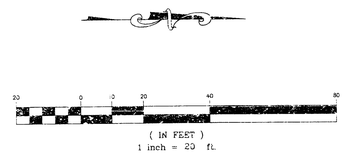
STORM SEWER IMPROVEMENTS TO SERVE

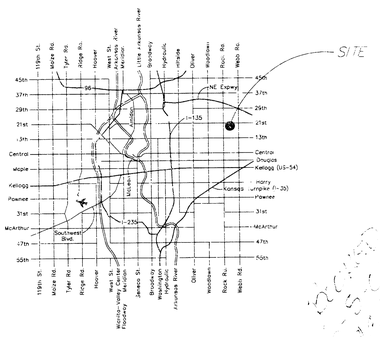
WILSON ESTATES OFFICE PARK

8415 E. 21ST STREET NORTH
LOT 2, BLOCK 1
BRADLEY FAIR 3RD ADDITION
WICHITA, KANSAS

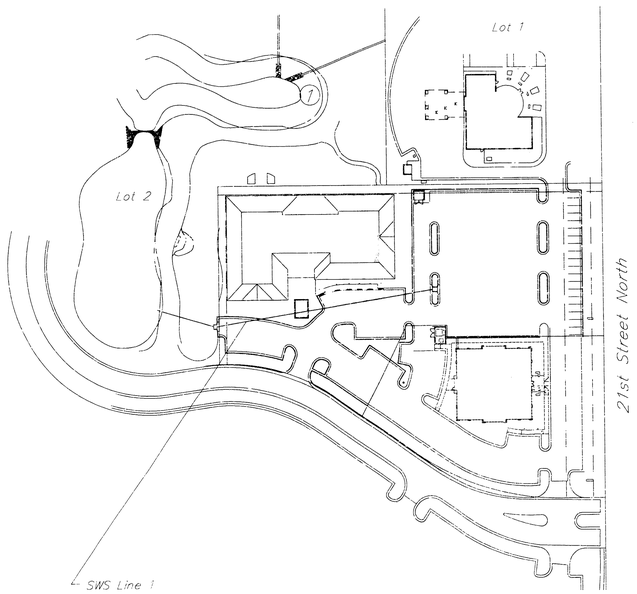
Michael E. Lindebak, P.E., City Engineer

PROJECT NO.: 1147 PPS (607861)





LOCATION MAP



General Notes

1. Contractor will be required to provide notice to utility companies a minimum of twenty-four (24) hours prior to any excavation, as follows:

   Kansas One-Call 687-2470

   The Contractor must notify the following in case of an emergency:

Cablevision	262-4270
or	263-2061
K.P.L. Gas Service Company	263-7511
Kansas Gas & Electric Company	264-1141
Arkla Gas Company	942-8350
or	263-8161
Southwestern Bell Telephone Company	1-571-2611
City of Wichita Water Department	268-4908
City of Wichita Sewer Maintenance	268-4071
Kansas Gas Service	832-3168
or	832-3167

2. All water mains and appurtenances shall be installed in accordance with City of Wichita, Kansas Standard Specifications for Water Main Installations No. 145.33.

3. The water main shall be constructed on the alignment shown by the plans. Trees and shrubs in public right-of-way which are in direct conflict with proposed new construction shall be removed by the Contractor with the Engineer's approval. Trees and shrubs which are not in direct conflict with proposed new construction shall be saved and protected from damage. The cost for any necessary tree trimming, clearing and/or grubbing shall be included in the price bid for the installed water main pipe.

4. Opening and closing of water valves shall be done slowly to prevent damage to the water distribution system from water hammer. All valves closed by the contractor must be reopened as new construction permits. Project inspector must ascertain that any valve closed by the contractor is reopened. Contractor will be permitted to operate water valves only when the project inspector assigned to the project is present.

5. Contractor shall not start work on the project until the project inspector is assigned to the project and is present on the site. Any work done without inspection will be required to be uncovered for inspection.

6. Underground utility service lines and overhead utility pole lines are to be adjusted as necessary by others prior to construction, unless the plans specifically call for their adjustment by the Contractor. Existing utilities and their locations, as shown on the plans, represent the best information obtainable for design. Location information has been obtained from the various utility companies and is either from company record drawings or company-provided field locations. The Contractor will be required to work around existing utilities within the right-of-way which do not conflict with proposed construction.

7. The Contractor shall give all property owners and/or tenants of developed property directly abutting the construction of this project a minimum of ten (10) days notice prior to start of construction.

8. The Contractor shall be responsible for preserving property irons. The Contractor will be required to re-establish any property irons which are damaged or destroyed by his construction operations. Such irons shall be re-established by a licensed land surveyor in accordance with state law.

9. All areas disturbed by construction operations shall be seeded with rye grass at a rate of 300 lbs/acre immediately following construction in that area. Ground shall be prepared per City of Wichita specifications prior to seeding.

APPROVED AS NOTED

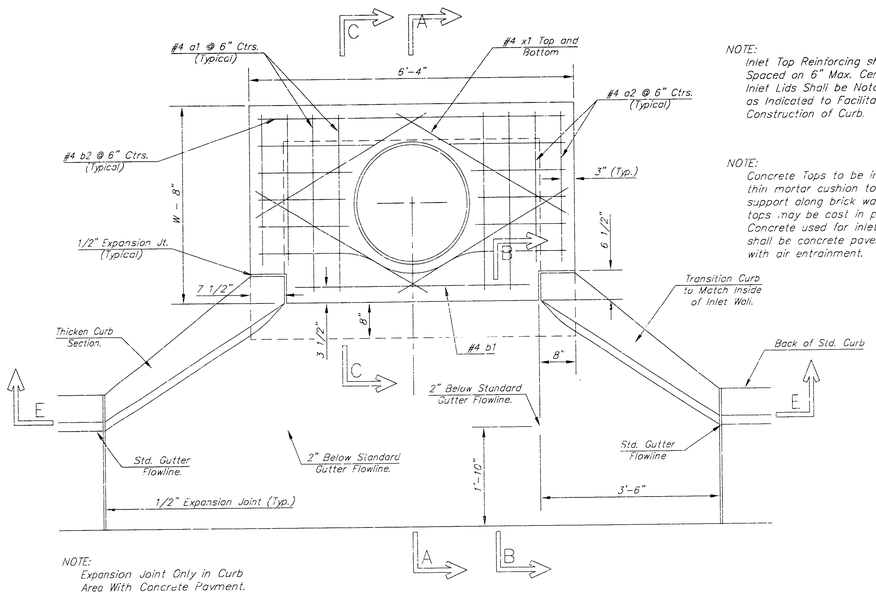
Storm Sewers VRH 8/16/01

NOTE TO CONTRACTORS

Installation, inspection and testing for this project is 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. All Construction and Materials shall comply with the City of Wichita Specifications and Standards (on file and available in the City Engineer's Office).

8/16/01

316 S. Market,
Wichita, KS 67202 316/264-0242

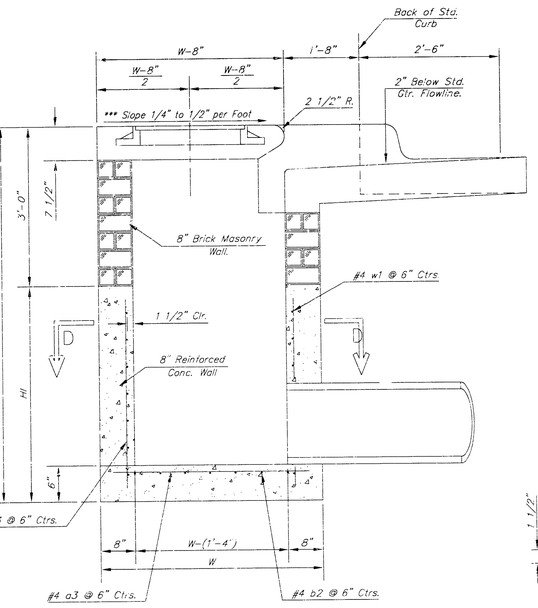


NOTE:
Inlet Top Reinforcing shall be Spaced on 6" Max. Centers. Inlet Lids Shall be Notched Out as Indicated to Facilitate Construction of Curb.

NOTE:
Concrete Tops to be installed on thin mortar cushion to insure full support along brick walls. Concrete tops may be cast in place or precast. Concrete used for inlet construction shall be concrete pavement mix with air entrainment.

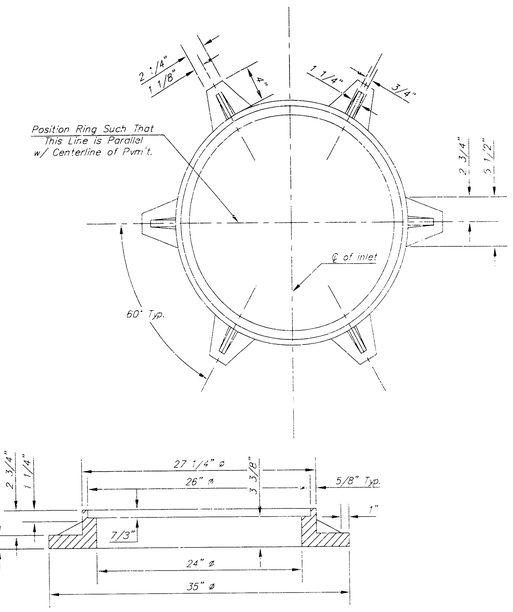
NOTE:
Expansion Joint Only in Curb Area With Concrete Pavement.

PLAN



SECTION A-A

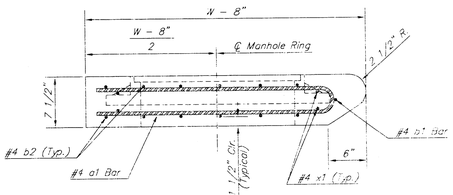
***NOTE: Slope of Inlet tops to Match Sidewalk or Parking Slopes within Limits indicated.



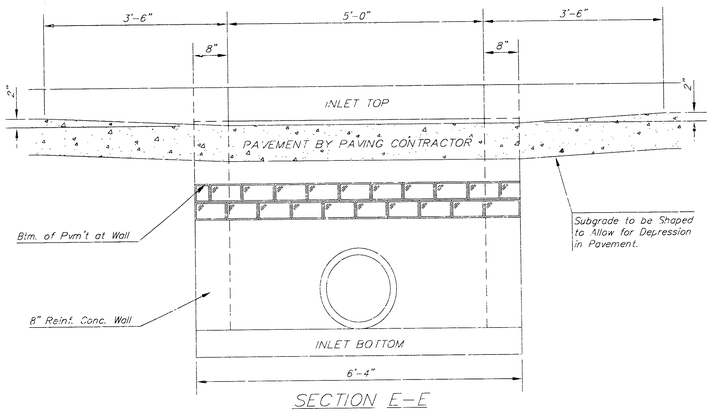
MANHOLE RING AND COVER

Weight = 180 Lbs.

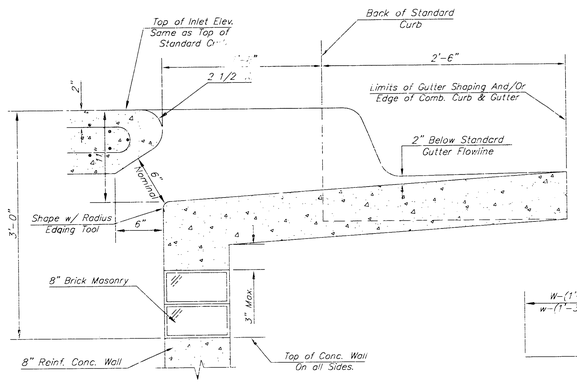
*See City of Wichita Standard Manhole Ring and Cover Detail Sheet for Cover Details to Be Used With Inlet Frame.



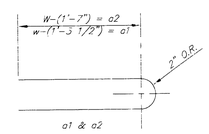
SECTION A-A



SECTION E-E

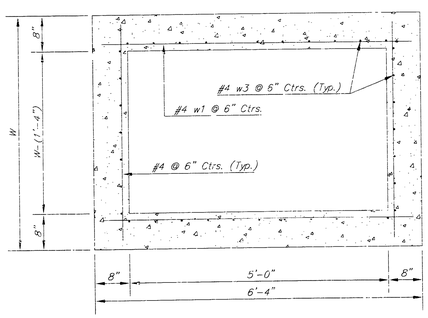


SECTION B-B



BENDING DIAGRAM

STANDARD CURB INLET PRECAST TOPS			
W	PRE-CAST TOP SIZE	PIPE SIZE	CU. YD. CONC.
4'-4"	3'-8" x 6'-4" x 7 1/2"	21" & SMALLER	0.38±
5'-4"	4'-8" x 6'-4" x 7 1/2"	24" & 30"	0.51±
6'-4"	5'-8" x 6'-4" x 7 1/2"	36" & 42"	0.64±
7'-4"	6'-8" x 6'-4" x 7 1/2"	48" & 54"	0.77±
8'-4"	7'-8" x 6'-4" x 7 1/2"	60" & 66"	0.90±



SECTION D-D

NOTE: Contractor shall have the option of constructing 8" brick masonry walls between the concrete inlet base and top on this inlet when W=6'-4" and H=7'-0" or less.

Additional curb and gutter construction necessary to connect set-back inlet to pavement will be paid for at the unit price bid for each inlet hookup.

Inlet invert shall be shaped with 6 sack sand mix concrete to create flow channels and to increase hydraulic efficiency such that the inlet will be self-cleaning between all inlet and/or outlet pipes.

The ends of all pipes installed in inlets shall be cut off flush with the inside face of the inlet wall

PRECAST SLAB AND FLOOR REINFORCING											
		W = 4'-4"		W = 5'-4"		W = 6'-4"		W = 7'-4"		W = 8'-4"	
MARK	SIZE	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH
* a1	#4	6	6'-7"	6	8'-7"	6	10'-7"	6	12'-7"	6	14'-7"
a2	#4	4	6'-0"	4	8'-0"	4	10'-0"	4	12'-0"	4	14'-0"
a3	#4	13	4'-1"	13	5'-1"	13	6'-1"	13	7'-1	13	8'-1"
b1	#4	1	4'-9"	1	4'-9"	1	4'-9"	1	4'-9"	1	4'-9"
* b2	#4	23	6'-1"	29	6'-1"	35	6'-1"	41	6'-1"	47	6'-1"
x1	#4	8	3'-10"	8	4'-2"	8	4'-6"	8	4'-10"	8	5'-2"

WALL REINFORCING											
		W = 4'-4"		W = 5'-4"		W = 6'-4"		W = 7'-4"		W = 8'-4"	
MARK	SIZE	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH
w1	#4	①	6'-1"	①	6'-1"	①	6'-1"	①	6'-1"	①	8'-1"
w2	#4	①	4'-1"	①	5'-1"	①	6'-1"	①	7'-1"	①	8'-1"
w3	#4	32	②	36	②	40	②	44	②	48	②

* Field Bend or Cut Reinforcing as Required for Clearance.
① 4 (Hl - 12") (Hl - 21") Rounded down to nearest 0.5'
② Hl - 3"

THE CITY OF WICHITA
CITY ENGINEER'S OFFICE
CITY HALL - SEVENTH FLOOR
455 NORTH MAIN STREET
WICHITA, KANSAS 67202
(316) 268-4500
(316) 268-4514 FAX

STANDARD TYPE 1-A CURB INLET OPENING = 6" x 5'-0"

M. E. LINDEBAK P.E. - CITY ENGINEER

PROJECT NUMBER	INDEX CODE
XXX-XXXXX	XXXXXX
DATE	SHEET 2 OF 3
JULY 01	

TYP1A-S.DWG

(IN FEET)
1 inch = 20 ft.

BENCHMARK
"V" cut on T/C 360'
South of 21st Street
Elev.=191.55

145.75' to E Line Lot 1, Blk1
Bradley Fair 3rd Add.

124' to E Line
Lot 1, Blk1
Bradley Fair
3rd Addition

557.34' to S R/W of 21st Street

209.98' to S R/W of 21st Street

155°6'

LOT 2

Sta. 0+00 SWS Line 1
1-18" End Section w/ # S.Y.
Heavy Stone Rip-Rap
Fl=~~184.84~~ 185.80

75.00 L.F. 18" RCP

Sta. ~~0+75.00~~ SWS Line 1
B.L. Sta. 16+36.91 547.71' Lt.
1-J' Type 1-A Curb Inlet
(6'-4" x 4'-4")
Top=~~190.63~~ 190.68
Fl (N)=~~185.48~~ 186.51
Fl (S)=~~185.23~~ 186.46

278.42 L.F. 15" RCP

Sta. 3+53.42 SWS Line 1
B.L. Sta. 16+58.99 271.88' Lt.
1-5' Type 1-A Modified Curb Inlet
Inlet openings north & south
(6'-4" x 4'-4")
Top=~~191.25~~ 191.03
Fl (S)=~~186.93~~ 188.60

Existing Grade
Finish Grade

75.00 L.F. 18" RCP @ 0.52%
279.42 L.F. 15" RCP @ 0.52%

200
190
180
170

0 1 2 3 4

New England Financial Wilson Estates Office Park
Storm Sewer Line 1
Wichita, Kansas

PROJECT NUMBER

KEM NO.	FILE	DATE	SHEET
01044	SWS	7/01	3
DESIGN TR	DRAWN KM	REVISED	OF 3

516 S. Market,
Wichita, KS 67202 316/264-0242