

# GENERAL NOTES:

- The Contractor shall comply with all applicable safety regulations. All construction shall be completed following current City Standard Specifications and Special Provisions.
  - Maintain a minimum of 10-foot horizontal separation between all water lines (mains, services, and fire hydrants) and all sanitary sewer lines (mains, services, and manholes). All separation distances are to be measured from edge-to-edge, at the closest point.
  - Maintain a minimum of 2-foot vertical separation between all water lines (mains and services) and all gravity sanitary sewer lines (mains, services, and manholes) at crossings. All separation distances are to be measured from edge-to-edge, at the closest point.
  - Maintain a minimum of 2-foot vertical separation between all water lines (mains and services) and all pressurized sanitary sewer lines (force mains and services) at crossings. Waterlines must always be placed above pressurized sanitary sewer lines where they cross. All separation distances are to be measured from edge-to-edge, at the closest point.
- 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
Evergny	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. Corps 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 City 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 abutting 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 valve 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 field grades by the contractor.
- The Contractor shall notify the consultant engineer and Dawnita Reinhardt at 316-650-0740 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 at [traffic@wichita.gov](mailto: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 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 NAVD88.
- All areas disturbed during construction that will not be under proposed pavement shall be restored to match existing conditions per City specifications.
- 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 work on this project can commence. Quotes can be obtained on fees by calling 316-268-4555.
- Opening and closing of 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. The project inspector must ascertain that any valve closed by the Contractor is reopened. The contractor will be permitted to operate water valves only when the project inspector assigned to the project is present.
- The Contractor shall lay a Tracer Wire and Set Test Stations along all water pipe installed in accordance with City Specifications and Tracer Wire Detail on detail sheet WL-101, cost is subsidiary to pipe installation.
- The contractor shall provide materials for temporary blowoff of waterlines. Connections to the existing waterline(s) shall be made with clean, swabbed pipe and flushed upon completion of tie-ins.
- Requests for short term water interruptions shall be made to the City Water Distribution Division and will be subject to their approval. The Contractor shall give written notice to any property owner, business, and/or tenants that will have water service interrupted at least 5 days in advance. Such notifications should indicate the time and date that the water will be turned off and when the service will be restored. No business, property owner, and/or tenants shall be without water service for more than 8 hours. Proposed tie in locations which will affect water service to property owners shall be performed during non-peak hours.
- The Contractor must schedule the connections to the existing main with the City such that there is a minimum disruption of service. Connections shall be made during periods of low water usage. The Contractor shall submit his proposed schedule for completing work for City approval at least 10 days prior to beginning construction.
- Any existing joint exposed during excavation shall be replaced if within four feet of proposed joint.
- All wet taps shall be installed by the City of Wichita. The Contractor will reimburse the City for tapping fees prior to tap being made. Unless noted on plans.
- 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.
- Contractor shall limit the extent of trench openings overnight and weekends to less than 50 feet.
- All existing and proposed erosion control measures including silt fencing, erosion control mat, straw bales, inlet barriers, and const. entrance shall be maintained throughout construction by the contractor and until project is accepted by the City of Wichita. The on-site engineer shall complete weekly reports on the status of erosion control measures. The contractor shall be required to comply with maintenance and/or replacement of erosion control measures as determined by the on-site engineer until project is accepted by City of Wichita. Maintenance and/or replacement of erosion control measures to be paid by L.S. bid item "Maintain Existing BMPs".
- All excess excavation shall remain on-site and shall be stockpiled or spread at a location determined by the engineer.

26. All areas not under pavement shall be seeded and mulched as follows:

Seed -- Kansas Premium Fescue Blend; 8 lbs. PLS/1000 Sq. Ft.  
 Annual Rye grass; 3 lbs./1000 Sq. Ft.  
 Fertilizer -- 12-24-12 Ratio; 45 Lbs./Ac.  
 Mulch -- 2 Tons Prairie Hay/Ac.

All costs associated with seeding including mobilization, preparation of ground, seeding, fertilizing, mulching, etc. shall be included in the L.S. bid item "Seeding".

An additional bid item for "Seeding, Temporary" has been included and may be used at the discretion of the design engineer. Temporary seed shall be Annual Rye at 5 lbs./1000 Sq. Ft. unless otherwise noted and shall be planted when permanent seed or sod cannot be used due to seasonal limitations. If the "Seeding, Temporary" bid item is not used, 100% of the pay item will be deducted from the contract. All costs associated with temporary seeding including mobilization, preparation of ground, seeding, etc., shall be included in the L.S. bid item "Seeding, Temporary".

27. The Contractor shall not begin work on the project until the Project Inspector is assigned and on site. Any work completed without inspection will be required to be uncovered for inspection at the Contractor's expense.

## Benchmarks

BM #1: "+" cut in curb, west side of Hiram Ave., at intersection of Mentor Ave. Elev. = 1297.03 NAVD88

BM #2: "+" cut in sidewalk near William Penn Science Building. Elev. = 1299.58 NAVD88

Fire Hydrant Assy. = Mueller  
 6" DICL Pipe = Westlake Certalok  
 6" PVC Pipe = Fastite

# AS-BUILT PLANS WATER DISTRIBUTION SYSTEM

to serve

# FRIENDS UNIVERSITY WM. PENN SCIENCE BLDG.

2100 W. UNIVERSITY  
 CITY OF WICHITA, KANSAS

Gary Janzen, P.E. City Engineer  
 2023-003381PPW  
 54030980

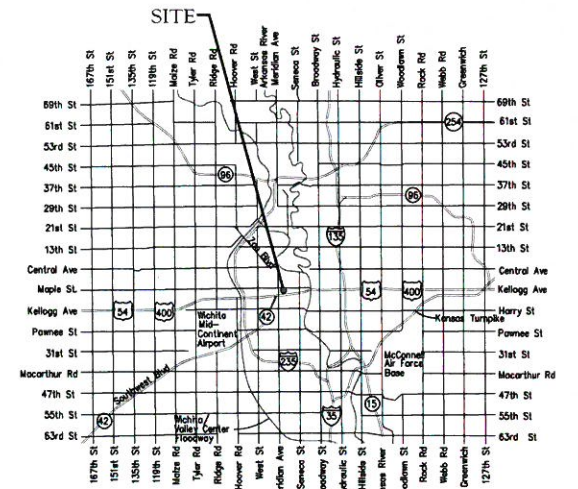
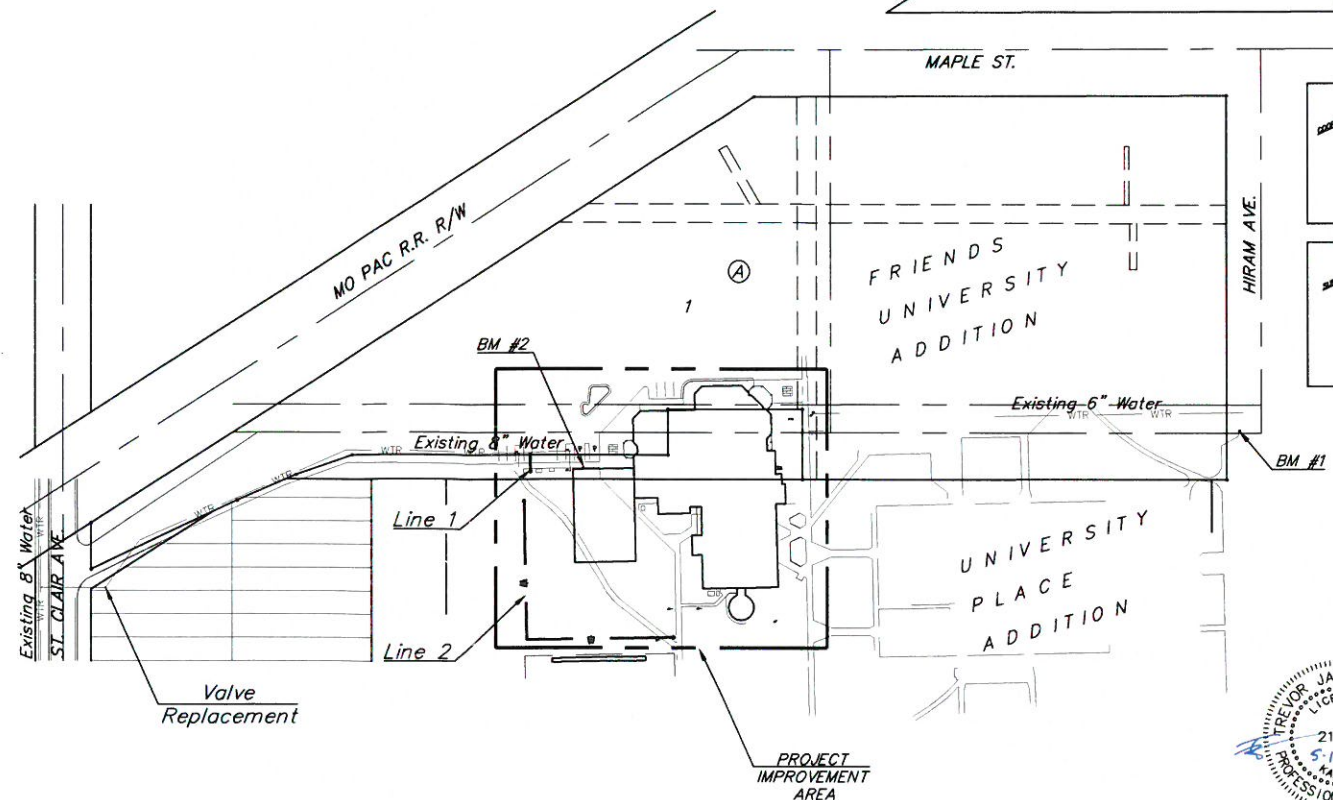
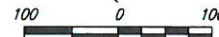
Baughman No.: 23-06-E517

Contractor: McCullough Excavation  
 Inspector: James Ralston  
 Baughman Co.

As Built By: JAR  
 As Built Date: 19JUL23

## Sheet Index

Title Sheet	1
Line 1	2
Line 2	3
Std. Water Assembly Detail	4
Miscellaneous Water Details	5
Copy of Plat	6



## Vicinity Map

Construction Began: June 05, 2023  
 Construction Ended: July 17, 2023

APPROVED AS NOTED  
 BY WICHITA PUBLIC WORKS  
 ENGINEERING DIVISION  
 & BY WICHITA FIRE DEPARTMENT

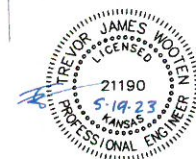
Engineering approved by Shawn Mellies on 05.18.23  
 Utilities approved by Greg Lalley on 05.18.23  
 Fire Dept. approved by Jose Oradiz on 05.18.23

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 is 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 City Engineering. All Construction and Materials shall comply with the City of Wichita Specifications and Standards and Special Provisions (on file and available in the City Engineer's Office) or on the City's Website.

Private Property:  
 Installation and testing for the fire protection line is to be performed by a City of Wichita licensed fire protection contractor in accordance with the fire codes as adopted by the City of Wichita. All material 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 and approval of the Wichita Fire Department. Inspection of the fire protection line is to be provided by a licensed Engineering Firm under contract with the Owner/Developer and the Fire Department. The contractor shall not start work until the project inspector is assigned to the project and present on the site. Any work done without inspection will be required to be uncovered for inspection.

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

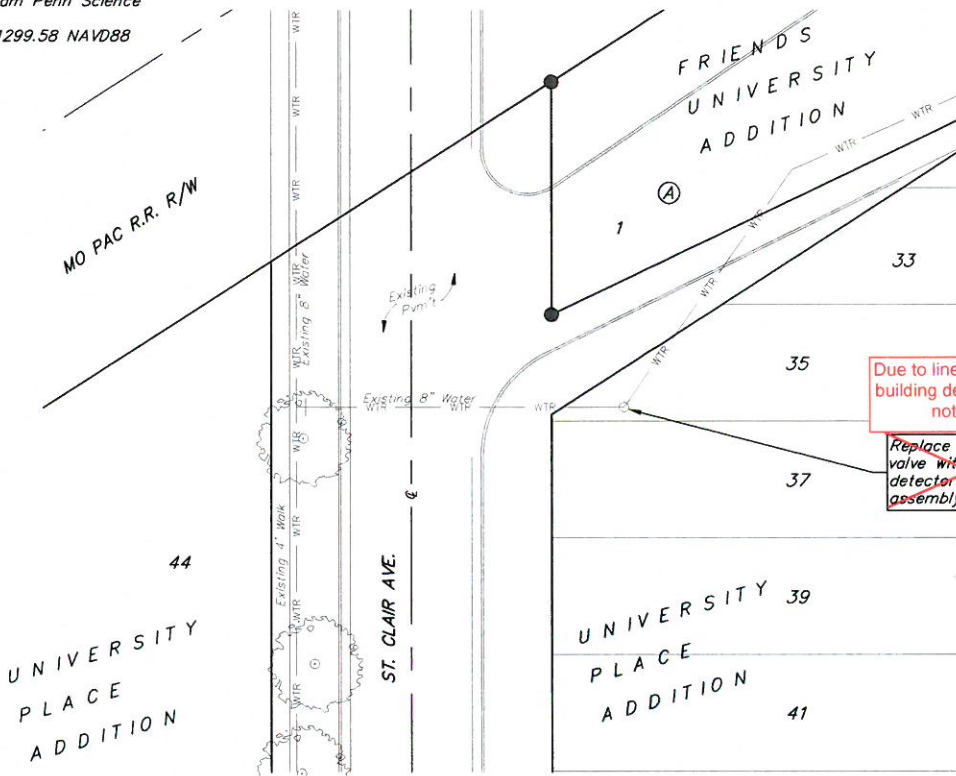


May 18, 2023

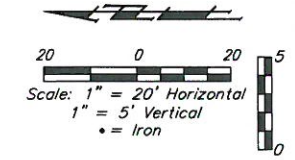
**BAUGHMAN COMPANY**  
 315 Ellis St. Wichita, KS 67211 316-262-7271  
 BaughmanCo.com

**BENCHMARKS:**  
 BM #1: "+" cut in curb,  
 west side of Hiram Ave., at  
 intersection of Mentor Ave.  
 Elev. = 1297.03 NAVD88

BM #2: "+" cut in sidewalk  
 near William Penn Science  
 Building.  
 Elev. = 1299.58 NAVD88



City maintenance ends here.  
 Fire Hydrant is outside of utility easment



Due to line servicing library building detector assembly not installed.  
 Replace existing 8" valve with double detector check assembly.

Saw cut, remove and replace existing pavement & sidewalk on private property with permanent replacement as necessary for water line construction.

Sta. 0+00.00, Begin Line 1  
 1 - 8"x6" Tapping Saddle & Valve Box  
 City will not tap a private water line. Contractor to make tap. Contractor to set valve box to grade. Cap pipe east and abandon pipe east.  
 Valve Box Elev. = 1299.40  
 N=1,683,042.37 E=1,640,163.48

Valve Box Elev. = 1299.34  
 N = 1,683,043.13 E = 1,640,163.12

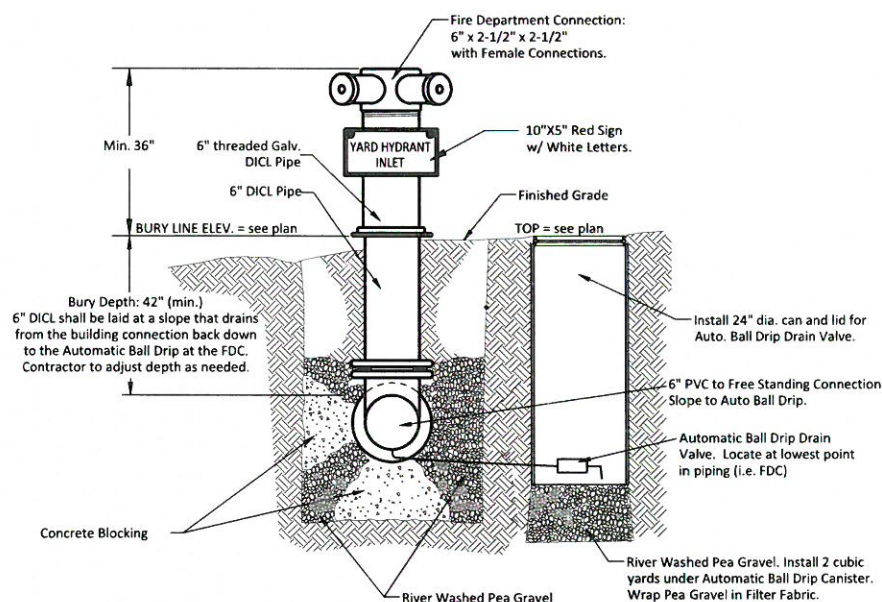
8"x6" CIMJ Tee w/ cap Sta. 0+00.00  
 493' East CL of St. Clair and Mentor St. Intersection  
 10' South CL of St. Clair and Mentor St. Intersection  
 6" Gate Valve Tee w/ cap Sta. 0+01  
 493' East CL of St. Clair and Mentor St. Intersection  
 11' South CL of St. Clair and Mentor St. Intersection  
 FH Assembly Sta. 0+20  
 493' East CL of St. Clair and Mentor St. Intersection  
 30' South CL of St. Clair and Mentor St. Intersection

Pipe to be abandoned in place, fire hydrant to be removed.

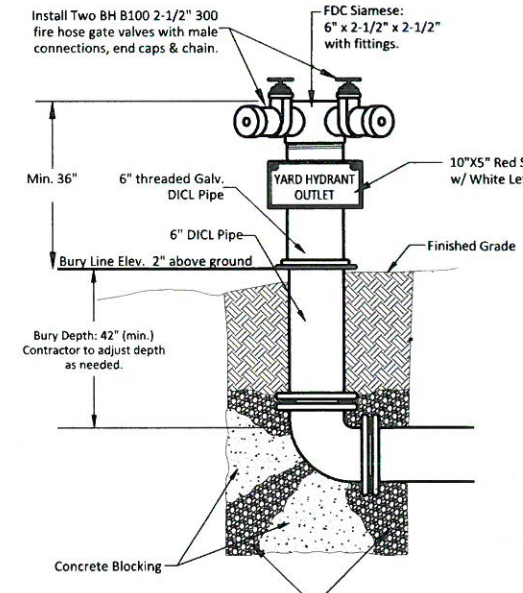
Sta. 0+20.00, End Line 1  
 1 - Fire Hydrant  
 L = 20'  
 Bury Line Elev. = 1299.30  
 N=1,683,022.39 E=1,640,164.21

Bury Line Elev. = 1299.24  
 N = 1,683,024.40 E = 1,640,163.60

20.00 L.F. 6" DI CL Pipe

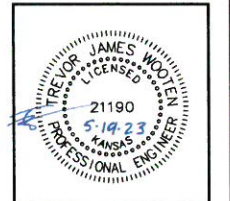
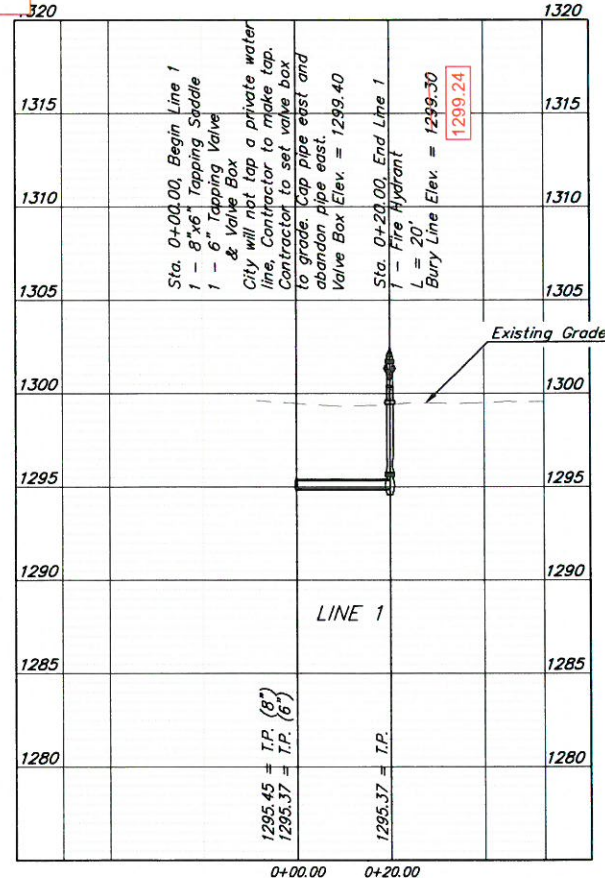


**1 FREE STANDING YARD HYDRANT INLET**  
 NOT TO SCALE



**2 FREE Standing Yard Hydrant Outlet**  
 NOT TO SCALE

DEPTH UNKNOWN  
 Contractor to Verify  
 Depth & Location of  
 Existing Water Line  
 Prior to Construction.



**BAUGHMAN COMPANY**  
 315 Ellis St.  
 Wichita, KS 67211  
 316-262-7271  
 BaughmanCo.com

FRIENDS UNIVERSITY  
**LINE 1**  
 WATER DISTRIBUTION SYSTEM  
 PROJECT NUMBER:  
 22-12-E406  
 DESIGN: TJW DRAWN: TMS  
 DATE: May 18, 2023  
 SHEET **2** OF **6**

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**BENCHMARKS:**  
 BM #1: "+" cut in curb,  
 west side of Hiram Ave., at  
 intersection of Mentor Ave.  
 Elev. = 1297.03 NAVD88

BM #2: "+" cut in sidewalk  
 near William Penn Science  
 Building.  
 Elev. = 1299.58 NAVD88

Yard Hydrant (Inlet) Sta. 0+00.00  
 486' East CL of St. Clair and Mentor St. Intersection  
 62' South CL of St. Clair and Mentor St. Intersection

Bury Line Elev. = 1299.74  
 N = 1,682,991.34 E = 1,640,160.39

Sta. 0+00.00, Begin Line 2  
 Install Free Standing Yard  
 Hydrant (Inlet).  
 Bury Line Elev. = 1299.60  
 N=1,682,990.61 E=1,640,157.08

Drip Line Box Elev. = 1299.74

Approx. 148 L.F. 6" RJPVC  
 148.69 L.F. 6" Pipe

Approx. 152 L.F. 6" RJPVC  
 159.31 L.F. 6" Pipe

90° CIMJ Bend Sta. 1+48  
 486' East CL of St. Clair and Mentor St. Intersection  
 211' South CL of St. Clair and Mentor St. Intersection

Sta. 1+48.69, Line 2  
 1 - 6" 90° CIMJ Bend  
 N=1,682,841.94 E=1,640,159.83

Sta. 3+07.00, End Line 2  
 Install Free Standing Yard  
 Hydrant (Outlet).  
 Bury Line Elev. = 1300.60  
 N=1,682,844.62 E=1,640,318.12

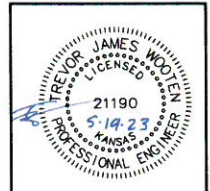
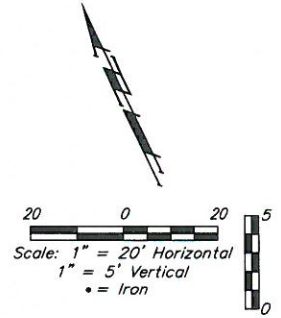
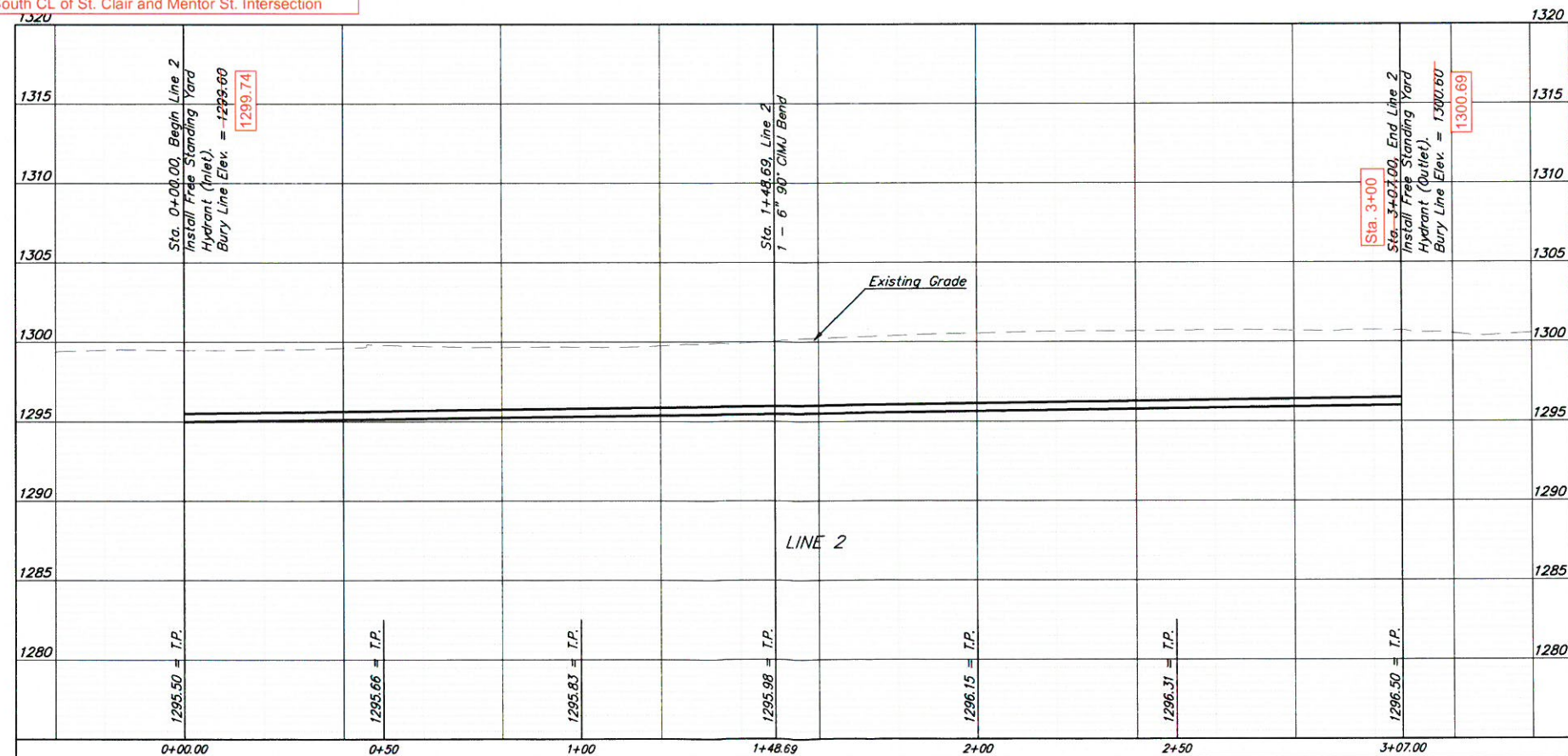
Bury Line Elev. = 1300.69  
 N = 1,682,844.69 E = 1,640,316.35

Contractor to verify depth and  
 location of existing utilities.  
 Contractor to relocate any  
 existing utilities as necessary  
 for construction.

Contact utility companies 3 weeks prior to  
 construction to coordinate temporary  
 removal/replacement.  
 Heide Bryan, Evergy, (316) 261-6354  
 Shannon Brinkmeyer, AT&T (316) 268-2931  
 Travis Taylor, Cox Comm., Travis.taylor@cox.com

UNIVERSITY  
 PLACE  
 ADDITION

Yard Hydrant (Outlet) Sta. 3+00  
 638' East CL of St. Clair and Mentor St. Intersection  
 211' South CL of St. Clair and Mentor St. Intersection



**BAUGHMAN  
 COMPANY**

315 Ellis St.  
 Wichita, KS 67211  
 316-262-7271  
 BaughmanCo.com

FRIENDS UNIVERSITY

**LINE 2**

WATER DISTRIBUTION  
 SYSTEM

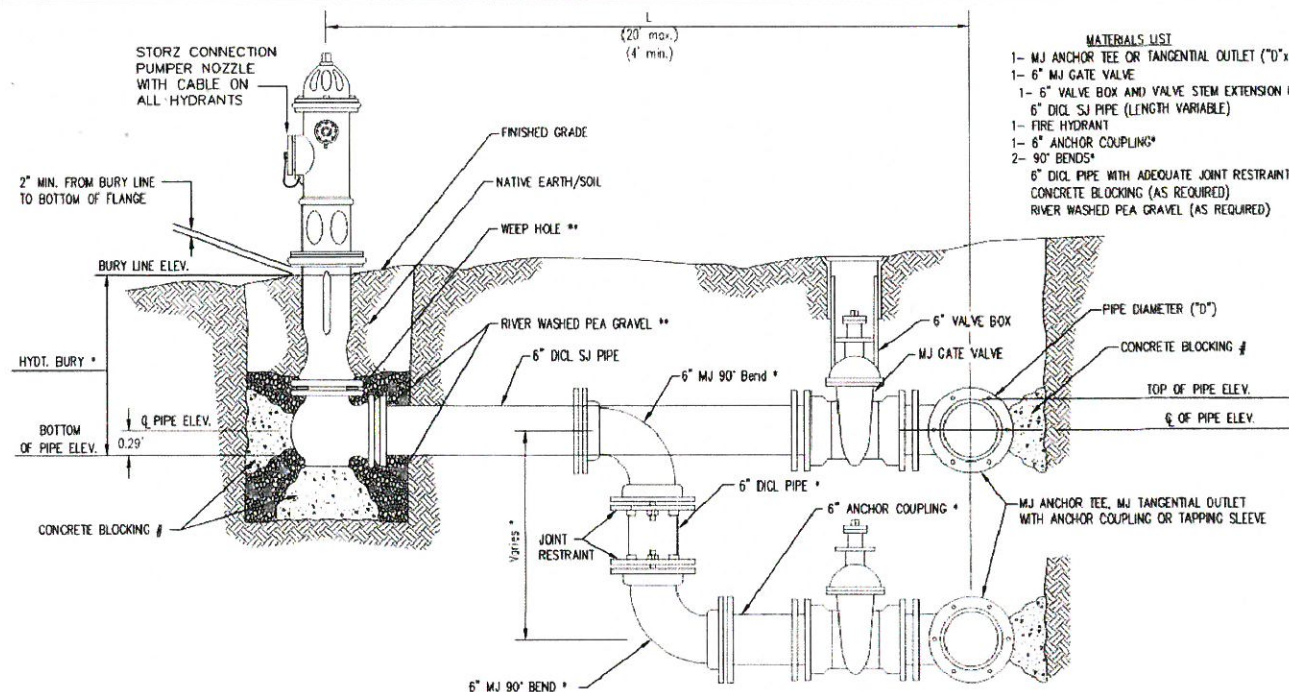
PROJECT NUMBER:  
 22-12-E406

DESIGN: T.J.W. DRAWN: T.M.S.

DATE: May 18, 2023

SHEET **3** OF **6**

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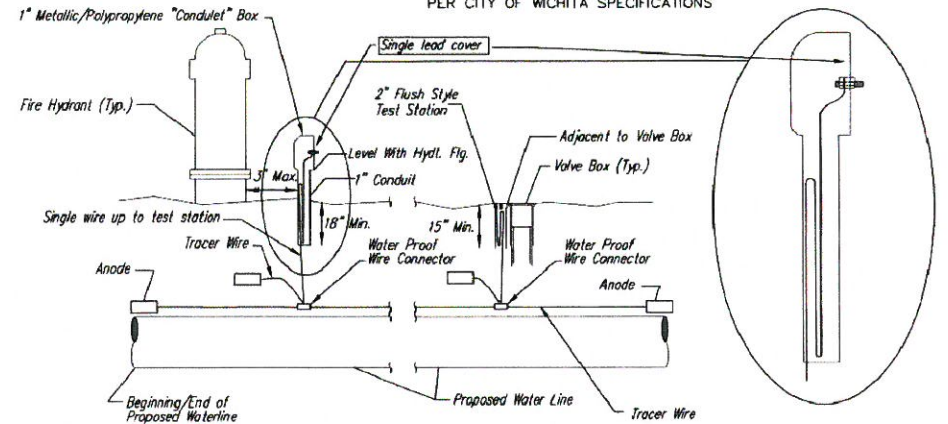
- MATERIALS LIST**
- 1- MJ ANCHOR TEE OR TANGENTIAL OUTLET (10" x 6")
  - 1- 6" MJ GATE VALVE
  - 1- 6" VALVE BOX AND VALVE STEM EXTENSION IF REQUIRED \*
  - 6" DI CL SJ PIPE (LENGTH VARIABLE)
  - 1- FIRE HYDRANT
  - 1- 6" ANCHOR COUPLING\*
  - 2- 90° BENDS\*
  - 6" DI CL PIPE WITH ADEQUATE JOINT RESTRAINT \*
  - 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 PIPE AS NECESSARY FOR VERTICAL ADJUSTMENT. THE CONTRACTOR SHALL PROVIDE ADEQUATE THRUST BLOCKING AT HYDRANT AND MEGALUGS, 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. A waterproof connector shall be used at splice locations. A complete list of approved tracer wire and waterproof connectors can be found on the City of Wichita's website at [www.wichita.gov](http://www.wichita.gov).

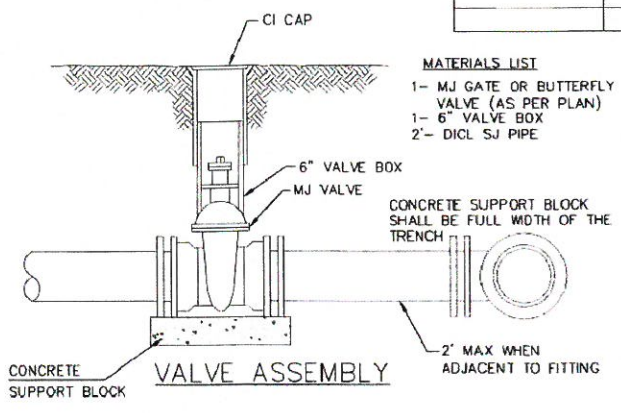
**WIRE**  
The tracer wire shall be Blue No. 12 AWG CCS with 45 mil HDPE insulation. To allow for grade adjustment, a minimum of 12" of excess wire shall be coiled at the bottom of the test station for all wires. Wire connectors shall be installed per manufacturer recommendations. Contractor shall attach wire being installed with proposed water main to any tracer wire installed with adjacent waterline projects.

**TEST STATIONS**  
The test station for fire hydrant application shall be a 1" "condulet" style station as manufactured by AGRA Industries with a removable solid cover having a single lead extending from the face or approved equal. The "conduit" style test station shall be attached to a 1" 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. The test station for valve applications shall be a 2" flush style test station with wire connector on lid. Model # 12PH7B1LP Handley Industries or CD14\*TP SnakePit as manufactured by Copperhead Industries or approved equal. 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 12" of wire within the test station. The location of all test stations shall be recorded, and shown in the as-built drawings. Flush style test stations shall not be installed in pavement or sidewalk unless approved by the Engineer. Contractor shall extend tracer wire & move flush mount test station to nearest location out of pavement or sidewalk.

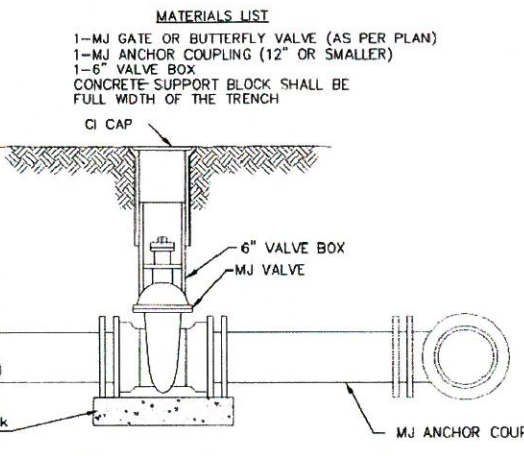
**ANODES**  
The anodes shall be 3 lb. bare zinc or magnesium. The anodes shall be buried at the same elevation as the waterline at each test station. The anodes shall be connected to 12 AWG CCS which shall be extended to the test station.

**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+20.00	1299.30	1295.37	4.5'	None
	1299.24			

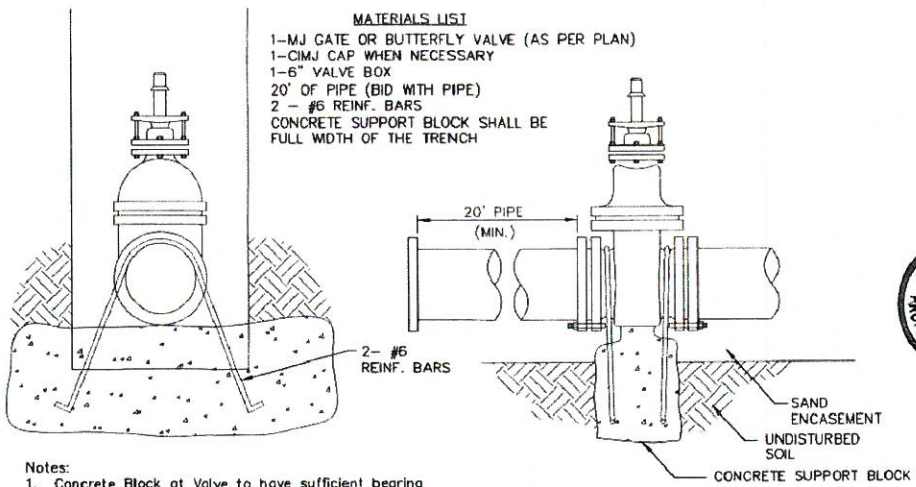


- MATERIALS LIST**
- 1- MJ GATE OR BUTTERFLY VALVE (AS PER PLAN)
  - 1- 6" VALVE BOX
  - 2- 6" DI CL SJ PIPE



- 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**



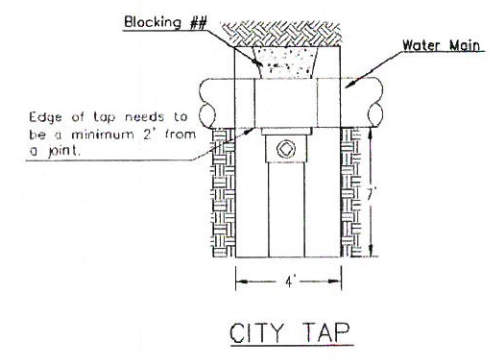
- MATERIALS LIST**
- 1- MJ GATE OR BUTTERFLY VALVE (AS PER PLAN)
  - 1- CIMJ CAP WHEN NECESSARY
  - 1- 6" VALVE BOX
  - 20" OF PIPE (BID WITH PIPE)
  - 2 - #6 REINF. BARS
  - CONCRETE SUPPORT BLOCK SHALL BE FULL WIDTH OF THE TRENCH

**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.

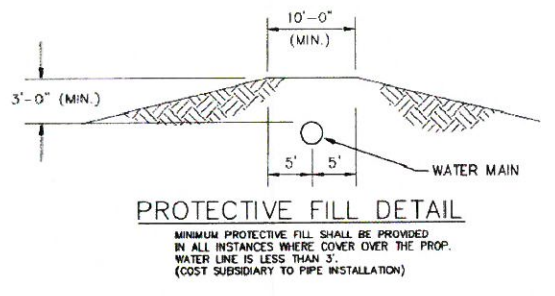
THRUST AT VALVES	
VALVE	THRUST AT 150 PSI
4"	1809 lbs.
6"	4245 lbs.
8"	7540 lbs.
12"	16965 lbs.

**ANCHORED VALVE ASSEMBLY, SPECIAL**



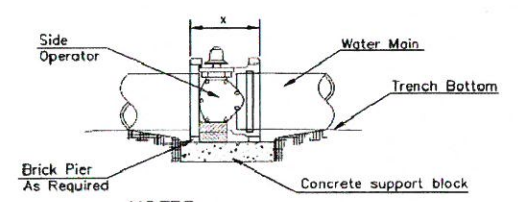
**CITY TAP**

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



**PROTECTIVE FILL DETAIL**

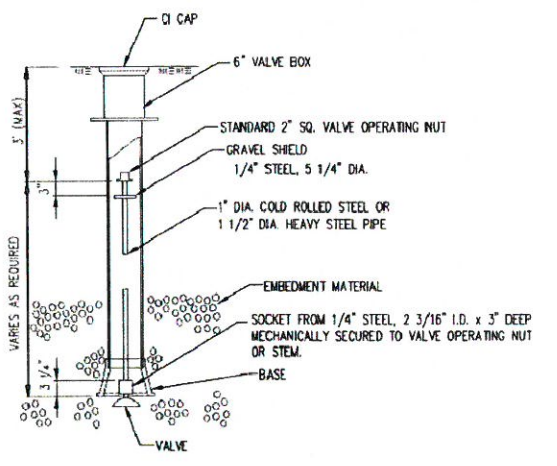
MINIMUM PROTECTIVE FILL SHALL BE PROVIDED IN ALL INSTANCES WHERE COVER OVER THE PROP. WATER LINE IS LESS THAN 3". (COST SUBSIDIARY TO PIPE INSTALLATION)



**NOTES**

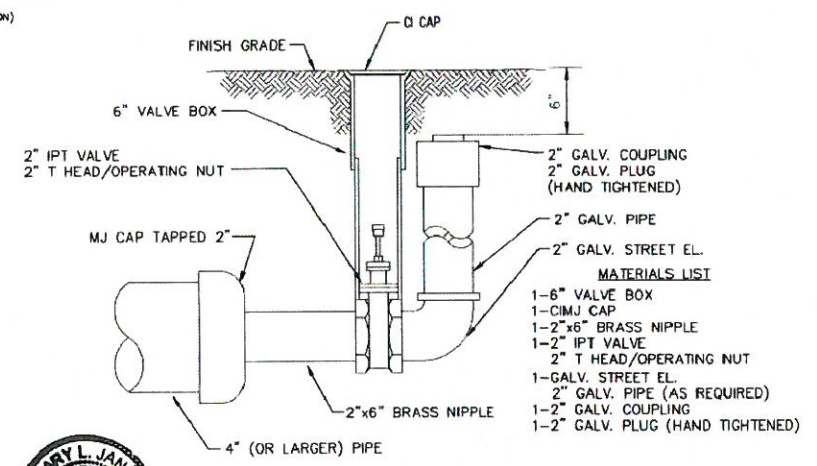
1. This detail covers Butterfly Valve installation, inclusive, regardless of type of pipe or joint used. 24" and larger lines to be detailed on plans.
2. 6" Valve Box and Cover required per City of Wichita Std. Specifications.
3. Conc. Support Block to be full width of trench.

**CONCRETE SUPPORT BLOCKING FOR BUTTERFLY VALVE INSTALLATION**



**VALVE STEM EXTENSION DETAIL**

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



**2" BLOWOFF ASSEMBLY**



**CITY OF WICHITA**  
PUBLIC WORKS & UTILITIES ENGINEERING DIVISION

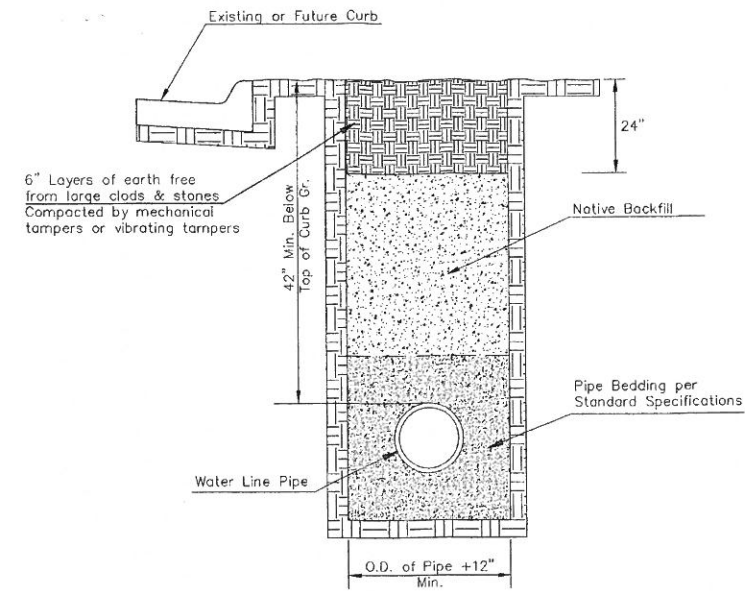
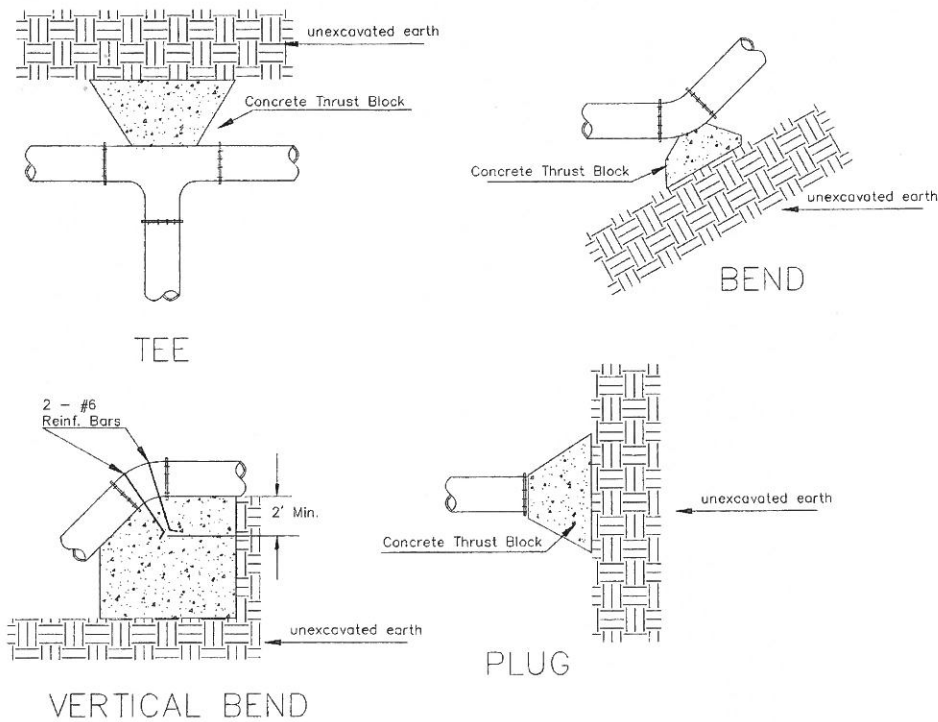
**STANDARD WATER ASSEMBLY DETAIL**  
CITY ENGINEER  
**GARY JANZEN, P.E.**

PROJECT NUMBER	OCA NUMBER	DATE

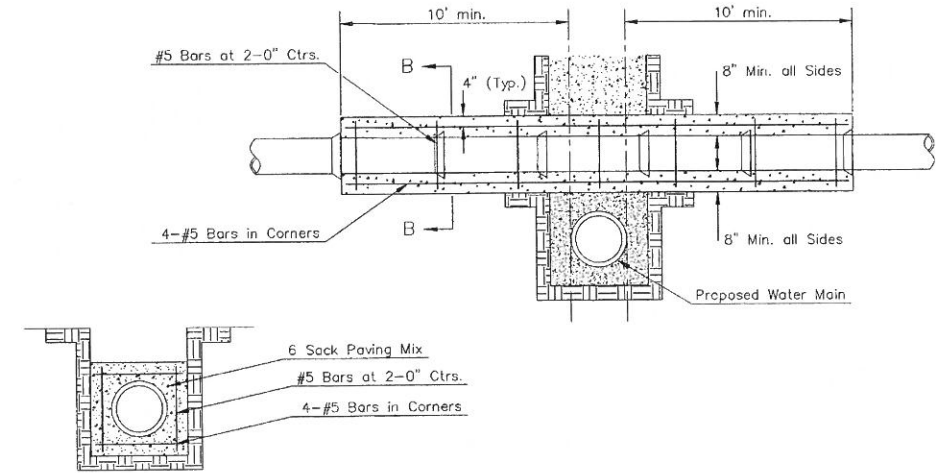
**CITY ENGINEER'S OFFICE**  
CITY HALL - SEVENTH FLOOR  
455 NORTH MAIN STREET  
WICHITA, KANSAS 67202-1620  
(316) 268-4501

SHEET  
**4 of 6**

REVISED: OCTOBER 2016



TRENCH COMPACTION IN ROAD RIGHT-OF-WAY



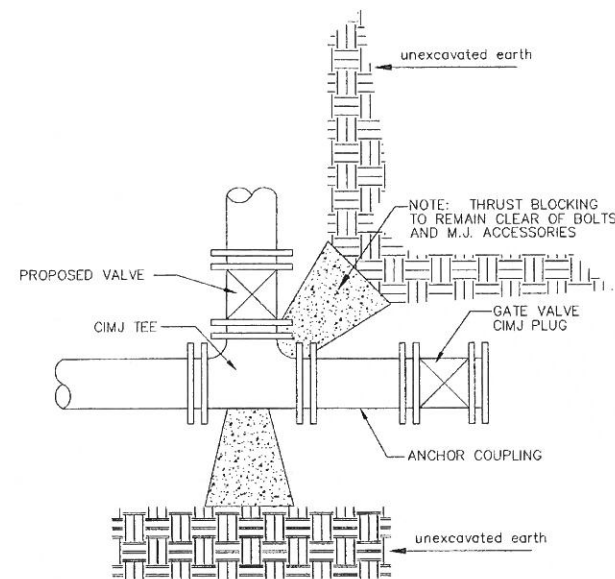
SECTION B-B

Note: Encasement to begin and end at a Bell on Sanitary Sewer Pipe.

REINFORCED CONCRETE ENCASEMENT OF SANITARY SEWER

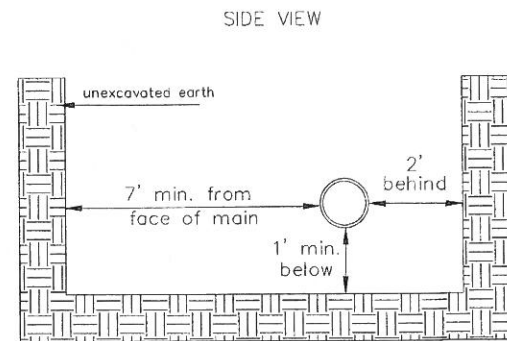
PIPE SIZE	THRUST AT FITTINGS IN TONS--AT 150#/IN <sup>2</sup> P					
	PLUG	90°	45°	22 1/2°	11 1/4°	TEE
6"	2.8	3.95	2.15	1.09	.55	2.8
8"	4.9	6.95	3.75	1.90	.96	4.9
12"	11.4	16.1	8.75	4.45	2.25	11.4
16"	20.15	28.5	15.4	7.85	3.95	20.15
20"	31.15	44.0	23.85	12.15	6.10	31.15
24"	44.55	63.0	34.1	17.4	8.75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

TYPICAL THRUST BLOCKS

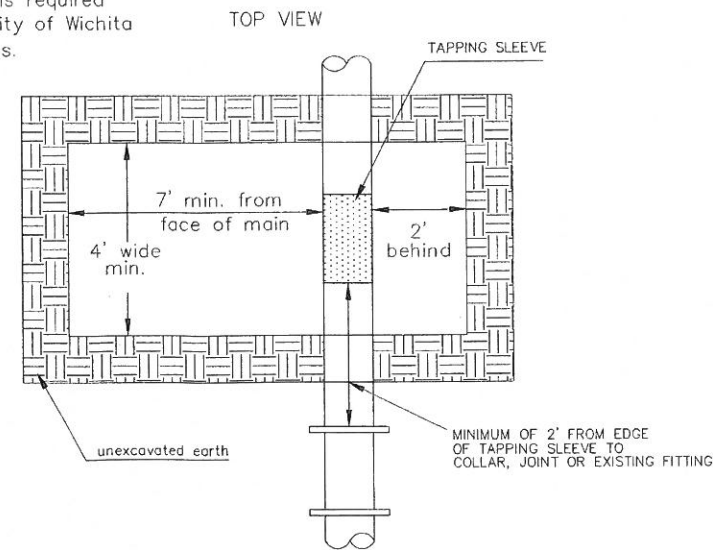


KEY BLOCK DETAIL

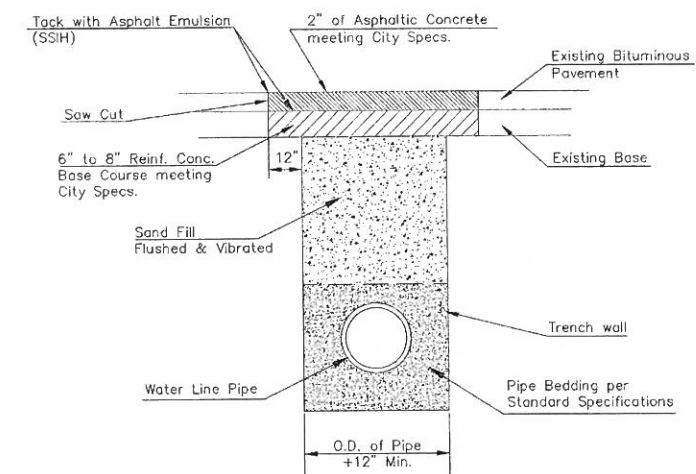
\* PLANS GOVERN UNLESS OTHERWISE NOTED ON PLANS



Note: When shoring is required it is to be per The City of Wichita Standard Specifications.



EXCAVATION FOR WET TAP



PAVEMENT REPLACEMENT & TRENCH COMPACTION UNDER EXISTING AND PROPOSED CITY ROADS

REVISED: JULY 2015



**CITY OF WICHITA**  
PUBLIC WORKS & UTILITIES ENGINEERING DIVISION

**MISCELLANEOUS WATER DETAILS**  
CITY ENGINEER  
**GARY JANZEN, P.E.**

PROJECT NUMBER	OCA NUMBER	DATE
CITY ENGINEER'S OFFICE CITY HALL - SEVENTH FLOOR 455 NORTH MAIN STREET WICHITA, KANSAS 67202-1620 (316) 268-4501		SHEET <b>5 of 6</b>

# FRIENDS UNIVERSITY ADDITION WICHITA, SEDGWICK COUNTY, KANSAS

State of Kansas) SS We, Baughman Company, P.A., Surveyors in  
Sedgwick County) do hereby certify that we have surveyed  
and platted "FRIENDS UNIVERSITY ADDITION", Wichita, Sedgwick County,  
Kansas and that the accompanying plat is a true and correct exhibit  
of the property surveyed, described as and being a replat of Lots 139  
through 199 odd and even inclusive, and the unnumbered parcel lying  
west of said Lot 199, all in Hendryx Subdivision of Lots in University  
Place Addition to Wichita, Kansas, together with Bonn Ave. and the  
alleys lying between said lots, and together with part of Mentor Ave.,  
Hiram Ave., and part of Lots 28, and 30 on Everett Ave., University  
Place Addition to the City of Wichita, Kansas, and together with part  
of Lots 31, 33, and 35 on St. Clair Ave., in said University Place Addition,  
all being more particularly described as beginning at the N.E. Corner of  
Lot 140 in said Hendryx Subdivision; thence N89°58'49"E along the  
extended north line of said Lot 140, 13 feet; thence S00°E parallel with  
the west right-of-way line of Hiram Ave., 424.71 feet to a point of  
intersection with the south right-of-way line of Mentor Ave. extended  
east; thence S89°59'42"W along said south right-of-way line of  
Mentor Ave., 453.18 feet; thence N00°02'23"W, 75 feet; thence S89°59'42"W,  
143 feet; thence S00°02'23"E, 49 feet; thence S89°59'42"W, 340.63 feet;  
thence S70°42'23"W, 64.67 feet; thence S66°07'45"W, 68.47 feet;  
thence S64°32'37"W, 172.40 feet to a point on the east right-of-way  
line of St. Clair Ave.; thence N00°06'32"W along said east right-of-way  
line, 49.93 feet to a point on the southeasterly right-of-way line  
of the St. Louis, Fort Scott & Wichita Railroad now Missouri Pacific  
Railroad; thence N57°17'42"E, along said right-of-way line,  
873.32 feet to a point on the north line of said Lot 176 in Hendryx  
Subdivision; thence N89°58'49"E, 470.36 feet to the point of beginning.

All being situated in the NW/4 of Sec. 30, Twp. 27-S,  
R-1-E of the 6th P.M., Sedgwick County, Kansas.

Existing public easements and dedications being vacated  
by virtue of K.S.A. 12-512(b).

Baughman Company, P.A.

*Michael D. Conrey*  
Michael D. Conrey, L.S. 9716  
Surveyor

Know all men by these presents that we,  
the undersigned, have caused the land in the surveyors certificate to  
be platted into a Lot and a Block to be known as "FRIENDS UNIVERSITY  
ADDITION", Wichita, Sedgwick County, Kansas. The public easements are  
hereby granted as indicated for the construction and maintenance of all  
all public utilities. The street is hereby dedicated to and for the use  
of the public. All abutters rights of access to and from Maple Street over  
and across the north line of Lot 1, Block A, are hereby granted to the  
City of Wichita, Kansas EXCEPT the east 50 feet of the east 145.45 feet  
thereof.

Friends University

*Randall C. Doerksen*  
Vice-President  
Randall C. Doerksen

State of Kansas) SS The foregoing instrument acknowledged be-  
fore me, this 30th day of August, 1994, by Randall C. Doerksen,  
Vice-President of Friends University, on behalf of the university.

*Michael E. Franz*  
Notary Public

My App't. Exp. 3-3-95

MICHAEL E. FRANZ  
NOTARY PUBLIC  
STATE OF KANSAS

We, Boatmen's First National Bank of Kansas  
City, holder of a mortgage on the above described property do hereby  
consent to this plat of "FRIENDS UNIVERSITY ADDITION", Wichita, Sedgwick  
County, Kansas.

*James P. Colgan*  
Vice President  
JAMES P. COLGAN

State of Kansas) SS The foregoing instrument acknowledged be-  
fore me, this 2nd day of September, 1994, by  
JAMES P. COLGAN, Vice Pres. of Boatmen's First National Bank of  
Kansas City, on behalf of the bank.

*Paul G. Clarkin*  
My App't. Exp. 3-20-1996  
PAUL G. CLARKIN

Entered on transfer record this 1st day  
of November, 1994.

*Susan E. Crockett-Spoon*  
County Clerk  
Susan E. Crockett-Spoon



State of Kansas) SS This is to certify that this plat has been  
filed for record in the office of the Register of Deeds, this 1st day  
of NOVEMBER, 1994, at 3:00 o'clock P.M. and is duly recorded.

*Pat Kettler*  
Register of Deeds  
Pat Kettler

*Ed Resa*  
Deputy  
Ed Resa

This plat of "FRIENDS UNIVERSITY ADDITION",  
to Sedgwick County, Kansas has been submitted to and approved by  
the Wichita-Sedgwick County Metropolitan Area Planning Commission,  
Wichita, Kansas.  
Dated this 30th day of June, 1994.  
Wichita-Sedgwick County Metropolitan Area Planning Commission

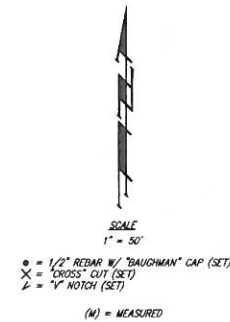


*James D. Miner*  
Chairman  
James D. Miner  
*Marvin S. Krout*  
Secretary  
Marvin S. Krout

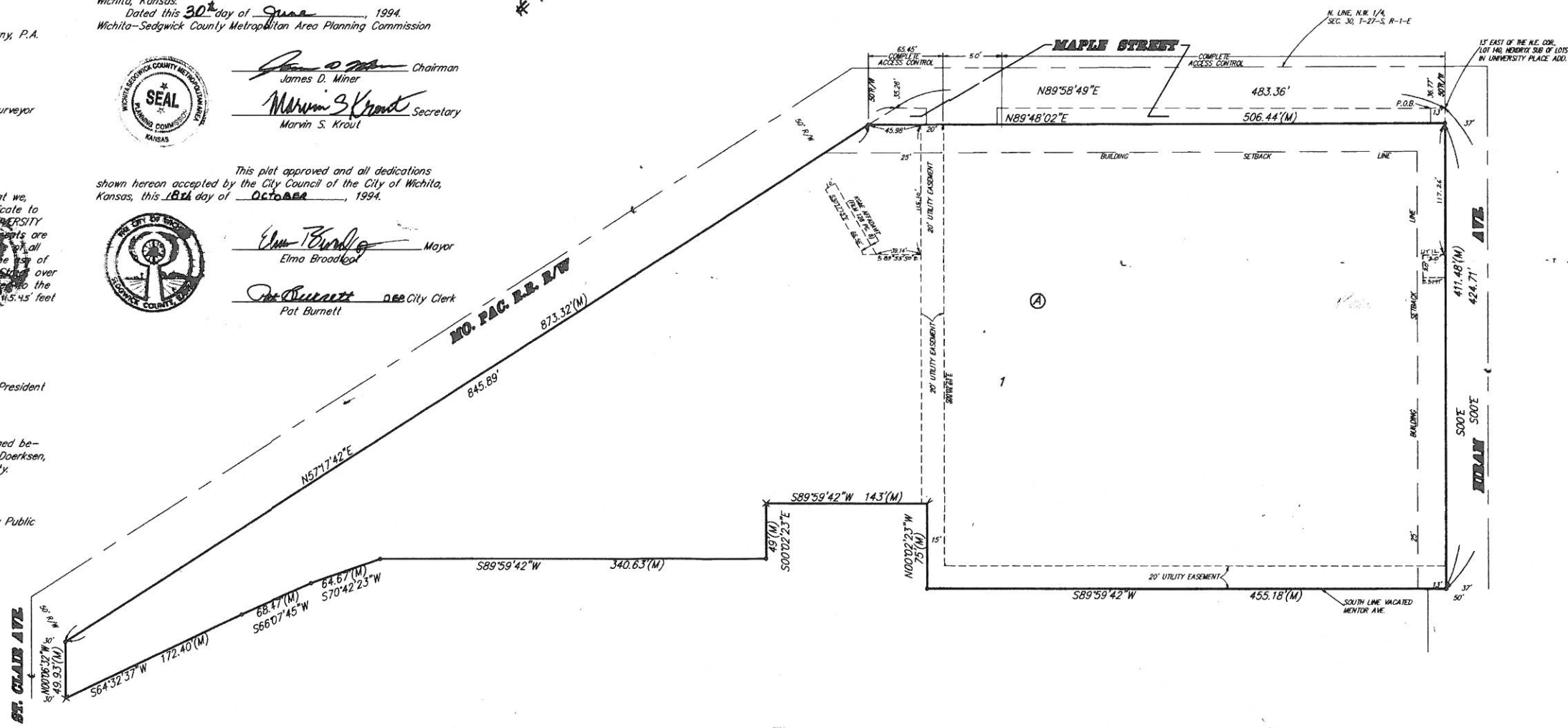
This plat approved and all dedications  
shown hereon accepted by the City Council of the City of Wichita,  
Kansas, this 18th day of October, 1994.



*Elmo Broadfoot*  
Mayor  
Elmo Broadfoot  
*Pat Burnett*  
City Clerk  
Pat Burnett



FOR REFERENCE ONLY  
NOT TO SCALE



20.00 ct

**B**  
BAUGHMAN  
COMPANY  
315 Ellis St.  
Wichita, KS 67211  
316-262-7271  
BaughmanCo.com

FRIENDS UNIVERSITY

**COPY OF  
PLAT**

WATER DISTRIBUTION  
SYSTEM  
PROJECT NUMBER:  
22-12-E406  
DESIGN: DRAWN:  
DATE: January 23, 2023  
SHEET 6 OF 6

File: E:\Projects\Friends University - William Penn Science Addition - PPW (22-12-E406)\Engineering\PPW\PPW.dwg