AT THE EXPENSE OF THE CONTRACTOR.

NOTES:

THIS DETAIL IS A COPY OF DIV. V/STANDARD DRAWINGS NO. 1 & 2 OF THE STANDARD SPECIFICATIONS FOR WATER & SEWER MAIN CONSTRUCTION IN ILLINOIS.

TABLE I

INSIDE DIAMETER OF CONDUIT IN INCHES -D-	SECT. 20 - 2.03 MAXIMUM TRENCH WIDTH W + 8"	PAYMENT QUANTITIES PER FOOT OF CONDUIT						
		SECT. 20 - 2.21 C SELECT BACKFILL CU. YDS./FT. OF DEPTH W + 8"	SECT. 20 - 2.20 GRANULAR CRADLE CU. YDS./FT. W + 8"	PERM. TYPE PAVEMENT OR DRIVE REMOVAL & REPLACEMENT S.Y./FT. W + 8" - 8"	CONCRETE OR BRICK SIDEWALK REMOVAL & REPLACEMENT FT./FT. W + 2" - 8"	CURB OR CURB AND GUTTER REMOVAL REPLACEMENT FT./FT. W + 2" - 8"	TEMPORARY SURFACE OVER TRENCH CU. YDS./FT. W + 8"	GRANULAR BACKFILL 1 FT. OVER TOP OF PIPE CU. YDS./FT. W + 8"
6	3'-2"	0.117	0.09	0.57	5.17	5.17	0.06	0.15
8	3'-2"	0.117	0.10	0.57	5.17	5.17	0.06	0.16
10	3'-2"	0.117	0.11	0.57	5.17	5.17	0.06	0.17
12	3'-4"	0.12	0.12	0.59	5.33	5.33	0.06	0.18
15	3'-6"	0.13	0.13	0.61	5.50	5.50	0.06	0.20
18	3'-10"	0.14	0.15	0.65	5.83	5.83	0.07	0.22
21	4'-4"	0.16	0.19	0.70	6.33	6.33	0.08	0.27
24	4'-8"	0.17	0.21	0.74	6.67	6.67	0.09	0.30
27	4'-11"	0.18	0.23	0.77	6.92	6.92	0.09	0.32
30	5'-3"	0.19	0.26	0.81	7.25	7.25	0.10	0.36
33	6'-0"	0.22	0.32	0.89	8.00	8.00	0.11	0.43
36	6'-4"	0.23	0.35	0.93	8.33	8.33	0.12	0.47
42	6'-11"	0.26	0.41	0.99	8.92	8.92	0.13	0.54
48	7'-6"	0.28	0.47	1.06	9.50	9.50	0.14	0.61
54	8'-7"	0.32	0.59	1.18	10.58	10.58	0.16	0.75
60	9'-2"	0.34	0.66	1.24	11.17	11.17	0.17	0.84
66	9'-9"	0.36	0.74	1.31	11.75	11.75	0.18	0.92
72	10'-4"	0.38	0.82	1.37	12.33	12.33	0.19	1.01
78	10'-11"	0.40	0.90	1.44	12.92	12.92	0.20	1.10
84	11'-6"	0.43	0.98	1.50	13.50	13.50	0.21	1.19
90	12'-1"	0.45	1.06	1.56	14.08	14.08	0.22	1.29
96	12'-8"	0.47	1.15	1.63	14.67	14.67	0.23	1.39
102	13'-3"	0.49	1.24	1.69	15.25	15.25	0.25	1.48
108	13'-10"	0.51	1.32	1.76	15.83	15.83	0.26	1.58

TYPICAL DETAIL OF CONDUIT INSTALLATION

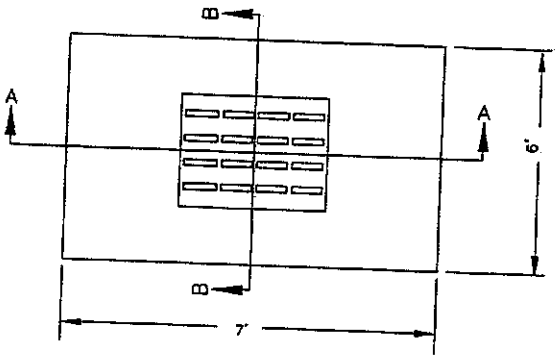
NOT TO SCALE

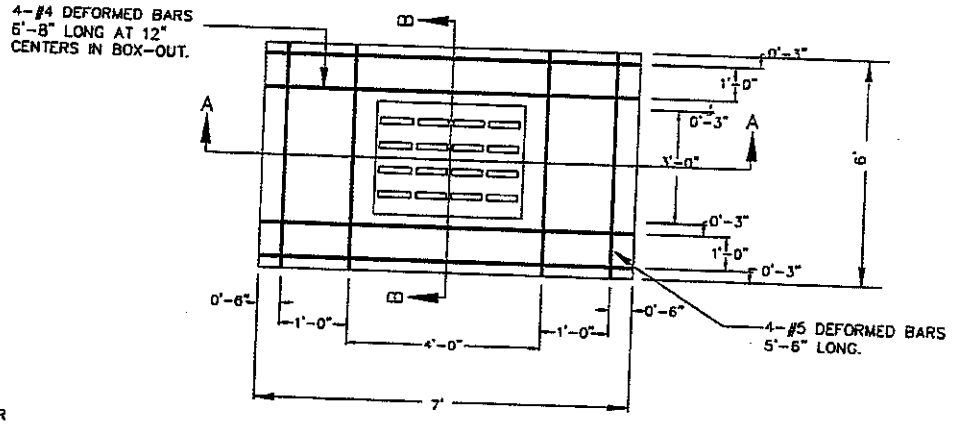
STANDARDIZED	PNCJ	5/31/95
REVISION	BY	DATE

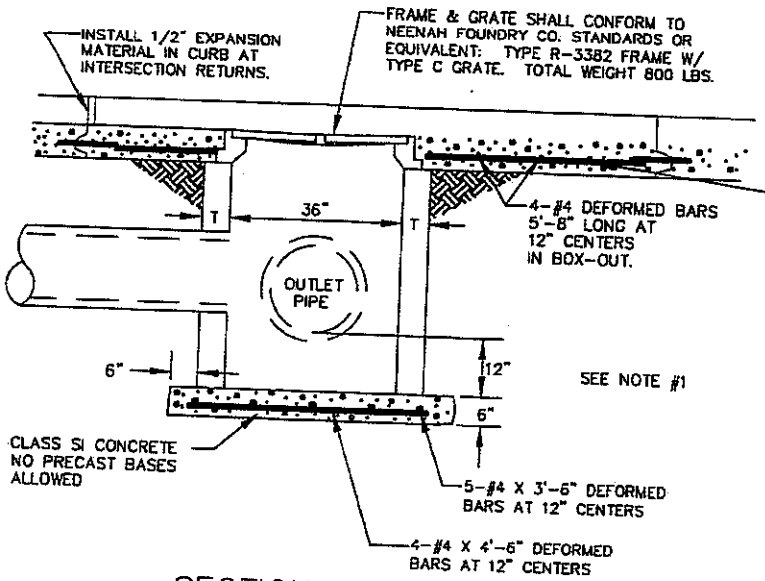
* NOTE: SEE ALSO STANDARD 212

CITY OF ROCK ISLAND
ENGINEERING DIVISION

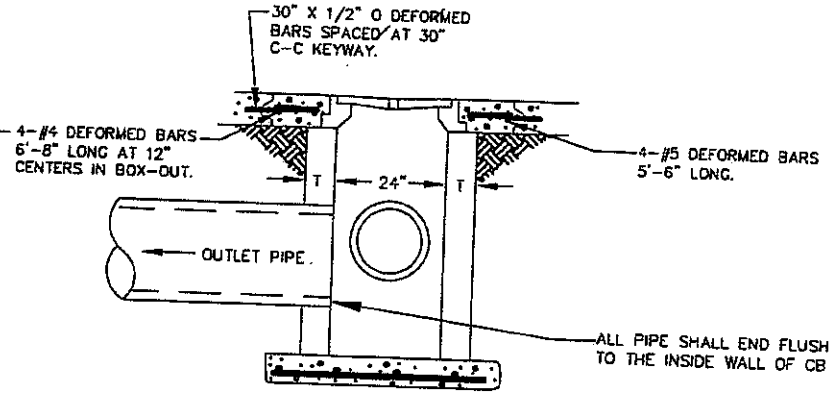
STANDARD NO. 209







SECTION A-A



SECTION B-B

NOTE:

1. 12" SUMP OMITTED FROM CATCH BASIN BOTTOMS EXCEPT IN AREAS WHERE SANITARY & STORM SEWERS ARE COMBINED.

2. PIPE CONNECTIONS FOR C.B. WORK ARE INCIDENTAL, IF WITHIN 2' OF STRUCTURE.

3. REBARS TO BE PLACED IN ALL INSTANCES.

ALTERNATE MATERIAL FOR WALLS	T
PRECAST SECTIONS	5"
POURED WALLS *	6"

* CLASS SI CONCRETE, VIBRATED, WITH FORMS RIGID AND TRUE TO VERTICAL ALIGNMENT.

NOT TO SCALE

REVISION	BY	DATE
CHANGE GRATE #	WRP	05/24/07
REVISED	TAB	11/04/99
CHANGE GRATE #	PMCJ	06/02/99
METRIC	PMCJ	01/27/97
STANDARDIZED	PMCJ	05/01/95

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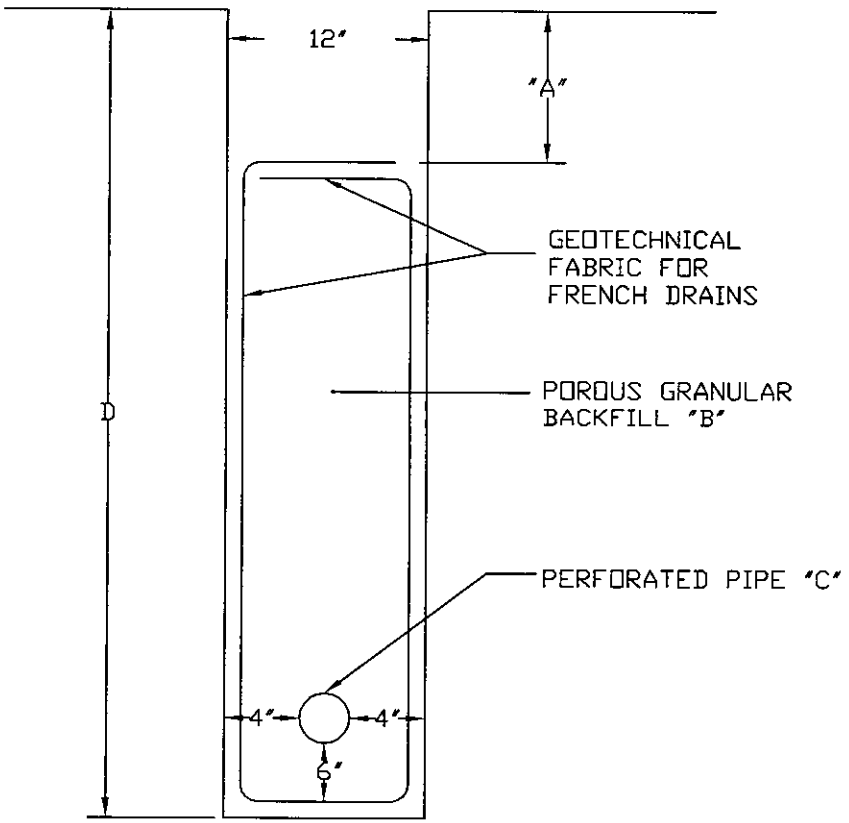
CATCH BASIN SPECIAL

CITY OF ROCK ISLAND
ENGINEERING DIVISION

STANDARD NO. 210



	A	B	C	D					
TOP SOIL									
GRANULAR SUB BASE									
FA-1 (sand)									
CA-13									
CA-7		X							
POLY (VINYL CHLORIDE) PIPE PVC									
CORRUGATED POLYETHYLENE TUBING (HEAVY DUTY) 4"			X						
TRENCH DEPTH				X					

NOTES:

NO OPEN JOINT PIPE WILL BE ALLOWED FOR PIPE UNDERDRAINS USED UNDER OR ALONG THE EDGE OF PAVEMENT OR SHOULDERS.

CONTRACTOR MAY SUBSTITUTE A STRONGER PIPE OF THE SAME KIND OF MATERIAL FOR THE PIPE DESIGNATED FOR THIS PROJECT. NO EXTRA COMPENSATION WILL BE ALLOWED.

REFERENCE: ILL. D.O.T. STRD. SPECS. SEC. 601

NOT TO SCALE

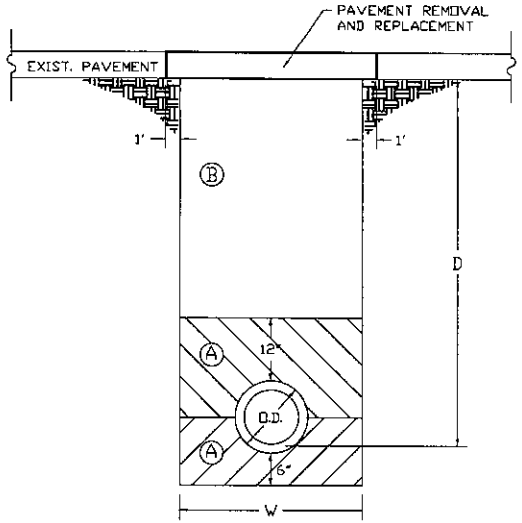
REVISION	MDW	08/9/01
REVISION	WLC	07/18/01
STANDARDIZED	PMCJ	09/30/94
REVISION	BY	DATE

PIPE UNDERDRAIN

CITY OF ROCK ISLAND
ENGINEERING DIVISION

STANDARD NO. 211

TRENCH DETAIL FOR ALL EXCAVATIONS UNDER OR WITHIN TWO FEET OF A PROPOSED OR EXISTING PAVEMENT



D ≤ 5', W = O.D. + 1.5'

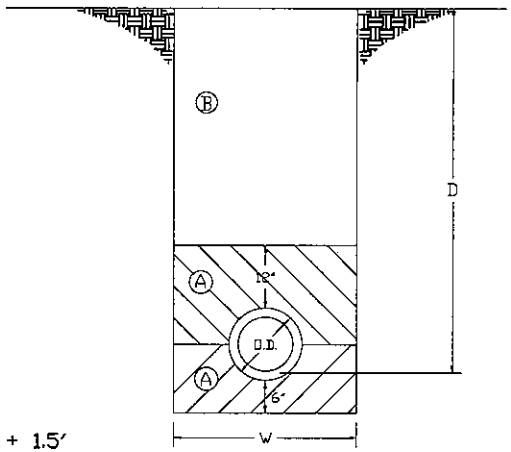
D > 5', W = O.D. + 3.0'

AREA (A) CA-6 AGGREGATE COMPACTED IN 8" LIFTS, ACCORDING TO ART. 550.07

AREA (B) TRENCH BACKFILL (PAY ITEM). COMPACTED BY METHOD 1, 2 OR 3 ART. 550.07.

BEDDING, BACKFILLING AND COMPACTING AREA A IS INCIDENTAL TO THE SEWER CONSTRUCTION.

TRENCH DETAIL FOR EXCAVATIONS OUTSIDE PAVED AREAS



D < 5', W = O.D. + 1.5'

D > 5', W = O.D. + 3.0'

AREA (A) CA-6 AGGREGATE COMPACTED IN 8" LIFTS, ACCORDING TO ART. 550.07

AREA (B) EXCAVATED MATERIAL COMPACTED BY METHOD 1, 2 OR 3 ART. 550.07.

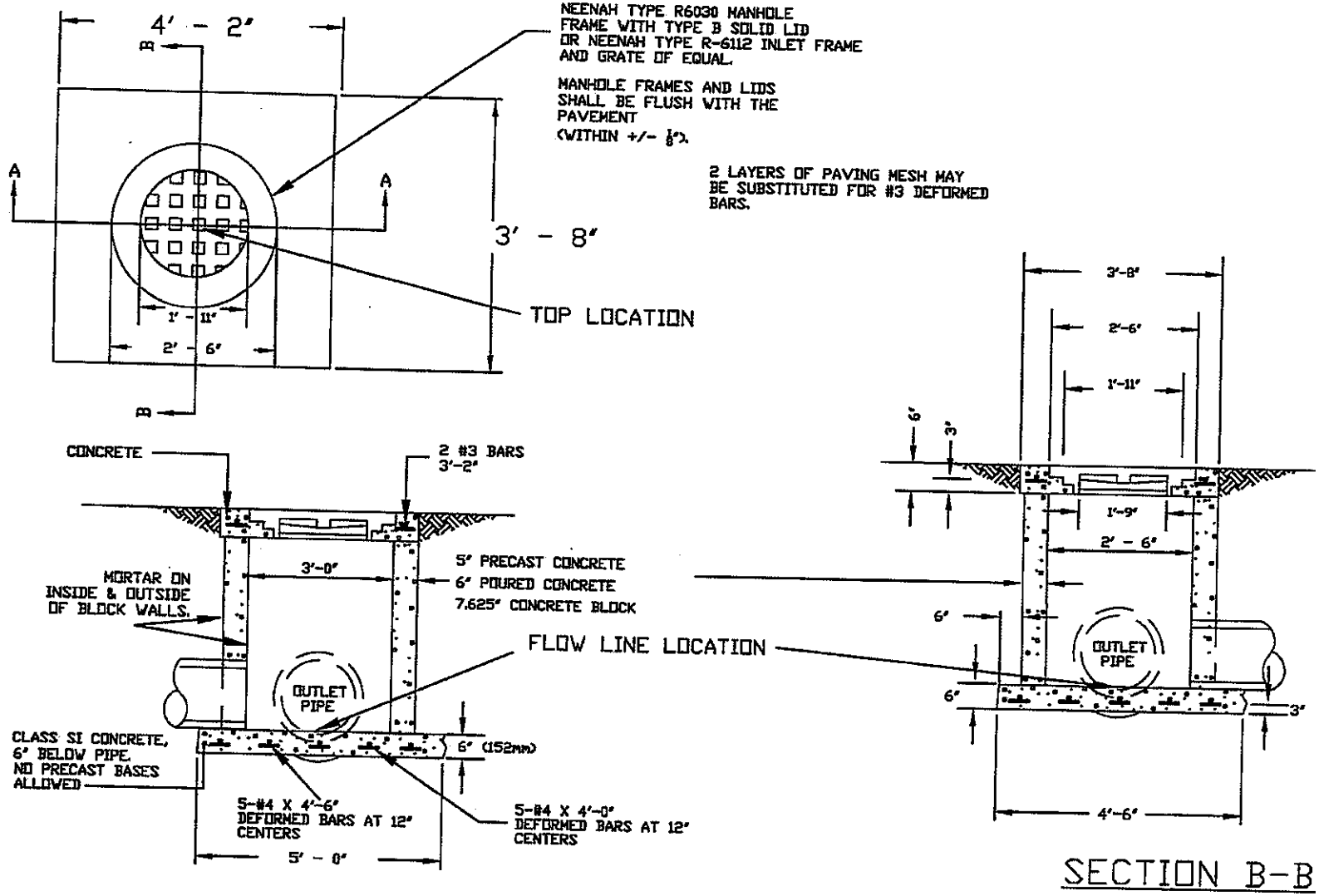
BEDDING, BACKFILLING, AND COMPACTING AREAS A AND B IS INCIDENTAL TO THE SEWER CONSTRUCTION.

STANDARDIZED	MDW	08/11/94
STANDARDIZED	CWE	06/28/93
REVISION	BY	DATE

TRENCH DETAILS FOR STORM AND SANITARY SEWER INSTALLATION

CITY OF ROCK ISLAND
ENGINEERING DIVISION

STANDARD NO. 212



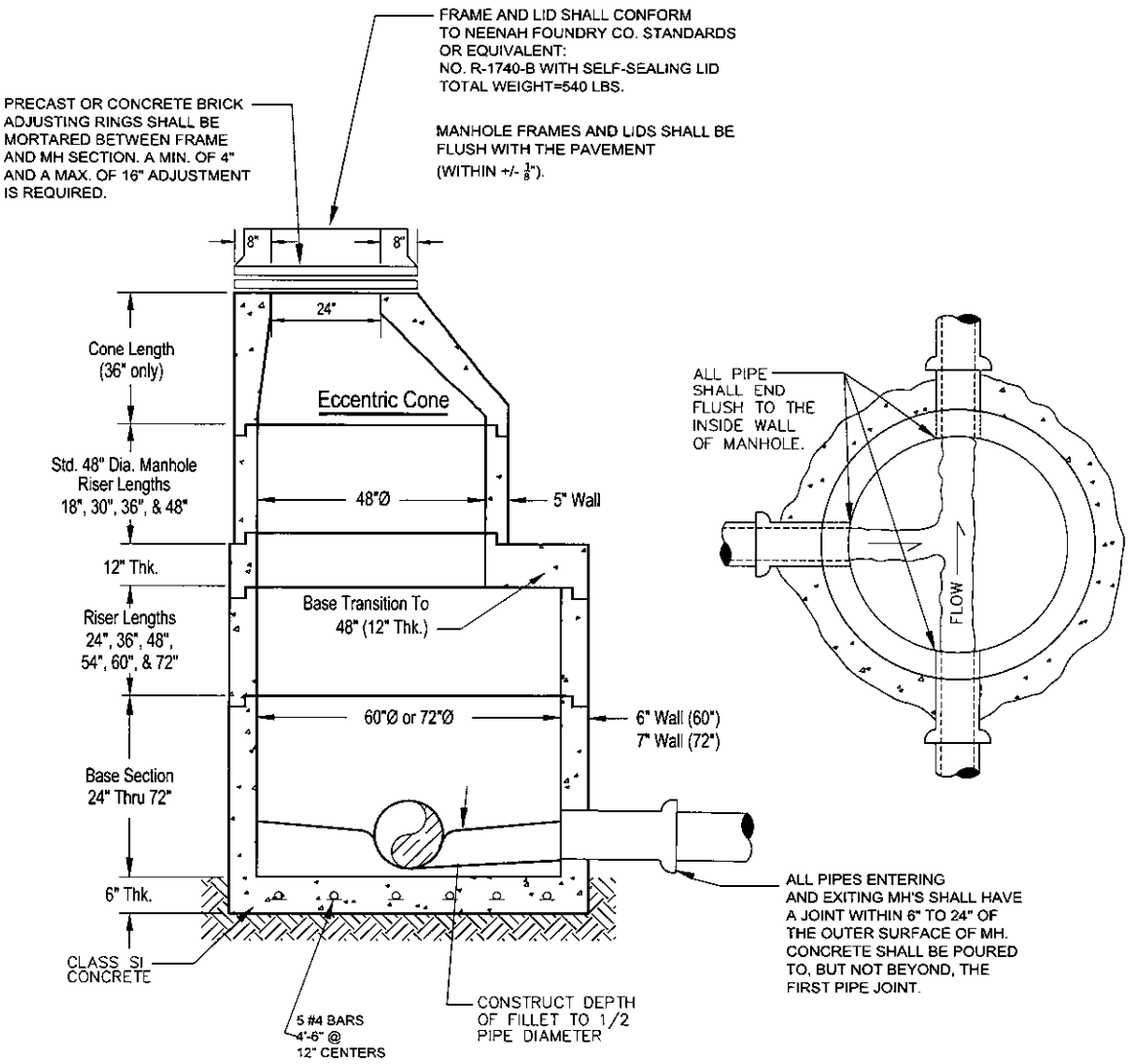
NOT TO SCALE

MH FRAME/GRATE ELEV.	JCP	01/16/09
REVISED	TAB	11/08/99
STAND206.DVG	PMCJ	6/1/95
REVISION	BY	DATE

FLAT-TOP STORM SEWER MANHOLE

CITY OF ROCK ISLAND ENGINEERING DIVISION

STANDARD NO. 213



WALLS MAY BE EITHER PRECAST OR CAST-IN-PLACE, 7" THICKNESS. POURED WALLS MUST ME WITH CLASS SI CONCRETE, VIBRATED, WITH RIGID FORMS TRUE TO VERTICAL ALIGNMENT.

NOTES:

1. NO PIPE SHALL ENTER MANHOLE HIGHER THAN 2' FROM FILLET, UNLESS AN OUTSIDE DROP M.H. IS CONSTRUCTED.
2. ALL PRECAST MANHOLE JOINTS SHALL BE SEALED WITH AN O-RING RUBBER GASKET. MEETING ASTM C443.
3. PIPE CONNECTIONS ON M.H. WORK ARE INCIDENTAL, IF WITHIN 2' OF STRUCTURE.
4. PRECAST M.H. SECTIONS WITH A-LOCKS & PRECAST FILLETS SHALL NOT BE ALLOWED.
5. STEPS SHALL NOT BE INSTALLED IN MANHOLE.
6. USE TYPE B LID IN PAVED AREAS IN LIEU OF SELF SEALING LID.
7. MATCH 0.8 POINTS ON PIPE ENTERING MANHOLE
8. FOR USE WITH 42" & 48" SEWERS

NOT TO SCALE

REVISION	BY	DATE
FRAME & LID ELEV.	JCP	01/16/09
FRAME & LID	MDW	12/04/06
OVERSIZE	CAM	1/28/09

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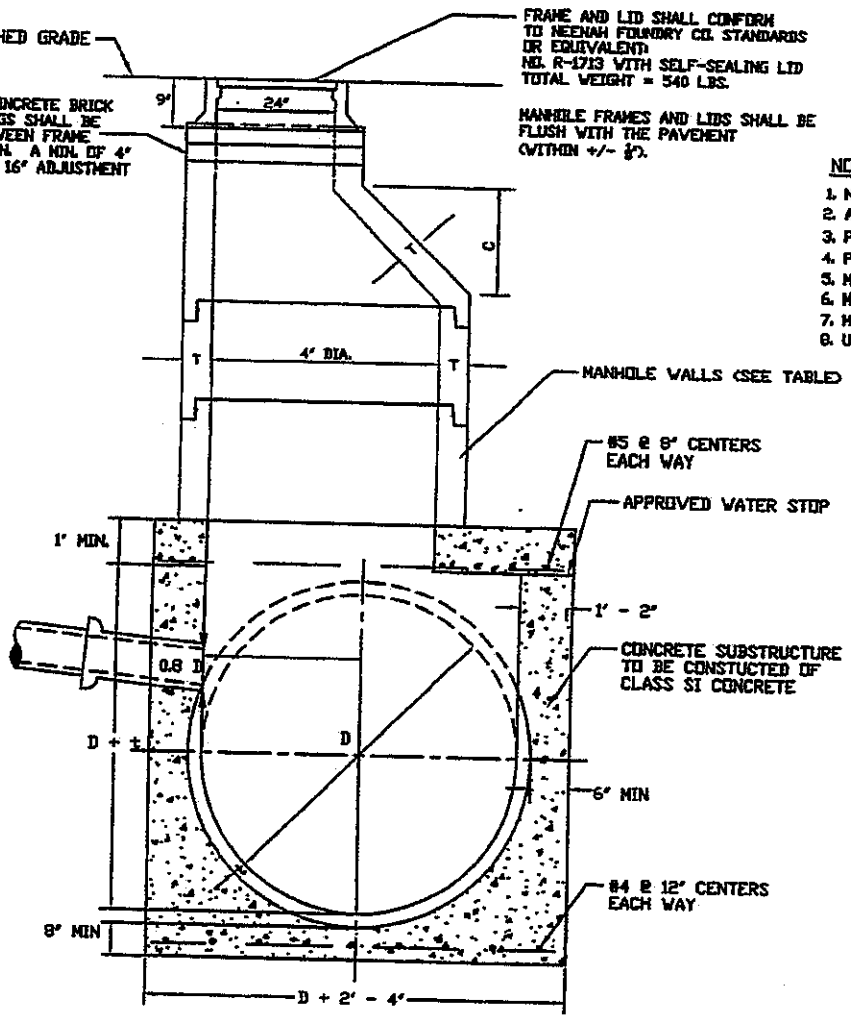
OVERSIZE MANHOLE

CITY OF ROCK ISLAND
ENGINEERING DIVISION

STANDARD NO. 214

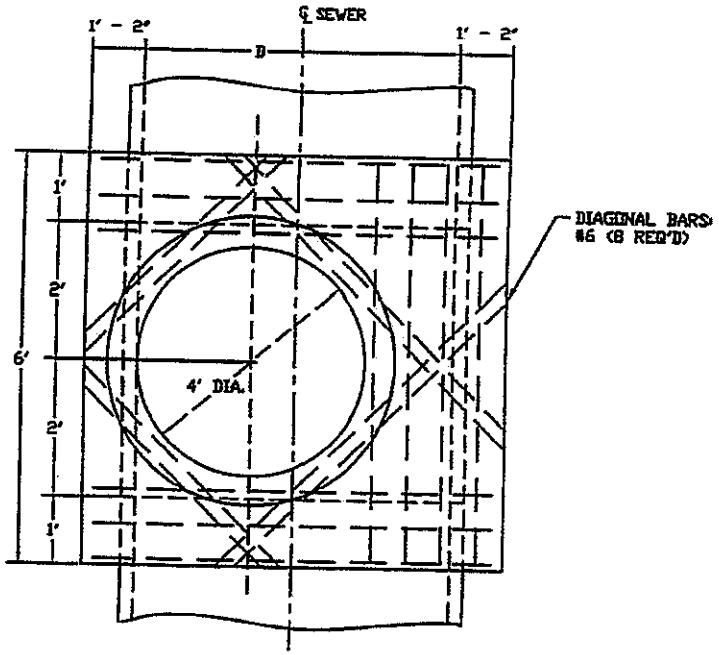


ALTERNATE MATERIAL FOR WALLS	C	T
PRECAST SECTIONS	3'	5'
POURED WALLS *	3'	6"

* CLASS SI CONCRETE, VIBRATED, WITH FORMS RIDGED AND TRUE TO VERTICAL ALIGNMENT.

NOTES:

1. NO PIPE SHALL ENTER MANHOLE HIGHER THAN 2' FROM FILLET, UNLESS AN OUTSIDE DROP MH IS CONSTRUCTED
2. ALL PRECAST MANHOLE JOINTS SHALL BE SEALED WITH AN O-RING RUBBER GASKET, MEETING ASTH C443
3. PIPE CONNECTIONS ON MH WORK ARE INCIDENTAL, IF WITHIN 2' OF STRUCTURE
4. PRECAST MH SECTIONS WITH A-LOCKS & PRECAST FILLETS SHALL NOT BE ALLOWED
5. MANHOLES ARE NOT TO HAVE STEPS.
6. MANHOLE FOR SEWER 54" DIA. AND LARGER.
7. MATCH 0.8 POINTS ON PIPES ENTERING MANHOLE.
8. USE TYPE B LID INPAVED AREAS IN LIEU OF SELF SEALING LID.

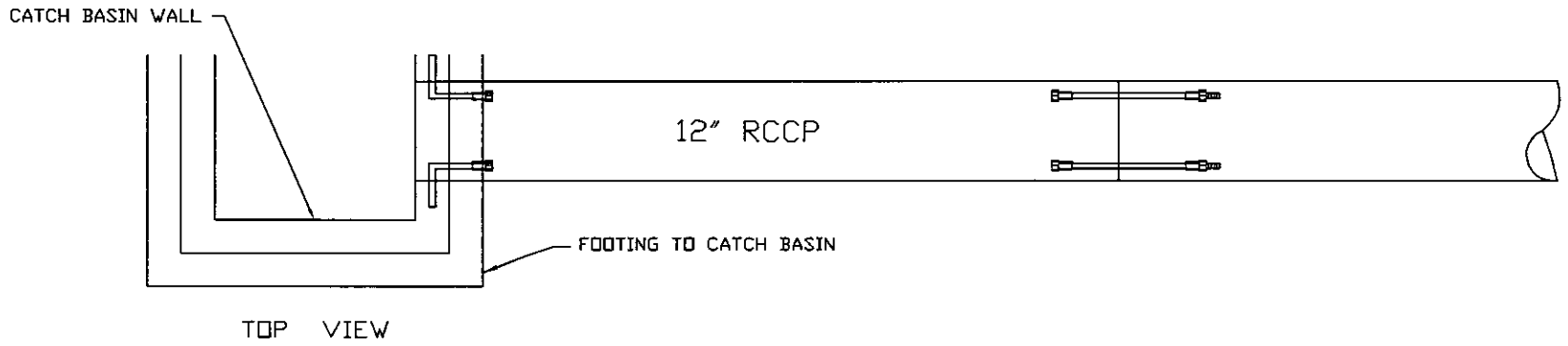


FRAME & LID ELEV.	JCP	01/16/09
FRAME & LID	MDW	12/04/06
Revised	CAH	01/22/09

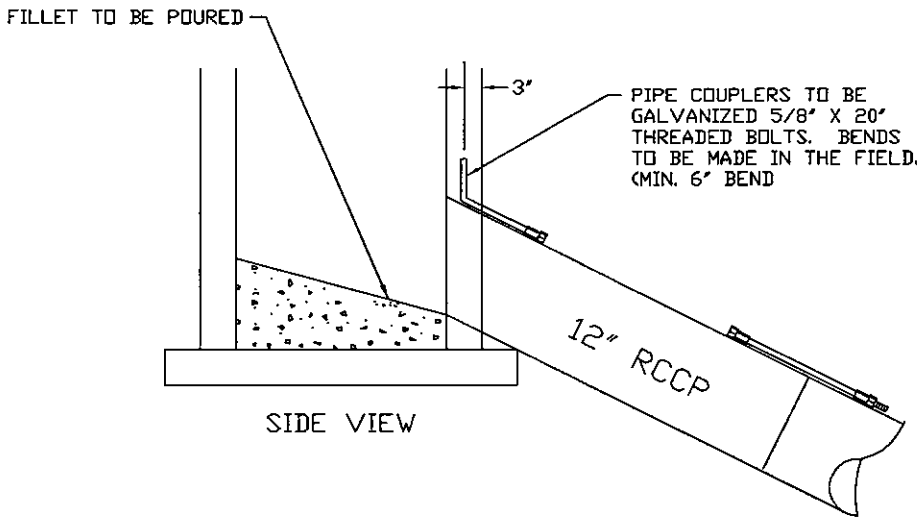
MANHOLE FOR SEWERS 54" AND LARGER

CITY OF ROCK ISLAND ENGINEERING DIVISION	STANDARD NO. 215

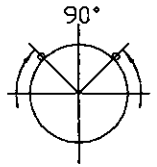
STORM SEWER PIPE COUPLER DETAIL



TOP VIEW



SIDE VIEW

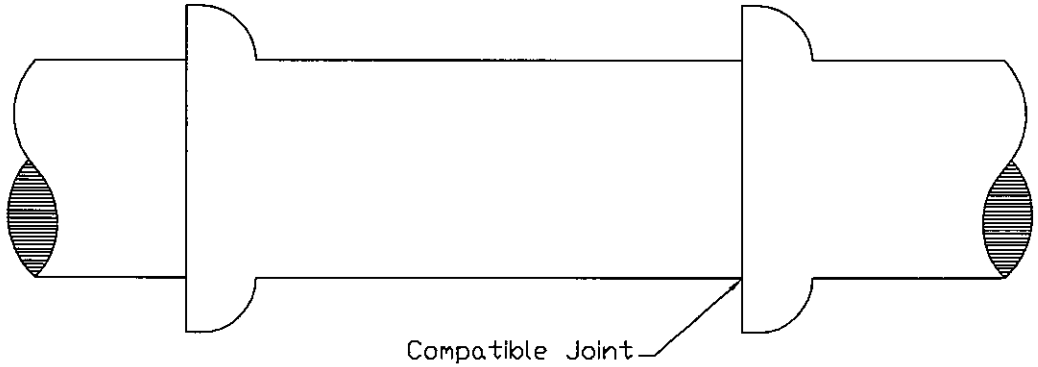


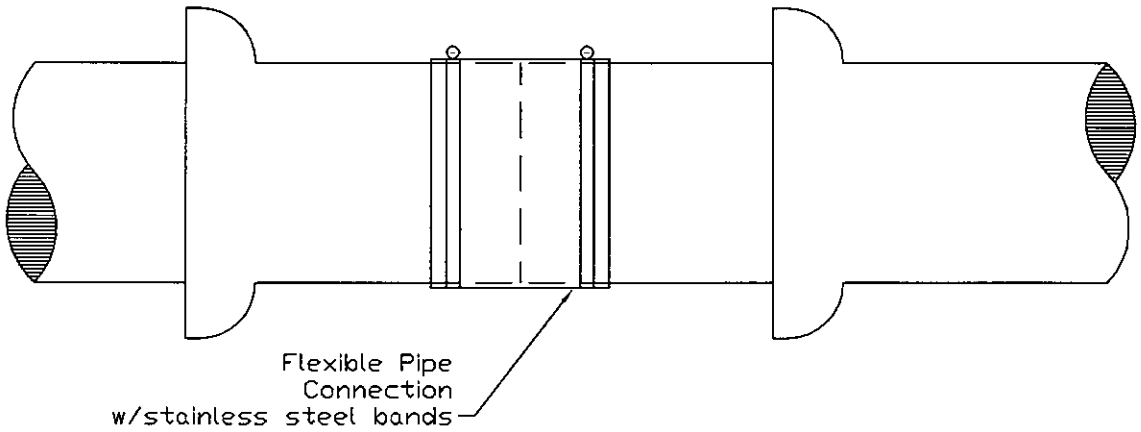
LOCATION OF COUPLERS

STAND216.DWG	WLC	06/04/03
STAND216.DWG	MDW	06/04/03

CITY OF ROCK ISLAND
ENGINEERING DIVISION

STANDARD NO. 216





NOTES:

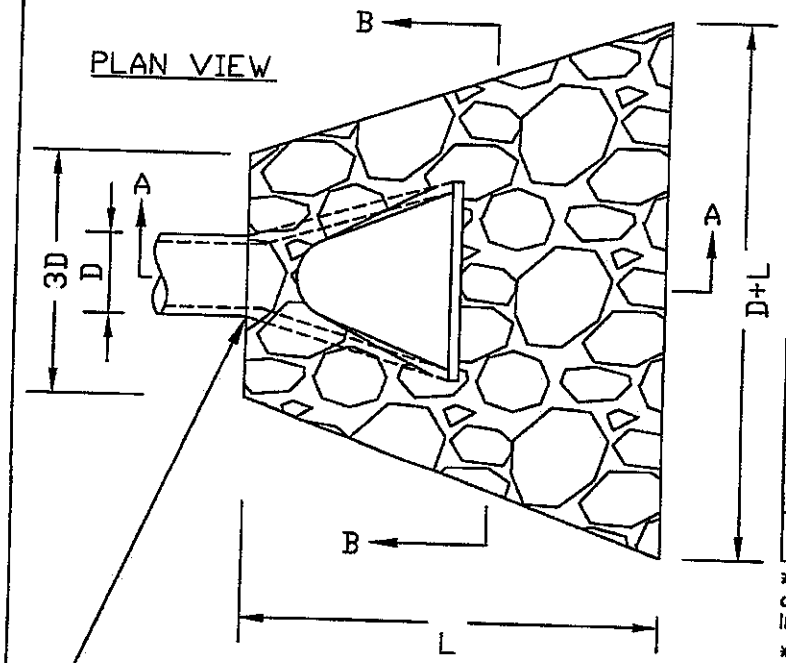
1. All connections to new or existing sanitary or storm sewer pipes shall be made using compatible joints. This requires the pipes to be of same material with the same joint configuration.

2. If joints or material are not compatible, a flexible pipe connector shall be used. This flexible connector shall be applied using stainless steel bands at each end. The connectors shall be Fernco or City approved equal.

SEWER PIPE CONNECTIONS

STAND217.DWG	WLC	12/15/03
REVISION	BY	DATE

CITY OF ROCK ISLAND ENGINEERING DIVISION	STANDARD NO. 217



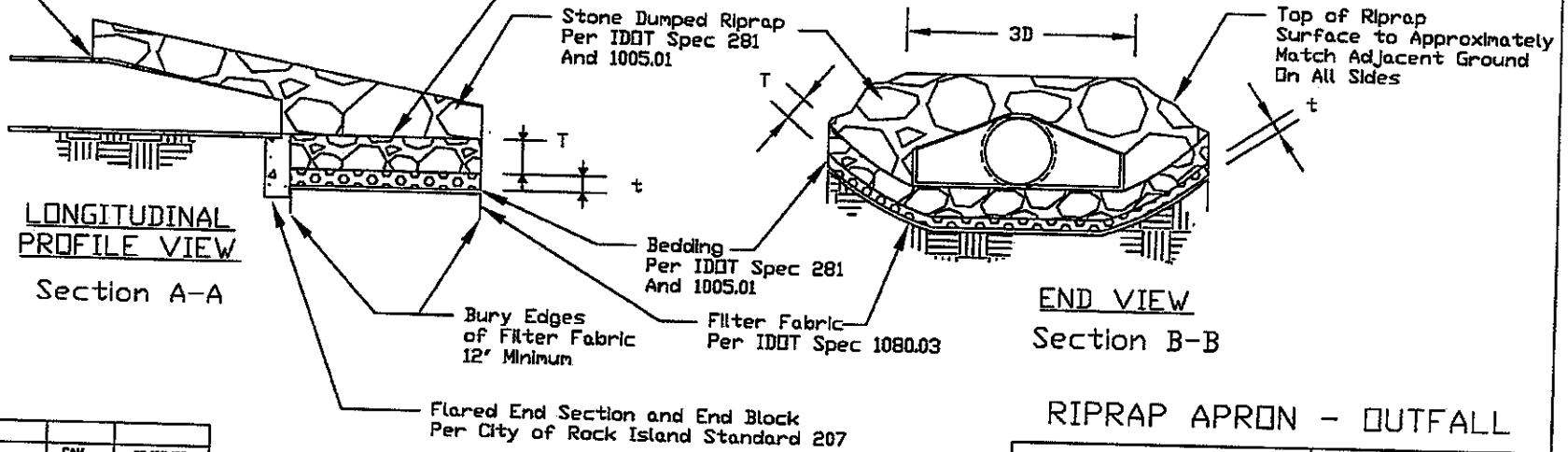
Inside Pipe Dia. (Inches)	Outside D (Inches)	Max. Pipe Slope (%) *	IDOT Rock Grad.	Surface T Min (Inches)	Bedding t Min (Inches)	3D (Feet)	L (Feet)	D+L (Feet) **
12	16	3.1	RR3	15	-	4	15	16
15	20	2.3	RR4	20	6	5	16	18
18	23	1.8	RR4	20	6	6	16	18
24	30	1.2	RR4	20	6	8	20	23
30	37	0.9	RR4	20	6	9	22	25
36	44	0.7	RR5	28	8	11	24	28
48	58	0.5	RR6	32	10	15	28	33
60	72	0.4	RR6	32	10	18	36	42
72	86	0.3	RR6	32	10	22	44	51
96	112	0.2	RR7	32	12	28	54	63

* Note: When maximum pipe slope is exceeded, this detail and table of values cannot be used. A different form of energy dissipation, such as a concrete impact basin or stilling basin, must be designed and constructed.

** Note: 'D+L' Width may be reduced to match a smaller channel width, as long as the elevation along the 'L' dimension is not reduced from the '3D' surface elevation.

Connection Point Between End of Pipe and Flared End Section

The riprap apron shall be constructed with no slope along its longitudinal invert and the downstream elevation shall be equal to the elevation of the receiving channel or adjacent ground.

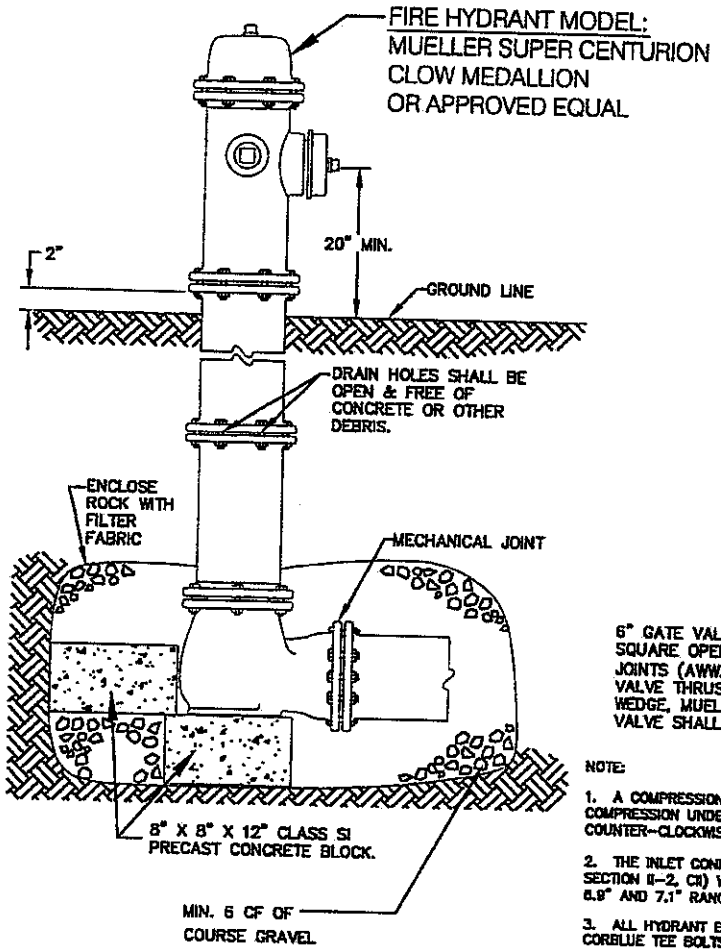


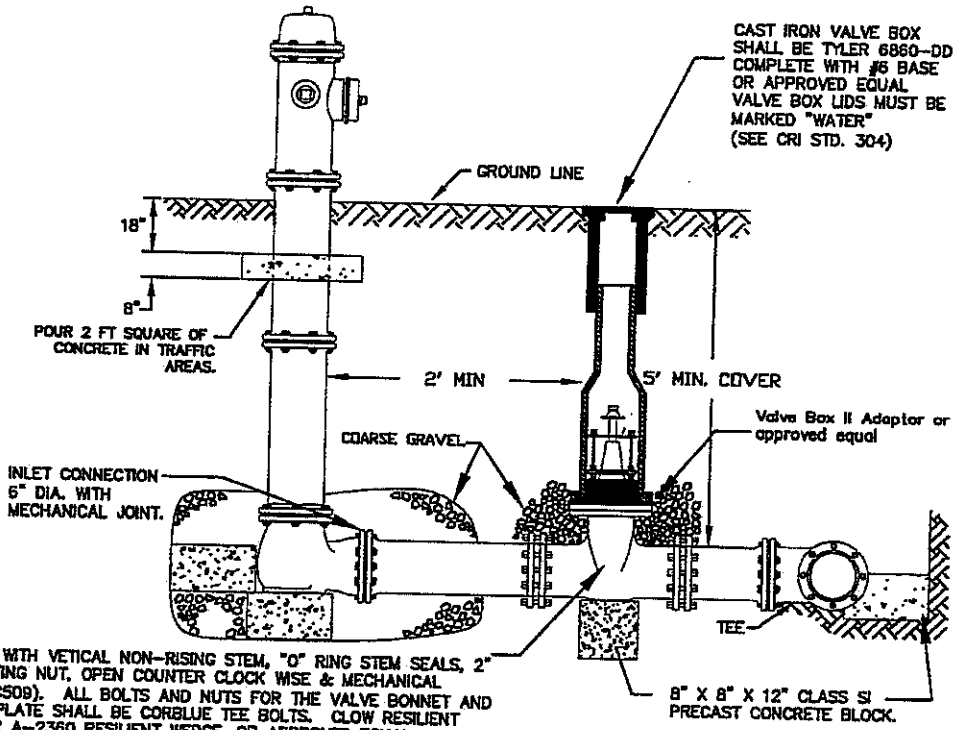
REVISED	CAH	02/03/09
STANDARDIZED	RAP	07/15/08
REVISION	BY	DATE

NOT TO SCALE

RIPRAP APRON - OUTFALL

CITY OF ROCK ISLAND ENGINEERING DIVISION	STANDARD NO. 218





6" GATE VALVE WITH VETICAL NON-RISING STEM, "O" RING STEM SEALS, 2" SQUARE OPERATING NUT, OPEN COUNTER CLOCK WISE & MECHANICAL JOINTS (AWWA C509). ALL BOLTS AND NUTS FOR THE VALVE BONNET AND VALVE THRUST PLATE SHALL BE CORBLUE TEE BOLTS. CLOW RESILIENT WEDGE, MUELLER A-2360 RESILIENT WEDGE, OR APPROVED EQUAL. VALVE SHALL BE INSTALLED AS CLOSE TO THE MAIN AS POSSIBLE.

NOTE:

1. A COMPRESSION TYPE MAIN VALVE, CLOSING WITH STREAM FLOW. THE VALVE WILL BE DESIGNED TO BE HELD CLOSED IN COMPRESSION UNDER STATIC WATER PRESSURE. THE VALVE OPENING WILL BE 5.25" MINIMUM NOMINAL DIAMETER AND OPEN COUNTER-CLOCKWISE. OPERATING NUT SHALL BE 7/8" SQUARE IN SIZE.

2. THE INLET CONNECTION WILL BE 6" DIA. "CUT-IN" MECHANICAL JOINT (AS DESCRIBED IN SECTION II-2, CI) WITH RESTRAINING LUGS, FOOT PIECE BELL WILL ACCEPT PIPE OUTSIDE DIAMETERS IN THE 6.9" AND 7.1" RANGE.

3. ALL HYDRANT BOLTS AND NUTS FROM THE GRADE LINE MARK ON THE BARREL TO THE SHOE BOLTS AND NUTS SHALL BE CORBLUE TEE BOLTS.

4. DELIVERY CLASSIFICATION - ONE PUMPER AND TWO HOSE NOZZLES. THESE NOZZLES SHALL BE 4.5" & 2.5" NOMINAL INSIDE DIA. RESPECTIVELY. THREADS SHALL BE OF NATIONAL STANDARD FIRE HOSE COUPLING SCREW DESIGN.

5. THE HYDRANTS WILL BE OF "TRAFFIC BREAKAWAY DESIGN," WITH GROUND LINE FLANGE AND SAFETY STEM OPERATOR COUPLING. GRADE LINE SHALL BE POSITIVELY MARKED ON THE LOWER BARREL. THE CENTER LINE OF ALL PORTS SHALL BE A MINIMUM OF 18" ABOVE ESTABLISHED GRADE LINES.

6. HYDRANTS WILL BE PROVIDED WITH BRONZE-LINED OUTLETS TO ALLOW CORROSION RESISTANT DRAINAGE OF THE BARREL SECTIONS. SEAT AND DRAIN RINGS WILL BE OF BRONZE COMPOSITION AS PROVIDED IN THE STANDARD RECOMMENDATIONS.

7. NOZZLE CAPS WILL OPEN COUNTER-CLOCKWISE, HAVE NATIONAL STANDARD TREADS, AND BE PROVIDED WITH A SECURITY CHAIN. OPERATING NUT SHALL BE 7/8" SQUARE IN SIZE.

8. POSITIVE O-RINGS SEALS WILL BE PROVIDED TO PROTECT STEM AND OPERATING NUT THREADS, AND ALL BEARING SURFACES FROM THE ATMOSPHERE AND THE WATERWAY. THE TOP WILL HAVE AN AN OIL RESERVOIR OR GREASE CHAMBER TO INSURE AUTOMATIC LUBRICATION OF THE STEM THREADS DURING OPERATION.

9. PRIMARY COATING AND PAINTING MUST COMPLY WITH THE STANDARD RECOMMENDATIONS, AND A SAFETY FINISH COAT WILL BE APPLIED ABOVE THE GRADE LINE. FINISH COAT MUST BE SAFETY YELLOW IN COLOR.

NOT TO SCALE

REVISION	BY	DATE
REVISED	MDW	10/28/10
REVISED	MDW	07/15/05
REVISED	WLC	04/12/05
REVISED	CAM	04/03/02
REVISED	PJK	03/25/02
REVISED	MDW	01/08/00
REV. HYD. MODEL STD.	PMCJ	08/25/99
METRIC	PMCJ	01/27/97
REVISED	MDW	08/22/94
STAND301.DWG	MDM	03/91

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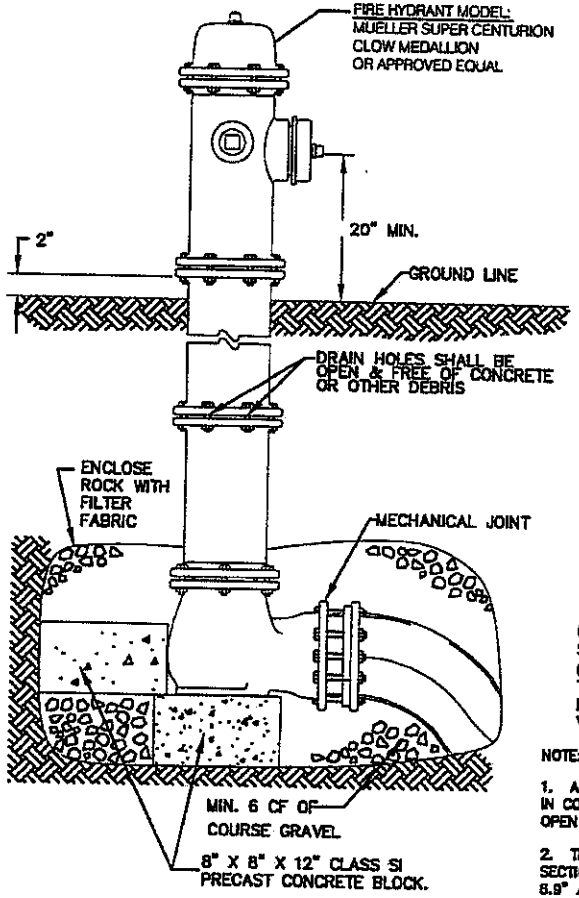
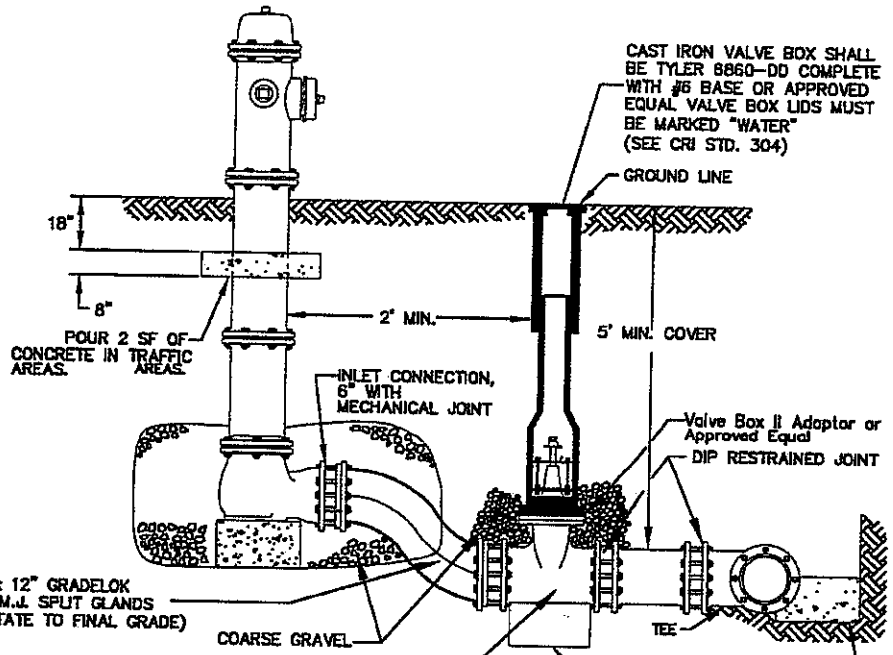
FIRE HYDRANT DETAIL

CITY OF ROCK ISLAND
ENGINEERING DIVISION

STANDARD NO. 301





6" GATE VALVE WITH VETICAL NON-RISING STEM, "O" RING STEM SEALS, 2" SQUARE OPERATING NUT, OPEN COUNTER CLOCK WISE & MECHANICAL JOINTS (AWWA C509). ALL BOLTS AND NUTS FOR THE VALVE BONNET AND VALVE THRUST PLATE SHALL BE CORBLUE TEE BOLTS. CLOW RESILIENT WEDGE, MUELLER A-2360 RESILIENT WEDGE, OR APPROVED EQUAL. VALVE SHALL BE INSTALLED AS CLOSE TO THE MAIN AS POSSIBLE.

NOTE:

1. A COMPRESSION TYPE MAIN VALVE, CLOSING WITH STREAM FLOW. THE VALVE WILL BE DESIGNED TO BE HELD CLOSED IN COMPRESSION UNDER STATIC WATER PRESSURE. THE VALVE OPENING WILL BE 5.25" MINIMUM NOMINAL DIAMETER AND OPEN COUNTER-CLOCKWISE. OPERATING NUT SHALL BE 7/8" SQUARE IN SIZE.

2. THE INLET CONNECTION WILL BE 6" DIA. "CUT-IN" MECHANICAL JOINT (AS DESCRIBED IN SECTION II-2, C8) WITH RESTRAINING LUGS, FOOT PIECE BELL WILL ACCEPT PIPE OUTSIDE DIAMETERS IN THE 6.9" AND 7.1" RANGE.

3. ALL HYDRANT BOLTS AND NUTS FROM THE GRADE LINE MARK ON THE BARREL TO THE SHOE BOLTS AND NUTS SHALL BE CORBLUE TEE BOLTS.

4. DELIVERY CLASSIFICATION - ONE PUMPER AND TWO HOSE NOZZLES. THESE NOZZLES SHALL BE 4.5" & 2.5" NOMINAL INSIDE DIA. RESPECTIVELY. THREADS SHALL BE OF NATIONAL STANDARD FIRE HOSE COUPLING SCREW DESIGN.

5. THE HYDRANTS WILL BE OF "TRAFFIC BREAKAWAY DESIGN," WITH GROUND LINE FLANGE AND SAFETY STEM OPERATOR COUPLING. GRADE LINE SHALL BE POSITIVELY MARKED ON THE LOWER BARREL. THE CENTER LINE OF ALL PORTS SHALL BE A MINIMUM OF 18" ABOVE ESTABLISHED GRADE LINES.

6. HYDRANTS WILL BE PROVIDED WITH BRONZE-LINED OUTLETS TO ALLOW CORROSION RESISTANT DRAINAGE OF THE BARREL SECTIONS. SEAT AND DRAIN RINGS WILL BE OF BRONZE COMPOSITION AS PROVIDED IN THE STANDARD RECOMMENDATIONS.

7. NOZZLE CAPS WILL OPEN COUNTER-CLOCKWISE, HAVE NATIONAL STANDARD TREADS, AND BE PROVIDED WITH A SECURITY CHAIN. OPERATING NUT SHALL BE 7/8" SQUARE IN SIZE.

8. POSITIVE O-RINGS SEALS WILL BE PROVIDED TO PROTECT STEM AND OPERATING NUT THREADS, AND ALL BEARING SURFACES FROM THE ATMOSPHERE AND THE WATERWAY. THE TOP WILL HAVE AN AN OIL RESERVOIR OR GREASE CHAMBER TO INSURE AUTOMATIC LUBRICATION OF THE STEM THREADS DURING OPERATION.

9. PRIMARY COATING AND PAINTING MUST COMPLY WITH THE STANDARD RECOMMENDATIONS, AND A SAFETY FINISH COAT WILL BE APPLIED ABOVE THE GRADE LINE. FINISH COAT MUST BE SAFETY YELLOW IN COLOR.

NOT TO SCALE

REVISION	BY	DATE
REVISED	MDW	10/26/10
REVISED	MDW	07/15/05
REVISED	WLC	04/12/05
REVISED	PJK	03/25/02
REV. HYD. MODEL STD.	PMCJ	08/25/99
METRIC	PMCJ	01/27/97
STAND301.DWG	MDM	10/96

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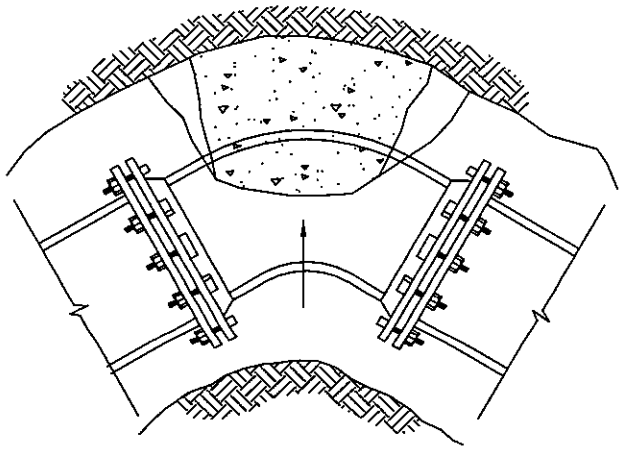
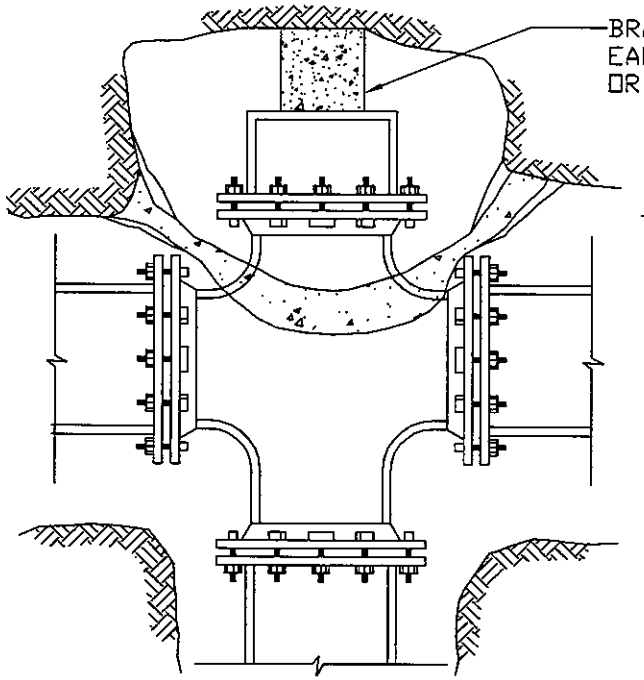
FIRE HYDRANT WITH GRADELOK OFFSET DETAIL

CITY OF ROCK ISLAND
ENGINEERING DIVISION

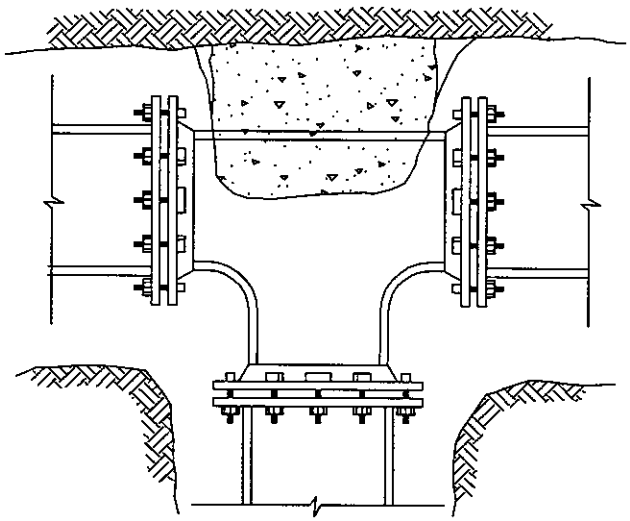
STANDARD NO. 301A



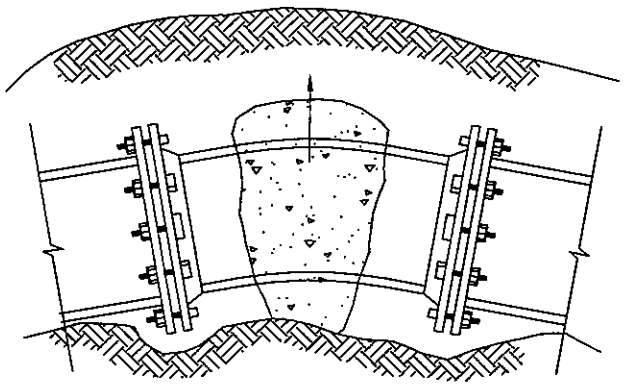
90° ELBOW



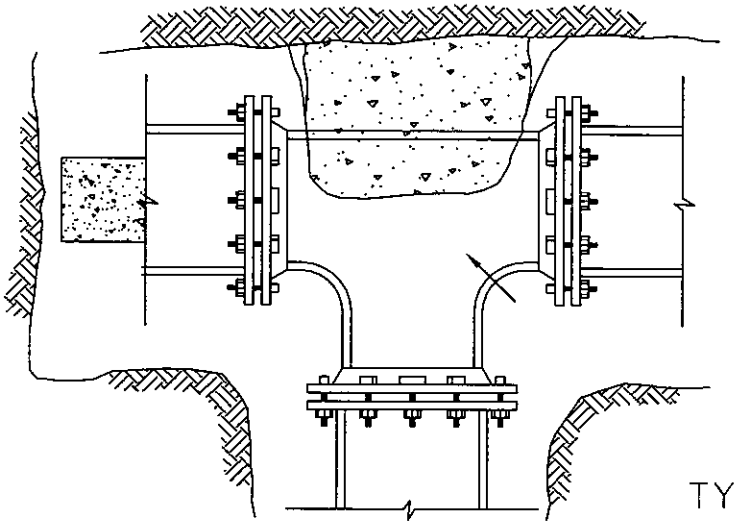
PLUGGED CROSS



TEE



VERTICAL BEND



PLUGGED TEE

NOTES:

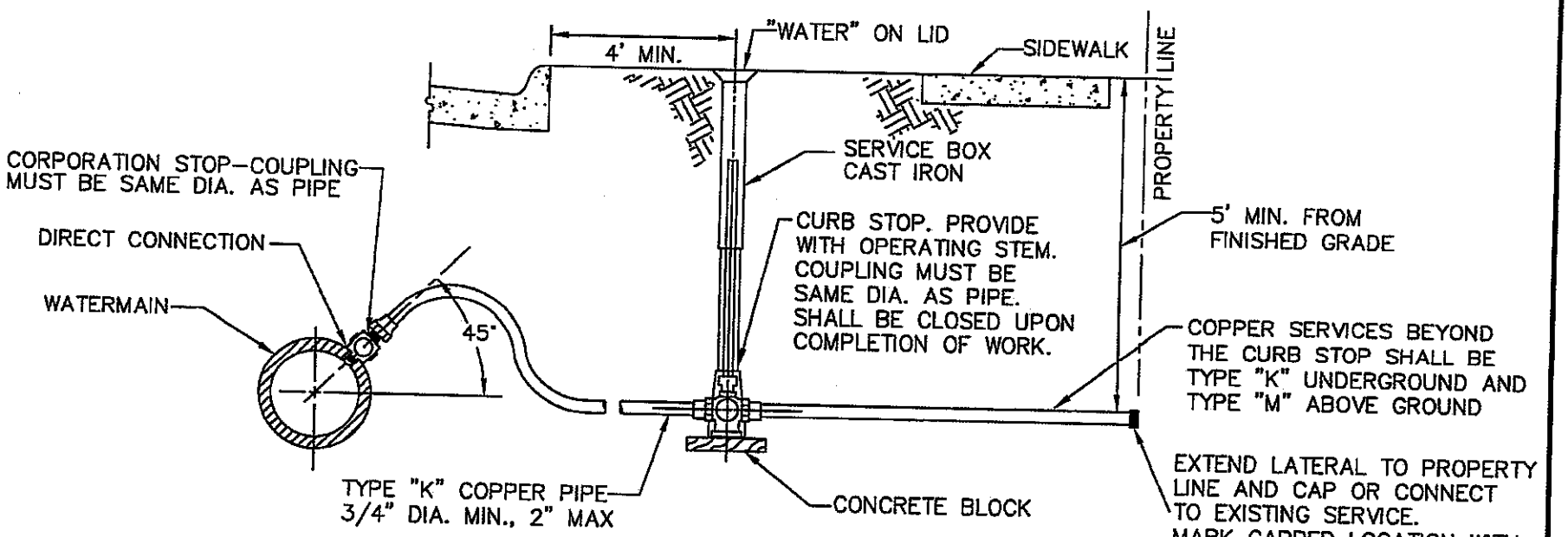
1. ALL BLOCKS BEAR AGAINST UNDISTURBED EARTH.
2. ARROWS INDICATE DIRECTION OF THRUST.
3. ALL THRUST BLOCKS TO BE 3000 PSI CONCRETE.
4. ALL FITTING SHOWN IN PLAN EXCEPT VERTICAL BEND.
5. FRESH CONCRETE SHALL NOT TOUCH FLANGE OR FLANGE BOLTS.

TYPICAL THRUST BLOCK INSTALLATIONS

NOT TO SCALE

STANDARDIZED	PMCJ	10/03/94
REVISION	BY	DATE

CITY OF ROCK ISLAND ENGINEERING DIVISION	STANDARD NO. 302



MAXIMUM RECOMMENDED DIRECT TAP SIZES		
MAIN DIA.	MAX TAP SIZE BY MAIN MATERIAL TYPE	
	CL 350 DIP & CAST IRON	ALL W/ SADDLE
3"	3/4"	3/4"
4"	3/4"	1"
6"	1"	1-1/2"
8"	1"	2"
10"	1"	2"
12"	1-1/4"	2"
14"	1-1/2"	2" *
16"	2"	2" *
18"	2"	2" *
20"	2"	2" *
24"	2"	2" *

NOTES:

1. THE SERVICE PIPE SHALL BE LAID IN THE TRENCH WITH SUFFICIENT HORIZONTAL WEAVING TO ALLOW NOT LESS THAN 1' EXTRA LENGTH IN ITS ENTIRE LENGTH.

2. SERVICE PIPES OVER 2" DIAMETER SHALL BE TAPPED LIVE THROUGH A SADDLE SLEEVE OR CUT-IN TO THE MAIN WITH A SOLID SLEEVE. NOTIFY THE PUBLIC WORKS DEPARTMENT PRIOR TO PERFORMING SUCH A CONNECTION.

3. THE PIPING FROM TWO OR MORE SERVICES ON THE SAME PREMISES MUST BE KEPT SEPARATE, WITH NO CROSS CONNECTIONS.

4. CONTACT THE PLUMBING INSPECTOR FOR SPECIAL BEDDING AND INSTALLATION REQUIREMENTS FOR SERVICES IN ACID SOILS OR LANDFILLS.

5. CURB STOP SHALL BE 4' MIN FROM BACK OF CURB OR EDGE OF PAVEMENT AND 1' MIN FROM PROPERTY LINE, BUT IN EITHER CASE NOT IN A SIDEWALK WITHOUT APPROVAL OF THE PUBLIC WORKS DEPARTMENT.

6. IF A SADDLE IS PROVIDED FOR TAPPING OF DUCTILE IRON OR CAST IRON WATERMAINS, THE "ALL W/ SADDLE" FIGURES CAN BE USED FOR MAX. TAP SIZES.

7. MANUFACTURERS DO NOT RECOMMEND TAPPING C900 PVC OVER 12" DIAMETER.

* FOR PVC WATER MAINS OVER 12" THAT NEED TO BE TAPPED, CONTACT THE PUBLIC WORKS DEPARTMENT – D.I.P. OR A SPECIAL GRADE OF PVC MAY BE REQUIRED.

REVISION	BY	DATE
REVISED	MDW	3/26/08
REVISED	TAB	4/2/02
REVISED	PMCJ	12/14/98
METRIC	PMCJ	01/27/97
STAND303.DWG	CWE	06/19/91

S:\...\MISC\STANDARD\CRI_STD\303.DWG

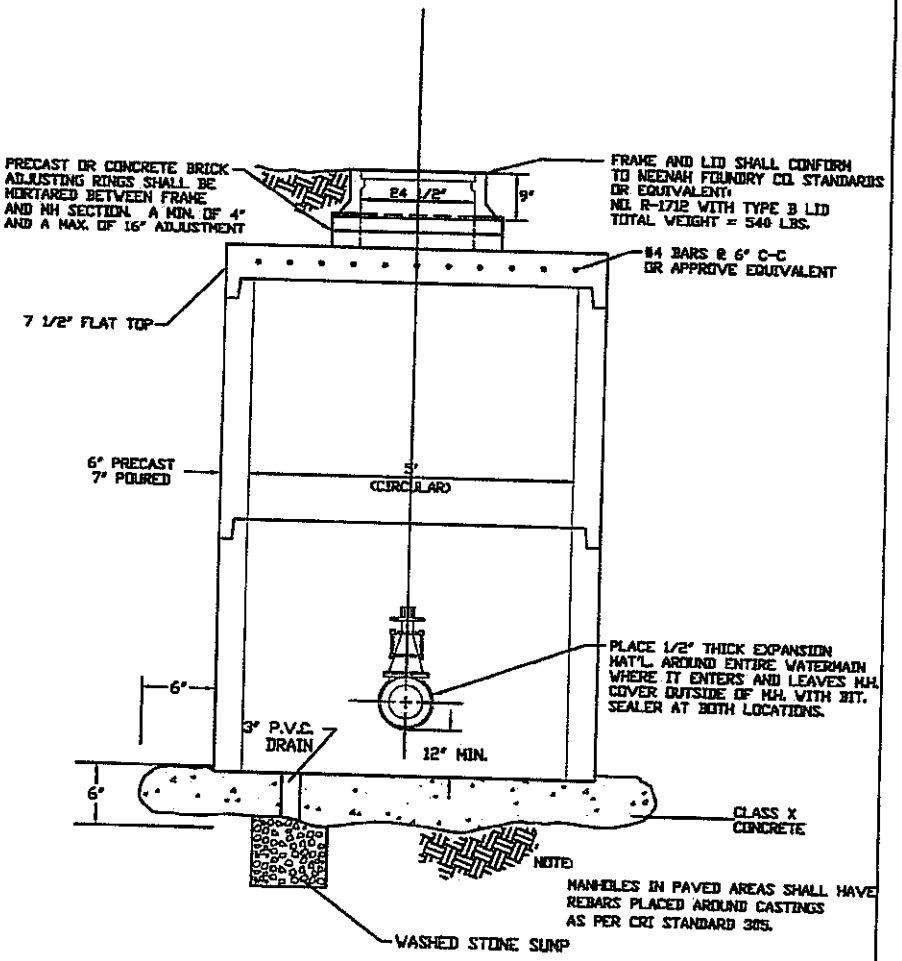
STANDARD TAP
SERVICE PIPING (COPPER)

NOT TO SCALE

CITY OF ROCK ISLAND
ENGINEERING DIVISION

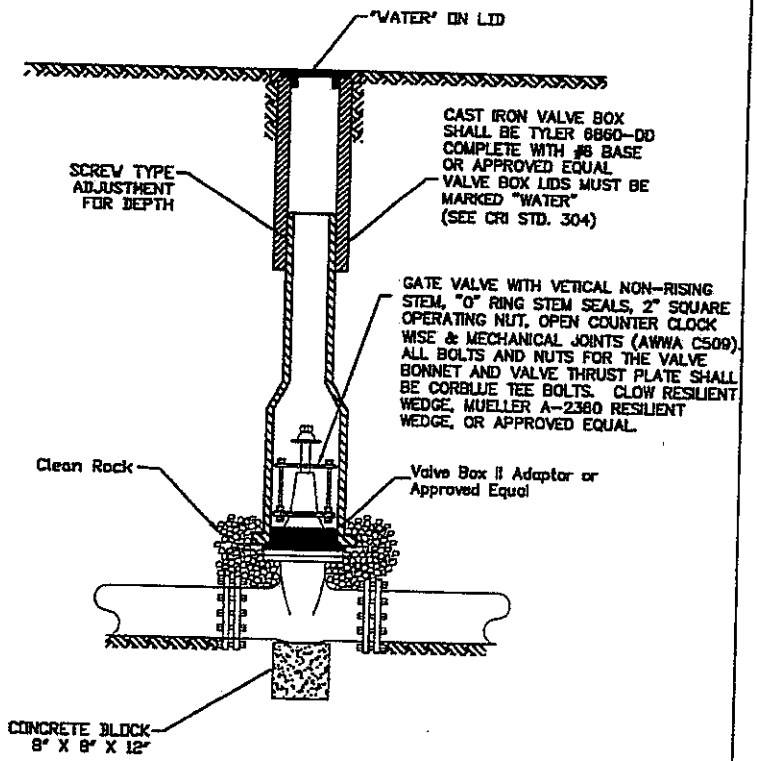
STANDARD NO. 303

VALVE VAULT



REVISED	KDV	10/26/10
REVISED	MLC	04/12/05
REVISED	CAH	04/03/02
REVISED	PJK	03/25/02
REVISED	TAB	03/14/00
STAND304.DWG	KDV	03/12/93

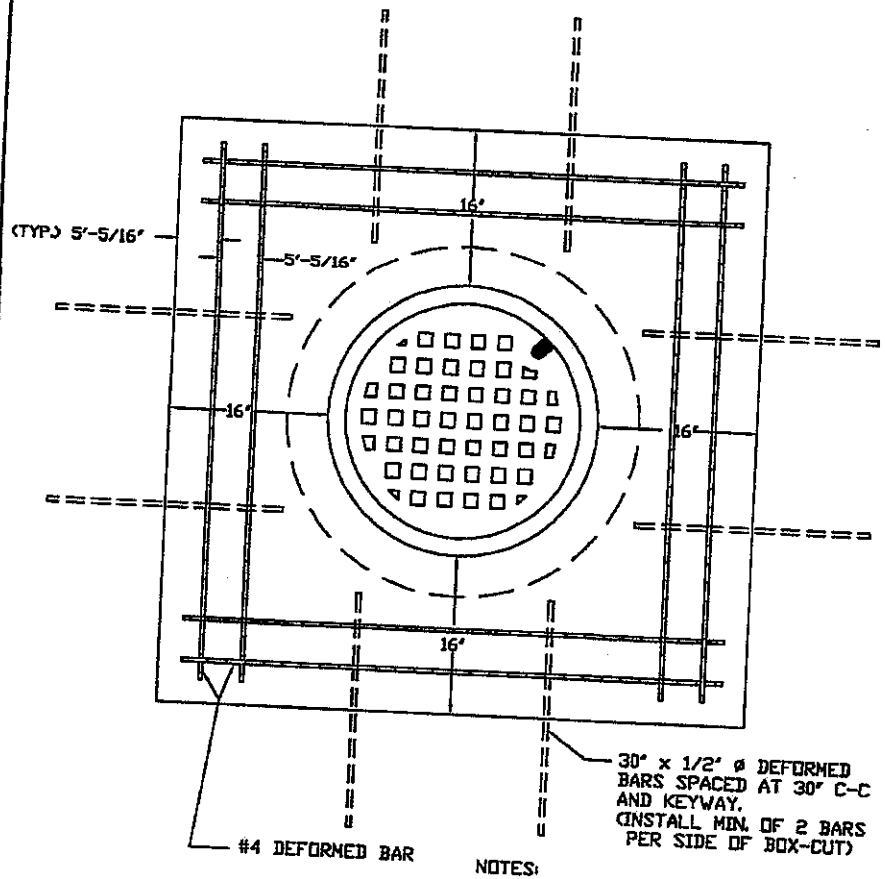
VALVE BOX



STANDARD VALVE VAULT & STANDARD VALVE BOX

CITY OF ROCK ISLAND ENGINEERING DIVISION	STANDARD NO. 304

MANHOLE BOX-OUT



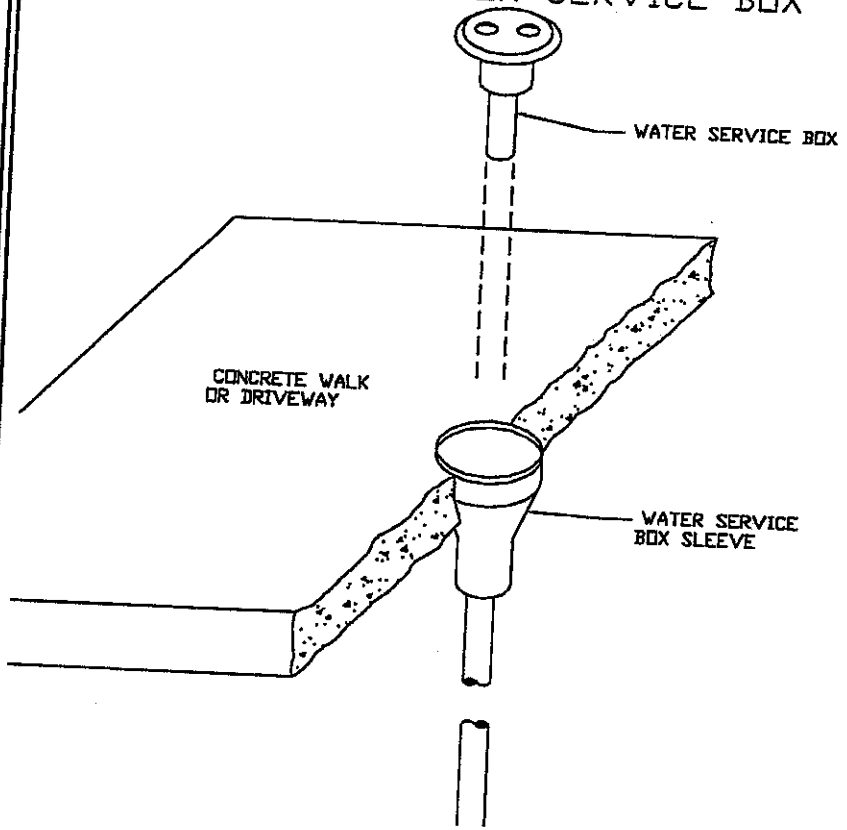
NOTES:

#1 REBARS TO BE PLACED WHETHER BOX-OUT IS USED OR NOT.

#2 MINIMUM OF 2" CLEARANCE BETWEEN BOX-OUT AND END OF REBARS.

REVISION	BY	DATE
REVISED	TAB	03/14/2000
STAND305.DWG	CWE	06/24/91

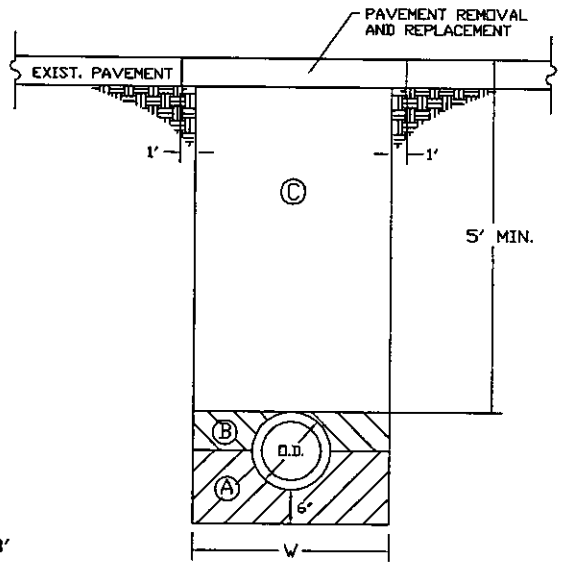
SLEEVE - WATER SERVICE BOX



MANHOLE BOX-OUT & WATER SERVICE BOX SLEEVE

CITY OF ROCK ISLAND ENGINEERING DIVISION	STANDARD NO. 305

TRENCH DETAIL FOR ALL EXCAVATIONS UNDER OR WITHIN TWO FEET OF A PROPOSED OR EXISTING PAVEMENT



W = O.D. + 3.0'

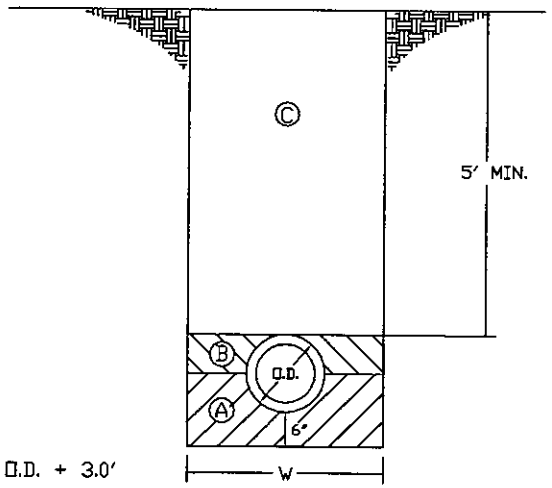
AREA Ⓐ FA-1 OR FA-2 BEDDING COMPACTED IN 8" LIFTS ACCORDING TO ART. 550.07

AREA Ⓑ TRENCH BACKFILL (PAY ITEM) COMPACTED IN 8" LIFTS ACCORDING TO ART. 550.07

AREA Ⓒ TRENCH BACKFILL (PAY ITEM). COMPACTED BY METHOD 1, 2, OR 3 ART. 550.07.

BEDDING, BACKFILLING AND COMPACTING AREA A ARE INCIDENTAL TO THE WATERMAIN CONSTRUCTION.

TRENCH DETAIL FOR EXCAVATIONS OUTSIDE PAVED AREAS



W = O.D. + 3.0'

AREA Ⓐ FA-1 OR FA-2 BEDDING COMPACTED IN 8" LIFTS ACCORDING TO ART. 550.07

AREA Ⓑ SELECT MATERIAL – NATIVE SOIL EXCAVATED FROM THE TRENCH, FREE OF ROCKS, FOREIGN MATERIALS, AND FROZEN EARTH. COMPACTED IN 8" LIFTS ACCORDING TO ART. 550.07

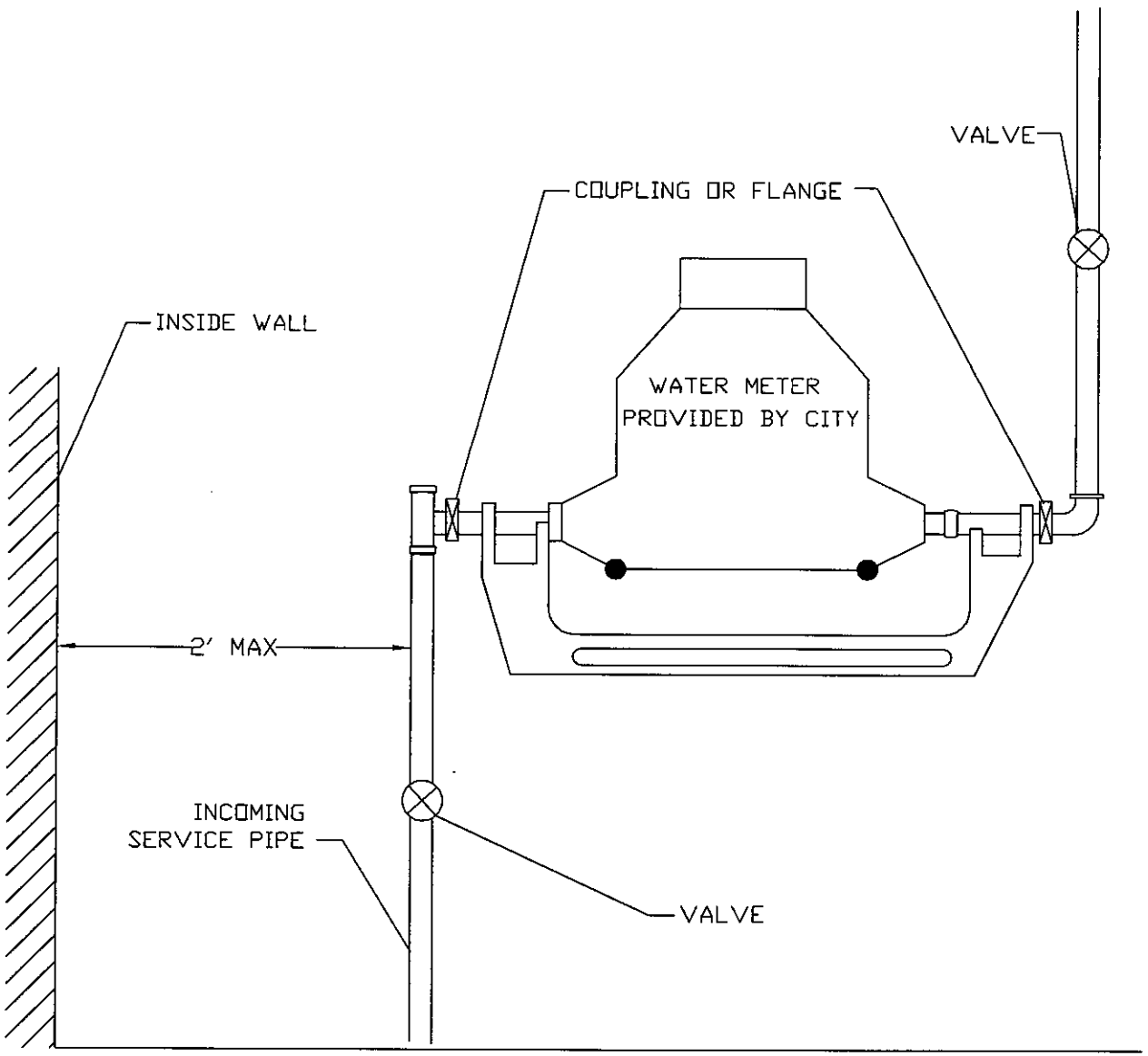
AREA Ⓒ EXCAVATED MATERIAL FREE OF ROCKS LARGER THAN 8" IN GREATEST DIMENSION COMPACTED BY METHOD 1, 2, OR 3 ART. 550.07

BEDDING, BACKFILLING AND COMPACTING AREAS A ,B, AND C ARE INCIDENTAL TO THE WATERMAIN CONSTRUCTION.

REVISED	MDW	08/22/94
STANDARDIZED	MEE	08/20/94
REVISION	BY	DATE

TRENCH DETAILS FOR WATERMAIN INSTALLATION

CITY OF ROCK ISLAND ENGINEERING DIVISION	STANDARD NO. 306



NOTES:

1. ALL METERS SHALL BE FURNISHED AND SET BY THE PUBLIC WORKS DEPARTMENT, BUT OWNERS MUST PROVIDE A SUITABLE LOCATION IN THE PIPING SYSTEM.

2. METERS SHALL BE SET LEAVING A MAXIMUM OF 2 FEET OF SERVICE FROM THE WALL FROM WHERE THE PIPE ENTERS THE PREMISES.

3. THE METER SHALL BE LOCATED FOR READY ACCESS AT ALL TIMES BY PUBLIC WORKS STAFF, AND KEPT DRY, CLEAN AND PROTECTED FROM FREEZING.

4. ALL VALVES AND FITTINGS NECESSARY TO COMPLY WITH THE REQUIREMENTS AND TO PROVIDE CONNECTION TO THE METER, EXCEPT A COUPLING OR FLANGE AT EACH END OF THE METER, SHALL BE PROVIDED BY THE OWNER OF THE PREMISES TO BE SERVED.

5. PROVIDE A WIRE CONNECTION, METER YOKE, OR OTHER MEANS TO PROVIDE ELECTRICAL CONDUCTIVITY AROUND THE METER FOR GROUNDING PURPOSES.

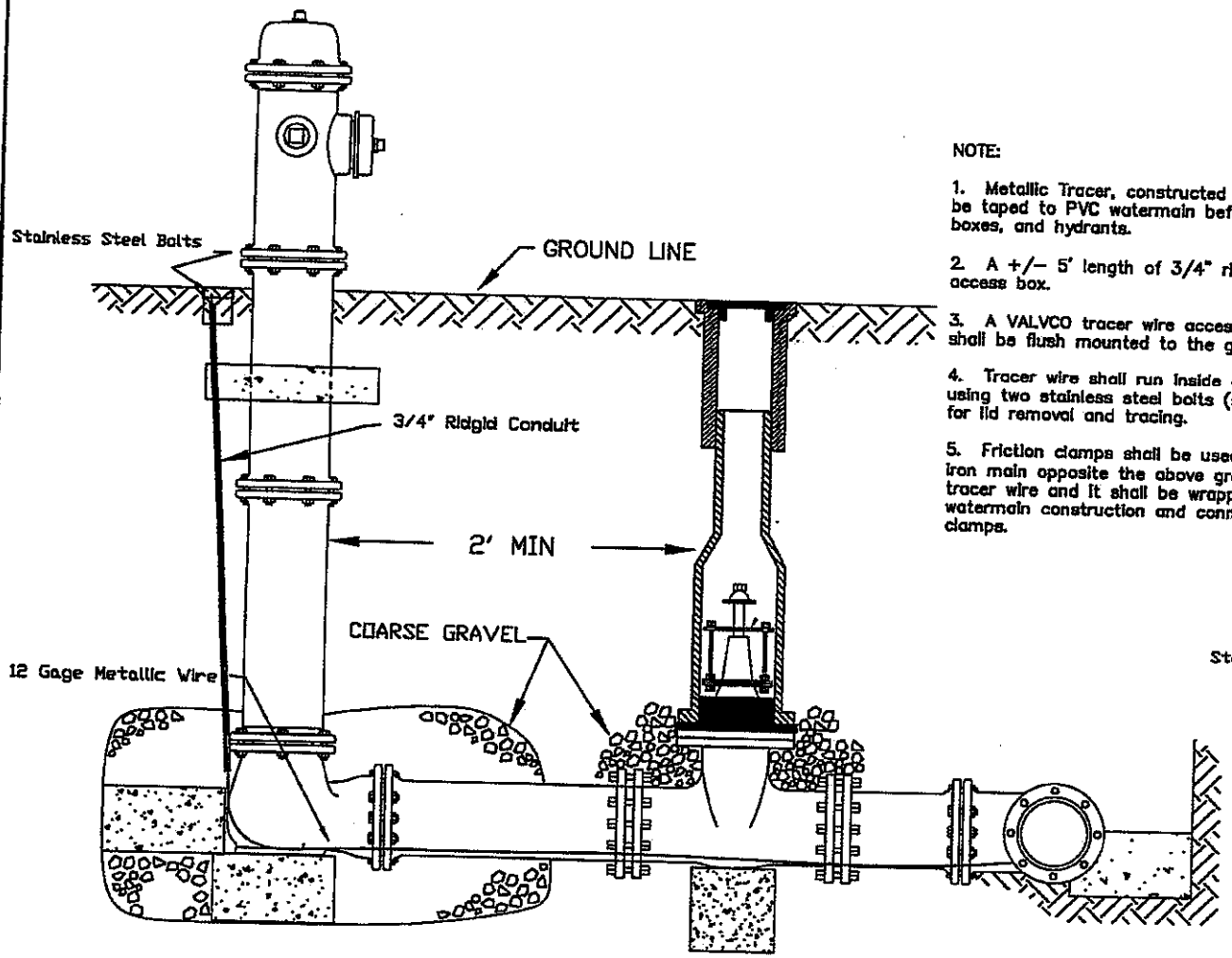
TYPICAL-SINGLE WATER METER INSTALLATION

NOT TO SCALE

STANDARDIZED	TAB	01/25/02
REVISION	MJH	05/07/01
STANDARDIZED	PMCJ	09/07/94
REVISION	BY	DATE

CITY OF ROCK ISLAND
ENGINEERING DIVISION

STANDARD NO. 307



NOTE:

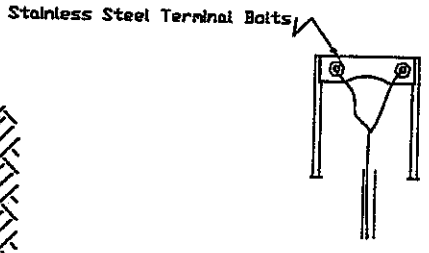
1. Metallic Tracer, constructed of USE 12 gage metallic wire with blue insulation shall be taped to PVC watermain before placement. The tracer shall be connected to all valve boxes, and hydrants.

2. A +/– 5' length of 3/4" rigid conduit shall be used to guide the wire to tracer wire access box.

3. A VALVCO tracer wire access box (TRACER WIRE imprinted on the lid) or approved equal shall be flush mounted to the grade.

4. Tracer wire shall run inside conduit and shall be connected to the lid using two stainless steel bolts (supplied with the lid). Extra wire shall be left for for lid removal and tracing.

5. Friction clamps shall be used at both terminating ends of the tracer wire at the ductile iron main opposite the above grade switch box. Insulation shall be removed from 12" of the tracer wire and it shall be wrapped around the watermain at the terminating point for watermain construction and connected directly to the watermain using the friction clamps.



Lid Detail

NOT TO SCALE

STAND308.DWG	JCP	03/05/10
STAND308.DWG	CAM	04/03/02
REVISION	BY	DATE

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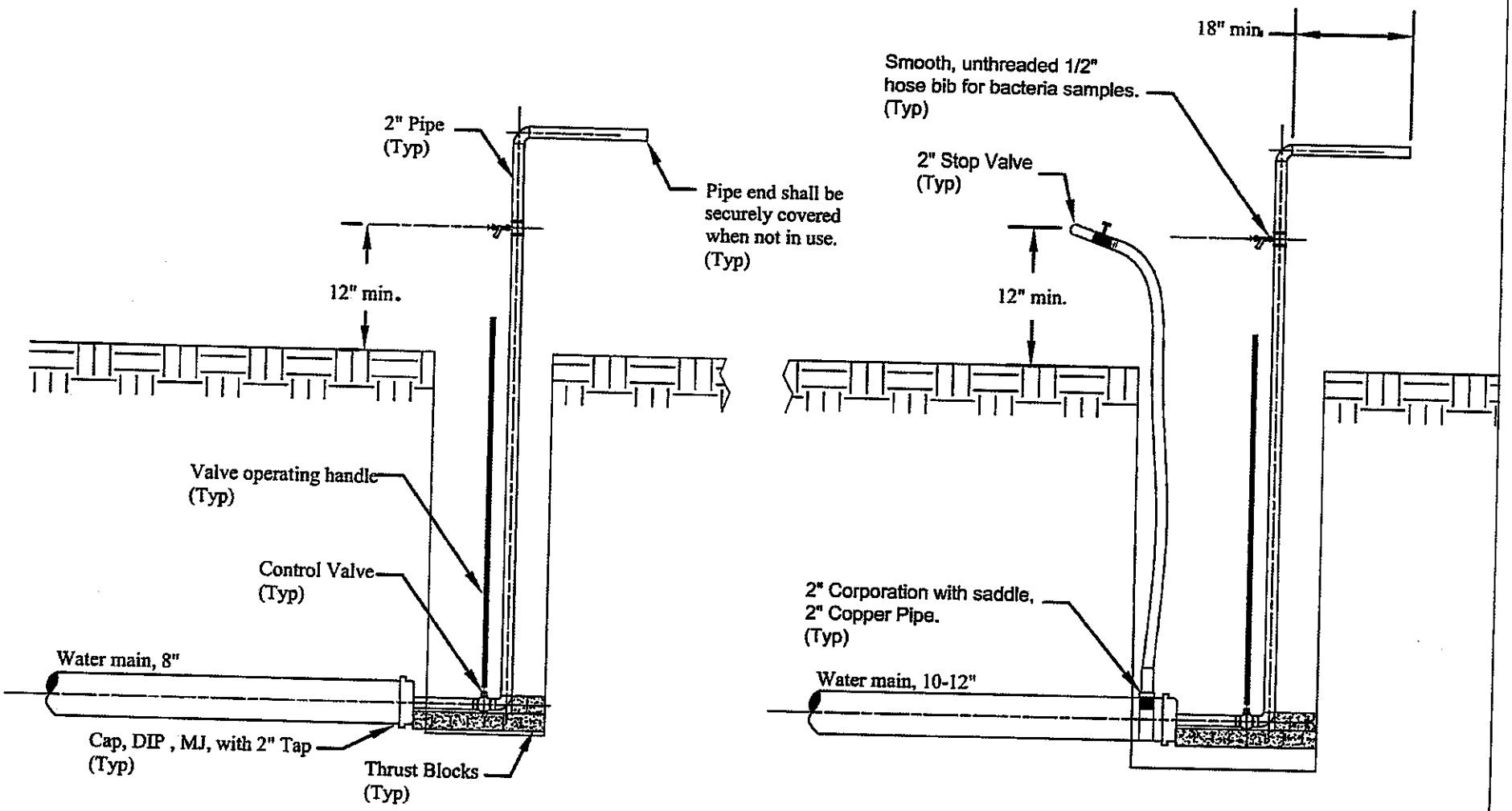
Watermain Tracer Wire Detail

CITY OF ROCK ISLAND
ENGINEERING DIVISION

STANDARD NO. 308

NOTE: Water mains 8" or less shall have a minimum of one 2" pipe at downstream end for adequate flow for flushing. Water mains that are greater than 8" shall have two 2" pipes to provide for adequate flow for flushing. All material and labor required to provide for adequate flushing of new water main shall be incidental to the cost of the water main. Excavation sites shall be backfilled during testing period.



NOT TO SCALE

STAND309.DWG	WLC	02/03/06
REVISION	BY	DATE

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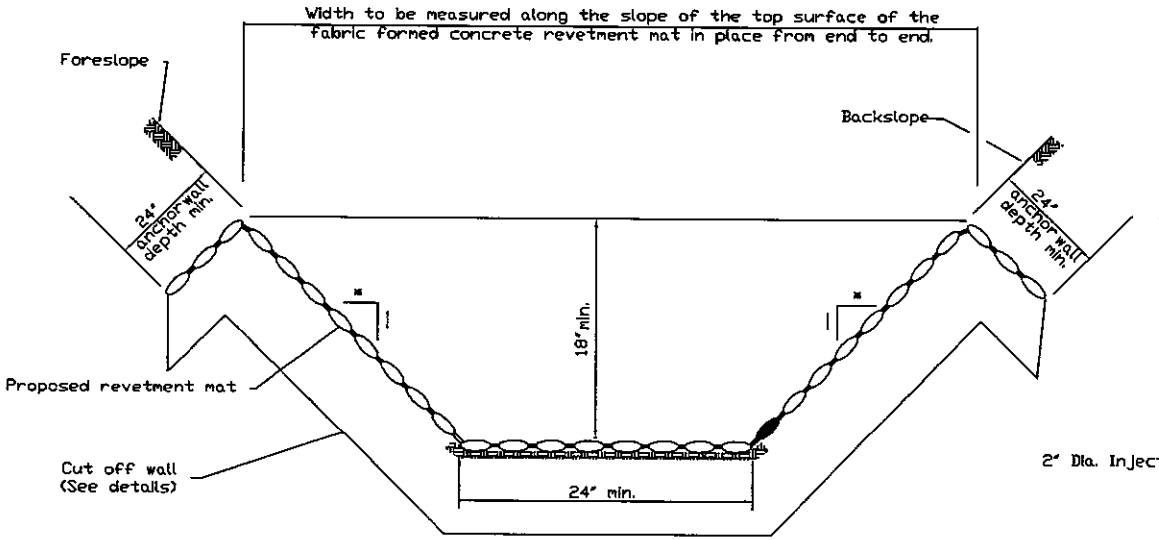
Watermain Blowoff and Sample Tap

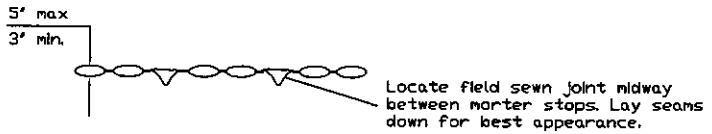
CITY OF ROCK ISLAND
ENGINEERING DIVISION

STANDARD NO. 309

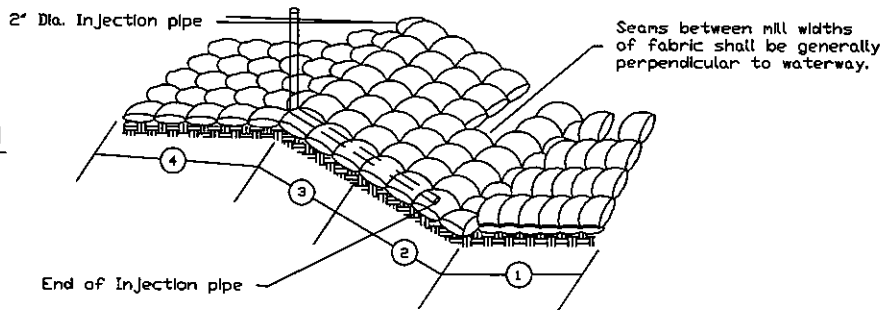


TYPICAL FABRIC FORMED CONCRETE REVETMENT MAT LINED DITCH

* 1.5min
6.0max



TYPICAL SECTION THRU FILTER POINT MAT



INSTALLATION DETAILS

1. In placing inserts through fabric use care to avoid breaking drop stitches.
2. —(1)— Indicates sequence of pour.

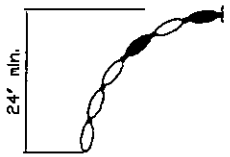
GENERAL NOTES

Dimensions given with minimum limits shall be adjusted for field conditions as directed by the engineer.

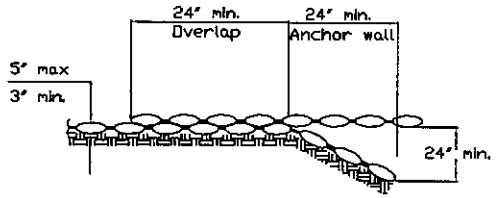
All anchor walls on side slopes and at lap joints as well as cut off walls, shall be installed in trenches and measured as such.

Cut off walls shall be installed at the upstream and downstream ends.

All dimensions are in inches (millimeters) unless otherwise shown.



CUT OFF WALL DETAILS



TYPICAL LAP JOINTS W/ANCHOR WALL

NOT TO SCALE

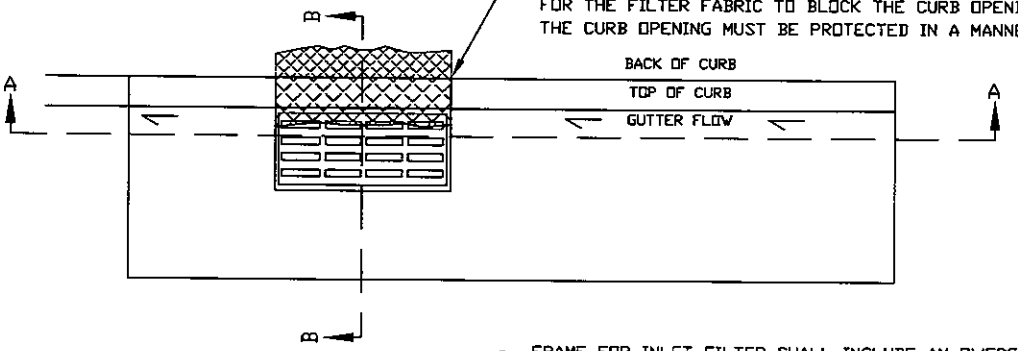
STANDARD	CAM	12/06/00
STANDARDIZED	PMCJ	08/31/94
REVISION	BY	DATE

FABRIC FORMED CONCRETE REVETMENT MATS

CITY OF ROCK ISLAND
ENGINEERING DIVISION

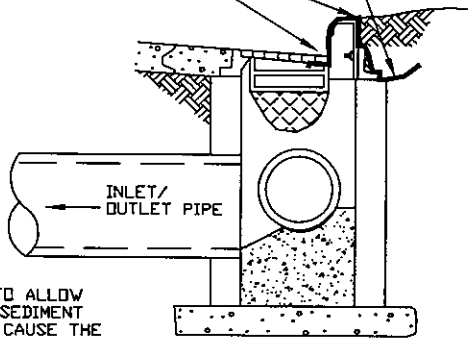
STANDARD NO. 401

PLAN VIEW



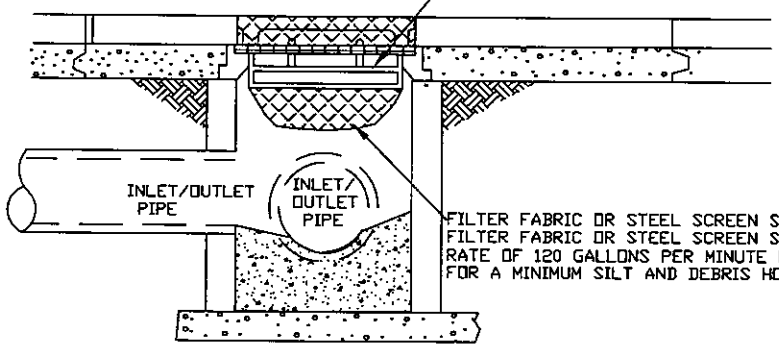
CURB INLET MUST BE PROTECTED FROM BYPASS. IF FILTER DOES NOT HAVE PROTECTION IN THE WAY OF A DEFLECTOR PLATE, THEN THE USE OF FILTER FABRIC SHALL BE USED TO PROTECT THE CURB INLET. FILTER FABRIC SECURED BEHIND CURB AND UNDER BACK EDGE OF SURFACE GRATE. FABRIC MUST BE FLUSH WITH CURB FACE ACROSS ENTIRE CURB OPENING
MESH SOCK/TUBE FILLED WITH STRAW, COMPOST, OR GRAVEL MAY BE SUBSTITUTED FOR THE FILTER FABRIC TO BLOCK THE CURB OPENING IN THE CASTING.
THE CURB OPENING MUST BE PROTECTED IN A MANNER ACCEPTABLE TO THE ENGINEER

BURY FILTER FABRIC BEHIND CURB OR SECURE USING SAND BAGS IN A MANNER ACCEPTABLE TO THE ENGINEER



SECTION B-B

FRAME FOR INLET FILTER SHALL INCLUDE AN OVERFLOW FEATURE DESIGNED TO ALLOW FULL FLOW OF WATER INTO THE STRUCTURE IF THE FILTER IS FILLED WITH SEDIMENT THE FRAME SHALL REST ON THE INSIDE LIP OF THE INLET CASTING AND NOT CAUSE THE SURFACE GRATE TO EXTEND HIGHER THAN 1/4 INCH ABOVE THE INLET FRAME



FILTER FABRIC OR STEEL SCREEN SHALL BE SECURED TO DROP IN FRAME
FILTER FABRIC OR STEEL SCREEN SHALL HAVE A MINIMUM FLOW RATE OF 120 GALLONS PER MINUTE PER SQUARE FOOT AND BE DESIGNED FOR A MINIMUM SILT AND DEBRIS HOLDING CAPACITY OF 2 CUBIC FEET

SECTION A-A

Inlet filter unit may also be fitted for round inlet structures. Inlet filter unit shall be as manufactured by **Inlet & Pipe Protection, Inc**, at 24137 W. 111th St - Unit A, Naperville, IL (866) 287-8655// www.inletfilters.com , or approved equal.

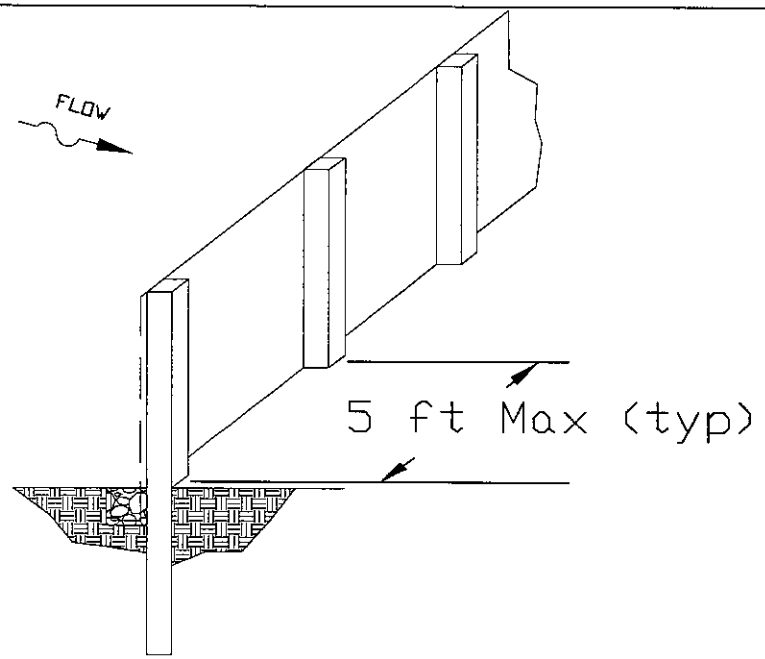
INLET FILTER FOR INLET AND PIPE PROTECTION

REVISION	BY	DATE
REVISED	RAH	9/06/12
REVISED	RAH	3/02/10
NEW	RAH	3/29/07

NOT TO SCALE

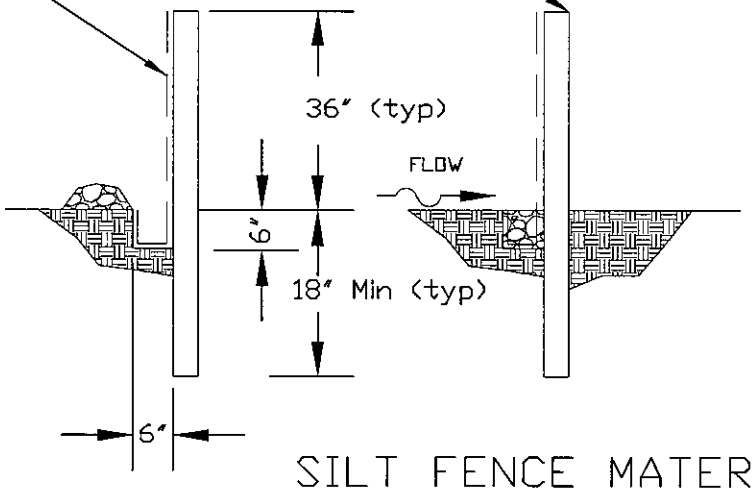
CITY OF ROCK ISLAND
ENGINEERING DIVISION

STANDARD NO. 402

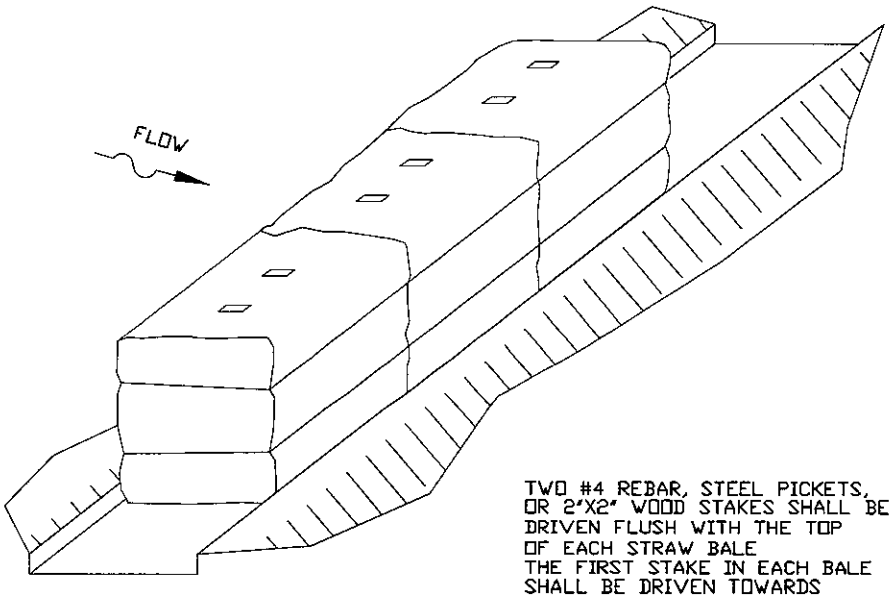


FILTER FABRIC SECURED TO POST
MINIMUM OF 4 FASTENERS PER POST
MINIMUM 10 GUAGE WIRE
OR IN A MANNER ACCEPTABLE
TO ENGINEER

2"X2" WOOD POST OR
STD. STEEL PICKET

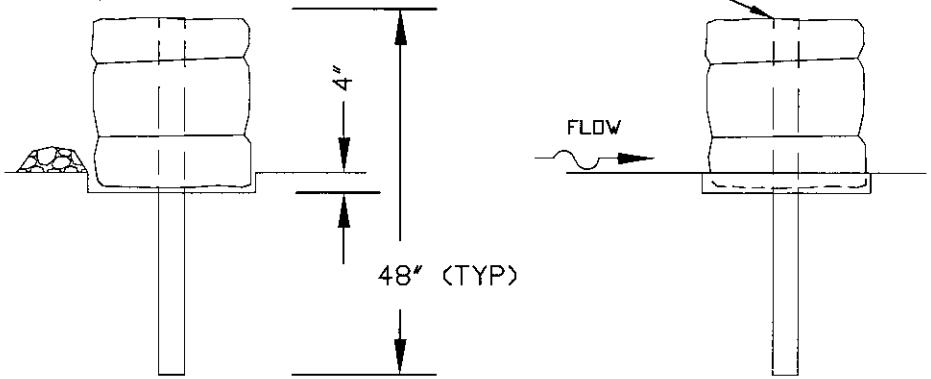


SILT FENCE MATERIAL



TWO #4 REBAR, STEEL PICKETS,
OR 2"X2" WOOD STAKES SHALL BE
DRIVEN FLUSH WITH THE TOP
OF EACH STRAW BALE
THE FIRST STAKE IN EACH BALE
SHALL BE DRIVEN TOWARDS
PREVIOUSLY PLACED BALE AT
AN ANGLE TO FORCE THE BALES
TOGETHER

BOUND BALES PLACED ON CONTOUR



STRAW BALE MATERIAL

PERIMETER EROSION BARRIER

NEW	RAH	3/29/07
REVISION	BY	DATE

NOT TO SCALE

CITY OF ROCK ISLAND
ENGINEERING DIVISION

STANDARD NO. 403