

# WATER DISTRIBUTION SYSTEM

## To Serve

### WICHITA REGIONAL FIRE TRAINING ADDITION

#### 1632 PPW O.C.A. 607853

### GENERAL NOTES

1. Contractor 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 687-2470

The Contractor must notify the following in case of an emergency:

Cox Communications	260-7204
Kansas Gas Service	888-482-4950
Westar	383-8600
AT&T	1-800-286-8313
City of Wichita Water Department	262-6000
City of Wichita Sewer Maintenance	262-6000

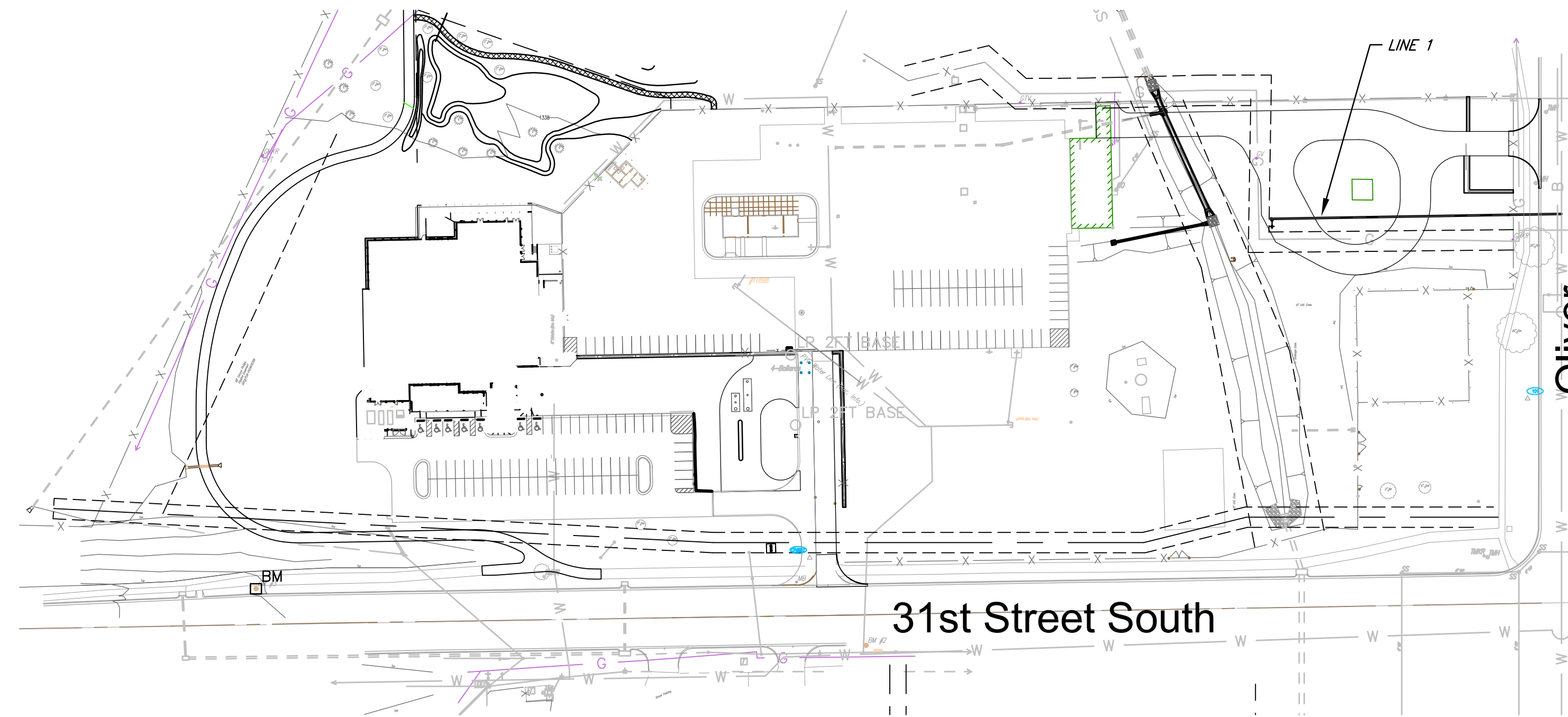
2. Underground utility service lines and overhead utility pole lines are to be adjusted as necessary by others prior to construction unless the plans specifically call for their adjustment by the Contractor or unless the plans specifically identify a utility to be adjusted by its owner during construction. 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.

3. 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.

4. 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 permitting regulations. Any material buried or stockpiled beyond approved of Engineers construction limits would require additional archeological investigations unless buried in a previously approved borrow location.

5. The Contractor shall give all property owners and/or tenants of developed property directly abutting the construction of this project a minimum of ten (11) days advance notice prior to start of construction.

6. Fire Hydrants shall have Storz Connection Pumper Nozzles. Nozzles shall be integral to the hydrant with no adapters and shall be unpainted with securing wire.



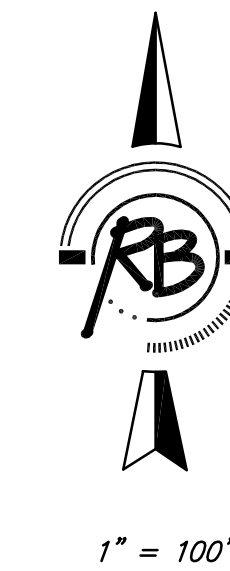
### BENCH MARKS

BENCH MARK #1: COW Benchmark Disc in Traffic Signal Base on SE corner of intersection of Oliver and 31st St. South Elev. 1352.35 NGVD

BENCH MARK #2: COW Benchmark Disc in Traffic Signal Base on N side of 31st St. South at W line of Turnpike Drive Elev. 1353.45 NGVD

### INDEX OF SHEETS

1. TITLE SHEET
2. WATER ASSEMBLY DETAILS
3. LINE 1 PLAN/PROFILE



APPROVED AS NOTED  
BY CITY ENGINEER OF WICHITA

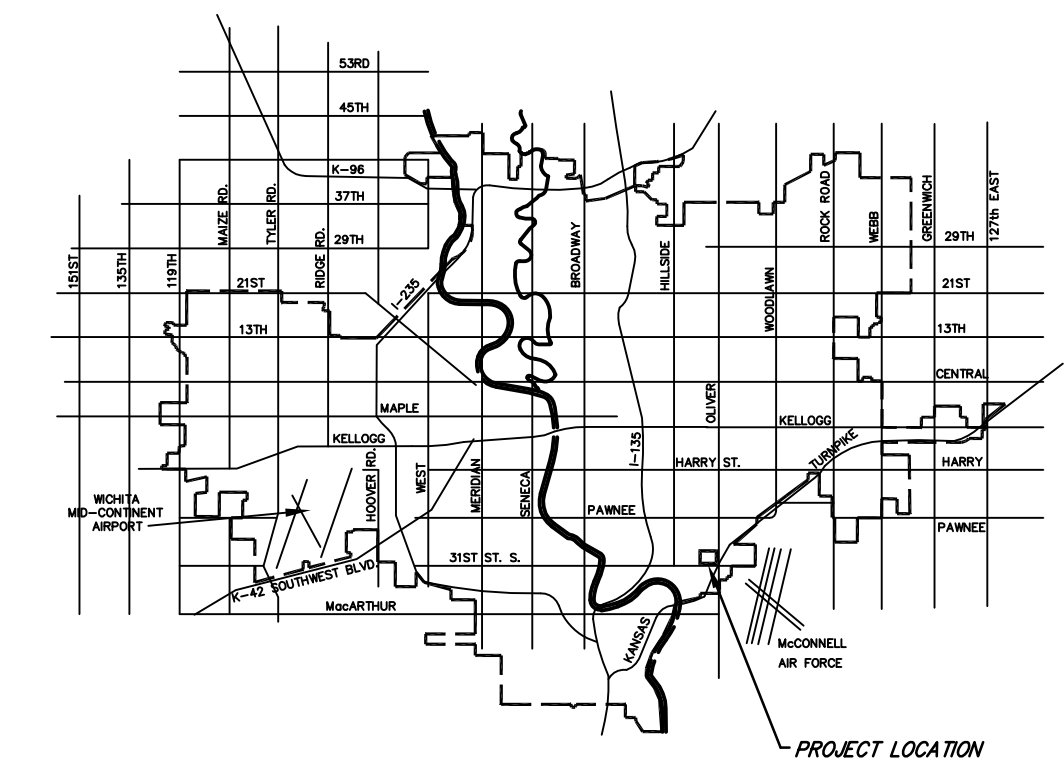
Engineering *Jim Fisher* 7-2-13

Water *Greg Jolly* 08-01-13

Fire *Bushman* 8-06-2013

NOTE TO CONTRACTORS

Inspection and testing for this project are 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 public right-of-way by the Contractor without such Inspection, nor shall any work be commenced without written authorization by the City Engineer.



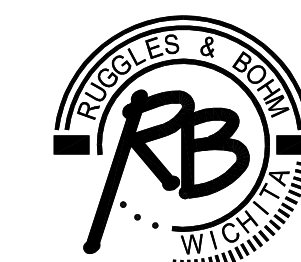
VICINITY MAP

AS-BUILT 9-13-2013  
 Contractor: Fire Protection Services, Inc  
 Superintendent: Jason Long  
 Inspector: Tony Young (Ruggles & Bohm, P.A.)

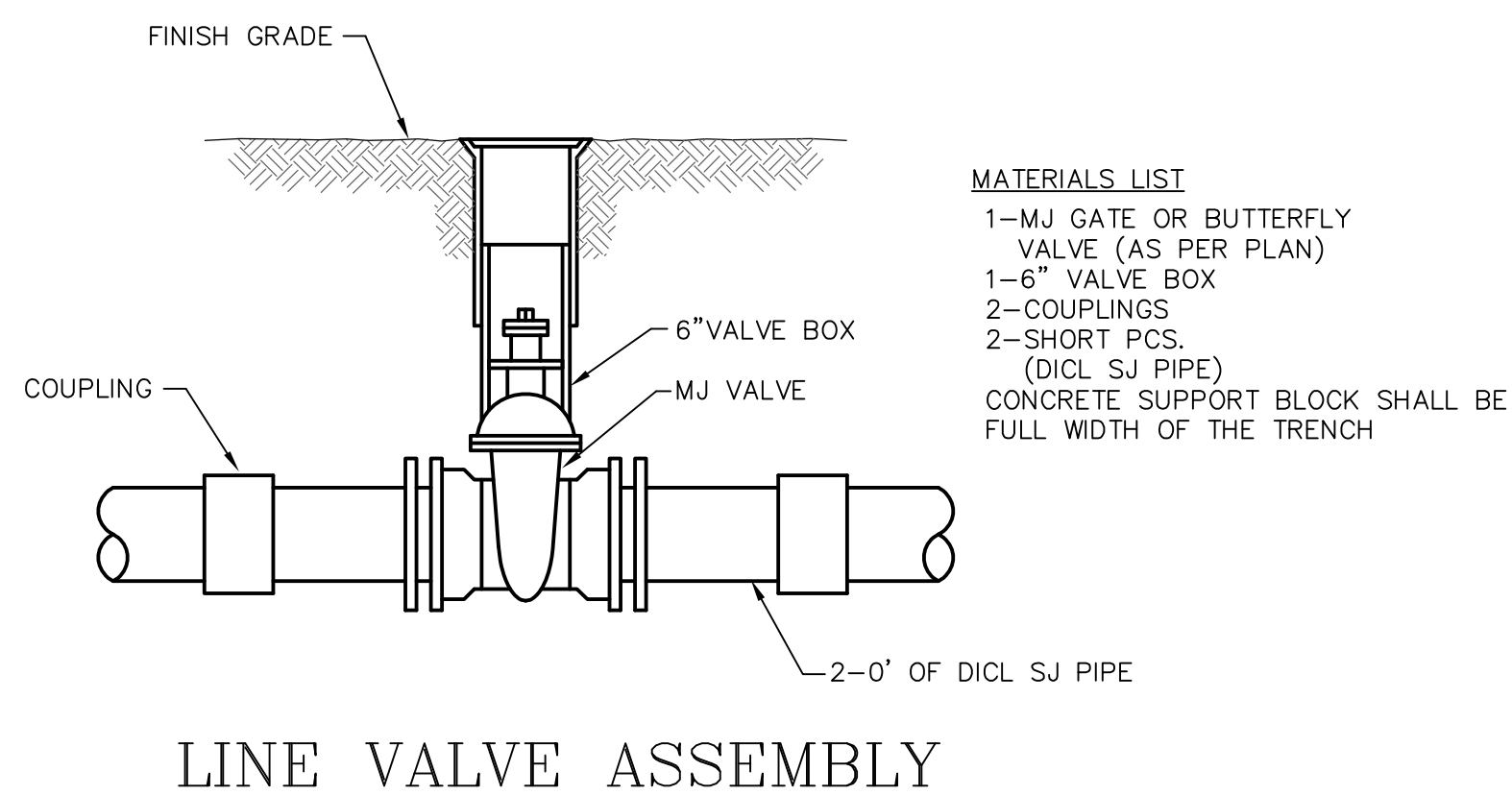
**IMPROVEMENT DISTRICT**



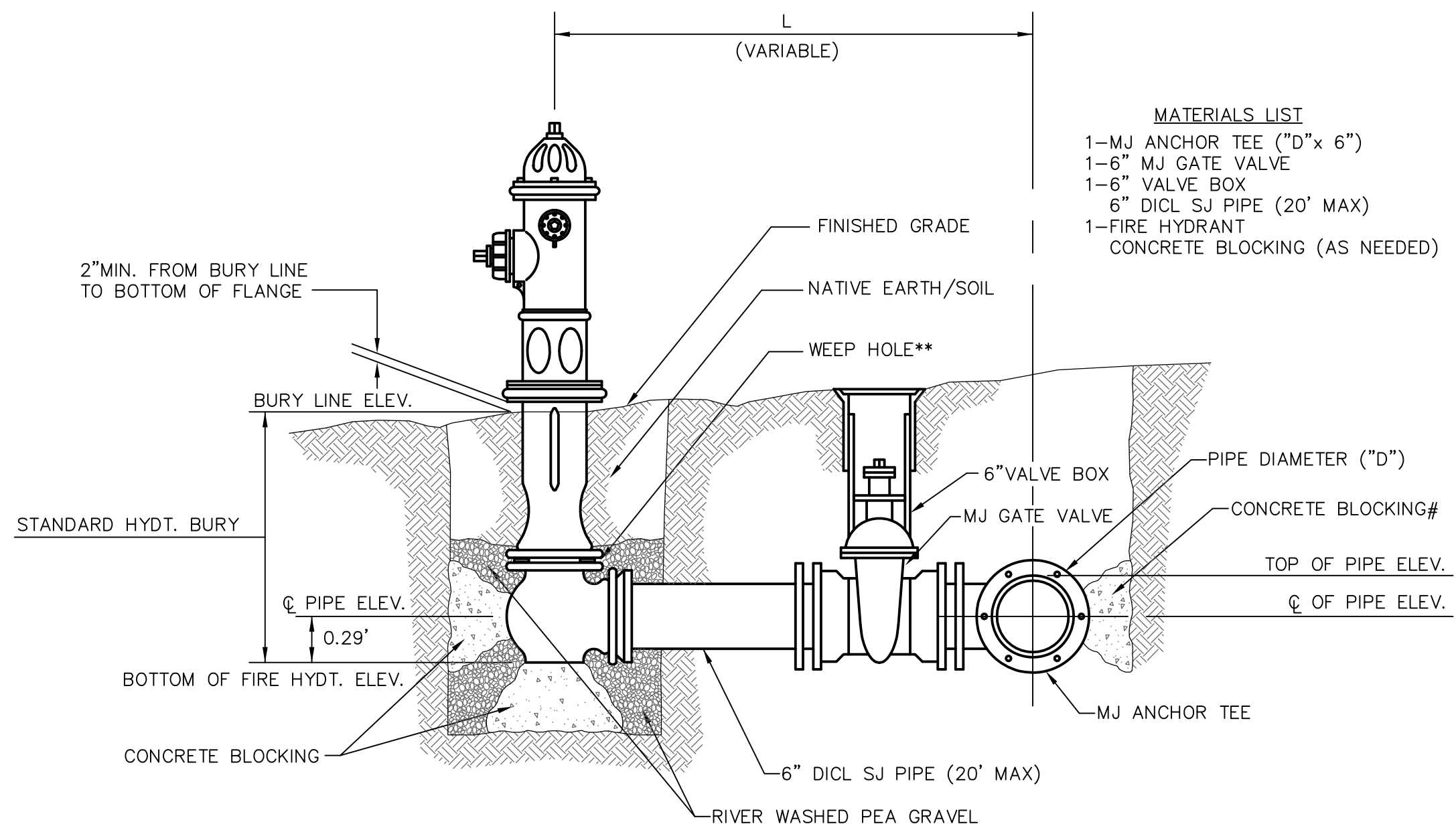
**CITY OF WICHITA, KANSAS**  
**JAMES ARMOUR, P.E. - CITY ENGINEER**



Ruggles & Bohm, P.A.  
 Engineering, Surveying, Land Planning  
 924 North Main (316) 264-8008  
 Wichita, Kansas 67203 (316) 264-4621 fax  
 www.rbkansas.com E-mail: info@rbkansas.com



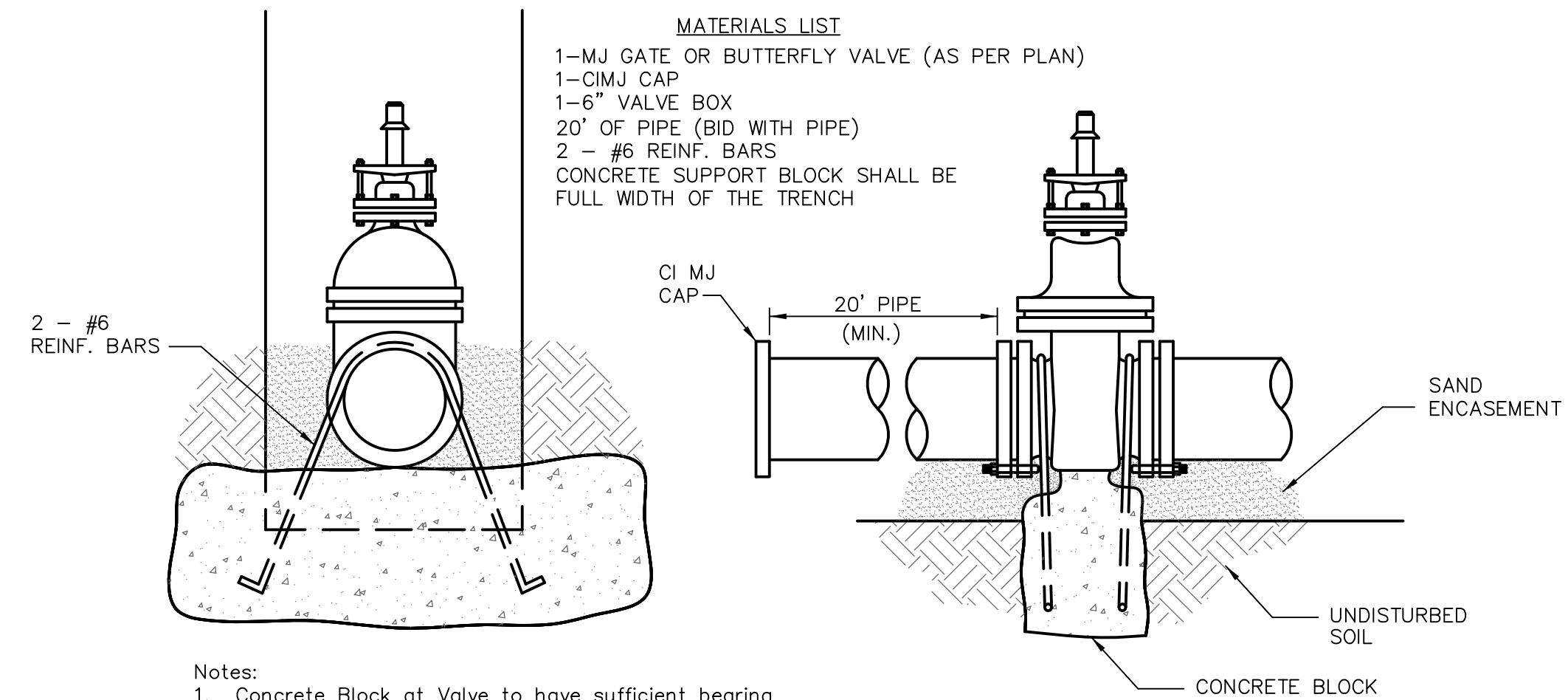
- MATERIALS LIST**  
 1-MJ GATE OR BUTTERFLY VALVE (AS PER PLAN)  
 1-6" VALVE BOX  
 2-COUPINGS  
 2-SHORT PCS. (DICTL SJ PIPE)  
 CONCRETE SUPPORT BLOCK SHALL BE FULL WIDTH OF THE TRENCH



- MATERIALS LIST**  
 1-MJ ANCHOR TEE ("D"x 6")  
 1-6" MJ GATE VALVE  
 1-6" VALVE BOX  
 6" DICTL SJ PIPE (20' MAX)  
 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.

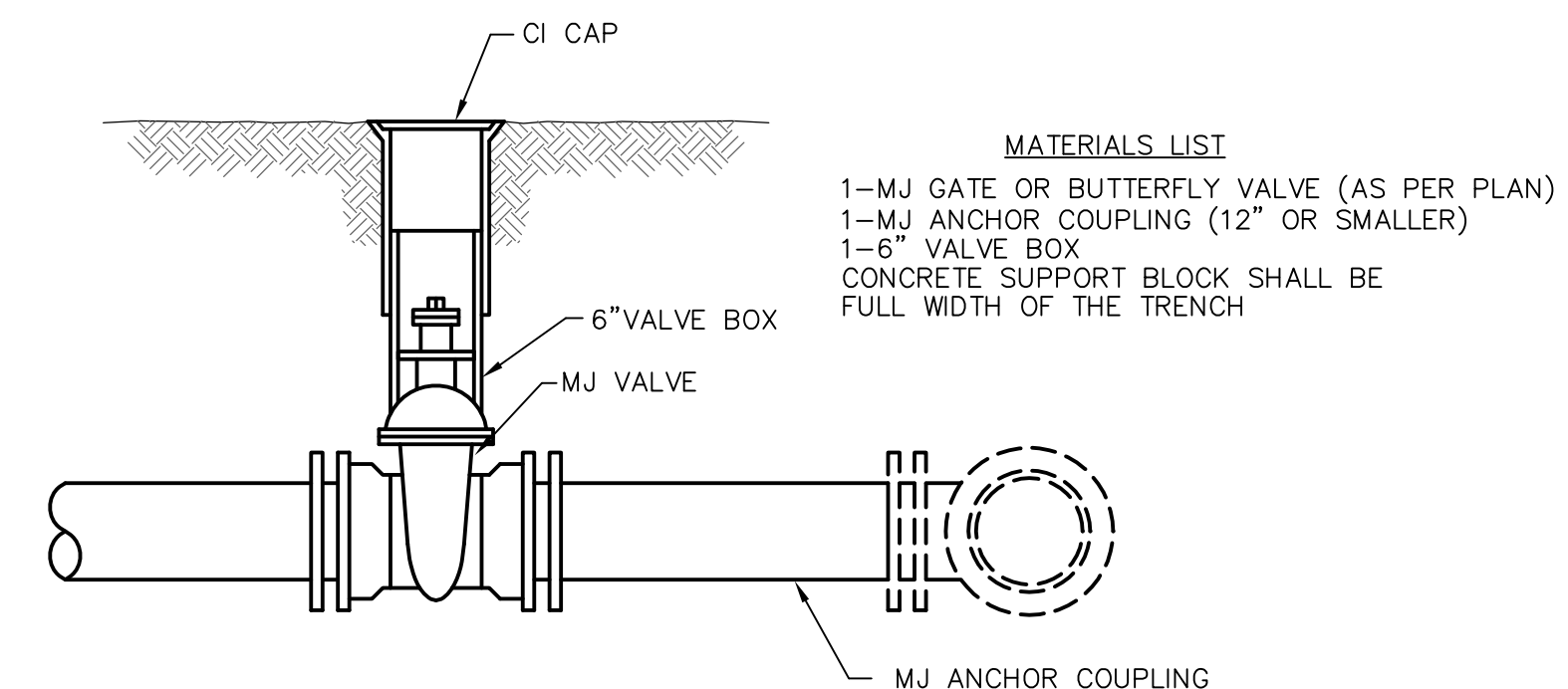
FIRE HYDRANTS REQUIRED			
STATION	BURY LINE ELEVATION	TOP OF PIPE ELEVATION	FIRE HYDRANT BURY REQUIRED*
2+85.03	1345.26	1341.45	4.5'



**Notes:**  
 1. 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.  
 2. The thrust block shall be constructed such that bolts, nuts, and other MJ accessories are kept clear of concrete.  
 3. 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 #/in <sup>2</sup>
4"	1809 lbs.
6"	4245 lbs.
8"	7540 lbs.
12"	16965 lbs.

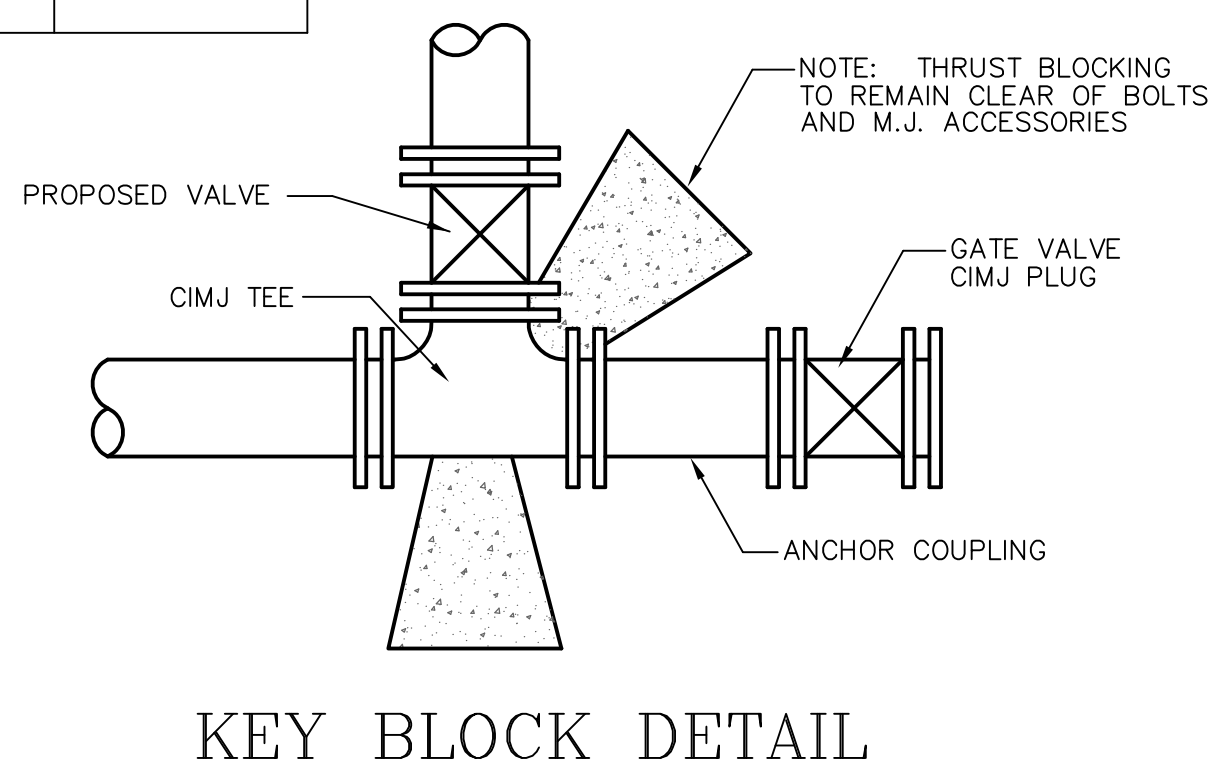
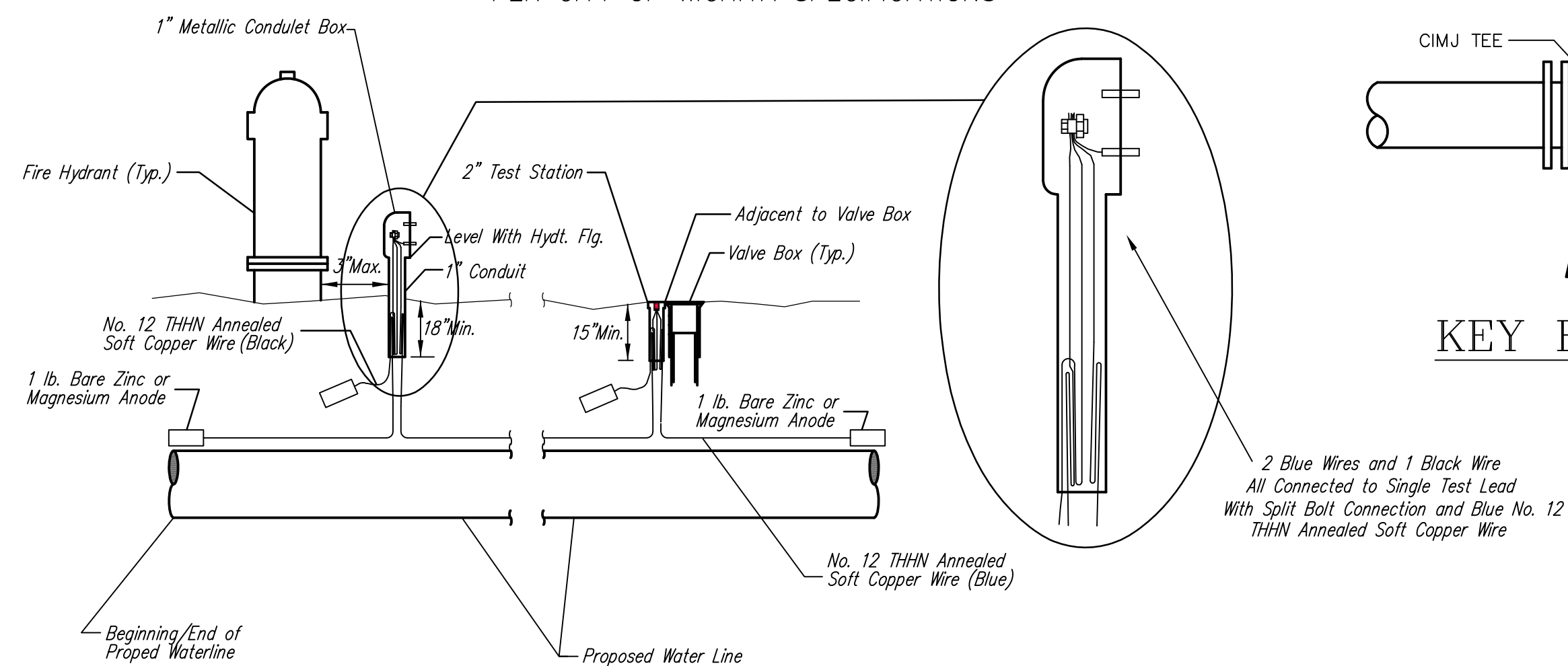
**ANCHORED VALVE ASSEMBLY, SPECIAL**



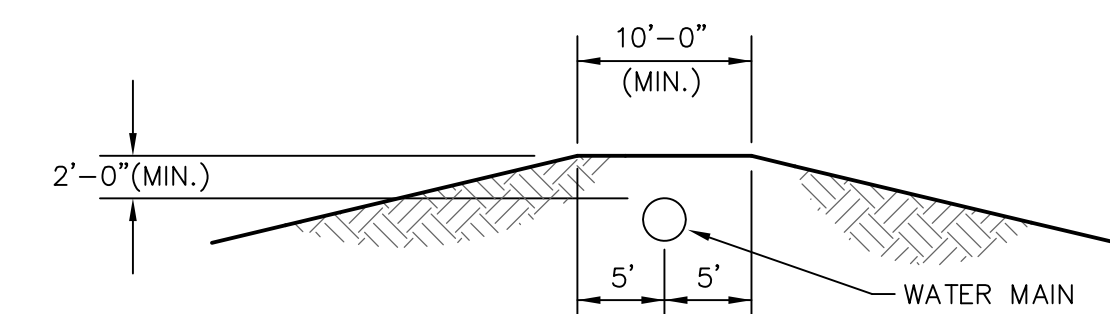
- MATERIALS LIST**  
 1-MJ GATE OR BUTTERFLY VALVE (AS PER PLAN)  
 1-MJ ANCHOR COUPLING (12" OR SMALLER)  
 1-6" VALVE BOX  
 CONCRETE SUPPORT BLOCK SHALL BE FULL WIDTH OF THE TRENCH

**ANCHORED VALVE ASSEMBLY**

**FIRE HYDRANT ASSEMBLY**  
 PER CITY OF WICHITA SPECIFICATIONS

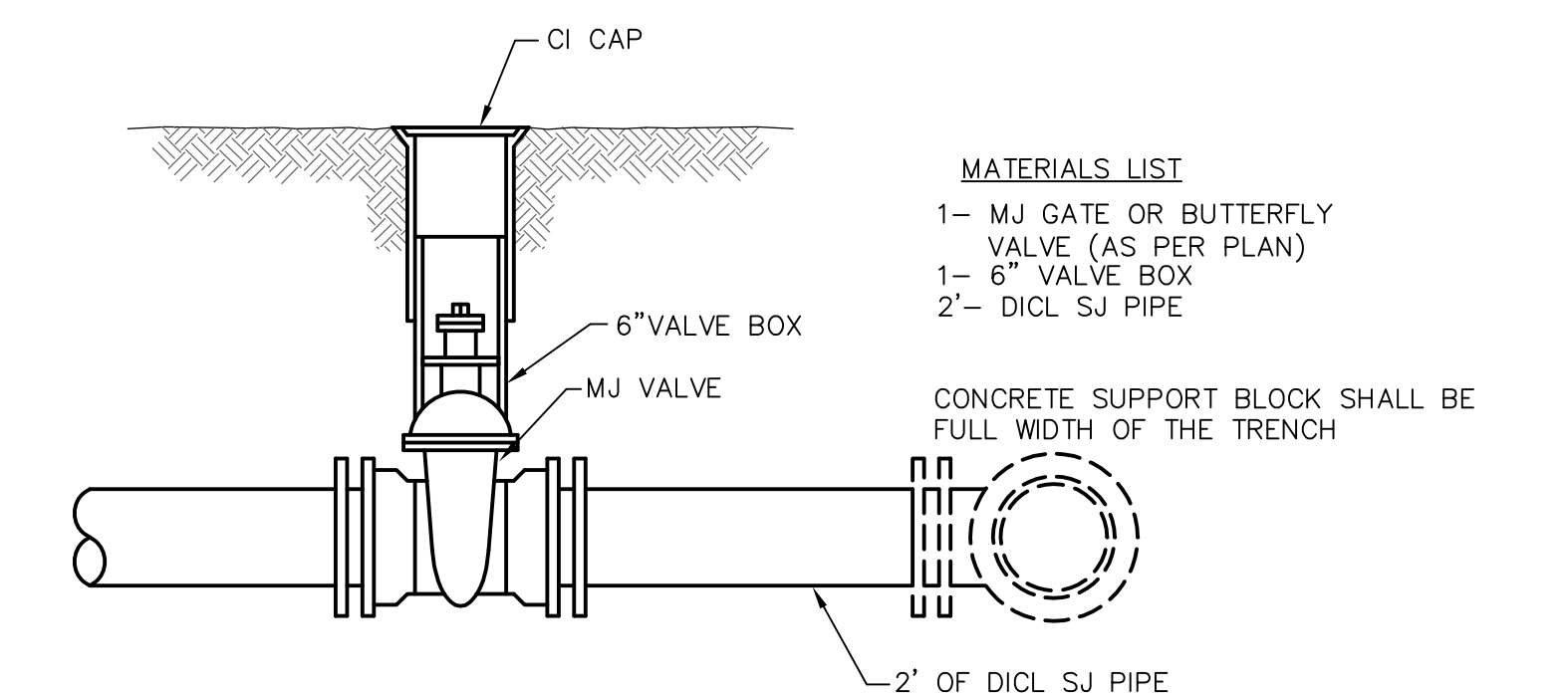


**KEY BLOCK DETAIL**



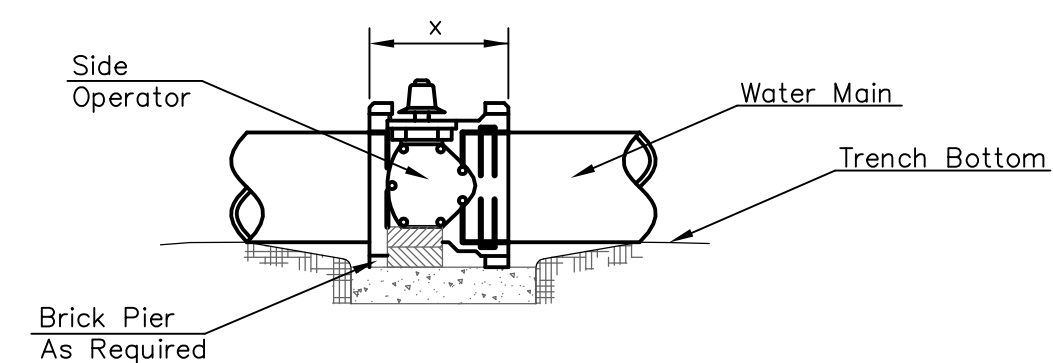
**PROTECTIVE FILL DETAIL**

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)



- MATERIALS LIST**  
 1-MJ GATE OR BUTTERFLY VALVE (AS PER PLAN)  
 1-6" VALVE BOX  
 2- DICTL 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.

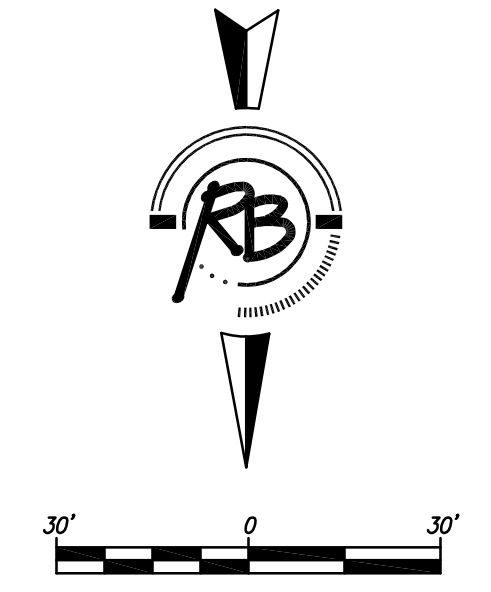
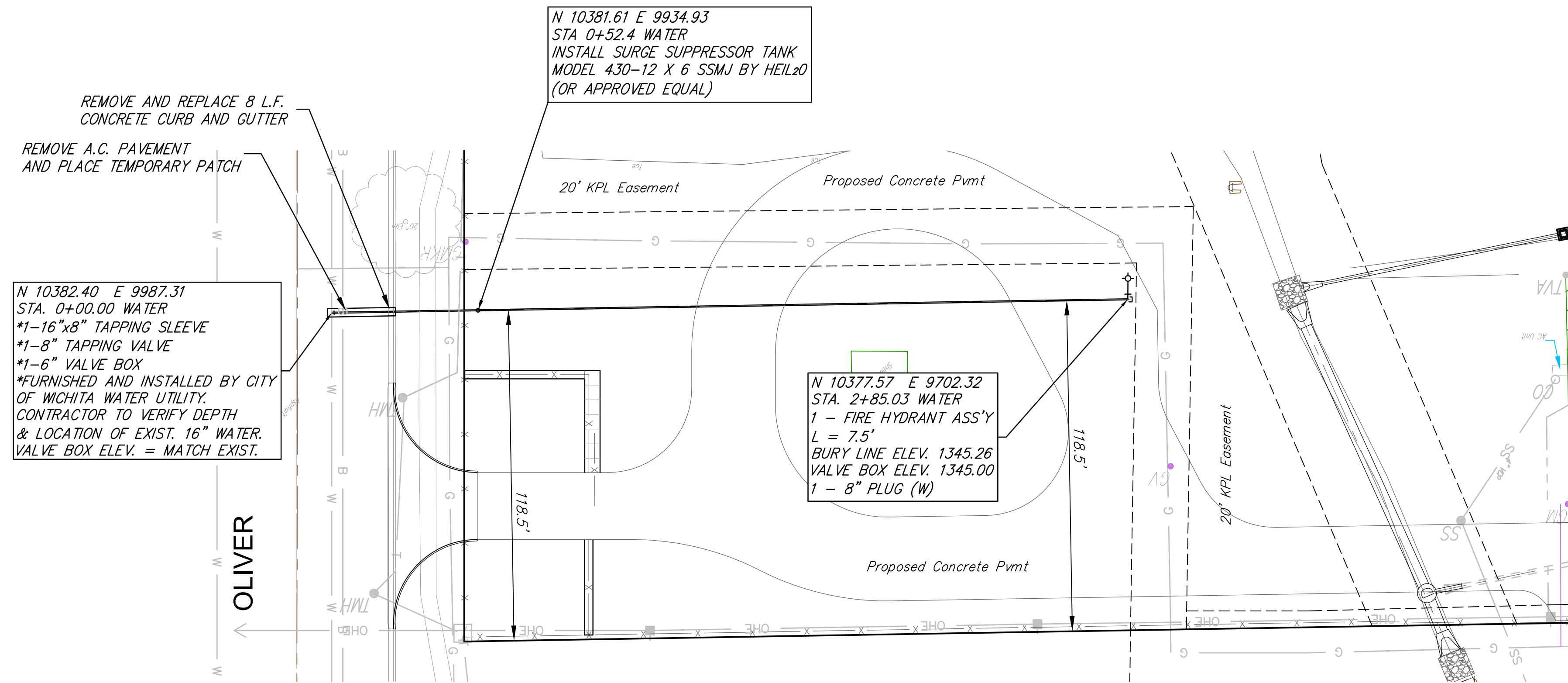
**CONCRETE SUPPORT BLOCKING FOR BUTTERFLY VALVE INSTALLATION**



<b>THE CITY OF WICHITA</b>  <b>CITY ENGINEER'S OFFICE</b> CITY HALL - SEVENTH FLOOR 455 NORTH MAIN STREET WICHITA, KANSAS 67202 (316) 268-4501 (316) 268-4114 FAX		<b>STANDARD WATER ASSEMBLY DETAILS</b> <b>JAMES L. ARMOUR, P.E. - CITY ENGINEER</b> PROJECT NUMBER _____ OCA # _____ DATE DEC 98 SHEET 2 OF 3	
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**TRACER WIRE DETAIL**  
 COST IS SUBSIDIARY TO PIPE INSTALLATION

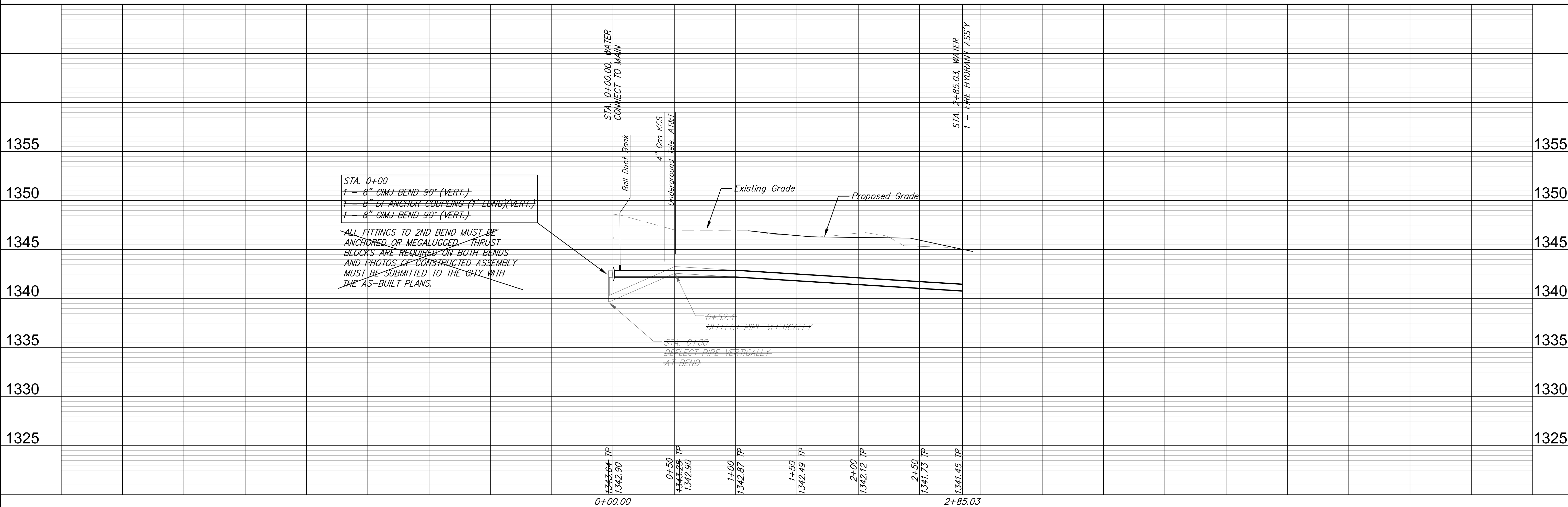
Revised: 6-7-00, MCG



AS-BUILT 9-13-2013  
 Contractor: Fire Protection Services, Inc  
 Superintendent: Jason Long  
 Inspector: Tony Young (Ruggles & Bohm, P.A.)



REVISED 8-20-13



PROJECT NUMBER	DESIGN	REVISION
1355	UTILITY	REVIEW
	DATE	REVIEW
1350		
1345		
1340		
1335		
1330		
1325		

FIRE TRAINING FACILITY  
 WATER LINE EXTENSION  
 WICHITA, KANSAS

RB JOB 3849P  
 SHEET 3