

**GENERAL NOTES:**

- ALL ELEVATIONS SHOWN ARE BASED ON MEAN SEA LEVEL.
- 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	687-2470
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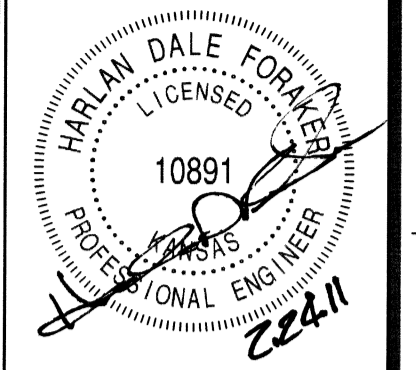
THE CONTRACTOR MUST NOTIFY THE FOLLOWING IN CASE OF AN EMERGENCY:  

COX COMMUNICATIONS	262-4270 OR 263-2061
AT&T	1-800-870-8390
KANSAS GAS SERVICE	1-888-482-4950
WESTAR	1-800-383-1183
BLACK HILLS ENERGY	1-800-303-0752
CITY OF WICHITA(WATER & SEWER)	268-4555

THE CONTRACTOR SHALL NOTIFY PIPELINE COMPANIES AT LEAST 24 HOURS IN ADVANCE OF ANY WORK BEING PERFORMED ACROSS AND/OR ADJACENT TO PIPELINES.
- COST OF EXCAVATION, HAULING AND DUMPING OF EXCESS EXCAVATION SHALL BE SUBSIDIARY TO OTHER ITEMS OF WORK.
- THE CONTRACTOR SHALL NOTIFY THE INSPECTOR FOR THIS PROJECT 48 HOURS PRIOR TO BEGINNING CONSTRUCTION. THE CONTRACTOR SHALL NOT START WORK ON THE PROJECT UNTIL THE PROJECT INSPECTOR ASSIGNED TO THE PROJECT IS PRESENT ON SITE. ANY WORK DONE WITHOUT INSPECTION WILL BE REQUIRED TO BE UNCOVERED FOR INSPECTION.
- THE CONTRACTOR SHALL GIVE ALL PROPERTY OWNERS AND/OR TENANTS OF DEVELOPED PROPERTY DIRECTLY ADJUTING THE CONSTRUCTION OF THIS PROJECT A MINIMUM OF TEN (10) DAYS ADVANCE NOTICE PRIOR TO START OF CONSTRUCTION.
- 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.
- THE CONTRACTOR SHALL RESTORE ALL DITCHES, SWALES, ROAD SHOULDERS, ENTRANCES AND BANK LINES TO THEIR ORIGINAL SLOPES AND GRADES EXCEPT AS SHOWN OTHERWISE.
- INTERURBAN TRAFFIC GENERATED OUTSIDE THE PROJECT AREA SHALL BE CARRIED THROUGH CONSTRUCTION. LOCAL RESIDENTIAL TRAFFIC GENERATED WITHIN THE PROJECT AREA SHALL BE CARRIED THROUGH CONSTRUCTION AS FURTHER PROMULGATED BY PROJECT SPECIAL PROVISIONS.
- UNDERGROUND UTILITY SERVICE LINES AND OVERHEAD UTILITY POLE LINES ARE TO BE ADJUSTED AS NECESSARY BY OTHERS PRIOR TO CONSTRUCTION UNLESS THE PLANS SPECIFICALLY CALL FOR THEIR ADJUSTMENT BY THE CONTRACTOR OR UNLESS THE PLANS SPECIFICALLY IDENTIFY A UTILITY TO BE ADJUSTED BY ITS OWNER DURING CONSTRUCTION. EXISTING UTILITIES AND THEIR LOCATION, 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 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, 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 FLOODPLAIN 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.
- PROPERTIES WITHIN THE PROJECT LIMITS MAY HAVE UNDERGROUND SPRINKLER SYSTEMS IN THE PUBLIC RIGHT-OF-WAY WHICH CONFLICT WITH NEW CONSTRUCTION. CONTRACTOR WILL BE REQUIRED TO REMOVE SUCH IMPROVEMENTS SHOULD THEY NOT BE REMOVED BY THEIR OWNER AT THE TIME OF CONSTRUCTION OF THE PROJECT. THE CONTRACTOR WILL BE REQUIRED TO SALVAGE ALL SPRINKLER HEADS AND/OR VALVES AND GIVE SUCH MATERIAL TO THEIR OWNER. PORTIONS OF UNDERGROUND SPRINKLER SYSTEMS NOT IN CONFLICT WITH NEW CONSTRUCTION SHALL BE PROTECTED FROM DAMAGE AND SHALL REMAIN IN PLACE. ALL WORK IN CONNECTION WITH UNDERGROUND SPRINKLER SYSTEMS SHALL BE CONSIDERED AS SUBSIDIARY TO THE CONTRACT PAY ITEMS OF WORK.
- ALL PROPOSED STUBS AND PLUGGED PIPES SHALL BE LOCATED WITH GREEN PLASTIC TAPE.
- PRIOR TO LAYING THE NEW SEWER LINES THE CONTRACTOR SHALL EXPOSE AND VERIFY THE ELEVATION, GRADE AND ALIGNMENT OF THE EXISTING SANITARY SEWER AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES FROM THE PLAN.
- THE CONTRACTOR MUST EXAMINE THE CONSTRUCTION SITE PRIOR TO BIDDING AND BE SATISFIED AS TO THE WORK SHOWN FOR COMPLETION. AFTER BIDS HAVE BEEN RECEIVED, THE CONTRACTOR SHALL NOT ASSERT THAT THERE WAS A MISUNDERSTANDING OF THE QUANTITIES OF WORK OR OF THE NATURE FOR THE WORK TO BE COMPLETED.
- EXISTING UTILITIES AND THEIR LOCATION, AS SHOWN ON THE PLANS, REPRESENT THE BEST INFORMATION AVAILABLE 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 ARE NOT GUARANTEED. ADDITIONAL EXISTING UTILITIES MAY ALSO BE ENCOUNTERED. THE CONTRACTOR WILL BE REQUIRED TO WORK AROUND EXISTING UTILITIES WHICH ARE ENCOUNTERED ON THIS PROJECT. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION DURING TRENCHING OPERATIONS TO AVOID DAMAGING THESE LINES. ANY LINES DAMAGED SHALL BE REPLACED OR REPAIRED IMMEDIATELY AS DIRECTED BY THE ENGINEER AT THE CONTRACTOR'S EXPENSE.
- ALL PIPE JOINTS SHALL BE LAID AND PUSHED 'FULL HOME', WITH THE BEVELED END OF THE SPIGOT MAKING FULL CONTACT WITH THE CHAMFERED AREA AT THE THROAT OF THE BELL OR SOCKET, WITH NO SEPARATION BETWEEN THEM. IF SEPARATION IS DETERMINED, THE PIPE SHALL BE EXCAVATED AND RE-LAID
- AT LEAST 24 HOURS BEFORE CONNECTING NEW SEWER PIPE TO THE EXISTING SEWAGE SYSTEM, THE CONTRACTOR SHALL CONTACT THE CITY OF WICHITA SEWER DEPARTMENT (268-4024). THE CONTRACTOR SHALL KEEP ANY CONSTRUCTION DEBRIS FROM ENTERING THE EXISTING SANITARY SEWER DURING CONSTRUCTION. TO PREVENT WATER OR DEBRIS FROM ENTERING THE EXISTING SEWER, A MECHANICAL PLUG SHALL BE INSTALLED AND MAINTAINED TO ISOLATE THE EXISTING SEWER FROM THE NEW CONSTRUCTION UNTIL THE NEW CONSTRUCTION IS CLEANED, TELEVIEWED AND HAS BEEN ACCEPTED. THE WATER USED FOR CLEANING SHALL NOT BE ADDED TO THE FLOW OF THE EXISTING SEWER. THE CLEANING OR OTHERWISE ACCUMULATED WATER SHALL BE PUMPED OR OTHERWISE REMOVED PRIOR TO TELEVIEWING.
- THE CONTRACTOR SHALL CONTAIN HIS OPERATIONS TO PERMIT TRAFFIC THROUGH AND ACROSS CONSTRUCTION AT EXISTING ROADWAYS AT ALL TIMES. THE CONTRACTOR SHALL ERECT WARNING SIGNS, FLASHING LIGHTS, AND BARRICADES IN COMPLIANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES TO ENSURE SAFETY AS DIRECTED IN THE GENERAL CONDITIONS. THE CONTRACTOR SHALL LIMIT THE EXTENT OF TRENCH TO REMAIN OPEN OVERNIGHT AND WEEKENDS TO LESS THAN 50 FEET.
- ALL SODDING, SEEDING, AND EROSION CONTROL OF THE AREAS DISTURBED BY CONSTRUCTION OF THE SANITARY SEWER AS SHOWN ON THE PLANS (SEE SHEET NO.3), SHALL BE "SUBSIDIARY" TO "SITE CLEARING & RESTORATION".
- THE CONTRACTOR SHALL PROVIDE POSITIVE DRAINAGE AWAY FROM ALL MANHOLE COVERS.

# SANITARY SEWER PRIVATE PROJECT PLANS FOR QUIKTRIP 11th ADDITION WICHITA, SEDGWICK COUNTY, KANSAS 2094 PPS (O.C.A. NO. 607861) JAMES L. ARMOUR, P.E., CITY ENGINEER FEBRUARY 2011

RELEASE DATE: 10/6/2011  
: APRosas 10/6/2011



PROJECT NO.: 20101899

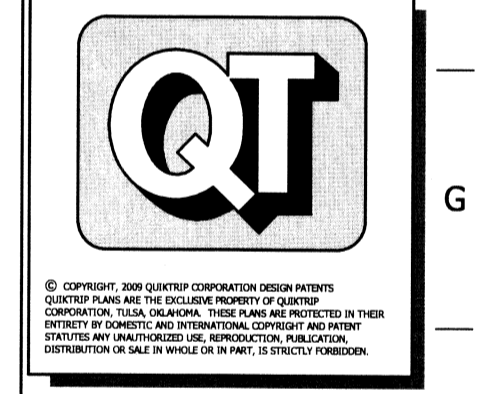
**CED**  
CERTIFIED ENGINEERING DESIGN, P.A.  
1935 W. MAPLE  
WICHITA, KANSAS 67213  
PH: (316) 262-9808  
FAX: (316) 262-0685

**SHEET INDEX**

NO.	TITLE
1	COVER
2	SURVEY
3	FINAL PLAT
4	SITE PLAN
5	PLAN & PROFILE
6	STD. TYPE 'P' MH DETAIL

**QuikTrip No. 0369R**

625 SOUTH HILLSIDE AVENUE  
WICHITA, KS

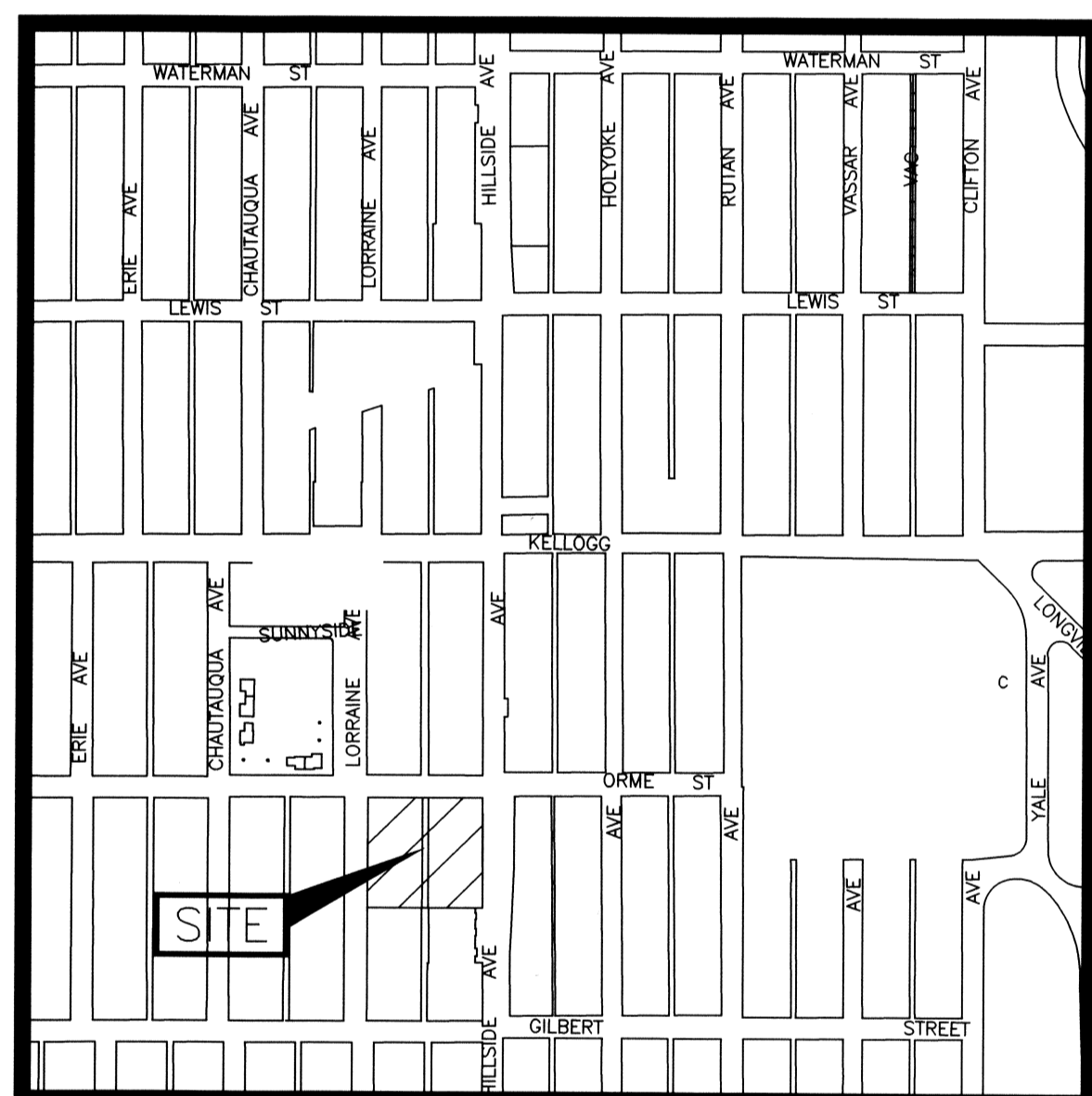


PROTOTYPE: P-65 (02/01/11)
DIVISION: WICHITA
VERSION: 001
DESIGNED BY: CKW
DRAWN BY: CKW
REVIEWED BY: HDF

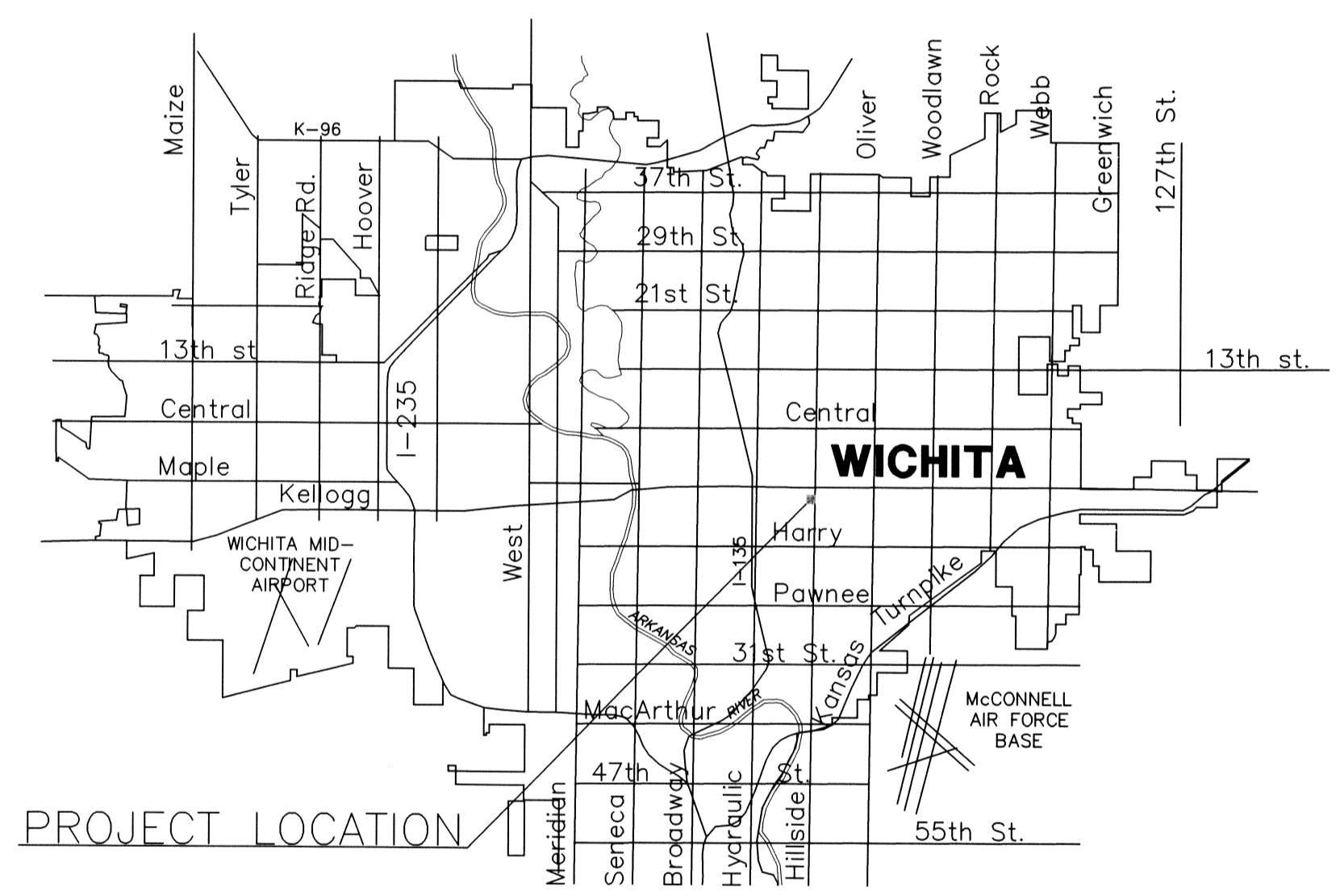
REV.	DATE	DESCRIPTION

SHEET TITLE:  
**COVER**

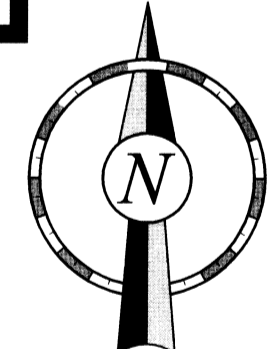
SHEET NUMBER:  
**1**



**Vicinity Map**  
Not to Scale



LOCATION MAP



**BENCHMARKS:**

- BM-1 (CITY OF GPS MONUMENT NO. R-08) ALUMINUM DISK ON ALUMINUM ROD, WEST SIDE OF BELT LINE ROAD, 415'+/- SOUTH OF WILLOW CREEK DRIVE, 16' WEST OF BACK OF CURB, EAST OF GOLDEN CORRAL RESTAURANT LOCATED AT 1701 N. BELT LINE ROAD. ELEVATION=531.87'
- BM-2 (CITY OF GPS MONUMENT NO. S-09) ALUMINUM MONUMENT WITH ACCESS COVER, EAST SIDE OF LUKE STREET, 61' SOUTHEAST OF THE SOUTHEAST FENCE CORNER OF FRENCH'S FOREIGN CAR REPAIR LOCATED AT 925 LUKE STREET, MIDWAY BETWEEN TWO DRIVEWAYS & WEST OF SIDEWALK, 97.5 FEET NORTH OF A FIRE HYDRANT. ELEVATION=521.29'
- TBM-1 SQUARE CUT WITH "X" SET ON SOUTHEAST CORNER OF CURB INLET, EAST SIDE OF BELT LINE ROAD, 267' SOUTH OF WILLOW CREEK DRIVE. ELEVATION=537.56'
- TBM-2 SQUARE CUT WITH "X" SET ON TOP OF CURB, NORTH SIDE OF WILLOW CREEK DRIVE, 230' EAST OF BELT LINE ROAD, 40' EAST OF A POWER POLE. ELEVATION=543.33'

APPROVED AS NOTED  
By CITY ENGINEER OF WICHITA

Sanitary Sewers Julianna Kallman 2-25-11

Storm Sewers \_\_\_\_\_

Driveway Approaches \_\_\_\_\_

Water Mains \_\_\_\_\_

Paving \_\_\_\_\_

NOTE TO CONTRACTOR

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. NO WORK SHALL BE PERFORMED IN DEDICATED EASEMENTS OR THE PUBLIC RIGHT-OF-WAY BY THE CONTRACTOR WITHOUT SUCH INSPECTION NOR SHALL ANY WORK BE COMMENCED IN DEDICATED EASEMENTS OR PUBLIC RIGHT-OF-WAY WITHOUT WRITTEN AUTHORIZATION BY THE CITY ENGINEER.

FILE LOCATIONS:\Drawing Files\Project CKW 12-7-09\QT #369(20101899)\dwg\SS Private Project.dwg USER:swinkler SAVED:2/24/2011 10:48 AM PLOTTED:2/24/2011 10:50 AM



**CERTIFICATE OF SURVEY**

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 "QUIKTRIP 11th ADDITION", an addition to Wichita, Sedgwick County, Kansas, into a Lot, a Block, a Street, and an Alley, the same being accurately set forth in the accompanying plat and described herein:

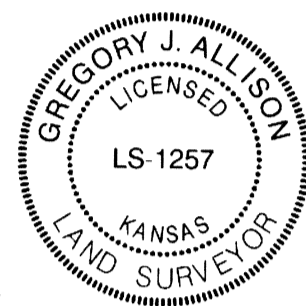
Lots 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, and 72, Block 8, together with, the adjoining 16 foot platted alley, all in Sunny-Side Addition to the City of Wichita, Kansas, said tract being located in the Northeast Quarter of Section 27, Township 27 South, Range 1 East of the Sixth Principal Meridian, Wichita, Sedgwick County, Kansas, collectively being more particularly described as follows:

BEGINNING at the northeast corner of said Lot 49, thence along the east line of said Block 8 on a Kansas coordinate system of 1983 south zone grid bearing of S01°04'18"E, a distance of 300.06 feet to the southeast corner of said Lot 71; thence S88°47'37"W along the south lines of said Lots 71 and 72, a distance of 318.01 feet to the southwest corner of said Lot 72; thence N01°03'56"W, along the west line of said Block 8, a distance of 299.91 feet to the northwest corner of said Lot 50; thence N88°46'03"E, along the north line of said Block 8, a distance of 317.98 feet to the POINT OF BEGINNING.

Said described tract contains 95,394 square feet or 2.19 acres, more or less.

All alleys, streets, easements, building setbacks, access controls, together with all other public dedications 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 \_\_\_\_\_, 2011.



Gregory J. Allison, PE, LS #1257  
MKEC Engineering Consultants, Inc.  
411 North Webb Road  
Wichita, Kansas 67206

**OWNER CERTIFICATE**

Know all men by these presents that the undersigned property owner of the land above set forth in the Registered Land Surveyor's Certificate, has caused the same to be surveyed and platted into a Lot, a Block, a Street, and an Alley, the same to be known as "QUIKTRIP 11th ADDITION," an addition to Wichita, Sedgwick County, Kansas.

Easements for the construction and maintenance of public utilities, as indicated on the accompanying plat are hereby granted to the public.

The street and alley are hereby dedicated to and for the use of the public.

All abutters rights of access to or from Hillside Avenue over and across the east line; and to or from Lorraine Avenue over and across the west line of "QUIKTRIP 11th ADDITION," are hereby granted to the appropriate governing body, as indicated hereon.

A drainage plan has been developed for this plat. All drainage easements, right-of-way, or reserves shall remain at established grades or as modified with the approval of the applicable City or County Engineer, and unobstructed to allow for the conveyance of storm water.

QuikTrip Corporation

Larry D. Dickerson, Director of Real Estate

STATE OF OKLAHOMA, TULSA COUNTY) ss:

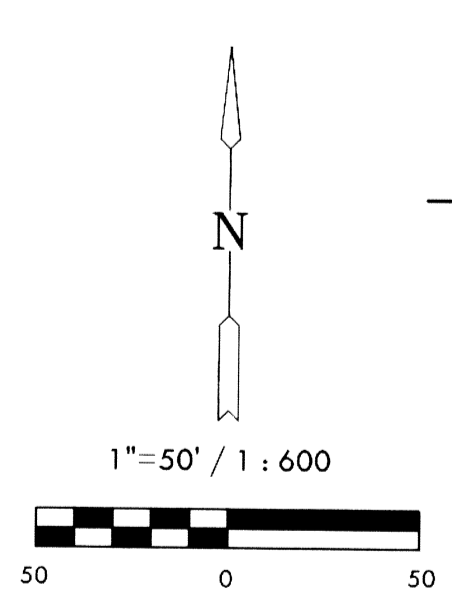
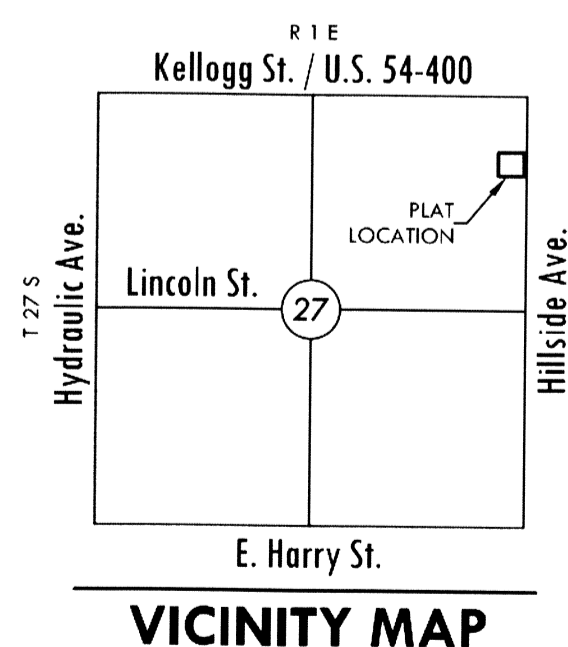
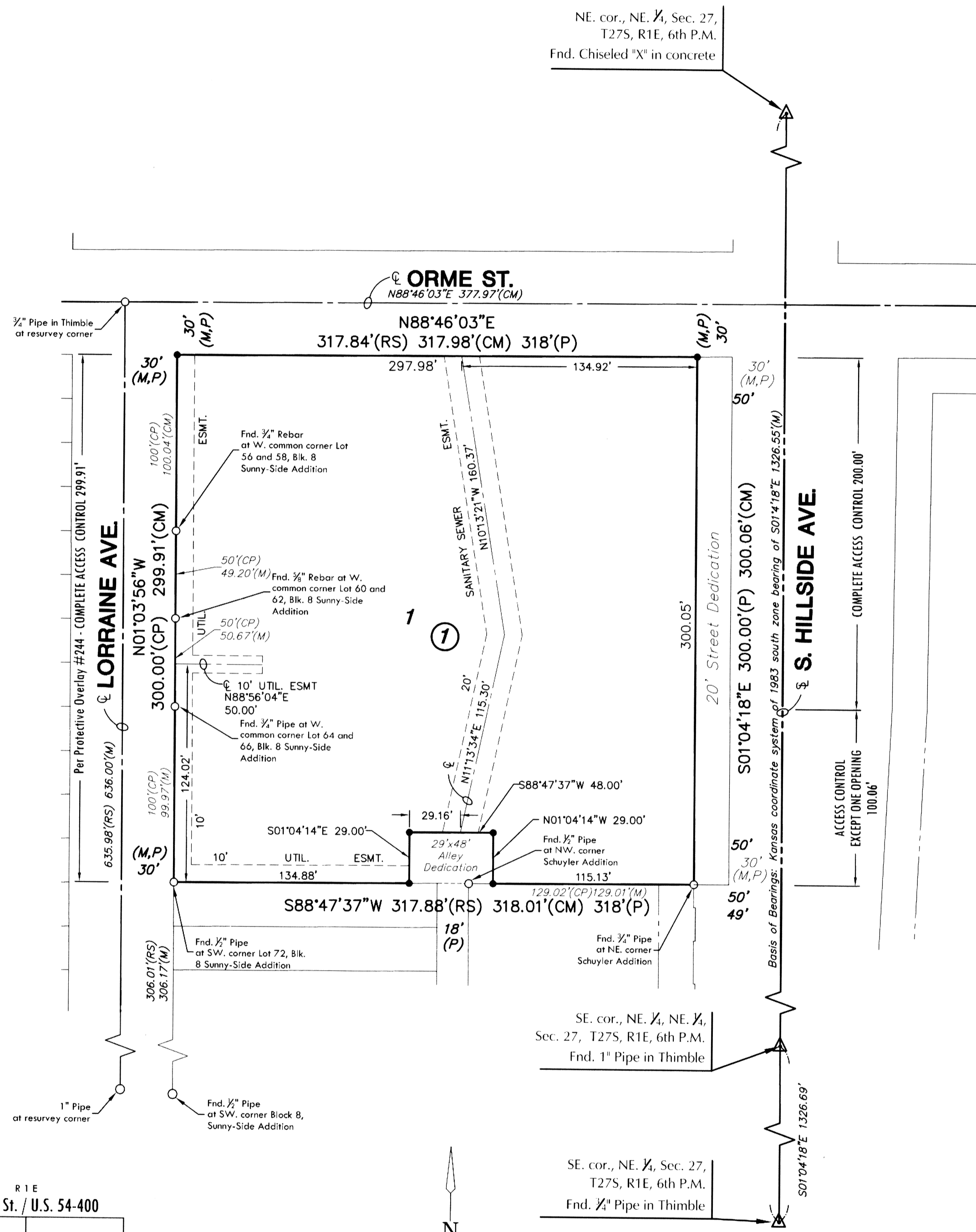
This instrument was acknowledged before me on \_\_\_ day of \_\_\_\_\_, 2011, by Larry D. Dickerson, Director of Real Estate, QuikTrip Corporation.

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

Notary Public: \_\_\_\_\_, Notary Public

My Term Expires: \_\_\_\_\_

**FINAL PLAT**  
**QUIKTRIP 11th ADDITION**  
**AN ADDITION TO WICHITA, SEDGWICK COUNTY, KANSAS**



- LEGEND**  
Date of Survey: Sept., 2010
- △ = Section Corner Monument Found
  - = Found survey monument see annotation for type
  - = Set 3/8" rebar w/ MKEC CLS 39 id. cap
  - (M) = Measured
  - (CM) = Calculated from measured
  - (CP) = Calculated from Platted
  - (P) = Platted
  - (RS) = Record Survey

Basis of Bearing: Kansas coordinate system of 1983 south zone grid bearing of S01°04'18"E along the E. line of the NE 1/4, Sec. 27, T27S, R1E, 6th P.M.

This plat is surveyed and platted on NAD83-09 using Kansas state plane south zone coordinates, modified to the surface, having a combined adjustment scale factor of 1.000120014401728

**PLANNING COMMISSION CERTIFICATE**

This plat of "QUIKTRIP 11th ADDITION" has been submitted to and approved by the Wichita-Sedgwick County Metropolitan Area Planning Commission, Wichita, Kansas.

Dated this \_\_\_ day of \_\_\_\_\_, 2010

WICHITA-SEDGWICK COUNTY METROPOLITAN AREA PLANNING COMMISSION

Debra Miller Stevens, Chair

Attest: John L. Schlegel, Secretary

**GOVERNING BODY CERTIFICATE**

The dedications shown on this plat are hereby accepted and this plat is hereby approved by the governing body of the City of Wichita, Kansas.

Dated this \_\_\_ day of \_\_\_\_\_, 20\_\_

At the direction of the City Council.

Carl Brewer, Mayor

Attest: Karen Sublett, City Clerk

**TRANSFER RECORD**

STATE OF KANSAS, SEDGWICK COUNTY) ss:

Entered on transfer record this \_\_\_ day of \_\_\_\_\_, 2011

Kelly B. Arnold, County Clerk

**REGISTER OF DEEDS CERTIFICATE**

STATE OF KANSAS, SEDGWICK COUNTY) ss:

This is to certify that this instrument was filed for record in the Register of Deeds office this \_\_\_ day of \_\_\_\_\_, 2011, at \_\_\_\_\_ o'clock \_\_\_M; and is duly recorded.

Bill Meek, Register of Deeds

Attest: Tonya E. Buckingham, Deputy

**COUNTY SURVEYOR**

STATE OF KANSAS, SEDGWICK COUNTY) ss:

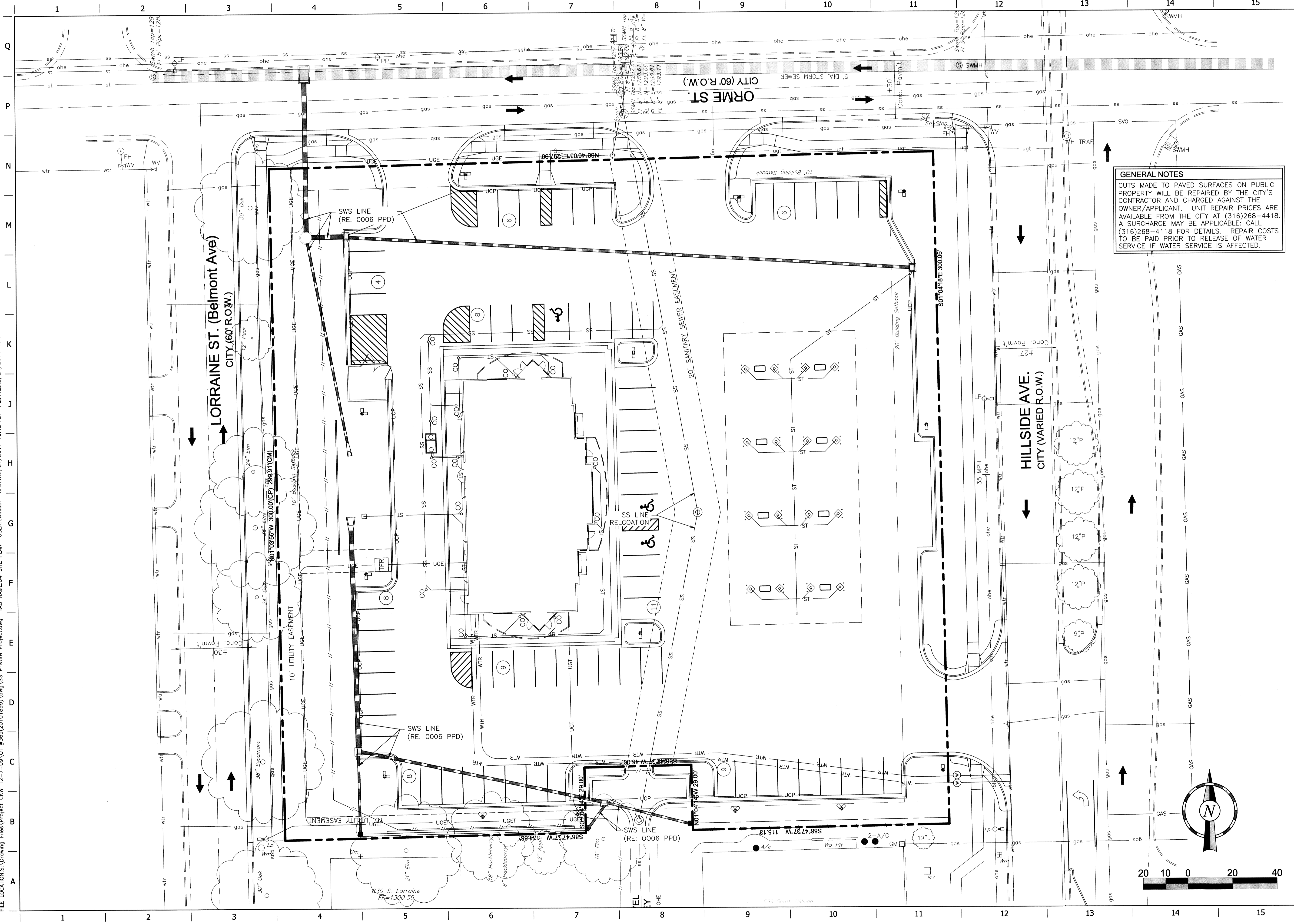
Reviewed in accordance with K.S.A. 58-2005 on this \_\_\_ day of \_\_\_\_\_, 2010

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

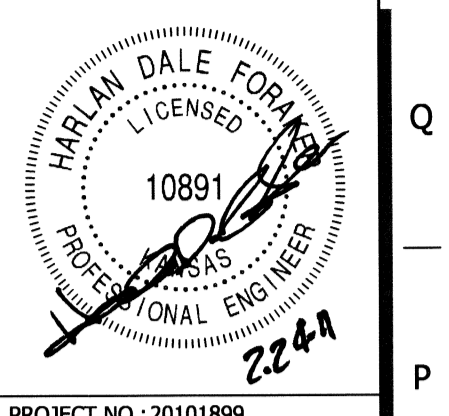
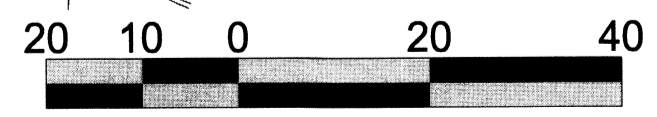
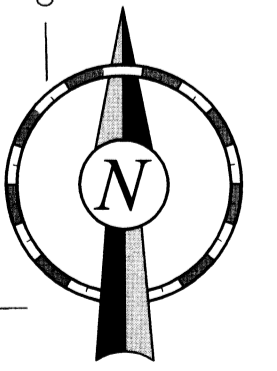


411 N. WEBB ROAD  
WICHITA, K.S. 67206  
316-684-9600

FILE LOCATION: S:\Drawing Files\Project\_CKW 12-7-09\OT #369(20101899)\dwg\SS Private Project.dwg TAB NAME: 04 SITE PLAN USER: c:\ninkler SAVED: 2/24/2011 10:48 AM PLOTTED: 2/24/2011 10:51 AM

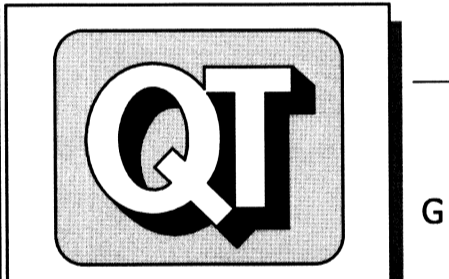


**GENERAL NOTES**  
 CUTS MADE TO PAVED SURFACES ON PUBLIC PROPERTY WILL BE REPAIRED BY THE CITY'S CONTRACTOR AND CHARGED AGAINST THE OWNER/APPLICANT. UNIT REPAIR PRICES ARE AVAILABLE FROM THE CITY AT (316)268-4418. A SURCHARGE MAY BE APPLICABLE. CALL (316)268-4118 FOR DETAILS. REPAIR COSTS TO BE PAID PRIOR TO RELEASE OF WATER SERVICE IF WATER SERVICE IS AFFECTED.



PROJECT NO.: 20101899  
**GED**  
 CERTIFIED ENGINEERING DESIGN, P.A.  
 1995 W. MAPLE  
 WICHITA, KANSAS 67213  
 FAX: (316)262-1888

**QuikTrip No. 0369R**  
 625 SOUTH HILLSIDE AVENUE  
 WICHITA, KS



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 DIVISION: WICHITA  
 VERSION: 001  
 DESIGNED BY: CKW  
 DRAWN BY: CKW  
 REVIEWED BY: HDF

REV	DATE	DESCRIPTION

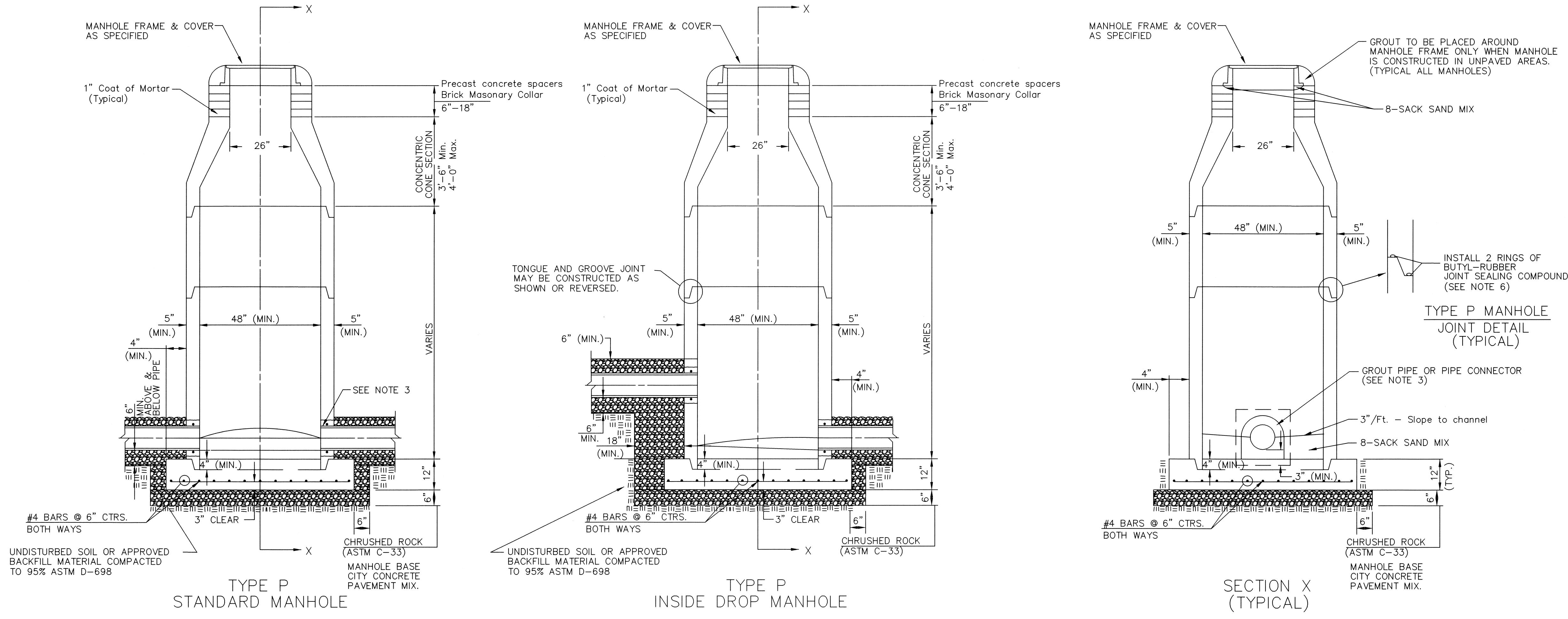
SHEET TITLE:  
 SITE PLAN

SHEET NUMBER:  
 4

ORIGINAL ISSUE DATE: 01-21-2011

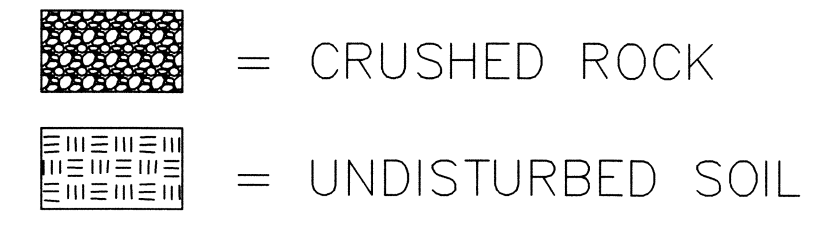


# SEWER APPURTENANCES DETAILS



**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 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 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.
- 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. 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.
- 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' REGARDLESS OF PIPE SIZE. 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.
- 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.



CRUSHED ROCK USED FOR ENCASEMENT AND BEDDING 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. ALL CRUSHED ROCK FOR BEDDING AND ENCASEMENT SHALL EXTEND TO THE LIMITS OF THE MANHOLE EXCAVATION.

REV. 3/29/06, MCG

	<b>STANDARD TYPE 'P' MANHOLES</b>		
	CITY ENGINEER <b>JAMES L. ARMOUR, P.E., L.S.</b>		
	PROJECT NUMBER 2094 PPS	OCA NUMBER (607861)	DATE MM/YY
CITY ENGINEER'S OFFICE CITY HALL - SEVENTH FLOOR 455 NORTH MAIN STREET WICHITA, KANSAS 67202-1620 (316) 268-4501 (316) 268-4114 FAX	DESIGN ABC	DRAWN DEF	SHEET 6