

SRB

SCALE:
1"=20' PLAN
1"=5' PROFILE (V.)

APPROVED AS NOTED
BY CITY ENGINEER OF WICHITA

Sanitary Sewers _____

Storm Sewers VRH 5/20/97

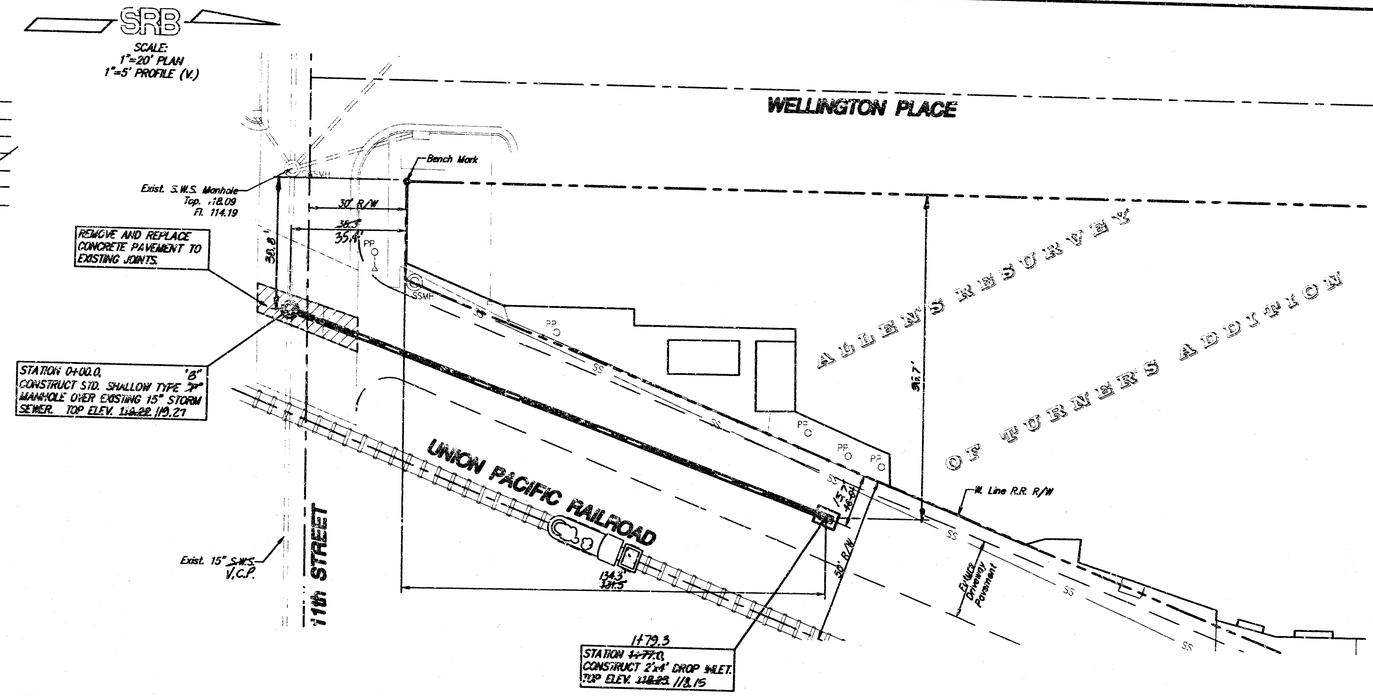
Driveway Approaches _____

Water Mains _____

Paving _____

NOTE TO CONTRACTORS

Inspection and testing for this project are to be provided by a Licensed Consulting Engineering Firm under contract with the Owner/Developer. Said inspection to be in accordance with the City of Wichita standard construction engineering practices and certified by a Licensed Professional Engineer. No work shall be performed in dedicated easements or public right-of-way by the Contractor without such inspection, nor shall any work be commenced without written authorization by the City Engineer.



GENERAL NOTES

1. All work on this project shall conform to the Standard Specifications for Storm Sewer Construction of the City of Wichita.
2. Inserting dimensions are to center of new inlet.
3. All areas within public right-of-way which may be disturbed by Contractor's operations shall be restored in accordance with City of Wichita Administrative Regulation AR-78.
4. The Contractor shall notify Kansas One-Call (688-2470) a minimum of 24 hours prior to any excavation.
5. Traffic on 11th Street to be maintained in one direction at all times.
6. Any roof drain connection to this storm sewer will require a permit from the City of Wichita.
7. Construction within Union Pacific Railroad is permitted under an encroachment agreement with the adjacent property owner. The Contractor will be responsible for notification prior to construction. Contact Keith Davis at 268-9434.

RUNOFF CALCULATIONS:

By Rational Formula:			Q=CIA
Impervious Area			26400 S.F.
Pervious Area			7209 S.F.
D.A. (to storm sewer)			0.77 Acres
$C_{impervious}$			0.95
$C_{pervious}$			0.45
$C_{composite}$			0.84
Assumed time of concentration			10 min.
I_5	5.34 in./hr.	I_{100}	8.54 in./hr.
Q_5	3.5 cfs	Q_{100}	5.5 cfs
Inlet open area			2.56 S.F.
Capacity at 0.3" depth			6.75 cfs

BENCH MARK:

"+" Cut at N.E. Corner 11th and Wellington Place
Elev. 118.10 (City Datum)

BOOKED
9-4-96
MCB
B-119

AS BUILT 5-7-97 TCB

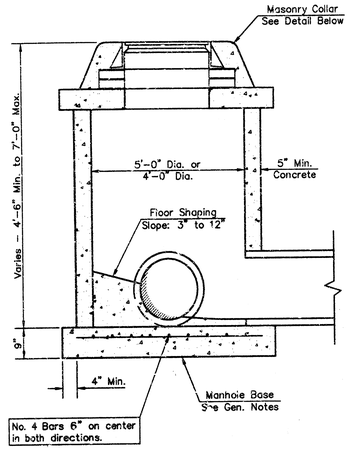
PRIVATE STORM SEWER IN
UNION PACIFIC RAILROAD RIGHT-OF-WAY
NORTH OF 11th STREET, WICHITA, KANSAS

SRB
924 NORTH MAIN
WICHITA, KANSAS 67203
316-264-8005
FAX 264-4621
http://www.kdot.com/~srbeng
e-mail: srbeng@ink.com
SAVOY, RUGGLES & BOHM, P. A.
ENGINEERING & SURVEYING

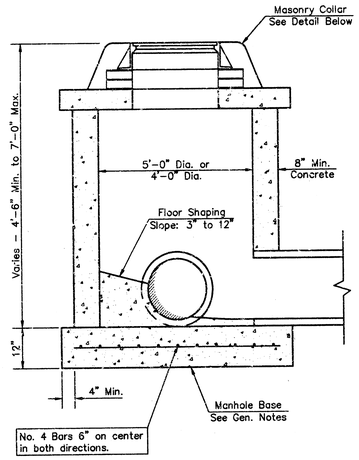
PROJECT NUMBER
714 PPS (607861)

DESIGN	DRAWN	UTILITY	REVISED	DATE	REVISED
T.C.R.	J. Lang			May 12, 1997	

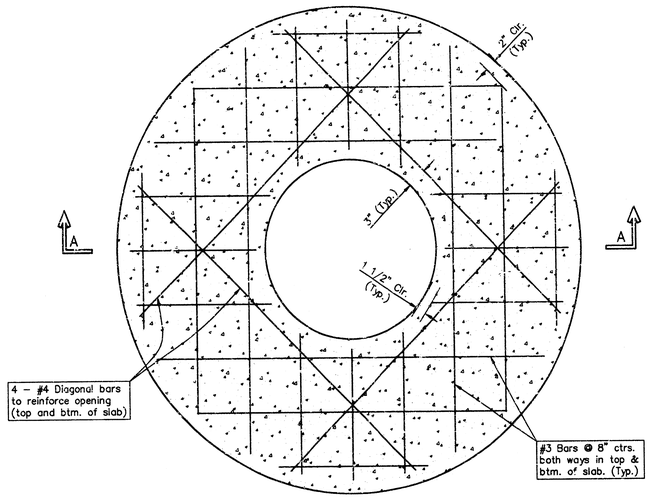
SHEET 1 OF 3



SHALLOW TYPE "P" MANHOLE



SHALLOW TYPE "C" MANHOLE



PLAN

GENERAL NOTES

1. Mortar used in masonry construction shall contain 8 sacks of cement per cubic yard. Concrete used in manhole bases shall conform to the requirements of concrete for concrete pavement construction as specified in the city standard paving specifications using city concrete cement mix without air entraining admixture. Mortar shall be placed around the manhole ring as shown on the drawings when manholes are constructed in unpaved areas. Manholes constructed where pipe sizes are smaller than 24" shall have an inside diameter of 4'. Manholes constructed where pipe sizes are 24" or larger shall have an inside diameter of 5'. Completed manhole shall be without leaks and water tight.

2. Reinforcing steel shall be installed in the manhole bases and shall consist of no. 4 bars placed on 6" centers in both directions. The manhole base reinforcement shall be placed 6" above the bottom of the manhole base. All costs for furnishing and installing reinforcing steel shall be included in the unit price bid for the manhole.

3. The floors of all manholes shall be shaped with flow channels such that the manholes will be self cleaning and free of areas where solids could be deposited as sewage flows through the manhole from all inlet pipes to the outlet pipe. Flow channels shall be formed to match the bottom halves of the inflowing pipes and the outflowing pipe as shown by the drawings. Manhole floors shall have slopes of 3 inches per foot in the areas outside of the flow channels sloped toward the flow channels. Pipes laid through manholes shall have the top half removed to neat lines for the full inside diameter of the manhole. Manhole floors shall then be shaped around the bottom half of the pipe which forms the flow channel.

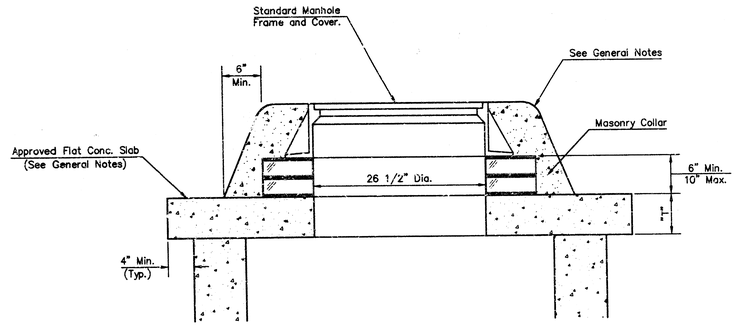
4. Pipes installed within the excavation made for the manhole shall be cradled with concrete to the limits of the manhole excavation. When clay pipe is used, the cradle shall extend to the first joint outside the manhole. The cradle shall be terminated at the clay pipe joint in a manner which will maintain the flexibility of the joint. Cost of cradle within manhole excavation or to clay pipe joints adjacent to manhole shall be included in the unit price bid for the manhole.

5. Manhole cover castings and manhole frame castings shall conform to the requirements as indicated in the standard specifications and as shown in the standard detail drawings.

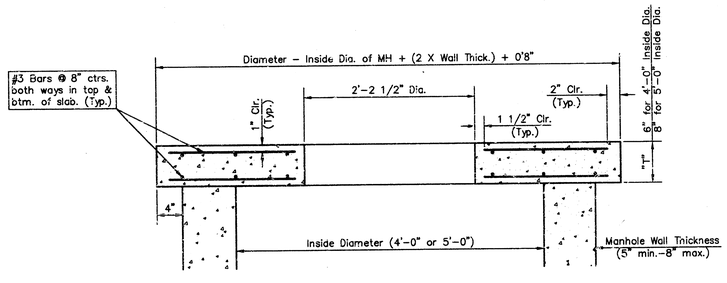
6. The crowns of inflowing pipes shall never be set lower than the crown of the outflowing pipe.

7. Standard shallow manholes type "P" and "C" shall be paid for at the unit price bid per each for the type and diameter indicated. All standard shallow manhole diameters will be 4' unless indicated otherwise.

8. All brick used in manhole construction shall meet Grade SW of ASTM C852 or C62-87.



MASONRY COLLAR DETAIL



SECTION A–A

FLAT CONCRETE SLAB DETAILS

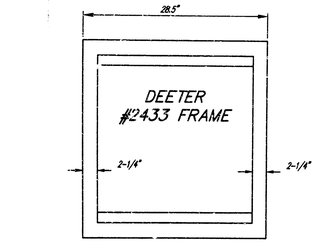
THE CITY OF WICHITA
CITY ENGINEER'S OFFICE
CITY HALL – SEVENTH FLOOR
455 NORTH MAIN STREET
WICHITA, KANSAS 67202
(316) 268-4422
(316) 268-4114 FAX

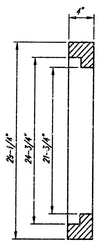
SHALLOW MANHOLES TYPE 'P' AND 'C'

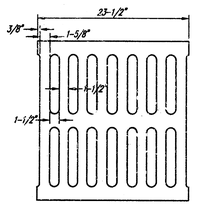
M. E. LINDEBAK P.E. – CITY ENGINEER

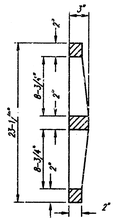
PROJECT NUMBER	INDEX CODE
714 PPS	607861

DATE MAR 96 | SHEET 2 OF 3





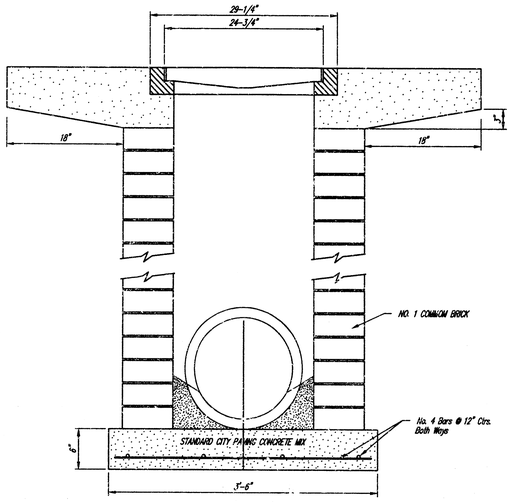


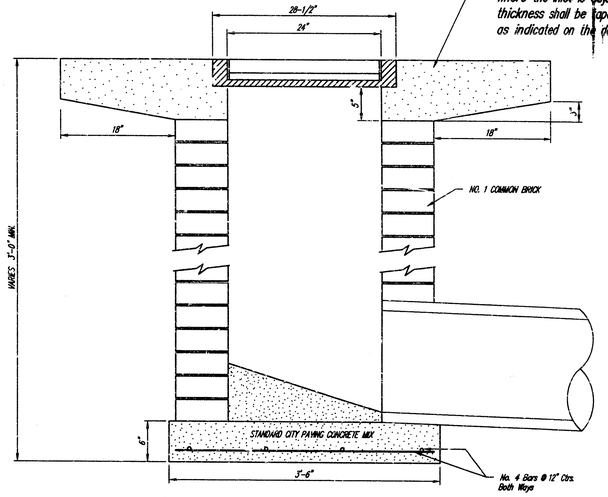


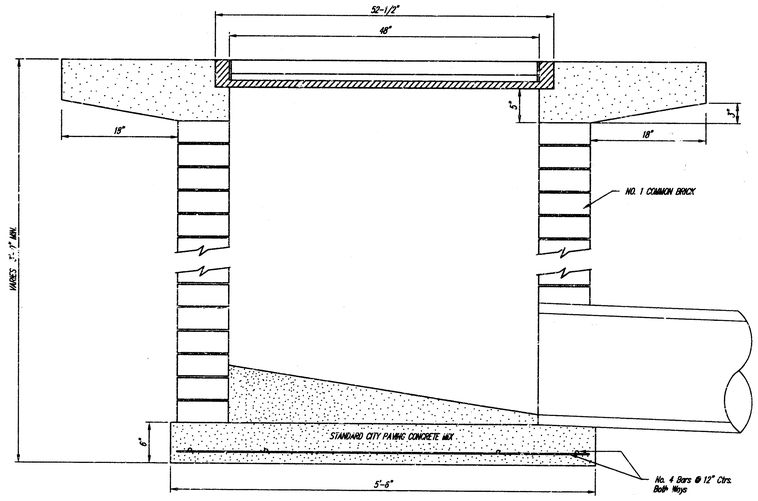
DEETER #2433 GRATE

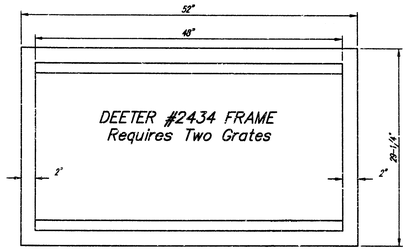
NOTE: Grates shall be imprinted on the top surface with "CITY OF WICHITA" using letters at least 1" in height. Other marking methods may be approved by the engineer.

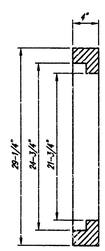
24" x 24" Frame and Grate Detail











Double 24" x 24" Frame Detail

JN 652

THE CITY OF WICHITA

CITY ENGINEER'S OFFICE
CITY HALL – SEVENTH FLOOR
455 NORTH MAIN STREET
WICHITA, KANSAS 67202
(316) 268-4601
(316) 268-4174 FAX

DROP INLET 2'x2' / 2'x4'

M. E. LINDEBAK P.E. – CITY ENGINEER

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DATE 12-23-08 | SHEET 3 OF 3