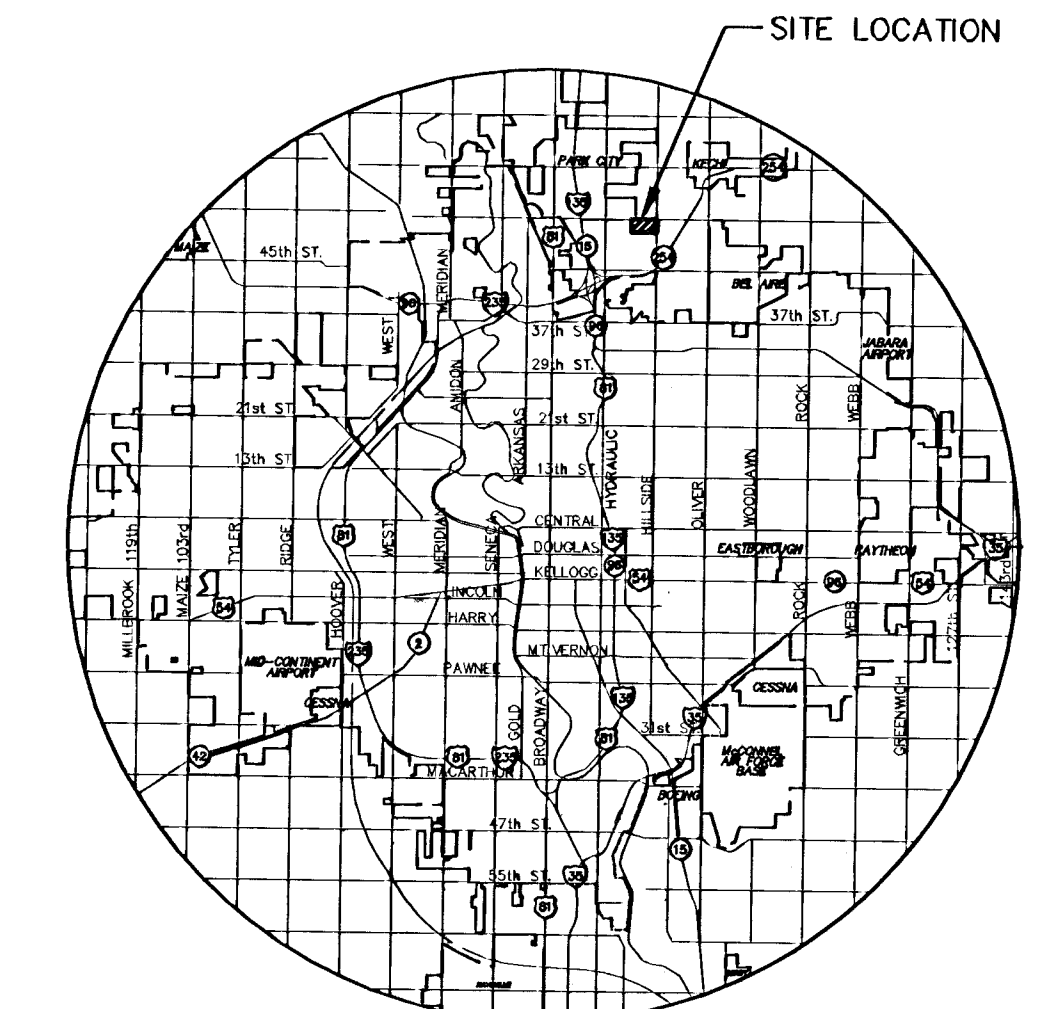


SANITARY SEWER PLANS TO SERVE WICHITA HEIGHTS HIGH SCHOOL ADDITION

AND FALCON FALLS ADDITION

**LATERAL 3, MAIN 13, SS NO. 23
PROJECT NO. 468-83535**

**CITY OF WICHITA, KANSAS
NEIL D. CABLE, P.E. - CITY ENGINEER
OCA 743964**



LOCATION MAP

GENERAL NOTES

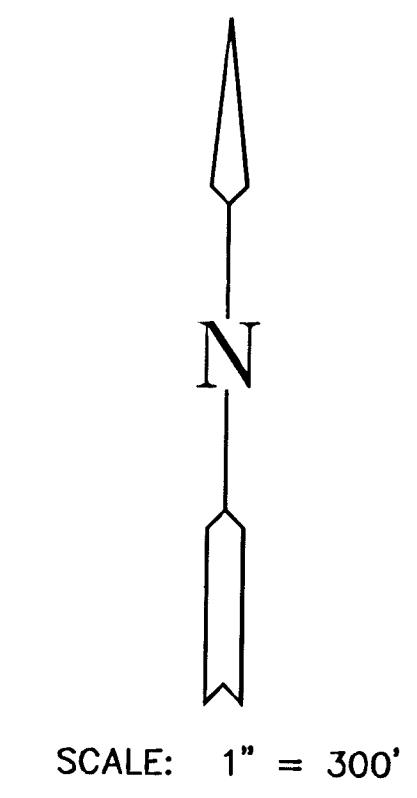
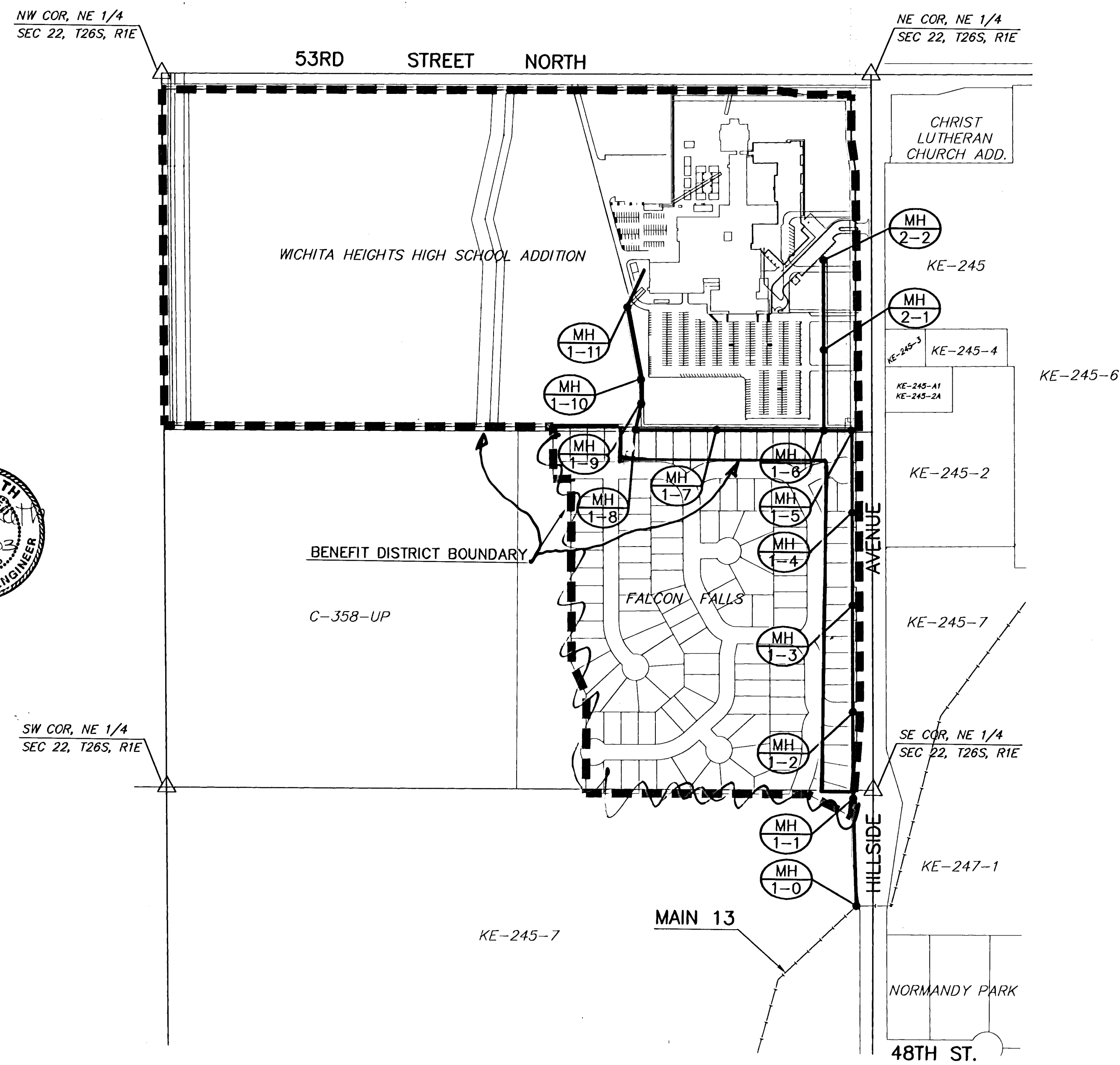
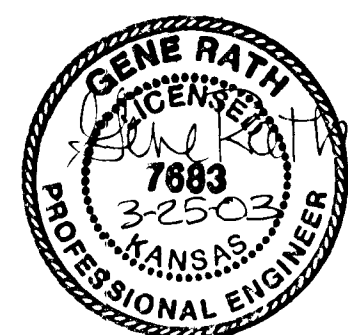
1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PRESERVING PROPERTY IRONS. THE CONTRACTOR WILL BE REQUIRED TO RE-ESTABLISH ANY PROPERTY IRONS WHICH ARE DAMAGED OR DESTROYED BY HIS CONSTRUCTION OPERATIONS. SUCH IRONS SHALL BE RE-ESTABLISHED BY A LICENSED LAND SURVEYOR IN ACCORDANCE WITH STATE LAWS.
2. EXISTING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

WESTAR (ELECTRIC)	261-6512
SBC (TELEPHONE)	800-870-8390
COX COMMUNICATIONS (CABLE)	1-316-262-0661
KANSAS GAS SERVICE (GAS)	832-3101
CITY OF WICHITA WATER & SEWER MAINTENANCE	262-6000
PARK CITY WATER & SEWER	744-2026
HEIGHTS HIGH SCHOOL (VIRGIL FRISBEE)	973-2118

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. CONNECTING TO EXISTING MANHOLES:
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 BORE CUT INTO EXISTING MANHOLE WALL TO MAKE CONNECTION USING APPROVED WATER STOP GASKET, AND RESHAPE THE EXISTING MANHOLE INVERT TO PROVIDE SMOOTH FLOW. THE COST OF CONNECTING TO EXISTING MANHOLES 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 200 LBS. PER ACRE WITHIN 10 DAYS OF CONSTRUCTION. CONTRACTOR TO PREPARE GROUND PER CITY SPECIFICATIONS. COST IS SUBSIDIARY TO SITE CLEARING AND RESTORATION.
11. ALL FENCES AND IRRIGATION SYSTEMS ON HEIGHTS PROPERTY WILL BE REMOVED AND REPLACED BY OTHERS.
12. THE CONTRACTOR WILL NOT BE REQUIRED TO RESEED OR SOD AREAS DISTURBED BY CONSTRUCTION ON HEIGHTS PROPERTY. SEEDING AND SODDING WILL BE DONE BY OTHERS.
13. WORK ON THE SECTION OF LINE ON HEIGHTS PROPERTY SHALL BE DONE AFTER THE SPRING SEMESTER SCHOOL SESSION AND SHALL BE COORDINATED WITH USD 259.



INDEX TO DRAWINGS

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	DETAILS
3-6	LINE 1
7	LINE 2
8-9	BMP DETAILS
10-11	FINAL PLATS

BENCHMARKS

- | | |
|--|--|
| <p>BM#1 C.O.W. BM DISK IN THE SOUTH END OF THE EAST CONC. TRAFFIC RAIL ON THE HILLSIDE AVE. BRIDGE OF THE MIDDLE FORK OF CHISHOLM CREEK. 190' SOUTH AND 26.7' EAST OF THE EAST 1/4 COR. SEC. 22, T 26 S, R 1 E. ELEV. = 1354.49</p> <p>BM#2 R.R. SPIKE IN THE EAST FACE OF THE 3RD P.P. NORTH OF THE HILLSIDE AVE. BRIDGE OF THE MIDDLE FORK OF CHISHOLM CREEK ON THE WEST SIDE OF HILLSIDE. 530' NORTH AND 48' WEST OF THE EAST 1/4 COR. SEC. 22, T 26 S, R 1 E. ELEV. = 1350.78</p> <p>BM#3 R.R. SPIKE IN THE WEST FACE OF P.P. 84' SOUTH AND 108' EAST OF THE SE COR. OF HEIGHTS HIGH SCHOOL ADD., 1400' SOUTH AND 48' EAST OF THE NE COR. SEC. 22, T 26 S, R 1 E. ELEV. = 1354.51</p> | <p>BM#4 " " CUT ON THE SE COR. OF CONC. PAD ON THE EAST SIDE OF A WATER PUMPING STATION, 22' NORTH AND 5' WEST OF THE SE COR. OF HEIGHTS HIGH SCHOOL ADD., 1294' SOUTH AND 65' WEST OF THE NE COR. SEC. 22, T 26 S, R 1 E. ELEV. = 1356.77</p> <p>BM#5 " " TOP CURB AT THE SW COR. OF PARKING LOT NEAR THE NW COR. OF HEIGHTS HIGH SCHOOL TENNIS COURTS, 769' WEST AND 185' NORTH OF THE SE COR. OF HEIGHTS HIGH SCHOOL ADD. ELEV. = 1360.44</p> <p>BM#6 R.R. SPIKE IN THE SW FACE OF GUY POLE, 45' EAST AND 36' NORTH OF THE NE COR. SEC. 22, T 26 S, R 1 E. ELEV. = 1369.43</p> |
|--|--|

*Per Plan
11/05/03
RPL - PDF*

WICHITA HEIGHTS HIGH SCHOOL
PROJECT NAME

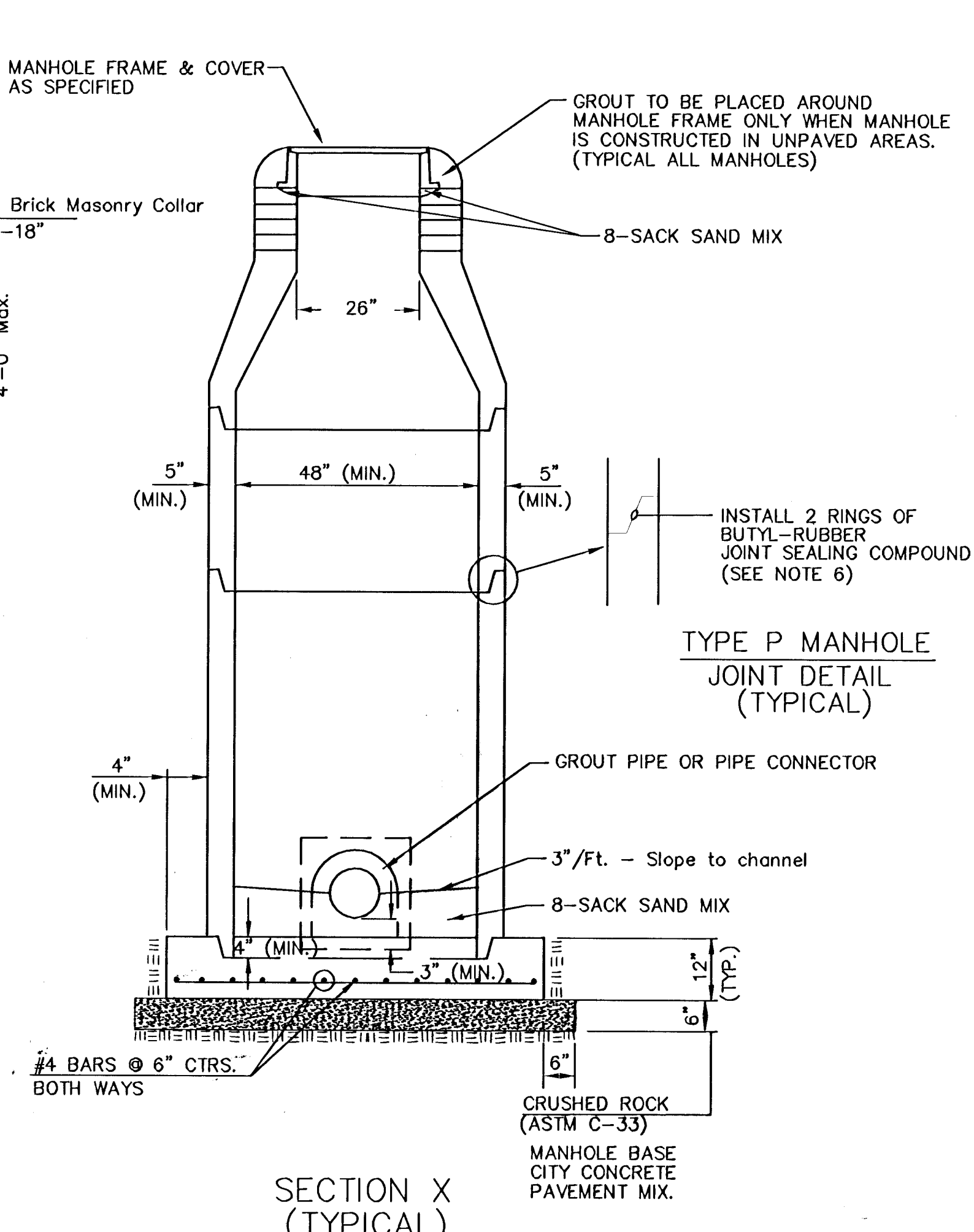
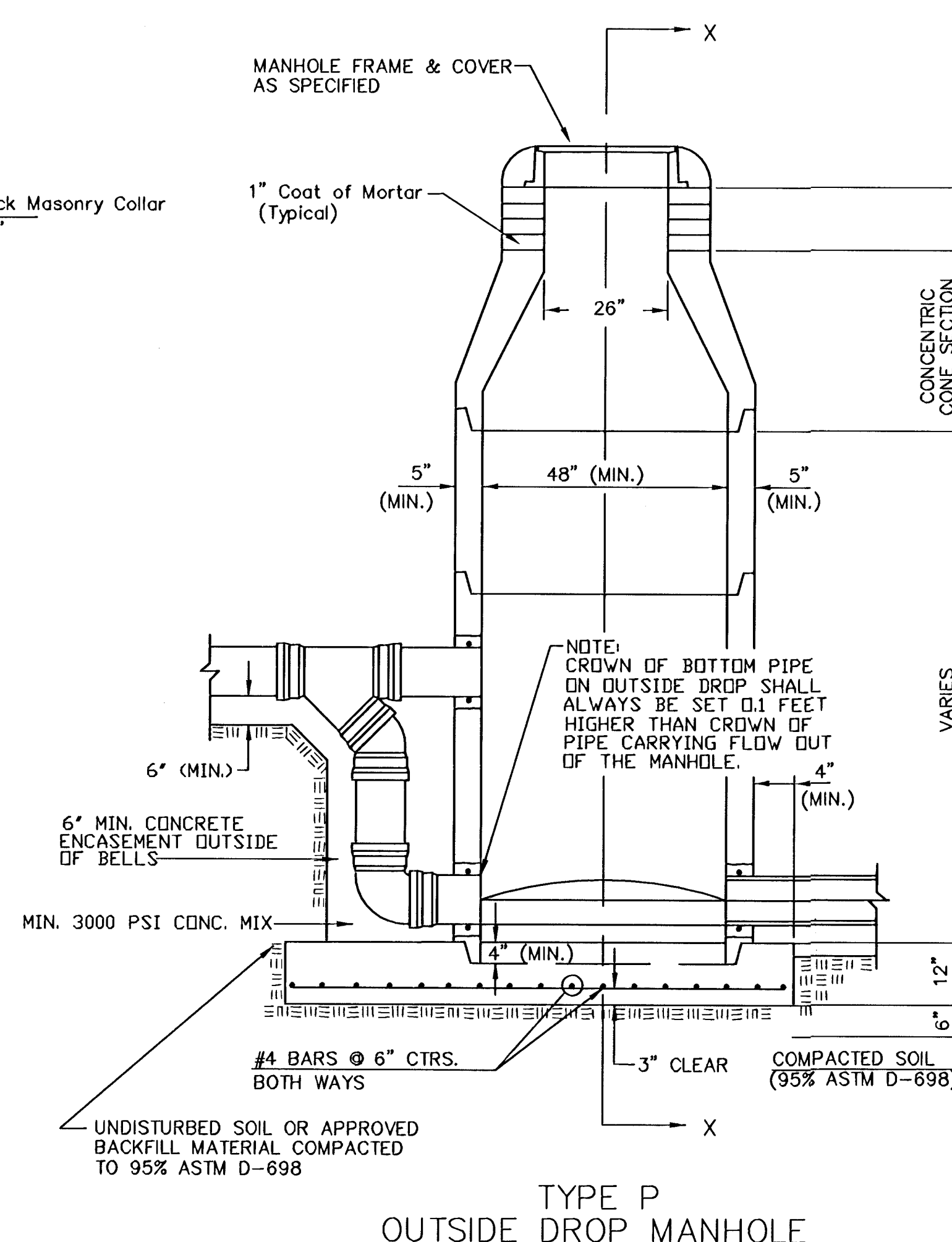
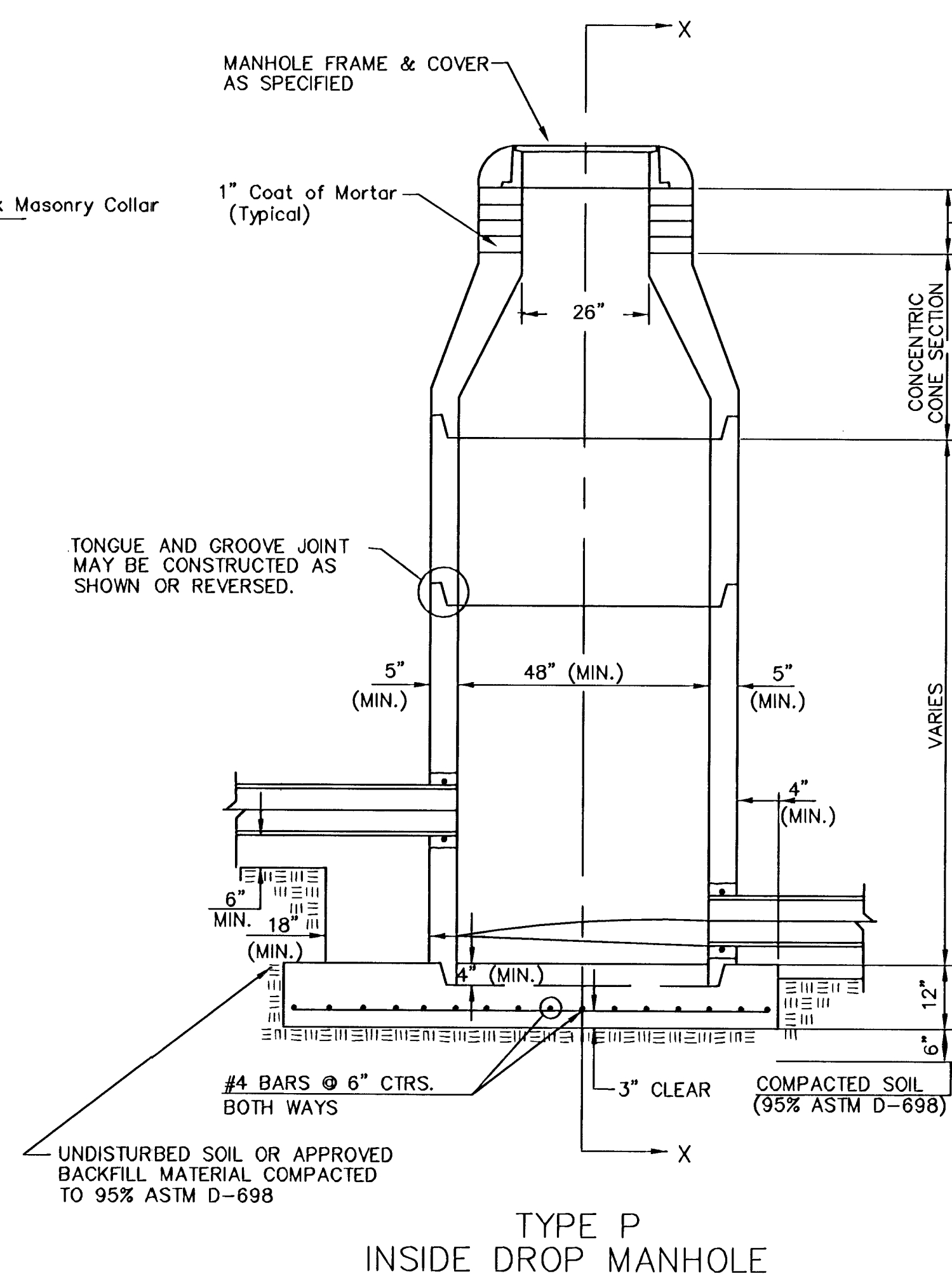
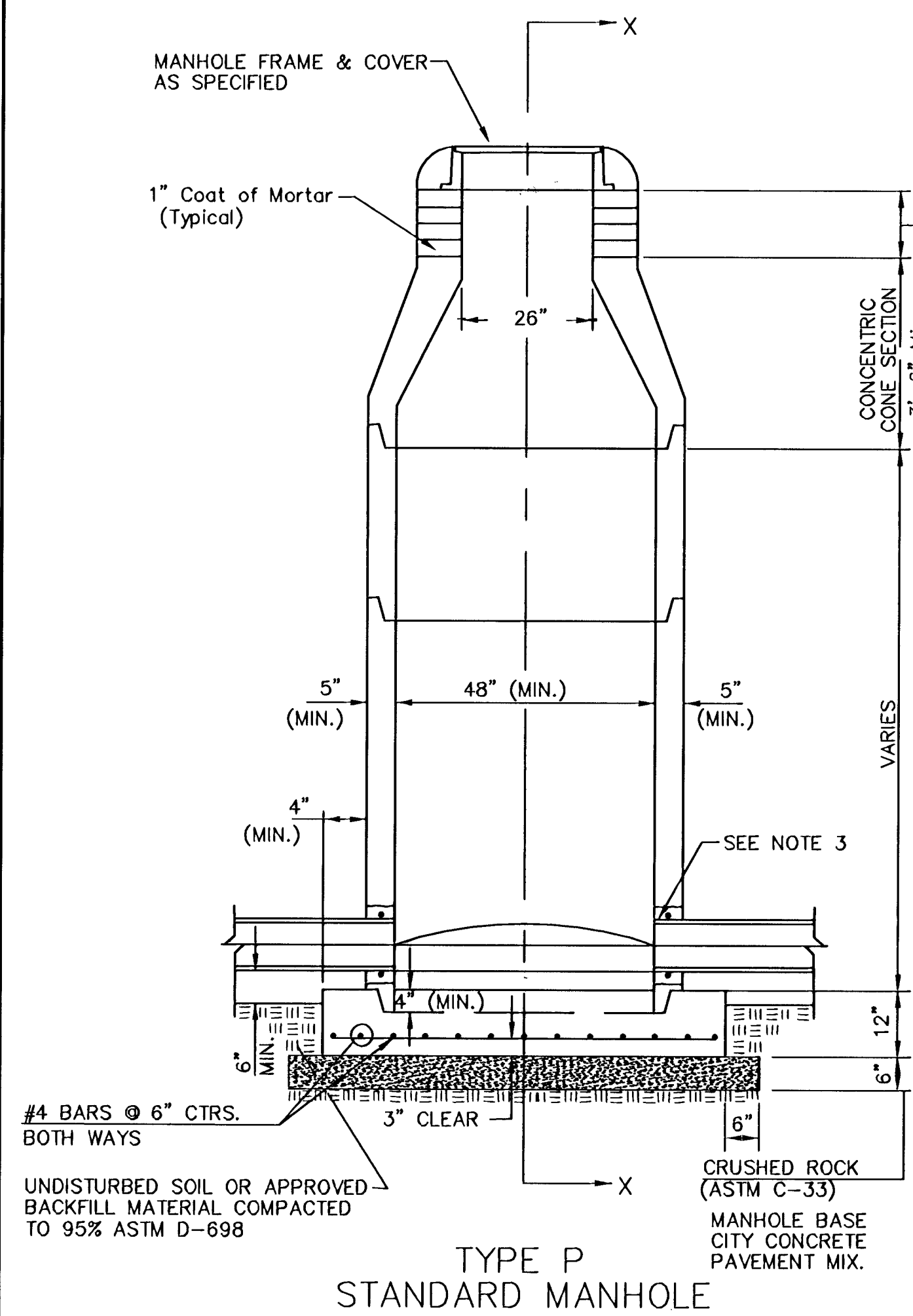
SANITARY SEWER PLANS
SHEET TITLE

GAR DESIGN BY. **KKL** DRAWN BY. **GAR** CHECKED BY.

MARCH 2003 DATE. **01270_BT** JOB NO. **1 / 11** SHEET/OF

H:\DWG\01270 DWG\SAN\01270_BT

SEWER APPURTENANCES DETAILS



GENERAL NOTES

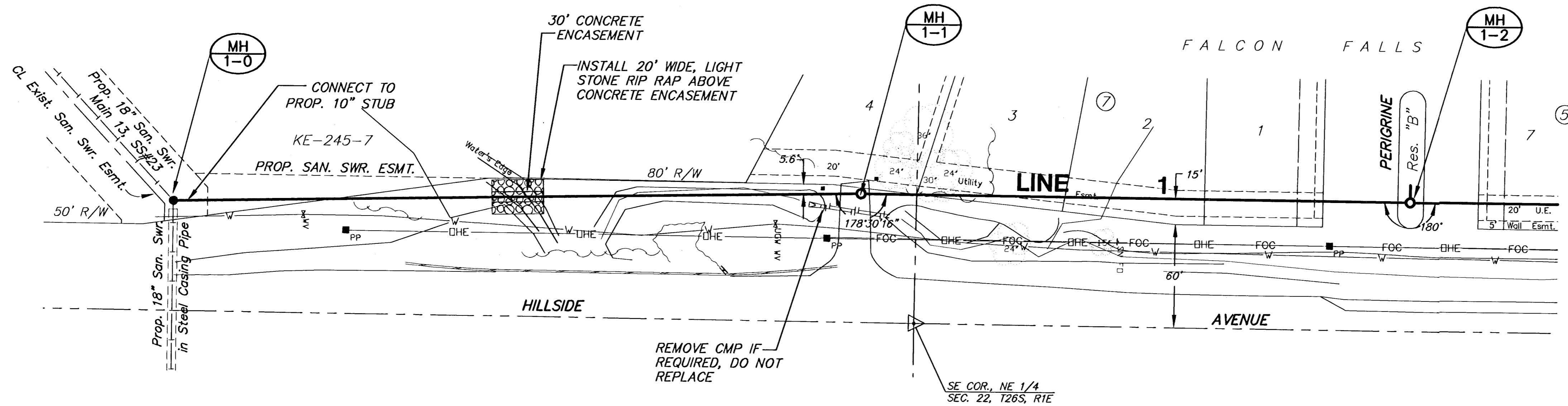
PRECAST MANHOLE NOTES

- ALL PRECAST CONCRETE MANHOLE SECTIONS SHALL CONFORM TO THE LATEST REVISIONS OF A.S.T.M. C478 AS MODIFIED BY THE SPECIFICATIONS.
- NON-SHRINK GROUT SHALL BE NON-METALLIC TYPE.
- 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.
- ALL INSIDE SURFACES OF THE CONCRETE MANHOLE WHICH WOULD BE EXPOSED TO SEWER GAS SHALL BE COATED WITH 2 COATS TNEDEC SERIES 66 HI-BUILD EPOXOLINE, DRY THICKNESS OF 8 MILS (MIN.)
- EXTERIOR MANHOLE WALLS SHALL BE COATED WITH 1 COAT MOBILARMA 633 BITUMINOUS COATING.
- JOINT SEALING COMPOUND SHALL BE KENT SEAL NO. 2 OR APPROVED EQUAL.
- PRECAST MANHOLES SHALL BE SET AT LEAST 4 INCHES INTO THE MANHOLE BASE.
- 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.
- LIFTING HOLES SHALL BE FILLED WITH NON-SHRINK GROUT AND THE INTERIOR SURFACE COATED AS SPECIFIED.
- 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.

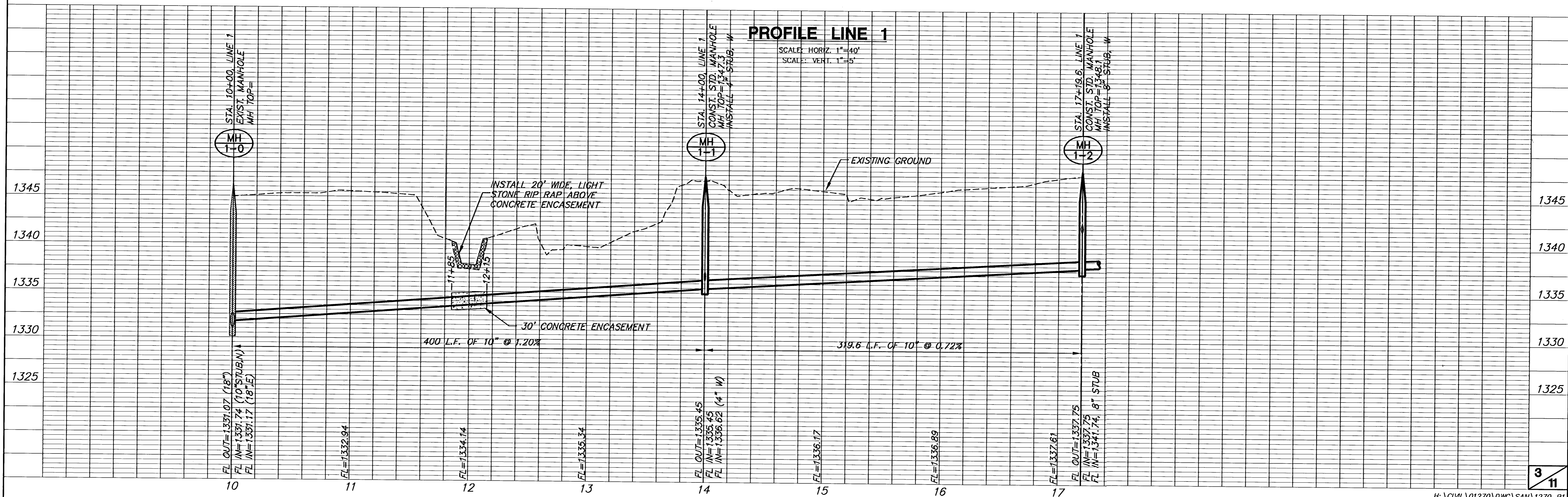
- REINFORCING STEEL SHALL BE INSTALLED IN THE MANHOLE BASES AND SHALL CONSIST OF NO. 4 BARS PLACED ON 6" CENTERS IN BOTH DIRECTIONS. THE MANHOLE BASE REINFORCEMENT SHALL BE PLACED AT LEAST 3" ABOVE THE BOTTOM OF THE MANHOLE BASE. ALL COSTS FOR FURNISHING AND INSTALLING REINFORCING STEEL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE MANHOLE.
- 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.
- 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.
- 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 MAHOLE. 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.

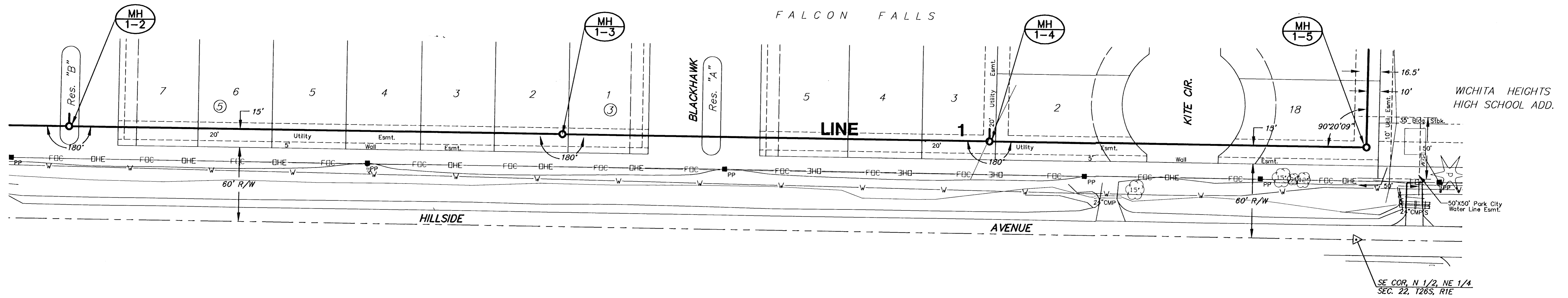
- MANHOLE COVER CASTINGS AND MANHOLE FRAME CASTINGS SHALL CONFORM TO THE REQUIREMENTS AS INDICATED IN THE STANDARD SPECIFICATIONS AND AS SHOWN IN THE STANDARD DETAIL DRAWING.
- THE VERTICAL DROP IN INSIDE DROP MANHOLES SHALL NOT EXCEED 2' FOR INFLOWING PIPES SIZED 12" OR SMALLER AND 2' FOR INFLOWING PIPES LARGER THAN 12". THE CROWNS OF INFLOWING PIPES SHALL NEVER BE SET LOWER THAN THE CROWN OF THE OUTFLOWING PIPE.
- 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.
- 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.
- CRUSHED ROCK CONFORMING TO ASTM C-33 WITH A GRADATION OF NO. 67 SHALL BE INSTALLED AT THE BASE OF THE MANHOLE TO A DEPTH OF NO LESS THAN 6", AND SHALL EXTEND NO LESS THAN 6" OUTSIDE THE DIAMETER OF THE CONCRETE FLOOR OF THE MANHOLE.
- WALL THICKNESS SHALL BE 1" GREATER THAN MANHOLE DIAMETER IN FEET.
- THE FULL DIAMETER OF THE MANHOLE SHALL EXTEND THE ENTIRE DEPTH OF THE MANHOLE TO THE CONE SECTION. NO REDUCTION IN MANHOLE DIAMETER WILL BE ALLOWED.

<p>THE CITY OF WICHITA</p> <p>CITY ENGINEER'S OFFICE 453 NORTH MAIN STREET WICHITA, KANSAS 67202 (316) 268-4901 (316) 268-4114 Fax</p>	<p>STANDARD TYPE 'P' MANHOLES</p>	
	<p>NEIL D. CABLE, P.E. - CITY ENGINEER</p>	
<p>PROJECT NUMBER 468-83535</p>	<p>INDEX CODE 743964</p>	
<p>DATE JAN 03</p>	<p>SHEET 2 OF 11</p>	

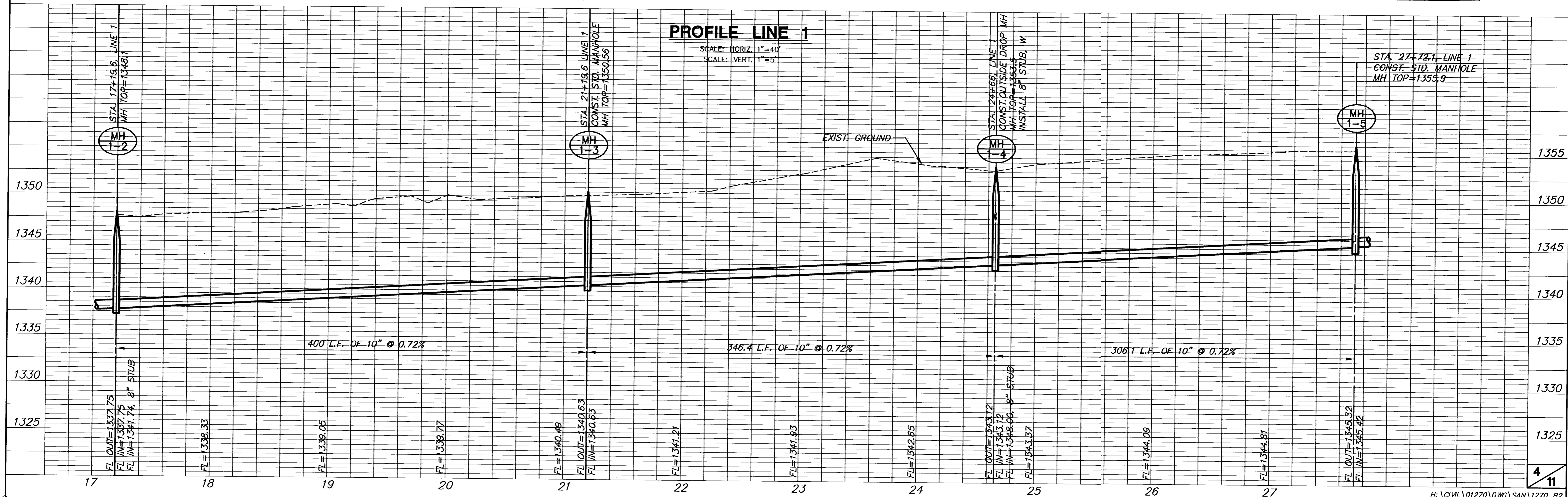


PLAN LINE 1



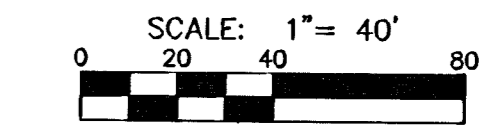


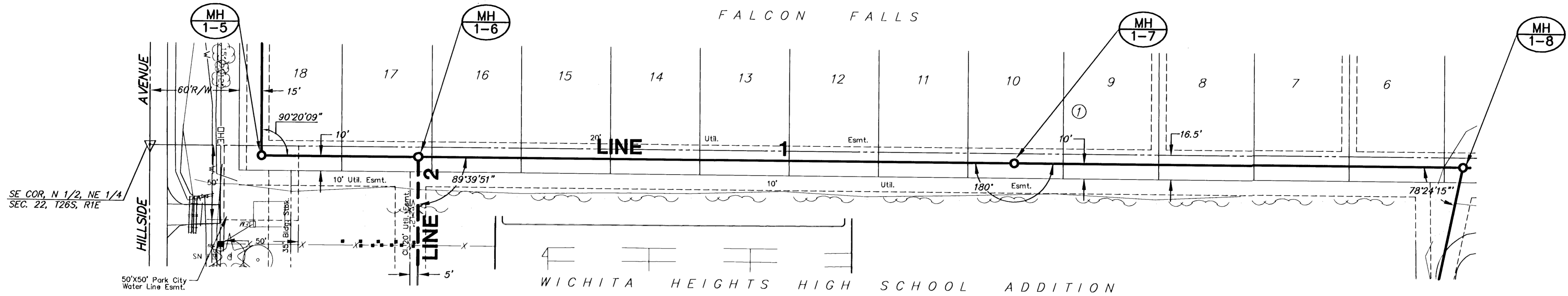
PLAN LINE 1



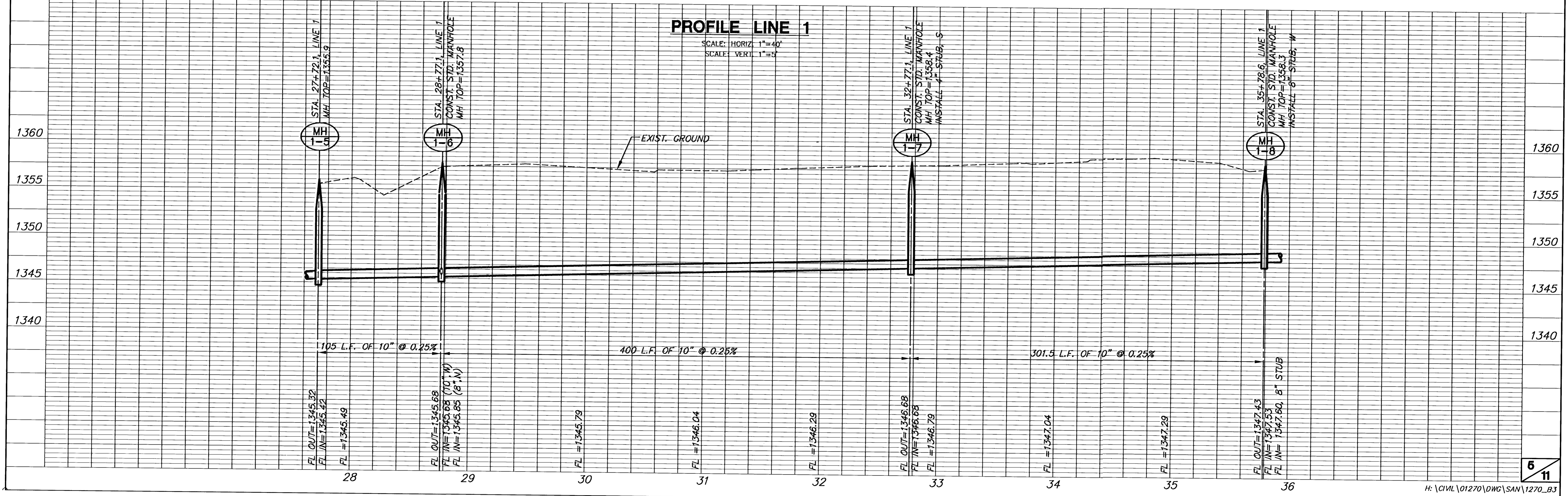
PROFILE LINE 1

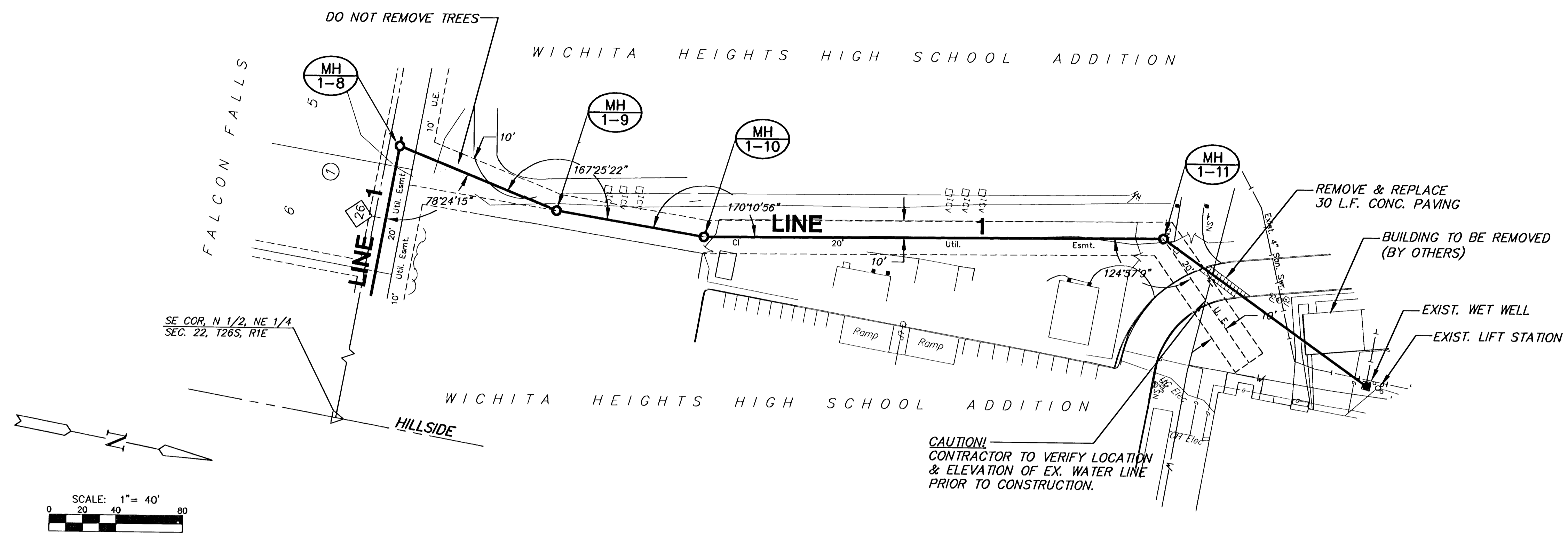
SCALE: HORIZ. 1"=40'
SCALE: VERT. 1"=5'





PLAN LINE 1





PLAN LINE 1

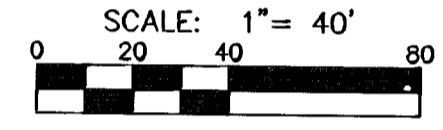
NOTES:

THE CONTRACTOR SHALL EXTEND A 10" LINE FROM MH 1-11 TO THE EXISTING WET WELL MANHOLE. THE CONTRACTOR SHALL LOCATE AND VERIFY ALL EXISTING SERVICE LINES LEADING TO THE WET WELL MANHOLE AND SHALL RECONNECT ANY SERVICE LINES DISTURBED BY CONSTRUCTION.

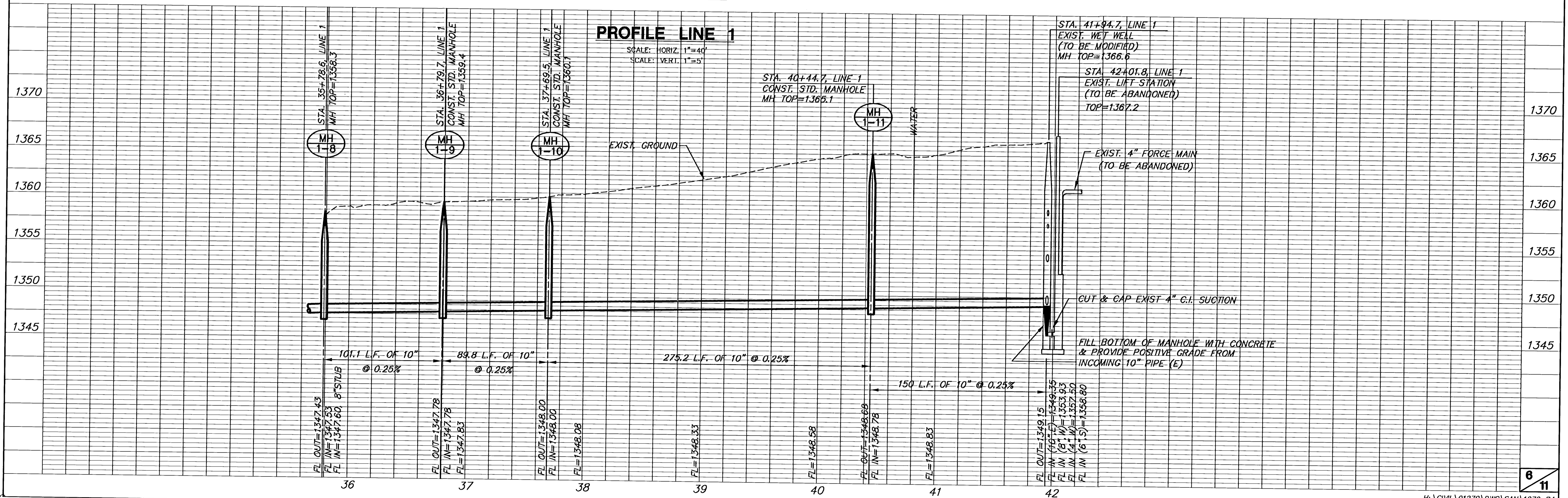
THE EXISTING 4" SUCTION LINES FROM THE WET WELL MANHOLE SHALL BE ABANDONED AND PLUGGED.

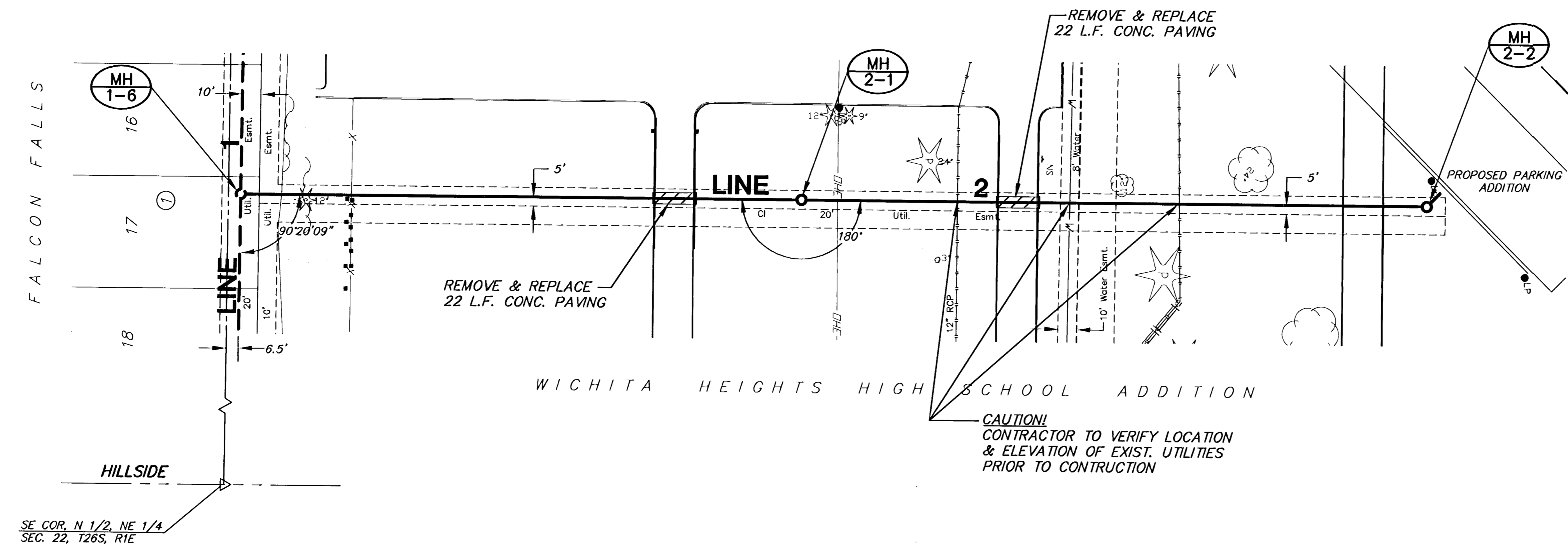
THE CONTRACTOR SHALL REWORK THE EXISTING WET WELL TO PROVIDE POSITIVE GRAVITY FLOW FROM THE INCOMING 10" LINE TO THE PROPOSED NEW 10" LINE CONNECTION TO MH 1-11.

CAUTION!
CONTRACTOR TO VERIFY LOCATION & ELEVATION OF EX. WATER LINE PRIOR TO CONSTRUCTION.



PROFILE LINE 1

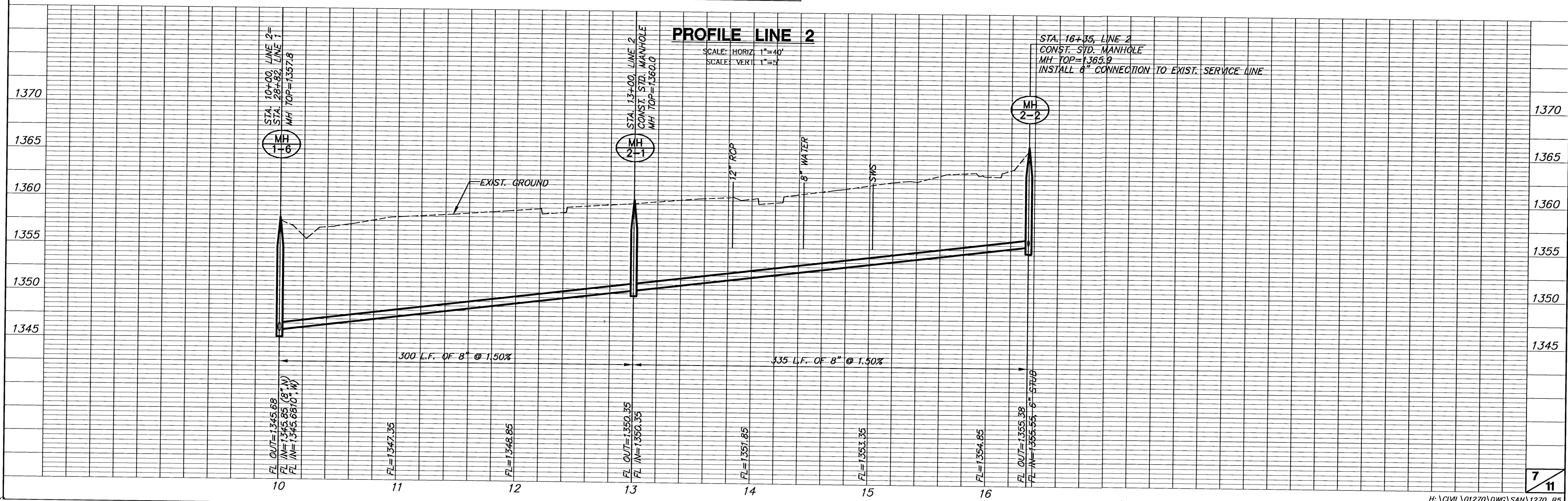




NOTE:
A 6" sanitary sewer service line was constructed with the recent building expansion project. The line was proposed to be extended approximately 15' beyond the edge of the parking lot and stubbed at a proposed flowline elevation of 1357.81. The construction superintendent for the project indicated the line is probably shallower than the proposed elevation of 1357.81.

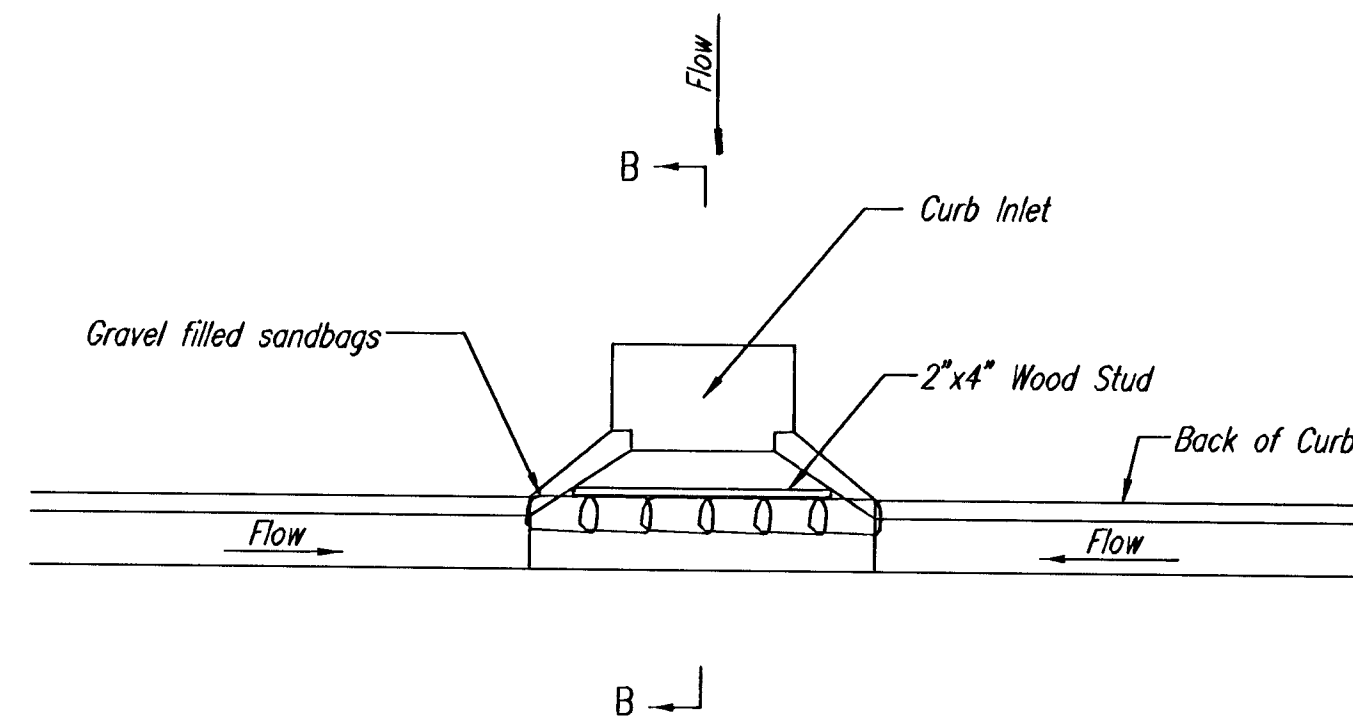
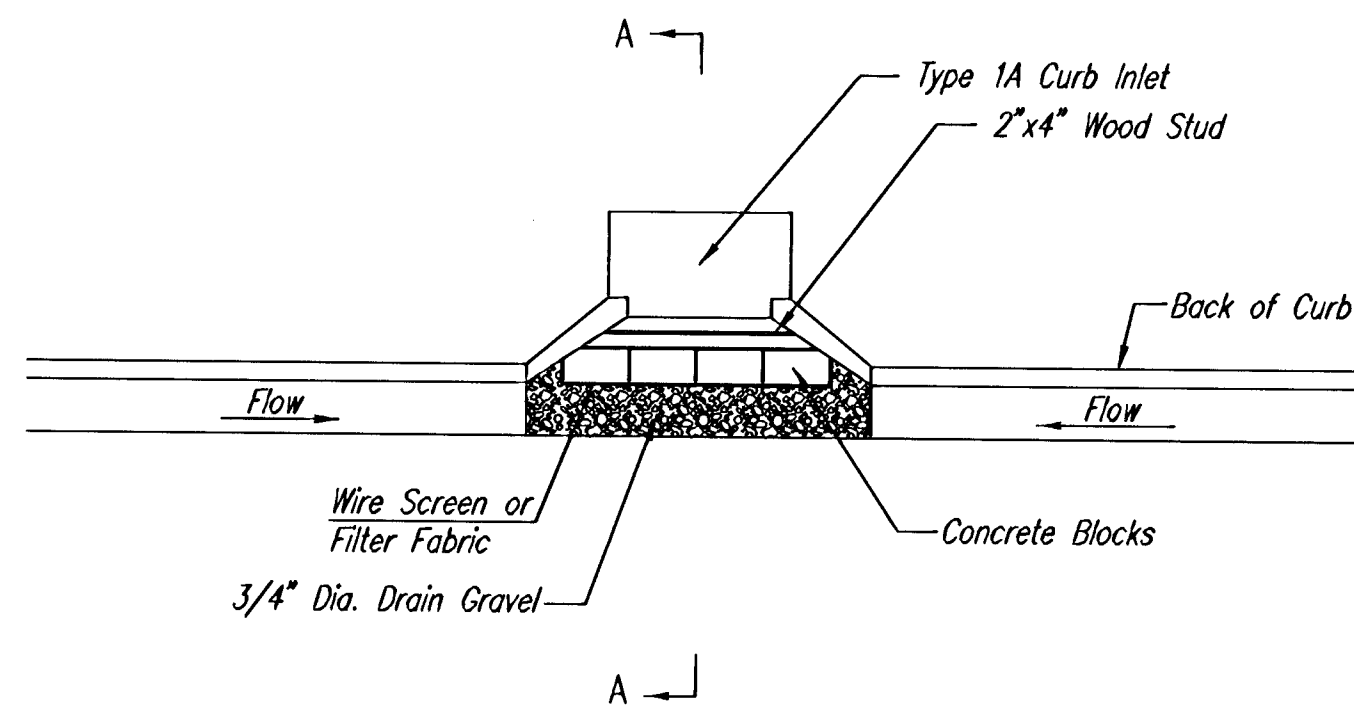
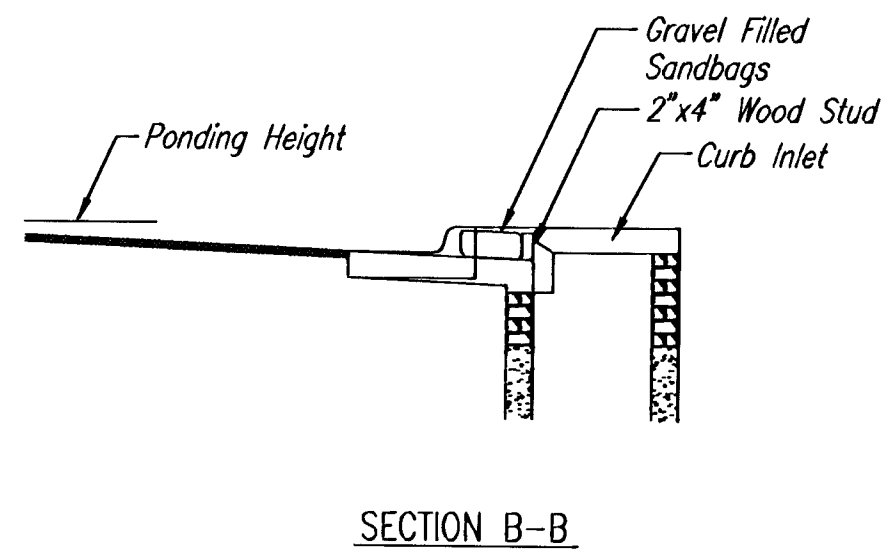
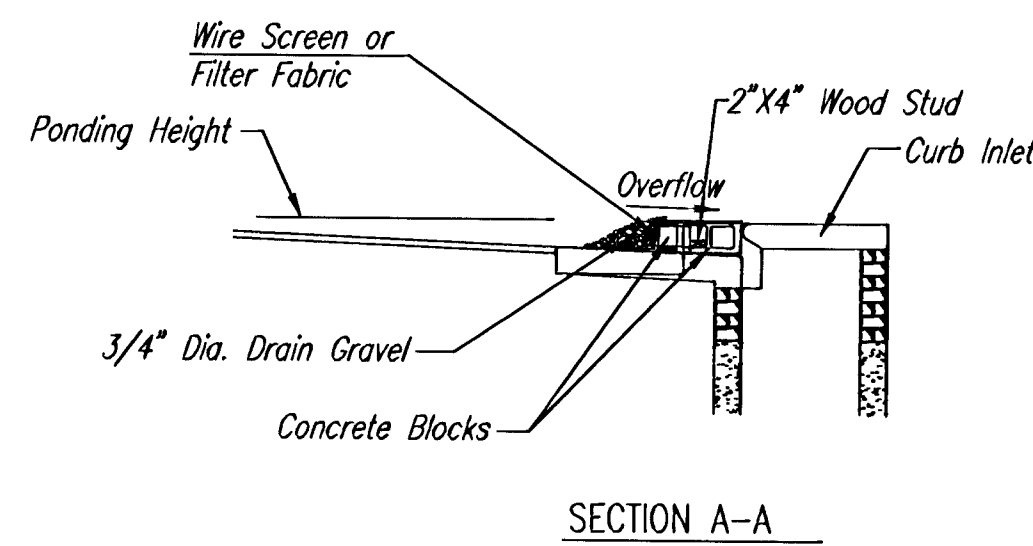
The contractor shall locate, expose, verify the flowline elevation and extend/connect the 6" line to the proposed manhole. An outside drop connection may be required. Cost of the extension/connection shall be paid for as "Connection to Existing Service Line".

PLAN LINE 2



PROFILE LINE 2

JSNR: DEP OPER: DEP SCALE: 1=1.00
 2:\STANDARD\Standards Wichita\SEBMP_PEC_DTL33 06-05-2001 02:03:06 pm



CURB INLET SANDBAG FILTERS
(INLET PROTECTION)

NOTE: Other types of curb inlet protection may be approved by the City so long as equal protection is provided.

CURB INLET GRAVEL FILTERS
(INLET PROTECTION-RESIDENTIAL STREETS ONLY)

NOTE: Other types of curb inlet protection may be approved by the city so long as equal protection is provided.

A gravel inlet filter shall be installed at sump locations on residential streets. This type of protection is not to be used on arterial or collector streets at any time that it would pose an undue traffic hazard.

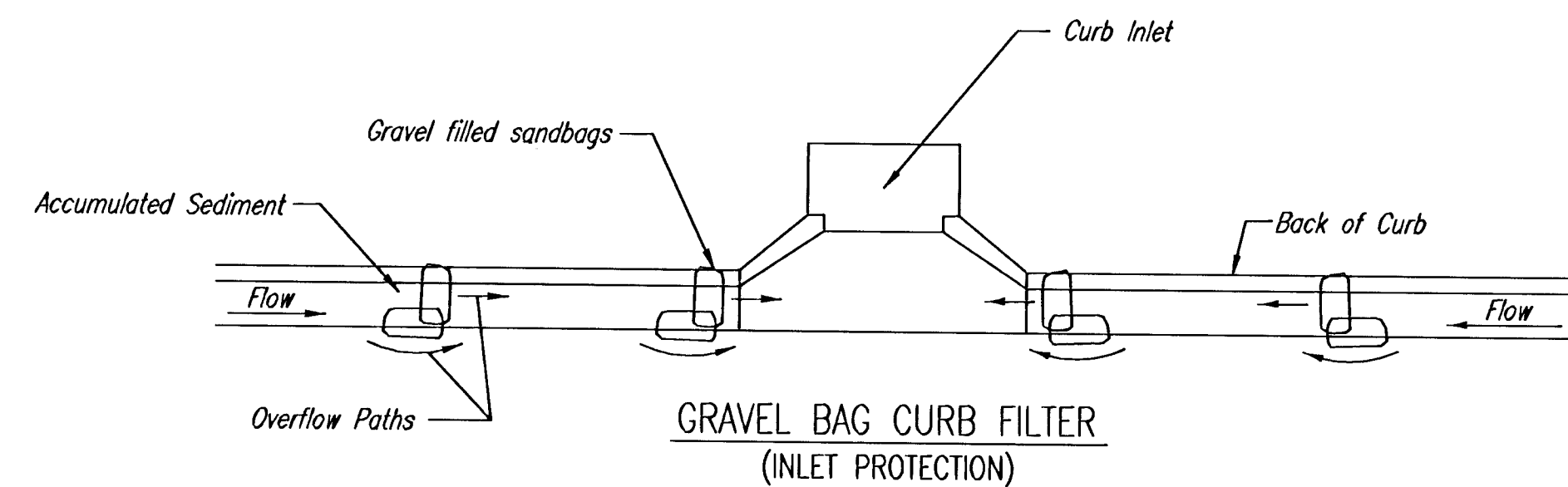
Instructions for Installing:

- STEP 1: Place concrete blocks around the inlet as shown on drawing. Insert 2x4 board as shown.
- STEP 2: Wrap 1/2" mesh wire screen around the concrete blocks.
- STEP 3: Place 1" to 1-1/2" diameter rock around the blocks and wire screen. Be sure the rock extends down from the top of the concrete block.
- STEP 4: To prevent damage to vehicles, signs warning drivers about the structures may be necessary. An alternative installation is the use of gravel bags supported by a 2"x4" board to prevent collapsing.

Use of rock with diameters smaller than 1" in the bag may result in clogging of pores and reduce the amount of water flowing into an inlet.

Maintenance:

All curb inlet gravel filters shall be inspected and repaired after each runoff event. Sediment deposits are to be removed once material is within 8 cm (3 inches) of the top of any block. Periodically, the gravel shall be raked to increase infiltration and filtering of runoff waters. Accumulated sediment is to be removed immediately from roads and streets.



NOTE: Place two or more sets of bags in a manner that results in maximum support. The flow line bag must be lower than top of curb.

CURB SEDIMENT TRAPS

When inlets are located on streets having a grade (i.e., sump conditions do not exist), installing gravel (or sand) bags in the gutter flow line to create small sediment traps can be considered. Gravel bags are recommended over sand bags to allow for drainage.

If the spacing between bags becomes too large, little sediment may be trapped. Spacing of bags should be completed using the table or graph that illustrates placement distances based upon street slope. When installed in the gutter, bag tops must be lower than the sidewalk.

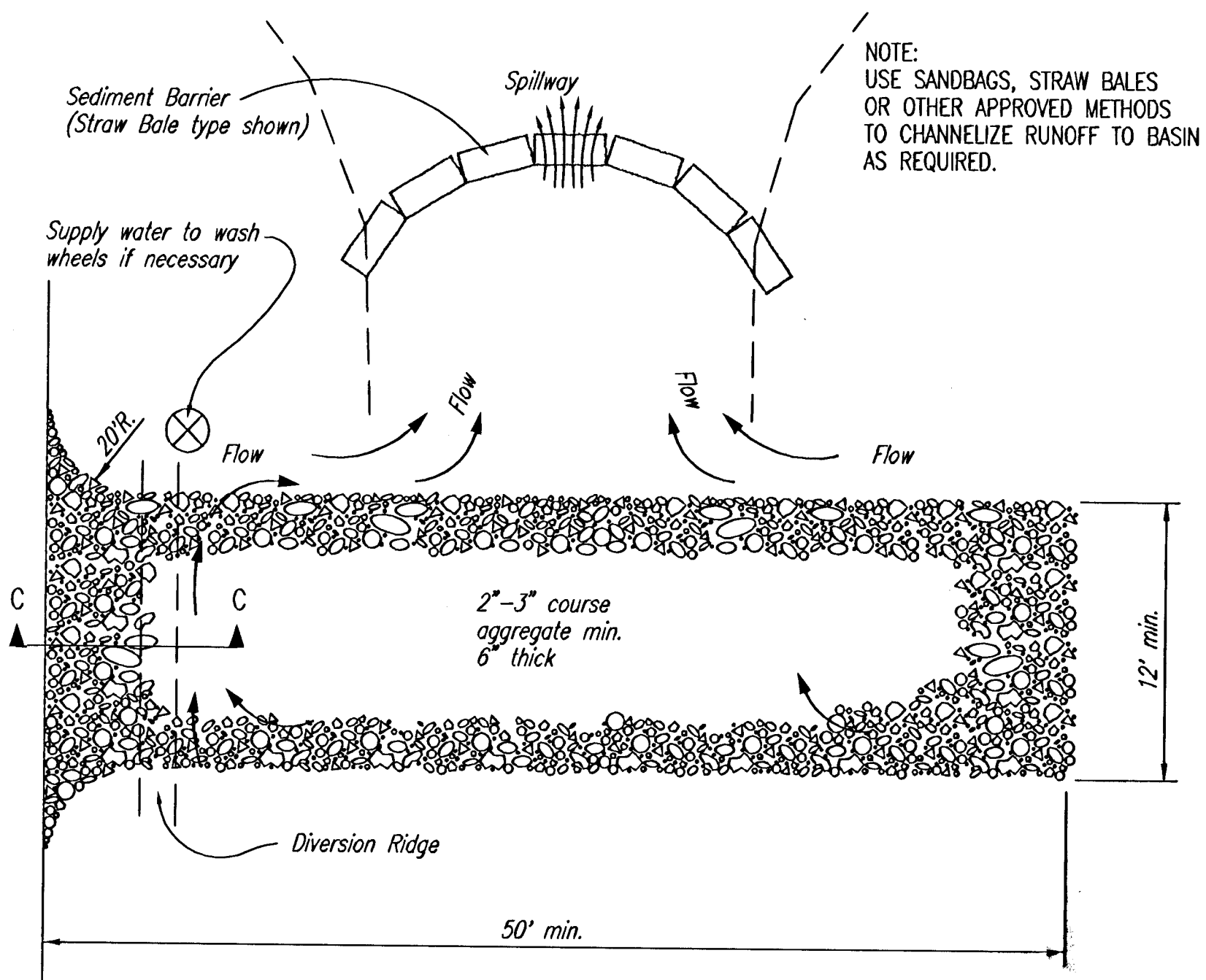
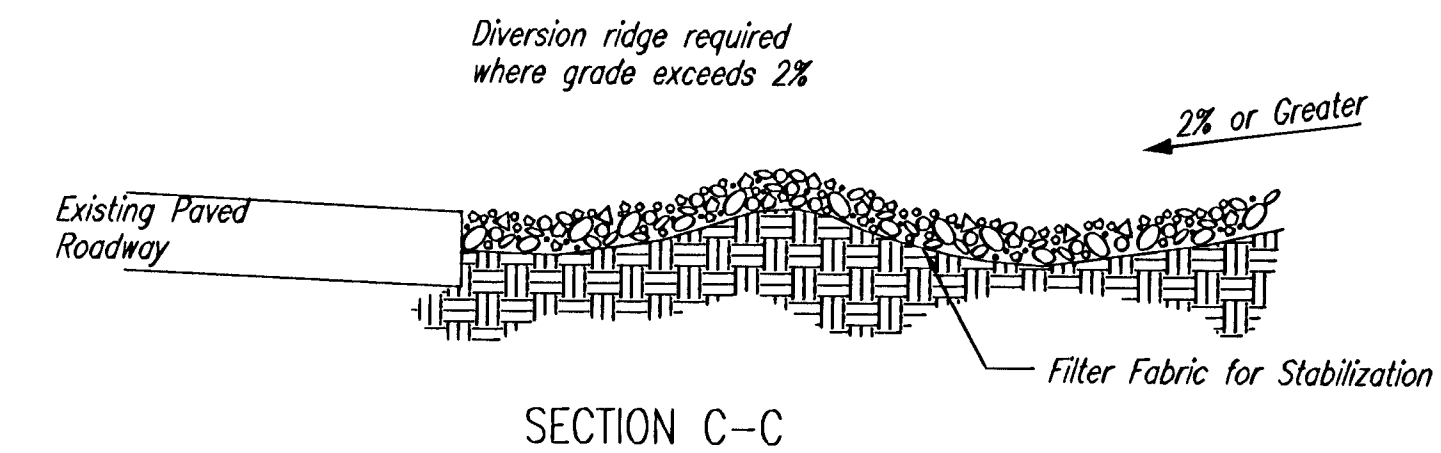
Spacing:

Gravel bags are to be placed according to street grades using the following table or graph that appears below.

GRADE (%)	SPACING (FEET)
0.5	75
1.0	45
2.0	18
3.0	12
4.0	9
5.0	6

Maintenance:

Collected sediment shall be removed after every runoff event. Bags that are destroyed by vehicular traffic or through natural deterioration are to be immediately replaced.



NOTES:

1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.
3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN, AS SHOWN ABOVE.
4. DRIVE ENTRANCES ONTO RESIDENTIAL LOTS WILL NOT BE REQUIRED TO HAVE THE SEDIMENT BARRIER SHOWN, BUT WHEEL WASHING MAY BE REQUIRED IF STABILIZED ENTRANCE IS NOT SUFFICIENT TO KEEP MUD FROM BEING TRACKED ONTO ADJACENT STREET. ENTRANCE SHALL EXTEND FROM BACK OF CURB TO DWELLING.



SOIL EROSION BMP DETAILS

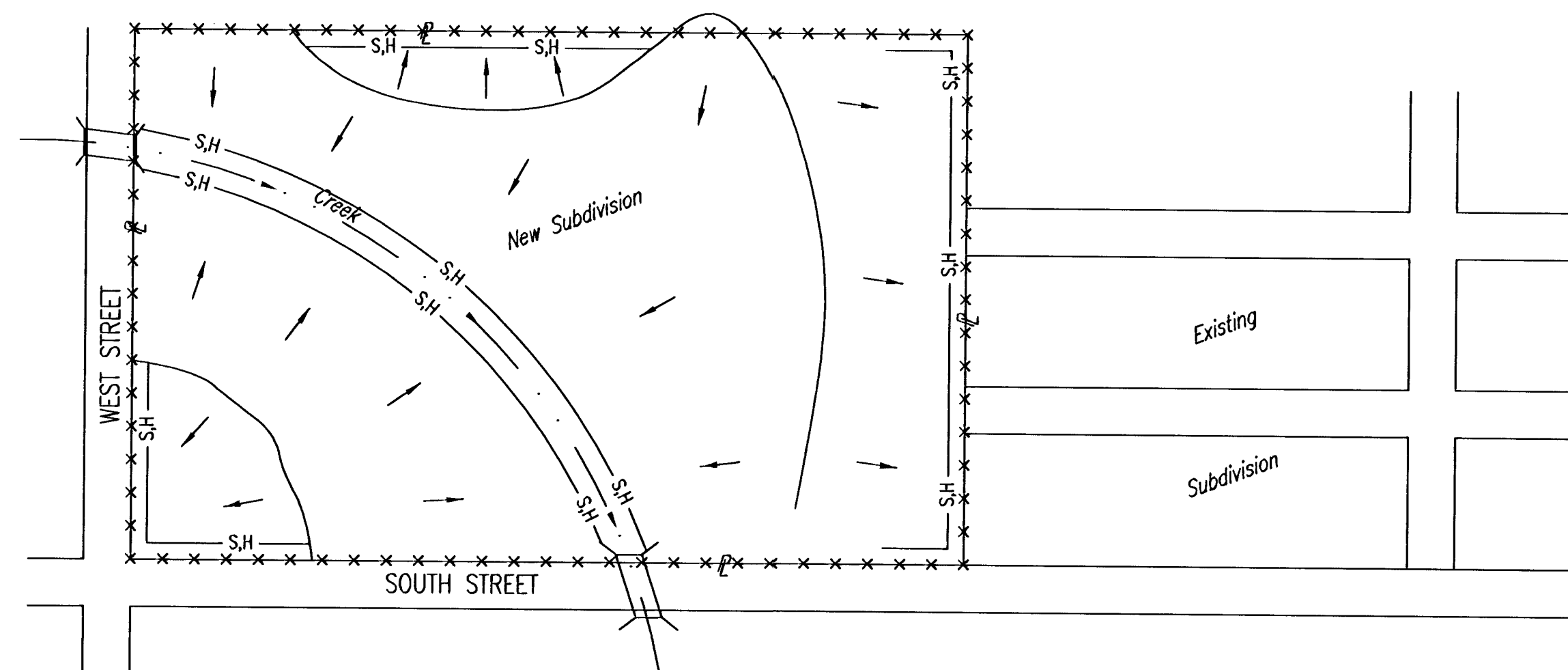
CHRISTOPHER M. CARRIER, P.E.
STORM WATER ENGINEER

PROJECT NUMBER: 468-83535
OCA NO.: 743964

DATE: NOV 2002
SHEET 8 OF 11

PHASE 1 - INITIAL EARTHWORK AND UTILITIES (EXCEPT STORM SEWER)

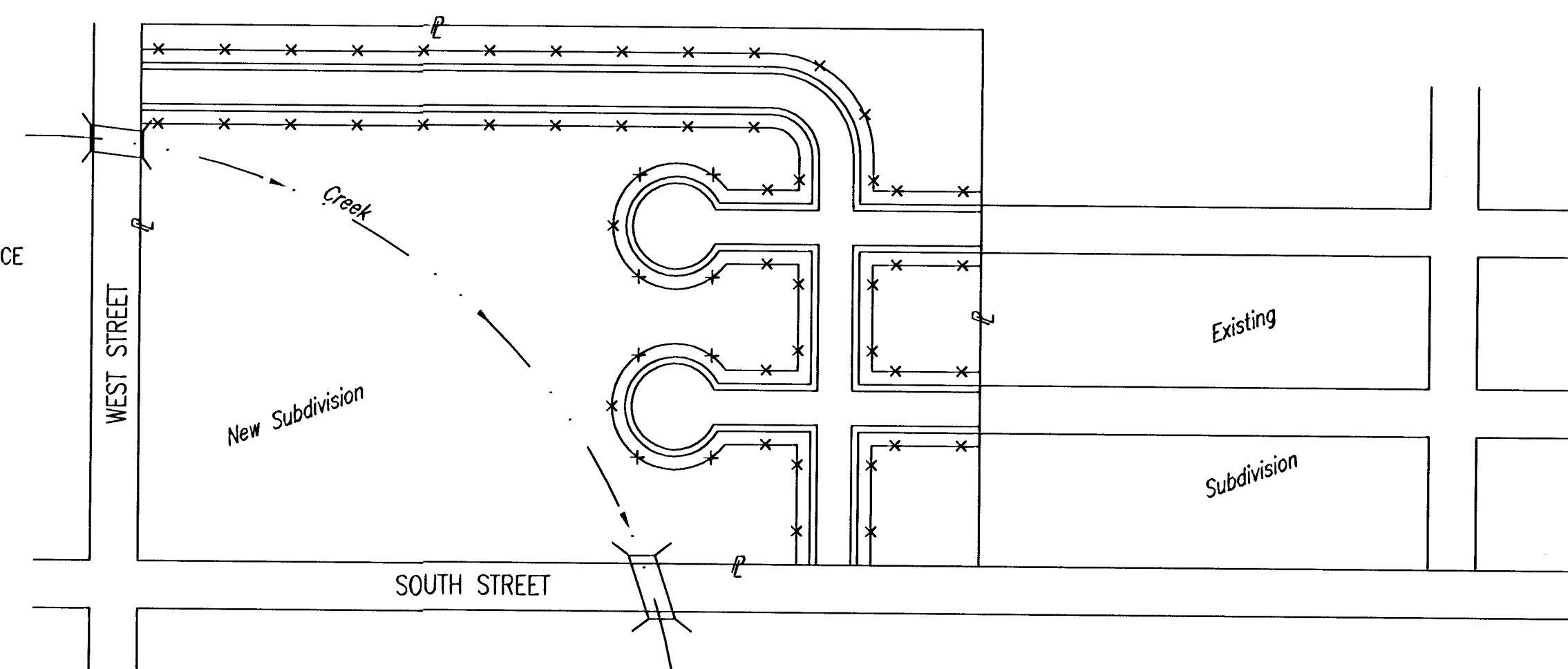
- LEGEND**
- DRAINAGE FLOW PATH
 - RIDGE LINES
 - × POINT OF COMPLIANCE
 - S.H- SILT FENCE OR HAY BALE BMP
 - DRAINAGEWAY FLOWLINE



- DURING THIS PHASE OF SUBDIVISION CONSTRUCTION, THE POINTS OF COMPLIANCE ARE THE PERIMETER BOUNDARIES AND ANY DRAINAGE WAYS OR STORM SEWERS DRAINING THROUGH OR FROM THE SITE. SHOULD LAKES BE CONSTRUCTED WITHIN THE SUBDIVISION THAT WILL DISCHARGE DURING STORMS, THEY ARE ALSO A POINT OF COMPLIANCE.
- HAYBALES OR SILT FENCE MUST BE CONSTRUCTED ALONG THE PROPERTY LINE WHERE ON SITE WATER CAN DRAIN OFF THE PROPERTY. THESE BMP'S WILL ALSO BE INSTALLED ALONG ANY DRAINAGE DITCH OR LAKE THAT CAN DISCHARGE.
- SHOULD SILT OR SEDIMENT ENTER THE DITCHES OR GUTTERLINES ON THE ADJACENT BOUNDARY STREETS, APPROPRIATE BMP'S WILL BE PLACED WITHIN THE SUBDIVISION TO PREVENT THIS.
- ANY MUD TRACKED ONTO ADJACENT STREETS WILL BE REMOVED AT THE END OF EACH WORK DAY.
- CONTRACTORS WORKING WITHIN THE SITE WILL NOT BE REQUIRED TO USE INDIVIDUAL BMP'S AS LONG AS THOSE SPECIFIED ABOVE ARE IN PLACE AND EFFECTIVE. CONTRACTORS WORKING ON THE BOUNDARY LINE STREETS OR ON ADJACENT PROPERTIES TO EXTEND UTILITIES ARE EXPECTED TO USE BMP'S AT THEIR WORK LOCATIONS, AS NEEDED.
- UTILIZE STABILIZED CONSTRUCTION ENTRANCE AT ENTRANCE AND EXIT ONTO ANY EXISTING PUBLIC STREETS.
- THE SUBDIVISION DEVELOPER (OWNER) SHALL INSTALL AND MAINTAIN THE ON-SITE BMP'S.

PHASE 3 - STREET CONSTRUCTION

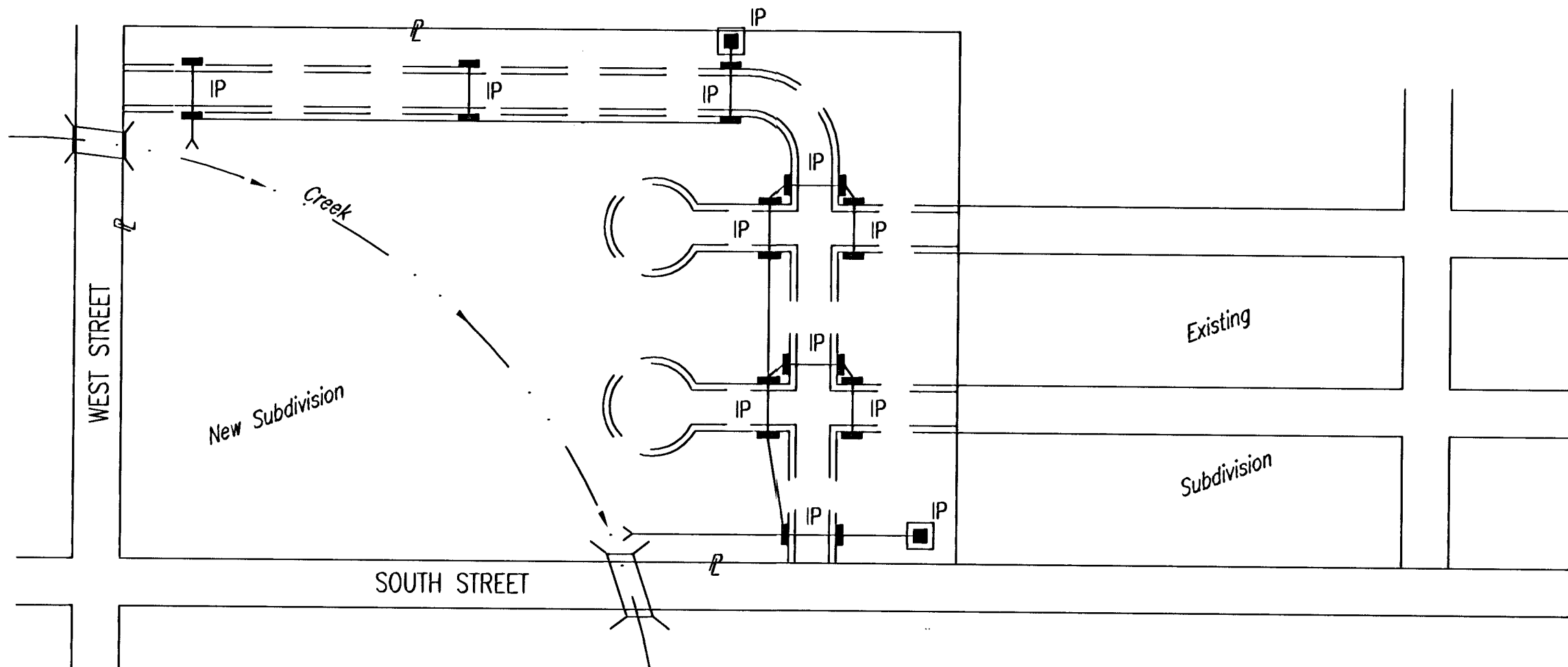
- LEGEND**
- == NEW STREETS
 - ××× ADDITIONAL POINTS OF COMPLIANCE



- DURING THIS PHASE OF SUBDIVISION CONSTRUCTION, NEW STREETS ARE INSTALLED. ALL BMP'S INSTALLED DURING PHASE 1 AND 2 MUST STILL BE MAINTAINED. THE POINT OF COMPLIANCE NOW SHIFTS TO THE BACK OF CURB ALONG EACH STREET.
- CURB OPENING INLET PROTECTION:
 - SUMP AREAS - INLET PROTECTION SHALL BE PROVIDED WHEN STREET SUBGRADE WORK IS COMPLETED.
 - NON-SUMP LOCATIONS - PROVIDE INLET PROTECTION AS SOON AS BASE COURSE ASPHALT IS INSTALLED, BEFORE THE SURFACE COURSE LIFT.
- BMP'S WILL BE REQUIRED BACK OF CURB WHEREVER WATER CAN FLOW OVER THE CURB AND THE CURB HAS BEEN BACKFILLED TO WITHIN 3" OR LESS OF THE TOP OF CURB (SEE CURB BACKFILL DETAIL). FOR CURBS NOT YET ENTIRELY BACKFILLED (3" OR MORE BELOW TOP OF CURB), BMP'S WILL BE REQUIRED AT POINTS WHERE WATER BREAKS OVER CURB WHICH COULD RESULT IN THE PLACEMENT OF SEDIMENT IN THE GUTTER.
- SEE DETAIL THIS SHEET ON BACK OF CURB PROTECTION.
- THE BACK OF CURB PROTECTION SPECIFIED ON THIS PLAN MAY HAVE TO BE SUPPLEMENTED WITH HAYBALE OR SILT FENCE BMP'S AT LOCATIONS WHERE CONCENTRATED FLOW RESULTS IN SEDIMENT BEING CARRIED OVER THE EXCELSIOR MATS.
- THE STREET CONTRACTOR WILL BE RESPONSIBLE FOR INSTALLING BACK OF CURB BMP'S.
- THE INDIVIDUAL LOT OWNERS WILL BE RESPONSIBLE FOR MAINTAINING THE BACK OF CURB BMP'S IN FRONT OF THEIR LOTS UNTIL SUCH TIME AS ADJACENT DISTURBED EARTH IS STABILIZED WITH GRASS OR SOD.

PHASE 2 - INSTALLATION OF STORM SEWER

- LEGEND**
- == PROPOSED NEW STREETS
 - CURB INLETS
 - AREA DRAINS
 - IP- INLET PROTECTION

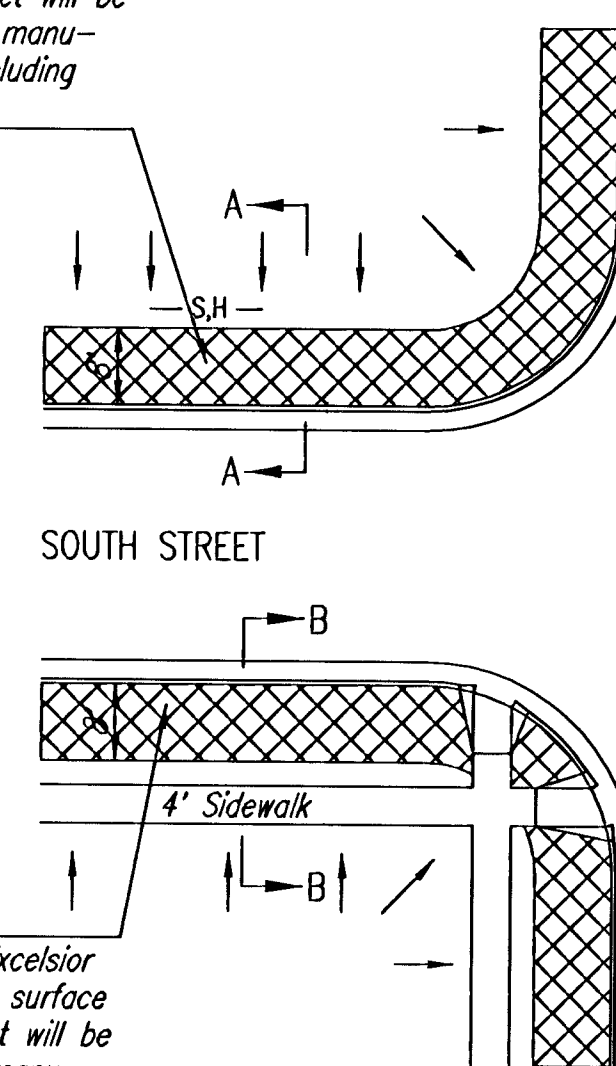


- DURING THIS PHASE OF SUBDIVISION DEVELOPMENT, ALL BMP'S REQUIRED IN PHASE 1 SHALL REMAIN IN PLACE AND BE MAINTAINED.
- AS NEW STORM SEWERS, WITH INLETS, ARE INSTALLED, THE STORM SEWERS MUST NOW BE PROTECTED SO ALL NEW INLETS BECOME POINTS OF COMPLIANCE.
- AREA DRAINS - AS SOON AS WATER CAN FLOW INTO THESE DRAINS, HAYBALE OR SILT FENCE PROTECTION WILL BE INSTALLED AROUND THEM.
- CURB OPENING INLETS - AS SOON AS WATER CAN FLOW INTO THESE DRAINS, INLET PROTECTION BMP'S MUST BE INSTALLED. SEE PHASE 3 - STREET CONSTRUCTION.
- THE STORM SEWER CONTRACTOR WILL BE RESPONSIBLE FOR INSTALLING THESE BMP'S. IF WATER CANNOT FLOW INTO CURB INLETS UNTIL STREET CONSTRUCTION IS COMPLETE, THEN STREET CONTRACTOR WILL INSTALL INLET PROTECTION.
- THE SUBDIVISION DEVELOPER WILL MAINTAIN THESE BMP'S ONCE INSTALLED.
- ONCE ALL DISTURBED GROUND DRAINING TO AN INLET HAS BEEN RESTABILIZED WITH GRASS OR SOD, THE SUBDIVISION DEVELOPER WILL BE RESPONSIBLE FOR PERMANENTLY REMOVING THE INLET PROTECTION.

GENERAL NOTES:

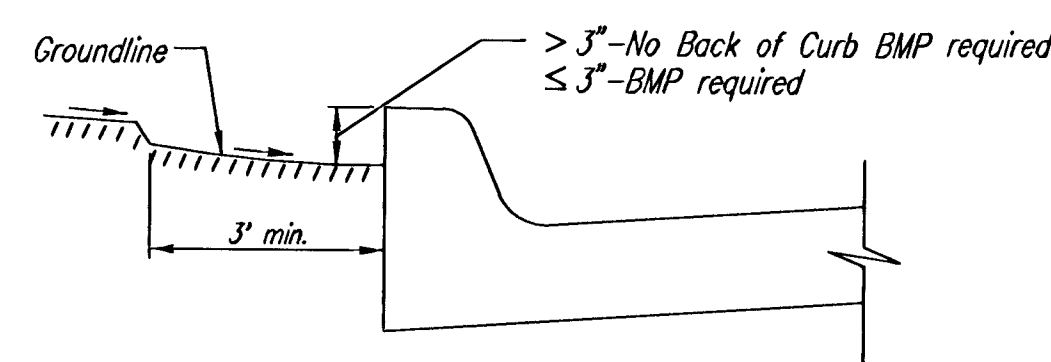
- THE INTENT OF ALL BEST MANAGEMENT PRACTICES (B.M.P.'S) IS TO PREVENT ERODED SOIL FROM ENTERING DITCHES, STORM SEWERS, OR ANY OTHER DRAINAGE FEATURE.
- THIS SHEET IS INTENDED TO PROVIDE GUIDELINES AS TO WHAT TYPE OF BMP'S WILL BE INSTALLED DURING THE CONSTRUCTION PROCESS. CONTRACTORS ARE EXPECTED TO BID PROJECTS ACCORDINGLY.
- BMP'S SHALL BE MAINTAINED DURING THE CONSTRUCTION PROCESS TO REMAIN EFFECTIVE. MAINTENANCE SHALL BE AS INDICATED ON THE BMP DETAIL SHEETS.
- PERSONS DESTROYING BMP'S SHALL BE RESPONSIBLE FOR IMMEDIATELY REPAIRING THEM OR INSTALLING SUITABLE REPLACEMENT BMP'S.
- THE DEVELOPMENT OF ANY SUBDIVISION THAT DISTURBS 5 ACRES OR MORE WILL REQUIRE A FEDERAL/STATE NPDES STORMWATER PERMIT. THE PREPARATION OF A STORMWATER POLLUTION PREVENTION PLAN IS REQUIRED. EROSION CONTROL BMP'S ARE REQUIRED. THE DETAILS SHOWN ON THIS SHEET ARE THE MINIMUM STANDARDS TO BE SHOWN ON POLLUTION PREVENTION PLAN.
- FOR SUBDIVISIONS SMALLER THAN 5 ACRES, SOIL EROSION BMP'S ARE REQUIRED. ALSO, DEVELOPERS AND CONTRACTORS ARE ENCOURAGED TO DEVELOP POLLUTION PREVENTION PLANS FOR EACH PROJECT PRIOR TO CONSTRUCTION.
- FAILURE TO USE AND MAINTAIN BMP'S IS A VIOLATION OF SECTION 16.32 OF THE CITY CODE AND WILL SUBJECT THE SUBDIVISION DEVELOPER AND CONTRACTORS TO THE PENALTIES PROVIDED THEREIN.
- THE APPLICATION OF BMP'S SHOWN ON THIS SHEET IS FOR SITUATIONS NORMALLY ENCOUNTERED. FROM TIME TO TIME, SITUATIONS WILL ARISE THAT MAY REQUIRE A DIFFERENT BMP OTHER THAN THAT SHOWN. BMP'S, OTHER THAN THOSE SHOWN, MAY BE UTILIZED SO LONG AS THEY ARE EFFECTIVE AND MAINTAINED.
- A STABILIZED EARTH SURFACE IS DEFINED AS ONE THAT IS HARD SURFACED WITH CONCRETE, ASPHALT, OR THE LIKE, OR ONE ON WHICH 70% OF THE GRASS HAS GERMINATED ON THE ENTIRE SURFACE.

BMP-Install 8' wide Curlex I Excelsior Blanket, or equal, on prepared surface back of curb. Edge of blanket will be at back of curb. Install per manufacturer's recommendation, including staples.



BMP-Install 8' wide Curlex I Excelsior Blanket, or equal, on prepared surface back of curb. Edge of blanket will be at back of curb. Install per manufacturer's recommendation, including staples.

BACK OF CURB PROTECTION DETAIL



CURB BACKFILL DETAIL

JSNR: DEP OPER: DEP SCALE: 1=1,000
 2: \STANDARD\Standards Wichita \SEBMP_SUBDIVISION 06-05-2001 01:57:53 pm

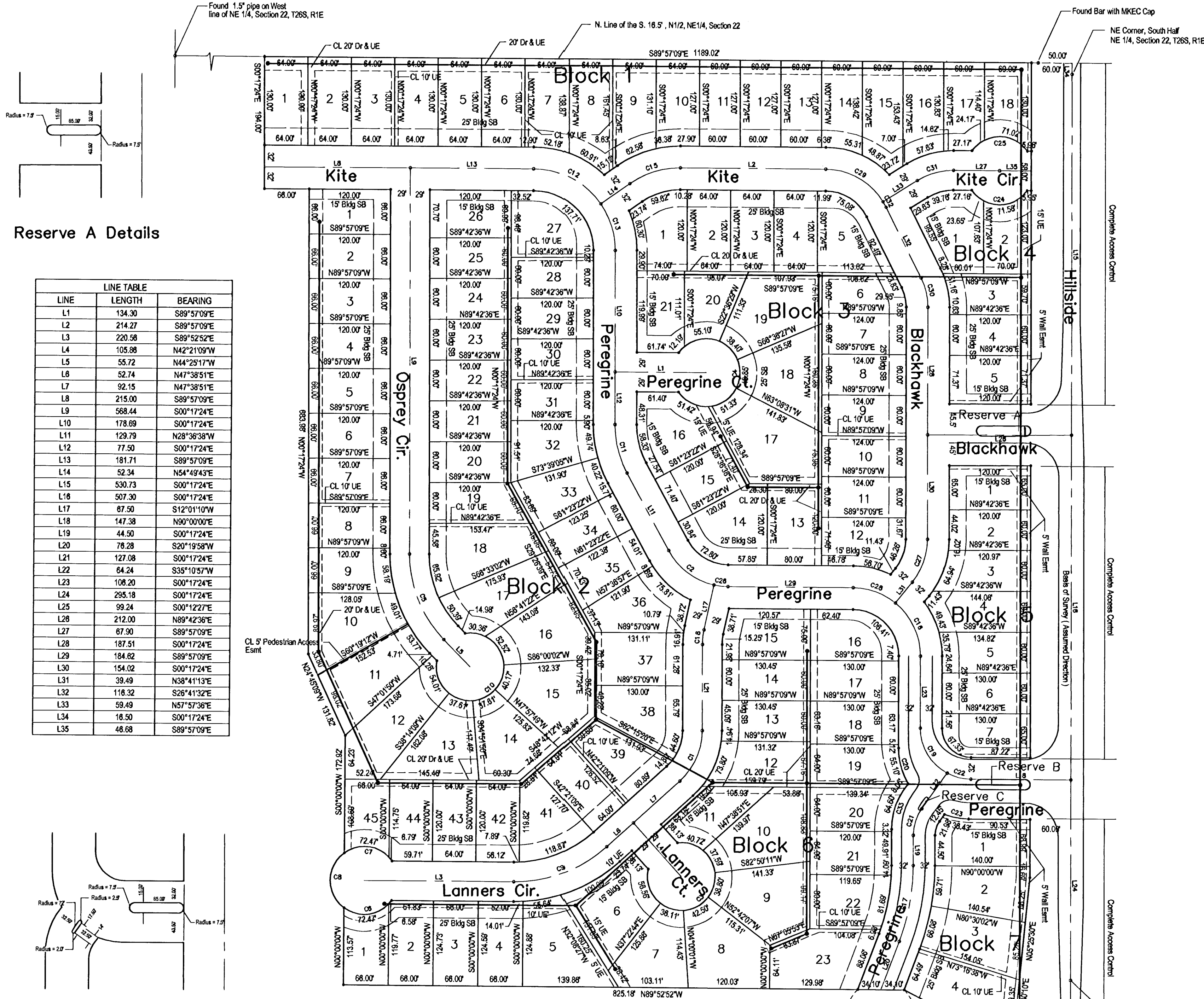
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**SOIL EROSION BMP'S
SUBDIVISION
DEVELOPMENT
PROCESS**

CHRISTOPHER M. CARRIER, P.E.
STORM WATER ENGINEER

PROJECT NUMBER 468-83535 OCA NO. 743964

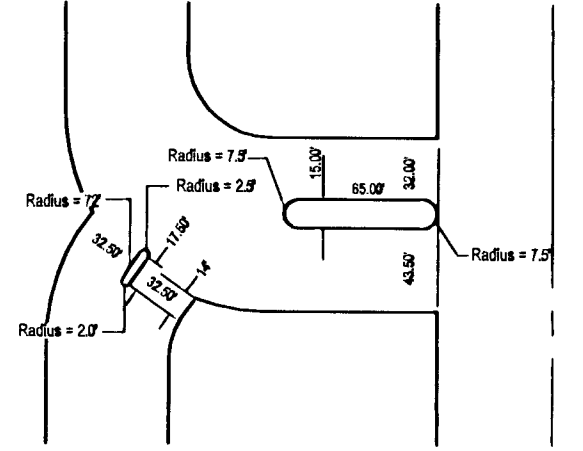
DATE NOV 02 SHEET 9 OF 11



Reserve A Details

LINE	LENGTH	BEARING
L1	134.30	S89°57'09"E
L2	214.27	S89°57'09"E
L3	220.58	S89°52'52"E
L4	105.86	N42°25'17"W
L5	55.72	N44°25'17"W
L6	52.74	N47°38'51"E
L7	92.15	N47°38'51"E
L8	215.00	S89°57'09"E
L9	568.44	S00°17'24"E
L10	178.89	S00°17'24"E
L11	129.79	N28°36'38"W
L12	77.50	S00°17'24"E
L13	181.71	S89°57'09"E
L14	52.34	N54°49'43"E
L15	530.73	S00°17'24"E
L16	507.30	S00°17'24"E
L17	87.50	S12°01'10"W
L18	147.38	N90°00'00"E
L19	44.50	S00°17'24"E
L20	76.28	S20°19'58"W
L21	127.08	S00°17'24"E
L22	64.24	S35°10'57"W
L23	108.20	S00°17'24"E
L24	295.18	S00°17'24"E
L25	99.24	S00°12'27"E
L26	212.00	N89°42'36"E
L27	67.90	S89°57'09"E
L28	187.51	S00°17'24"E
L29	184.62	S89°57'09"E
L30	154.02	S00°17'24"E
L31	39.49	N38°41'13"E
L32	116.52	S26°41'32"E
L33	59.49	N57°57'36"E
L34	16.50	S00°17'24"E
L35	46.68	S89°57'09"E

Reserve B and C Details



Note:

All lots in this addition shall have a side yard setback of 5 feet.

Temporary easement by separate instrument.

STATE OF KANSAS, COUNTY OF SEDGWICK: ss.
I, Kenny E. Hill, being a duly licensed Land Surveyor in said County and State, do hereby certify that the survey and platting of "FALCON FALLS ADDITION to Wichita, Kansas, was completed under my direct supervision, said plat being described as follows:

Beginning at the Southeast corner of the Northeast Quarter of Section 22, Township 28 South, Range 1 East of the 6th P.M., Sedgwick County, Kansas; thence S00°12'27"E for a distance of 99.24 feet; thence S89°47'33"W for a distance of 80.00 feet; thence N63°12'08"W for a distance of 185.29 feet; thence N89°52'52"W for a distance of 825.18 feet; thence N00°00'00"W for a distance of 113.57 feet; thence Northwestly on a non-tangent circular curve lying West of a 80.74 foot chord bearing N00°00'00"E, having a radius of 50.00 feet and a central angle of 107°41'00" for an arc distance of 93.97 feet; thence N00°00'00"E for a distance of 172.92 feet; thence N24°45'09"W for a distance of 131.82 feet; thence N00°17'24"W for a distance of 683.98 feet; thence N89°57'09"W for a distance of 68.00 feet; thence N00°17'24"W for a distance of 194.00 feet; thence S89°57'09"E for a distance of 1189.02 feet; thence S00°17'24"E for a distance of 18.50 feet to the Northeast corner of the South Half of said Northeast Quarter; thence on an assumed bearing of S00°17'24"E for a distance of 1333.21 feet to the point of beginning, subject to road right-of-way.

The accompanying plat is a true and correct exhibit of property surveyed.

Dated this ____ day of ____, 2002.

Poe and Associates of Kansas, Inc.
Kenny E. Hill, L.S. 984
Vice President



KNOW ALL MEN BY THESE PRESENTS:

That we, the undersigned, have caused the land described in the Surveyor's Certificate to be platted into lots, blocks, streets and reserves. The streets are hereby dedicated to and for the use of the public. Easements are hereby granted as indicated for the construction and maintenance of wells, drainage and utilities. Reserve A, B and C shall be reserved for, only monuments, lighting, landscaping and utilities. All reserves are to be owned and maintained by a home owners association its successors and assigns. A drainage plan has been developed for the plat and all drainage easements, rights-of-way and reserves shall remain as established grades or modified with the approval of the applicable City or County Engineer, and remain unobstructed to allow for the conveyance of stormwater. All abutters rights of access to or from Hillside over and across the East line of Blocks 1, 4, 5 and 7 are hereby granted to the City of Wichita. Vacation of the temporary turnaround easement, located on the south line of this addition at the end of Peregrine, shall be effective upon the extension of the street to the south.

Heights, LLC

Jay W. Russell, Managing Member

STATE OF KANSAS, COUNTY OF SEDGWICK: ss.

This instrument was acknowledged before me on this ____ day of ____, 2002, by Jay W. Russell, Managing Member of Heights, LLC.

Notary Public

My Appointment Expires: _____

KNOW ALL MEN BY THESE PRESENTS: ss.

That, the Chisholm Trail State Bank, holders of a mortgage on the property described in the Surveyor's Certificate, do hereby consent to the plat of Falcon Falls Addition.

Chisholm Trail State Bank

Elmer S. Peters, Jr., Executive Vice President

This instrument was acknowledged before me on this ____ day of ____, 2002, by Elmer S. Peters, Jr., Executive Vice President of Chisholm Trail State Bank.

Notary Public

My Appointment Expires: _____

This plat of FALCON FALLS ADDITION to Wichita, Kansas has been submitted to and approved by this WICHITA-SEDGWICK COUNTY METROPOLITAN AREA PLANNING COMMISSION, Wichita, Kansas.

Dated this ____ day of ____, 2002.

WICHITA-SEDGWICK COUNTY METROPOLITAN AREA PLANNING COMMISSION

Bernard A. Hentzen, Chair Dale Miller, Secretary

Reviewed in accordance with K.S.A. 58-2005 on this ____ day of ____, 2002.

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

This plat approved and all dedications shown hereon accepted by the City Council of the City of Wichita, Kansas, this day of ____, 2002.

At the Direction of the City Council

Chris Cherches, City Manager Pat Graves, City Clerk

Entered on transfer record this ____ day of ____, 2002.

Heights, LLC

Don Braca, County Clerk

This is to certify that this instrument was filed for record in the Register of Deeds Office at ____ A.M.-P.M. on the ____ day of ____, 2002.

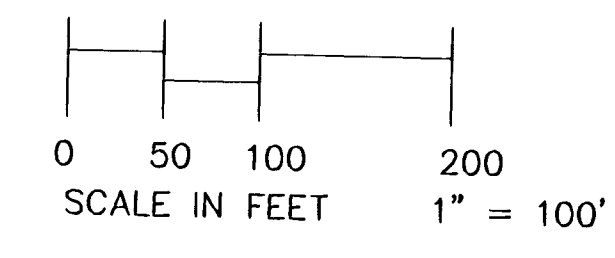
Bill Meek, Register of Deeds

Linda Kizzire, Chief Deputy

CURVE	LENGTH	RADIUS	TANGENT	CHORD	BEARING	DELTA
C1	83.67	100.00	44.48	81.25	N23°40'44"E	47°58'16"
C2	88.17	100.00	45.96	83.53	S53°17'44"E	49°22'12"
C3	252.29	50.00	35.60	58.00	N47°38'51"E	289°05'58"
C4	252.29	50.00	35.60	58.00	N00°02'51"E	289°05'58"
C5	138.64	180.00	72.96	135.24	S22°21'20"E	44°07'52"
C6	79.05	50.00	50.52	71.07	N80°51'50"E	90°49'36"
C7	79.28	50.00	50.73	71.22	N80°44'42"W	90°49'36"
C8	93.97	50.00	68.42	80.74	S00°00'00"W	107°41'00"
C9	148.25	200.00	77.72	144.88	N68°53'00"E	42°28'17"
C10	252.29	50.00	35.60	58.00	N45°34'43"E	289°05'58"
C11	74.14	150.00	37.85	73.39	S14°27'01"E	28°19'14"
C12	114.73	120.00	62.18	110.41	N62°33'43"W	54°46'53"
C13	73.06	120.00	37.70	71.93	N17°43'50"W	34°52'53"
C15	79.29	129.00	40.94	78.05	S72°28'17"W	35°13'07"
C16	89.05	100.00	47.72	86.14	N25°48'06"W	51°01'23"
C17	114.28	317.50	57.77	113.68	N10°01'17"E	20°37'22"
C18	21.48	100.00	10.78	21.44	S05°51'53"W	12°18'34"
C19	81.18	75.00	45.08	77.28	S31°17'57"E	62°01'06"
C20	55.10	104.20	28.21	54.46	S15°28'02"E	30°21'16"
C21	41.79	87.50	21.59	41.13	S17°26'47"W	35°28'21"
C22	38.25	75.00	18.49	35.90	S76°09'15"E	27°41'30"
C23	38.43	104.00	18.41	38.25	S79°57'49"E	20°04'21"
C24	95.23	50.00	70.25	81.47	S89°57'09"E	109°07'11"
C25	95.19	50.00	70.20	81.45	N89°57'09"W	109°04'41"
C26	20.90	100.00	10.49	20.86	S83°58'00"E	11°58'19"
C27	68.03	100.00	35.39	66.72	N19°11'54"E	38°58'37"
C28	87.44	100.00	35.08	66.17	N70°37'58"W	38°38'22"
C29	101.08	100.00	55.33	96.83	N60°59'47"W	57°54'45"
C30	44.70	97.00	22.75	44.30	N13°29'28"W	26°24'08"
C31	56.00	100.00	28.78	55.27	S74°00'13"W	32°05'15"
C32	9.33	100.00	4.67	9.33	N29°21'58"W	05°20'53"
C33	72.68	104.50	37.87	71.20	N19°37'41"E	39°50'11"

LEGEND

- Utility Easement 20' UE
- Drainage Easement 20' Dr E
- Iron Set
- Building Setback 25' Bldg SB
- Curve Label c2
- Line Label L2
- Center Line CL

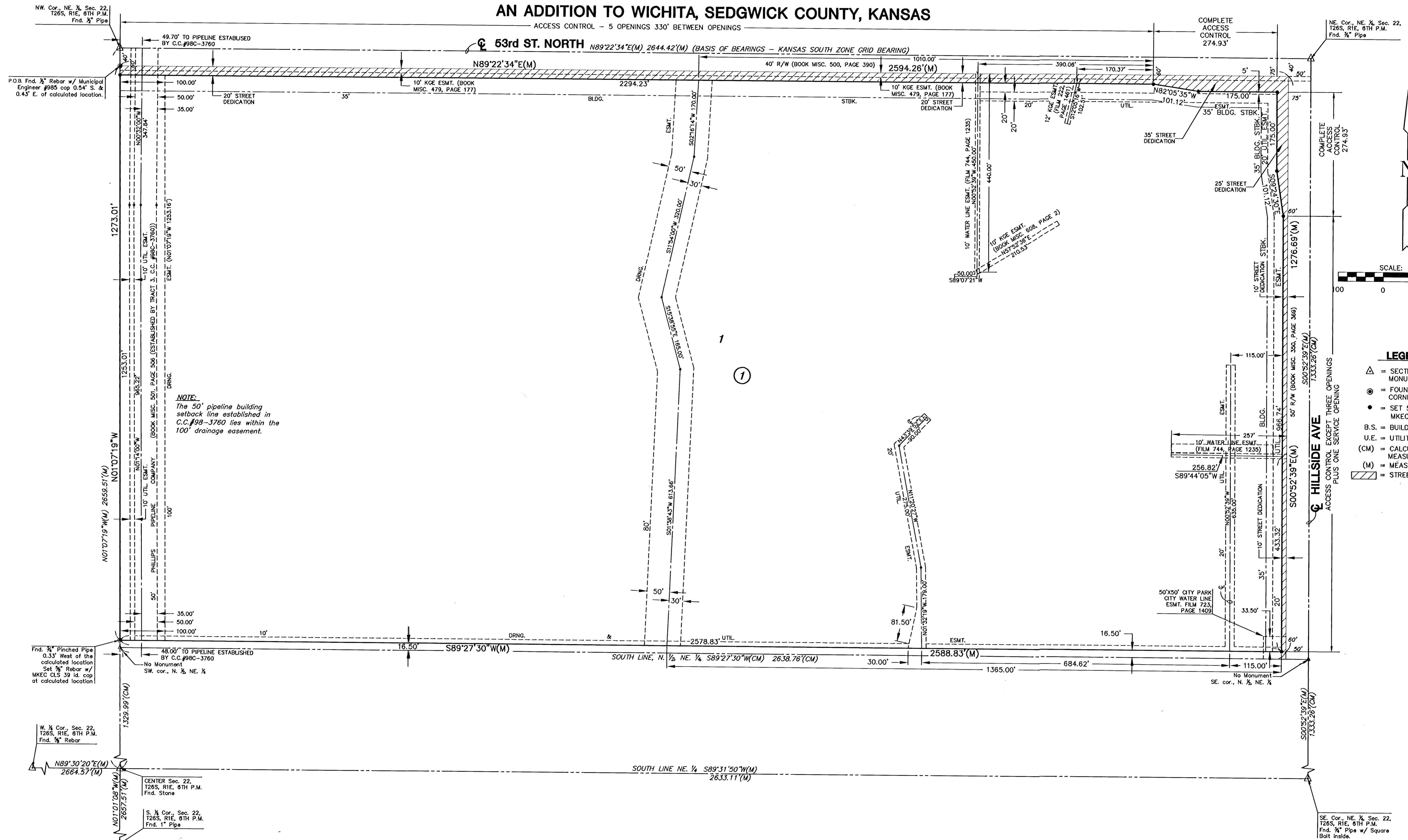


FALCON FALLS ADDITION to Wichita, Sedgwick County, Kansas

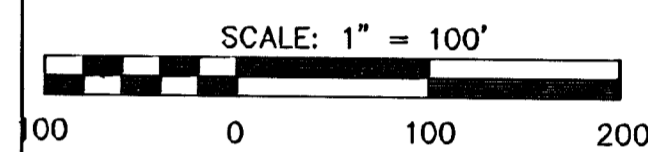
FINAL PLAT WICHITA HEIGHTS HIGH SCHOOL ADDITION

AN ADDITION TO WICHITA, SEDGWICK COUNTY, KANSAS

ACCESS CONTROL - 5 OPENINGS 330' BETWEEN OPENINGS



NOTE:
The 50' pipeline building setback line established in C.C. #98-3760 lies within the 100' drainage easement.



LEGEND

- △ = SECTION CORNER MONUMENT FOUND
- = FOUND PROPERTY CORNER
- = SET 5/8" REBAR W/ MKEC CLS #39 CAP
- B.S. = BUILDING SETBACK
- U.E. = UTILITY EASEMENT
- (CM) = CALCULATED FROM MEASUREMENT
- (M) = MEASURED
- ▨ = STREET DEDICATION