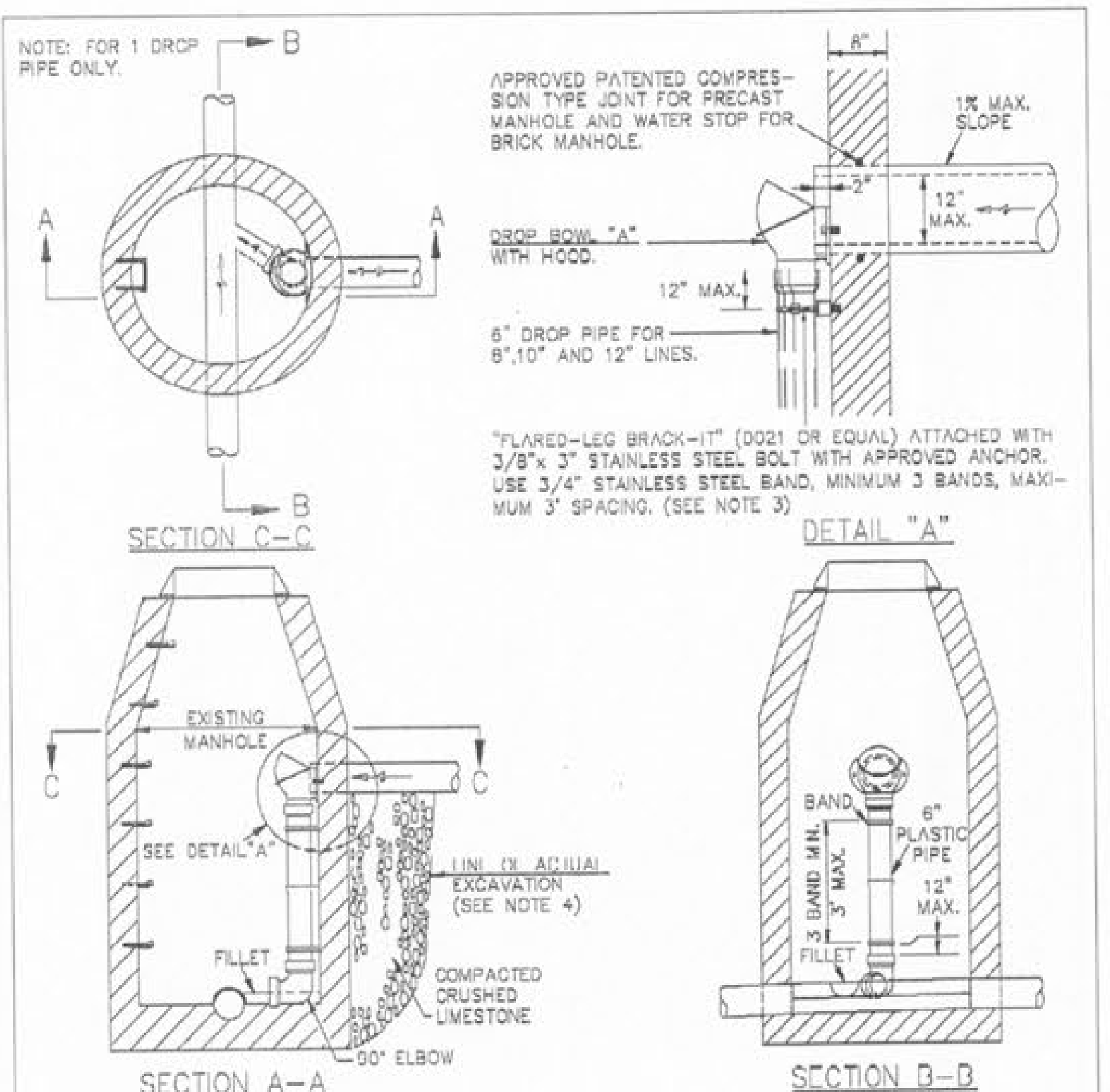
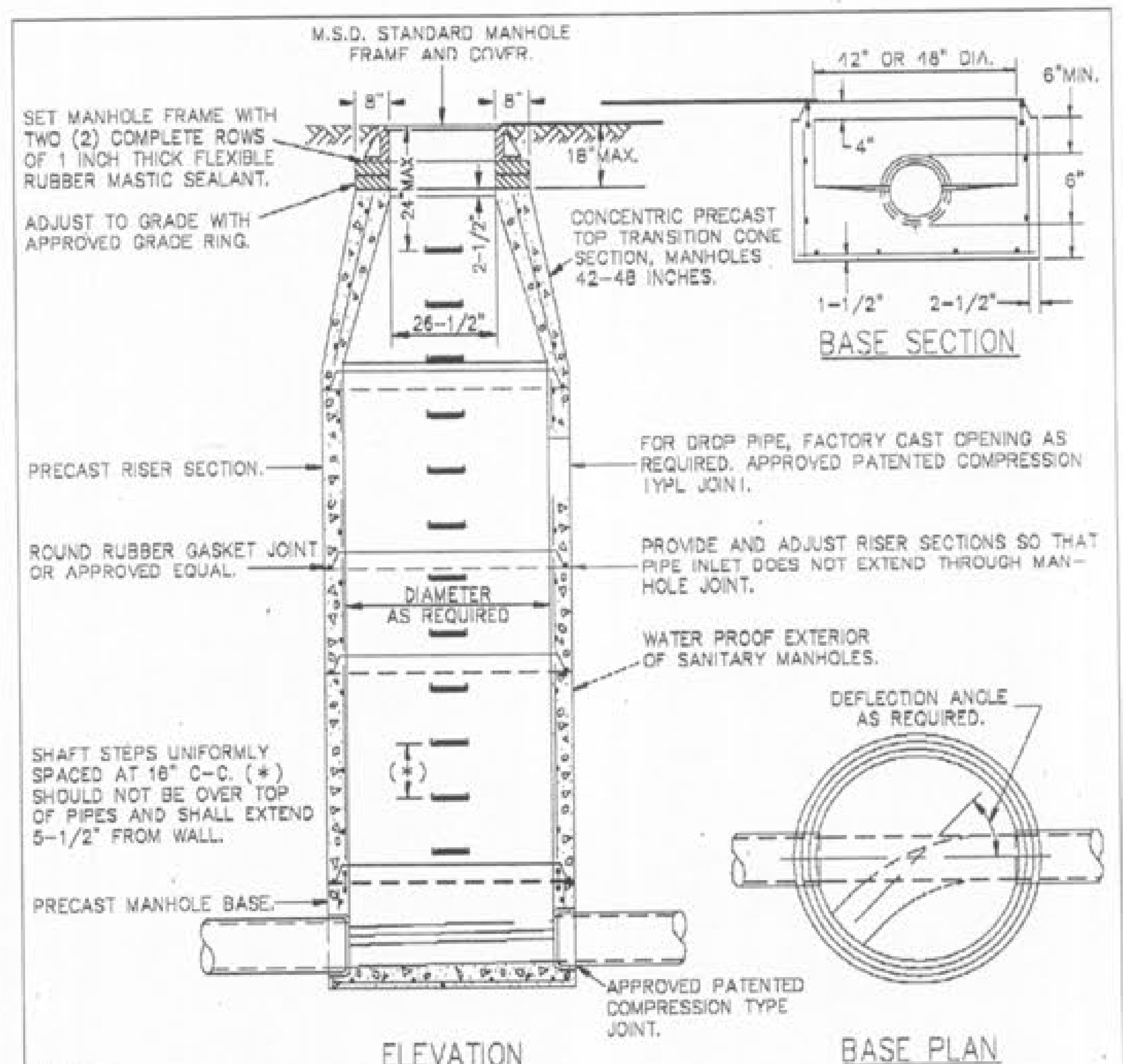


NOTES:

1) NEW INSIDE DROP ON EXISTING MANHOLE REQUIRES THAT THE FLOWLINE OF THE NEW DROP PIPE ELBOW BE CONSTRUCTED AT THE SAME ELEVATION AS THE SPRINGLINE OF THE EXISTING SEWER MAIN AT THE CENTER OF THE EXISTING MANHOLE.
2) THE MINIMUM INSIDE DIAMETER FOR THE BASE AND RISER SECTIONS SHALL BE 42 INCHES.
3) INSTALL DROP BOWL "A" (MFR. RELINER—DURAN INC. OR EQUAL). ATTACH BOWL DIRECTLY UNDER INCOMING PIPE WITH 1" CLEARANCE USING TWO (2) 3/8"x 3" STAINLESS STEEL BOLTS WITH APPROVED ANCHORS & MASTIC.
4) IF EXCAVATED SPACE OUTSIDE OF MANHOLE WALL EXCEEDS ONE FOOT, PROVIDE SIX INCHES OF CLASS "A" CONCRETE ENCASEMENT ON INCOMING LINE FROM WALL OF MANHOLE TO A MINIMUM OF TWO FEET INTO UNDISTURBED EARTH WITH A MINIMUM OF 4-#4 REBARS FOR LENGTH OF ENCASEMENT OR INSTALL ONE (1) LENGTH OF D.I.P. FROM MANHOLE INTO UNDISTURBED EARTH.

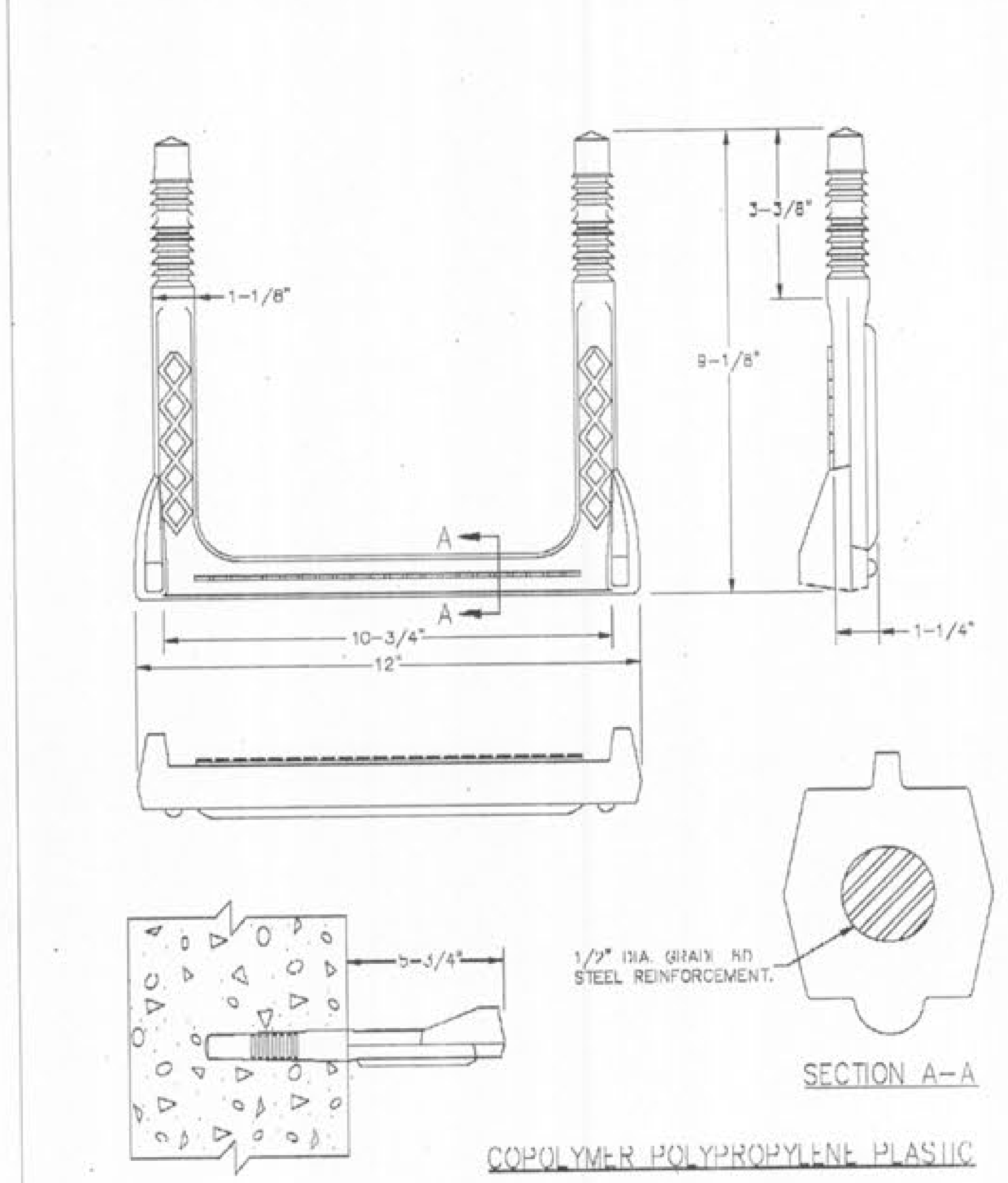
NEW INSIDE DROP ON EXISTING MANHOLE	METROPOLITAN ST. LOUIS SEWER DISTRICT *Standard Details of Sewer Construction*		
	Dr. RGW/SAM Ch. J.C.K.	2009	SHEET 18



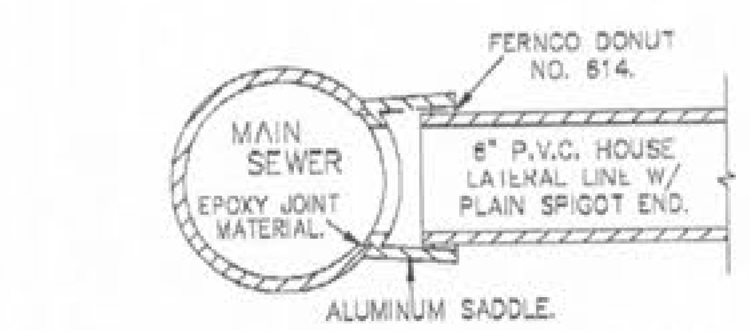
NOTES:

1) THE MINIMUM INSIDE DIAMETER FOR THE BASE AND RISER SECTIONS SHALL BE 42 INCHES FOR 8 INCH DIAMETER SANITARY SEWERS AND ALL STORM SEWERS. THE MINIMUM INSIDE DIAMETER FOR SANITARY SEWERS LARGER THAN 8 INCH DIAMETER IS 48 INCHES. MANHOLE SHALL MEET ASTM C-478 REQUIREMENTS.
2) FLOWLINE ELEVATION OF INCOMING PIPES SHALL BE 1 INCH HIGHER THAN THAT OF OUTGOING PIPE.
3) PIPE SIZES LARGER THAN 24 INCH DIAMETER MAY REQUIRE MANHOLE DIAMETERS OF 60 INCH, 72 INCH OR 96 INCH AS DETERMINED BY OUTSIDE DIAMETERS AND ORIENTATIONS OF CONNECTING PIPES.
4) ECCENTRIC CONES SHALL BE USED ON DIAMETERS 60 INCH AND LARGER. STEPS SHALL EXTEND DOWN VERTICAL WALL OF CONE.
5) PRIOR TO FABRICATION, SHOP DRAWINGS SHALL BE SUBMITTED TO THE DISTRICT FOR APPROVAL OF MANHOLES ON PIPE DIAMETERS LARGER THAN 24 INCH AND ALSO FOR THOSE STRUCTURES WITH A DROP PIPE CONNECTION.

PRECAST CONCRETE MANHOLE	METROPOLITAN ST. LOUIS SEWER DISTRICT *Standard Details of Sewer Construction*		
	Dr. WSH/SAM Ch. J.C.K.	2009	SHEET 21



MANHOLE STEP FOR PRECAST & CAST-IN-PLACE MANHOLE	METROPOLITAN ST. LOUIS SEWER DISTRICT *Standard Details of Sewer Construction*		
	Dr. D.A.B. Ch. J.C.K.	2009	SHEET 58



NOTES:

1) 6" P.V.C. HOUSE CONNECTION INTO PUBLIC V.C.P. OR PUBLIC P.V.C. MAIN 8" TO 24" DIAMETER AND NO WYE OR TEE AVAILABLE, A MACHINE TAP IS REQUIRED.

~~2) THE DISTRICT WILL CUT THE HOLE IN THE MAIN, PROVIDE AND EPOXY THE SADDLE TO THE MAIN. ALL OTHER MATERIAL AND LABOR ARE THE RESPONSIBILITY OF THE CONTRACTOR.~~

3) A CLEAN DRY BEDDING MATERIAL IS REQUIRED AROUND THE CONNECTION BEFORE BACKFILLING. THE BEDDING MATERIAL SHALL BE ONE OF THE FOLLOWING:
   A) M.S.D. NO. 1 BEDDING.
   B) 1 TO 3 SAND TO CEMENT MORTAR MIX.
   C) "PRE-MIX" CONCRETE.

~~4) IF 4" HOUSE CONNECTION IS APPROVED, A 4" TO 6" INCREASER IS REQUIRED AT MACHINE TAP.~~

~~5) ALL EXCAVATION MUST BE ADEQUATELY BRACED BEFORE DISTRICT WILL MAKE AN INSPECTION OR TAP.~~

~~6) ALL MATERIAL REQUIRED TO MAKE AN APPROVED CONNECTION MUST BE ON THE CONNECTION SITE AT THE TIME OF ARRIVAL OF THE TAP TRUCK. IF THE MATERIAL IS NOT AVAILABLE, THE TAP MUST BE RESCHEDULED.~~

MACHINE TAP	METROPOLITAN ST. LOUIS SEWER DISTRICT *Standard Details of Sewer Construction*		
	Dr. WSH/SAM Ch. J.C.K.	2009	SHEET 64

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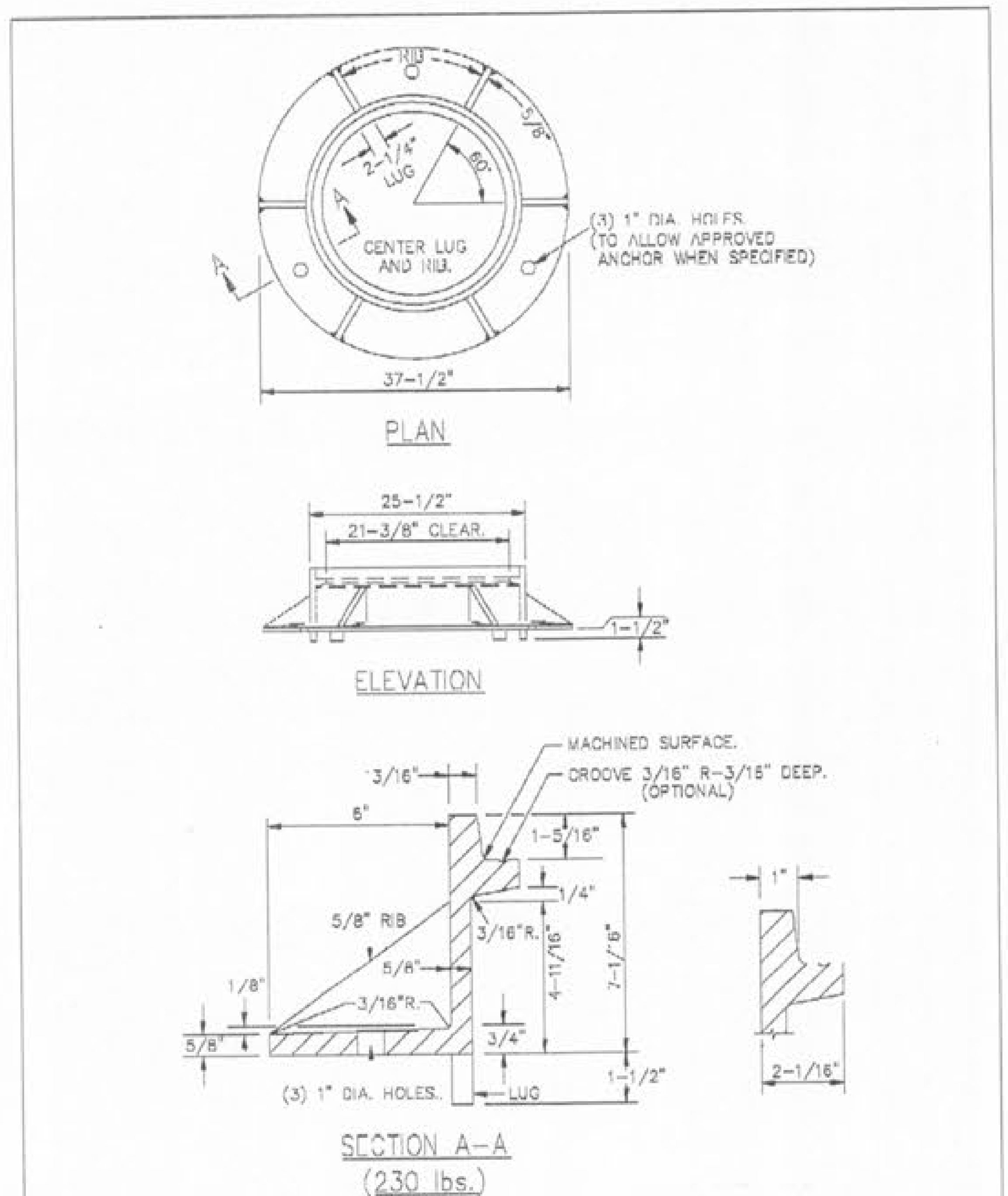
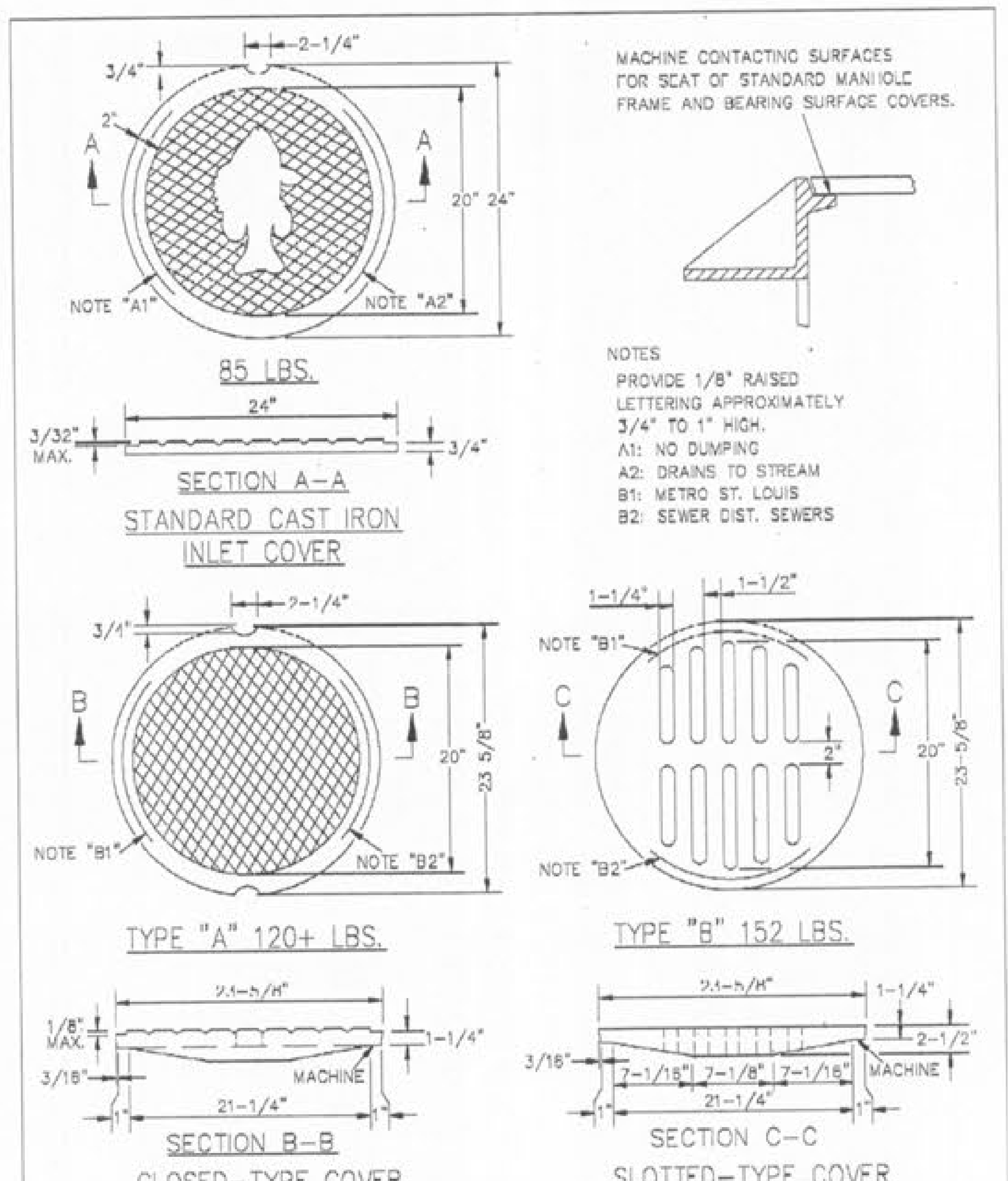
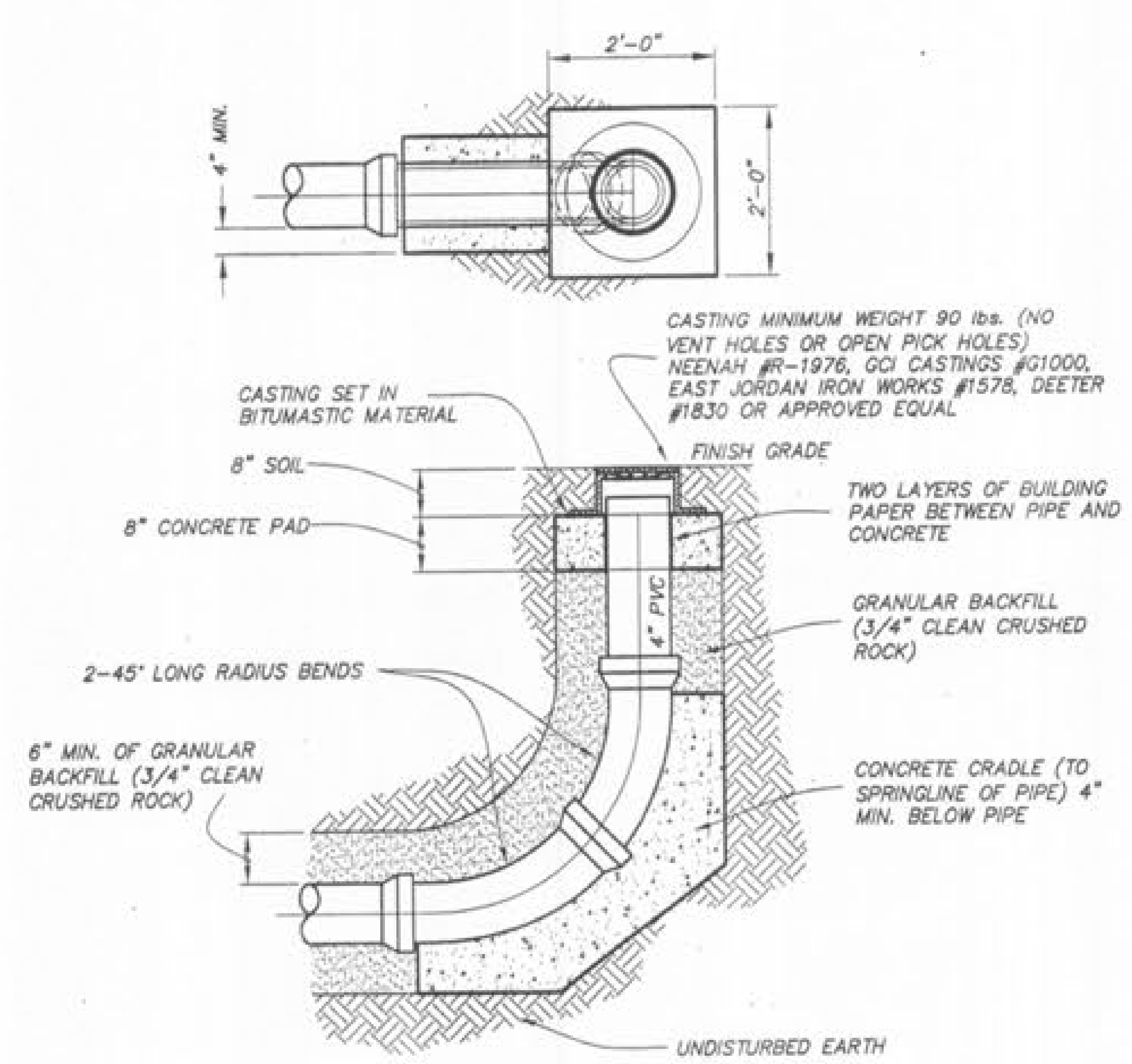


CAST IRON MANHOLE FRAME	METROPOLITAN ST. LOUIS SEWER DISTRICT *Standard Details of Sewer Construction*		
	Dr. DAR/SAM Ch. J.C.K.	2009	SHEET 52



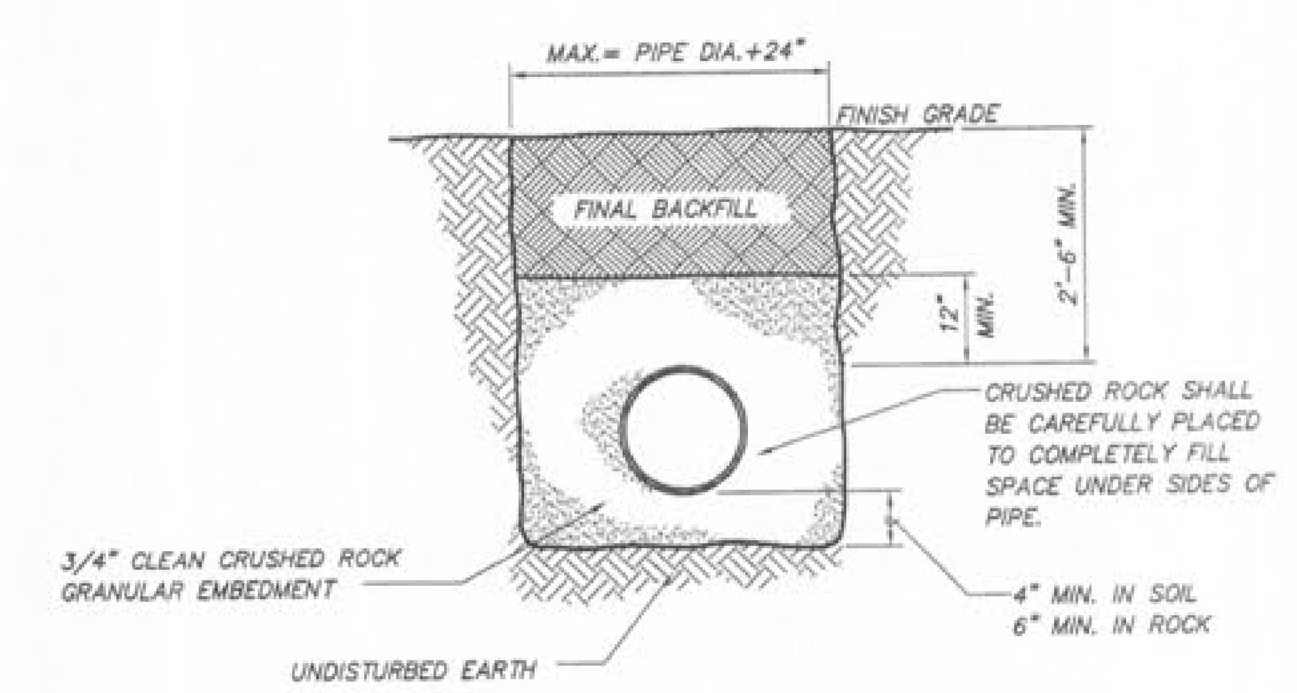
CAST IRON COVERS FOR MANHOLES AND INLETS	METROPOLITAN ST. LOUIS SEWER DISTRICT *Standard Details of Sewer Construction*		
	Dr. RGW/SAM Ch. J.C.K.	2009	SHEET 53



STANDARD SANITARY SEWER CLEANOUT

NOT TO SCALE

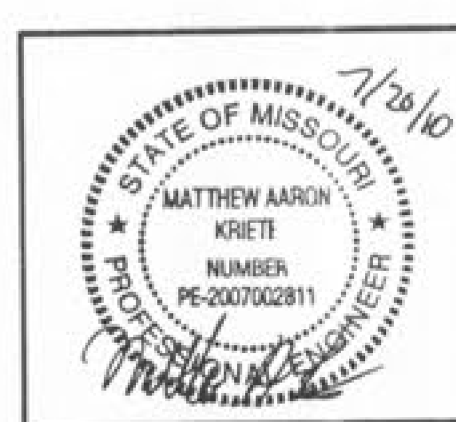
PIPE DIA.	MIN. TRENCH WIDTH
≤6"	PIPE DIA. + 18"
8"-10"	PIPE DIA. + 10"
12"-36"	PIPE DIA. + 12"



EMBEDMENT OF PVC SANITARY SEWER PIPE

NOT TO SCALE

PLANNING & DEVELOPMENT #1709.03 APPROVED JANUARY 7, 2010



MATTHEW A. KRIETE
PROFESSIONAL ENGINEER
PE-2007002811

SANITARY SEWER DETAILS

HILLMANN PLACE

ST. CHARLES COUNTY, O'FALLON, MISSOURI

Surveyed: –
Drawn: BR
Checked: MK

Engineering Surveys & Services
1113 Fay Street
Columbia, Missouri
573 - 449 - 2646
Missouri Engineering Corporation # 2004005018

Revised: 1 JULY 20, 2010

Scale	Date	Job	Sheet
AS SHOWN	JUNE 4, 2010	11481	C121