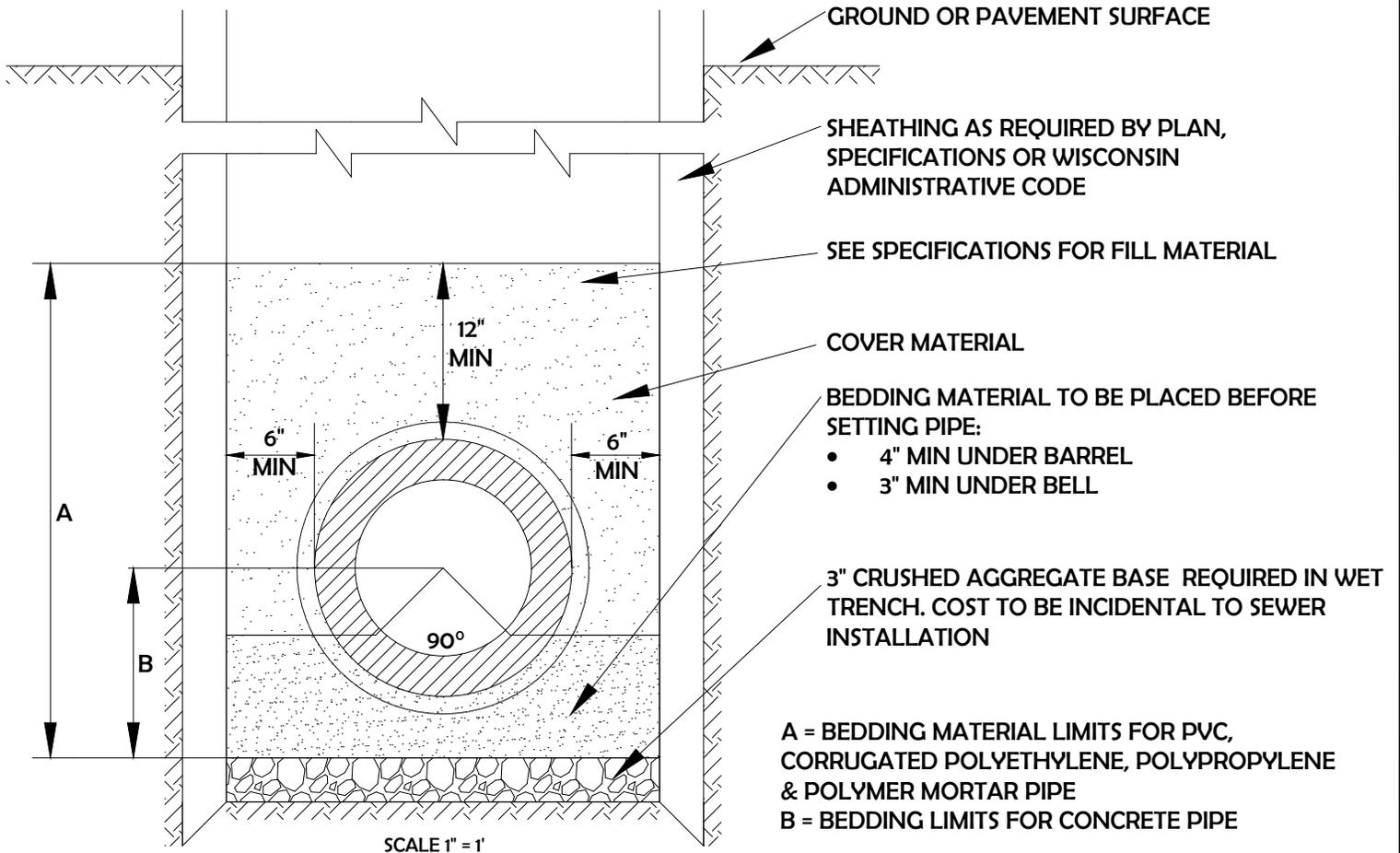
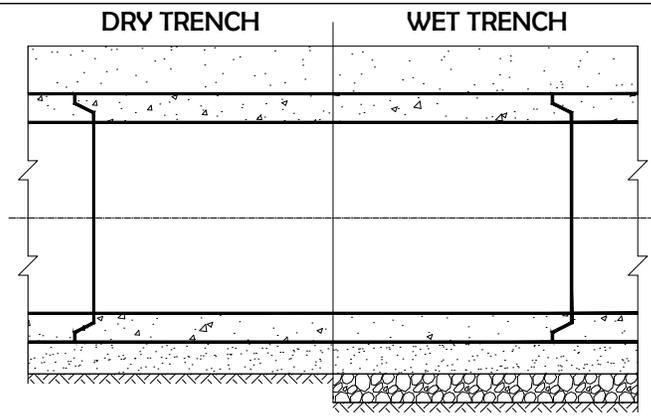


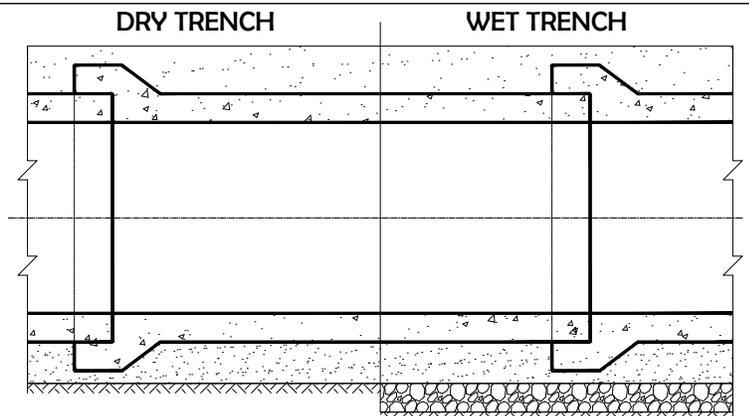
TRENCH SECTION (TYPICAL)



BELL AND SPIGOT JOINT SHOWN



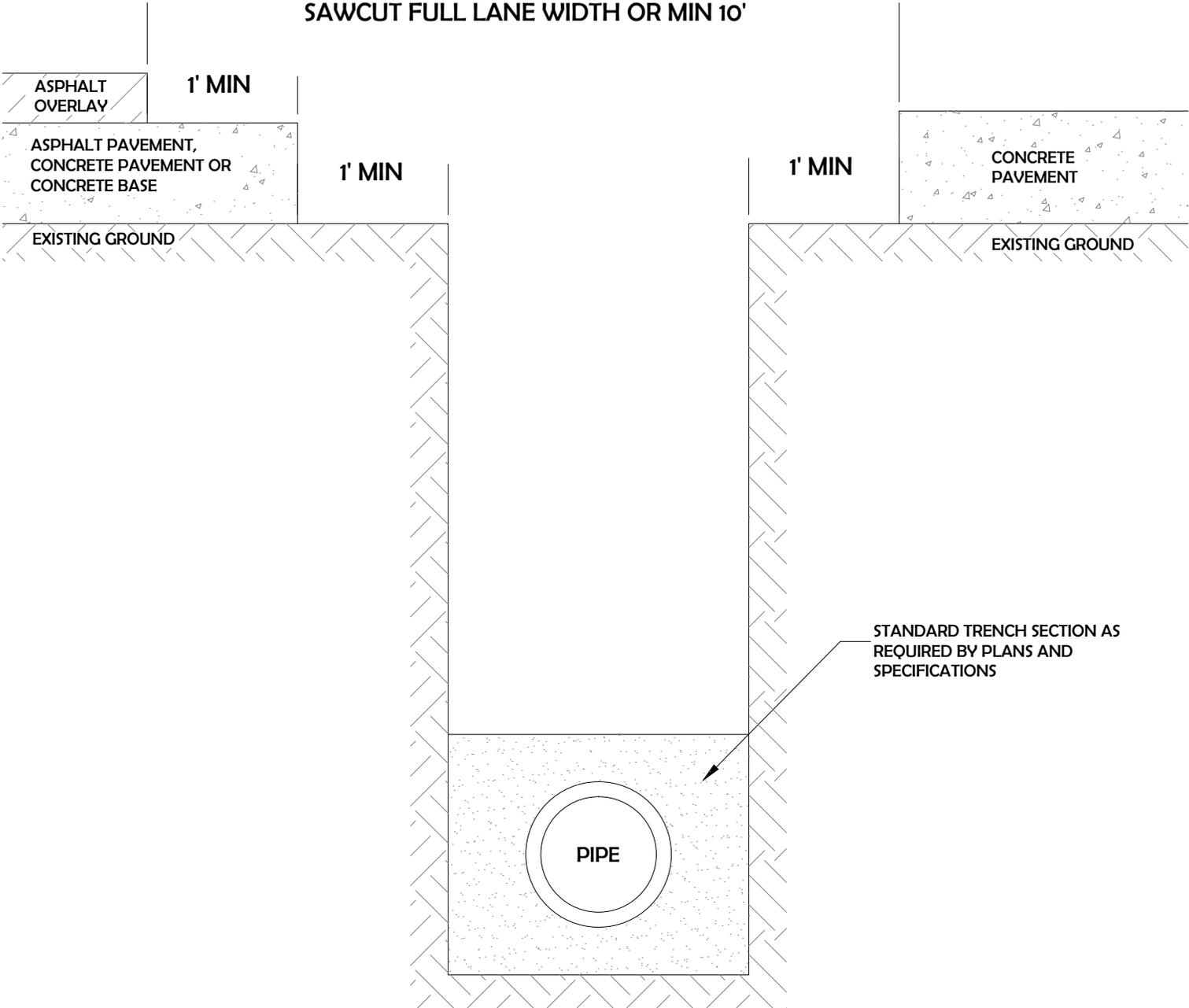
TONGUE AND GROOVE CROSS SECTION
(EXAGGERATED)



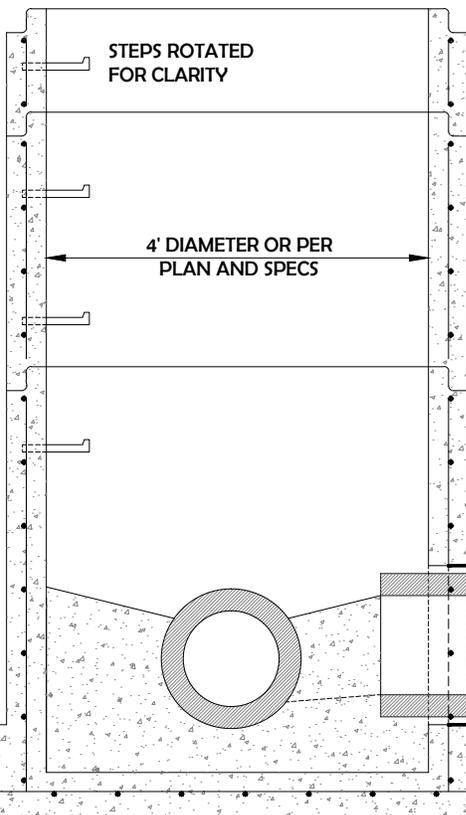
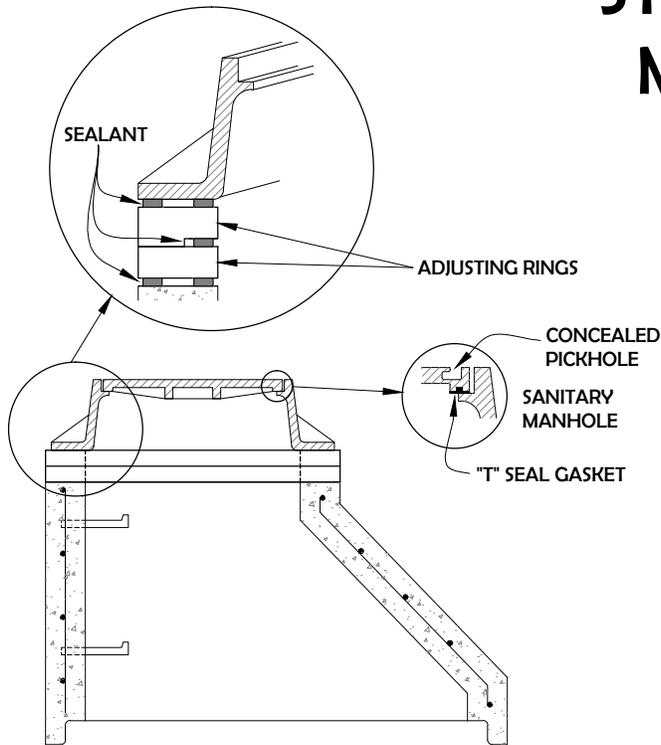
BELL AND SPIGOT CROSS SECTION
(EXAGGERATED)



PAVEMENT SAWCUT - TRENCH SECTION (TYPICAL)



STANDARD PRECAST MANHOLE DETAIL



MIN 4" LIP
REQUIRED

6" GRAVEL BASE

- 6 INCHES OF CRUSHED STONE BASE REQUIRED
- CONCRETE AND STEEL REINFORCEMENT SHALL CONFORM TO ASTM DESIGNATION C478
- MANHOLE CONCRETE STRENGTH TO BE 4,000 PSI OR GREATER
- MIN. MANHOLE WALL, BASE & FLAT TOP SLAB THICKNESSES
4 FT I.D.: 5 INCH WALL, 6 INCH BASE & FLAT TOP SLAB
5 FT I.D.: 6 INCH WALL, 8 INCH BASE & FLAT TOP SLAB
6 FT I.D.: 7 INCH WALL, 8 INCH BASE & FLAT TOP SLAB
8 FT I.D.: 9 INCH WALL, 8 INCH BASE & FLAT TOP SLAB
- MANHOLE BASE TO BE CONSTRUCTED OF CLASS "A" CONCRETE, MINIMUM OF 12 INCHES PLACED UNDER FLOW LINE OF PIPE
- HEIGHT OF BENCH TO BE 0.8 X DIA. OF SEWER
STORM SEWER BENCH SLOPE - 1 INCH PER FT
SANITARY SEWER BENCH SLOPE - 3 INCHES PER FT
- PIPE HOLES TO BE MANUFACTURED SO AS TO ALLOW FOR LATERAL AND VERTICAL MOVEMENT, AS WELL AS ANGULAR ADJUSTMENT THROUGH 15°
- PIPE TO MANHOLE CONNECTORS SHALL MEET ASTM C923 (KOR-N-SEAL, QUIK-LOK OR EQUAL)
- JOINTS SHALL BE WATERTIGHT AND SHALL BE MADE USING RUBBER TYPE GASKETS OR PRE-FORMED JOINT MATERIAL
- MANHOLE STEPS TO BE PLACED AT 16 INCH INTERVALS. THE FIRST STEP SHALL BE PLACED 16 INCHES ABOVE THE BENCH. THE TOP STEP MAY VARY FROM 16 INCHES - 24 INCHES FROM THE TOP OF CASTING. STEPS SHALL BE STEEL REINFORCED PLASTIC CONFORMING TO WS&W 8.40.1.(c). MANHOLE STEPS SHALL BE ALIGNED OVER THE OUTGOING PIPE.
- BARREL SECTION - 12 INCH, 16 INCH, 24 INCH, 32 INCH, 48 INCH AND 64 INCH HIGH. AREA OF CIRCUMFERENTIAL STEEL = 0.12 SQ INCH PER LINEAL FOOT
- ECCENTRIC CONE MAY VARY IN HEIGHT FROM 28 INCHES TO 36 INCHES
- INSTALL FLAT TOP WHEN SHOWN ON PLANS, IN SPECIFICATIONS OR APPROVED BY ENGINEER
- ADJUSTING RINGS SHALL BE INJECTION MOLDED-RECYCLED HDPE AS MANUFACTURED BY LADTECH, INC., OR APPROVED EQUAL. RINGS SHALL HAVE AN INSIDE DIAMETER OF APPROX. 23-3/4 INCHES. CONCRETE ADJUSTMENT RINGS SHALL NOT BE ALLOWED.
- FRAME SHALL BE NEENAH FOUNDRY R-1550 OR EQUAL.
- SANITARY MANHOLE LID TO HAVE CONCEALED PICK HOLES AND "T" SEAL GASKET.



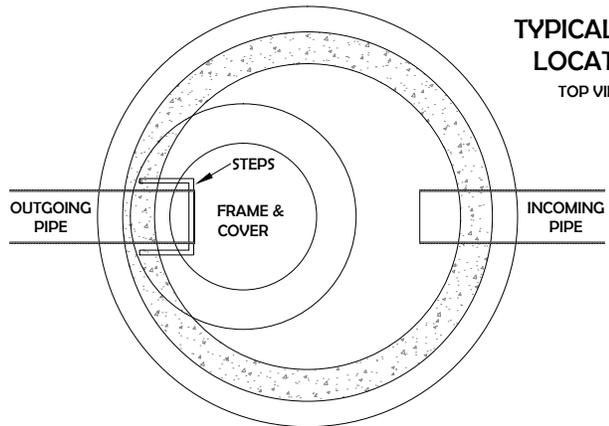
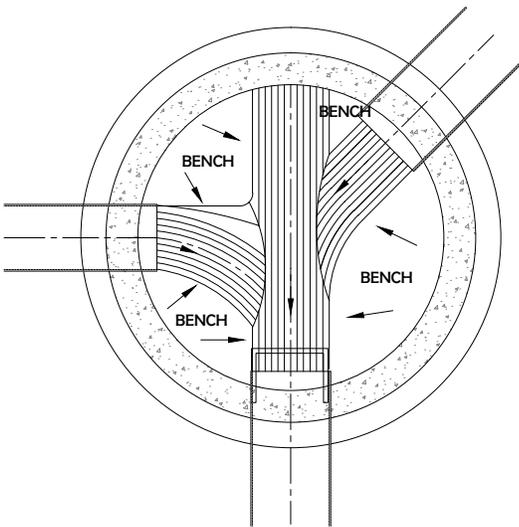
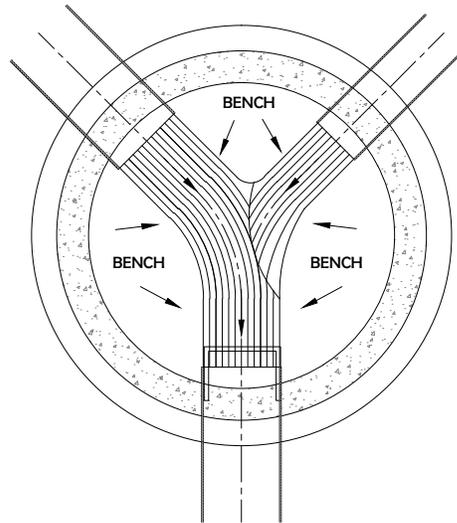
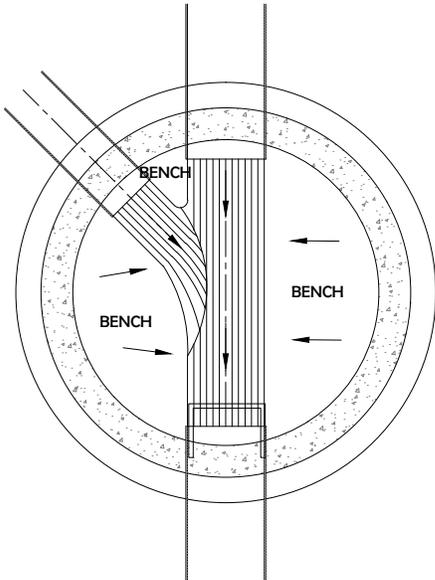
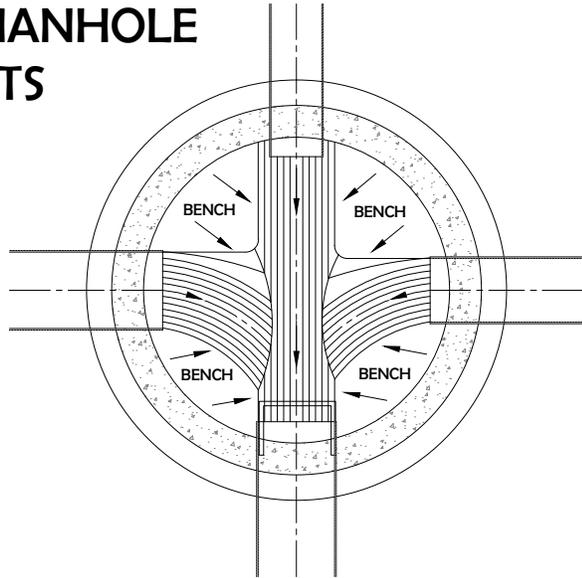
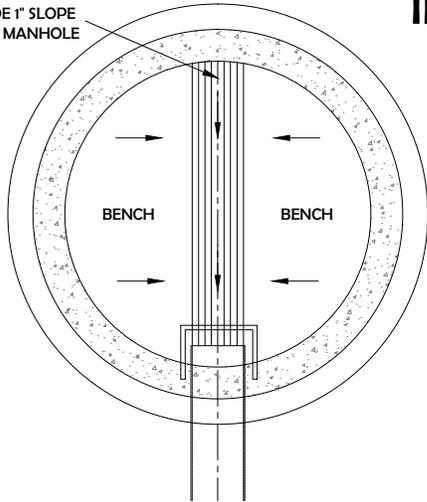
DEPARTMENT OF PUBLIC WORKS
ENGINEERING AND TRAFFIC DIVISION
CITY OF FOND DU LAC, WISCONSIN

SCALE: 1" = 2'
REVISED 04/13/15 BY NW

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STANDARD MANHOLE INVERTS

PROVIDE 1" SLOPE
ACROSS MANHOLE



HEIGHT OF BENCH TO BE 0.8 X DIA. OF SEWER
STORM SEWER BENCH SLOPE - 1 INCH PER FT
SANITARY SEWER BENCH SLOPE - 3 INCHES PER FT

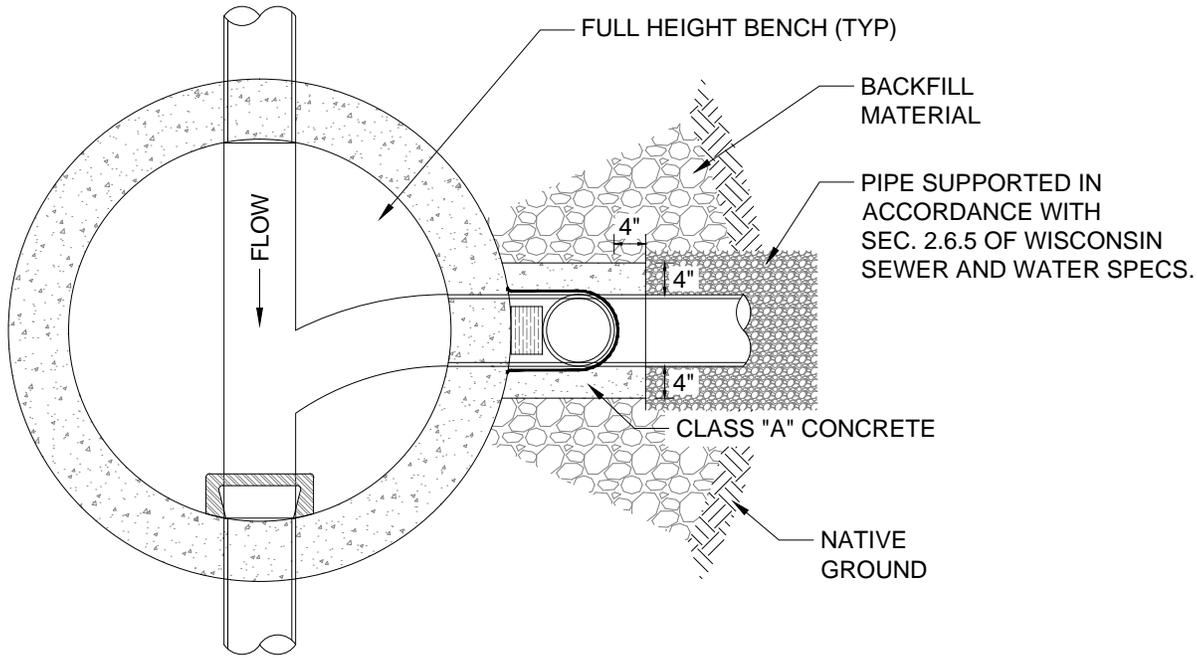
SIDE CONNECTING MAINS SHALL HAVE FULL SWEEP CURVATURE INTO MAIN FLOW LINE

MANHOLE STEPS SHALL BE ALIGNED OVER THE OUTGOING PIPE

REVISED 11/10/15 BY NW
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DEPARTMENT OF PUBLIC WORKS
ENGINEERING AND TRAFFIC DIVISION
CITY OF FOND DU LAC, WISCONSIN

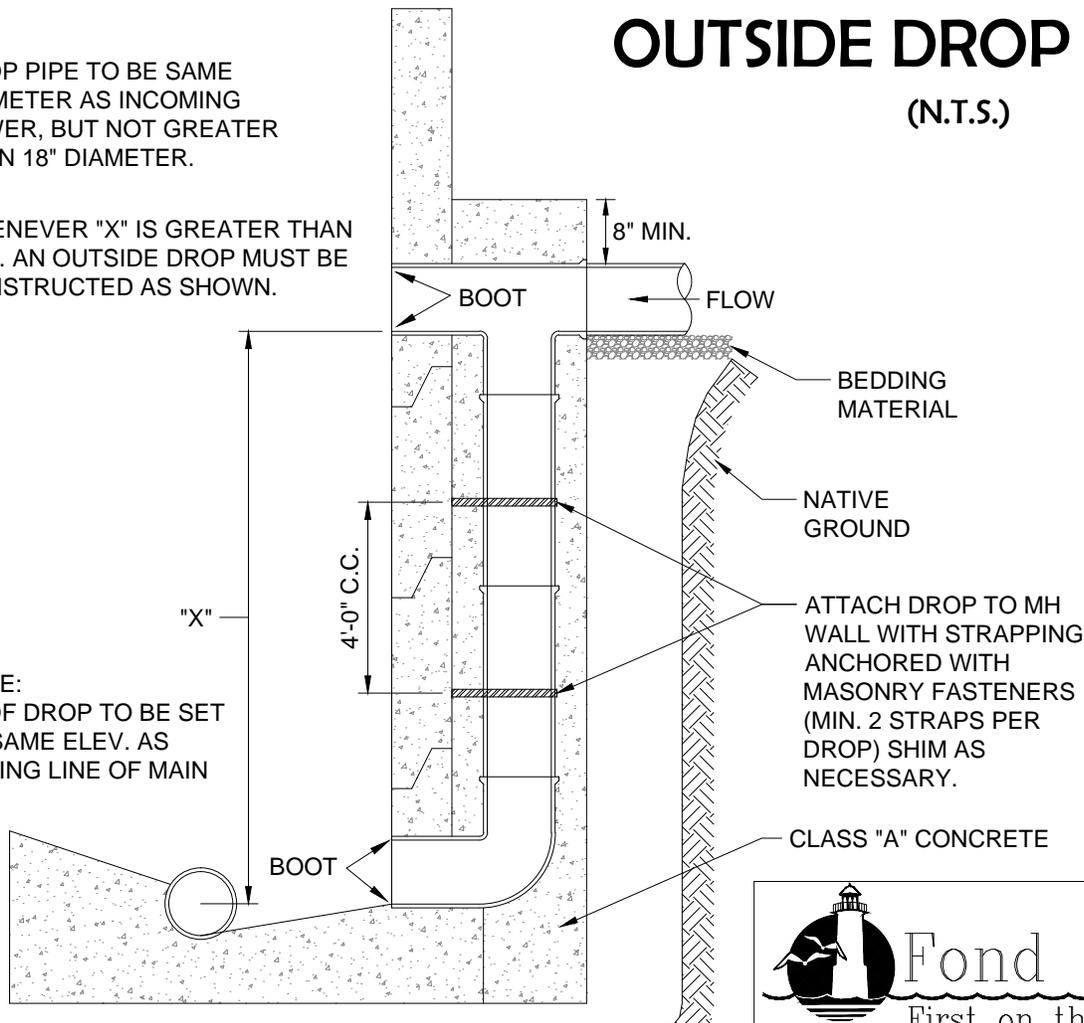


STANDARD PRECAST OUTSIDE DROP DETAIL (N.T.S.)

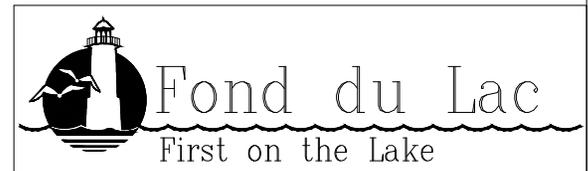
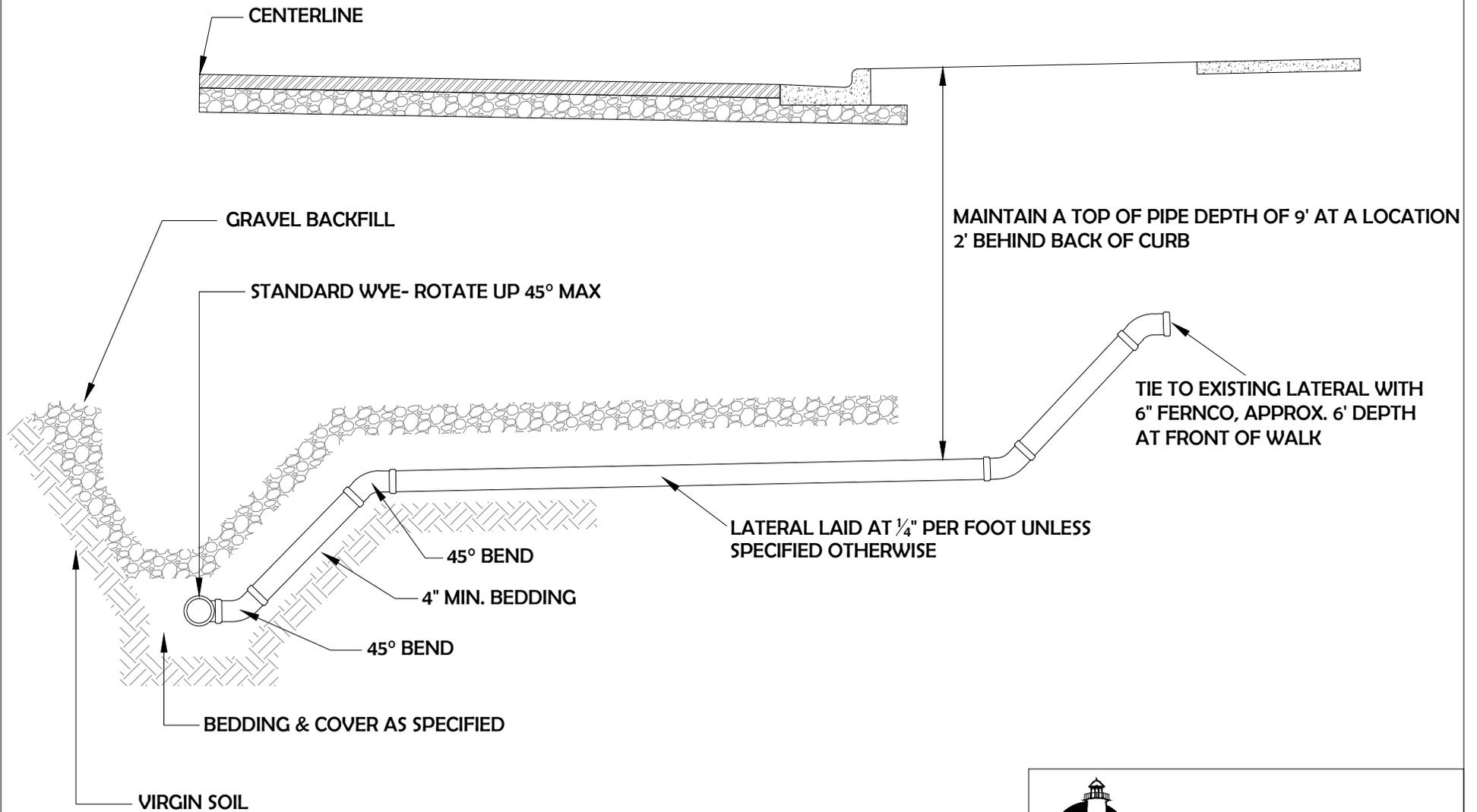
DROP PIPE TO BE SAME DIAMETER AS INCOMING SEWER, BUT NOT GREATER THAN 18" DIAMETER.

WHENEVER "X" IS GREATER THAN 2 FT. AN OUTSIDE DROP MUST BE CONSTRUCTED AS SHOWN.

NOTE:
FL OF DROP TO BE SET AT SAME ELEV. AS SPRING LINE OF MAIN



SANITARY RISER DETAIL (TYPICAL) EXISTING LATERAL

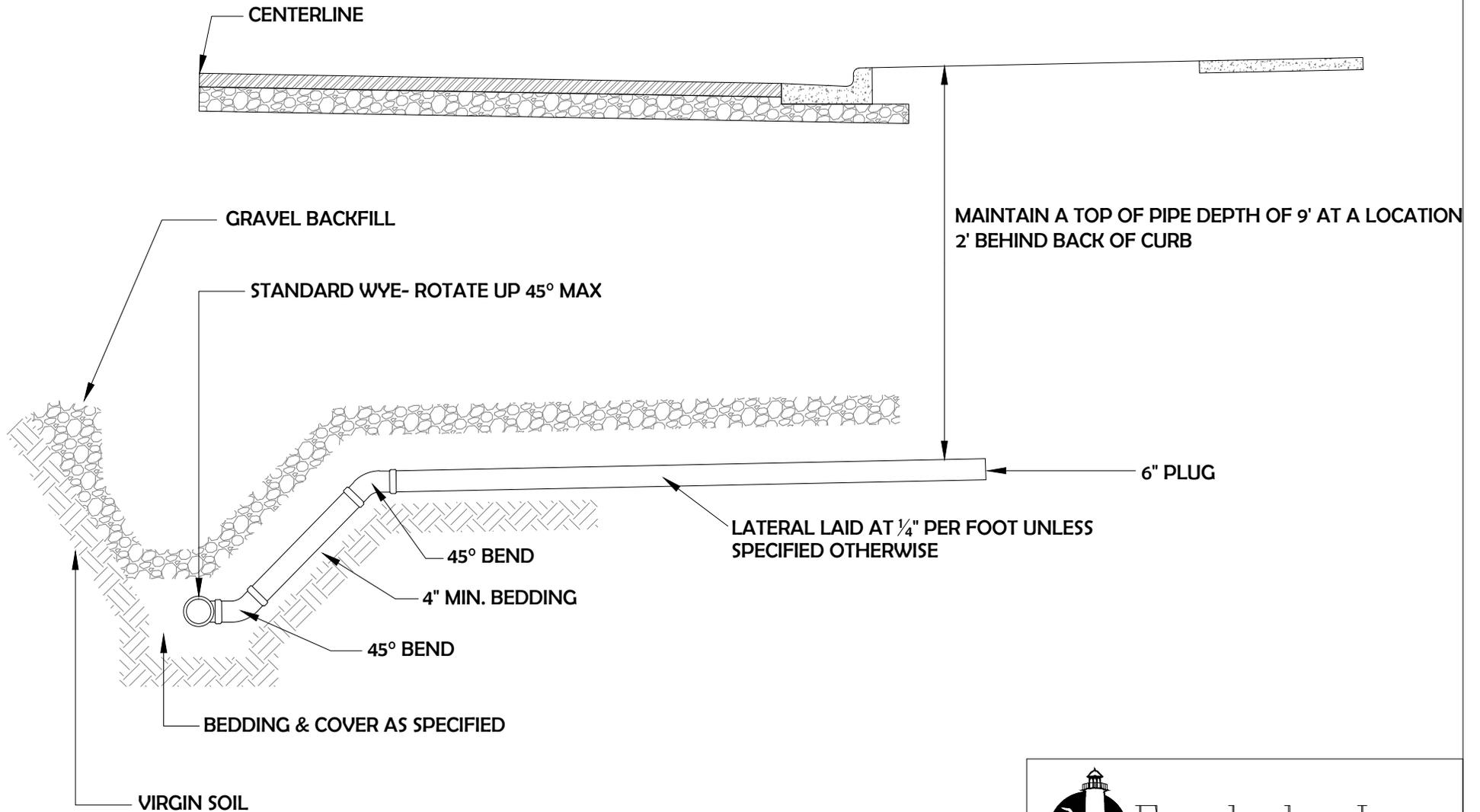


SCALE: 1" = 4'
REVISED 02/10/12 BY JMK

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DEPARTMENT OF PUBLIC WORKS
ENGINEERING AND TRAFFIC DIVISION
CITY OF FOND DU LAC, WISCONSIN

SANITARY RISER DETAIL (TYPICAL) NEW LATERAL

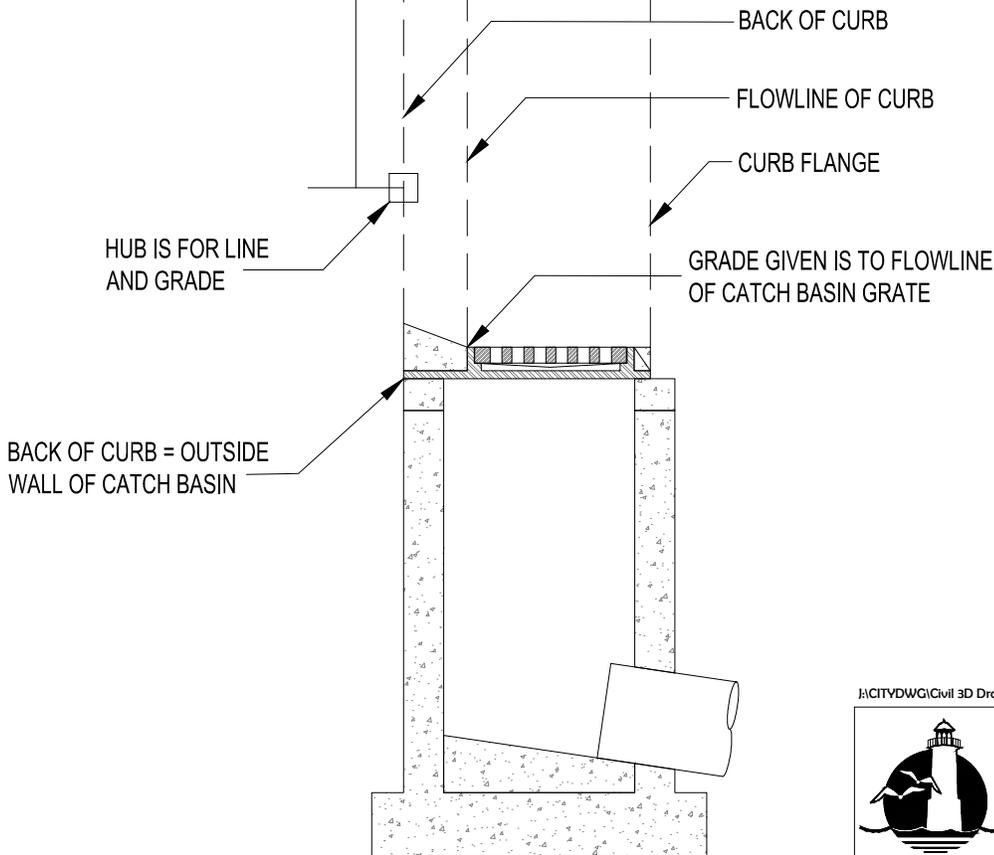
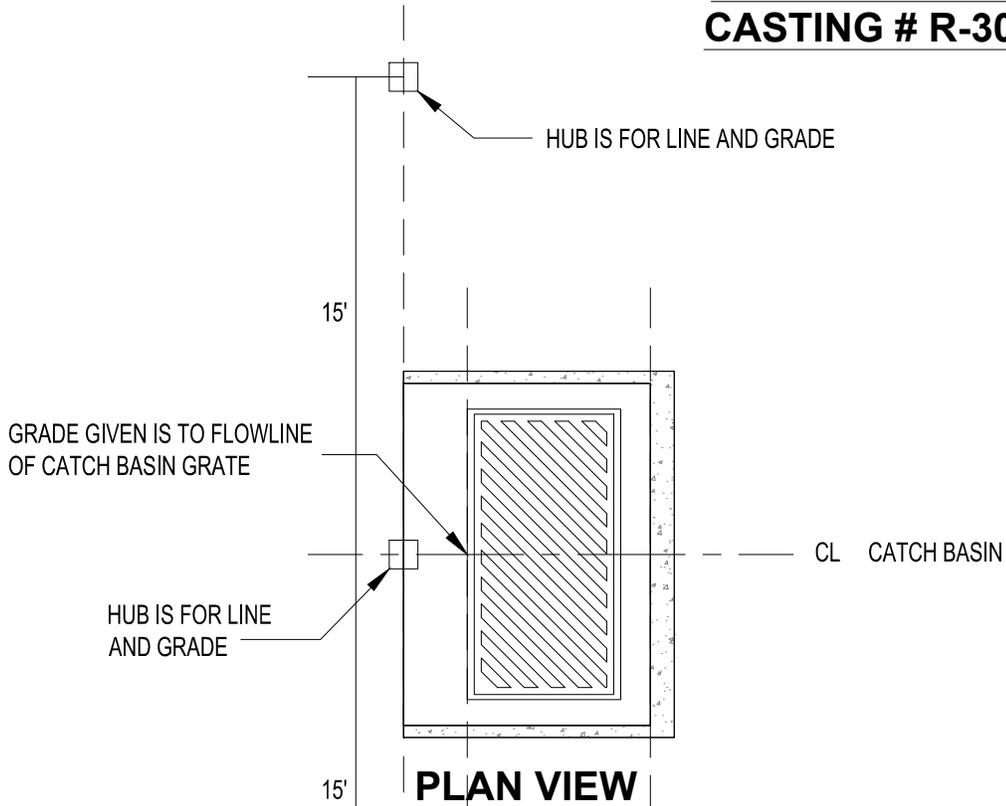


SCALE: 1" = 4'
REVISED 06/13/13 BY JMK

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DEPARTMENT OF PUBLIC WORKS
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CITY OF FOND DU LAC, WISCONSIN

CATCH BASIN STAKING DIAGRAM MOUNTABLE CURB CASTING # R-3067-C



SCALE: 1" = 2"
REVISED 02/26/14 BY NW
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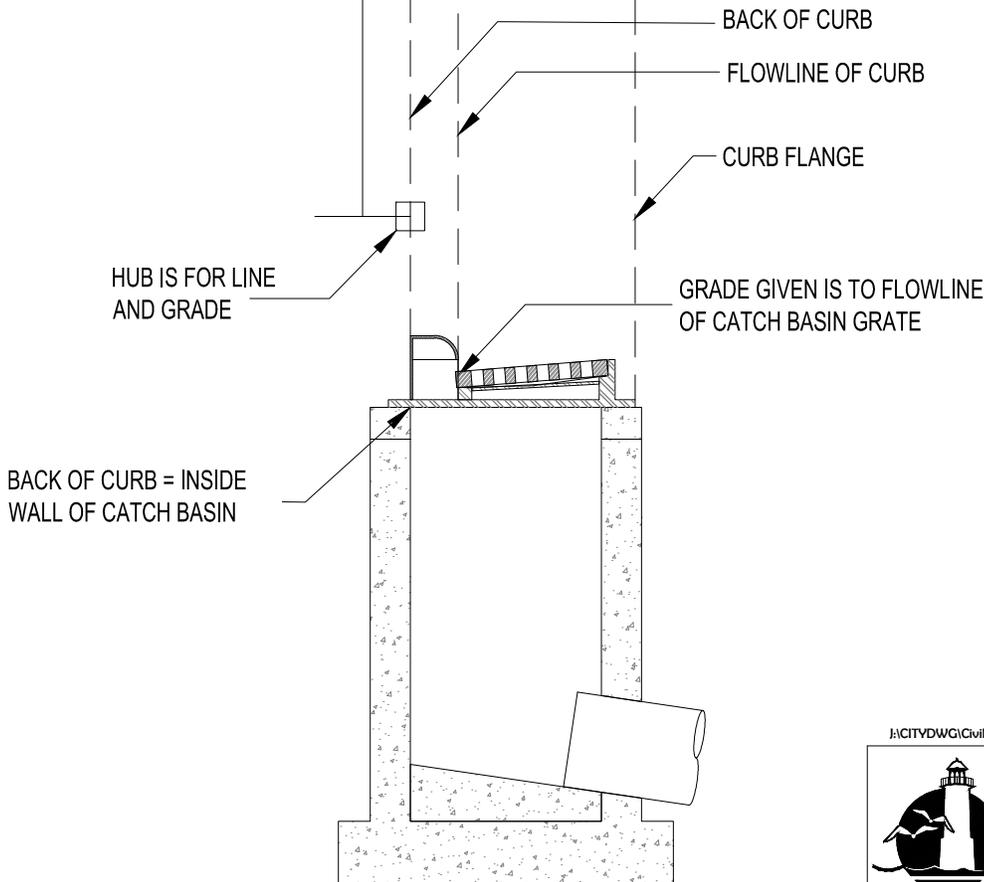
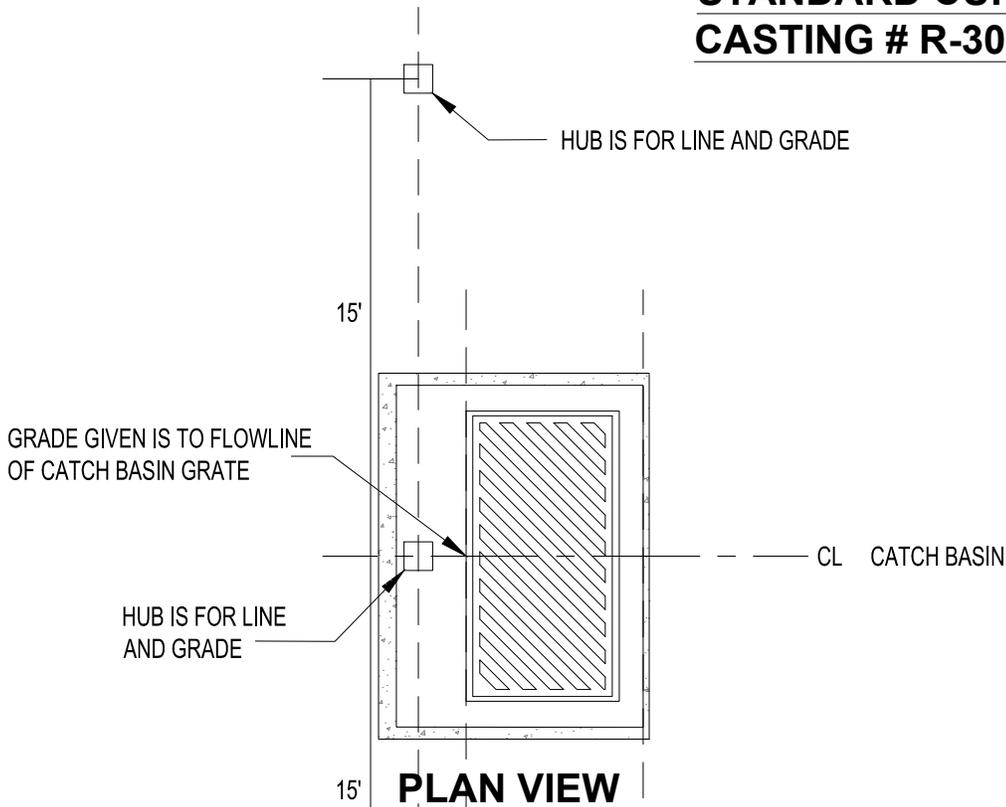


DEPARTMENT OF PUBLIC WORKS
ENGINEERING AND TRAFFIC DIVISION
CITY OF FOND DU LAC, WISCONSIN

CATCH BASIN STAKING DIAGRAM

STANDARD CURB

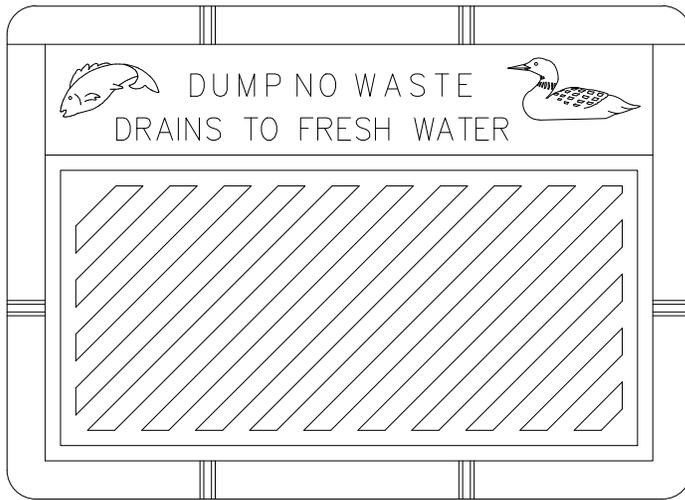
CASTING # R-3067



SCALE: 1" = 2'
 REVISED 02/26/14 BY NW
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DEPARTMENT OF PUBLIC WORKS
 ENGINEERING AND TRAFFIC DIVISION
 CITY OF FOND DU LAC, WISCONSIN



**PRECAST
TYPE "H" CATCH BASIN**

STANDARD CATCH BASIN DETAIL

TYPE R GRATE REQUIRED,
UNLESS SPECIFIED OTHERWISE

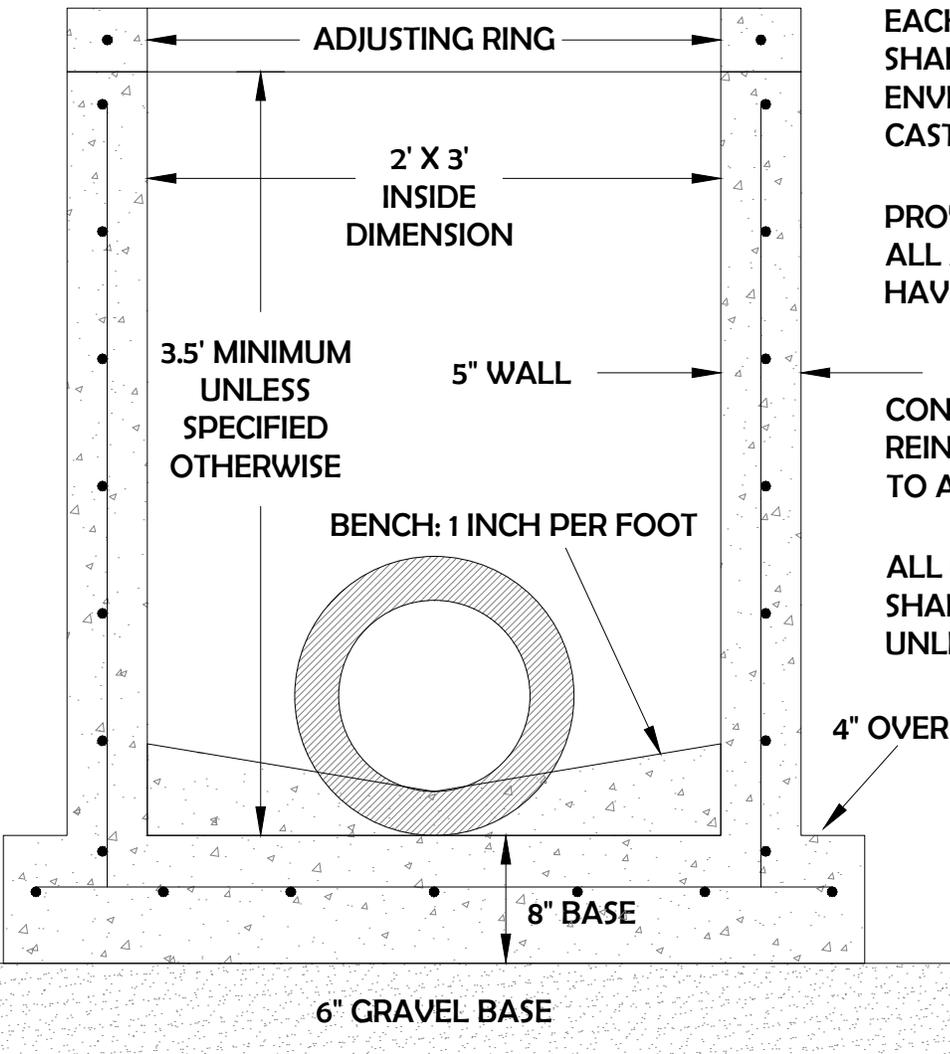
NEENAH FOUNDRY FRAME TYPE
R-3067 (VERTICAL FACE CURB)
OR R-3067-C (DRIVEWAY OR
MOUNTABLE CURB), UNLESS
SPECIFIED OTHERWISE

EACH R-3067 CATCH BASIN
SHALL INCLUDE NEENAH
ENVIRONOTICE LETTERING
CAST INTO TOP OF CURB BOX.

PROVIDE 3"-6" OF ADJUSTMENT
ALL ADJUSTING RINGS SHALL
HAVE A 2" MINIMUM THICKNESS

CONCRETE AND STEEL
REINFORCEMENT SHALL CONFORM
TO ASTM DESIGNATION C913

ALL CATCH BASIN LEADS
SHALL BE 12" CLASS III RCP
UNLESS OTHERWISE NOTED



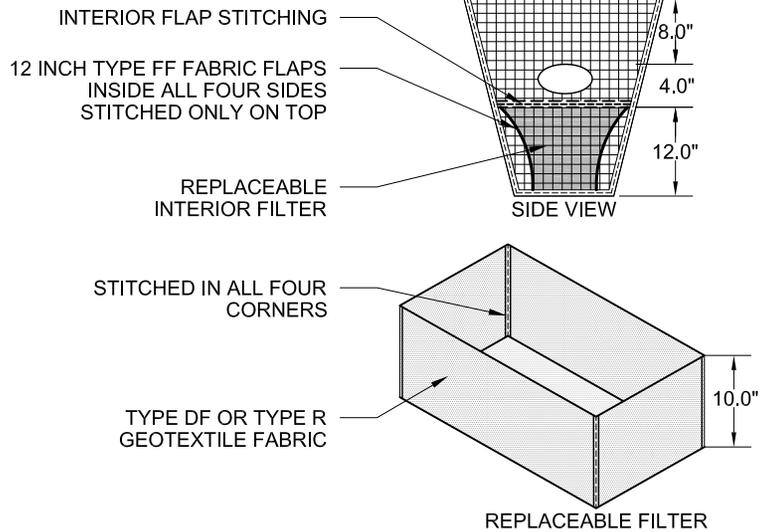
4" OVERHANG



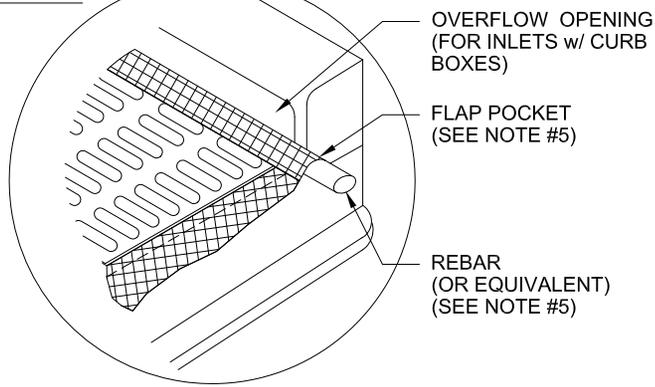
DEPARTMENT OF PUBLIC WORKS
ENGINEERING AND TRAFFIC DIVISION
CITY OF FOND DU LAC, WISCONSIN

FIGURE 2. INLET PROTECTION TYPE D-M

INSET #1



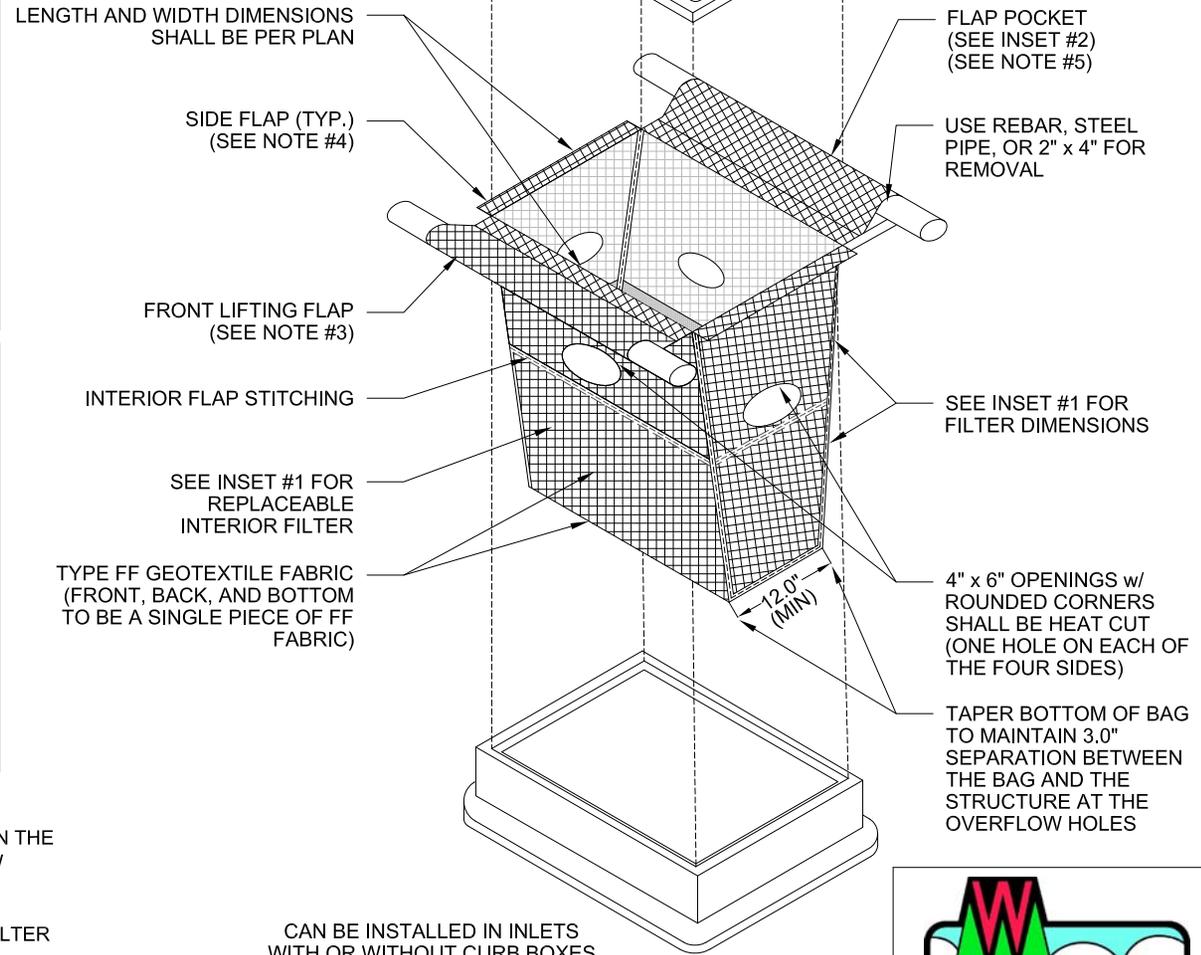
INSET #2



NOTES:

1. TAPER BOTTOM OF BAG TO MAINTAIN THREE INCHES OF CLEARANCE BETWEEN THE BAG AND THE STRUCTURE, MEASURED FROM THE BOTTOM OF THE OVERFLOW OPENINGS TO THE STRUCTURE WALL.
2. GEOTEXTILE FABRIC TYPE FF FOR FLAPS, TOP AND BOTTOM OF OUTSIDE OF FILTER BAG. FRONT, BACK, AND BOTTOM OF FILTER BAG BEING ONE PIECE.
3. FRONT LIFTING FLAP IS TO BE USED WHEN REMOVING AND MAINTAINING FILTER BAG.
4. SIDE FLAPS SHALL BE A MAXIMUM OF TWO INCHES LONG. FOLD THE FABRIC OVER AND REINFORCE WITH MULTIPLE STITCHES.
5. FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2" x 4". THE REBAR, STEEL PIPE, OR WOOD SHALL BE INSTALLED IN THE REAR FLAP AND SHALL NOT BLOCK THE TOP HALF OF THE CURB FACE OPENING.

LENGTH AND WIDTH DIMENSIONS SHALL BE PER PLAN



CAN BE INSTALLED IN INLETS WITH OR WITHOUT CURB BOXES

MAINTENANCE NOTES:

1. WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED IN THE FABRIC DOES NOT FALL INTO THE STRUCTURE. MATERIAL THAT HAS FALLEN INTO THE INLET SHALL BE IMMEDIATELY REMOVED.

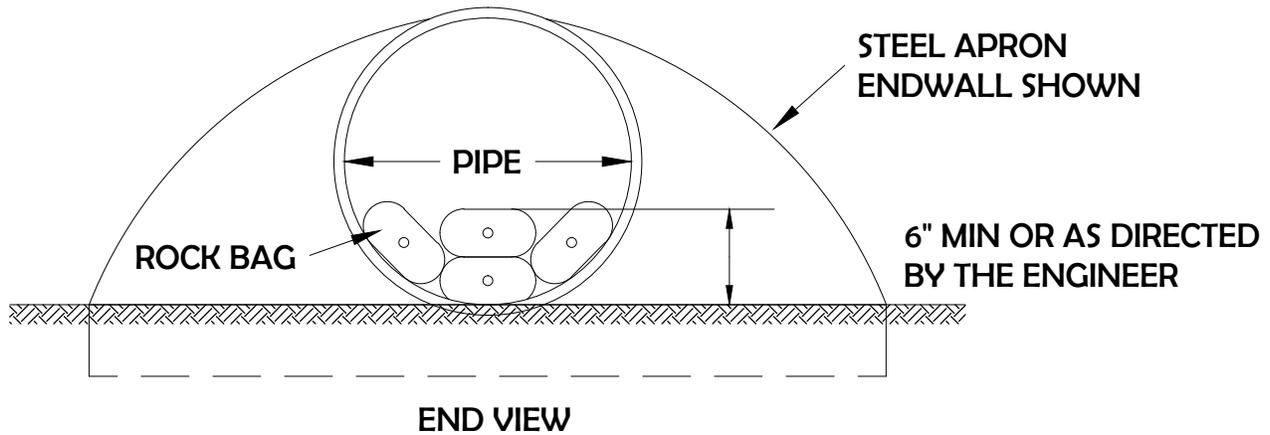


1060
TECHNICAL STANDARD No.

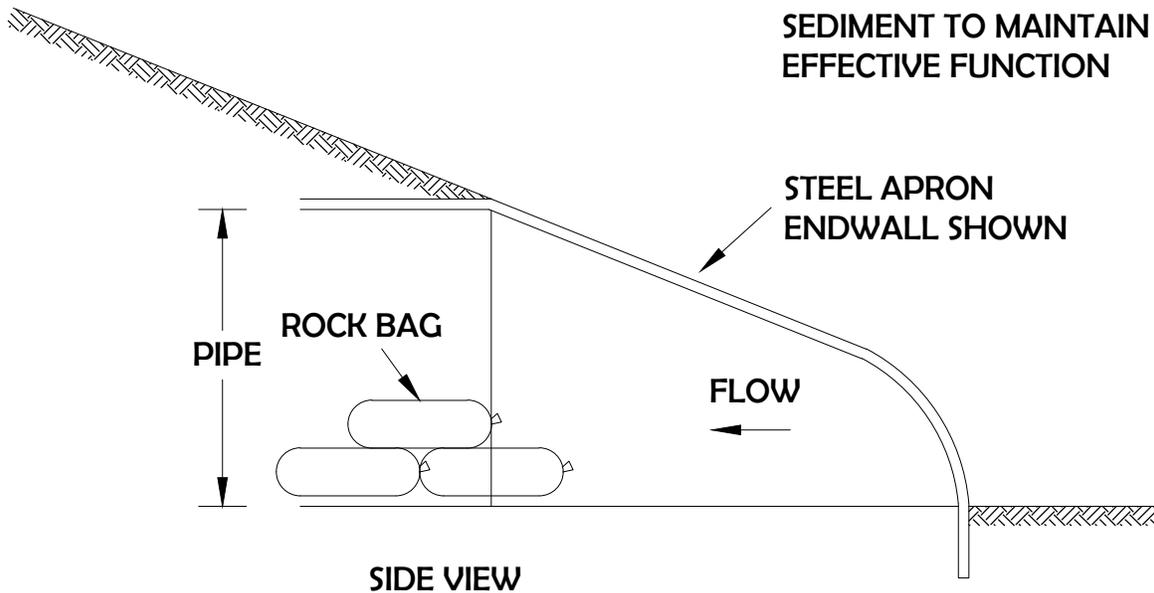
08/2014
REVISION DATE

NOT TO SCALE

CULVERT PIPE CHECK DETAIL



PERIODICALLY REMOVE
SEDIMENT TO MAINTAIN
EFFECTIVE FUNCTION



FILL BAGS WITH AGGREGATE CONFORMING
TO THE FOLLOWING GRADATION (WISDOT
NO. 1 COARSE AGGREGATE)

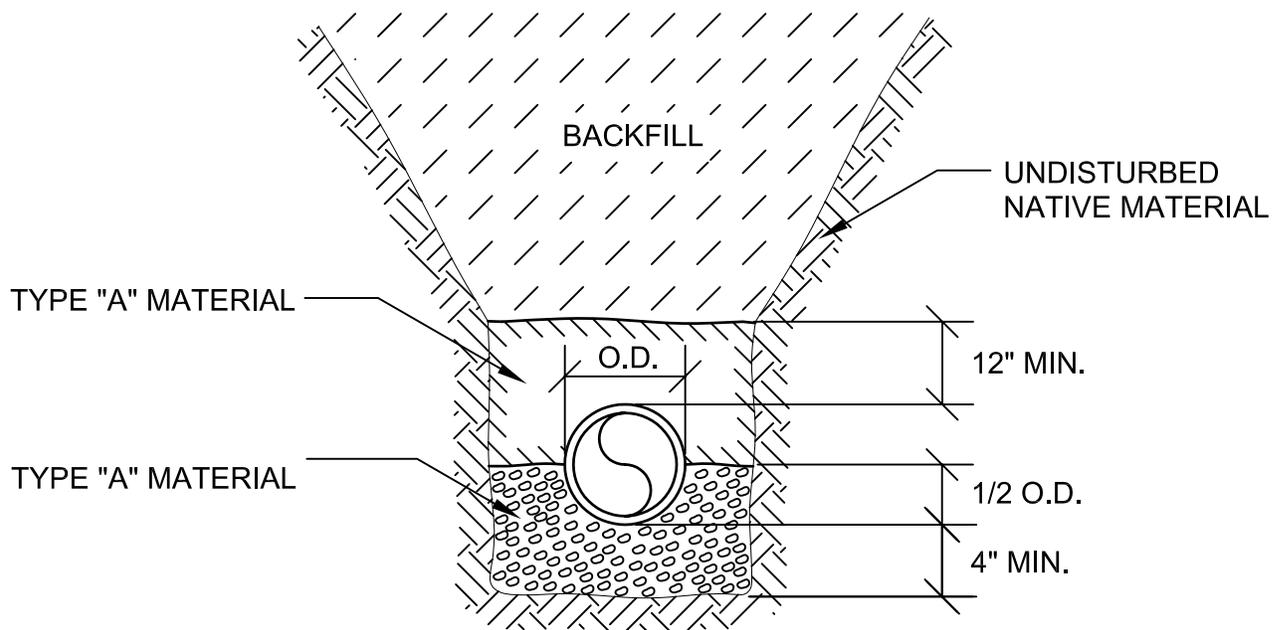
SIEVE	PERCENT PASSING BY WEIGHT
2-INCH	-
1 1/2"-INCH	-
1-INCH	100
3/4"-INCH	90-100
3/8"-INCH	20-55
No. 4	0-10
No. 8	0-5

PROVIDE BAGS MADE OF
HIGH-DENSITY POLYETHYLENE
OR GEOTEXTILE FABRIC

BAGS SHALL HAVE A MINIMUM
IN-PLACE FILLED SIZE OF 18
INCHES LONG BY 12 INCHES
WIDE BY 6 INCHES HIGH



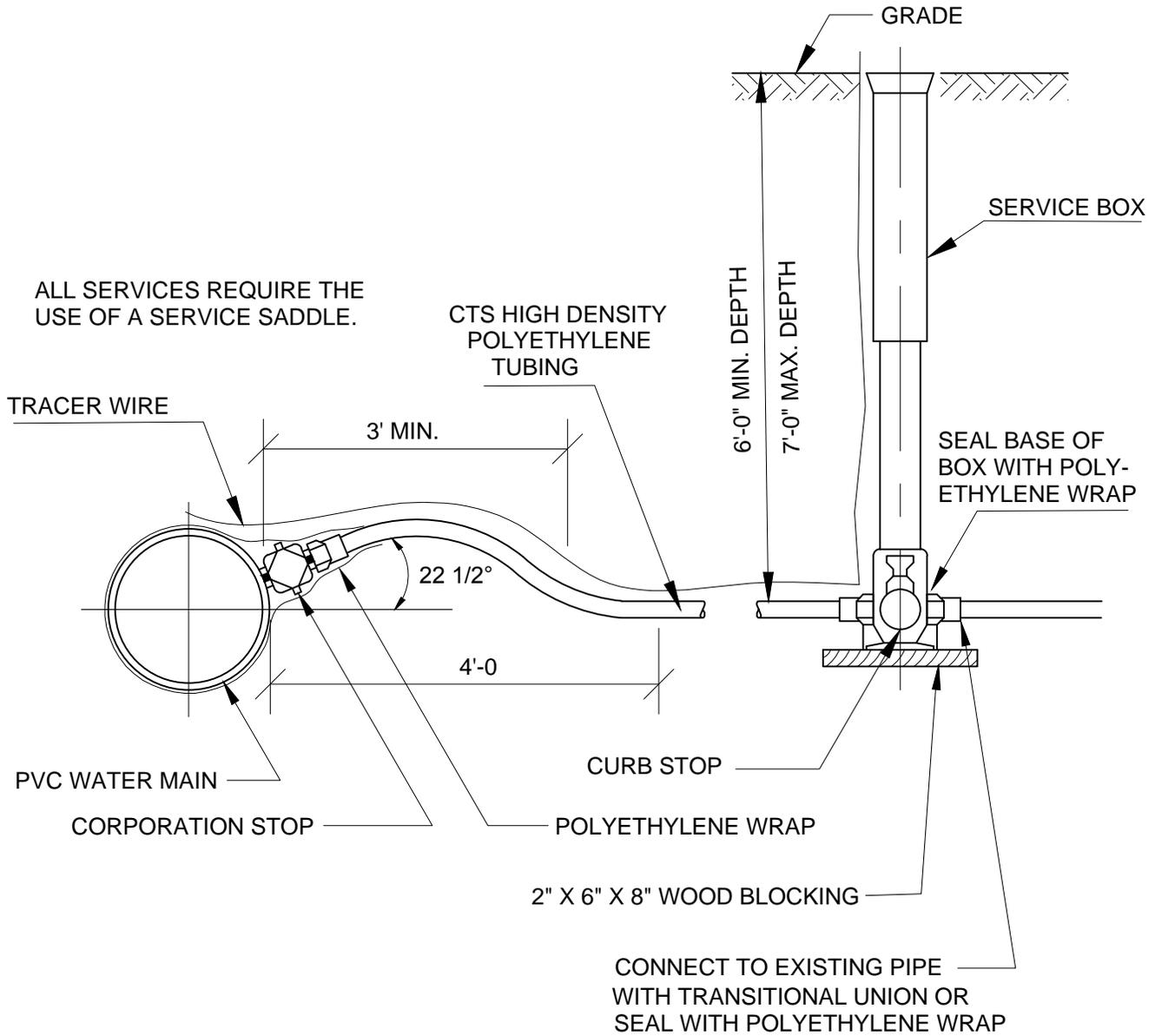
DEPARTMENT OF PUBLIC WORKS
ENGINEERING AND TRAFFIC DIVISION
CITY OF FOND DU LAC, WISCONSIN



PROJECT **STANDARD DETAILS FOR WATER MAIN CONSTRUCTION**

CITY OF FOND DU LAC WATER UTILITY FOND DU LAC COUNTY, WISCONSIN	TITLE CLASS "E" BEDDING			
	DRAWN	JS	JOB NO. E101-54.01	DETAIL NO.
	CHECKED	MW	DATE 11/30/99	S-5

SERVICE PIPE	CORP. STOP	CURB STOP	SERVICE BOX
1"	3/4" x 1"	1" x 3/4" x 1"	2 1/2"
1 1/4"	1" x 1 1/4"	1 1/4" x 1" x 1 1/4"	2 1/2"
1 1/2"	1 1/2"	1 1/2"	2 1/2"
2"	2"	2"	2 1/2"

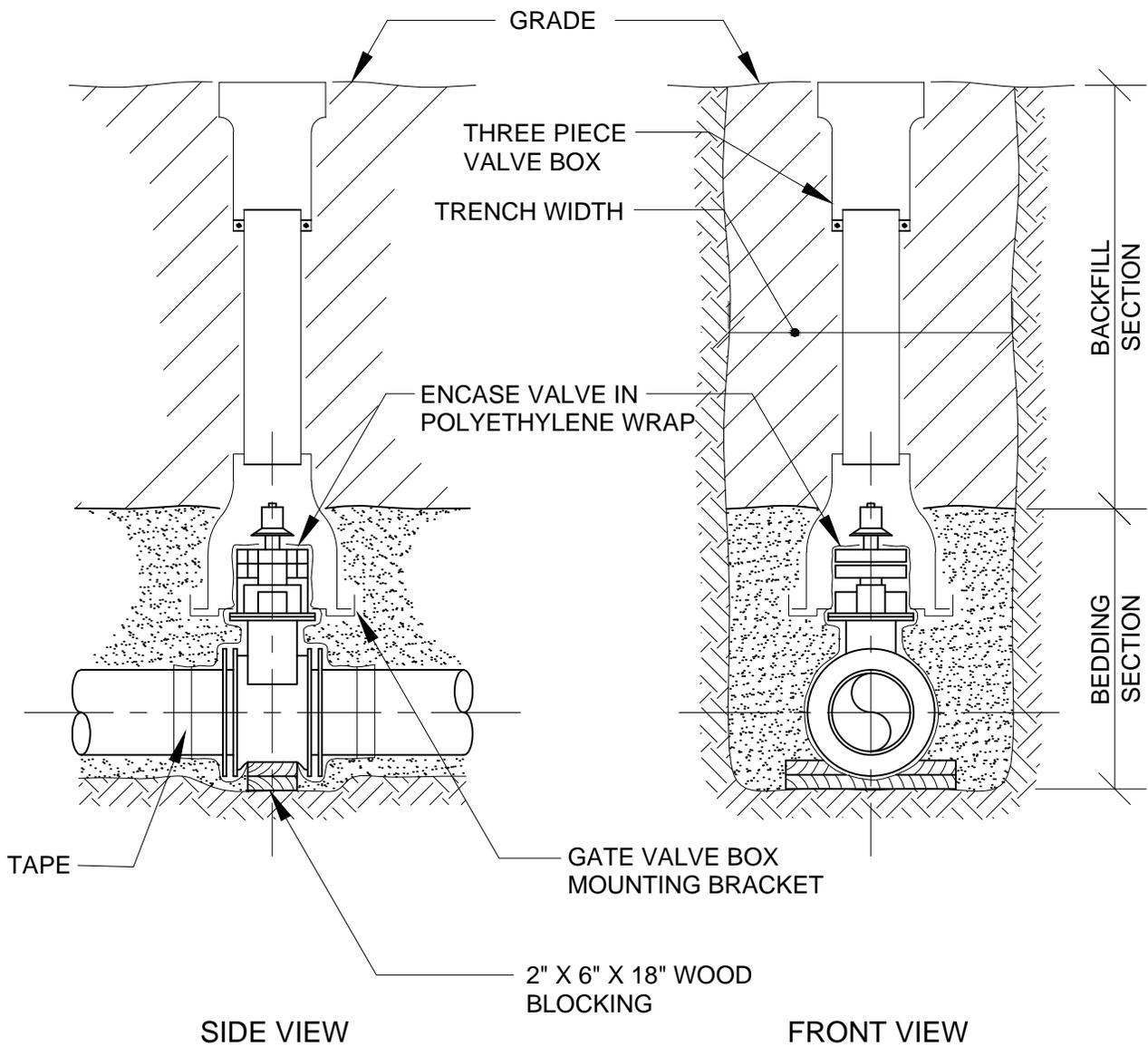


PROJECT **STANDARD DETAILS FOR WATER MAIN CONSTRUCTION**

**CITY OF FOND DU LAC
WATER UTILITY
FOND DU LAC COUNTY, WISCONSIN**

TITLE **POLYETHYLENE WATER SERVICE**

DRAWN	JS	JOB NO. E101-54.01	DETAIL NO.
CHECKED	MW	DATE 2/14/14	S-16



PROJECT

STANDARD DETAILS FOR WATER MAIN CONSTRUCTION

**CITY OF FOND DU LAC
 WATER UTILITY
 FOND DU LAC COUNTY, WISCONSIN**

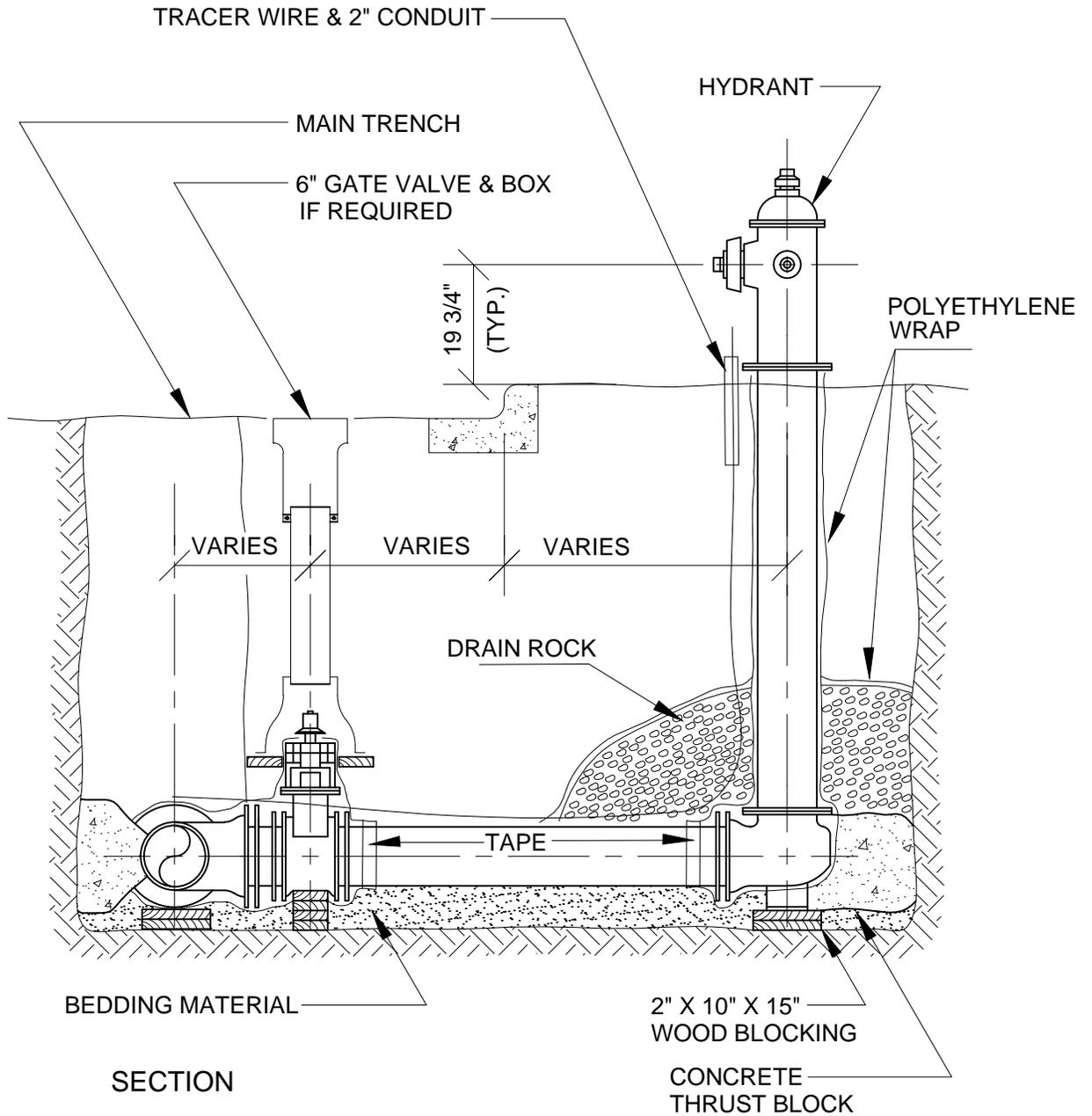
TITLE **RESILIENT SEATED GATE VALVE & BOX
 SETTING WITH PVC WATER MAIN**

DRAWN JS JOB NO. E101-54.01

DETAIL NO.

CHECKED MW DATE 2/15/2000

S-13



SECTION

PROJECT

STANDARD DETAILS FOR WATER MAIN CONSTRUCTION

CITY OF FOND DU LAC
 WATER UTILITY
 FOND DU LAC COUNTY, WISCONSIN

TITLE STANDARD HYDRANT
 WITH PVC WATER MAIN

DRAWN	JS	JOB NO. E101-54.01	DETAIL NO. S-15
CHECKED	MW	DATE 3/29/2010	

THRUST BLOCK DIMENSIONS (1)											
PIPE SIZE	A	11 1/4° BEND		22 1/2° BEND		45° BEND		90° BEND		TEE/DEAD END	
		B	C	B	C	B	C	B	C	B	C
6"	1'-0	1'-8	1'-0	1'-8	1'-0	1'-8	1'-0	1'-8	1'-4	1'-8	1'-0
8"	1'-2	2'-0	1'-0	2'-0	1'-0	2'-0	1'-0	2'-0	1'-10	2'-0	1'-4
10"	1'-4	2'-3	1'-0	2'-3	1'-0	2'-3	1'-4	2'-3	2'-4	2'-3	1'-8
12"	1'-6	2'-6	1'-0	2'-6	1'-0	2'-6	1'-8	2'-6	3'-0	2'-6	2'-2
16"	2'-0	3'-0	1'-0	3'-0	1'-2	3'-0	2'-4	3'-0	4'-4	3'-0	3'-0
20"	2'-6	3'-9	1'-0	3'-9	1'-6"	3'-9	2'-10"	3'-9	5'-4"	3'-9	3'-9"
24"	3'-0	4'-3	1'-0	4'-3	1'-10"	4'-3	3'-8"	4'-3	6'-8"	4'-3	4'-8"

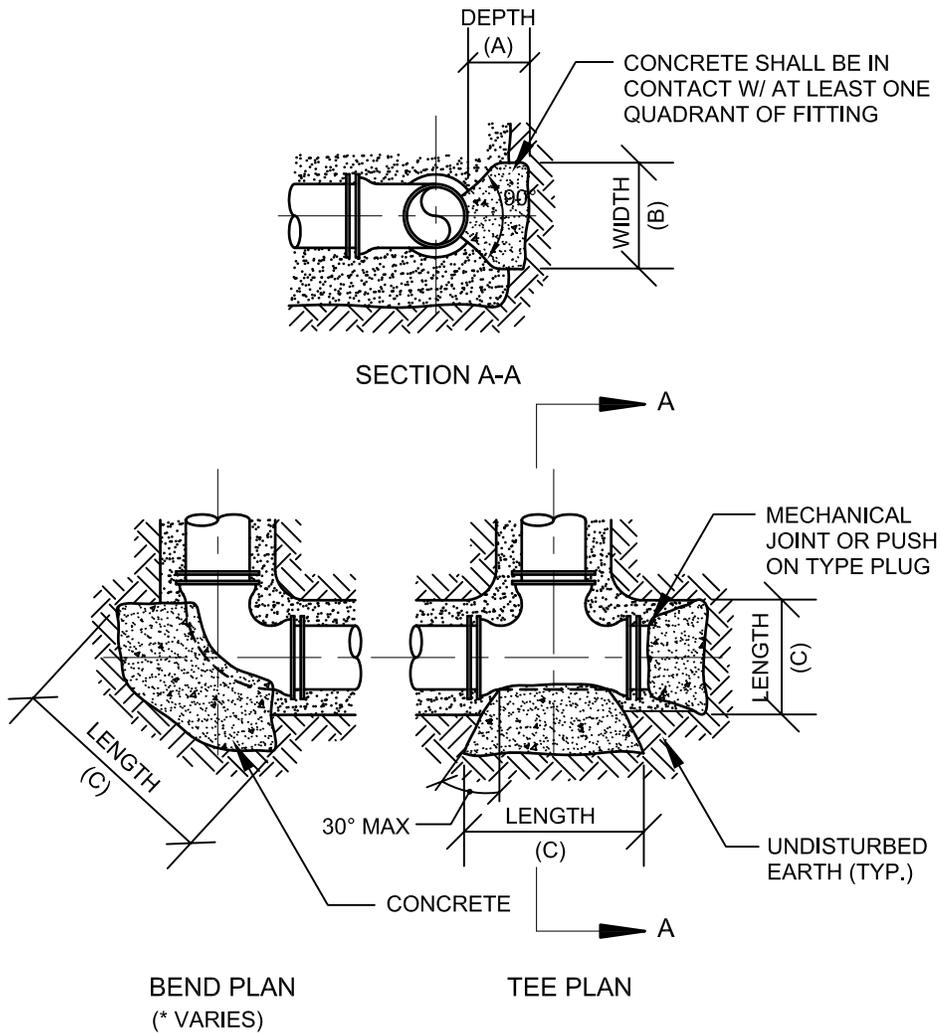
(1) DIMENSIONS IN TABLE ARE BASED ON A WATER PRESSURE OF 150 PSI AND AN ALLOWABLE SOIL BEARING PRESSURE OF 4000 PSF.

PROJECT STANDARD DETAILS FOR WATER MAIN CONSTRUCTION

CITY OF FOND DU LAC WATER UTILITY FOND DU LAC COUNTY, WISCONSIN	TITLE THRUST BLOCK DIMENSIONS		
	DRAWN JS	JOB NO. E101-54.01	DETAIL NO.
	CHECKED MW	DATE 11/30/99	S-11

THRUST BLOCKING NOTES:

1. CONCRETE SHALL HAVE A MIN. COMPRESSIVE STRENGTH OF 2000 PSI & SHALL BE CAST AGAINST UNDISTURBED EARTH.
2. FITTINGS SHALL BE ENCASED IN PLASTIC TO PREVENT CONCRETE BONDING TO FITTINGS.
3. FORM CONCRETE AS REQUIRED TO PREVENT CONTACT OR INTERFERENCE W/PIPE JOINTS.
4. THE LENGTH OF THE THRUST BLOCK SHALL BE APPROXIMATELY TWICE THE WIDTH.
BEARING AREA = LENGTH (A) X WIDTH (B).



PROJECT **STANDARD DETAILS FOR WATER MAIN CONSTRUCTION**

**CITY OF FOND DU LAC
WATER UTILITY
FOND DU LAC COUNTY, WISCONSIN**

TITLE **THRUST BLOCKING**

DRAWN	JS	JOB NO. E101-54.01	DETAIL NO. S-9
CHECKED	MW	DATE 11/30/99	

ORNAMENTAL STREET LIGHT



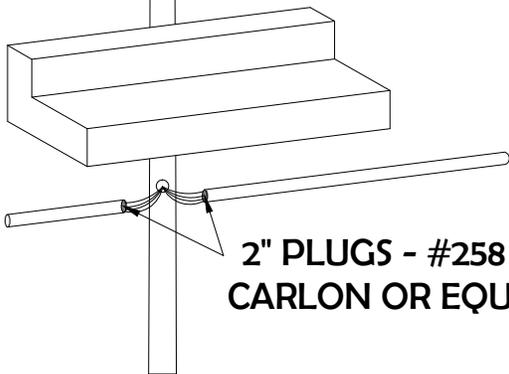
100 W HPS

POLES AND LUMINAIRES
TO BE SUPPLIED BY THE
CITY OF FDL

20' CABLE TYPE UF 2-12
AWG FROM HANDHOLE
TO LIGHT FIXTURE

ALL WIRES SPICED
WITH WINGNUTS IN
POLE HANDHOLE
FORMED IN "S" SHAPE

HANDHOLE SHALL BE
8"-12" ABOVE GRADE

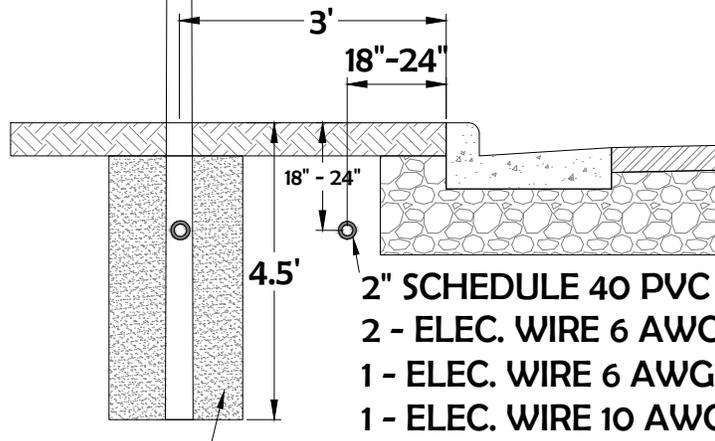
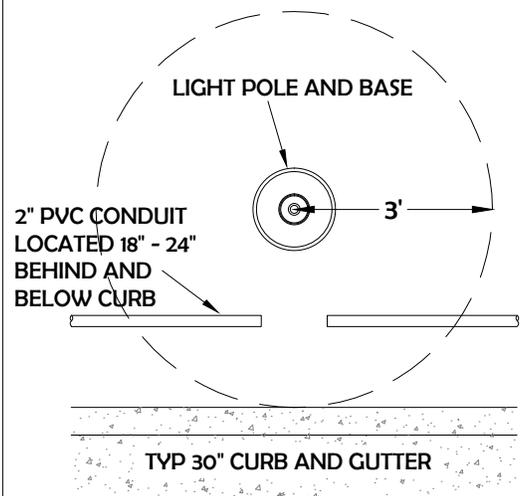


2" PLUGS - #258 JT
CARLON OR EQUAL



TOP VIEW

ENDS OF CONDUIT NO MORE
THAN 3' FROM LIGHT POLE
AND NOT UNDER CURB



SAND BACKFILL



Fond du Lac
First on the Lake

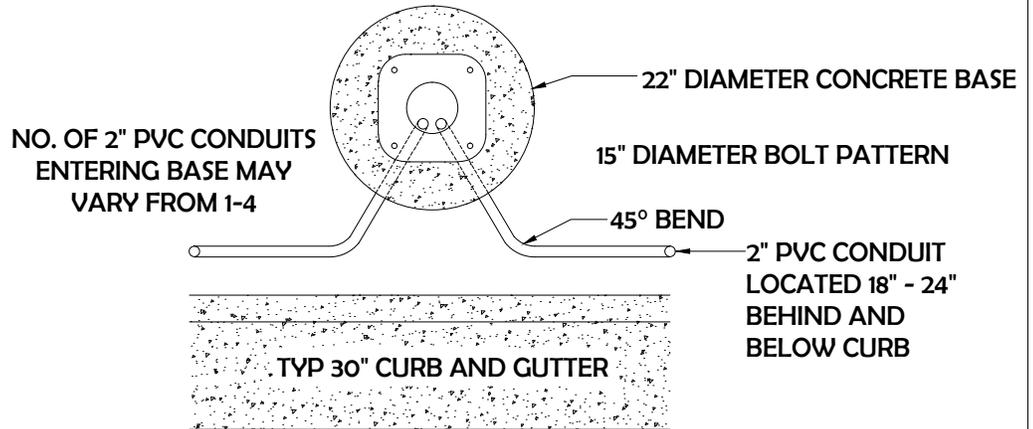
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CITY OF FOND DU LAC, WISCONSIN

REVISED 03/16/16 BY NW

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RESIDENTIAL DECORATIVE STREET LIGHT

TOP VIEW



THE CITY OF FOND DU LAC ELECTRICAL DEPT SUPPLIES ALL POLES, LUMINAIRES, AND BOLTS. THE CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION OF POLES, THE CONSTRUCTION OF BASES, AND THE SUPPLY AND INSTALLATION OF CONDUIT AND WIRING.

14' NORTH YORKSHIRE ALUM. POLE, BLACK

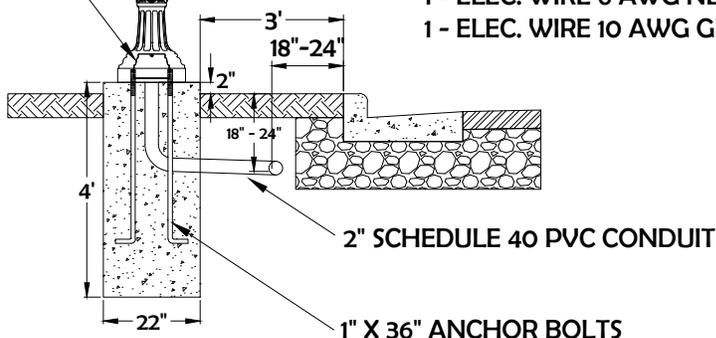
20' CABLE TYPE UF 2-12 AWG

HOLOPHANE UTILITY GRANDVILLE LUMINAIRE
100 W HPS, MOGUL BASE, MULTI TAP
ASYMMETRIC TYPE IV
BRONZE FINISH

ALL THREADS SHALL BE ANTI-SEIZED

THREADED BOLTS 3" MAX ABOVE CONCRETE

2 - ELEC. WIRE 6 AWG
1 - ELEC. WIRE 6 AWG NEUTRAL
1 - ELEC. WIRE 10 AWG GROUND

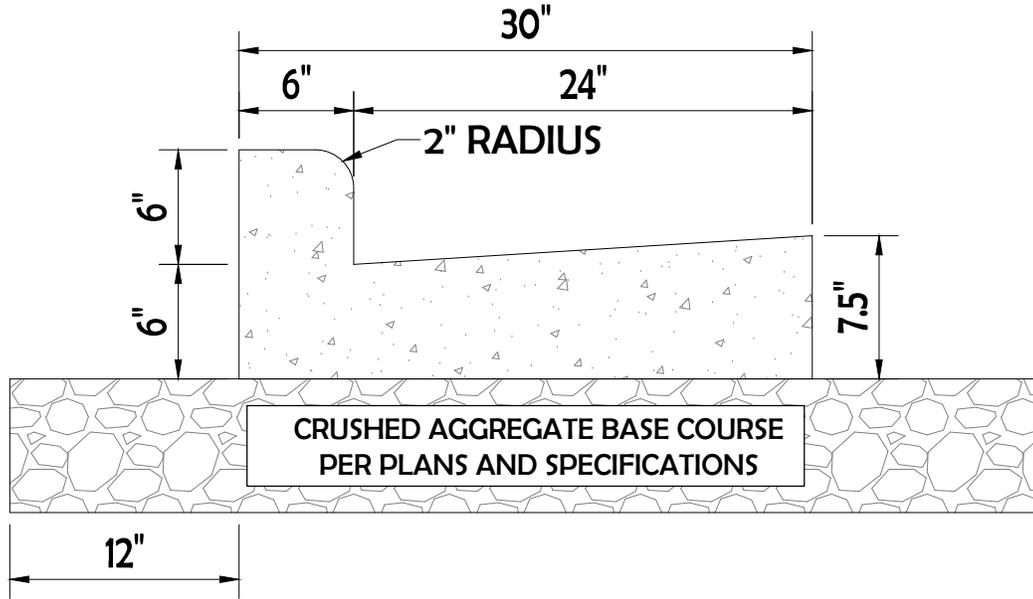


REVISED 07/07/14 BY NW
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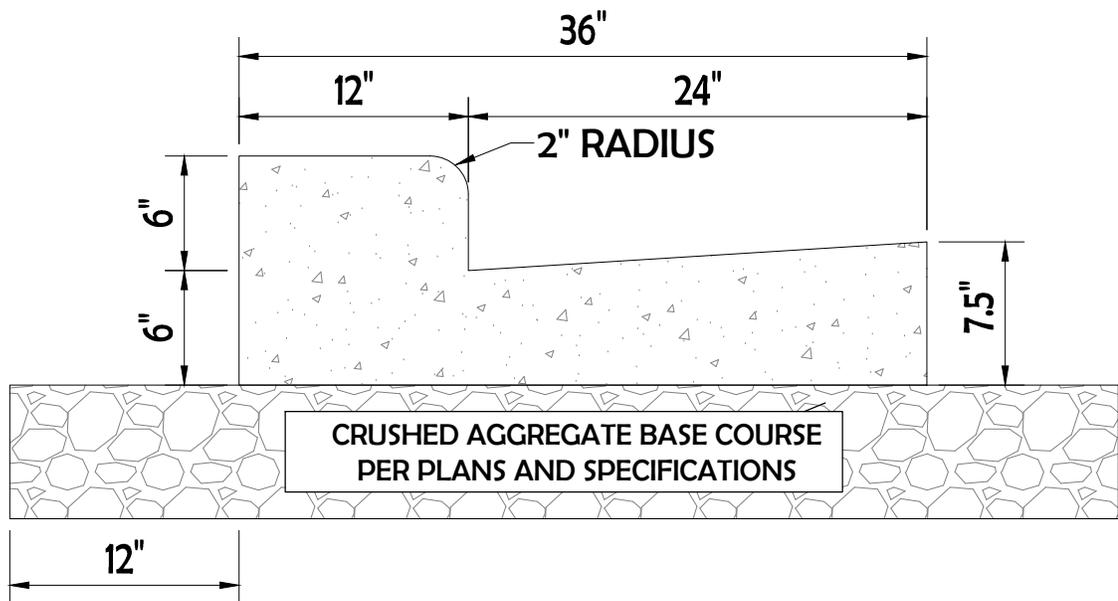


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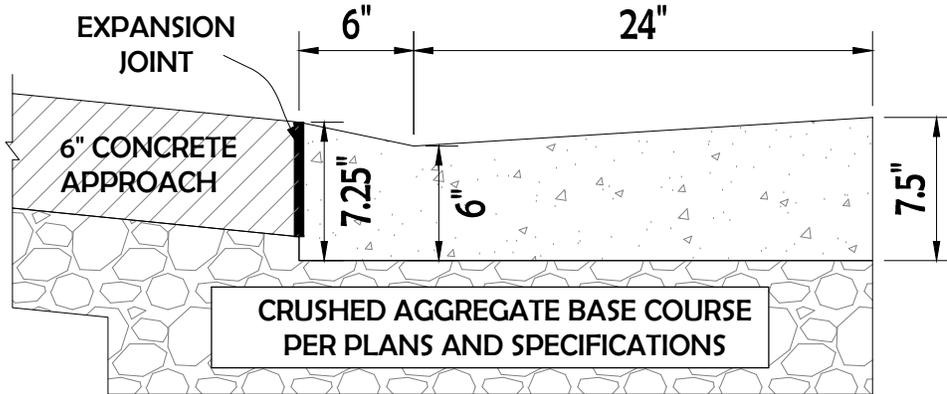
30" CONCRETE CURB AND GUTTER - STANDARD



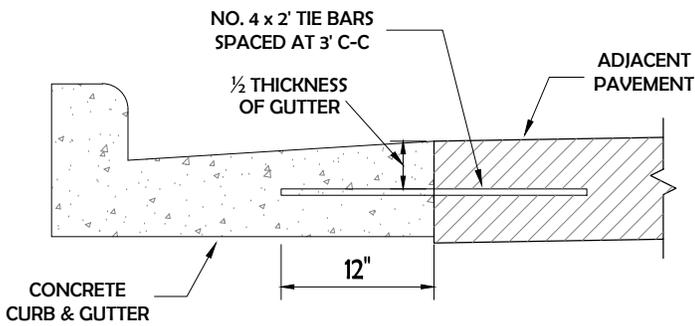
36" CONCRETE CURB AND GUTTER - STANDARD



DRIVE APPROACH CURB AND GUTTER

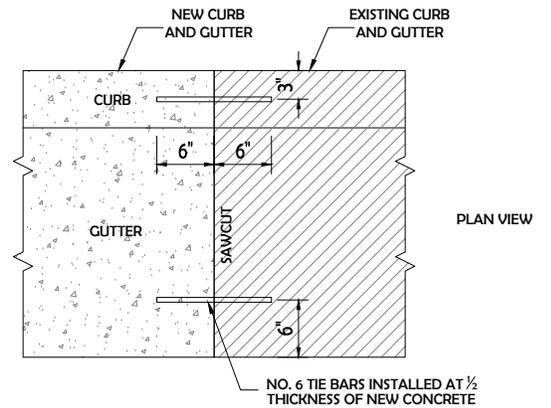


TYPICAL TIE BAR LOCATION

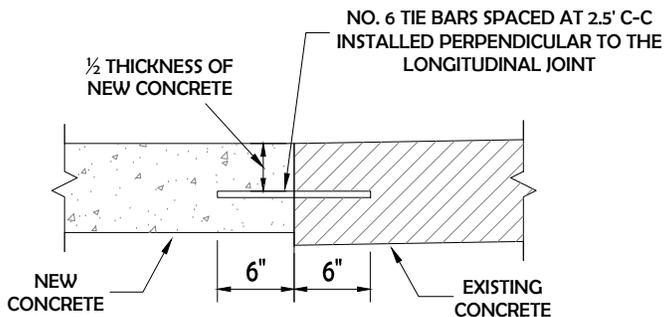


TIE BARS

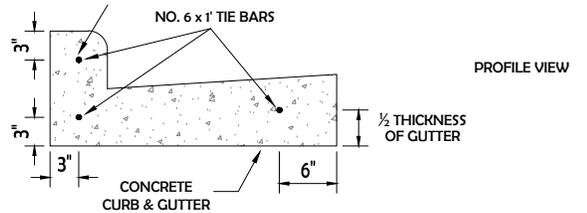
TIE BARS DRILLED INTO EXISTING CURB AND GUTTER



TIE BARS DRILLED INTO EXISTING PAVEMENT



TIE BAR MAY BE OMITTED IF EXISTING CURB HEAD DAMAGED

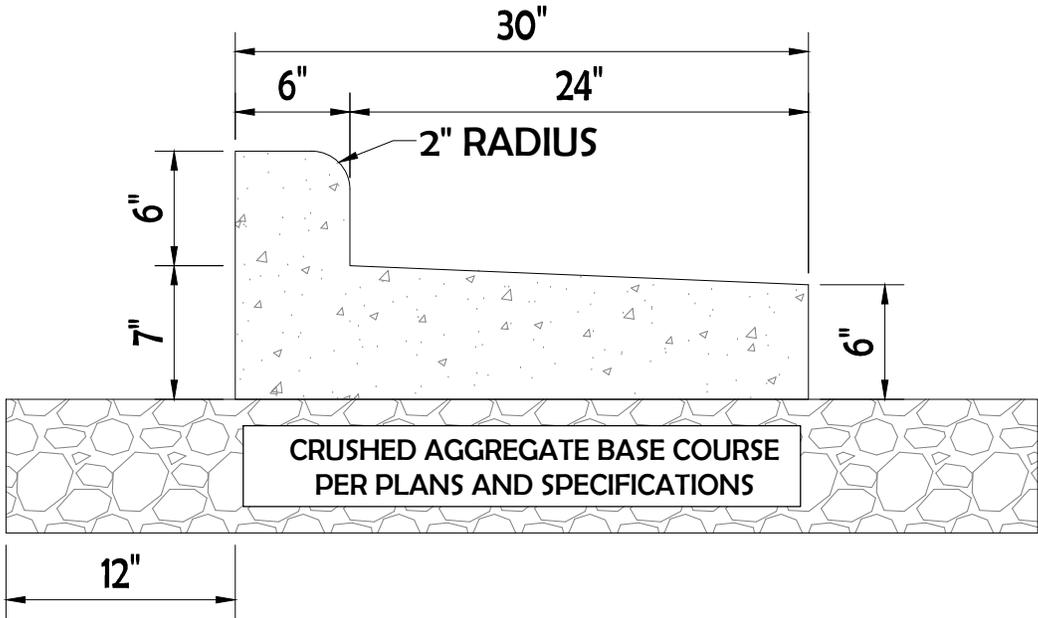


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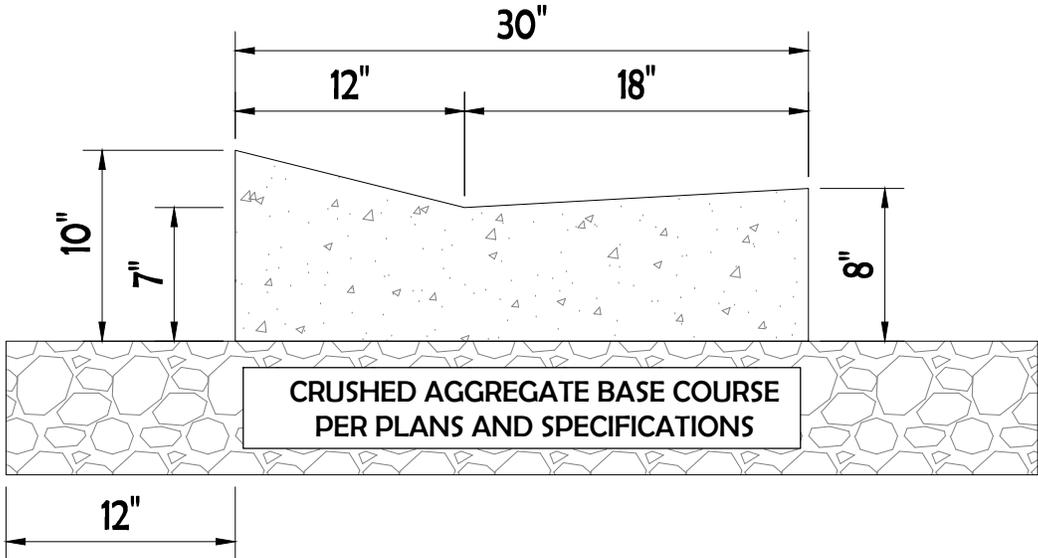
NOT TO SCALE
REVISED 08/1/14 BY NW

J:\CITYDWG\Civil 3D Drawings\DTL\City SDDs\Curb and Gutter Details-Drive Approach & Tie Bars.pdf

30" CONCRETE CURB AND GUTTER - REVERSE SLOPE

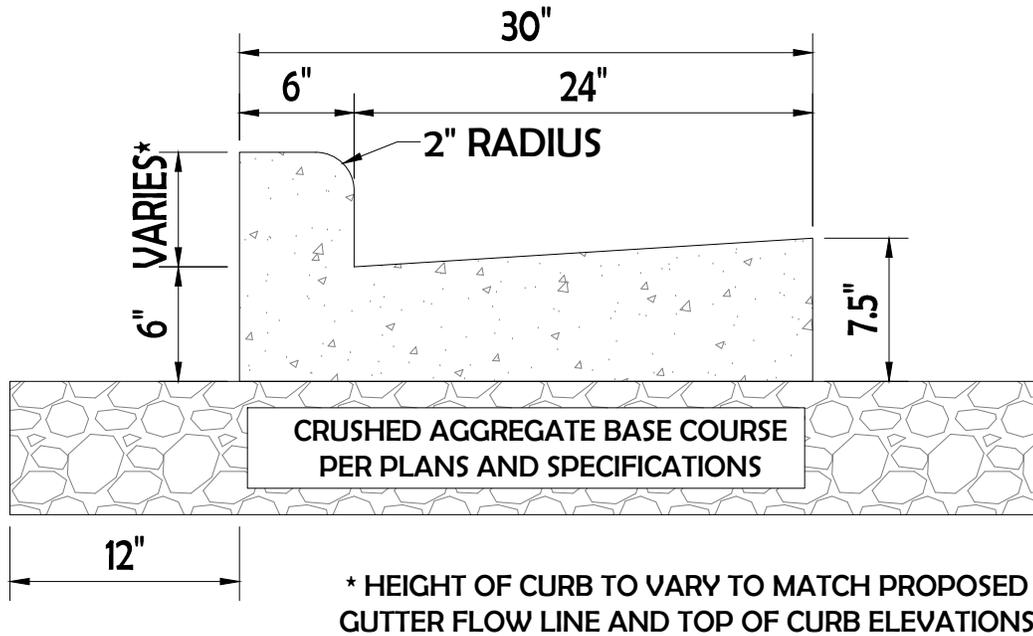


30" CONCRETE CURB AND GUTTER - MOUNTABLE

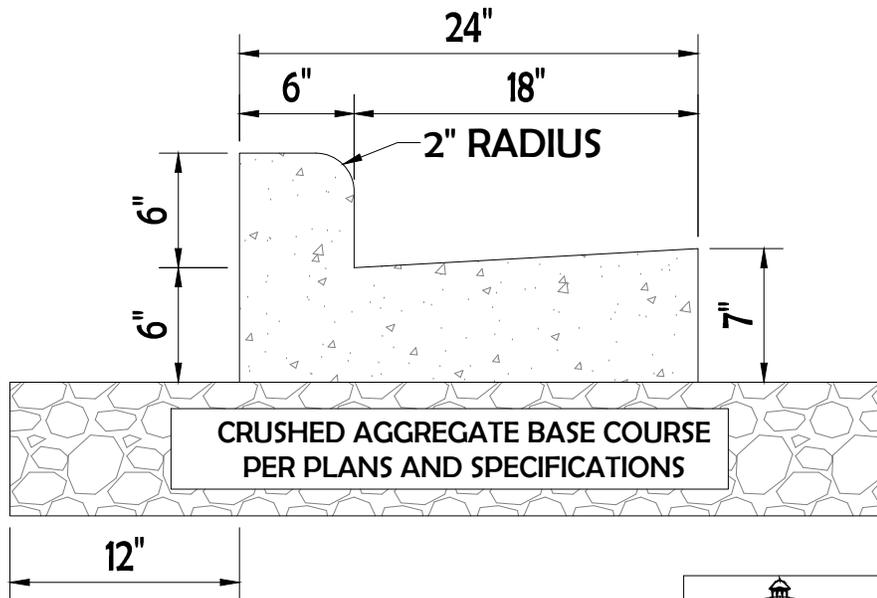


SCALE: 1" = 10'
REVISED 07/16/14 BY NW

30" CONCRETE CURB AND GUTTER - STANDARD WITH VARIABLE CURB HEIGHT

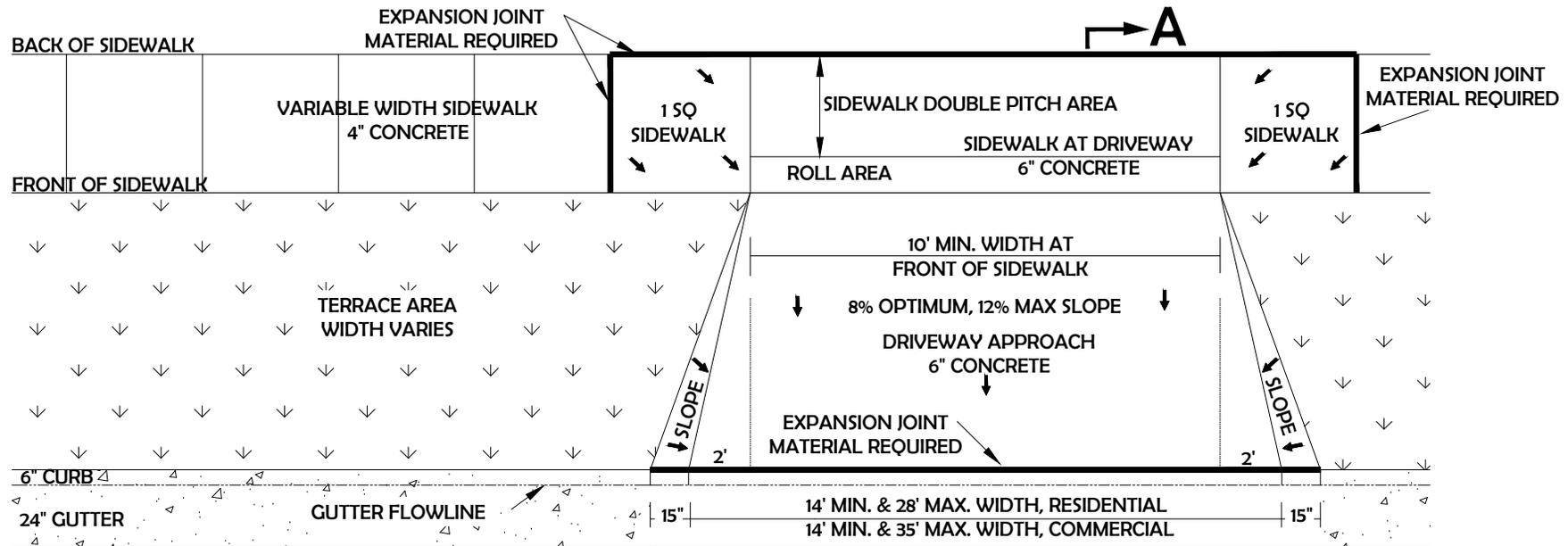


24" CONCRETE CURB AND GUTTER - STANDARD

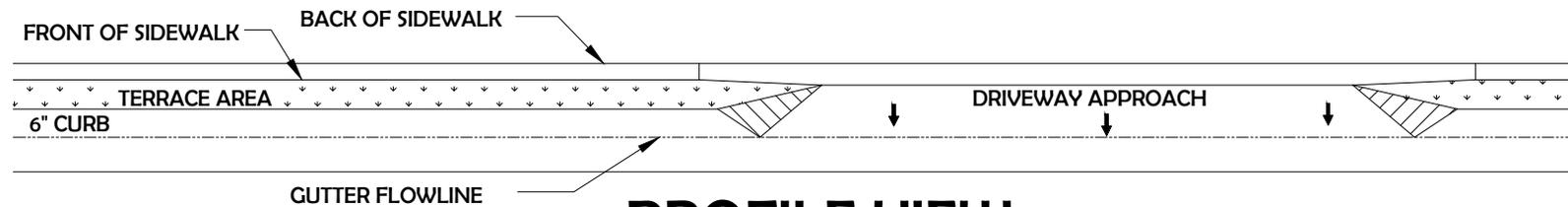


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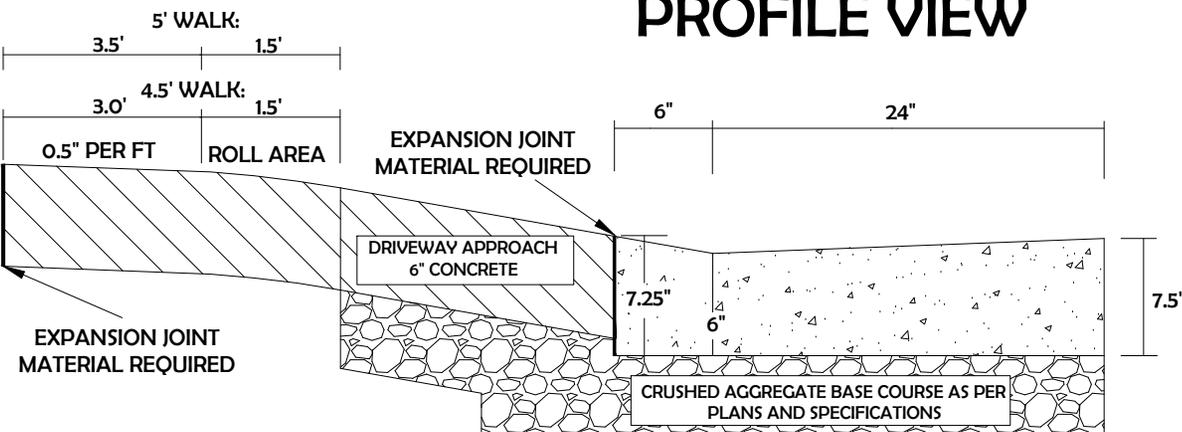
SCALE: 1" = 10'
REVISED 07/16/14 BY NW



PLAN VIEW



PROFILE VIEW



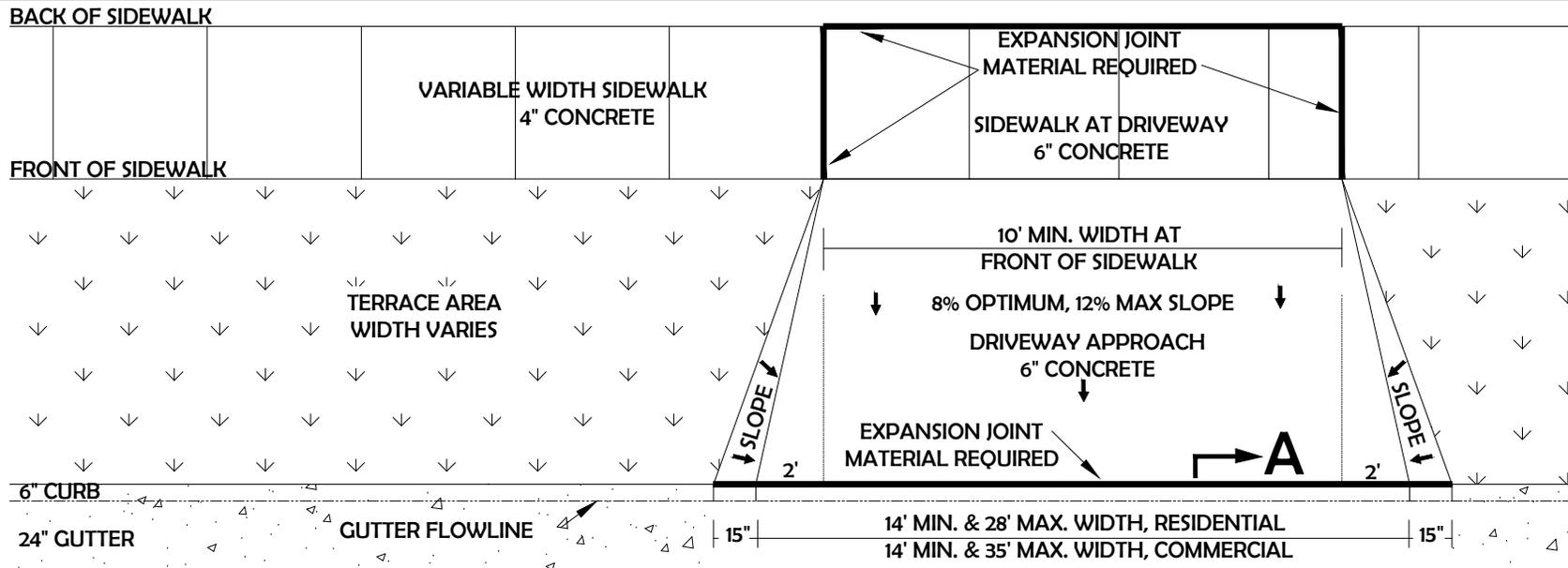
SECTION A-A

DOUBLE PITCH / ROLLED DRIVE APPROACH AND WALK



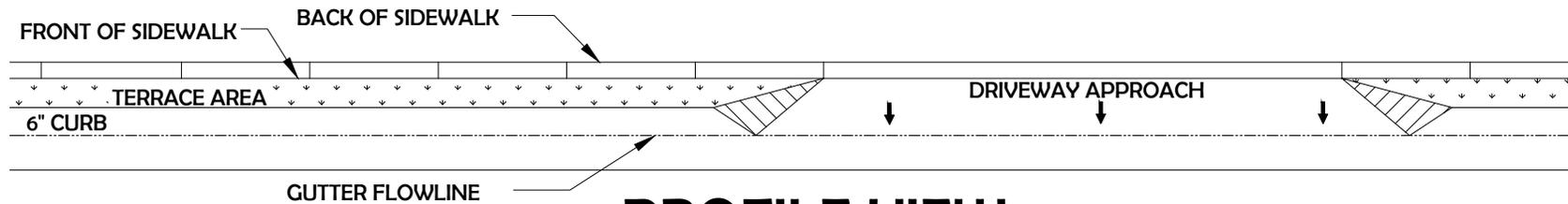
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REVISED 02/13/12 BY JMK
I:\CITYDWG\DTL\SPEC BOOK UPDATES-JMK\DRIVE APPROACH DETAILS-DOUBLE PITCH.PDF

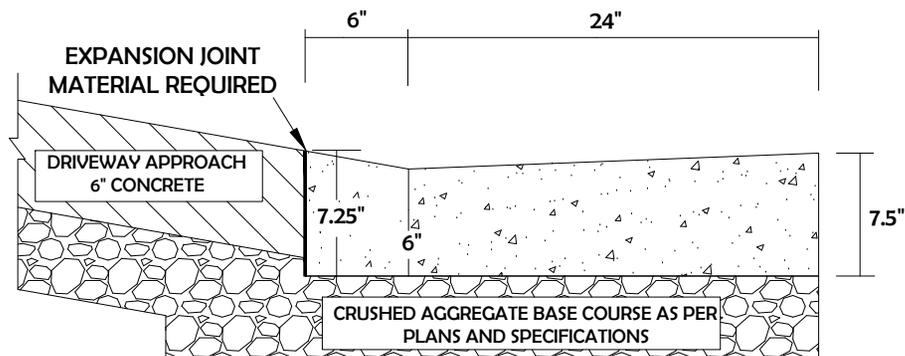


PLAN VIEW

A



PROFILE VIEW

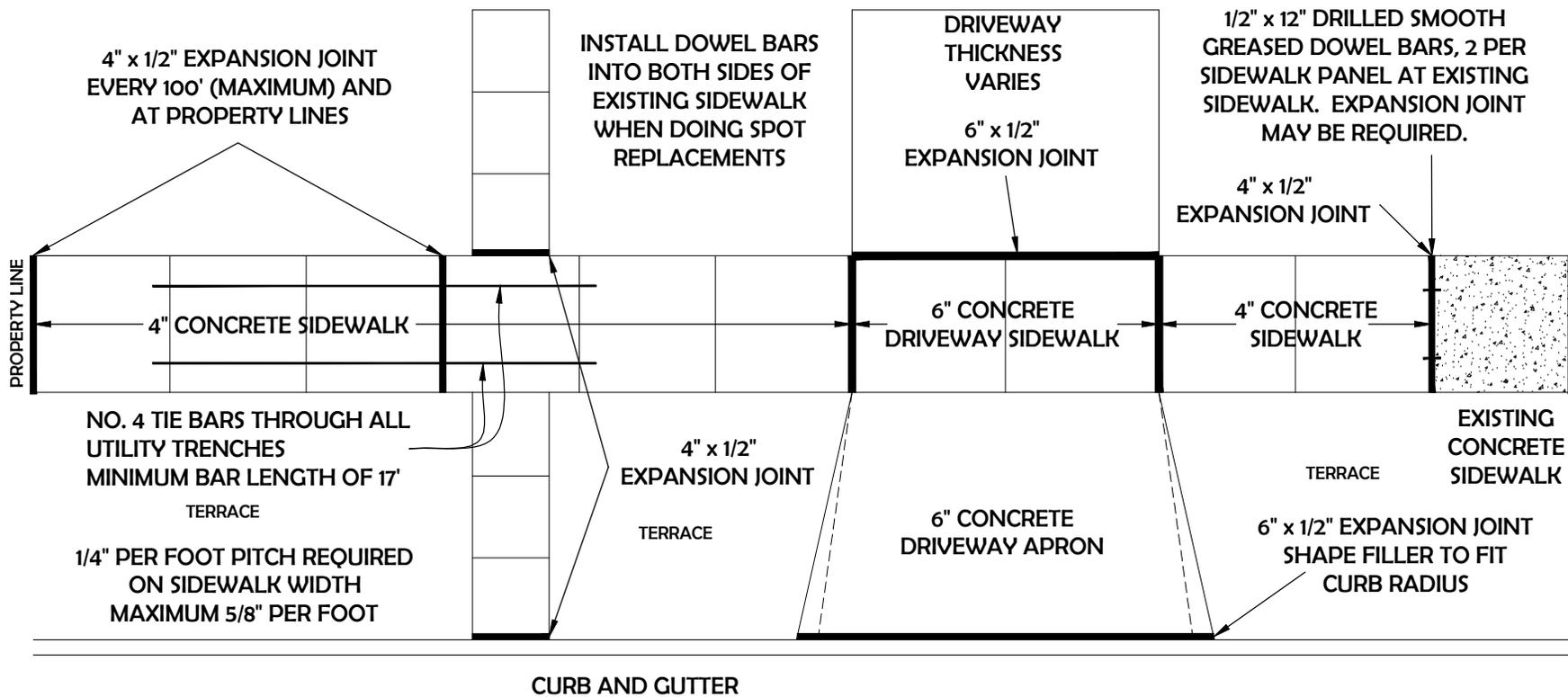


SECTION A - A

TYPICAL DRIVE APPROACH: UNPAVED TERRACE



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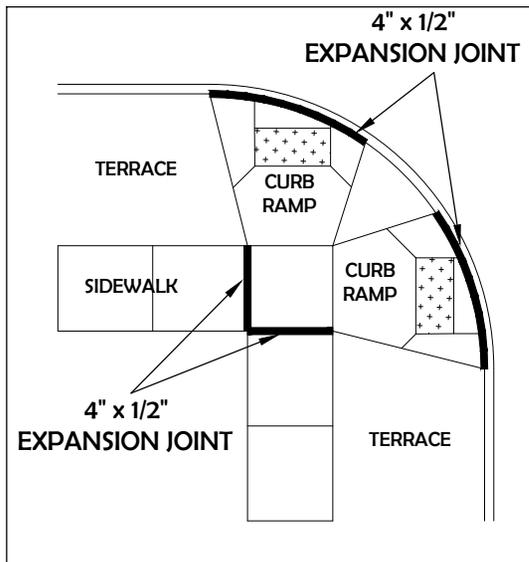


TYPICAL SIDEWALK (MINIMUM WIDTH 4.5')

INSTALL "HUDSON" BOX (PROVIDED BY CITY) AT WATER & GAS SERVICE BOXES LOCATED IN CONCRETE AREAS

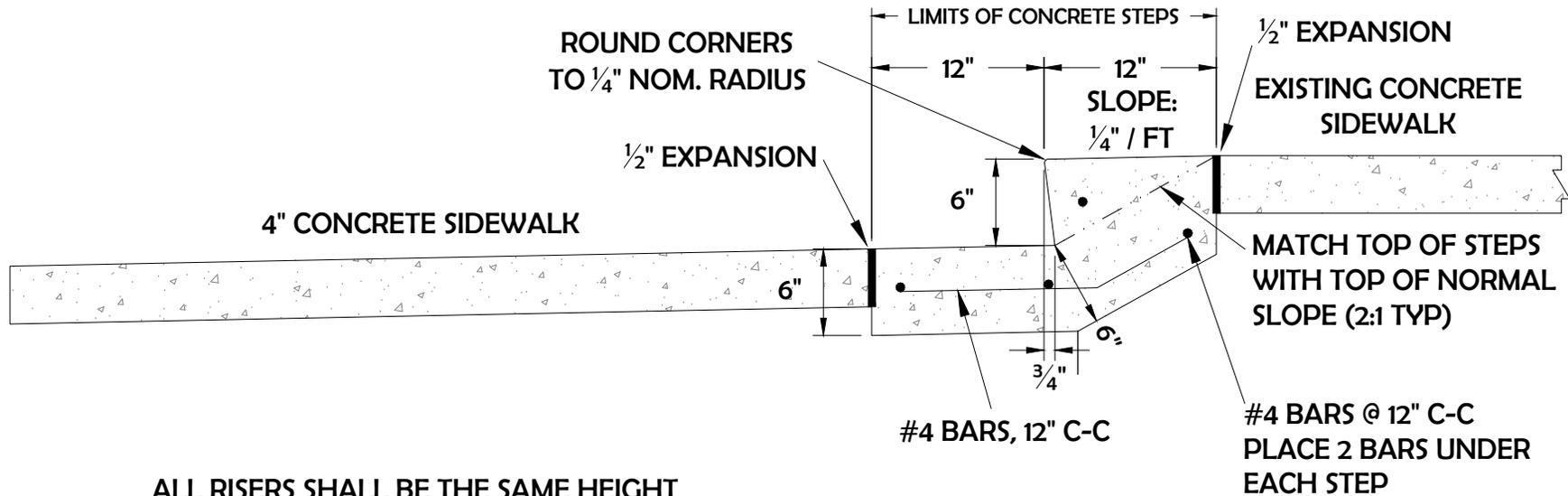
INSTALL DETECTABLE WARNING FIELDS AT CURB RAMPS

EXPANSION JOINT & FILLER SHALL MATCH SIDEWALK THICKNESS



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CONCRETE STEPS DETAIL



ALL RISERS SHALL BE THE SAME HEIGHT

ACTUAL HEIGHT AND NUMBER OF STEPS MAY VARY DUE TO FIELD CONDITIONS

MINIMUM WIDTH OF STEP SHALL BE 4 FT

ALL STEEL TO BE 2" CLEAR

INSTALL HANDRAIL IF SHOWN ON PLANS

CONCRETE STEPS INCLUDE A 3" COMPACTED CRUSHED AGGREGATE BASE COURSE

