GENERAL NOTES

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PRESERVING PROPERTY IRONS. THE CONTRACTOR WILL BE REQUIRED TO REESTABLISH ANY PROPERTY IRONS WHICH ARE DAMAGED OR DESTROYED BY HIS CONSTRUCTION OPERATIONS. SUCH IRONS SHALL BE REESTABLISHED 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 ALSO BE ENCOUNTERED.

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

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

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

SOUTHWESTERN BELL TELEPHONE COMPANY	1-800-734-7630
CABLEVISION	262-0661
K.G.&E. (GAS & ELECTRIC)	383-8600
CITY OF WICHITA WATER & SEWER MAINTENANCE	262-6000

4. 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.

5. COST OF EXCAVATION, HAULING, AND DUMPING OF EXCESS EXCAVATION SHALL BE SUBSIDIARY TO THE PROJECT.

6. A PORTION OF EXCESS EXCAVATED MATERIAL SHALL BE MOUNDED AROUND MANHOLES WHICH EXTEND MORE THAN ONE (1) FOOT ABOVE THE EXISTING GROUND. SUCH MOUNDS SHALL BE CONSTRUCTED WITH A SIX (6) FOOT DIAMETER FLAT TOP WITH 4 TO 1 SIDE SLOPES DOWN TO THE ORIGINAL GROUND. THE ELEVATION OF THE FLAT TOP OF THE MOUND SHALL BE 0.4 FOOT BELOW THE TOP OF THE MANHOLE

7. ALL STUBS AND PLUGGED PIPES SHALL BE LOCATED WITH GREEN PLASTIC TAPE IN THE SAME MANNER AS RISERS.

8. PRIOR TO LAYING SEWER LINES USING EXISTING STUBS IN EXISTING MANHOLES, THE CONTRACTOR SHALL EXPOSE AND VERIFY THE ELEVATION, GRADE AND ALIGNMENT OF EXISTING STUBS AND NOTIFY THE ENGINEER OF ANY DEVIATION FROM THE PLAN. WHERE CONNECTION TO AN EXISTING MANHOLE THAT DOES NOT HAVE AN EXISTING STUB OR THE STUB IS UNUSABLE DUE TO ELEVATION GRADE OR ALIGNMENT, THE CONTRACTOR SHALL RESHAPE THE EXISTING MANHOLE INVERT TO PROVIDE SMOOTH FLOW. THE COST OF RESHAPING EXISTING MANHOLE INVERTS IS INCIDENTAL TO THE PROJECT.

9. TREES AND SHRUBS IN PUBLIC RIGHT-OF-WAY WHICH ARE IN DIRECT CONFLICT WITH PROPOSED NEW CONSTRUCTION SHALL BE REMOVED BY THE CONTRACTOR WITH THE ENGINEER'S APPROVAL. TREES AND SHRUBS WHICH ARE NOT IN DIRECT CONFLICT WITH PROPOSED NEW CONSTRUCTION SHALL BE SAVED AND PROTECTED FROM DAMAGE.

10. ALL DISTURBED AREAS TO BE SEEDED WITH RYE GRASS AT A RATE OF 200LBS./ ACRE WITHIN 10 DAYS OF CONSTRUCTION.

11. CONTRACTOR SHALL OBTAIN APPROVAL FROM OWNER PRIOR TO REMOVAL OF ALL TREES. TREES REMOVED WITHOUT APPROVAL WILL BE PAID FOR BY THE CONTRACTOR AS DAMAGED PROPERTY.

12. EXCESS EXCAVATION MAY BE WASTED ON SITE IN APPROVED LOCATIONS.

13. CONTRACTOR SHALL MAINTAIN EROSION CONTROL THROUGHOUT CONSTRUCTION. COST SUBSIDIARY TO PROJECT.

14. CONTRACTOR TO PRESERVE EXISTING LANDSCAPING. ANY LANDSCAPING DISTURBED DUE TO THE SPECIFIED WORK OR CONTRACTORS NEGLIGENCE SHALL BE REPLACED AND RESEEDED WITH SAME AS EXISTING. COST SUBSIDIARY TO PROJECT.

14. CONTRACTOR TO INSTALL PLASTIC SEWER MANHOLE MARKERS. SEWER DEPARTMENT WILL PROVIDE THE MATERIALS. COST TO INSTALL MARKERS SUBSIDIARY TO MANHOLES.

SANITARY SEWER PLANS

WILSON FARMS 2ND ADDITION

PHASE I

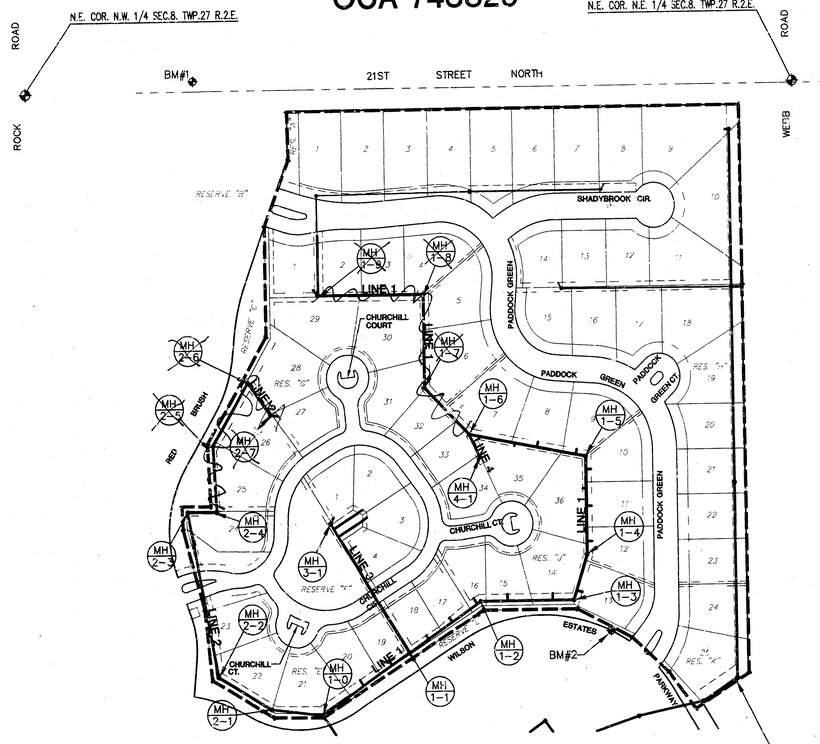
LAT. 79, MAIN 22, WAR INDUSTRIES SEWER

PROJECT NO. 468-83057

CITY OF WICHITA, KANSAS

MICHAEL E. LINDEBAK, CITY ENGINEER

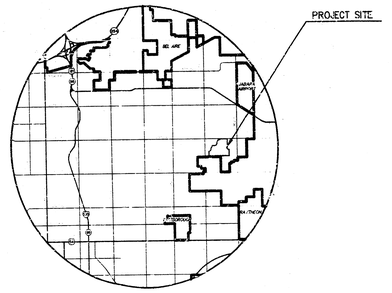
OCA 743829



Benefit District Boundary

LEGEND

- LIMITS OF TREE REMOVAL
- INDIVIDUAL TREE REMOVAL
- (8) VERTICAL RISER– SEE SEWER SERVICE TABLE SHT. 3 FOR CONSTRUCTION TYPE & LOCATION



LOCATION MAP

INDEX TO DRAWINGS

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	DETAILS
3	VERTICAL RISER LOCATIONS
⚠ 3A	VERTICAL RISER DETAILS
4	LINE 1
5	LINE 1 CONT.
6	LINE 2
7	LINE 3 & 4
8	EASEMENT GRADING
9–10	INLET RELOCATION
11	FINAL PLAT

SCALE: 1" = 150'

Booked
P-143
8-15-00
RDL
~~Pre Plan~~
AS BUILT

BENCHMARKS

BM#1 C.O.W. BENCHMARK
1/2 MILE EAST OF ROCK ROAD ON 21ST ST.
C.O.W. BENCH MARK. N.E. COR. HUBGUARD ON R.C.B.C.
ELEV. = 190.005 (PUBLISHED ELEV. = 190.04)

BM#2 TOP OF "T" POST ± 7' NORTH OF THE SE. CORNER RESERVE "L" (SOUTH OF LOT 15, BLK. 5).
ELEV. = 195.00

⚠ REVISED 04/12/00



MID-KANSAS ENGINEERING CONSULTANTS, INC.
411 N. WEBB ROAD
WICHITA, KS. 67206
316-684-9600

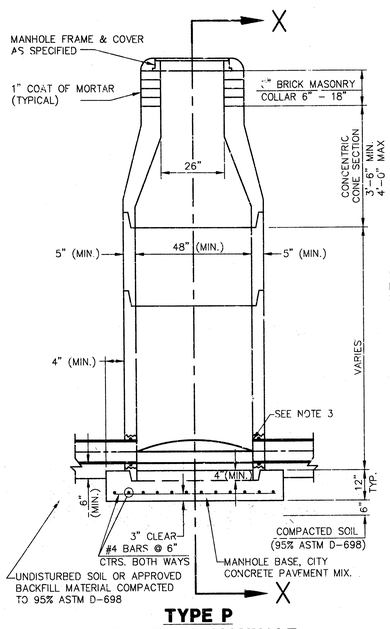
WILSON FARM 2ND ADDITION - PHASE 1
PROJECT NAME

SANITARY SEWER PLANS
SHEET TITLE

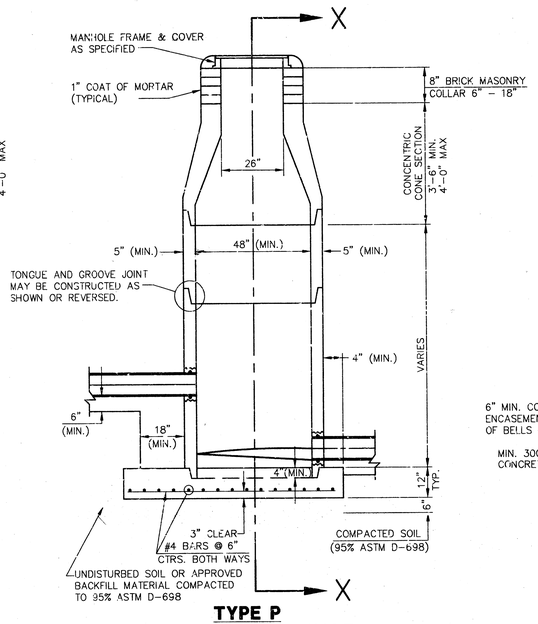
DFL	DAC	GJA
DESIGN BY:	DRAWN BY:	CHECKED BY:
JANUARY 2000	99223_BT	1 11
DATE	JOB NO.	SHEET/OF

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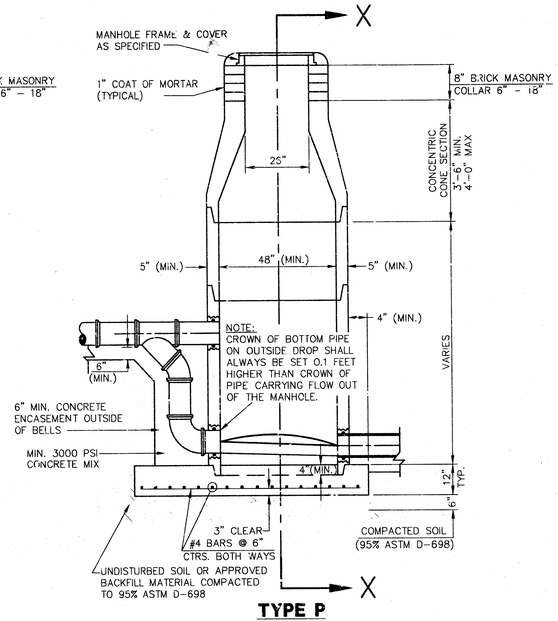
SEWER APPURTENANCES DETAILS



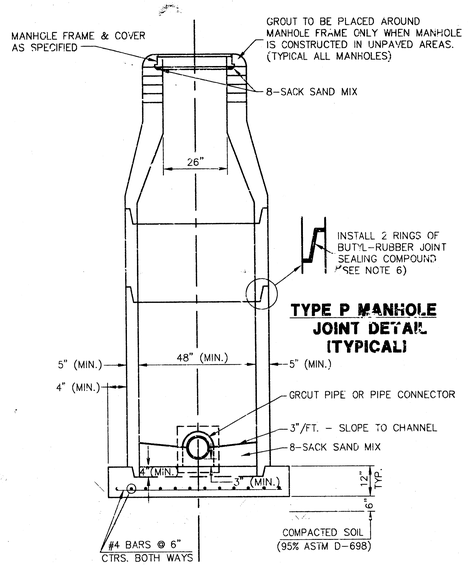
TYPE P
STANDARD MANHOLE



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 BITUMINOUS 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 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 AND A VERTICAL HEIGHT OF 6" MINIMUM AND 18" MAXIMUM. A 1" COAT OF MORTAR WILL BE PLASTERED ON THE OUTSIDE OF THE COLLAR. THE USE OF PRE-CAST CONCRETE SPACERS FOR MANHOLE TOP ADJUSTMENT IS ALSO ALLOWED.

THE CITY OF WICHITA
CITY ENGINEER'S OFFICE
CITY HALL - SEVENTH FLOOR
455 NORTH MAIN STREET
WICHITA, KANSAS 67202
(316) 268-4501
(316) 268-4114 FAX

STANDARD TYPE 'P' MANHOLES

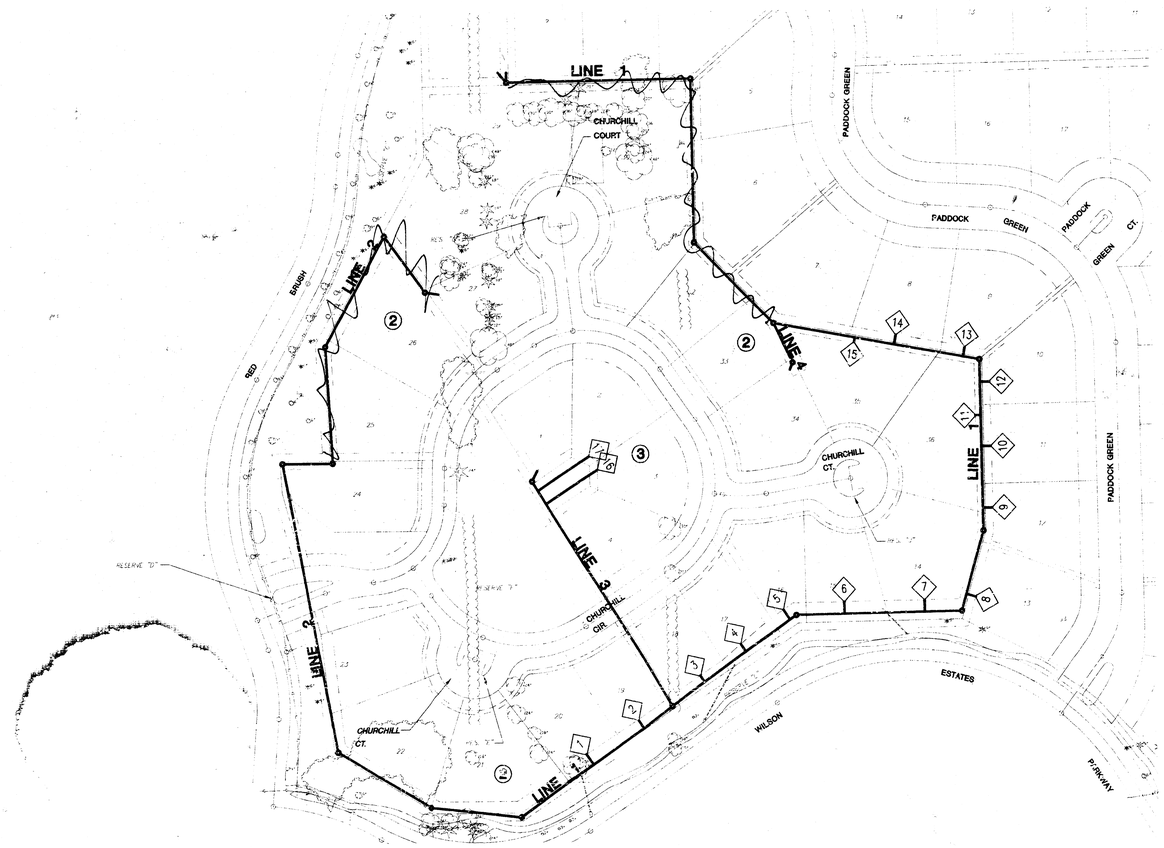
M. E. LINDEBAK P.E. - CITY ENGINEER

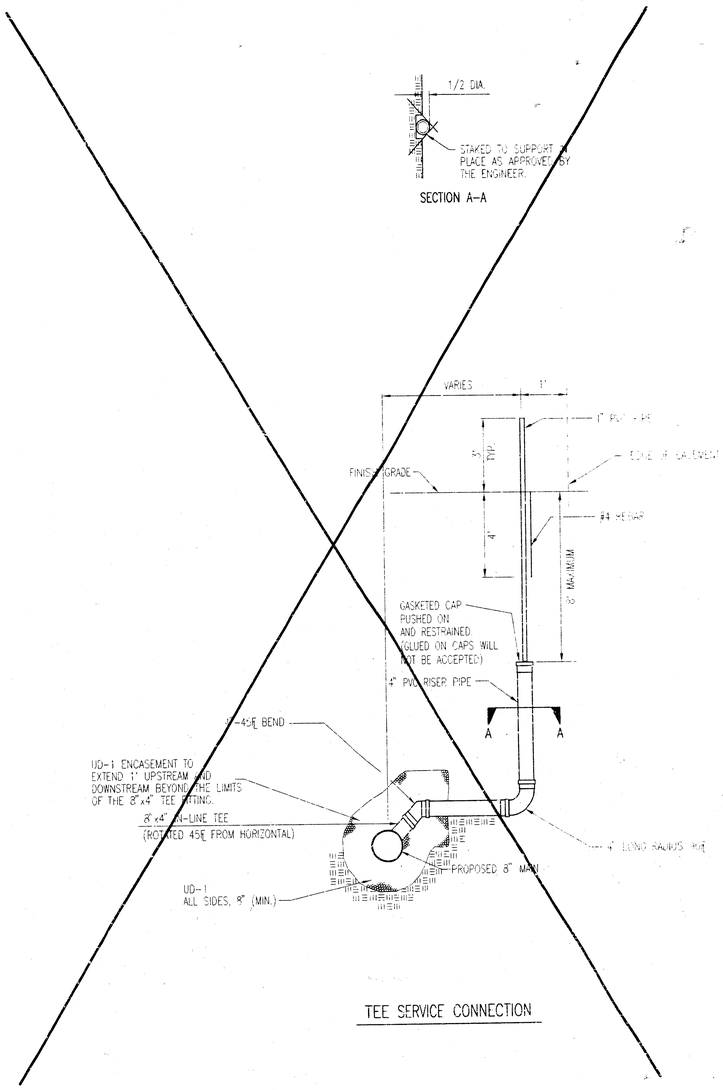
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468-83057	74382.J
DATE: JAN 00	SHEET 2 OF 11

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SEWER SERVICE TABLE

LOCATION						FOR INFORMATION ONLY		RECORD INFORMATION (TO BE COMPLETED BY PROJECT INSPECTOR)		
						APPROXIMATE LENGTH 4" PIPE		DISTANCE FROM NEAREST MANHOLE		
NO.	TYPE	LOT NO.	BLOCK NO.	LATERAL NO.	STATION/ DIRECTION	VERTICAL	HORIZONTAL	UPSTREAM	DOWNSTREAM	NO.
1	TEE SERVICE CONNECTION	20	2	LINE 1	1+15.52 / LT.	9'	16'			1
2	TEE SERVICE CONNECTION	19	2	LINE 1	1+36.48 / LT.	10'	13.5'			2
3	TEE SERVICE CONNECTION	18	2	LINE 1	2+99.14 / LT.	13'	10'			3
4	TEE SERVICE CONNECTION	17	2	LINE 1	3+66.54 / LT.	15'	11.5'			4
5	TEE SERVICE CONNECTION	16	2	LINE 1	4+36.73 / LT.	16'	15'			5
6	TEE SERVICE CONNECTION	15	2	LINE 1	5+11.59 / LT.	18'	15'			6
7	TEE SERVICE CONNECTION	14	2	LINE 1	6+18.83 / LT.	16'	15'			7
8	TEE SERVICE CONNECTION	13	2	LINE 1	6+89.80 / RT.	13'	13'			8
9	TEE SERVICE CONNECTION	12	2	LINE 1	8+02.04 / RT.	13'	12'			9
10	TEE SERVICE CONNECTION	11	2	LINE 1	8+79.99 / RT.	13'	12'			10
11	TEE SERVICE CONNECTION	36	2	LINE 1	9+19.03 / LT.	13'	7'			11
12	TEE SERVICE CONNECTION	10	2	LINE 1	9+61.35 / RT.	13'	12'			12
13	TEE SERVICE CONNECTION	9	2	LINE 1	10+12.01 / RT.	13'	12'			13
14	TEE SERVICE CONNECTION	8	2	LINE 1	11+04.00 / RT.	12'	12'			14
15	TEE SERVICE CONNECTION	35	2	LINE 1	11+57.47 / LT.	11'	6'			15
16	TEE SERVICE CONNECTION	3	3	LINE 3	3+05.41 / RT.	5.5'	80'			16
17	TEE SERVICE CONNECTION	2	3	LINE 3	3+25.41 / RT.	5.5'	80'			17





TEE SERVICE CONNECTION

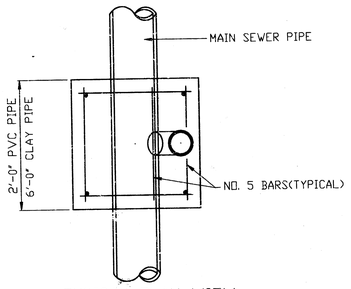
REVISED: 04/12/10

WILSON FARMS 2ND ADDITION
RISER INFORMATION

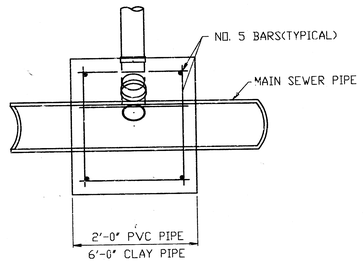
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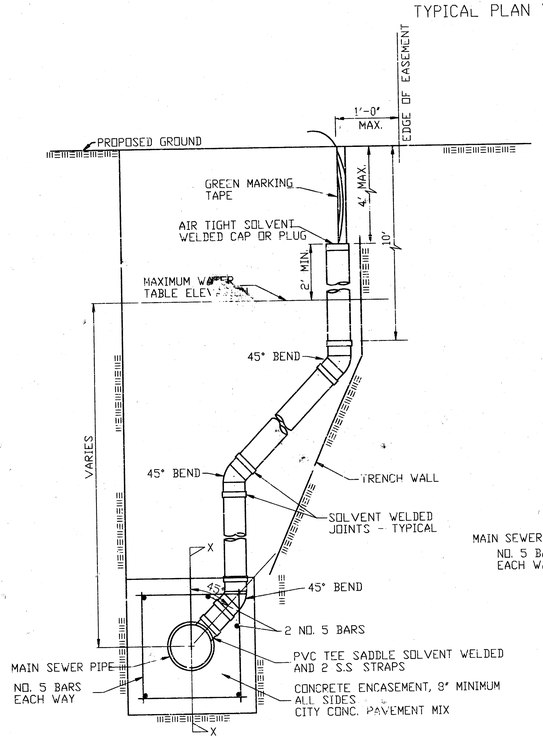
VERTICAL RISER DETAILS
ADOPTED AS STANDARD DESIGN
BY
CITY OF WICHITA, KANSAS
OCTOBER 1992



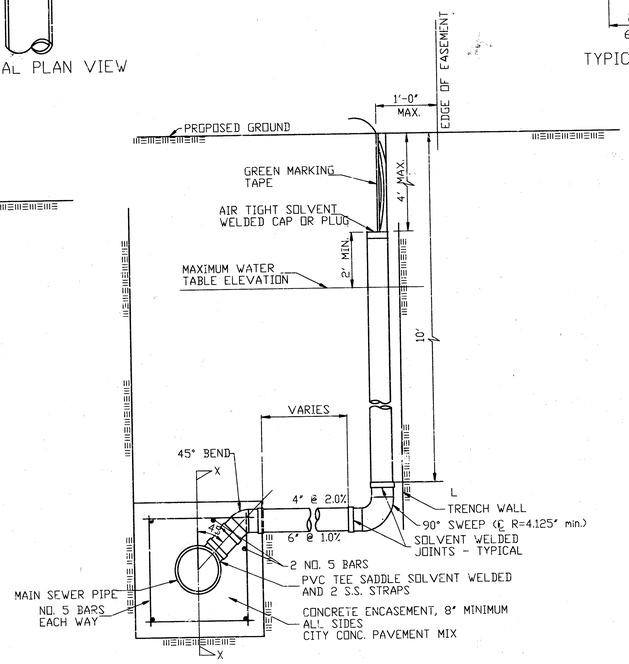
TYPICAL PLAN VIEW



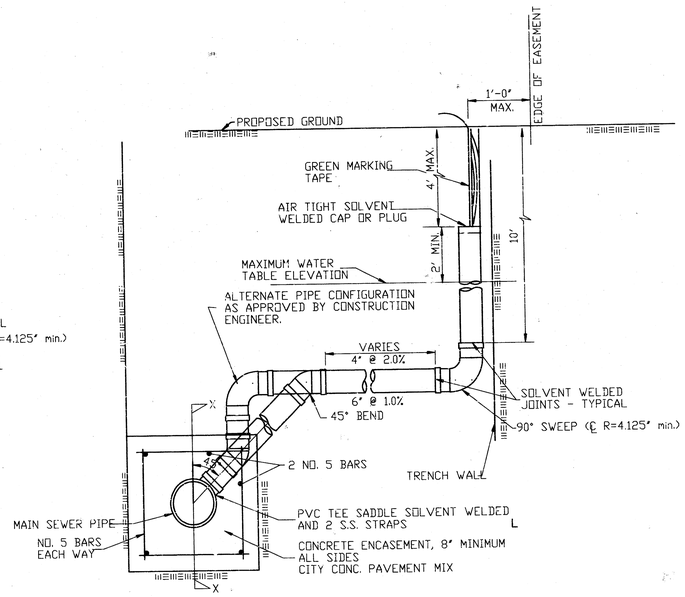
TYPICAL SECTION X-X



METHOD "A"



METHOD "B"



METHOD "C"

NOTE: RISER PIPE REQUIREMENTS AT MANHOLE STUBS SHALL BE SIMILAR TO THOSE SHOWN ABOVE.

GENERAL NOTES

1. RISERS. Risers shall be installed to serve all lots or tracts where the sanitary sewer main is below the water table. Risers shall also be installed to serve all lots and tracts where the sanitary sewer main depth is greater than 12 feet below the proposed ground elevation. Installation of risers because of field conditions shall be as approved by the Construction Engineer. The location of the risers to serve developed property shall be approved by the property owner and the Construction Engineer.

2. PIPE STUBS. Pipe stubs shall be installed in manholes where locations of manholes will provide satisfactory service connection as determined by the Construction Engineer. The vertical distance between the flowline of the manhole pipe stub and the flowline of the sanitary sewer main out of the manhole shall not exceed 2 feet. Risers shall be utilized at manhole pipe stubs as indicated in Note 1. Manhole pipe stubs shall be set such that the top of the stub is not lower than the top of the sanitary sewer main.

3. SIZING. Pipe stubs and risers shall be sized according to the plans and riser table where risers are indicated by the plans. Where risers or pipe stubs are required because of field conditions, the risers and stubs shall be six-inch diameter for commercial or industrial properties and 4" or 6" diameter for residential properties, based on lot size and sanitary sewer main depth. Sizing of risers and stubs shall be approved by the Construction Engineer prior to installation.

4. RISER OR STUB MATERIAL. Risers and stubs shall be constructed of Schedule 40 PVC Pipe, meeting the requirements of the latest revision of A.S.T.M. . All pipe joints shall be solvent welded.

5. REINFORCED CONCRETE ENCASEMENT. Riser connections to clay pipe sanitary sewers shall be reinforced concrete encased both ways from the riser centerline. The reinforced concrete encasement shall extend three feet from the riser centerline or stop at the first sanitary sewer pipe joint within three feet of the riser centerline. Riser connections to PVC Sanitary Sewer mains shall be reinforced concrete encased one foot each way from the riser centerline. The concrete encasement shall be reinforced using reinforcing steel as shown in the appropriate drawing. The concrete shall conform to the City Standard Specifications for concrete pavement.

6. BEDDING. Bedding around the sanitary sewer riser shall be compacted Pipe Bedding Type 1 or 2. The bedding shall be placed and compacted from the depth of the sanitary sewer main to the top of the sanitary sewer riser pipe. Compacted Pipe Bedding Type 1 or 2 shall be required for all risers whether constructed in vertical wall or sloped wall trenches. Bedding material and construction practices shall be approved by the Construction Engineer prior to installation.

7. SUPPORT OF RISERS. Sanitary sewer riser pipe shall be supported during trench backfill. The riser pipe shall be held in a vertical position at all times until trench backfill and compaction has been completed. Contractor's methods for supporting and backfilling the riser pipe shall be approved by the Construction Engineer.

8. PLUGGING. The ends of the riser pipes and manhole stubs shall be plugged using an airtight solvent welded cap or plug. Cap or plug fittings shall be approved by the Construction Engineer prior to installation. Caps or plugs which do not provide an airtight seal will not be accepted.

9. TOP OF THE RISER PIPE. The top elevation of the sanitary sewer riser pipe shall be built per plan elevations, unless otherwise directed by the Construction Engineer. Where riser elevations are not shown on the plans, the top of the risers shall be set at an elevation four feet below the proposed ground surface. If ground water is encountered, the top of the riser pipe shall be set at an elevation two feet (min.) above the maximum water table elevation, regardless of the riser elevation shown on the plans.

10. MARKING. Locations of the ends of the sanitary sewer riser pipe shall be marked by fastening green colored plastic tape to the end of the riser. The tape shall be supported by a length of wooden 2 x 4, extending from the top of the riser pipe to the proposed ground surface. The green tape shall be visible and extend one foot above the proposed ground surface. The green tape shall be 4 mil Polyethylene Film with a minimum width of three inches, specifically manufactured for the purpose of identification of underground sewers.

11. LOCATION MEASURES. The project inspector shall record and document the location of all risers constructed as measured from the nearest manhole, indicating the direction from the manhole, the direction and distance from the main, riser size, and elevation of the top of the riser.

12. RISER LOCATION. The riser shall be located per plan if shown. If not shown on the plan, the riser shall be located at the center of the lot within one foot of the property side of the easement for the lot being served. All riser locations shall be approved by the Construction Engineer prior to installation.

13. PAYMENT. "Sanitary sewer risers" shall be paid for at the contract unit price per each, which price shall be full compensation for all pipe, fittings, marking tape, length of wooden 2 x 4, reinforced concrete encasement, support during backfill, backfill, labor, site restoration, and any other items necessary to complete the work.

"Manhole stubs" shall be paid for at the contract unit price per each, which shall be full compensation for all labor, material, and incidentals necessary to complete the work including all pipe, fittings, reinforced concrete encasement, and all other items as required and listed for "Sanitary Sewer Risers".

REVISED: 04/12/00 (ADDED SHEET)

THE CITY OF WICHITA
CITY ENGINEER'S OFFICE
CITY HALL – SEVENTH FLOOR
455 NORTH MAIN STREET
WICHITA, KANSAS 67202
(316) 268-4501
(316) 268-4114 FAX

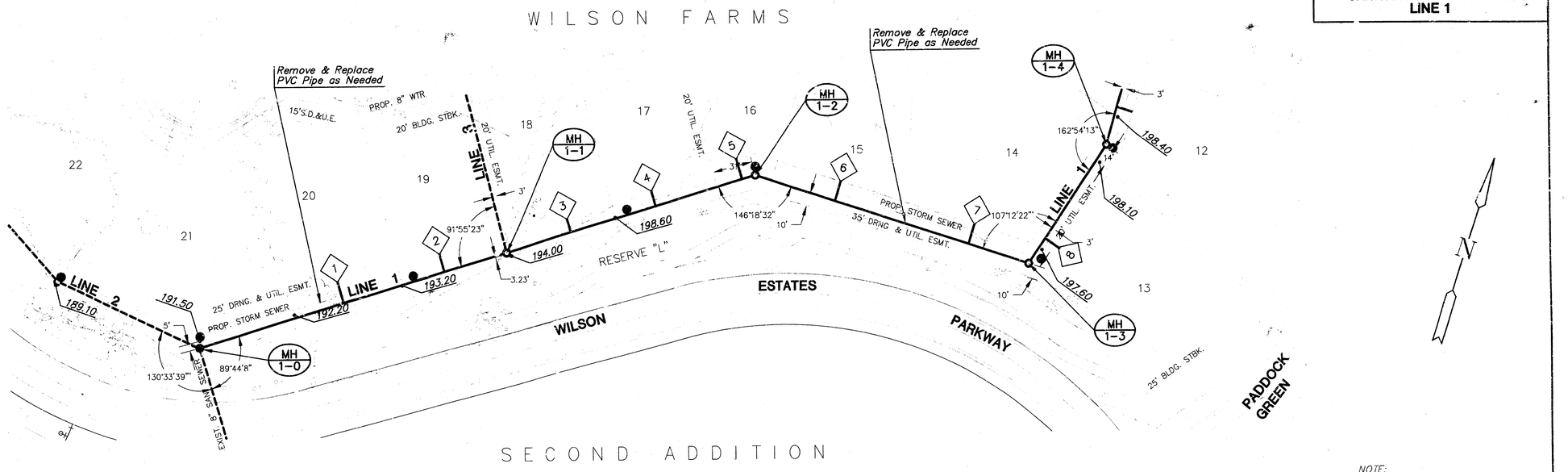
VERTICAL RISER DETAIL

M. E. LINDEBAK P.E. – CITY ENGINEER

PROJECT NUMBER	INDEX CODE
468-83057	743829
DATE: APR 00	SHEET 3A OF 11

H:\CIVIL\961861.9223\SAN\9223804.DWG Wed Apr 19 13:50:37 2000

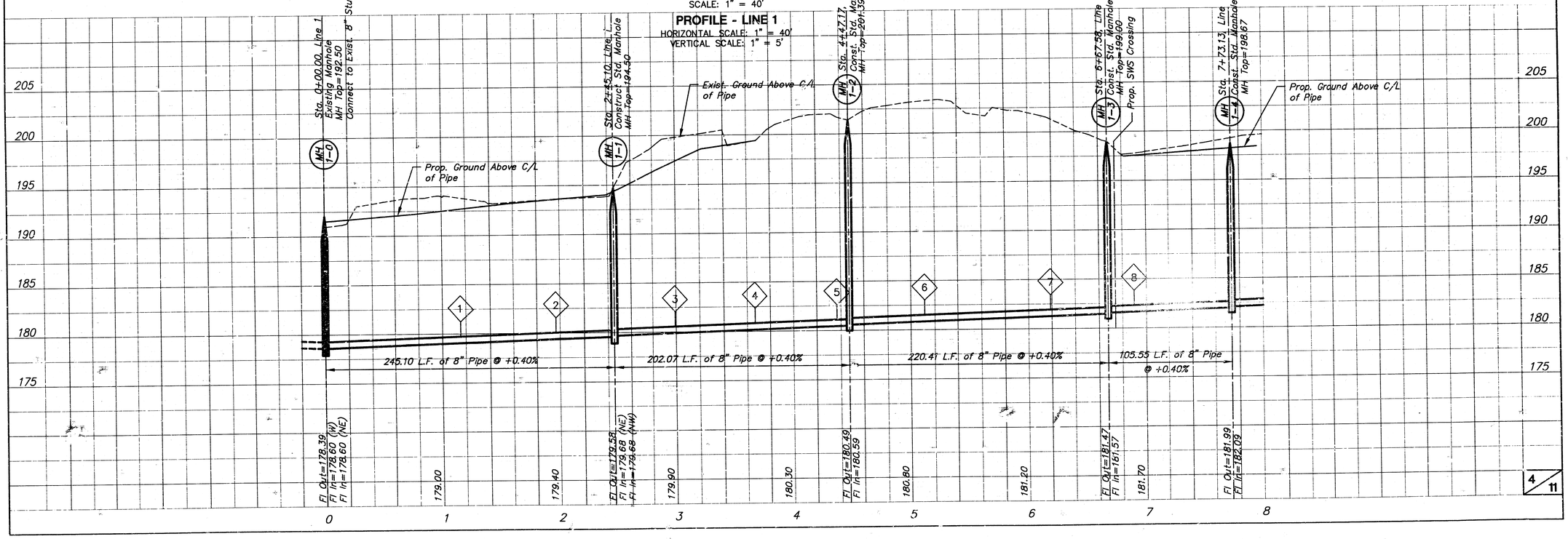
WILSON FARMS SECOND ADDITION SANITARY SEWER PLANS LINE 1



NOTE:
EASEMENT GRADING SEE SHEET 8

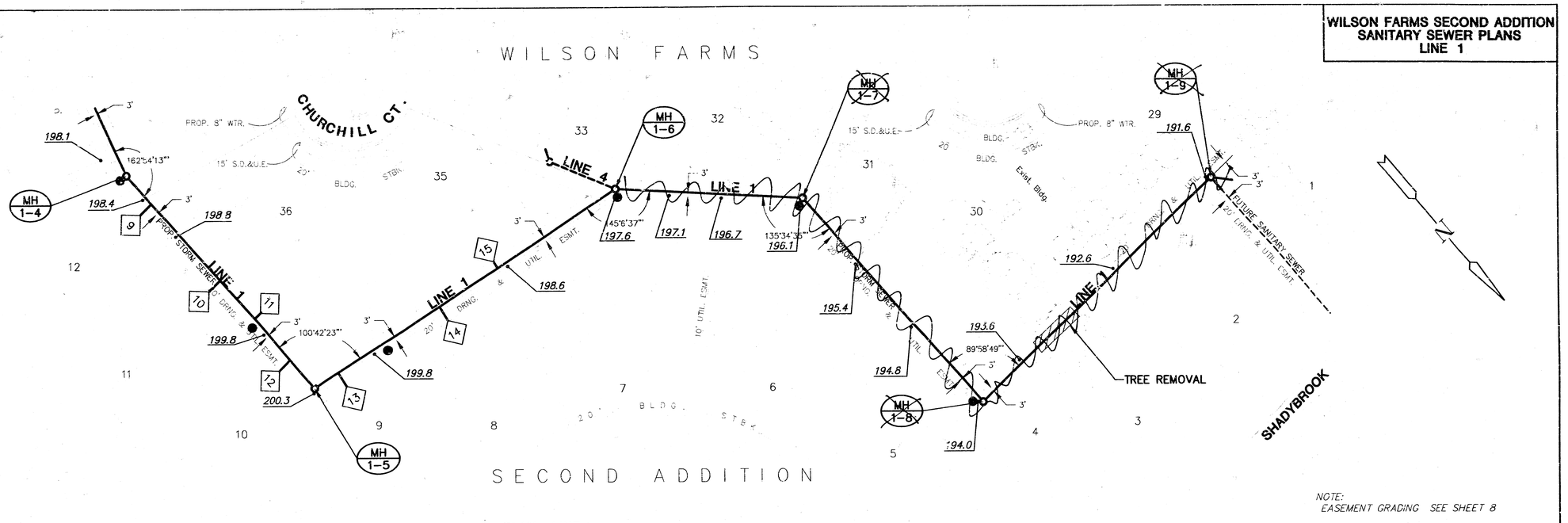
PLAN - LINE 1
SCALE: 1" = 40'

PROFILE - LINE 1
HORIZONTAL SCALE: 1" = 40'
VERTICAL SCALE: 1" = 5'



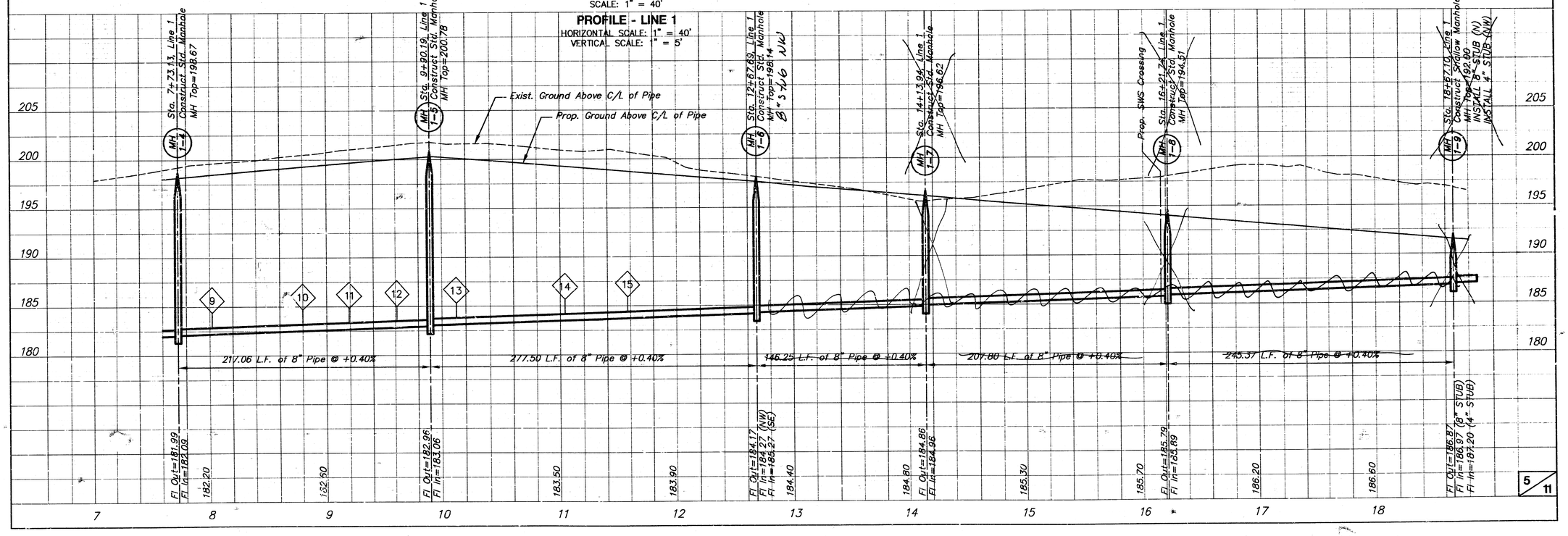
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WILSON FARMS SECOND ADDITION
SANITARY SEWER PLANS
LINE 1



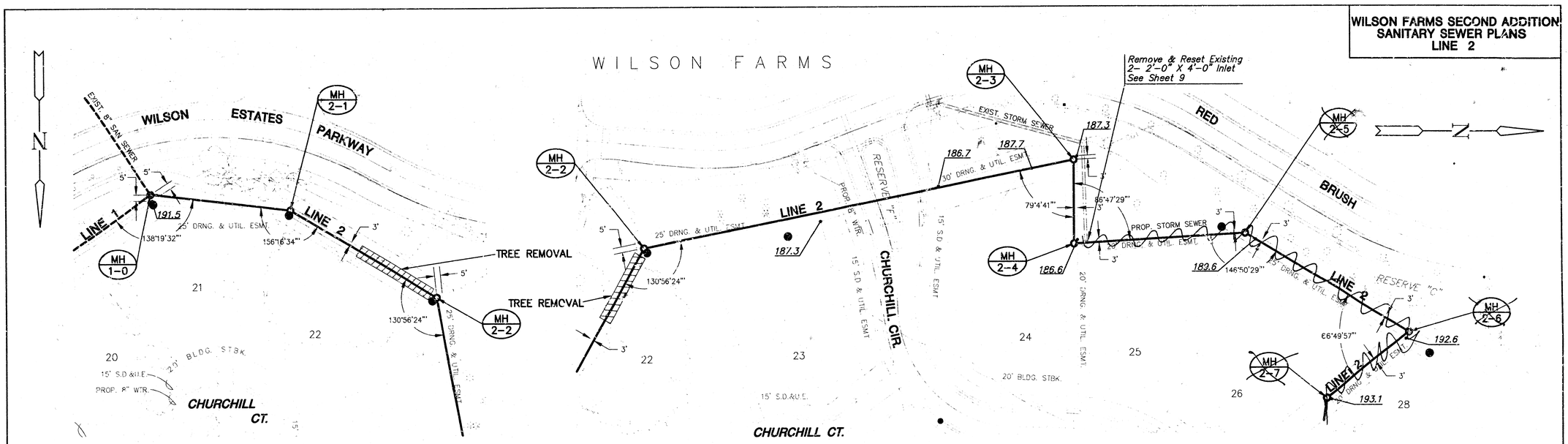
PLAN - LINE 1
SCALE: 1" = 40'

PROFILE - LINE 1
HORIZONTAL SCALE: 1" = 40'
VERTICAL SCALE: 1" = 5'



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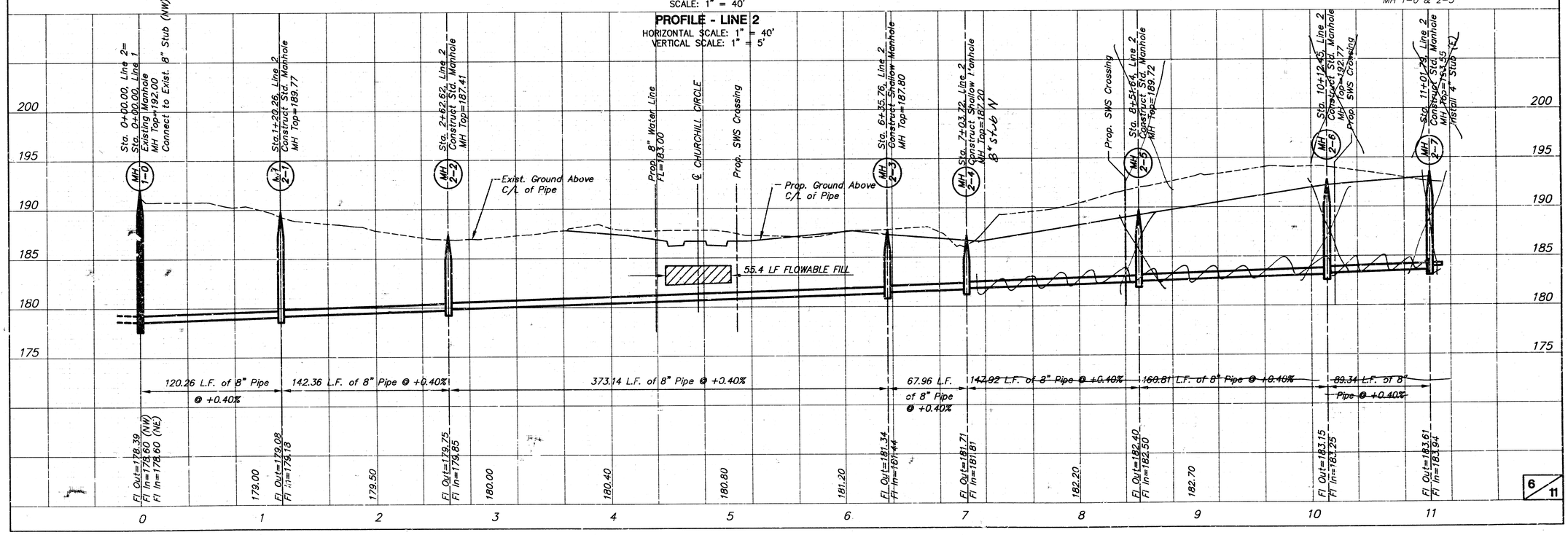
WILSON FARMS SECOND ADDITION
SANITARY SEWER PLANS
LINE 2



NOTE:
EASEMENT GRADING SEE SHEET 8
NO EASEMENT CARDING BETWEEN
MH 1-0 & 2-3

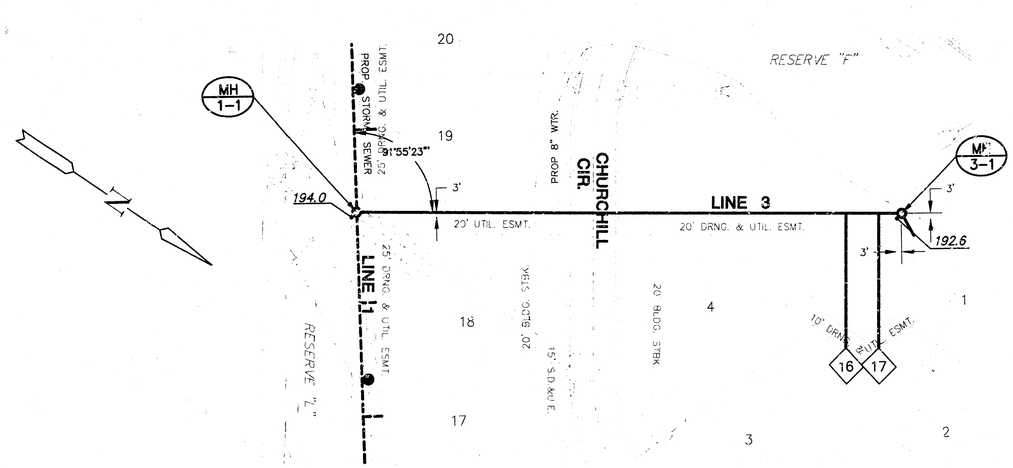
PLAN - LINE 2
SCALE: 1" = 40'

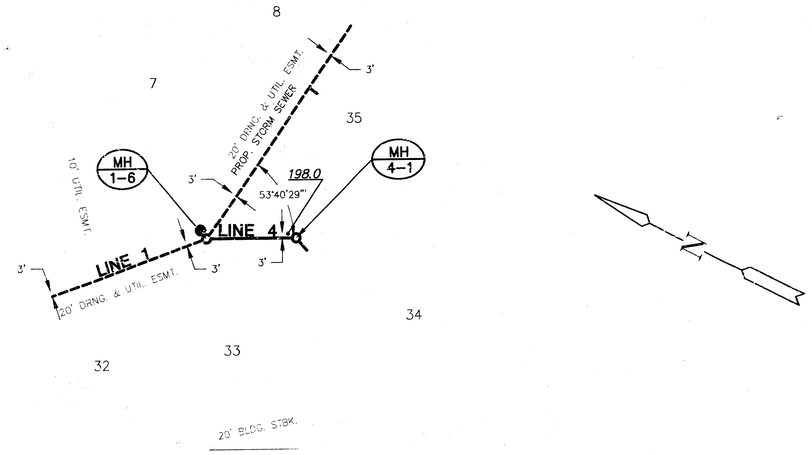
PROFILE - LINE 2
HORIZONTAL SCALE: 1" = 40'
VERTICAL SCALE: 1" = 5'



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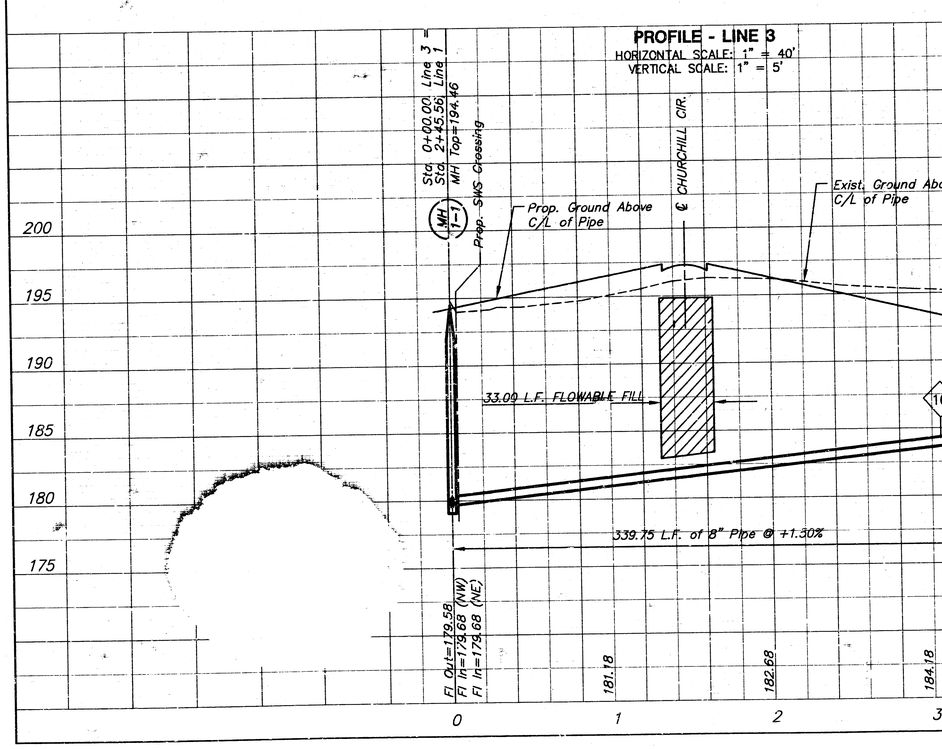
WILSON FARMS SECOND ADDITION
SANITARY SEWER PLANS
LINES 3 & 4

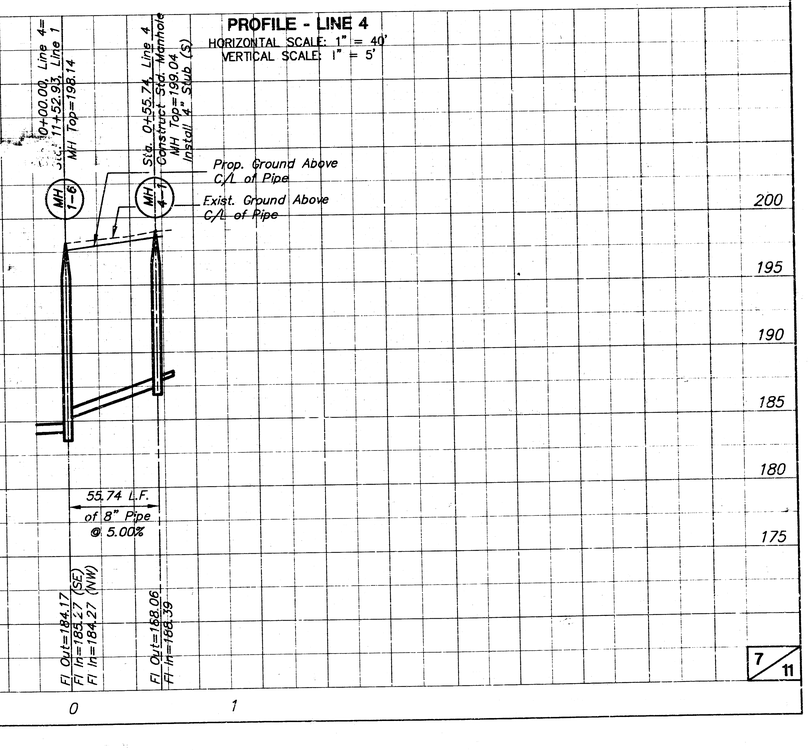




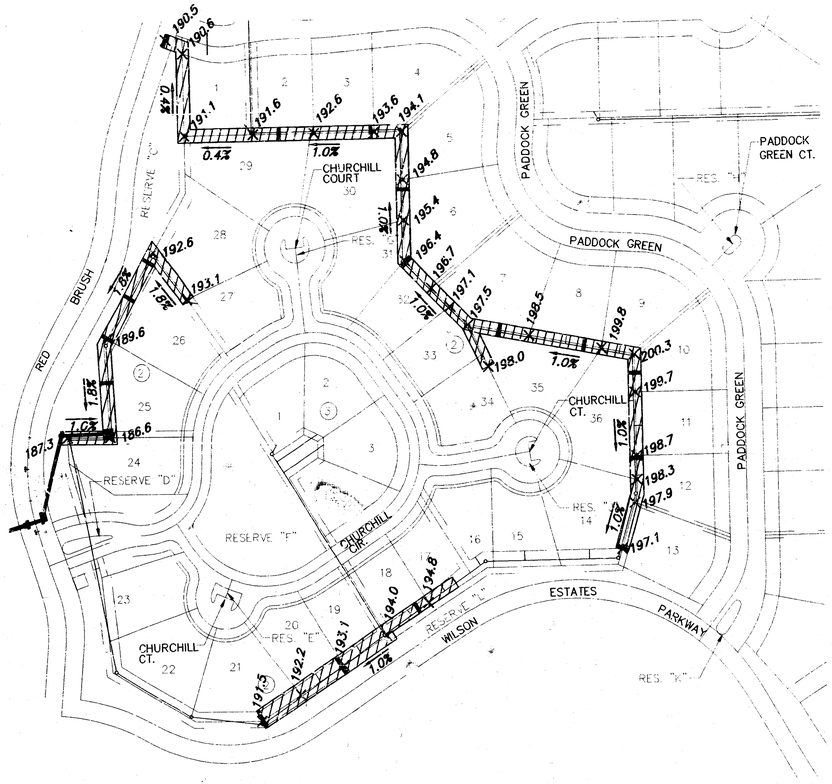
PLAN - LINE 3 & LINE 4
SCALE: 1" = 40'

NOTE:
EASEMENT GRADING SEE SHEET 8
NO EASEMENT GRADING BETWEEN MH 1-1 & 4-1

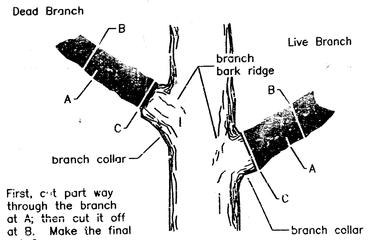




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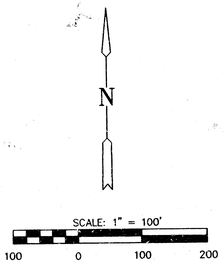


EASEMENT GRADING PLAN



TREE TRIMMING DETAIL

NOT TO SCALE



EASEMENT GRADING DETAILS

= AREAS TO BE GRADED

= LOCATION FOR SEDIMENT CONTROL

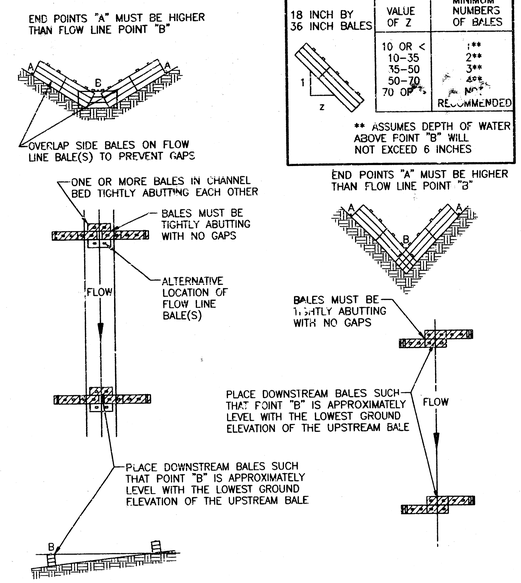
= LOCATION OF INLET SEDIMENT CONTROL

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.

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.

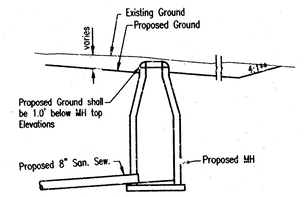
Cut 4850 C.Y. (Approximate)
Fill 0 C.Y. (Approximate)



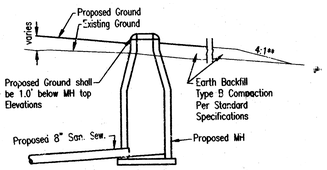
18 INCH BY 36 INCH BALES	VALUE OF Z	MINIMUM NUMBERS OF BALES
	10 OR <	1**
	10-35	2**
	35-50	3**
	50-70	4**
	70 OR >	NOT RECOMMENDED

** ASSUMES DEPTH OF WATER ABOVE POINT "B" WILL NOT EXCEED 6 INCHES

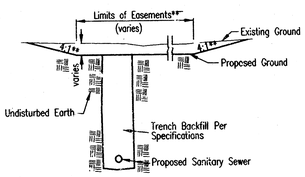
STRAW BALE DIKES FOR EASEMENT GRADING



TYPICAL PROFILE

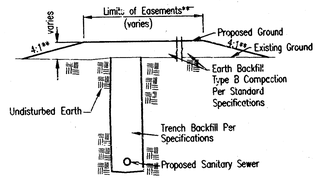


TYPICAL PROFILE



TYPICAL SECTION

"CUT" SITUATIONS



TYPICAL SECTION

"FILL" SITUATIONS

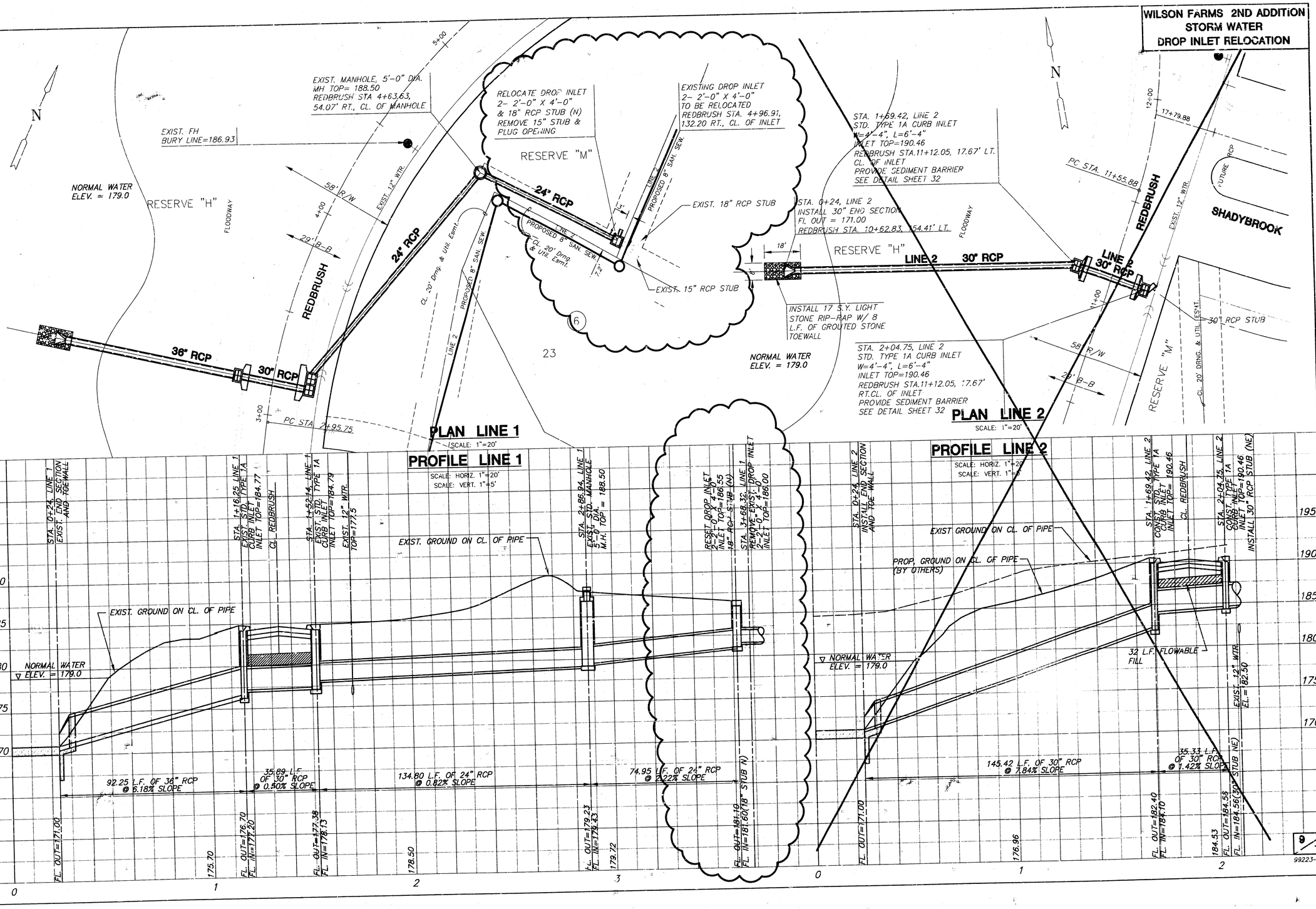
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EASEMENT GRADING DETAILS FOR WISLON FARMS 2ND ADDITION -- PHASE 1

8/11

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WILSON FARMS 2ND ADDITION
STORM WATER
DROP INLET RELOCATION



PLAN LINE 1

SCALE: 1"=20'

PLAN LINE 2

SCALE: 1"=20'

PROFILE LINE 1

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

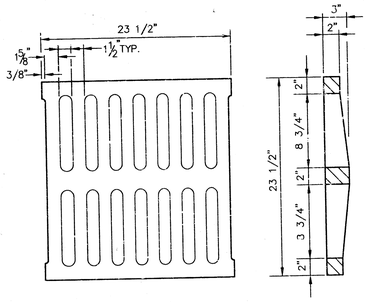
PROFILE LINE 2

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

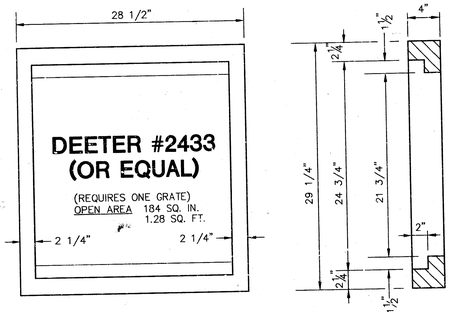
9/11

99223-D1

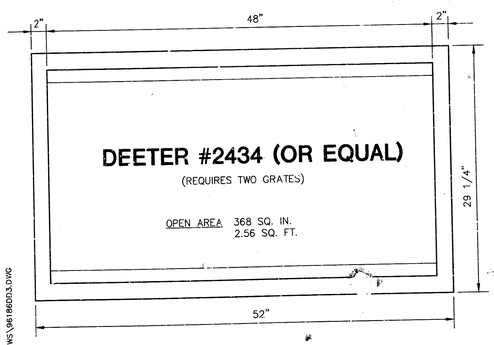
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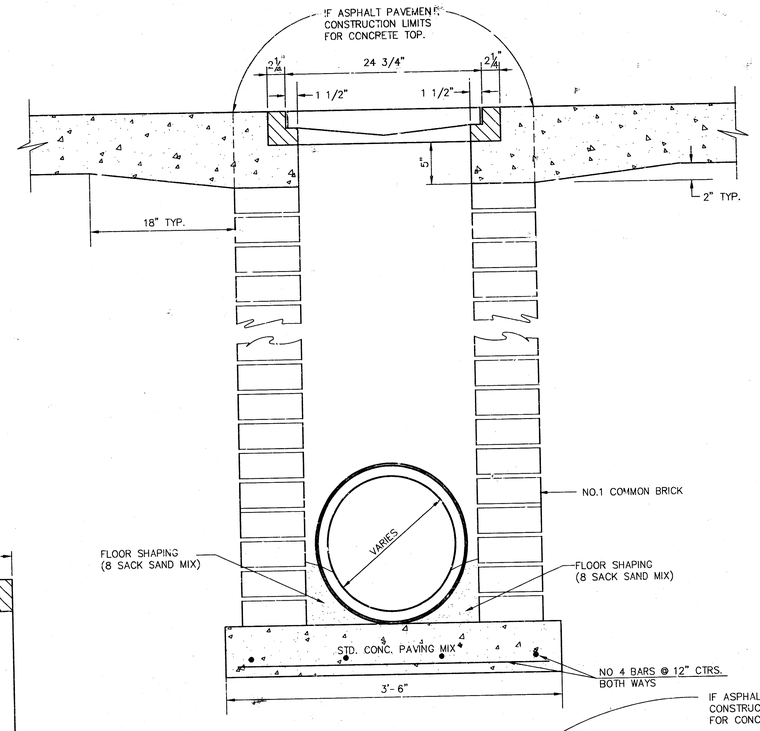
24"x24" GRATE DETAIL

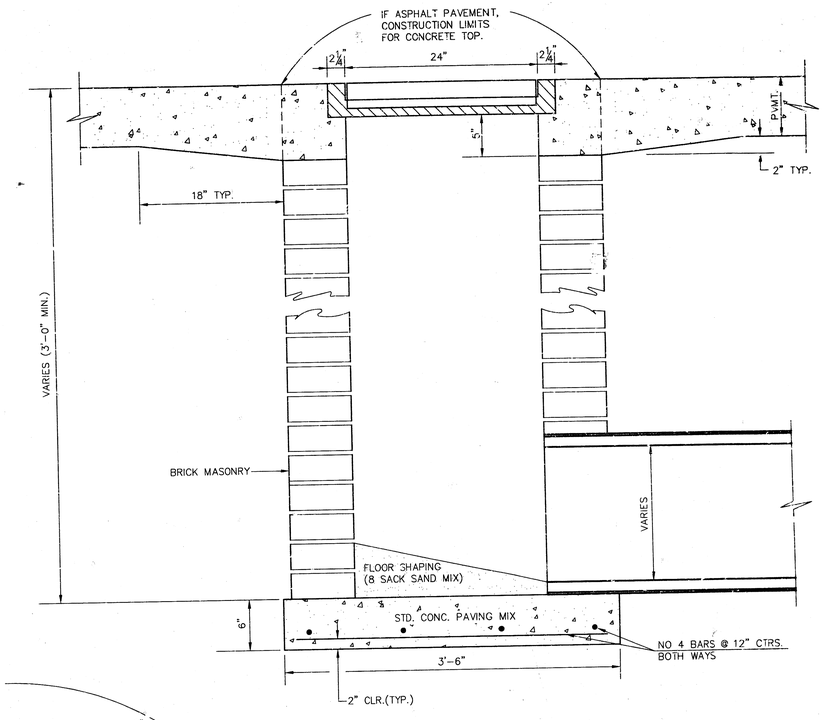


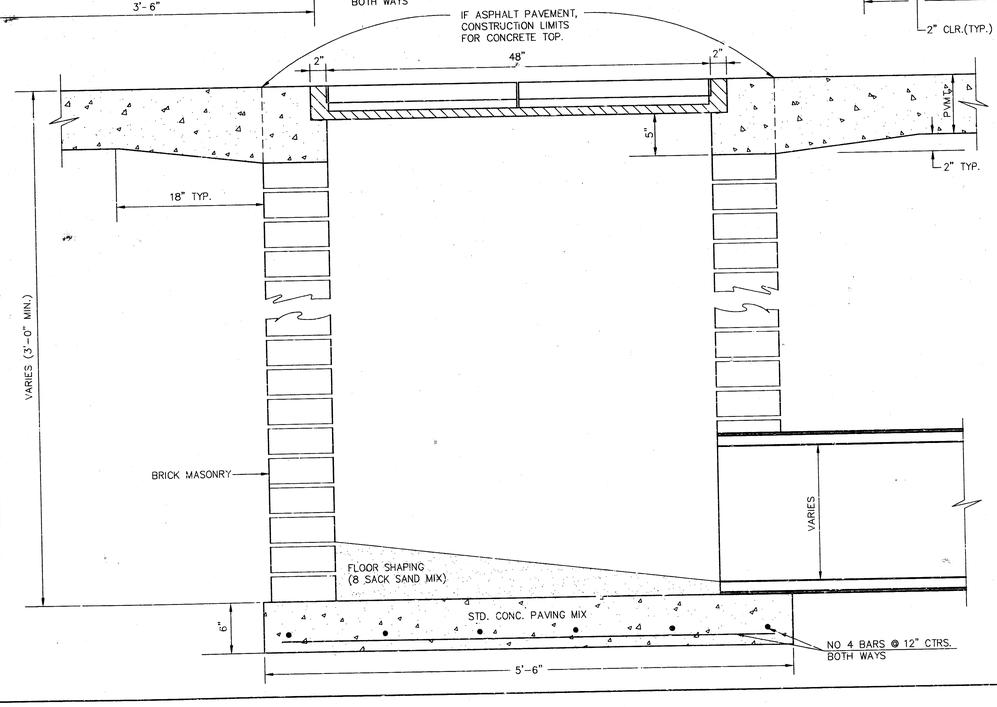
SINGLE 24"x24" FRAME DETAIL



DOUBLE 24"x24" FRAME DETAIL







ORIFICE EQUATION		
$Q=C*A*\sqrt{2gh}$ C=0.60		
h (DEPTH)	#2433 (SINGLE)	#2434 (DOUBLE)
0.1	1.95 cfs	3.89 cfs
0.2	2.75 cfs	5.50 cfs
0.3	3.37 cfs	6.74 cfs
0.4	3.89 cfs	7.78 cfs
0.5	4.35 cfs	8.70 cfs
0.6	4.77 cfs	9.53 cfs
0.7	5.15 cfs	10.30 cfs
0.8	5.50 cfs	11.01 cfs
0.9	5.84 cfs	11.67 cfs
1.0	6.15 cfs	12.30 cfs

REVISED: 5-8-90 JNJ

DROP INLET DETAILS

CITY OF WICHITA, KANSAS

Design C.O.W.	Checked by	Checked by	10/11
Drawn by	Date	Date AUG. 1997	Job No. 99223DD3

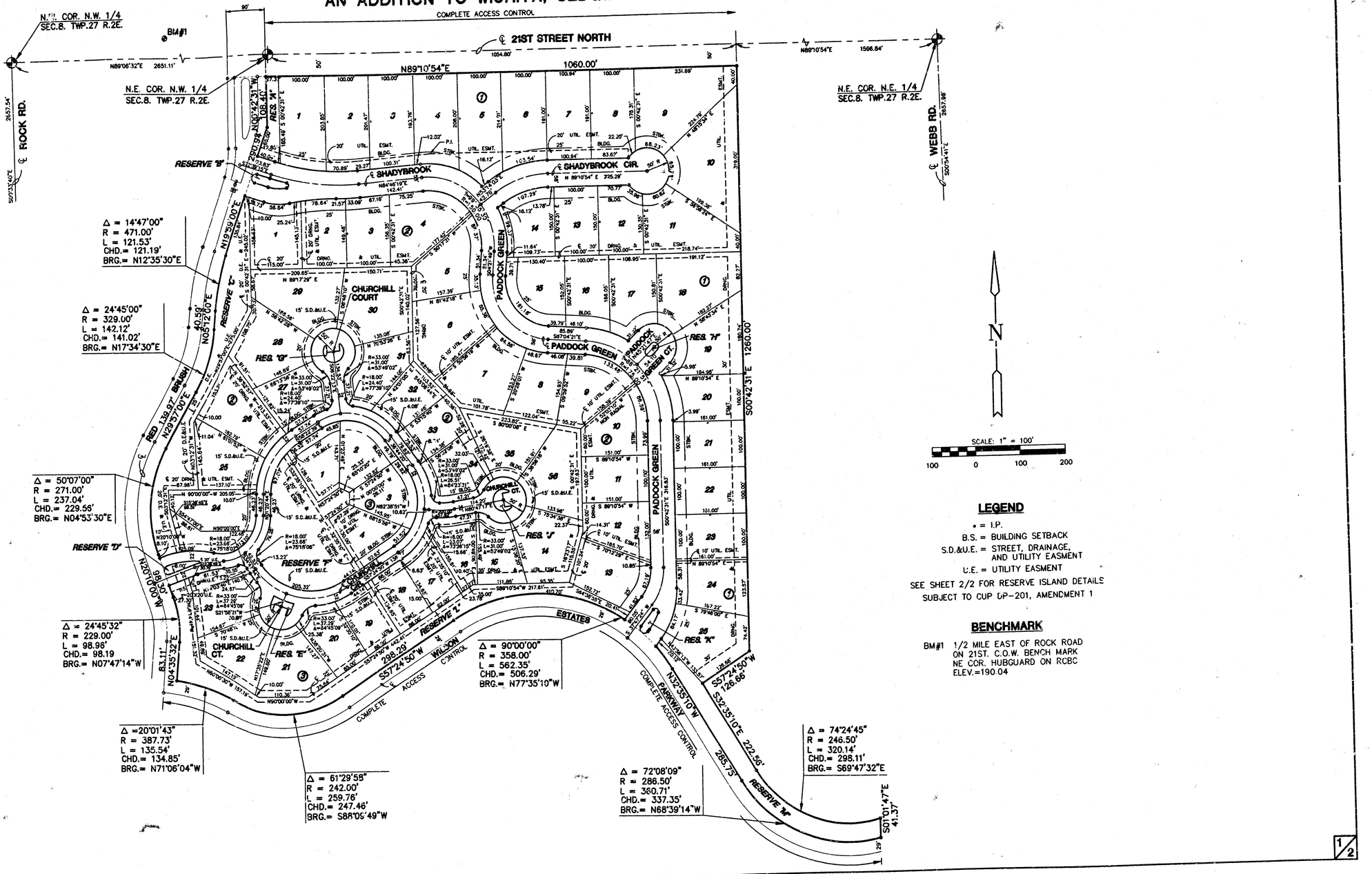
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FINAL PLAT

WILSON FARMS SECOND ADDITION

AN ADDITION TO WICHITA, SEDGWICK COUNTY, KANSAS



LEGEND

• = I.P.
B.S. = BUILDING SETBACK
S.D.&U.E. = STREET, DRAINAGE, AND UTILITY EASMENT
U.E. = UTILITY EASMENT

SEE SHEET 2/2 FOR RESERVE ISLAND DETAILS

SUBJECT TO CUP DP-201, AMENDMENT 1

BENCHMARK

BM#1 1/2 MILE EAST OF ROCK ROAD ON 21ST. C.O.W. BENCH MARK NE COR. HUBGUARD ON RCBC ELEV.=1900.04

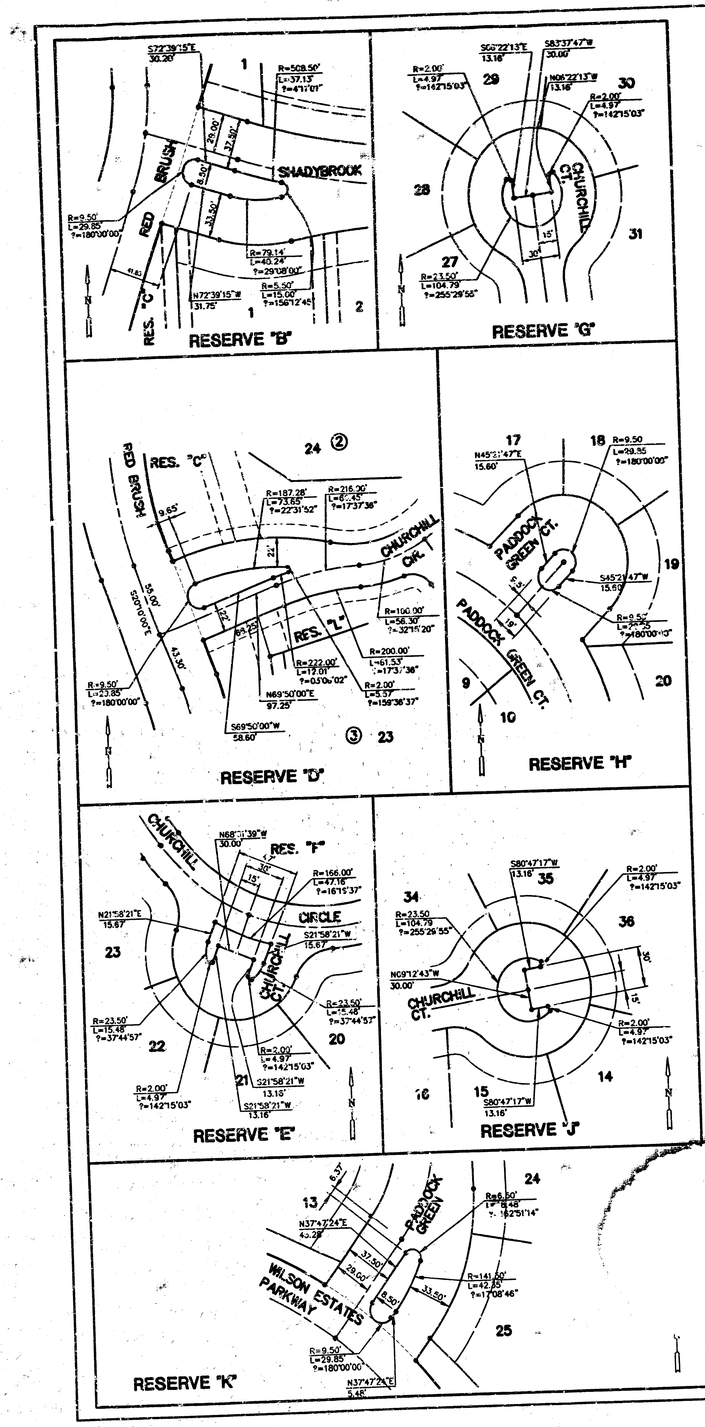
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FINAL PLAT

WILSON FARMS SECOND ADDITION

AN ADDITION TO WICHITA, SEDGWICK COUNTY, KANSAS



I, Gregory J. Allison, a Registered Land Surveyor in Kansas, do hereby certify that I have been in responsible charge of surveying and platting of "WILSON FARMS SECOND ADDITION", an addition to Wichita, Sedgwick County, Kansas, into lots, blocks, streets, and reserves the same being accurately set forth in the accompanying plat and described herein:

A replat of Lots 1–15 inclusive, Block 5; Lots 1–23 inclusive, Block 6; Lots 1–25 inclusive, Block 7; Reserves "L", "M", "N", "P", "Q", "R", "S" and "Z", and an adjacent street right–of–way (Shadybrook, Shadybrook Cir., Shadybrook Ct., Paddock Green, Paddock Green Ct. Churchill and Churchill Ct.), "WILSON FARMS ADDITION" an addition to Wichita, Sedgwick County, Kansas.

All Lots, Blocks, Easements, Streets, and Building Setbacks found within the above described property are hereby vacated and replatted by virtue of K.S.A. 12–512(b)

I hereby certify that the details of this plat are correct to the best of my knowledge and belief this ____ day of _____, 2000.

Gregory J. Allison, R.L.S. #1257
Mid–Kansas Engineering Consultants, Inc.
411 North Webb Road

Know all men by these presents that we the undersigned property owners of the land as above set forth in the Registered Land Surveyor's Certificate, have caused the same to be surveyed and platted into lots, blocks, streets, and reserves the same to be known as "WILSON FARMS SECOND ADDITION," an addition to Wichita, Sedgwick County, Kansas. The streets are hereby dedicated to and for the use of public. Easements for the construction and maintenance of public utilities and drainage, are hereby granted to the public. Reserves "A" through "D" inclusive and reserves "K" through "M" inclusive are platted for lighting, landscaping, irrigation, and entry monuments. Reserves "A" "C" "L" and "M" are also platted for public drainage and walks. Reserve "F" is platted for construction and maintenance of public drainage, lakes, gazebos/small structures, walks, landscaping, open space, recreational activities, and irrigation. Reserves "E" "C" "H" and "J" are platted for lighting, landscaping, and irrigation The Reserves shall be owned and maintained by the homeowners association. All abutters right of access to or from 21st Street North over and across the North line of WILSON FARMS SECOND ADDITION, are hereby granted to the governing body. All abutters right of access across to or from Wilson Estates Parkway over and across the South lines of Reserves L, and M are hereby granted to the governing body. A drainage plan has been developed for the plat and all drainage easements, rights of way, or reserves shall remain at established grades or as modified with the approval of the applicable City or County Engineer, and shall remain unobstructed to allow for the convergence of stormwater.

WILSON RESIDENTIAL COMPANY, L.L.C.
By: Ritchie Associates, inc.
a Kansas Corporation, Manager

_____
Kevin M. Mullen, President
Ritchie Associates, Inc.

STATE OF KANSAS)
) ss.
SEDGWICK COUNTY)

BE IT REMEMBERED, that on this _____ day of _____, 2000, before me the undersigned, a Notary Public in and for the County and State aforesaid, came Kevin M. Mullen, President of Ritchie Associates, Inc. a Kansas Corporation, Manager for Wilson Residential Company, L.L.C., to me personally known to be the same person who executed the foregoing instrument of writing and duly acknowledged the execution of the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal, the day and year last above written.

_____
Notary Public
My appointment expires: _____

_____
Barbara W. Waddell

STATE OF)
) ss.
COUNTY)

BE IT REMEMBERED, that on this _____ day of _____, 2000, before me the undersigned, a Notary Public in and for the County and State came Barbara W. Waddell, to me personally known to be the same person who executed the foregoing instrument of writing and duly acknowledged the execution of the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal, the day and year last above written.

_____
Notary Public
My appointment expires: _____

We INTRUST Bank, N.A., holders of a mortgage on the above described property, do hereby consent to the plat of "WILSON FARMS SECOND ADDITION."

_____

STATE OF KANSAS)
) ss.
SEDGWICK COUNTY)

BE IT REMEMBERED, that on this ____ day of _____, 2000, before me the undersigned, a Notary Public in and for the County and State aforesaid, came _____ to me personally known to be the person who executed the foregoing instrument of writing and duly acknowledged the execution of the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal, the day and year last above written.

_____
Notary Public
My appointment expires: _____

This plat of "WILSON FARMS SECOND ADDITION", has been submitted to and approved by the Wichita–Sedgwick County Metropolitan Area Planning Commission, Wichita, Kansas. Dated this ____ day of _____, 1999.

WICHITA–SEDGWICK COUNTY METROPOLITAN PLANNING COMMISSION

_____, Chairman
Francis S. Garofalo

_____, Secretary
Marvin S. Krout

This plat approved and all dedications shown thereon, if any, accepted by the City Council of the City of Wichita, Kansas, this ____ day of _____ 2000.

_____, Mayor
Bob Knight

_____, City Clerk
Pat Burnett

Entered on transfer record this ____ day of _____, 2000.

_____, County Clerk
James Alford

STATE OF KANSAS)
)ss:
SEDGWICK COUNTY)

This is to certify that this instrument was filed for record in the Register of Deeds office this ____ day of _____, 2000.

_____, Register of Deeds
Bill Meek

_____, Deputy
Linda Kizzire

Reviewed in accordance with K.S.A. 58–2005 on this ____ day of _____, 2000.

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

2/2

20-40-10-01

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