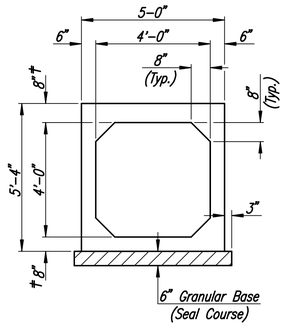
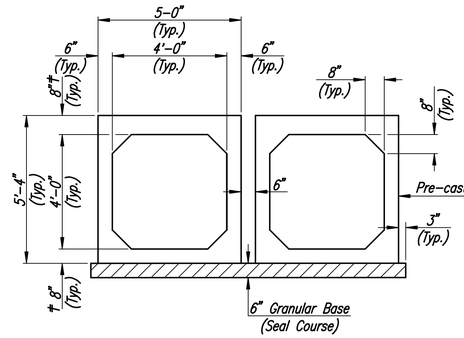
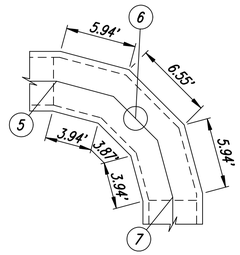


SECTION A-A



SECTION B-B

† Dimension may vary based on Shop Drawings.



4'X4' RCB BEND
90° Bend

GENERAL NOTES

LOADING: HS20-44 A.A.S.H.T.O. Specification, 1983 Edition.

UNIT STRESSES:
Concrete F'c = 4000 p.s.i. Fy = 60,000 p.s.i.
Fc = 1600 p.s.i. Fs = 24,000 p.s.i.

CONSTRUCTION: The Contractor has the option of constructing either the Cast-In Place Option (See Option A) or the Precast Option (See Option B). Payment for the structure will be the same regardless of which option is used.

JOINTS: Construction Joints shall only be formed at locations shown or as approved by the Engineer

EXCAVATION: All excavation and backfill shall extend two (2) feet beyond the sides of the box and wingwall.

CONFLICT: If R.C.B. plan notes conflict with the General Notes from this sheet, then these General Notes will govern.

PAYMENT: The "4'-0"x4'-0" R.C. Box" shall bid per Linear Foot shall include all labor, material, excavation, concrete, reinforcing steel, seal course, manholes (Type X) and all other incidentals necessary to complete the work. Quantities shown are for information only.

Specific Notes for Cast-In-Place Option are provided on the R.C.B. Detail Sheet.

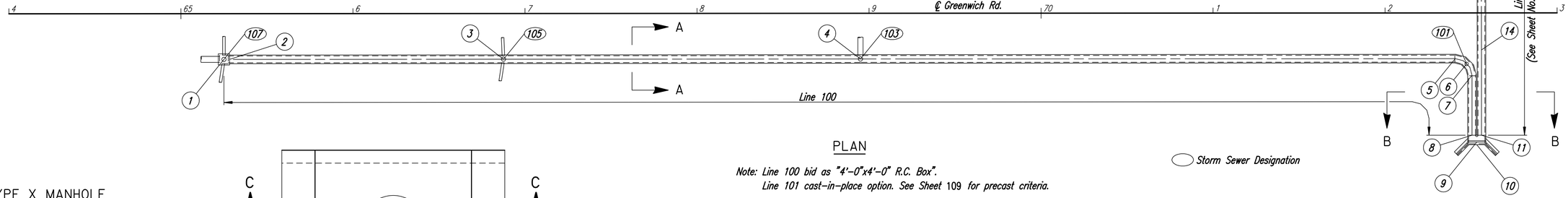
OPTION B (PRECAST) NOTES

PRECAST CONCRETE: Precast Box Sections shall meet the appropriate design and inspection requirements of A.S.T.M. Designation C-850, Table 2 or C789, Table 2 whichever is critical and the Loading Specifications. The intermediate joints shall be sealed with a mastic compound which shall be provided for approval with the shop detail submittal. The Contractor shall furnish, to the Engineer, detail plans and shop drawings showing the proposed precast layout and all other details for manufacture and delivery of any precast items to be incorporated into the work.

SEAL COURSE: A Seal Course shall be constructed below the R.C.B. as shown in the Plans. The Seal Course shall consist of 6" of crushed rock conforming to ASTM C-33, Gradation No. 67, and shall meet all requirements for Portland Cement Concrete Pavement Coarse Aggregate, Section 406.2, City of Wichita Standard Specifications. No reinforcing shall be placed until the Seal Course has gained sufficient strength to permit working upon it without injury.

REINFORCING STEEL: All dimensions relative to reinforcing are to centerline of bars unless otherwise noted. Bar bending and dimensions shall be as shown and noted on the Bar Bending Diagrams. Reinforcing used in the Precast Sections is not required to be epoxy coated. The concrete cover for all reinforcing shall be 1½" minimum unless otherwise noted. A revised bar schedule will be required at shop detail submittal due to shortened box length in Precast Option.

Doweling details between pre-cast and cast-in-place ends must be submitted for approval by the Engineer.



PLAN

Scale" 1"=30'

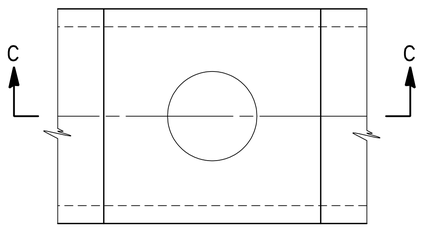
Note: Line 100 bid as "4'-0"x4'-0" R.C. Box".
Line 101 cast-in-place option. See Sheet 109 for precast criteria.

Storm Sewer Designation

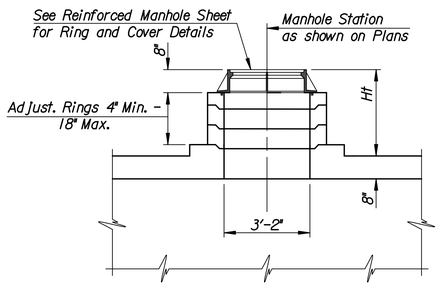
TYPE X MANHOLE

Manhole (101) "Ht" = 2'-9¼"
Manhole (103) "Ht" = 3'-1¾"
Manhole (105) "Ht" = 1'-10¼"

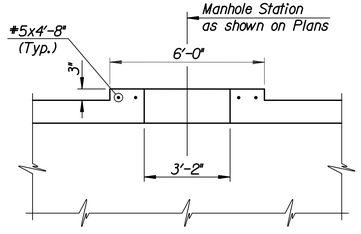
Ht based on Option A. If Option B is used dimension Ht must be field adjusted.



Note: Additional RCB Concrete and reinforcing steel required for Manhole (Type X).



TYPICAL MANHOLE DETAIL



SECTION C-C

(Line 100 Option A) (See Sheet No. 93 for details)

BILL OF MATERIALS (CAST-IN-PLACE)	
Concrete (Grade 4.0) (AE)	301.2 C.Y.
Reinforcing Steel (Epoxy Coated)	31,940 Lbs.
Seal Course (Granular Base)	77.7 C.Y.
Manhole (Type X)	3 Ea.

(Line 100 Option B)

BILL OF MATERIALS (PRECAST OPTION)	
Precast Box (4'-0"x4'-0")	762.4 L.F.
Seal Course (Granular Base)	77.7 C.Y.
Manhole (Type X)	3 Ea.

TABLE OF COORDINATES

REFERENCE	POINT NO.	NORTH COORDINATE	EAST COORDINATE	ELEVATION	STATION	OFFSET
℄ Manhole 107 @ ℄ 4'x4' RCB Line 100 ℄	1	1696320.3196	1686290.9987	1361.40	65+25.00	26.500' Rt.
℄ 4'x4' RCB Line 100 @ Exterior Wall of Manhole 107 ℄	2	1696323.5692	1686290.9532	1361.40	65+28.25	26.500' Rt.
℄ Manhole 105 @ ℄ 4'x4' RCB Line 100 ℄	3	1696482.8036	1686288.7218	1360.98	66+87.50	26.500' Rt.
℄ Manhole 103 @ ℄ 4'x4' RCB Line 100 ℄	4	1696690.2832	1686285.8144	1360.44	68+95.00	26.500' Rt.
℄ 4'x4' RCB Line 100 @ Beginning of Bend ℄	5	1697036.0126	1686280.9697	1359.54	72+40.76	26.500' Rt.
℄ Manhole 101 @ ℄ 4'x4' RCB Line 100 ℄	6	1697042.6707	1686283.9984	1359.51	72+47.38	29.622' Rt.
℄ 4'x4' RCB Line 100 @ Ending of Bend ℄	7	1697045.8848	1686290.5690	1359.50	72+50.50	36.237' Rt.
℄ 4'x4' RCB Line 100 @ End ℄	8	1697046.3718	1686325.3240	1359.40	72+50.50	70.995' Rt.
℄ Headwall (Top) (East Edge)	9	1697049.1776	1686329.2851	1364.89	72+53.25	75.000' Rt.
℄ Headwall Footing ℄	10	1697049.1986	1686330.7849	1359.39	72+53.25	76.495' Rt.
℄ 4'x4' RCB Line 101 @ East End ℄	11	1697051.8712	1686325.2469	1359.40	72+56.00	70.995' Rt.
℄ 4'x4' RCB Line 101 @ Headwall (Top) (West Edge)	12	1697049.8957	1686184.2656	1366.40	72+56.00	70.000' Lt.
℄ 4'x4' RCB Line 101 @ Soil Saver Edge (Top) (West Edge)	13	1697049.7958	1686177.1364	1363.90	72+56.00	77.130' Lt.
℄ 4'x4' RCB Line 101 @ Vertical P.I. (Floor) ℄	14	1697051.1777	1686275.7567	1359.52	72+56.00	21.500' Rt.
℄ 4'x4' RCB Line 101 @ Headwall Footing ℄	15	1697049.8957	1686184.2656	1360.90	72+56.00	70.000' Lt.

No.	Revision	By	Date

GENERAL NOTES AND LAYOUT
STA. 65+25.00 TO STA. 72+56.00

JAMES L. ARMOUR, P.E.-CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-84004

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303 S. TOPEKA • WICHITA, KANSAS 67202
316-262-2691 • FAX 316-262-3003

Designed by	RAS	Job No.	04219
Drawn by	DRP	Date	AUGUST 2005

Sht. 89 of 215

DSNR: RAS OPER: RAS SCALE: 30
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