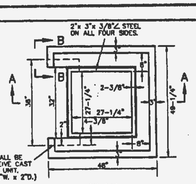
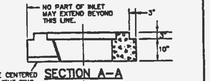
CONSTRUCTION DETAILS

NOTES:
1) INLETS ON THIS SHEET ARE TO BE USED IN LOCATIONS WHERE STANDARD OPEN THROAT INLETS CAN NOT BE USED IN PAVED TRAFFIC WAY AND IN LIMITED EASEMENTS.
2) STANDARD DEPTH = 4.0 FEET.
3) ADJUSTMENTS SHALL BE MADE WITH PRECAST ADJUSTMENT RINGS AND APPROVED BITUMINOUS SEALANT.



PLAN

SECTION B–B

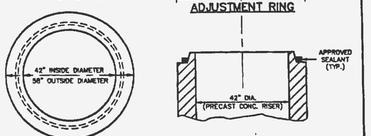


SECTION A–A

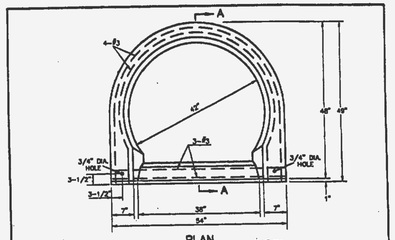
UNIT SHALL BE CENTERED OVER ADJUSTMENT RING.

3/4" MORTAR BED
CIRCULAR REINFORCING .12 IN²/FT.
CLASS "A" CONCRETE, SEE ASTM C-478 FOR MINIMUM REQUIREMENTS.

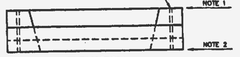
ADJUSTMENT RING



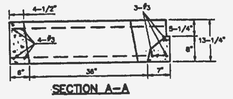
GRATE SEAT FOR 2 GRATE WITH SIDE INTAKE	METROPOLITAN ST. LOUIS SEWER DISTRICT *Standard Details of Sewer Construction*		
	Dr. S.A.M. Ch. J.C.K.	2000	SHEET 33



PLAN



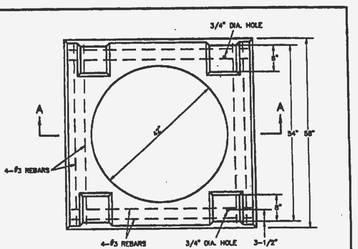
ELEVATION



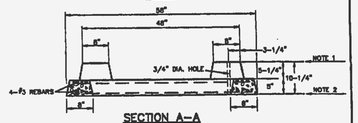
SECTION A–A

NOTES:
1) SET STANDARD INLET STONE IN 3/4" MORTAR BED AND DOWEL WITH 5/8" DIA. 1'-0" LONG PINS AND GROUT.
2) RAISE TO FINAL GRADE WITH COURSES OF BRICK AND SET THE UNIT TO BASE WITH 3/4" MORTAR BED.
3) THIS UNIT IS TO BE USED WITH 42 INCH I.D. POURED-IN-PLACE CONCRETE OR BRICK BASE.
4) 5000 P.S.I. CONCRETE IS REQUIRED.

PRECAST CONCRETE UNIT FOR SINGLE STREET INLET	METROPOLITAN ST. LOUIS SEWER DISTRICT *Standard Details of Sewer Construction*		
	Dr. WSH/SAM Ch. J.C.K.	2000	SHEET 40



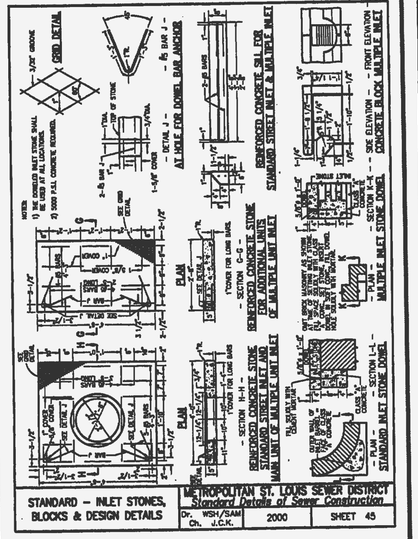
PLAN



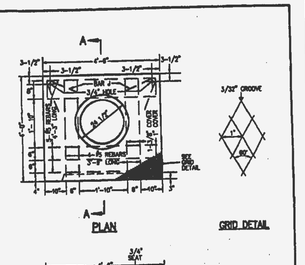
SECTION A–A

NOTES:
1) SET STANDARD INLET STONE IN 3/4" MORTAR BED AND DOWEL WITH 5/8" DIA. 1'-0" LONG PINS AND GROUT.
2) RAISE TO FINAL GRADE WITH COURSES OF BRICK AND SET THE UNIT TO BASE WITH 3/4" MORTAR BED.
3) THIS UNIT TO BE USED WITH 42 INCH I.D. BASE.
4) 5000 P.S.I. CONCRETE IS REQUIRED.

PRECAST CONCRETE UNIT FOR 4 WAY AREA INLET	METROPOLITAN ST. LOUIS SEWE *Standard Details of Sewer Co*		
	Dr. DAB/SAM Ch. J.C.K.	2000	

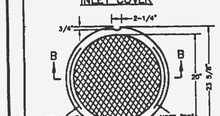


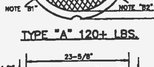
STANDARD – INLET STONES, BLOCKS & DESIGN DETAILS	METROPOLITAN ST. LOUIS SEWER DISTRICT *Standard Details of Sewer Construction*		
	Dr. WSH/SAM Ch. J.C.K.	2000	SHEET 45



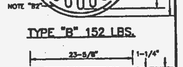
NOTE:
FOR SPECIAL USE WHEN APPROVED IN TRUCK TRAFFIC AREA.

HEAVY DUTY 8 INCH INLET STONE (ALTERNATE)	METROPOLITAN ST. LOUIS SEWER DISTRICT *Standard Details of Sewer Construction*		
	Dr. S.A.M. Ch. P.W.S.	2000	SHEET 46

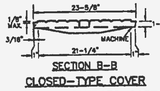




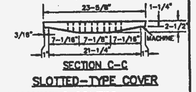
DETAIL "A"



SECTION A–A



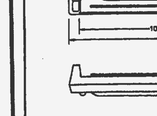
GRID DETAIL



STANDARD INLET STONE MUST BE MODIFIED TO RECEIVE CONC. COVER.

NOTES:
1) PROVIDE 1/8" RAISED LETTERING APPROXIMATELY 3/4" TO 1" HIGH.
A1: METRO ST. LOUIS
A2: SEWER DIST. SEWERS
2) 5000 P.S.I. CONCRETE REQUIRED.
3) #3 REBARS SHALL BE FRP (FIBER REINFORCED POLYMER) MINIMUM GRADE F80 AS DEFINED IN THE ACI COMMITTEE 440 "GUIDE FOR THE DESIGN AND CONSTRUCTION OF CONCRETE REINFORCED WITH FRP BARS" REVISED 17 JANUARY 2000

PRECAST CONCRETE INLET COVER	METROPOLITAN ST. LOUIS SEWER DISTRICT *Standard Details of Sewer Construction*		
	Dr. RGW/SAM Ch. J.C.K.	2000	SHEET 47



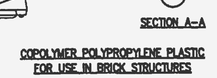
SECTION A–A

NOTE:
3/8" DIA. CONTINUOUS ANCHOR IS IN THIS POSITION ONLY FOR CENTER SUPPORT OF DOUBLE 3 GRATE & 2 GRATE INLET WITH SIDE INTAKE UNIT.

SECTION N–N

GRATE INLET FRAME

DETAIL OF CONTINUOUS ANCHOR FOR ANGLE SEAT

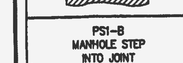


S 8 x 23 STEEL BEAM FOR CENTER SUPPORT OF 6 OR 8 GRATE INLET

PLAN

TABLE FOR SIZE OF FRAMES
2 GRATE = 30-1/2" x 30-1/2"
3 GRATE = 30-1/2" x 48-1/2"
4 GRATE = 30-1/2" x 66-1/2"

NOTE B:
PROVIDE 1/8" RAISED LETTERING APPROX. 3/4" TO 1" HIGH.
B1: METRO ST. LOUIS
B2: SEWER DIST. SEWERS.
MATERIAL:
CAST GRAY IRON ASTM. A48.

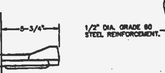


SECTION F–F

CAST IRON GRATE (NF. R-3297 OR EQUAL)

DETAILS OF INLET FRAME AND GRATES	METROPOLITAN ST. LOUIS SEWER DISTRICT *Standard Details of Sewer Construction*		
	DR. RGW/SAM Ch. J.C.K.	2000	SHEET 48

PLAN

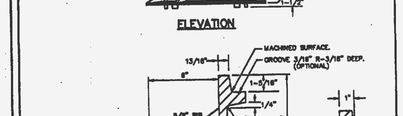


SECTION A–A

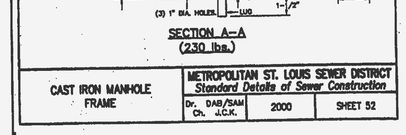
ELEVATION

FINISH	– HOT DIP GALVANIZED–(ASTM A123/A123M–97).
MATERIAL	– MILD CARBON STEEL – ASTM A569.
CAPACITY	– H–20 LOADING.
WEIGHT	– 65 LB. MINIMUM.
TOLERANCES	– ALL DIMENSIONS 1/8"±.
IDENTIFICATION	– THE MANUFACTURER MUST PLACE HIS NAME OR MARK ON EACH UNIT FOR THE PURPOSE OF IDENTIFICATION.

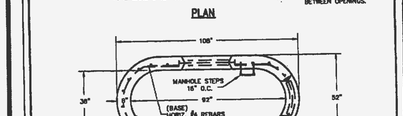
DETAIL OF STEEL GRATE	METROPOLITAN ST. LOUIS SEWER DISTRICT *Standard Details of Sewer Construction*		
	Dr. RGW/SAM Ch. J.C.K.	2000	SHEET 49



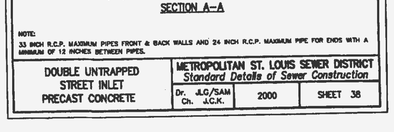
CALL	USE	a	STRAIGHT BARS
G–1	2, 3, OR 4 GRATE	3'–4"	
G–2	6 & 8 GRATE	5'–10"	
H–2	2 GRATE		3'–8"
H–3	3 & 6 GRATE		4'–9"
H–4	4 & 8 GRATE		6'–0"



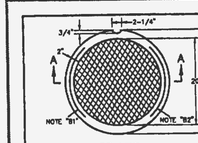
STEEL REQUIREMENTS FOR GRATE INLET SEAT	METROPOLITAN ST. LOUIS SEWER DISTRICT *Standard Details of Sewer Construction*		
	Dr. WSH/SAM Ch. J.C.K.	2000	SHEET 50



NOTE:
ALL RADII NOT INDICATED SHALL HAVE A PERMISSIBLE ROUNDING OF 1/8" R. OR LESS.



CAST IRON SIDE INTAKE UNIT FOR GRATED INLETS 249 LBS.	METROPOLITAN ST. LOUIS SEWER DISTRICT *Standard Details of Sewer Construction*		
	Dr. RGW/SAM Ch. J.C.K.	2000	SHEET 51

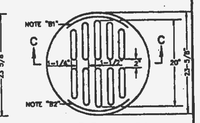


85 LBS.

SECTION A–A

STANDARD CAST IRON INLET COVER

TYPE "A" 120+ LBS.



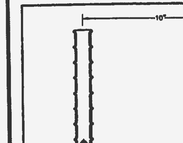
TYPE "B" 152 LBS.

SECTION B–B
CLOSED–TYPE COVER

SECTION C–C
SLOTTED–TYPE COVER

STANDARD CAST IRON MANHOLE COVERS

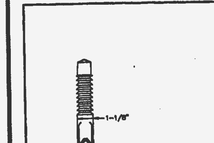
CAST IRON COVERS MANHOLES AND INLETS	METROPOLITAN ST. LOUIS SEWER DISTRICT *Standard Details of Sewer Construction*		
	Dr. RGW/SAM Ch. J.C.K.	2000	SHEET 53



SECTION A–A

COPOLYMER POLYPROPYLENE PLASTIC FOR USE IN BRICK STRUCTURES

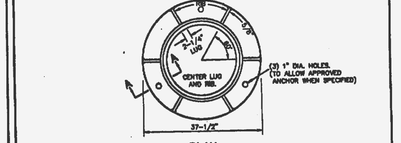
PS1–B MANHOLE STEP INTO JOINT	METROPOLITAN ST. LOUIS SEWER DISTRICT *Standard Details of Sewer Construction*		
	Dr. W.S.M. Ch. J.C.K.	2000	SHEET 57

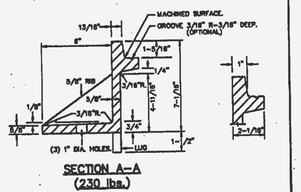


SECTION A–A

COPOLYMER POLYPROPYLENE PLASTIC

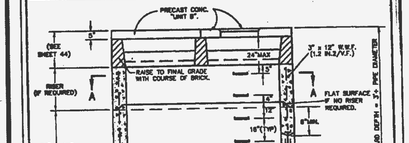
MANHOLE STEP FOR PRECAST & CAST–IN–PLACE MANHOLE	METROPOLITAN ST. LOUIS SEWE *Standard Details of Sewer Co*		
	Dr. D.A.B. Ch. J.C.K.	2000	





SECTION A–A
(230 lbs.)

CAST IRON MANHOLE FRAME	METROPOLITAN ST. LOUIS SEWER DISTRICT *Standard Details of Sewer Construction*		
	Dr. DAB/SAM Ch. J.C.K.	2000	SHEET 52



NOTE:
33 INCH R.C.P. MAXIMUM PIPES FRONT & BACK WALLS AND 24 INCH R.C.P. MAXIMUM PIPE FOR ENDS WITH A MINIMUM OF 12 INCHES BETWEEN PIPES.

DOUBLE UNTRAPPED STREET INLET PRECAST CONCRETE	METROPOLITAN ST. LOUIS SEWER DISTRICT *Standard Details of Sewer Construction*		
	Dr. JLG/SAM Ch. J.C.K.	2000	SHEET 38

CD 2