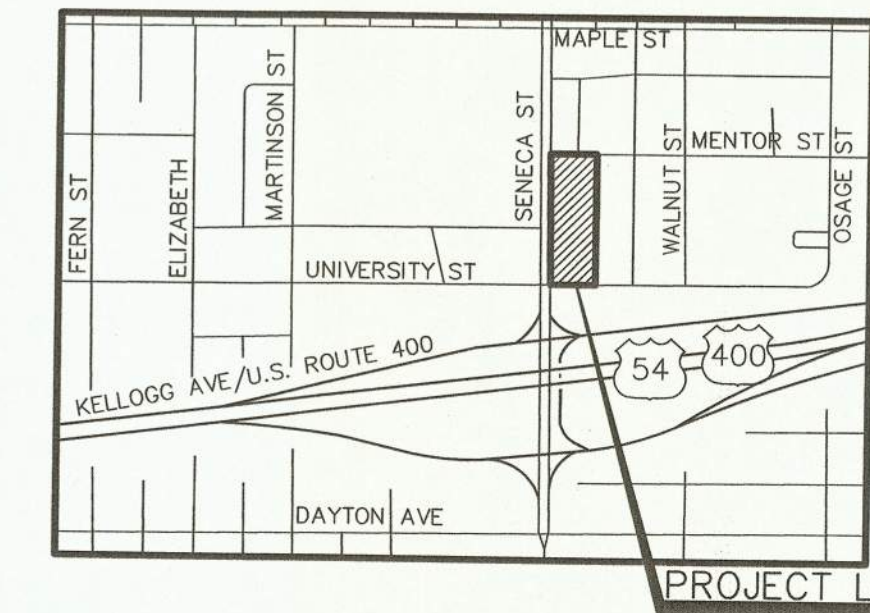


GENERAL NOTES:

- THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE SAFETY REGULATIONS. ALL CONSTRUCTION SHALL BE COMPLETED FOLLOWING CURRENT CITY STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.
- THE CONTRACTOR WILL BE REQUIRED TO PROVIDE NOTICE TO UTILITY COMPANIES A MINIMUM OF SEVENTY-TWO (72) HOURS PRIOR TO ANY EXCAVATION, AS FOLLOWS:
KANSAS ONE-CALL 687-2470
THE CONTRACTOR MUST NOTIFY THE FOLLOWING IN CASE OF AN EMERGENCY:
AT&T 1-800-246-8464
BLACK HILLS ENERGY 1-800-694-8989
CITY OF WICHITA WATER & SEWER 1-316-219-8921
CITY OF WICHITA STORMWATER 1-316-268-4090
CITY OF WICHITA TRAFFIC 1-316-268-4034
COX COMMUNICATIONS 1-888-249-3530
KANSAS GAS SERVICE 1-888-482-4950
WESTAR ENERGY 1-800-544-4857
- UTILITY SERVICE LINES, POLES, ETC. ARE TO BE ADJUSTED AS NECESSARY BY OTHERS PRIOR TO CONSTRUCTION UNLESS THE PLANS SPECIFICALLY CALL FOR THEIR ADJUSTMENT BY THE CONTRACTOR OR UNLESS THE PLANS SPECIFICALLY IDENTIFY A UTILITY TO BE ADJUSTED BY ITS OWNER DURING CONSTRUCTION. EXISTING UTILITIES AND THEIR LOCATION, AS SHOWN ON THE PLANS, REPRESENT THE BEST INFORMATION OBTAINABLE FOR DESIGN. THE CONTRACTOR WILL BE REQUIRED TO WORK AROUND EXISTING UTILITIES WITHIN THE RIGHT-OF-WAY WHICH DO NOT CONFLICT WITH PROPOSED CONSTRUCTION.
- 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, IN THE OPINION OF THE ENGINEER, THAT WILL LEAVE AN UNSIGHTLY APPEARANCE WILL NOT BE APPROVED. ALL DISPOSAL SITES MUST BE APPROVED BY THE KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT. MATERIAL EITHER STOCKPILED OR DISPOSED OF IN A FLOOD PLAIN WILL REQUIRE A KANSAS STATE BOARD OF AGRICULTURE PERMIT. ANY MATERIAL DUMPED IN WATERS OF THE UNITED STATES OR WETLANDS IS SUBJECT TO U.S. CORPUS OF ENGINEERS PERMITTING REGULATIONS. ANY MATERIAL BURIED OR STOCKPILED BEYOND APPROVED CONSTRUCTION LIMITS WILL REQUIRE ADDITIONAL ARCHAEOLOGICAL INVESTIGATIONS UNLESS BURIED IN A PREVIOUSLY APPROVED BORROW LOCATION.
- 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.
- THE CONTRACTOR SHALL GIVE ALL PROPERTY OWNERS AND/OR TENANTS OF DEVELOPED PROPERTY ADJACENT TO THE CONSTRUCTION OF THIS PROJECT A MINIMUM OF TEN (10) DAYS NOTICE PRIOR TO START OF CONSTRUCTION.
- 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.
- THE ENGINEERING DIVISION SHALL FIELD LOCATE WATER VALVES ONE TIME DURING CONSTRUCTION WHEN REQUESTED BY THE CONTRACTOR. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PRESERVE SUCH FIELD LOCATIONS DURING THE CONSTRUCTION PROCESS. WATER VALVES, VALVE BOXES OR FIRE HYDRANTS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED BY CONTRACTOR AT HIS OWN EXPENSE. VALVE BOXES AND WATER METERS WITHIN THE PROJECT LIMITS SHALL BE ADJUSTED TO MATCH FINAL GRADES BY THE CONTRACTOR.
- THE CONTRACTOR SHALL NOTIFY THE CONSULTANT ENGINEER AND TOM MASON AT 316-268-4574 WITH THE CITY OF WICHITA WITH THE ANTICIPATED CONSTRUCTION START DATE AND NOTIFY THEM OF PROJECT COMPLETION. STAKING AND INSPECTION FOR THIS PROJECT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- IF TRAFFIC WILL BE IMPACTED BY CONSTRUCTION, A TRAFFIC CONTROL PLAN MUST BE SUBMITTED AND APPROVED BY THE CITY TRAFFIC ENGINEER, BRIAN COON AT TRAFFIC@WICHITA.GOV BEFORE CONSTRUCTION CAN BEGIN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TRAFFIC CONTROL MEASURES TO FACILITATE CONSTRUCTION. ALL CONSTRUCTION ZONE MARKINGS AND SIGNAGE SHALL CONFORM TO THE LATEST VERSION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AS PUBLISHED BY THE US DEPT. OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION. ALL COSTS ASSOCIATED WITH CONSTRUCTION MARKINGS AND SIGNAGE SHALL BE THE CONTRACTORS RESPONSIBILITY.
- ALL ELEVATIONS SHOWN ARE NAVD 88.
- ALL AREAS DISTURBED DURING CONSTRUCTION THAT WILL NOT BE UNDER PROPOSED PAVEMENT SHALL BE RESTORED TO MATCH EXISTING CONDITIONS.
- ANY SIDEWALK, DRIVE APPROACH, CURB, OR STREET PAVEMENT REMOVED TO CONSTRUCT PROJECT MUST HAVE A PAVEMENT CUT PERMIT AND BE REPLACED BY THE CITY CONTRACTOR. PERMITS CAN BE OBTAINED BY CALLING 316-268-4501 OR 316-268-4480.
- ALL APPLICABLE FEES (TAP, EQUITY, IN LIEU OF & MAIN BENEFIT) MUST BE PAID BEFORE ANY CONNECTIONS CAN BE MADE ON THIS PROJECT. QUOTES CAN BE OBTAINED ON FEES BY CALLING 316-268-4555.
- CITY MAINTENANCE OF SANITARY SEWER MAINS ENDS AT LAST STRUCTURE WITHIN THE EASEMENT OR RIGHT-OF-WAY.
- ALL STUBS AND CAPPED 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 CONTRACTOR SHALL EXPOSE AND VERIFY THE ELEVATION, GRADE AND ALIGNMENT OF EXISTING STUBS AND NOTIFY THE ENGINEER OF ANY DEVIATION FROM THE PLANS. WHERE THE STUB IS UNUSABLE DUE TO ELEVATION GRADE OR ALIGNMENT, THE CONTRACTOR SHALL REMOVE THE STUB AND PLUG THE HOLE, AND RESHAPE THE EXISTING MANHOLE INVERT TO PROVIDE SMOOTH FLOW. WHERE CONNECTION TO AN EXISTING MANHOLE THAT DOES NOT HAVE AN EXISTING STUB, THE CONTRACTOR SHALL CORE 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 TO CONNECTING TO EXISTING MANHOLES IS INCIDENTAL TO THE PROJECT.
- THE CONTRACTOR SHALL LIMIT THE EXTENT OF TRENCH OPEN OVERNIGHT AND WEEKENDS TO LESS THAN 50 FEET.
- THE CONTRACTOR SHALL PROVIDE POSITIVE DRAINAGE AWAY FROM ALL MANHOLE COVERS.
- THE CONTRACTOR SHALL PREVENT ANY CONSTRUCTION DEBRIS FROM ENTERING THE EXISTING SANITARY SEWER DURING CONSTRUCTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING CONTINUOUS FLOW OF SEWAGE THROUGH CONSTRUCTION. CONTRACTORS PROPOSED METHOD FOR MAINTAINING SEWAGE FLOW SHALL BE SUBMITTED AND APPROVED BY THE SEWER MAINTENANCE DIVISION (316-268-4073) PRIOR TO STARTING AND BY-PASSING OF SEWAGE FLOWS.
- ANY OVER EXCAVATION FROM MANHOLE AND PIPE REMOVAL SHALL BE BACKFILLED WITH AB-3 COMPACTED TO 90-95% ASTM D698.
- THE CONTRACTOR SHALL PROTECT FROM DAMAGE AND SUPPORT EXISTING UTILITIES THROUGH CONSTRUCTION AS APPROVED BY THE UTILITY OWNER AND THE ENGINEER AT THE CONTRACTORS EXPENSE.
- SITE PREPARATION AND RESTORATION SHALL BE SUBSIDIARY TO THE PROJECT.
- THE CONTRACTOR/ OWNER SHALL PROVIDE ALL TESTING AND SHOP DRAWING REVIEW, INSPECTION, TESTING AND SHOP DRAWING DOCUMENTS SHALL BE PROVIDED TO THE ENGINEERING FIRM FOR RECORDS.
- THE CONTRACTOR SHALL USE BEST MANAGEMENT PRACTICES (BMP'S) TO PREVENT ERODED SOIL FROM ENTERING DITCHES, CULVERTS, AND DRAINAGE BASINS. THE CONTRACTOR SHALL FOLLOW THE INTENT OF THE BMP'S WHICH ACT AS A GUIDELINE.
- EACH BIDDER SHALL VISIT THE SITE OF THE PROJECT BEFORE SUBMITTING A PROPOSAL IN ORDER TO BECOME BETTER INFORMED OF THE EXISTING FIELD CONDITIONS AND OBSTACLES WHICH MIGHT BE ENCOUNTERED DURING CONSTRUCTION. EACH BIDDER SHOULD UNDERSTAND THAT NO ADDITIONAL COMPENSATION WILL BE AWARDED FOR EXTRA WORK THAT SHOULD HAVE BEEN EVALUATED PRIOR TO BIDDING.
- EXISTING UTILITIES AND THEIR LOCATIONS, AS SHOWN ON THE PLANS REPRESENT THE BEST INFORMATION OBTAINABLE FOR DESIGN. LOCATION INFORMATION HAS BEEN OBTAINED FROM VARIOUS COMPANIES AND IS EITHER FROM COMPANY UTILITY DRAWINGS OR COMPANY PROVIDED FIELD LOCATIONS. THE PLAN LOCATIONS SHOWN ARE NOT GUARANTEED. ADDITIONAL EXISTING UTILITIES MAY BE ENCOUNTERED.
- ANY AND ALL UTILITY SYSTEM COMPONENTS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
- ALL TRENCHING IN PAVEMENT OR DRIVEWAYS, WHICH WILL BE REQUIRED TO CARRY TRAFFIC UNTIL PERMANENT PAVING REPLACEMENT, SHALL BE TOPPED WITH A MINIMUM OF 6" CRUSHED ROCK (COMPACTED) TO BE INCIDENTAL TO THE PROJECT. CONTRACTOR SHALL BE REQUIRED TO MAINTAIN TEMPORARY CRUSHED ROCK UNTIL PERMANENT PAVEMENT IS INSTALLED.
- THE PRECAST MANUFACTURER SHALL PROVIDE A SEALED DESIGN DETAIL FOR ALL PRECAST ITEMS USED ON THE PROJECT TO INSURE THE INTENT OF THE PLANS ARE MET.

SANITARY SEWER TO SERVE LOTS 2 & 3, BLOCK 6 LAWRENCE'S ADDITION CITY OF WICHITA, KANSAS

GARY JANZEN, P.E. CITY ENGINEER
PROJECT NUMBER
2367 PPS (184011)



VICINITY MAP

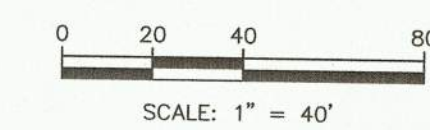
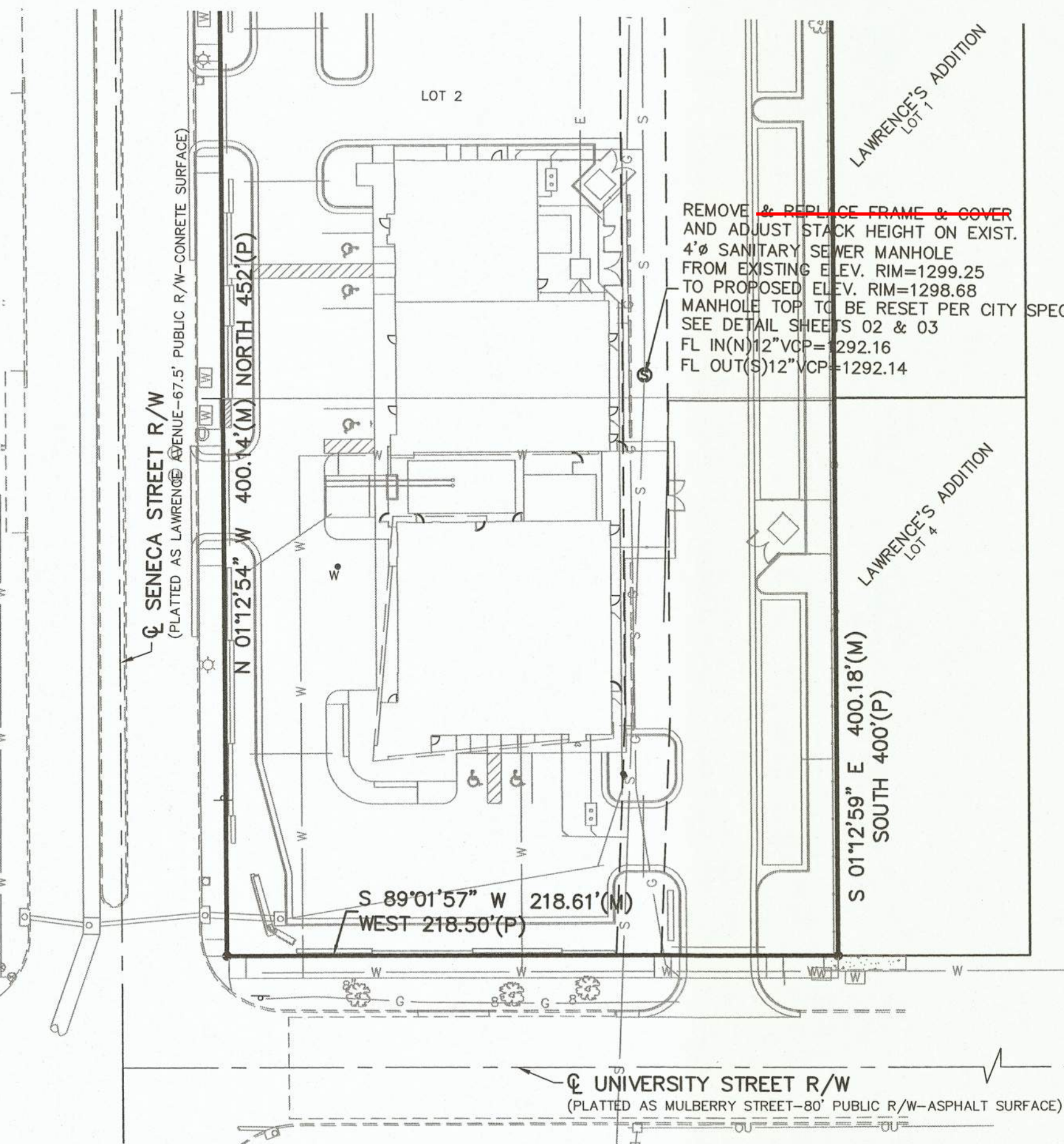
T. Mason - City of Wichita, Inspector
Release Date: 9/23/2019
: 9/26/2019 apr

NOT AN AS-BUILT

No inspection and no new ring & frame installed.

SHEET INDEX

TITLE AND PLAN SHEET 01
STANDARD DETAILS 02-03
ALTA 04-05



BENCHMARKS

- DATUM BENCHMARK:**
DATUM IS U.S. SURVEY FEET AND REFERS TO NAVD88 DATUM DERIVED FROM CONNECTIONS TO NATIONAL CORS NETWORK VIA GPS STATIC SESSIONS ON PROJECT CONTROL PROCESSED WITH THE NATIONAL GEODETIC SURVEY'S OPUS PROJECTS UTILITY. ORTHOMETRIC HEIGHT WAS CALCULATED USING THE GEIOD12B MODEL.
- BENCHMARKS:**
BM #1: CHISELED "SQUARE" ON SOUTH POINT OF CURB MEDIAN AT INTERSECTION OF SENECA STREET AND UNIVERSITY STREET. ELEV=1296.81
BM #2: CHISELED "SQUARE" ON NORTHEAST CORNER OF CURB INLET, NORTHEAST CORNER OF INTERSECTION OF MENTOR STREET AND SENECA STREET. ELEV=1296.83

THE COORDINATES PROVIDED IN THESE PLANS ARE FOR INFORMATION AND CHECKING PURPOSES ONLY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CALCULATE CONSTRUCTION STAKING COORDINATES ACCORDING TO THE DIMENSIONS SHOWN ON THESE PLANS. CONTRACTOR SHALL VERIFY THE ACCURACY OF THE COORDINATES SHOWN IN THE TABLE HEREON BEFORE CONSTRUCTION.

CAUTION - NOTICE TO CONTRACTOR

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
THE CONTRACTOR SHALL EXPOSE EXISTING UTILITIES AT LOCATIONS OF POSSIBLE CONFLICTS PRIOR TO ANY CONSTRUCTION.

SAFETY NOTICE TO CONTRACTOR

IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR WILL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.

WARRANTY / DISCLAIMER

THE DESIGNS REPRESENTED IN THESE PLANS ARE IN ACCORDANCE WITH ESTABLISHED PRACTICES OF CIVIL ENGINEERING FOR THE DESIGN FUNCTIONS AND USES INTENDED BY THE OWNER AT THIS TIME. HOWEVER, NEITHER KAW VALLEY ENGINEERING, INC NOR ITS PERSONNEL CAN OR DO WARRANTY THESE DESIGNS OR PLANS AS CONSTRUCTED, EXCEPT IN THE SPECIFIC CASES WHERE KAW VALLEY ENGINEERING PERSONNEL INSPECT AND CONTROL THE PHYSICAL CONSTRUCTION ON A CONTEMPORARY BASIS AT THE SITE.

APPROVED AS NOTED
BY WICHITA PUBLIC WORKS
ENGINEERING DIVISION

Engineering: *Dth Detchey* 10.18.18
Utilities: *[Signature]* 10.18.18

NOTE TO CONTRACTORS

Inspection and testing for this project 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 Licensed Professional Engineer in the state of Kansas. No work shall be performed by the Contractor without such inspection nor shall any work be commenced without written authorization by City Engineering. All Construction and Materials shall comply with the current City of Wichita Specifications and Standards and Special Provisions. (on file and available at Wichita.gov).

An approved copy of these plans signed by City staff are required on-site.

THIS PLAN SHEET IS PART OF AN OVERALL KAW VALLEY ENGINEERING PLAN SET FOR THE SPECIFIC IMPROVEMENTS CONTEMPLATED THEREIN. AS SUCH, THE INFORMATION CONTAINED MAY BE LIMITED AND SHOULD ONLY BE INTERPRETED WITHIN THE CONTEXT OF THE COMPLETE PLAN SET.



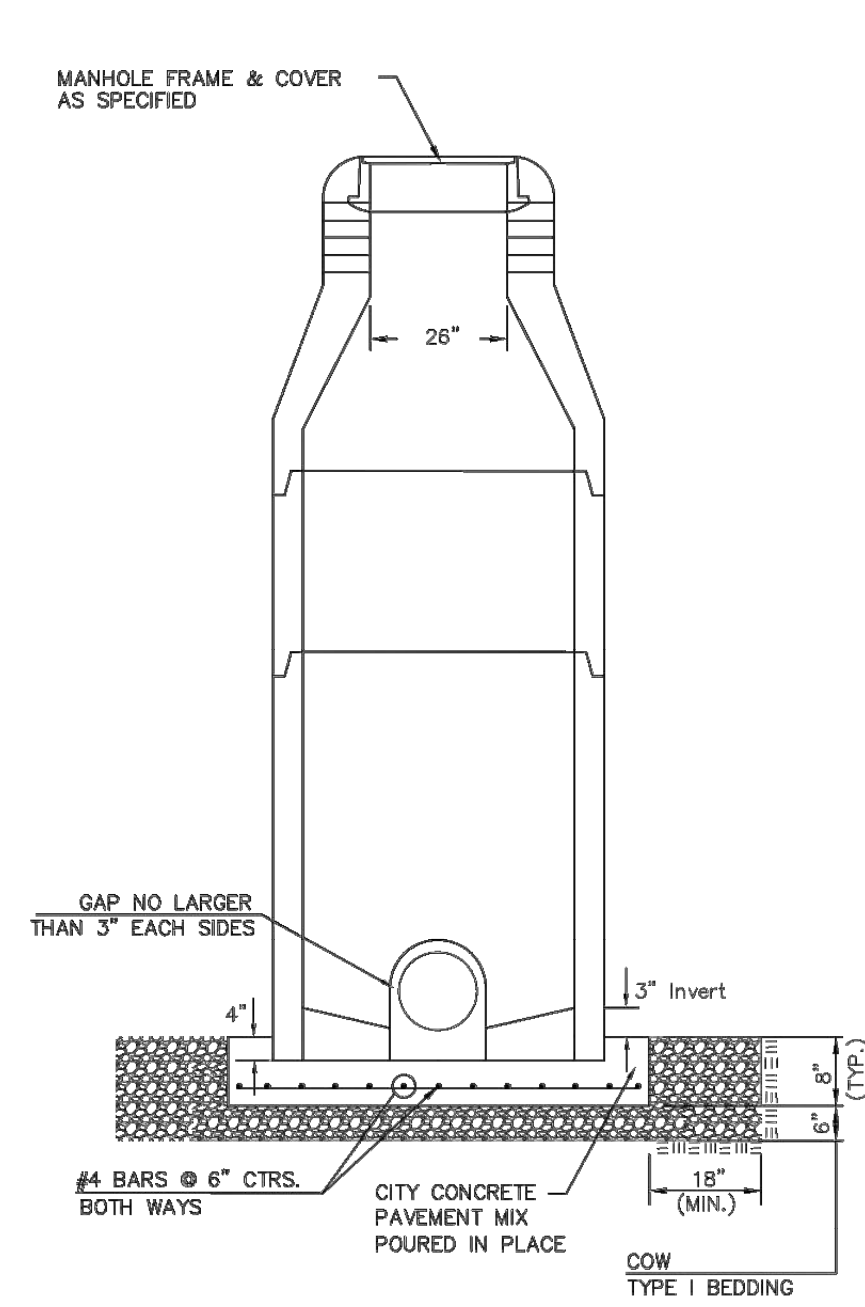
OCTOBER 2018

PROJ. NO. G18_0678 DSN: TRA TIMOTHY R. AUSTIN
CPN: 06785TS DWN: EAM ENGINEER
KS # 11496

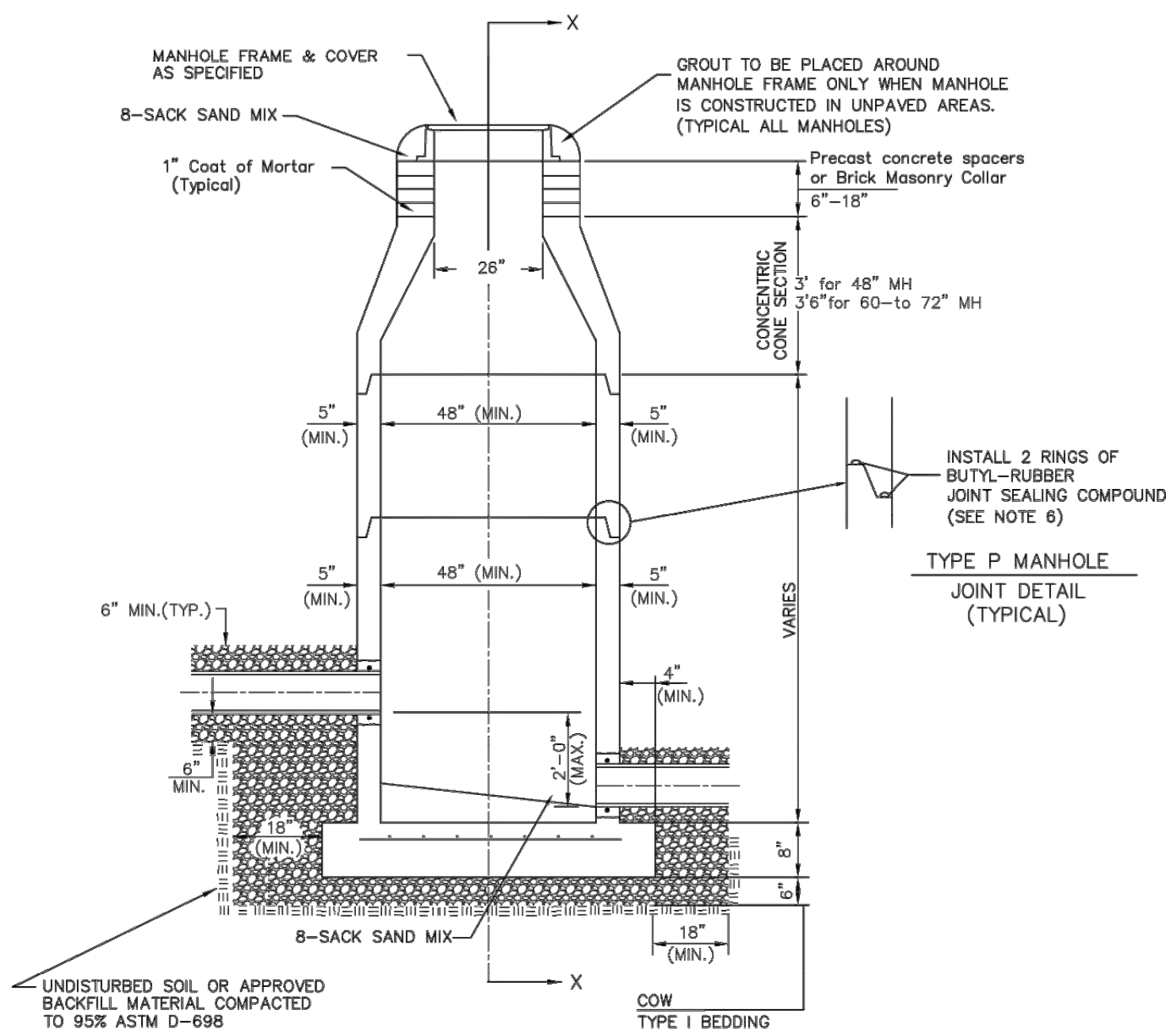
200 N. EMPORIA, SUITE 100
WICHITA, KANSAS 67202
PH. (316) 440-4304 | FAX (316) 440-4309
wh@kve.com | www.kve.com

KAW VALLEY ENGINEERING

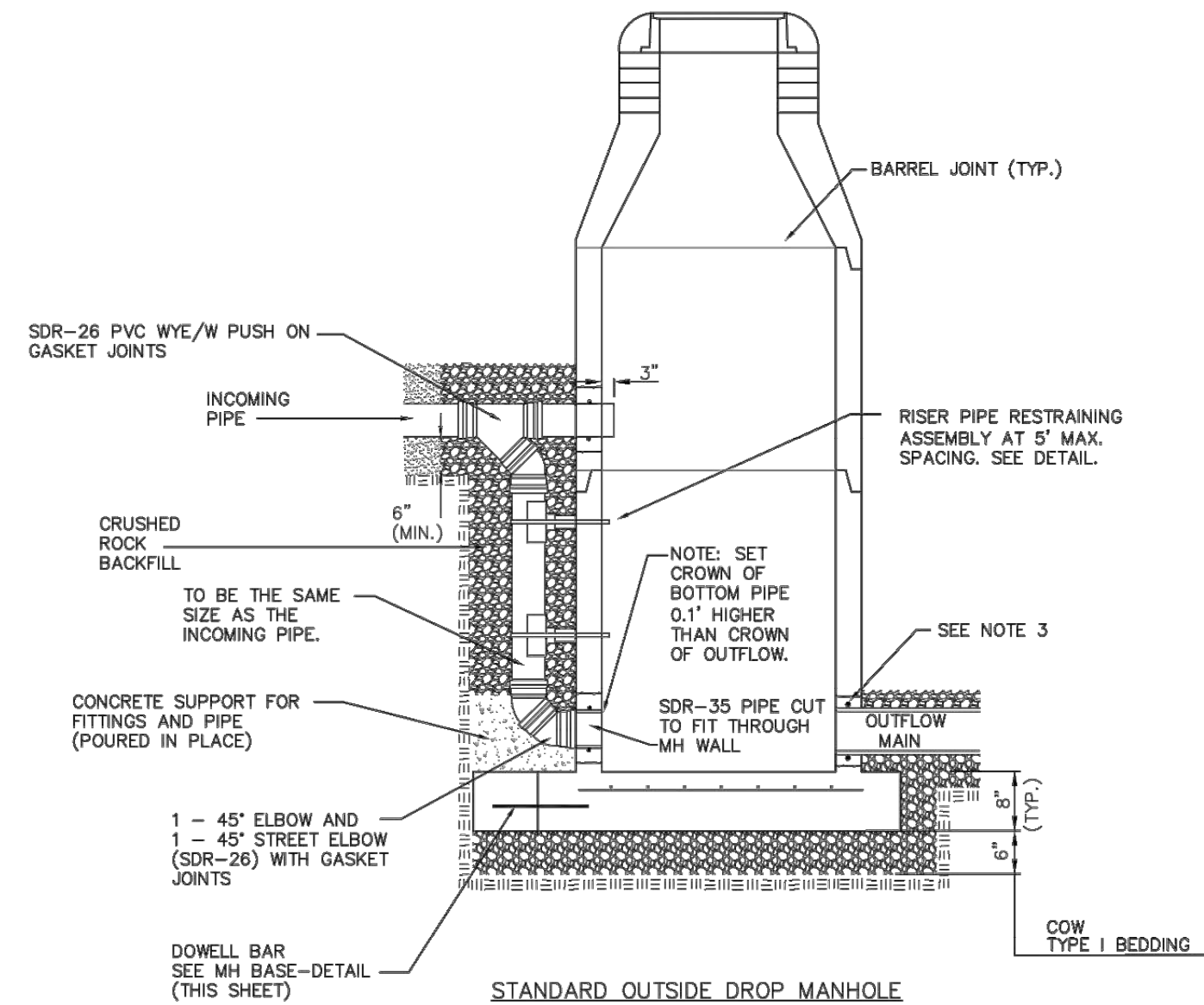
KAW VALLEY ENGINEERING, INC., IS AUTHORIZED TO OFFER ENGINEERING SERVICES BY KANSAS STATE CERTIFICATE OF AUTHORIZATION # E-113. EXPIRES 12/31/18



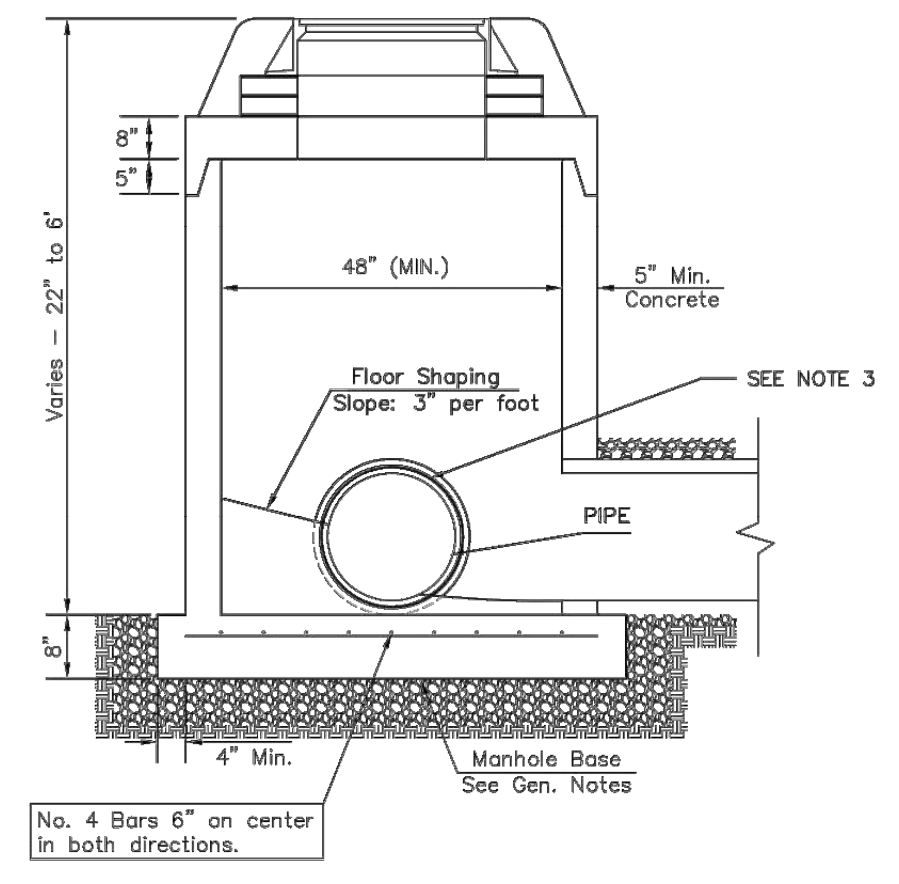
DOG HOUSE MANHOLE
(OVER EXISTING PIPE)
Not to Scale



STANDARD MANHOLE
Not to Scale



STANDARD OUTSIDE DROP MANHOLE
Not to Scale

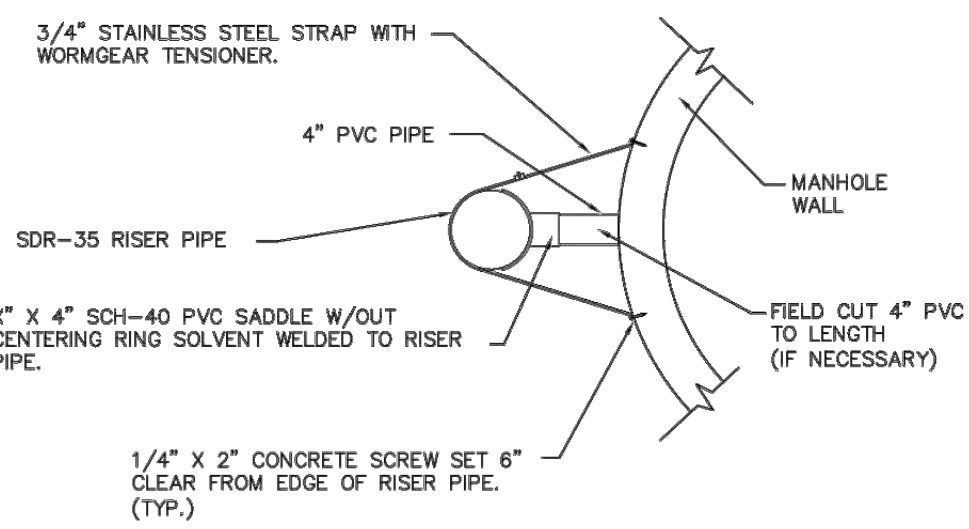


SHALLOW MANHOLE
Not to Scale

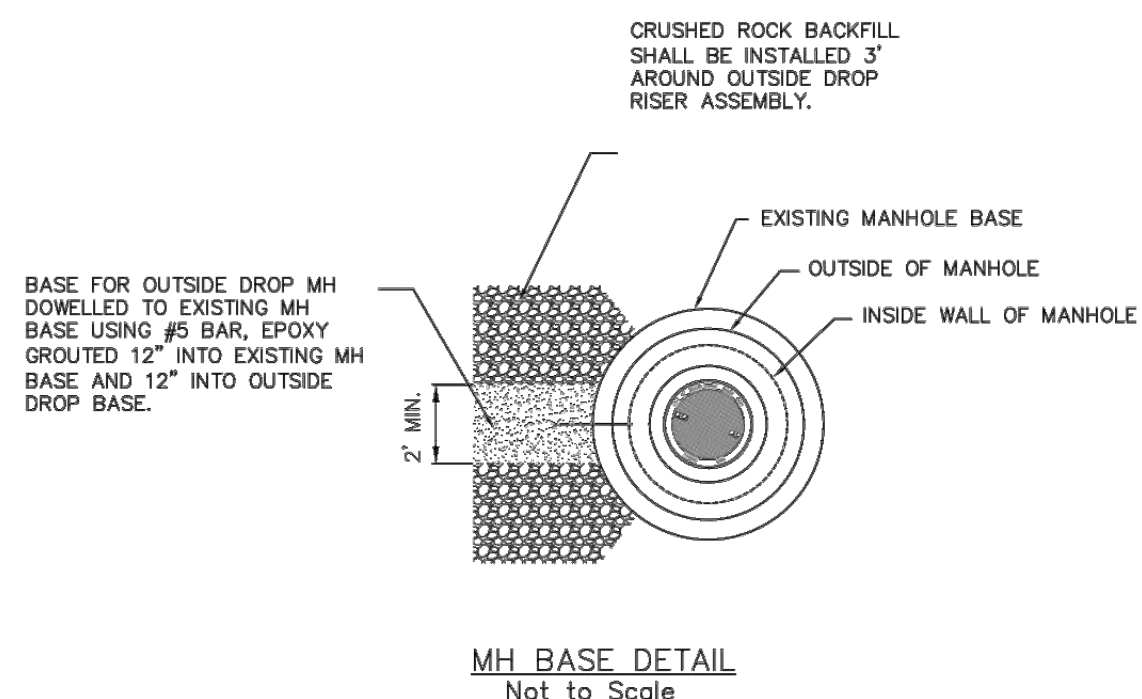
= COW TYPE I BEDDING
 = UNDISTURBED SOIL

PRECAST MANHOLE GENERAL 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 SHALL BE INSTALLED TO JOIN THE SEWER PIPE TO THE MANHOLE WALL. THE SEWER PIPE SHALL BE SUPPORTED WITH CRUSHED ROCK 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 PER SECTION 804.4 OF STANDARD SPECIFICATIONS.
- EXTERIOR MANHOLE WALLS SHALL BE COATED PER SECTION 804.4 OF STANDARD SPECIFICATIONS.
- JOINT SEALING COMPOUND SHALL BE PER 804.4 OF STANDARD SPECIFICATIONS.
- ALL MANHOLE SECTION JOINTS THAT WILL BE IN GROUNDWATER OR GREATER THAN 12" DEEP SHALL BE WRAPPED WITH AN EXTERNAL JOINT SEAL PER SECTION 804.4 OF STANDARD SPECIFICATIONS, AS INDICATED BY THE PLANS.
- PRECAST MANHOLES SHALL BE SET AT LEAST 4 INCHES INTO THE MANHOLE BASE FOR DOG HOUSE MANHOLES.
- 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. 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.
- WALL THICKNESS SHALL BE 1" GREATER THAN MANHOLE DIAMETER IN FEET.
- OPENINGS SHALL BE CORE DRILLED INTO THE MANHOLE WALL WHEN OUTSIDE DROPS ARE CONSTRUCTED ON EXISTING MANHOLES. SUCH OPENINGS DRILLED 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. 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 CONSTRUCTION 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. 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.
- 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 STANDARD MANHOLES SHALL NOT EXCEED 2" REGARDLESS OF PIPE SIZE. THE CROWNS OF INFLOWING PIPES SHALL NEVER BE SET LOWER THAN THE CROWN OF THE OUTFLOWING PIPE.
- STANDARD 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.
- PRECAST CONCRETE SPACERS OR 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 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.



RISER PIPE RESTRAINING ASSEMBLY
Not to Scale



MH BASE DETAIL
Not to Scale

SANITARY SEWER MANHOLE DIAMETERS

DIAMETER	DEPTH	PIPE SIZE
4'	0'-15'	8"-18"
5'	>15'-30'	21"-30"
6'	>30'	36"-60"

REVISION APRIL 2017	REMOVED CLEANOUT ON OUTSIDE DROP MANHOLE
 CITY OF WICHITA PUBLIC WORKS & UTILITIES ENGINEERING DIVISION	
PRECAST SANITARY SEWER MANHOLE CITY ENGINEER GARY JANZEN, P.E.	
PROJECT NUMBER	OCA NUMBER
DATE	SHEET
CITY ENGINEER'S OFFICE CITY HALL - SEVENTH FLOOR 455 NORTH MAIN STREET WICHITA, KANSAS 67202-1620 (316) 268-4501	

SS-101

DESIGNER	TRA	TRA	TRA
DRAWN BY	EAM	EAM	EAM
CFN	0678PPS	REV	1
SHEET	03	REV	1
PROJ. NO.	G18_0678	DATE	10-18-18
DESIGNER	TRA	DATE	10-18-18
DRAWN BY	EAM	DATE	10-18-18
CFN	0678PPS	DATE	10-18-18
SHEET	03	DATE	10-18-18
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DESIGNER	TRA	DATE	10-18-18
DRAWN BY	EAM	DATE	10-18-18
CFN	0678PPS	DATE	10-18-18
SHEET	03	DATE	10-18-18

TIMOTHY R. AUSTIN
 ENGINEER
 KS # 11496

KAW VALLEY ENGINEERING
 KAW VALLEY ENGINEERING, INC. IS AUTHORIZED TO OFFER ENGINEERING SERVICES UNDER THE KANSAS STATE CERTIFICATE OF AUTHORIZATION # E-113. EXPIRES 12/31/18.

GATES OF DELANO
 512, 516, 524 S Seneca St.
 WICHITA, KS

STANDARD DETAILS

