

GENERAL NOTES

- ALL ELEVATIONS SHOWN ARE BASED ON (NAVD 88)
- 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	867-2470
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THE CONTRACTOR MUST NOTIFY THE FOLLOWING IN CASE OF AN EMERGENCY:

COX COMMUNICATIONS	282-4270 OR 283-2061
AT&T	1-800-870-6390
KANSAS GAS SERVICE	1-888-482-4950
WESTAR	1-800-383-1189
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.
- WATERLINES SHALL BE INSTALLED IN ACCORDANCE WITH CITY OF WICHITA STANDARD SPECIFICATIONS, FOR THE "INSTALLATION OF WATER DISTRIBUTION SYSTEMS", NO. 14533.
- 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.
- ANY EXCESS EXCAVATION WHICH IS TO BE WASTED, SHALL BE DISPOSED OF ON SITES PROVIDED BY THE CONTRACTOR. THESE SITES SHALL BE APPROVED BY THE ENGINEER AS TO SUITABILITY, APPEARANCE, AND SITE LOCATION, AND SHALL BE DISPOSED OF IN ACCORDANCE WITH THE PROVISIONS OF THE KANSAS SOLID WASTE MANAGEMENT STATUTES AND REGULATIONS (KSA 65-3401, KAR 28-29-1 ET SEQ.)
- THE CONTRACTOR WILL BE REQUIRED TO WORK AROUND EXISTING UTILITIES WITHIN THE RIGHT-OF-WAY. THE CONTRACTOR WILL DELIVER REMOVED FIRE HYDRANTS TO WATER DISTRIBUTION, 1703 SIM PARK DRIVE.
- CONTRACTOR TO MAINTAIN TRAFFIC USING BARRICADES AND FLAGPERSONS WHILE WORKING WITHIN STREET RIGHT OF WAY.
- ALL AREAS DISTURBED BY CONSTRUCTION INCLUDING STAGING AREAS, SHALL BE REPLANTED WITH GRASS SEED AT THE APPROPRIATE RATES APPROVED BY THE ENGINEER
- EXISTING UTILITIES AND THEIR LOCATION, AS SHOWN ON THE PLANS, REPRESENT THE BEST AVAILABLE INFORMATION. IT SHOULD BE NOTED THAT OTHER BURIED LINES AND CABLE MAY EXIST WHICH ARE NOT SHOWN ON THESE PLANS. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION DURING TRENCHING OPERATIONS TO AVOID DAMAGING THESE LINES AND CABLES. ANY UTILITIES DAMAGED SHALL BE REPLACED OR REPAIRED IMMEDIATELY AS DIRECTED BY THE ENGINEER AT THE CONTRACTOR'S EXPENSE. THE CONTRACTOR SHALL PROTECT FROM DAMAGE AND SUPPORT EXISTING UTILITIES THROUGH CONSTRUCTION AS APPROVED BY THE UTILITY OWNER AND THE ENGINEER AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PRESERVING EXISTING PROPERTY IRONS AND RIGHT-OF-WAY MONUMENTS. THE CONTRACTOR SHALL BE REQUIRED TO RE-ESTABLISH ANY PROPERTY IRONS OR RIGHT-OF-WAY MONUMENTS WHICH ARE DAMAGED OR DESTROYED BY HIS CONSTRUCTION OPERATIONS. SUCH IRONS OR MONUMENTS SHALL BE RE-ESTABLISHED BY A LICENSED LAND SURVEYOR IN ACCORDANCE WITH STATE LAWS.
- THE CONTRACTOR SHALL VERIFY HORIZONTAL AND VERTICAL LOCATION, TYPE, SIZE, AND CLASS OF EXISTING WATERLINES PRIOR TO CONSTRUCTION. EXISTING WATERLINE LOCATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THE CONTRACTOR SHALL MAKE ADJUSTMENTS AS REQUIRED AND APPROVED BY THE ENGINEER. PROVISIONS FOR AND INSTALLATION OF PIPE ADAPTORS, SHORT SECTIONS OF PIPE, AND COUPLERS SHALL BE SUBSIDIARY TO OTHER PAY ITEMS OF WORK.
- THE CONTRACTOR SHALL NOT START WORK ON THE PROJECT UNTIL THE PROJECT INSPECTOR IS ASSIGNED TO THE PROJECT AND IS PRESENT ON THE SITE. ANY WORK PERFORMED WITHOUT INSPECTION IS SUBJECT TO BE UNCOVERED FOR INSPECTION.
- OPENING AND CLOSING WATER VALVES SHALL BE DONE SLOWLY TO PREVENT DAMAGE TO THE WATER DISTRIBUTION SYSTEM FROM WATER HAMMER. ALL VALVES CLOSED BY THE CONTRACTOR MUST BE REOPENED AS NEW CONSTRUCTION PERMITS. PROJECT INSPECTOR MUST ASCERTAIN THAT ANY VALVE CLOSED BY THE CONTRACTOR IS REOPENED. CONTRACTOR WILL BE PERMITTED TO OPERATE WATER VALVES ONLY WHEN THE PROJECT INSPECTOR ASSIGNED TO THE PROJECT IS PRESENT.
- THE CONTRACTOR SHALL GIVE ALL PROPERTY OWNERS AND/OR TENANTS OF DEVELOPED PROPERTY DIRECTLY ABUTTING THE CONSTRUCTION OF THIS PROJECT A MINIMUM OF TEN (10) DAYS ADVANCE NOTICE PRIOR TO START OF CONSTRUCTION.
- EACH BIDDER SHALL VISIT THE SITE OF THE PROJECT BEFORE SUBMITTING THE PROPOSAL FOR THIS WORK SO THAT HE WILL BE FULLY INFORMED OF THE EXISTING FIELD CONDITIONS AND THE OBSTACLES WHICH MIGHT BE ENCOUNTERED. UPON AWARD OF THE CONTRACT THE CONTRACTOR WILL NOT BE GRANTED ANY ADDITIONAL COMPENSATION WITH REGARDS TO TIME AND MONEY FOR CONDITIONS THAT MAY HAVE BEEN EVALUATED DURING ANY INSPECTION OF THE SITE.
- ALL WATERLINES SHALL HAVE A MINIMUM DEPTH OF BURY OF 42 INCHES. THE WATER MAIN SHALL BE CONSTRUCTED ON THE ALIGNMENT SHOWN BY THE PLANS. THE COST FOR ANY NECESSARY TREE TRIMMING, CLEARING AND/OR GRUBBING SHALL BE INCLUDED IN THE PRICE BID FOR THE INSTALLED WATER MAIN PIPE. TREES AND SHRUBS IN PUBLIC RIGHT OF WAY WHICH ARE IN DIRECT CONFLICT WITH PROPOSED CONSTRUCTION SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE INCLUDED IN THE PRICE BID FOR THE INSTALLED WATER PIPE. TREES AND SHRUBS NOT IN DIRECT CONFLICT WITH PROPOSED CONSTRUCTION SHALL BE SAVED AND PROTECTED FROM DAMAGE.
- INSPECTOR WILL NOTE ON AS BUILT PLAN LOCATIONS OF ALL FITTINGS AND VALVES. LOCATIONS WILL BE MEASURED FROM PROPERTY LINES, CURB LINES, AND/OR CENTER LINES. HYDRANT BRANCH LENGTH AND HYDRANT BURY LINE ELEVATION ARE TO MATCH FIELD CONDITIONS AND BE APPROVED BY THE ENGINEER.
- ALL LAWN/TURF AREAS DISTURBED BY CONSTRUCTION OF THE PROPOSED IMPROVEMENTS SHALL BE RESTORED WITH THE SAME GRASS AS EXISTING. RESTORATION OF DISTURBED AREAS SHALL INCLUDE, BUT NOT BE LIMITED TO, TOP SOIL PREPARATION, SEEDING, MULCH (ALL SEEDED AREAS), OUTSIDE THE LIMITS OF EROSION MAT PLACEMENT), AND/OR RESEEDING, AND INSTALLATION OF EROSION CONTROL MAT. ALL SEEDING WORK SHALL BE IN ACCORDANCE WITH THE CITY OF WICHITA STANDARD SPECIFICATIONS AND THE CITY OF WICHITA ADMINISTRATIVE REGULATIONS NO. AR 8.5 WHICH GOVERNS CLEANUP AND RESTORATION OR REPLACEMENT FOLLOWING CONSTRUCTION. ALL COSTS FOR THE SOIL PREPARATION, SEEDING AND MULCHING (ALL SEEDED AREAS, OUTSIDE THE LIMITS OF EROSION MAT PLACEMENT) SHALL BE PAID FOR THROUGH THE LUMP SUM BID ITEM FOR "SEEDING". ALL SEEDED AREAS WITHIN EIGHT FEET OF THE BACK OF CURB SHALL BE COVERED WITH APPROVED EROSION MAT, WHICH SHALL BE PAID FOR BY THE MEASURED QUANTITY BID ITEM "BACK OF CURB PROTECTION (8' WIDE)".

WATER MAIN IMPROVEMENTS

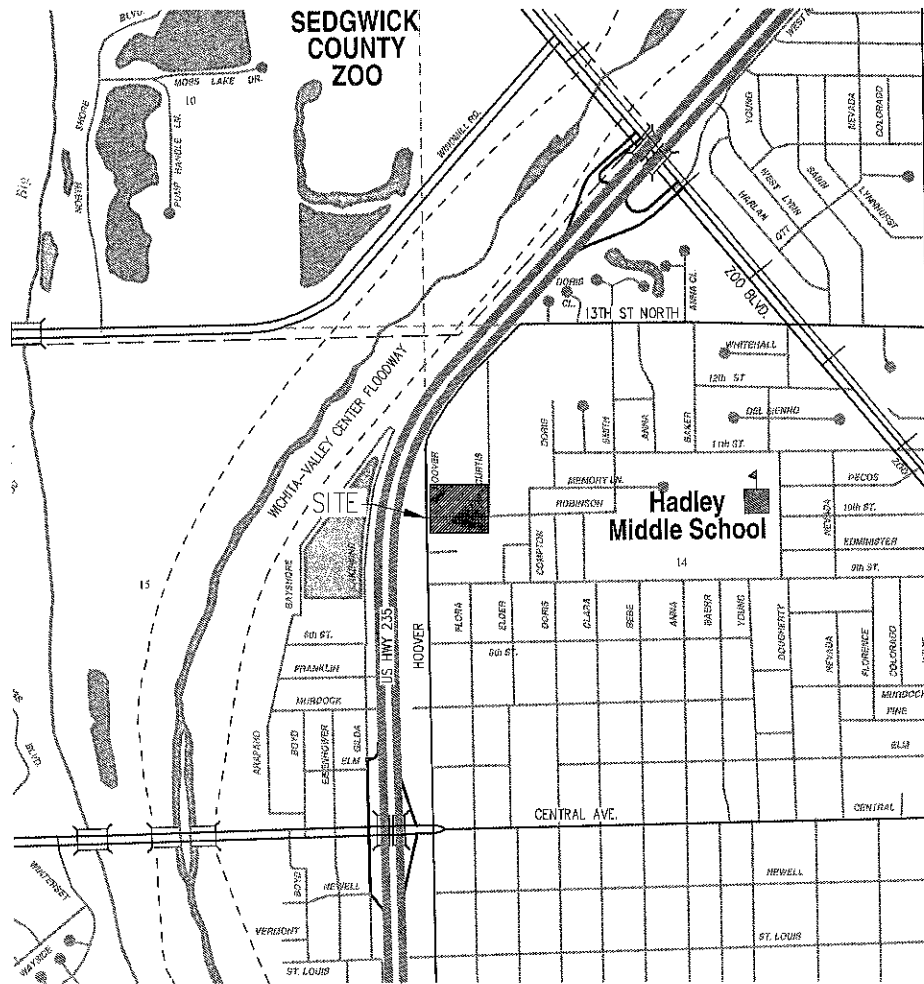
TO SERVE

LOT 12, R.A. MORRIS TRACTS WICHITA, SEDGWICK COUNTY, KANSAS

CITY OF WICHITA PRIVATE PROJECT NO.:

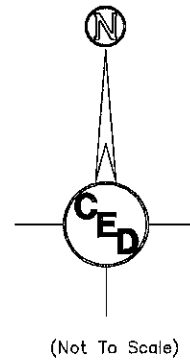
1604 PPW (O.C.A. NO. 607853),
JAMES L. ARMOUR, P.E., CITY ENGINEER
AUGUST 2011

SHEET INDEX	
NO.	SHEET TITLE
1	Cover
2	Final Plat
3	Site Plan
4	Waterline P&P
5	Std. Water Assy. Details



PROJECT LOCATED IN THE SW 1/4,
NW 1/4, SEC. 14, T27S, R1W,
WICHITA, SEDGWICK COUNTY, KANSAS

SPM #1: RAIL ROAD SPIKE IN POWER POLE 251' W
OF THE CENTERLINE OF CURRIC ST. GOING SOUTH
AND 21' N OF THE CENTERLINE OF ROBINSON ST.
Elevation = 1316.58 (NAVD 88)



APPROVED AS NOTED
BY CITY ENGINEER OF WICHITA,
WATER & SEWER DEPT. AND
BY WICHITA FIRE DEPARTMENT

PUBLIC WORKS: *[Signature]* 8/2/11

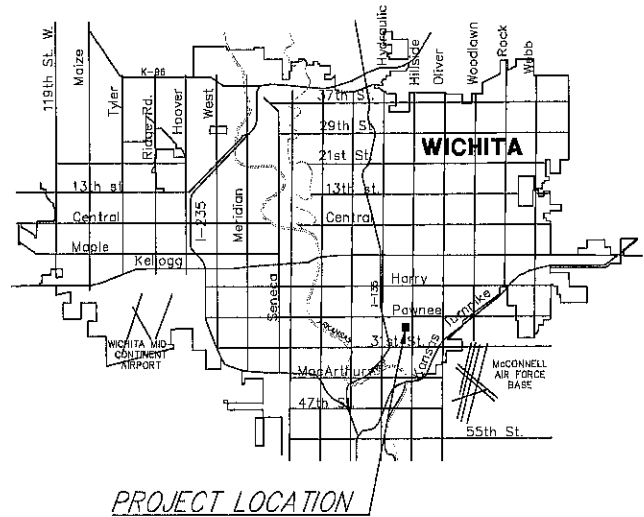
WATER & SEWER: *[Signature]* 08/04/11

FIRE DEPARTMENT: *[Signature]* 8/2/11

NOTE TO CONTRACTORS

PUBLIC PROPERTY:
INSTALLATION, INSPECTION AND TESTING FOR THE WATERLINE 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 WITHOUT THE 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).

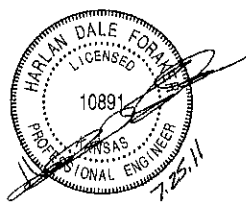
PRIVATE PROPERTY:
INSTALLATION, INSPECTION, AND TESTING FOR THE FIRE PROTECTION LINE IS TO BE PERFORMED BY A CITY OF WICHITA CERTIFIED FIRE PROTECTION CONTRACTOR IN ACCORDANCE WITH THE FIRE CODES AS ADOPTED BY THE CITY OF WICHITA. ALL MATERIALS AND CONSTRUCTION PRACTICES FOR THE FIRE PROTECTION LINE SHALL COMPLY WITH THE FIRE CODES AS ADOPTED BY THE CITY OF WICHITA (AVAILABLE FROM THE CITY OF WICHITA FIRE DEPARTMENT). THE CONTRACTOR SHALL NOT COMMENCE WORK WITHOUT NOTIFICATION TO AND APPROVAL OF THE WICHITA FIRE DEPARTMENT.



REV.	DESCRIPTION	DATE

WATER MAIN IMPROVEMENTS
TO SERVE
LOT 12, R.A. MORRIS TRACTS
5450 W ROBINSON ST.
WICHITA, KANSAS 67212

CERTIFIED ENGINEERING DESIGN, P.A.
CIVIL ENGINEERING
CED
1935 WEST MAPLE
WICHITA, KANSAS 67213
PH.(316)262-8808 FAX.(316)262-1669



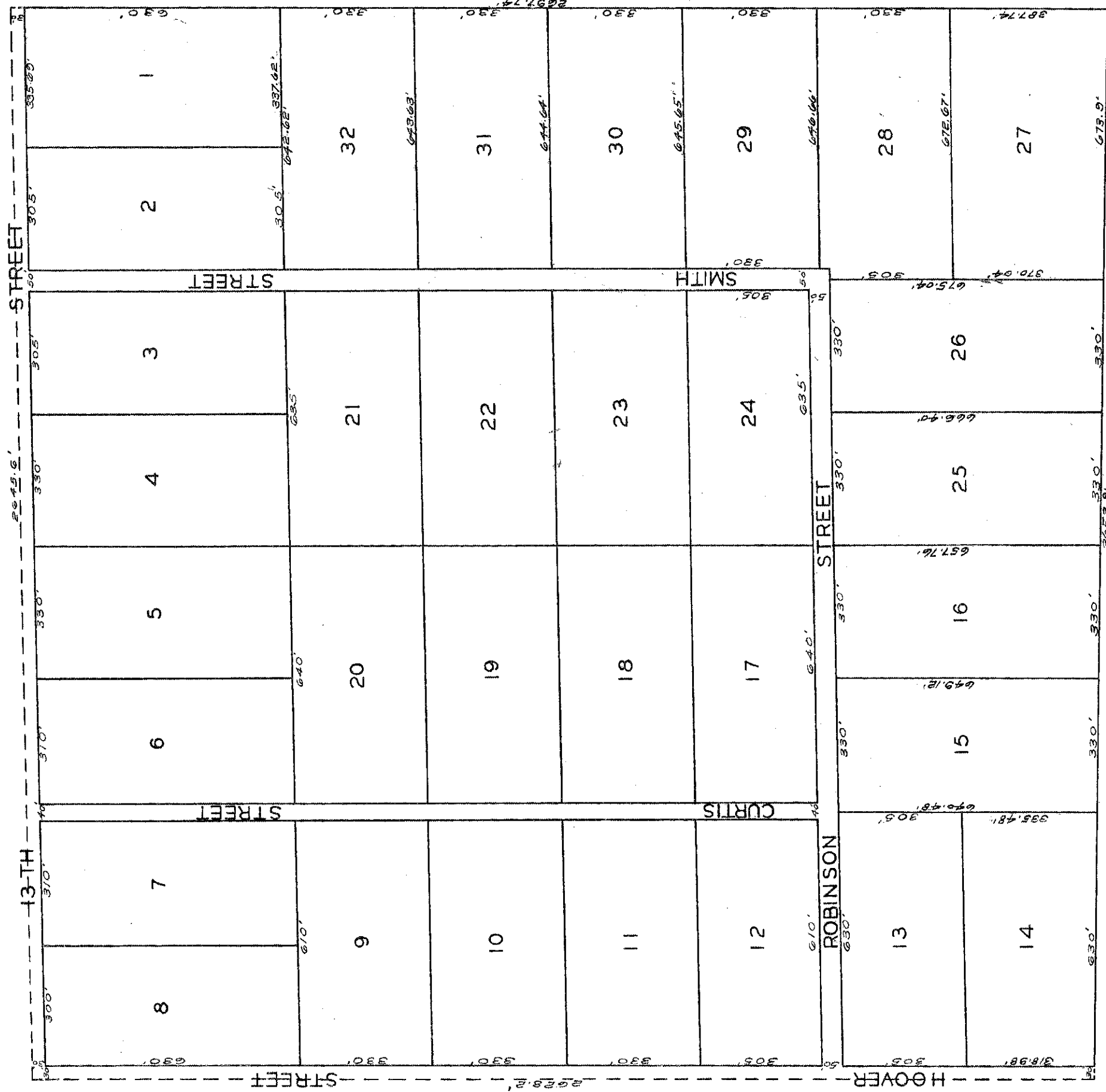
PROJECT NO.: 20111975
ISSUE DATE: 07/01/2011
CONTACT: C. WINKLER, H. FORAKER
CHECKED BY:

COVER
1 OF 5

FILE LOCATION: S:\Drawing Files\Project: CKW 12-7-09\Robinson Wk. Priv Proj\20111975\dwg\Cover.dwg TAB NAME: Cover USER: cwinkler SAVED: 8/1/2011 4:35 PM PLOTTED: 8/19/2011 9:42 AM

M2-5-2

R. A. MORRIS TRACTS SEDGWICK COUNTY KANSAS



State of Kansas } ss. I, Ransom H. Brown, County
County of Sedgwick } Surveyor in and for said county and state
do hereby certify that I have surveyed and
plotted R. A. Morris Tracts Sedgwick County,
Kansas, and that the accompanying plat
is a true and correct exhibit of the property
as surveyed, described as follows: The north-
west quarter of Section 14, Township 21 South,
Range 1 West of the 6th P. M.

Ransom H. Brown, County Surveyor.
Know all men by these presents that
R. A. Morris and Josie Morris, his wife, A. F.
Bickel and Florence Bickel, his wife, have
caused the land described in the surveyors
certificate to be platted into lots and streets,
to be known as R. A. Morris Tracts Sedgwick
County, Kansas. The streets are hereby ded-
icated to and for the use of the public.

Ransom H. Brown
A. F. Bickel

State of Kansas } ss. I, Ransom H. Brown, County
County of Sedgwick } Notary Public, in and for said county and
this 16th day of October 1928, before me a
Notary Public, came R. A. Morris and Josie Morris,
his wife, A. F. Bickel and Florence Bickel, his
wife, to me personally known to be the same
persons who executed the foregoing instru-
ment of writing and duly acknowledged the
execution of the same to be their voluntary
act and deed.

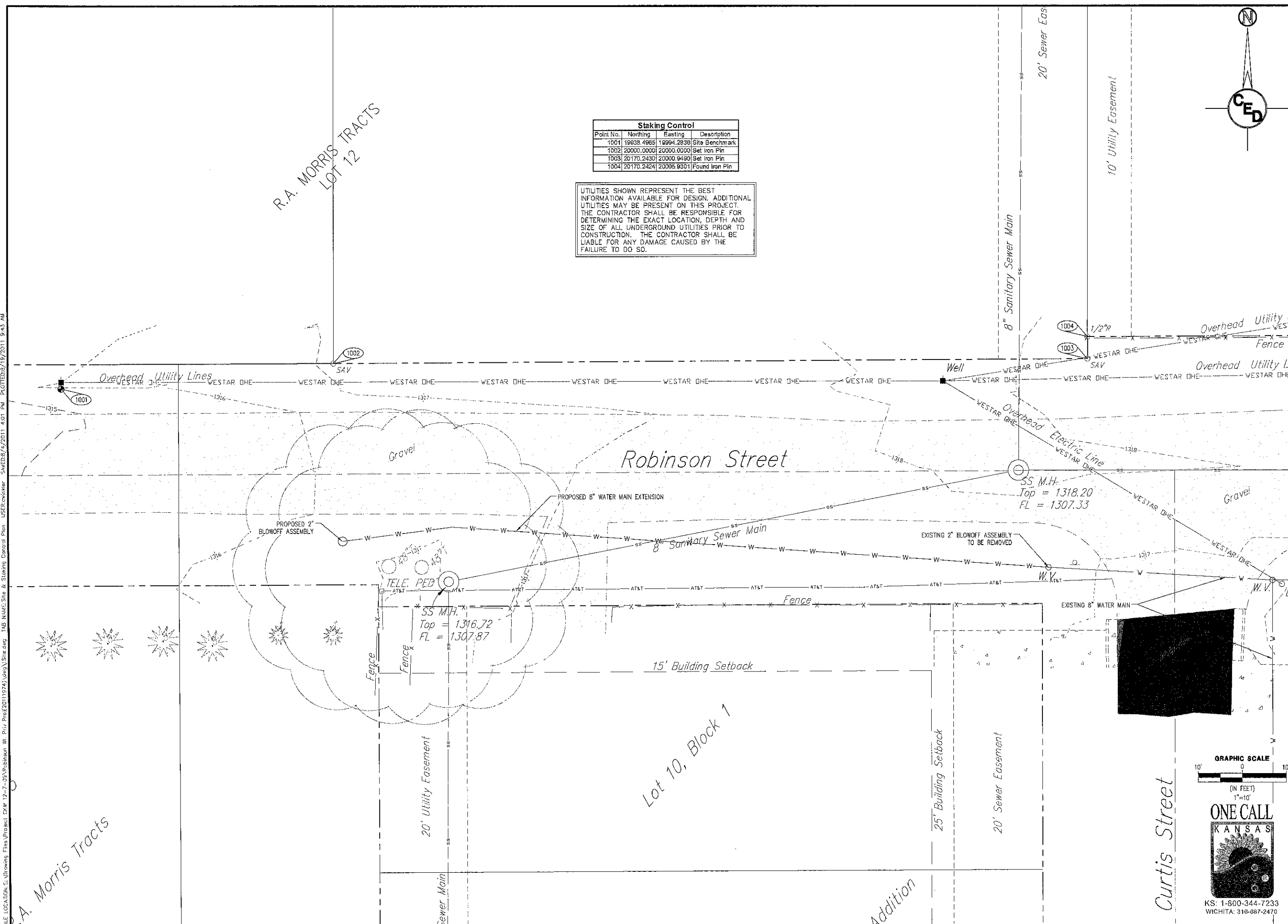
My commission expires Jan. 18, 1930.
Approved by County Plat Board Oct. 16, 1928.
R. A. Bickel, County Clerk.
Ransom H. Brown, County Surveyor.
Entered on Transfer Record Dec. 16, 1928.

State of Kansas } ss. This is to certify that
County of Sedgwick } this instrument was filed for record this
- 16 day of Oct - 1928, at 10 o'clock A. M.
and is duly recorded.

Lester E. Neal,
Register of Deeds.
By Marie Joseph.

M2-5-2

FILE LOCATION: S:\Drawing Files\Project_CDW 12-7-03\Robinson St. & Staking Control Plan USER: hinkler SAV: 08/19/2011 10:01 PM PLOT: 08/19/2011 9:43 AM



Staking Control			
Point No.	Northing	Easting	Description
1001	19938.4985	19994.2838	Site Benchmark
1002	20000.0000	20000.0000	Set Iron Pin
1003	20170.2430	20000.9490	Set Iron Pin
1004	20170.2424	20005.9301	Found Iron Pin

UTILITIES SHOWN REPRESENT THE BEST INFORMATION AVAILABLE FOR DESIGN. ADDITIONAL UTILITIES MAY BE PRESENT ON THIS PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATION, DEPTH AND SIZE OF ALL UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE LIABLE FOR ANY DAMAGE CAUSED BY THE FAILURE TO DO SO.

R.A. MORRIS TRACTS
LOT 12

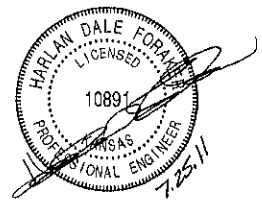
R.A. Morris Tracts

Lot 10, Block 1

REV.	DESCRIPTION	DATE

WATER MAIN IMPROVEMENTS
TO SERVE
LOT 12, R.A. MORRIS TRACTS
5450 W ROBINSON ST.
WICHITA, KANSAS 67212

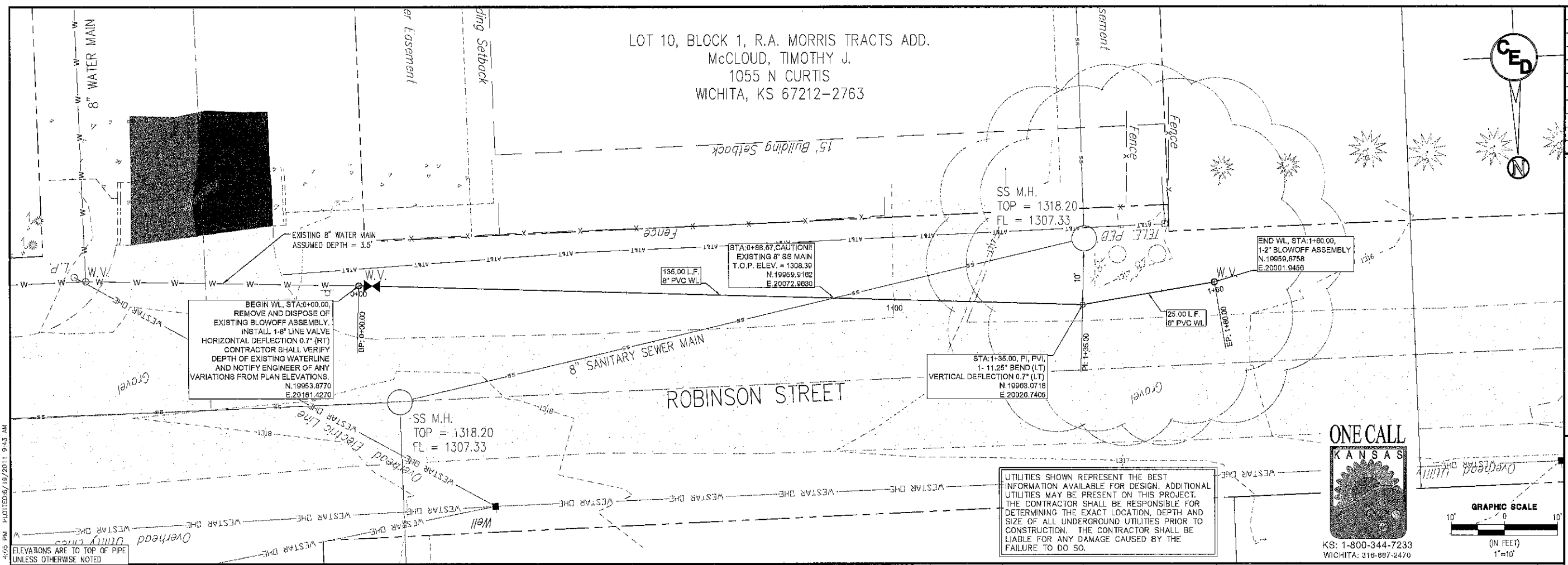
CERTIFIED ENGINEERING DESIGN, P.A.
CIVIL ENGINEERING
CED
1935 WEST MAPLE
WICHITA, KANSAS 67213
PH. (316) 262-8808 FAX. (316) 262-1669



PROJECT NO.: 20111975
ISSUE DATE: 07/01/2011
CONTACT: C. WINKLER, H. FORAKER
CHECKED BY:

SITE & STAKING CONTROL PLAN





REV.	DESCRIPTION	DATE

LOT 10, BLOCK 1, R.A. MORRIS TRACTS ADD.
 McCLOUD, TIMOTHY J.
 1055 N CURTIS
 WICHITA, KS 67212-2763

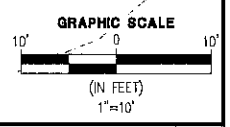
BEGIN WL, STA. 0+00.00,
 REMOVE AND DISPOSE OF
 EXISTING BLOWOFF ASSEMBLY.
 INSTALL 1-8" LINE VALVE
 HORIZONTAL DEFLECTION 0.7' (RT)
 CONTRACTOR SHALL VERIFY
 DEPTH OF EXISTING WATERLINE
 AND NOTIFY ENGINEER OF ANY
 VARIATIONS FROM PLAN ELEVATIONS.
 N.10953.8770
 E.20181.4270

STA. 0+86.67, CAUTION!!
 EXISTING 8" SS MAIN
 T.O.P. ELEV. = 1308.39
 N.19959.9182
 E.20072.9830

STA. 1+35.00, PVI,
 1-11.25' BEND (LT)
 VERTICAL DEFLECTION 0.7' (LT)
 N.10963.0718
 E.20026.7408

END WL, STA. 1+60.00,
 1-2" BLOWOFF ASSEMBLY
 N.19959.8758
 E.20001.9458

UTILITIES SHOWN REPRESENT THE BEST
 INFORMATION AVAILABLE FOR DESIGN. ADDITIONAL
 UTILITIES MAY BE PRESENT ON THIS PROJECT.
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 CONSTRUCTION. THE CONTRACTOR SHALL BE
 LIABLE FOR ANY DAMAGE CAUSED BY THE
 FAILURE TO DO SO.

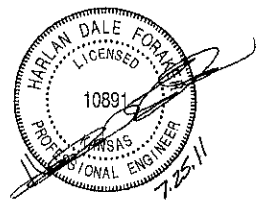


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 TAB: WATERLINE P&P.dwg
 PLOTTED: 6/19/2011 9:43 AM
 SAVED: 6/14/2011 4:05 PM

WATER MAIN IMPROVEMENTS
 TO SERVE
 LOT 12, R.A. MORRIS TRACTS
 5450 W ROBINSON ST.
 WICHITA, KANSAS 67212

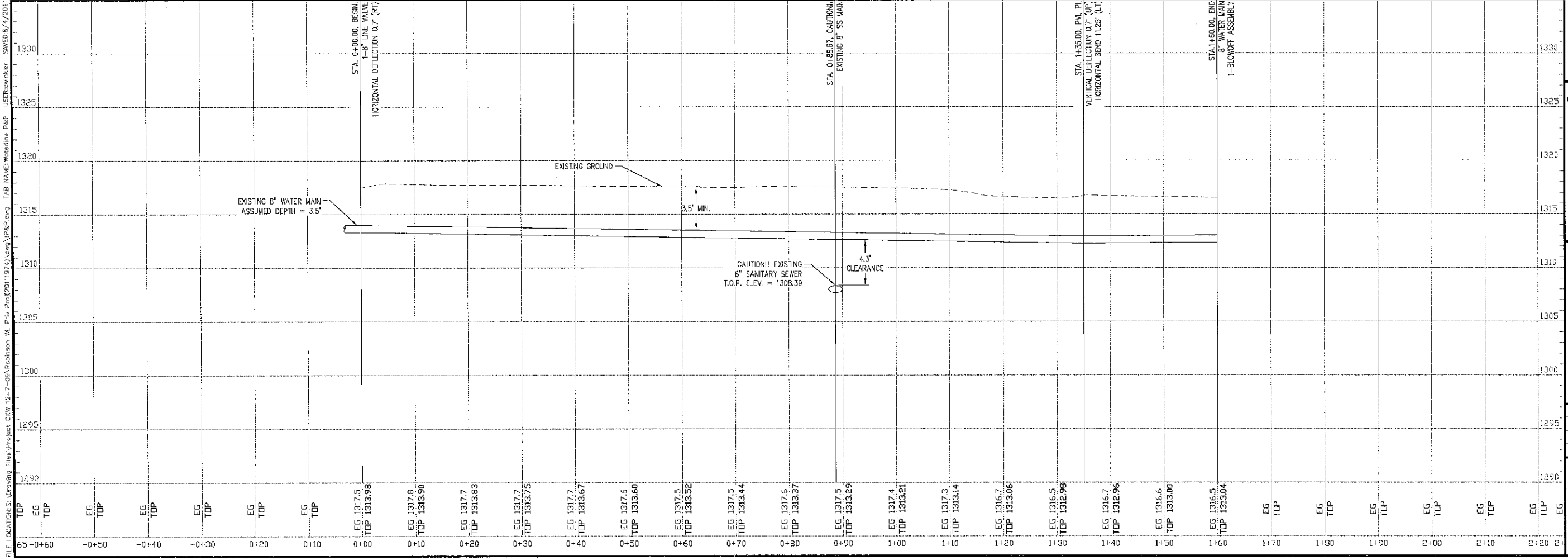
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 CIVIL ENGINEERING

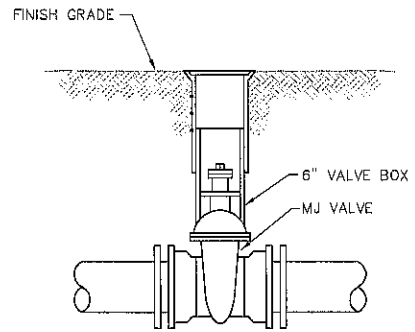
 1935 WEST MAPLE
 WICHITA, KANSAS 67213
 PH.(316)262-8808 FAX.(316)262-1669



PROJECT NO.: 20111975
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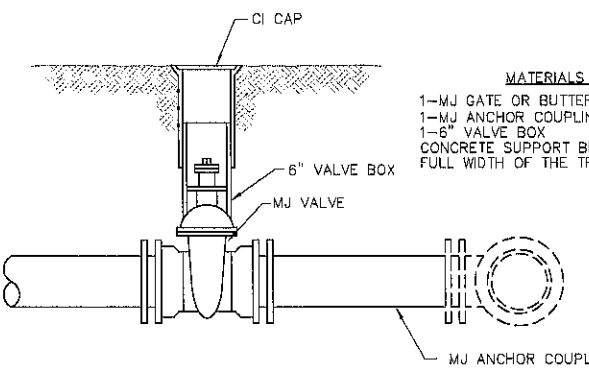
WATERLINE P&P
 4 OF 5





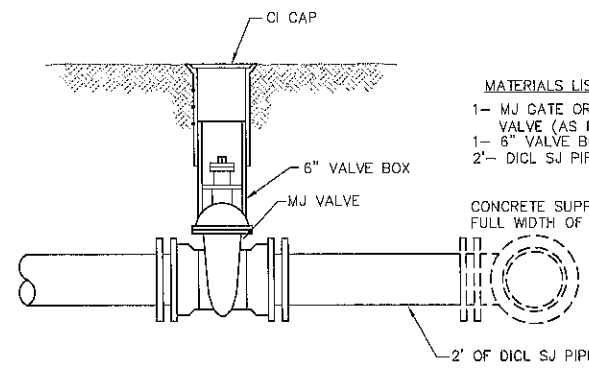
- MATERIALS LIST**
- 1-MJ GATE OR BUTTERFLY VALVE (AS PER PLAN)
 - 1-6" VALVE BOX
 - CONCRETE SUPPORT BLOCK SHALL BE FULL WIDTH OF THE TRENCH

LINE VALVE ASSEMBLY



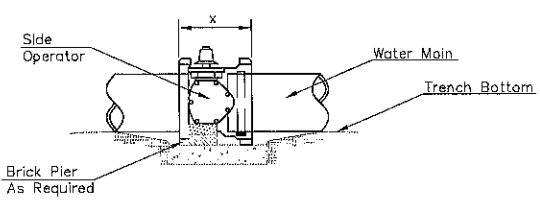
- MATERIALS LIST**
- 1-MJ GATE OR BUTTERFLY VALVE (AS PER PLAN)
 - 1-MJ ANCHOR COUPLING (12" OR SMALLER)
 - 1-6" VALVE BOX
 - CONCRETE SUPPORT BLOCK SHALL BE FULL WIDTH OF THE TRENCH

ANCHORED VALVE ASSEMBLY



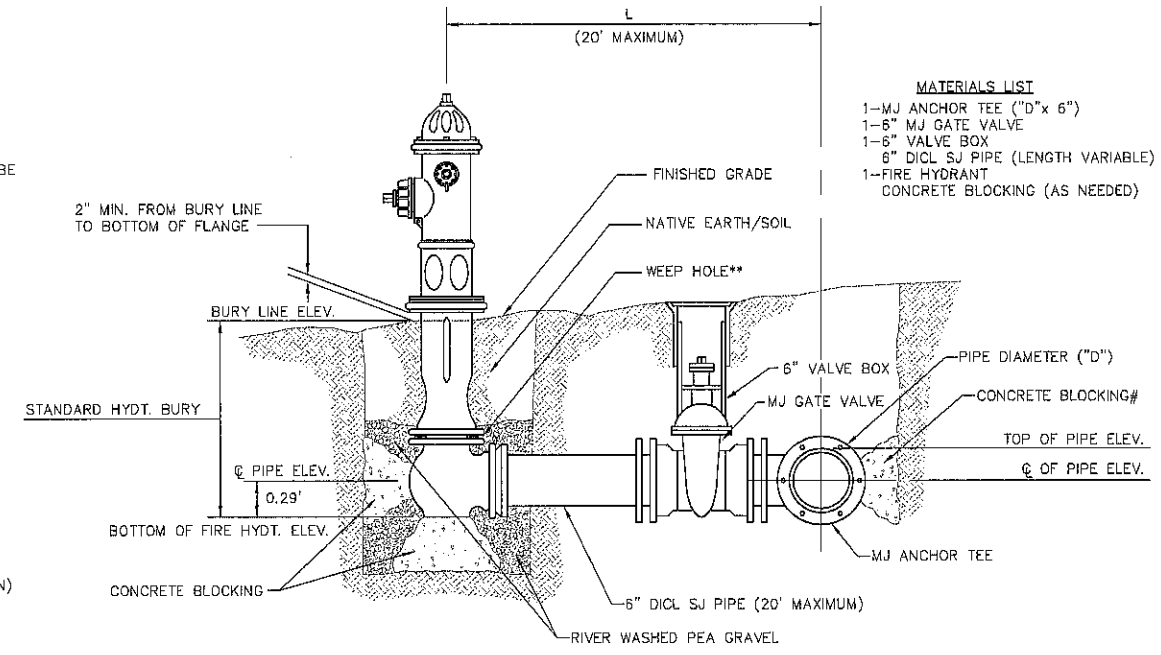
- MATERIALS LIST**
- 1-MJ GATE OR BUTTERFLY VALVE (AS PER PLAN)
 - 1-6" VALVE BOX
 - 2'- DCL SJ PIPE
 - CONCRETE SUPPORT BLOCK SHALL BE FULL WIDTH OF THE TRENCH

VALVE ASSEMBLY



- NOTES**
- This detail covers Butterfly Valve installation, inclusive, regardless of type of pipe or joint used. Larger lines to be detailed on plans.
 - 6" Valve Box and Cover required per City of Wichita Std. Specifications.
 - Conc. Support Block to be full width of trench.

CONCRETE SUPPORT BLOCKING FOR BUTTERFLY VALVE INSTALLATION



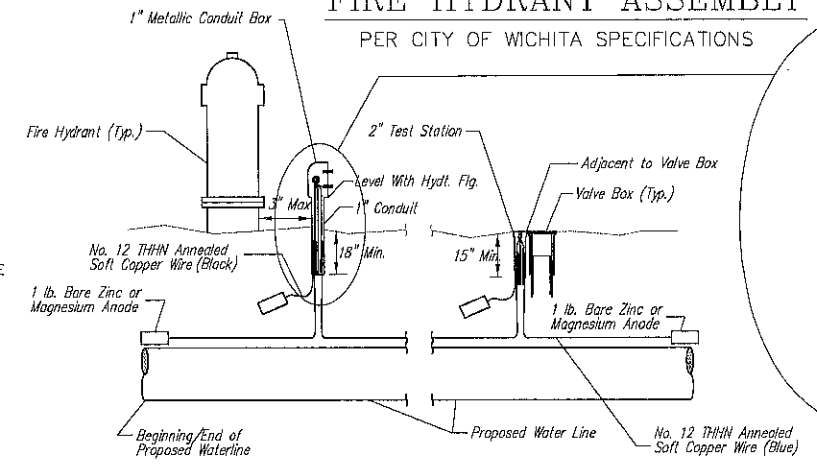
- MATERIALS LIST**
- 1-MJ ANCHOR TEE ("D"x 6")
 - 1-6" MJ GATE VALVE
 - 1-6" VALVE BOX
 - 6" DCL SJ PIPE (LENGTH VARIABLE)
 - 1-FIRE HYDRANT
 - CONCRETE BLOCKING (AS NEEDED)

- ** CAUTION! WEEP HOLES TO BE KEPT CLEAR DURING CONSTRUCTION AND BACKFILL. CONCRETE FOR THRUST BLOCKING SHALL NOT OBSTRUCT WEEP HOLES.**
- # CONCRETE THRUST BLOCKING SHALL BE KEPT CLEAR OF BOLTS, NUTS, AND MJ ACCESSORIES.**
- * IF HYDRANT BURY IS IN EXCESS OF 5', CONTRACTOR SHALL USE STANDARD 5' HYDRANT BURY AND HYDRANT BARREL EXTENSIONS AS NECESSARY.**

FIRE HYDRANTS REQUIRED

STATION	BURY LINE ELEVATION	TOP OF PIPE ELEVATION	FIRE HYDRANT BURY REQUIRED*

FIRE HYDRANT ASSEMBLY PER CITY OF WICHITA SPECIFICATIONS



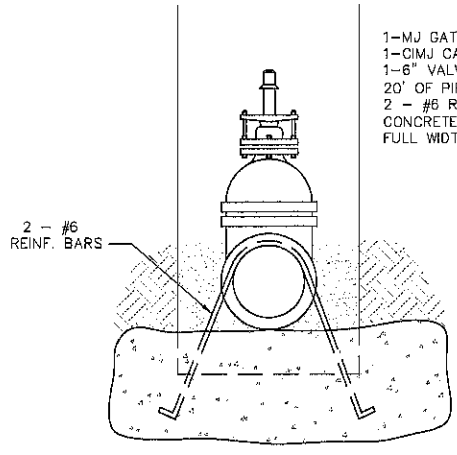
TRACER WIRE
Conductive type pipe locator/tracer wire shall be installed to locate all waterline pipe regardless of pipe material. The wire shall extend the entire length of the proposed pipe. The wire shall be taped to the waterline and pulled with the pipe. Split-bolt connectors shall be used at splice locations. Electrical tape shall cover all splices so no bare wire is exposed. Test stations shall be installed adjacent to all fire hydrants along the waterline and at blowoffs or valves near the ends of the waterlines. Any exceptions to the location of test stations shall be approved by the engineer. At each test station, the tracer wire shall be connected to a 1 lb. Zinc or magnesium anode. Anodes shall also be attached to the tracer wire at both the beginning and the end of the proposed waterline. A typical layout of the tracer wire and test station is provided in the above figure.

WIRE
The tracer wire shall be Blue No. 12 THHN annealed soft copper wire with thermal plastic insulation. The insulation shall be heat, oil, and gasoline resistant as manufactured by Temple Electric or approved equal. To allow for grade adjustment, a minimum of 12" of excess wire shall be coiled at the bottom of the test station for all wires. The insulation sheathing shall be removed such that 1" bare copper wire is exposed at all points of connection. Contractor shall attach wire being installed with proposed water main to any tracer wire installed with adjacent waterline projects.

TEST STATIONS
The test station for fire hydrant applications shall be a 1 inch galvanized conduit style test station as manufactured by AGRA Industries with a removable solid cover having two leads extending from the face or approved equal. The test station for valve applications shall be 2 inch flush style test station T2PS3B as manufactured by HANDLEY Industries or approved equal. The conduit style shall be attached to a 1 inch rigid galvanized conduit with a minimum length of 36" and plastic end bushing. The flush style shall have the word "WATER" stamped or molded into the lid. All test stations shall be manufactured using molded blue tops or sufficiently coated with blue enamel paint. The tracer wire and the anode wire shall be installed to allow 10 inches of wire within the test station. In concrete environments such as sidewalks or in the downtown area the contractor shall use the flush style test station. The location of all test stations shall be approved by the engineer, recorded, and shown in the as-built drawings.

ANODES
The anodes shall be 1 lb. bare zinc or magnesium. The anodes shall be buried at the same elevation as the waterline at each test station. The anodes shall be connected to Black No. 12 THHN annealed soft copper wire which shall be extended to the test station.

TRACER WIRE DETAIL
COST IS SUBSIDIARY TO PIPE INSTALLATION

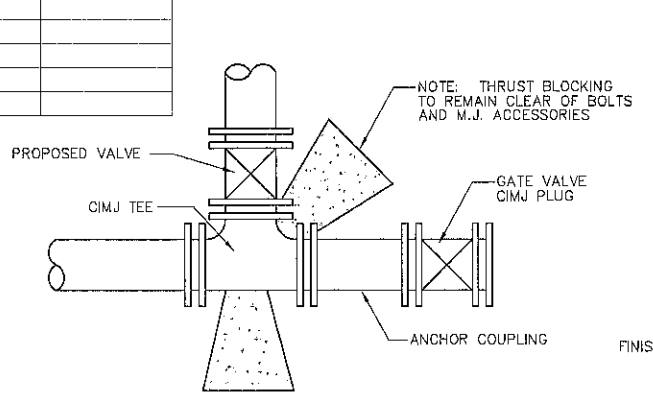


- Notes:**
- Concrete Block at Valve to have sufficient bearing in undisturbed soil to prevent thrust movement as shown in table at right. Field Engineer to determine thrust loading of undisturbed soil and final size of thrust block.
 - The thrust block shall be constructed such that bolts, nuts, and other MJ accessories are kept clear of concrete.
 - All valves at dead ends and at other locations as called out on the plans shall be blocked as shown here.

THRUST AT VALVES

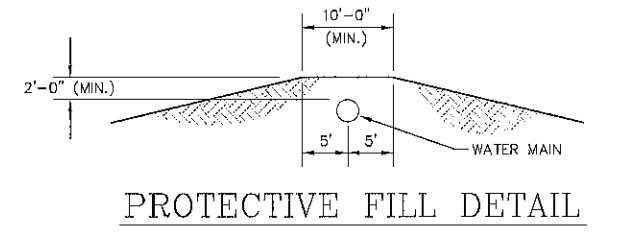
VALVE	THRUST AT 150 #/sq
4"	1809 lbs.
6"	4245 lbs.
8"	7540 lbs.
12"	16965 lbs.

ANCHORED VALVE ASSEMBLY, SPECIAL



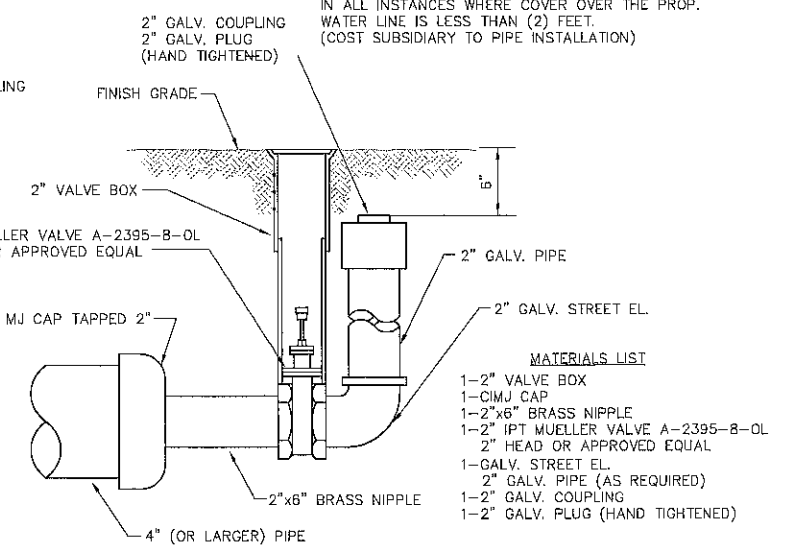
KEY BLOCK DETAIL

2 Blue Wires and 1 Black Wire All Connected to Single Test Lead With Split Bolt Connection and Blue No. 12 THHN Annealed Soft Copper Wire



PROTECTIVE FILL DETAIL

MINIMUM PROTECTIVE FILL SHALL BE PROVIDED IN ALL INSTANCES WHERE COVER OVER THE PROP. WATER LINE IS LESS THAN (2) FEET. (COST SUBSIDIARY TO PIPE INSTALLATION)



2" BLOWOFF ASSEMBLY

- MATERIALS LIST**
- 1-2" VALVE BOX
 - 1-CIMJ CAP
 - 1-2"x6" BRASS NIPPLE
 - 1-2" IPT MUELLER VALVE A-2395-B-0L
 - 2" HEAD OR APPROVED EQUAL
 - 1-GALV. STREET EL.
 - 2" GALV. PIPE (AS REQUIRED)
 - 1-2" GALV. COUPLING
 - 1-2" GALV. PLUG (HAND TIGHTENED)



STANDARD WATER ASSEMBLY DETAILS

CITY ENGINEER
JAMES L. ARMOUR, P.E., L.S.

PROJECT NUMBER: XXX-XXXX
O&A NUMBER: 607853
DATE: MM/YY

CITY ENGINEER'S OFFICE
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455 NORTH MAIN STREET
WICHITA, KANSAS 67202-1920
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DESIGN: ABC
DRAWN: DEF
SHEET: 5 OF 5