TEMPORARY FORCE MAIN IN CONNECTION WITH MAIN 10, FOUR MILE CREEK SEWER PROJECT NO. 468-83392

CITY OF WICHITA, KANSAS

MICHAEL E. LINDEBAK, CITY ENGINEER

OCA 624501

GENERAL NOTES

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PRESERVING PROPERTY IRONS SHOWN ON PLANS. 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.

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

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

   KANSAS ONE-CALL 1-800-344-7233 OR 687-2470 (LOCAL WICHITA)

   THE CONTRACTOR MUST NOTIFY THE FOLLOWING IN CASE OF AN EMERGENCY:

SOUTHWESTERN BELL TELEPHONE COMPANY	1-800-734-7590
COX CABLEVISION	1-316-263-2031
KG&E (GAS & ELECTRIC)	1-316-383-8600
CITY OF WICHITA WATER & SEWER MAINTENANCE	1-316-262-6000
KANEB PIPELINE	1-316-773-9000
SEDGWICK COUNTY PUBLIC WORKS	1-316-383-7901

4. UNDERGROUND UTILITY SERVICE LINES AND OVERHEAD UTILITY POLE LINES ARE TO BE ADJUSTED AS NECESSARY BY OTHERS PRIOR TO CONSTRUCTION UNLESS THE PLANS SPECIFICALLY CALL FOR THEIR ADJUSTMENT BY THE CONTRACTOR OR UNLESS THE PLANS SPECIFICALLY IDENTIFY A UTILITY TO BE ADJUSTED BY ITS OWNER DURING CONSTRUCTION. EXISTING UTILITIES AND THEIR LOCATIONS, AS SHOWN ON THE PLANS, REPRESENT THE BEST INFORMATION OBTAINABLE FOR DESIGN. THE CONTRACTOR WILL BE REQUIRED TO WORK AROUND EXISTING UTILITIES WITHIN THE RIGHT-OF-WAY WHICH DO NOT CONFLICT WITH PROPOSED CONSTRUCTION.

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

6. THE CONTRACTOR SHALL GIVE ALL PROPERTY OWNERS AND/OR TENANTS OF DEVELOPED PROPERTY ABUTTING THE CONSTRUCTION OF THIS PROJECT A MINIMUM OF (48) HOURS ADVANCE NOTICE PRIOR TO START OF CONSTRUCTION.

7. ALL CONSTRUCTION AND MATERIALS SHALL COMPLY WITH CITY OF WICHITA STANDARD SPECIFICATIONS.

8. INTER-URBAN TRAFFIC GENERATED OUTSIDE THE PROJECT AREA AND LOCAL TRAFFIC GENERATED WITHIN THE PROJECT AREA ARE TO BE CARRIED THROUGH CONSTRUCTION ON EXISTING ROADWAYS AT ALL TIMES. ACCESS TO ALL DWELLINGS IN THE PROJECT AREA SHALL BE PROVIDED AT ALL TIMES. THE CONTRACTOR SHALL ERECT WARNING SIGNS, FLASHING LIGHTS, AND BARRICADES IN COMPLIANCE WITH THE STANDARD SPECIFICATIONS.

9. THE CONTRACTOR SHALL LIMIT THE EXTENT OF TRENCH TO REMAIN OPEN OVERNIGHT AND WEEKENDS TO LESS THAN 50 FEET.

10. THE CONTRACTOR SHALL RESTORE ALL DITCHES, CHANNELS, BANK STABILIZATION, SWALES, ROAD SHOULDERS, PAVEMENT ENTRANCES, AND BANKS TO THEIR ORIGINAL SLOPES AND GRADES. WHERE EXISTING ENTRANCE PIPE, DRAINAGE PIPE, SPRINKLER SYSTEMS, SIDEWALKS, DRIVES, SIGNS, FENCES, ETC., CONFLICT WITH THE PROPOSED WORK HEREIN THEY SHALL BE REMOVED AND REPLACED OR RESET IN LIKE KIND. ALL OF THE ABOVE INCLUDING TREES, SHRUBS, GRASS, SOD AND OTHER LANDSCAPING, WHERE NOTED, SHALL BE CONSIDERED SUBSIDIARY TO THE PRICE BID FOR SITE RESTORATION.

11. TREES AND SHRUBS IN PUBLIC RIGHTS-OF-WAY WHICH ARE IN DIRECT CONFLICT WITH PROPOSED NEW CONSTRUCTION SHALL BE REMOVED BY THE CONTRACTOR WITH THE ENGINEER'S APPROVAL. THE CONTRACTOR SHALL RESTORE AND REPLACE LANDSCAPE FEATURES AND PLANTINGS AS NOTED IN THE DRAWINGS OR AS DIRECTED BY THE ENGINEER. TREES AND SHRUBS WHICH ARE NOT IN DIRECT CONFLICT WITH PROPOSED NEW CONSTRUCTION SHALL BE SAVED AND PROTECTED FROM DAMAGE.

12. POSITIVE DRAINAGE SHALL BE PROVIDED FOR ALL AREAS ON OR NEAR SPOIL AREAS. NATURAL DRAINAGE WAYS SHALL BE MAINTAINED.

13. WHERE REMOVAL OF EXISTING FENCES NEXT TO THE CONSTRUCTION IS DEEMED NECESSARY BY THE CONTRACTOR, THE CONTRACTOR SHALL COORDINATE REMOVAL WITH ADJACENT PROPERTY OWNERS. ALL REMOVAL AND RESETTING OF FENCES SHALL BE CONSIDERED SUBSIDIARY TO SITE PREPARATION AND SITE RESTORATION, RESPECTIVELY.

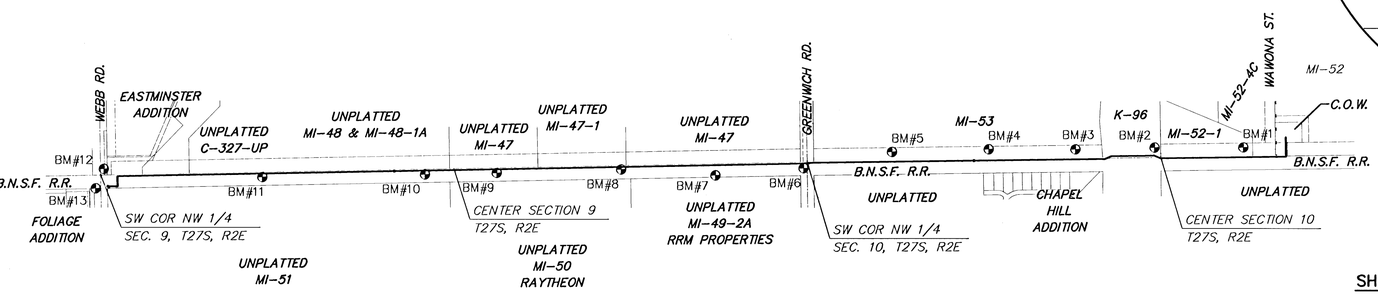
14. ALL ELEVATIONS SHOWN ARE CITY OF WCHITA DATUM. CITY DATUM = NGVD - 1187.4.

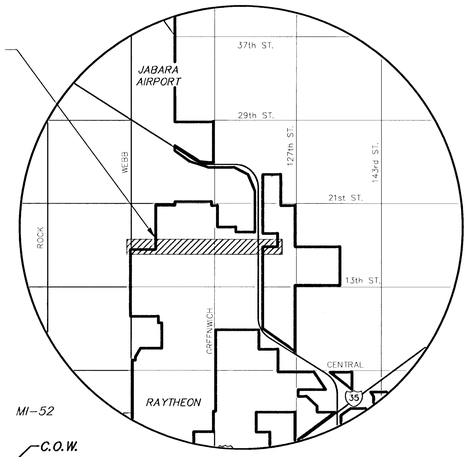
15. ALL EXISTING GRASSED AREAS WHICH ARE DISTURBED OR DAMAGED DURING CONSTRUCTION OPERATIONS SHALL BE RESTORED TO ORIGINAL CONDITIONS, AND RE-SEEDED OR RE-SODDED IN LIKE KIND, UNLESS OTHERWISE NOTED ON THE PLANS. COSTS SHALL BE CONSIDERED SUBSIDIARY TO THE PRICE BID FOR SITE RESTORATION. APPLICATION RATE FOR THE VARIOUS SEED MIXTURES SHALL BE AS APPROVED BY THE ENGINEER. SEEDING SHALL CONFORM TO APPLICABLE REQUIREMENTS OF STANDARD SPECIFICATIONS. SODDING SHALL CONFORM TO APPLICABLE REQUIREMENTS OF SUPPLEMENTAL SPECIFICATIONS.

16. SLOPES STEEPER THAN 10 TO 1 SHALL BE MULCHED AS REQUIRED BY STANDARD SPECIFICATIONS. COST OF MULCHING SHALL BE INCLUDED IN PRICE BID FOR SITE RESTORATION.

17. EROSION CONTROL AREA DISTURBED BY CONSTRUCTION SHALL BE COVERED WITH AN EROSION CONTROL MAT\BLANKET WITHIN TWENTY -FOUR (24) HOURS OF BACKFILLING, LEVELING AND TEMPORARY SEEDING. PLACEMENT OF EROSION CONTROL MATS/BLANKETS (ECM'S) SHALL IN ACCORDANCE WITH MANUFACTURER'S RECCOMMENDATIONS REGARDING OVERLAPS, EDGE TRENCHING AND STAPLING OR THE CITY OF WICHITA'S STANDARD DETAIL DRAWINGS WHICHEVER IS MORE RESTRICTIVE. (ECM'S) MAY BE AMERICAN EXCELSIOR CURLEX I, NORTH AMERICAN GREEN S75, SYNTHETIC INDUSTRIES LANDLOK BON TERRA S1 OR AN APPROVED EQUAL.

18. MANHOLES WITH A DEPTH OF 20 FEET OR MORE SHALL BE A MINIMUM OF 5 FEET IN DIAMETER REGARDLESS OF PIPE SIZE AND SHALL BE PLASTIC LINED.





LOCATION MAP

INDEX TO DRAWINGS

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	MANHOLE DETAIL
3	AIR RELEASE AND MISC. DETAILS
4-11	FORCE MAIN PLAN/PROFILE

LEGEND

- BIN - TREE AND DIAMETER
- SN SN - SIGN AND POSTS
- IP-1/2" MID-KANSAS BAR - IRON PIPE AND DESCRIPTION
- 214 x 49 - SPOT ELEVATION AND LOCATION
- PP - POWER POLE AND DEADMAN
- KGE - ELECTRIC BOX
- - DRAINAGE ARROW
- - EDGE OF TREES
- E - UNDERGROUND ELECTRIC LINE
- OHE - OVERHEAD ELECTRIC LINE
- X X X - FENCE
- BM - BENCHMARK
- SWMH - STORM WATER MANHOLE
- SSMH - SANITARY SEWER MANHOLE
- - RETAINING WALL
- LP - LIGHT POLE
- FH - FIRE HYDRANT
- WV - WATER VALVE
- WM - WATER METER
- ICV - IRRIGATION CONTROL VALVE
- - GRATE INLET
- TR - TELEPHONE RISER
- - STORM SEWER PIPE
- W W - WATER LINE
- SS - SANITARY SEWER LINE
- G G - GAS LINE
- T T - TELEPHONE LINE

BENCHMARKS

BM #1 RR SPIKE IN N. LEG OF 2ND "H" POLE STRUCTURE E. K-96, 1ST "H" POLE W. OF WAWONA, 660' E. AND 75' N. OF CENTER COR. OF SEC. 10-T27S-R2E ELEV=167.22

BM #2 RR SPIKE IN N. LEG OF 1ST "H" POLE STRUCTURE E. K-96, 73' N. AND 39' W. OF CENTER COR. OF SEC. 10-T27S-R2E ELEV=167.22

BM #3 RR SPIKE IN N. LEG OF 4TH "H" POLE STRUCTURE E. OF GREENWICH ROAD, 1ST "H" POLE W. OF HIGHWAY K-96, 2015' E. AND 70' N. OF THE W. 1/4 COR. OF SEC. 10-T27S-R2E ELEV=175.075

BM #4 RR SPIKE IN N. LEG OF 3RD "H" POLE STRUCTURE EAST OF GREENWICH ROAD, 1370' E. AND 67' N. OF THE W. 1/4 COR. OF SEC. 10-T27S-R2E ELEV=177.345

BM #5 RR SPIKE IN N. LEG OF 2ND "H" POLE STRUCTURE EAST OF GREENWICH ROAD, 720' E. AND 66' N. OF THE W. 1/4 COR. OF SEC. 10-T27S-R2E ELEV=173.37

BM #6 COW BENCHMARK DISK IN CONCRETE BASE OF RR CROSSING POLE 30.5' S. & 25' W. OF W. 1/4 COR. SEC 10-T27S-R2E (17TH ST. & GREENWICH) ELEV=183.22 (PUBLISHED 183.19)

BM #7 CHISELED SQUARE ON A CONCRETE FLUME, 624' WEST AND 90.8' SOUTH OF THE EAST 1/4 CORNER 9-27S-2E. 46' SOUTH OF ℄ RR TRACKS. ELEV.=188.515

BM #8 FENCE "T" POST 1367' WEST AND 48' SOUTH OF THE EAST 1/4 CORNER 9-27S-2E. 5' SOUTH OF ℄ RR TRACKS. ELEV.=197.12

BM #9 FENCE "T" POST 2221' WEST AND 47' SOUTH OF THE EAST 1/4 CORNER 9-27S-2E, 455' EAST OF THE CENTER 9-27S-2E, 5' SOUTH OF ℄ RR TRACKS. ELEV.=205.77

BM #10 FENCE "T" POST 312' WEST AND 46' SOUTH OF THE CENTER 9-27S-2E. 2302' EAST OF THE WEST 1/4 CORNER 9-27S-2E, 4.5' SOUTH OF ℄ RR TRACKS. ELEV.=208.00

BM #11 FENCE "T" POST 1254' WEST AND 44' SOUTH OF THE WEST 1/4 CORNER 9-27S-2E. 4.6' SOUTH OF ℄ RR TRACKS. ELEV.=198.57

BM #12 CHISELED SQUARE ON SE CORNER HEADWALL, 44' NORTH AND 42' EAST OF THE WEST 1/4 CORNER 9-27S-2E, 82' NORTH OF ℄ RR TRACKS. ELEV.=192.73

BM #13 PEC'S BM#6 ON C.O.W. PROJECT NO. 448-76-245-89467-000-000-001. CHISELED SQUARE ON TOP OF WEST CURB ON WEBB ROAD, 16' SOUTH OF RR TRACKS. ELEV.=194.45

N

SCALE: 1" = 500'

AS BUILT
1/31/03
R. Loomis
P-282 P-243

DUANE A. GUTTILL LICENSED 23 1990 KANSAS PROFESSIONAL ENGINEER

MKEC ENGINEERING CONSULTANTS
411 N. WEBB ROAD
WICHITA, KS. 67206
316-684-9600

CITY OF WICHITA
NORTHEAST SEWER FORCE MAIN
PROJECT NAME

TITLE SHEET
SHEET TITLE

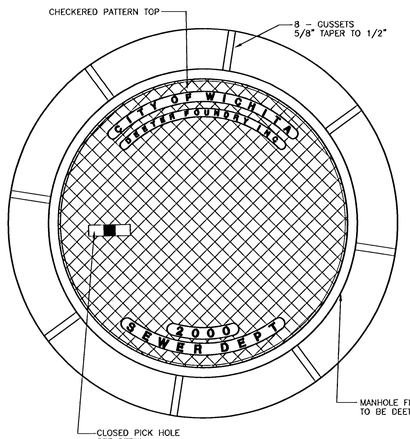
GJA	BDM	GJA
DESIGN BY:	DRAWN BY:	CHECKED BY:
APRIL, 2001	00276FMT	1 / 11
DATE	DRAWING NAME	SHEET / OF

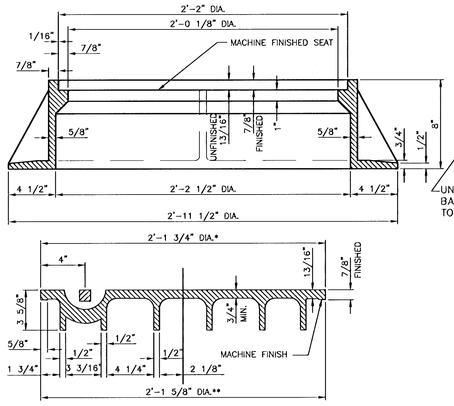
I:\KENR\00276\GWG\FM\00276FMT.DWG

I:\KENR\00276\GWG\FM\00276FMT.DWG Tue May 22 15:07:33 2001

SEWER APPURTENANCES DETAILS

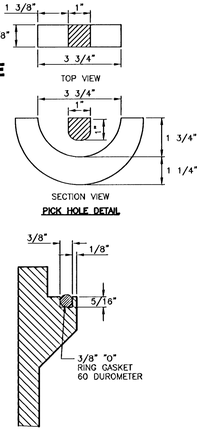
ADOPTED AS STANDARD DESIGN BY CITY OF WICHITA





MANHOLE FRAME AND COVER

(TOTAL WEIGHT = 430 LBS.)

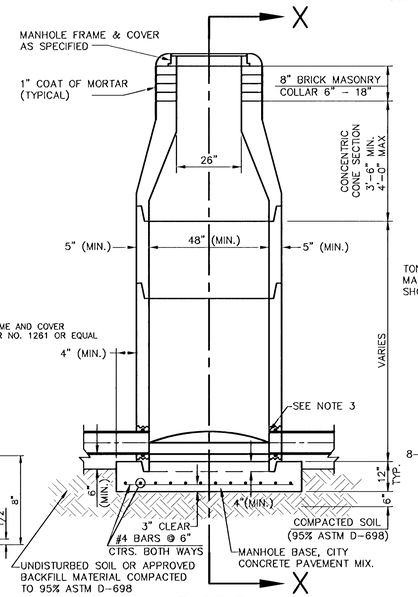


MANHOLE FRAME AND COVER NOTES

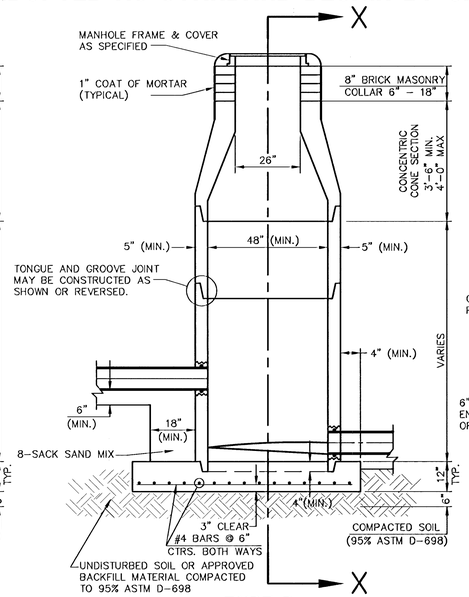
1. CAST IRON MANHOLE FRAME AND COVER SHALL CONFORM TO ASTM A-48, CLASS 30, OR BETTER.
2. THE FRAMES AND COVERS SHALL BE OF A NONROCKING TYPE OR WITH MACHINED BEARING SURFACES SO FITTING PARTS WILL NOT RATTLE OR ROCK UNDER TRAFFIC.
3. MANHOLE CASTINGS SHALL BE DEETER FOUNDRY INC. NO. 1261 OR APPROVED EQUAL UNLESS OTHERWISE SPECIFIED IN THE SPECIAL CONDITIONS. (MINIMUM WT.–430 LBS.) ALL MANHOLE CASTINGS, REGARDLESS OF TYPE, SHALL BE CONSIDERED SUBSIDIARY TO THE UNIT PRICES BID FOR THE VARIOUS MANHOLE TYPES.
4. GRIND ALL BURRS SMOOTH, CLEAN THOROUGHLY, THEN APPLY SHOP COAT OF ASPHALT BASE PAINT.
5. 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.
6. WHERE SELF–SEALING MANHOLE FRAMES ARE SPECIFIED ON THE PLANS, 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. THE CONTRACTOR SHALL SUPPLY TO THE OWNER ONE (1) REPLACEMENT "O" RING GASKET FOR EACH SELF–SEALING MANHOLE SPECIFIED.

PICK HOLE DETAIL

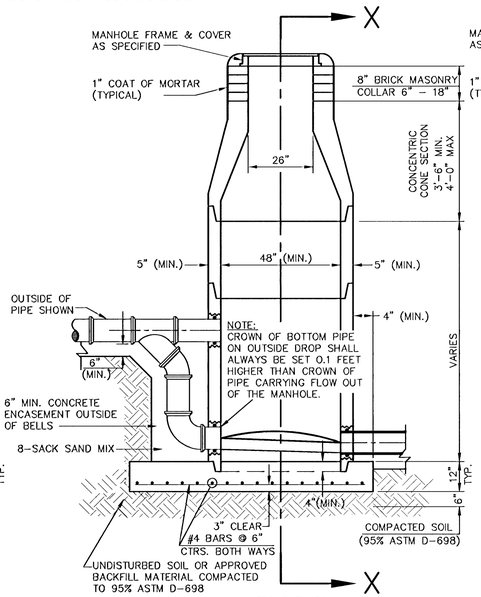
FRAME GROOVING DETAIL
(FOR SELF–SEALING MHS ONLY)



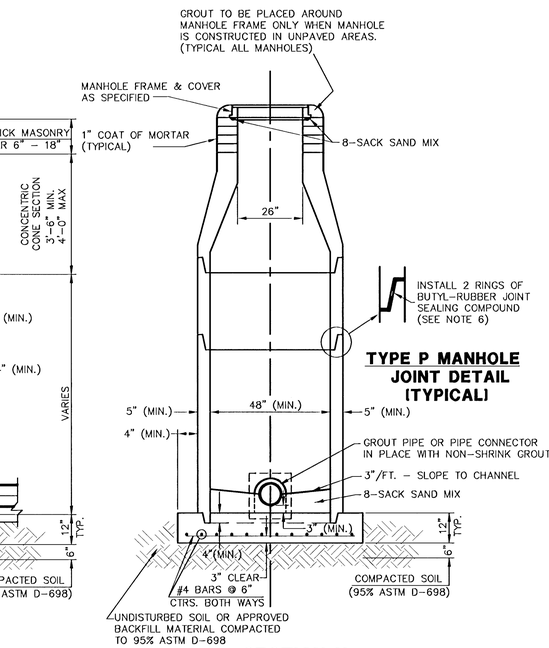
TYPE P
STANDARD MANHOLE



TYPE P
INSIDE DROP MANHOLE



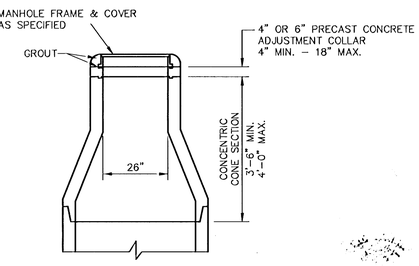
TYPE P
OUTSIDE DROP MANHOLE



SECTION X
(TYPICAL)

GENERAL NOTES - PRECAST MANHOLE NOTES

1. ALL PRECAST CONCRETE MANHOLE SECTIONS SHALL CONFORM TO THE LATEST REVISIONS OF A.S.T.M. C478 AS MODIFIED BY THE SPECIFICATIONS.
2. NON–SHRINK GROUT SHALL BE NON–METALLIC TYPE.
3. APPROVED FLEXIBLE WATERSTOP GASKETS SHALL BE INSTALLED TO JOIN THE SEWER TO THE MANHOLE WALL WHEN A.B.S. COMPOSITE PIPE OR P.V.C. PIPE IS USED. FOR OTHER TYPES OF PIPE THE SEWER SHALL BE GROUTED IN PLACE WITH NON–SHRINK GROUT. THE SEWER PIPE SHALL BE SUPPORTED WITH CONCRETE ENCASEMENT A MINIMUM OF 3 FEET FROM THE MANHOLE WALL AND TO THE FIRST JOINT FOR V.C.P. SUCH THAT THE JOINT REMAINS FLEXIBLE.
4. ALL INSIDE SURFACES OF THE CONCRETE MANHOLE WHICH WOULD BE EXPOSED TO SEWER GAS SHALL BE COATED WITH 2 COATS TNEMEC SERIES 66 HI–BUILD EPOXOLINE, DRY THICKNESS OF 8 MILS (MIN.)
5. EXTERIOR MANHOLE WALLS SHALL BE COATED WITH 1 COAT MOBILARMA 633 BITUMINUS COATING.
6. JOINT SEALING COMPOUND SHALL BE KENT SEAL NO. 2 OR APPROVED EQUAL.
7. PRECAST MANHOLES SHALL BE SET AT LEAST 4 INCHES INTO THE MANHOLE BASE.
8. 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.
9. LIFTING HOLES SHALL BE FILLED WITH NON–SHRINK GROUT AND THE INTERIOR SURFACE COATED AS SPECIFIED.
10. MORTAR USED IN MASONRY CONSTRUCTION SHALL CONTAIN 8 SACKS OF CEMENT PER CUBIC YARD. CONCRETE USED IN MANHOLE BASES SHALL CONFORM TO THE REQUIREMENTS OF CONCRETE FOR CONCRETE PAVEMENT CONSTRUCTION AS SPECIFIED IN THE CITY STANDARD PAVING SPECIFICATIONS USING CITY CONCRETE PAVEMENT MIX WITHOUT AIR ENTRAINING ADMIXTURE. MORTAR SHALL BE PLACED AROUND THE MANHOLE RING AS SHOWN ON THE DRAWINGS WHEN MANHOLES ARE CONSTRUCTED IN UNPAVED AREAS. MANHOLES CONSTRUCTED WHERE PIPE SIZES ARE SMALLER THAN 24" SHALL HAVE AN INSIDE DIAMETER OF 4'. MANHOLES CONSTRUCTED WHERE PIPE SIZES ARE 24" OR LARGER SHALL HAVE AN INSIDE DIAMETER OF 5'. COMPLETED MANHOLE SHALL BE WITHOUT LEAKS AND WATER TIGHT.
11. REINFORCING STEEL SHALL BE INSTALLED IN THE MANHOLE BASES AND SHALL CONSIST OF NO. 4 BARS PLACED ON 6" CENTERS IN BOTH DIRECTIONS. THE MANHOLE BASE REINFORCEMENT SHALL BE PLACED AT LEAST 3" ABOVE THE BOTTOM OF THE MANHOLE BASE. ALL COSTS FOR FURNISHING AND INSTALLING REINFORCING STEEL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE MANHOLE.
12. OPENINGS SHALL BE CUT INTO THE MANHOLE WALL WHEN OUTSIDE DROPS ARE CONSTRUCTED ON EXISTING MANHOLES. SUCH OPENINGS CUT INTO EXISTING MANHOLES SHALL BE AS SMALL AS PRACTICAL TO FACILITATE INSTALLING AND GROUTING THE NEW PIPE IN PLACE. WATERSTOP GASKETS SHALL BE USED WITH P.V.C. AND A.B.S. COMPOSITE PIPE. THE NEW PIPE SHALL BE GROUTED INTO THE OPENING USING AN APPROVED NONSHRINK GROUT FOR THE FULL MANHOLE WALL THICKNESS. THE EXTERIOR OF THE COMPLETED CONNECTION SHALL BE SEALED WITH AN APPROVED BITUMINOUS COATING SUCH THAT THE CONNECTION WILL BE WATER TIGHT. FLOOR OF MANHOLE SHALL BE MODIFIED TO FORM NEW FLOW CHANNEL FOR THE NEW CONNECTION AS INDICATED BY THE DRAWING. THIS WORK, INCLUDING MODIFICATION OF MANHOLE FLOOR, SHALL BE PAID FOR AT THE UNIT PRICE BID FOR OUTSIDE DROP STACK CONSTRUCTED ON EXISTING MANHOLE.
13. THE FLOORS OF ALL MANHOLES SHALL BE SHAPED WITH FLOW CHANNELS SUCH THAT THE MANHOLES WILL BE SELF CLEANING AND FREE OF AREAS WHERE SOLIDS COULD BE DEPOSITED AS SEWAGE FLOWS THROUGH THE MANHOLE FROM ALL INLET PIPES TO THE OUTLET PIPE. FLOW CHANNELS SHALL BE FORMED TO MATCH THE BOTTOM HALVES OF THE INFLOWING PIPES AND THE OUTFLOWING PIPE AS SHOWN BY THE DRAWINGS EXCEPT FOR INSIDE DROP MANHOLES. FLOW CHANNELS FOR INSIDE DROP MANHOLES SHALL BE CONSTRUCTED AS INDICATED BY THE DRAWING. MANHOLE FLOORS SHALL HAVE SLOPES OF 3 INCHES PER FOOT IN THE AREAS OUTSIDE OF THE FLOW CHANNELS SLOPED TOWARD THE FLOW CHANNELS. PIPES LAID THROUGH MANHOLES SHALL HAVE THE TOP HALF REMOVED TO NEAT LINES FOR THE FULL INSIDE DIAMETER OF THE MANHOLE. MANHOLE FLOORS SHALL THEN BE SHAPED AROUND THE BOTTOM HALF OF THE PIPE WHICH FORMS THE FLOW CHANNEL.
14. PIPES INSTALLED WITHIN THE EXCAVATION MADE FOR THE MANHOLE SHALL BE CRADLED WITH CONCRETE TO THE LIMITS OF THE MANHOLE EXCAVATION. WHEN CLAY PIPE IS USED, THE CRADLE SHALL EXTEND TO THE FIRST JOINT OUTSIDE THE MANHOLE. THE CRADLE SHALL BE TERMINATED AT THE CLAY PIPE JOINT IN A MANNER WHICH WILL MAINTAIN THE FLEXIBILITY OF THE JOINT. COST OF CRADLE WITHIN MANHOLE EXCAVATION OR TO CLAY PIPE JOINTS ADJACENT TO MANHOLE SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE MANHOLE.
15. MANHOLE COVER CASTINGS AND MANHOLE FRAME CASTINGS SHALL CONFORM TO THE REQUIREMENTS AS INDICATED IN THE STANDARD SPECIFICATIONS AND AS SHOWN IN THE STANDARD DETAIL DRAWING.
16. THE VERTICAL DROP IN INSIDE DROP MANHOLES SHALL NOT EXCEED 2' FOR INFLOWING PIPES. THE CROWNS OF INFLOWING PIPES SHALL NEVER BE SET LOWER THAN THE CROWN OF THE OUTFLOWING PIPE.
17. STANDARD MANHOLES AND STANDARD INSIDE DROP MANHOLES SHALL BE BID AS STANDARD MANHOLES FOR THE TYPE AND DIAMETER INDICATED. OUTSIDE DROP MANHOLES SHALL BE BID AS STANDARD OUTSIDE DROP MANHOLES FOR THE TYPE AND DIAMETER INDICATED. ALL MANHOLE DIAMETERS WILL BE 4' UNLESS INDICATED OTHERWISE.
18. A BRICK MASONRY COLLAR SHALL BE INSTALLED BETWEEN THE CAST IRON FRAME AND THE CONCENTRIC CONE. THE COLLAR WILL HAVE 8" WALLS AND A VERTICAL HEIGHT OF 6" MINIMUM AND 18" MAXIMUM. A 1" COAT OF MORTAR WILL BE PLASTERED ON THE OUTSIDE OF THE COLLAR.



ALTERNATE CONSTRUCTION IN UNPAVED AREAS

REVISED: 6–12–86

2/11



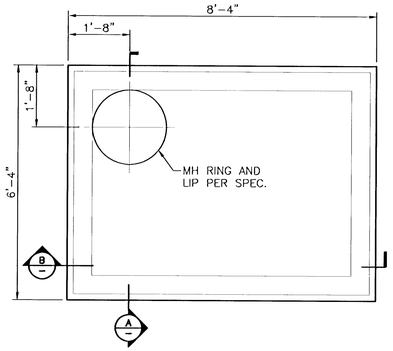
MANHOLE DETAILS

CITY OF WICHITA, KANSAS

Design C.O.W.	Checked by	Checked by	
Drawn by	Date	Date APR. 2001	Job No. 00278BD1

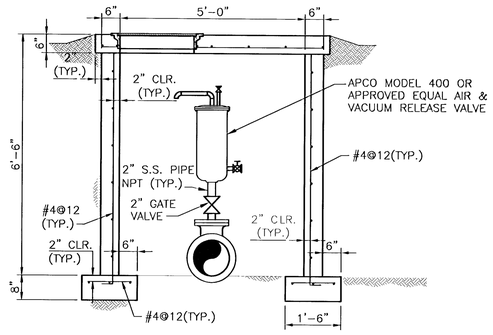
I:\ENVR\00278\dwg\PW00278BD1.dwg Tue May 22 15:07:41 2001

I:\ENVR\00278\dwg\MHS00278BD1.dwg 10/18/00 0113:43 PM PM CST



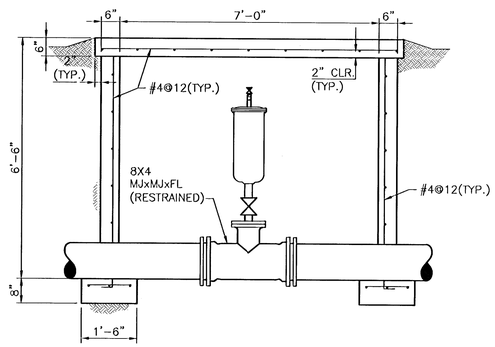
AIR RELEASE DETAIL

SCALE: 1/2" = 1'-0"



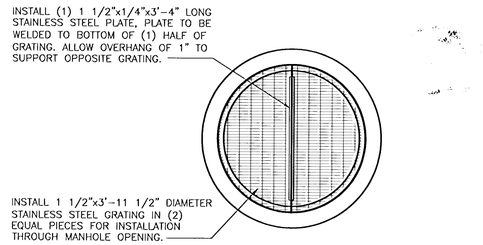
SECTION

SCALE: 1/2" = 1'-0"



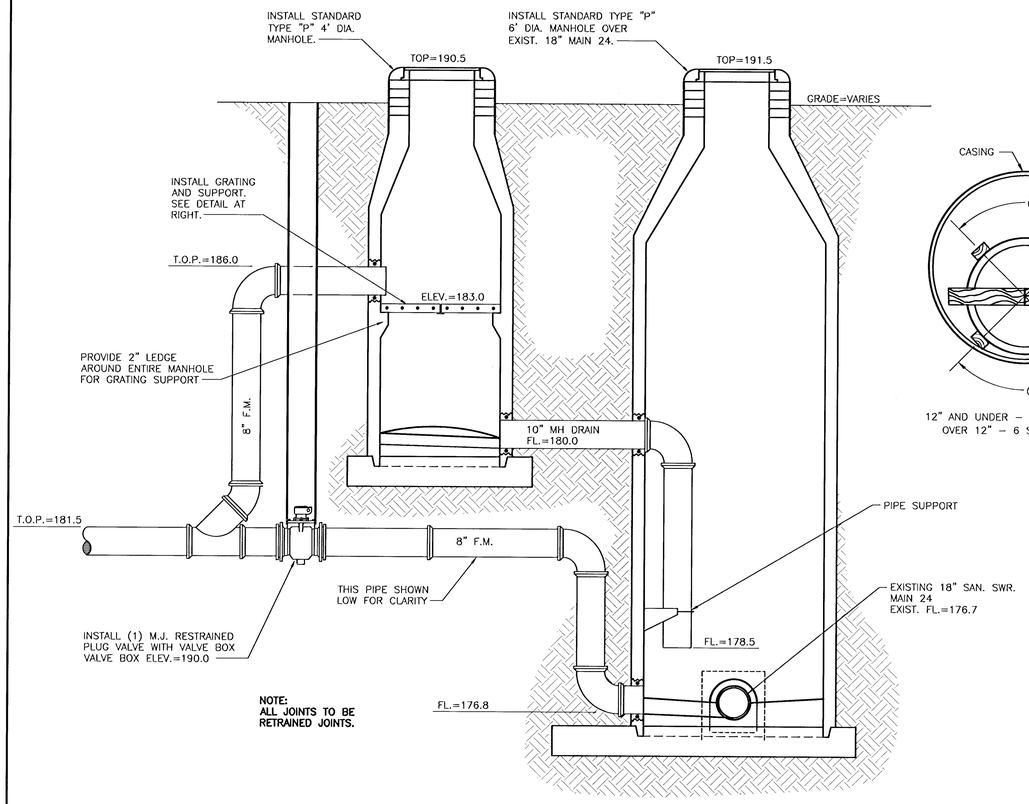
SECTION

SCALE: 1/2" = 1'-0"



GRATE DETAIL

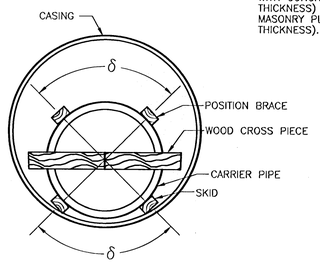
NO SCALE



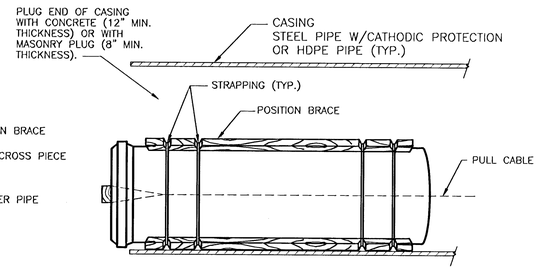
NOTE:
ALL JOINTS TO BE RETRAINED JOINTS.

PIG RECOVERY MANHOLE DETAIL

NO SCALE

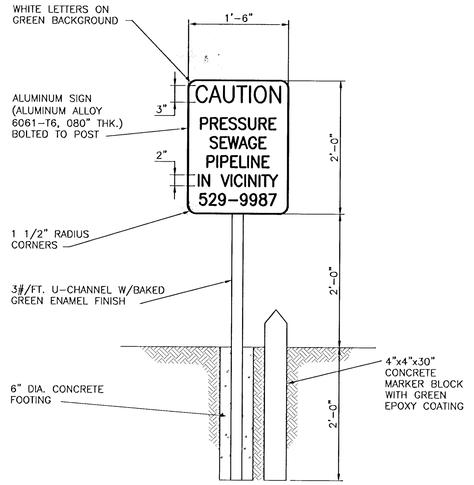


12" AND UNDER – 4 SKIDS δ =90°
OVER 12" – 6 SKIDS δ =60°



PIPE CASING DETAIL

NO SCALE



FORCE MAIN WARNING SIGN DETAIL

SCALE: NONE



MKEC
ENGINEERING CONSULTANTS
411 N. WEBB ROAD
WICHITA, KS. 67206
316-684-9600

CITY OF WICHITA
NORTHEAST SEWER FORCE MAIN
PROJECT NAME

AIR RELEASE & MISCELLANEOUS DETAILS
SHEET TITLE

GJA	BDM	GJA
DESIGN BY:	DRAWN BY:	CHECKED BY:
APRIL, 2001	00276-113	3 / 11
DATE	DRAWING NAME	SHEET/OF

I:\ENVR\00276\DWG\PM\00276B02.DWG

I:\ENVR\00276\dwg\PM\00276B02.dwg Wed May 23 15:27:10 2001

CITY OF WICHITA
NORTHEAST FORCE MAIN PLANS
PROJ. #468-83392



BM #1 RR SPIKE IN N. LEG OF 2ND "H" POLE STRUCTURE E. K-96, 1ST "H" POLE W. OF WAWONA, 660' E. AND 75' N. OF CENTER COR. OF SEC. 10-T27S-R2E ELEV=167.22

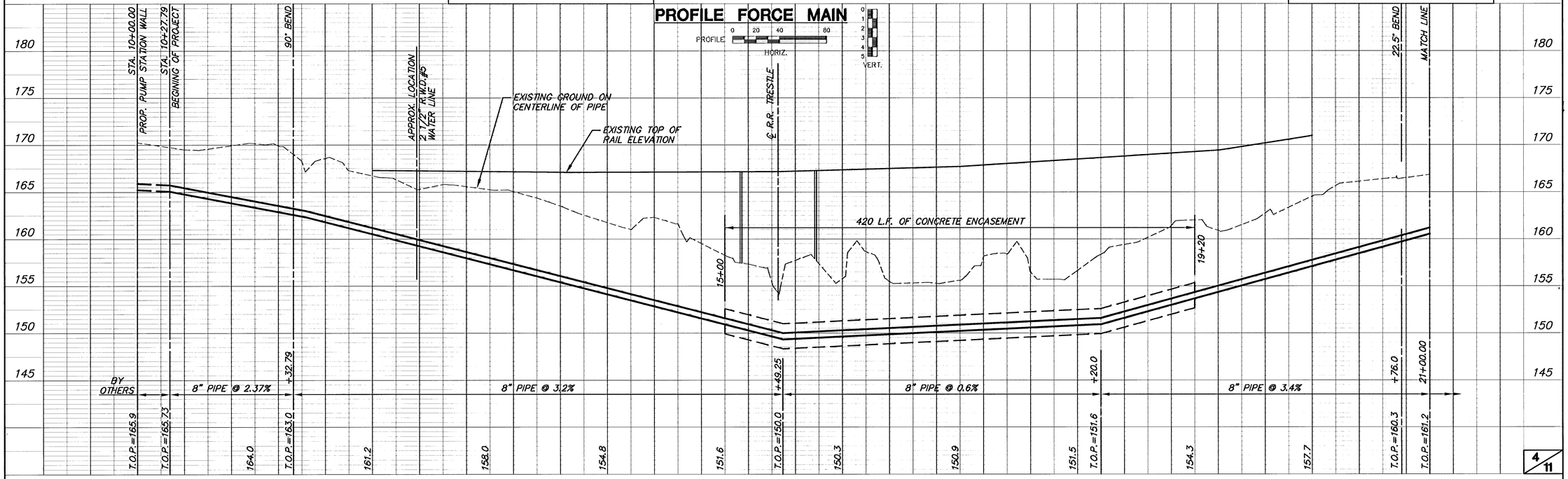
BM #2 RR SPIKE IN N. LEG OF 1ST "H" POLE STRUCTURE E. K-96, 73' N. AND 39' W. OF CENTER COR. OF SEC. 10-T27S-R2E ELEV=167.22

PLAN FORCE MAIN

PLAN 0 20 40 80 LAT. & LONG.

PROFILE FORCE MAIN

PROFILE 0 20 40 80 HORIZ. 0 1 2 3 4 5 VERT.



00276FM1

I:\ENVR\00276\dwg\FM\00276fm1.dwg 12/20/2000 1:31:53 PM CST

I:\ENVR\00276\dwg\FM\00276fm1.dwg Wed May 23 14:35:30 2001

CITY OF WICHITA
NORTHEAST FORCE MAIN PLANS
PROJ. #468-83392

NOTE: TRIM TREES AS REQUIRED. SEE DETAIL FOR TREE TRIMMING. REMOVAL OF TREES ONLY WITH PERMISSION OF THE ENGINEER. COST OF TRIMMING AND REMOVAL SHALL BE CONSIDERED SUBSIDIARY TO PROJECT.

CHAPEL HILL ADDITION

18 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25

CENTER SECTION 10 T27S, R2E.

STA. 21+00.00= BL. STA. 276+21.29 OFFSET 4.23' L. MATCH LINE

NORTH BOUND K-96

SOUTH BOUND K-96

K-96

INSTALL (1) MJ RESTRAINED 22.5° BEND STA. 24+48.00= BL. STA. 272+75.44 OFFSET 15.0' L.

INSTALL (1) MJ RESTRAINED 22.5° BEND STA. 25+00.00= BL. STA. 272+27.44 OFFSET 5.0' R.

B. N. S. F. R. R.

NORTH RAIL OF TRACKS

PROPOSED SANITARY SEWER (BY OTHERS)

100' RAILROAD RIGHT OF WAY

STA. 32+00.00= BL. STA. 265+27.43 OFFSET 5.00' R. MATCH LINE

N

21+00 | 276+00 | 157°22'47" | 275+00 | 22+00 | 23+00 | 274+00 | 24+00 | 157°22'48" | 25+00 | 26+00 | 27+00 | 28+00 | 29+00 | 30+00 | 31+00 | 32+00

271+00 | 270+00 | 269+00 | 268+00 | 267+00 | 266+00 | 265+00

15.0' | 157°22'48" | 5.0'

BASELINE=SECTION LINE

100' KG&E EASEMENT

BM #2 | BM #3

INSTALL (1) MJ RESTRAINED 22.5° BEND STA. 21+27.99= BL. STA. 276+95.44 OFFSET 15.0' L.

MI-52-1 | K-96 | MI-53

BM #2 RR SPIKE IN N. LEG OF 1ST "H" POLE STRUCTURE E. K-96, 73' N. AND 39' W. OF CENTER COR. OF SEC. 10-T27S-R2E ELEV=167.22

BM #3 RR SPIKE IN N. LEG OF 4TH "H" POLE STRUCTURE E. OF GREENWICH ROAD, 1ST "H" POLE W. OF HIGHWAY K-96, 2015' E. AND 70' N. OF THE W. 1/4 COR. OF SEC. 10-T27S-R2E ELEV=175.075

PLAN FORCE MAIN

PLAN 0 20 40 80

LAT. & LONG.

PROFILE FORCE MAIN

PROFILE 0 20 40 80

HORIZ.

VERT. 0 1 2 3 4 5

MATCH LINE | 22.5° BEND WITH HORIZ. DEFLECTION | NORTH BOUND K-96 | SOUTH BOUND K-96 | 22.5° BEND WITH HORIZ. DEFLECTION | 22.5° BEND | MATCH LINE

190 | 185 | 180 | 175 | 170 | 165 | 160 | 155

8" PIPE @ 1.22% | 8" PIPE @ -3.4% | 8" PIPE @ 0.19%

WALK/BIKE PATH +61.8

21+30.0 | 312 L.F. OF STEEL CASING PIPE BY BORING | 24+42.0

TRENCH PLUG +43.0

EXISTING GROUND ON ℄ OF PIPE

21+00.00 +28.0 | 32+00.00

T.O.P.=161.2 | T.O.P.=162.1 | T.O.P.=166.0 +48.0 | T.O.P.=166.1 +00.0 | T.O.P.=167.5

163.0 | 164.2 | 165.4 | 166.3 | 166.5 | 166.7 | 166.9 | 167.1 | 167.3

21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32

I:\ENVR\00276\dwg\FM\00276fm2.dwg 12/20/2000 1:33:31 PM CST

I:\ENVR\00276\dwg\FM\00276fm2.dwg Wed May 23 14:32:06 2001

6/11

00276FM2

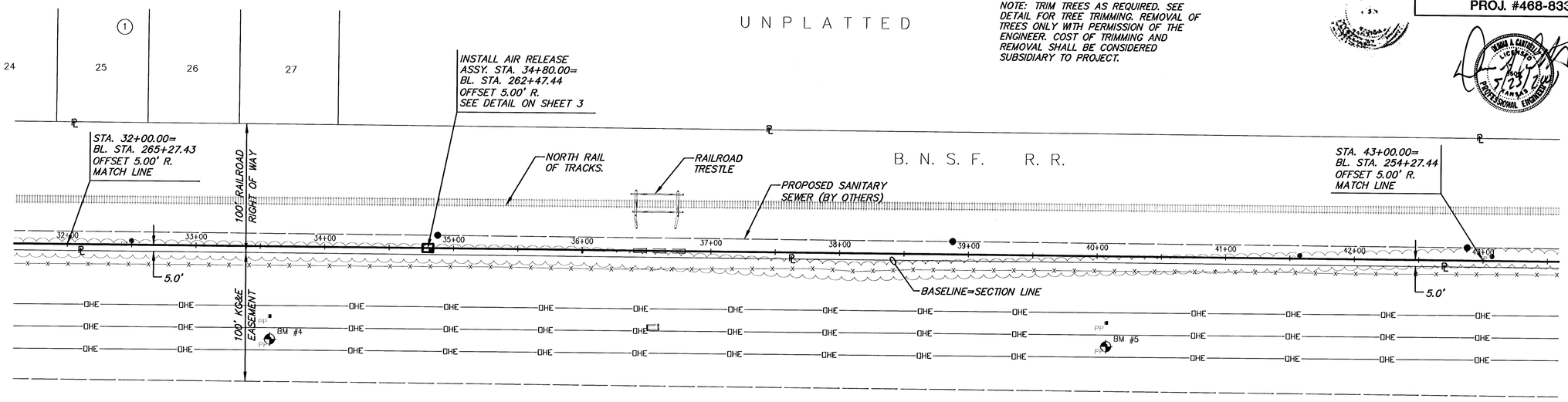
CITY OF WICHITA
NORTHEAST FORCE MAIN PLANS
PROJ. #468-83392

CHAPEL HILL ADDITION

UNPLATTED

B. N. S. F. R. R.

NOTE: TRIM TREES AS REQUIRED. SEE DETAIL FOR TREE TRIMMING. REMOVAL OF TREES ONLY WITH PERMISSION OF THE ENGINEER. COST OF TRIMMING AND REMOVAL SHALL BE CONSIDERED SUBSIDIARY TO PROJECT.



BM #4 RR SPIKE IN N. LEG OF 3RD "H" POLE STRUCTURE EAST OF GREENWICH ROAD, 1370' E. AND 67' N. OF THE W. 1/4 COR. OF SEC. 10-T27S-R2E ELEV=177.345

MI-53

PLAN FORCE MAIN

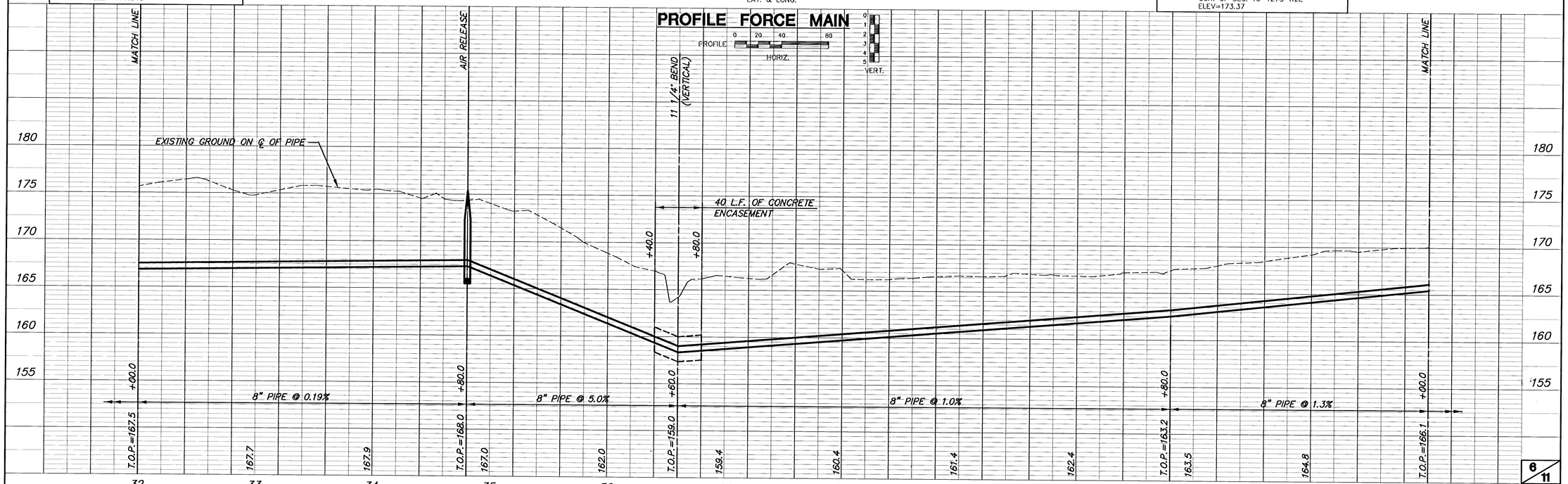
PLAN 0 20 40 80 LAT. & LONG.

MI-53

BM #5 RR SPIKE IN N. LEG OF 2ND "H" POLE STRUCTURE EAST OF GREENWICH ROAD, 720' E. AND 66' N. OF THE W. 1/4 COR. OF SEC. 10-T27S-R2E ELEV=173.37

PROFILE FORCE MAIN

PROFILE 0 20 40 80 HORIZ. 0 1 2 3 4 5 VERT.



I:\ENVR\00276\dwg\FM\00276fm3.dwg 12/20/2000 1:36:49 PM CST

I:\ENVR\00276\dwg\PA\00276fa3.dwg Wed May 23 14:30:36 2001

00276FM3

CITY OF WICHITA
NORTHEAST FORCE MAIN PLANS
PROJ. #468-83392

UNPLATTED

STA. 43+00.00=
BL. STA. 254+27.44
OFFSET 5.0' R.
MATCH LINE

NORTH RAIL OF TRACKS.

GREENWICH RD.

NOTE: TRIM TREES AS REQUIRED. SEE DETAIL FOR TREE TRIMMING. REMOVAL OF TREES ONLY WITH PERMISSION OF THE ENGINEER. ABANDONED TELEGRAPH POLES AND WIRES SHALL BE REMOVED. COST OF TRIMMING AND REMOVAL OF ALL ITEMS SHALL BE CONSIDERED SUBSIDIARY TO PROJECT.

UNPLATTED
MI-49-2A
RRM PROPERTIES

B. N. S. F. R. R.

INSTALL FORCE MAIN SIGN. SEE MISC. DETAILS SHT. 3.

PROPOSED SANITARY SEWER (BY OTHERS)

INSTALL FORCE MAIN SIGN. SEE MISC. DETAILS SHT. 3.

BM #6

BM #7

100' RAILROAD RIGHT OF WAY

100' KG&E EASEMENT

43+00 44+00 45+00 46+00 47+00 48+00 49+00 50+00 51+00 52+00 53+00 54+00

5.0'

BASELINE=SECTION LINE

5.0'

10.0'

BASELINE=SECTION LINE

10.0'

STA. 54+00.00=
BL. STA. 243+27.55
OFFSET 10.0' R.
MATCH LINE

SW COR. NW 1/4
SEC.10 T27S, R2E.

N

MI-53

UNPLATTED
MI-47

BM #6 COW BENCHMARK DISK IN CONCRETE BASE OF RR CROSSING POLE 30.5' S. & 25' W. OF W. 1/4 COR. SEC 10-T27S-R2E (17TH ST. & GREENWICH) ELEV=183.22 (PUBLISHED 183.19)

BM #7 CHISELED SQUARE ON A CONCRETE FLUME, 624' WEST AND 90.8' SOUTH OF THE EAST 1/4 CORNER 9-27S-2E. 46' SOUTH OF C RR TRACKS. ELEV.=188.515

PLAN FORCE MAIN

PLAN 0 20 40 80
LAT. & LONG.

PROFILE FORCE MAIN

PROFILE 0 20 40 80
HORIZ.
VERT. 0 1 2 3 4 5

MATCH LINE

3°43'49" HORIZ. DEFLECTION

@ GREENWICH RD.

3°25'17" HORIZ. DEFLECTION

EXISTING GROUND ON ℄ OF PIPE

+90.0

75.0 L.F. OF STEEL CASING PIPE BY BORING

+65.0

+00.0

+87.4

+67.7

+00.0

8" PIPE @ 1.3%

T.O.P.=166.1

T.O.P.=171.1

171.3

T.O.P.=172.2

T.O.P.=180.4

167.4 168.7 170.0 172.6 173.9 175.2 176.5 177.8 179.1

190 185 180 175 170 165 160 155

43 44 45 46 47 48 49 50 51 52 53 54

I:\ENVR\00276\dwg\FM\00276fm4.dwg 12/20/2000 1:39:05 PM CST

7/11

00276FM4

I:\ENVR\00276\dwg\FM\00276fm4.dwg Wed May 23 14:26:11 2001

CITY OF WICHITA
NORTHEAST FORCE MAIN PLANS
PROJ. #468-83392

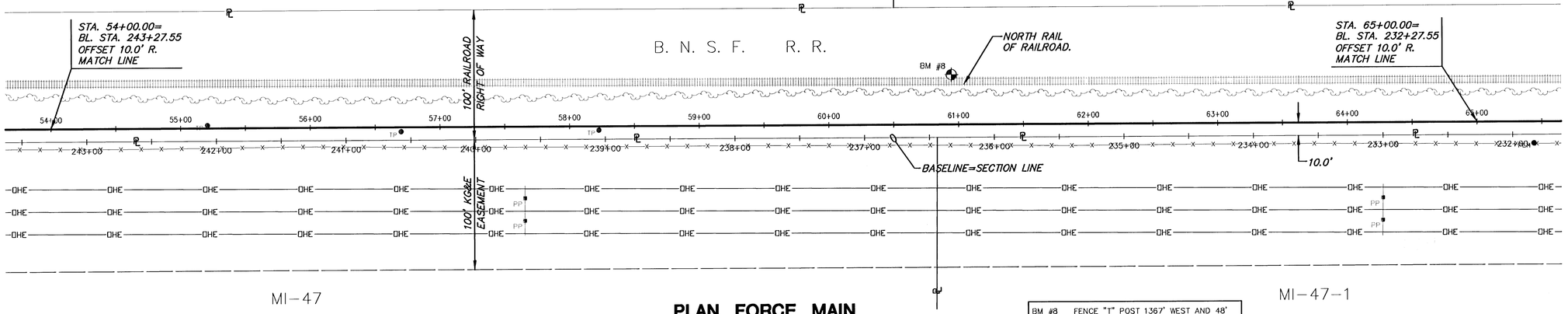


NOTE: TRIM TREES AS REQUIRED. SEE DETAIL FOR TREE TRIMMING. REMOVAL OF TREES ONLY WITH PERMISSION OF THE ENGINEER. ABANDONED TELEGRAPH POLES AND WIRES SHALL BE REMOVED. COST OF TRIMMING AND REMOVAL OF ALL ITEMS SHALL BE CONSIDERED SUBSIDIARY TO PROJECT.

UNPLATTED
MI-49-2A
RRM PROPERTIES

UNPLATTED
MI-50
RAYTHEON

N



MI-47

MI-47-1

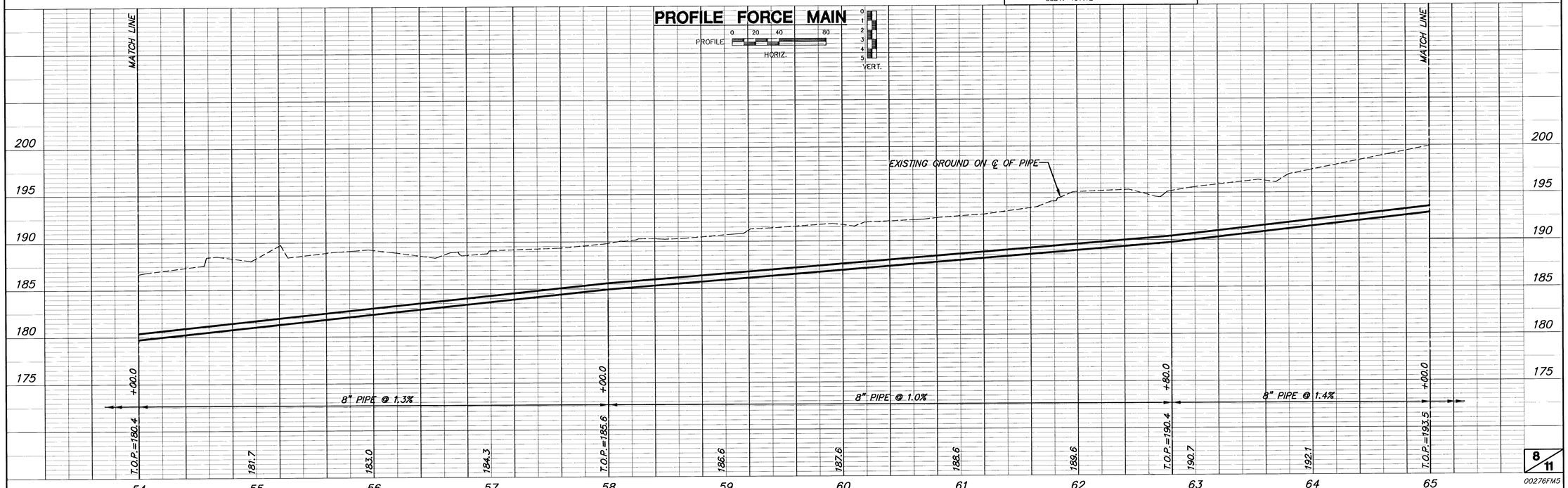
PLAN FORCE MAIN

PLAN 0 20 40 80
LAT. & LONG.

BM #8 FENCE "T" POST 1.36' WEST AND 48' SOUTH OF THE EAST 1/4 CORNER 9-27S-2E. 5' SOUTH OF ℄ RR TRACKS.
ELEV.=197.12

PROFILE FORCE MAIN

PROFILE 0 20 40 80
HORIZ.
VERT. 0 1 2 3 4 5



8/11

00276FM5

I:\ENVR\00276\dwg\FM\00276fm5.dwg 12/20/2000 1:42:16 PM CST

I:\ENVR\00276\dwg\FM\00276fm5.dwg Wed May 23 14:26:44 2001

CITY OF WICHITA
NORTHEAST FORCE MAIN PLANS
PROJ. #699001



NOTE: TRIM TREES AS REQUIRED. SEE DETAIL FOR TREE TRIMMING. REMOVAL OF TREES ONLY WITH PERMISSION OF THE ENGINEER. ABANDONED TELEGRAPH POLES AND WIRES SHALL BE REMOVED. COST OF TRIMMING AND REMOVAL OF ALL ITEMS SHALL BE CONSIDERED SUBSIDIARY TO PROJECT.

UNPLATTED
MI–50
RAYTHEON

UNPLATTED
MI–51
RAYTHEON

CENTER SECTION 9
T27S, R2E.
BL. STA. 223+23.33

STA. 21+00.00=
BL. STA. 276+21.29
OFFSET 4.23' L.
MATCH LINE

NORTH RAIL OF TRACKS.

BM #9

B. N. S. F. R. R.

100' RAILROAD RIGHT OF WAY

STA. 76+00.00=
BL. STA. 221+27.56
OFFSET 10.00' R.
MATCH LINE

65+00 66+00 67+00 68+00 69+00 70+00 71+00 72+00 73+00 74+00 75+00 76+00

232+00 231+00 230+00 229+00 228+00 227+00 226+00 225+00 224+00 223+00 222+00 221+00

10.0'

BASELINE=SECTION LINE

179°58'53"

10.0'

100' KC&E EASEMENT

UNPLATTED
MI–47–1

UNPLATTED
MI–47

UNPLATTED
MI–48 & MI–48–1A

PLAN FORCE MAIN

PLAN 0 20 40 80
LAT. & LONG.

BM #9 FENCE "I" POST 2221' WEST AND 47' SOUTH OF THE EAST 1/4 CORNER 9–27S–2E, 455' EAST OF THE CENTER 9–27S–2E, 5' SOUTH OF ℄ RR TRACKS. ELEV.=205.77

PROFILE FORCE MAIN

PROFILE 0 20 40 80
HORIZ.
0 1 2 3 4 5
VERT.

MATCH LINE

03°17" HORIZ. DEFLECTION

MATCH LINE

EXISTING GROUND ON ℄ OF PIPE

205 200 195 190 185 180

+00.0 T.O.P.=193.5

8" PIPE @ 1.4%

+13.0 T.O.P.=200.0

8" PIPE @ 0.22%

+04.22 T.O.P.=199.1

+00.0 T.O.P.=199.5

194.9 196.3 197.8 198.0 198.2 198.4 198.6 198.9 199.3

65 66 67 68 69 70 71 72 73 74 75 76

00276FM6

I:\ENVR\00276\dwg\FM\00276fm6.dwg 12/20/2000 1:46:53 PM CST

I:\ENVR\00276\dwg\FM\00276fm6.dwg Wed May 23 14:24:48 2001

CITY OF WICHITA
NORTHEAST FORCE MAIN PLANS
PROJ. #468-83392

JASON A. CANTRELL LICENSED 18509 5/23/2001 KANSAS PROFESSIONAL ENGINEER

NOTE: TRIM TREES AS REQUIRED. SEE DETAIL FOR TREE TRIMMING. REMOVAL OF TREES ONLY WITH PERMISSION OF THE ENGINEER. ABANDONED TELEGRAPH POLES AND WIRES SHALL BE REMOVED. COST OF TRIMMING AND REMOVAL OF ALL ITEMS SHALL BE CONSIDERED SUBSIDIARY TO PROJECT.

INSTALL AIR RELEASE ASSY.
STA. 78+20.00=
BL. STA. 219+07.56
OFFSET 10.0' R.
MATCH LINE

STA. 76+00.00=
BL. STA. 221+27.56
OFFSET 10.0' R.
MATCH LINE

STA. 88+00.00=
BL. STA. 209+27.57
OFFSET 10.0' R.
MATCH LINE

NORTH RAIL ON TRACKS.

UNPLATTED
MI-51

B. N. S. F. R. R.

100' RAILROAD RIGHT OF WAY

100' KG&E EASEMENT

BASELINE=SECTION LINE

10.0'

10.0'

BM #10

BM #11

N

76+00 77+00 78+00 79+00 80+00 81+00 82+00 83+00 84+00 85+00 86+00 87+00 88+00

221+00 220+00 219+00 218+00 217+00 216+00 215+00 214+00 213+00 212+00 211+00 210+00 209+00

OHE PP

UNPLATTED
MI-48

BM #10 FENCE "T" POST 312' WEST AND 46' SOUTH OF THE CENTER 9-27S-2E. 2302' EAST OF THE WEST 1/4 CORNER 9-27S-2E, 4.5' SOUTH OF ℄ RR TRACKS.
ELEV.=208.00

BM #11 FENCE "T" POST 1254' WEST AND 44' SOUTH OF THE WEST 1/4 CORNER 9-27S-2E. 4.6' SOUTH OF ℄ RR TRACKS.
ELEV.=198.57

PLAN FORCE MAIN

PLAN 0 20 40 80
LAT. & LONG.

PROFILE FORCE MAIN

PROFILE 0 20 40 80
HORIZ.
0 1 2 3 4 5
VERT.

MATCH LINE

AIR RELEASE WITH

MATCH LINE

210 205 200 195 190 185

EXISTING GROUND ON CENTERLINE OF PIPE

+00.0 8" PIPE @ 0.22% +20.0 8" PIPE @ 0.8% +80.0 8" PIPE @ 1.5% +00.0

T.O.P.=199.5 199.7 199.9 T.O.P.=200.0 199.4 198.6 197.8 197.0 196.2 195.4 194.6 T.O.P.=193.9 193.6 192.1 T.O.P.=192.6

76 77 78 79 80 81 82 83 84 85 86 87 88

10/11

00276FM7

I:\ENVR\00276\dwg\FM\00276fm7.dwg 12/20/2000 1:52:35 PM CST

I:\ENVR\00276\dwg\PW\00276fm7.dwg Wed May 23 14:21:32 2001

CITY OF WICHITA
NORTHEAST FORCE MAIN PLANS
PROJ. #468-83392

NOTE: TRIM TREES AS REQUIRED. SEE DETAIL FOR TREE TRIMMING. REMOVAL OF TREES ONLY WITH PERMISSION OF THE ENGINEER. ABANDONED TELEGRAPH POLES AND WIRES SHALL BE REMOVED. COST OF TRIMMING AND REMOVAL OF ALL ITEMS SHALL BE CONSIDERED SUBSIDIARY TO PROJECT.

NOTE: WEST 80 FT. OF FENCE ALONG RAILROAD EASEMENT TO BE RELOCATED ALONG PROPERTY LINE AS SHOWN IN LIKE & KIND.

BM #13 PEC'S BM#6 ON C.O.W. PROJECT NO. 448-76-245-89467-000-000-001. CHISELED SQUARE ON TOP OF WEST CURB ON WEBB ROAD, 16' SOUTH OF RR TRACKS. ELEV.=194.45

GLENN A. CARTER LICENSED 9508 5/21/2001 PROFESSIONAL ENGINEER

N

CONST. PLASTIC LINED MANHOLE STA. 100+41.27 BL. STA.197+61.36 OFFSET 85.0' R. SEE DETAILS SHEET 3

CONST. 4' MANHOLE STA. 100+41.27 BL. STA.197+71.98 OFFSET 84.91' R. SEE DETAILS SHEET 3

INSTALL (1) M.J. RESTRAINED 90° BEND STA. 99+68.30= BL. STA. 198+34.34 OFFSET 85.0' R.

FENCE RE-LOCATION

INSTALL (1) M.J. RESTRAINED 90° BEND STA. 98+93.21= BL. STA. 198+34.35 OFFSET 10.00' R.

UNPLATTED MI-51 RAYTHEON

B. N. S. F. R. R.

100' RAILROAD RIGHT OF WAY

NORTH RAIL OF TRACKS.

STA. 88+00.00= BL. STA. 209+27.57 OFFSET 10.0' R. MATCH LINE

BM #11

BASELINE=SECTION LINE

100' KG&E EASEMENT

EXIST. 30" WTR. W/ 48" CASING PIPE

WEBB RD.

BM #13

15.0'

10.0'

10.0'

EXIST. 18" SAN. SWR. MAIN 24

BM #12

INSTALL (1) BURIED M.J. RESTRAINED PLUG VALVE STA. 100+30.57= BL. STA. 197+71.98 OFFSET 85.0' R.

30' SAN. SWR.. ESMT.

UNPLATTED C-327-UP

EASTMINSTER ADDITION

BL. STA. 97+09.58 SW COR. NW 1/4 SEC. 9 T27S, R2E.

UNPLATTED MI-48

BM #11 FENCE "T" POST 1254' WEST AND 44' SOUTH OF THE WEST 1/4 CORNER 9-27S-2E. 4.6' SOUTH OF ℄ RR TRACKS. ELEV.=198.57

BM #12 CHISELED SQUARE ON SE CORNER HEADWALL, 44' NORTH AND 42' EAST OF THE WEST 1/4 CORNER 9-27S-2E, 82' NORTH OF ℄ RR TRACKS. ELEV.=192.73

PLAN FORCE MAIN

PLAN 0 20 40 80 LAT. & LONG.

PROFILE FORCE MAIN

PROFILE 0 20 40 80 HORIZ. 0 1 2 3 4 5 VERT.

MATCH LINE

EXISTING GROUND ON ℄ OF PIPE

20 L.F. OF CONCRETE ENCASEMENT

45 L.F. OF STEEL CASING PIPE BY BORING

8" PIPE @ 1.5%

8" PIPE @ 0.5%

8" PIPE @ 2.9%

8" PIPE @ 0.0%

90° BEND HORIZ. DEFLECTION

℄ RAILROAD TRACKS

90° BEND HORIZ. DEFLECTION

10"x10" MJ TEE

10" MJ PLUG VALVE STA. 100+41.27

CONST. STD. TYPE P 6' DIA. MANHOLE MANHOLE TOP=191.5

EX. FL. IN & OUT=176.0

T.O.P.=190.6 T.O.P.=178.0 T.O.P.=178.1 T.O.P.=181.5 T.O.P.=181.5 T.O.P.=181.5 T.O.P.=181.5 T.O.P.=181.5 T.O.P.=181.5

189.1 187.6 186.1 184.6 183.1 181.6 180.1 178.6 179.3 181.5 181.5

+00.0 +40.0 +60.0 +76.2 +93.21 +97.0 +42.0 +68.3 +27.6 +30.6 +41.27

200 195 190 185 180 175 170

88 89 90 91 92 93 94 95 96 97 98 99 100

11/11

00276FM8

\ENVR\00276\dwg\FM\00276fm8.dwg 12/20/2000 2:11:52 PM CST

I:\ENVR\00276\dwg\FM\00276fm8.dwg Wed May 23 14:22:20 2001

GENERAL NOTES

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PRESERVING PROPERTY IRONS SHOWN ON PLANS. 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.

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

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

   KANSAS ONE-CALL 1-800-344-7233 OR 687-2470 (LOCAL WICHITA)

   THE CONTRACTOR MUST NOTIFY THE FOLLOWING IN CASE OF AN EMERGENCY:

SOUTHWESTERN BELL TELEPHONE COMPANY	1-800-734-7590
COX CABLEVISION	1-316-262-0661
KG&E (GAS & ELECTRIC)	1-316-383-8600
CITY OF WICHITA WATER & SEWER MAINTENANCE	1-316-262-6000
KANEB PIPELINE	1-316-773-9000
SEDGWICK COUNTY PUBLIC WORKS	1-316-383-7901

4. UNDERGROUND UTILITY SERVICE LINES AND OVERHEAD UTILITY POLE LINES ARE TO BE ADJUSTED AS NECESSARY BY OTHERS PRIOR TO CONSTRUCTION UNLESS THE PLANS SPECIFICALLY CALL FOR THEIR ADJUSTMENT BY THE CONTRACTOR OR UNLESS THE PLANS SPECIFICALLY IDENTIFY A UTILITY TO BE ADJUSTED BY ITS OWNER DURING CONSTRUCTION. EXISTING UTILITIES AND THEIR LOCATIONS, AS SHOWN ON THE PLANS, REPRESENT THE BEST INFORMATION OBTAINABLE FOR DESIGN. THE CONTRACTOR WILL BE REQUIRED TO WORK AROUND EXISTING UTILITIES WITHIN THE RIGHT-OF-WAY WHICH DO NOT CONFLICT WITH PROPOSED CONSTRUCTION.

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

6. THE CONTRACTOR SHALL GIVE ALL PROPERTY OWNERS AND/OR TENANTS OF DEVELOPED PROPERTY ABUTTING THE CONSTRUCTION OF THIS PROJECT A MINIMUM OF (48) HOURS ADVANCE NOTICE PRIOR TO START OF CONSTRUCTION.

7. ALL CONSTRUCTION AND MATERIALS SHALL COMPLY WITH CITY OF WICHITA STANDARD SPECIFICATIONS.

8. INTER-URBAN TRAFFIC GENERATED OUTSIDE THE PROJECT AREA AND LOCAL TRAFFIC GENERATED WITHIN THE PROJECT AREA ARE TO BE CARRIED THROUGH CONSTRUCTION ON EXISTING ROADWAYS AT ALL TIMES. ACCESS TO ALL DWELLINGS IN THE PROJECT AREA SHALL BE PROVIDED AT ALL TIMES. THE CONTRACTOR SHALL ERECT WARNING SIGNS, FLASHING LIGHTS, AND BARRICADES IN COMPLIANCE WITH THE STANDARD SPECIFICATIONS.

9. THE CONTRACTOR SHALL LIMIT THE EXTENT OF TRENCH TO REMAIN OPEN OVERNIGHT AND WEEKENDS TO LESS THAN 50 FEET.

10. THE CONTRACTOR SHALL RESTORE ALL DITCHES, CHANNELS, BANK STABILIZATION, SWALES, ROAD SHOULDERS, PAVEMENT ENTRANCES, AND BANKS TO THEIR ORIGINAL SLOPES AND GRADES. WHERE EXISTING ENTRANCE PIPE, DRAINAGE PIPE, SPRINKLER SYSTEMS, SIDEWALKS, DRIVES, SIGNS, FENCES, ETC., CONFLICT WITH THE PROPOSED WORK HEREIN THEY SHALL BE REMOVED AND REPLACED OR RESET IN LIKE KIND. ALL OF THE ABOVE INCLUDING TREES, SHRUBS, GRASS, SOD AND OTHER LANDSCAPING, WHERE NOTED, SHALL BE CONSIDERED SUBSIDIARY TO THE PRICE BID FOR SITE RESTORATION.

11. TREES AND SHRUBS IN PUBLIC RIGHTS-OF-WAY WHICH ARE IN DIRECT CONFLICT WITH PROPOSED NEW CONSTRUCTION SHALL BE REMOVED BY THE CONTRACTOR WITH THE ENGINEER'S APPROVAL. THE CONTRACTOR SHALL RESTORE AND REPLACE LANDSCAPE FEATURES AND PLANTINGS AS NOTED IN THE DRAWINGS OR AS DIRECTED BY THE ENGINEER. TREES AND SHRUBS WHICH ARE NOT IN DIRECT CONFLICT WITH PROPOSED NEW CONSTRUCTION SHALL BE SAVED AND PROTECTED FROM DAMAGE.

12. POSITIVE DRAINAGE SHALL BE PROVIDED FOR ALL AREAS ON OR NEAR SPOIL AREAS. NATURAL DRAINAGE WAYS SHALL BE MAINTAINED.

13. WHERE REMOVAL OF EXISTING FENCES NEXT TO THE CONSTRUCTION IS DEEMED NECESSARY BY THE CONTRACTOR, THE CONTRACTOR SHALL COORDINATE REMOVAL WITH ADJACENT PROPERTY OWNERS. ALL REMOVAL AND RESETTING OF FENCES SHALL BE CONSIDERED SUBSIDIARY TO SITE PREPARATION AND SITE RESTORATION, RESPECTIVELY.

14. ALL ELEVATIONS SHOWN ARE CITY OF WICHITA DATUM. CITY DATUM = NGVD - 1187.4.

15. ALL EXISTING GRASSED AREAS WHICH ARE DISTURBED OR DAMAGED DURING CONSTRUCTION OPERATIONS SHALL BE RESTORED TO ORIGINAL CONDITIONS, AND RE-SEEDED OR RE-SODDED IN LIKE KIND, UNLESS OTHERWISE NOTED ON THE PLANS. COSTS SHALL BE CONSIDERED SUBSIDIARY TO THE PRICE BID FOR SITE RESTORATION. APPLICATION RATE FOR THE VARIOUS SEED MIXTURES SHALL BE AS APPROVED BY THE ENGINEER. SEEDING SHALL CONFORM TO APPLICABLE REQUIREMENTS OF STANDARD SPECIFICATIONS. SODDING SHALL CONFORM TO APPLICABLE REQUIREMENTS OF SUPPLEMENTAL SPECIFICATIONS.

16. SLOPES STEEPER THAN 10 TO 1 SHALL BE MULCHED AS REQUIRED BY STANDARD SPECIFICATIONS. COST OF MULCHING SHALL BE INCLUDED IN PRICE BID FOR SITE RESTORATION.

17. EROSION CONTROL AREA DISTURBED BY CONSTRUCTION SHALL BE COVERED WITH AN EROSION CONTROL MAT\BLANKET WITHIN TWENTY -FOUR (24) HOURS OF BACKFILLING, LEVELING AND TEMPORARY SEEDING. PLACEMENT OF EROSION CONTROL MATS/BLANKETS (ECM'S) SHALL IN ACCORDANCE WITH MANUFACTURER'S RECCOMMENDATIONS REGARDING OVERLAPS, EDGE TRENCHING AND STAPLING OR THE CITY OF WCHITA'S STANDARD DETAIL DRAWINGS WHICHEVER IS MORE RESTRICTIVE. (ECM'S) MAY BE AMERICAN EXCELSIOR CURLEX I, NORTH AMERICAN GREEN S75, SYNTHETIC INDUSTRIES LANDLOK BON TERRA S1 OR AN APPROVED EQUAL.

18. MANHOLES WITH A DEPTH OF 20 FEET OR MORE SHALL BE A MINIMUM OF 5 FEET IN DIAMETER REGARDLESS OF PIPE SIZE AND SHALL BE PLASTIC LINED.

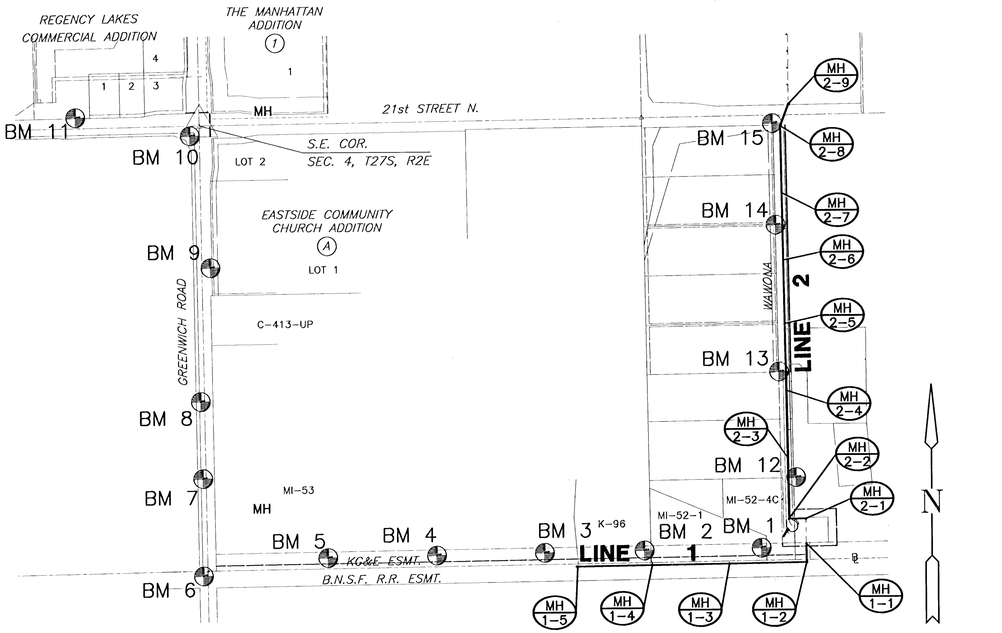
SANITARY SEWER PLANS FOR

MAIN 10
FOUR MILE CREEK SEWER - PHASE 1
PROJECT NO. 468-83392

CITY OF WICHITA, KANSAS

MICHAEL E. LINDEBAK, CITY ENGINEER

INDEX CODE 624503



SCALE: 1" = 400'

BENCHMARKS

BM #1 RR SPIKE IN N. LEG OF 2ND "H" POLE STRUCTURE E. K-96, 1ST "H" POLE W. OF WAWONA, 660' E. AND 75' N. OF CENTER COR. OF SEC. 10-T27S-R2E ELEV=167.22

BM #2 RR SPIKE IN N. LEG OF 1ST "H" POLE STRUCTURE E. K-96, 73' N. AND 39' W. OF CENTER COR. OF SEC. 10-T27S-R2E ELEV=167.22

BM #3 RR SPIKE IN N. LEG OF 4TH "H" POLE STRUCTURE E. OF GREENWICH ROAD, 1ST "H" POLE W. OF HIGHWAY K-96, 2015' E. AND 70' N. OF THE W. 1/4 COR. OF SEC. 10-T27S-R2E ELEV=175.075

BM #4 RR SPIKE IN N. LEG OF 3RD "H" POLE STRUCTURE EAST OF GREENWICH ROAD, 1370' E. AND 67' N. OF THE W. 1/4 COR. OF SEC. 10-T27S-R2E ELEV=177.345

BM #5 RR SPIKE IN N. LEG OF 2ND "H" POLE STRUCTURE EAST OF GREENWICH ROAD, 720' E. AND 66' N. OF THE W. 1/4 COR. OF SEC. 10-T27S-R2E ELEV=173.37

BM #6 COW BENCHMARK DISK IN CONCRETE BASE OF RR CROSSING POLE 30.5' S. & 25' W. OF W. 1/4 COR. SEC 10-T27S-R2E (17TH ST. & GREENWICH) ELEV=183.22 (PUBLISHED 183.19)

BM #7 5/8" BAR AND MKEC CAP, 550' N.& 17.5' W. OF W. 1/4 COR. SEC. 10-T27S-R2E ELEV=177.48

BM #8 CHISELED "LI" ON N. END OF W. HDWL OF RCB UNDER GREENWICH RD, 1011' N. OF W. 1/4 COR. SEC. 10-T27S-R2E ELEV=172.705

BM #9 RR SPIKE IN SW SIDE OF 24" TREE, 849' S. AND 51' E. OF THE NW. COR. SEC. 10-T27S-R2E ELEV=180.35

BM #10 CHISELED "LI" ON SW. COR. OF CONC. BASE OF TRAFFIC SIGNAL POLE ON SW. COR. 21ST ST. N. AND GREENWICH ROAD. ELEV=176.105

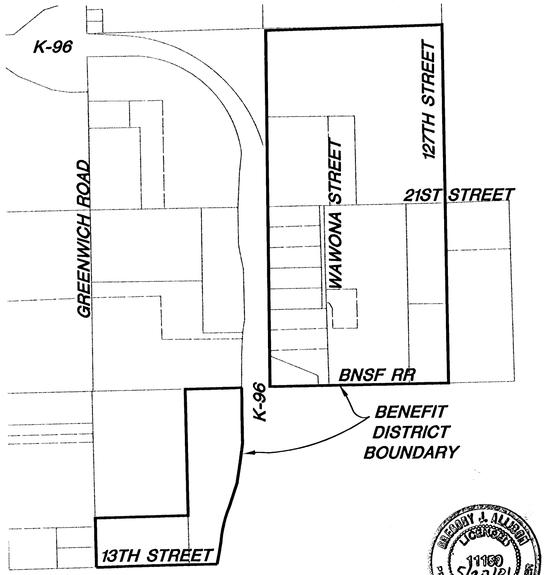
BM #11 CHISELED "LI" ON E. END OF N. HDWL OF RCB 740' W. OF SE. COR. SEC. 4-T27S-R2E ELEV=175.035

BM #12 RR SPIKE IN E. SIDE 18" ELM TREE 2163' S. OF N. LINE NE 1/4 SEC. 10-T27S-R2E (21ST ST. N.) & 62' E. OF THE W. LINE OF WAWONA EXTENDED SOUTH. ELEV=176.30

BM #13 RR SPIKE IN W. SIDE OF PP ON W. SIDE OF WAWONA, 1531' S. OF THE N. OF THE NE 1/4 SEC. 10-T27S-R2E ELEV=181.24

BM #14 RR SPIKE IN W. SIDE OF PP ON W. SIDE OF WAWONA, 654' S. OF THE N. LINE OF THE NE 1/4 SEC. 10-T27S-R2E ELEV=197.32

BM #15 STEPPED SPIKE IN N. SIDE OF PP ON SW. COR. 21ST & WAWONA 779' E. & 48' S. OF N. 1/4 COR. SEC. 10-T27S-R2E ELEV=197.32



BENEFIT DISTRICT MAP

INDEX TO DRAWINGS

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	MANHOLE DETAILS
3-7	PLAN / PROFILE SHEETS

LEGEND

BIN - TREE AND DIAMETER	SSMH - SANITARY SEWER MANHOLE
SN SN - SIGN AND POSTS	- RETAINING WALL
IP-1/2" MID-KANSAS BAR - IRON PIPE AND DESCRIPTION	LP - LIGHT POLE
214 x 49 - SPOT ELEVATION AND LOCATION	FH - FIRE HYDRANT
PP - POWER POLE AND DEADMAN	WV - WATER VALVE
KGE - ELECTRIC BOX	WM - WATER METER
- DRAINAGE ARROW	ICV - IRRIGATION CONTROL VALVE
- EDGE OF TREES	- GRATE INLET
E - UNDERGROUND ELECTRIC LINE	TR - TELEPHONE RISER
OHE - OVERHEAD ELECTRIC LINE	- STORM SEWER PIPE
- FENCE	W - WATER LINE
BM - BENCHMARK	SS - SANITARY SEWER LINE
SWMH - STORM WATER MANHOLE	G - GAS LINE
	T - TELEPHONE LINE

GREGORY L. ALLBEE LICENSED 11180 5-23-01 KANSAS PROFESSIONAL ENGINEER

I:\ENVR\00276\DWG\SAN\WAWONA\00276_BT

MKEC ENGINEERING CONSULTANTS
411 N. WEBB ROAD
WICHITA, KS. 67206
316-684-9600

MAIN 10
FOUR MILE CREEK SEWER - PHASE 1
PROJECT NAME

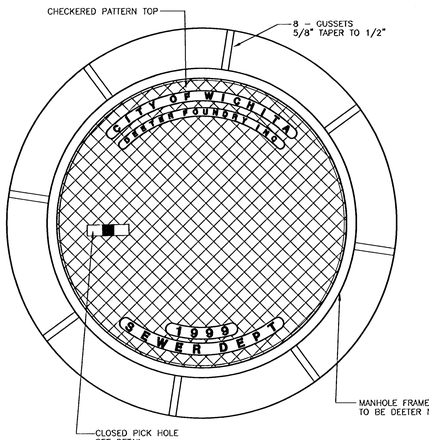
SANITARY SEWER PLANS
SHEET TITLE

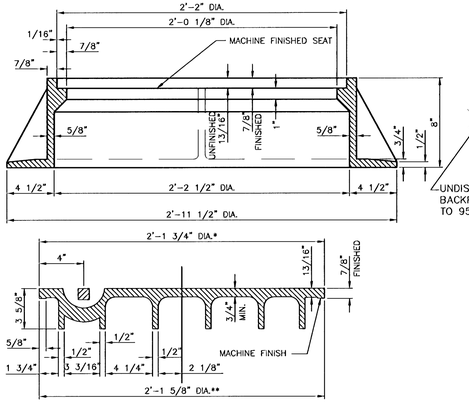
GJA	BDM/KKL	GJA
DESIGN BY:	DRAWN BY:	CHECKED BY:
MAY 2001	00276_BT	1 / 7
DATE	DRAWING NAME	SHEET / OF

I:\ENVR\00276\DWG\SAN\WAWONA\00276_BT.dwg Thu May 24 09:55:36 2001

SEWER APPURTENANCES DETAILS

ADOPTED AS STANDARD DESIGN BY CITY OF WICHITA

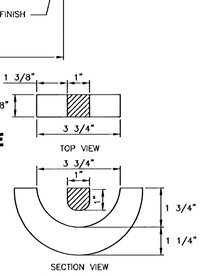




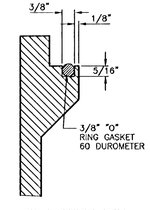
*OUTSIDE DIA. TOP OF COVER
**OUTSIDE DIA. BOTTOM OF COVER

MANHOLE FRAME AND COVER

(TOTAL WEIGHT = 430 LBS.)



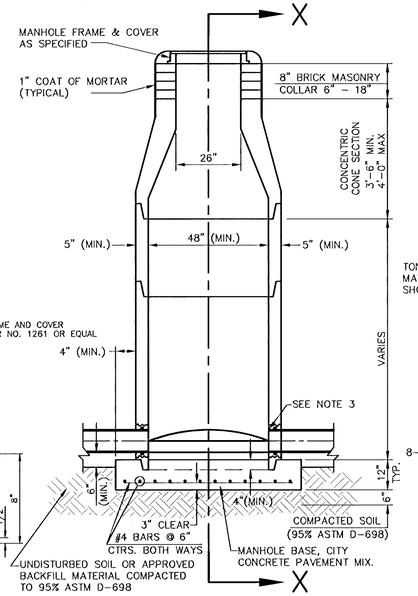
PICK HOLE DETAIL



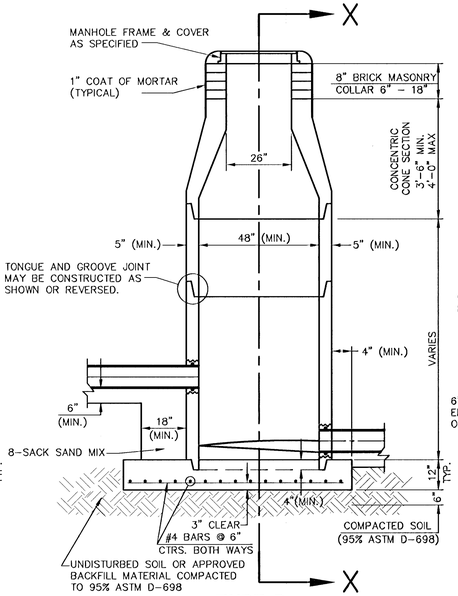
FRAME GROOVING DETAIL
(FOR SELF-SEALING MHS ONLY)

MANHOLE FRAME AND COVER NOTES

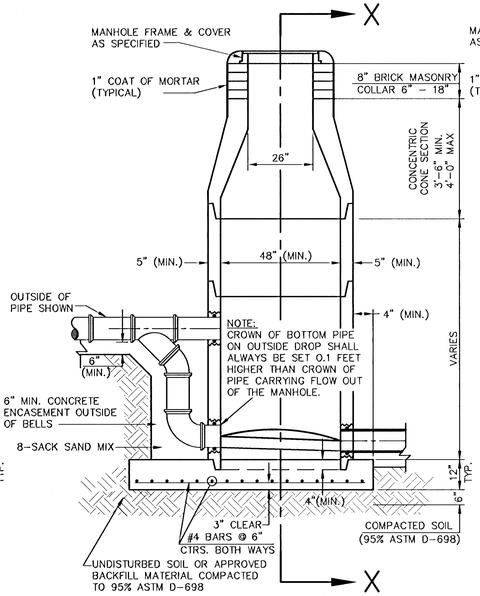
1. CAST IRON MANHOLE FRAME AND COVER SHALL CONFORM TO ASTM A-48, CLASS 30, OR BETTER.
2. THE FRAMES AND COVERS SHALL BE OF A NONROCKING TYPE OR WITH MACHINED BEARING SURFACES SO FITTING PARTS WILL NOT RATTLE OR ROCK UNDER TRAFFIC.
3. MANHOLE CASTINGS SHALL BE DEETER FOUNDRY INC. NO. 1261 OR APPROVED EQUAL, UNLESS OTHERWISE SPECIFIED IN THE SPECIAL CONDITIONS. (MINIMUM WT.–430 LBS.) ALL MANHOLE CASTINGS, REGARDLESS OF TYPE, SHALL BE CONSIDERED SUBSIDIARY TO THE UNIT PRICES BID FOR THE VARIOUS MANHOLE TYPES.
4. GRIND ALL BURRS SMOOTH, CLEAN THOROUGHLY, THEN APPLY SHOP COAT OF ASPHALT BASE PAINT.
5. 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.
6. WHERE SELF-SEALING MANHOLE FRAMES ARE SPECIFIED ON THE PLANS, 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. THE CONTRACTOR SHALL SUPPLY TO THE OWNER ONE (1) REPLACEMENT "O" RING GASKET FOR EACH SELF-SEALING MANHOLE SPECIFIED.



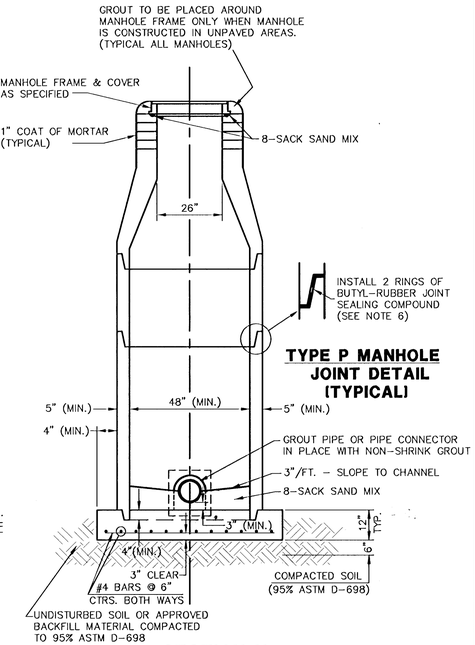
TYPE P
STANDARD MANHOLE



TYPE P
INSIDE DROP MANHOLE



TYPE P
OUTSIDE DROP MANHOLE

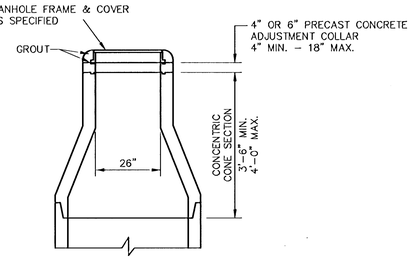


TYPE P MANHOLE JOINT DETAIL (TYPICAL)

SECTION X (TYPICAL)

GENERAL NOTES - PRECAST MANHOLE NOTES

1. ALL PRECAST CONCRETE MANHOLE SECTIONS SHALL CONFORM TO THE LATEST REVISIONS OF A.S.T.M. C478 AS MODIFIED BY THE SPECIFICATIONS.
2. NON–SHRINK GROUT SHALL BE NON–METALLIC TYPE.
3. APPROVED FLEXIBLE WATERSTOP GASKETS SHALL BE INSTALLED TO JOIN THE SEWER TO THE MANHOLE WALL WHEN A.B.S. COMPOSITE PIPE OR P.V.C. PIPE IS USED. FOR OTHER TYPES OF PIPE THE SEWER SHALL BE GROUTED IN PLACE WITH NON–SHRINK GROUT. THE SEWER PIPE SHALL BE SUPPORTED WITH CONCRETE ENCASEMENT A MINIMUM OF 3 FEET FROM THE MANHOLE WALL AND TO THE FIRST JOINT FOR V.C.P. SUCH THAT THE JOINT REMAINS FLEXIBLE.
4. ALL INSIDE SURFACES OF THE CONCRETE MANHOLE WHICH WOULD BE EXPOSED TO SEWER GAS SHALL BE COATED WITH 2 COATS TNEMEC SERIES 66 HI–BUILD EPOXOLINE, DRY THICKNESS OF 8 MILS (MIN.)
5. EXTERIOR MANHOLE WALLS SHALL BE COATED WITH 1 COAT MOBILARMA 633 BITUMINUS COATING.
6. JOINT SEALING COMPOUND SHALL BE KENT SEAL NO. 2 OR APPROVED EQUAL.
7. PRECAST MANHOLES SHALL BE SET AT LEAST 4 INCHES INTO THE MANHOLE BASE.
8. 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.
9. LIFTING HOLES SHALL BE FILLED WITH NON–SHRINK GROUT AND THE INTERIOR SURFACE COATED AS SPECIFIED.
10. MORTAR USED IN MASONRY CONSTRUCTION SHALL CONTAIN 8 SACKS OF CEMENT PER CUBIC YARD. CONCRETE USED IN MANHOLE BASES SHALL CONFORM TO THE REQUIREMENTS OF CONCRETE FOR CONCRETE PAVEMENT CONSTRUCTION AS SPECIFIED IN THE CITY STANDARD PAVING SPECIFICATIONS USING CITY CONCRETE PAVEMENT MIX WITHOUT AIR ENTRAINING ADMIXTURE. MORTAR SHALL BE PLACED AROUND THE MANHOLE RING AS SHOWN ON THE DRAWINGS WHEN MANHOLES ARE CONSTRUCTED IN UNPAVED AREAS. MANHOLES CONSTRUCTED WHERE PIPE SIZES ARE SMALLER THAN 24" SHALL HAVE AN INSIDE DIAMETER OF 4'. MANHOLES CONSTRUCTED WHERE PIPE SIZES ARE 24" OR LARGER SHALL HAVE AN INSIDE DIAMETER OF 5'. COMPLETED MANHOLE SHALL BE WITHOUT LEAKS AND WATER TIGHT.
11. REINFORCING STEEL SHALL BE INSTALLED IN THE MANHOLE BASES AND SHALL CONSIST OF NO. 4 BARS PLACED ON 6" CENTERS IN BOTH DIRECTIONS. THE MANHOLE BASE REINFORCEMENT SHALL BE PLACED AT LEAST 3" ABOVE THE BOTTOM OF THE MANHOLE BASE. ALL COSTS FOR FURNISHING AND INSTALLING REINFORCING STEEL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE MANHOLE.
12. OPENINGS SHALL BE CUT INTO THE MANHOLE WALL WHEN OUTSIDE DROPS ARE CONSTRUCTED ON EXISTING MANHOLES. SUCH OPENINGS CUT INTO EXISTING MANHOLES SHALL BE AS SMALL AS PRACTICAL TO FACILITATE INSTALLING AND GROUTING THE NEW PIPE IN PLACE. WATERSTOP GASKETS SHALL BE USED WITH P.V.C. AND A.B.S. COMPOSITE PIPE. THE NEW PIPE SHALL BE GROUTED INTO THE OPENING USING AN APPROVED NONSHRINK GROUT FOR THE FULL MANHOLE WALL THICKNESS. THE EXTERIOR OF THE COMPLETED CONNECTION SHALL BE SEALED WITH AN APPROVED BITUMINOUS COATING SUCH THAT THE CONNECTION WILL BE WATER TIGHT. FLOOR OF MANHOLE SHALL BE MODIFIED TO FORM NEW FLOW CHANNEL FOR THE NEW CONNECTION AS INDICATED BY THE DRAWING. THIS WORK, INCLUDING MODIFICATION OF MANHOLE FLOOR, SHALL BE PAID FOR AT THE UNIT PRICE BID FOR OUTSIDE DROP STACK CONSTRUCTED ON EXISTING MANHOLE.
13. THE FLOORS OF ALL MANHOLES SHALL BE SHAPED WITH FLOW CHANNELS SUCH THAT THE MANHOLES WILL BE SELF CLEANING AND FREE OF AREAS WHERE SOLIDS COULD BE DEPOSITED AS SEWAGE FLOWS THROUGH THE MANHOLE FROM ALL INLET PIPES TO THE OUTLET PIPE. FLOW CHANNELS SHALL BE FORMED TO MATCH THE BOTTOM HALVES OF THE INFLOWING PIPES AND THE OUTFLOWING PIPE AS SHOWN BY THE DRAWINGS EXCEPT FOR INSIDE DROP MANHOLES. FLOW CHANNELS FOR INSIDE DROP MANHOLES SHALL BE CONSTRUCTED AS INDICATED BY THE DRAWING. MANHOLE FLOORS SHALL HAVE SLOPES OF 3 INCHES PER FOOT IN THE AREAS OUTSIDE OF THE FLOW CHANNELS SLOPED TOWARD THE FLOW CHANNELS. PIPES LAID THROUGH MANHOLES SHALL HAVE THE TOP HALF REMOVED TO NEAT LINES FOR THE FULL INSIDE DIAMETER OF THE MANHOLE. MANHOLE FLOORS SHALL THEN BE SHAPED AROUND THE BOTTOM HALF OF THE PIPE WHICH FORMS THE FLOW CHANNEL.
14. PIPES INSTALLED WITHIN THE EXCAVATION MADE FOR THE MANHOLE SHALL BE CRADLED WITH CONCRETE TO THE LIMITS OF THE MANHOLE EXCAVATION. WHEN CLAY PIPE IS USED, THE CRADLE SHALL EXTEND TO THE FIRST JOINT OUTSIDE THE MANHOLE. THE CRADLE SHALL BE TERMINATED AT THE CLAY PIPE JOINT IN A MANNER WHICH WILL MAINTAIN THE FLEXIBILITY OF THE JOINT. COST OF CRADLE WITHIN MANHOLE EXCAVATION OR TO CLAY PIPE JOINTS ADJACENT TO MANHOLE SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE MANHOLE.
15. MANHOLE COVER CASTINGS AND MANHOLE FRAME CASTINGS SHALL CONFORM TO THE REQUIREMENTS AS INDICATED IN THE STANDARD SPECIFICATIONS AND AS SHOWN IN THE STANDARD DETAIL DRAWING.
16. THE VERTICAL DROP IN INSIDE DROP MANHOLES SHALL NOT EXCEED 2' FOR INFLOWING PIPES. THE CROWNS OF INFLOWING PIPES SHALL NEVER BE SET LOWER THAN THE CROWN OF THE OUTFLOWING PIPE.
17. STANDARD MANHOLES AND STANDARD INSIDE DROP MANHOLES SHALL BE BID AS STANDARD MANHOLES FOR THE TYPE AND DIAMETER INDICATED. OUTSIDE DROP MANHOLES SHALL BE BID AS STANDARD OUTSIDE DROP MANHOLES FOR THE TYPE AND DIAMETER INDICATED. ALL MANHOLE DIAMETERS WILL BE 4' UNLESS INDICATED OTHERWISE.
18. A BRICK MASONRY COLLAR SHALL BE INSTALLED BETWEEN THE CAST IRON FRAME AND THE CONCENTRIC CONE. THE COLLAR WILL HAVE 8" WALLS AND A VERTICAL HEIGHT OF 6" MINIMUM AND 18" MAXIMUM. A 1" COAT OF MORTAR WILL BE PLASTERED ON THE OUTSIDE OF THE COLLAR.



ALTERNATE CONSTRUCTION IN UNPAVED AREAS

REVISED: 6-12-06
I:\ENVR\00276\DWG\SAN\WAWONA\00276_BD

2/7

MANHOLE DETAILS

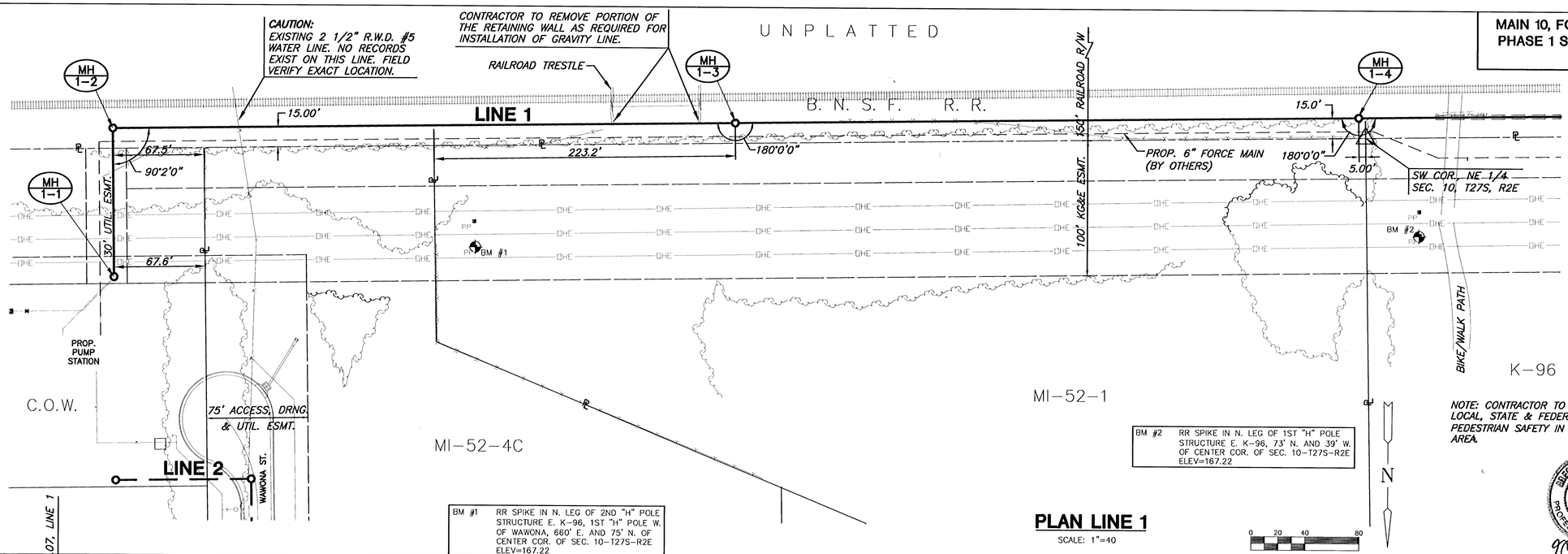
CITY OF WICHITA, KANSAS

Design C.O.W.	Checked by	Checked by	
Drawn by	Date	Date APRIL 2001	Job No. 468-699003

GREGORY J. ALLIBERT LICENSED 11169 12/31/01 KANSAS PROFESSIONAL ENGINEER

I:\ENVR\00276\dwg\SAN\WAWONA\00276_Bd.dwg Wed May 23 12:01:00 2001

MAIN 10, FOUR MILE CREEK
PHASE 1 SANITARY SEWER
LINE 1



BM #1 RR SPIKE IN N. LEG OF 2ND "H" POLE STRUCTURE E. K-96, 1ST "H" POLE W. OF WAWONA, 660' E. AND 75' N. OF CENTER COR. OF SEC. 10-T27S-R2E ELEV=167.22

BM #2 RR SPIKE IN N. LEG OF 1ST "H" POLE STRUCTURE E. K-96, 73' N. AND 39' W. OF CENTER COR. OF SEC. 10-T27S-R2E ELEV=167.22

NOTE: CONTRACTOR TO CONFORM TO ALL LOCAL, STATE & FEDERAL STANDARDS FOR PEDESTRIAN SAFETY IN BIKE/WALK PATH AREA.

PLAN LINE 1

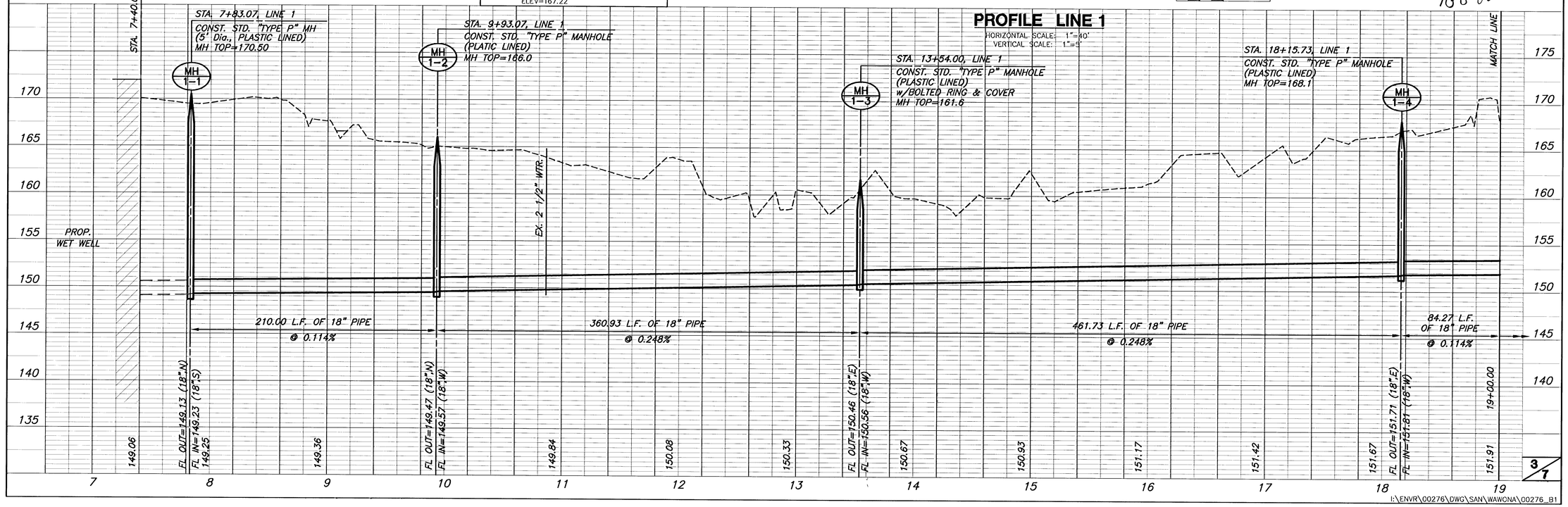
SCALE: 1"=40

0 20 40 80

GREGORY J. ALLRED LICENSED 11169 5/31/01 MANDAN PROFESSIONAL ENGINEER

PROFILE LINE 1

HORIZONTAL SCALE: 1"=40'
VERTICAL SCALE: 1"=5'



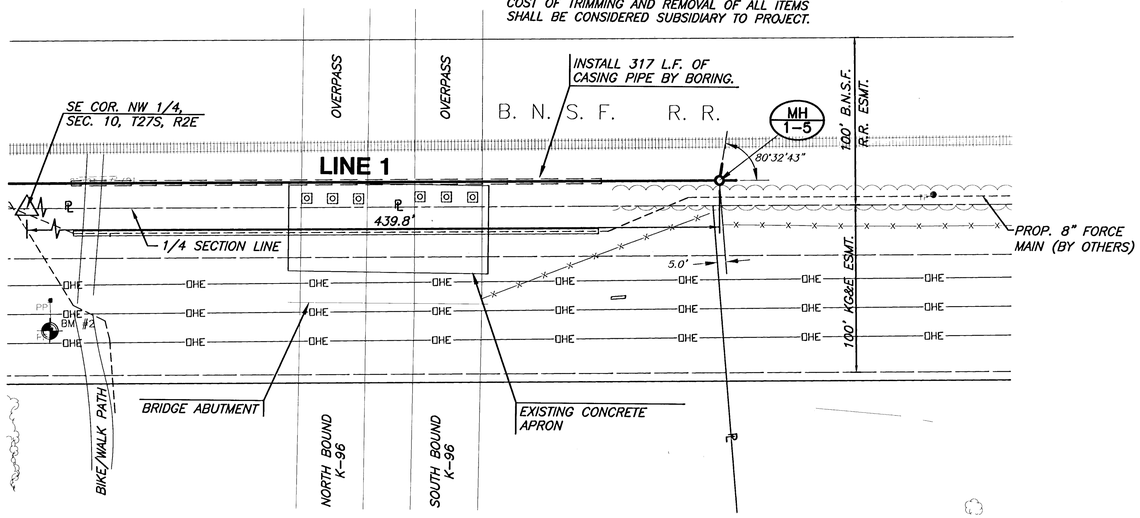
3/1

I:\ENVR\00276\DWG\SAN\WAWONA\00276_B1

I:\ENVR\00276\dwg\SAN\WAWONA\00276_P1.dwg Thu May 24 09:56:01 2001

MAIN 10, FOUR MILE CREEK
PHASE 1 SANITARY SEWER
LINE 1

NOTE: TRIM TREES AS REQUIRED. SEE DETAIL FOR TREE TRIMMING. REMOVAL OF TREES ONLY WITH PERMISSION OF THE ENGINEER. ABANDONED TELEGRAPH POLES AND WIRES SHALL BE REMOVED. COST OF TRIMMING AND REMOVAL OF ALL ITEMS SHALL BE CONSIDERED SUBSIDIARY TO PROJECT.



K-96

BM #2 RR SPIKE IN N. LEG OF 1ST "H" POLE STRUCTURE E. K-96, 73' N. AND 39' W. OF CENTER COR. OF SEC. 10-T27S-R2E ELEV=167.22

PLAN LINE 1 (cont.)

SCALE: 1"=40

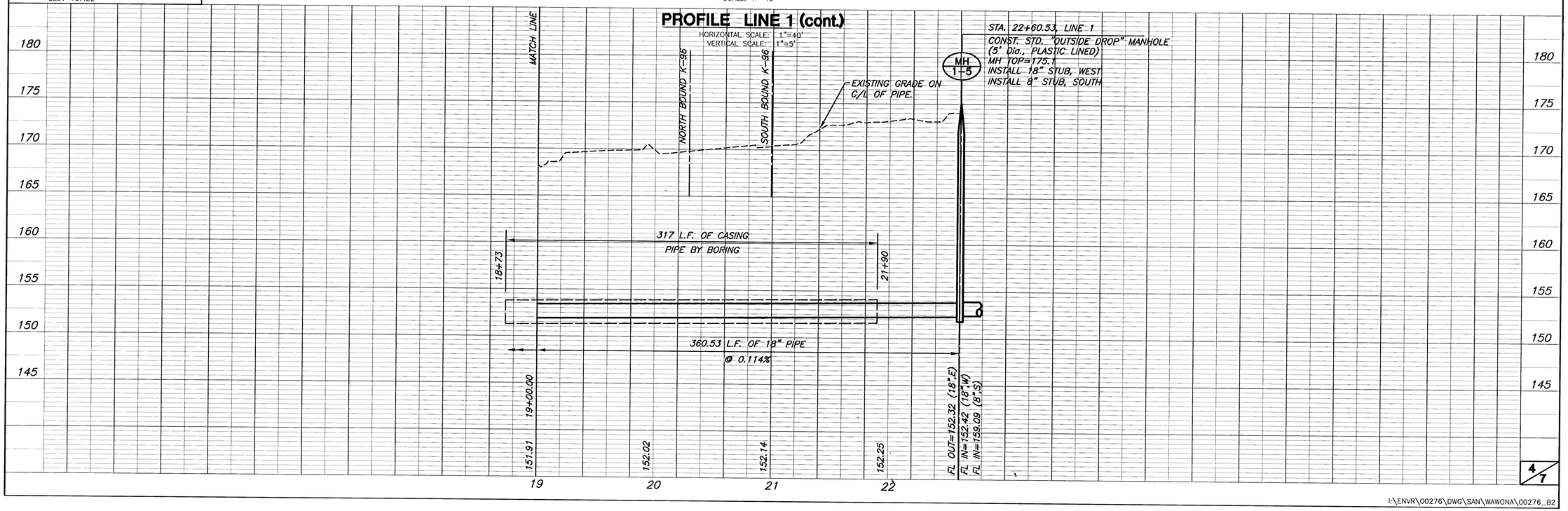
N

0 20 40 80



PROFILE LINE 1 (cont.)

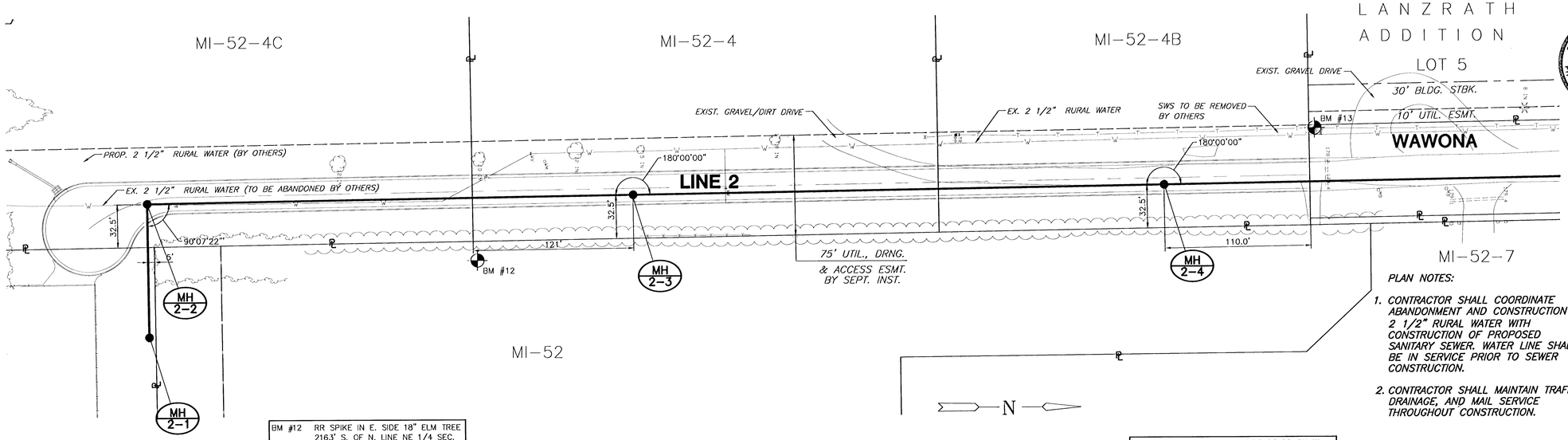
HORIZONTAL SCALE: 1"=40'
VERTICAL SCALE: 1"=5'



I:\ENVR\00276\DWG\SAN\WAWONA\00276_B2

I:\ENVR\00276\dwg\SAN\WAWONA\00276_B2.dwg Thu May 24 10:01:14 2001

MAIN 10, FOUR MILE CREEK
PHASE 1 SANITARY SEWER
LINE 2



GREGORY J. ALLRED
LICENSED
5/23/01
11168
KANSAS
PROFESSIONAL ENGINEER

PLAN NOTES:

1. *CONTRACTOR SHALL COORDINATE ABANDONMENT AND CONSTRUCTION OF 2 1/2" RURAL WATER WITH CONSTRUCTION OF PROPOSED SANITARY SEWER. WATER LINE SHALL BE IN SERVICE PRIOR TO SEWER CONSTRUCTION.*
2. *CONTRACTOR SHALL MAINTAIN TRAFFIC, DRAINAGE, AND MAIL SERVICE THROUGHOUT CONSTRUCTION.*

BM #12 RR SPIKE IN E. SIDE 18" ELM TREE 2163' S. OF N. LINE NE 1/4 SEC. 10-T27S-R2E (21ST ST. N.) & 62' E. OF THE W. LINE OF WAWONA EXTENDED SOUTH. ELEV=176.30

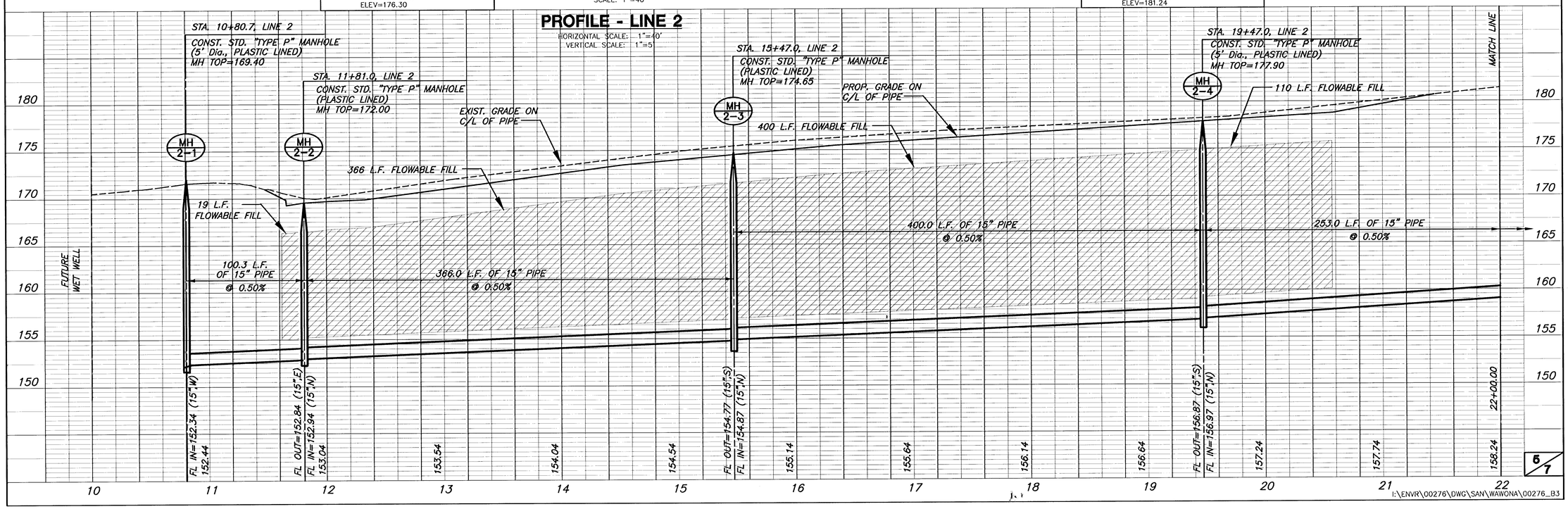
BM #13 RR SPIKE IN W. SIDE OF PP ON W. SIDE OF WAWONA, 1531' S. OF THE N. OF THE NE 1/4 SEC. 10-T27S-R2E ELEV=181.24

PLAN - LINE 2

SCALE: 1"=40

PROFILE - LINE 2

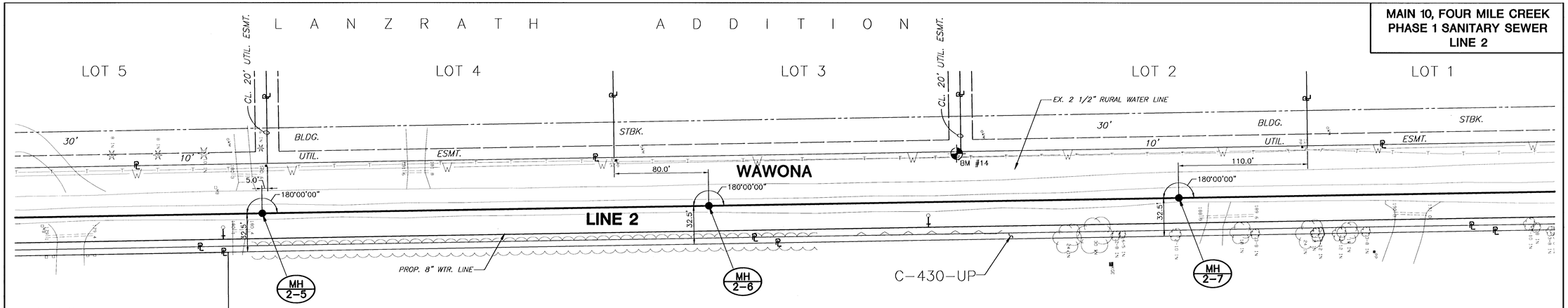
HORIZONTAL SCALE: 1"=40'
VERTICAL SCALE: 1"=5'



I:\ENVR\00276\DWG\SAN\WAWONA\00276_B3

I:\ENVR\00276\dwg\SAN\WAWONA\00276_p3.dwg Wed May 23 09:06:02 2001

MAIN 10, FOUR MILE CREEK
PHASE 1 SANITARY SEWER
LINE 2



PLAN NOTES:

1. *CONTRACTOR SHALL MAINTAIN TRAFFIC, DRAINAGE, AND MAIL SERVICE THROUGHOUT CONSTRUCTION.*
2. *CONTRACTOR TO PROVIDE A MINIMUM OF 6" GRAVEL COVER OVER MANHOLES 2-5 TRHOUGH 2-7.*

GREGORY J. ALLISON
LICENSED
11100
KANSAS
PROFESSIONAL ENGINEER

N

0 20 40 80

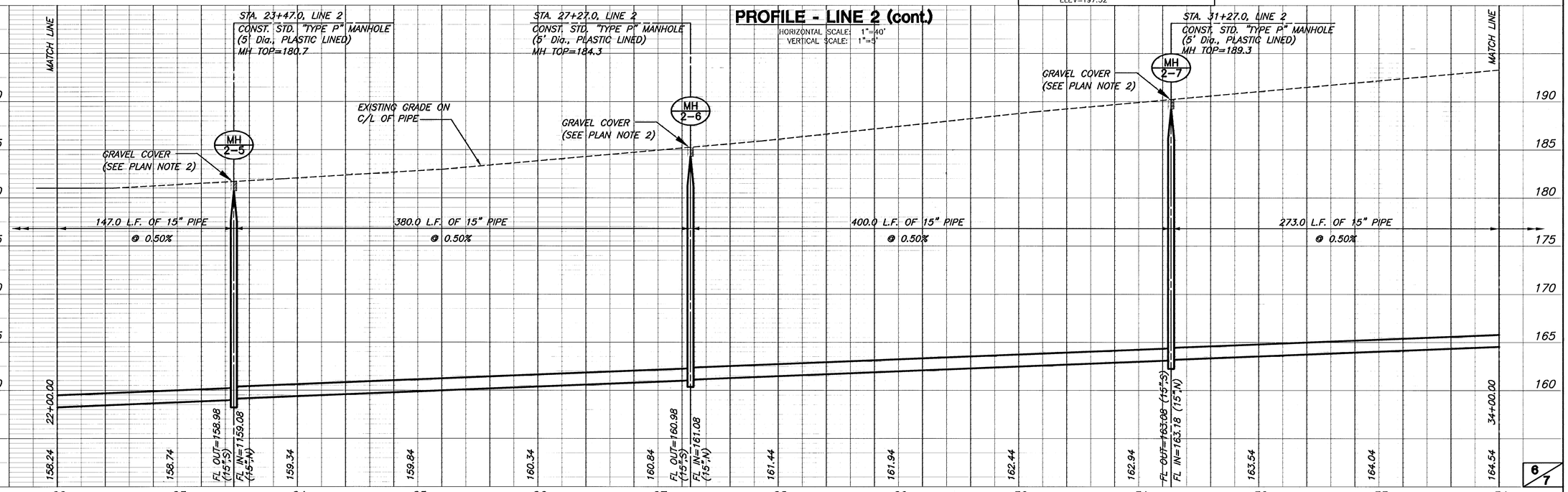
PLAN - LINE 2 (cont.)

SCALE: 1"=40

BM #14 RR SPIKE IN W. SIDE OF PP ON W. SIDE OF WAWONA, 654' S. OF THE N. LINE OF THE NE 1/4 SEC. 10-T27S-R2E ELEV=197.32

PROFILE - LINE 2 (cont.)

HORIZONTAL SCALE: 1"=40'
VERTICAL SCALE: 1"=5'



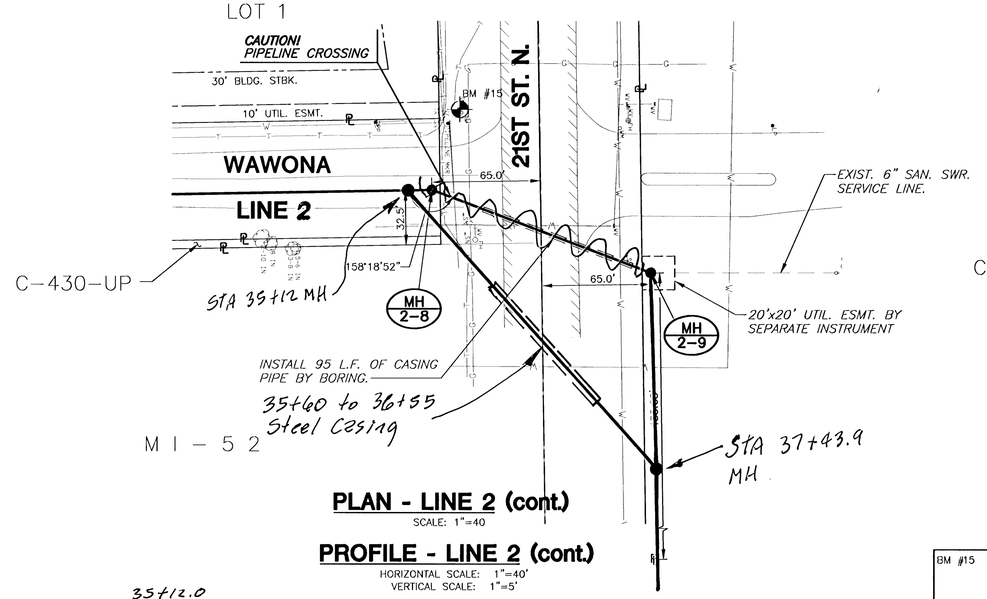
I:\ENVR\00276\DWG\SAN\WAWONA\00276_B4

I:\ENVR\00276\dwg\SAN\WAWONA\00276_B4.dwg Wed May 23 09:10:38 2001

MAIN 10, FOUR MILE CREEK
PHASE 1 SANITARY SEWER
LINE 2

LANZRATH ADDITION

LOT 1



MESSIAH BAPTIST
CHURCH 4TH ADDITION

PLAN - LINE 2 (cont.)

SCALE: 1"=40

PROFILE - LINE 2 (cont.)

HORIZONTAL SCALE: 1"=40'
VERTICAL SCALE: 1"=5'

PLAN NOTES:

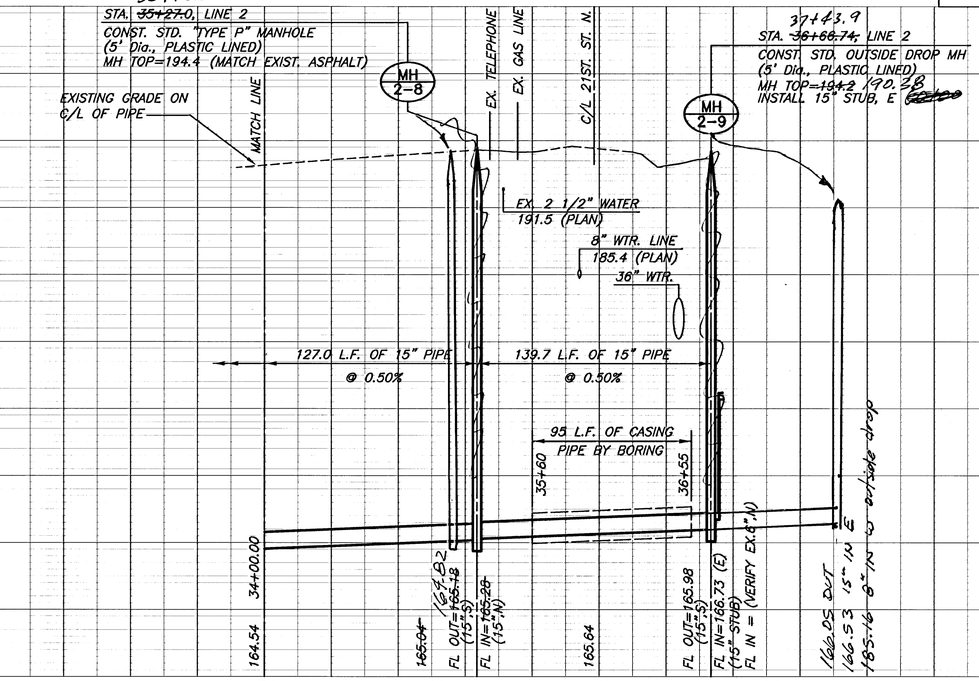
1. *CONTRACTOR SHALL MAINTAIN TRAFFIC AND DRAINAGE THROUGHOUT CONSTRUCTION*

BM #15 STEPPED SPIKE IN N. SIDE OF PP ON SW. COR. 21ST & WAWONA 779' E. & 48' S. OF N. 1/4 COR. SEC. 10-T27S-R2E
ELEV=197.32

GREGORY J. ALLISON
LICENSED
5/2/01
11100
KANSAS
PROFESSIONAL ENGINEER

N

0 20 40 80



7/7

I:\ENVR\00276\DWG\SAN\WAWONA\00276_B5

I:\ENVR\00276\Dwg\SAN\WAWONA\00276_b5.dwg Wed May 23 05:12:13 2001

SANITARY SEWER EXTENSION

MAIN #10, 4 MILE CREEK SEWER, PHASE 1

Church Of The Magdalen Addition

LOT 1

Project Number 468-83392
OCA Number 624503

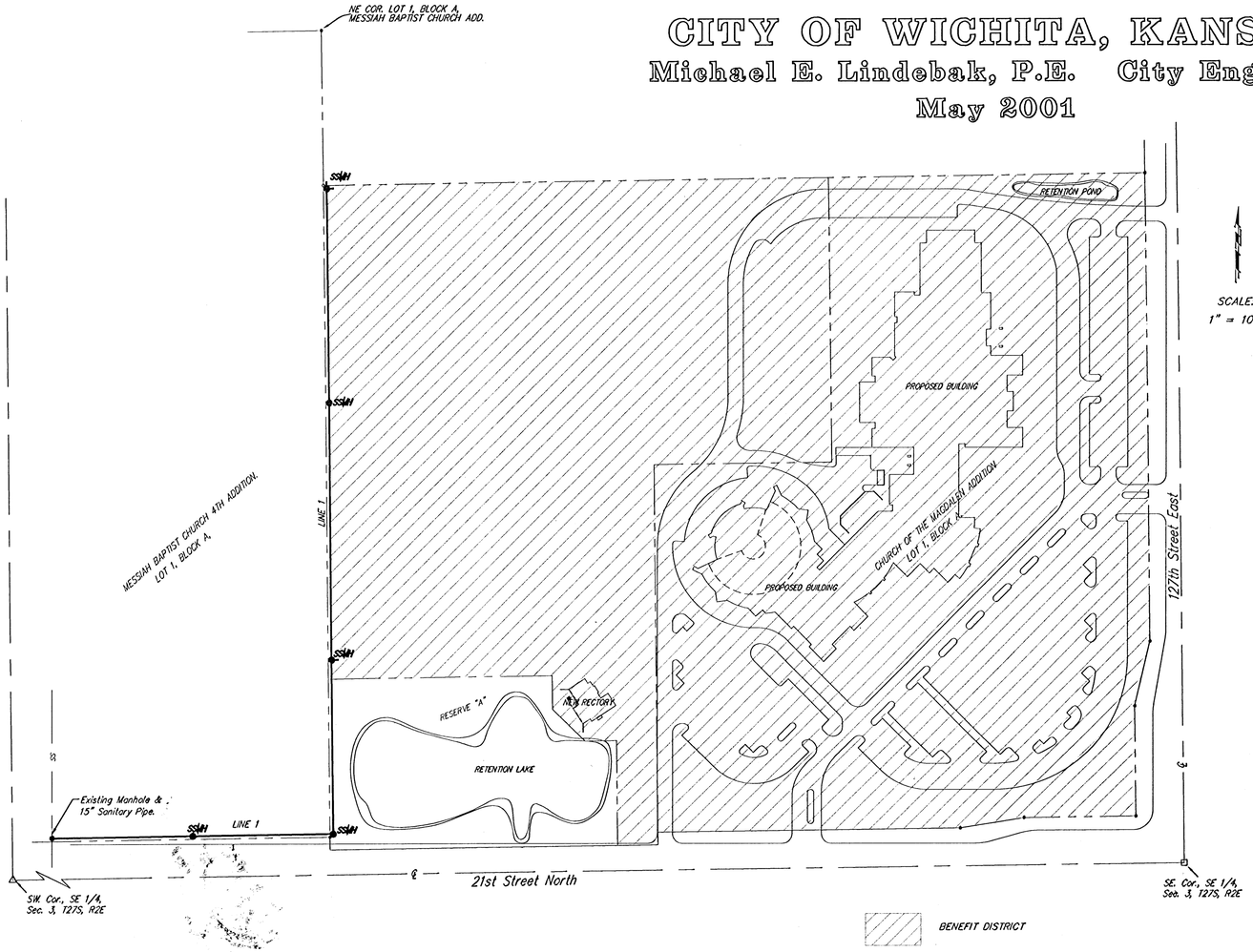
CITY OF WICHITA, KANSAS

Michael E. Lindebak, P.E. City Engineer

May 2001

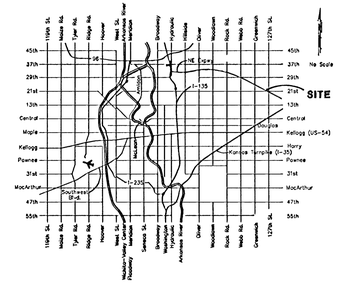
Index

Cover Sheet	1
Plan/Profile Sheet	2-3
Manhole Details	4
Ring & Cover Details	5
Copy Of Plat	6



SCALE:
1" = 100'

Location Map



BENCHMARKS:

COUNTY Benchmark #1:
" □ " Cut South Headwall 1/2 mile West of 127th Street East on 37th Street North.
Elevation = 200.16' City Datum

Benchmark #2:
" O " In "Open" of Fire Hydrant On East Side of 127th Street East Approximately 354' North of Intersection of 127th Street East & 21st Street North.
Elevation = 197.93' City Datum

Benchmark #3:
Top of Iron Pipe S.E. Corner, Sec. 12 7S, R2E Intersection of 127th Street East & 21st Street North.
Elevation = 198.01' City Datum

LEGAL DESCRIPTION:

Lot 1, Block A, Church Of The Magdalen Addition Wichita, Sedgwick County, Kansas

General Notes

1. Contractor will be required to provide notice to utility companies a minimum of forty-eight (48) hours prior to any excavation, as follows:

   Kansas One-Call 687-2470

   The Contractor must notify the following in case of an emergency:

Cox Communications	262-4270
Kansas Gas Service Company	383-8600
Kansas Gas & Electric Company	383-8650
Peoples Gas Company	942-7600
Southwestern Bell Telephone Company	1-571-2611
City of Wichita Water Department	268-4908
City of Wichita Sewer Department	268-4071

3. Utility service lines, poles, valve boxes, meters, et cetera are to be adjusted as necessary by others prior to construction unless the plans specifically call for their adjustment by the Contractor or unless the plans specifically identify a utility to be adjusted by its owner during construction. Existing utilities and their location, as shown on the plans represent the best information obtainable for design and shall be field verified. The contractor will be required to work around existing utilities within the right-of-way which do not conflict with proposed construction.

4. Contractor shall not start work on the project until the project inspector is assigned to the project and is present on the site. Any work done without inspection will be required to be uncovered for inspection.

5. All areas disturbed by construction operations shall be seeded with rye grass at a rate of 6 lbs. per 1000 sq. feet or as per city specs. Contractor to prepare ground to city specifications.

6. Rubble from the removal of miscellaneous structures and excess excavation which is to be wasted shall be disposed of on sites to be provided by the Contractor. These sites shall be approved by the Engineer as to suitability, appearance and site location. Locations that, in the opinion of the Engineer, will leave an unsightly appearance will not be approved. All disposal sites must be approved by the Kansas Department of Health and Environment. Material either stockpiled or disposed of in a flood plain would require a Kansas State Board of Agriculture permit. Any material dumped in waters of the United States or wetlands is subject to U.S. Corps. of Engineers permitting regulations. Any material buried or stockpiled beyond approved construction limits would require additional archaeological investigations unless buried in a previously approved borrow location.

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



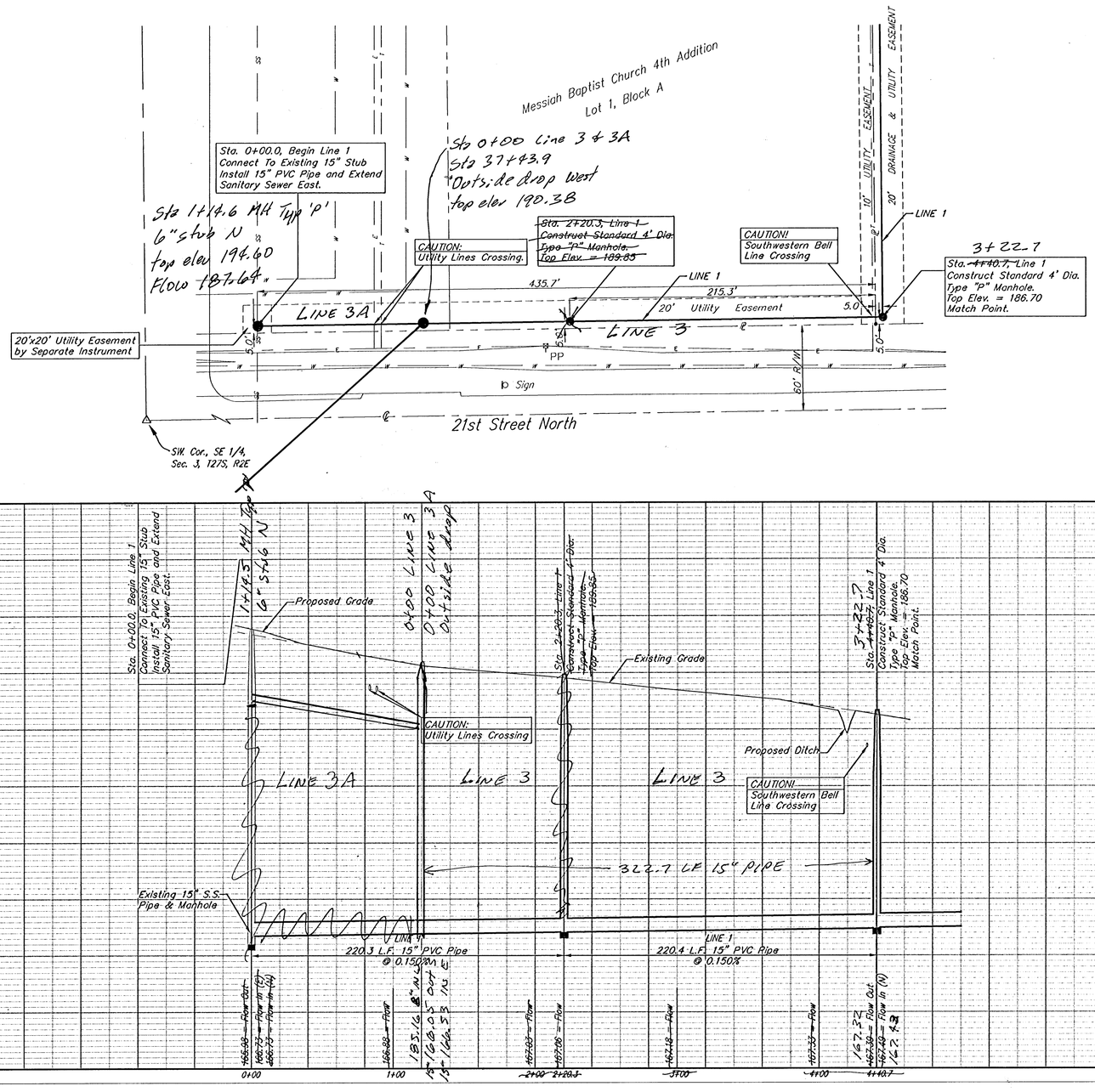
BAUGHMAN COMPANY P.A.
ENGINEERING, SURVEYING, & PLANNING
316-262-7271 • 315 ELLIS • WICHITA, KANSAS 67211

BENCHMARKS:

COUNTY Benchmark #1:
"□" Cut South Headwall 1/2 mile West of 127th Street East on 37th Street North.
Elevation = 200.16 City Datum

Benchmark #2:
"O" In "Open" of Fire Hydrant On East Side of 127th Street East Approximately 354' North of Intersection of 127th Street East & 21st Street North.
Elevation = 197.93 City Datum

Benchmark #3:
Top of Iron Pipe S.E. Corner, Sec 3, T27S, R2E Intersection of 127th Street East & 21st Street North.
Elevation = 198.01 City Datum



SANITARY SEWER TO SERVE
Church Of The Magdalen Addition
WICHITA, SEDGWICK COUNTY, KANSAS

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

PROJECT NUMBER	SHEET
468-89201	2 of 6

DESIGN	DRAWN	APPROVED	DATE	SCALE
LU	JW		05/01	NOTED

99-06-420
magdalen1.sst.dwg

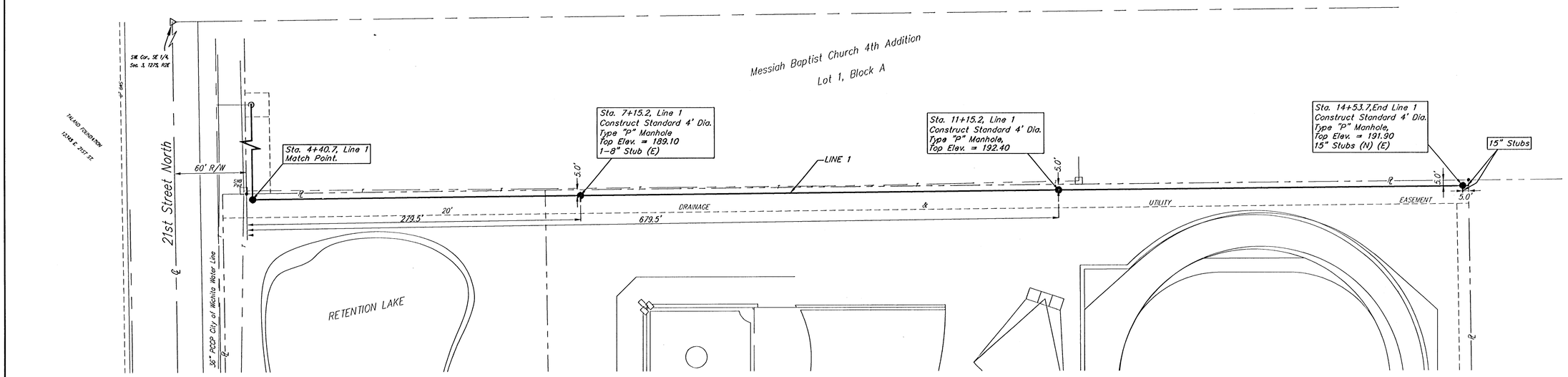
BENCHMARKS:

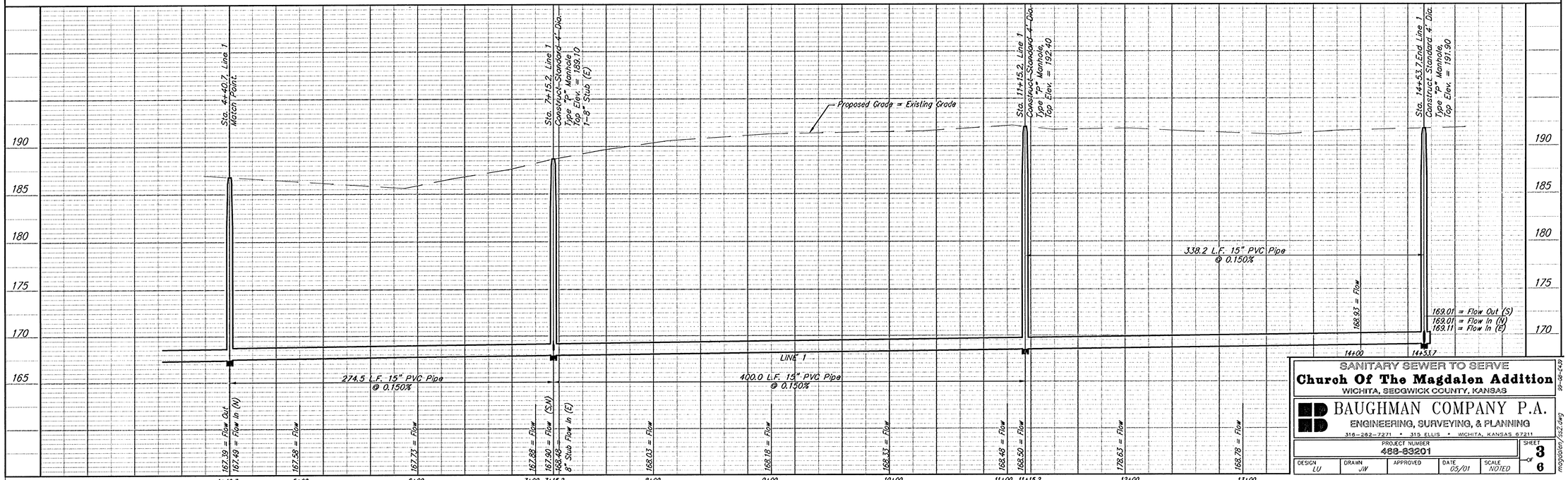
COUNTY Benchmark #1:
" □ " Cut South Headwall 1/2 mile West of 127th Street East on 37th Street North.
Elevation = 200.16 City Datum

Benchmark #2:
" O " In "Open" of Fire Hydrant On East Side of 127th Street East Approximately 354' North of Intersection of 127th Street East & 21st Street North.
Elevation = 197.93 City Datum

Benchmark #3:
Top of Iron Pipe S.E. Corner, Sec 3, T27S, R2E Intersection of 127th Street East & 21st Street North.
Elevation = 198.01 City Datum

SCALE:
1" = 40' HORIZONTAL
1" = 5' VERTICAL





SANITARY SEWER TO SERVE
Church Of The Magdalen Addition
WICHITA, SEDGWICK COUNTY, KANSAS

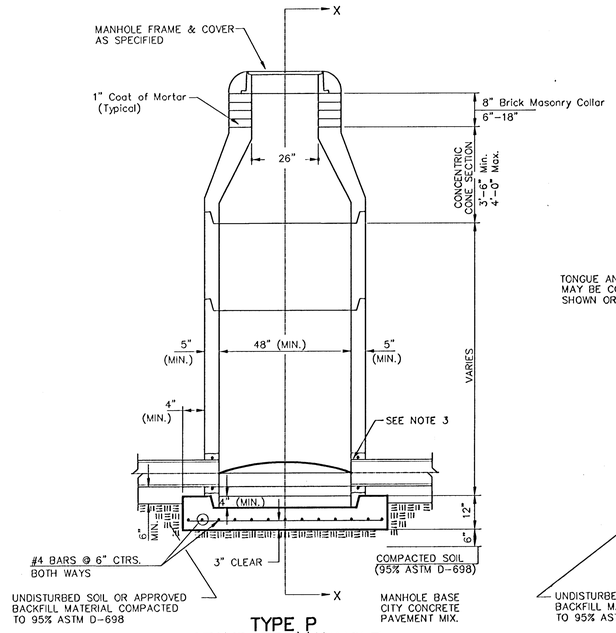
BAUGHMAN COMPANY P.A.
ENGINEERING, SURVEYING, & PLANNING
316-262-7271 • 315 ELLIS • WICHITA, KANSAS 67211

PROJECT NUMBER 488-83201 | SHEET 3 of 6

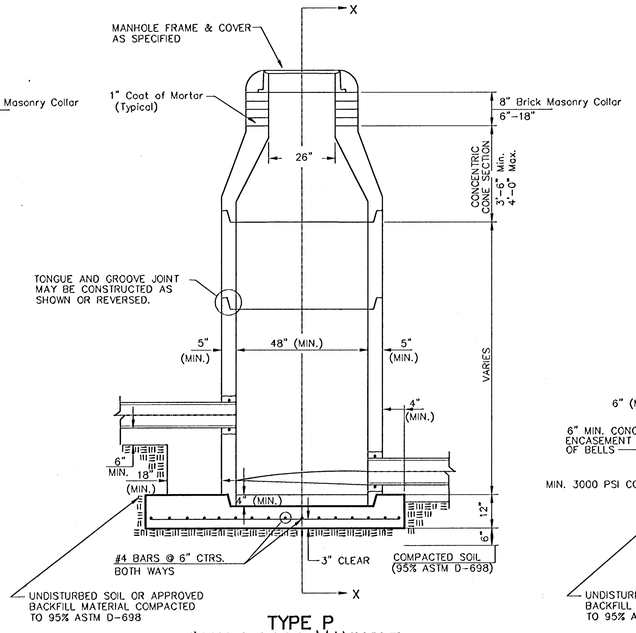
DESIGN	DRAWN	APPROVED	DATE	SCALE
LU	JW		05/01	NOTED

98-488-4.dwg
magdalen/ss2.dwg

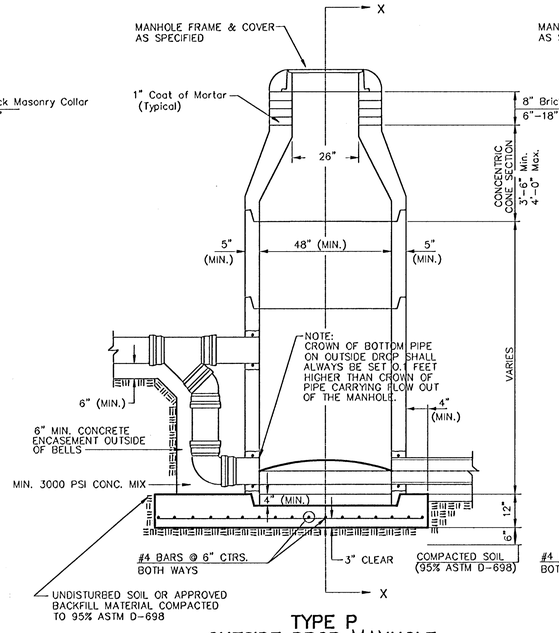
SEWER APPURTENANCES DETAILS



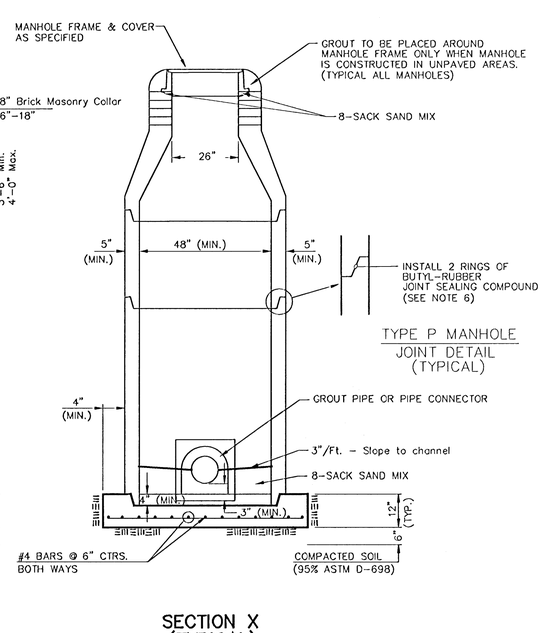
TYPE P
STANDARD MANHOLE



TYPE P
INSIDE DROP MANHOLE



TYPE P
OUTSIDE DROP MANHOLE

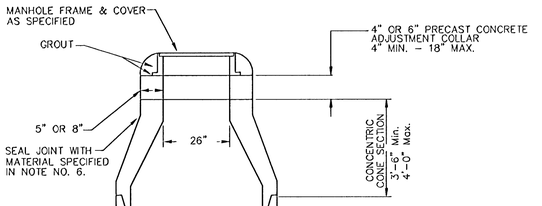


SECTION X
(TYPICAL)

GENERAL NOTES

PRECAST MANHOLE NOTES

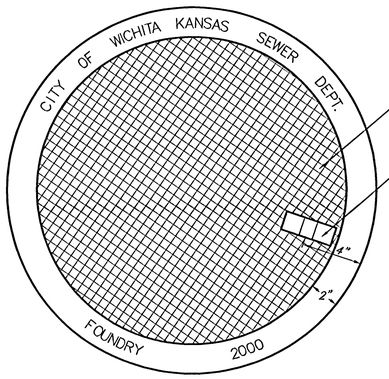
1. ALL PRECAST CONCRETE MANHOLE SECTIONS SHALL CONFORM TO THE LATEST REVISIONS OF A.S.T.M. C478 AS MODIFIED BY THE SPECIFICATIONS.
2. NON-SHRINK GROUT SHALL BE NON-METALLIC TYPE.
3. APPROVED FLEXIBLE WATERSTOP GASKETS SHALL BE INSTALLED TO JOIN THE SEWER TO THE MANHOLE WALL WHEN A.B.S. COMPOSITE PIPE OR P.V.C. PIPE IS USED. FOR OTHER TYPES OF PIPE THE SEWER SHALL BE GROUTED IN PLACE WITH NON-SHRINK GROUT. THE SEWER PIPE SHALL BE SUPPORTED WITH CONCRETE ENCASEMENT A MINIMUM OF 3 FEET FROM THE MANHOLE WALL AND TO THE FIRST JOINT FOR V.C.P. SUCH THAT THE JOINT REMAINS FLEXIBLE.
4. ALL INSIDE SURFACES OF THE CONCRETE MANHOLE WHICH WOULD BE EXPOSED TO SEWER GAS SHALL BE COATED WITH 2 COATS TNEMEC
11. REINFORCING STEEL SHALL BE INSTALLED IN THE MANHOLE BASES AND SHALL CONSIST OF NO. 4 BARS PLACED ON 6" CENTERS IN BOTH DIRECTIONS. THE MANHOLE BASE REINFORCEMENT SHALL BE PLACED AT LEAST 3" ABOVE THE BOTTOM OF THE MANHOLE BASE. ALL COSTS FOR FURNISHING AND INSTALLING REINFORCING STEEL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE MANHOLE.
12. OPENINGS SHALL BE CUT INTO THE MANHOLE WALL WHEN OUTSIDE DROPS ARE CONSTRUCTED ON EXISTING MANHOLES. SUCH OPENINGS CUT INTO EXISTING MANHOLES SHALL BE AS SMALL AS PRACTICAL TO FACILITATE INSTALLING AND GROUTING THE NEW PIPE IN PLACE. WATERSTOP GASKETS SHALL BE USED WITH P.V.C. AND A.B.S. COMPOSITE PIPE. THE NEW PIPE SHALL BE GROUTED INTO THE OPENING USING AN APPROVED NON-SHRINK GROUT FOR THE FULL MANHOLE WALL THICKNESS. THE EXTERIOR OF THE COMPLETED CONNECTION SHALL BE SEALED WITH AN APPROVED BITUMINOUS COATING SUCH THAT THE CONNECTION WILL BE
15. MANHOLE COVER CASTINGS AND MANHOLE FRAME CASTINGS SHALL CONFORM TO THE REQUIREMENTS AS INDICATED IN THE STANDARD SPECIFICATIONS AND AS SHOWN IN THE STANDARD DETAIL DRAWING.
16. THE VERTICAL DROP IN INSIDE DROP MANHOLES SHALL NOT EXCEED 2' FOR INFLOWING PIPES SIZED 12" OR SMALLER AND 2' FOR INFLOWING PIPES LARGER THAN 12". THE CROWNS OF INFLOWING PIPES SHALL NEVER BE SET LOWER THAN THE CROWN OF THE OUTFLOWING PIPE.
17. STANDARD MANHOLES AND STANDARD INSIDE DROP MANHOLES SHALL BE BID AS STANDARD MANHOLES FOR THE TYPE AND DIAMETER INDICATED. OUTSIDE DROP MANHOLES SHALL BE BID AS STANDARD OUTSIDE DROP MANHOLES FOR THE TYPE AND DIAMETER INDICATED. ALL MANHOLE DIAMETERS WILL BE 4' UNLESS INDICATED OTHERWISE.
18. A BRICK MASONRY COLLAR SHALL BE INSTALLED BETWEEN THE CAST IRON FRAME AND THE CONCENTRIC CONE. THE COLLAR WILL HAVE 8" WALLS



MANHOLE FRAME AND COVER DETAIL

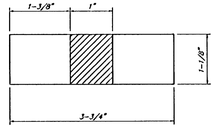
ADOPTED AS STANDARD DESIGN BY
CITY OF WICHITA, KANSAS

MANHOLE COVER
Weight = 180 Lbs.

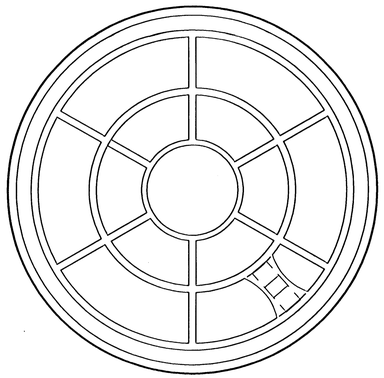


TOP VIEW

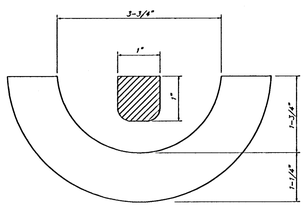
PICKHOLE DETAIL



TOP VIEW

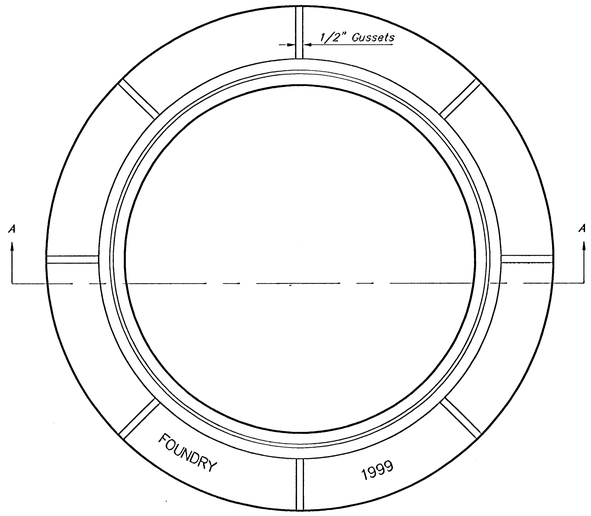


BOTTOM VIEW

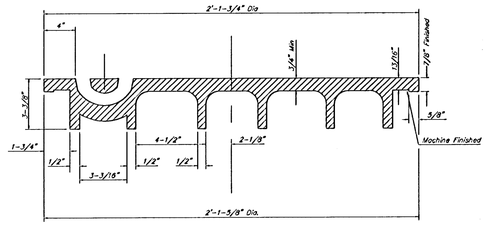


SECTION VIEW

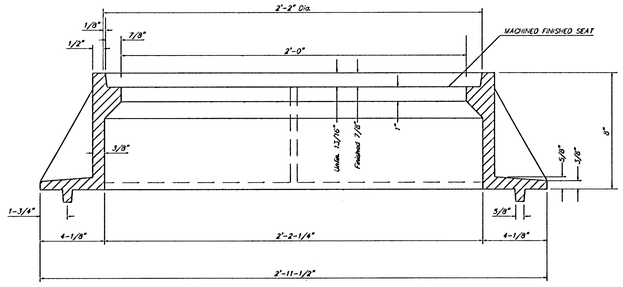
MANHOLE FRAME
Weight = 145 Lbs.



TOP VIEW



SECTION VIEW



SECTION A–A

GENERAL NOTES

MANHOLE CASTINGS SHALL BE MANUFACTURED USING GOOD QUALITY GRAY IRON CONFORMING TO CLASS 30 OF A.S.T.M. DESIGNATION A-48. DIMENSIONS AND WEIGHTS SHOWN ON THE DETAILED DRAWNGS SHALL BE CONSIDERED AS MINIMUM REQUIREMENTS AND ANY DEVIATIONS FROM THE DIMENSIONS SHOWN MUST BE SPECIFICALLY APPROVED. THE FINISHED CASTINGS SHALL BE OF UNIFORM QUALITY, FREE FROM BLOWHOLES, POROSITY, HARD SPOTS, SHRINKAGE DISTORTIONS OR OTHER DEFECTS.

MANHOLE CASTINGS SHALL BE COATED WITH AN ASPHALT PAINT RESULTING IN A SMOOTH, TOUGH AND TENACIOUS COATING WHICH IS NOT BRITTLE OR TACKY.

MANHOLE CASTINGS SHALL BE MANUFACTURED SUCH THAT A COVER MANUFACTURED BY ANY ONE FOUNDRY WILL FIT INTERCHANGEABLY INTO A FRAME MANUFACTURED BY ANOTHER FOUNDRY AND STILL MEET ALLOWABLE CLEARANCES AND NON-ROCKING REQUIREMENTS. THIS WILL REQUIRE MANUFACTURING OF THE MATCHING FACES ON THE COVER AND THE FRAME TO CLOSE TOLERANCES.

THE OUTSIDE CIRCUMFERENCE OF THE VERTICAL FACE OF THE COVER AND THE INSIDE CIRCUMFERENCE OF THE VERTICAL FACE IN THE FRAME RECESS SHALL BE MANUFACTURED TO TOLERANCES SUCH THAT THE CLEARANCE BETWEEN THE COVER AND FRAME WILL NOT EXCEED 1/8" AT ANY POINT AROUND THE CIRCUMFERENCE OF THE COVER. THE SEATING SURFACES BETWEEN THE COVER AND FRAME SHALL BE MACHINED SUCH AS THESE SURFACES SHALL MAKE FULL CONTACT FOR THEIR FULL CIRCUMFERENCE TO PRECLUDE THE COVER FROM ROCKING IN THE FRAME.

THE MANHOLE FRAME AND COVER SHALL BE MARKED WITH LETTERING INDICATING THE NAME OF THE MANUFACTURER AND THE YEAR WHEN THE COVER OR FRAME WAS CAST. THE COVER SHALL BE FURTHER IDENTIFIED WITH REGARDS TO OWNERSHIP USING LETTERS AT LEAST 1 INCH IN HEIGHT. THIS IDENTIFICATION SHALL BE "CITY OF WCHITA SEWER DEPARTMENT". THE WORD DEPARTMENT MAY BE ABBREVIATED. THE TEXTURE OF THE TOP SURFACE OF THE COVER SHALL BE MANUFACTURED IN A CHECKERED PATTERN DESIGN AS INDICATED ON THE DRAWINGS. SMOOTH BLOCKOUTS SHALL BE UTILIZED TO HIGHLIGHT THE LETTERING ON THE COVER SURFACE. THE TOTAL AREA OF SMOOTH SURFACE BLOCKOUT SHALL NOT EXCEED THE AREA AS INDICATED ON THE DRAWNG. POSITIONING OF SMOOTH BLOCKOUTS AND LETTERING MAY VARY FROM THAT SHOWN ON THE DETAILED DRAWING.

MANHOLE FRAME AND COVER DETAIL
ADOPTED AS STANDARD DESIGN BY
CITY OF WICHITA, KANSAS

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

PROJECT NUMBER	SHEET
488-83201	5 OF 6

DESIGN	DRAWN	APPROVED	DATE	SCALE
STAFF	STAFF		05/01	NONE

Magdalen Printing 99-08-4249

CHURCH OF THE MAGDALEN ADDITION

WICHITA, SEDGWICK COUNTY, KANSAS

NOTE:
A DRAINAGE PLAN HAS BEEN DEVELOPED FOR THIS SUBDIVISION AND IS ON FILE WITH THE CITY OF WICHITA, KANSAS. DRAINAGE INTENT SHALL REMAIN AS DEPICTED OR AS MODIFIED WITH THE APPROVAL OF THE CITY ENGINEER OF THE CITY OF WICHITA, KANSAS. NO OBSTRUCTIONS WHICH IMPEDE THE FLOW OF THIS DRAINAGE PLAN SHALL BE ALLOWED.

0 100 200

● = #4 REBAR W/ "BAUGHMAN" CAP (SET)
○ = #4 REBAR W/ "BAUGHMAN" CAP (FOUND)
□ = 3/4" IRON (FOUND)
△ = #5 REBAR W/ "FERGY" CAP (FOUND)
▲ = #4 REBAR OVER STONE (FOUND)

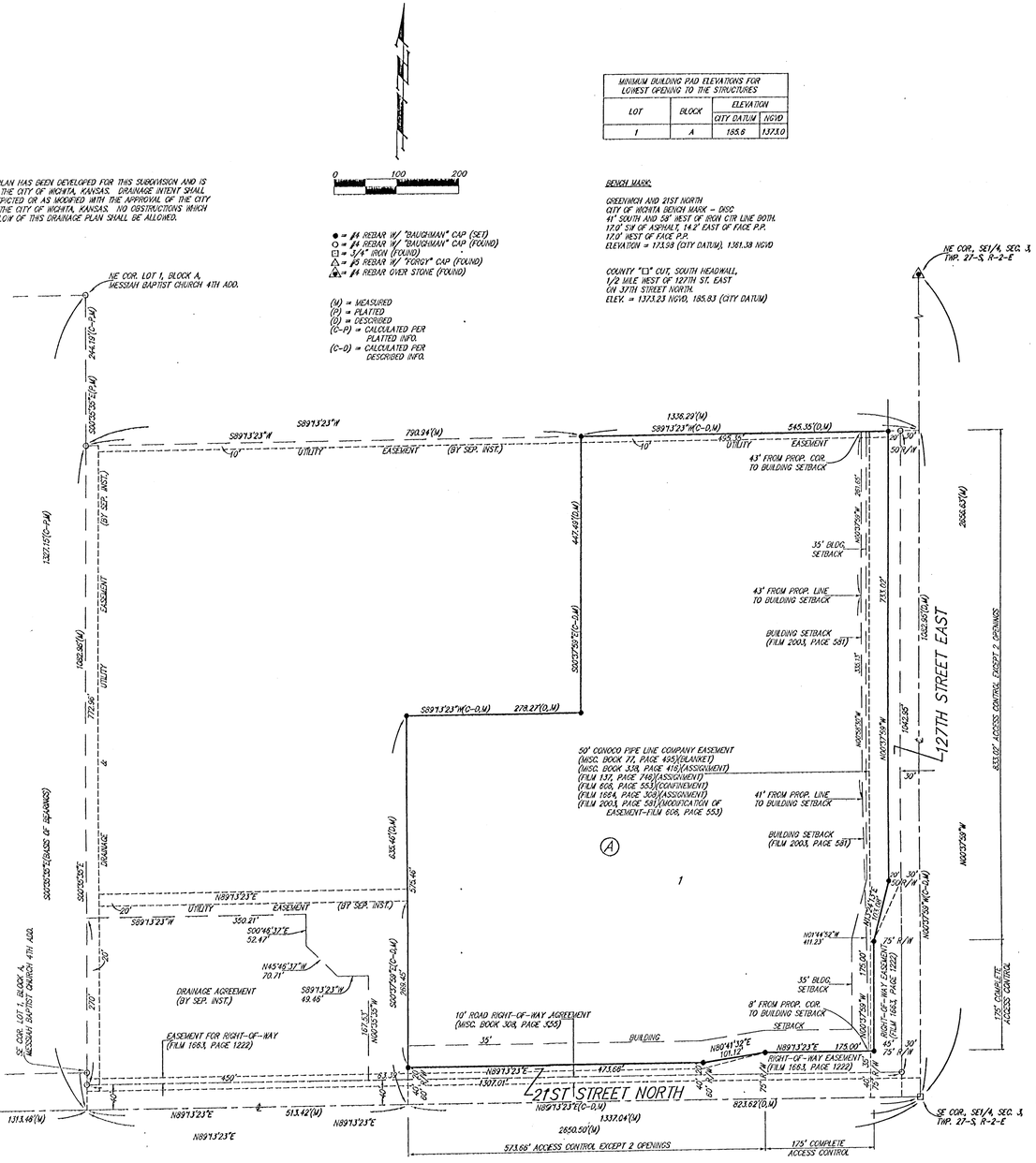
(M) = MEASURED
(P) = PLATTED
(D) = DESCRIBED
(C-P) = CALCULATED PER PLATTED INFO.
(C-D) = CALCULATED PER DESCRIBED INFO.

MINIMUM BUILDING PAD ELEVATIONS FOR LOWEST OPENING TO THE STRUCTURES			
LOT	BLOCK	ELEVATION	
		CITY DATUM	NGVD
1	A	185.6	1373.0

BENCH MARK:

GREENWICH AND 21ST NORTH
CITY OF WICHITA BENCH MARK - DISC.
41' SOUTH AND 58' WEST OF IRON C/R LINE BOTH.
17.0' S/W OF ASPHALT, 14.2' EAST OF FACE P.P.
17.0' WEST OF FACE P.P.
ELEVATION = 173.59 (CITY DATUM), 1361.38 NGVD

COUNTY "D" CUT, SOUTH HEADWALL,
1/2 MILE WEST OF 127TH ST. EAST
ON 37TH STREET NORTH.
ELEV. = 1373.23 NGVD, 185.83 (CITY DATUM)



NOTE:
THE FOLLOWING INSTRUMENT IS IN THE PROCESS OF BEING RELEASED THIS 16TH DAY OF OCTOBER, 2000.
TELEPHONE AND TELEGRAPH EASEMENT TO SHELL PETROLEUM

State of Kansas)
Sedgwick County) SS

We, Baughman Company, P.A., Surveyors in aforesaid county and state do hereby certify that we have surveyed and platted "CHURCH OF THE MAGDALEN ADDITION", Wichita, Sedgwick County, Kansas and that the accompanying plat is a true and correct exhibit of the property surveyed, described as Beginning at the SE corner of the SE1/4 of Sec. 3, Twp. 27-S, R-2-E of the 6th P.M., Sedgwick County, Kansas; thence north along the east line of said SE1/4, 1082.95 feet; thence west parallel with the south line of said SE1/4, 545.35 feet; thence south parallel with the east line of said SE1/4, 447.49 feet; thence west parallel with the south line of said SE1/4, 278.27 feet; thence south parallel with the east line of said SE1/4, 635.46 feet to a point on the south line of said SE 1/4; thence east along the south line of said SE 1/4, 823.62 feet to the point of beginning, subject to road rights-of-way over the south 40.00 feet and the east 30.00 feet thereof.

Existing easements and dedications being vacated by virtue of K.S.A. 12-512(b).

Baughman Company, P.A.

Michael C. Conrey — 10-20-2000
Michael C. Conrey, Surveyor

RICHARD G. CONREY — REGISTERED — L.S.-971 — KANSAS — LAND SURVEYOR

Know all men by these presents that we, the undersigned, have caused the land in the surveyors certificate to be platted into a Lot, a Block, and Streets, to be known as "CHURCH OF THE MAGDALEN ADDITION", Wichita, Sedgwick County, Kansas. The utility easement is hereby granted as indicated for the construction and maintenance of all public utilities. The streets are hereby dedicated to and for the use of the public. Access controls shall be as depicted on the face of the plat and are hereby granted to the City of Wichita, Kansas. The permitted opening locations shall be as determined by the City Engineer of the City of Wichita, Kansas. The Minimum Building Pad Elevations for the lowest opening to the structures on Lot 1, Block A, shall be 185.6 City Datum, (1373.0 NGVD).

The Catholic Diocese of Wichita

John P. Lanzrath, Asst. Sec/Treas.
JOHN P. LANZRATH (Title)

State of Kansas)
Sedgwick County) SS

The foregoing instrument acknowledged before me, this 16th day of November, 2000, by John P. Lanzrath, Asst. Sec/Treas. (Title), of The Catholic Diocese of Wichita, on behalf of the Diocese.

KARL N. HESSE — NOTARY PUBLIC — STATE OF KANSAS — My Appt. Exp. 6/29/2003

Karl N. Hesse
KARL N. HESSE, Notary Public

My App't. Exp. 6/29/2003

This plat of "CHURCH OF THE MAGDALEN ADDITION", Wichita, Sedgwick County, Kansas has been submitted to and approved by the Wichita-Sedgwick County Metropolitan Area Planning Commission, Wichita, Kansas.
Dated this 17th day of October, 2000.
Wichita-Sedgwick County Metropoliton Area Planning Commission

SEDGWICK COUNTY METROPOLITAN AREA PLANNING COMMISSION — CITY — COUNTY — KANSAS

Francis S. Garofalo, Chairman
Francis S. Garofalo

Marvin S. Krout, Secretary
Marvin S. Krout

This plat approved and all dedications shown hereon accepted by the City Council of the City of Wichita, Kansas, this 27th day of February, 2001.

CITY OF WICHITA — SEDGWICK COUNTY, KANSAS

Bob Knight, Mayor
Bob Knight

Pat Burnett, City Clerk
Pat Burnett

Reviewed in accordance with K.S.A. 58-2005 on this 28th day of November, 2000.

Tricia L. Robello
Tricia L. Robello, L.S. #1246
Deputy County Surveyor
Sedgwick County, Kansas

Entered on transfer record this 5th day of MARCH, 2001.

CLERK OF SEDGWICK COUNTY — SEDGWICK COUNTY — KANSAS

Don Brace, County Clerk
Don Brace

State of Kansas)
Sedgwick County) SS

This is to certify that this plat has been filed for record in the office of the Register of Deeds, this 5th day of March, 2001 at 3:00 o'clock P.M; and is duly recorded.

Bill Meek, Register of Deeds
Bill Meek

Linda Kilgore, Deputy
Linda Kilgore

REGISTER OF DEEDS — SEDGWICK COUNTY — KANSAS

#1953736

18-03-04-13 BAUGHMAN COMPANY, P.A.