

**PRECAST CONCRETE STORMWATER STRUCTURES**

MINIMUM DISTANCE FLOWLINE TO TOP OF STONE OR GRATE

PIPE D NOMINAL INCHES	AREA INLET			2 GRATE INLET			SINGLE STREET INLET		
	CIRCULAR BASE DIA	CIRCULAR BASE DIA	SQUARE CIRCULAR BASE DIA RECTANGULAR	CIRCULAR BASE DIA	CIRCULAR BASE DIA	SQUARE CIRCULAR BASE DIA RECTANGULAR	CIRCULAR BASE DIA	CIRCULAR BASE DIA	SQUARE CIRCULAR BASE DIA RECTANGULAR
12"	45"	45"	45"	38"	48"	31"	42"	42"	41"
15"	48"	48"	48"	41"	51"	34"	45"	45"	44"
18"	52"	52"	52"	44"	55"	37"	48"	48"	47"
21"	55"	55"	55"	47"	60"	40"	51"	51"	50"
24"	58"	58"	58"	51"	64"	44"	55"	55"	54"
27"	61"	61"	61"	54"	68"	47"	59"	59"	58"
30"	64"	64"	64"	57"	72"	50"	63"	63"	62"
33"	67"	67"	67"	60"	76"	53"	67"	67"	66"

(SEE SHEET 32 FOR DETAILS) (SEE SHEET 33 FOR DETAILS) (SEE SHEET 34 FOR DETAILS)

NOTE: 1. 48" DIA BASE REQUIRES 3" HIGH TRANSITION SECTION TO 42" DIA. SIMILAR TO "ADAPTER RING" SHEET 33.  
2. 60" DIA BASE REQUIRES 24" HIGH CONCENTRIC REDUCER TRANSITION TO 42" DIA. SIMILAR TO "ADAPTER RING" SHEET 33.

PRECAST CONCRETE STORMWATER STRUCTURES  
METROPOLITAN ST. LOUIS SEWER DISTRICT  
Standard Details of Sewer Construction  
Dr. J.L.G. Ch. J.C.K. SEPT. 1990 SHEET 31

CONCRETE OR CAST IRON COVER  
SHIPPED AS ONE UNIT  
INLET STONE (SEE SHEET 42)  
3/4" MORTAR BED JOINT  
(2) 5/8" DIA - 10" PINS  
ADJUST TO FINAL GRADE WITH BRICK WORK (MAX 11")  
4 WAY CONCRETE UNIT (SEE SHEET 38)  
ADAPTER RING  
7'-9"-11'-13"  
3/4" MORTAR BED JOINT  
APPROVED JOINT  
SEE SHEET 31 FOR MINIMUM DIMENSIONS  
APPROVED PATENTED COMPRESSION TYPE JOINT (SEE CHART FOR MAX PIPE O.D.)  
INLET BASE & INLET MANHOLE BASE

AREA INLET PRECAST CONCRETE  
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(2) 30" x 15" GRATES  
43 1/4" x 43 1/4" x 43 1/4" x 43 1/4"  
STANDARD 2 GRATE INLET SEAT  
ADJUST TO FINAL GRADE WITH BRICK WORK (MAX 11")  
3/4" MORTAR BED  
APPROVED PATENTED COMPRESSION TYPE JOINT  
7'-9"-11'-13"  
ADAPTER RING OR STANDARD 42" DIA CONE SECTION (ADAPTER RING SHOWN)  
APPROVED MASTIC JOINT  
42" x 42" x 42" x 42"  
2 GRATE INLET INLET MANHOLE BASE  
NOTE: 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 CIRCUMSTANCES.  
SEE SHEET 31 FOR MINIMUM DIMENSIONS

2 GRATE INLETS PRECAST CONCRETE  
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CONCRETE OR CAST IRON COVER  
14 3/4" x 14 3/4" x 14 3/4" x 14 3/4"  
SHIPPED AS ONE UNIT  
INLET STONE (SEE SHEET 42)  
PLANT INSTALLED INVERT  
3/4" MORTAR BED WITH 2 5/8" DIA 1-10" PINS  
ADJUST TO FINAL GRADE WITH BRICK WORK (MAX 11")  
SINGLE CURB INLET (SEE SHEET 37)  
APPROVED PATENTED COMPRESSION TYPE JOINT  
7'-9"-11'-13"  
ADAPTER RING  
3/4" MORTAR BED TO RECEIVE 3-2" SILL  
#4 BARS @ 10" CENTERS IN WALLS & BASE  
SHALLOW SINGLE CURB INLET  
INLET SILL 6" x 8" x 3-2"  
SEE SHEET 31 FOR MINIMUM DIMENSIONS

SINGLE STREET INLETS PRECAST CONCRETE  
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DOUBLE UNTRAPPED STREET INLET PRECAST CONCRETE  
JOB # 89-204B  
JUNE 1998  
MANHOLE STEPS 16" O.C.  
HORIZ #4 BARS ON 10" O.C.  
3" x 12" W/F #12 IN 2" X 1/2"  
PRECAST CONC UNIT B  
RAISE TO FINAL GRADE W/ COURSE OF BRICK  
15"(TYP) x 15"(TYP)  
16"(TYP) x 16"(TYP)  
FLAT SURFACE IF NO RISER REQUIRED  
24" x 58" BASE VARIES  
APPROVED PATENTED COMPRESSION TYPE JOINT REQUIRES A MIN DIA 12" BETWEEN OPENINGS

DOUBLE UNTRAPPED STREET INLET PRECAST CONCRETE  
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42" DIA  
20 1/2" x 24 1/2" HOLE  
4 1/4" x 4 1/4" x 4 1/4" x 4 1/4"  
SEAL W/ NON SHALLOW GROUT AROUND 2" x 20" CONCRETE PLUG  
PLANT INSTALLED INVERT  
1 1/2"  
KOR-IN-SEAL OR APPROVED EQUAL FLEXIBLE PIPE CONNECTOR  
6" MIN  
12" x 15" PIPE  
THIS TRAP INLET CAN BE USED W/ 42" RISER SECTION OR PRECAST CONCRETE ADAPTER RING

TRAPPED STREET INLET BASE PRECAST CONCRETE  
METROPOLITAN ST. LOUIS SEWER DISTRICT  
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3/4" DIA HOLE  
3/4" DIA HOLE  
3/4" DIA HOLE  
3/4" DIA HOLE  
NOTE 1  
NOTE 2

SECTION A-A  
NOTES:  
1. SET STANDARD INLET STONE IN 3/4" MORTAR BED AND DOWEL WITH 5/8" 1-0" LONG PINS AND GROUT.  
2. RAISE TO FINAL GRADE WITH COURSES OF BRICK AND 3/4" MORTAR BED.  
3. THIS UNIT IS TO BE USED WITH 42" DIA. BASE WITH 3/4" MORTAR BED.  
4. 4000 P.S.I. CONCRETE IS REQUIRED.

PRE-CAST CONCRETE UNIT FOR SINGLE STREET INLET  
METROPOLITAN ST. LOUIS SEWER DISTRICT  
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3/4" DIA HOLE  
3/4" DIA HOLE  
3/4" DIA HOLE  
3/4" DIA HOLE  
NOTE 1  
NOTE 2

SECTION A-A  
NOTES:  
1. SET STANDARD INLET STONE IN 3/4" MORTAR BED AND DOWEL WITH 5/8" 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" DIA. BASE WITH 3/4" MORTAR BED.  
4. 4000 P.S.I. CONCRETE IS REQUIRED.

PRE-CAST CONCRETE UNIT FOR 4 WAY AREA INLET  
METROPOLITAN ST. LOUIS SEWER DISTRICT  
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SECTION A-A  
ELEVATION  
SECTION B-B  
3/4" MORTAR BED  
PRE CAST UNIT SHEET 40  
SEE NOTE 2 SHEET 40

CONCRETE DOUBLE STREET INLET W/PRE CAST CONCRETE UNIT A  
METROPOLITAN ST. LOUIS SEWER DISTRICT  
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SECTION A-A  
NOTE 1  
NOTE 2  
NOTE 3  
NOTE 4

PRE-CAST CONCRETE UNIT A FOR STREET DOUBLE INLET  
METROPOLITAN ST. LOUIS SEWER DISTRICT  
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SECTION A-A  
NOTE 1  
NOTE 2  
NOTE 3  
NOTE 4

PRE-CAST CONCRETE UNIT B FOR STREET DOUBLE INLET  
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CORD DETAIL  
AT HOLE FOR DOWEL BAR ANCHOR  
REINFORCED CONCRETE SILL FOR STANDARD STREET INLET AND MAIN UNIT OF MULTIPLE UNIT INLET  
REINFORCED CONCRETE STONE FOR ADDITIONAL UNITS OF MULTIPLE UNIT INLET  
CONCRETE BLOCK MULTIPLE INLET  
STANDARD INLET STONE DOWEL

STANDARD - INLET STONES, BLOCKS & DESIGN DETAILS  
METROPOLITAN ST. LOUIS SEWER DISTRICT  
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GRID DETAIL  
SECTION A-A  
NOTE A1  
NOTE A2  
REMOVAL SLOT SEE DETAIL A  
#3 BARS @ 3" C/W  
3/32" GROOVE  
24 1/4" x 24 1/4" x 24 1/4" x 24 1/4"  
STANDARD INLET STONE MUST BE MODIFIED TO RECEIVE CONC. COVER

PRE-CAST CONCRETE INLET COVER  
METROPOLITAN ST. LOUIS SEWER DISTRICT  
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SECTION A-A  
SECTION F-F  
DETAIL OF CONTINUOUS ANCHOR FOR ANGLE SEAT  
8" I-23lbs FOR CENTER SUPPORT OF 6-OR-8 GRATE INLET  
CAST IRON GRATE (NF. 41164 OR EQUAL)

DETAILS OF INLET FRAME AND GRATES  
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SECTION A-A  
FINISH - ASPHALTIC 10 MIL COATING  
MATERIAL - WILD CARBON STEEL - ASTM A569  
CAPACITY - H=20 LOADING  
WEIGHT - 65 LB MINIMUM  
TOLERANCES - ALL DIMENSIONS 1/8"

DETAIL OF STEEL GRATE  
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