STORM SEWER PLANS FOR

STAR LUMBER

PROJECT NO. 412 PPS

CITY OF WICHITA, KANSAS

MICHAEL E. LINDEBAK, CITY ENGINEER

INDEX NO. 607861

SEPTEMBER 1993

GENERAL NOTES

1. THE TOPS OF INLETS AND MANHOLES AS NOTED ON THE PLANS MAY VARY SO AS TO MEET PROPOSED TOP OF CURB ELEVATIONS OR PAVEMENT ELEVATIONS. THE FIELD ENGINEER SHALL LOCATE INLETS AND MANHOLES WITH REFERENCE TO PROPOSED PAVING PLANS OF THE PERTINENT STREETS.

2. ALL CONCRETE SHALL BE STANDARD C.O.W. PAVING MIX UNLESS OTHERWISE NOTED.

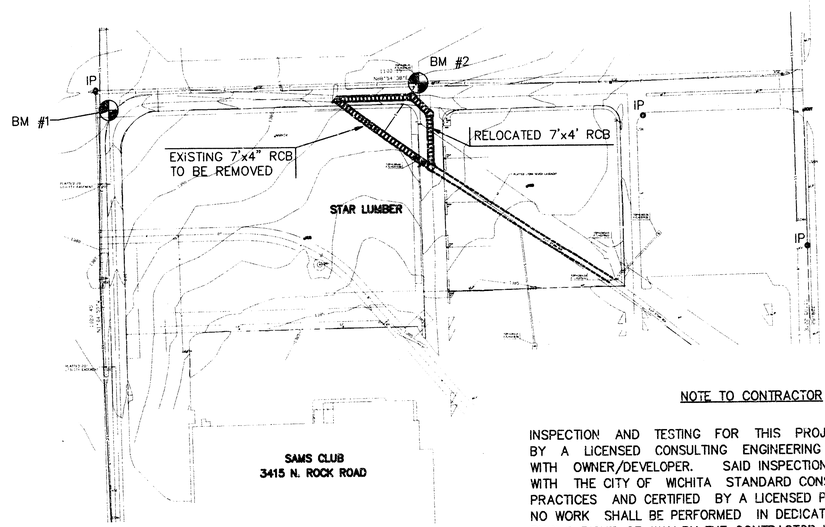
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PRESERVING PROPERTY IRONS. THE CONTRACTOR SHALL BE REQUIRED TO RE-ESTABLISH ANY PROPERTY IRONS WHICH ARE DAMAGED OR DESTROYED BY HIS CONSTRUCTION OPERATIONS. SUCH IRONS SHALL BE RE-ESTABLISHED BY A LICENSED LAND SURVEYOR IN ACCORDANCE WITH STATE LAWS.

4. EXISTING UTILITIES AND THEIR LOCATIONS, AS SHOWN ON THE PLANS REPRESENT THE BEST INFORMATION OBTAINABLE FOR DESIGN. LOCATION INFORMATION INFORMATION HAS BEEN OBTAINED FROM THE VARIOUS COMPANIES AND IS EITHER FROM COMPANY UTILITY DRAWINGS OR COMPANY PROVIDED FIELD LOCATIONS. THE PLAN LOCATIONS SHOWN ARE NOT GUARANTEED. ADDITIONAL EXISTING UTILITIES MAY ALSO BE ENCOUNTERED.

5. CONTRACTOR WILL BE REQUIRED TO PROVIDE A MINIMUM ADVANCE NOTICE OF FORTY-EIGHT (48) HOURS TO UTILITY COMPANIES PRIOR TO STARTING ANY EXCAVATION AS FOLLOWS:

KANSAS ONE-CALL	1-800-344-7233 OR 687-2470 (LOCAL WICHITA)
SOUTHWESTERN BELL TELEPHONE COMPANY	1-571-2115
CABLEVISION	262-0661
KG&E (GAS DIST.)	832-3169 OR 3180
KG&E (ELECTRIC)	264-1141
CITY OF WICHITA WATER & SEWER DEPT.	268-4908

6. RUBBLE FROM THE REMOVAL OF MISCELLANEOUS STRUCTURES AND EXCESS EXCAVATION WHICH IS TO BE WASTED SHALL BE DISPOSED OF ON SITES TO BE PROVIDED BY THE CONTRACTOR. THESE SITES SHALL BE APPROVED BY THE ENGINEER AS TO SUITABILITY, APPEARANCE AND SITE LOCATION. LOCATIONS THAT, IN THE OPINION OF THE ENGINEER, WILL LEAVE AN UNSIGHTLY APPEARANCE WILL NOT BE APPROVED. ALL DISPOSAL SITES MUST BE APPROVED BY THE KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT. MATERIAL EITHER STOCKPILED OR DISPOSED OF IN A FLOOD PLAIN WOULD REQUIRE A KANSAS STATE BOARD OF AGRICULTURE PERMIT. ANY MATERIAL DUMPED IN WATERS OF THE UNITED STATES OR WETLANDS IS SUBJECT TO U.S. CORPS OF ENGINEERS PERMITTING REGULATIONS. ANY MATERIAL BURIED OR STOCKPILED BEYOND APPROVED CONSTRUCTION LIMITS WOULD REQUIRE ADDITIONAL ARCHAEOLOGICAL INVESTIGATIONS UNLESS BURIED IN A PREVIOUSLY APPROVED BORROW LOCATION.



NOTE TO CONTRACTOR

INSPECTION AND TESTING FOR THIS PROJECT IS TO BE PROVIDED BY A LICENSED CONSULTING ENGINEERING FIRM UNDER CONTRACT WITH 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 THE PUBLIC RIGHT-OF-WAY BY THE CONTRACTOR WITHOUT SUCH INSPECTION NOR SHALL ANY WORK BE COMMENCED IN DEDICATED EASEMENTS OR PUBLIC RIGHT-OF-WAY WITHOUT WRITTEN AUTHORIZATION BY THE CITY ENGINEER.

APPROVED AS NOTED
BY CITY ENGINEER OF WICHITA

Sanitary Sewers_____

Storm Sewers VRH 9/21/93

Driveway Approaches_____

Water Mains_____

Paving_____

INDEX TO DRAWINGS

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	LINE 1
3	INLET DETAIL
4	MANHOLE DETAIL
5	FINAL PLATS

BENCHMARKS

BM #1 "□" CUT, N.W. CORNER OF INLET, ±24' S. AND ± 25' E. OF THE N.W. PROP. CORNER LOT 1, BLOCK 1, COMOTARA POWER CENTER ADDITION.
ELEV. = 1377.90 (NGVD)
ELEV. = 190.50 (WICHITA DATUM)

BM #2 "□" CUT, N.W. CORNER OF INLET, ±2' S. AND ± 500' E. OF THE N.W. PROP. CORNER LOT 1, BLOCK 1, COMOTARA POWER CENTER ADDITION.
ELEV. = 1381.35 (NGVD)
ELEV. = 193.95 (WICHITA DATUM)

N

SCALE: 1" = 100'

LEGEND

• IRON

BOOKED 5-16-97 MCG P-234

DEAN S. SELLERS 3683 LICENSED PROFESSIONAL ENGINEER STATE OF KANSAS 4-24-95

AS BUILT: 3-6-97

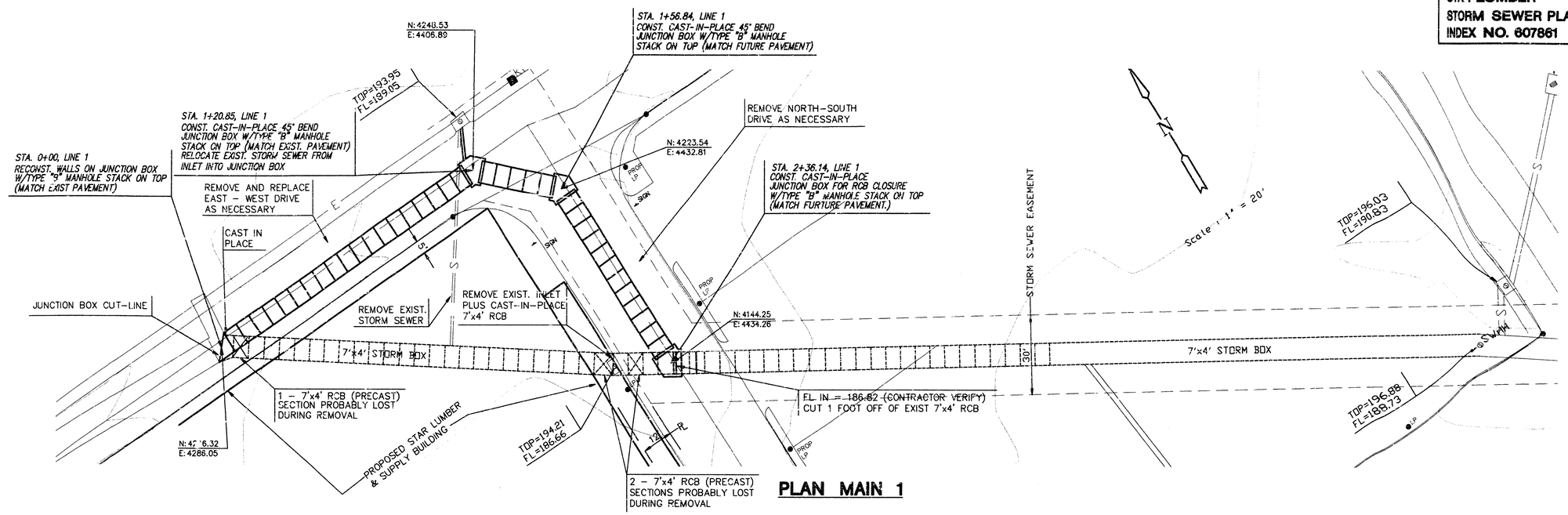
STAR LUMBER

STORM SEWER PLANS

Design	G.J.A.
Drawn by	K.K.L.
Checked by	J.N.J
Date	8/93
Job no.	9328SWST
Sheet	1
of	5

MID-KANSAS ENGINEERING CONSULTANTS INC.
3500 NORTH ROCK ROAD
BUILDING #800
WICHITA, KANSAS 67226
(316) 636-5566

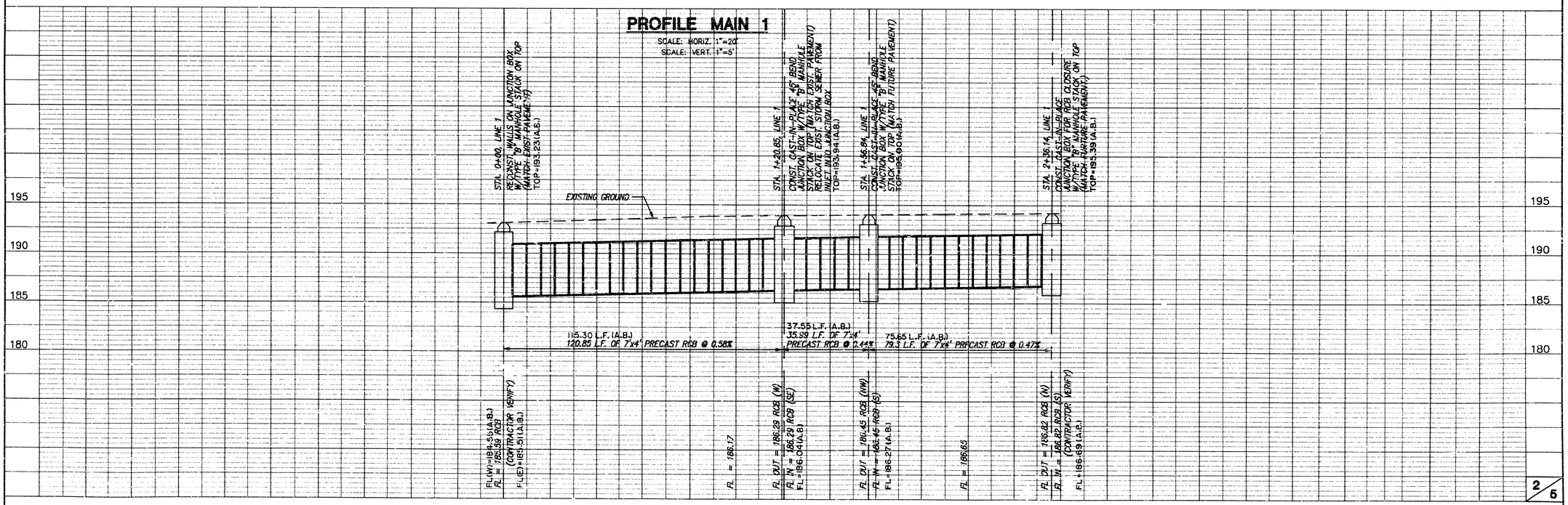
STAR LUMBER
STORM SEWER PLANS
INDEX NO. 607861



PLAN MAIN 1

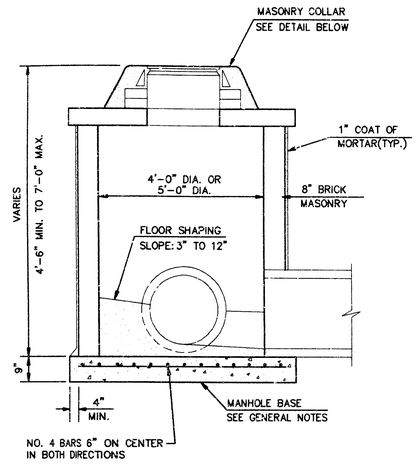
PROFILE MAIN 1

SCALE: HORIZ. 1"=20'
SCALE: VERT. 1"=5'

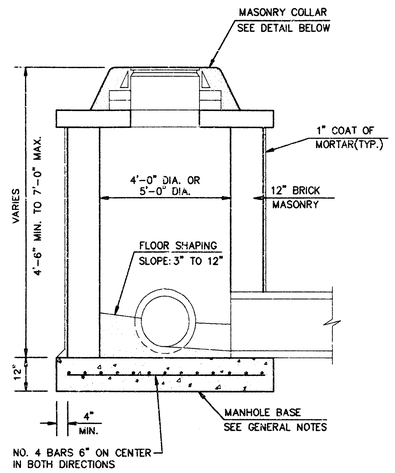


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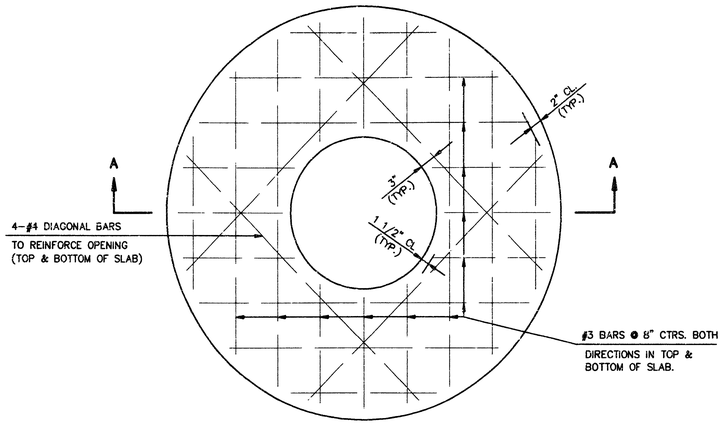
9328SWS2



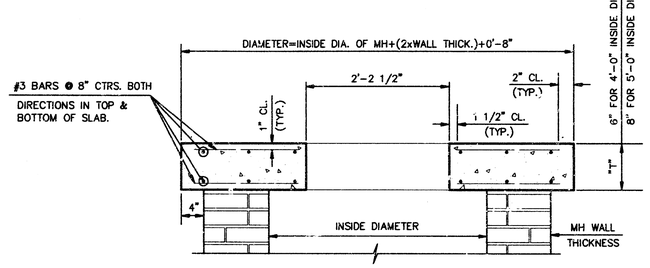
SHALLOW TYPE "A" MANHOLE



SHALLOW TYPE "B" MANHOLE

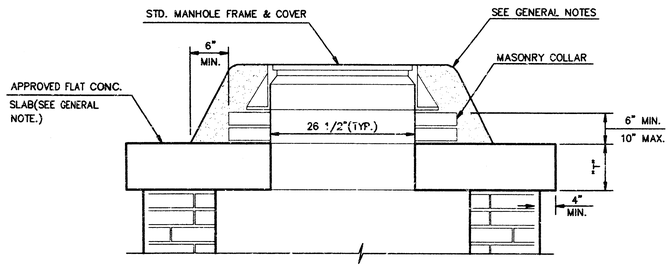


PLAN

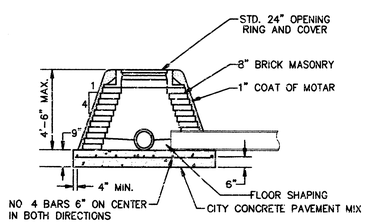


SECTION A-A

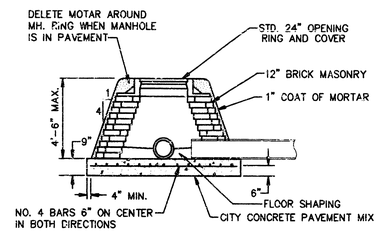
FLAT CONCRETE SLAB DETAILS



MASONRY COLLAR DETAIL



SPECIAL SHALLOW TYPE "A" MANHOLE



SPECIAL SHALLOW TYPE "B" MANHOLE

GENERAL NOTES

1. MOTAR 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 ENTAINING ADMIXTURE. MOTAR SHALL BE PLACED AROUND THE MANHOLE RING AS SHOWN ON THE DRAWINGS WHEN MANHOLES ARE CONSTRUCTED IN UNPAVED AREAS. TYPE "A" SHALLOW MANHOLES CAN BE USED ON SEWERS WHEN THE MANHOLE IS NOT LOCATED WITHIN PUBLIC STREET PAVEMENT. 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.

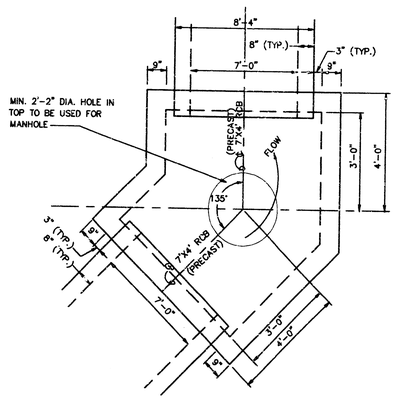
7. STANDARD SHALLOW MANHOLES TYPE "A" AND "B" SHALL BE PAID FOR AT THE UNIT PRICE BID PER EACH FOR THE TYPE AND DIAMETER INDICATED. STANDARD SPECIAL SHALLOW MANHOLES TYPE "A" AND "B" SHALL BE PAID FOR AT THE UNIT PRICE BID PER EACH FOR THE TYPE INDICATED. ALL STANDARD SHALLOW MANHOLE DIAMETERS WILL BE 4' UNLESS INDICATED OTHERWISE.

INLET DETAILS

CITY OF WICHITA, KANSAS

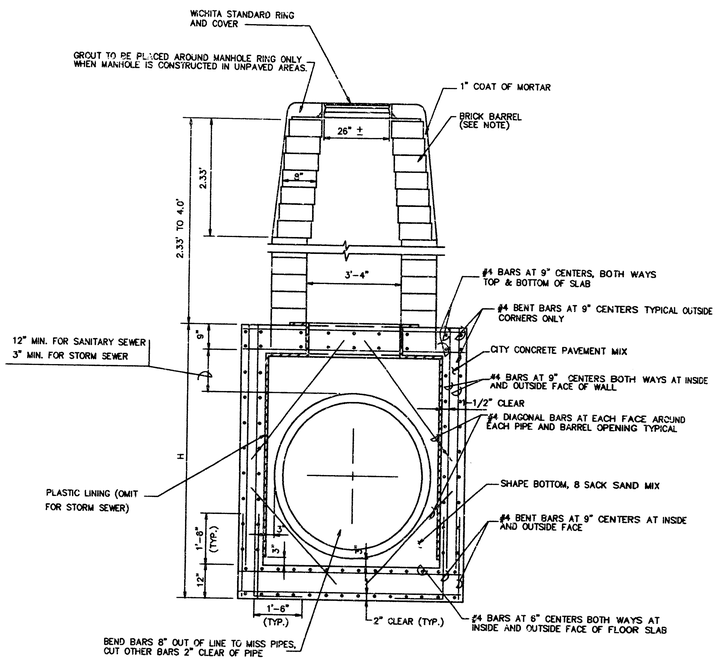
PROJECT NUMBER

9328SWS3



STA. 1+20.85, LINE 1
STA. 1+56.84, LINE 1

SPECIAL 45 °∠ BEND JUNCTION BOXES



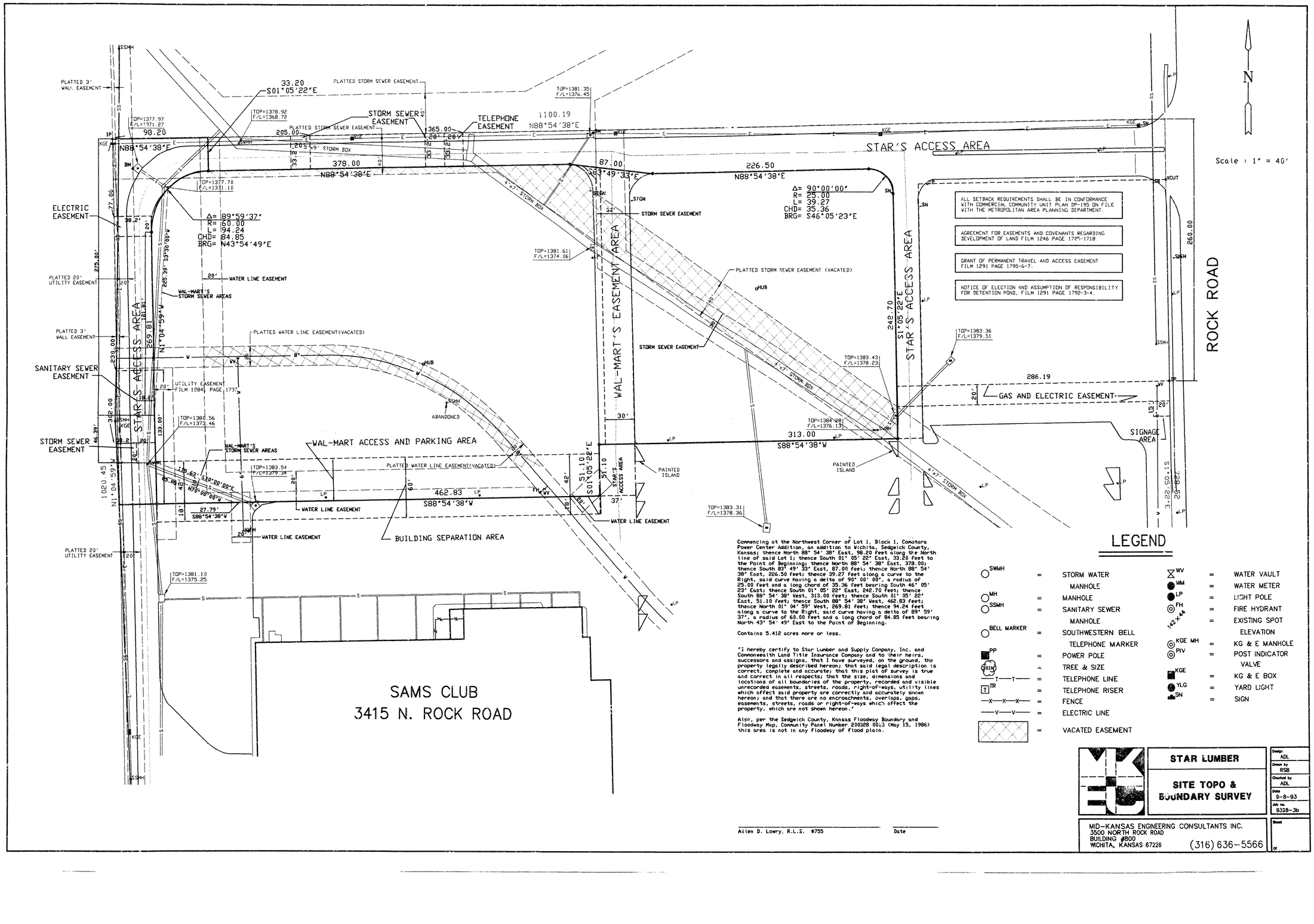
REINFORCED CONCRETE MANHOLE

DEPTH OF STACK: 2.33' TO 4.0'

NOTE:
BRICK BARRELS LESS THAN 16' DEEP SHALL HAVE 8" WALLS EXCEPT WHEN LOCATED WITHIN PUBLIC STREET OR ALLEY PAVEMENT THEN THE WALL SHALL BE 12". BRICK BARRELS MORE THEN 16' DEEP SHALL HAVE 12" WALLS. THE "L" AND "W" DIMENSIONS SHALL BE A MINIMUM OF 5'-6" FOR BRICK BARRELS WITH 8" WALLS AND 6'-2" FOR BRICK BARRELS WITH 12" WALLS WHEN THE BRICK BARRELS ARE OVER 4 FEET IN HEIGHT. COMPLETED MANHOLE SHALL BE WITHOUT LEAKS AND WATERTIGHT.

STAR LUMBER	Design: JNJ
MANHOLE DETAILS	Drawn by: DLM
	Checked by:
	Date: AUG, 1993
	Job no.: 93-28-100
MID-KANSAS ENGINEERING CONSULTANTS INC. 3500 NORTH ROCK ROAD BUILDING #800 WICHITA, KANSAS 67226 (316) 636-5566	Sheet 4 of 5

9328SWS4



Commencing at the Northwest Corner of Lot 1, Block 1, Comotara Power Center Addition, an addition to Wichita, Sedgwick County, Kansas; thence North 88° 54' 38" East, 98.20 Feet along the North line of said Lot 1; thence South 01° 05' 22" East, 33.20 feet to the Point of Beginning; thence North 88° 54' 38" East, 378.00; thence South 83° 49' 33" East, 87.00 feet; thence North 88° 54' 38" East, 226.50 feet; thence 39.27 feet along a curve to the Right, said curve having a delta of 90° 00' 00", a radius of 25.00 feet and a long chord of 35.36 feet bearing South 46° 05' 23" East; thence South 01° 05' 22" East, 242.70 feet; thence South 88° 54' 38" West, 313.00 feet; thence South 01° 05' 22" East, 51.10 feet; thence South 88° 54' 38" West, 462.83 feet; thence North 01° 04' 59" West, 269.81 feet; thence 94.24 feet along a curve to the Right, said curve having a delta of 89° 59' 37", a radius of 60.00 feet and a long chord of 84.85 feet bearing North 43° 54' 49" East to the Point of Beginning.

Contains 5.412 acres more or less.

"I hereby certify to Star Lumber and Supply Company, Inc. and Commonwealth Land Title Insurance Company and to their heirs, successors and assigns, that I have surveyed, on the ground, the property legally described hereon; that said legal description is correct, complete and accurate; that this plat of survey is true and correct in all respects; that the size, dimensions and locations of all boundaries of the property, recorded and visible unrecorded easements, streets, roads, right-of-ways, utility lines which affect said property are correctly and accurately shown hereon; and that there are no encroachments, overlaps, gaps, easements, streets, roads or right-of-ways which effect the property, which are not shown hereon."

Also, per the Sedgwick County, Kansas Floodway Boundary and Floodway Map, Community Panel Number 200328 0013 (May 15, 1986) this area is not in any floodway of flood plain.

Allen D. Lowry, R.L.S. #755 — Date

LEGEND

SWMH	=	STORM WATER MANHOLE	WV	=	WATER VAULT
MH	=	MANHOLE	WM	=	WATER METER
SSMH	=	SANITARY SEWER MANHOLE	LP	=	LIGHT POLE
BELL MARKER	=	SOUTHWESTERN BELL TELEPHONE MARKER	FH	=	FIRE HYDRANT
PP	=	POWER POLE	1412.44	=	EXISTING SPOT ELEVATION
30"	=	TREE & SIZE	KGE MH	=	KG & E MANHOLE
T—T—	=	TELEPHONE LINE	PIV	=	POST INDICATOR VALVE
TR	=	TELEPHONE RISER	KGE	=	KG & E BOX
—X—X—X—	=	FENCE	YLG	=	YARD LIGHT
—V—V—	=	ELECTRIC LINE	SN	=	SIGN
	=	VACATED EASEMENT			

STAR LUMBER

SITE TOPO & BOUNDARY SURVEY

Design: ADL
Drawn by: RSB
Checked by: ADL
Date: 9-8-93
Job no.: 9328-3b
Sheet: 1 of 1

MID-KANSAS ENGINEERING CONSULTANTS INC.
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