STORM WATER SEWER

LARKSFIELD PLACE

PROJECT NO.

468-76-245-31790-000-000-001

CITY OF WICHITA, KANSAS

MICHAEL E. LINDEBAK, CITY ENGINEER

SWS NO. 352

GENERAL NOTES

1. ALL CONCRETE SHALL BE STANDARD PAVING MIX UNLESS OTHERWISE NOTED.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PRESERVING PROPERTY IRONS. THE CONTRACTOR SHALL 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 OR A LICENSED PROFESSIONAL ENGINEER IN ACCORDANCE WITH STATE LAWS.
3. TREES TO BE REMOVED ARE MARKED ⊗. ALL TREES WHICH IN THE OPINION OF THE FIELD ENGINEER CAN BE SAVED, SHALL BE SAVED.
4. CONTRACTOR SHALL NOTIFY THE UTILITY COMPANIES OF CONSTRUCTION SCHEDULING.
5. 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 PLAN LOCATIONS SHOWN ARE NOT GUARANTEED. ADDITIONAL EXISTING UTILITIES MAY ALSO BE ENCOUNTERED.
6. The cost of breaking into and connecting with existing structures and existing pipe is subsidiary to the bid of sewer line.

NOTE: NOTIFY THE FOLLOWING COMPANIES PRIOR TO ANY EXCAVATION:

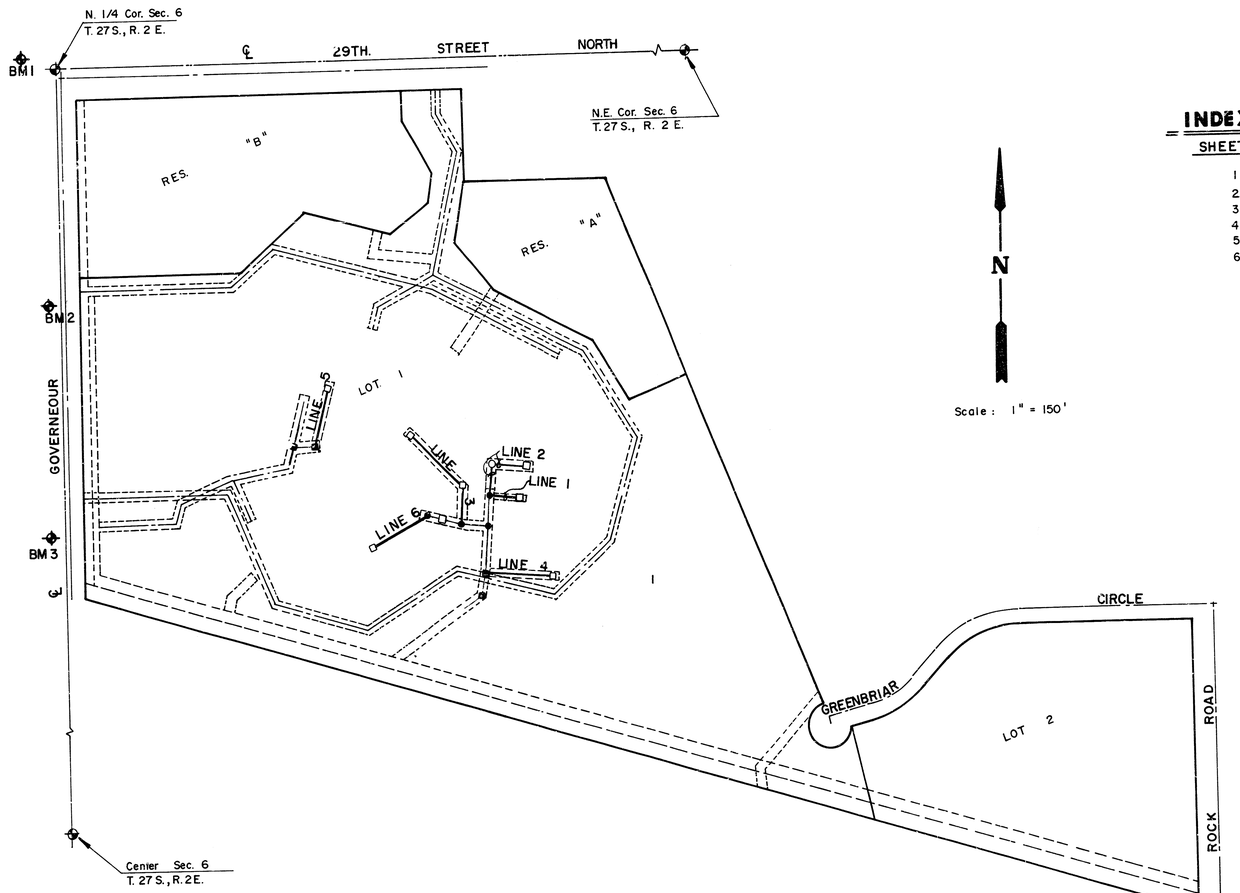
ARKLA GAS COMPANY	942-8350
BELL TELEPHONE COMPANY	1-316-571-2115
CABLEVISION	262-0661
KP&L COMPANY	263-7511
KANSAS GAS & ELECTRIC	264-1141
KANSAS ONE-CALL	1-800-344-7233
CITIES SERVICE	524-0491
KANSAS GAS SUPPLY	1-316-254-7243
CONTINENTAL PIPELINE COMPANY	1-316-681-2081
CO-OP REFINERY PIPELINE	1-316-221-2107

BENCH MARKS

B.M. #1 Governeour & 29th Street North, City of Wichita Bench Mark Disc, 75' West and 30.3' North of Quarter Section Corner 55' North and 85' West of Center Line of Pavement Governeour and 29th Street North. Elevation 182.566

B.M. #2 Railroad Spike in West face of West leg of "H" Pole Structure ± 500' South of 29th Street North on the West side of Governeour. Elevation 187.876

B.M. #3 Railroad Spike in West face of West leg of "H" Pole Structure ± 1,000' South of 29th Street North on the West side of Governeour. Elevation 191.85



N

Scale : 1" = 150'

INDEX TO DRAWINGS

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	LINE 1 & 2
3	LINE 3 & 4
4	LINE 5 & 6
5	DROP INLET DETAILS
6	MANHOLE DETAILS

LEGEND

- Electric
- Gas
- Telephone
- Cable
- Water

SPECIAL NOTE:
Grading & Lime stabilization of areas disturbed by the construction and the regrading required by the installation of these Storm Drains will be done by the Storm Sewer Contractor. The cost of this work shall be considered subsidiary to this project.

Subsequent to the survey and preparation of this plan much ongoing construction activity has and is taking place. It is the contractors responsibility to contact the utility companies for marking of their lines prior to excavation.

LARKSFIELD PLACE

STORM WATER SEWER PLANS

Drawn by RCB
Designed by DLM
Checked by KHB
Date NOV., 1987
SCS NO.

MID-KANSAS ENGINEERING CONSULTANTS PA
3500 NORTH ROCK ROAD
BUILDING 1800
WICHITA, KANSAS 67226
682-6561

1/6

Sheet 1 of 6

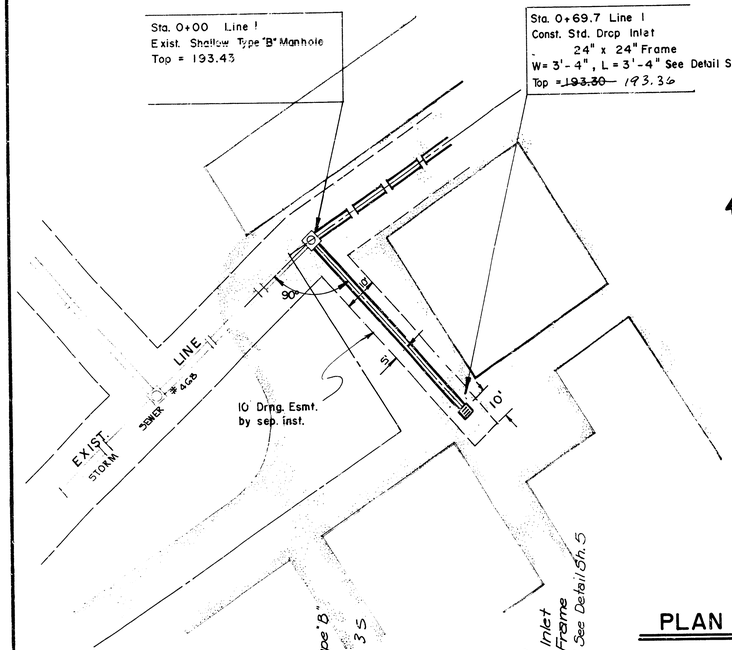
LARKSFIELD PLACE
STORM WATER SEWER
PROJ. NO. 468-76-245-81790-000-000

Sta. 0+00 Line 1
Exist. Shallow Type "B" Manhole
Top = 193.43

Sta. 0+69.7 Line 1
Const. Std. Drop Inlet
24" x 24" Frame
W= 3'-4", L = 3'-4" See Detail Sheet 5
Top = ~~193.30~~ 193.36

N

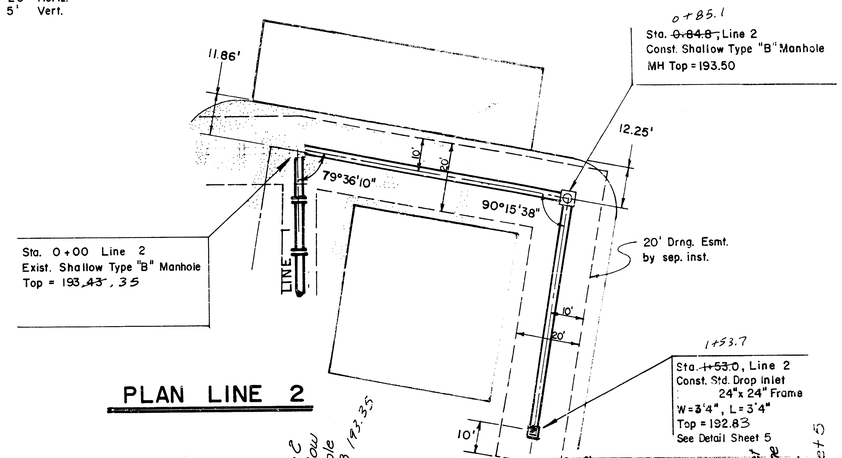
Scale: 1" = 20' Horiz.
1" = 5' Vert.



PLAN LINE 1

N

Scale: 1" = 20' Horiz.
1" = 5' Vert.



0+85.1
Sta. ~~0+84.8~~ Line 2
Const. Shallow Type "B" Manhole
MH Top = 193.50

Sta. 0+00 Line 2
Exist. Shallow Type "B" Manhole
Top = ~~193.43~~ 193.35

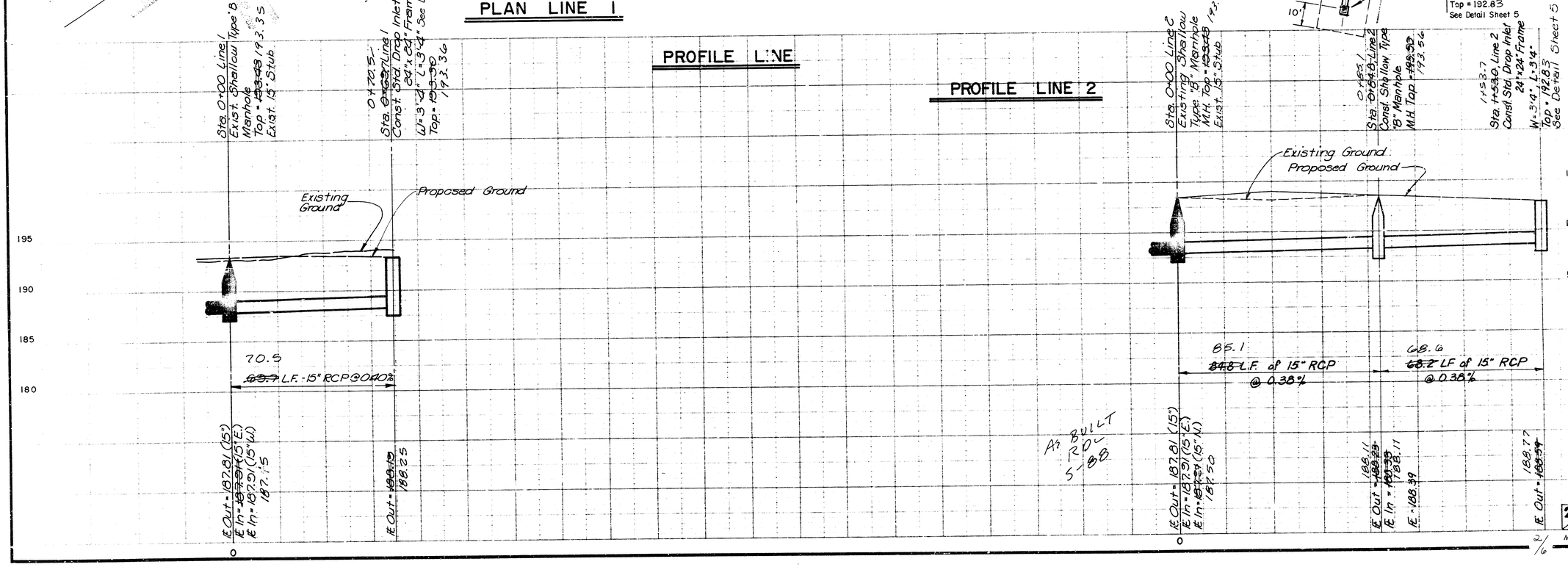
20' Drng. Esmt. by sep. inst.

1+53.7
Sta. ~~1+53.0~~, Line 2
Const. Std. Drop Inlet
24"x 24" Frame
W = ~~3'4"~~, L = 3'4"
Top = 192.83
See Detail Sheet 5

PLAN LINE 2

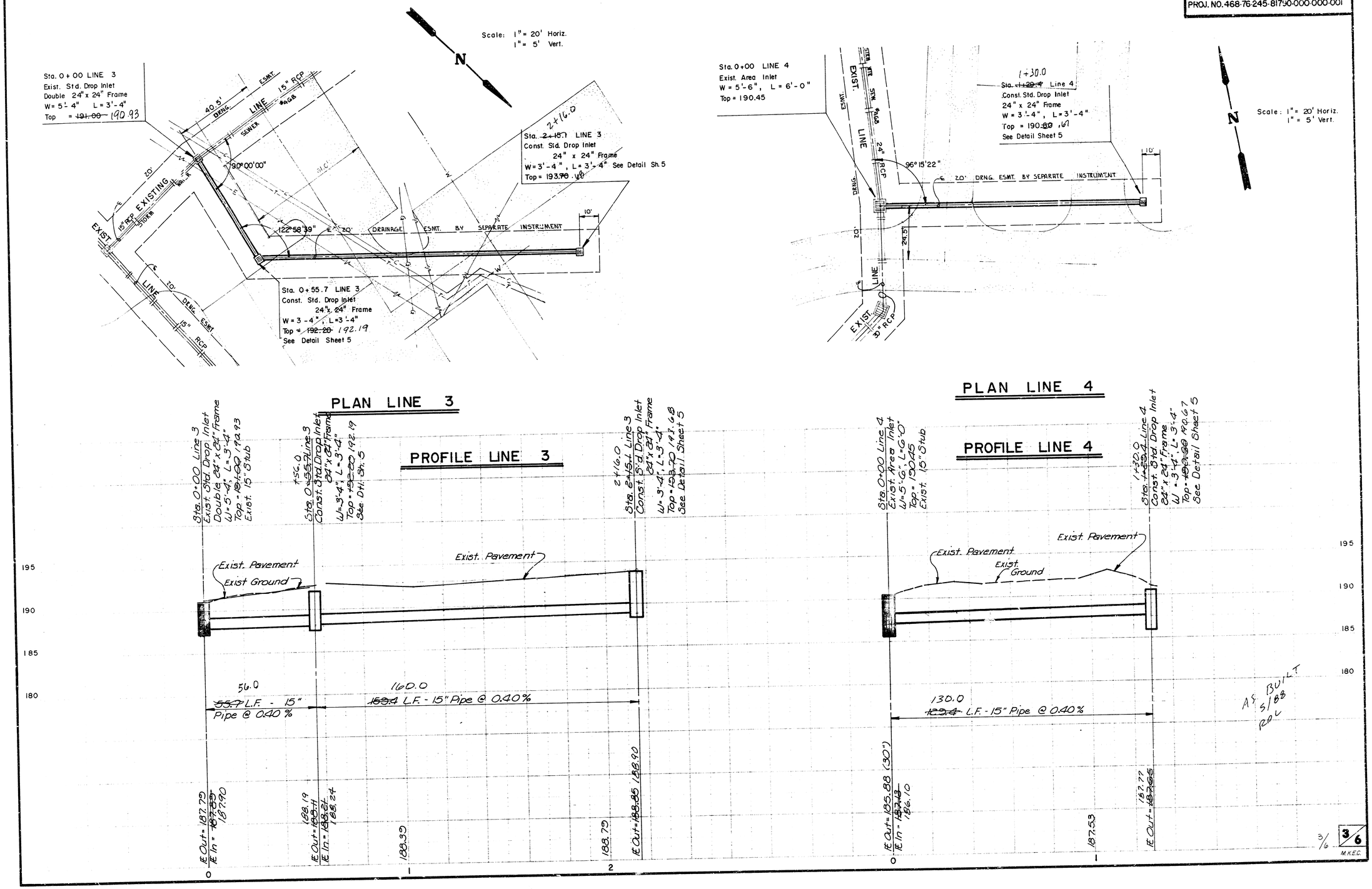
PROFILE LINE

PROFILE LINE 2



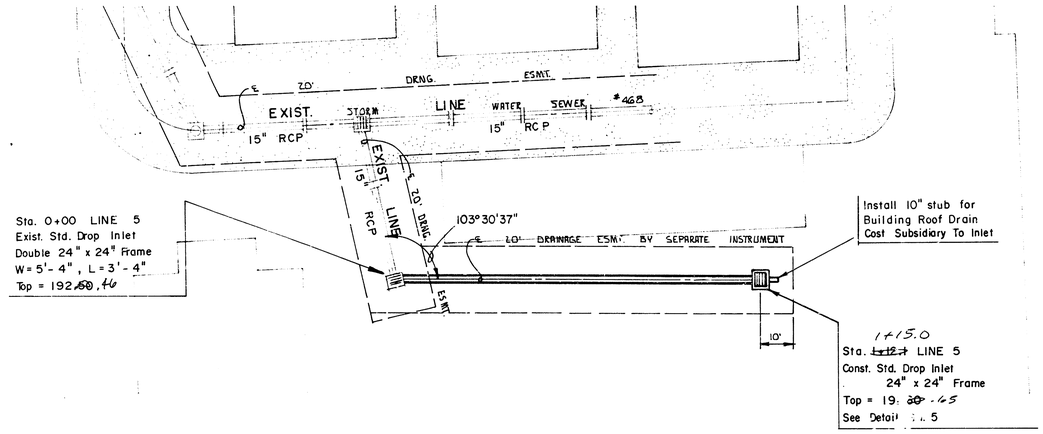
2/6
M.K.E.C.

LARKSFIELD PLACE
STORM WATER SEWER
PROJ. NO. 468-76-245-81790-000-000-001

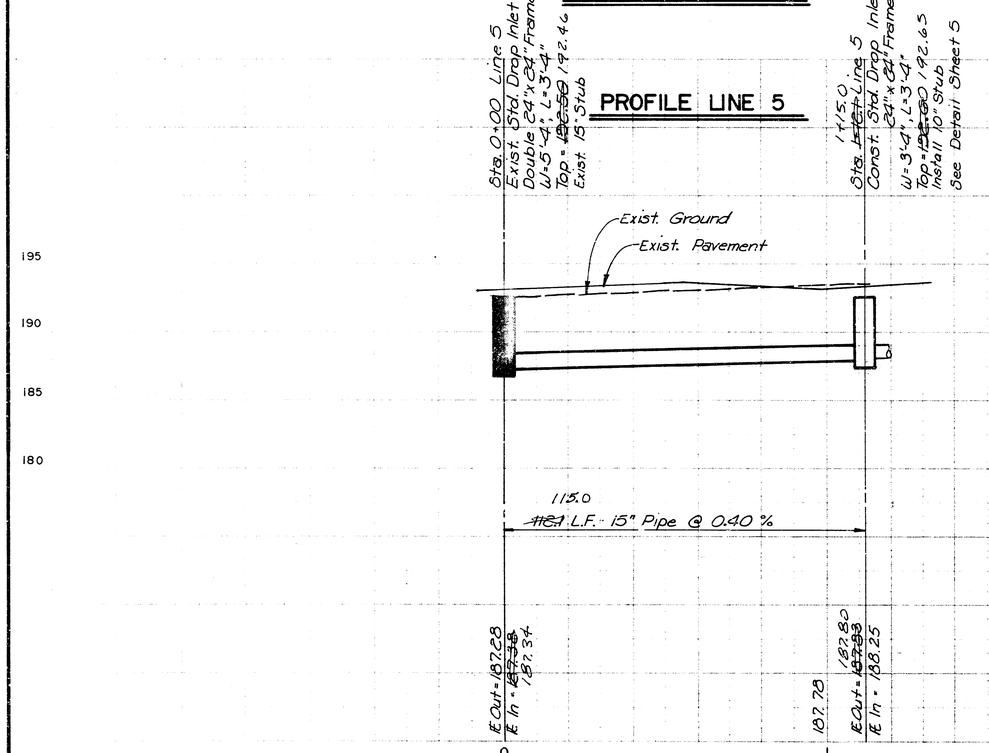


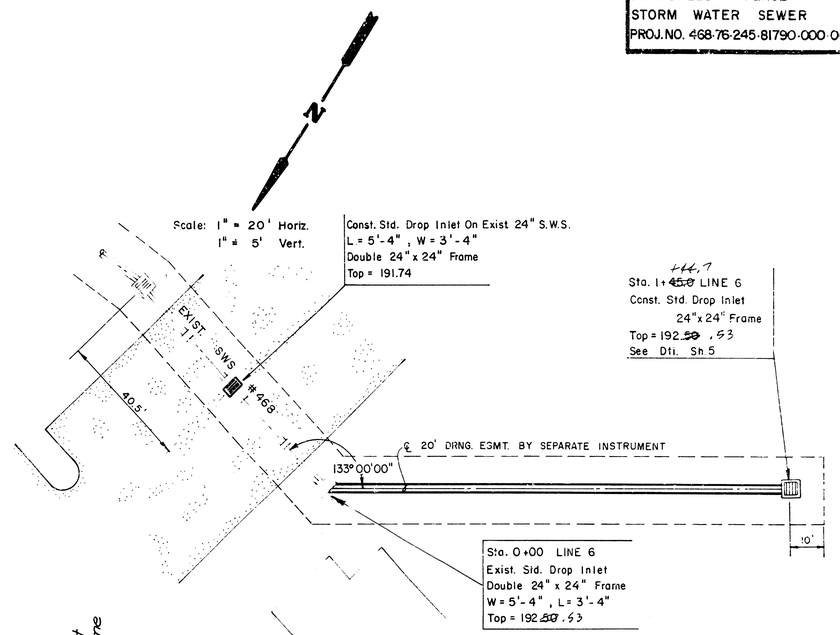
LARKSFIELD PLACE
STORM WATER SEWER
PROJ. NO. 468-76-245-81790-000-000-001

Scale: 1" = 20' Horiz.
1" = 5' Vert.

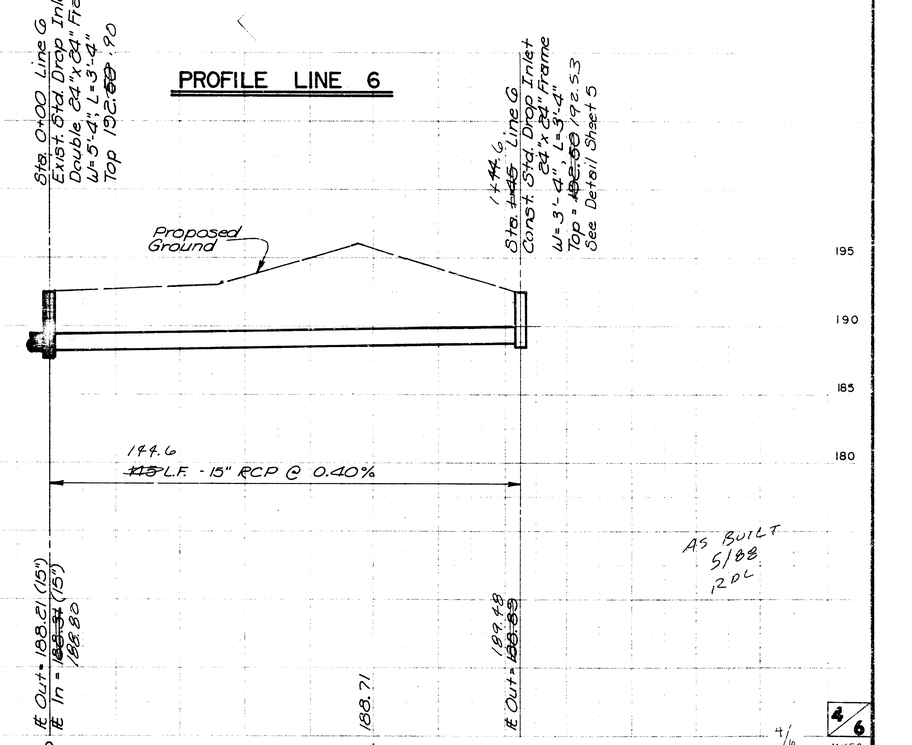


PLAN LINE 5





PROFILE LINE 6



AS BUILT
5/88
J.D.L.

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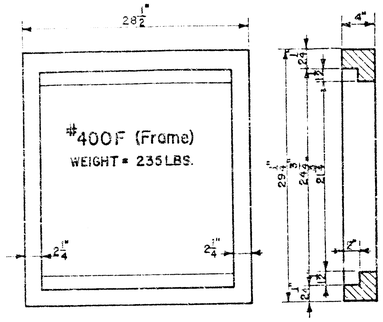
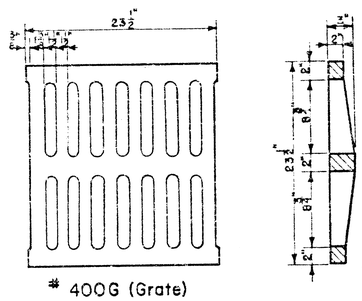
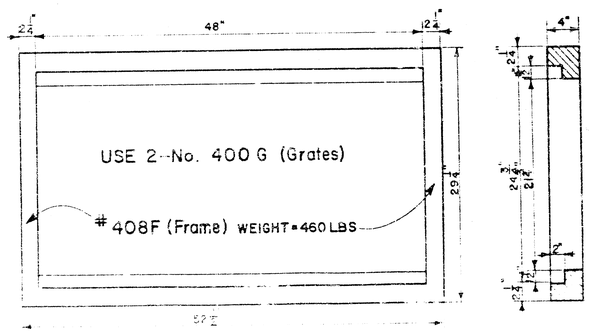
MKEC

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 used only if approved by the [illegible].

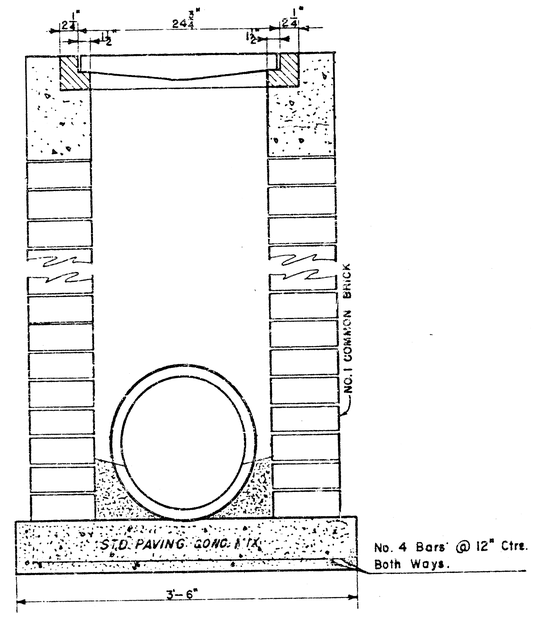


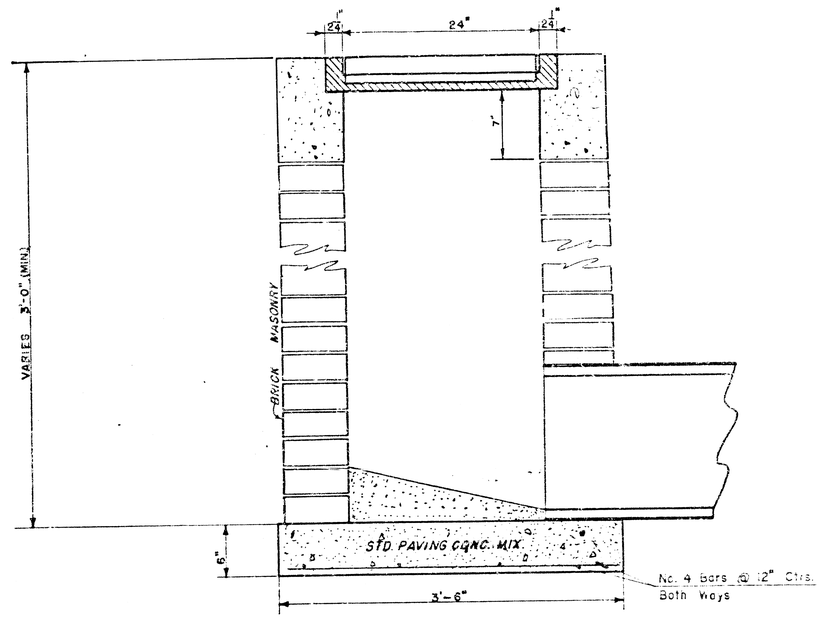


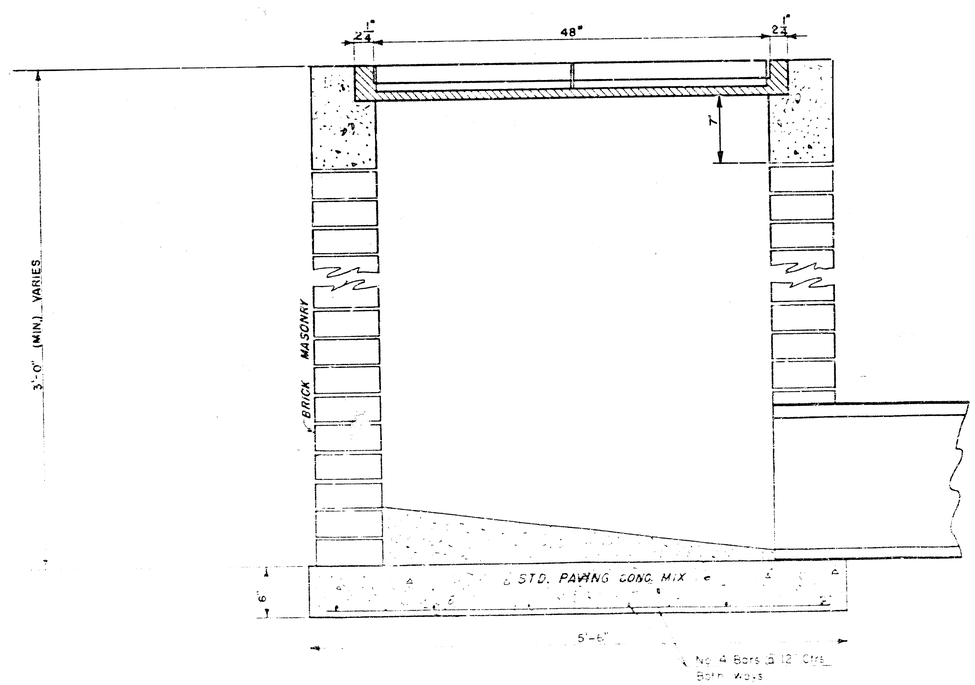
24"x24" Frame & Grate Detail



Double 24"x24" Frame Detail



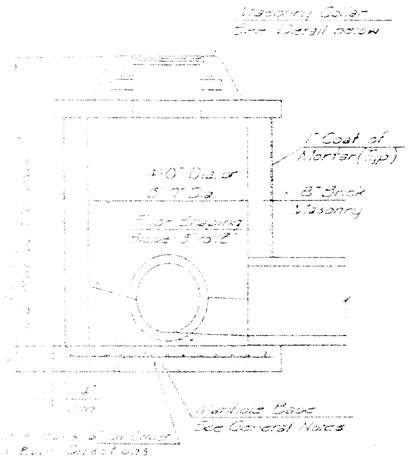




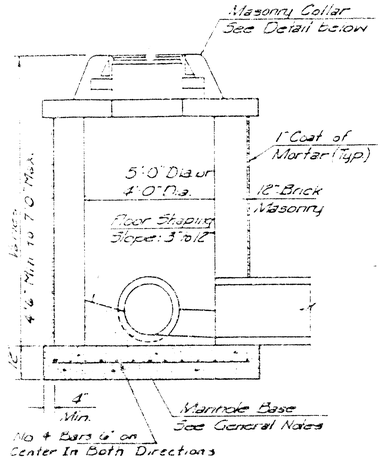
DROP INLET DETAILS

M.E. Lindebak, City Engineer
City of Wichita, Kansas
Project 468-76-245-81790-000-000-001
Project No.
Date
SCALE: 1-½" = 1'-0"

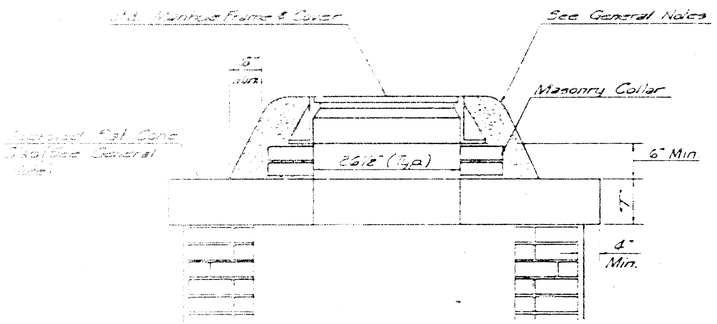
5/6 5 6



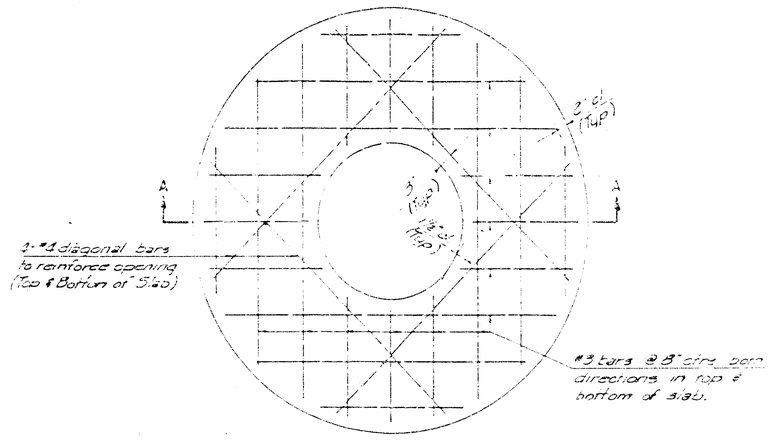
SHALLOW TYPE "A" MANHOLE



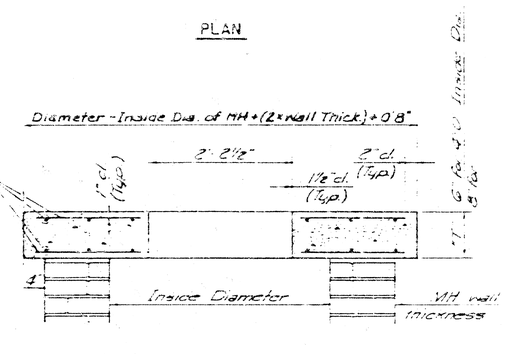
SHALLOW TYPE "B" MANHOLE



MASONRY COLLAR DETAIL

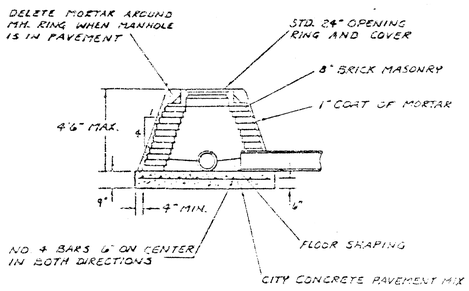


PLAN

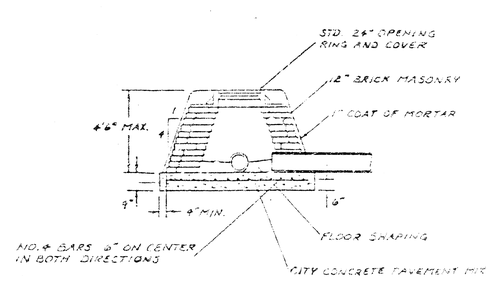


SECTION A-A

FLAT CONCRETE SLAB DETAILS



SPECIAL SHALLOW TYPE 'A' MANHOLE



SPECIAL SHALLOW TYPE 'B' MANHOLE

GENERAL NOTES

1. MORTAR USED IN MASONRY CONSTRUCTION SHALL CONTAIN 1 SACK 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 TYPE I CEMENT AND SIX SACKS WITHOUT AIR ENTRAINING ADMIXTURE. MANHOLE COVERS AND FRAMES SHALL BE MANHOLE RING AS SHOWN ON THE DRAWINGS WITH COVERS AND FRAMES AS SPECIFIED IN UNPAVED AREAS. TYPE "A" SHALLOW MANHOLES SHALL BE USED IN PAVED AREAS WHERE THE MANHOLE IS NOT LOCATED WITHIN FOURTEEN (14) FEET (MEASURED FROM FACE OF CURB). MANHOLES CONSTRUCTED WHERE PIPE SIZES ARE SMALLER THAN 24" SHALL HAVE AN INSIDE DIAMETER OF 4'. MANHOLES CONSTRUCTED WHERE PIPE SIZES ARE 24" TO 42" INCLUSIVE SHALL HAVE AN INSIDE DIAMETER OF 5'. COMPLETED MANHOLE SHALL BE WATERTIGHT WITHOUT LEAKS AND WATER TIGHT.

2. REINFORCING STEEL SHALL BE INSTALLED IN THE MANHOLE BASE AS SHOWN. BASE SHALL CONSIST OF NO. 4 BARS PLACED ON 6" CENTERS, EACH WAY, BOTH DIRECTIONS. THE MANHOLE BASE REINFORCEMENT SHALL BE PLACED 3" FROM 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 SOLIDS WHERE SOLIDS SHALL BE DEPOSITED AS SEWAGE FLOWS THROUGH THE MANHOLE FROM ALL INLET PIPES TO THE OUTLET PIPE. FLOW CHANNELS SHALL BE FORMED 3 INCHES IN BOTTOM VALVES OF THE INFLOWING PIPES AND THE OUTFLOWING PIPE AND SHALL BE SMOOTH AND UNIFORM. 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 AT JOINT LINES FOR THE FULL INSIDE DIAMETER OF THE MANHOLE. MANHOLE FLOORS SHALL THEN BE SHAPED AROUND THE BOTTOM HALF OF THE PIPE WITH SLOPES OF 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 OUTSIDE 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 "A" AND "B" SHALL BE PAID FOR AT THE UNIT PRICE BID PER EACH FOR THE TYPE AND DIAMETER INDICATED. STANDARD SPECIAL SHALLOW MANHOLES TYPE "A" AND "B" SHALL BE PAID FOR AT THE UNIT PRICE BID PER EACH FOR THE TYPE INDICATED. ALL STANDARD SHALLOW MANHOLE DIAMETERS WILL BE 4' UNLESS INDICATED OTHERWISE.

CITY OF WICHITA, KANSAS
STANDARD SHALLOW MANHOLES
TYPE 'A' AND TYPE 'B'

6/6

PROJ. NO. 468-10725

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