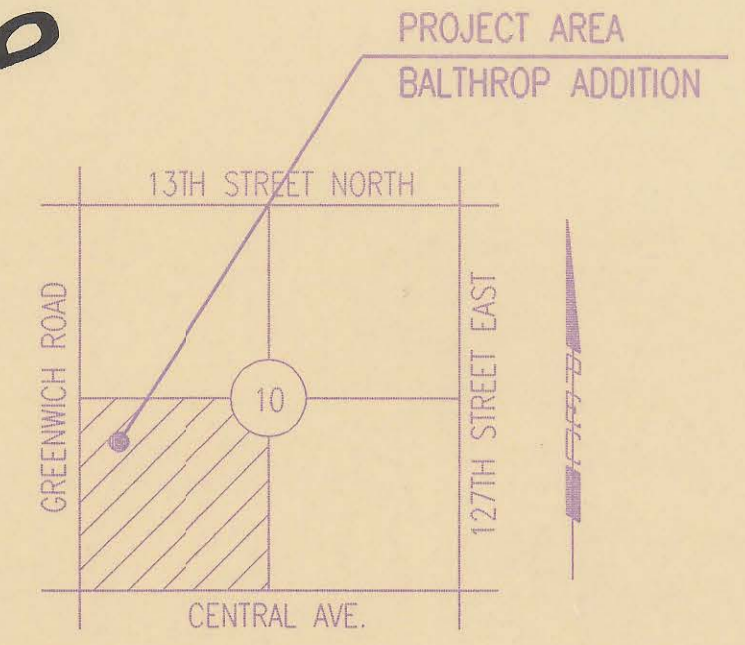


4MC-056

# BUREAU OF PUBLIC SERVICES



LOCATION MAP  
NOT TO SCALE

### INDEX OF SHEETS

SHEET NO.	TITLE SHEET
1	KEY MAP
2-3	EASEMENT GRADING
4-5	PLAT
6	PRECAST MANHOLE DETAILS
7	BACKFILL DETAILS
8-9	SERVICE CONNECTION DETAILS
10-21	PLAN & PROFILE

# CONSTRUCTION PLANS FOR SANITARY SEWER IMPROVEMENTS

## IN BALTHROP ADDITION (PHASE 2)

TO SEDGWICK COUNTY, KANSAS

MARCH 1996

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

### RECORD DRAWING

PROJ. ENG. 1/14/97 DATE  
RES. ENG. DATE

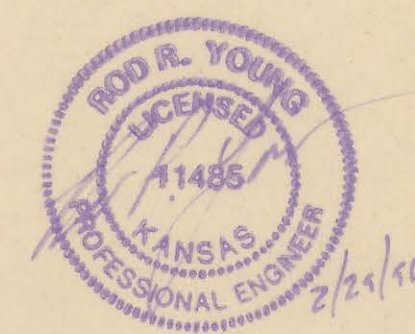
APPROVED:

*David C. Spears*  
 DAVID C. SPEARS, P.E.  
 DIRECTOR OF PUBLIC SERVICES/COUNTY ENGINEER  
 DATE: 4/1/96

APPROVED:

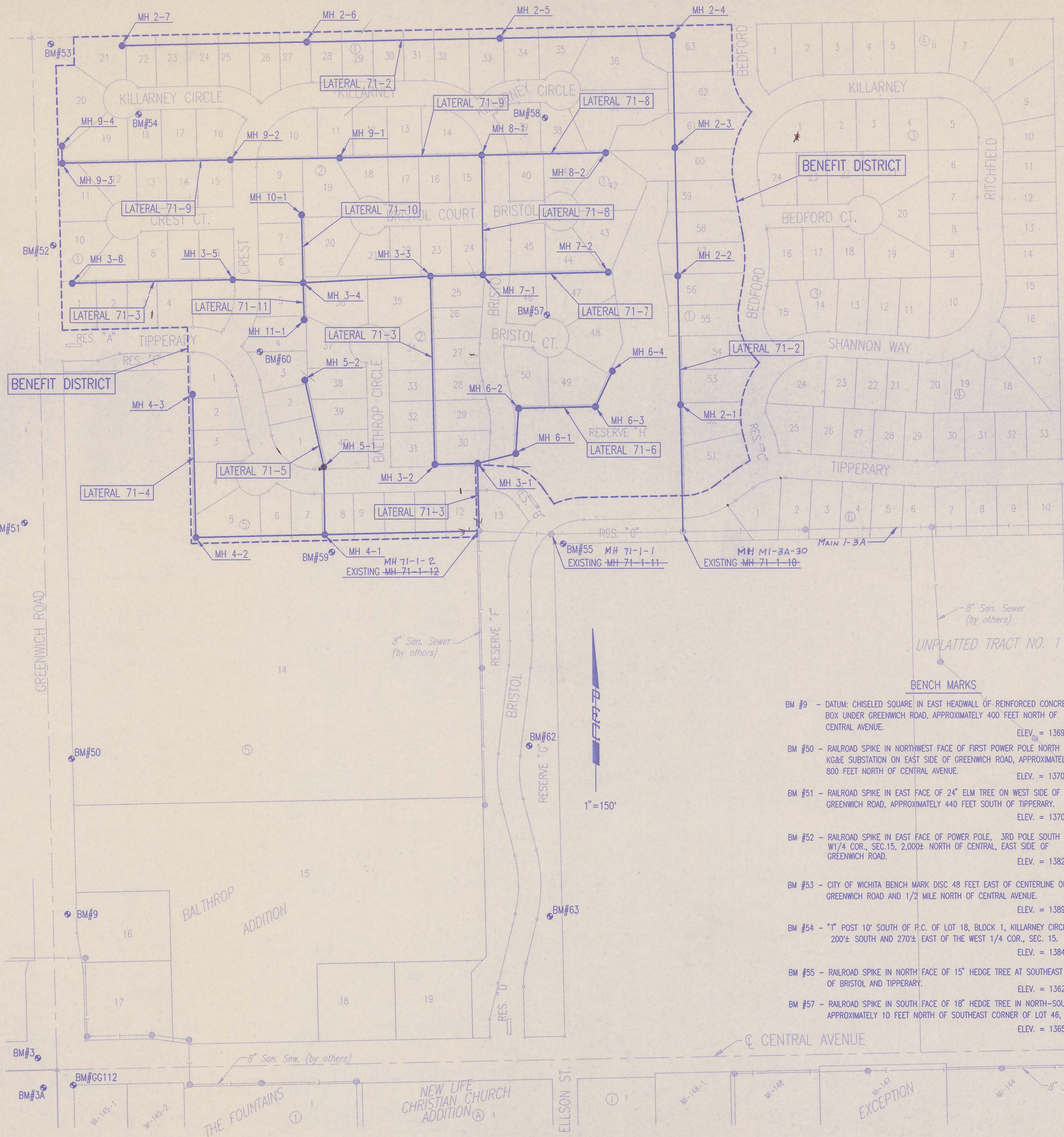
*James Winters*  
 CHAIRMAN, BOARD OF COUNTY COMMISSIONERS  
 DATE:

FILED IN THE OFFICE OF  
 THE SEDGWICK COUNTY CLERK  
*Susan J. Keith*  
 COUNTY CLERK  
 DATE: April 4, 1996



4mc-056

DSNR: REF. OPER. REJ. SCALE: 1"=150.00  
 C:\1995\95586\001\KEYMAP.dwg 02-28-1996 4:53:34 pm



- GENERAL NOTES
- ALL ELEVATIONS SHOWN ARE USGS DATUM.
  - 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 887-2470 TO REQUEST THE FOLLOWING UTILITY COMPANIES TO LOCATE ANY EXISTING LINES WITHIN THE PROJECT AREA: MULTIMEDIA CABLE TV, WICHITA WATER, SOUTHWESTERN BELL TELEPHONE, K G & E GAS, AND K G & E ELECTRIC.
  - 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.
  - AT LEAST 24 HOURS BEFORE CONNECTING NEW SEWER PIPE TO THE EXISTING SEWAGE SYSTEM, THE CONTRACTOR SHALL CONTACT THE SEDGWICK COUNTY EASTERN SEWER (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, TESTED, 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 TELEVISION.
  - ALL PIPE JOINTS SHALL BE LAID AND PUSHED "FULL HOME", WITH THE BEVELED 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.
  - 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.
  - 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.
  - 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 CONTRACTOR'S 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.
  - 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 UNLESS OTHERWISE INDICATED ON THE PLANS. THE REPLACEMENT OF ALL THE AFORESAID ITEMS, INCLUDING SEEDING, FERTILIZER, AND MULCHING SHALL BE CONSIDERED SUBSIDIARY TO "SITE CLEARING AND RESTORATION".
  - 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.
  - POSITIVE DRAINAGE SHALL BE PROVIDED FOR ALL AREAS ON OR NEAR SPOIL AREAS. NATURAL DRAINAGE WAYS SHALL BE MAINTAINED.

- THE CONTRACTOR SHALL PROVIDE POSITIVE DRAINAGE AWAY FROM ALL MANHOLE COVERS.
- THE CONTRACTOR SHALL GIVE ALL PROPERTY OWNERS AND/OR TENANTS OF DEVELOPED PROPERTY ADJUTING THE CONSTRUCTION OF THIS PROJECT A MINIMUM OF 10 DAYS ADVANCE NOTICE PRIOR TO START OF CONSTRUCTION IN THE VICINITY OF THE AFFECTED PROPERTY.
- ALL TRENCH BACKFILL SHALL BE EITHER TYPE I OR TYPE II UNLESS NOTED OTHERWISE. TYPE I BACKFILL SHALL BE USED AT ALL EXISTING AND PROPOSED STREETS, SEE SHT. 7 OF 21.
- THE CONTRACTOR SHALL 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
- THE CONTRACTOR SHALL AVOID REMOVAL OR TRIMMING OF ANY TREES WHERE POSSIBLE. WHERE THE CONTRACTOR BELIEVES THE REMOVAL OR TRIMMING IS UNAVOIDABLE, HE SHALL OBTAIN THE CONCURRENCE OF THE ENGINEER BEFORE PROCEEDING WITH SUCH WORK.
- RUBBLE FROM THE REMOVAL OF MISCELLANEOUS STRUCTURES INCLUDING ANY TREES REMOVED, TREE TRIMMINGS, AND EXCESS EXCAVATION WHICH IS TO BE WASTED, SHALL BE DISPOSED OF ON SITES PROVIDED BY THE CONTRACTOR. THESE SITES SHALL ALSO BE APPROVED BY THE ENGINEER AS TO SUITABILITY, APPEARANCE, AND SITE LOCATION. ALL DISPOSAL SITES MUST BE APPROVED BY THE KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT. MATERIAL EITHER STOCKPILED OR DISPOSED OF IN A FLOODPLAIN WILL REQUIRE A KANSAS STATE BOARD OF AGRICULTURE PERMIT AND A FLOODPLAIN DEVELOPMENT PERMIT FROM SEDGWICK COUNTY. ANY MATERIALS DUMPED IN WATERS OF THE UNITED STATES OR WETLANDS IS SUBJECT TO U.S. CORPS OF ENGINEERS PERMITTING REGULATIONS. ANY MATERIALS BURIED OR STOCKPILED BEYOND APPROVED CONSTRUCTION LIMITS MAY REQUIRE ARCHAEOLOGICAL INVESTIGATIONS UNLESS BURIED IN A PREVIOUSLY APPROVED DISPOSAL LOCATION.
- EACH BIDDER SHALL VISIT THE SITE OF THE PROJECT BEFORE SUBMITTING THE PROPOSAL FOR THIS WORK SO THAT HE WILL BE FULLY INFORMED OF THE EXISTING FIELD CONDITIONS AND THE OBSTACLES WHICH MIGHT BE ENCOUNTERED. UPON AWARD OF THE CONTRACT, THE CONTRACTOR WILL NOT BE GRANTED ANY ADDITIONAL COMPENSATION WITH REGARDS TO TIME AND MONEY FOR CONDITIONS THAT MAY HAVE BEEN EVALUATED DURING AN INSPECTION OF THE SITE.
- ALL GRASSED AREAS DISTURBED BY CONSTRUCTION OF THE PROPOSED IMPROVEMENTS SHALL BE REPLANTED WITH GRASS AND FERTILIZED IN ACCORDANCE WITH THE SPECIFICATIONS FOR SUCH WORK. ALL COSTS FOR SEEDING AND FERTILIZING SHALL BE CONSIDERED SUBSIDIARY TO "SITE CLEARING AND RESTORATION".
- PROPERTIES WITHIN THE PROJECT LIMITS MAY HAVE UNDERGROUND SPRINKLER SYSTEMS IN PUBLIC RIGHT-OF-WAY WHICH CONFLICT WITH NEW CONSTRUCTION. THE CONTRACTOR WILL BE REQUIRED TO REMOVE SUCH IMPROVEMENTS SHOULD THEY NOT BE REMOVED BY THEIR OWNER AT THE TIME OF CONSTRUCTION OF THE PROJECT. THE CONTRACTOR WILL BE REQUIRED TO SALVAGE ALL SPRINKLER HEADS AND/OR VALVES AND GIVE SUCH MATERIAL TO THEIR OWNER. PORTIONS OF UNDERGROUND SPRINKLER SYSTEMS NOT IN CONFLICT WITH NEW CONSTRUCTION SHALL BE PROTECTED FROM DAMAGE AND SHALL REMAIN IN PLACE. ALL WORK IN CONNECTION WITH UNDERGROUND SPRINKLER SYSTEMS SHALL BE CONSIDERED AS SUBSIDIARY TO PRICE BID FOR PIPE IN PLACE.
- APPROVED EXCESS EXCAVATED MATERIAL FROM CONSTRUCTION ACTIVITIES SHALL BE WASTED AT A LOCATION APPROVED BY THE DEVELOPER AND IN ACCORDANCE WITH NOTE 17.
- THE CONTRACTOR SHALL NOT BURY MANHOLES THAT HAVE RIM ELEVATIONS WHICH ARE LOWER THAN EXISTING GROUND AT THE MANHOLE. THE GROUND AROUND SUCH MANHOLES AND ALONG THE SEWER ALIGNMENT SHALL BE BACKFILLED TO THE APPROXIMATE ELEVATION OF THE PROPOSED GROUND ELEVATION SHOWN ON THE PLAN/PROFILE SHEETS. THE CONTRACTOR SHALL PROVIDE DRAINAGE AWAY FROM THESE MANHOLES AND SEWER LINES BY CONSTRUCTION OF TEMPORARY DITCHES OR SLOPING THE GROUND AS REQUIRED. ALL COSTS FOR THIS WORK SHALL BE CONSIDERED SUBSIDIARY TO THE INSTALLED BID PRICE FOR MANHOLES OR PIPE.
- 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".

- BENCH MARKS
- BM #9 - DATUM: CHISELED SQUARE IN EAST HEADWALL OF REINFORCED CONCRETE BOX UNDER GREENWICH ROAD, APPROXIMATELY 400 FEET NORTH OF CENTRAL AVENUE. ELEV. = 1369.86
  - BM #50 - RAILROAD SPIKE IN NORTHWEST FACE OF FIRST POWER POLE NORTH OF K&E SUBSTATION ON EAST SIDE OF GREENWICH ROAD, APPROXIMATELY 800 FEET NORTH OF CENTRAL AVENUE. ELEV. = 1370.49
  - BM #51 - RAILROAD SPIKE IN EAST FACE OF 24" ELM TREE ON WEST SIDE OF GREENWICH ROAD, APPROXIMATELY 440 FEET SOUTH OF TIPPERARY. ELEV. = 1370.71
  - BM #52 - RAILROAD SPIKE IN EAST FACE OF POWER POLE, 3RD POLE SOUTH OF W1/4 COR., SEC.15, 2,000± NORTH OF CENTRAL, EAST SIDE OF GREENWICH ROAD. ELEV. = 1382.58
  - BM #53 - CITY OF WICHITA BENCH MARK DISC 48 FEET EAST OF CENTERLINE OF GREENWICH ROAD AND 1/2 MILE NORTH OF CENTRAL AVENUE. ELEV. = 1389.10
  - BM #54 - "T" POST 10' SOUTH OF P.C. OF LOT 18, BLOCK 1, KILLARNEY CIRCLE, 200± SOUTH AND 270± EAST OF THE WEST 1/4 COR., SEC. 15. ELEV. = 1384.04
  - BM #55 - RAILROAD SPIKE IN NORTH FACE OF 15" HEDGE TREE AT SOUTHEAST CORNER OF BRISTOL AND TIPPERARY. ELEV. = 1362.38
  - BM #57 - RAILROAD SPIKE IN SOUTH FACE OF 18" HEDGE TREE IN NORTH-SOUTH ROW, APPROXIMATELY 10 FEET NORTH OF SOUTHEAST CORNER OF LOT 46, BLOCK 1. ELEV. = 1365.395
  - BM #58 - RAILROAD SPIKE IN NORTH FACE OF 18" HEDGE TREE IN NORTH-SOUTH ROW, 40 FEET SOUTH OF PC OF LOT 38, BLOCK 1 KILLARNEY CIRCLE. ELEV. = 1366.275
  - BM #59 - RAILROAD SPIKE IN EAST FACE OF 18" HEDGE TREE 20 FEET EAST OF TREE ROW P.I. EAST/WEST/SOUTH ON SOUTH SIDE OF LOT 8, BLOCK 5. ELEV. = 1369.49
  - BM #60 - "T" POST 35 FEET EAST OF NORTHWEST CORNER OF LOT 3, BLOCK 2, EAST OF CREST AND TIPPERARY. ELEV. = 1375.855
  - BM #62 - RAILROAD SPIKE IN SOUTHWEST FACE OF 18" ELM TREE 50 FEET EAST OF CENTERLINE OF BRISTOL AND 810 FEET NORTH OF CENTERLINE OF CENTRAL AVENUE. ELEV. = 1357.29
  - BM #63 - RAILROAD SPIKE IN WEST SIDE OF 18" ELM TREE 60 FEET EAST OF CENTERLINE OF BRISTOL STREET AND 370 NORTH OF CENTERLINE OF CENTRAL AVENUE. ELEV. = 1369.935
  - BM #66 112 - STEP NAILS IN POWER POLE AT SOUTHEAST CORNER OF CENTRAL AVENUE AND GREENWICH ROAD. ELEV. = 1378.23
  - BM #63 - CHISELED SQUARE ON CONCRETE BASE TO TRAFFIC SIGNAL POLE AT NORTHWEST CORNER OF CENTRAL AVENUE AND GREENWICH ROAD. ELEV. = 1373.91
  - BM #3A - CITY OF WICHITA BENCH MARK DISC IN CONCRETE BASE TO TRAFFIC SIGNAL POLE AT SOUTHWEST CORNER OF CENTRAL AVENUE AND GREENWICH ROAD. ELEV. = 1376.24

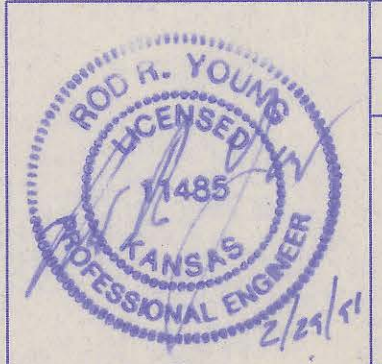
NOTICE

THE CONTRACTOR IS ADVISED THAT OTHER CONSTRUCTION AND GRADING PROJECTS ARE SCHEDULED TO BE UNDERWAY PRIOR TO OR CONCURRENTLY WITH THIS PROJECT. THESE INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING:

- PAVING AND DRAINAGE IMPROVEMENTS IN BALTHROP ADDITION.
- SITE GRADING, BUILDING CONSTRUCTION, AND PAVING FOR HOLY CROSS LUTHERAN CHURCH IN BALTHROP ADDITION.
- WATERLINE CONSTRUCTION IN BALTHROP ADDITION AND ALONG GREENWICH ROAD AND CENTRAL AVENUE (CITY OF WICHITA PROJECT NOS. 448-89015, 448-89016, AND 448-89017)

THE CONTRACTOR IS REQUIRED TO COORDINATE WITH AND/OR ACCOMMODATE OTHER CONTRACTORS WORKING IN THE VICINITY TO THE EXTENT POSSIBLE AND AS DIRECTED BY THE ENGINEER. THE CONTRACTOR WILL BE REQUIRED TO WORK AROUND IMPROVEMENTS CONSTRUCTED UNDER OTHER PROJECTS AND SHALL BE RESPONSIBLE FOR REPAIR OF DAMAGE TO IMPROVEMENTS IN PLACE. COSTS FOR COORDINATION AND REPAIRS TO IMPROVEMENTS IN PLACE, IF REQUIRED, SHALL BE BORNE BY THE CONTRACTOR.

**RECORD DRAWING**  
 MDK PROJ. ENG. 1/14/97 DATE  
 RES. ENG. DATE



No.	Revision	By	Date

SEDGWICK COUNTY BUREAU OF PUBLIC SERVICES  
 DAVID C. SPEARS, P.E.  
 DIRECTOR, BUREAU OF PUBLIC SERVICES/COUNTY ENGINEER

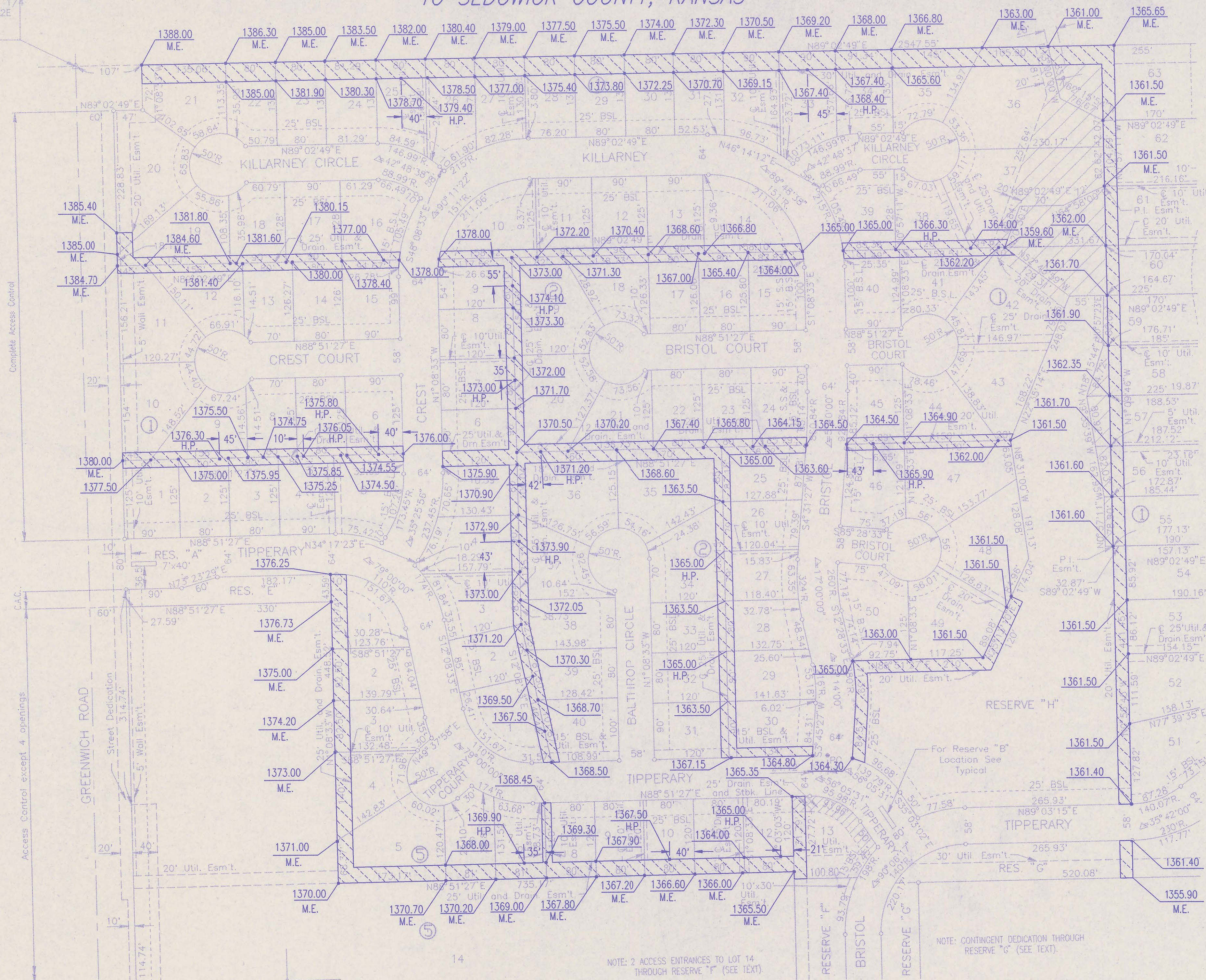
**SANITARY SEWER KEY MAP**  
 PHASE 2-SANITARY SEWER IMPROVEMENTS  
 BALTHROP ADDITION

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

Designed by	MDS, MDK	Job No.	34-95586-1	Sht. 2 of 21
Drawn by	JLM	Date	November 1995	

# BALTHROP ADDITION TO SEDGWICK COUNTY, KANSAS

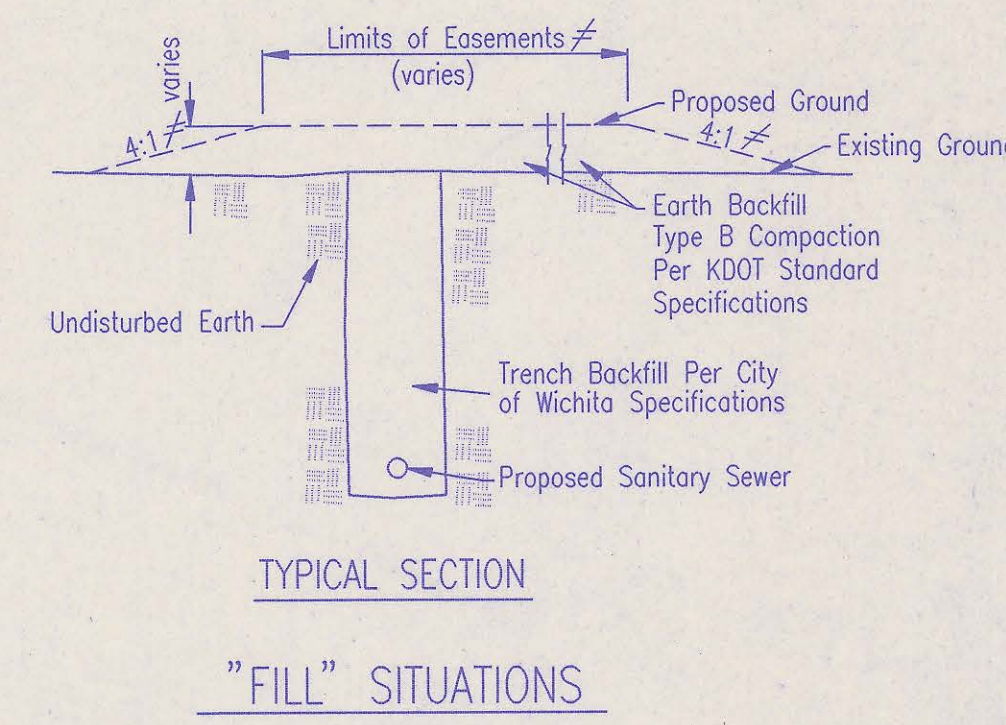
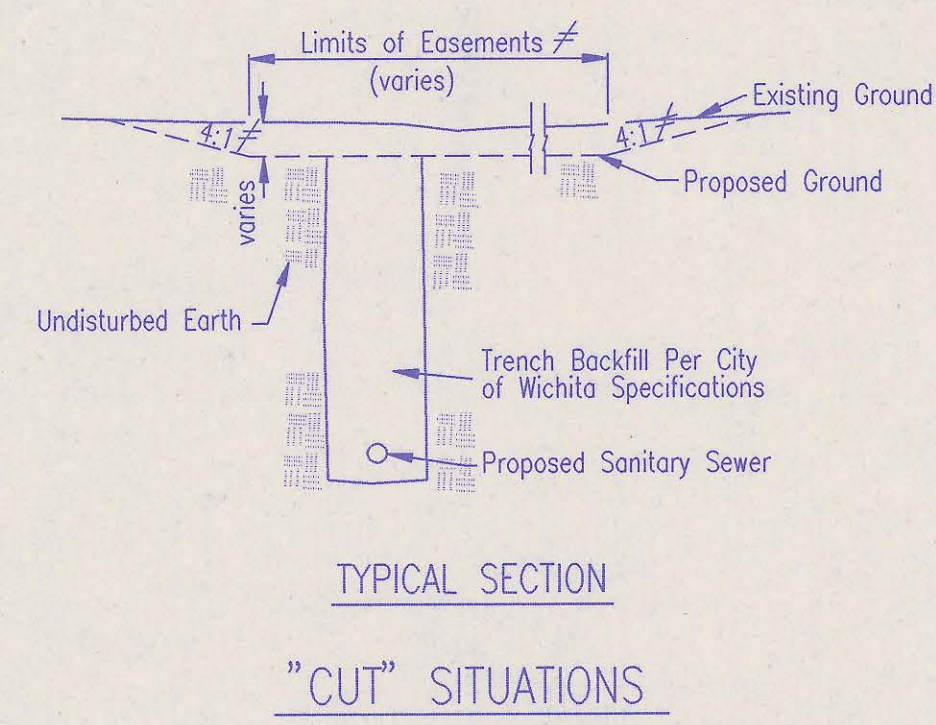
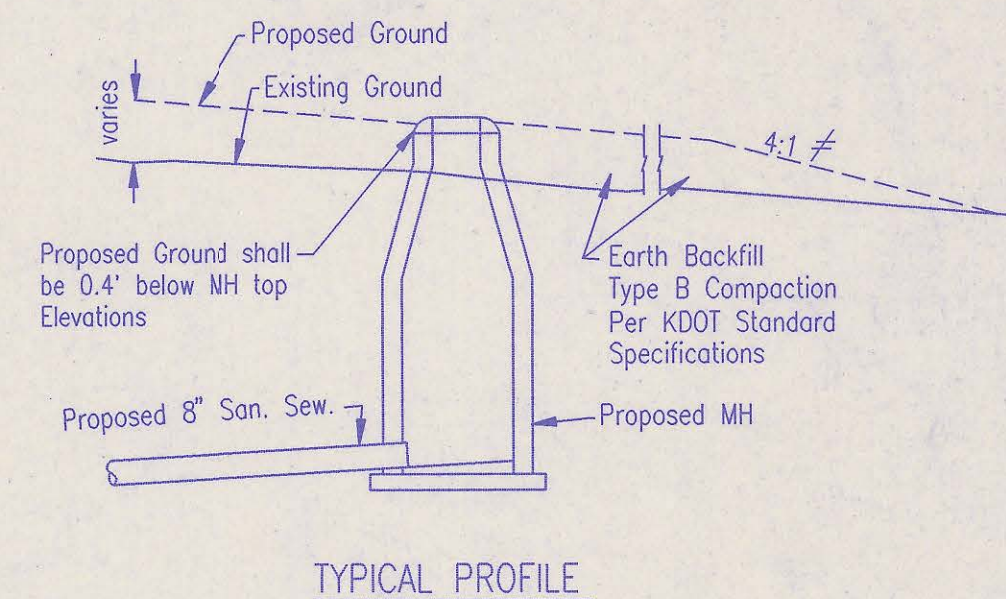
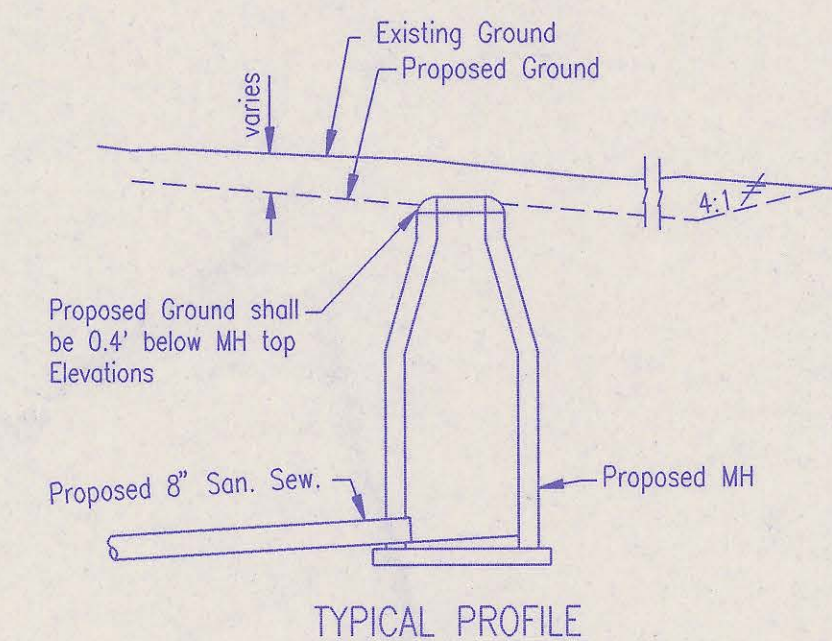
N.W. Corner, S.W. 1/4  
Sec. 15, T27S, R2E  
of the 6th P.M.  
Fd. 1" I.P.



SCALE: 1"=100'

- = IRON SET
- BSL = BUILDING SETBACK LINE
- C.A.C. = COMPLETE ACCESS CONTROL
- S.S. = SANITARY SEWER
- DRAINAGE EASEMENT

MINIMUM PAD ELEVATIONS (LOWEST OPENING) AS FOLLOWS:  
LOTS 36-63, BLOCK 1 = ELEV. 1362.00 M.S.L.  
LOTS 14&15, BLOCK 5 = ELEV. 1362.00 M.S.L.



## EASEMENT GRADING DETAILS

Easement Grading will be bid on a lump sum basis for grading the easements to the profile and elevations shown on the Easement Grading Plan (this sheet). Approximate quantities of earthwork for easement grading are shown below. These approximate quantities are given for information only. The Contractor should verify the quantities when preparing the proposal.

- Cut 18,200 C.Y. (Approximate)
- Fill 2,600 C.Y. (Approximate)

- = AREAS TO BE GRADED
- H.P. = HIGH POINT
- M.E. = MATCH EXISTING

Graded widths and slopes may vary as approved by the Engineer to minimize conflict with existing trees.

**RECORD DRAWING**  
MDK PROJ. ENG. 1/14/97 DATE  
RES. ENG. DATE

DSMR:RFJ OFER:REJ SCALE: 1"=100.00  
01/1995/955866/001/ESMTGRAD.dwg 02-28-1996 4:54:39 pm

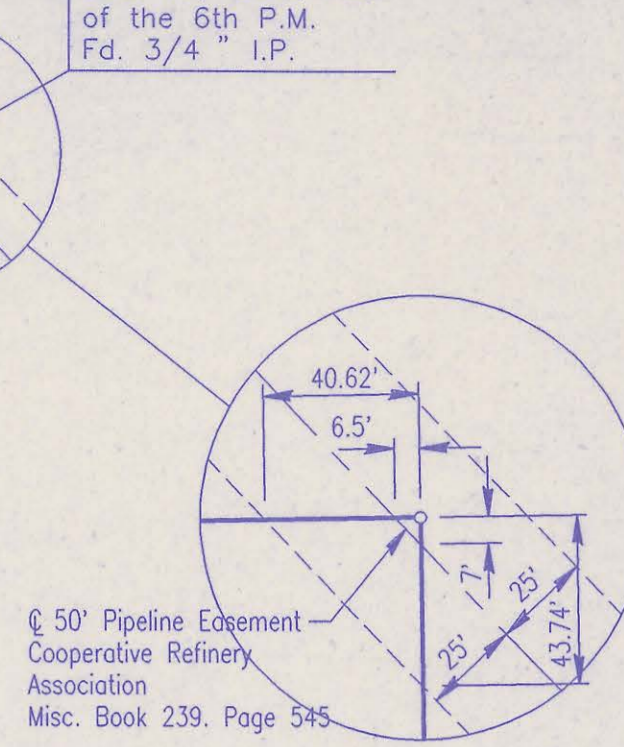
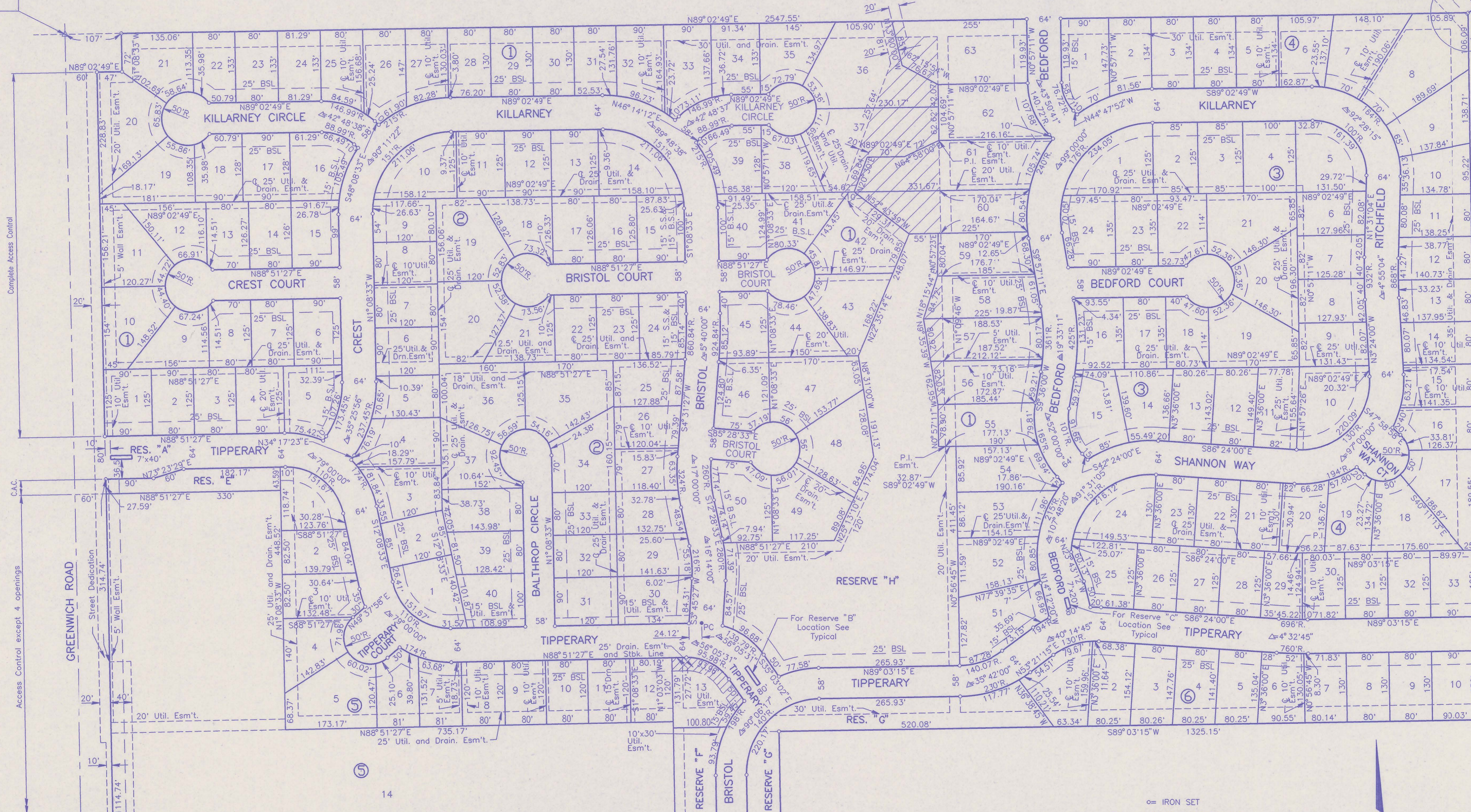


No.	Revision	By	Date
	SEDGWICK COUNTY BUREAU OF PUBLIC SERVICES DAVID C. SPEARS, P.E. DIRECTOR, BUREAU OF PUBLIC SERVICES/COUNTY ENGINEER		
<b>EASEMENT GRADING</b>			
PHASE 2-SANITARY SEWER IMPROVEMENTS BALTHROP ADDITION			
<b>PROFESSIONAL ENGINEERING CONSULTANTS, P.A.</b> ENGINEERS WICHITA, KANSAS			
Designed by	RRY, MDK	Job No.	34-95586-1
Drawn by		Date	November 1995
			Sht. 3 of 21

# BALTHROP ADDITION TO SEDGWICK COUNTY, KANSAS

N.W. Corner, S.W. 1/4  
Sec. 15, T27S, R2E  
of the 6th P.M.  
Fd. 1" I.P.

N.E. Corner, S.W. 1/4  
Sec. 15, T27S, R2E  
of the 6th P.M.  
Fd. 3/4" I.P.



Complete Access Control

Access Control except 4 openings

GREENWICH ROAD

RES. "A"

RES. "B"

RES. "C"

RES. "D"

RES. "E"

RES. "F"

RES. "G"

RES. "H"

RES. "I"

RES. "J"

RES. "K"

RES. "L"

RES. "M"

RES. "N"

RES. "O"

RES. "P"

RES. "Q"

RES. "R"

RES. "S"

RES. "T"

RES. "U"

RES. "V"

RES. "W"

RES. "X"

RES. "Y"

RES. "Z"

RES. "AA"

RES. "AB"

RES. "AC"

RES. "AD"

RES. "AE"

RES. "AF"

RES. "AG"

RES. "AH"

RES. "AI"

RES. "AJ"

RES. "AK"

RES. "AL"

RES. "AM"

RES. "AN"

RES. "AO"

RES. "AP"

Street Dedication  
314.74'

5' Wall Esm't.

20' Util. Esm't.

5' Drain. Esm't.

10' Util. Esm't.

5' Drain. Esm't.

10' Util. Esm't.

5' Drain. Esm't.

10' Util. Esm't.

5' Drain. Esm't.

10' Util. Esm't.

5' Drain. Esm't.

10' Util. Esm't.

5' Drain. Esm't.

10' Util. Esm't.

5' Drain. Esm't.

10' Util. Esm't.

5' Drain. Esm't.

10' Util. Esm't.

5' Drain. Esm't.

10' Util. Esm't.

5' Drain. Esm't.

10' Util. Esm't.

5' Drain. Esm't.

10' Util. Esm't.

5' Drain. Esm't.

10' Util. Esm't.

5' Drain. Esm't.

10' Util. Esm't.

5' Drain. Esm't.

10' Util. Esm't.

5' Drain. Esm't.

10' Util. Esm't.

5' Drain. Esm't.

10' Util. Esm't.

5' Drain. Esm't.

10' Util. Esm't.

5' Drain. Esm't.

10' Util. Esm't.

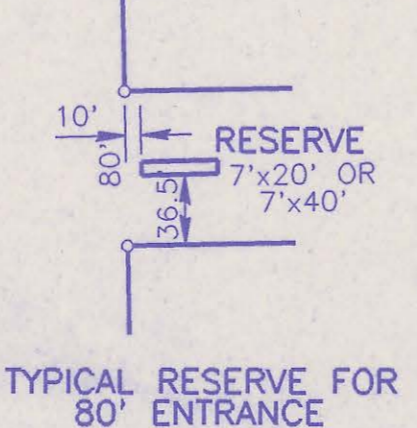
5' Drain. Esm't.

10' Util. Esm't.

5' Drain. Esm't.

10' Util. Esm't.

5' Drain. Esm't.

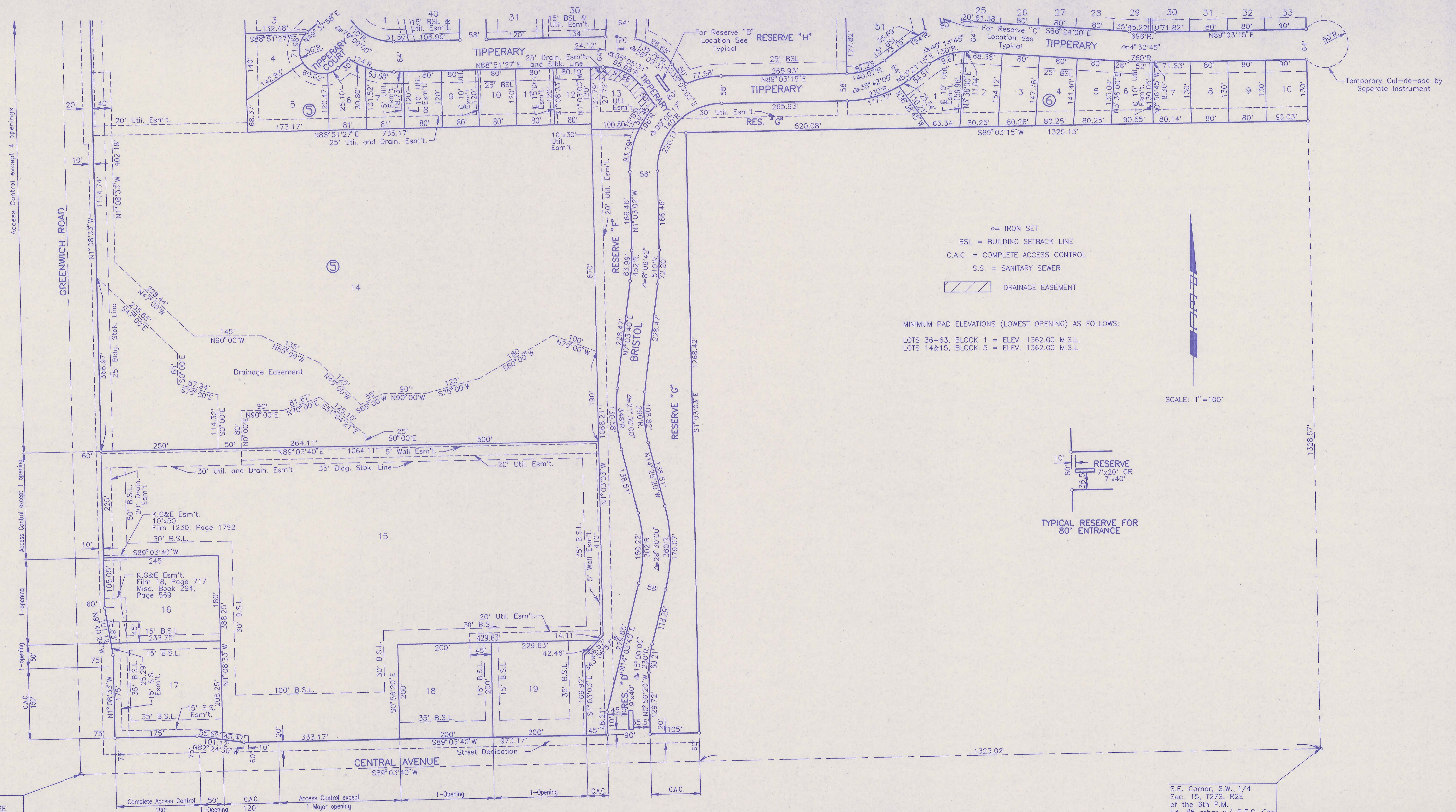


- = IRON SET
- BSL = BUILDING SETBACK LINE
- C.A.C. = COMPLETE ACCESS CONTROL
- S.S. = SANITARY SEWER
- ▨ = DRAINAGE EASEMENT

MINIMUM PAD ELEVATIONS (LOWEST OPENING) AS FOLLOWS:  
 LOTS 36-63, BLOCK 1 = ELEV. 1362.00 M.S.L.  
 LOTS 14&15, BLOCK 5 = ELEV. 1362.00 M.S.L.

SCALE: 1"=100'

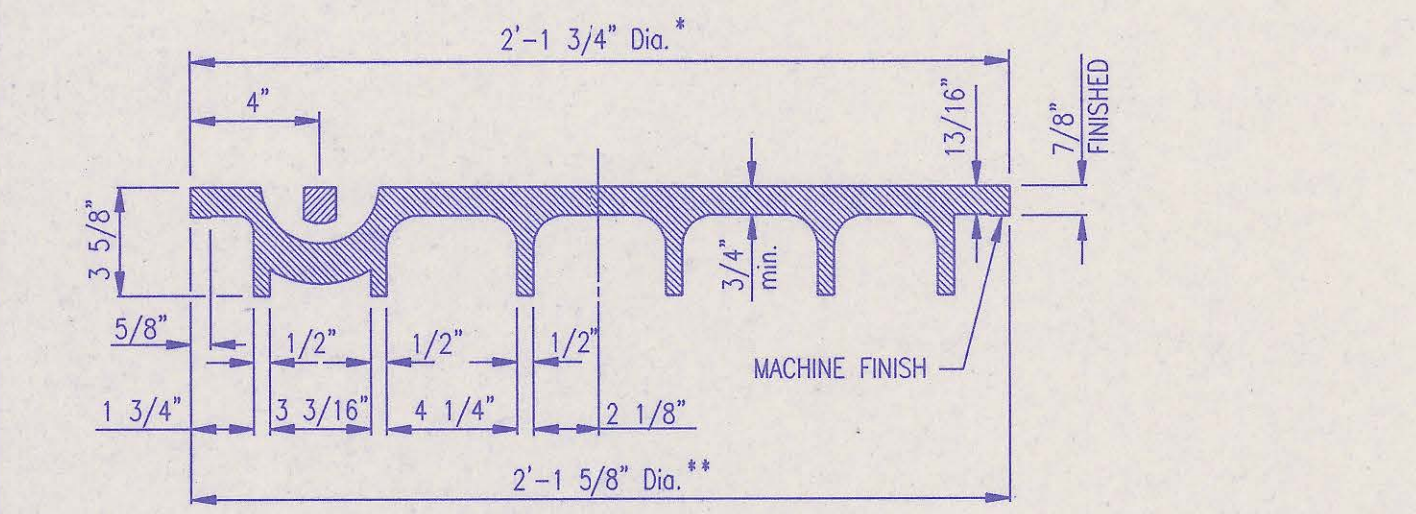
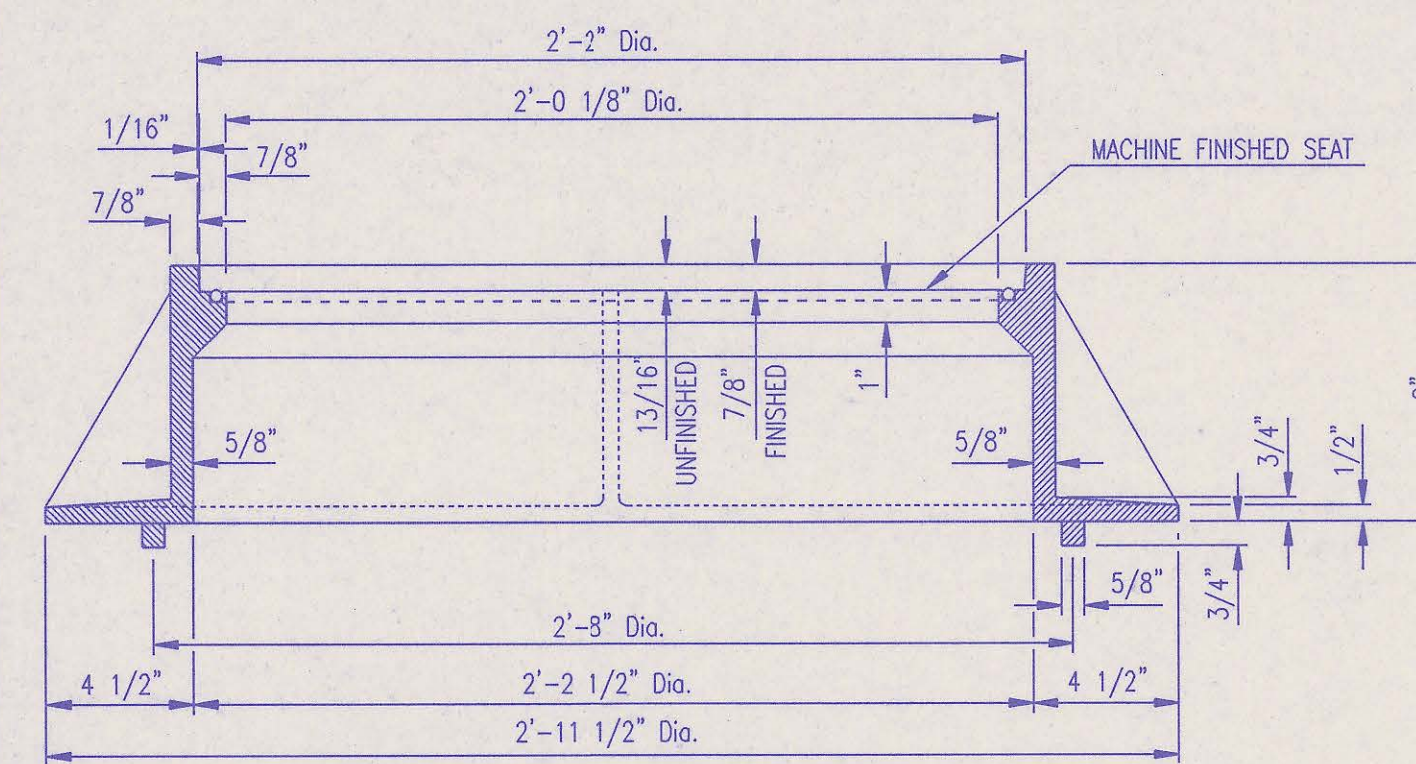
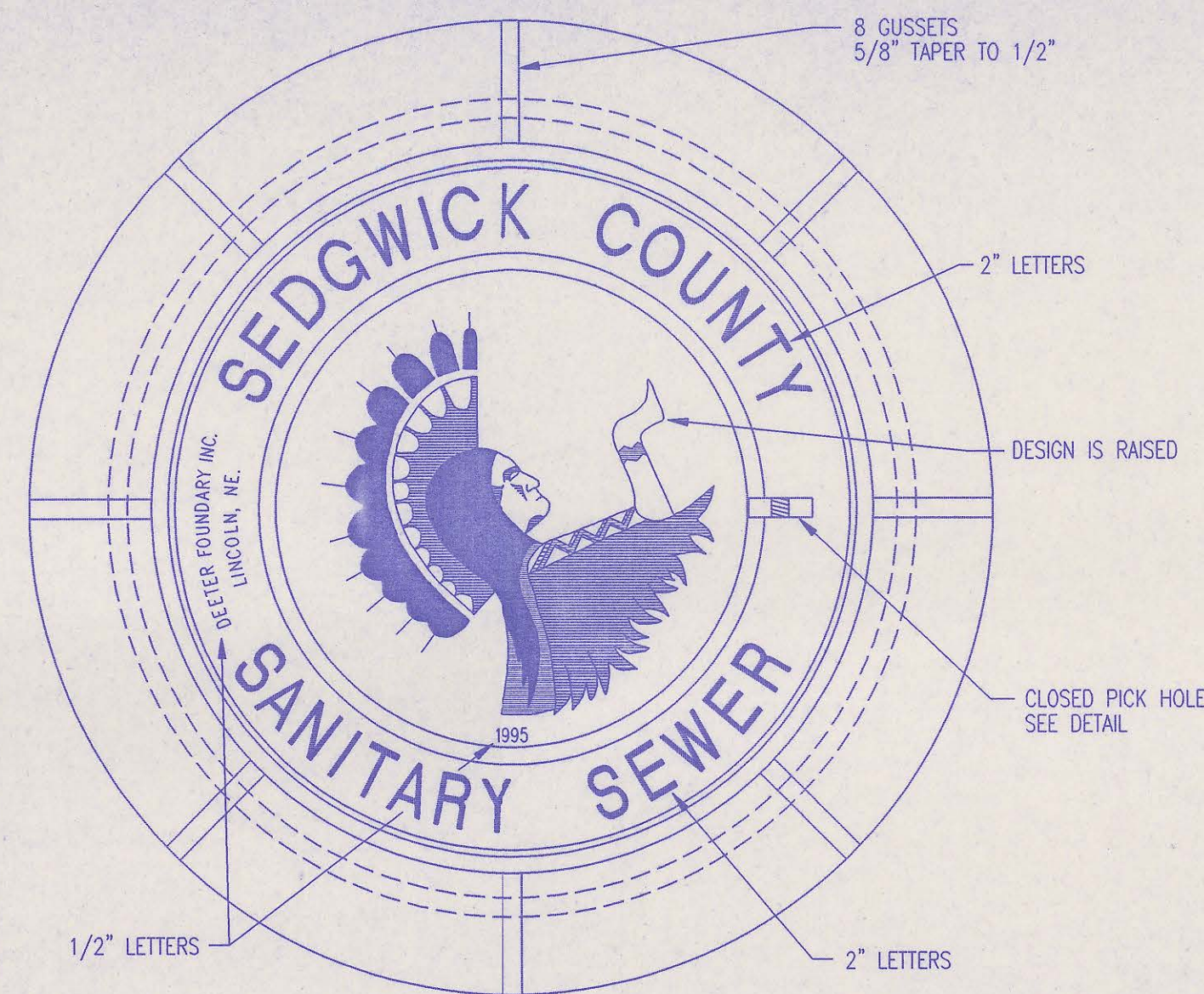
# BALTHROP ADDITION TO SEDGWICK COUNTY, KANSAS



DSNR: MWB OPER: REJ SCALE: 1"=100.00  
 Q:\1995\95586\00\PLAT2.dwg 02-29-1996 6:52:47 am

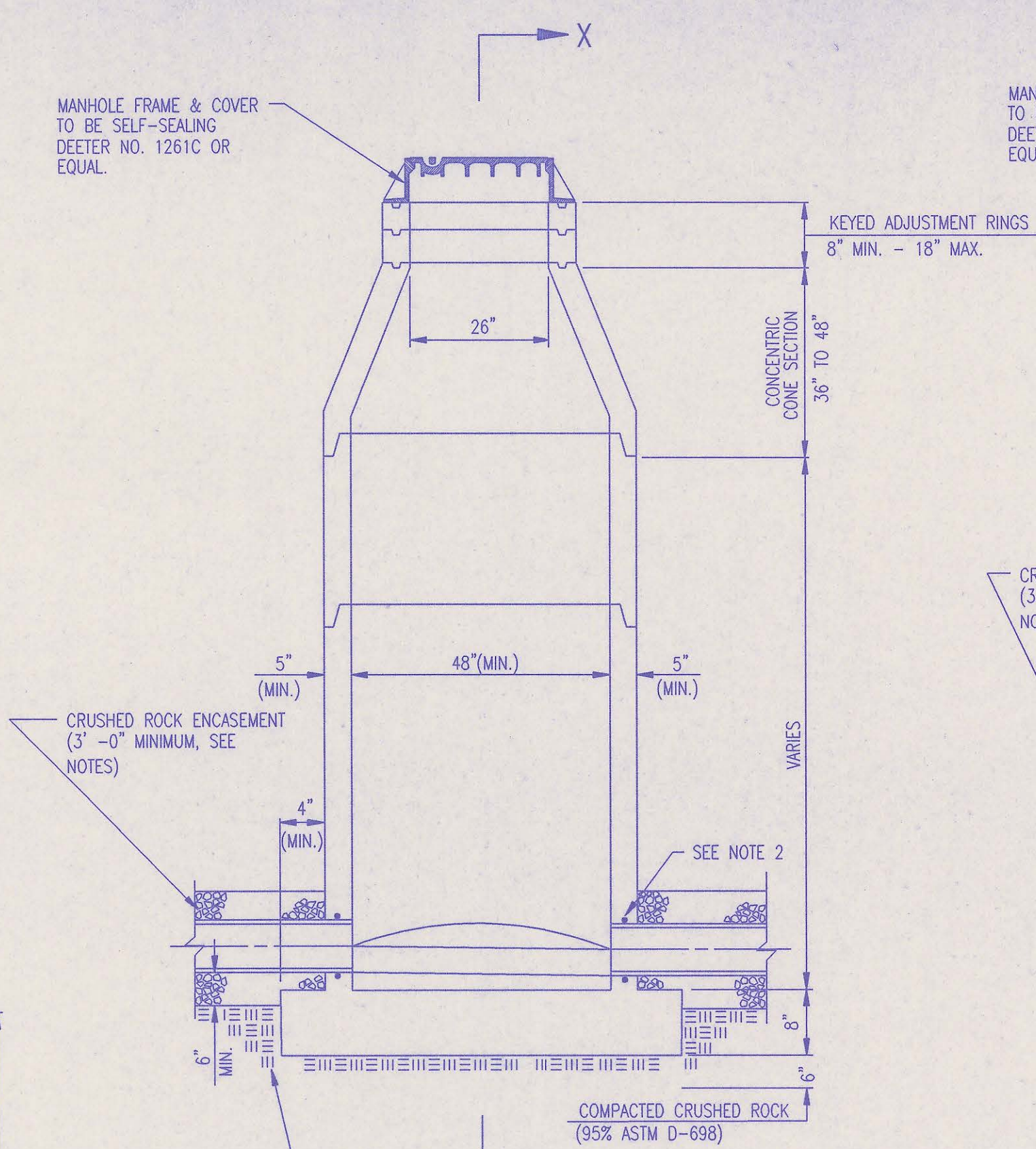
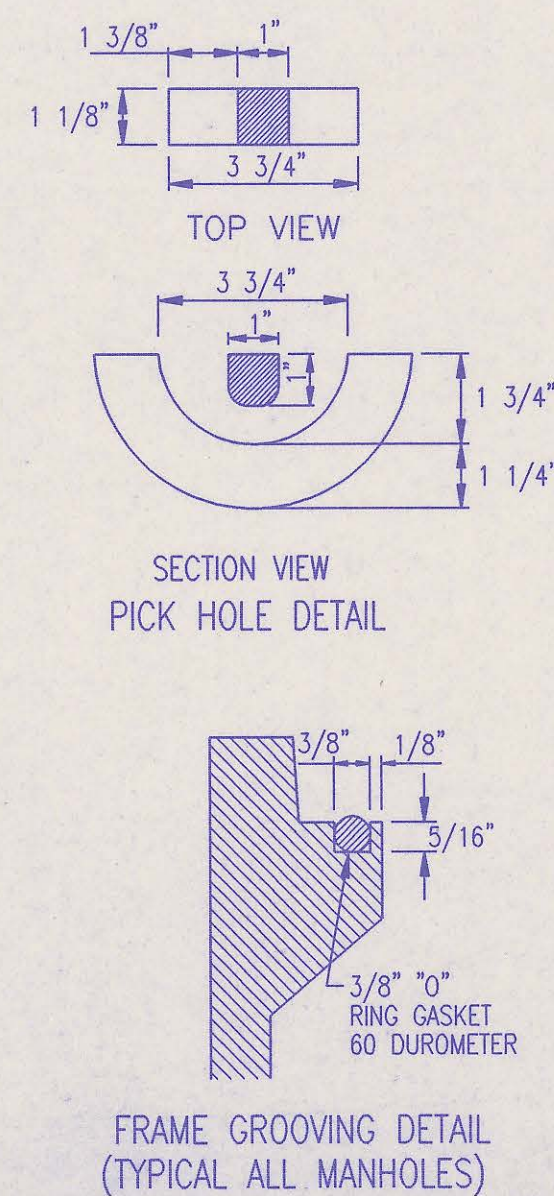
S.W. Corner  
 Sec. 15, T27S, R2E  
 of the 6th P.M.  
 Fd. 1/2" I.P. in Thimble

S.E. Corner, S.W. 1/4  
 Sec. 15, T27S, R2E  
 of the 6th P.M.  
 Fd. #5 rebar w/ P.E.C. Cap

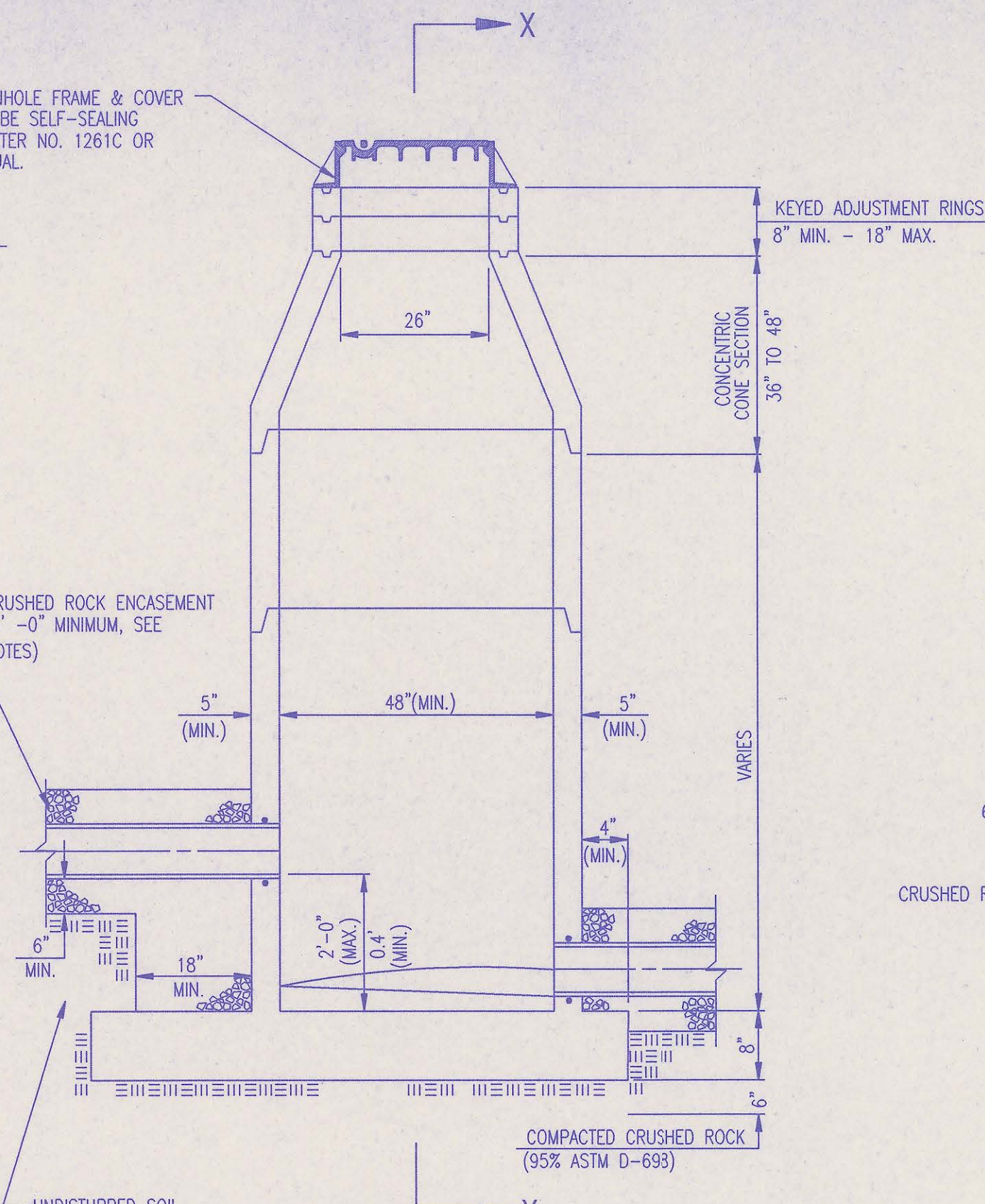


**MANHOLE FRAME AND COVER**  
(TOTAL WEIGHT = 430 LBS.)

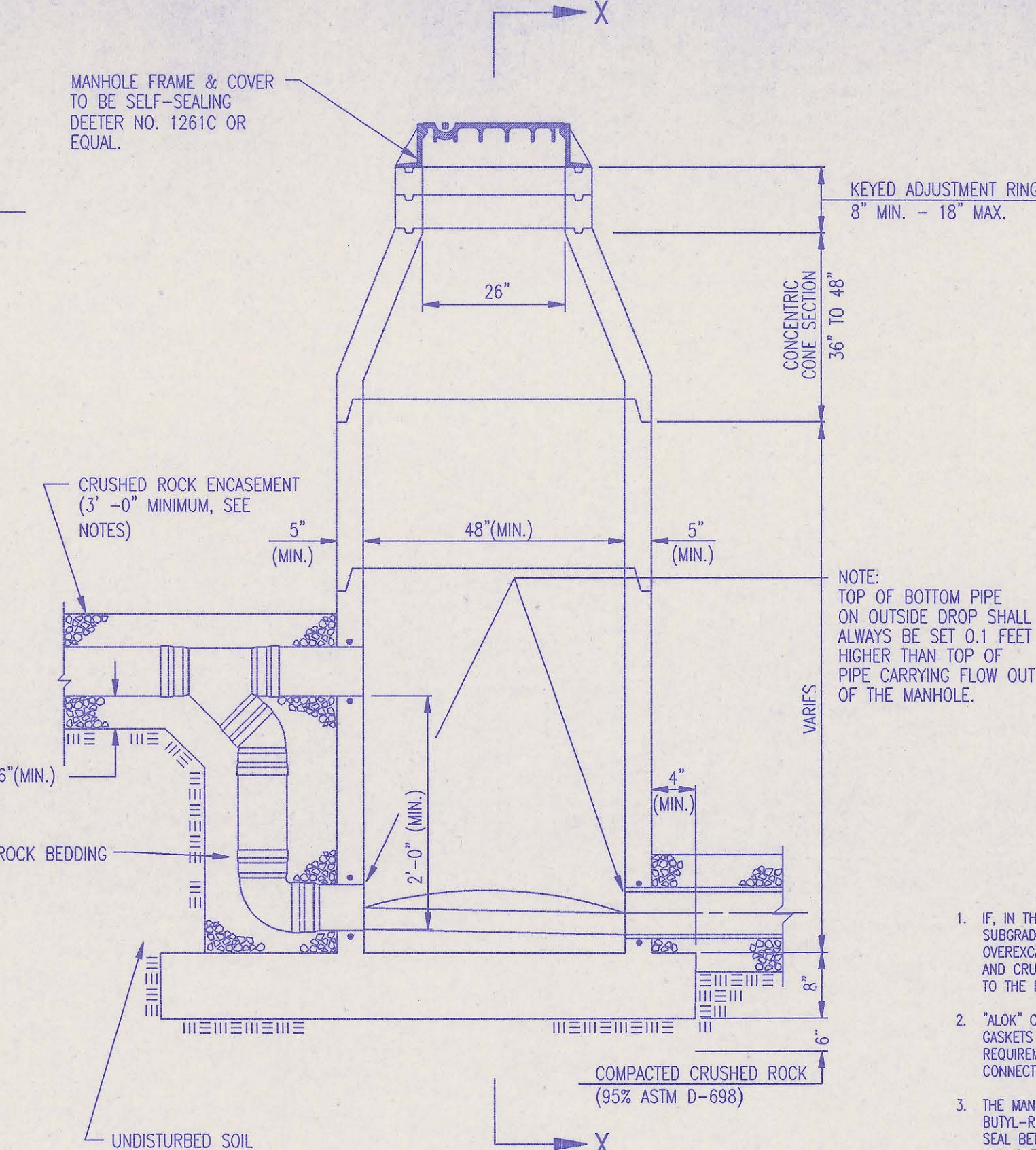
- MANHOLE FRAME AND COVER NOTES**
1. CAST IRON MANHOLE FRAME AND COVER SHALL CONFORM TO ASTM A-48, CLASS 350, OR BETTER.
  2. CASTINGS ARE TO BE MANUFACTURED TRUE TO PATTERN AND WITH SATISFACTORY FIT OF COMPONENT PARTS. CASTINGS SHALL BE FREE OF DEFECTS AND ALL BURRS SHALL BE GROUND SMOOTH. DIMENSIONS AS DETAIL ON PLAN SHALL NOT DEVIATE BY  $\pm 1/16$ " 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. 1261C 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. 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.
  8. THE MANHOLE FRAME SHALL BE FURNISHED WITH AN APPROVED CONTINUOUS "O" RING GASKET GROOVED INTO THE BEARING SURFACE OF THE MANHOLE FRAME (PER DETAIL). THE "O" RING GASKET SHALL BE FACTORY INSTALLED IN THE MANHOLE FRAME WITH 100% SILICON SEALANT-DOW CORNING OR EQUAL.



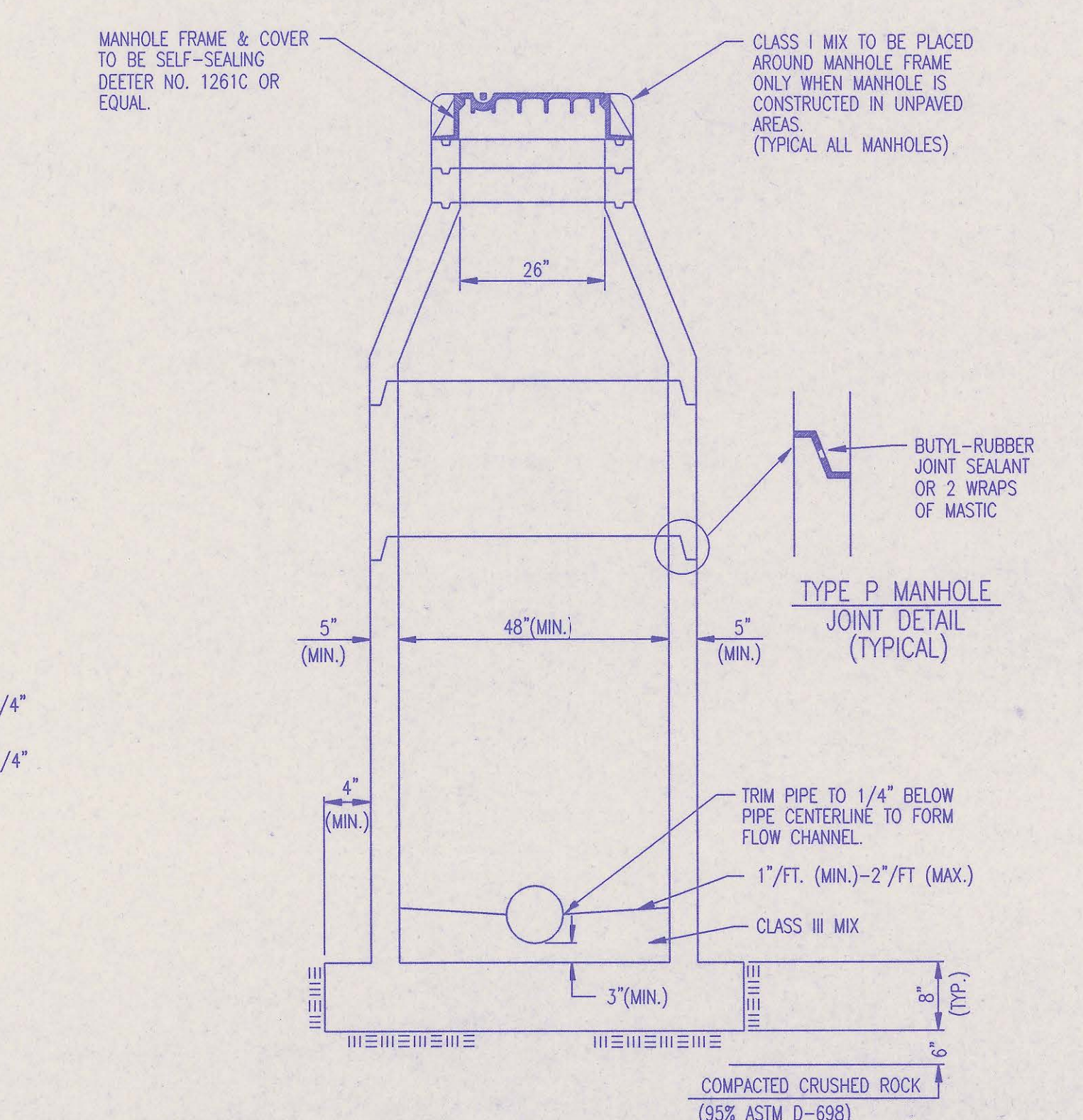
**PRECAST STANDARD MANHOLE TYPE "A"**



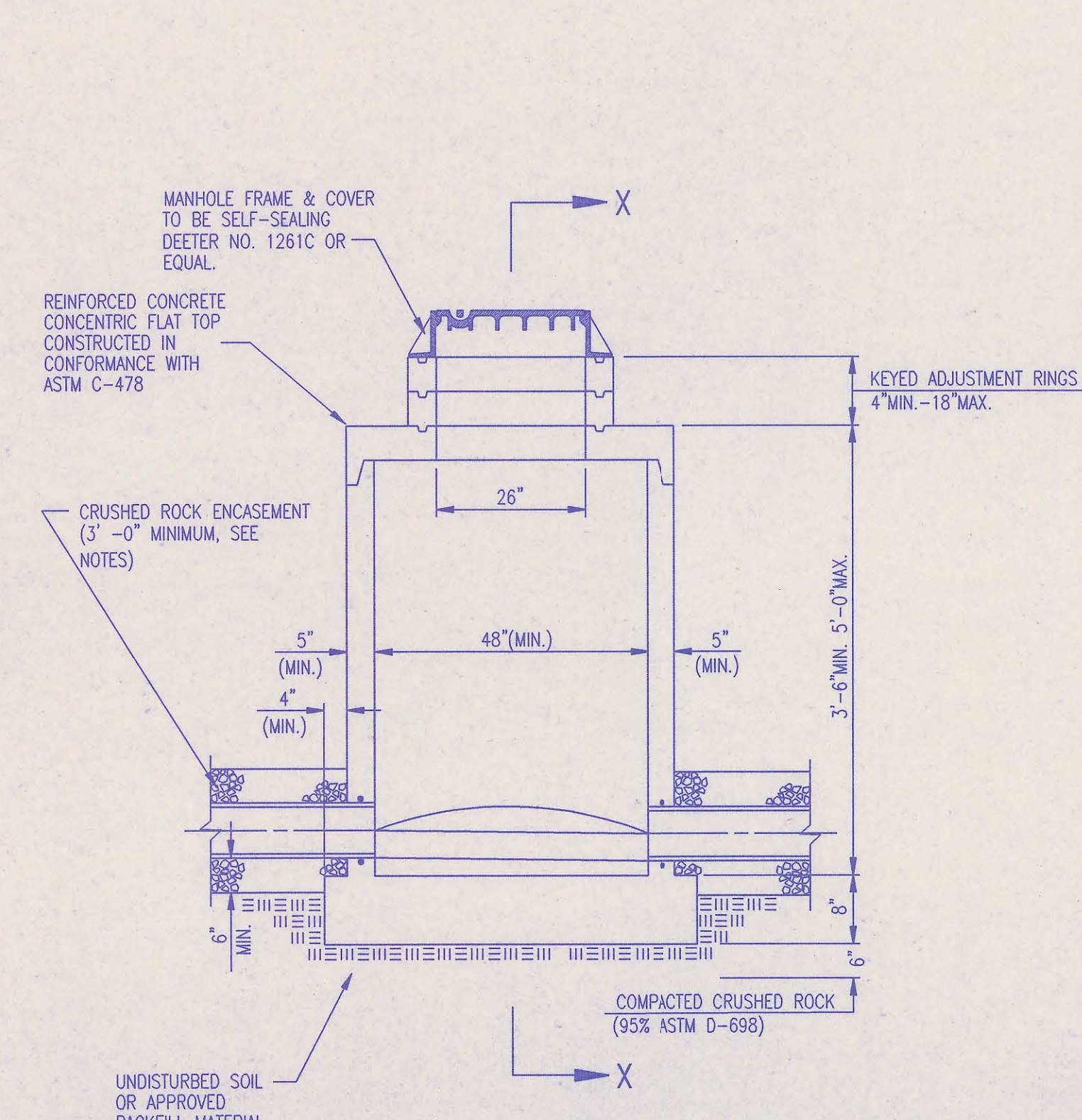
**PRECAST INSIDE DROP MANHOLE TYPE "B"**



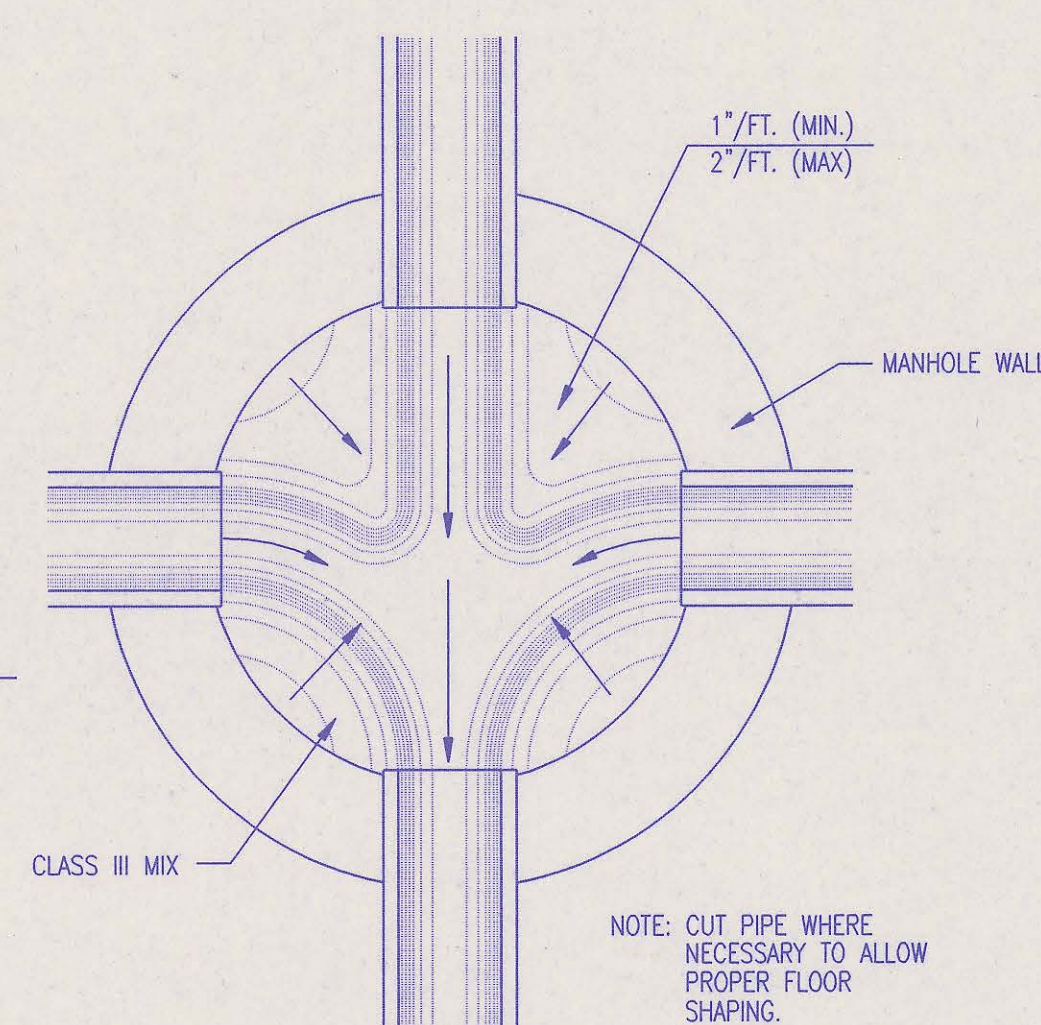
**PRECAST OUTSIDE DROP MANHOLE TYPE "C"**



**SECTION X (TYPICAL)**



**PRECAST SHALLOW MANHOLE TYPE "D"**



**TYPICAL MANHOLE FLOOR SHAPING**

- PRECAST MANHOLE NOTES**
1. IF, IN THE OPINION OF THE ENGINEER, THE MANHOLE SUBGRADE APPEARS UNSTABLE, THE CONTRACTOR WILL OVEREXCAVATE TO A SUITABLE SUBGRADE CONDITION AND CRUSHED ROCK SHALL BE PLACED AND COMPACTED TO THE REQUIRED GRADE.
  2. "A-LOK" OR APPROVED EQUAL FLEXIBLE WATER-STOP GASKETS WHICH MEET OR EXCEED THE TEST REQUIREMENTS OF ASTM C-923 SHALL BE INSTALLED TO CONNECT THE SEWER TO THE MANHOLE WALL.
  3. THE MANHOLE FRAME SHALL BE SEATED ON AN APPROVED BUTYL-RUBBER OR MASTIC SEALANT TO PROVIDE WATER-TIGHT SEAL BETWEEN THE MANHOLE ADJUSTMENT RING AND THE MANHOLE FRAME.
  4. GASKETED PIPE CAPS SHALL BE PROVIDED BY THE PIPE SUPPLIER. GLUED OR CEMENTED CAPS WILL NOT BE ACCEPTED.
  5. ALL MANHOLE CONSTRUCTION SHALL BE WATER TIGHT.
  6. 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.
  7. MANHOLES WITH PIPE SIZES 24" AND LARGER SHALL HAVE 5" INSIDE DIAMETER (MIN.).
  8. 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.
  9. MANHOLES SHALL BE SUPPLIED WITH PRECAST BASE SECTIONS UNLESS OTHERWISE APPROVED. ALL PRECAST CONCRETE MANHOLE SECTIONS AND BASES SHALL CONFORM TO THE LATEST REVISION OF ASTM C478 AS MODIFIED BY THE SPECIFICATIONS.
  10. WHERE MANHOLE STUBS ARE SHOWN ON THE PLANS, THE STUB SHALL EXTEND AT LEAST 5 FEET FROM THE INSIDE WALL OF THE MANHOLE. 4" STUBS SHALL BE SET AT 2.0% GRADE. 6" STUBS SHALL BE SET AT 1.0% GRADE.
  11. MANHOLE SECTIONS SHALL BE SUPPLIED WITH RECESSED LIFTING EYES. LIFTING EYE RECESSES SHALL BE GROUTED FLUSH TO THE MANHOLE WALL WITH HYDRAULIC CEMENT AFTER THE MANHOLE IS IN PLACE. LIFTING HOLES THRU THE MANHOLE WALL WILL NOT BE ACCEPTED.
  12. WHERE A-LOK GASKETS ARE REQUIRED, THE CONTRACTOR SHALL UTILIZE A CRUSHED ROCK BEDDING MATERIAL. THE ROCK BEDDING MATERIAL SHALL EXTEND TO 3 FEET FROM THE MANHOLE WALL AND SHALL BE COMPACTED IN PLACE FROM THE BOTTOM OF THE DISTURBED AREA TO 1 FOOT ABOVE THE TOP OF THE PIPE. THE CRUSHED ROCK WHICH IS PLACED BELOW THE PIPE BEDDING ZONE SHALL BE COMPACTED TO 95% ASTM D-698(MIN).
  13. WHERE MANHOLES ARE TO BE BUILT OVER EXISTING SANITARY SEWER LINES, SEWER PIPES SHALL BE SUPPORTED WITH CLASS I CONCRETE ENCASEMENT A MINIMUM OF 3 FEET OUTSIDE THE MANHOLE WALL.
  14. CRUSHED ROCK SHALL MEET THE REQUIREMENTS FOR GRANULAR BEDDING MATERIAL, AS OUTLINED IN THE SPECIFICATIONS.

2	Revised casting to Deeter Foundry Inc., No. 1261C	MK	12/20/95
1	Add mastic callout at joint	RJ	1/19/95
No.	Revision	By	Date

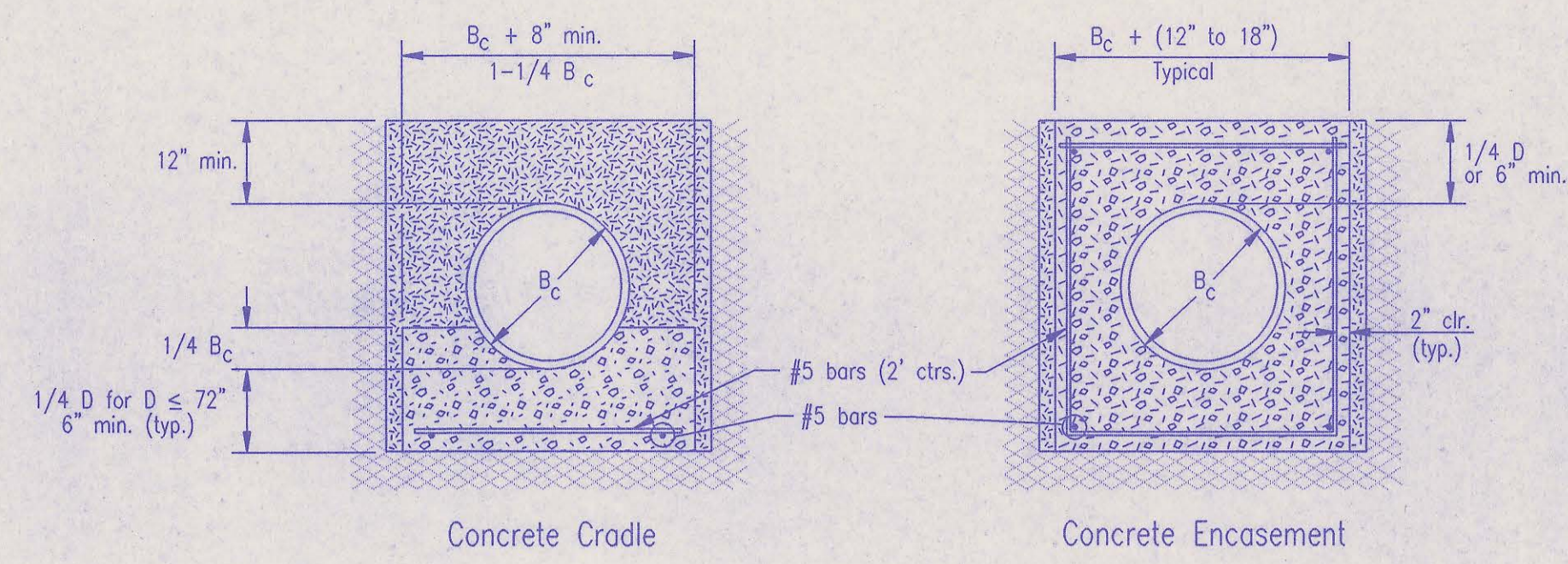
**PRECAST MANHOLE DETAILS**

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

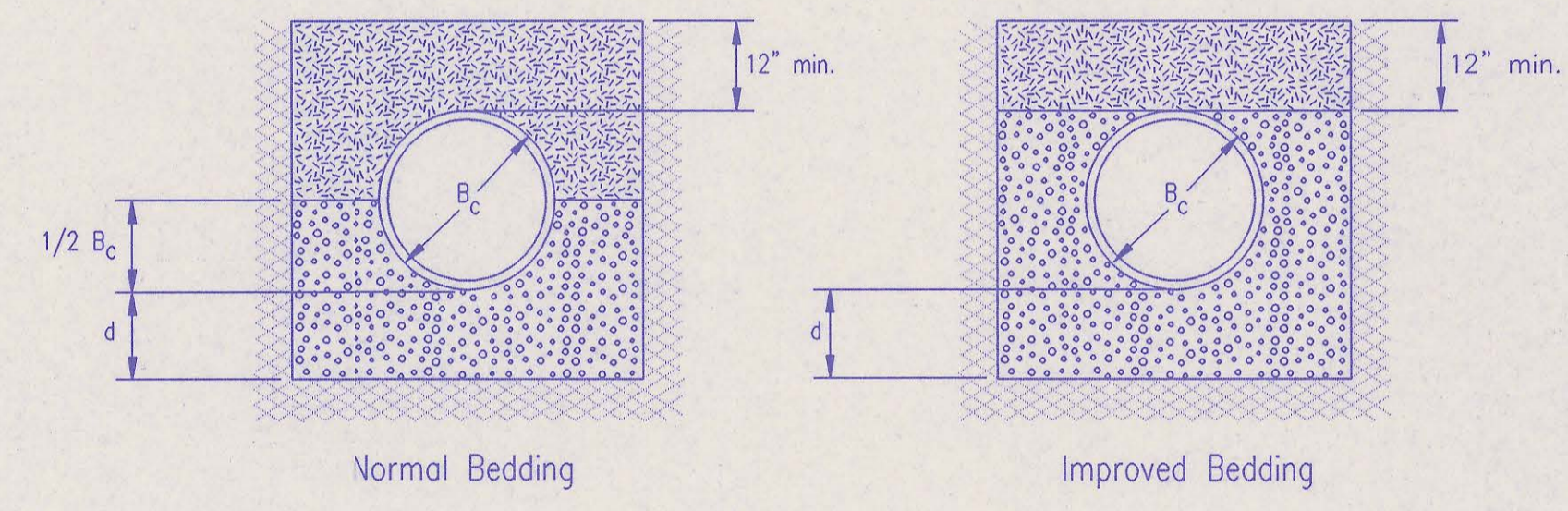
DSNR: GUM OPER: RFJ SCALE: 1=1:00  
 Q:\1995\95586\001\PREMHDTL.dwg 02-29-1996 10:54:21 am

DATE
BY
CHECKED
CHECKED
PLAN

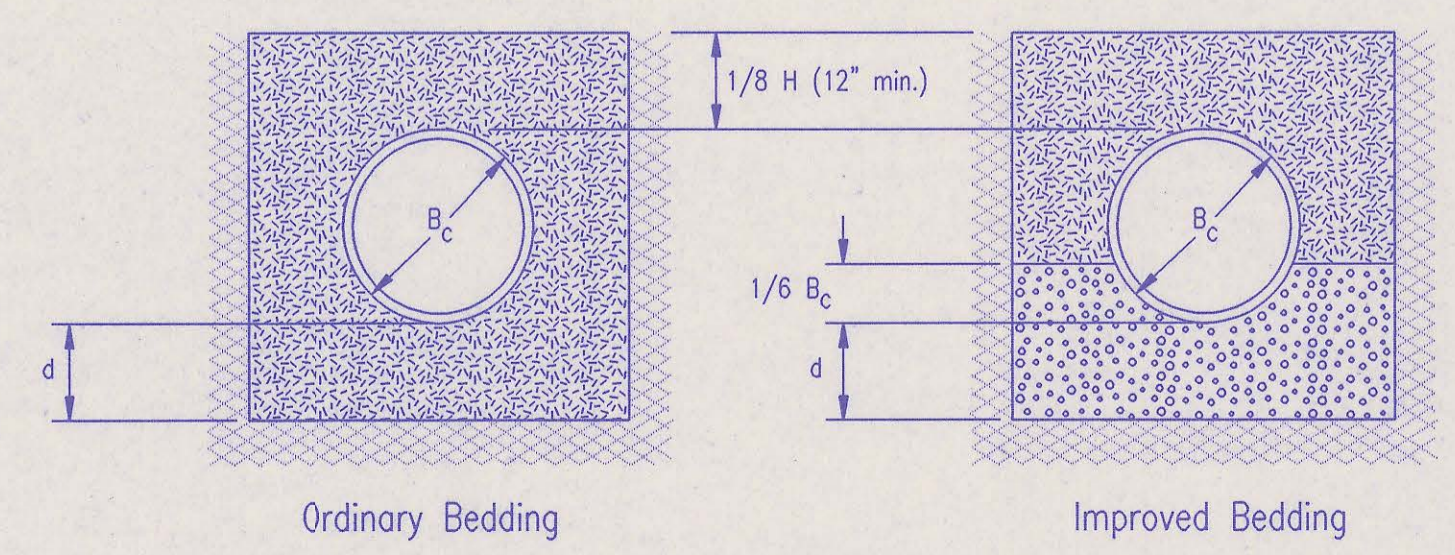
DSMR: BEJ OPER: REJ SCALE: 1=1.00  
 Q:\1995\95580\00\BK\EDL.dwg 02-29-1996 10:55:11 am



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
- [Granular Bedding Symbol] = Granular Bedding Material or Sand-Gravel Bedding
- [Compacted Embedment Symbol] = Compacted Embedment
- [Concrete Symbol] = Concrete

D	d(min) Soil	d(min) Rock
27" & smaller	4"	6"
30" to 60"	5"	9"
66" & larger	6"	12"

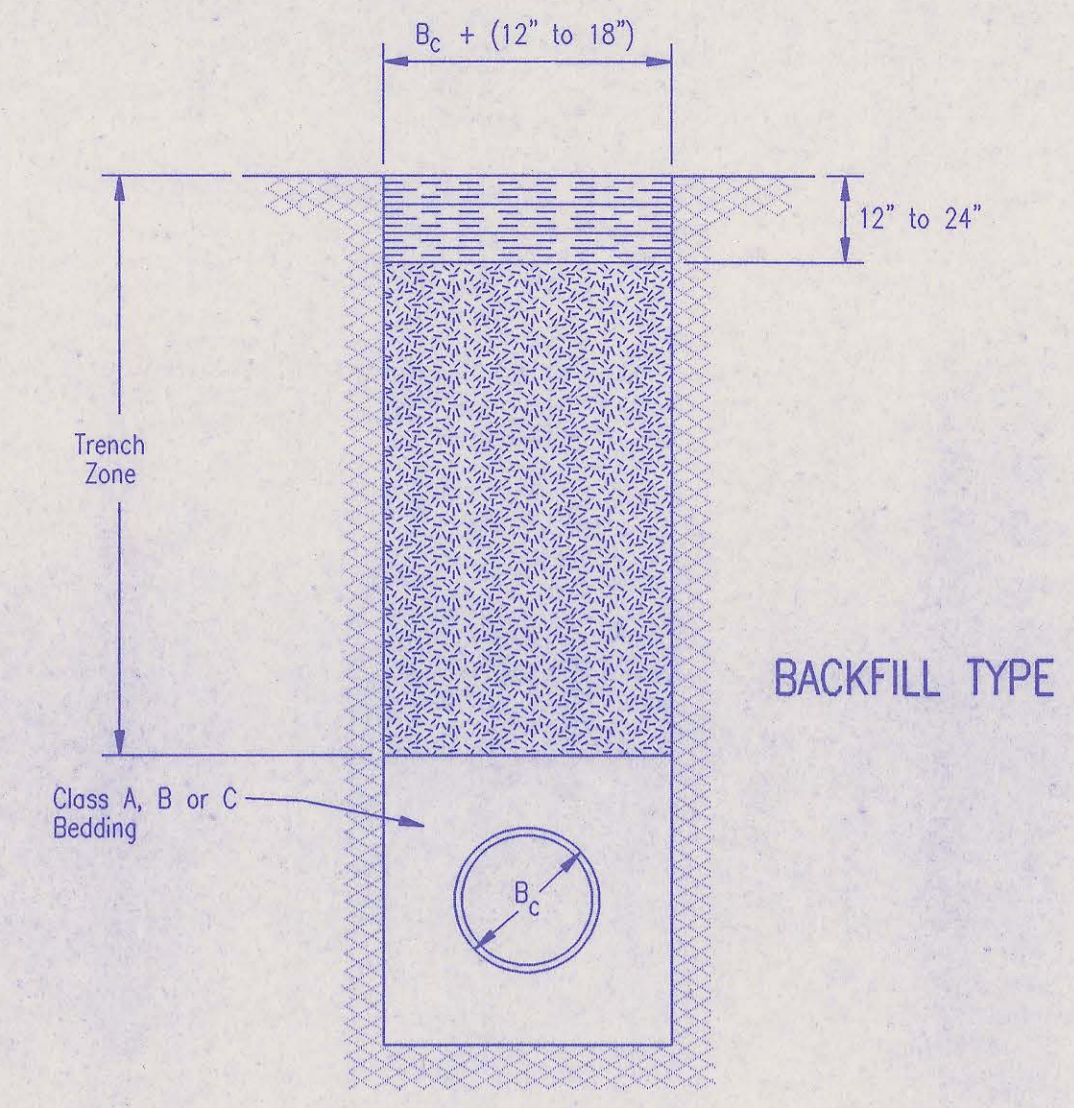
Granular Bedding Material shall be an approved material consisting of durable crushed rock conforming with the requirements of the latest revision of ASTM C-33 Size No. 67 (3/4" to No. 4); to be placed in not more than 6" layers and compacted by slicing with a shovel or vibrating. Soundness, abrasion, 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 95 percent maximum density as determined by ASTM D698. 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).



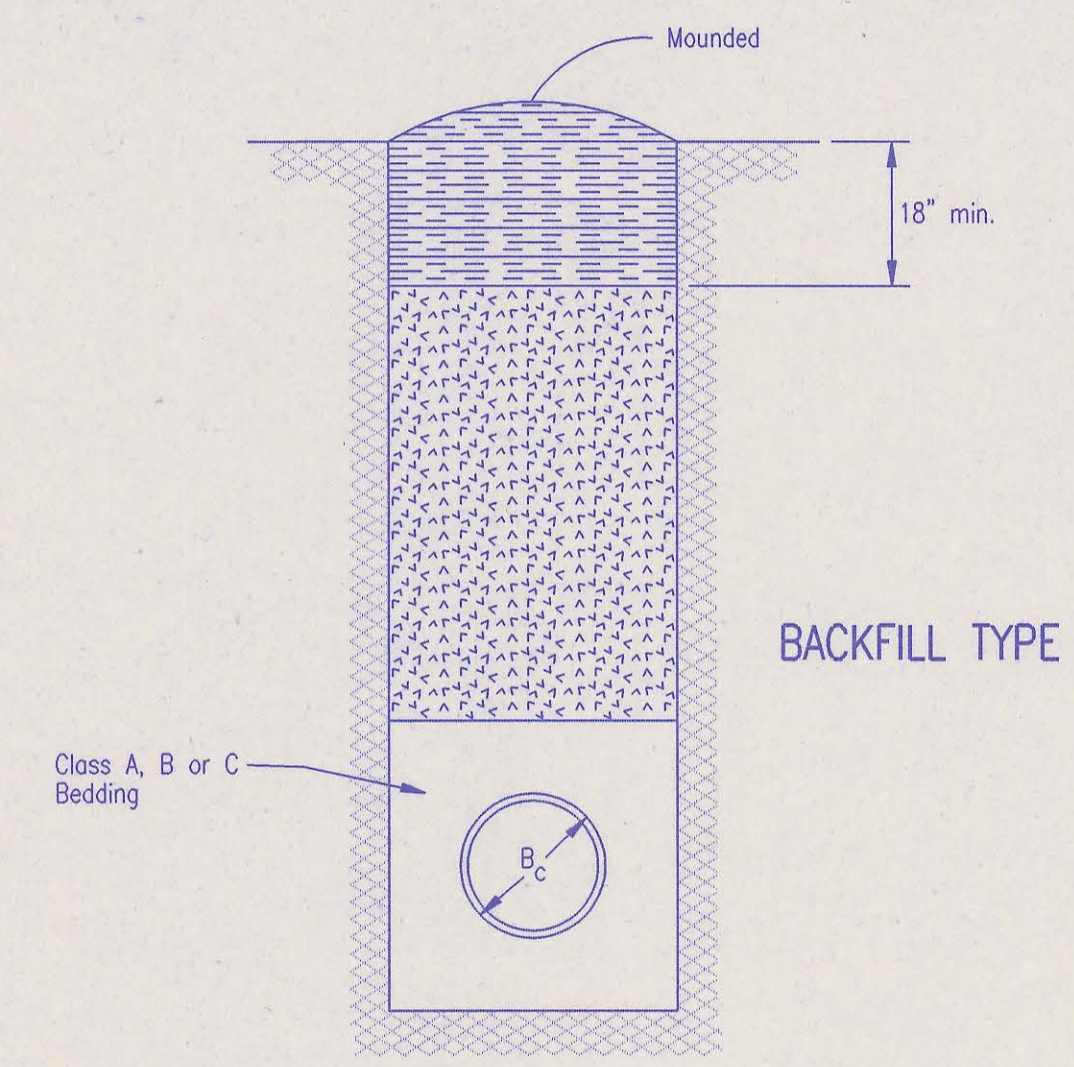
BACKFILL TYPE I

- $B_c$  = Outside Pipe Diameter
- [Compacted Granular Backfill Symbol] = Compacted Granular Backfill
- [Uncompacted Earth Backfill Symbol] = Uncompacted Earth Backfill
- [Compacted Earth Backfill Symbol] = 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 95% density as determined by ASTM D698.

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 D698.



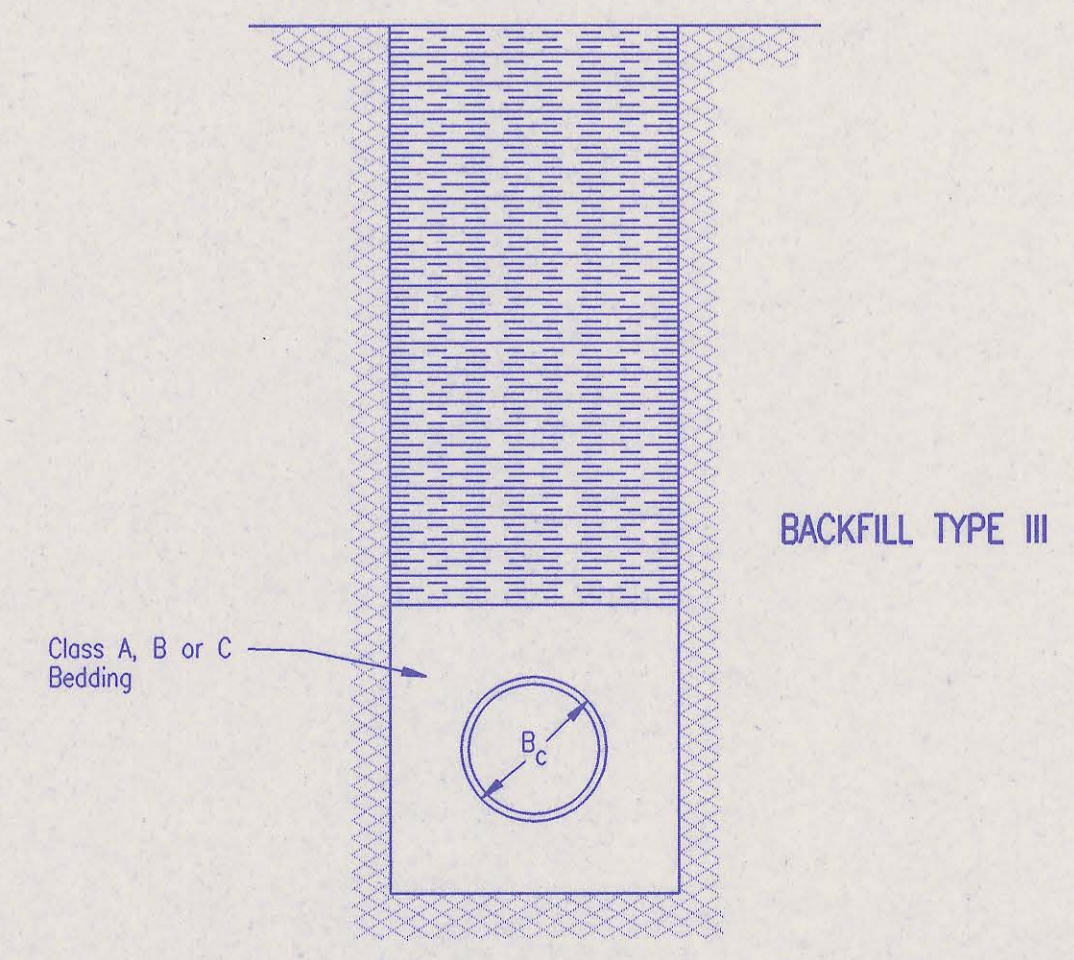
BACKFILL TYPE II

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 100 percent of standard density, in conformance with ASTM D698 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".



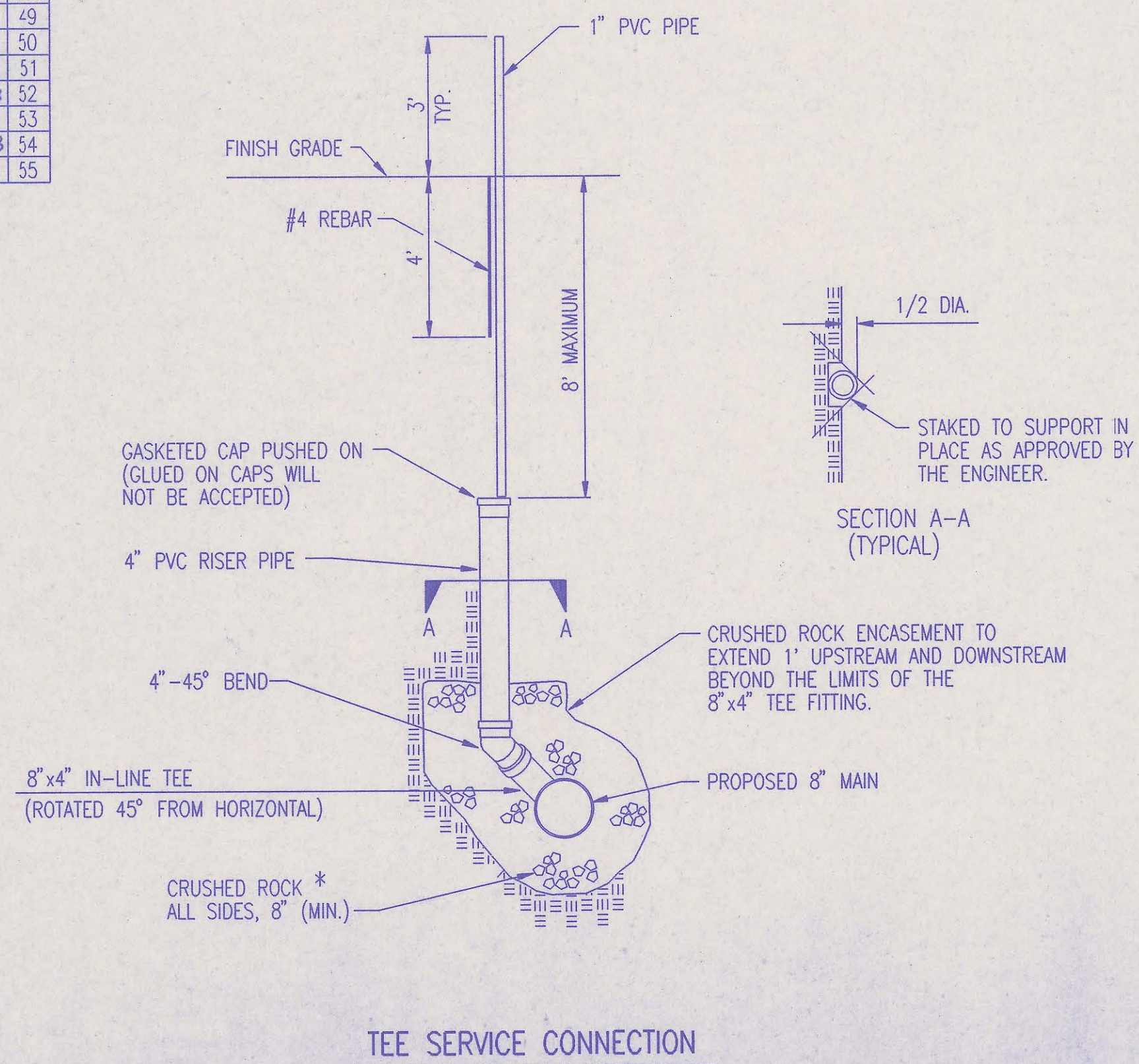
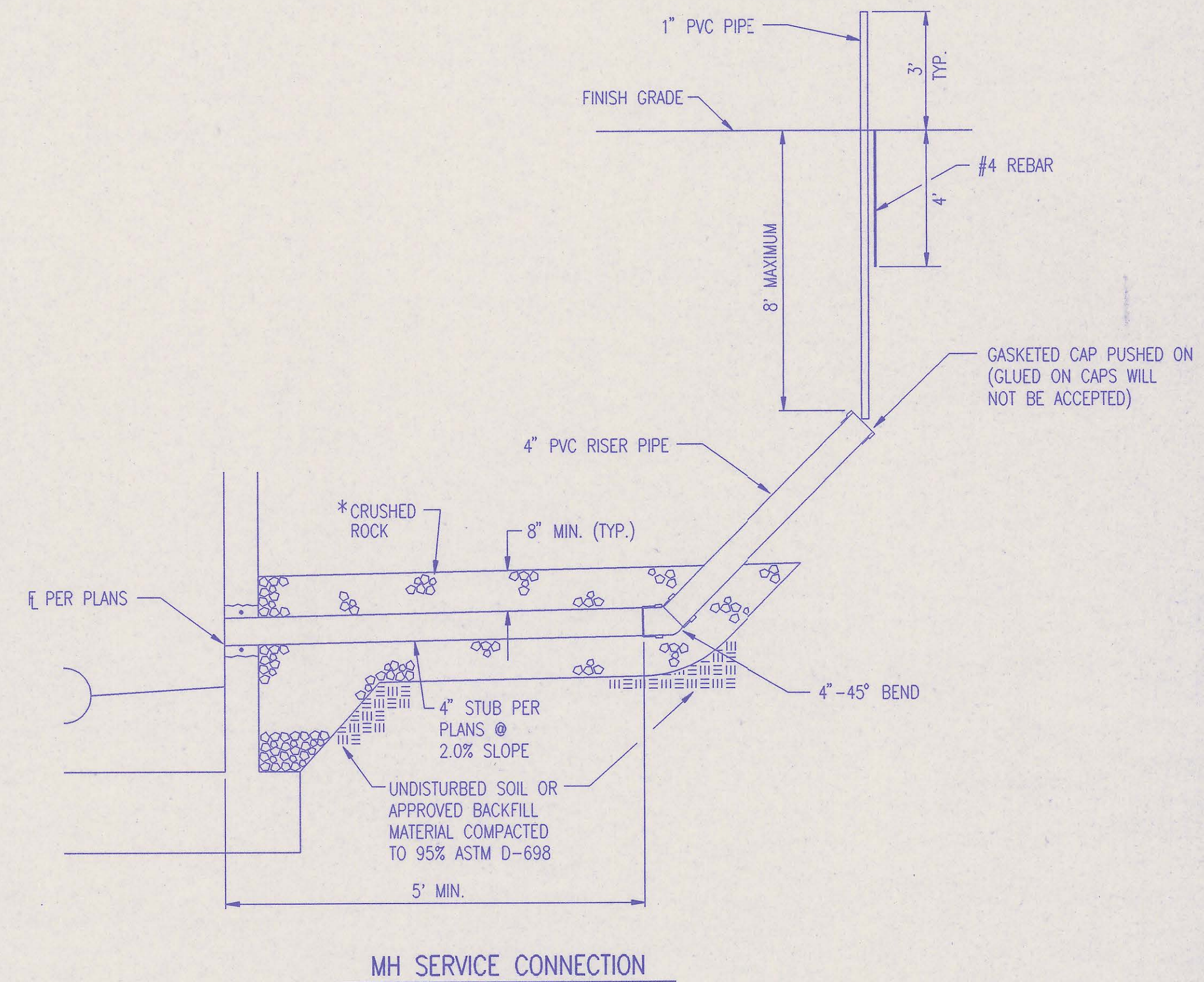
BACKFILL TYPE III

TRENCH ZONE BACKFILLING

2	Revised compaction designation-Backfilling under pavement	RJ	9/28/94
1	Revised compaction designation	RJ	3/9/94
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

SEWER SERVICE TABLE										
LOCATION					FOR INFORMATION ONLY		RECORD INFORMATION (TO BE COMPLETED BY PROJECT INSPECTOR)			
NO.	TYPE	LOT NO.	BLOCK NO.	LATERAL NO.	STATION/DIRECTION	APPROXIMATE LENGTH 4" PIPE	DISTANCE FROM NEAREST MANHOLE		NO.	
							UPSTREAM	DOWNSTREAM		
1	TEE SERVICE CONNECTION	51	1	71-2	1+70/RT.	7'		157' from MH 71-2-1		1
2	TEE SERVICE CONNECTION	52	1	71-2	2+60/RT.	7'		67' from MH 71-2-1		2
3	TEE SERVICE CONNECTION	53	1	71-2	3+60/RT.	6'	33' from MH 71-2-1			3
4	TEE SERVICE CONNECTION	54	1	71-2	4+40/RT.	6'	113' from MH 71-2-1			4
5	TEE SERVICE CONNECTION	55	1	71-2	5+15/RT.	6'		144' from MH 71-2-2		5
6	TEE SERVICE CONNECTION	56	1	71-2	5+95/RT.	5'		64' from MH 71-2-2		6
7	TEE SERVICE CONNECTION	57	1	71-2	6+85/RT.	5'	26' from MH 71-2-2			7
8	TEE SERVICE CONNECTION	58	1	71-2	7+65/RT.	5'	106' from MH 71-2-2			8
9	TEE SERVICE CONNECTION	59	1	71-2	8+45/RT.	4'		144' from MH 71-2-3		9
10	TEE SERVICE CONNECTION	60	1	71-2	9+25/RT.	4'		64' from MH 71-2-3		10
11	TEE SERVICE CONNECTION	29	1	71-2	20+90/LT.	4'		141' from MH 71-2-G		11
12	TEE SERVICE CONNECTION	28	1	71-2	21+85/LT.	4'		66' from MH 71-2-G		12
13	TEE SERVICE CONNECTION	27	1	71-2	22+50/LT.	5'	19' from MH 71-2-G			13
14	TEE SERVICE CONNECTION	26	1	71-2	23+30/LT.	5'	99' from MH 71-2-G			14
15	TEE SERVICE CONNECTION	25	1	71-2	24+05/LT.	4'	172' from MH 71-2-G			15
16	MH SERVICE CONNECTION	21	1	71-2	27+11.28/SW	4'	MH 71-2-7			16
17	TEE SERVICE CONNECTION	30	2	71-3	3+10/RT.	8'	26' from MH 71-3-2			17
18	TEE SERVICE CONNECTION	31	2	71-3	3+20/LT.	7'	96' from MH 71-3-2			18
19	TEE SERVICE CONNECTION	29	2	71-3	3+85/RT.	6'	101' from MH 71-3-2			19
20	TEE SERVICE CONNECTION	32	2	71-3	3+95/LT.	6'	111' from MH 71-3-2			20
21	TEE SERVICE CONNECTION	28	2	71-3	4+65/RT.	6'	171' from MH 71-3-2			21
22	TEE SERVICE CONNECTION	33	2	71-3	4+75/LT.	6'	181' from MH 71-3-2			22
23	TEE SERVICE CONNECTION	27	2	71-3	5+55/RT.	5'		214' from MH 71-3-3		23
24	TEE SERVICE CONNECTION	34	2	71-3	5+75/LT.	6'		194' from MH 71-3-3		24
25	TEE SERVICE CONNECTION	26	2	71-3	6+35/RT.	5'		134' from MH 71-3-3		25
26	TEE SERVICE CONNECTION	25	2	71-3	7+15/RT.	5'		64' from MH 71-3-3		26
27	TEE SERVICE CONNECTION	6	1	71-3	13+05/RT.	5'	21' from MH 71-3-5			27
28	TEE SERVICE CONNECTION	5	1	71-3	13+10/LT.	5'	26' from MH 71-3-5			28
29	MH SERVICE CONNECTION	10	1	71-3	17+02.13/N	4'	MH 71-3-G			29
30	TEE SERVICE CONNECTION	12	5	71-4	0+20/RT.	5'	20' from MH 71-4-2			30
31	TEE SERVICE CONNECTION	11	5	71-4	1+05/RT.	5'	105' from MH 71-4-2			31
32	TEE SERVICE CONNECTION	10	5	71-4	1+85/RT.	5'	185' from MH 71-4-2			32
33	TEE SERVICE CONNECTION	9	5	71-4	2+65/RT.	5'		135' from MH 71-4-1		33
34	TEE SERVICE CONNECTION	8	5	71-4	3+45/RT.	6'	3+43	57' from MH 71-4-1		34
35	TEE SERVICE CONNECTION	7	5	71-4	4+25/RT.	6'		25' from MH 71-4-1		35
36	TEE SERVICE CONNECTION	6	5	71-4	5+10/RT.	7'		110' from MH 71-4-1		36
37	TEE SERVICE CONNECTION	5	5	71-4	6+10/RT.	6'		125' from MH 71-4-2		37
38	TEE SERVICE CONNECTION	4	5	71-4	8+45/RT.	5'		110' from MH 71-4-2		38
39	TEE SERVICE CONNECTION	3	5	71-4	9+45/RT.	6'		158' from MH 71-4-3		39
40	TEE SERVICE CONNECTION	2	5	71-4	10+30/RT.	6'		43' from MH 71-4-3		40
41	MH SERVICE CONNECTION	1	5	71-4	11+03.56/NE	6'	MH 71-4-3			41
42	TEE SERVICE CONNECTION	50	1	71-6	2+40/LT.	5'	20' from MH 71-6-2			42
43	TEE SERVICE CONNECTION	23	2	71-7	0+30/LT.	5'	30' from MH 71-3-3			43
44	TEE SERVICE CONNECTION	46	1	71-7	2+35/RT.	4'	99' from MH 71-7-1			44
45	TEE SERVICE CONNECTION	45	1	71-7	2+58/LT.	4'	112' from MH 71-7-1			45
46	TEE SERVICE CONNECTION	15	1	71-9	6+65/LT.	3'		13' from MH 71-9-2		46
47	TEE SERVICE CONNECTION	16	1	71-9	6+75/RT.	3'		23' from MH 71-9-2		47
48	TEE SERVICE CONNECTION	14	1	71-9	7+55/LT.	4'		103' from MH 71-9-2		48
49	TEE SERVICE CONNECTION	17	1	71-9	7+65/RT.	4'		113' from MH 71-9-2		49
50	TEE SERVICE CONNECTION	13	1	71-9	8+40/LT.	5'		188' from MH 71-9-2		50
51	TEE SERVICE CONNECTION	18	1	71-9	8+50/RT.	5'		198' from MH 71-9-2		51
52	TEE SERVICE CONNECTION	12	1	71-9	9+35/LT.	5'		164' from MH 71-9-3		52
53	TEE SERVICE CONNECTION	19	1	71-9	9+45/RT.	5'		144' from MH 71-9-3		53
54	TEE SERVICE CONNECTION	11	1	71-9	10+60/LT.	6'		29' from MH 71-9-3		54
55	MH SERVICE CONNECTION	20	1	71-9	11+33.51/NE	5'	MH 71-9-4			55



\* CRUSHED ROCK SHALL MEET THE REQUIREMENTS FOR GRANULAR BEDDING MATERIAL, AS OUTLINED IN THE SPECIFICATIONS.

SERVICE CONNECTIONS ARE TO BE INSTALLED WHERE PROPOSED SEWER MAIN IS 12' OR MORE BELOW PROPOSED GROUND OR AS SHOWN IN THE PLANS.

RECORD DRAWING

MDK PROJ. ENG. 1/14/97 DATE  
RES. ENG. DATE



No.	Revision	By	Date

SEDGWICK COUNTY BUREAU OF PUBLIC SERVICES  
DAVID C. SPEARS, P.E.  
DIRECTOR, BUREAU OF PUBLIC SERVICES/COUNTY ENGINEER

SERVICE CONNECTION DETAILS  
PHASE 2-SANITARY SEWER IMPROVEMENTS  
BALTHROP ADDITION

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

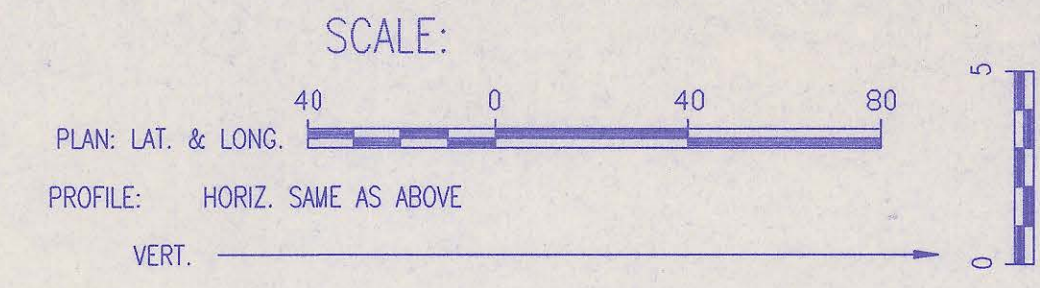
Designed by MDK, MDK Job No. 34-95586-1 Sht. 8 of 21  
Drawn by TLS Date October 1995

Sta. 0+00.00 M1-3A-30  
Existing MH 71-1-10  
Core MH wall and install  
new 8" pipe. Seal new  
8" pipe to MH wall with  
an approved waterstop  
gasket and quick-set  
hydraulic cement. Construct  
a minimum of 3' reinforced  
concrete encasement from  
MH wall. Reshape invert  
to provide smooth flow.  
This work shall be considered  
subsidiary to the price bid  
for pipe in place.

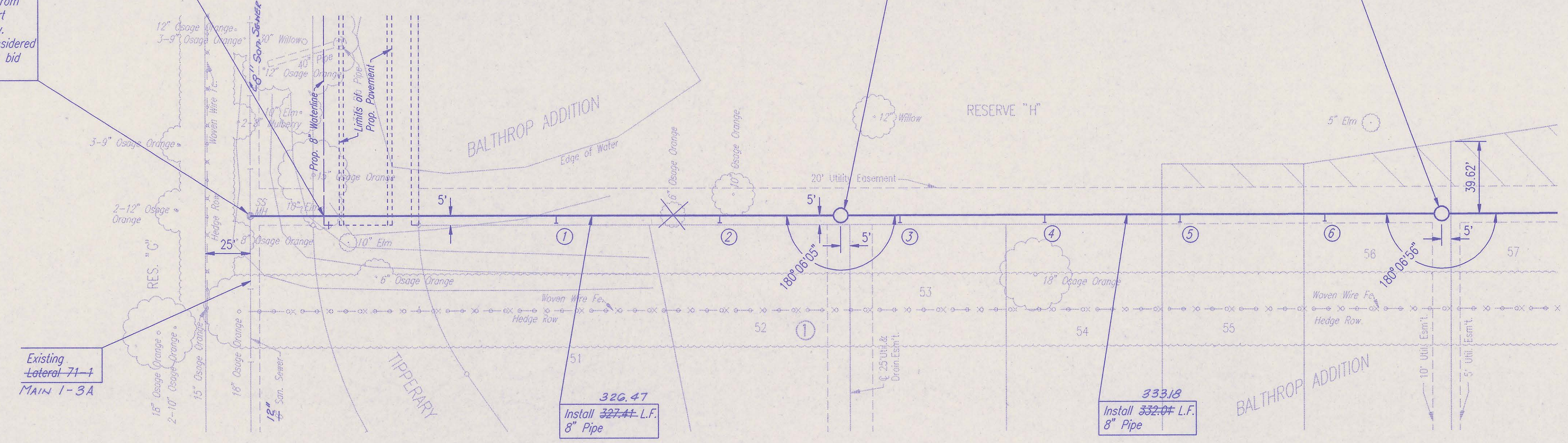
CAUTION!!!  
Prop. 8" Waterline  
(by others)

26.47  
Sta. 3+27.47  
Const. MH 71-2-1  
Type A

.65  
Sta. 6+59.45  
Const. MH 71-2-2  
Type A



PLAN	CHECKED	DATE
	CHECKED	



1 2  
DENOTES SEWER SERVICE.  
SEE SHEET NO. 8 FOR SEWER  
SERVICE SCHEDULE AND DETAILS

SANITARY SEWER PIPE SLOPES AND DEFLECTION  
ANGLES AT MANHOLES HAVE NOT BEEN REVISED  
TO REFLECT AS CONSTRUCTED CONDITIONS.

ALL PIPE INSTALLED  
IS PVC PIPE.

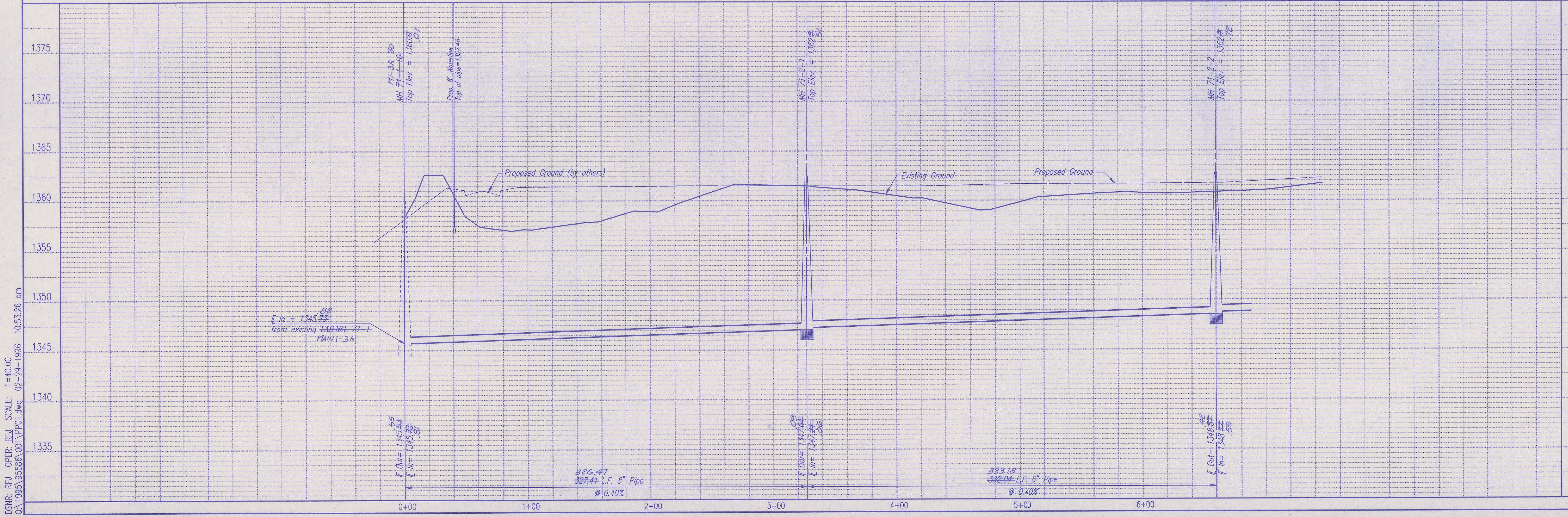
**RECORD DRAWING**

MOK PROJ. ENG. 1/14/97 DATE

RES. ENG. DATE

ROD R. YOUNG  
LICENSED  
1486  
KANSAS  
PROFESSIONAL ENGINEER

PROFILE	CHECKED	DATE
	CHECKED	



DSNR-REJ OPER-REJ SCALE: 1=40.00  
Q:\1995\95586\00\PP01.dwg 02-29-1996 10:53:26 am

SEDMICK COUNTY BUREAU OF PUBLIC SERVICES  
DIRECTOR, BUREAU OF PUBLIC SERVICES/COUNTY ENGINEER

LATERAL 71-2  
SANITARY SEWER IMPROVEMENTS  
BALTHROP ADDITION (PHASE 2)

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

Job No. 34-95586-001  
Date October 1995

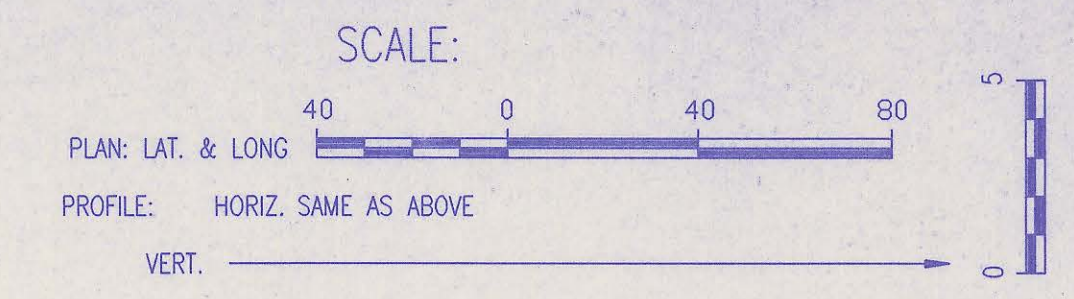
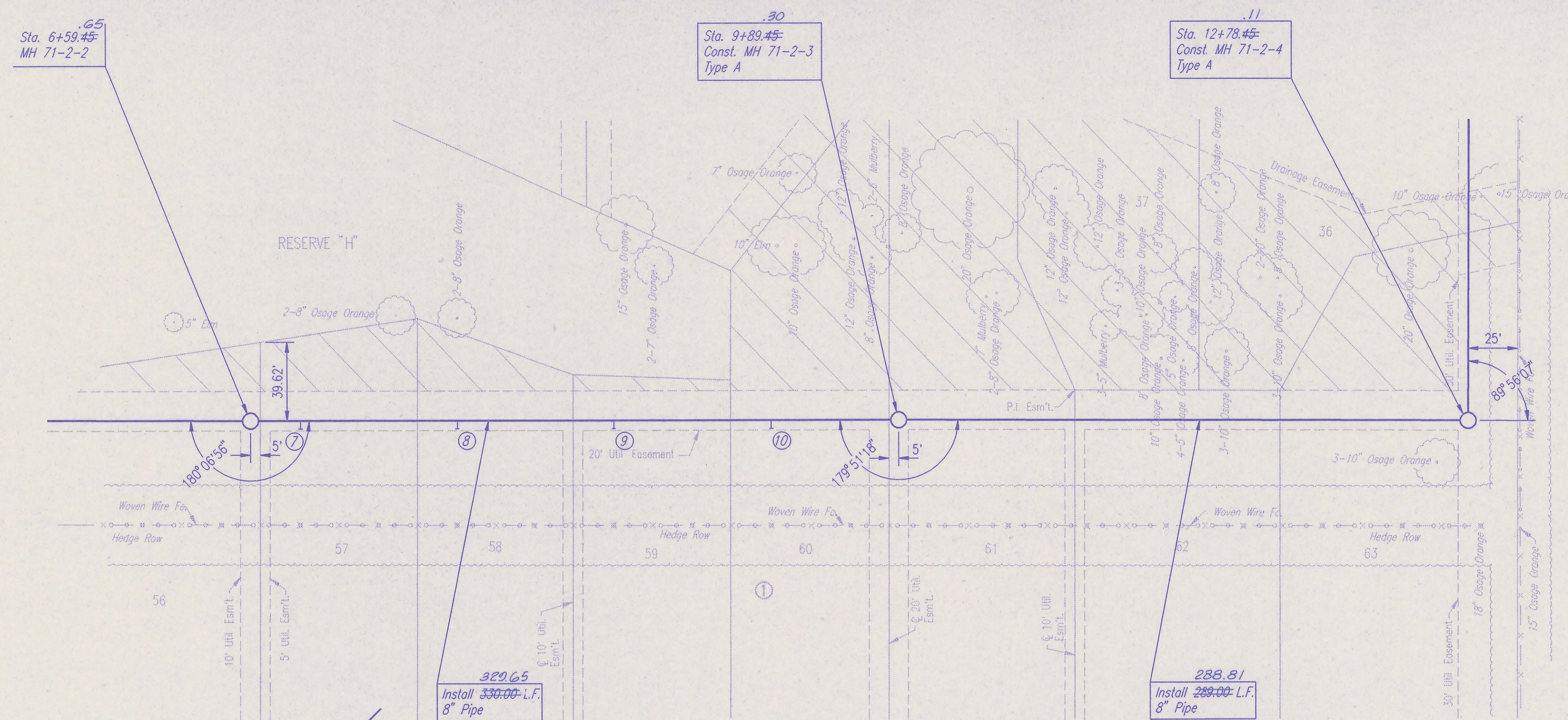
Designed By RRY, MOK  
Drawn By JLM

Sheet 9 of 21

PLAN	CHECKED	BY	DATE
	CHECKED		

PROFILE	CHECKED	BY	DATE
	CHECKED		

DSNR: RFJ OPER: REFJ SCALE: 1=40.00  
 Q:\1995\95586\00\PP02.dwg 02-29-1996 11:02:05 am



① ②  
 DENOTES SEWER SERVICE.  
 SEE SHEET NO. 8 FOR SEWER  
 SERVICE SCHEDULE AND DETAILS

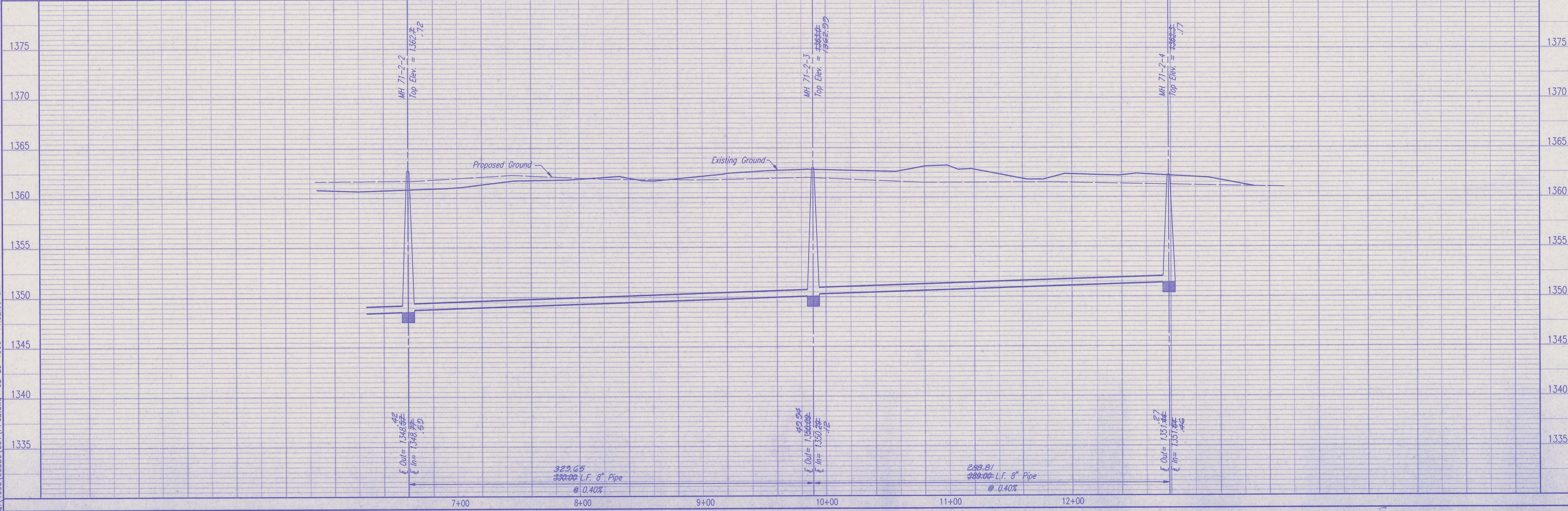
SANITARY SEWER PIPE SLOPES AND DEFLECTION  
 ANGLES AT MANHOLES HAVE NOT BEEN REVISED  
 TO REFLECT AS CONSTRUCTED CONDITIONS.

ALL PIPE INSTALLED  
 IS PVC PIPE.

RECORD DRAWING  
 MDK PROJ. ENG. 1/14/97 DATE  
 RES. ENG. DATE



LATERAL 71-2



SEDGWICK COUNTY BUREAU OF PUBLIC SERVICES  
 DIRECTOR: BUREAU OF PUBLIC SERVICES/COUNTY ENGINEER

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

Job No. 34-95586-001  
 Date October 1995

Designed By RRY, MDK  
 Drawn By JLM

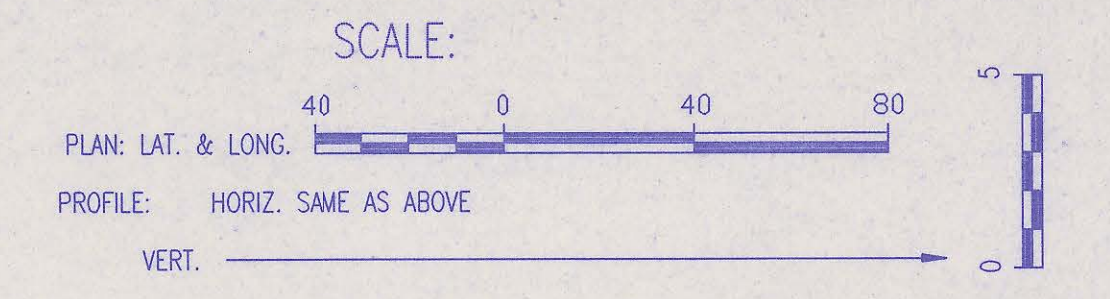
LATERAL 71-2  
 SANITARY SEWER IMPROVEMENTS  
 BALTHROP ADDITION (PHASE 2)

Sheet 10 of 21

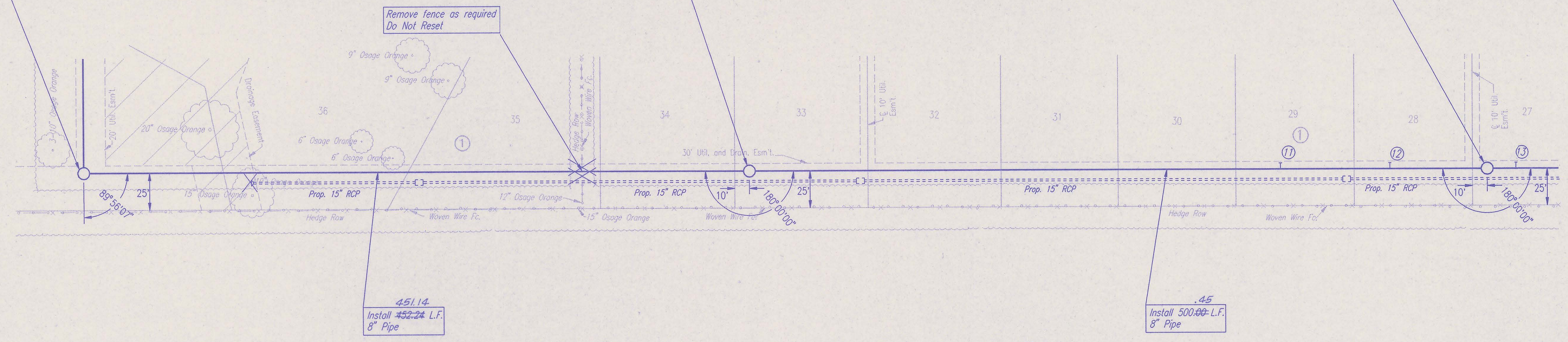
Sta. 12+78.45  
MH 71-2-4

29.25  
Sta. 17+30.69  
Const. MH 71-2-5  
Type A

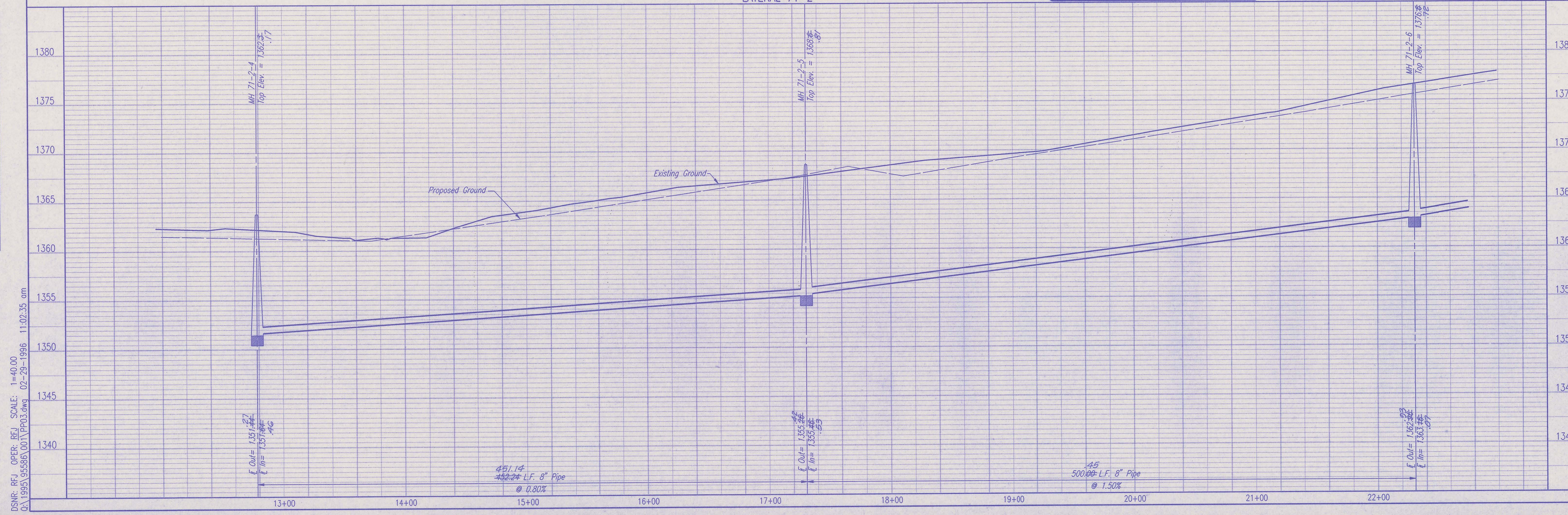
29.70  
Sta. 22+30.69  
Const. MH 71-2-6  
Type A



PLAN	CHECKED	DATE
	CHECKED	
BY		



PROFILE	CHECKED	DATE
	CHECKED	
BY		



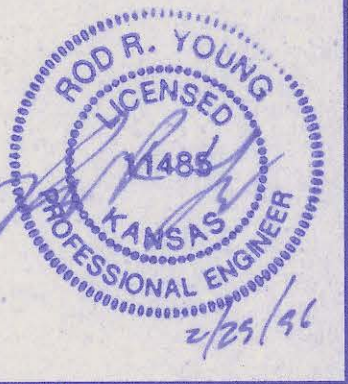
①  
②

DENOTES SEWER SERVICE.  
SEE SHEET NO. 8 FOR SEWER  
SERVICE SCHEDULE AND DETAILS

SANITARY SEWER PIPE SLOPES AND DEFLECTION  
ANGLES AT MANHOLES HAVE NOT BEEN REVISED  
TO REFLECT AS CONSTRUCTED CONDITIONS.

ALL PIPE INSTALLED  
IS PVC PIPE.

RECORD DRAWING  
MDK PROJ. ENG. 1/14/97 DATE  
RES. ENG. DATE



DSNR: RFJ OPER: RFJ SCALE: 1=40.00  
Q:\1995\95586\00\PP03.dwg 02-29-1996 11:02:35 am

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

LATERAL 71-2  
SANITARY SEWER IMPROVEMENTS  
BALTHROP ADDITION (PHASE 2)

PROFESSIONAL ENGINEERING CONSULTANTS, P.A.  
WICHITA, KANSAS

Designed By: RRY, MDK  
Drawn By: JLM

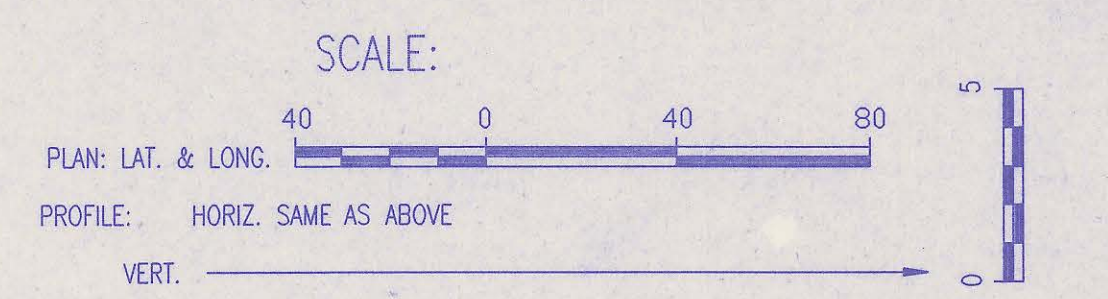
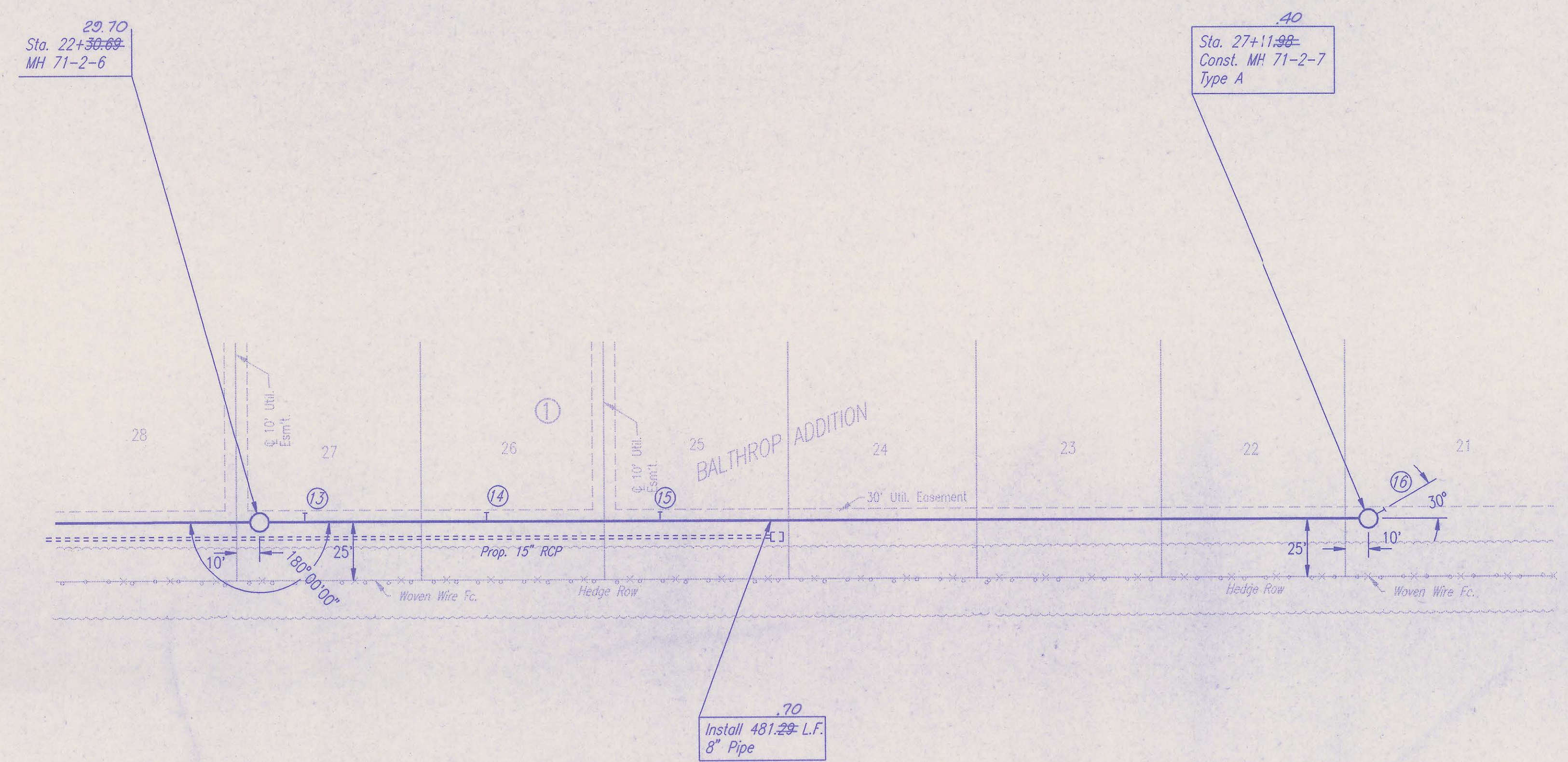
Job No. 34-95586-001  
Date October 1995

Sheet 11 of 21

PLAN	CHECKED	CHECKED
BY		
DATE		

PROFILE	CHECKED	CHECKED
BY		
DATE		

DSNR: RFJ OPER. BEJ SCALE: 1"=40.00  
 Q:\1995\95586\001\PP04.dwg 02-29-1996 11:03:16 am



LATERAL 71-2

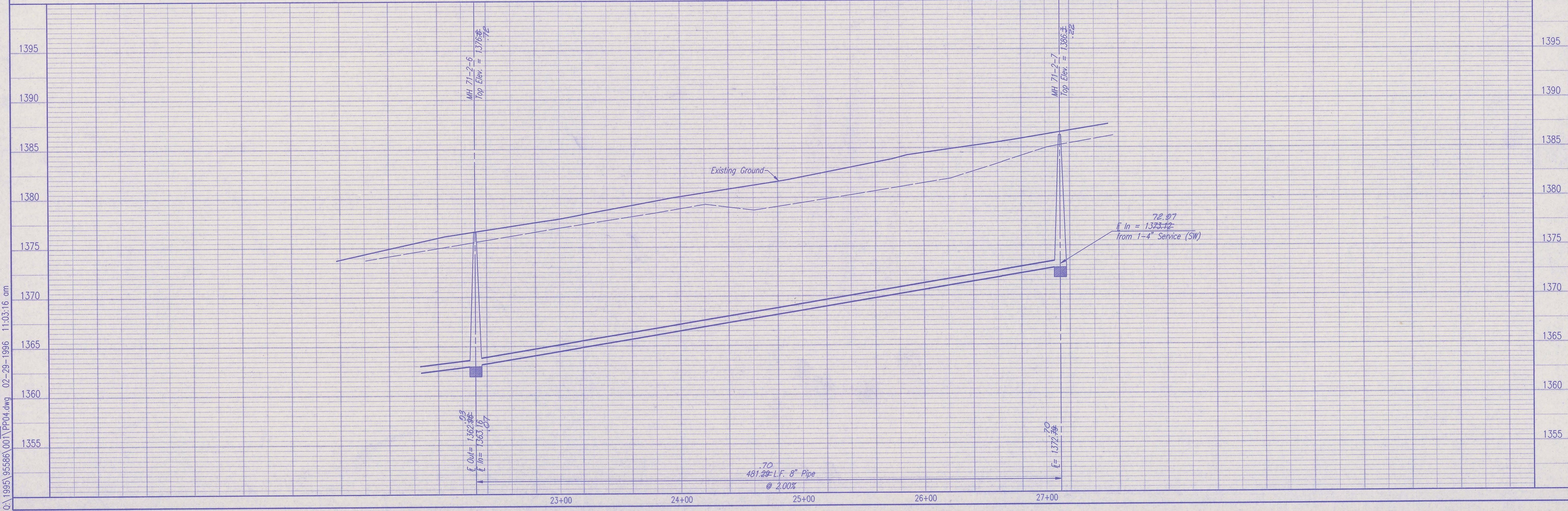
①  
 DENOTES SEWER SERVICE.  
 SEE SHEET NO. 8 FOR SEWER  
 SERVICE SCHEDULE AND DETAILS

SANITARY SEWER PIPE SLOPES AND DEFLECTION  
 ANGLES AT MANHOLES HAVE NOT BEEN REVISED  
 TO REFLECT AS CONSTRUCTED CONDITIONS.

ALL PIPE INSTALLED  
 IS PVC PIPE.

**RECORD DRAWING**  
 MDK PROJ. ENG. 1/14/97 DATE  
 REG. ENG. DATE

ROD R. YOUNG  
 LICENSED  
 PROFESSIONAL ENGINEER  
 KANSAS  
 2011



Sheet 12 of 21

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

Job No. 34-95586-001  
 Date October 1995

Designed By RRY, MDK  
 Drawn By JLM

SEDGWICK COUNTY BUREAU OF PUBLIC SERVICES  
 DIRECTOR: BUREAU OF PUBLIC SERVICES/COUNTY ENGINEER

LATERAL 71-2  
 SANITARY SEWER IMPROVEMENTS  
 BALTHROP ADDITION (PHASE 2)

PLAN	CHECKED	DATE
	CHECKED	
BY		

PROFILE	CHECKED	DATE
	CHECKED	
BY		

DSMR: RYJ OPER: REJ SCALE: 1"=40.00  
 0:\1995\95586\001\PP05.dwg 02-29-1996 11:04:47 am

Sta. 0+00.00  
 Existing MH 71-1-12  
 Core MH wall and install  
 new 8" pipe. Seal new  
 8" pipe to MH wall with  
 an approved watertight  
 gasket and quick-set  
 hydraulic cement. Construct  
 a minimum of 3' reinforced  
 concrete encasement from  
 MH wall. Reshape invert  
 to provide smooth flow.  
 This work shall be considered  
 subsidiary to the price bid  
 for pipe in place.

LATERAL 71-4  
 See sheet no. 15

CAUTION!!!  
 Prop. 24" RCP SWS  
 (by others)

73.55  
 Sta. 1+74.00  
 Const. MH 71-3-1  
 Type A

.50  
 Sta. 2+84.45  
 Const. MH 71-3-2  
 Type A

.15  
 Sta. 7+69.85  
 Const. MH 71-3-3  
 Type C

Existing  
 LATERAL 71-1

173.55  
 Install 774.00 L.F.  
 8" Pipe

CAUTION!!!  
 Prop. 8" Waterline  
 (by others)

LATERAL 71-6  
 See Sheet No. 17

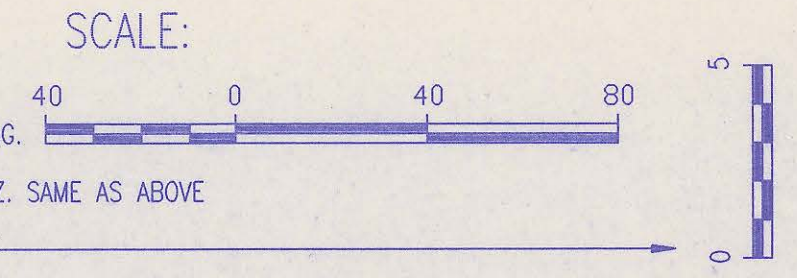
SANITARY SEWER PIPE SLOPES AND DEFLECTION  
 ANGLES AT MANHOLES HAVE NOT BEEN REVISED  
 TO REFLECT AS CONSTRUCTED CONDITIONS.

①  
 DENOTES SEWER SERVICE.  
 SEE SHEET NO. 8 FOR SEWER  
 SERVICE SCHEDULE AND DETAILS

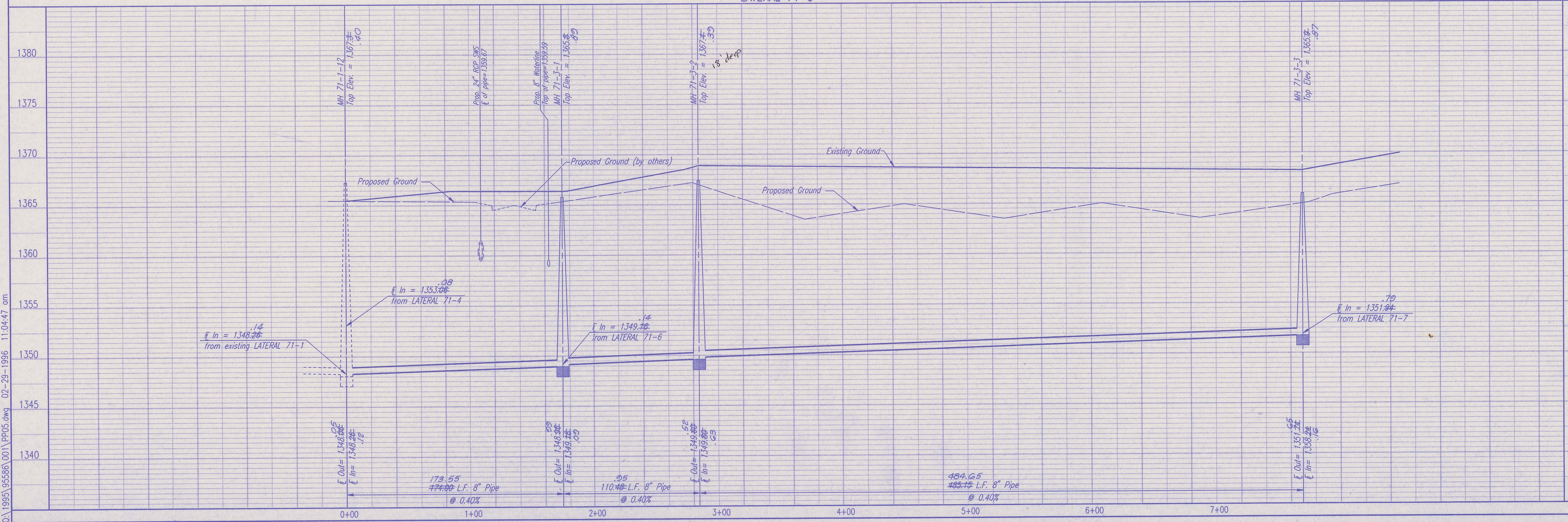
②  
 ALL PIPE INSTALLED  
 IS PVC PIPE.

LATERAL 71-7  
 See Sheet No. 18

LATERAL 71-3



RECORD DRAWING  
 MDK PROJ. ENG. 1/14/97 DATE  
 RES. ENG. DATE



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

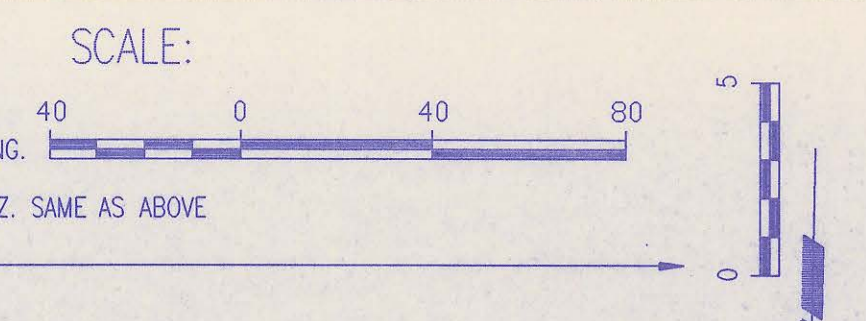
LATERAL 71-3  
 SANITARY SEWER IMPROVEMENTS  
 BALTHROP ADDITION (PHASE 2)

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

Job No. 34-95586-001  
 Date October 1995

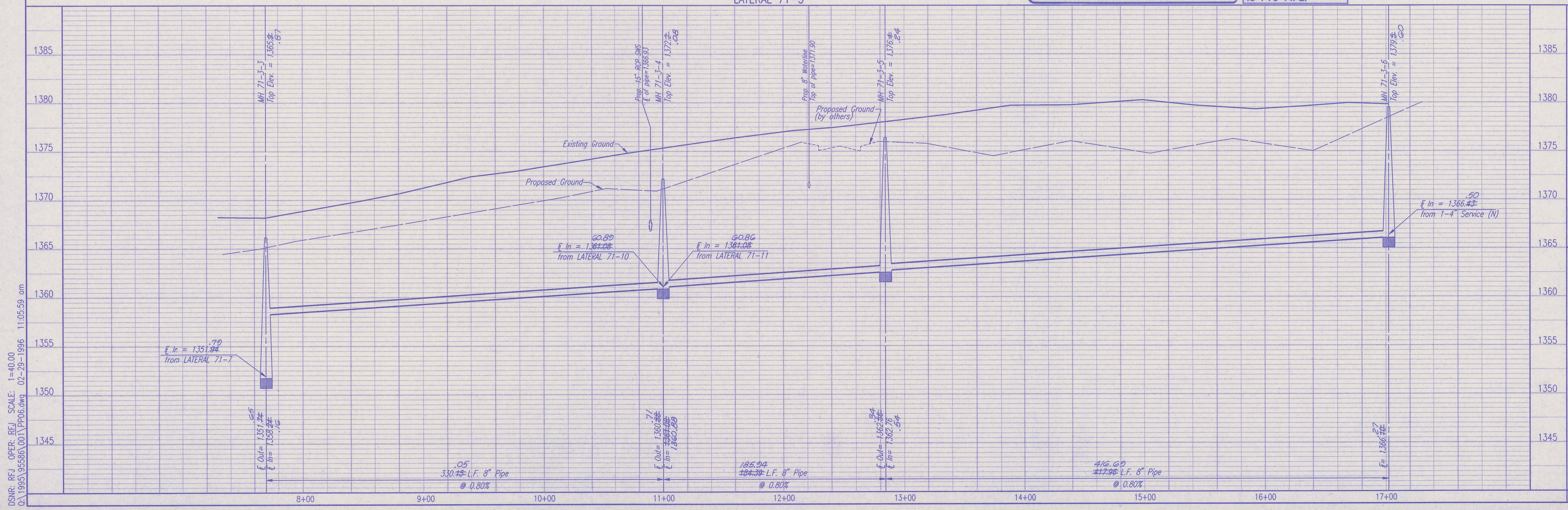
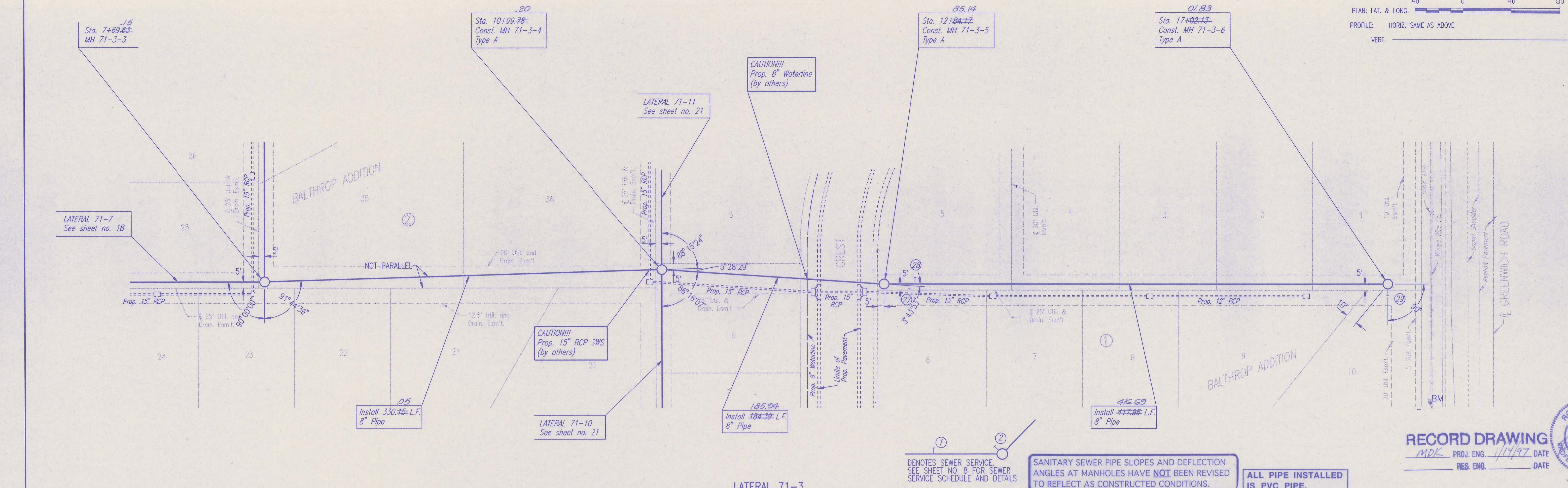
Designed By: RYJ, MDK  
 Drawn By: JLM

Sheet 13 of 21



DATE	
BY	
CHECKED	
CHECKED	
PLAN	

DATE	
BY	
CHECKED	
CHECKED	
PROFILE	



DSNR: RFJ OPER: RFJ SCALE: 1=40.00  
 Q:\1995\95586\00\PP06.dwg 02-29-1996 11:05:59 am

① DENOTES SEWER SERVICE. SEE SHEET NO. 8 FOR SEWER SERVICE SCHEDULE AND DETAILS

② SANITARY SEWER PIPE SLOPES AND DEFLECTION ANGLES AT MANHOLES HAVE NOT BEEN REFLECTED TO REFLECT AS CONSTRUCTED CONDITIONS.

ALL PIPE INSTALLED IS PVC PIPE.

**RECORD DRAWING**  
 MDK PROJ. ENG. 1/14/97 DATE  
 RES. ENG. DATE

**ROD R. YOUNG**  
 LICENSED PROFESSIONAL ENGINEER  
 1185 W. WASHINGTON  
 WICHITA, KANSAS  
 2/25/96

SEDWICK COUNTY BUREAU OF PUBLIC SERVICES  
 DIRECTOR, BUREAU OF PUBLIC SERVICES/COUNTY ENGINEER

**LATERAL 71-3**  
 SANITARY SEWER IMPROVEMENTS  
 BALTHROP ADDITION (PHASE 2)

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

Designed By: RRY, MDK  
 Drawn By: JUM

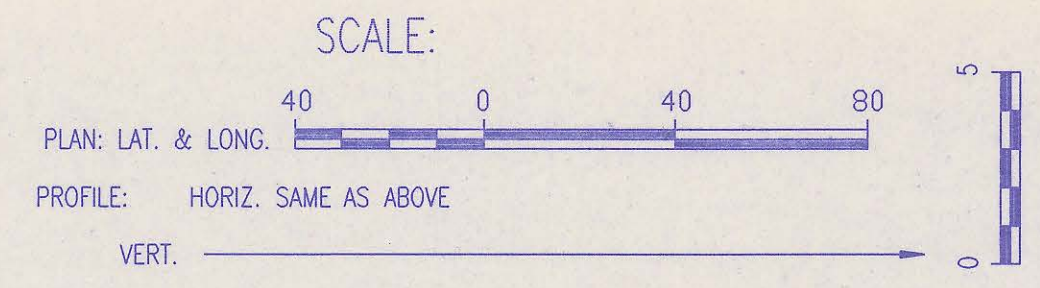
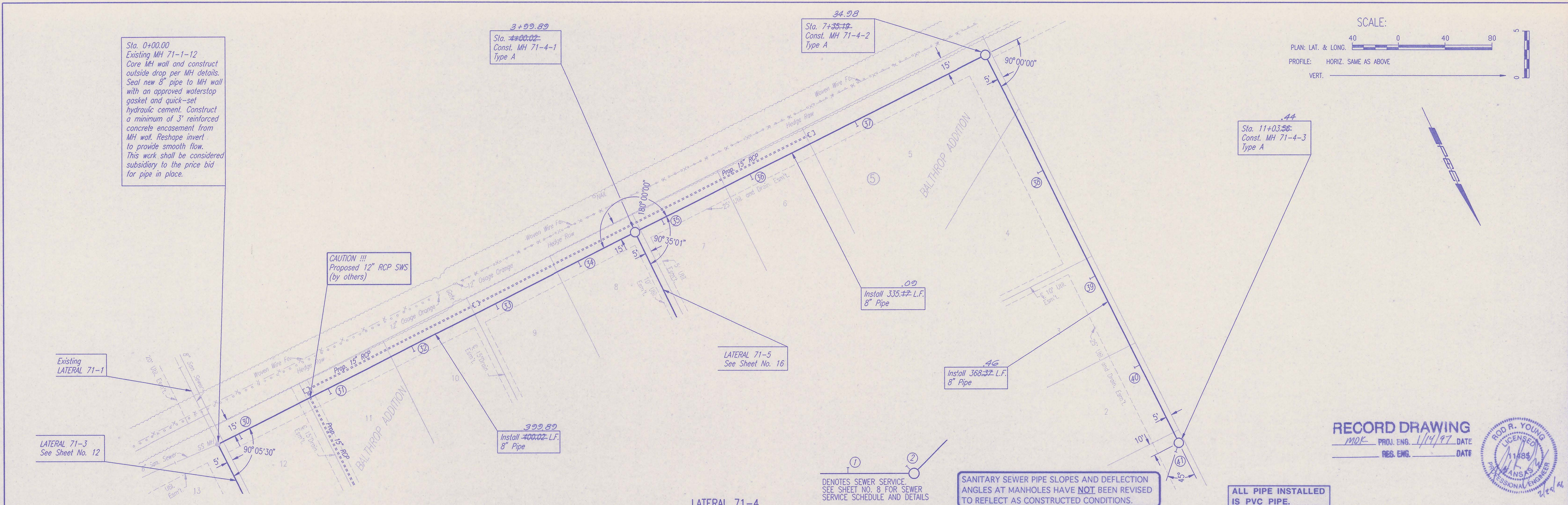
Job No. 34-95586-001  
 Date: October 1995

Sheet 14 of 21

PLAN	CHECKED	DATE
	CHECKED	

PROFILE	CHECKED	DATE
	CHECKED	

DSMR: REF OPER: REJ SCALE: 1=40.00  
 Q:\1995\95586\001\PP07.dwg 02-29-1996 11:25:38 am



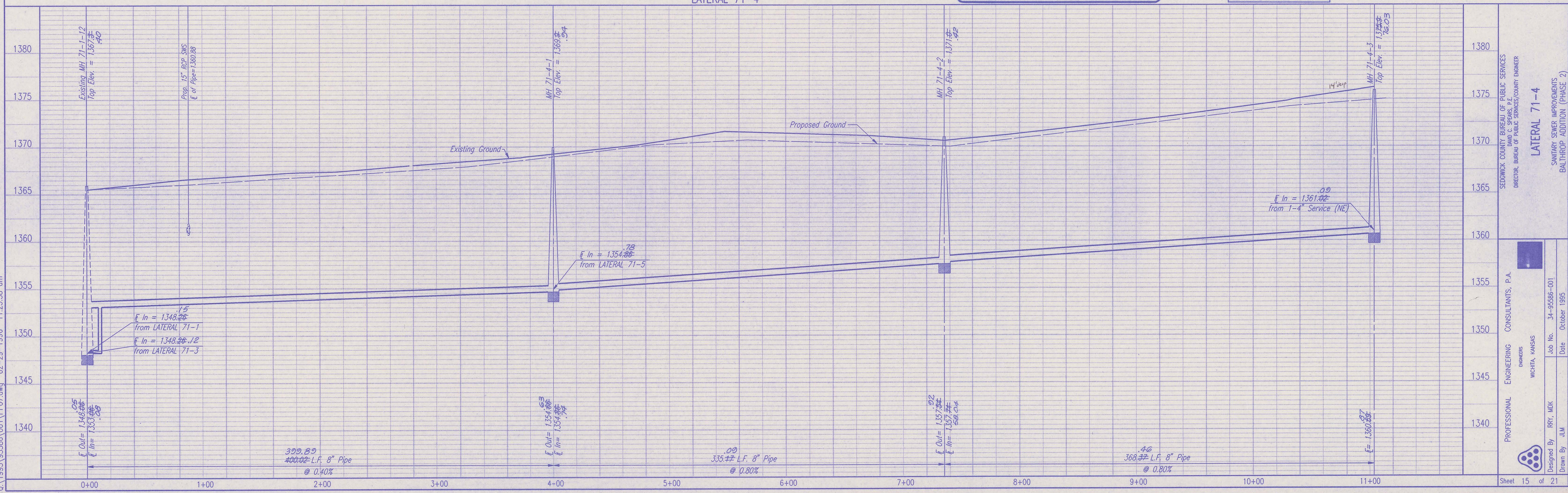
**RECORD DRAWING**  
 MDK PROJ. ENG. 1/14/97 DATE  
 RES. ENG. DATE



DENOTES SEWER SERVICE. SEE SHEET NO. 8 FOR SEWER SERVICE SCHEDULE AND DETAILS

SANITARY SEWER PIPE SLOPES AND DEFLECTION ANGLES AT MANHOLES HAVE NOT BEEN REVISED TO REFLECT AS CONSTRUCTED CONDITIONS.

ALL PIPE INSTALLED IS PVC PIPE.

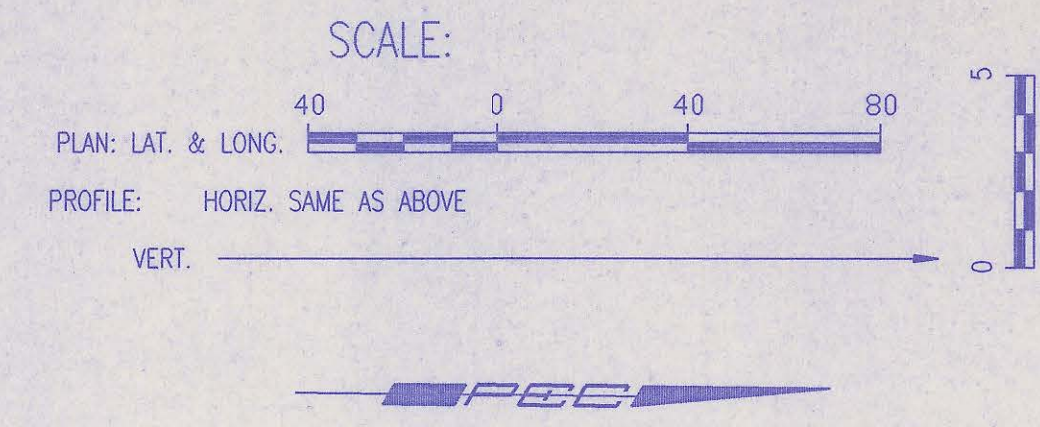
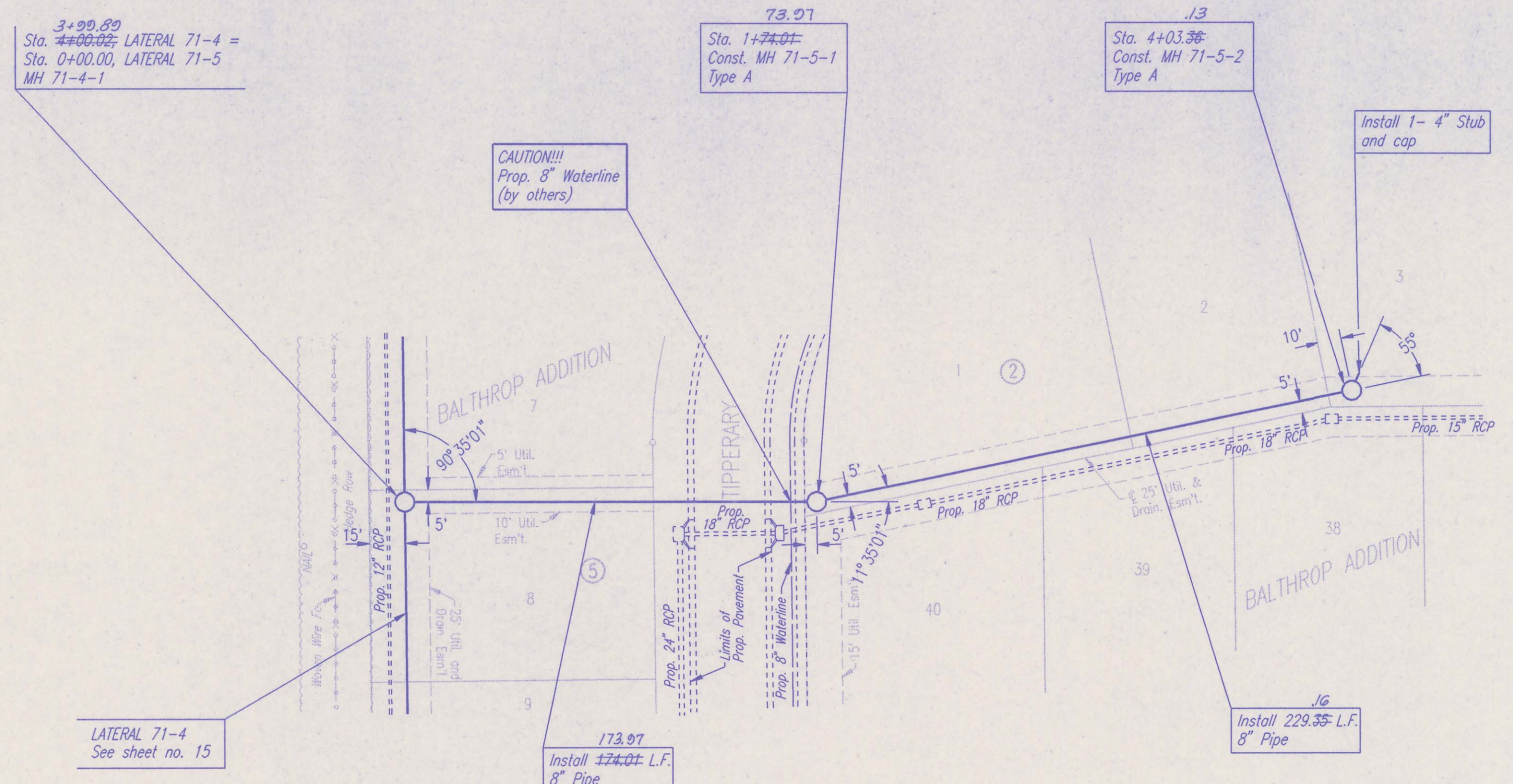


SEDDWICK COUNTY BUREAU OF PUBLIC SERVICES  
 DIRECTOR, BUREAU OF PUBLIC SERVICES/COUNTY ENGINEER  
**LATERAL 71-4**  
 SANITARY SEWER IMPROVEMENTS  
 BALTHROP ADDITION (PHASE 2)  
 PROFESSIONAL ENGINEERING CONSULTANTS, P.A.  
 DIRECTORS: WICHITA, KANSAS  
 Job No. 34-95586-001 Date October 1995  
 Designed By: RRY, MDK Drawn By: JLM  
 Sheet 15 of 21

PLAN	CHECKED	CHECKED
BY		
DATE		

PROFILE	CHECKED	CHECKED
BY		
DATE		

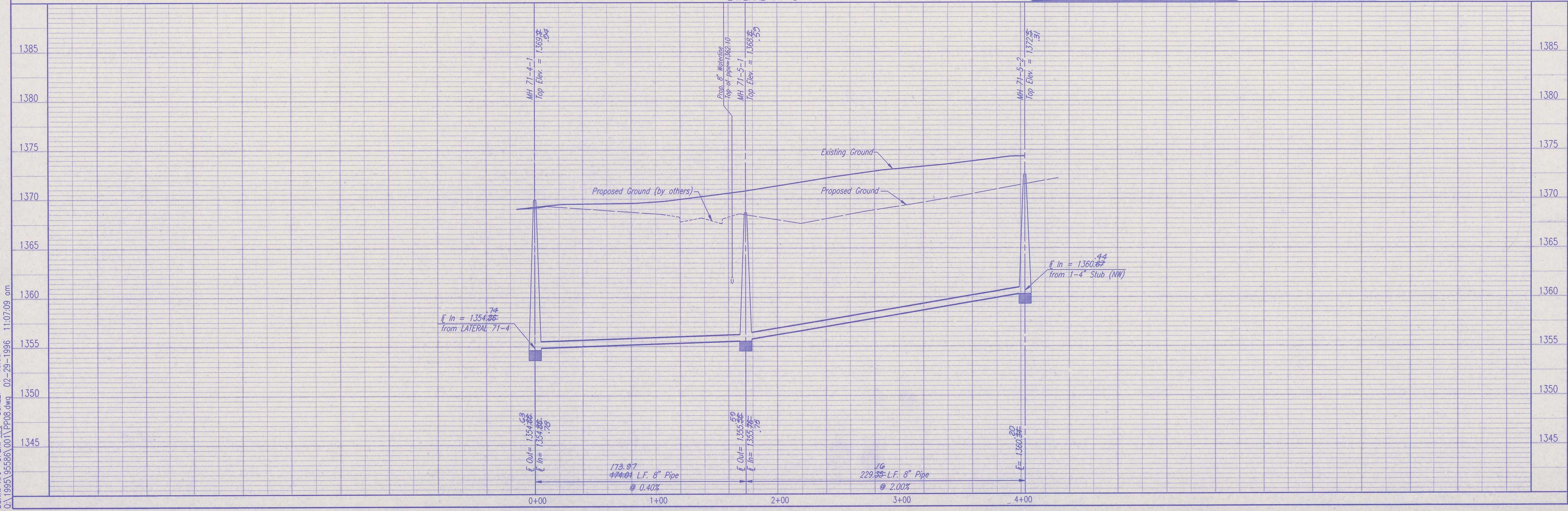
DSNR: RFJ OPER: REJ SCALE: 1=40.00  
 0:\1995\955566\001\PP08.dwg 11:07:09 am



SANITARY SEWER PIPE SLOPES AND DEFLECTION ANGLES AT MANHOLES HAVE NOT BEEN REVISED TO REFLECT AS CONSTRUCTED CONDITIONS.

ALL PIPE INSTALLED IS PVC PIPE.

**RECORD DRAWING**  
 PROJ. ENG. 1/14/97 DATE  
 REG. ENG. DATE



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

**LATERAL 71-5**  
 SANITARY SEWER IMPROVEMENTS  
 BALTHROP ADDITION (PHASE 2)

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

Designed By: RRY, MDK  
 Drawn By: JLM

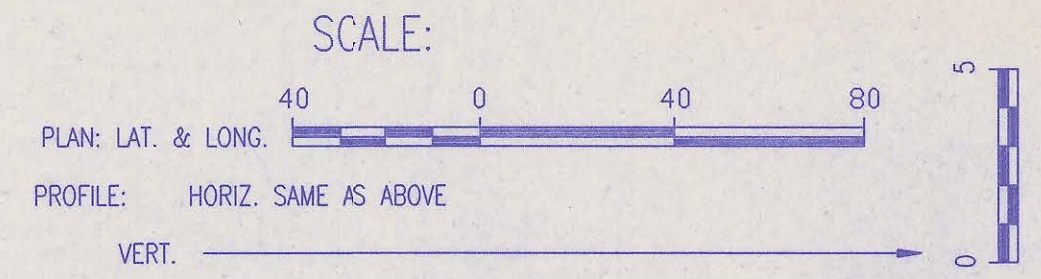
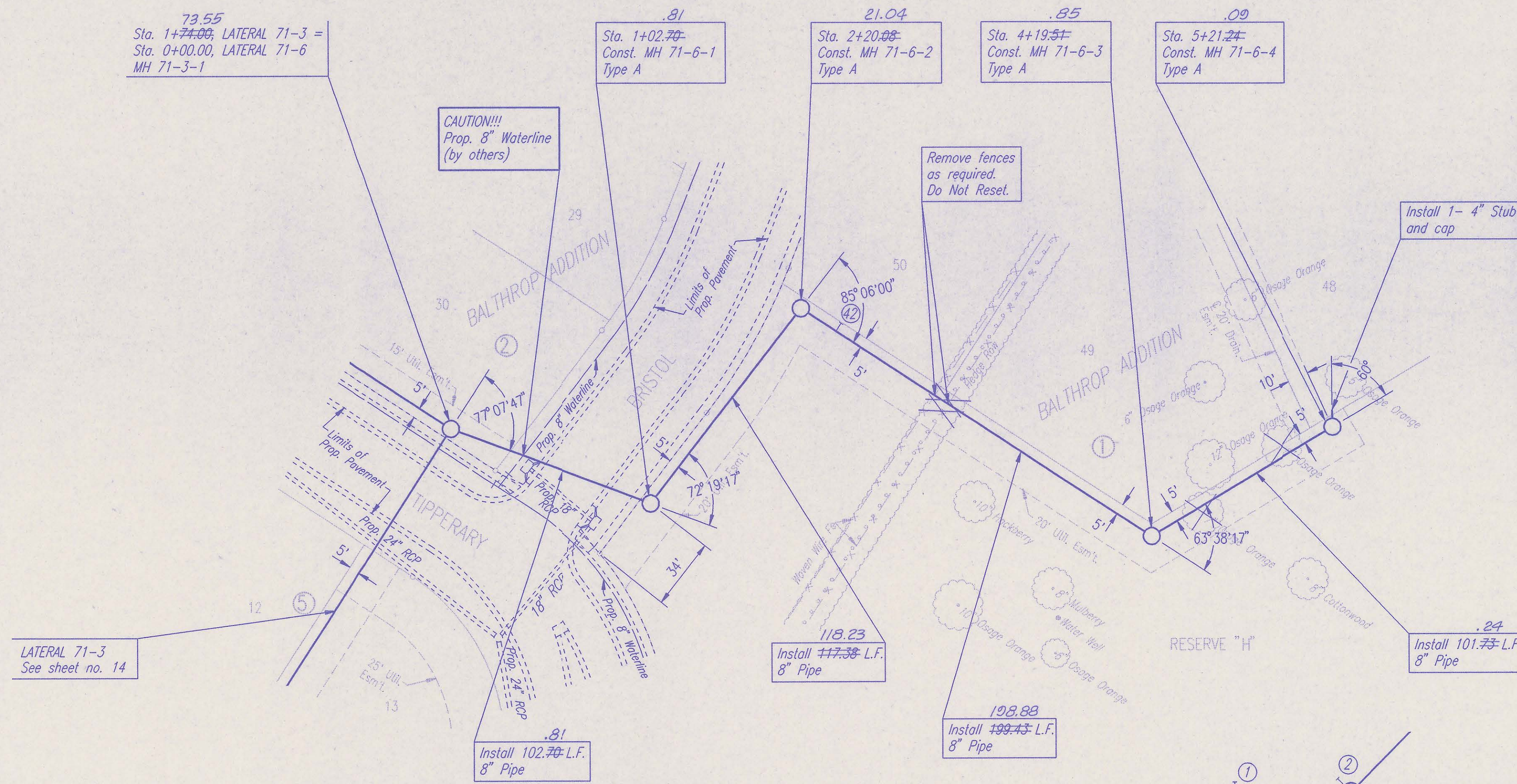
Job No. 34-95556-001  
 Date: October 1995

Sheet 16 of 21

PLAN	CHECKED	CHECKED
BY		
DATE		

PROFILE	CHECKED	CHECKED
BY		
DATE		

DSNR: PEJ OPR: PEJ SCALE: 1=40.00  
 Q:\1995\95586\00\PP09.dwg 02-29-1996 11:07:39 am



LATERAL 71-3  
See sheet no. 14

**RECORD DRAWING**  
 MDK PROJ. ENG. 1/14/97 DATE  
 RES. ENG. DATE

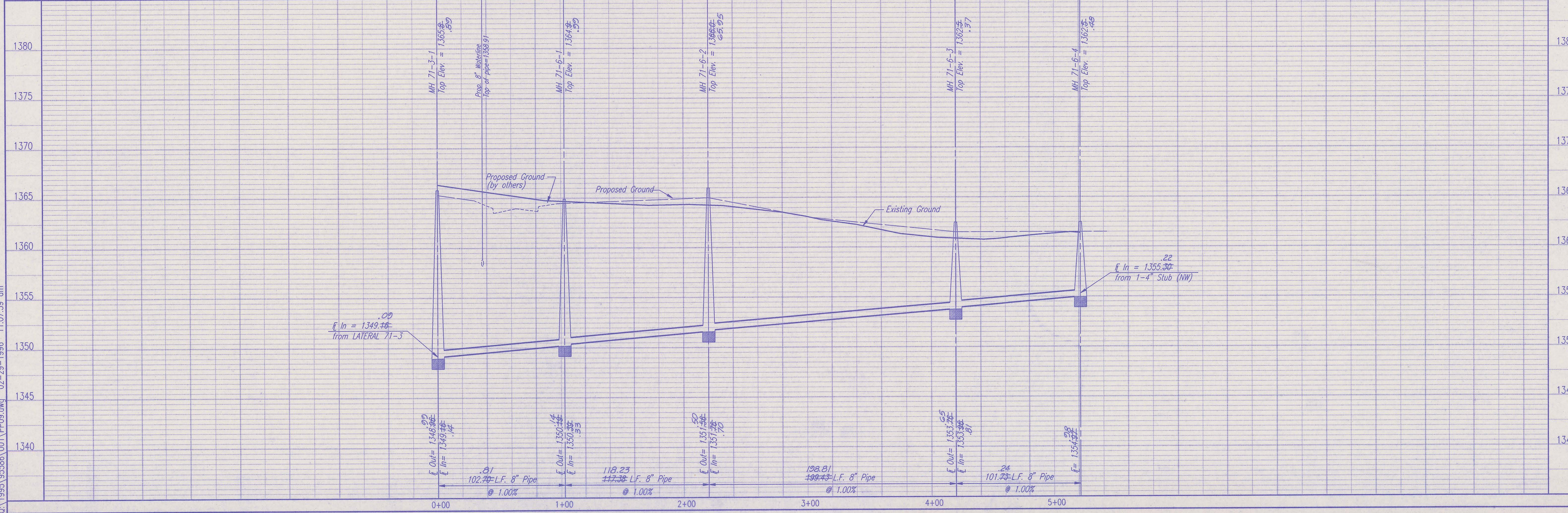


① ②  
 DENOTES SEWER SERVICE  
 SEE SHEET NO. 8 FOR SEWER  
 SERVICE SCHEDULE AND DETAILS

SANITARY SEWER PIPE SLOPES AND DEFLECTION ANGLES AT MANHOLES HAVE NOT BEEN REVISED TO REFLECT AS CONSTRUCTED CONDITIONS.

ALL PIPE INSTALLED IS PVC PIPE.

LATERAL 71-6



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

**LATERAL 71-6**  
 SANITARY SEWER IMPROVEMENTS  
 BALTHROP ADDITION (PHASE 2)

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

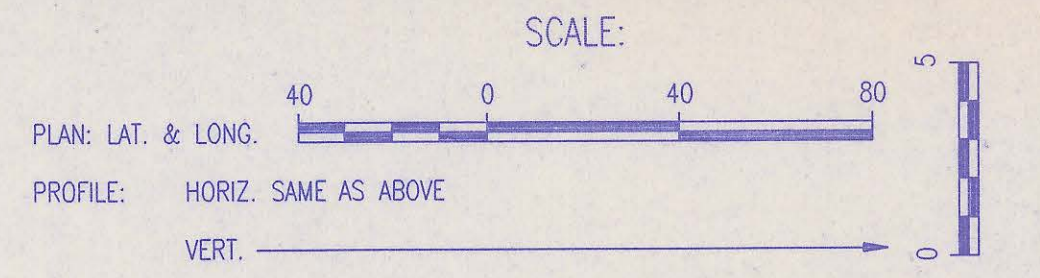
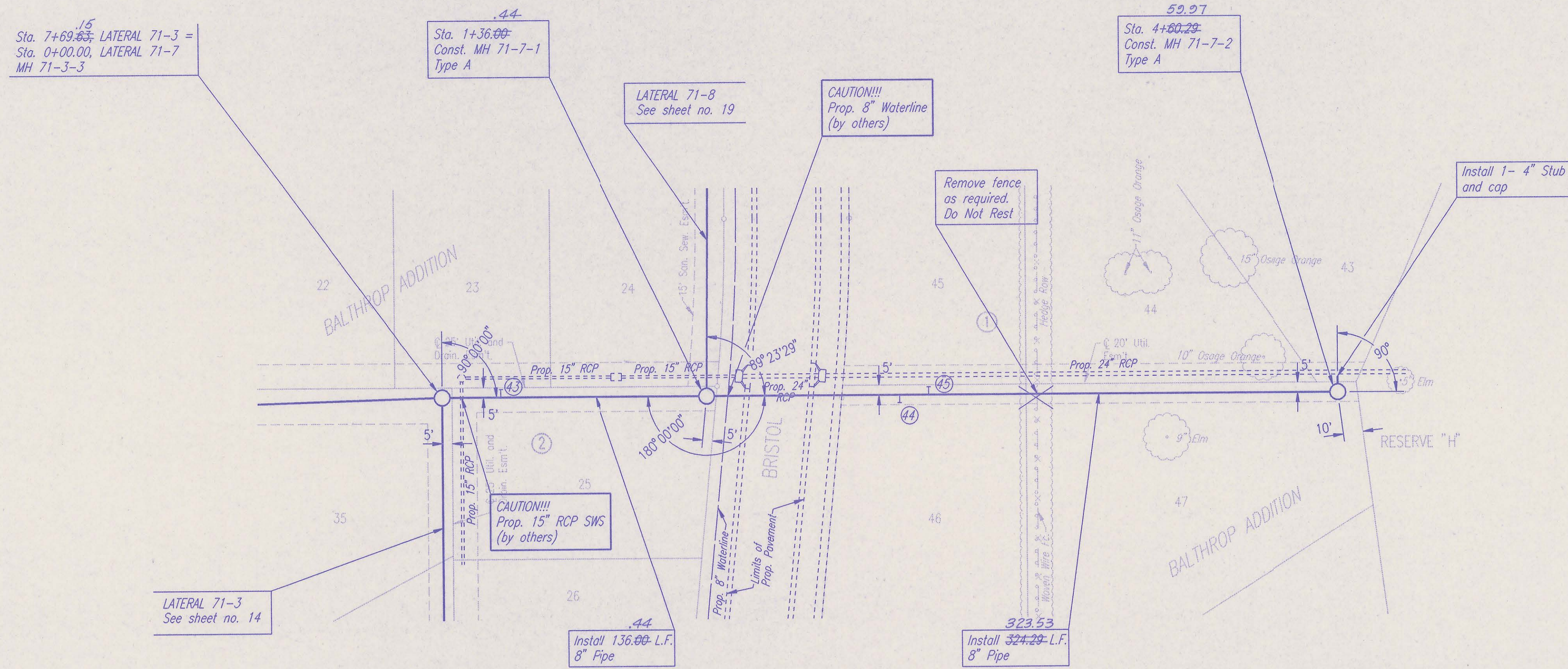
Job No. 34-95586-001  
 Date October 1995

Designed By RRY: MDK  
 Drawn By JLM

DATE	
BY	
CHECKED	
CHECKED	
PLAN	

DATE	
BY	
CHECKED	
CHECKED	
PROFILE	

DSNR: REJ OPER: REL SCALE: 1=40.00  
 O:\1995\95586\001\PP10.dwg 02-29-1996 11:08:28 am

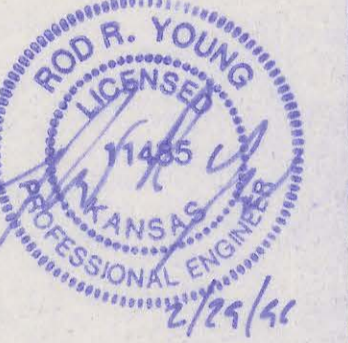


DENOTES SEWER SERVICE  
 SEE SHEET NO. 8 FOR SEWER  
 SERVICE SCHEDULE AND DETAILS

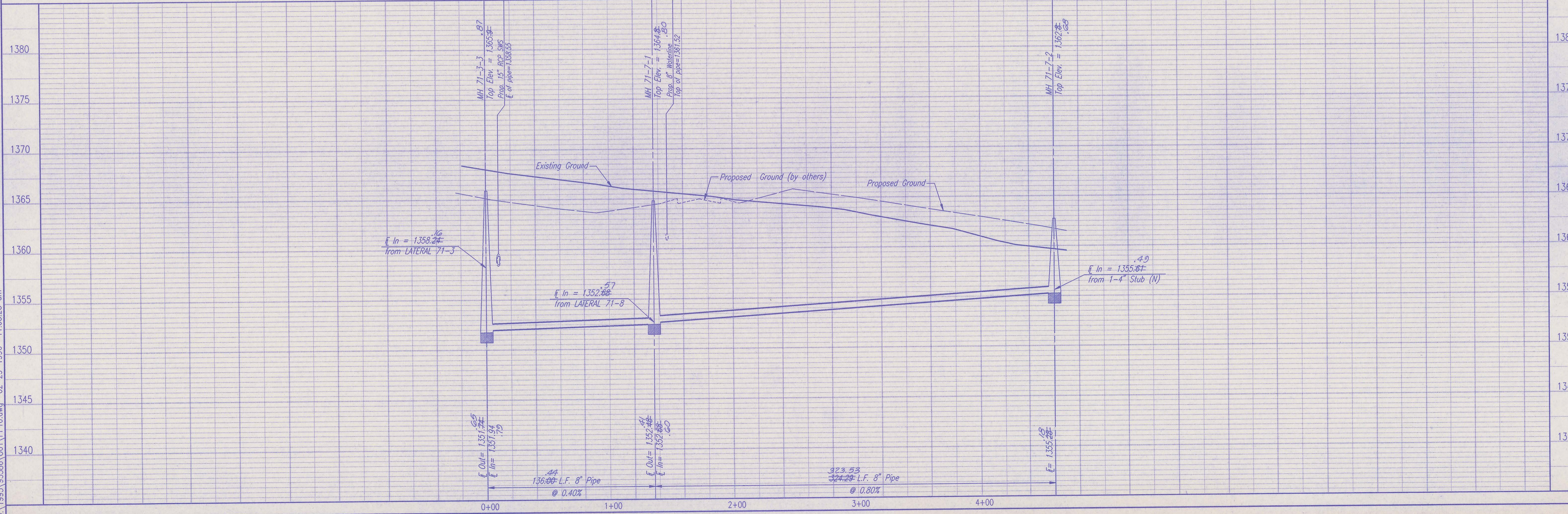
SANITARY SEWER PIPE SLOPES AND DEFLECTION  
 ANGLES AT MANHOLES HAVE NOT BEEN REVISED  
 TO REFLECT AS CONSTRUCTED CONDITIONS.

ALL PIPE INSTALLED  
 IS PVC PIPE.

RECORD DRAWING  
 MOK PROJ. ENG. 1/11/97 DATE  
 RES. ENG. DATE



LATERAL 71-7



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

LATERAL 71-7  
 SANITARY SEWER IMPROVEMENTS  
 BALTHROP ADDITION (PHASE 2)

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

Job No. 34-95586-001  
 Date October 1995

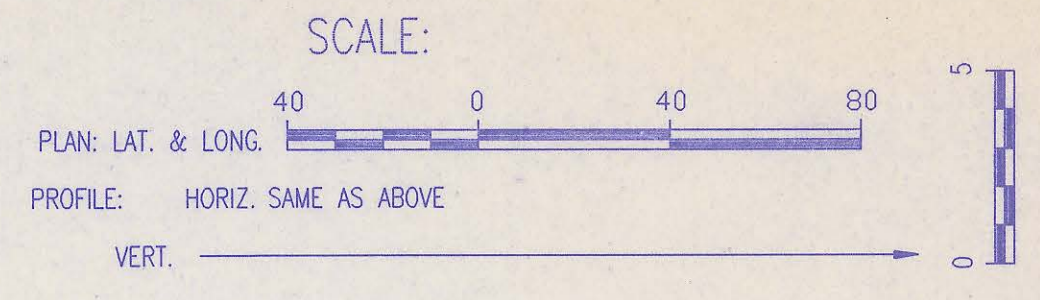
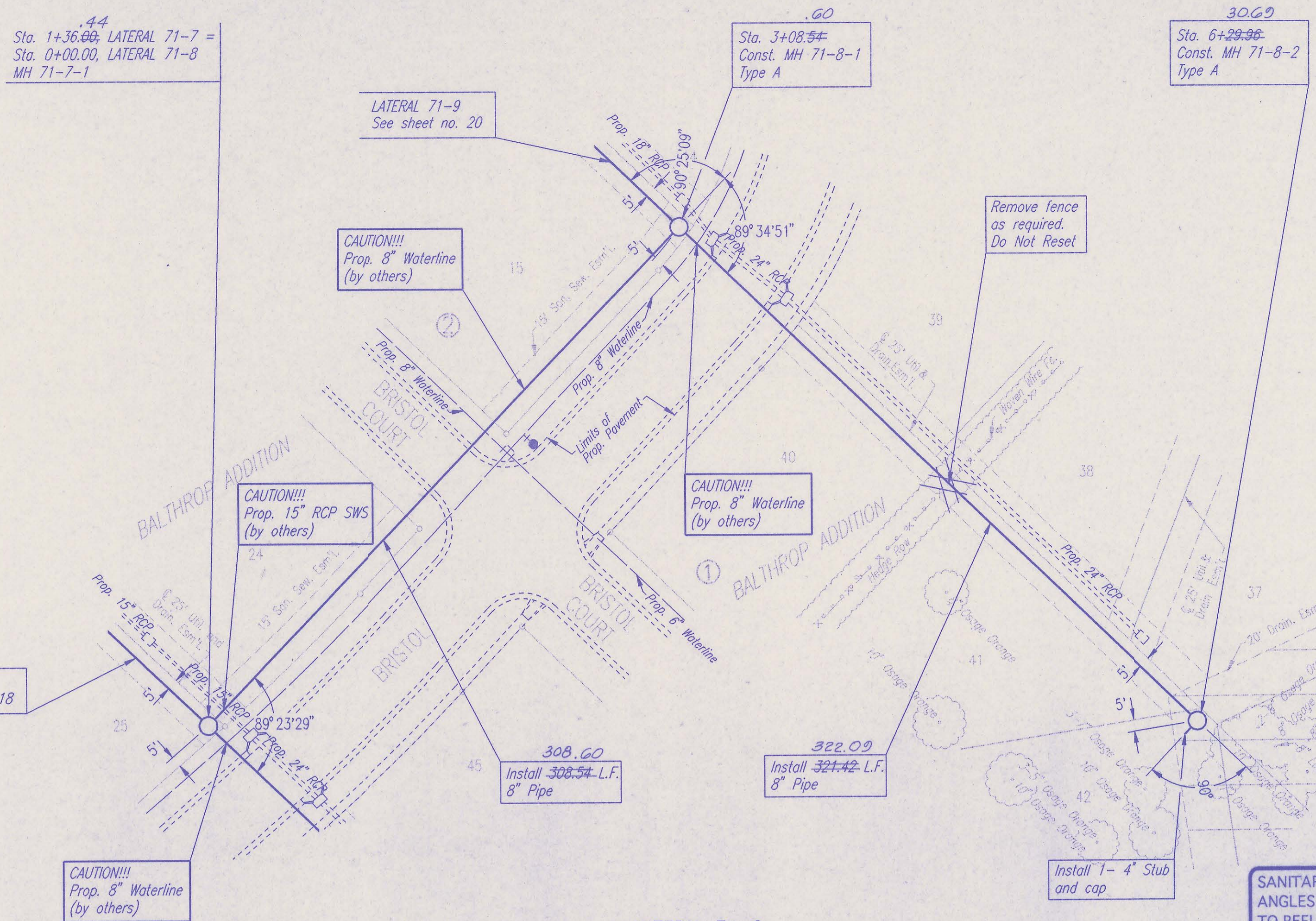
Designed By RRY, MDK  
 Drawn By JLM

Sheet 18 of 21

PLAN	CHECKED	BY	DATE
	CHECKED		

PROFILE	CHECKED	BY	DATE
	CHECKED		

DSNR: REJ OPER: BEJ SCALE: 1"=40.00  
 C:\1995\95586\00\PP11.dwg 02-29-1996 11:09:06 am

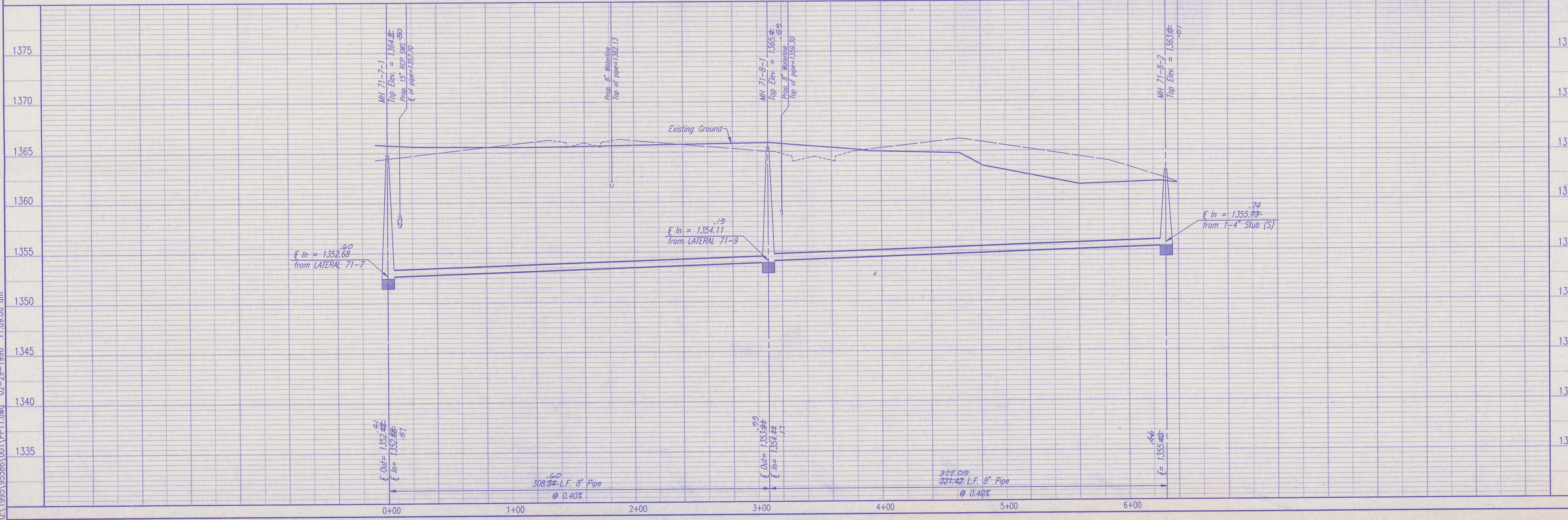


RECORD DRAWING  
 MDK PROJ. ENG. 1/14/97 DATE  
 RES. ENG. DATE



SANITARY SEWER PIPE SLOPES AND DEFLECTION ANGLES AT MANHOLES HAVE NOT BEEN REVISED TO REFLECT AS CONSTRUCTED CONDITIONS.  
 ALL PIPE INSTALLED IS PVC PIPE.

LATERAL 71-8



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

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

LATERAL 71-8  
 SANITARY SEWER IMPROVEMENTS  
 BALTHROP ADDITION (PHASE 2)

Job No. 34-95586-001  
 Date October 1995

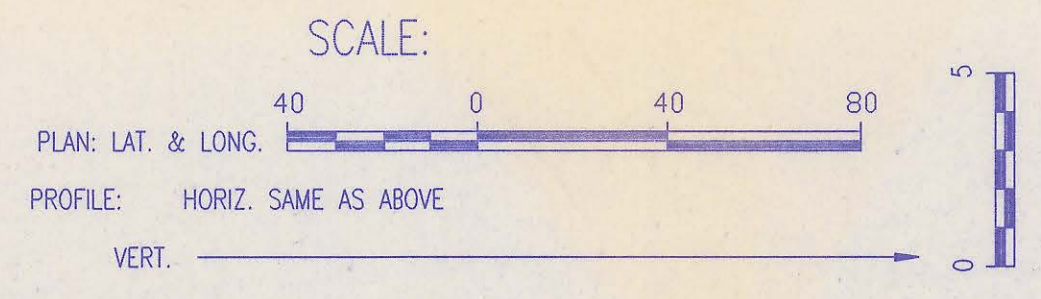
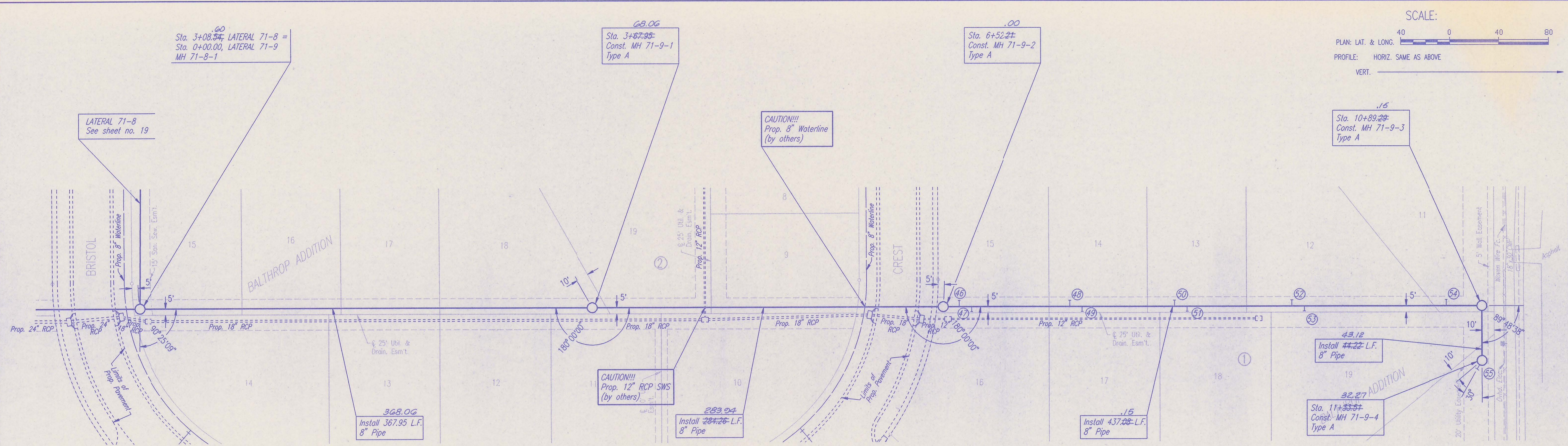
Designed By RRY, MDK  
 Drawn By JLM

Sheet 19 of 21

BY	DATE
CHECKED	CHECKED
PLAN	

BY	DATE
CHECKED	CHECKED
PROFILE	

DSNR: REJ OPER: REJ SCALE: 1=40.00  
 O:\1995\95586\00\PP12.dwg 02-29-1996 11:09:42 am



368.06  
 Install 367.95 L.F.  
 8" Pipe

CAUTION!!!  
 Prop. 12" RCP SWS  
 (by others)

283.94  
 Install 284.26 L.F.  
 8" Pipe

.15  
 Install 437.08 L.F.  
 8" Pipe

43.12  
 Install 44.22 L.F.  
 8" Pipe

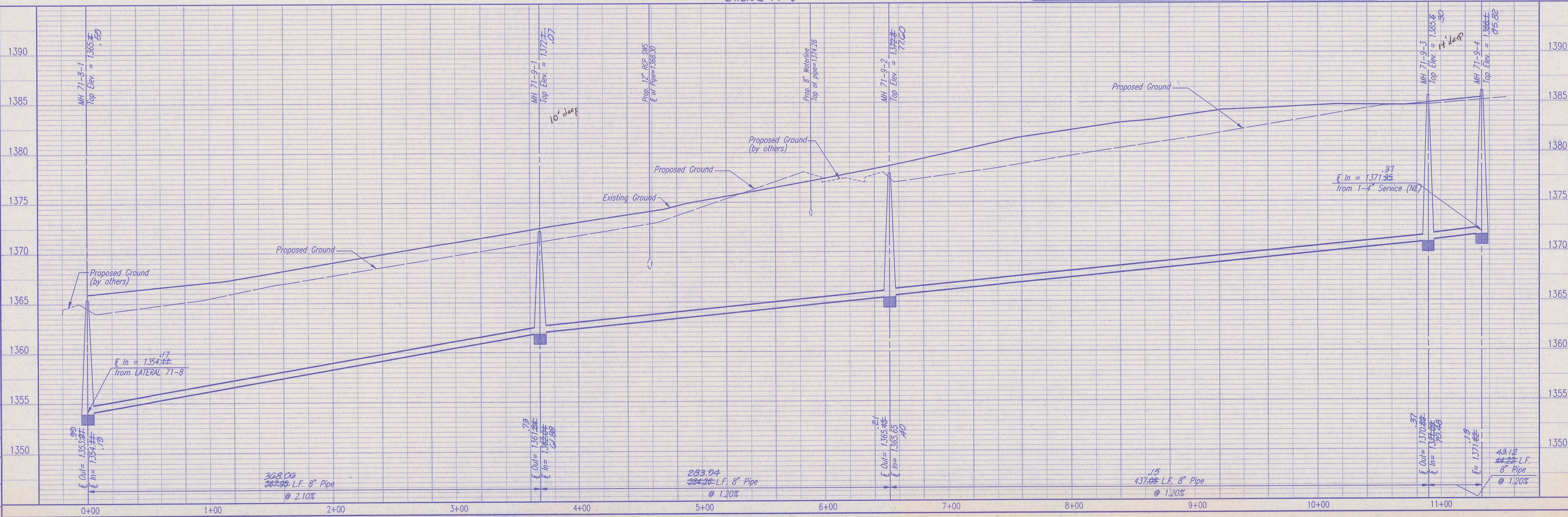
32.27  
 Sta. 11+33.51  
 Const. MH 71-9-4  
 Type A

①  
 DENOTES SEWER SERVICE.  
 SEE SHEET NO. 8 FOR SEWER  
 SERVICE SCHEDULE AND DETAILS

SANITARY SEWER PIPE SLOPES AND DEFLECTION  
 ANGLES AT MANHOLES HAVE NOT BEEN REVISED  
 TO REFLECT AS CONSTRUCTED CONDITIONS.

ALL PIPE INSTALLED  
 IS PVC PIPE.

RECORD DRAWING  
 MDK PROJ. ENG. 1/14/97 DATE  
 RES. ENG. DATE



368.06  
 367.95 L.F. 8" Pipe  
 @ 2.10%

283.94  
 284.26 L.F. 8" Pipe  
 @ 1.20%

.15  
 437.08 L.F. 8" Pipe  
 @ 1.20%

.37  
 43.12 L.F. 8" Pipe  
 @ 1.20%

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

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

Job No. 34-95586-001  
 Date October 1995

LATERAL 71-9  
 SANITARY SEWER IMPROVEMENTS  
 BALTHROP ADDITION (PHASE 2)

Designed By RRY, MDK  
 Drawn By JLM

Sheet 20 of 21

