

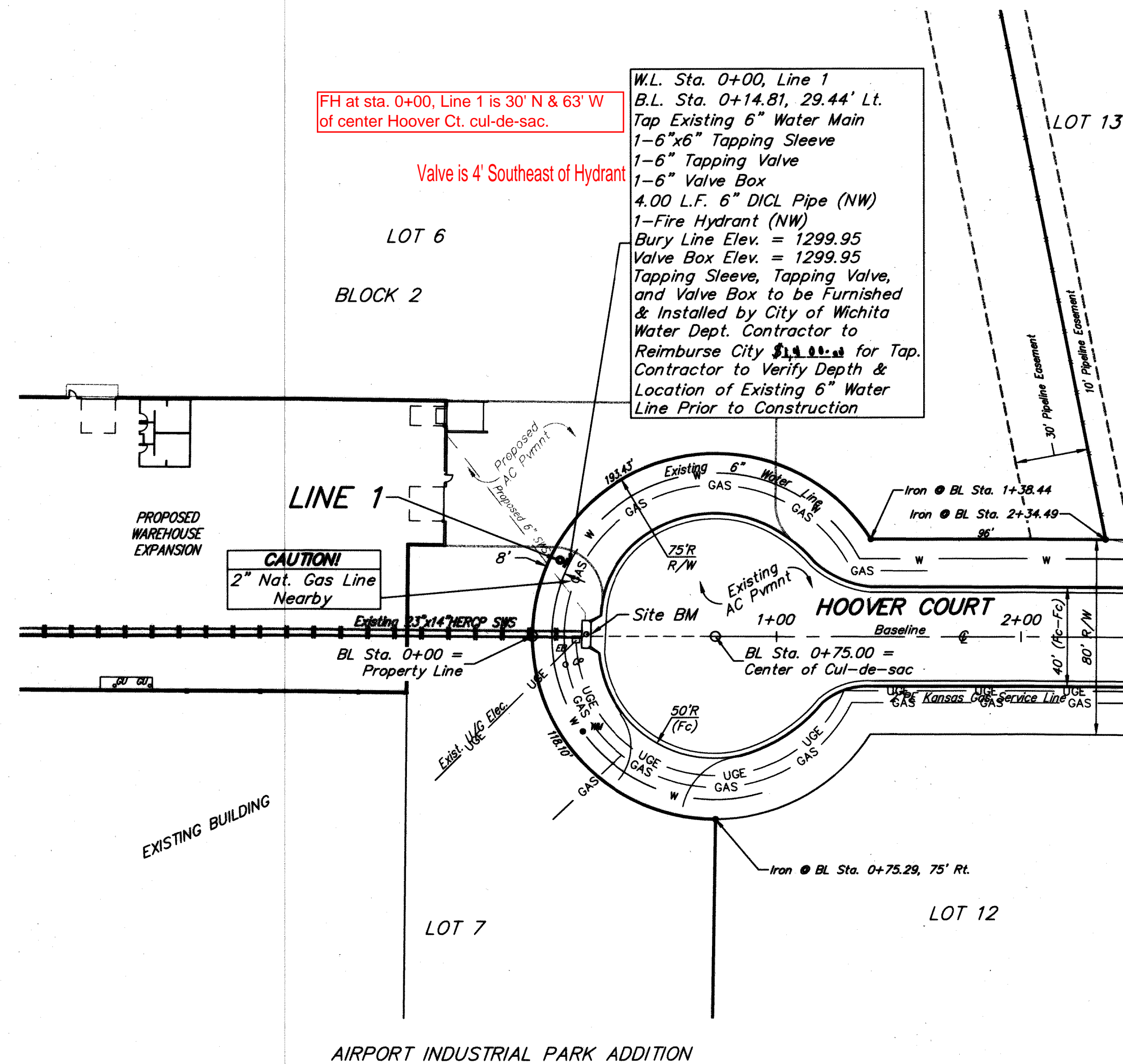
# AS BUILT PLANS

Contractor: Duling  
 Inspector: Fred Smith, Baughman Co.  
 pdf's by: KEK, 6/25/13

Clow Hydrant

## FIRE HYDRANT TO SERVE A Portion of Lots 6, and 7, Block 2, Airport Industrial Park Private Project: 1715 PPW (607853) CITY OF WICHITA, KANSAS

Gary Janzen, P.E. City Engineer  
 FEBRUARY 2013

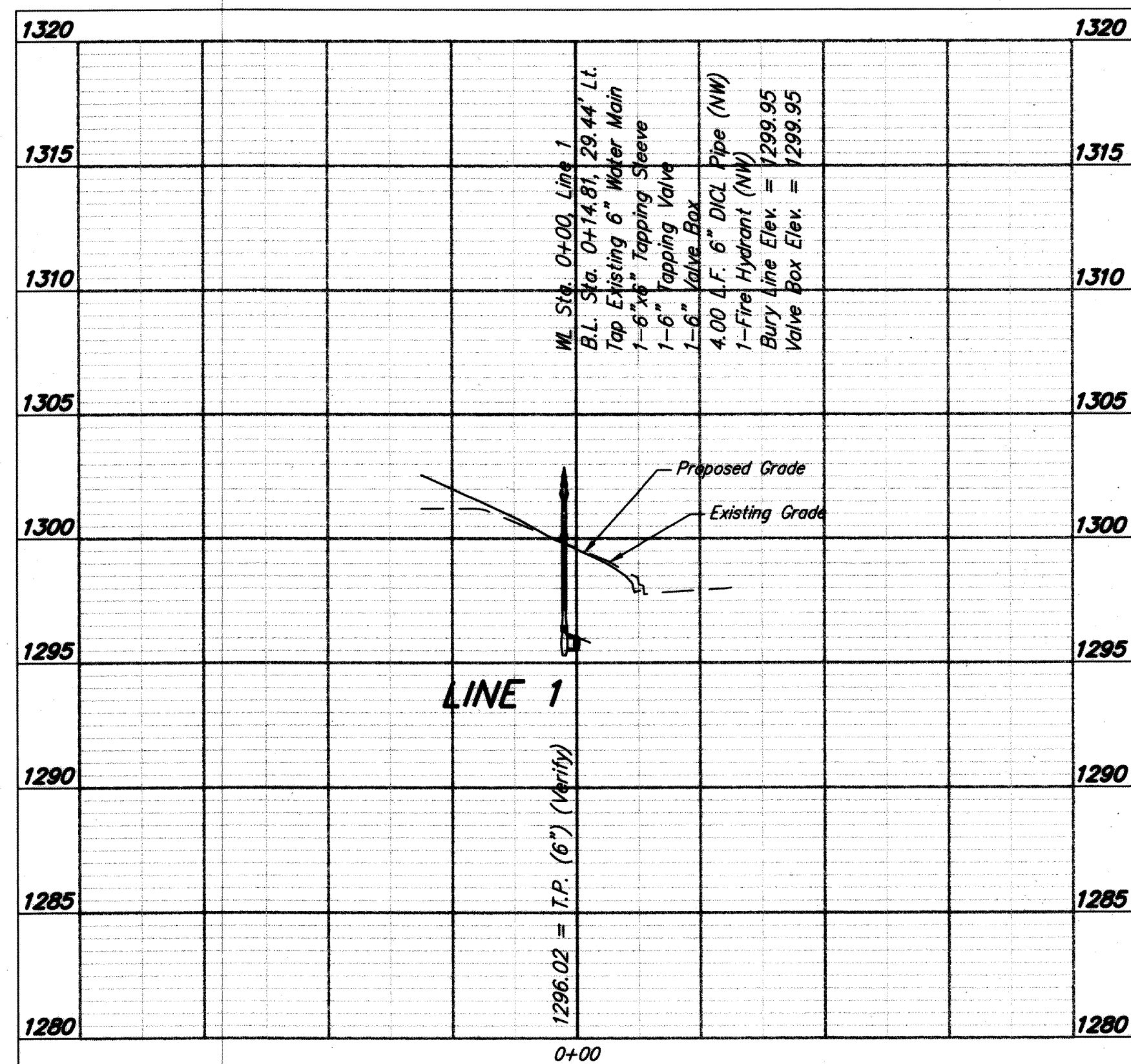
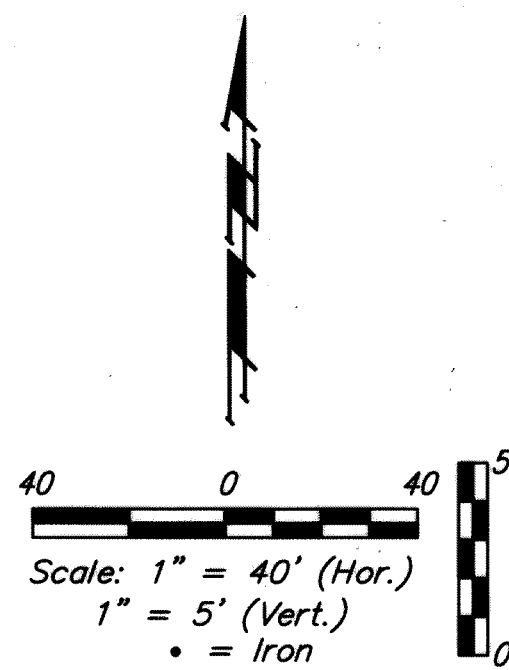


### BENCHMARK

SITE BENCHMARK:  
 "□" Cut Top of Curb Inlet  
 @ Front  
 Elev. = 1298.23 (MSL)

### SHEET INDEX:

Title Sheet - Plan/Profile	1
Standard Water Details	2-3
Copy of Plat	4



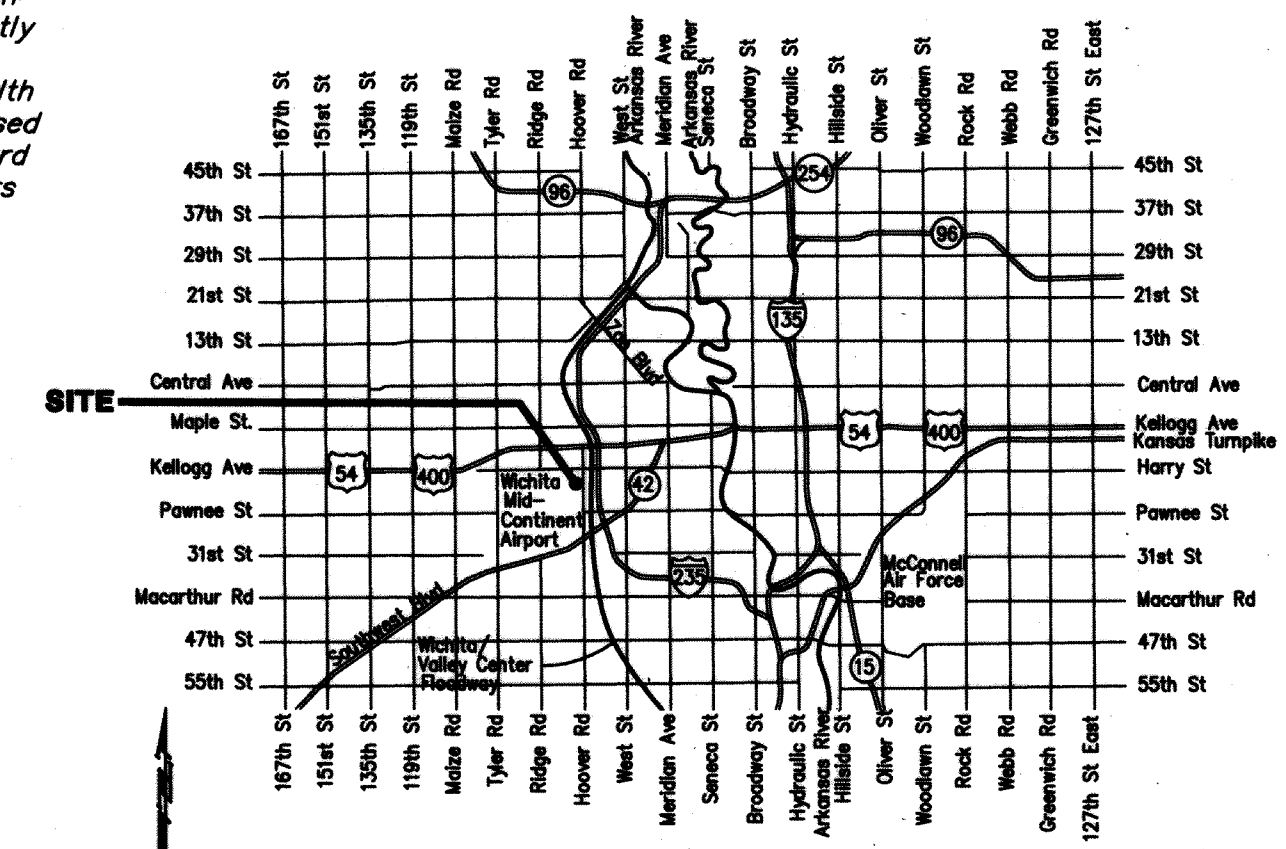
APPROVED AS NOTED  
 BY CITY ENGINEER OF WICHITA,  
 WICHITA WATER & SEWER DEPARTMENT,  
 & BY WICHITA FIRE DEPARTMENT

Public Works *[Signature]* 2-12-13  
 Water & Sewer *[Signature]* 2-12-13  
 Fire *[Signature]* 2-13-2013

#### NOTE TO CONTRACTORS

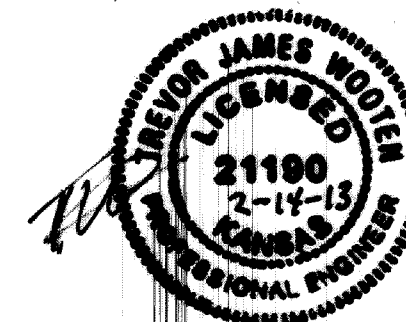
Public Property:  
 Inspection and testing for the waterline is to be provided by a Licensed Consulting Engineering Firm under contract with the Owner/Developer. Said inspection to be in accordance with the City of Wichita standard construction engineering practices and certified by a Professional Engineer Licensed in the state of Kansas. 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. All Construction and Materials shall comply with the City or Wichita Specifications and Standards (on file and available in the City Engineer's Office).

- Contractor will be required to provide notice to utility companies a minimum of forty-eight (48) hours prior to any excavation, as follows:  
 Kansas One-Call 687-2470  
 The Contractor must notify the following in case of an emergency:  
 Cox Communications 262-4270  
 Kansas Gas Service 1-888-482-4950  
 Westar Energy 383-8650  
 Black Hills Energy (Gas) 1-800-303-0357  
 ATT 268-2245  
 City of Wichita Water Dept. 268-4563  
 City of Wichita Sewer Maint. 268-4024  
 City of Wichita Storm Sewer Maint. 268-4090  
 City of Wichita Traffic Maint. 268-4034
- Utility service lines, poles, valve boxes, meters, and etcetera 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.
- All disturbed R/W areas not intended for pavement or sidewalk construction shall be seeded with Kansas Premium Fescue Blend at a rate of 8 lb./1000 Sq. Ft., fertilized with a 16-20-6 ratio at a rate of 4 lb./1000 Sq. Ft., and mulched with Prairie Hay at a rate of 92 lb./1000 Sq. Ft. Mulch shall be "patted" with forks or punched into soil to reduce loss due to wind.
- 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 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.
- Contractor to remove concrete sidewalk to the nearest construction joint if within 3' of joint. Saw cut if over 3' from joint. Removal and replacement of pavement shall not be paid for directly, but shall be considered incidental to other items in the project.
- Contractor shall furnish the inspector with a copy of the manufacturer's certification for any pipe used on this project after completion of pipe installation. The engineer will not certify the project to the city until pipe certification has been received.
- 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.
- All water lines and appurtenances shall be installed in accordance with the most recent edition of City of Wichita, Kansas Standard Specifications for the Construction of City Projects.
- Contractor shall not start work on the project until the project inspector is assigned to the project and is present on the site. Contractor shall not start on the project until all necessary bonds and permits have been obtained. Bonds may include but are not limited to Statutory, Performance & Maintenance. Any work done without inspection will be required to be uncovered for inspection.
- The Baseline for this project is the Centerline of Hoover Ct., with intersection of the centerline of Hoover Ct. and the Property Line = Station 0+00 and the Intersection of Hoover & Hoover Ct. = Station 5+14.74

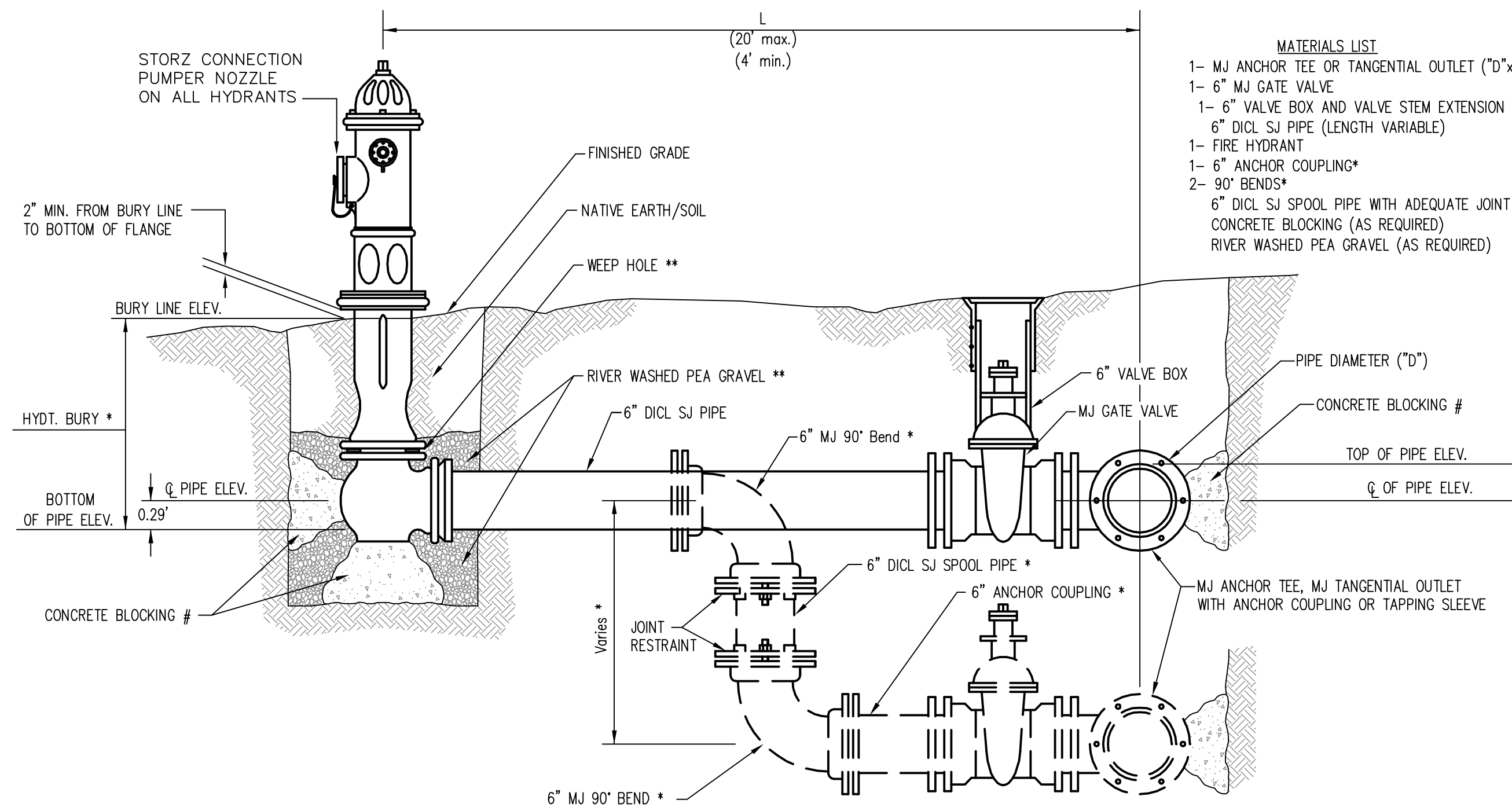


NO SCALE:

VICINITY MAP



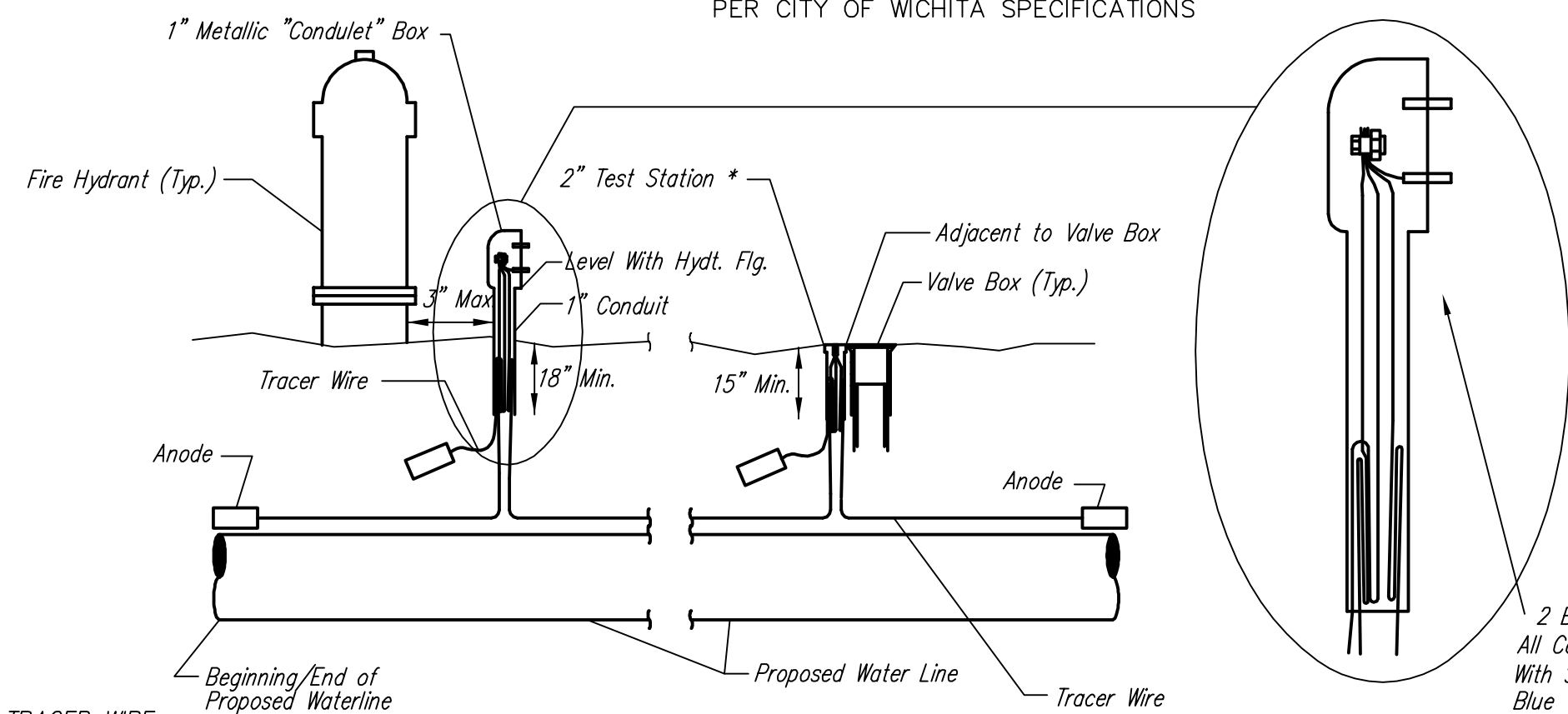
Baughman Company, P.A. 315 Ellis St. Wichita, KS 67211 P 316-262-7271 F 316-262-0149  
 ENGINEERING | SURVEYING | PLANNING | LANDSCAPE ARCHITECTURE



- MATERIALS LIST**
- 1- MJ ANCHOR TEE OR TANGENTIAL OUTLET ("D"x 6")
  - 1- 6" MJ GATE VALVE
  - 1- 6" VALVE BOX AND VALVE STEM EXTENSION IF REQUIRED \*
  - 6" DI-CL SJ PIPE (LENGTH VARIABLE)
  - 1- FIRE HYDRANT
  - 1- 6" ANCHOR COUPLING\*
  - 2- 90° BENDS\*
  - 6" DI-CL SJ SPOOL PIPE WITH ADEQUATE JOINT RESTRAINT \*
  - CONCRETE BLOCKING (AS REQUIRED)
  - RIVER WASHED PEA GRAVEL (AS REQUIRED)

- \* IF THE REQUIRED HYDRANT BURY IS IN EXCESS OF 5', BUT LESS THAN 7', CONTRACTOR SHALL USE STANDARD 5' HYDRANT BURY AND HYDRANT BARREL EXTENSIONS AS NECESSARY. IF THE REQUIRED HYDRANT BURY IS GREATER THAN 7', CONTRACTOR SHALL USE 5' HYDRANT BURY, 2-MJ 90° BENDS, 6" ANCHOR COUPLING AND 6" DI-CL SPOOL PIPE AS NECESSARY FOR VERTICAL ADJUSTMENT. THE CONTRACTOR SHALL PROVIDE ADEQUATE THRUST BLOCKING AT HYDRANT AND MEGALUGS, ROD AND LUG OR SIMILAR RESTRAINT BETWEEN 90° BENDS TO SECURE ALL FITTINGS DURING TESTING AND OPERATION. THE CONTRACTOR SHALL PROVIDE A VALVE STEM EXTENSION PER DETAIL THIS SHEET.
- \*\* CAUTION WEEP HOLES TO BE KEPT CLEAR DURING CONSTRUCTION AND BACKFILL. CONCRETE FOR THRUST BLOCKING SHALL NOT OBSTRUCT WEEP HOLES. PLACE 1 CUBIC FOOT OF RIVER WASHED PEA GRAVEL AROUND EACH WEEP HOLE.
- # CONCRETE THRUST BLOCKING SHALL BE KEPT CLEAR OF BOLTS, NUTS, AND MJ ACCESSORIES.

**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 3 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.

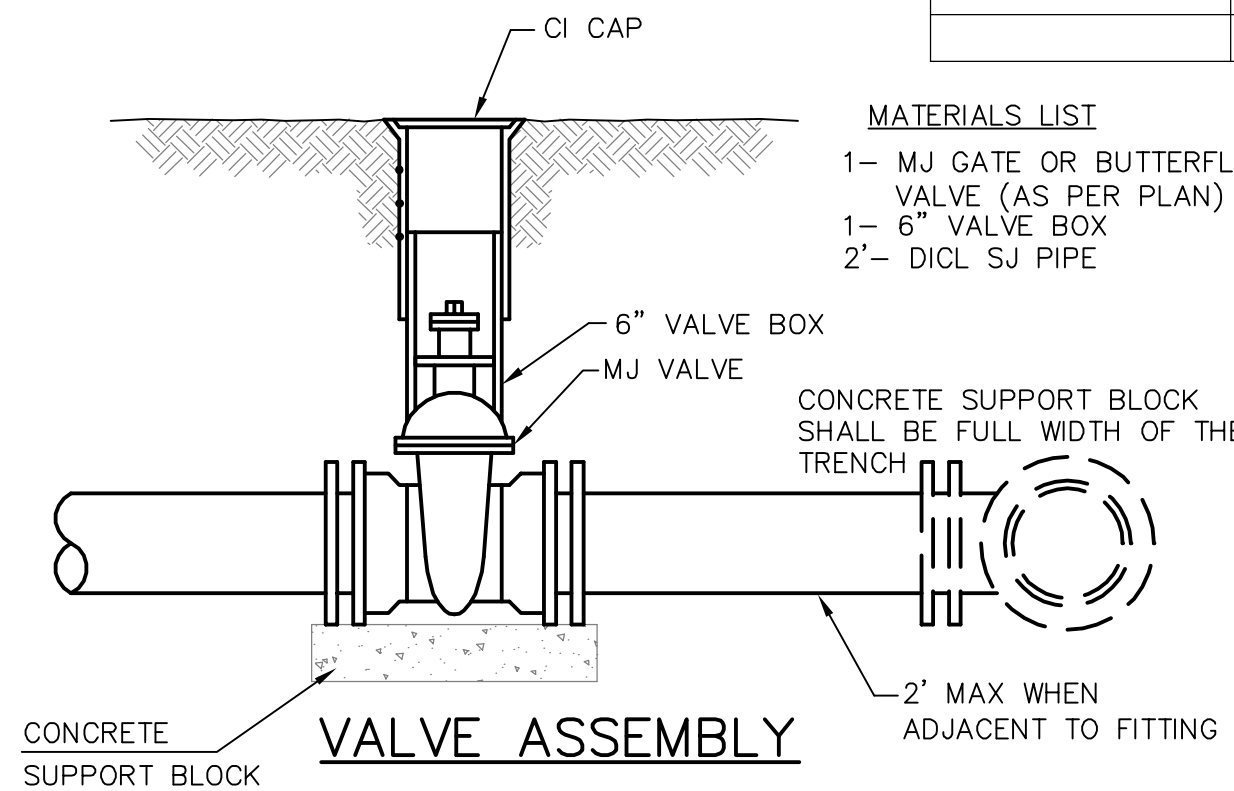
**WIRE**  
The tracer wire shall be Blue No. 12 THHN annealed soft copper wire with thermal plastic insulation or Blue No. 12 AWG CCS with 30 mil HDPE insulation. The insulation shall be heat, oil, and gasoline resistant as manufactured by Temple Electric or approved equal. To allow for grade adjustment, 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 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 "condulet" 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 "condulet" style test station 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.

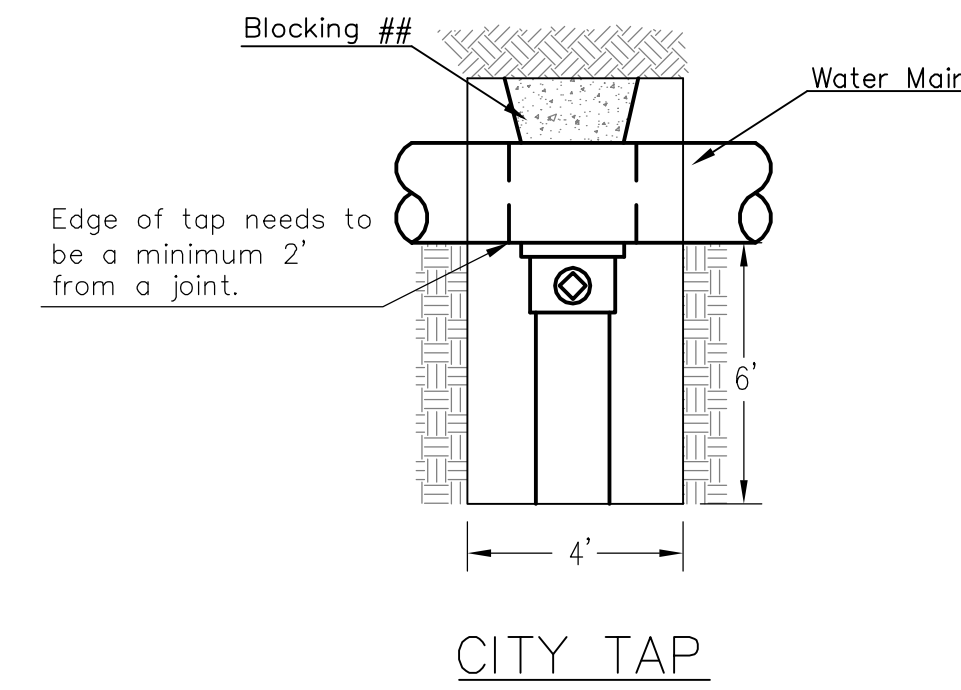
**ANODES**  
The anodes shall be 3 lb. bare zinc or magnesium. The anodes shall be buried at the same elevation as the waterline at each test station. The anodes shall be connected to Black No. 12 THHN annealed soft copper wire which shall be extended to the test station.

**TRACER WIRE DETAIL**  
COST IS SUBSIDIARY TO PIPE INSTALLATION

FIRE HYDRANTS REQUIRED				
STATION	BURY LINE ELEVATION	TOP OF PIPE ELEVATION	FIRE HYDRANT BURY REQUIRED*	VALVE STEM EXT. REQUIRED (ft)*
0+00	1299.95	1396.02	4.5'	-

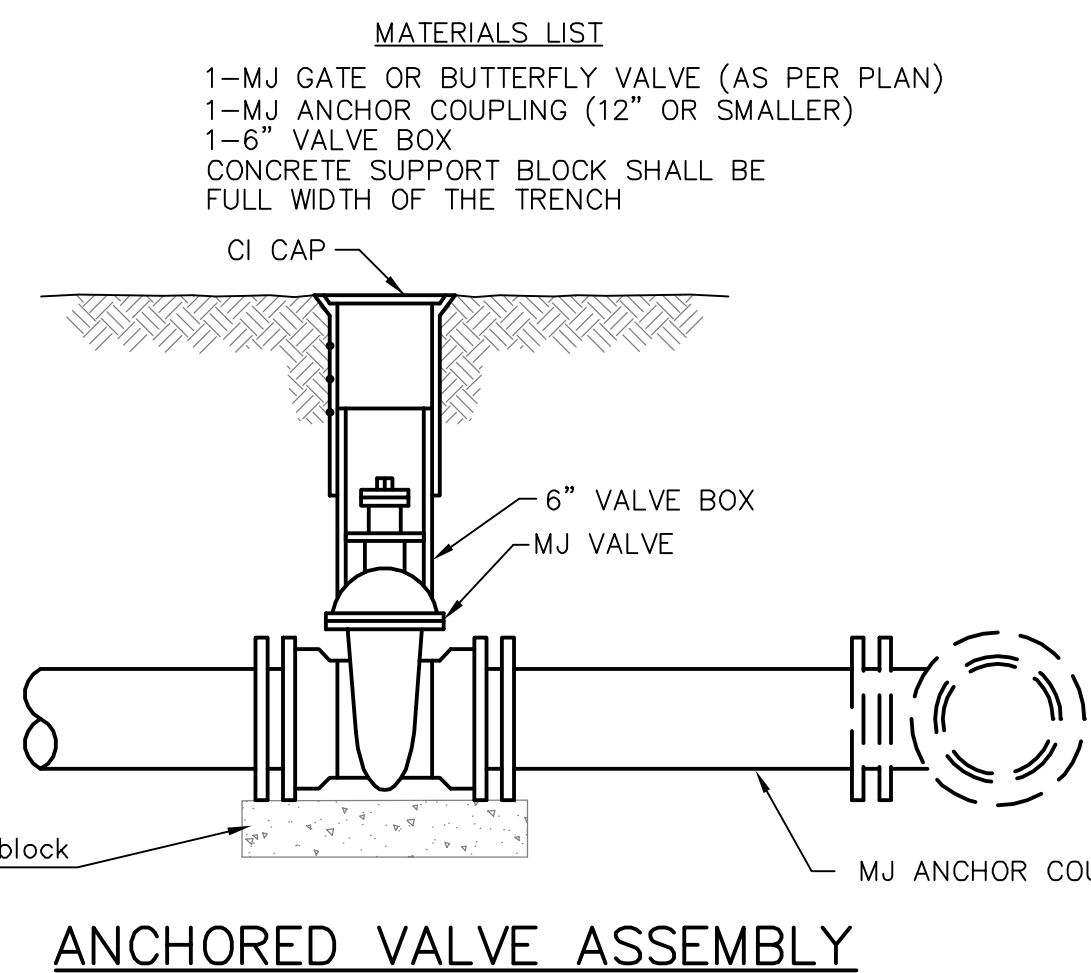


- MATERIALS LIST**
- 1- MJ GATE OR BUTTERFLY VALVE (AS PER PLAN)
  - 1- 6" VALVE BOX
  - 2- DI-CL SJ PIPE

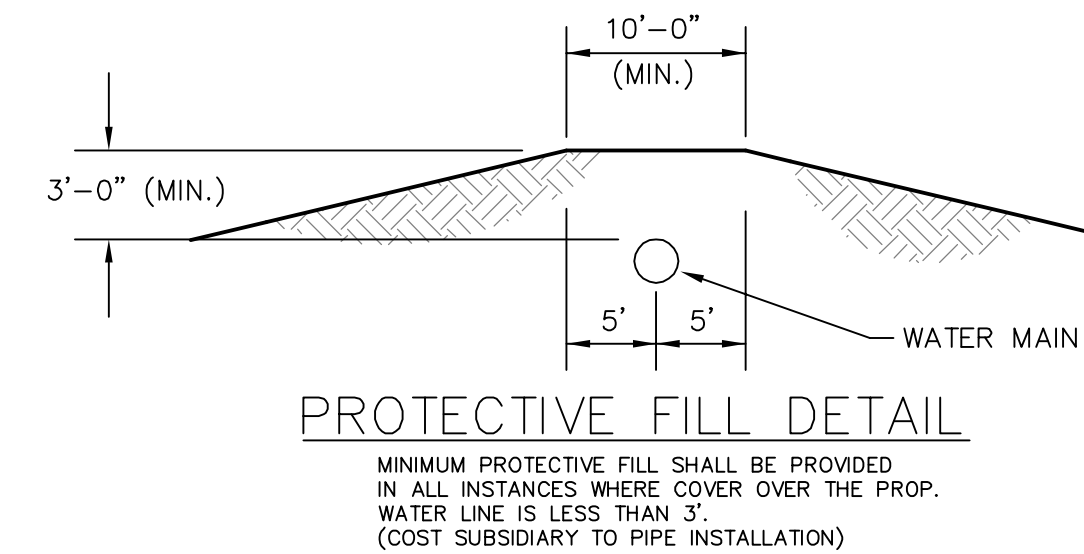


Edge of top needs to be a minimum 2' from a joint.

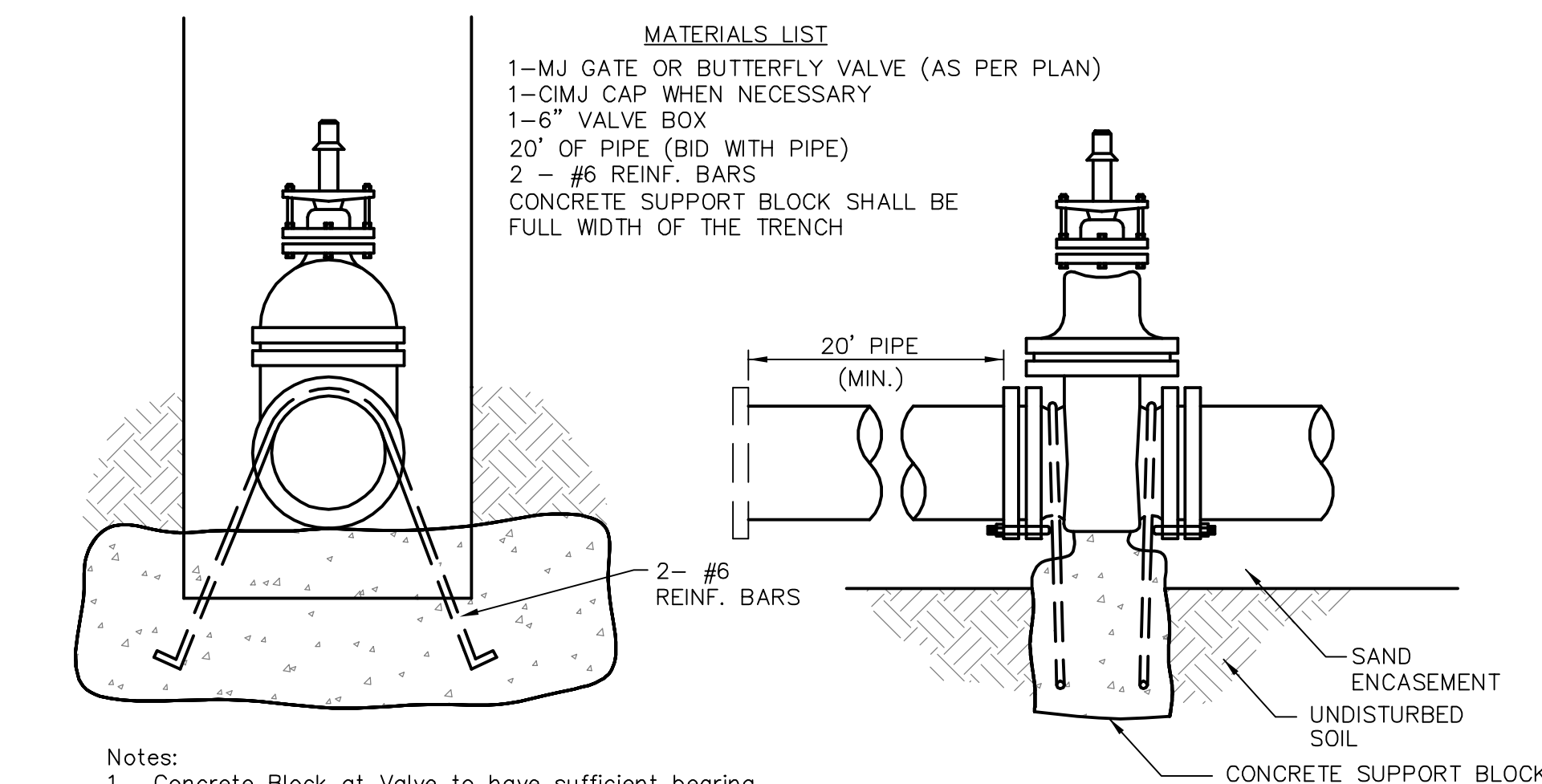
## When the City of Wichita makes tap, blocking is to be done by Contractor



- 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



**PROTECTIVE FILL DETAIL**  
MINIMUM PROTECTIVE FILL SHALL BE PROVIDED IN ALL INSTANCES WHERE COVER OVER THE PROP. WATER LINE IS LESS THAN 3'. (COST SUBSIDIARY TO PIPE INSTALLATION)



- MATERIALS LIST**
- 1-MJ GATE OR BUTTERFLY VALVE (AS PER PLAN)
  - 1-CIMJ CAP WHEN NECESSARY
  - 1-6" VALVE BOX
  - 20' OF PIPE (BID WITH PIPE)
  - 2 - #6 REINF. BARS
  - CONCRETE SUPPORT BLOCK SHALL BE FULL WIDTH OF THE TRENCH

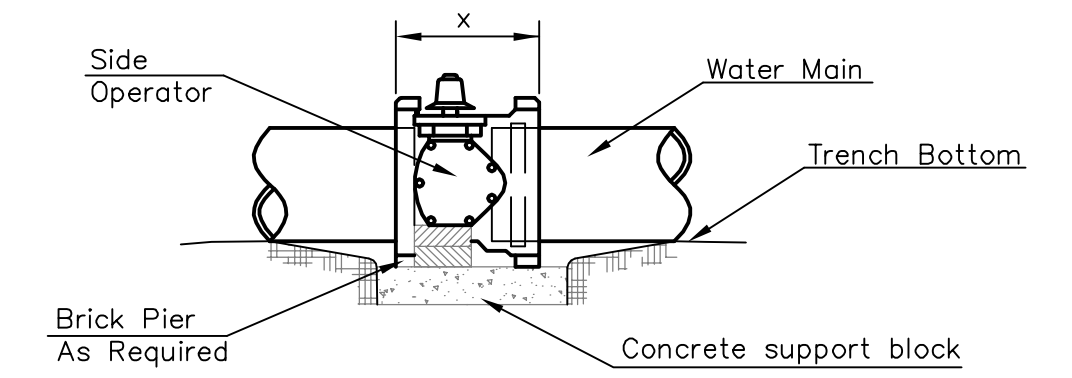
THRUST AT VALVES	
VALVE	THRUST AT 150 #/in <sup>2</sup>
4"	1809 lbs.
6"	4245 lbs.
8"	7540 lbs.
12"	16965 lbs.

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.

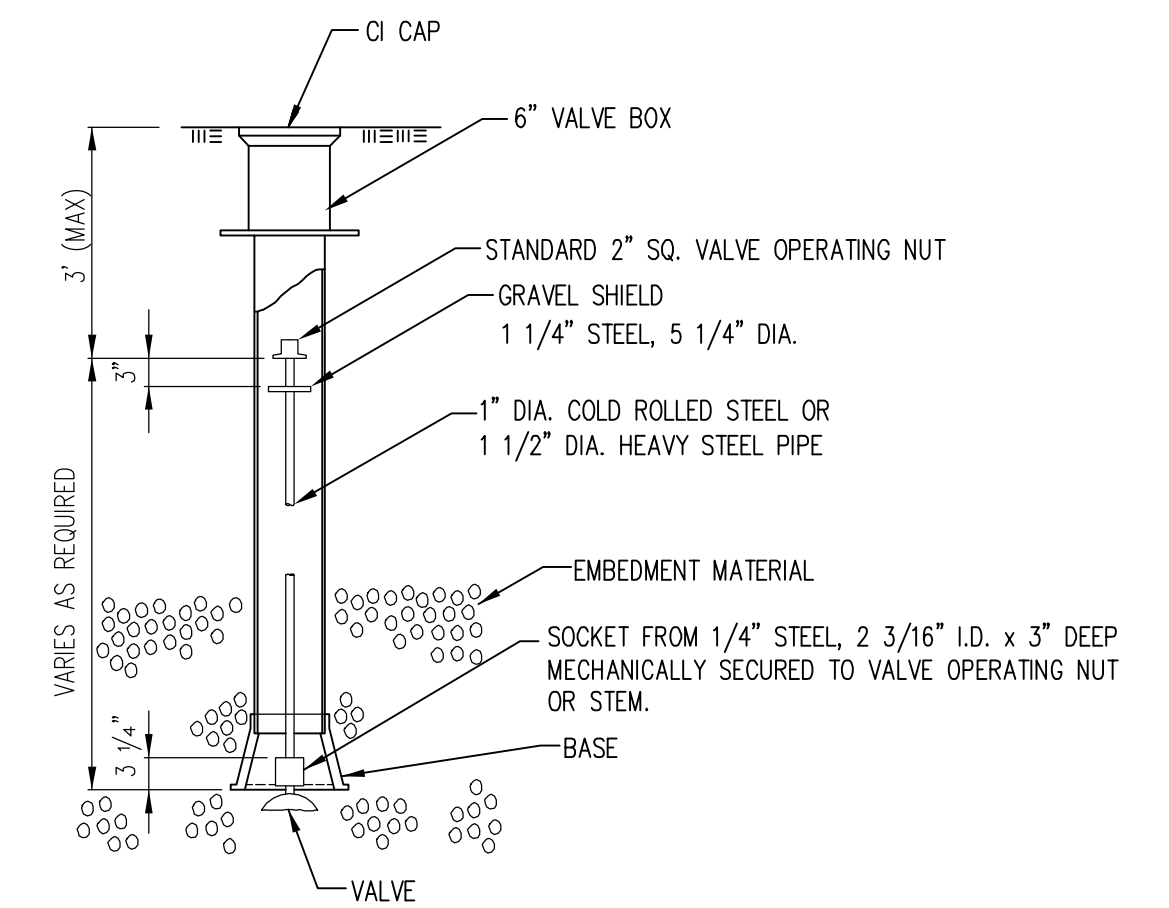
**ANCHORED VALVE ASSEMBLY, SPECIAL**



**NOTES**

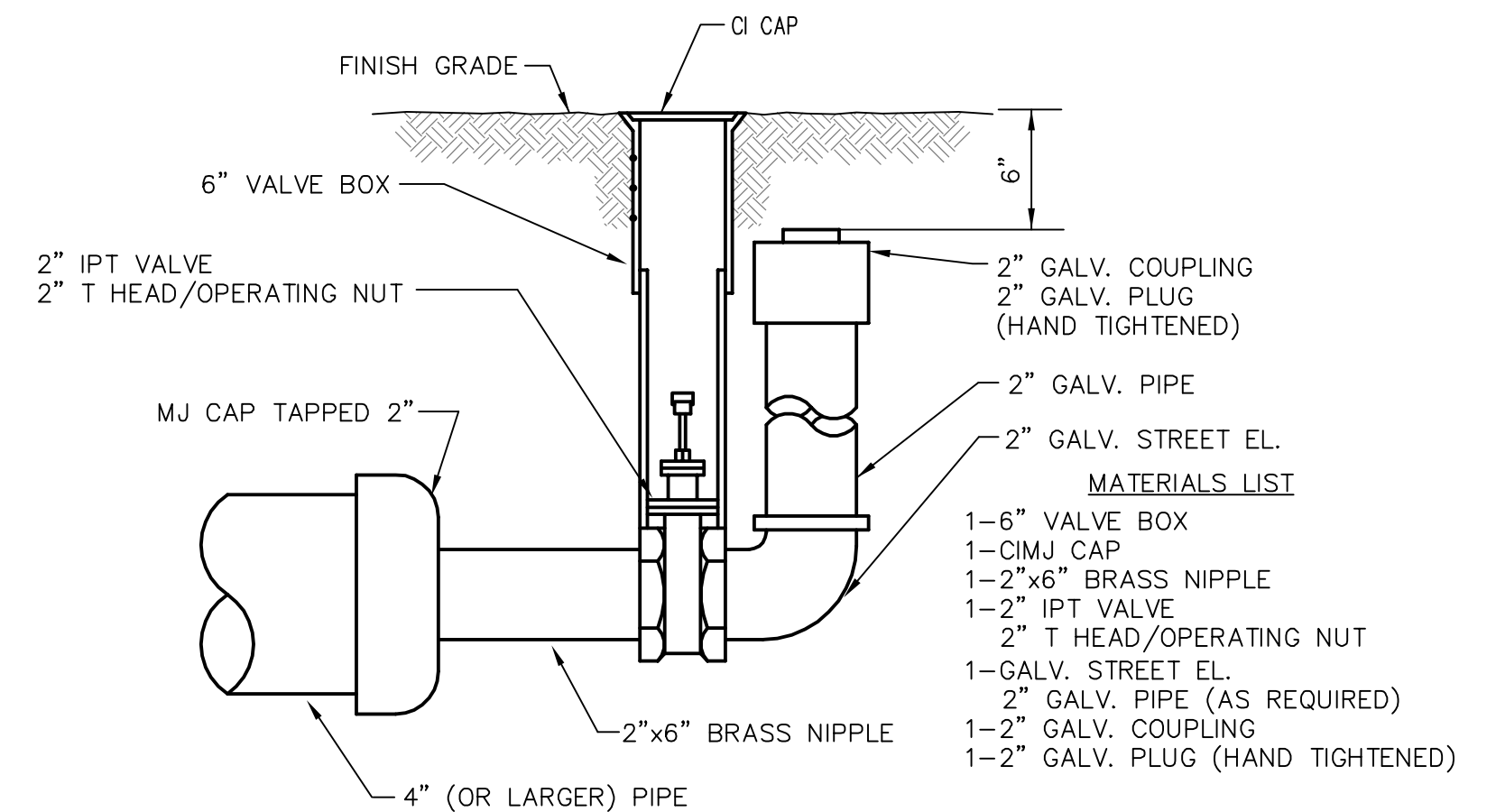
- This detail covers Butterfly Valve installation, inclusive, regardless of type of pipe or joint used. 24" and larger lines to be detailed on plans.
- 6" Valve Box and Cover required per City of Wichita Std. Specifications.
- Conc. Support Block to be full width of trench.

**CONCRETE SUPPORT BLOCKING FOR BUTTERFLY VALVE INSTALLATION**



NOTE: ONE VALVE STEM EXTENSION FOR EACH VALVE BURIED GREATER THAN 5'.

**VALVE STEM EXTENSION DETAIL**



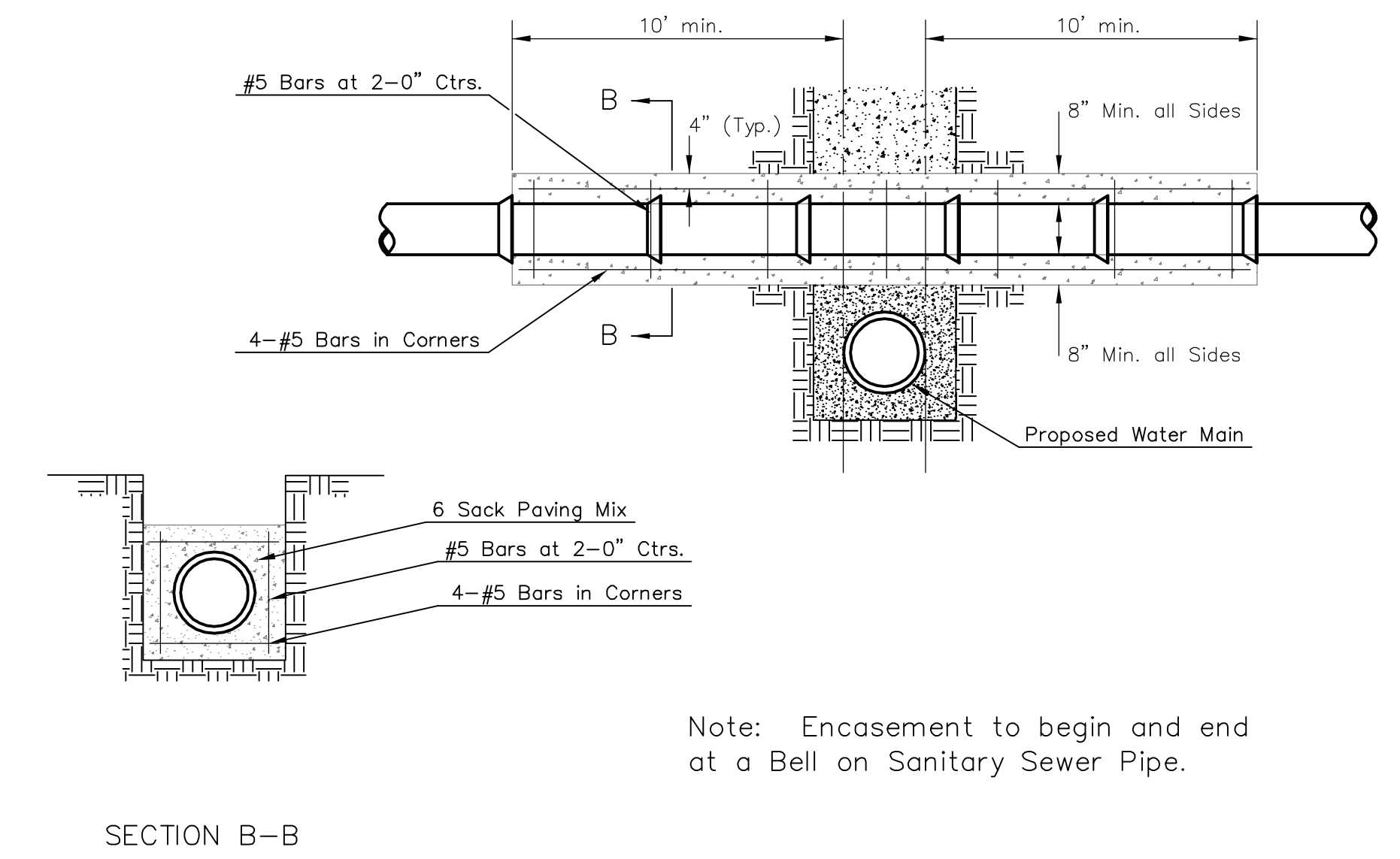
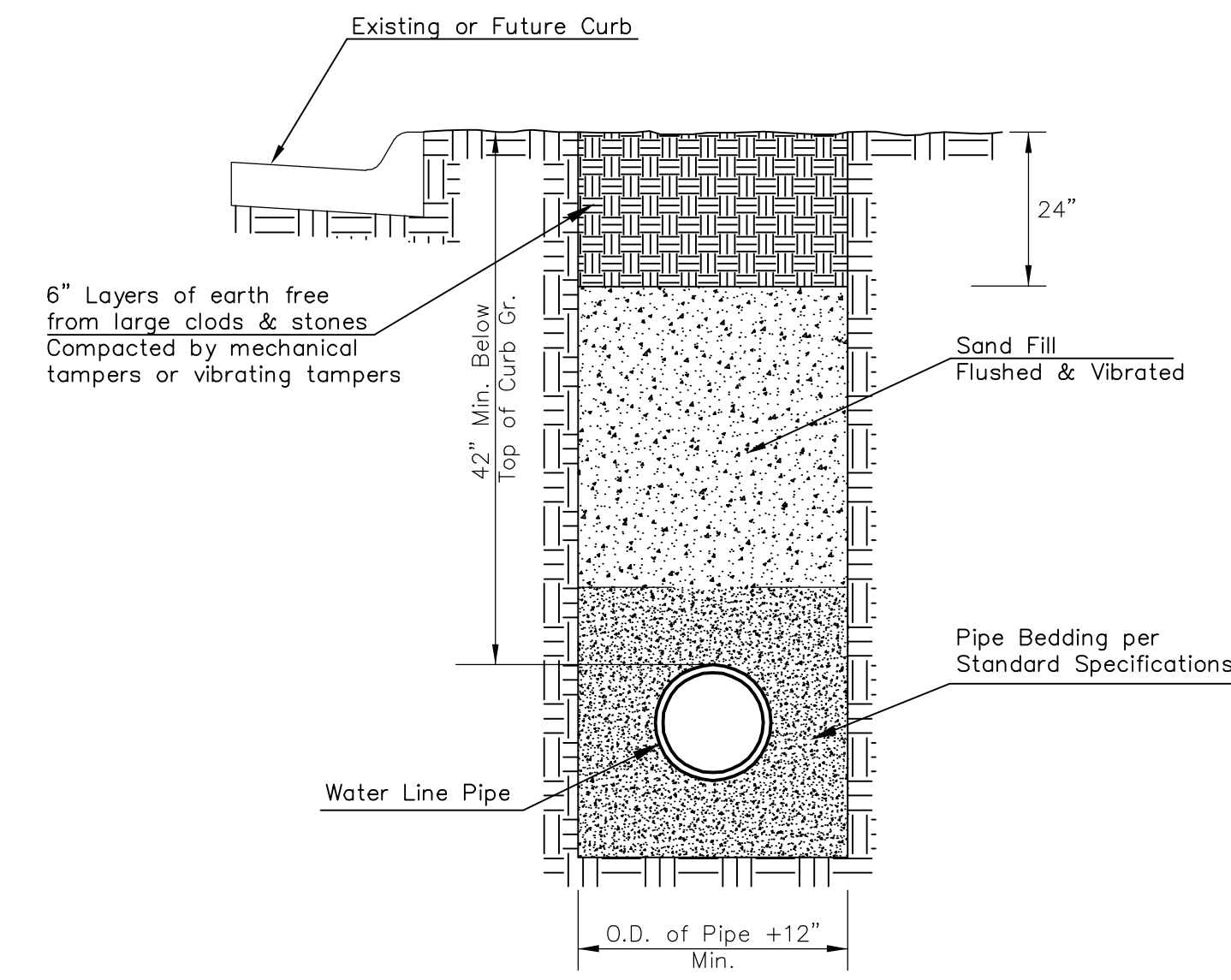
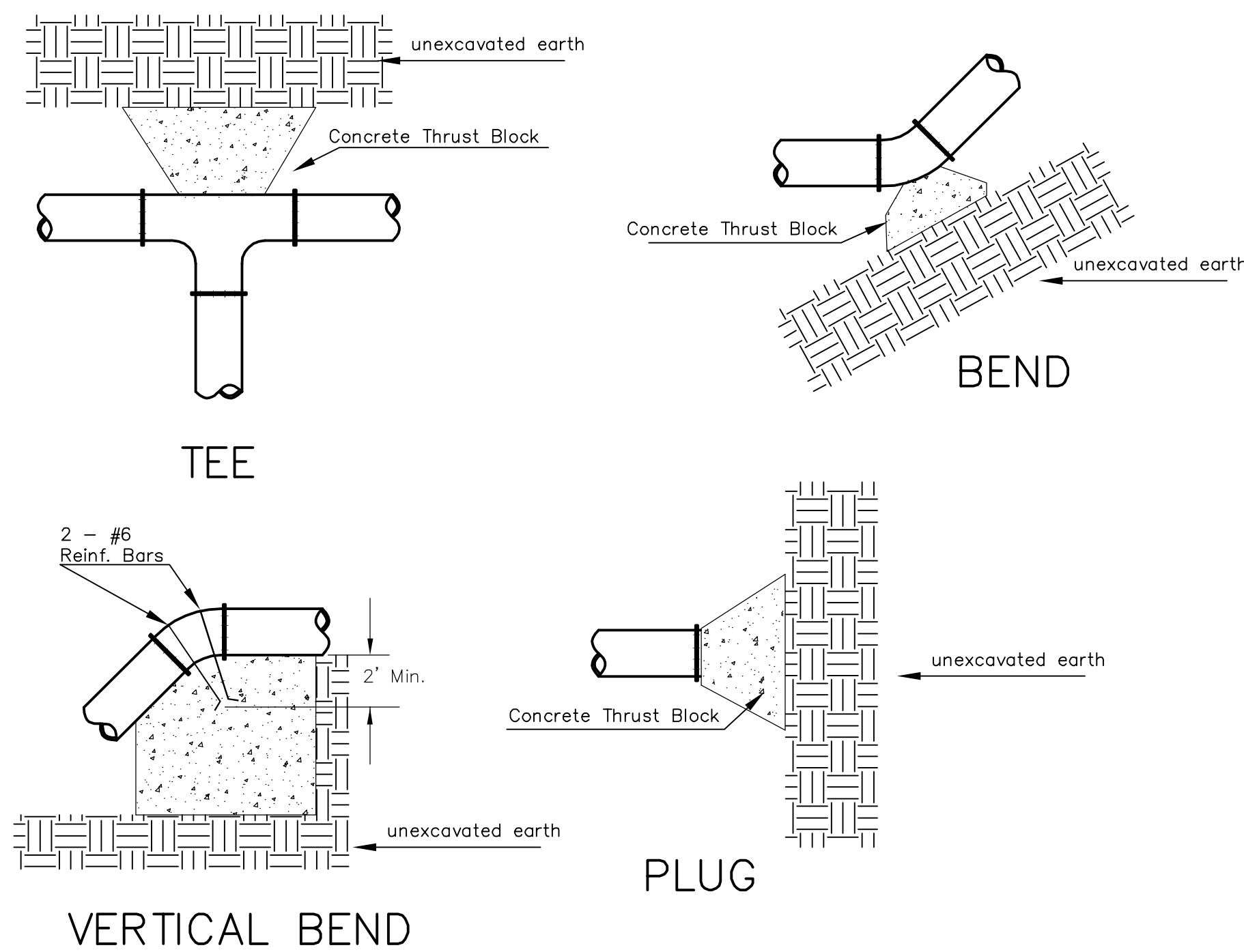
**2" BLOWOFF ASSEMBLY**

**STANDARD WATER ASSEMBLY DETAIL**

CITY ENGINEER  
**Gary Janzen, P.E. City Engineer**

PRIVATE PROJECT NUMBER <b>1715 PPW (607853)</b>	DATE <b>1/13</b>
CITY ENGINEER'S OFFICE CITY HALL - SEVENTH FLOOR 455 NORTH MAIN STREET WICHITA, KANSAS 67202-1620 (316) 268-4501	DESIGN <b>2</b>
SHEET <b>4</b>	

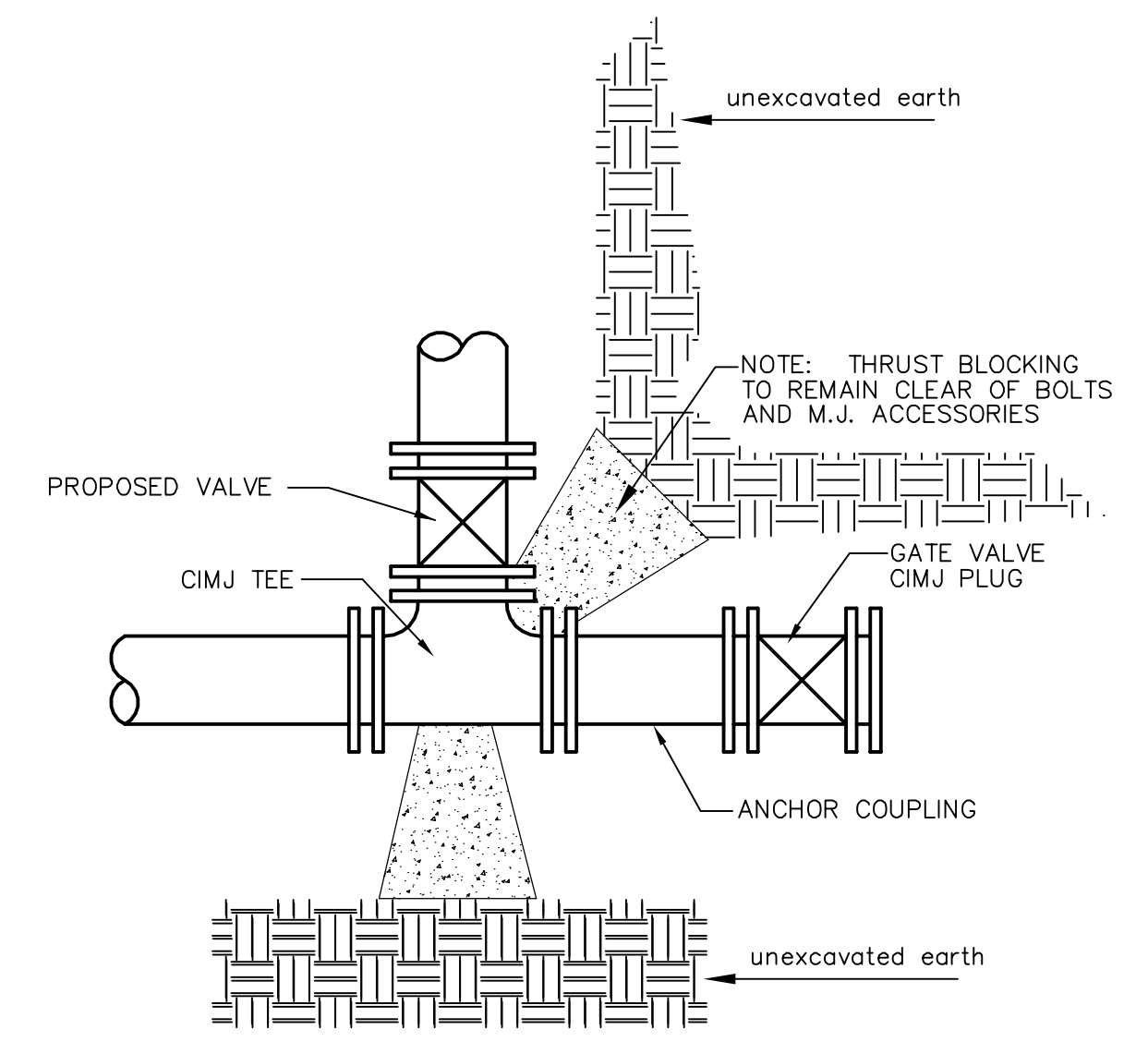
PUBLIC WORKS & UTILITIES ENGINEERING DIVISION



REINFORCED CONCRETE ENCASEMENT OF SANITARY SEWER

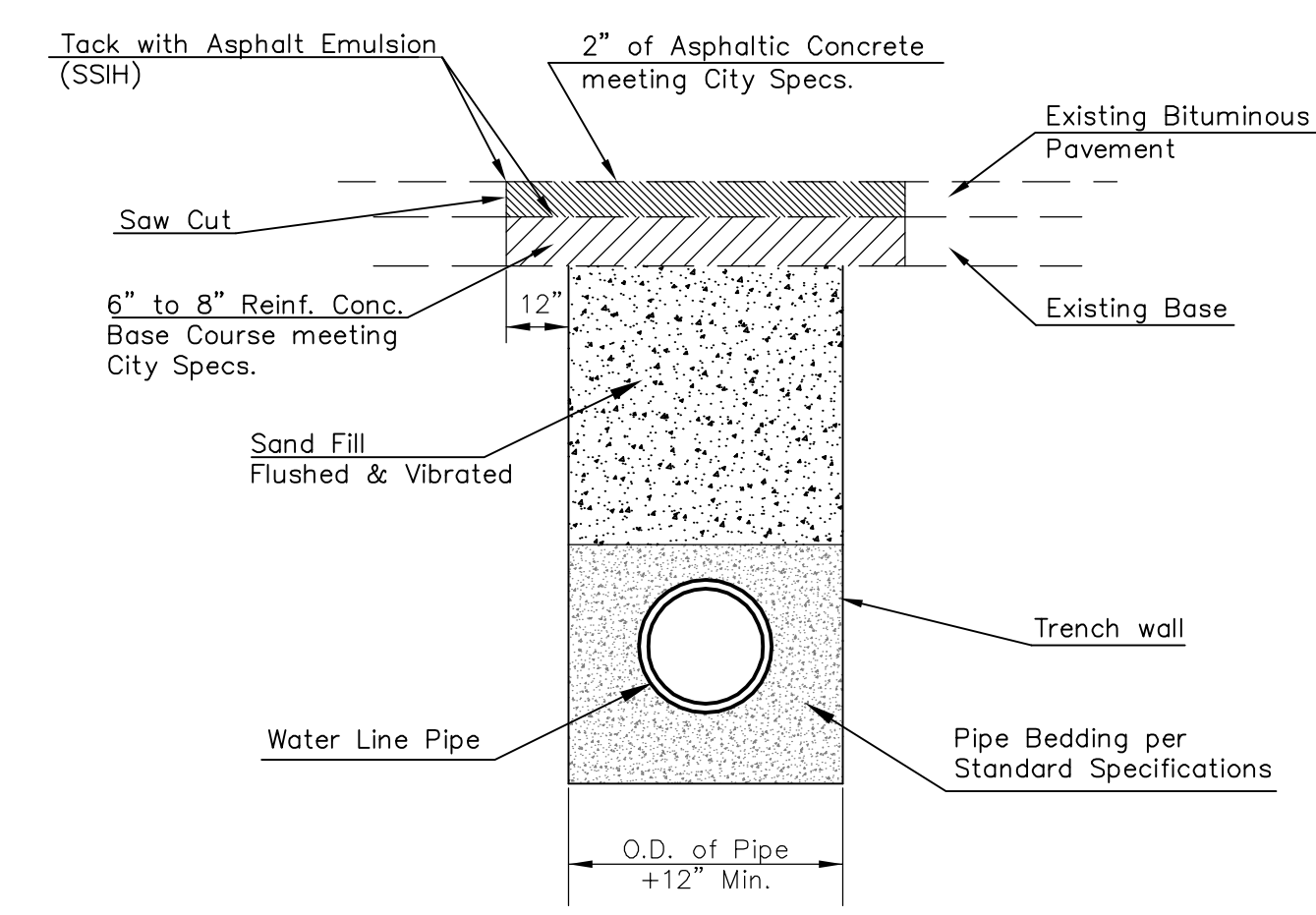
PIPE SIZE	THRUST AT FITTINGS IN TONS--AT 150#/IN <sup>2</sup> P					
	PLUG	90°	45°	22 1/2°	11 1/4°	TEE
6"	2.8	3.95	2.15	1.09	.55	2.8
8"	4.9	6.95	3.75	1.90	.96	4.9
12"	11.4	16.1	8.75	4.45	2.25	11.4
16"	20.15	28.5	15.4	7.85	3.95	20.15
20"	31.15	44.0	23.85	12.15	6.10	31.15
24"	44.55	63.0	34.1	17.4	8.75	44.55

TYPICAL THRUST BLOCKS



KEY BLOCK DETAIL

TRENCH COMPACTION IN ROAD RIGHT-OF-WAY



PAVEMENT REPLACEMENT & TRENCH COMPACTION UNDER EXISTING AND PROPOSED CITY ROADS

\* UNLESS OTHERWISE NOTED ON PLANS

<p>CITY OF WICHITA PUBLIC WORKS &amp; UTILITIES ENGINEERING DIVISION</p>	<p>MISCELLANEOUS WATER DETAILS</p> <p>CITY ENGINEER <b>Gary Janzen, P.E. City Engineer</b></p>	
	<p>PRIVATE PROJECT NUMBER <b>1715 PPW (607853)</b></p>	<p>DATE <b>1/13</b></p>
	<p>CITY ENGINEER'S OFFICE CITY HALL - SEVENTH FLOOR 455 NORTH MAIN STREET WICHITA, KANSAS 67202-1620 (316) 268-4501</p>	<p>DESIGN <b>3</b></p>
	<p>SHEET <b>4</b></p>	

D  
3-15

# AIRPORT INDUSTRIAL PARK

WICHITA, SEDGWICK COUNTY, KANSAS

Approved by the Board of City Commissioners this 10<sup>th</sup> day of November, 1964.

Edward C. Bogart, Mayor  
Robert G. Smith, City Clerk

STATE OF KANSAS )  
COUNTY OF SEDGWICK ) SS

I, Kenneth O. Taylor, Civil Engineer in said county and state, do hereby certify that I have surveyed and platted "AIRPORT INDUSTRIAL PARK", Wichita, Sedgwick County, Kansas:

The east 92 acres of the NE 1/4 of Section 34, T27S, R1W of the 6th P.M., also described as the NE 1/4 of Section 34, T27S, R1W of the 6th P.M., except the west 1122.83 feet thereof.

K.O. Taylor, Civil Engineer

Know all men by these presents that we, Dale Frey and Betty Frey, husband and wife, have caused the land described in the Civil Engineer's Certificate to be platted into lots, blocks and streets to be known as "AIRPORT INDUSTRIAL PARK", Wichita, Sedgwick County, Kansas. Utility easements are hereby granted as indicated on the plat for the construction and maintenance of all public utilities. The streets are hereby dedicated to and for the use of the public. The drainage channel right of way as indicated on the plat is hereby dedicated to the public for drainage purposes.

Dale Frey Betty Frey

STATE OF KANSAS )  
COUNTY OF SEDGWICK ) SS

Be it remembered that on this 29<sup>th</sup> day of October, 1964, before me, a Notary Public in and for said county and state, came Dale Frey and Betty Frey, husband and wife, to me personally known to be the same persons who executed the foregoing instrument of writing and duly acknowledged the execution of same. In testimony whereof, I have hereunto set my hand and affixed my notarial seal the day and year above written.

My Commission expires November 28, 1967.  
Charles Sandlin, Notary Public

Know all men by these presents that Haysville State Bank, a corporation, mortgagee of the property described in the Civil Engineer's Certificate does hereby consent to the platting of "AIRPORT INDUSTRIAL PARK", Wichita, Sedgwick County, Kansas.

HAYSVILLE STATE BANK  
C. Wayne Stearns  
Executive Vice President and Cashier

ATTORNEY:

John W. Short, Jr.

STATE OF KANSAS )  
COUNTY OF SEDGWICK ) SS

Be it remembered, that on this 2<sup>nd</sup> day of NOVEMBER, A.D., 1964, before me the undersigned, a Notary Public in and for the county and state aforesaid, came C. Wayne Stearns, Executive Vice President and Cashier of Haysville State Bank, a corporation, to me personally known to be the same person who executed the within instrument as Executive Vice President and Cashier of said corporation, and such person duly acknowledged the execution of the same as Executive Vice President and Cashier, for and on behalf of, and as the act and deed of said corporation.

My Commission expires AUGUST 1, 1967.  
Rosalie M. Crane, Notary Public

This plat of "AIRPORT INDUSTRIAL PARK", Wichita, Sedgwick County, Kansas, has been approved by the Wichita-Sedgwick County Metropolitan Area Planning Commission, Wichita, Kansas, and is hereby transmitted to the Board of Commissioners of the City of Wichita, Kansas, with the recommendation that such plat be approved as proposed.

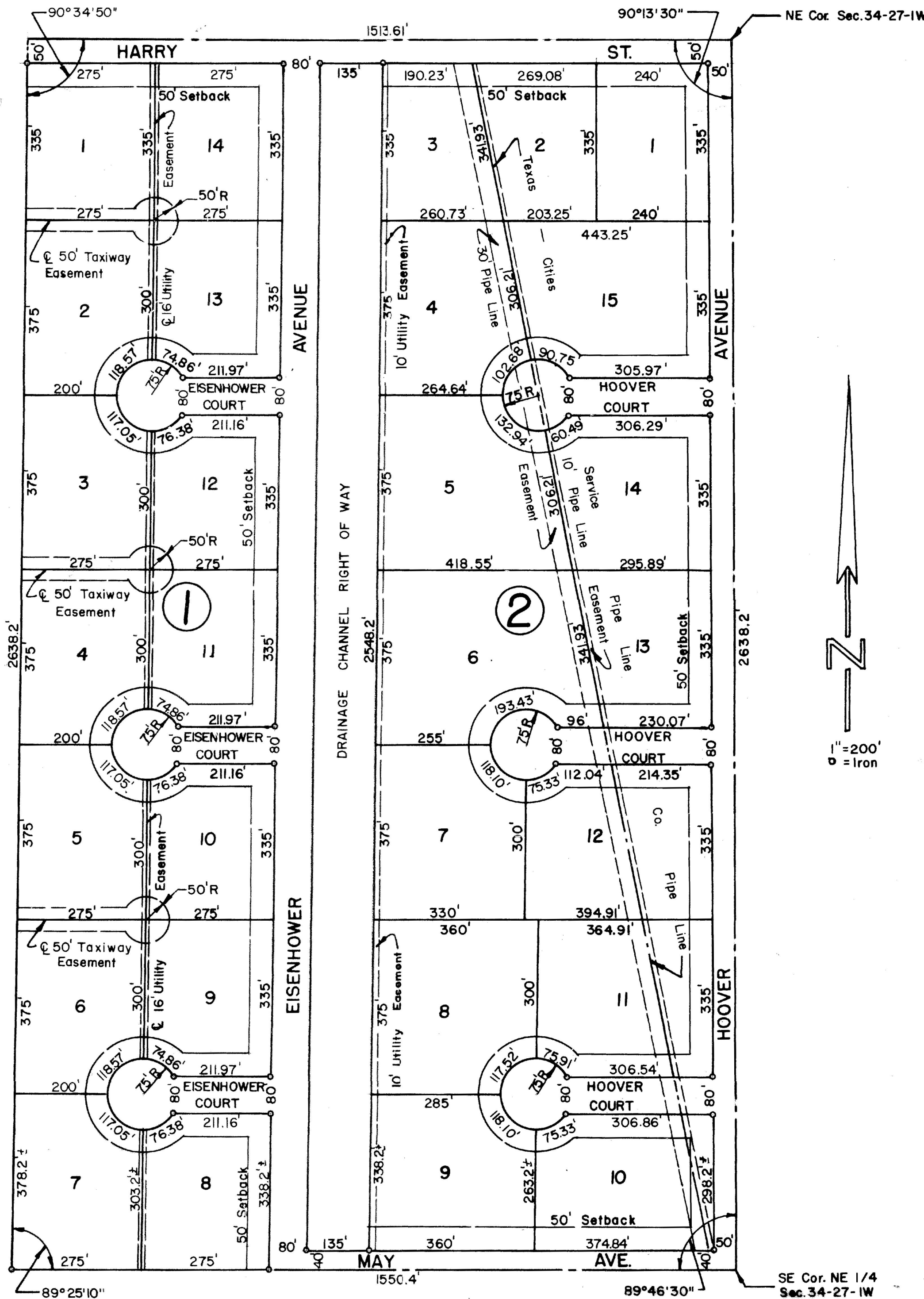
Dated this 15<sup>th</sup> day of OCTOBER, 1964.

WICHITA-SEDGWICK COUNTY METROPOLITAN  
AREA PLANNING COMMISSION  
By John W. Short, Jr., Vice, Chairman  
C. Bickley Foster, Secretary

Approved by the Board of County Commissioners this 8<sup>th</sup> day of December, 1964.

Albert P. Baker, Chairman  
Hugh Schneider, Commissioner  
Armon F. Reed, Commissioner

H.O. Williams  
County Clerk



Entered on transfer record this 16 day of December, 1964.  
H.O. Williams, County Clerk

STATE OF KANSAS )  
COUNTY OF SEDGWICK ) SS

This is to certify that this instrument was filed for record in the Register of Deeds Office on the 13 day of December, 1964, at 4:00 o'clock, P.M. and is duly recorded.

Rufus E. Weering  
Register of Deeds  
Beard Gilbert  
Deputy

Prot. Comms. M 551 pg 313  
Release of " " F 28 pg 1080 Restrictive Covenant F 251 pg 223