

PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
		1	

# BUREAU OF PUBLIC SERVICES

4MC-118

INDEX OF SHEETS

- 1 TITLE SHEET
- 2 LOCATION MAP
- 3B 3A MANHOLE DETAILS
- 4-5 LINE 1
- 6 LINE 6
- 7 LINE 7 & 8
- 8 FINAL PLAT



## SANITARY SEWER PLANS FOR SHADYBROOK MEADOW ADDITION PHASE I

DESIGN DESIGNATION

- ADT
- ADT
- DHV
- D
- T
- V

CONVENTIONAL SIGNS

- WIRE FENCE
- HEDGE ROW
- RAILROADS
- SURVEY LINE
- RIGHT OF WAY
- TELEPHONE POLE
- POWER POLE
- COMB. POWER & TELEPHONE
- TOWNSHIP LINE
- CONSTRUCTION LIMITS
- GUARD FENCE
- TREES

NET LENGTH OF PROJECT \_\_\_\_\_ FT. \_\_\_\_\_ MILES  
 NET LENGTH OF BRIDGES \_\_\_\_\_ FT. \_\_\_\_\_ MILES  
 NET LENGTH OF ROAD \_\_\_\_\_ FT. \_\_\_\_\_ MILES  
 EXCEPTIONS \_\_\_\_\_ FT. \_\_\_\_\_ MILES  
 ADDITIONS \_\_\_\_\_ FT. \_\_\_\_\_ MILES  
 GROSS LENGTH OF PROJECT \_\_\_\_\_ FT. \_\_\_\_\_ MILES

*Phase 2 attached*

PLANS PREPARED BY:  
 MID-KANSAS ENGINEERING CONSULTANTS PA  
 3500 NORTH ROCK ROAD  
 BUILDING # 900  
 WICHITA, KANSAS 67226 636-5566

APPROVED:  
  
 COUNTY ENGINEER / DIRECTOR OF PUBLIC SERVICES  
 DATE: 10/6/89

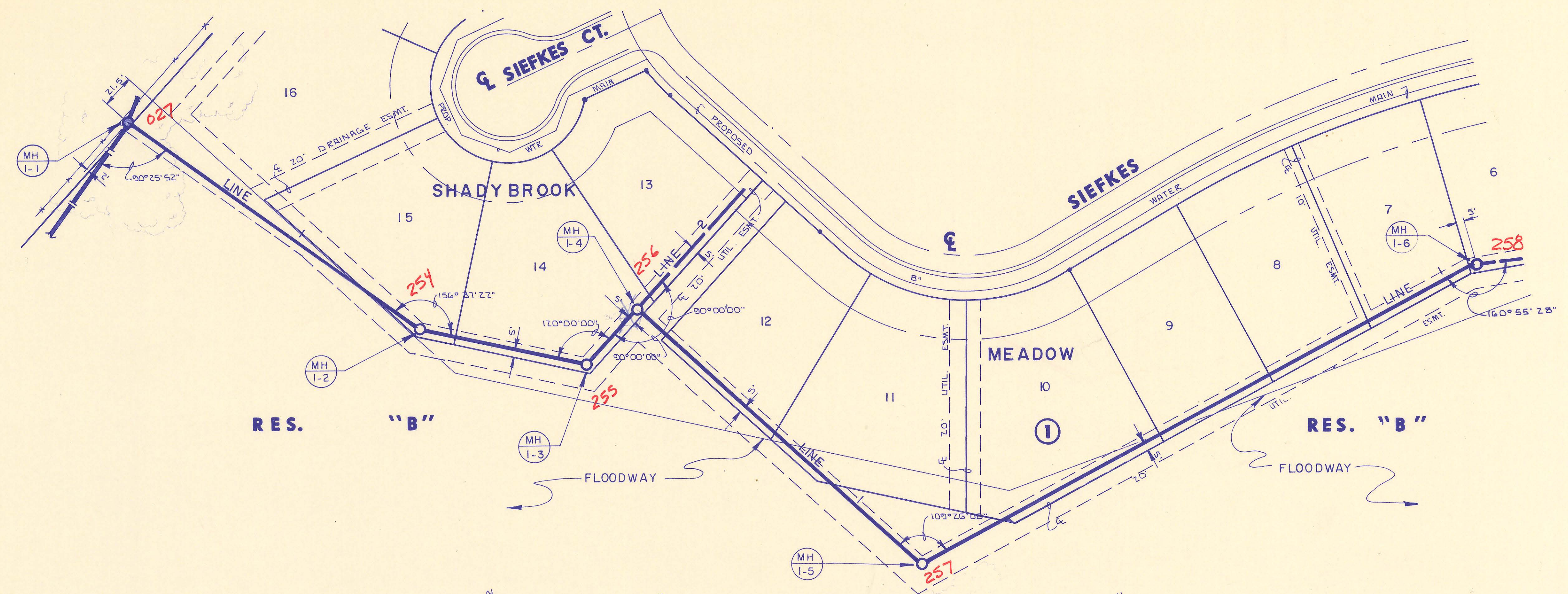
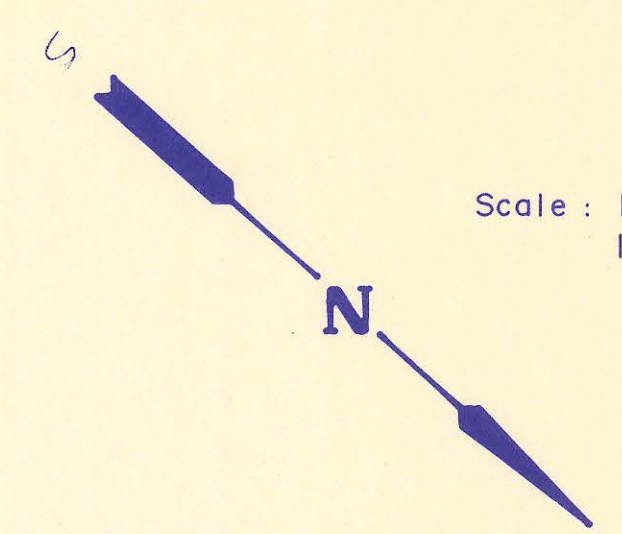
APPROVED: \_\_\_\_\_ DATE: 10/6/89  
  
 CHAIRMAN  
 BOARD OF COUNTY COMMISSIONERS

FILED:  
 FILED IN THE OFFICE OF  
 THE SEDGWICK COUNTY CLERK  
  
 COUNTY CLERK DATE: 10/6/89

4MC-118

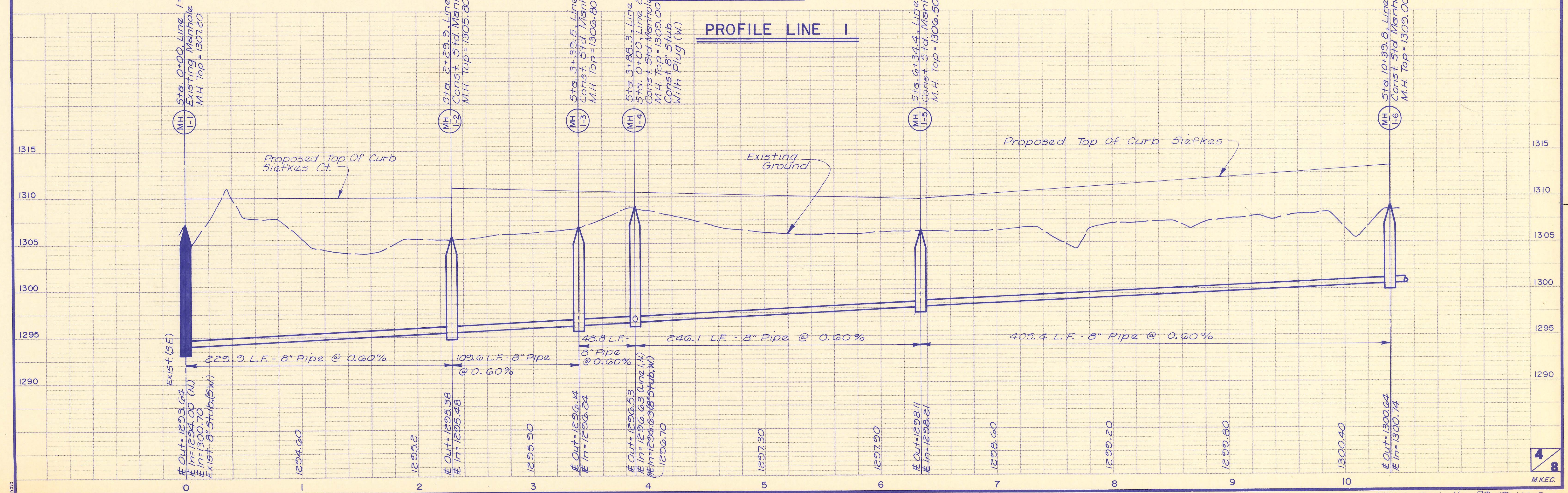


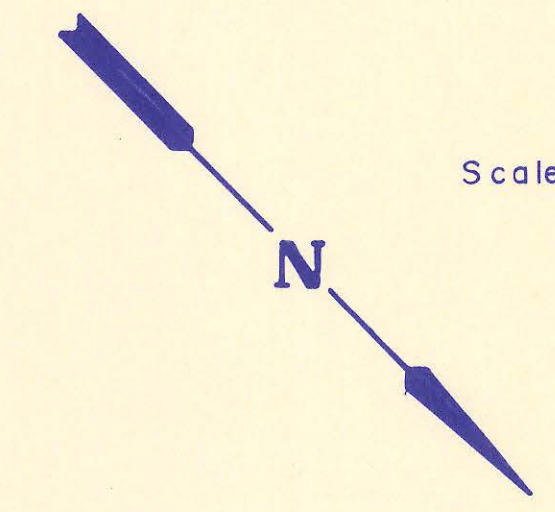
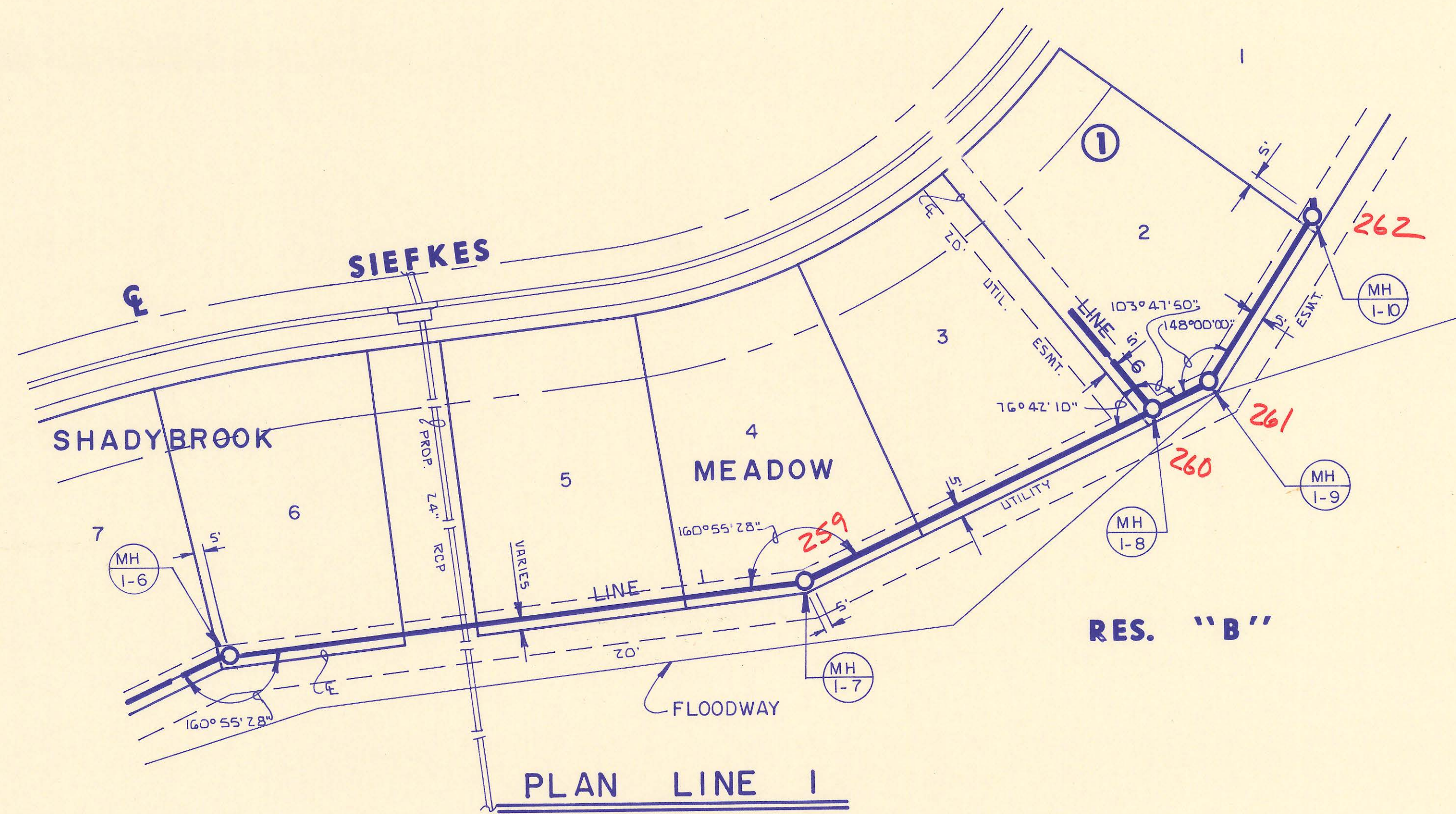
Scale: 1" = 40' Horiz.  
1" = 5' Vert.



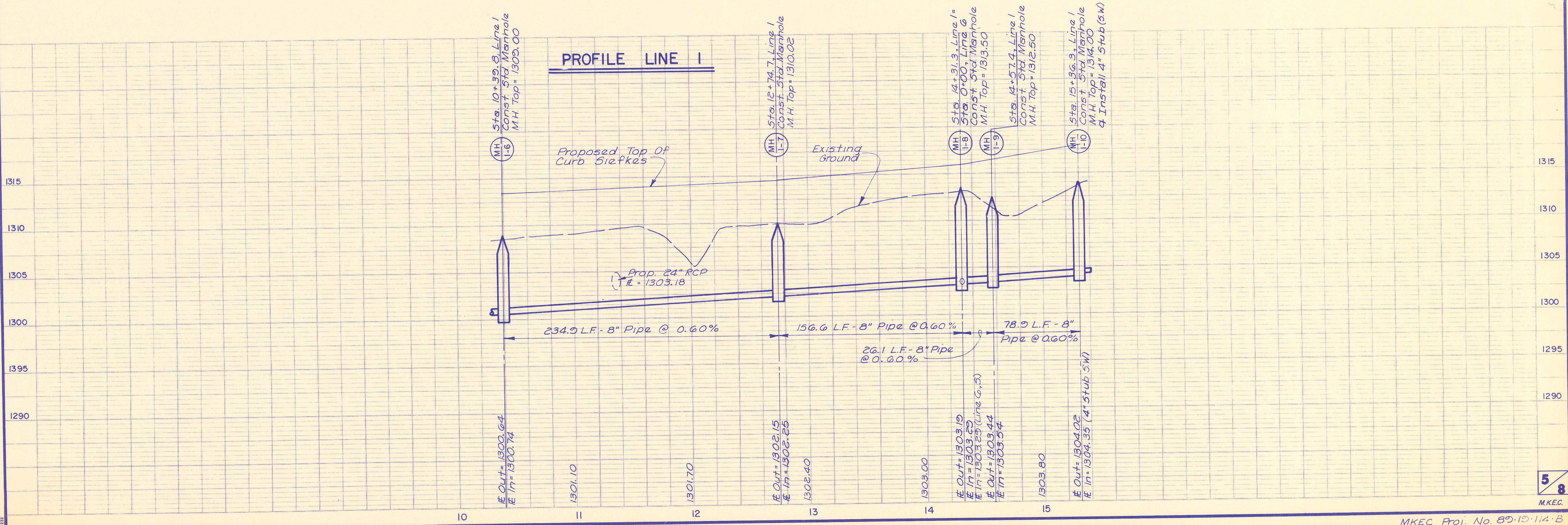
PLAN LINE 1

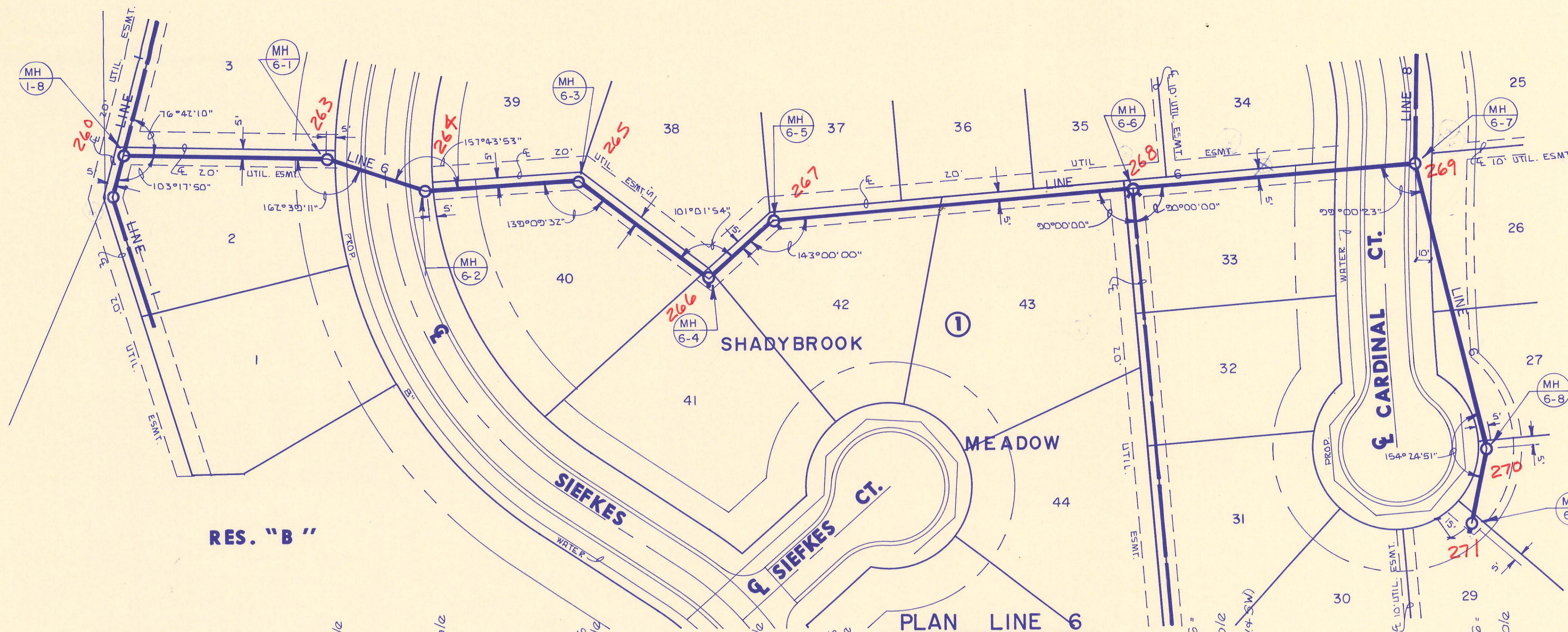
PROFILE LINE 1





Scale: 1" = 40' Horiz.  
1" = 5' Vert.

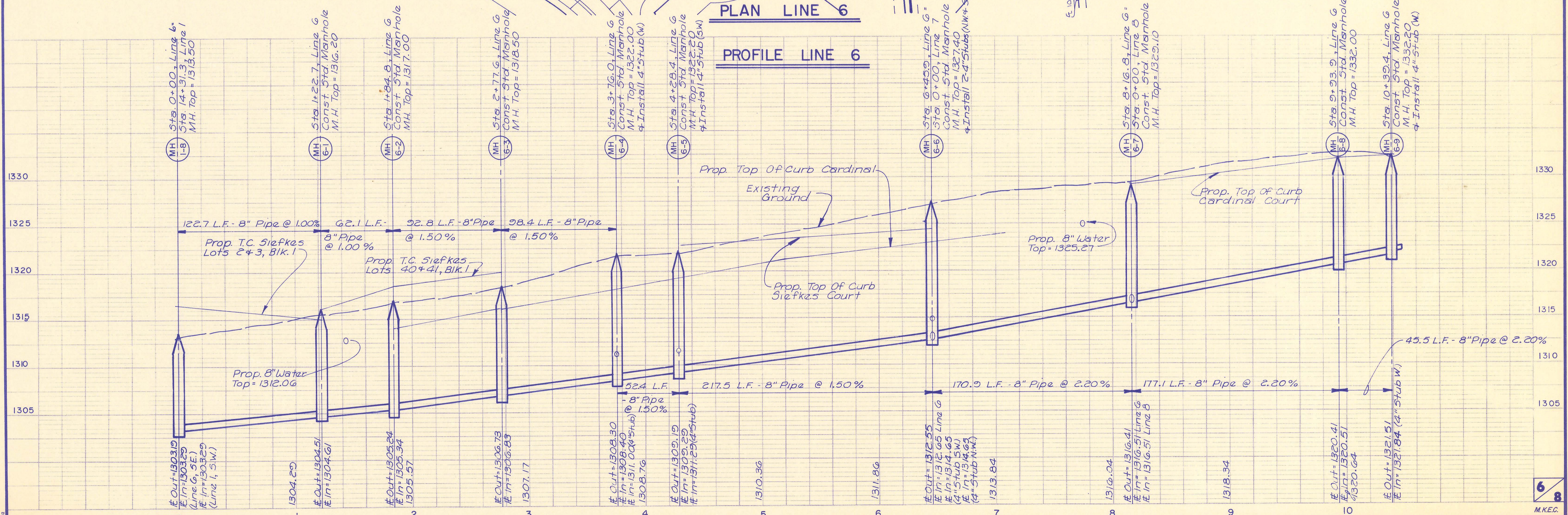




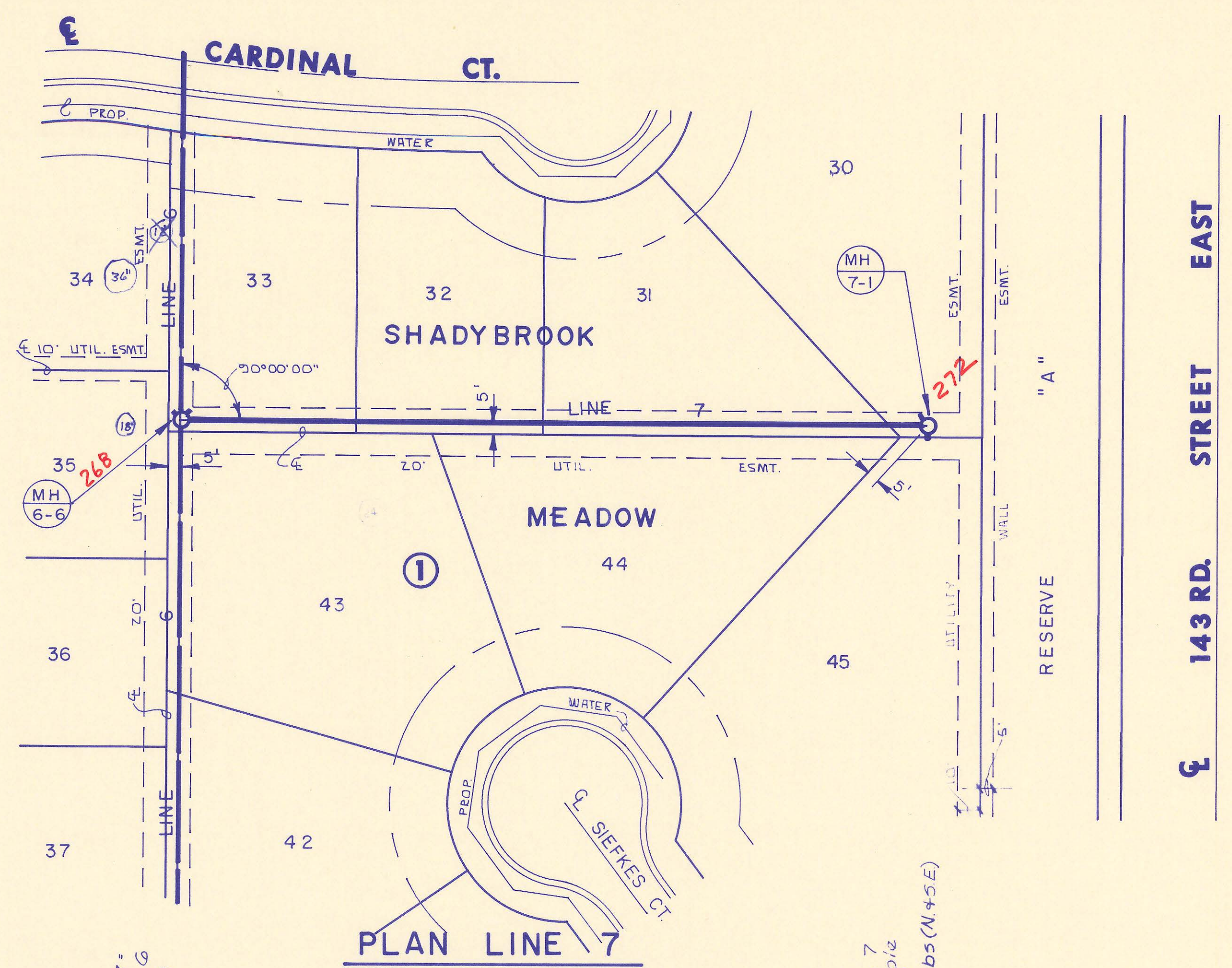
RES. "B"

PLAN LINE 6

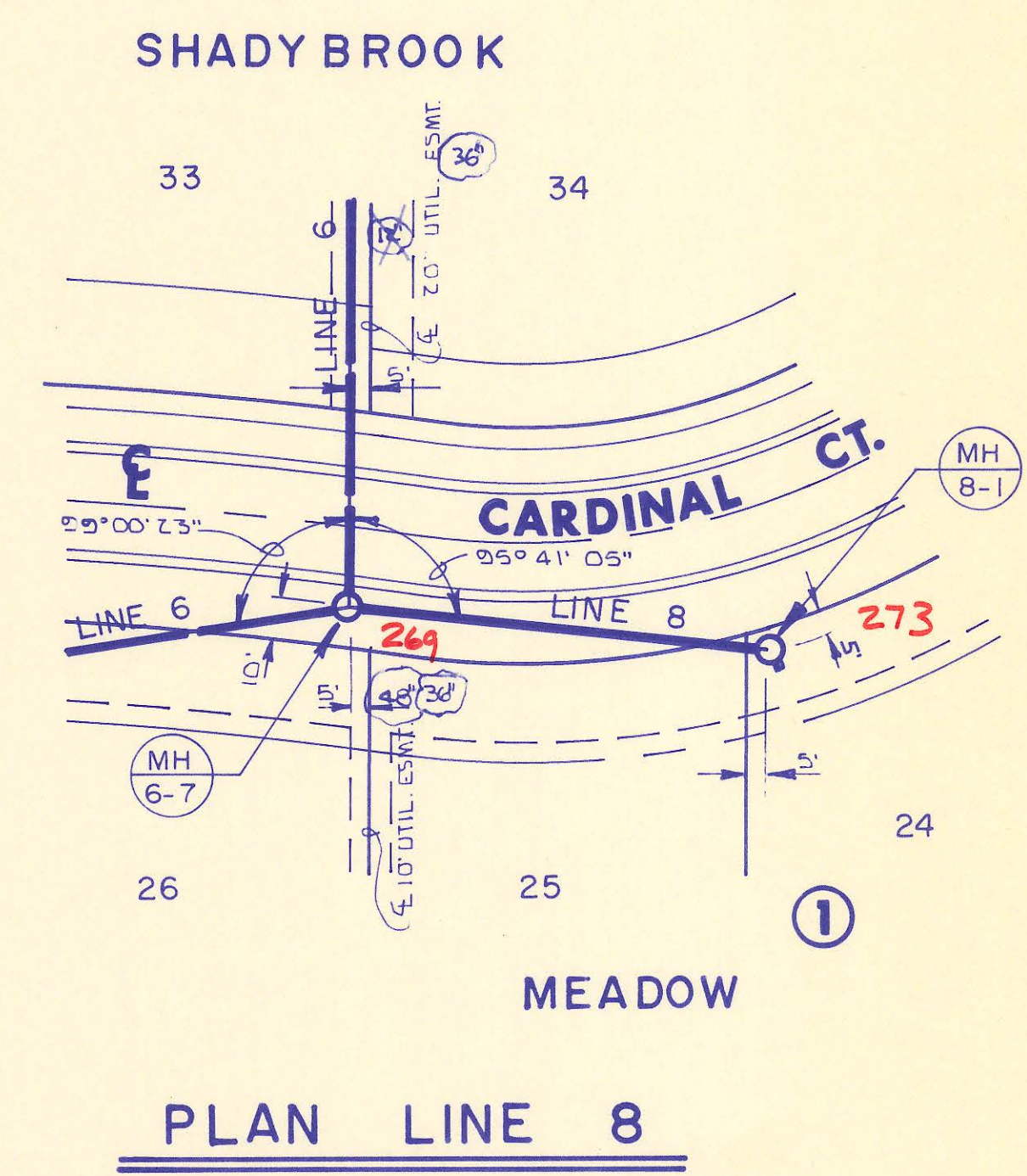
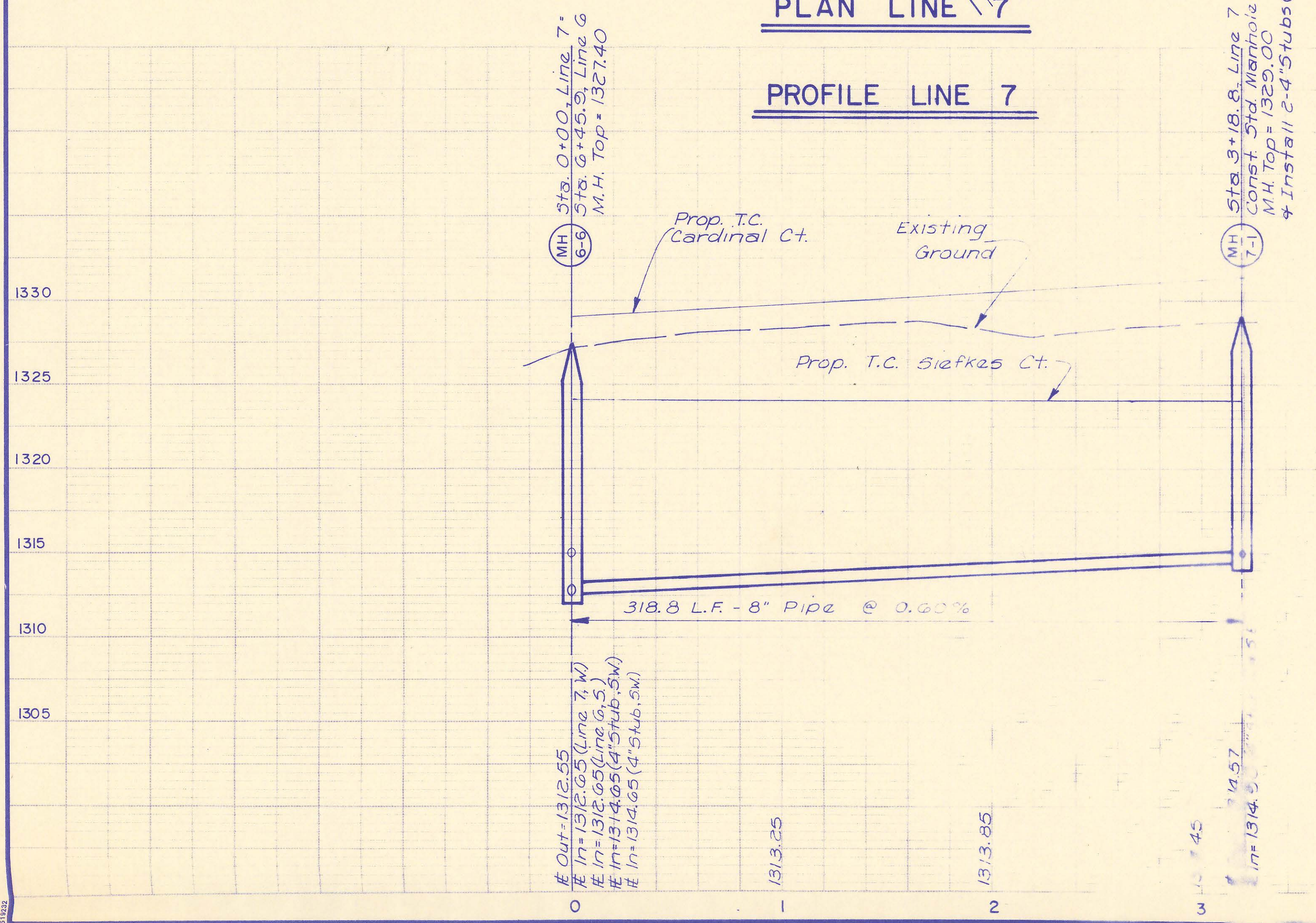
PROFILE LINE 6



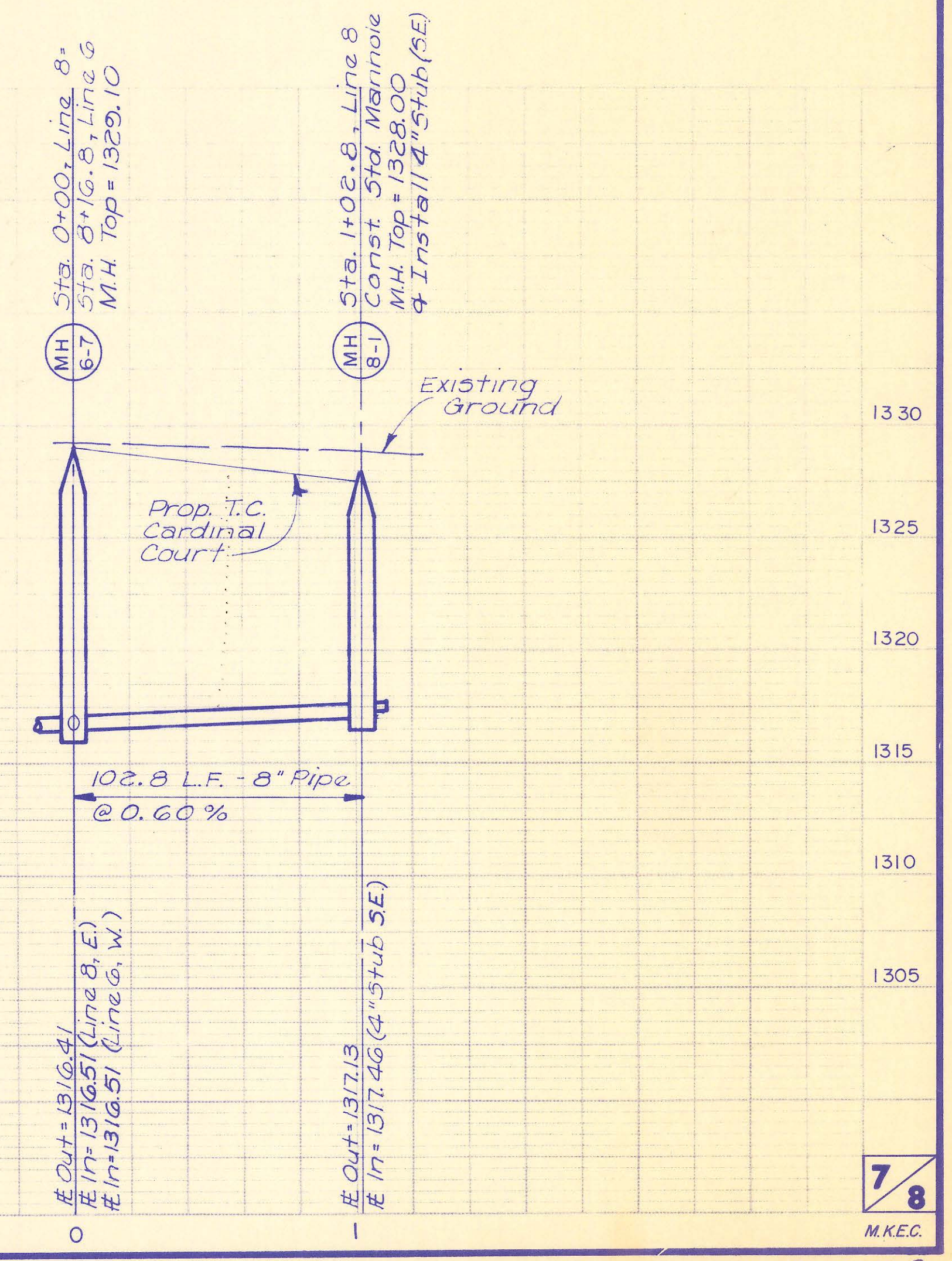
Scale: 1" = 40' Horiz.  
1" = 5' Vert.



PROFILE LINE 7



PROFILE LINE 8



FINAL PLAT OF

# SHADYBROOK MEADOW ADDITION

AN ADDITION TO SEDGWICK COUNTY, KANSAS

We, the Kansas State Bank and Trust, do hereby consent to the plat of "SHADYBROOK MEADOW".

KANSAS STATE BANK AND TRUST

By: John C. Kramer, Sr.

STATE OF KANSAS )  
SEDGWICK COUNTY ) SS:

Be it remembered that on this 17th day of August, 1989, before me a Notary Public in and for said State and County, came GAYLE A. THOMAS to me personally known to be the same person who executed the foregoing instrument of writing and duly acknowledged the execution of the same. In testimony whereof I have hereunto set my hand and affixed my notarial seal the day and year above written.

Kirk Durr, Notary Public

My Appointment Expires: August 25, 1991

This plat of "Shadybrook Meadows" has been submitted to and approved by the Wichita-Sedgwick County metropolitan Area Planning Commission, Wichita, Kansas.

Dated this 3rd day of August, 1989.

WICHITA-SEDGWICK COUNTY METROPOLITAN AREA PLANNING COMMISSION

Sue L. Crockett, Chairman

Marvin S. Krouit, Secretary



This plat approved and all dedications shown hereon, if any, accepted by the City Commission of the City of Wichita, Kansas, this 16th day of September, 1989.

Bob Knight, Mayor

John Moir, City Clerk



Entered on transfer record this 28 day of September, 1989.

Don Wright, County Clerk

STATE OF KANSAS )  
SEDGWICK COUNTY ) SS:

This is to certify that this instrument was filed for record in the Register of Deeds office this 28th day of September, 1989, at 11:00 A.M.

Pat Kettler, Register of Deeds

Ed Resa, Deputy

This plat approved and all dedications shown hereon accepted by the Board of County Commissioners of Sedgwick County, Kansas, this 27 day of September, 1989.

Paul W. Hancock, Chairman

Mark T. Schrage, Commissioner

David Blyouth, Commissioner

Bernard A. Hentzen, Commissioner

Billy Q. McRay, Commissioner

Attest: Don Wright, County Clerk

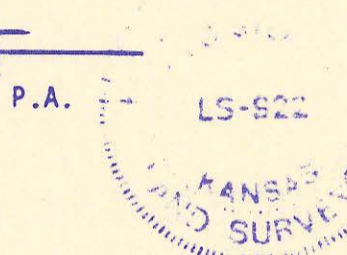
I, Kenneth H. Bengtson, a Civil Engineer and Registered Land Surveyor in Kansas, do hereby certify that I have been in responsible charge of surveying and platting of "SHADYBROOK MEADOWS" an addition to Sedgwick County, Kansas, into Lots, Blocks, Streets and Reserves, the same being accurately set forth in the accompanying plat and described herein:

A tract of land lying in the Northwest Quarter, Section 24, Township 27 South, Range 2 East of the 6th P.M., Sedgwick County, Kansas, more particularly described as follows:

Beginning at a point lying on the South line and 45.00 feet East of the Southwest corner of said Northwest Quarter; thence N 00° 11' 00" E, 1153.32 feet parallel with the West line of said Northwest Quarter; thence S 89° 49' 00" E, 415.52 feet to a point on the extended Southwesterly line of Lots 13 and 14, Block 8, SHADYBROOK FARM ADDITION, an addition to said Northwest Quarter; thence N 89° 30' 00" E, 173.59 feet along the South line to the Southeast corner of Lot 6, Block 8, of said addition; thence S 37° 52' 53" E, 401.02 feet along the West line of said Lot 6; thence continuing along said West line of said Lot 6, S 06° 54' 26" E, 380.00 feet to the Southwest corner of said Lot 6, to a point on the South line of said Northwest Quarter; thence N 89° 54' 26" W, 1771.29 feet along said South line to the point of beginning.

I hereby certify that the details of this plat are correct to the best of my knowledge and belief this 16 day of August, 1989.

Kenneth H. Bengtson  
Kenneth H. Bengtson, P.E., R.L.S.#922  
Mid-Kansas Engineering Consultants, P.A.  
3500 N. Rock Road, Building #800  
Wichita, KS 67226



Know all men by these presents that we the undersigned property owners of the land as above set forth in the Civil Engineer's and Registered Land Surveyor's Certificate, have caused the same to be surveyed and platted into Lots, Blocks, Reserves, and Streets, the same to be known as "SHADYBROOK MEADOWS", an addition to Sedgwick County, Kansas. The streets are hereby dedicated to and for the use of the public. Reserves A, B, and C are platted for the construction and maintenance of drainage, walkways, fencing, lighting, and landscaping. Reserves B & C are also platted for gazebos and playground equipment. Reserves A & B are also platted for monuments. Reserve B is also platted for Lakes and floodway. The Reserves shall be owned and maintained by the Homeowners Association. Easements for the construction and maintenance of public utilities and drainage as indicated on the accompanying plat, are hereby granted to the public. All abutters rights of access to and from 143rd Street East over and across the West lines of Reserves A and B are hereby granted to the owners until such time as the governing body exercising jurisdiction elects to assume the responsibility for the maintenance and improvement of the drainage, provided however, that no structure shall be constructed on or within said floodway, nor shall any fill, change of grade, creation of channel or other work be carried on without the permission of the Appropriate Engineer. Minimum pad elevations on Lots 1-12, and 14-16, Block 1, inclusive, shall be as indicated on the face of the plat.

By: Janice G. Siefkes  
Janice G. Siefkes

STATE OF KANSAS )  
SEDGWICK COUNTY ) SS:

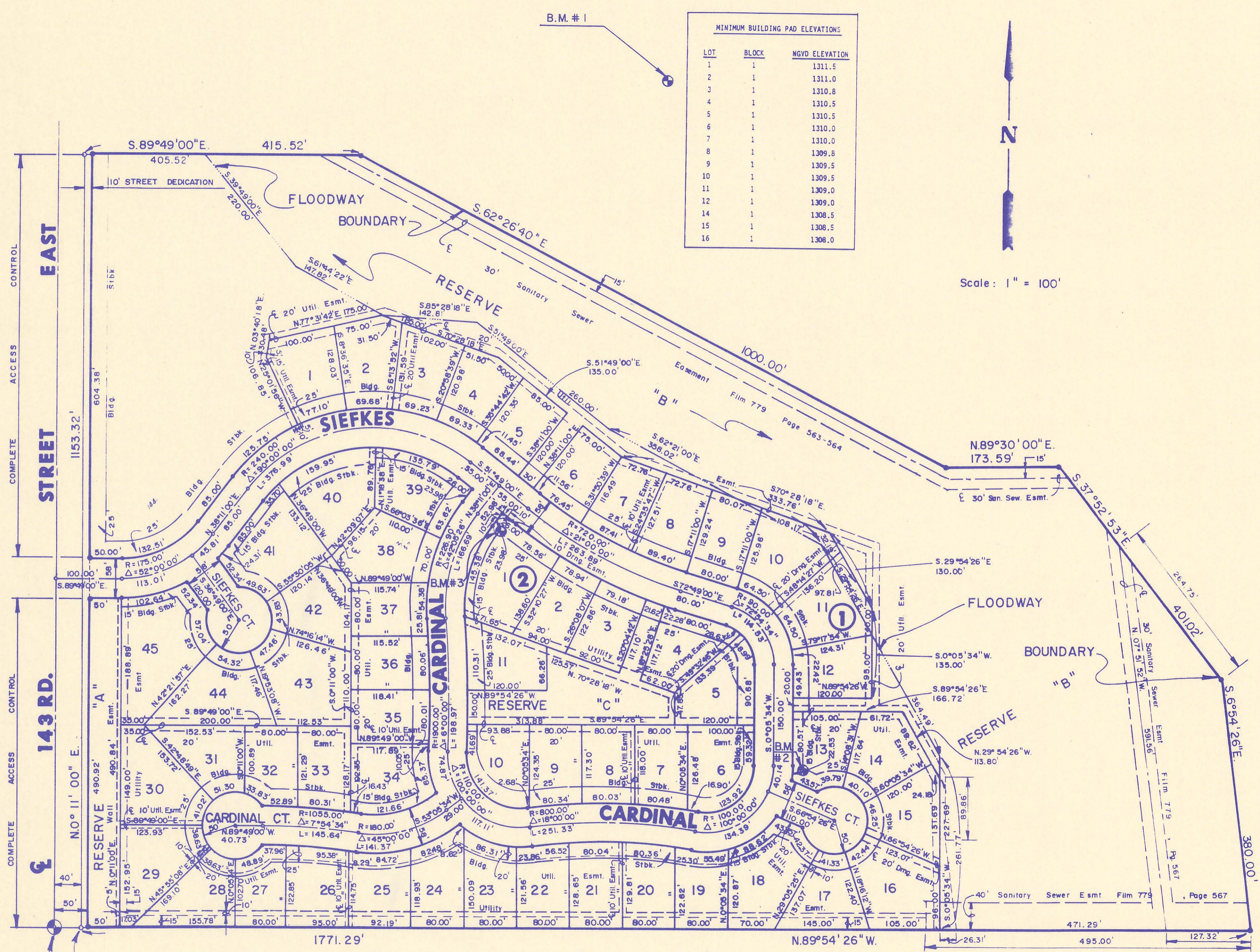
Be it remembered that on this 16th day of August, 1989, before me a Notary Public in and for said State and County, came Janice G. Siefkes to me personally known to be the same person who executed the foregoing instrument of writing and duly acknowledged the execution of the same. In testimony whereof I have hereunto set my hand and affixed my notarial seal the day and year above written.

Maribeth R. Nice, Notary Public  
My Appointment Expires: 2/3/93



LOT	BLOCK	MGVD ELEVATION
1	1	1311.5
2	1	1311.0
3	1	1310.8
4	1	1310.5
5	1	1310.5
6	1	1310.0
7	1	1310.0
8	1	1309.8
9	1	1309.5
10	1	1309.5
11	1	1309.0
12	1	1309.0
14	1	1308.5
15	1	1308.5
16	1	1308.0

Scale: 1" = 100'

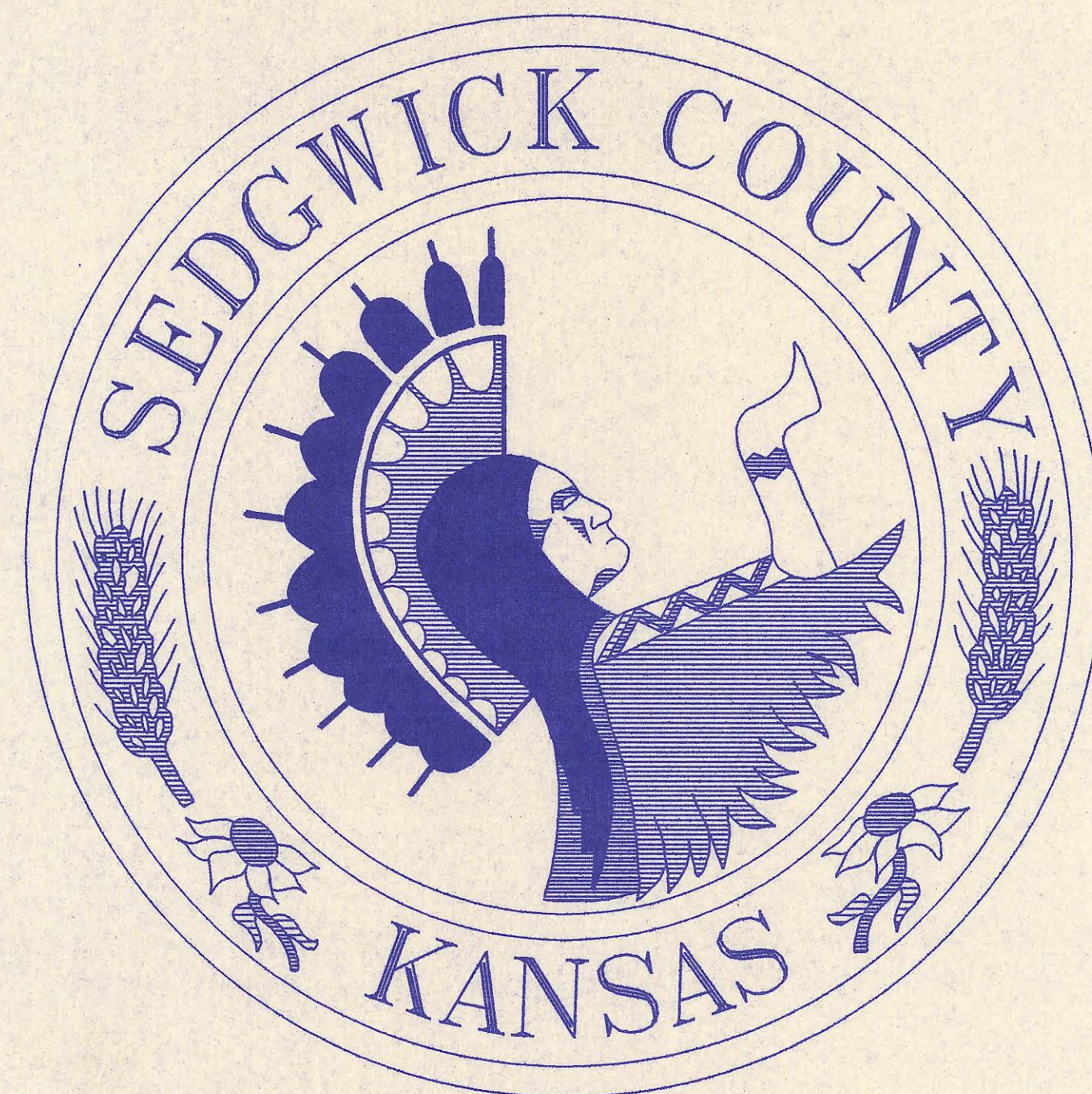


### BENCHMARKS

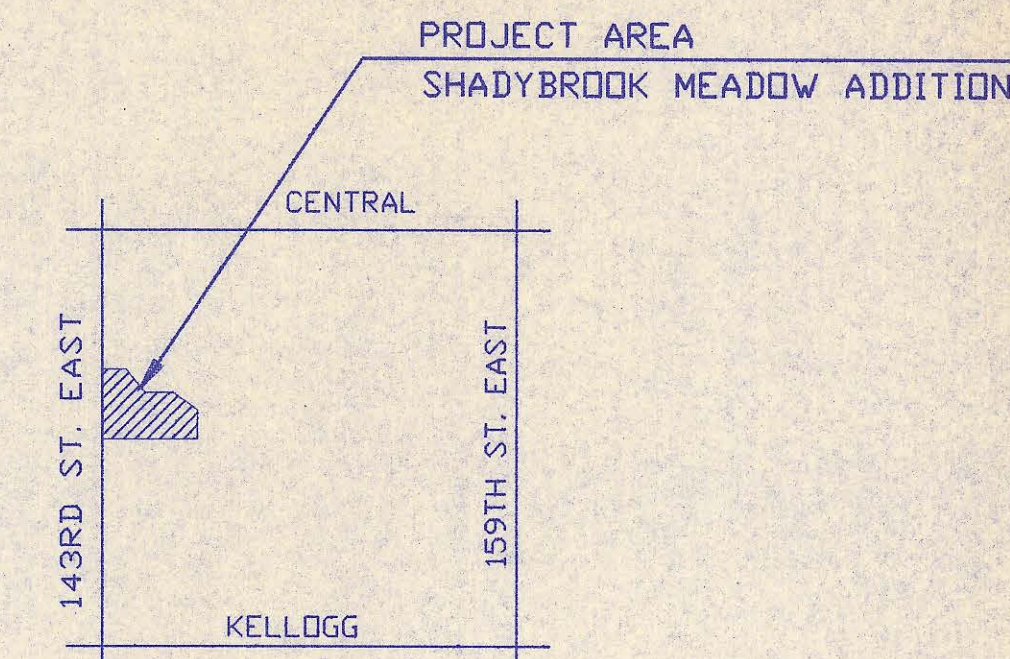
- B.M.#1 "□" on Southwest Corner of R.C.B. on Stagecoach in Shadybrook Farm Addition. Elevation = 1311.02
- B.M.#2 "T" post 5' ± North and 5' ± East of Southwest Corner Lot 13, Block 1. Elevation = 1312.06
- B.M.#3 "T" post 5' ± Southeast and 5' ± Southwest of Northwest Corner Lot 1, Block 2. Elevation = 1314.025

S.W. Cor., NW 1/4  
Sec. 24, T.27 S. R. 2E.  
6th. P.M.

# BUREAU OF PUBLIC SERVICES



4MC-118



LOCATION MAP

### INDEX OF SHEETS

SHEET NO.	1	TITLE SHEET
SHEET NO.	2	KEY MAP
SHEET NO.	3	EASEMENT GRADING PLAN
SHEET NO.	4	PLAN
SHEET NO.	5	PRECAST MANHOLE DETAILS
SHEET NO.	6	CAST IN PLACE MANHOLE DETAILS
SHEET NO.	7	BACKFILL DETAILS
SHEET NO.	8-9	PLAN/PROFILE

SECTION  
6447

# CONSTRUCTION PLANS FOR SANITARY SEWER IMPROVEMENTS

IN  
SHADYBROOK MEADOW ADDITION  
SEDGWICK COUNTY, KANSAS  
(PHASE 2)

MARCH, 1993

PROFESSIONAL ENGINEERING CONSULTANTS, P.A.  
ENGINEERS  
WICHITA, KANSAS

### RECORD DRAWING

MDK 8/10/93  
LM 8/10/93

APPROVED:

*David C. Spears*  
DAVID C. SPEARS, P.E.  
DIRECTOR OF PUBLIC SERVICES/COUNTY ENGINEER  
DATE: 4-5-93

APPROVED:

*Mark E. Ghumbel*  
CHAIRMAN, BOARD OF COUNTY COMMISSIONERS  
DATE: 4-5-93



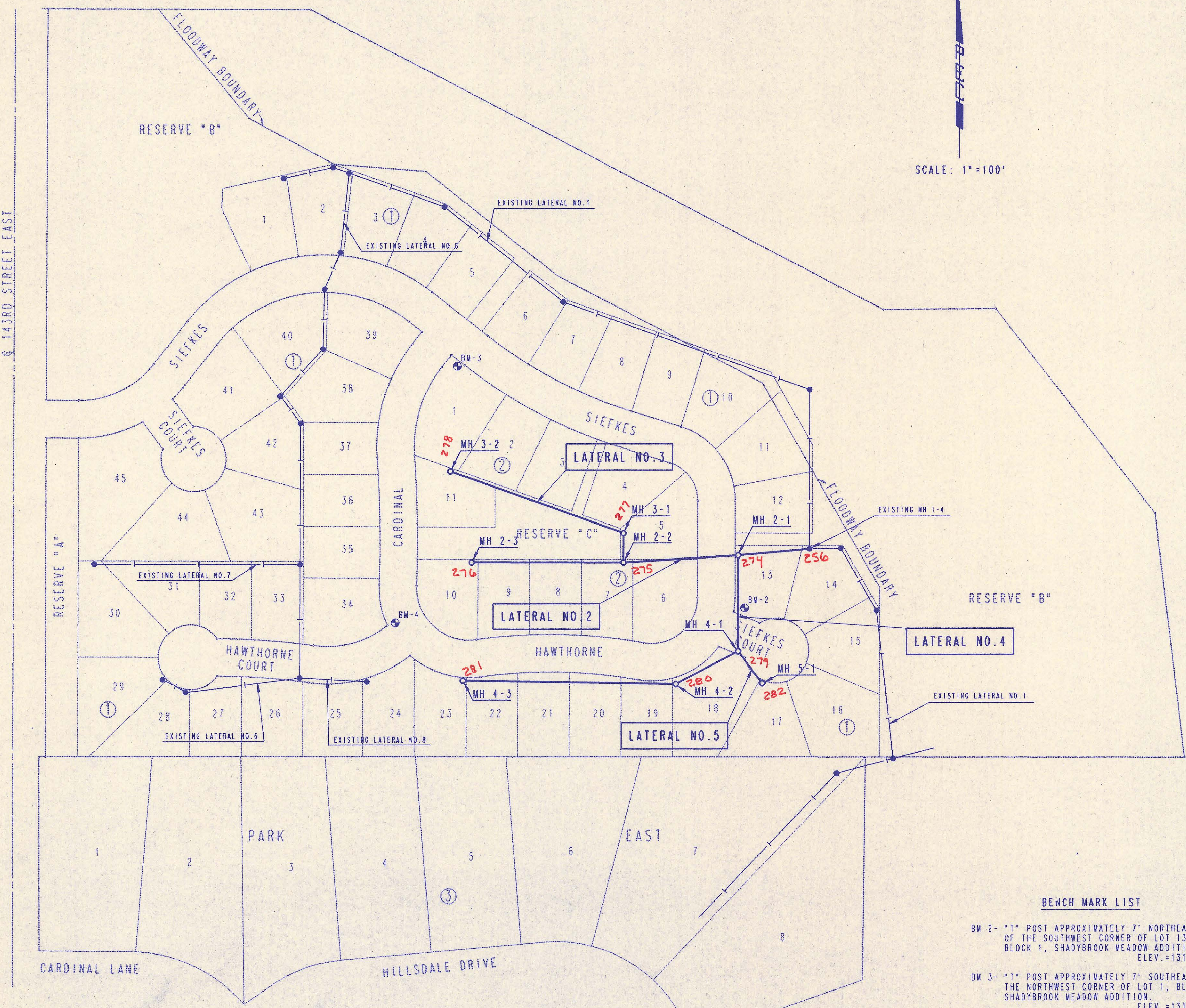
FILED IN THE OFFICE OF  
THE SEDGWICK COUNTY CLERK

*Brent W. Le Hen*  
DEPT. COUNTY CLERK  
DATE:



GENERAL NOTES

1. ALL ELEVATIONS SHOWN ARE USGS DATUM.
2. AT LEAST 72 HOURS PRIOR TO BEGINNING ANY EXCAVATION (EXCLUDING WEEKENDS AND HOLIDAYS), THE CONTRACTOR SHALL CONTACT THE KANSAS ONE-CALL SYSTEM, A UTILITY LOCATION SERVICE, AT 687-2470 TO REQUEST THE FOLLOWING UTILITIES TO LOCATE ANY EXISTING LINES WITHIN THE PROJECT AREA: MULTIMEDIA CABLE TV, WICHITA WATER, SOUTHWESTERN BELL TELEPHONE, K & E GAS, AND K & E ELECTRIC.
3. THE BURIED UTILITIES AS SHOWN ON THE PLANS ARE APPROXIMATE LOCATIONS ONLY. IT SHOULD BE NOTED THAT OTHER BURIED LINES AND CABLES MAY EXIST WHICH ARE NOT SHOWN ON THESE PLANS. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION DURING TRENCHING OPERATIONS TO AVOID DAMAGING THESE LINES. ANY LINES DAMAGED SHALL BE REPLACED OR REPAIRED IMMEDIATELY AS DIRECTED BY THE ENGINEER AT THE CONTRACTOR'S EXPENSE.
4. AT LEAST 24 HOURS BEFORE CONNECTING NEW SEWER PIPE TO THE EXISTING SEWERAGE SYSTEM, THE CONTRACTOR SHALL CONTACT THE SEDGWICK COUNTY EASTERN SEWER DISTRICT (733-0202). THE CONTRACTOR SHALL KEEP ANY CONSTRUCTION DEBRIS FROM ENTERING THE EXISTING SANITARY SEWER DURING CONSTRUCTION. TO PREVENT WATER OR DEBRIS FROM ENTERING THE EXISTING SEWER, A MECHANICAL PLUG SHALL BE INSTALLED AND MAINTAINED TO ISOLATE THE EXISTING SEWER FROM THE NEW CONSTRUCTION UNTIL THE NEW CONSTRUCTION IS CLEANED, TELEVIEWED, AND HAS BEEN ACCEPTED. THE WATER USED FOR CLEANING SHALL NOT BE ADDED TO THE FLOW OF THE EXISTING SEWER. THE CLEANING OR OTHERWISE ACCUMULATED WATER SHALL BE PUMPED OR OTHERWISE REMOVED PRIOR TO TELEVIEWING.
5. ALL MANHOLES CONSTRUCTED ON THIS PROJECT SHALL HAVE SELF-SEALING FRAMES AND SHALL BE COATED INTERNALLY WITH STRONG SEAL MS2-A PER PROJECT SPECIFICATIONS.
6. ALL PIPE JOINTS SHALL BE LAID AND PUSHED 'FULL HOME', WITH THE REVELED END OF THE SPIGOT MAKING FULL CONTACT WITH THE CHAMFERED AREA AT THE THROAT OF THE BELL OR SOCKET, WITH NO SEPARATION BETWEEN THEM. IF SEPARATION IS DETERMINED, THE PIPE SHALL BE EXCAVATED AND RE-LAID ACCORDING TO SPECIFICATIONS AT THE CONTRACTOR'S EXPENSE.
7. EXCESS EXCAVATED MATERIAL AND OTHER DEBRIS SHALL BE WASTED ON SITES TO BE PROVIDED BY THE CONTRACTOR AS APPROVED BY THE ENGINEER AT NO ADDITIONAL COST TO THE OWNER.
8. THE CONTRACTOR SHALL CONTAIN HIS OPERATIONS TO PERMIT TRAFFIC THROUGH AND ACROSS CONSTRUCTION AT EXISTING ROADWAYS AT ALL TIMES. THE CONTRACTOR SHALL ERECT WARNING SIGNS, FLASHING LIGHTS, AND BARRICADES IN COMPLIANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES TO ENSURE SAFETY AS DIRECTED IN THE GENERAL CONDITIONS. THE CONTRACTOR SHALL LIMIT THE EXTENT OF TRENCH TO REMAIN OPEN OVERNIGHT AND WEEKENDS TO LESS THAN 50 FEET.
9. 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. PRIOR TO START OF CONSTRUCTION THE CONTRACTOR SHALL FLAG AND REFERENCE ALL PROPERTY CORNERS THAT MAY BE DISTURBED BY CONSTRUCTION OPERATIONS, AND VERIFY THESE IN THE FIELD IN THE PRESENCE OF THE ENGINEER AND THE PROJECT SURVEYOR. AFTER CONSTRUCTION AND BEFORE THE FINAL INSPECTION, A LETTER SIGNED AND SEALED BY THE LICENSED LAND SURVEYOR CERTIFYING REPLACEMENT OF ALL DISTURBED PROPERTY CORNERS SHALL BE SUBMITTED TO THE ENGINEER.
10. THE CONTRACTOR SHALL RESTORE ALL DITCHES, SWALES, ROAD SHOULDERS, AND BANKS TO THEIR ORIGINAL SLOPES AND GRADES. WHERE EXISTING ENTRANCE PIPE, DRAINAGE PIPE, SIGNS, FENCES, ETC., CONFLICT WITH THE PROPOSED WORK HEREIN, THEY SHALL BE REMOVED AND REPLACED OR RESET. THE REPLACEMENT OF ALL THE AFORESAID ITEMS INCLUDING SEEDING, FERTILIZER, AND MULCHING SHALL BE CONSIDERED SUBSIDIARY TO "SITE CLEARING AND RESTORATION".
11. EASEMENTS AND RIGHTS-OF-WAY PROVIDED BY THE OWNER FOR THE PROJECT ARE SHOWN IN THE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ACQUISITION OF ANY ADDITIONAL TEMPORARY EASEMENTS OR RIGHTS-OF-WAY THAT HE DESIRES TO USE IN COMPLETING THE WORK.
12. POSITIVE DRAINAGE SHALL BE PROVIDED FOR ALL AREAS ON OR NEAR SPOIL AREAS. NATURAL DRAINAGE WAYS SHALL BE MAINTAINED.
13. THE CONTRACTOR SHALL PROVIDE POSITIVE DRAINAGE AWAY FROM ALL MANHOLE COVERS.
14. THE CONTRACTOR SHALL GIVE ALL PROPERTY OWNERS AND/OR TENANTS OF DEVELOPED PROPERTY ADJACENT TO THE CONSTRUCTION OF THIS PROJECT A MINIMUM OF 90 DAYS ADVANCE NOTICE PRIOR TO START OF CONSTRUCTION IN THE VICINITY OF THE AFFECTED PROPERTY.
15. ALL TRENCH BACKFILL SHALL BE EITHER TYPE I OR TYPE III UNLESS NOTED OTHERWISE.
16. TOP ELEVATIONS FOR MANHOLES ARE APPROXIMATE ONLY. TOP ELEVATIONS FOR MANHOLES SHALL BE SET AS FOLLOWS:  
 A. OUTSIDE OF TRAVELED WAYS, 0.4 FEET ABOVE FINISH GRADE.  
 B. PAVED TRAVELED WAYS, FLUSH WITH FINISH GRADE.  
 C. UNPAVED TRAVELED WAYS, AS DIRECTED BY THE ENGINEER.
17. THE CONTRACTOR SHALL ALSO CONTACT THE FOLLOWING AT LEAST 72 HOURS PRIOR TO BEGINNING CONSTRUCTION TO ADVISE THEM OF THE INTENDED WORK AND OF HIS PROPOSED SCHEDULE:  
 SEDGWICK COUNTY BUREAU OF PUBLIC SERVICES  
 1250 S. SENECA  
 WICHITA, KS 67213  
 MR. JIM WEBER  
 (316) 383-7901
18. CONTRACTOR SHALL GRADE THE SANITARY SEWER ALIGNMENT TO THE PROFILE AND ELEVATIONS SHOWN ON THE EASEMENT GRADING PLAN. ALL COSTS FOR EASEMENT GRADING SHALL BE SUBSIDIARY TO THE LUMP SUM PRICE BID FOR "EASEMENT GRADING".



SCALE: 1"=100'

PLAN	CHECKED	DATE
	CHECKED	

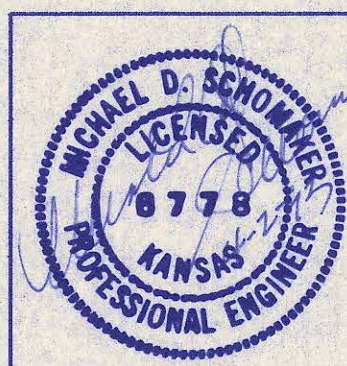
DRAWING NAME: 34-93106-1 SB SS KEY  
 LOCATION: E4 DMC #633  
 CENTER COORDINATES:  
 ROTATION ANGLE:  
 DATE LAST WORKED ON: MAR. 24, 1993  
 SPECIAL INSTRUCTIONS:  
 L-871

BENCH MARK LIST

- BM 2 - \*1" POST APPROXIMATELY 7' NORTHEAST OF THE SOUTHWEST CORNER OF LOT 13, BLOCK 1, SHADYBROOK MEADOW ADDITION. ELEV. -1312.12
- BM 3 - \*1" POST APPROXIMATELY 7' SOUTHWEST OF THE NORTHWEST CORNER OF LOT 1, BLOCK 2, SHADYBROOK MEADOW ADDITION. ELEV. -1314.03
- BM 4 - NORTH BOLT IN TOP OF FIRE HYDRANT, NORTHWEST OF INTERSECTION CARDINAL AND HAWTHORNE COURT. ELEV. -1326.42

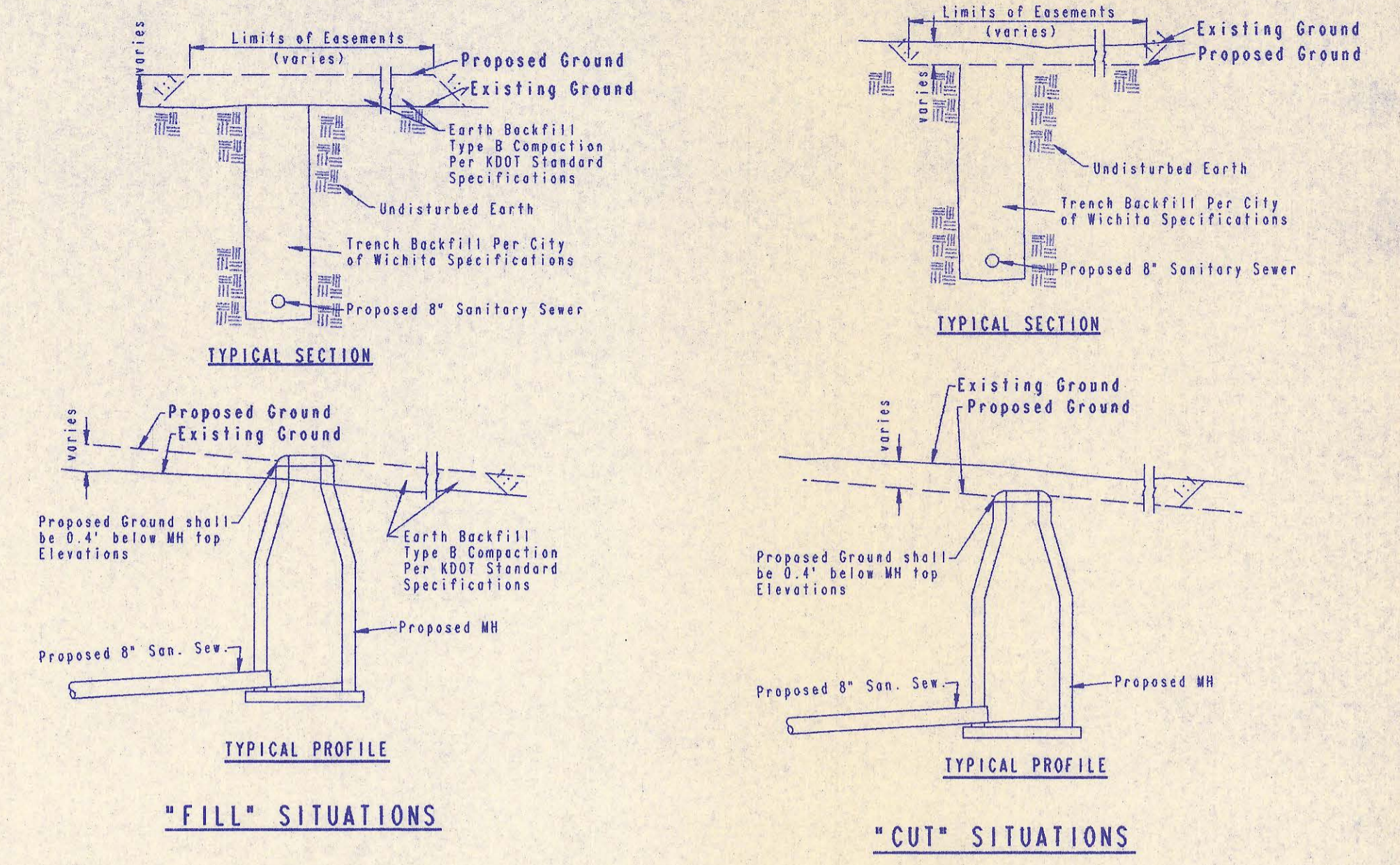
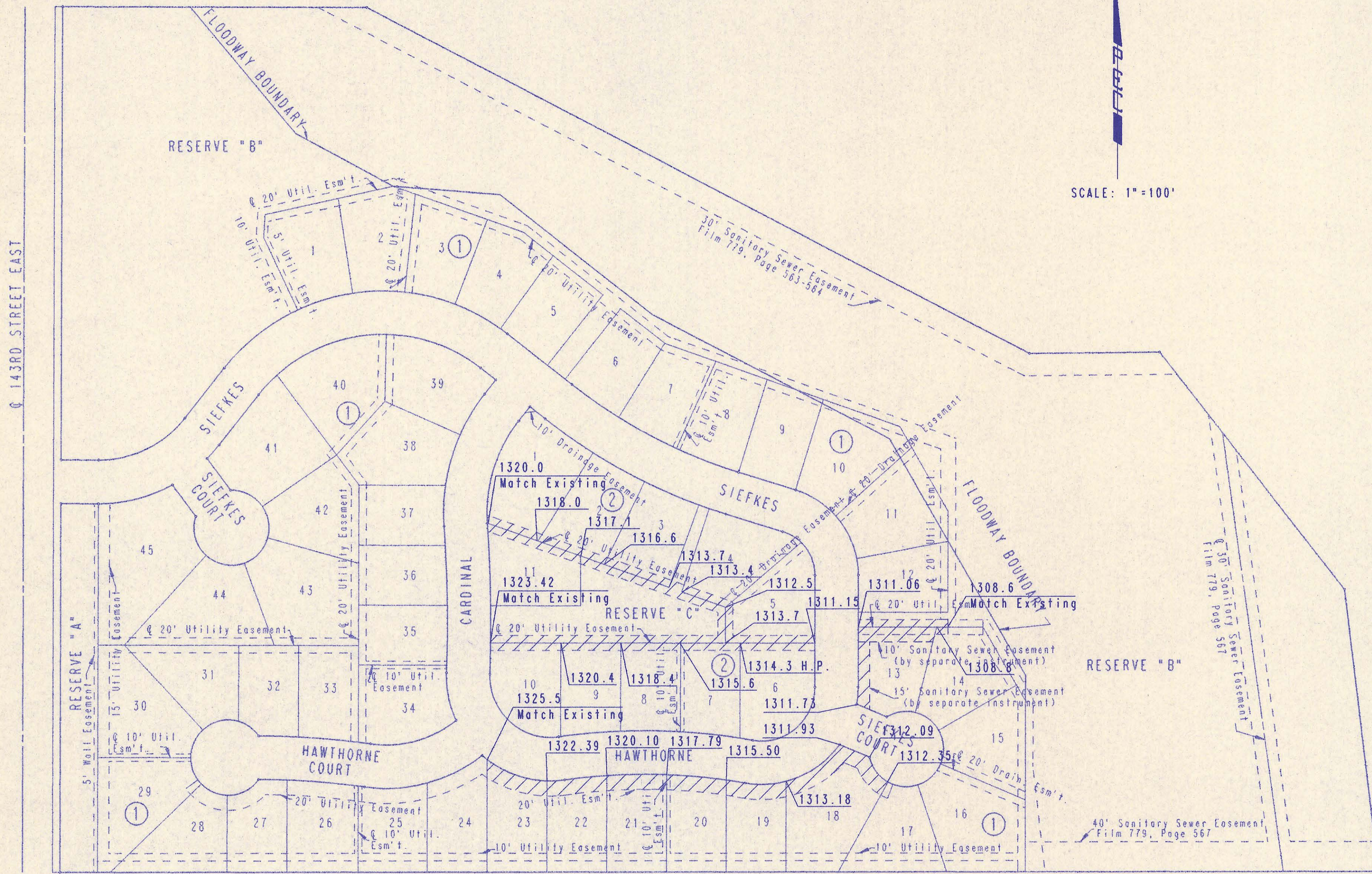
**RECORD DRAWING**

MDK 8/10/93  
 LM 8/10/93



No.	Revision	By	Date
SEDGWICK COUNTY BUREAU OF PUBLIC SERVICES DAVID C. SPEARS, P.E. DIRECTOR, BUREAU OF PUBLIC SERVICES			
<b>KEY MAP</b> SANITARY SEWER IMPROVEMENTS SHADYBROOK MEADOW ADDITION - PHASE 2 PROFESSIONAL ENGINEERING CONSULTANTS, P.A. ENGINEERS WICHITA, KANSAS			
Designed by MDK	Job No. 34-93106-1	Sht. 2 of 9	
Drawn by TDS	Date March, 1993		

PLAN	CHECKED	DATE
	CHECKED	



**EASEMENT GRADING DETAILS**

- = AREAS TO BE GRADED
- = Locations where surface drainage will be directed along the side lot lines from the rear yard easements to the front of the lot. This grading will be "by others".
- H.P. = HIGH POINT

**RECORD DRAWING**  
 MDK 8/10/93  
 LM 8/10/93

DRAWING NAME: 34-93106-1 SB SS ESMT  
 LOCATION: E4 DWG #636  
 CENTER COORDINATES:  
 DATE LAST WORKED ON: MAR. 20, 1993  
 SPECIAL INSTRUCTIONS:



No.	Revision	By	Date
SEDGWICK COUNTY BUREAU OF PUBLIC SERVICES DAVID C. SPEARS, P.E. DIRECTOR, BUREAU OF PUBLIC SERVICES			
<b>EASEMENT GRADING PLAN</b> SANITARY SEWER IMPROVEMENTS SHADYBROOK MEADOW ADDITION - PHASE 2			
<b>PROFESSIONAL ENGINEERING CONSULTANTS, P.A.</b> ENGINEERS WICHITA, KANSAS			
Designed by	MDS, MDK	Job No.	34-93106-1
Drawn by	TOS	Date	February, 1993
			Sht. 3 of 9

# FINAL PLAT OF SHADYBROOK MEADOW ADDITION

AN ADDITION TO SEDGWICK COUNTY, KANSAS

We, the Kansas State Bank and Trust, do hereby consent to the plat of "SHADYBROOK MEADOW".

KANSAS STATE BANK AND TRUST

By: Sue L. Crockett, Sr. VP

STATE OF KANSAS) SS:  
SEDGWICK COUNTY)

Be it remembered that on this 15th day of August, 1989, before me a Notary Public in and for said State and County, came SUE L. CROCKETT to me personally known to be the same person who executed the foregoing instrument of writing and duly acknowledged the execution of the same. In testimony whereof I have hereunto set my hand and affixed my notarial seal the day and year above written.

Kim Durr, Notary Public

My Appointment Expires: August 25, 1990

This plat of "Shadybrook Meadows" has been submitted to and approved by the Wichita-Sedgwick County Metropolitan Area Planning Commission, Wichita, Kansas.

Dated this 3rd day of August, 1989.

WICHITA-SEDGWICK COUNTY METROPOLITAN AREA PLANNING COMMISSION

Sue L. Crockett, Chairman

Marvin S. Krout, Secretary



This plat approved and all dedications shown hereon, if any, accepted by the City Commission of the City of Wichita, Kansas, this 12th day of September, 1989.

Bob Knight, Mayor

John Moir, City Clerk



Entered on transfer record this 28th day of September, 1989.

Don Wright, County Clerk

STATE OF KANSAS) SS:  
SEDGWICK COUNTY)

This is to certify that this instrument was filed for record in the Register of Deeds office this 28th day of September, 1989, at 11:00 A.M.

Pat Kettler, Register of Deeds

Ed Resa, Deputy

This plat approved and all dedications shown hereon accepted by the Board of County Commissioners of Sedgwick County, Kansas, this 27 day of September, 1989.

BOARD OF COUNTY COMMISSIONERS

Paul W. Hancock, Chairman

Mark F. Schroeder, Commissioner

David Bayouth, Commissioner

Bernard A. Hentzen, Commissioner

Billy O. McGray, Commissioner

Attest: Don Wright, County Clerk



I, Kenneth H. Bengtson, a Civil Engineer and Registered Land Surveyor in Kansas, do hereby certify that I have been in responsible charge of surveying and platting of "SHADYBROOK MEADOWS" an addition to Sedgwick County, Kansas, into Lots, Blocks, Streets and Reserves, the same being accurately set forth in the accompanying plat and described herein:

A tract of land lying in the Northwest Quarter, Section 24, Township 27 South, Range 2 East of the 6th P.M., Sedgwick County, Kansas, more particularly described as follows:

Beginning at a point lying on the South line and 45.00 feet East of the Southwest corner of said Northwest Quarter; thence N 00° 11' 00" E, 1153.32 feet parallel with the West line of said Northwest Quarter; thence S 89° 49' 00" E, 415.52 feet to a point on the extended Southwesterly line of Lots 13 and 14, Block 8, SHADYBROOK FARM ADDITION, an addition to Sedgwick County, Kansas; thence S 62° 26' 40" E, 1000.00 feet along said Southwesterly line to the Southwest corner of Lot 12, Block 8, of said addition; thence N 89° 30' 00" E, 173.59 feet along the South line to the Southeast corner of Lot 6, Block 8, of said addition; thence S 37° 52' 53" E, 401.02 feet along the West line of said Lot 6; thence continuing along said West line of said Lot 6, S 06° 54' 26" E, 380.00 feet to the Southwest corner of said Lot 6, to a point on the South line of said Northwest Quarter; thence N 89° 54' 26" W, 1771.29 feet along said South line to the point of beginning.

I hereby certify that the details of this plat are correct to the best of my knowledge and belief this 16 day of August, 1989.

Kenneth H. Bengtson  
Kenneth H. Bengtson, P.E., R.L.S.#922  
Mid-Kansas Engineering Consultants, P.A.  
3500 N. Rock Road, Building #800  
Wichita, KS 67226

Know all men by these presents that we the undersigned property owners of the land as above set forth in the Civil Engineer's and Registered Land Surveyor's Certificate, have caused the same to be surveyed and platted into Lots, Blocks, Reserves, and Streets, the same to be known as "SHADYBROOK MEADOWS", an addition to Sedgwick County, Kansas. The streets are hereby dedicated to and for the use of the public. Reserves A, B, and C are platted for the construction and maintenance of drainage, walkways, fencing, lighting, and landscaping. Reserves B & C are also platted for gazebos and playground equipment. Reserves A & B are also platted for monuments. Reserve B is also platted for lakes and floodway. The Reserves shall be owned and maintained by the Homeowners Association. Easements for the construction and maintenance of public utilities and drainage as indicated on the accompanying plat, are hereby granted to the public. All abutters rights of access to and from 143rd Street East over and across the West lines of Reserves A and B are hereby granted to appropriate governing body. The floodway shall be the responsibility of the owners until such time as the governing body exercising jurisdiction elects to assume the responsibility for the maintenance and improvement of the drainage, provided however, that no structure shall be constructed on or within said floodway, nor shall any fill, change of grade, creation of channel or other work be carried on without the permission of the Appropriate Engineer. Minimum pad elevations on Lots 1-12, and 14-16, Block 1, inclusive, shall be as indicated on the face of the plat.

By: Janice G. Siefkes  
Janice G. Siefkes

STATE OF KANSAS) SS:  
SEDGWICK COUNTY)

Be it remembered that on this 16th day of August, 1989, before me a Notary Public in and for said State and County, came Janice G. Siefkes to me personally known to be the same person who executed the foregoing instrument of writing and duly acknowledged the execution of the same. In testimony whereof I have hereunto set my hand and affixed my notarial seal the day and year above written.

Maribeth R. Rice, Notary Public

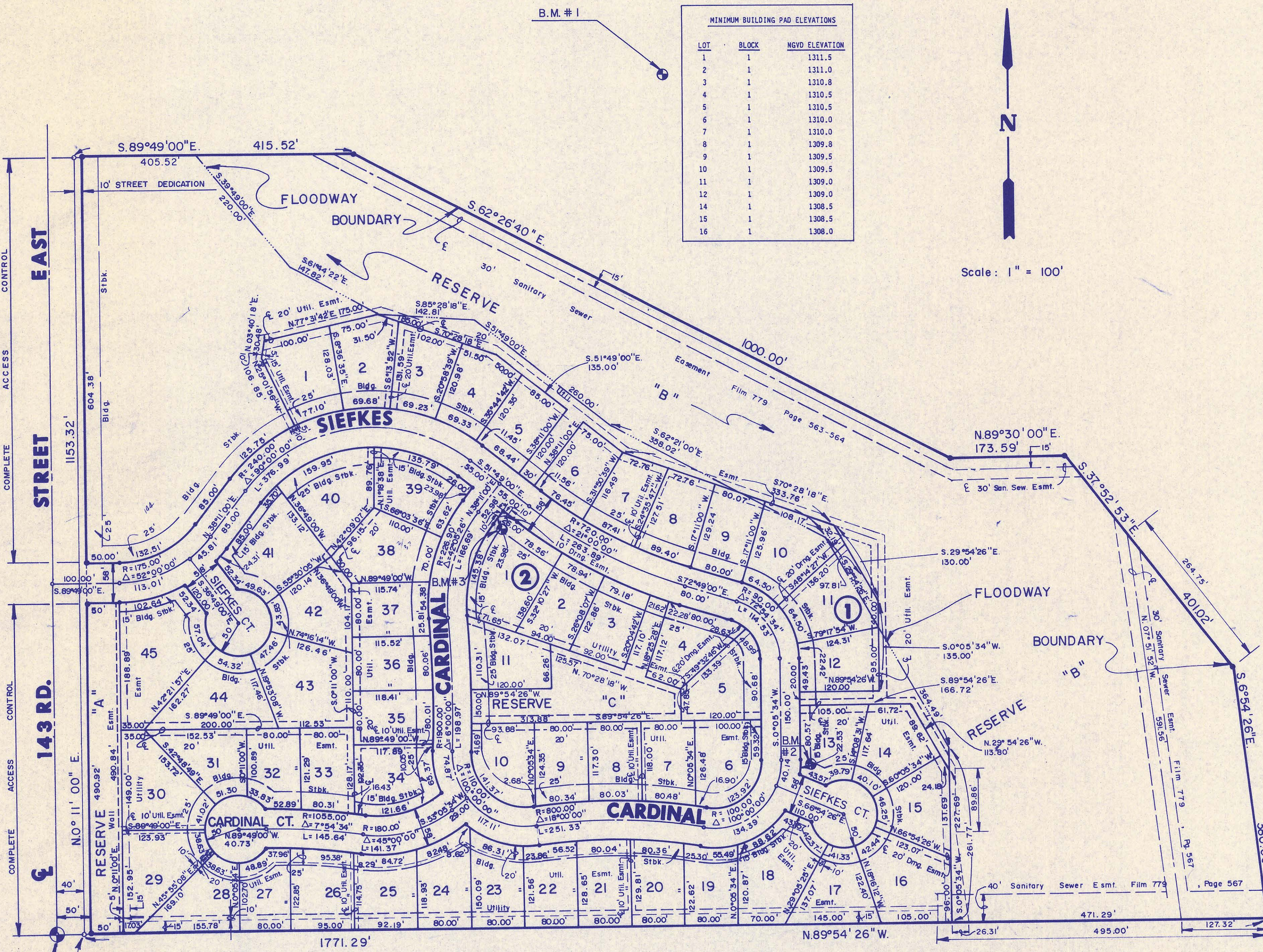
My Appointment Expires: 2/3/93



LOT	BLOCK	NGVD ELEVATION
1	1	1311.5
2	1	1311.0
3	1	1310.8
4	1	1310.5
5	1	1310.5
6	1	1310.0
7	1	1310.0
8	1	1309.8
9	1	1309.5
10	1	1309.5
11	1	1309.0
12	1	1309.0
14	1	1308.5
15	1	1308.5
16	1	1308.0



Scale: 1" = 100'



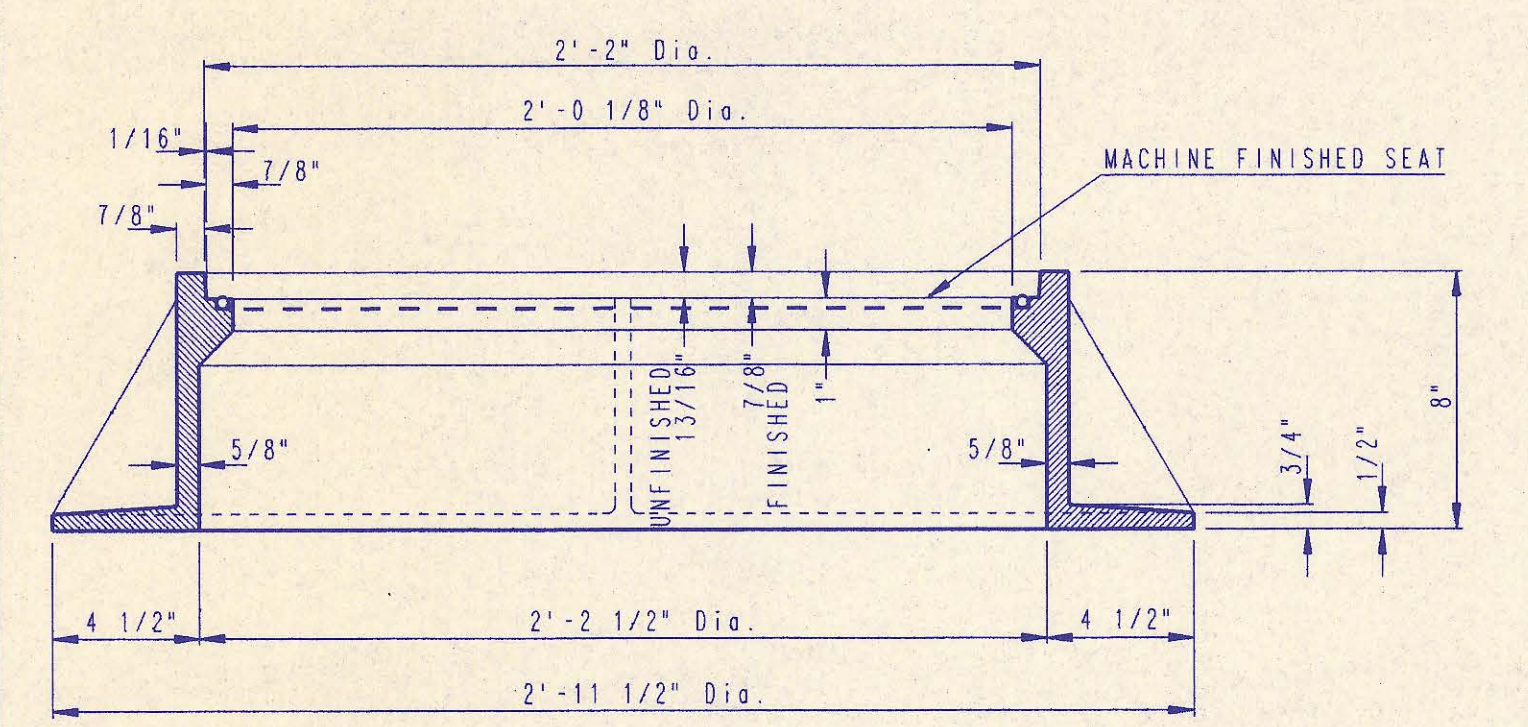
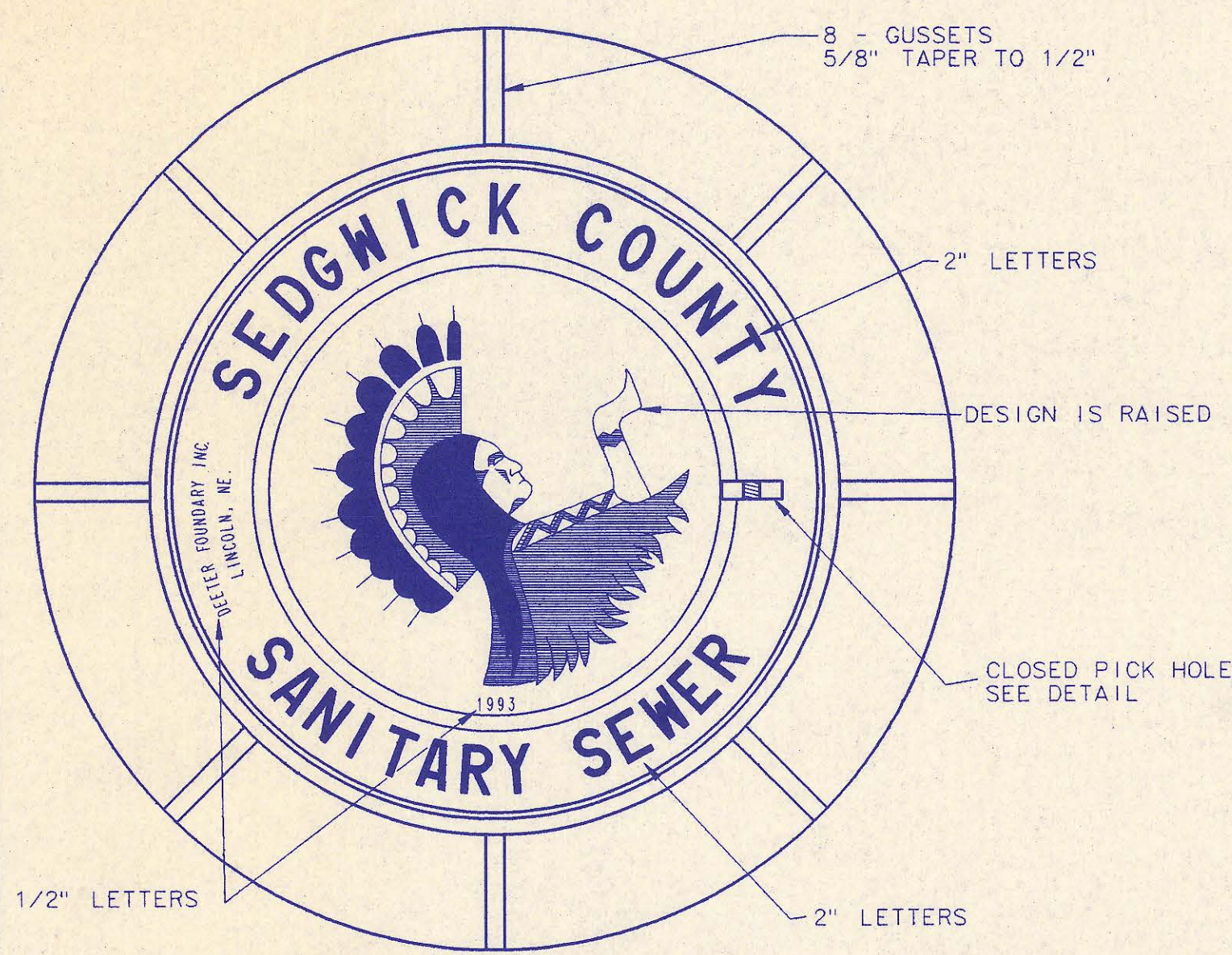
### BENCHMARKS

- B.M.#1 "□" on Southwest Corner of R.C.B. on Stagecoach in Shadybrook Farm Addition. Elevation = 1311.02
- B.M.#2 "T" post 5'± North and 5'± East of Southwest Corner Lot 13, Block 1. Elevation = 1312.06
- B.M.#3 "T" post 5'± Southeast and 5'± Southwest of Northwest Corner Lot 1, Block 2. Elevation = 1314.025

THE PLATTED STREET NAMES FOR "CARDINAL COURT" AND THE EAST-WEST PORTION OF "CARDINAL" HAVE BEEN CHANGED TO "HAWTHORNE COURT" AND "HAWTHORNE" RESPECTIVELY. AFFIDAVIT FILED JUNE 25, 1990 AND RECORDED ON FILM 1116, PAGE 0783.

S.W. Cor., NW. 1/4  
Sec. 24, T.27 S.R.2 E.  
6th. P.M.

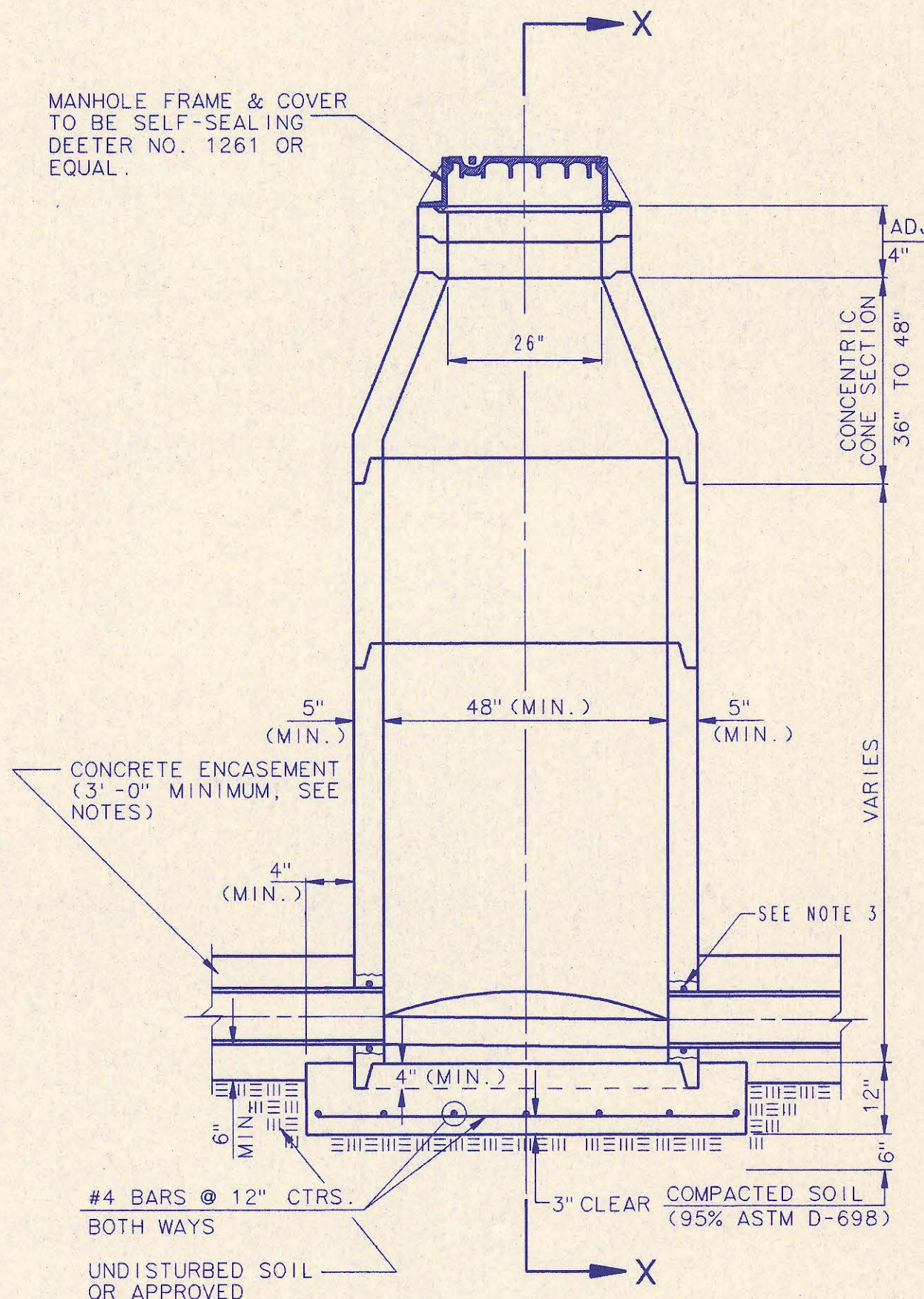
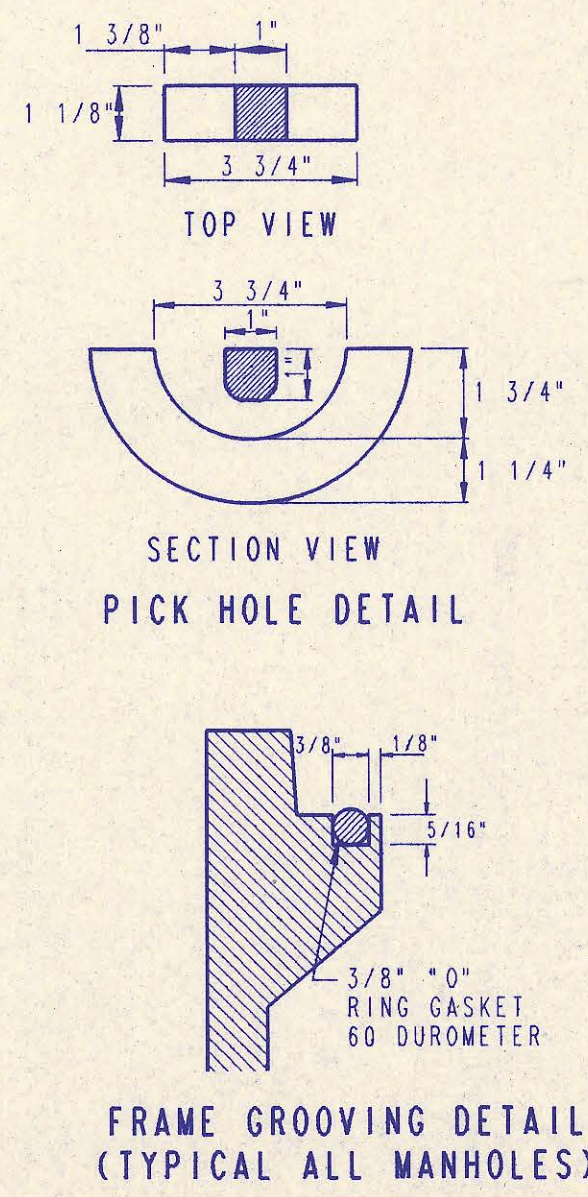
20.00 CA



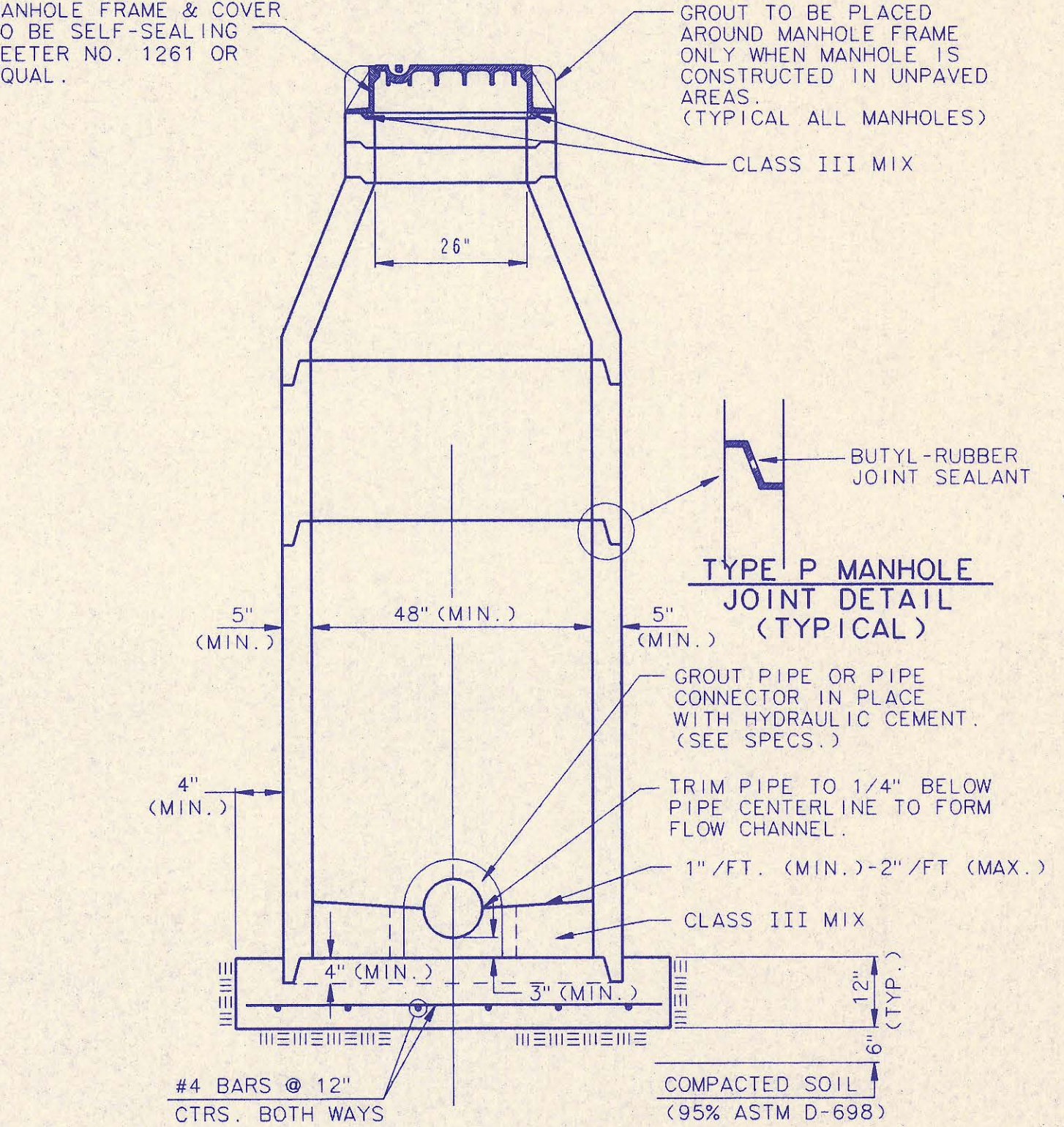
**MANHOLE FRAME AND COVER**  
(TOTAL WEIGHT = 430 LBS.)

**MANHOLE FRAME AND COVER NOTES**

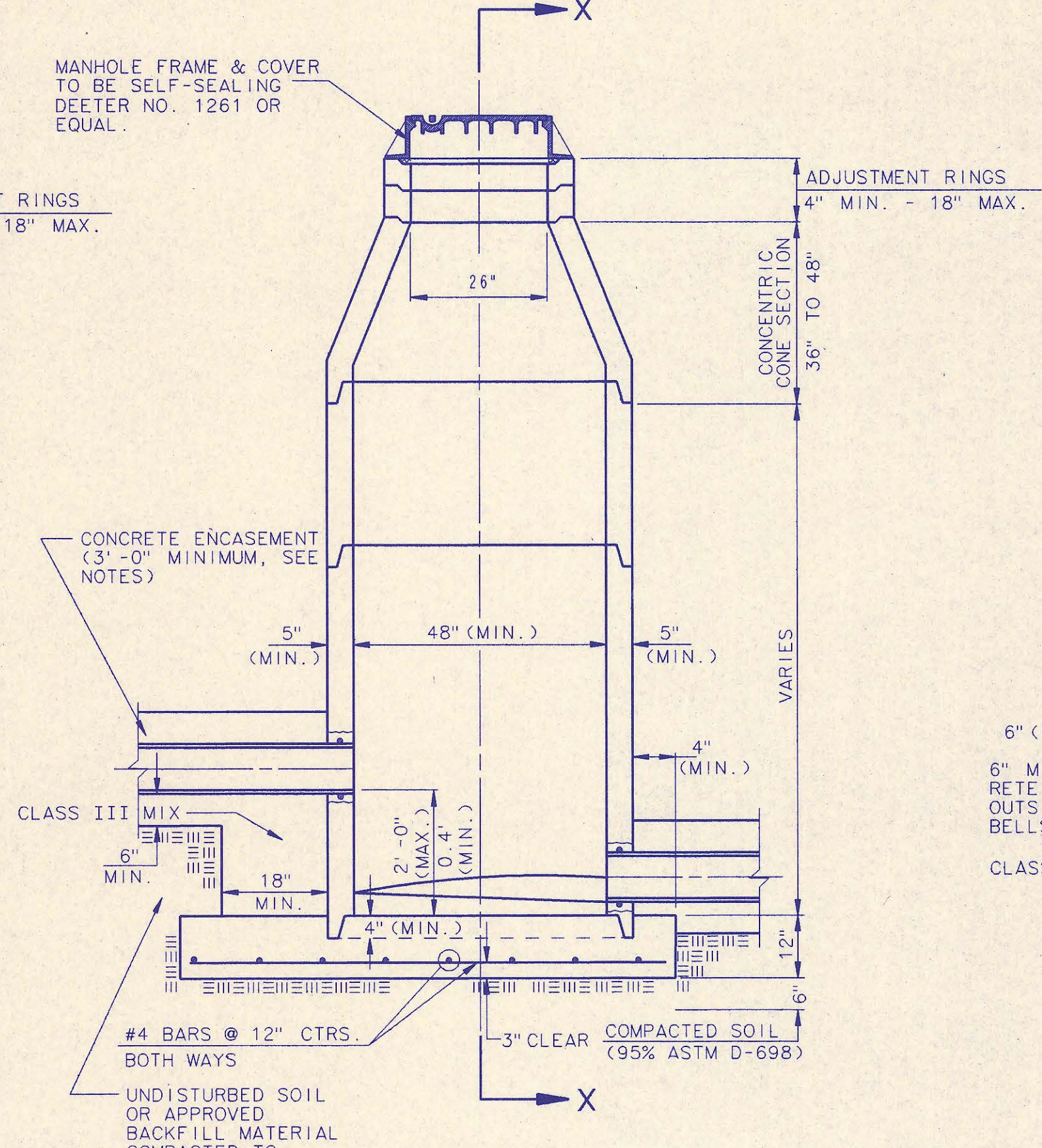
1. CAST IRON MANHOLE FRAME AND COVER SHALL CONFORM TO ASTM A-48, CLASS 35B, OR BETTER.
2. CASTINGS ARE TO BE MANUFACTURED TRUE TO PATTERN AND WITH SATISFACTORY FIT OF COMPONENT PARTS. CASTINGS SHALL BE FREE OF DEFECTS. DIMENSIONS AS DETAILED ON PLAN SHALL NOT DEVIATE BY ± 1/16" PER FOOT.
3. NO OTHER LETTERING OR MARKINGS OTHER THAN THOSE DETAILED ON PLAN WILL BE PERMITTED ON CASTINGS.
4. CASTINGS MUST BE DOMESTICALLY MANUFACTURED IN THE UNITED STATES OF AMERICA.
5. THE FRAMES AND COVERS SHALL BE FURNISHED WITH MACHINED HORIZONTAL BEARING SURFACES SO FITTING PARTS WILL NOT RATTLE OR ROCK UNDER TRAFFIC.
6. MANHOLE CASTINGS SHALL BE SELF-SEALING DEETER FOUNDRY INC. NO. 1261 OR APPROVED EQUAL, UNLESS OTHERWISE SPECIFIED IN THE SPECIAL CONDITIONS. (MINIMUM WT. 430 LBS.) ALL MANHOLE CASTINGS SHALL BE CONSIDERED SUBSIDIARY TO THE UNIT PRICES BID FOR THE VARIOUS MANHOLE TYPES.
7. GRIND ALL BURRS SMOOTH, CLEAN THOROUGHLY, THEN APPLY SHOP COAT OF ASPHALT BASE PAINT.
8. THE MANUFACTURER SHALL SUBMIT SHOP DRAWINGS TO THE ENGINEER FOR APPROVAL PRIOR TO MANUFACTURE. THE ENGINEER SHALL RETAIN THE RIGHT TO REJECT CASTINGS NOT CONFORMING TO THE SPECIFICATIONS OR THE APPROVED SHOP DRAWINGS.
9. THE MANHOLE FRAME SHALL BE FURNISHED WITH AN APPROVED "O" RING GASKET GROOVED INTO THE BEARING SURFACE OF THE MANHOLE FRAME (PER DETAIL). THE "O" RING GASKET SHALL NOT BE INSTALLED IN THE MANHOLE FRAME UNTIL AFTER FINAL INSPECTION AND ACCEPTANCE OF THE PROJECT BY THE ENGINEER.



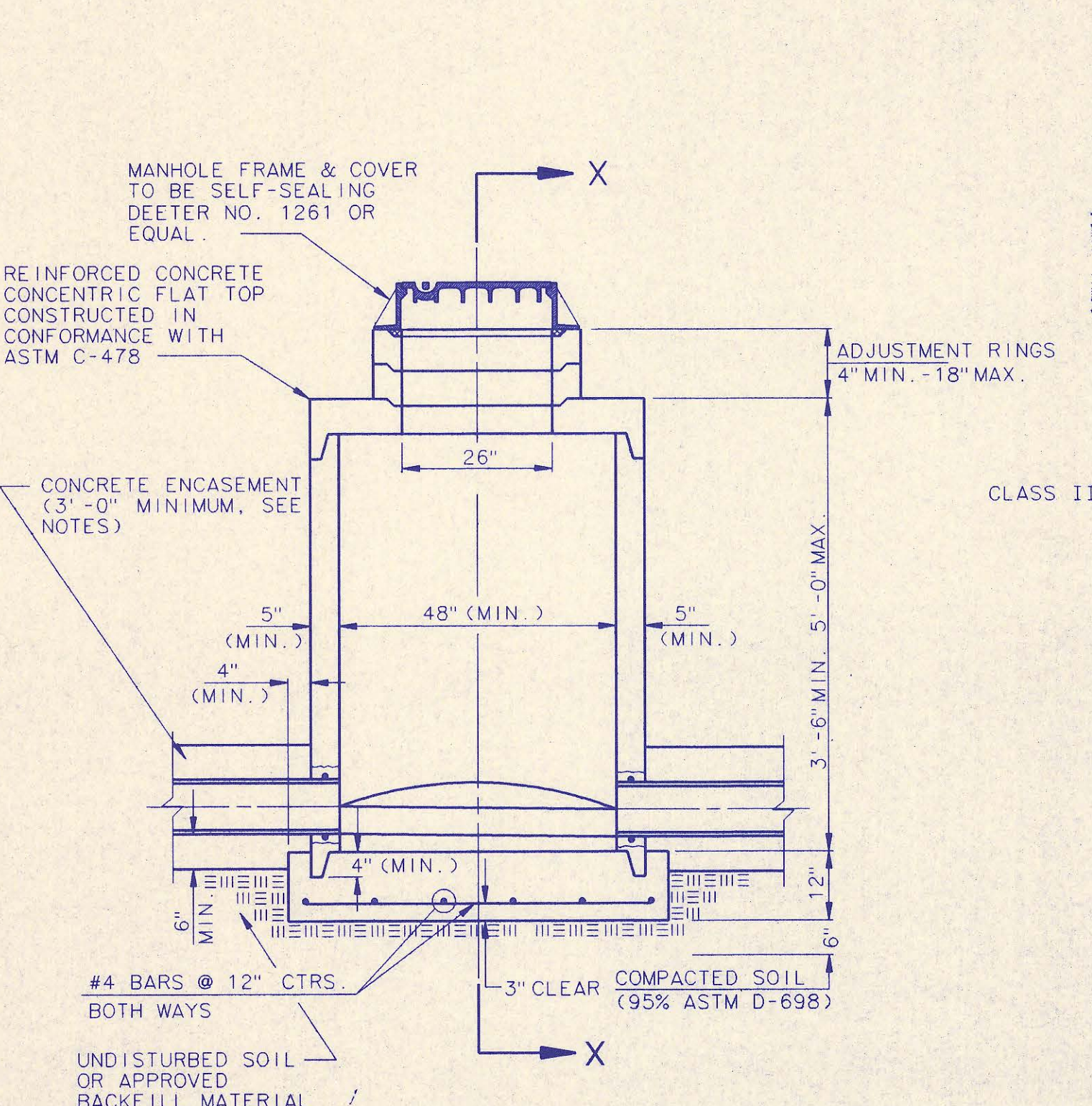
**PRECAST STANDARD MANHOLE TYPE "A"**



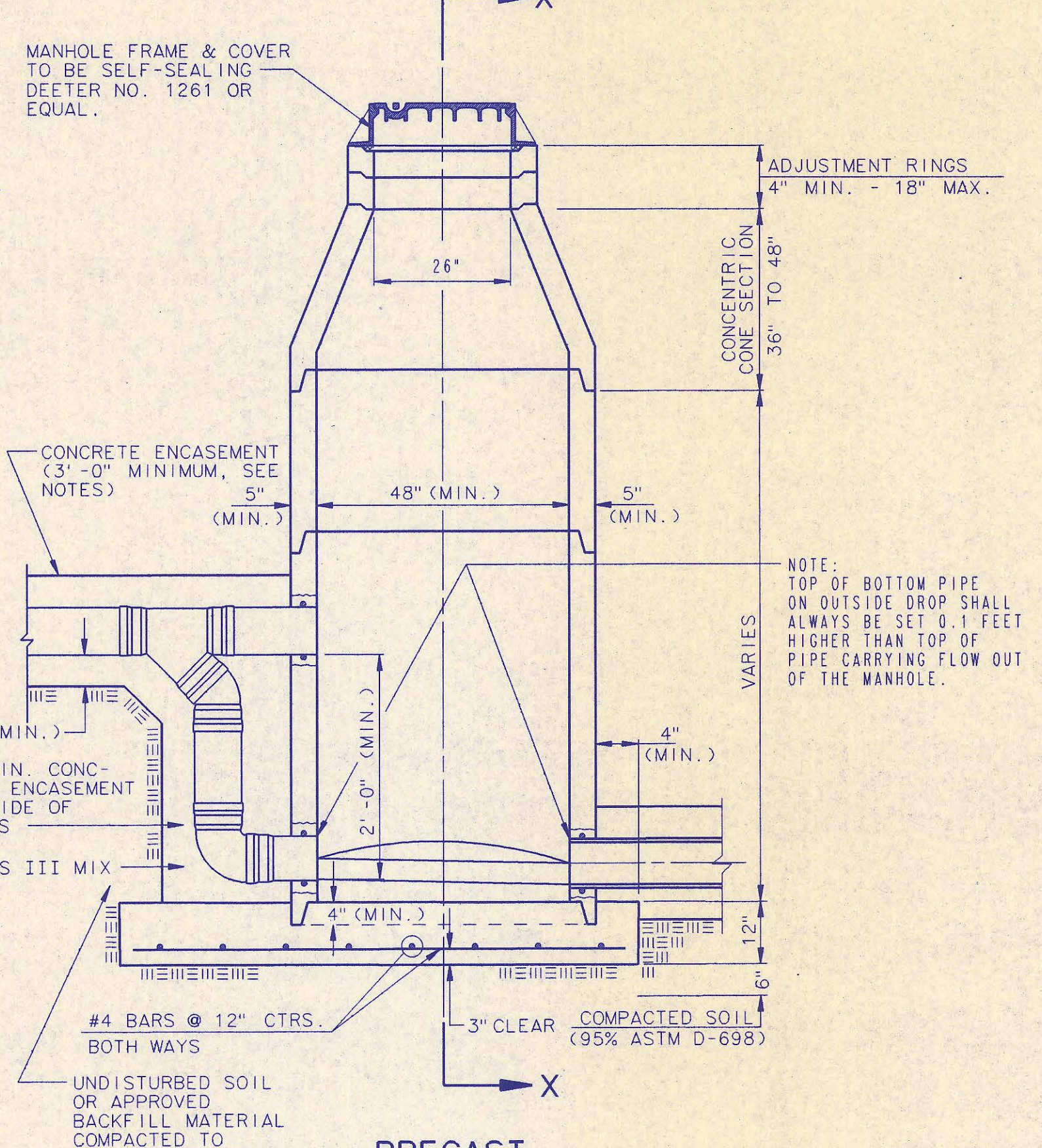
**SECTION X (TYPICAL)**



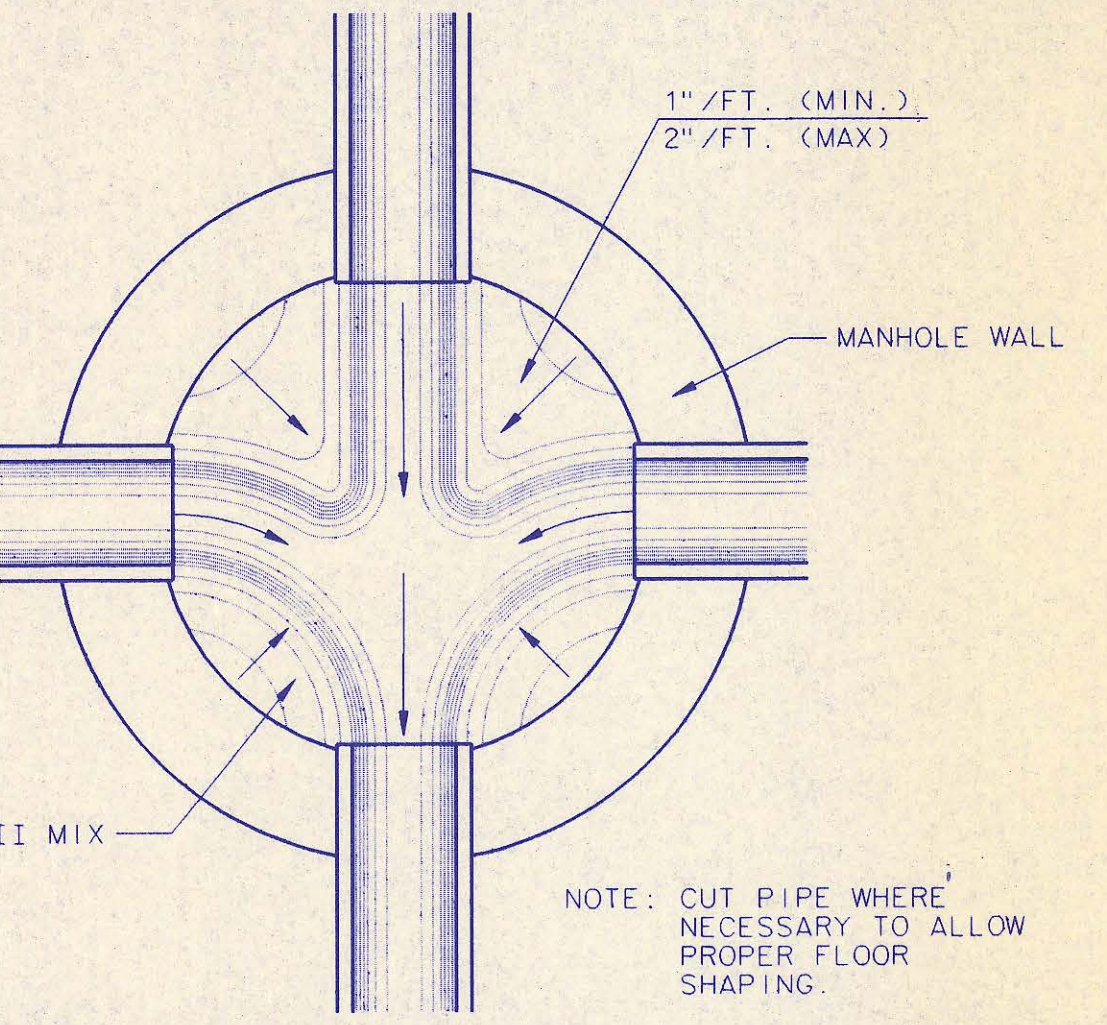
**PRECAST INSIDE DROP MANHOLE TYPE "B"**



**PRECAST SHALLOW MANHOLE TYPE "D"**



**PRECAST OUTSIDE DROP MANHOLE TYPE "C"**



**TYPICAL MANHOLE FLOOR SHAPING**

**PRECAST MANHOLE NOTES**

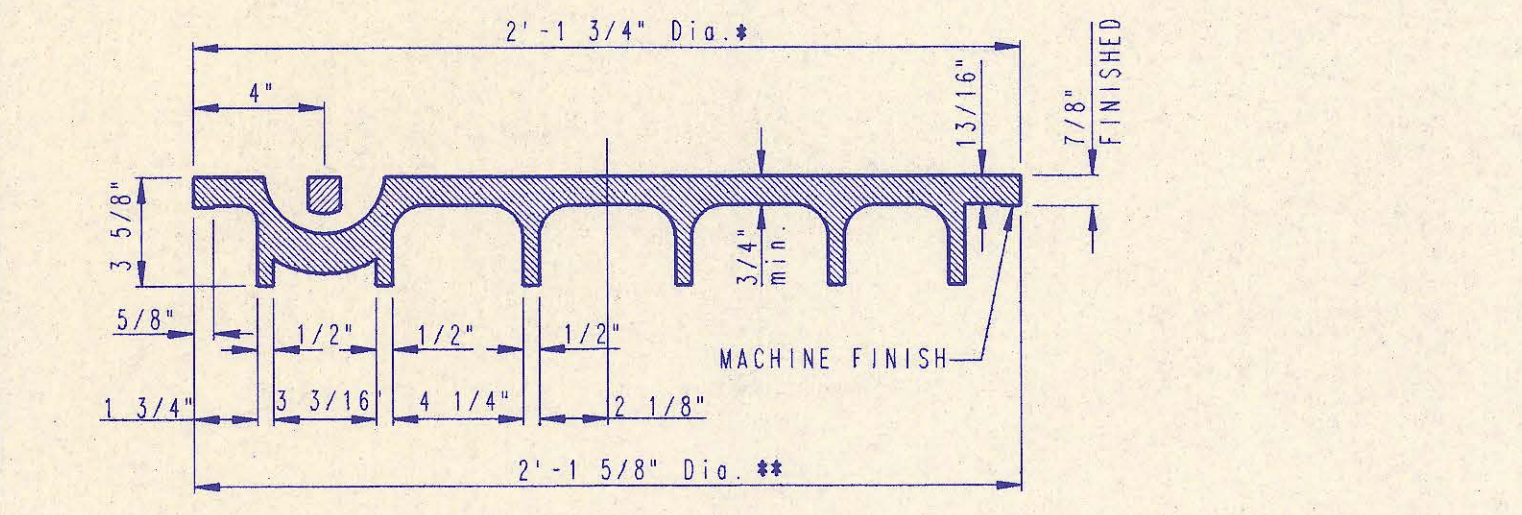
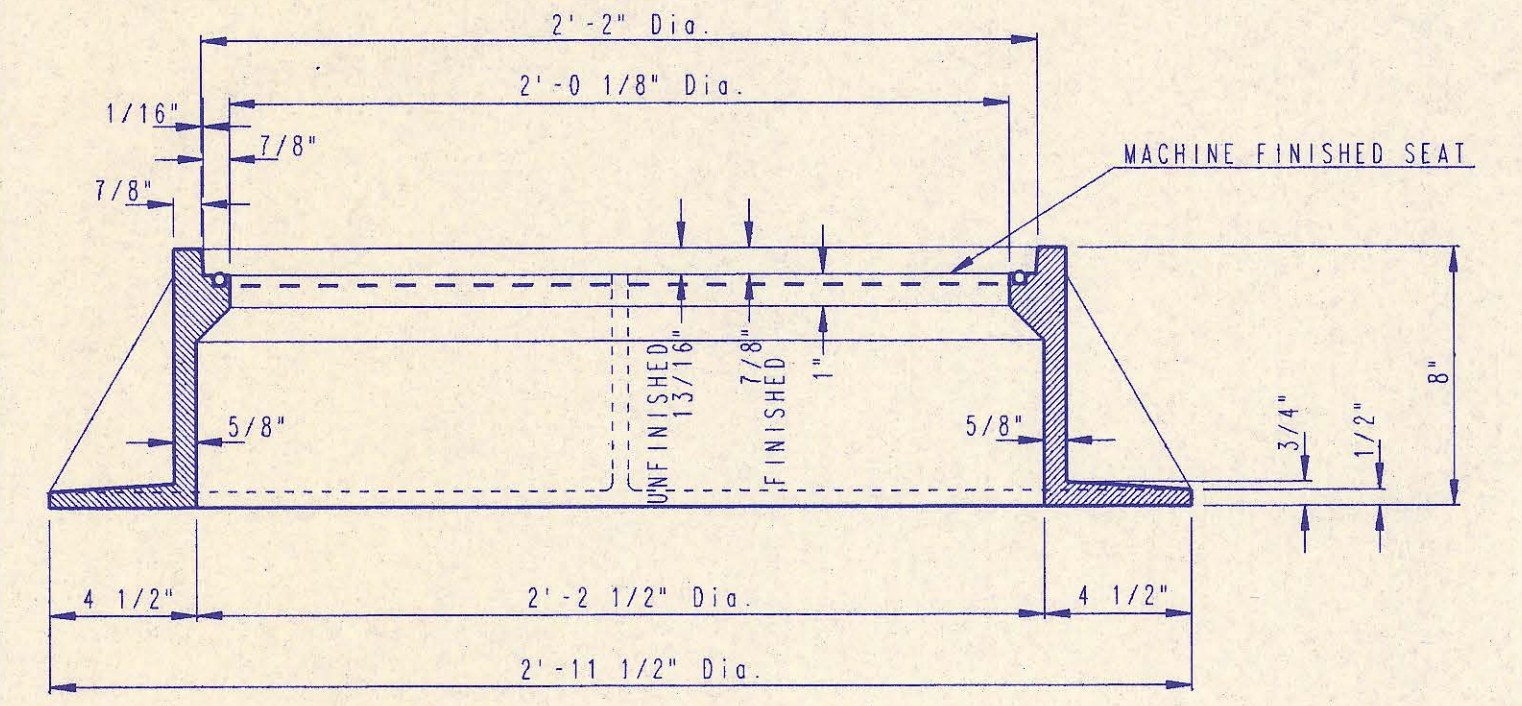
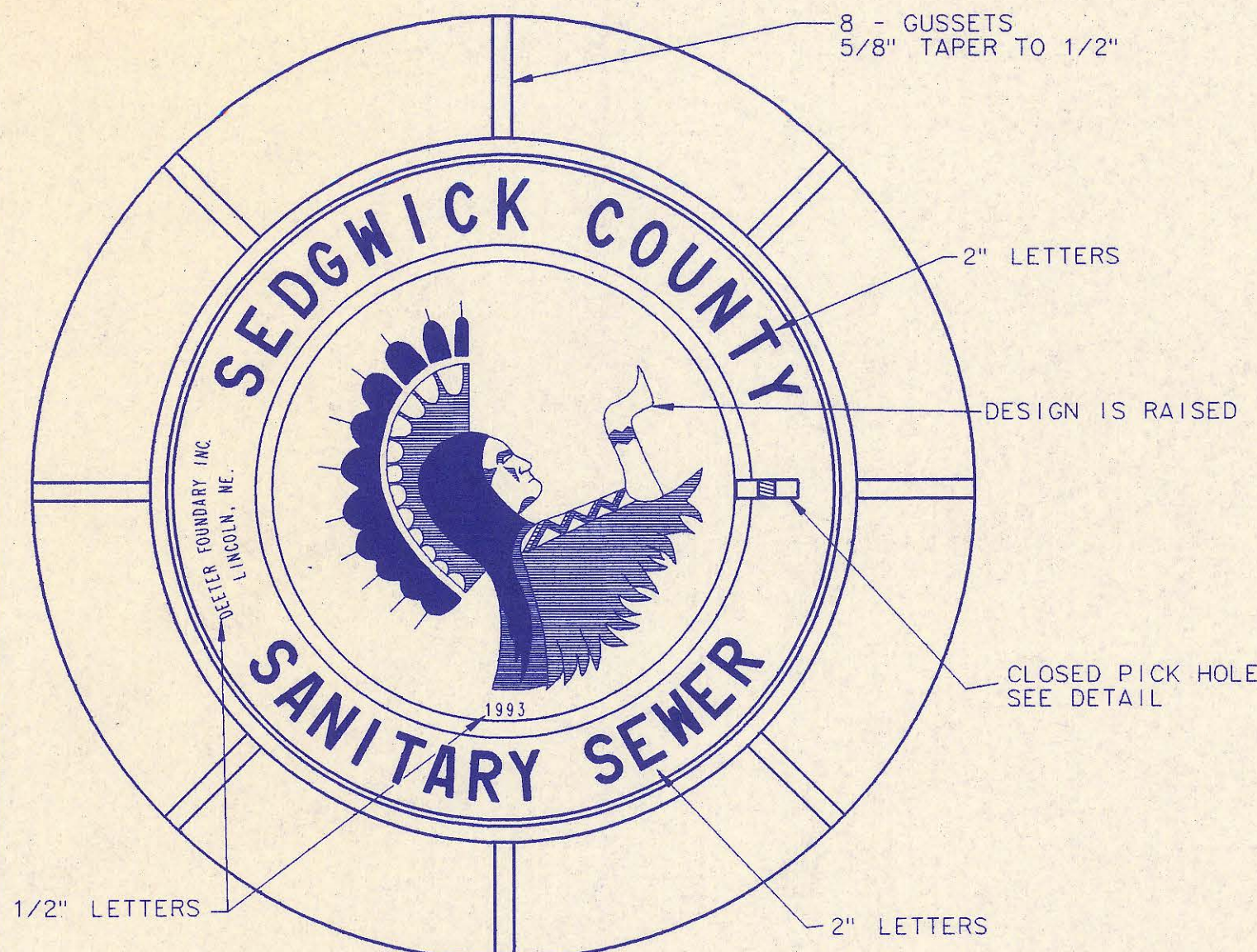
1. IF, IN THE OPINION OF THE ENGINEER, THE MANHOLE SUBGRADE APPEARS UNSTABLE, THE CONTRACTOR WILL HAVE THE OPTION TO COMPACT SUBGRADE AS SHOWN OR INCREASE THE THICKNESS OF THE MANHOLE BASE AS DIRECTED BY THE ENGINEER.
2. STEEL REINFORCING WILL BE REQUIRED IN ALL MANHOLE BASES.
3. APPROVED FLEXIBLE WATERSTOP GASKETS WHICH MEET OR EXCEED THE TEST REQUIREMENTS OF ASTM C-923 SHALL BE INSTALLED TO JOIN THE SEWER TO THE MANHOLE WALL WHEN PLASTIC PIPE IS USED. SEWER PIPE EXTENDING FROM MANHOLES SHALL BE SUPPORTED WITH CONCRETE ENCASUREMENT A MINIMUM OF 3 FEET FROM THE MANHOLE WALL.
4. THE MANHOLE FRAME SHALL BE SEATED ON AN APPROVED BUTYL-RUBBER SEALANT TO PROVIDE A WATER-TIGHT SEAL BETWEEN THE MANHOLE ADJUSTMENT RING AND THE MANHOLE FRAME.
5. GASKETED PIPE CAPS SHALL BE PROVIDED BY THE PIPE SUPPLIER. GLUED OR CEMENTED CAPS WILL NOT BE ACCEPTED.
6. ALL MANHOLE CONSTRUCTION SHALL BE WATER TIGHT.
7. TOP OF MANHOLE FLOOR SLAB SHALL BE AT LEAST 3 INCHES BELOW THE FLOW LINE OF THE OUTLET PIPE TO INSURE SUFFICIENT MINIMUM THICKNESS OF SHAPED INVERT.
8. ALL PRECAST CONCRETE MANHOLE SECTIONS SHALL CONFORM TO THE LATEST REVISION OF ASTM C478 AS MODIFIED BY THE SPECIFICATIONS.
9. CONCRETE FOR MANHOLE BASES SHALL BE CLASS I AS DESCRIBED IN THE SPECIFICATIONS.
10. PRECAST MANHOLES SHALL BE SET AT LEAST 4 INCHES INTO MANHOLE BASE.
11. MANHOLES WITH PIPE SIZES 24" AND LARGER SHALL HAVE 5" INSIDE DIAMETER (MIN.).
12. INSIDE DIAMETER OF FIVE-FOOT DIAMETER PRECAST MANHOLES SHALL REMAIN CONSTANT TO THE LOCATION OF THE REDUCING FLAT TOP WHICH CONNECTS THE FOUR-FOOT DIAMETER CONE SECTION TO THE FIVE-FOOT DIAMETER MANHOLE BARREL.

**RECORD DRAWING**

MDK 8/10/93  
LM 8/10/93

No.	Revision	By	Date
3	All Manholes self-sealing/MH Cover	RJ	1/25/93
2	Modified pipe connection note	RJ	6/01/92
1	Manhole Frame and Cover Note 1	RJ	7/16/91

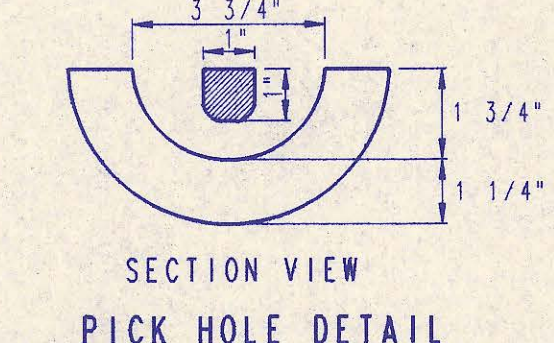
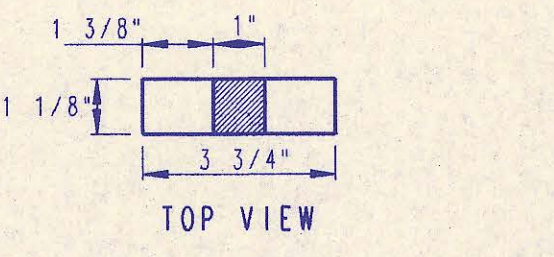
**PRECAST MANHOLE DETAILS**  
ADOPTED AS STANDARD DESIGN SEPTEMBER, 1989  
BY  
SEDGWICK COUNTY BUREAU OF PUBLIC SERVICES  
DAVID C. SPEARS, P.E. DIRECTOR, BUREAU OF PUBLIC SERVICES/COUNTY ENGINEER



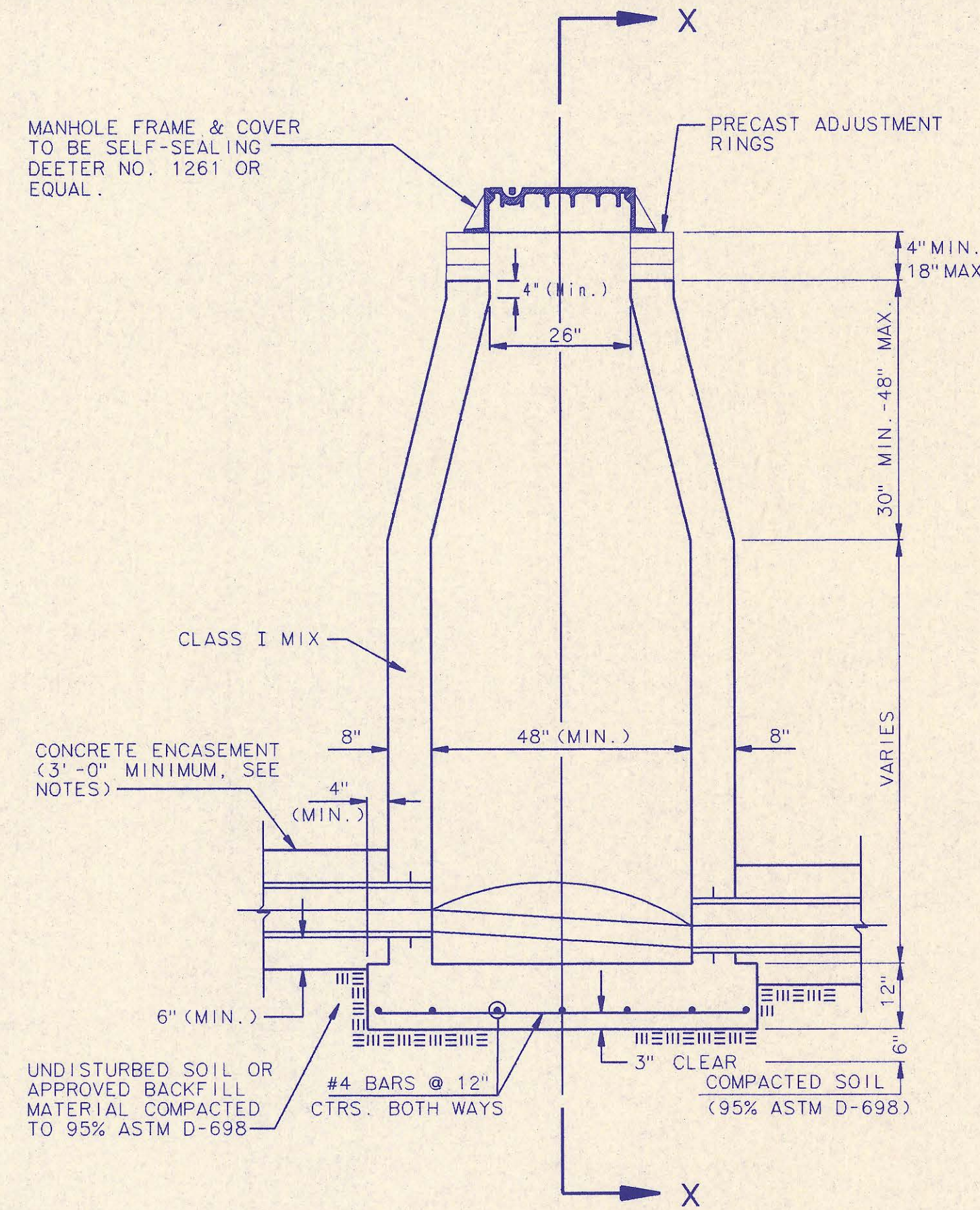
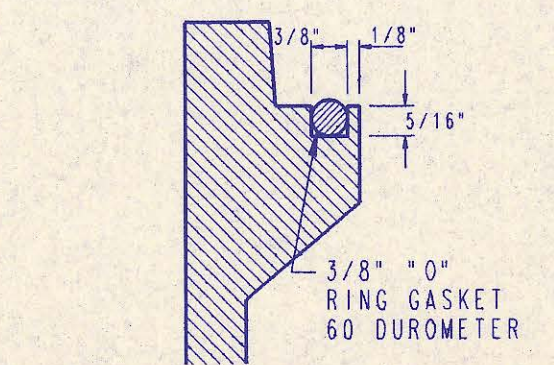
**MANHOLE FRAME AND COVER**  
(TOTAL WEIGHT = 430 LBS.)

**MANHOLE FRAME AND COVER NOTES**

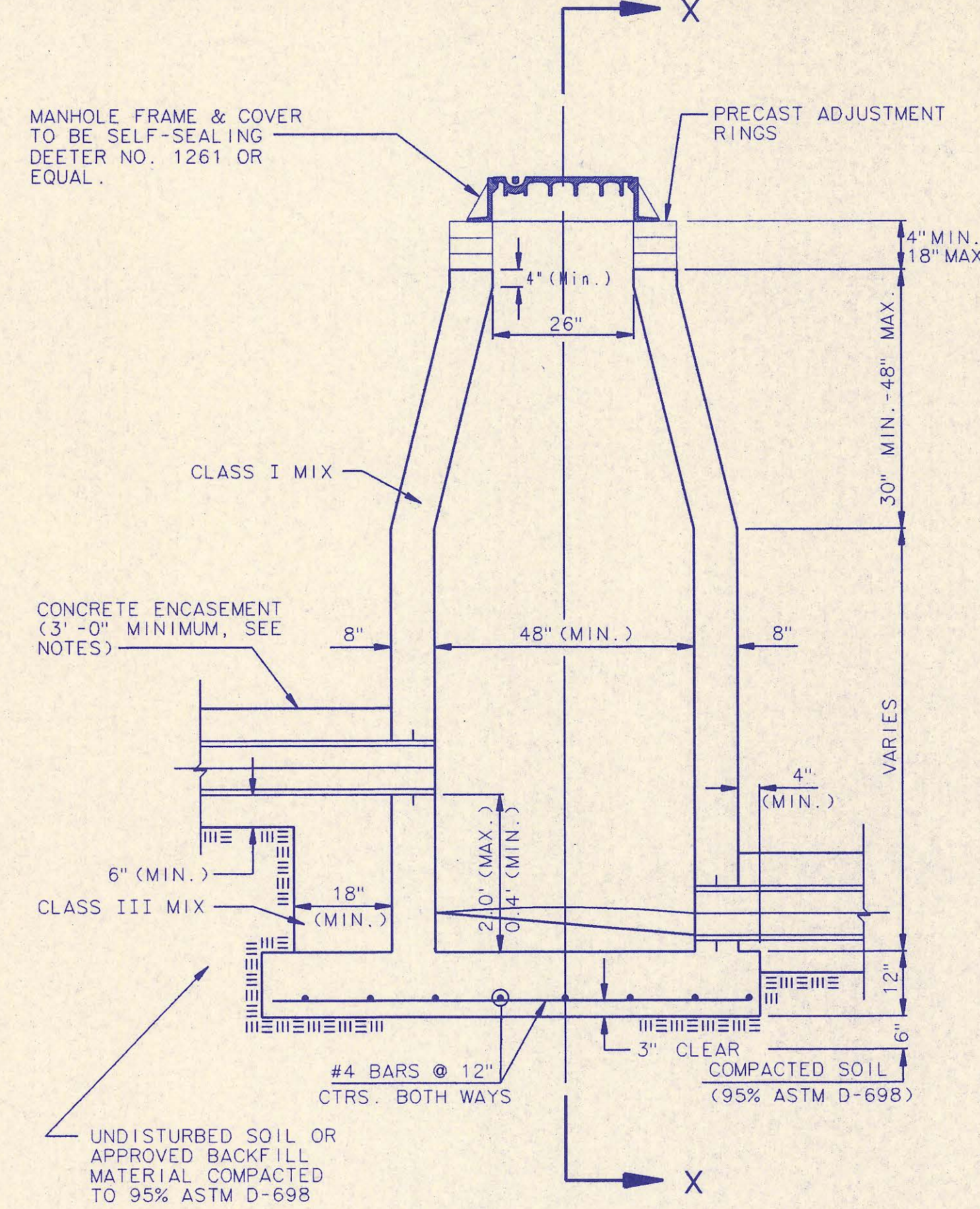
1. CAST IRON MANHOLE FRAME AND COVER SHALL CONFORM TO ASTM A-48, CLASS 35B, OR BETTER.
2. CASTINGS ARE TO BE MANUFACTURED TRUE TO PATTERN AND WITH SATISFACTORY FIT OF COMPONENT PARTS. CASTINGS SHALL BE FREE OF DEFECTS. DIMENSIONS AS DETAIL ON PLAN SHALL NOT DEVIATE BY ± 1/16" PER FOOT.
3. NO OTHER LETTERING OR MARKINGS OTHER THAN THOSE DETAILED ON PLAN WILL BE PERMITTED ON CASTINGS.
4. CASTINGS MUST BE DOMESTICALLY MANUFACTURED IN THE UNITED STATES OF AMERICA.
5. THE FRAMES AND COVERS SHALL BE FURNISHED WITH MACHINED HORIZONTAL BEARING SURFACES SO FITTING PARTS WILL NOT RATTLE OR ROCK UNDER TRAFFIC.
6. MANHOLE CASTINGS SHALL BE SELF-SEALING DEETER FOUNDRY INC. NO. 1261 OR APPROVED EQUAL, UNLESS OTHERWISE SPECIFIED IN THE SPECIAL CONDITIONS. (MINIMUM WT. 430 LBS.) ALL MANHOLE CASTINGS SHALL BE CONSIDERED SUBSIDIARY TO THE UNIT PRICES BID FOR THE VARIOUS MANHOLE TYPES.
7. GRIND ALL BURRS SMOOTH, CLEAN THOROUGHLY, THEN APPLY SHOP COAT OF ASPHALT BASE PAINT.
8. THE MANUFACTURER SHALL SUBMIT SHOP DRAWINGS TO THE ENGINEER FOR APPROVAL PRIOR TO MANUFACTURE. THE ENGINEER SHALL RETAIN THE RIGHT TO REJECT CASTINGS NOT CONFORMING TO THE SPECIFICATIONS OR THE APPROVED SHOP DRAWINGS.
9. THE MANHOLE FRAME SHALL BE FURNISHED WITH AN APPROVED "O" RING GASKET GROOVED INTO THE BEARING SURFACE OF THE MANHOLE FRAME (SEE DETAIL). THE "O" RING GASKET SHALL NOT BE INSTALLED IN THE MANHOLE FRAME UNTIL AFTER FINAL INSPECTION AND ACCEPTANCE OF THE PROJECT BY THE ENGINEER.



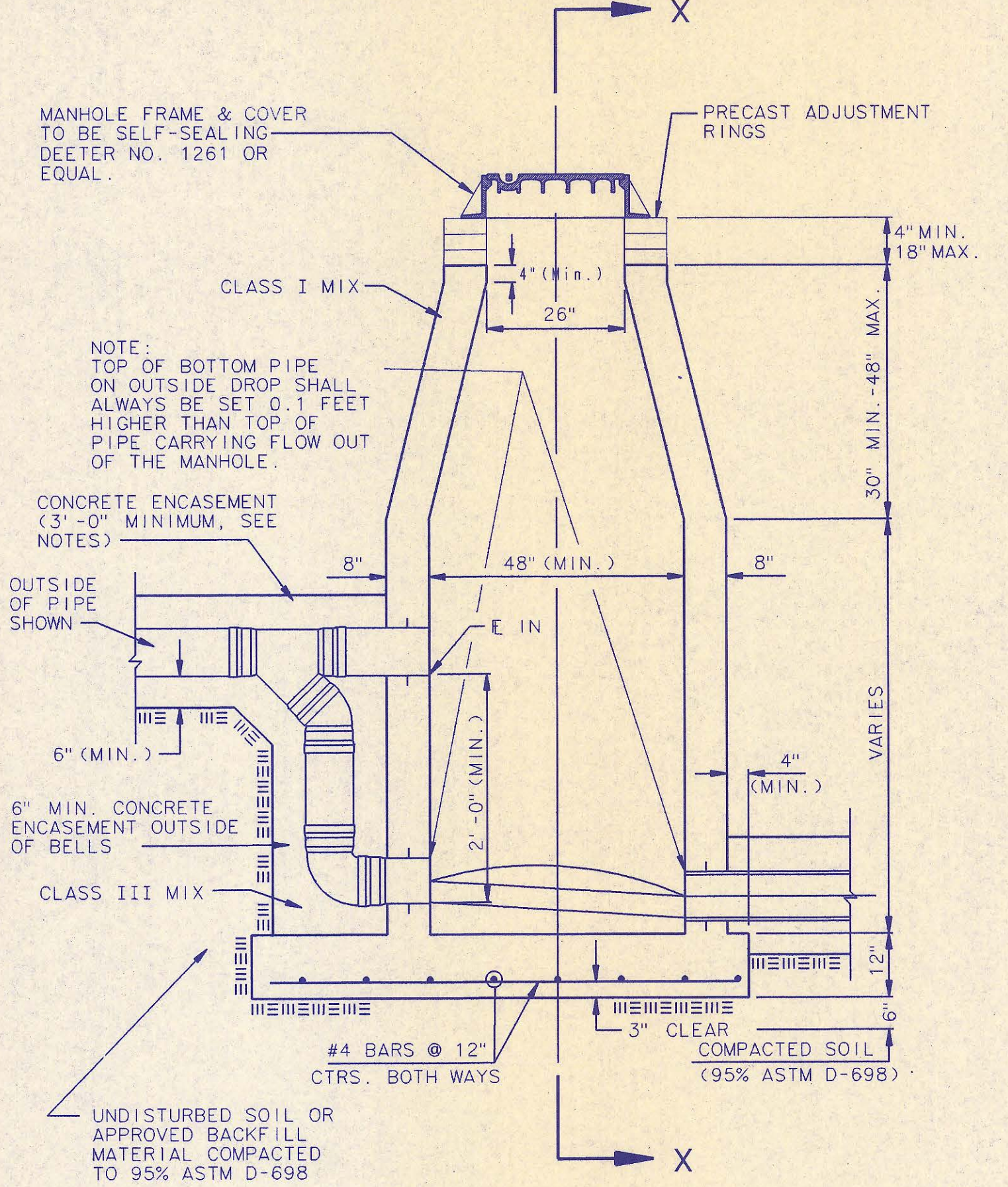
**PICK HOLE DETAIL**



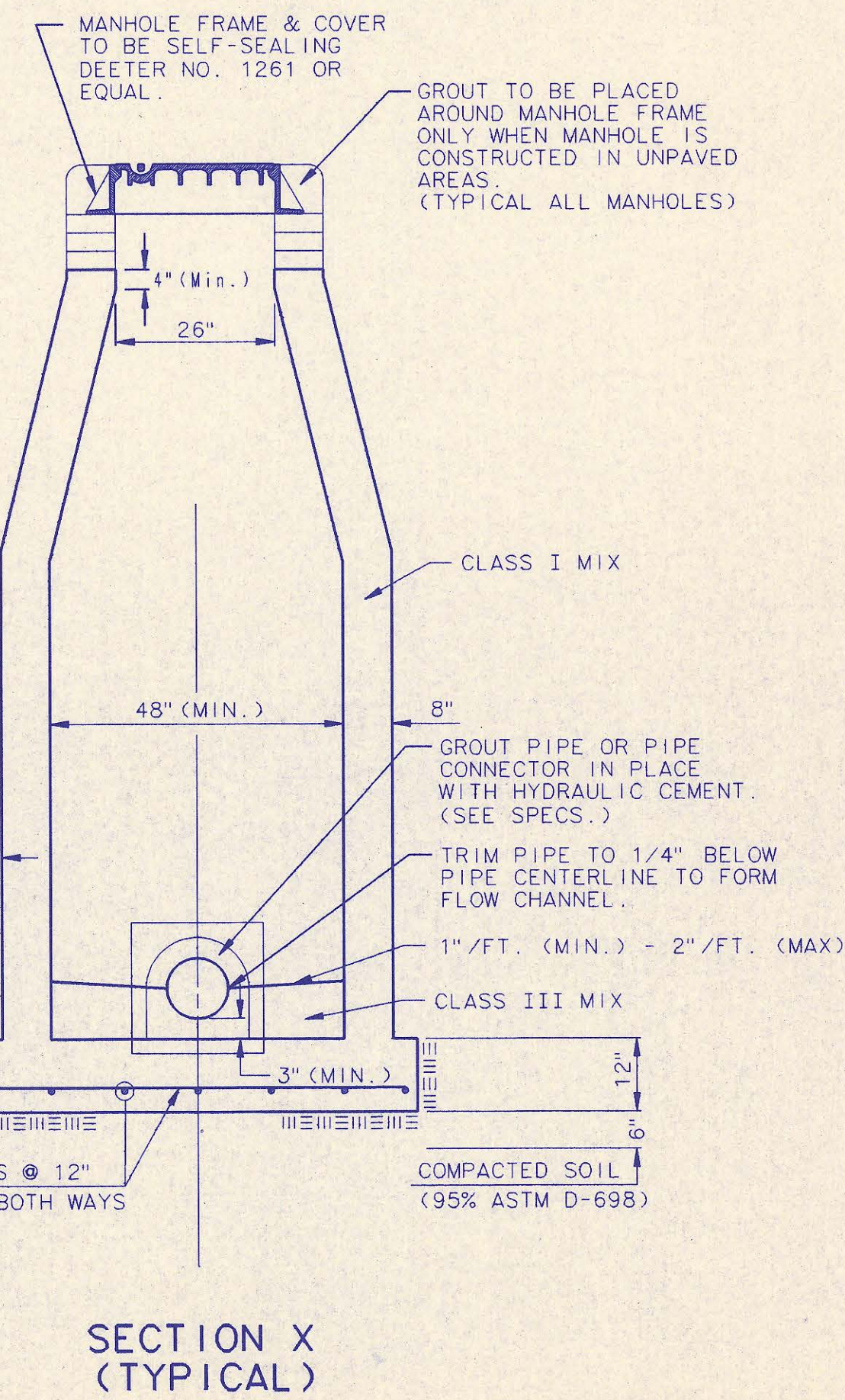
**CAST IN PLACE STANDARD MANHOLE TYPE "A"**



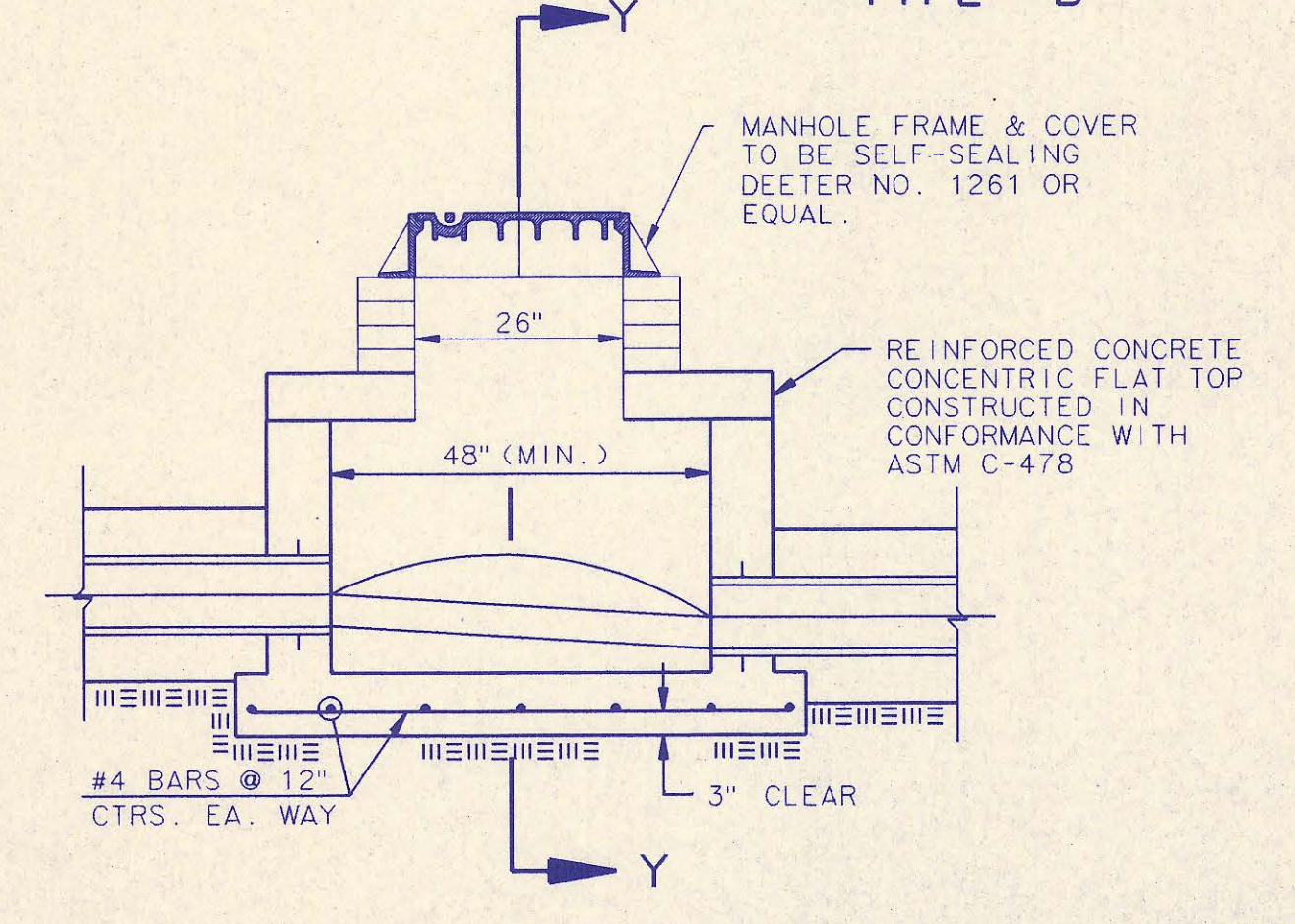
**CAST IN PLACE DROP MANHOLE TYPE "B"**



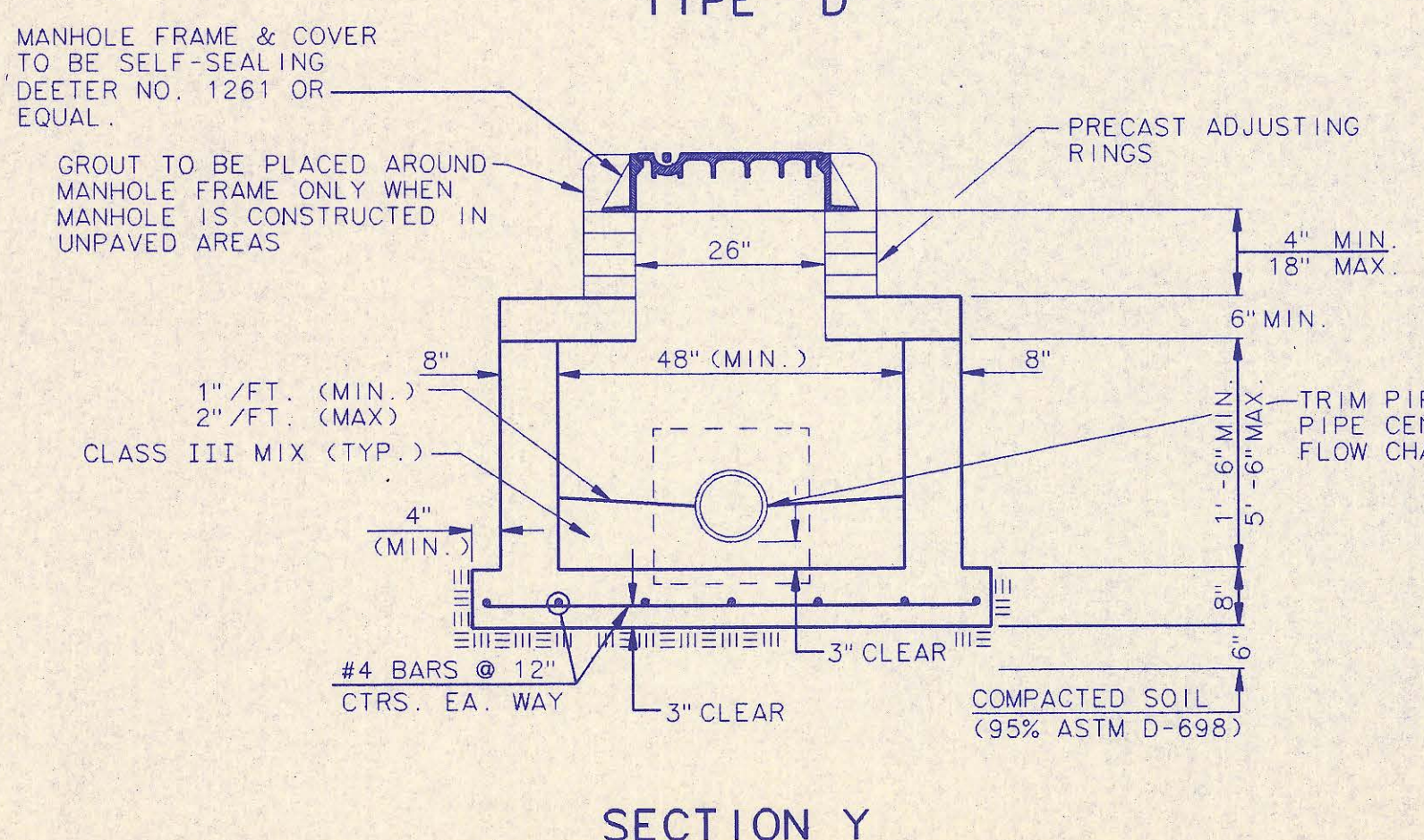
**CAST IN PLACE OUTSIDE DROP MANHOLE TYPE "C"**



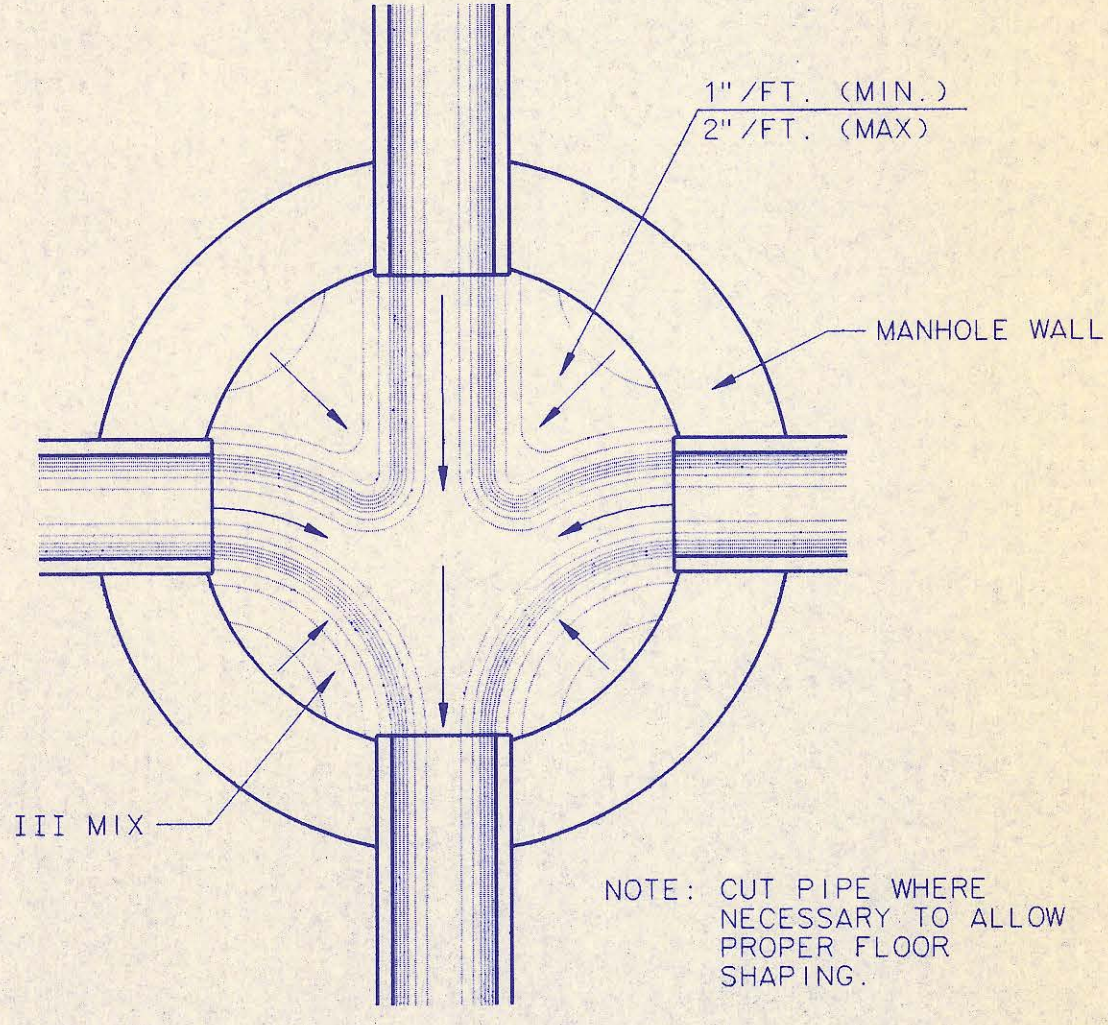
**SECTION X (TYPICAL)**



**SHALLOW MANHOLE TYPE "D"**



**SECTION Y**



**TYPICAL MANHOLE FLOOR SHAPING**

**CAST-IN-PLACE MANHOLE NOTES**

1. IF, IN THE OPINION OF THE ENGINEER, THE MANHOLE SUBGRADE APPEARS UNSTABLE, THE CONTRACTOR WILL HAVE THE OPTION TO COMPACT SUBGRADE AS SHOWN OR INCREASE THE THICKNESS OF THE MANHOLE BASE AS DIRECTED BY THE ENGINEER.
2. STEEL REINFORCING WILL BE REQUIRED IN ALL MANHOLE BASES.
3. WHEN OPENINGS ARE CUT IN MANHOLE WALLS FOR PIPE, THE PIPE OR PIPE CONNECTOR SHALL BE GROUTED IN PLACE WITH HYDRAULIC CEMENT. EXTERIOR OF COMPLETED CONNECTION SHALL BE SEALED WITH APPROVED COATINGS.
4. CAST-IN-PLACE CIRCULAR CONCRETE MANHOLES ARE TO BE CONSTRUCTED ONLY IN LOCATIONS WHERE IT IS OBVIOUS THAT ANY ADJUSTMENT OF THE MANHOLE TOP ELEVATIONS WHICH MAY BE NECESSARY WILL NOT REQUIRE MODIFICATION OF THE CONCRETE BARREL.
5. APPROVED FLEXIBLE WATERSTOP GASKETS WHICH MEET OR EXCEED THE TEST REQUIREMENTS OF ASTM C-923 SHALL BE INSTALLED TO JOIN THE SEWER TO THE MANHOLE WALL WHEN ABS COMPOSITE PIPE OR PVC PIPE IS USED. FOR OTHER TYPES OF PIPE THE SEWER EXTENDING FROM MANHOLES SHALL BE SUPPORTED WITH CONCRETE ENCASEMENT A MINIMUM OF 3 FEET FROM THE MANHOLE WALL.
6. THE MANHOLE FRAME SHALL BE SEATED ON AN APPROVED BUTYL-RUBBER SEALANT TO PROVIDE A WATER-TIGHT SEAL BETWEEN THE MANHOLE ADJUSTMENT RING OR BRICK MASONRY COLLAR AND THE MANHOLE FRAME.
7. GASKETED PIPE CAPS SHALL BE PROVIDED BY THE PIPE SUPPLIER. GLUE OR GEMENTED CAPS WILL NOT BE ACCEPTED.
8. CONCRETE FOR MANHOLE BASES SHALL BE CLASS I AS DESCRIBED IN THE SPECIFICATIONS.
9. MANHOLES WITH PIPE SIZES LARGER THAN 15" SHALL HAVE 5" INSIDE DIAMETER.

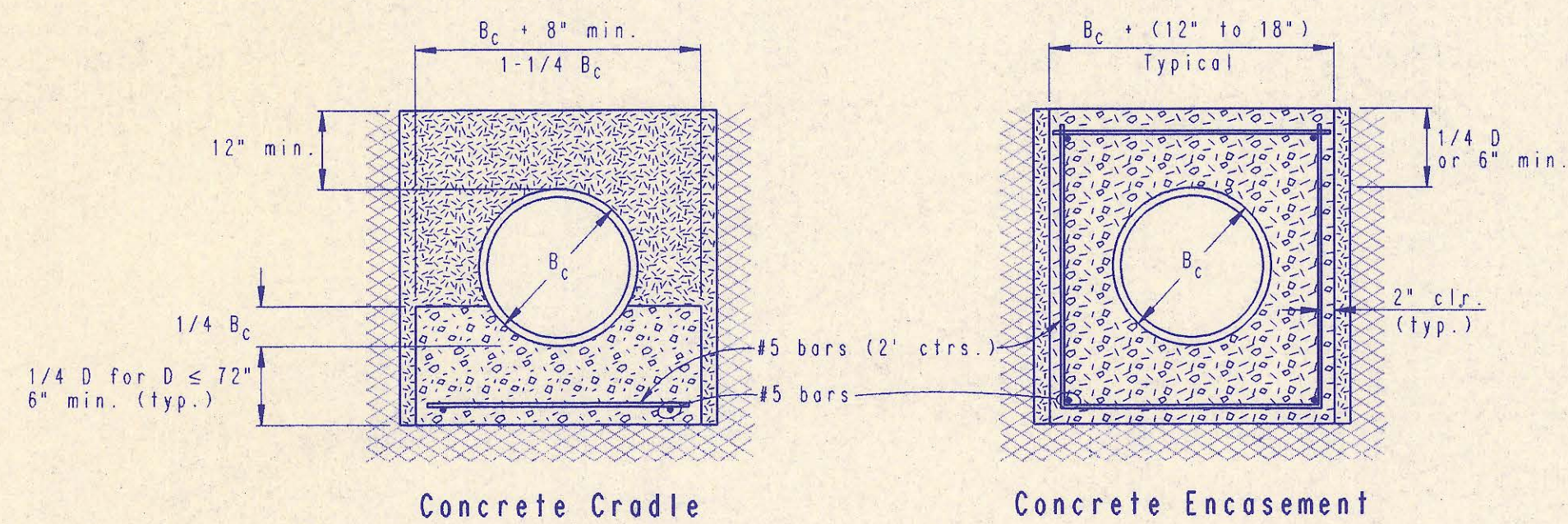
**RECORD DRAWING**

MDK 8/10/93  
LM 8/10/93

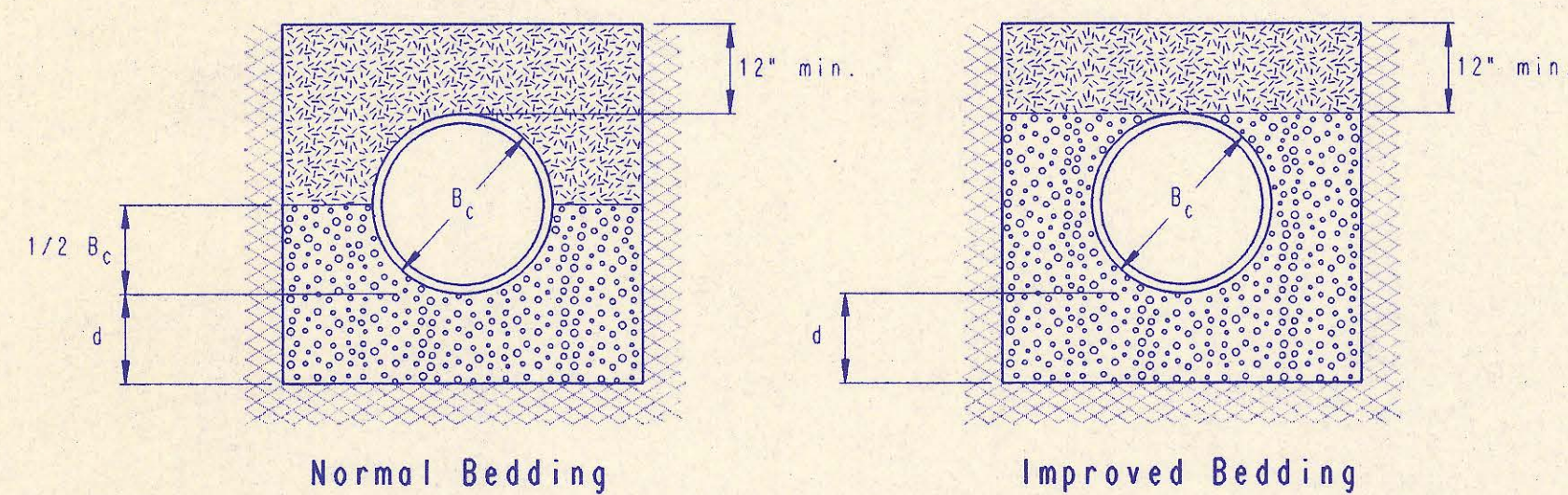
No.	Revision	By	Date
3	All Manholes Self-sealing/ MH Cover	RJ	1/25/93
2	Modified Pipe connection note and MH Note 3	RJ	6/01/92
1	Manhole Frame and Cover Note 1	RJ	7/16/91

**CAST-IN-PLACE MANHOLE DETAILS**  
ADOPTED AS STANDARD DESIGN SEPTEMBER, 1989  
BY  
SEDGWICK COUNTY BUREAU OF PUBLIC SERVICES  
DAVID C. SPEARS, P.E. DIRECTOR, BUREAU OF PUBLIC SERVICES/COUNTY ENGINEER

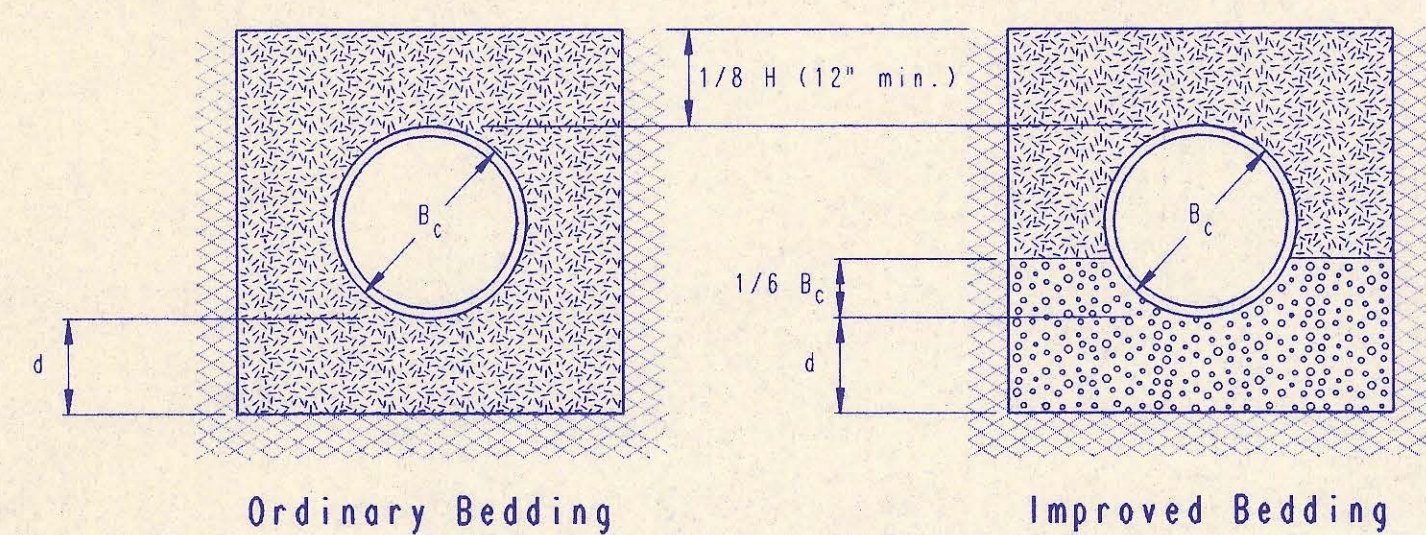
PLAN  
 CHECKED  
 CHECKED  
 BY  
 DATE



CLASS A



CLASS B



CLASS C

PIPE ZONE BACKFILLING

- $B_c$  = Outside Pipe Diameter
- H = Backfill from Top of Pipe to Existing Ground
- D = Inside Pipe Diameter
- d = Depth of Bedding Material Below Pipe

- [Pattern] = Granular Bedding Material or Sand-Gravel Bedding
- [Pattern] = Compacted Embedment
- [Pattern] = Concrete (Class III)

Depth of Bedding Material Below Pipe		
D	d (min) Soil	d (min) Rock
27" & smaller	4"	6"
30" to 60"	5"	9"
66" & larger	6"	12"

Granular Bedding Material shall be an approved material consisting of durable crushed rock conforming with the requirements of the latest revision of ASTM C-33 Size No. 67 (3/4" to No. 4); to be placed in not more than 6" layers and compacted by slicing with a shovel or vibrating. Soundness, abrasion, and absorption limits shall be as required for coarse aggregates in Section 03010-Concrete Work in the specifications.

Sand-Gravel Bedding Material - sand-gravel mix meeting Type UD-1 of the 1990 Kansas Standard Specifications for State Road and Bridge Construction.

Compacted Embedment shall be an approved sand material free from debris, organic material, and stones with 100% passing the 3/4" sieve to be placed in uniform layers not more than 6" thick and compacted to 90 percent maximum density as determined by ASTM D1557. Granular Bedding Material may be substituted for all or part of Compacted Embedment Materials.

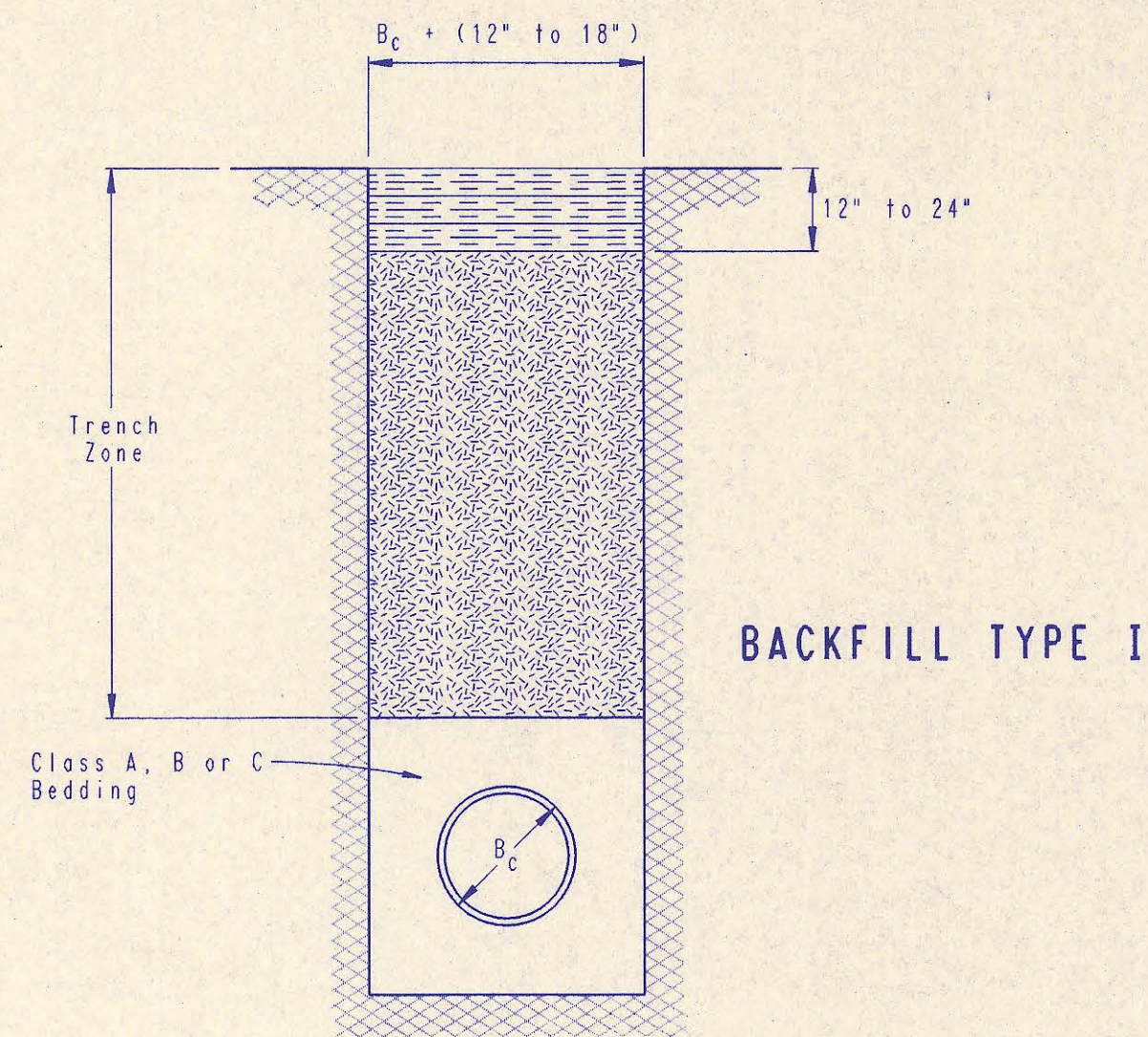
Class A "Concrete Cradle" and/or Class A "Concrete Encasement" is not required unless specified on the plans. However, where unexpected trench conditions exist or improper trenching is performed Class A Bedding may be required as determined by the Engineer.

Class B Bedding shall be used for all flexible pipe.

- a. Class B Normal Bedding shall be used for PVC Pipe unless wet conditions are encountered.
- b. Class B Improved Bedding shall be used for other flexible pipe, and for PVC pipe in wet conditions.

Class C Bedding shall be used for all rigid pipe.

- a. Class C Ordinary Bedding shall be used for all rigid pipe unless wet conditions are encountered.
- b. Class C Improved Bedding shall be used for wet conditions existing in the trench, as directed by the Engineer, at no additional cost to the Owner. The dimensions shall be equal to that required for "rock" excavation (see specifications).



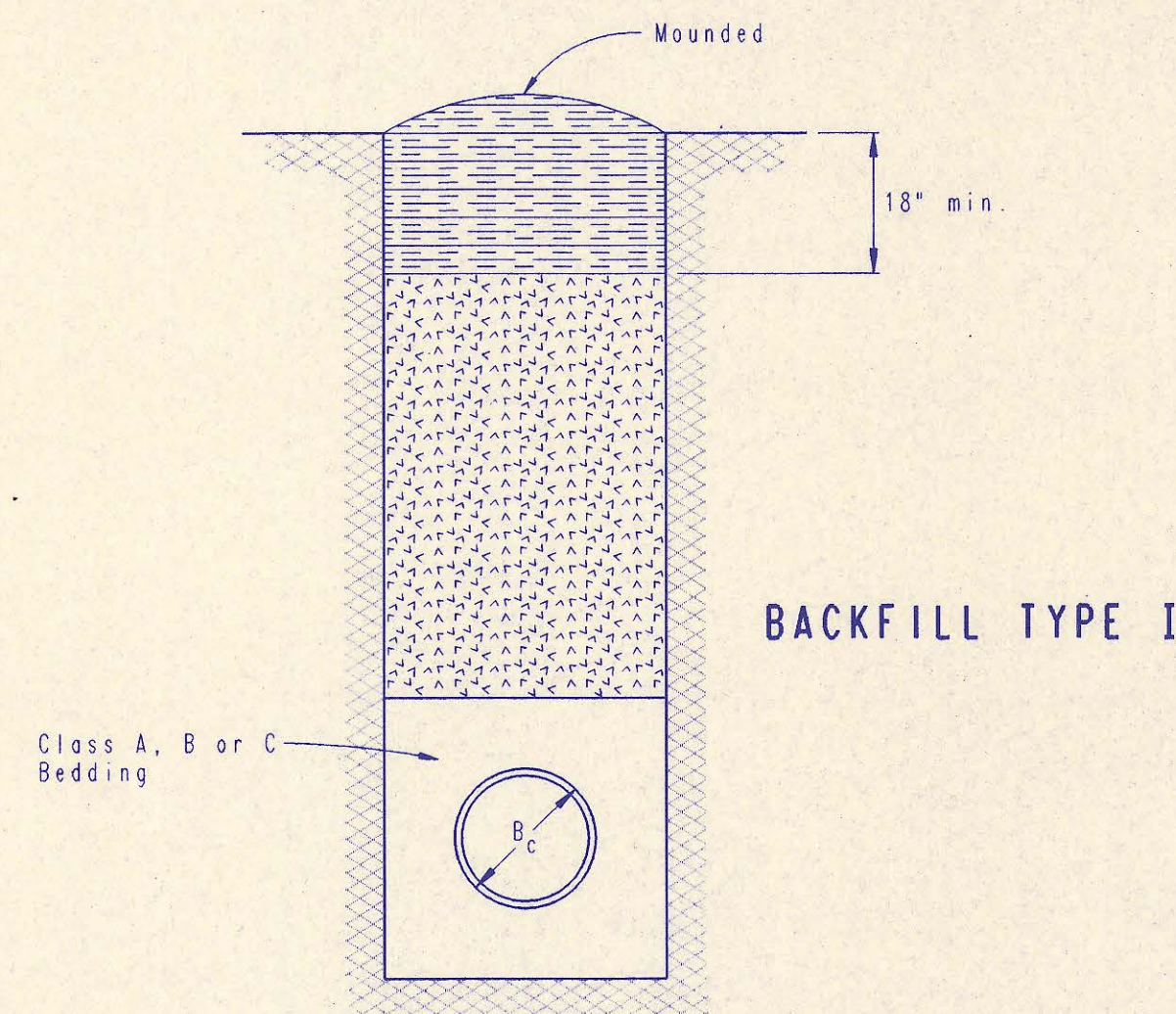
BACKFILL TYPE I

- $B_c$  = Outside Pipe Diameter
- [Pattern] = Compacted Granular Backfill
- [Pattern] = Uncompacted Earth Backfill
- [Pattern] = Compacted Earth Backfill

Compacted Granular Backfill material shall be an approved sand material free from debris, organic material and stones with 100% passing the 3/4" sieve and not more than 15% passing a No. 200 sieve; to be jetted and mechanically vibrated into place and compacted to 90% density as determined by ASTM D1557.

Uncompacted Earth Backfill material may be natural soil free from large clods or stones, brush, roots more than 2 inches in diameter, debris, and junk. Flooding with water shall be provided as directed by the Engineer.

Compacted Earth Backfill shall consist of material existing prior to trenching or selected material as directed by the Engineer, and shall be compacted to 90% density as determined by ASTM D1557.



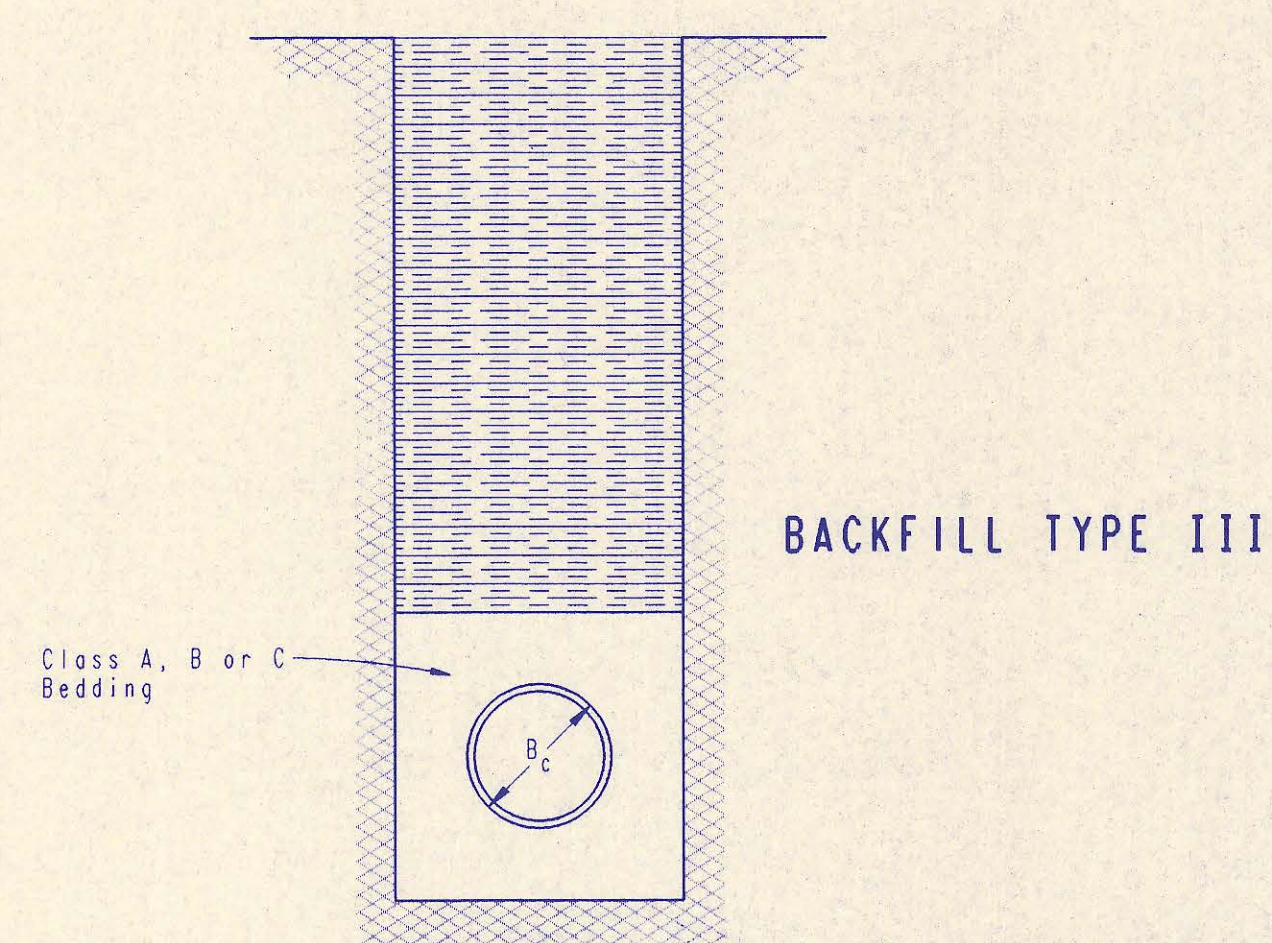
BACKFILL TYPE II

Backfill: Backfill material and compaction requirements shall conform to either Type I, Type II or Type III as specified in the plans. One years maintenance will be required on all backfill.

Backfilling Through Rock: Backfilling through rock shall be performed as specified in the paragraph Backfill above, except that the Pipe Zone is increased to provide eighteen (18) inches of cover over the pipe. When approved by the Engineer the remainder of the backfill may be excavated rock provided the excavated rock has been broken up so that earth and rock will thoroughly mix and not result in voids around the larger pieces of rock. Any excess rock remaining after the trench has been backfilled shall be removed or wasted as directed by the Engineer.

Backfilling Under Pavement: Backfilling under existing or proposed pavement shall be performed as Backfill Type I to a level of two (2) feet from the bottom of the pavement. The remainder of the trench shall be backfilled with selected material, sufficiently damp to be properly compacted in layers not exceeding six (6) inches in depth, compaction shall be performed with mechanical tampers and continued until a relative density of 95 percent of modified density, in conformance with ASTM D1557 is attained.

Backfilling Under Gravel Streets: Where the trench crosses or is in existing gravel surfaced streets, the backfill shall be compacted as provided in the paragraph "Backfilling Under Pavement".



BACKFILL TYPE III

TRENCH ZONE BACKFILLING

RECORD DRAWING

MDF 8/10/93  
 LM 8/10/93

No.	Revision	By	Date

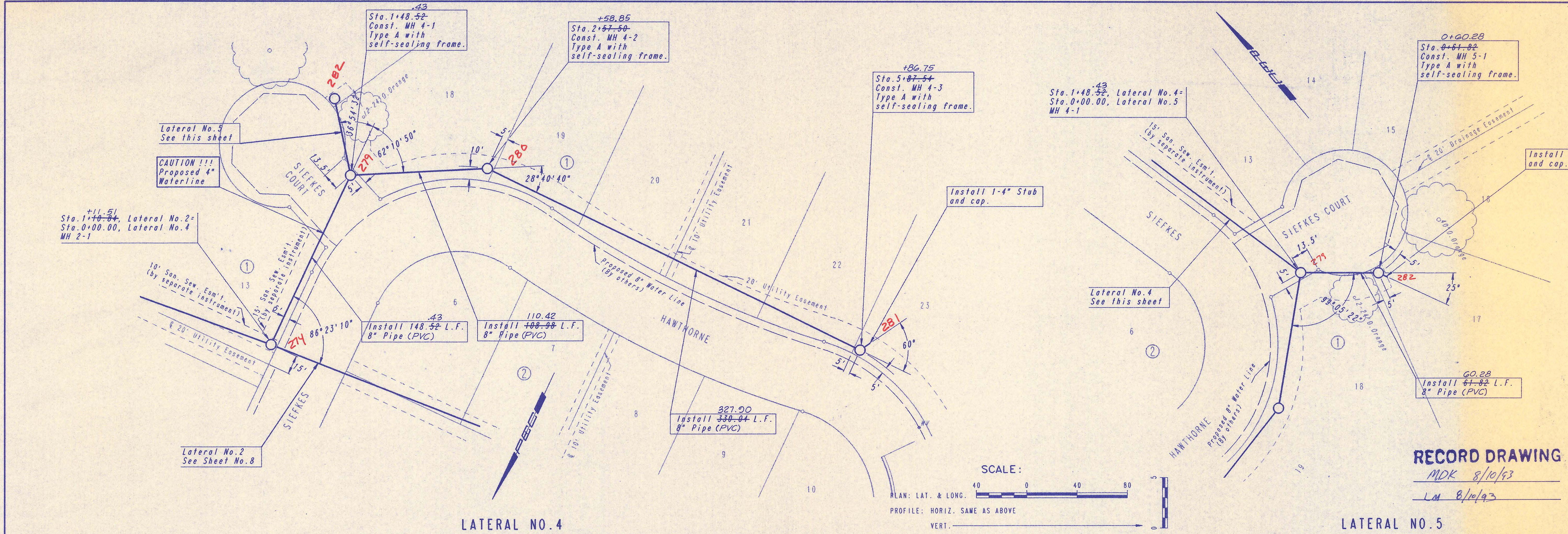
BACKFILL DETAILS  
 ADOPTED AS STANDARD DESIGN SEPTEMBER, 1989  
 BY  
 SEDGWICK COUNTY BUREAU OF PUBLIC SERVICES  
 DAVID C. SPEARS, P.E. DIRECTOR, BUREAU OF PUBLIC SERVICES/COUNTY ENGINEER



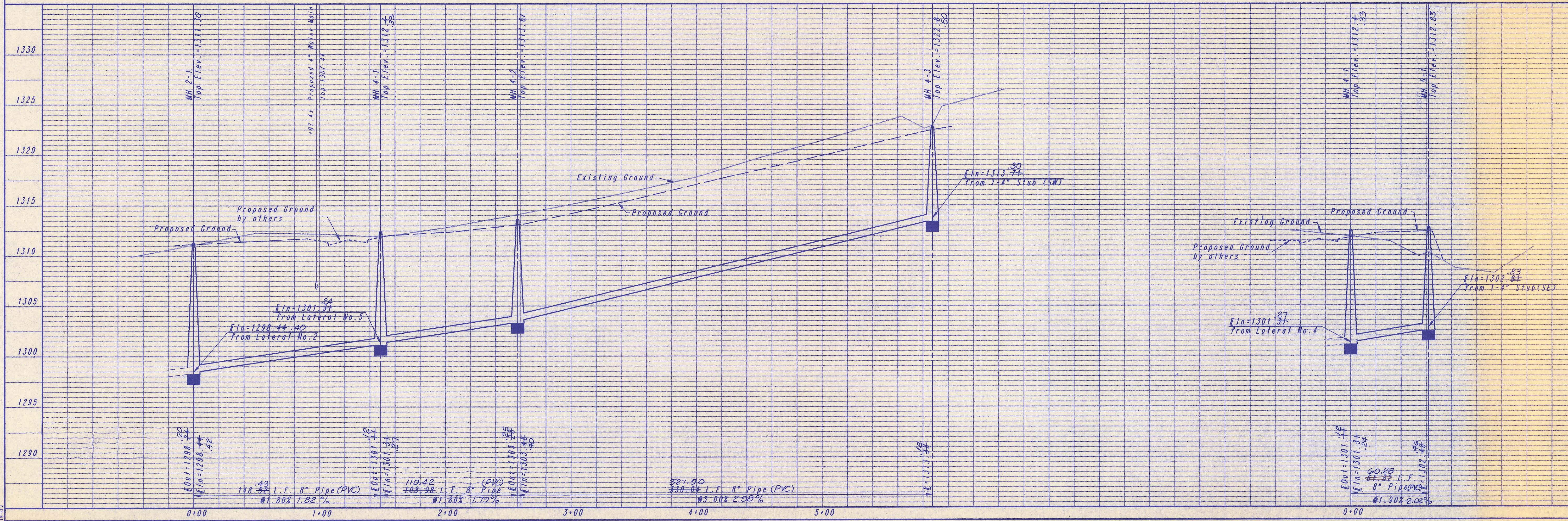
PLAN CHECKED BY DATE

PROFILE CHECKED BY DATE

DRAWING NAME: 34-93106-2 SB SS PP2  
 LOCATION: 6.54 DWG # 644  
 DATE LAST WORKED ON: MAR 24, 1993  
 SPECIAL INSTRUCTIONS:



RECORD DRAWING  
 MDK 8/10/93  
 LM 8/10/93



SEDGWICK COUNTY BUREAU OF PUBLIC SERVICES  
 DIRECTOR, BUREAU OF PUBLIC SERVICES

**LATERAL NO. 4 AND 5**  
 SANITARY SEWER IMPROVEMENTS  
 SHADYBROOK MEADOW ADDITION - PHASE 2

PROFESSIONAL ENGINEERING CONSULTANTS, P.A.  
 ENGINEERS  
 WICHITA, KANSAS

Job No. 34-93106-1  
 Date February, 1993

Designed By: MDS, MDK  
 Drawn By: TDS

Sheet 9 of 9