

PUBLIC SANITARY SEWER  
TO SERVE

# HOLIDAY INN EXPRESS & SUITES

PROJECT NO. 2145PPS

THE CITY OF WICHITA, KANSAS  
GARY JANZEN, P.E. - CITY ENGINEER

OCA NO. 607861

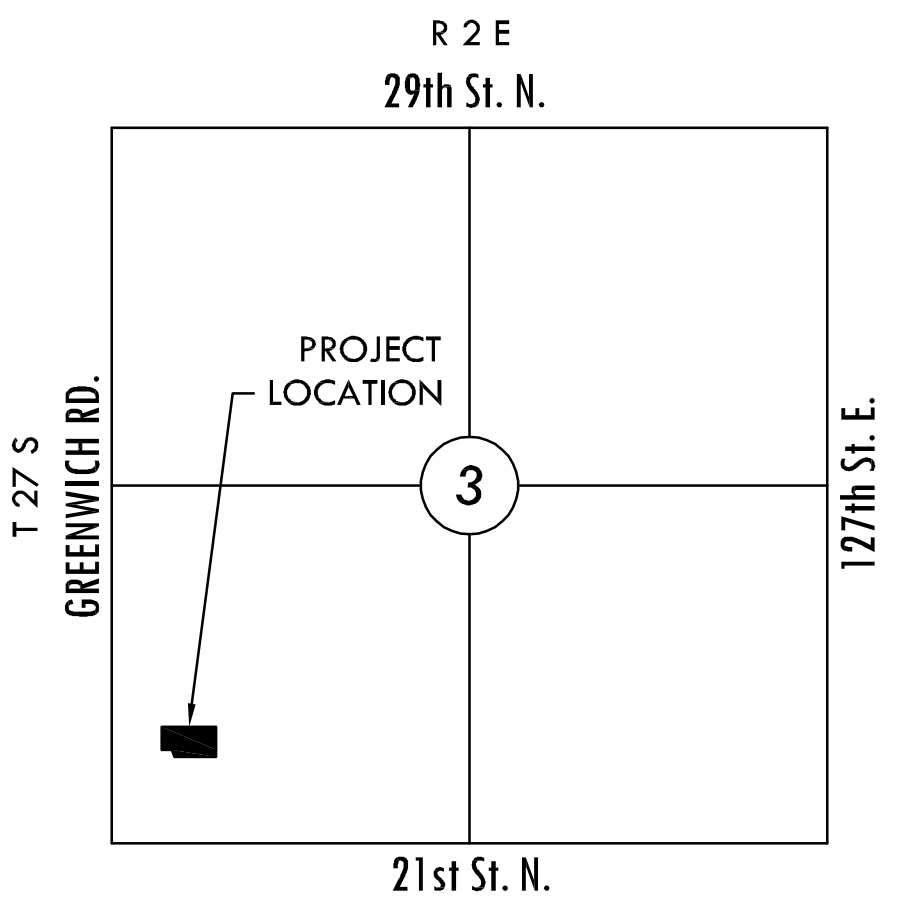
AS-BUILT PLANS - JUNE 2013

INSPECTED BY: GENE RATH, MKEC ENGINEERING CONSULTANTS, INC  
CONSTRUCTED BY: DANCO  
SUPERINTENDENT: ROBERT GLASSE  
SUPPLIER: HD SUPPLY WATERWORKS

T. Mason - City of Wichita, Field Inspector  
Stub and Riser  
Release Date: 07/01/2013  
Reviewed: APRosas 07/08/2013

## GENERAL NOTES

- UNLESS SHOWN OR STATED OTHERWISE ON THESE DRAWINGS, MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH CITY OF WICHITA STANDARD SPECIFICATIONS.
- SUBCONTRACTOR WILL BE REQUIRED TO PROVIDE A MINIMUM ADVANCE NOTICE OF SEVENTY-TWO (72) HOURS TO UTILITY COMPANIES PRIOR TO STARTING ANY EXCAVATION AS FOLLOWS:  
  
KANSAS ONE-CALL 800-344-7233  
OR LOCAL (WICHITA) 316-687-2470  
  
THE SUBCONTRACTOR MUST NOTIFY THE FOLLOWING IN CASE OF AN EMERGENCY:  
  
SBC (TELEPHONE) 800-870-8390  
COX COMMUNICATIONS (CABLE) 316-262-0661  
KANSAS GAS SERVICE (GAS) 316-832-3101  
CITY OF WICHITA WATER & SEWER 316-262-6000  
WESTAR (ELECTRIC) 316-261-6512  
AQUILA (GAS) 800-303-0357
- THE SUBCONTRACTOR SHALL BE RESPONSIBLE FOR PRESERVING PROPERTY IRONS. THE SUBCONTRACTOR 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.
- 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.
- 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.
- COST OF EXCAVATION, HAULING, AND DUMPING OF EXCESS EXCAVATION SHALL BE SUBSIDIARY TO THE PROJECT.
- 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 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.
- ALL STUBS AND PLUGGED PIPES SHALL BE LOCATED WITH GREEN PLASTIC TAPE IN THE SAME MANNER AS RISERS.
- CONNECTING TO EXISTING MANHOLES:  
PRIOR TO LAYING SEWER LINES USING EXISTING STUBS IN EXISTING MANHOLES, THE SUBCONTRACTOR 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 SUBCONTRACTOR 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.
- TREES AND SHRUBS IN PUBLIC RIGHT-OF-WAY WHICH ARE IN DIRECT CONFLICT WITH PROPOSED NEW CONSTRUCTION SHALL BE REMOVED BY THE SUBCONTRACTOR 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.
- ALL DISTURBED AREAS TO BE SEEDED WITH RYE GRASS AT A RATE OF 200 LBS. PER ACRE WITHIN 10 DAYS OF CONSTRUCTION. SUBCONTRACTOR TO PREPARE GROUND PER CITY SPECIFICATIONS. COST IS SUBSIDIARY TO SITE PREPARATION AND RESTORATION.
- WORK DONE UNDER THIS PROJECT IS SUBJECT TO THE CITY OF WICHITA REQUIREMENTS FOR "CONSTRUCTION OF INFRASTRUCTURE IMPROVEMENTS BY PRIVATE CONTRACT." THE CONTRACTOR SHALL BE FAMILIAR AND COMPLY WITH ALL OF THE REQUIREMENTS, INCLUDING BONDING, INSPECTION, TESTING, NOTIFICATION, PROVIDING AS-BUILT DRAWINGS, PAYING FOR ALL NECESSARY CONNECTIONS AND/OR STREET REPAIR FEES AND PROVIDING PIPE MATERIAL AND OTHER CERTIFICATIONS.



## VICINITY MAP

No Scale

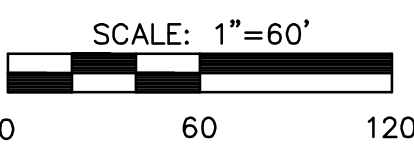
## INDEX TO DRAWINGS

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2-3	DETAILS
4	LINE 1
5	PLAT

## BENCHMARKS

BM#1 -Chiseled square front center of curb inlet West side of Access Street 57.2 feet South and 44.6 feet West of the Northwest corner of Lot 15, Block 1, Village at Greenwich Addition. Elev. = 1369.81 NGVD 29

CONTROL POINTS			
POINT	NORTHING	EASTING	DESC.
CP-1	1700665.34	1686577.37	MKEC CP
CP-2	1700670.43	1686981.77	MKEC CP
CP-3	1700447.56	1686984.62	MKEC CP
CP-4	1700443.61	1686677.59	MKEC CP
CP-5	1700494.00	1686658.60	MKEC CP
CP-6	1700492.93	1686579.64	MKEC CP

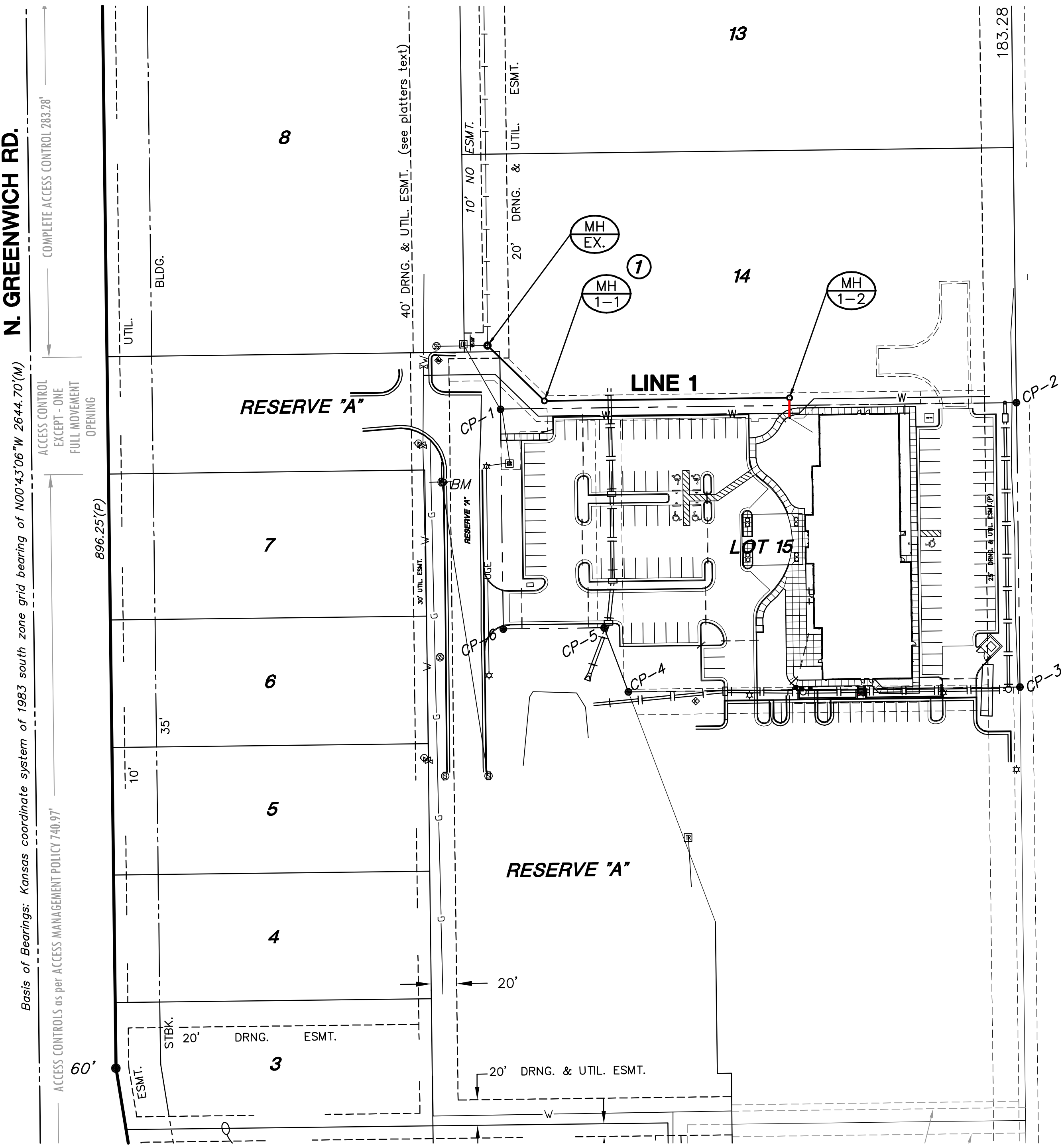


APPROVED AS NOTED  
BY CITY ENGINEER OF WICHITA, &  
WICHITA WATER & SEWER DEPARTMENT,

San. Swr. Mains *[Signature]* 12-4-12  
(Public Works)

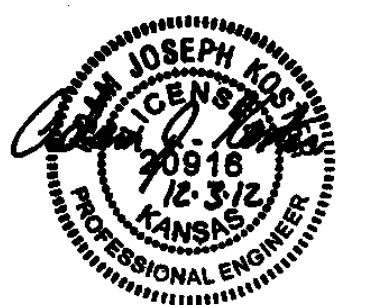
## NOTE TO CONTRACTORS

**Public Property:**  
Inspection and testing for the sanitary sewer is to be provided by a Licensed Consulting Engineering Firm under contract with the Owner/Developer. Said inspection to be in accordance with the City of Wichita Standard Construction Engineering Practices and certified by a Professional Engineer licensed in the state of Kansas. No work shall be performed in dedicated easements or public rights-of-way by the Contractor without such inspection, nor shall any work be commenced without written authorization by the City Engineer. All construction and materials shall comply with the City of Wichita Specifications and Standards (on file and available in the City Engineer's Office).



**MKEC**  
ENGINEERING  
CONSULTANTS, INC.

411 N. WEBB ROAD  
WICHITA, K.S. 67206  
316-684-9600



SANITARY SEWER PLANS FOR  
**HOLIDAY INN EXPRESS & SUITES**  
2340 N. GREENWICH ROAD, WICHITA, KS

## TITLE SHEET

SHEET TITLE  
**2145PPS**  
PROJECT NUMBER

SPE BKS AJK  
DESIGNED DRAWN CHECKED

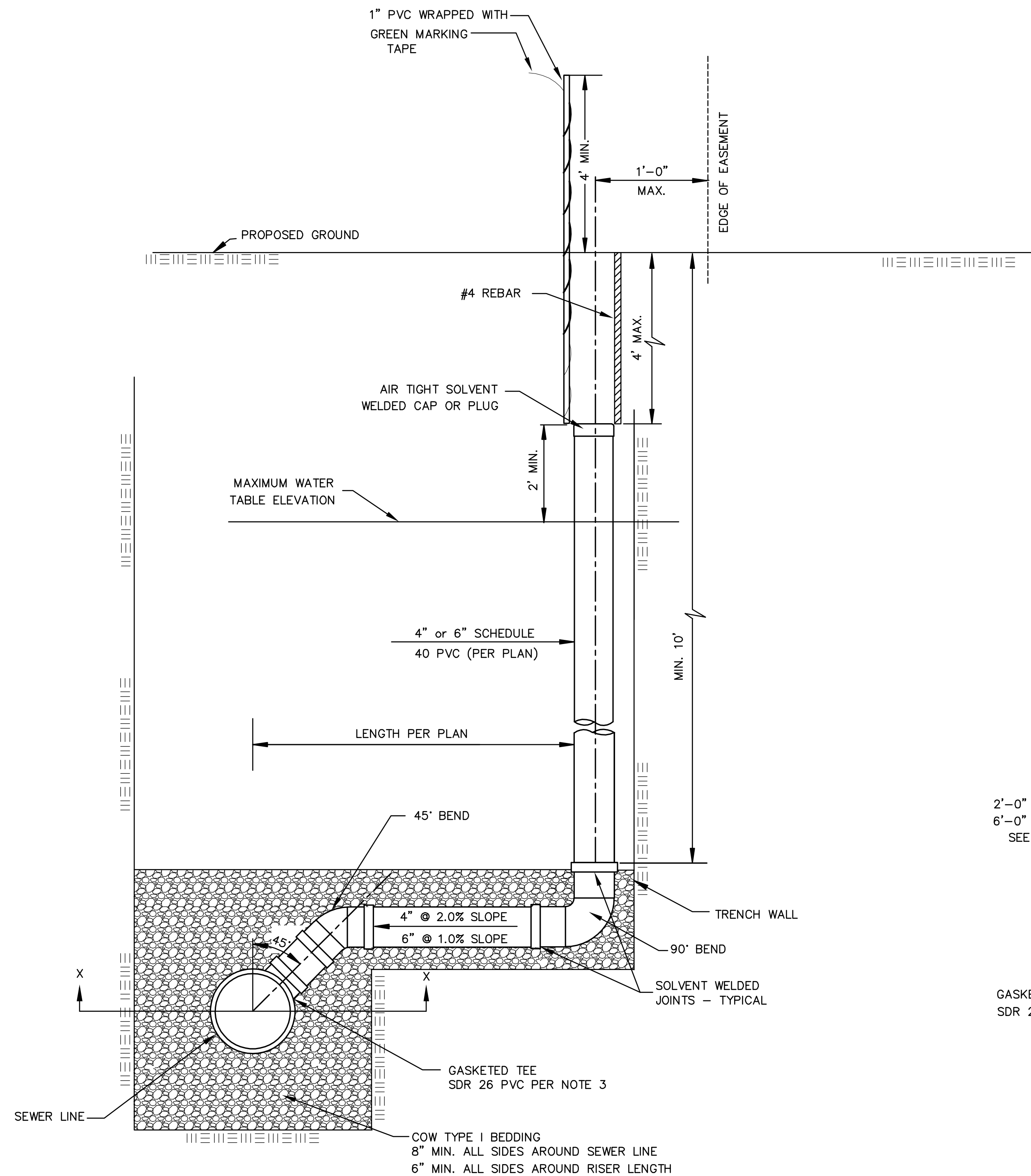
ISSUED  
**November 2012**  
REVISED  
**AS-BUILTS**

SHEET NO.  
**1 of 5**

GENERAL NOTES

- APPLICATION. Risers shall be installed to serve all lots or tracts where the sanitary sewer main is below the water table, where the sanitary sewer main depth is greater than 12' below the proposed ground elevation, where the main is adjacent to a pond or wherever service lines would have to cross under storm sewer pipe. Installation of risers because of field conditions shall be as approved by the City Engineer. The location of the risers to serve developed property shall be approved by the property owner and the Construction Engineer.
- MANHOLE STUB RISERS. Manhole stub risers 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 stub and the flowline of the sanitary sewer line out of the manhole shall not exceed 2' stub. Risers shall be utilized at manholes as indicated in Note 1. Manhole stub riser shall be set such that the top of the stub is not lower than the top of the sanitary sewer line.
- SIZING. Risers shall be sized according to the plans and riser table where risers are indicated by the plans. Where risers are required because of field conditions, the risers shall be 6" 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 shall be approved by the construction Engineer prior to installation.
- RISER MATERIAL. Risers shall be constructed of Schedule 40 PVC pipe, meeting the requirement of the latest revision of A.S.T.M.. All pipe joints shall be solvent welded. Full body tee shall be SDR 26 PVC pipe.
- ROCK ENCASUREMENT. Riser connection to clay pipe sanitary sewers shall be rock encased both ways from the riser centerline. The rock 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 rock encased one foot each way from the riser centerline. Crushed rock shall conform to ASTM C-33, Gradation No. 67, and shall meet all requirements for Portland Cement Concrete pavement Coarse Aggregate, Section 406.2, City of Wichita Standard Specifications.
- BEDDING. Beyond the limits of the rock encasement, 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.
- 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 back filling the riser pie shall be approved by the Construction Engineer.
- 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.
- 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 2' (min.) above the maximum water table elevation, regardless of the riser elevation shown on the plans.
- MARKING. Locations of the ends of the sanitary sewer riser pipe shall be marked by installing 1" PVC from the top of the riser to a minimum of 4' above the top of finished grade. No. 4 rebar shall be placed centered over the riser from the cap to the existing ground. The 1" PVC pipe shall be wrapped with green colored plastic tape, for the full length above 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.
- LOCATION MEASURES. The project inspector shall record and document the location of all risers constructed as measured from the nearest manhole, indicate the direction from the manhole, the direction and distance from the main, riser size, and elevation of the top of the riser in tabular format.
- 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.
- PAYMENT. "Riser Assembly, Vertical " shall be paid for at the contract unit price per each, which shall be full compensation for all pipe, fittings, marking tape, length of backfill, labor, site restoration, and any other items necessary to complete the work.

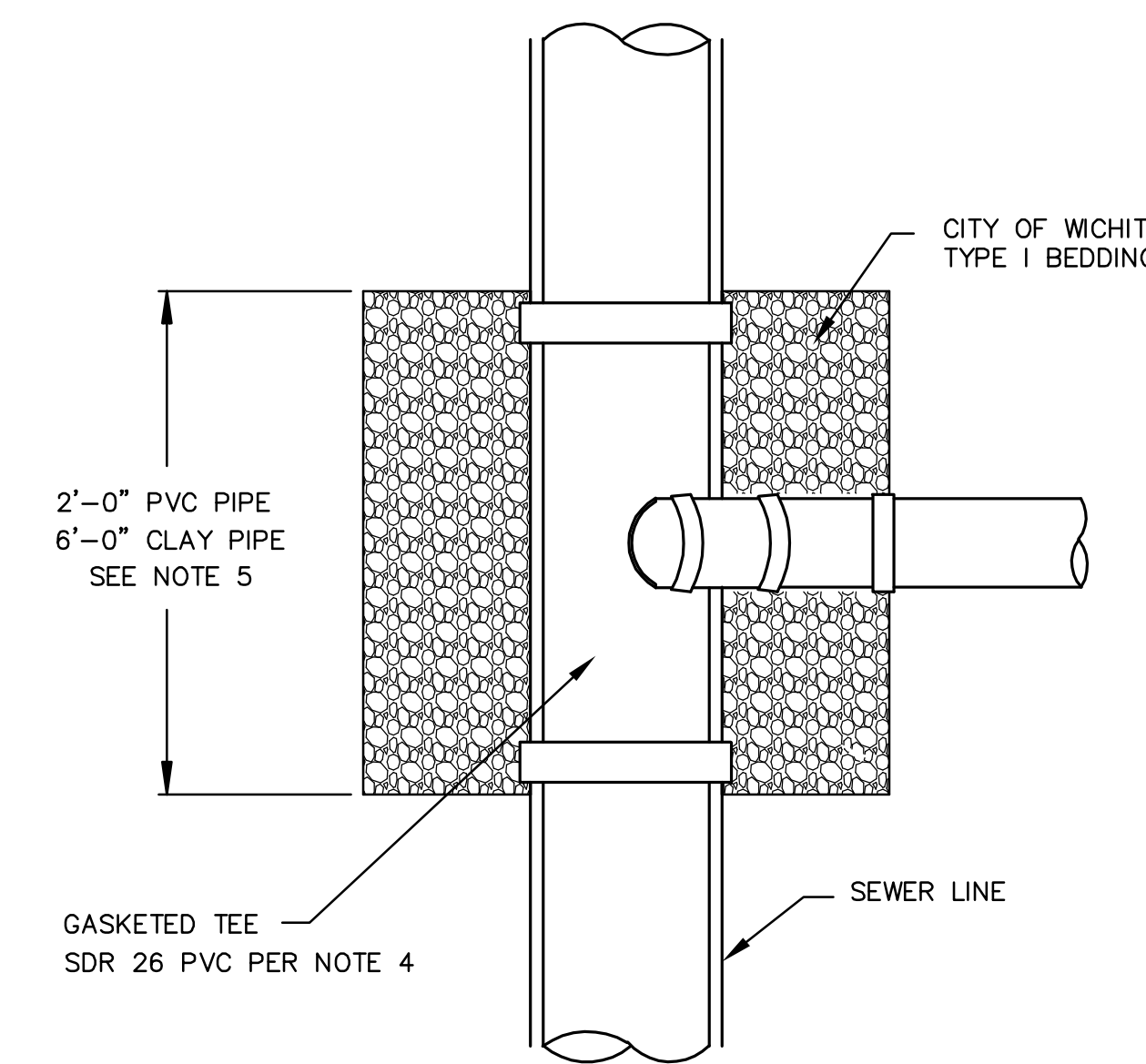
"Riser Assembly, Manhole Stub" shall be paid for at the contract unit price per each, which shall be full compensation for all labor material and incidentals necessary to complete the work including all pipe, fittings, rock encasement, and all other items as required and listed for "Riser Assembly, Vertical "



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

PROPOSED RISER TABLE						
NO.	TYPE	LOCATION			FOR INFORMATION ONLY	
		LOT/BLOCK	LINE NO.	STATION/DIRECTION	APPROXIMATE LENGTH 4" PIPE	APPROXIMATE LENGTH 6" PIPE
1	MH SERVICE CONNECTION	LOT 15, BLK. 1	1	12+54/RT	8'	16'

NOTE: NON SHEAR COUPLING TO BE USED WHEN HOOKING TO CLAY PIPE.

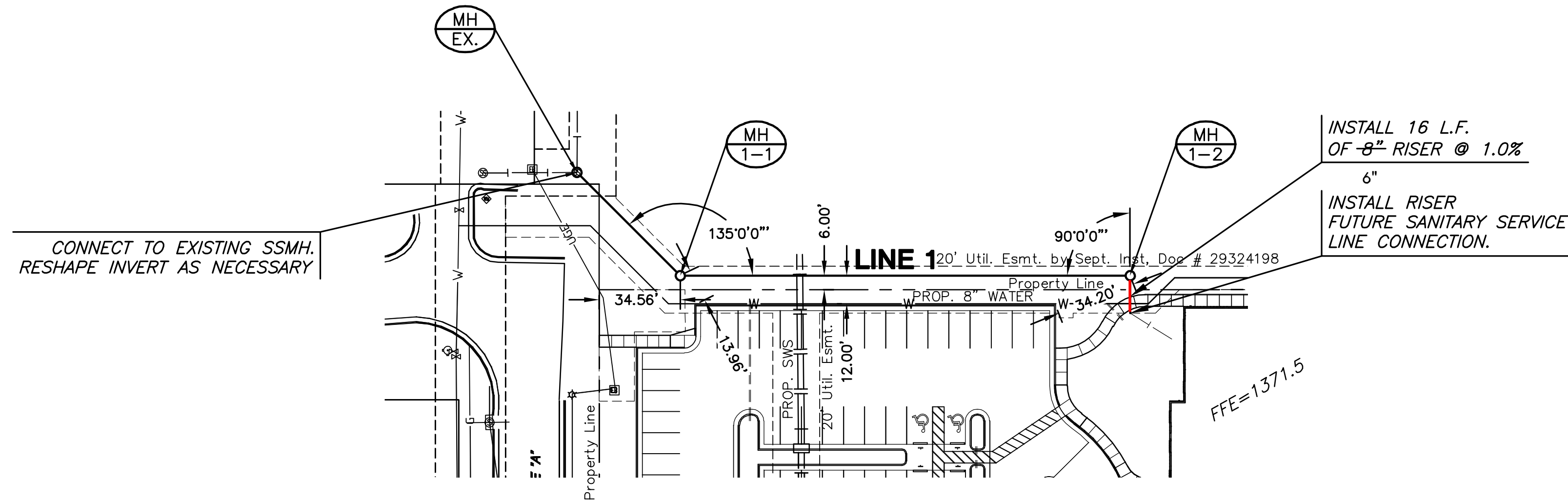


TYPICAL SECTION X-X



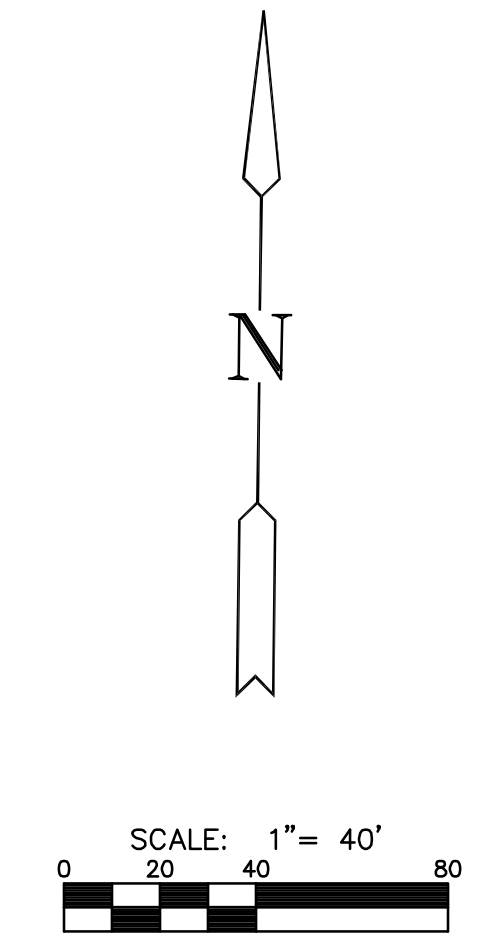
<b>VERTICAL RISER ASSEMBLY SEWER DETAIL</b>		
CITY ENGINEER <b>GARY JANZEN, P.E.</b>		
PROJECT NUMBER 2145PPS	OCA NUMBER 607861	DATE 11/2012
CITY ENGINEER'S OFFICE CITY HALL - SEVENTH FLOOR 455 NORTH MAIN STREET WICHITA, KANSAS 67202-1620 (316) 268-4501		DESIGN DRAWN
		SHEET <b>3 of 5</b>

COORDINATES		
SANITARY	NORTHING	EASTING
MH EX.	1700715.24	1686567.28
MH 1-1	1700671.77	1686611.85
MH 1-2	1700674.19	1686803.89
RISER	1700658.19	1686804.09



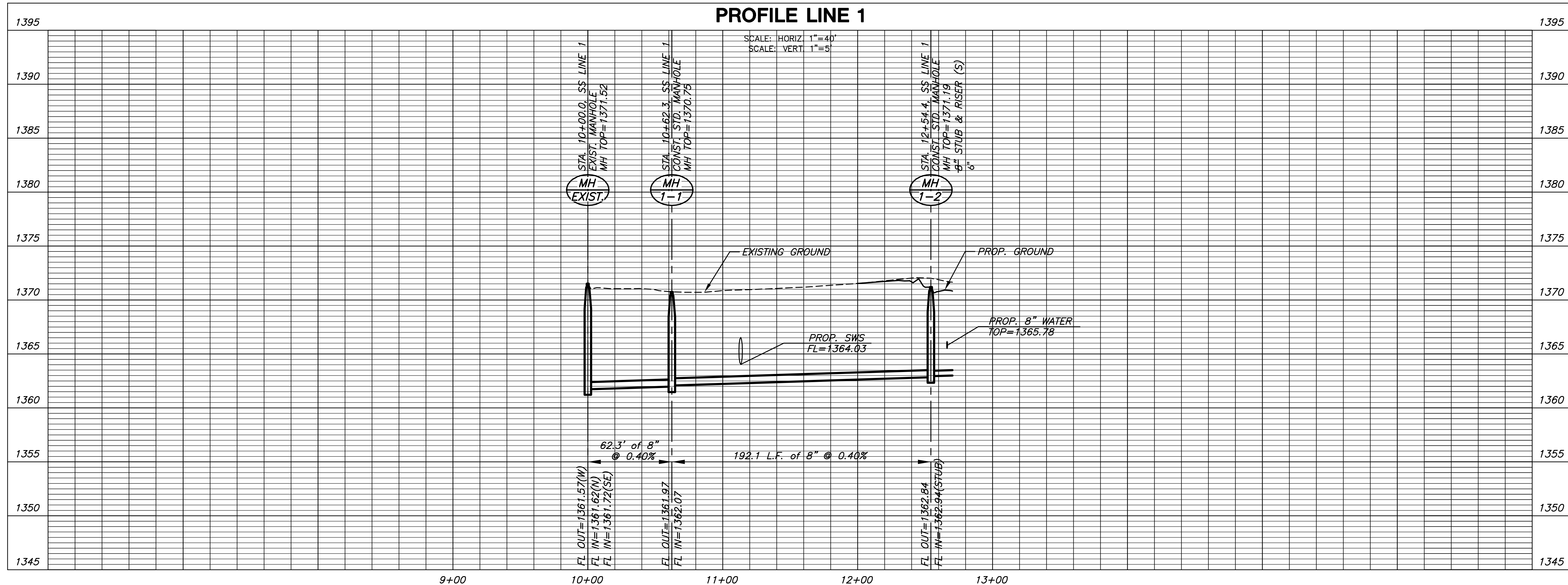
**AS-BUILT PLANS - JUNE 2013**

INSPECTED BY: GENE RATH, MKEC ENGINEERING CONSULTANTS, INC  
 CONSTRUCTED BY: DANCO  
 SUPERINTENDENT: ROBERT GLASSE  
 SUPPLIER: HD SUPPLY WATERWORKS



**NOTE:**  
 CONTRACTOR TO VERIFY THE  
 DEPTH AND LOCATION OF EXISTING  
 UTILITIES PRIOR TO CONSTRUCTION.

**PLAN LINE 1  
 PROFILE LINE 1**



**SAN. SEWER  
 LINE 1**  
 SHEET TITLE  
**2145PPS**  
 PROJECT NUMBER

**SPE | BKS | A/JK**  
 DESIGNED | DRAWN | CHECKED

ISSUED  
**November 2012**

REVISED  
**AS-BUILTS**

SHEET NO.  
**4 of 5**

PLOTTED: Friday, June 14, 2013 @ 07:37AM

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