SANITARY SEWER IMPROVEMENTS TO SERVE
RIVERSIDE HEALTH SYSTEM ADDITION

Private Project Number
749 PPS (607861)

CITY OF WICHITA, KANSAS
Michael E. Lindebak, P.E. City Engineer

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

2. 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 or unless the plans specifically identify a utility to be adjusted by its owner during construction. Existing utilities and their location, as shown on the plans, represent the best information obtainable for design. The Contractor will be required to work around existing utilities within the right-of-way which do not conflict with proposed construction.

3. 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.

4. The Contractor shall be responsible for maintaining continuous flow of sewage through construction. Contractor's proposed method for maintaining sewage flow shall be approved by the Engineer. Cost of maintaining flow of sewage through construction will not be paid for directly and this cost shall be considered as subsidiary to the other pay items of work.

5. 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 laws.

6. Contractor shall not start work on the project until th 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.

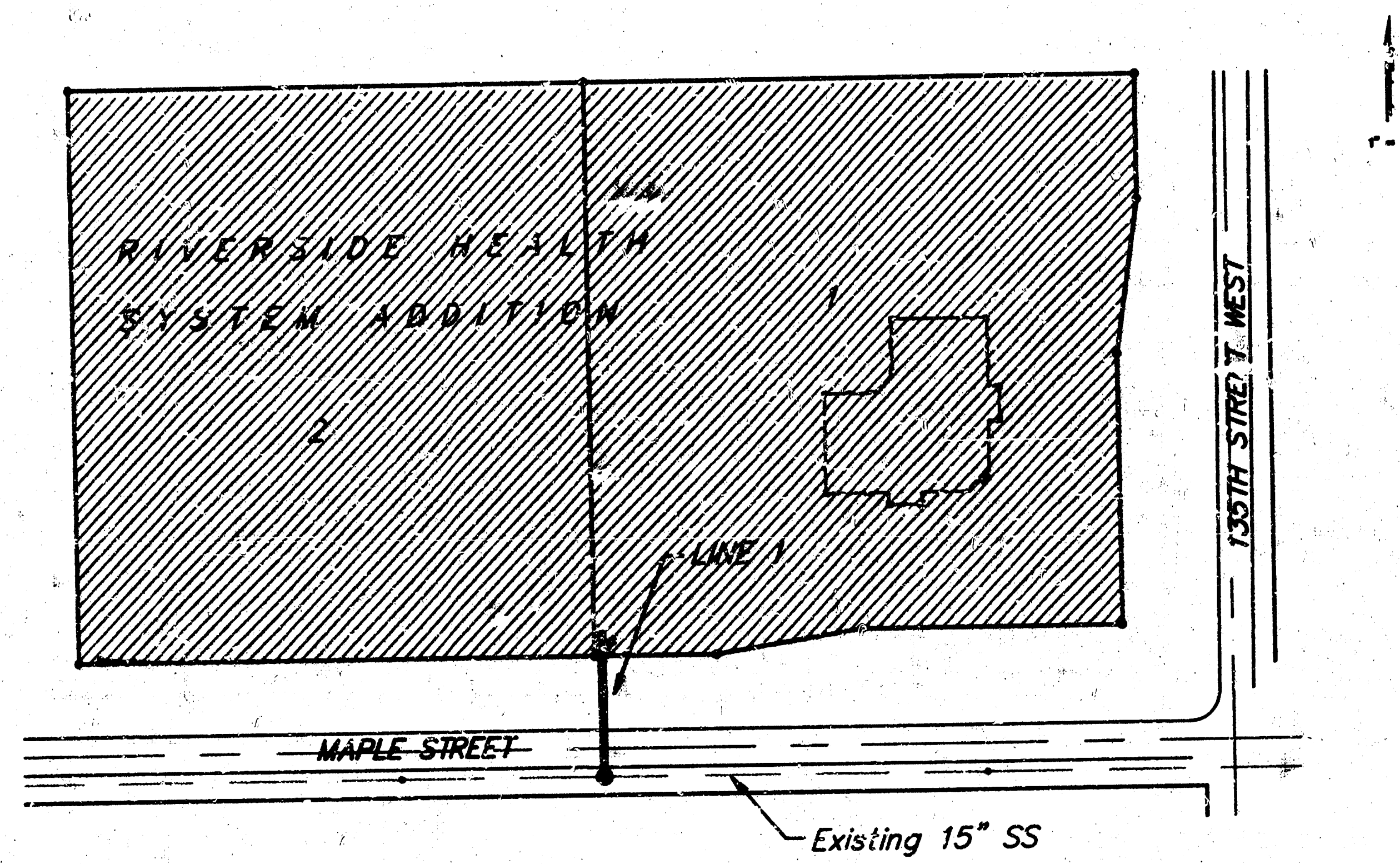
7. Street right-of-way disturbed by construction operations shall be restored per AR-78.

BENCHMARK:

BM #1 City of Wichita Bench Mark Disk
NE Corner of intersection on headwall. 34' SW to iron in Section Corner.
Elevation = 150.20 (City Datum)

INDEX:

1 Title Sheet\Line 1
2 Shallow Manhole Detail



RIVERSIDE HEALTH SYSTEM ADDITION
1
2
LINE 1
MAPLE STREET
135TH STREET WEST
1" = 100'
Existing 15" SS

▨ BENEFIT DISTRICT

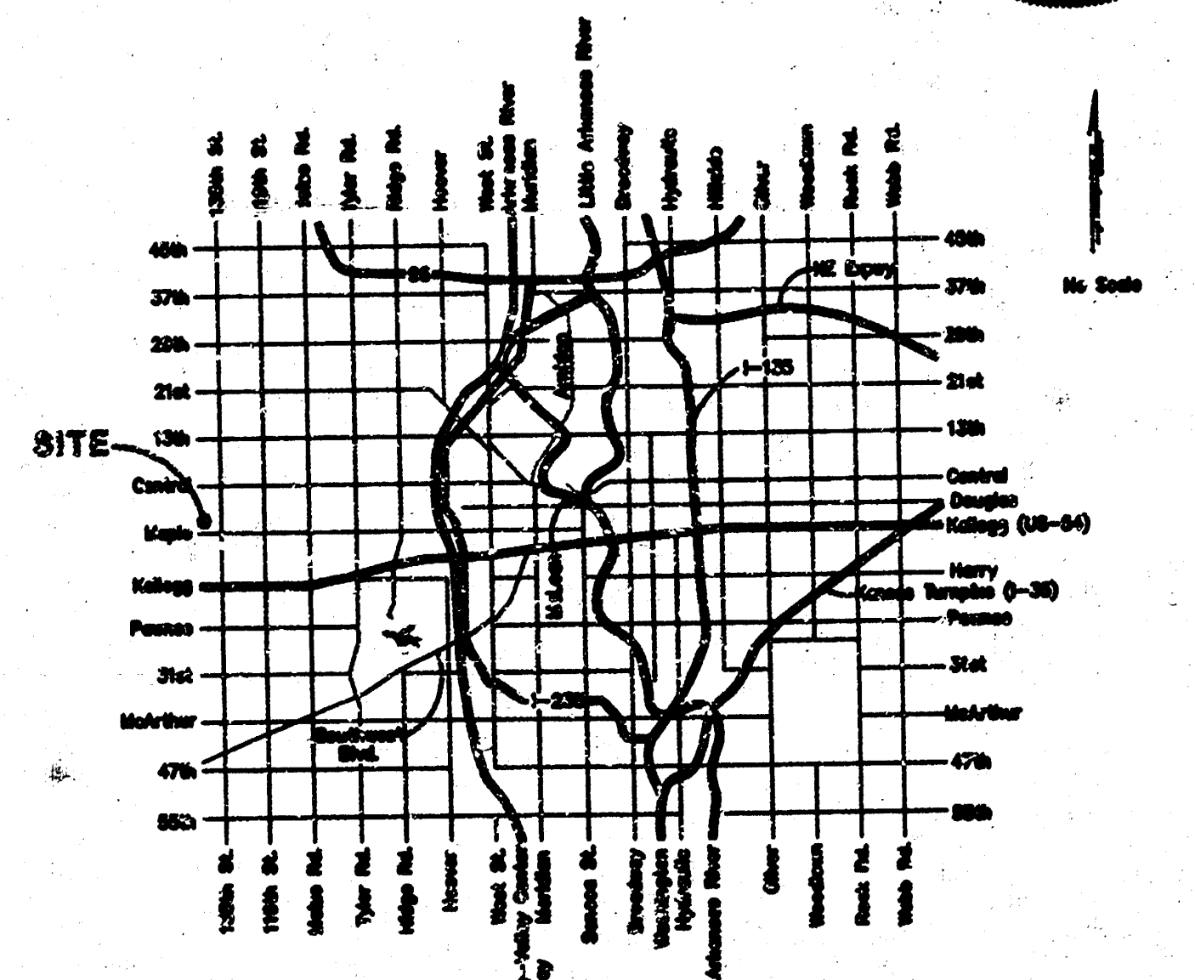
BRIAN LEE PELTIER
13744
10/10/97

APPROVED AS NOTED
BY CITY ENGINEER OF WICHITA

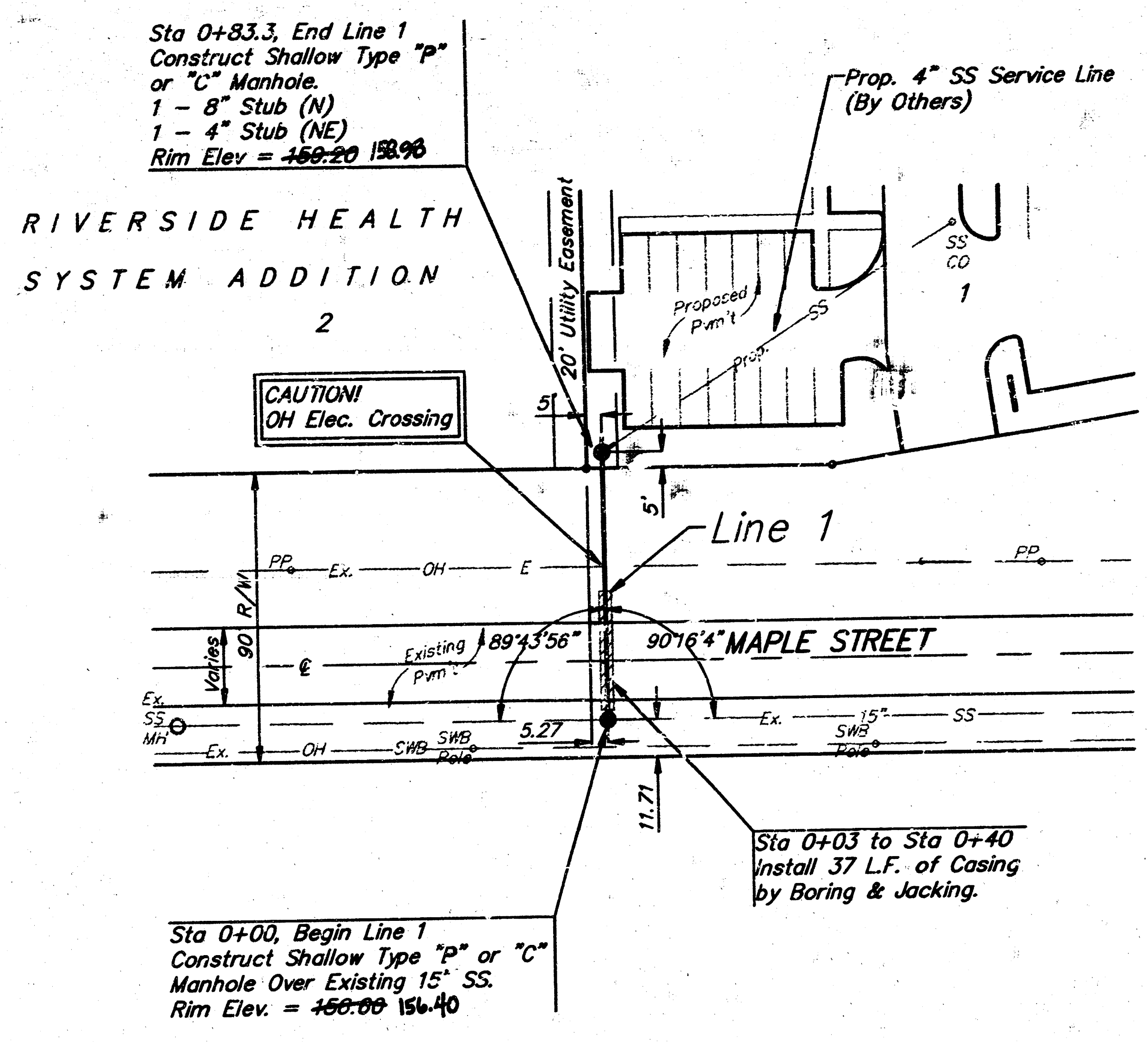
Sanitary Sewers VRH 10/10/97

NOTE TO CONTRACTORS

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).



SITE
No Scale

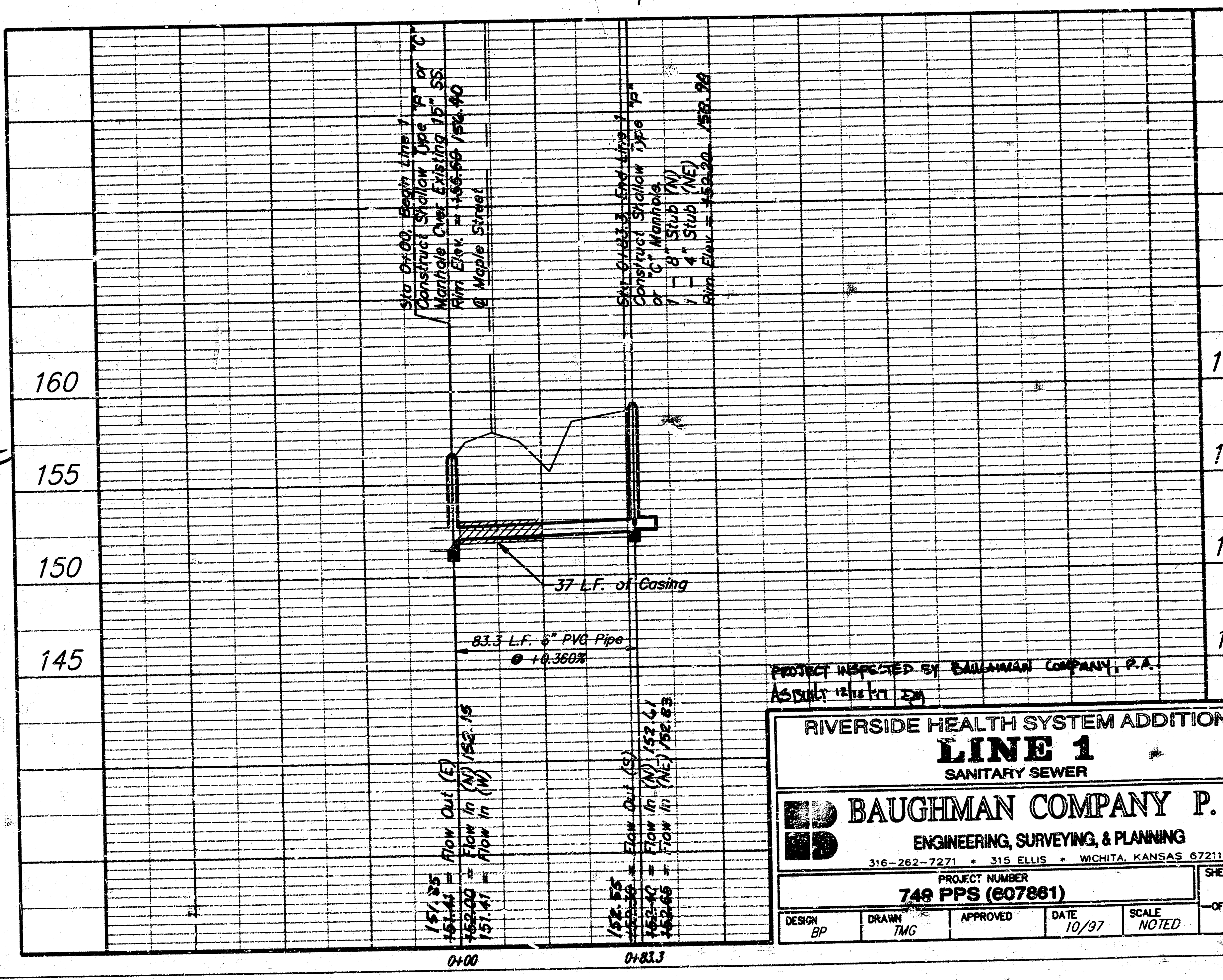


Sta 0+83.3, End Line 1
Construct Shallow Type "P" or "C" Manhole.
1 - 8" Stub (N)
1 - 4" Stub (NE)
Rim Elev = ~~159.20~~ 158.98
RIVERSIDE HEALTH SYSTEM ADDITION
2
1
Prop. 4" SS Service Line (By Others)
20' Utility Easement
Proposed Pvm't
Prop. SS
SS CO
CAUTION! OH Elec. Crossing
5'
5'
Line 1
PP
Ex. OH E
90 R/W
Varies
Existing Pvm't
89°43'56"
90°16'4"
MAPLE STREET
Ex. SS MH
Ex. 15" SS
Ex. OH SWB
SWB Pole
5.27
11.71
Sta 0+03 to Sta 0+40
Install 37 L.F. of Casing by Boring & Jacking.
Sta 0+00, Begin Line 1
Construct Shallow Type "P" or "C" Manhole Over Existing 15" SS.
Rim Elev. = ~~156.00~~ 156.40

Scale: 1" = 40' Horizontal
1" = 5' Vertical
● = Iron

Remove Trees Only as Necessary for Sanitary Sewer Construction. Cost of Removal to be Subsidiary to Bid Item "Site Clearing and Restoration".

Booked
N. 288
1/5/98
RDL



160
155
150
145
Sta 0+00, Begin Line 1
Construct Shallow Type "P" or "C" Manhole Over Existing 15" SS.
Rim Elev. = ~~156.00~~ 156.40
@ Maple Street
Sta 0+83.3, End Line 1
Construct Shallow Type "P" or "C" Manhole.
1 - 8" Stub (N)
1 - 4" Stub (NE)
Rim Elev = ~~159.20~~ 158.98
37 L.F. of Casing
83.3 L.F. 6" PVC Pipe
@ +0.360%
151.85 = Flow Out (E)
151.41 = Flow In (N) 152.15
152.00 = Flow In (W)
151.41
152.55 = Flow Out (S)
152.40 = Flow In (N) 152.41
152.65 = Flow In (NE) 152.83
0+00
0+83.3

PROJECT INSPECTED BY BAUGHMAN COMPANY, P.A.
AS BUILT 12/18/97 EM

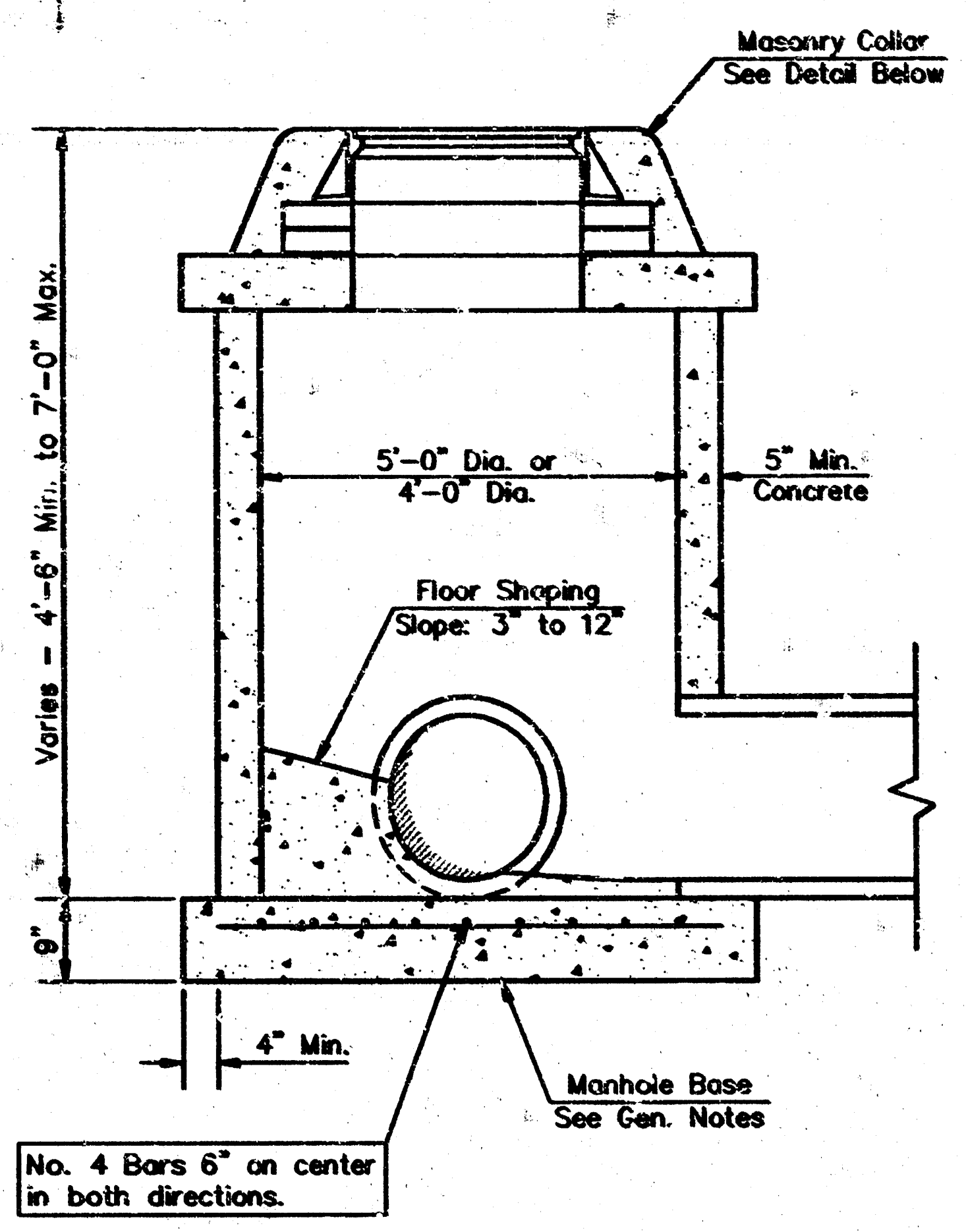
RIVERSIDE HEALTH SYSTEM ADDITION
LINE 1
SANITARY SEWER

BAUGHMAN COMPANY P.A.
ENGINEERING, SURVEYING, & PLANNING
316-262-7271 • 315 ELLIS • WICHITA, KANSAS 67211

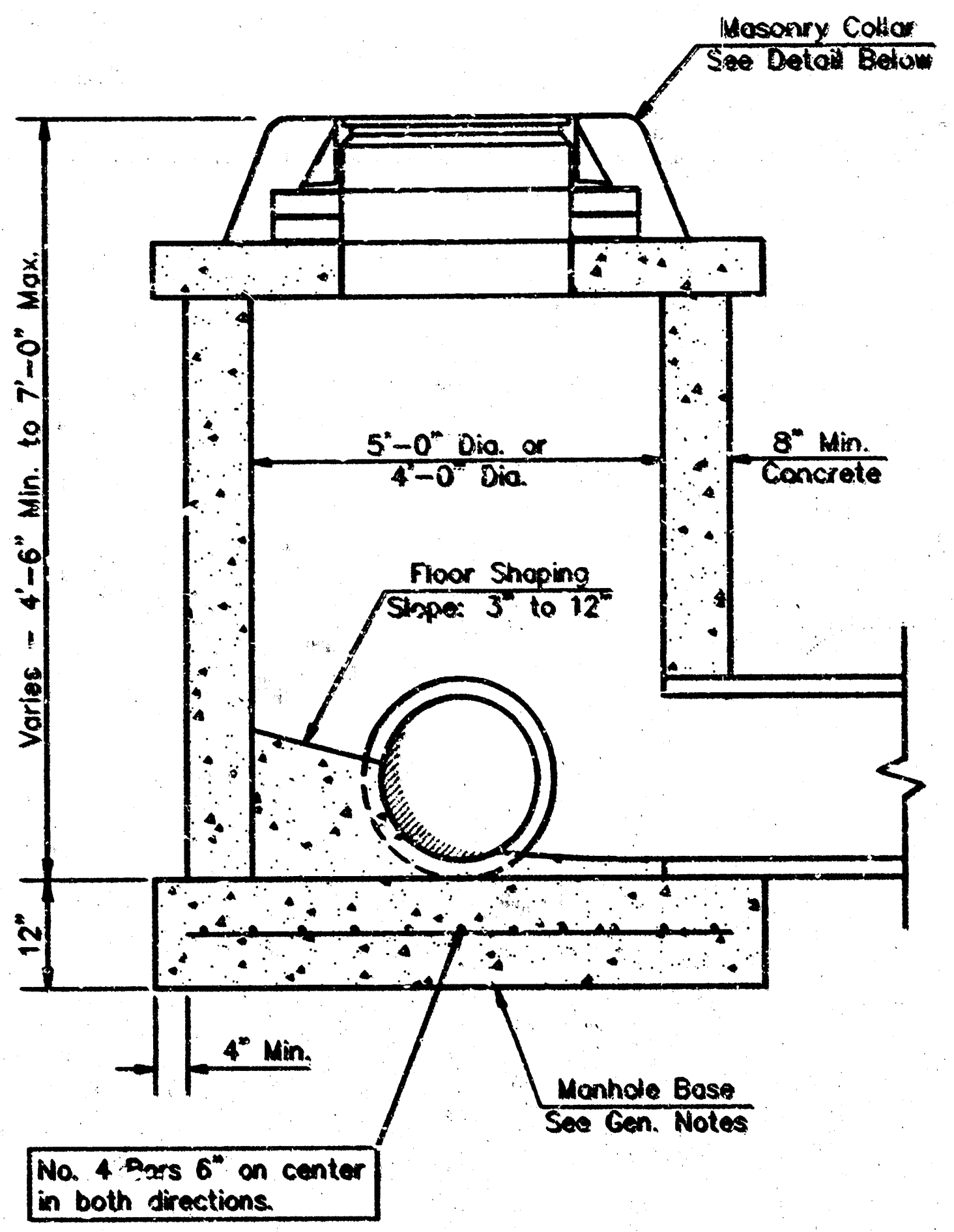
PROJECT NUMBER	SHEET
749 PPS (607861)	1 OF 2

DESIGN	DRAWN	APPROVED	DATE	SCALE
BP	TMG		10/97	NOTED

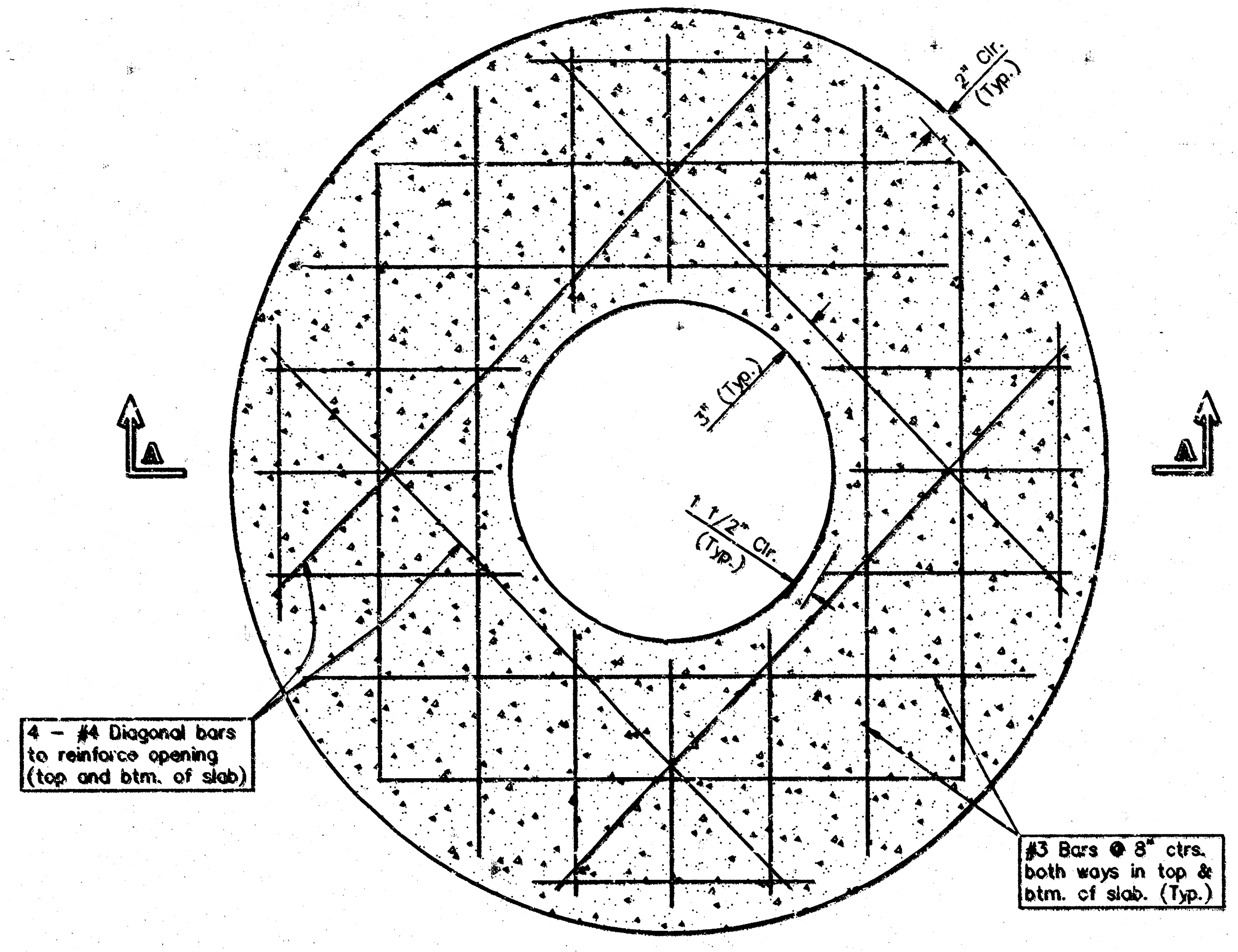
RVRSIDE2\SS1 97-09-E859


Masonry Collar
See Detail Below
Varies - 4'-6" Min. to 7'-0" Max.
5'-0" Dia. or
4'-0" Dia.
5" Min.
Concrete
Floor Shaping
Slope: 3" to 12"
9"
4" Min.
Manhole Base
See Gen. Notes
No. 4 Bars 6" on center
in both directions.

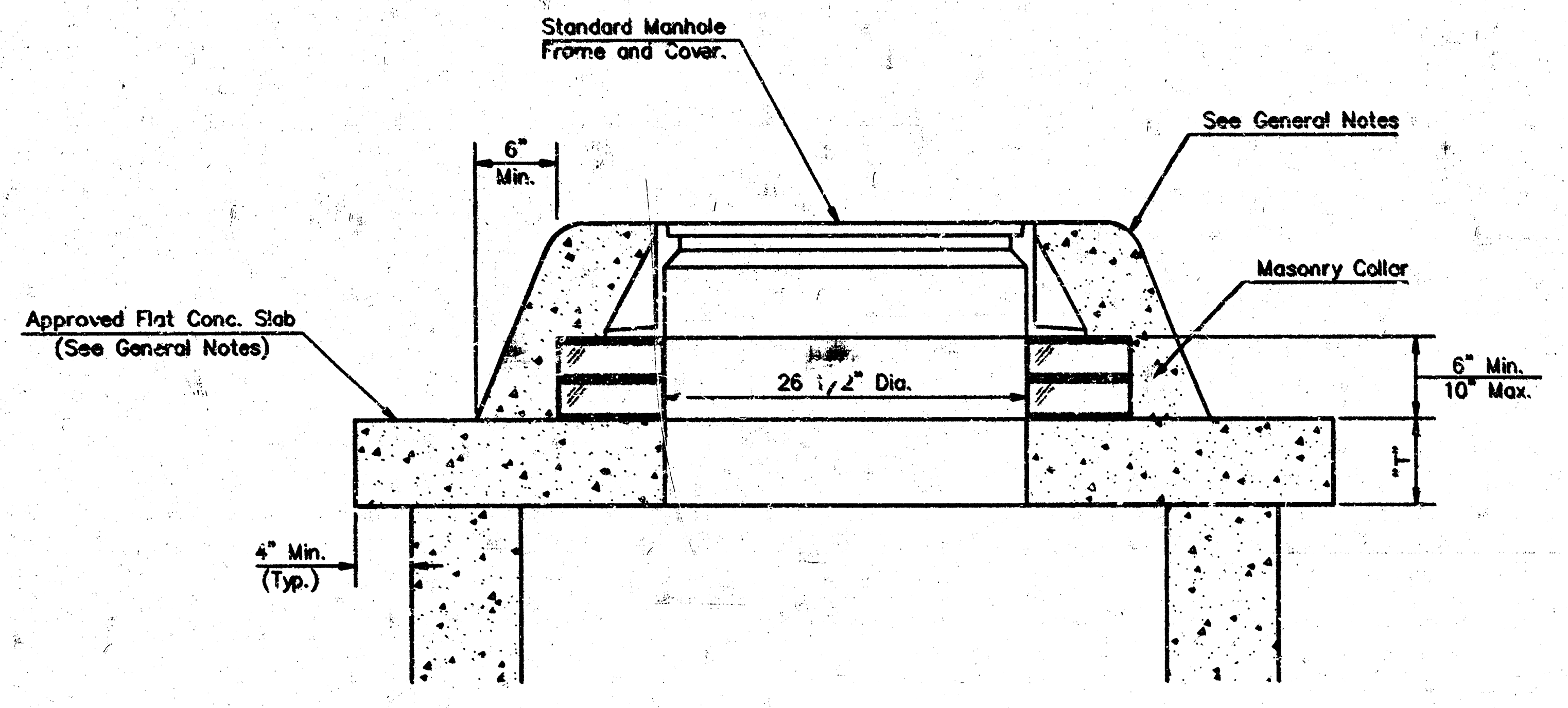
SHALLOW TYPE "P" MANHOLE


Masonry Collar
See Detail Below
Varies - 4'-6" Min. to 7'-0" Max.
5'-0" Dia. or
4'-0" Dia.
8" Min.
Concrete
Floor Shaping
Slope: 3" to 12"
12"
4" Min.
Manhole Base
See Gen. Notes
No. 4 Bars 6" on center
in both directions.

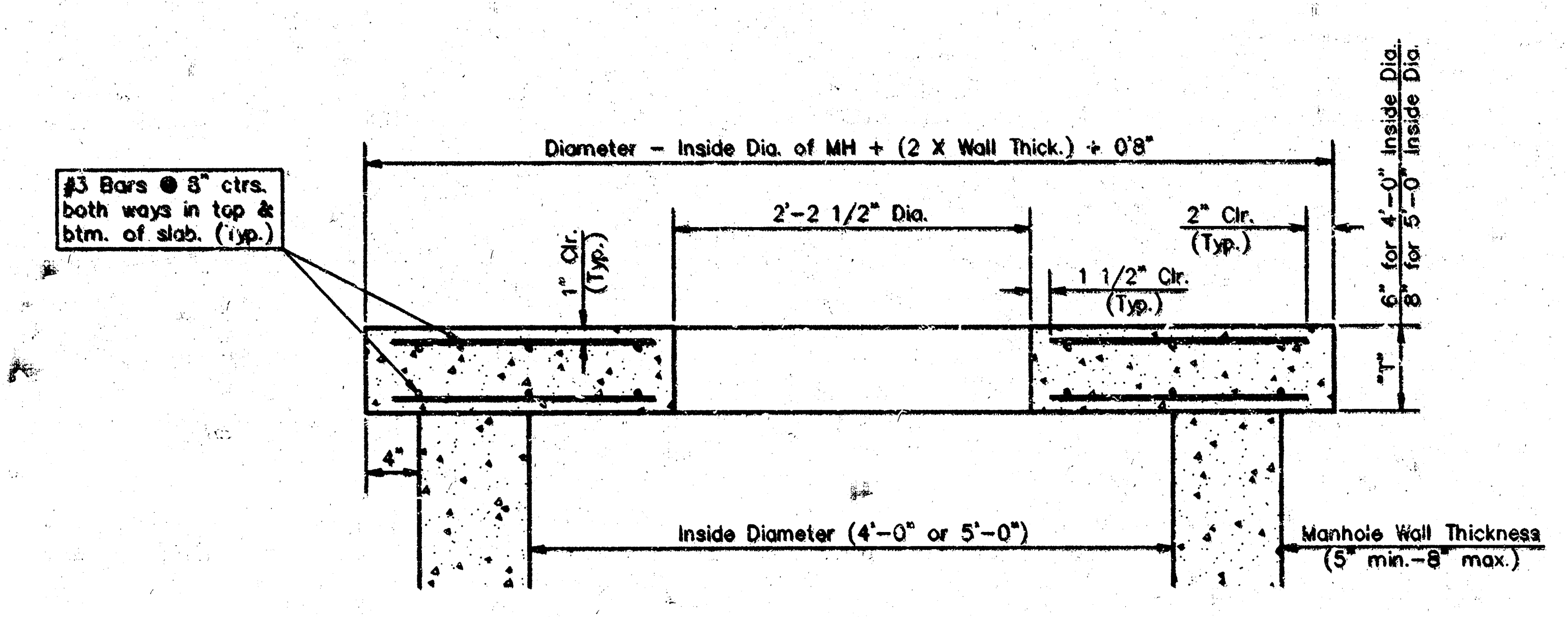
SHALLOW TYPE "C" MANHOLE


2" Clr.
(Typ.)
3" (Typ.)
1 1/2" Clr.
(Typ.)
A
A
4 - #4 Diagonal bars
to reinforce opening
(top and btm. of slab)
#3 Bars @ 8" ctrs.
both ways in top &
btm. of slab. (Typ.)

PLAN


Standard Manhole
Frame and Cover.
See General Notes
6"
Min.
Masonry Collar
Approved Flat Conc. Slab
(See General Notes)
26 1/2" Dia.
6" Min.
10" Max.
"T"
4" Min.
(Typ.)

MASONRY COLLAR DETAIL


Diameter - Inside Dia. of MH + (2 X Wall Thick.) + 0'8"
#3 Bars @ 8" ctrs.
both ways in top &
btm. of slab. (Typ.)
2'-2 1/2" Dia.
1" Clr.
(Typ.)
2" Clr.
(Typ.)
1 1/2" Clr.
(Typ.)
6" for 4'-0" Inside Dia.
8" for 5'-0" Inside Dia.
"T"
4"
Inside Diameter (4'-0" or 5'-0")
Manhole Wall Thickness
(5" min.-8" max.)

SECTION A-A

FLAT CONCRETE SLAB DETAILS

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 C652 or C62-87.

CITY OF WICHITA, KANSAS
STANDARD SHALLOW MANHOLES
TYPE 'P' AND TYPE 'C'

PROJECT NUMBER
97-09-E869

SHEET 2 / OF 2

BAUGHMAN COMPANY P. A.
ENGINEERING & SURVEYING
316/262-7271 • 315 ELLIS • WICHITA, KANSAS 67211

DETAIL\SHLWMH2.DWG

81 20 40 81