

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	87 N-0761-01	2025	1	11

CONSTRUCTION PLANS FOR PROPOSED 17TH STREET NORTH WATER DISTRIBUTION SYSTEM

FOR
THE CITY OF WICHITA,
SEDGWICK COUNTY, KANSAS
Paul Gunzelman, P.E. City Engineer

Waterline Project

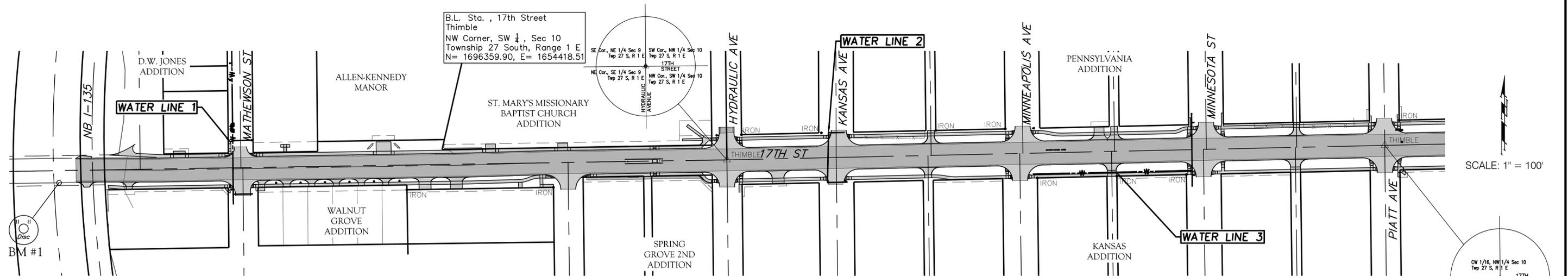
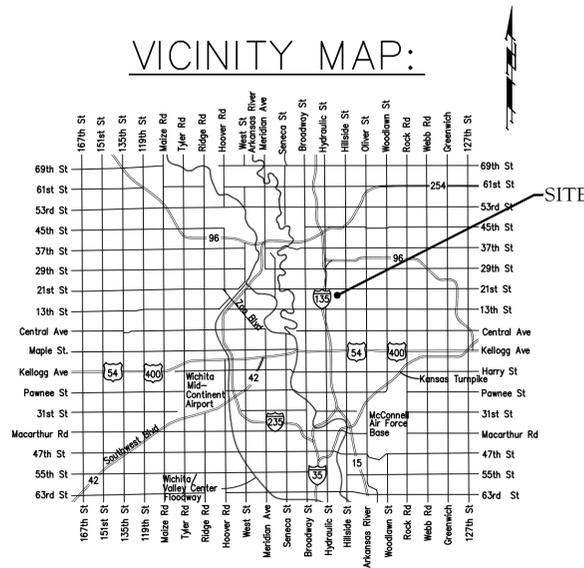
Project Number 448-2024-003398
Org Code 54250323
Munis Number W3023

August 2025

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VICINITY MAP:



BENCHMARKS:

BM #1: COW disc on top of curb,
south side of 17th St. N., ~370'
west of Matthewson.
Elev. = 1312.48 NAVD88

BM #2: "□" on highline pole, SE
corner of 17th St. N. &
Pennsylvania Ave.
Elev. = 1308.25 NAVD88



August 5, 2025

BAUGHMAN COMPANY
315 Ellis St. Wichita, KS 67211 316-262-7271
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GENERAL NOTES

- The Contractor shall comply with all applicable safety regulations. All construction shall be completed following current City Standard Specifications and Special Provisions.
- 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
 Eversource 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.
- 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.
- All elevations shown are NAVD88.
- 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 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 no additional cost to the Owner.
- 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.
- All excess excavation shall be removed from site, incidental to lump sum bid item "Site Restoration".
- 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. If trimming is necessary, a chainsaw shall be used. Breaking limbs with equipment will not be allowed. An on-site pre-construction meeting will occur prior to any construction to discuss tree removal, tree protection, and tree trimming. All trimming operations shall be considered SUBSIDIARY to the Bid Item "Site Clearing".

- Prior to bidding the project, each bidder shall visit the site and satisfy himself of surface & subsurface conditions. Each bidder shall also fully inform himself as to the extent of the scope of work to be performed. Each bidder shall also be aware that no additional compensation will be awarded for extra work that should have been evaluated prior to bidding.
- Adjacent Buildings, Structures, Parking Lots, Driveways, etc. other than those shown for replacement shall be protected from damage during construction of this Project.
- 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 the Manual on Uniform Traffic Control Devices (MUTCD) as published by the US Department of Transportation, Federal Highway Administration. All costs associated with construction markings and signage shall be included in the Lump Sum Bid Item "Traffic Control".

- All traffic control devices in the work zone (including markings and signs) and their installation and maintenance shall comply with the latest edition of the Manual on Uniform Traffic Control Devices (MUTCD). All traffic control devices in the traveled way or clear zone shall be crashworthy (NCHRP Report 350 or MASH compliant). http://safety.fhwa.dot.gov/roadway_dept/policy_guide/road_hardware/wzd
- Contractor shall erect Sidewalk Closed and Sidewalk Closed Ahead signs on Type II barricades, when pedestrian sidewalks are located inside the Contractor's Work Zone. These Signs and barricades shall be considered SUBSIDIARY to the Bid Item "Traffic Control".
- All construction equipment, including vehicles, materials, and debris, shall be stored outside the clear zone where this cannot be achieved the contractor shall place appropriate signs, object identifiers, and/or barricades in compliance with the latest addition of the MUTCD.
- Access to residential properties shall be maintained at all time during construction.
- Limits of earthwork shall match existing ground elevations at the right-of-way line unless otherwise noted on the plans with a new finished grade elevation.
- All areas disturbed during construction that will not be under proposed pavement shall be restored to match existing conditions per City Specifications and shall be included in the Lump Sum Bid Item "Sodding".
- Lawn irrigation lines, sprinkler heads and valve boxes maybe encountered within the project limits that maybe in conflict with proposed construction and not identified on the plans.

The Contractor shall notify property owners who have sprinkler systems or other improvements in conflict with new construction. The Contractor will be required to remove improvements, should they not be removed by the owner at the time of construction. The Contractor will be required to salvage sprinkler heads and/or valves and place in property owners yard. Sprinkler systems or other improvements not in conflict with the new construction shall be protected from damage and shall remain in place. Work shall be considered SUBSIDIARY to "Site Clearing"

- Total area disturbed estimated to be 1,500 Square Yards, to be used for bidding purposes only. Actual area disturbed will be based on Contractors Means and Methods and should be limited to least amount practical.
- All earthwork quantities are based on raw surface volume comparisons. No shrink or swell factors have been applied to quantities shown on plans.

EROSION CONTROL NOTES

- All erosion control shall be a part of the 17th Street Roadway Reconstruction. Contractor shall maintain all existing and proposed erosion control measures including silt fencing, erosion control mat, straw bales, and inlet barriers, throughout construction until project is accepted by the City of Wichita.

WATER NOTES

- The Contractor shall comply with all applicable safety regulations. All water mains and appurtenances shall be installed in accordance with City of Wichita, Kansas Standard Specifications and Special Provisions for Water Main Installations.

- 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.

- Requests for short term water interruptions will 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 services 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.

- Water valves 12" or larger are to be operated by the City Water Distribution Division. Contractor to provide notice at least 48 hours in advance through Dispatch at 316-291-8921. 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.

- Contractor shall limit the extent of trench openings overnight and weekends to less than 50 feet.
- 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 cost for all equipment, materials, and labor necessary to install waterline fittings shall be SUBSIDIARY to pipe installation.
- DI-CL pipe is required for any length of pipe 11' or shorter and as noted in the plan and profile sheets.
- 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.
- Pipe Deflection at pipe joints or couplings shall not exceed the pipe manufactures recommended maximum.
- Existing water mains and service connections are to remain in service until proposed new mains have been completed, pressure and water quality tested, and passed.

- Temporary Blow-off Valves necessary to flush lines at existing water line tie-ins shall be installed and removed prior to final connections. Cost to be SUBSIDIARY to other items in the project.

- Where plans indicate a tapping sleeve and valve, the City of Wichita will provide and install for lines less than 16" in diameter. The valve box will be provided by the City and INSTALLED BY THE CONTRACTOR. The contractor must install the blocking and the valve box, with the valve box installed at grade, per City details. Fittings for these Taps and ALL other fittings shall be considered SUBSIDIARY to the project.
- Any existing waterline joint exposed during construction shall be replaced within four (4) feet of proposed joint.
- Abandonment of the existing water system includes the removal or capping of existing lines, valve removal, and/or valve box and lid removal, as detailed in the plans. All existing piping to be abandoned shall be plugged and capped at each end and shall be completely removed from service no more than 24" from the point of disconnection from water mains that remain in service. This work will be SUBSIDIARY to the Bid Item "Pipe Abandoned in Place".

- Water service lines to be replaced shall be in accordance with the City of Wichita Specifications and Special Provisions. The unit price bid for new service lines shall include all necessary material and labor necessary for installation as detailed. Costs to be SUBSIDIARY to the Bid Items "Service Line, Long" or "Service Line, Short". Long Services cross the centerline of a nearby street and Short Services do not.
- Water meter locations to be abandoned, as noted in the plans, shall have water meter removed (if present), along with setter, meter box, ring and lid. This location shall then be backfilled and compacted to match surrounding grade. Costs to be SUBSIDIARY to the Bid Items "Water Meter Removed".

- The contractor shall return all salvageable valves, hydrants, fittings, meter setters, rings & lids, etc. to the City of Wichita Water Distribution Department Yard located at 1825 S. McLean Blvd. The Contractor shall have all salvaged material checked by the Storekeeper.

- When required and as detailed in the plans, the Contractor shall remove and replace street pavement for water line construction. Full-depth Concrete Pavement or full-depth Asphalt Pavement shall be used to replace existing asphalt surfaced pavement over Concrete Pavement. Costs to be included in the Bid Item "Pavement Removed and Replaced" paid for by the Square Yard.
- Contractor shall install temporary pavement utility patches in locations where pavement will be replaced in the near future and at the direction of the owner. Costs to install and remove temporary patches to be included in the bid item "AC Pavement, Temporary(Utility Patch)" paid for by the Square Yard. Quantity maybe adjusted throughout project to accommodate construction phasing.

- Waterlines installed by open cut methods under street pavement shall be backfilled with sand, flushed and vibrated, from 6" below pipes to within 2' below the bottom of the rock base or finished grade per Detail WL-104. Sidewalk or Sidewalk Ramps to be sand filled, flushed and vibrated, from 6" below pipe to the bottom of the sidewalk pavement. Costs to be SUBSIDIARY to the Bid Item "Fill, Sand (Flushed & Vibrated)" paid for by the Linear Foot.

- Existing street signs in conflict with construction activities shall be removed prior to construction, protected, stored, and re-installed by the Contractor. All work and materials associated with this effort shall be considered SUBSIDIARY to the Bid Items "Site Clearing" and "Site Restoration" unless specifically identified in the plans otherwise.

- For bid items "Service Line, Long" and "Service Line, Short" shall include all required material to relocate, replace, or install new services. Including but not limited to the removal of existing ring, lid, meter box, and setter, backfill, installation of new or re-connection to existing service saddle and corp stop, service line, new meter box, setter, ring, and lid, and connection to the existing service line. Bid item also includes the removal and re-installation of the existing meter. All material shall be the same size as the meter, as noted in the Water Service Table in the project drawings.

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Summary of Quantities

Bid Item Code	Bid Item	Quantity	Unit
Lump Sum Bid Items - Waterline			
1211000	Site Clearing	1	LS
1212000	Site Restoration	1	LS
4505000	Pipe, Connect to Existing	1	LS
8810000	Traffic Control	1	LS
9030000	Seeding	1	LS
Measured Bid Items - Waterline			
1228000	Fill, Sand (Flushed & Vibrated)	436	LF
4504000	Pipe Abandoned in Place	837	LF
4580004	Pipe, WL 4" (PVC)(Open Trench)	80	LF
4580008	Pipe, WL 8" (PVC)(Open Trench)	289	LF
4580008	Pipe, WL 8" (DI-CL)(Open Trench)	35	LF
4580008	Pipe, WL 8" (PVC)(Directional Drill)	610	LF
7511000	Fire Hydrant Assembly	7	EA
7512000	Fire Hydrant Removl	5	EA
7542000	Water Meter Removed	6	EA
7522001	Service Line, Long 1"	1	EA
7524001	Service Line, Short 1"	13	EA
7531100	Valve Assembly, Blowoff (2")	4	EA
7533008	Valve Assembly, 8"	2	EA
7533008	Valve Assembly, 8" Special	3	EA



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CITY OF WICHITA
 17TH STREET

WL GENERAL NOTES

WATERLINE PLANS

PROJECT NUMBER:
 472-2024-003398
 23-04-E485

DESIGN: BDC DRAWN: BDC

DATE: August 5, 2025

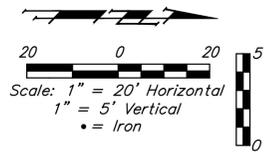
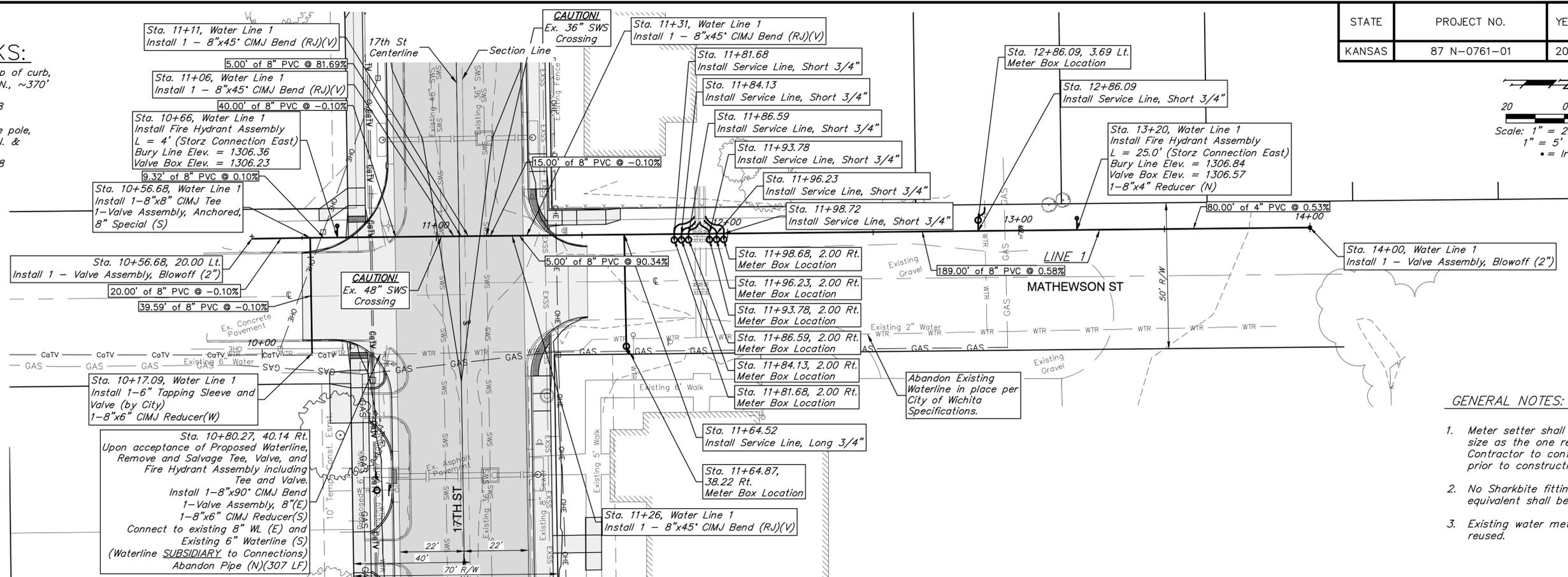
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STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	87 N-0761-01	2024	3	11

BENCHMARKS:

BM #1: COW disc on top of curb, south side of 17th St. N., ~370' west of Mathewson.
Elev. = 1312.48 NAVD88

BM #2: "□" on highline pole, SE corner of 17th St. N. & Pennsylvania Ave.
Elev. = 1308.25 NAVD88

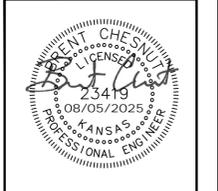
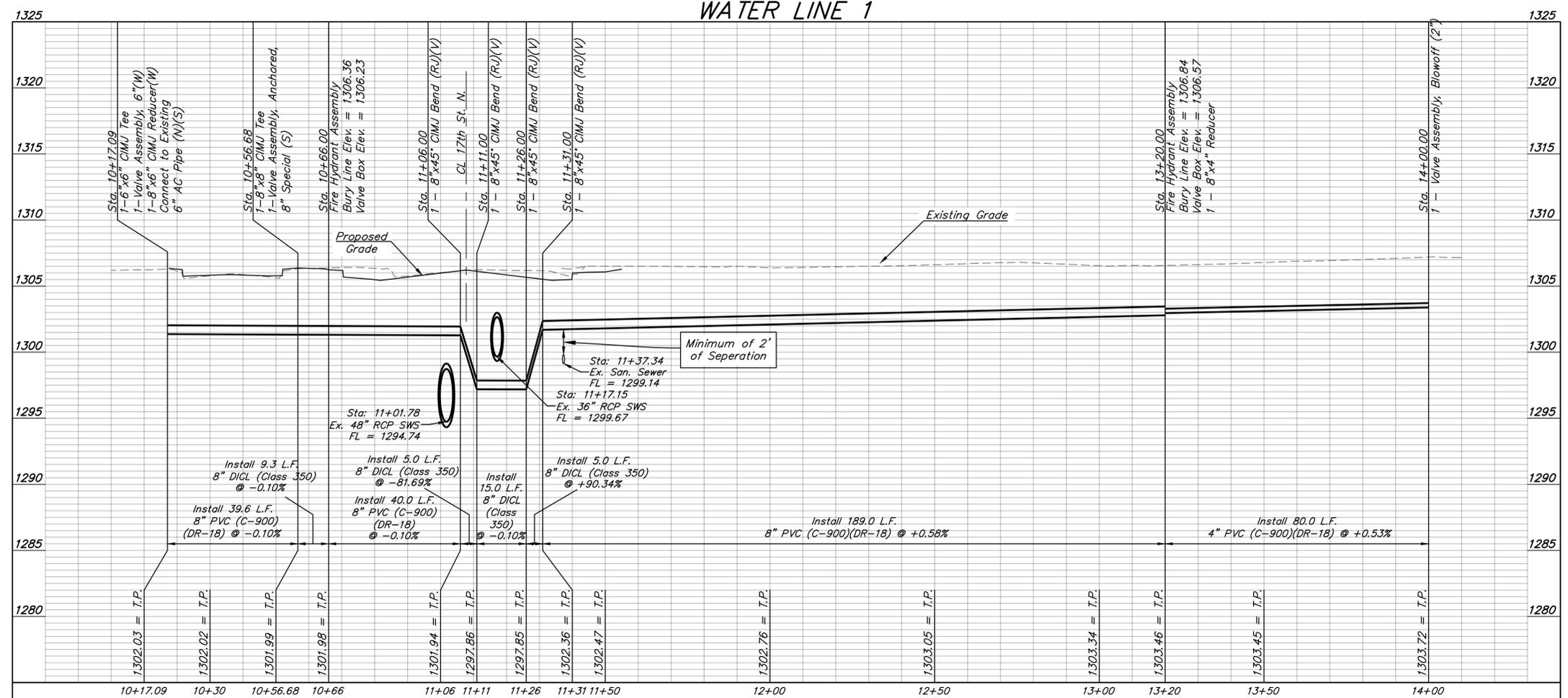


GENERAL NOTES:

- Meter setter shall be the same size as the one removed. Contractor to confirm sizes prior to construction.
- No Sharkbite fittings or equivalent shall be permitted.
- Existing water meter to be reused.

WATER LINE 1

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



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CITY OF WICHITA
17TH STREET

**WL P&P - WL 1
MATHEWSON STREET**

WATERLINE PLANS

PROJECT NUMBER:
472-2024-003398
23-04-E485

DESIGN: BDC DRAWN: BDC

DATE: August 5, 2025

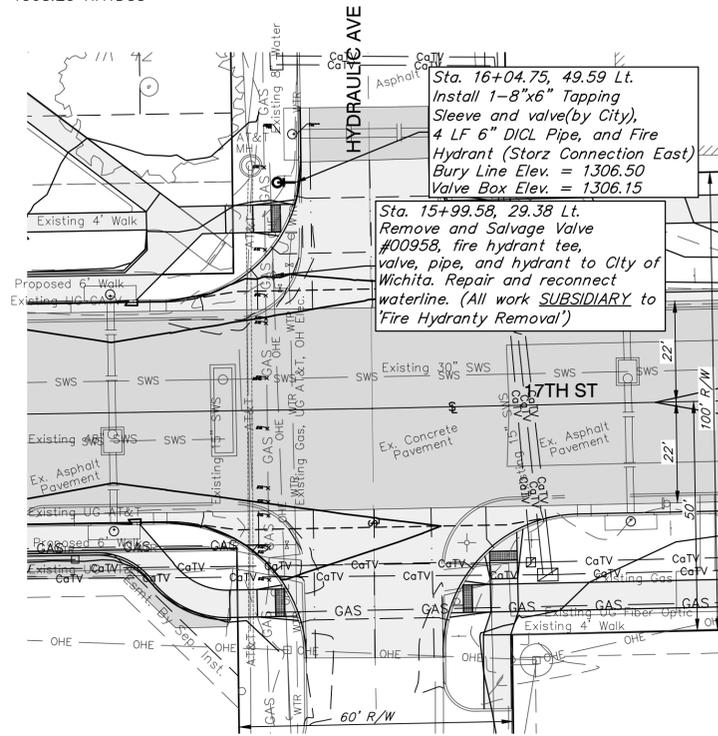
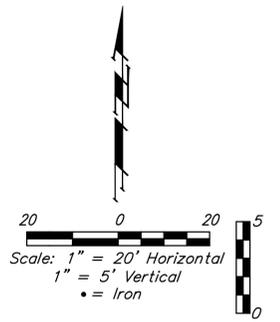
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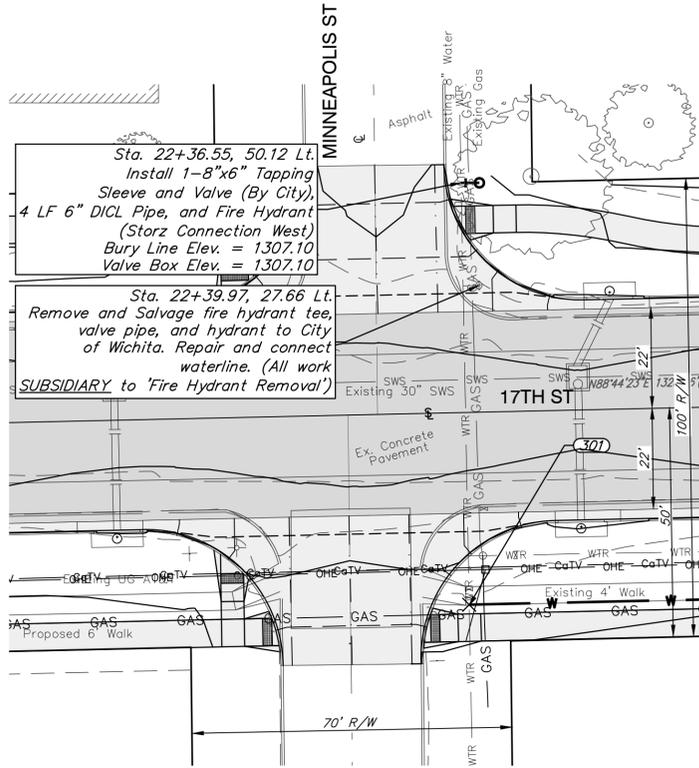
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KANSAS	87 N-0761-01	2024	6	11

BENCHMARKS:

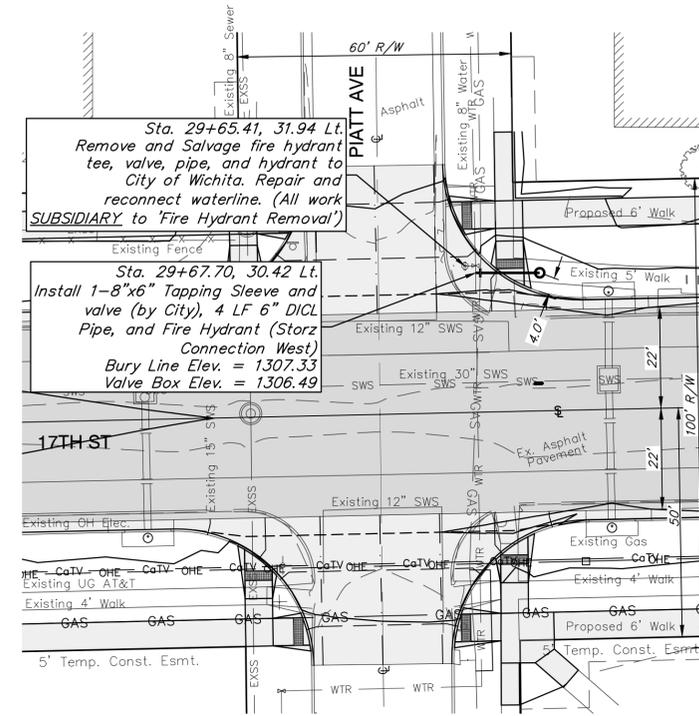
BM #2: "□" on highline pole,
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Pennsylvania Ave.
Elev. = 1308.25 NAVD88



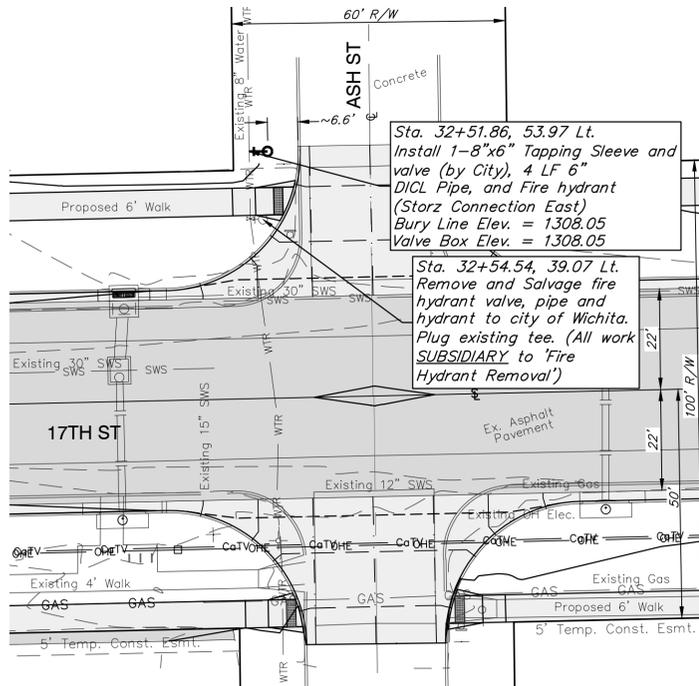
17TH AND HYDRAULIC
SCALE 1:20



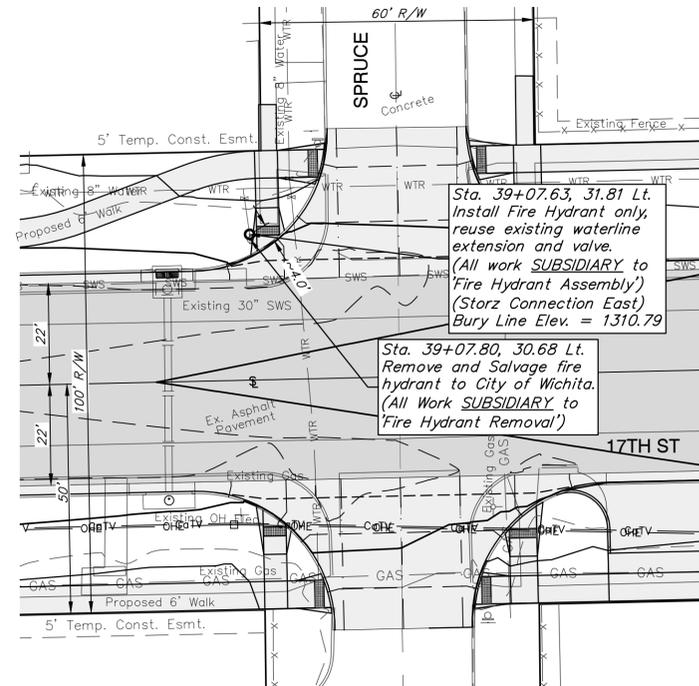
17TH AND MINNEAPOLIS
SCALE 1:20



17TH AND PIATT
SCALE 1:20



17TH AND ASH
SCALE 1:20



17TH AND SPRUCE
SCALE 1:20

GENERAL NOTES:

- Contractor to Field Locate existing waterline to determine depth and Fire Hydrant Stem Length prior to Construction.



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CITY OF WICHITA
17TH STREET

FIRE HYDRANT RELOCATIONS

WATERLINE PLANS

PROJECT NUMBER:
472-2024-003398
23-04-E485

DESIGN: BDC DRAWN: BDC

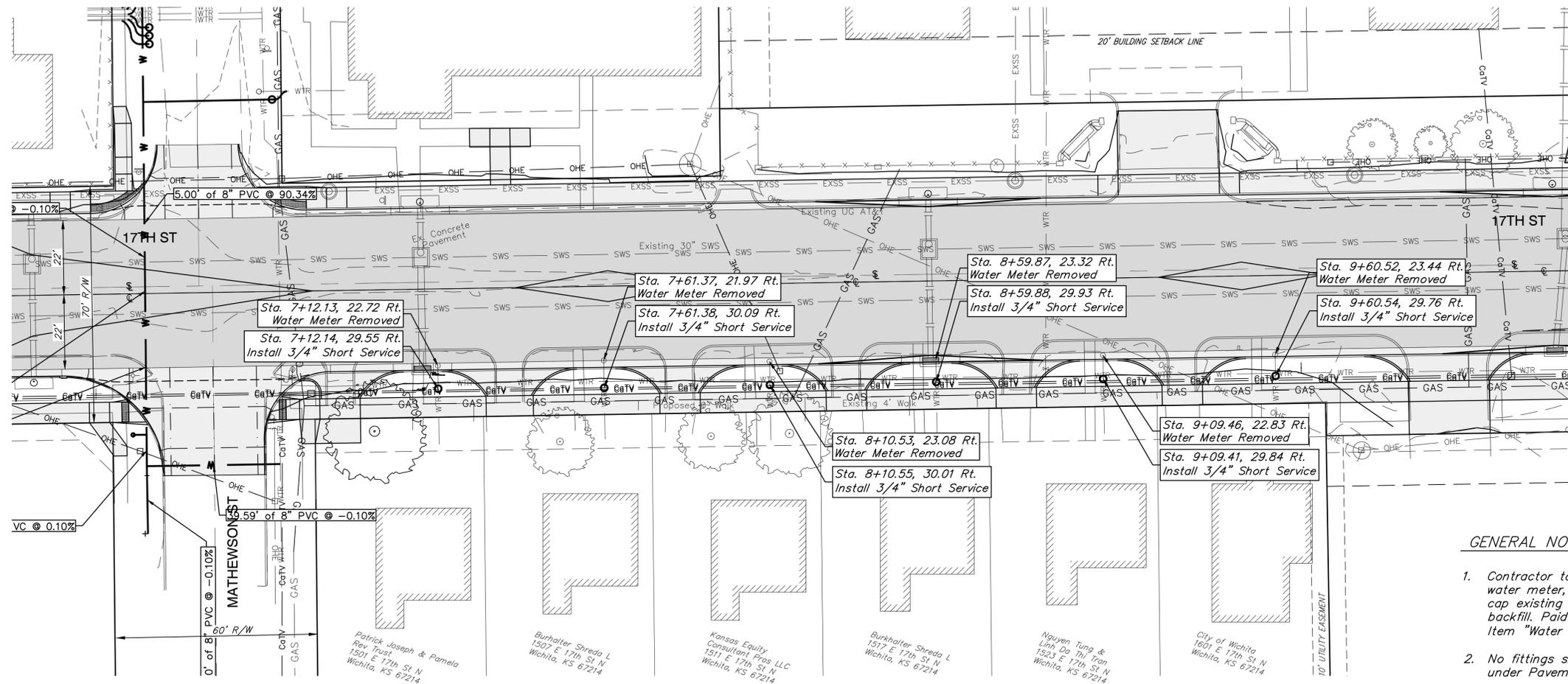
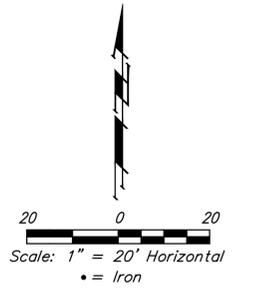
DATE: August 5, 2025

SHEET OF
6 11

BENCHMARKS:

BM #2: "□" on highline pole,
SE corner of 17th St. N. &
Pennsylvania Ave.
Elev. = 1308.25 NAVD88

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17TH AND MATHEWSON
SCALE 1:20

Water Service Table					
Address	Saddle WL Sta.	Service Length	Service Size	Meter Size	Meter Brand
1502 E 17th St N Wichita, KS 67214	11+64.52	Long	3/4"	5/8" - 3/4"	Badger
1460 E 17th St N Wichita, KS 67214 (200A)	11+81.68	Short	3/4"	3/4"	Badger
1460 E 17th St N Wichita, KS 67214 (200B)	11+84.13	Short	3/4"	3/4"	Badger
1460 E 17th St N Wichita, KS 67214 (300A)	11+86.59	Short	3/4"	3/4"	Badger
1460 E 17th St N Wichita, KS 67214 (300B)	11+93.78	Short	3/4"	3/4"	Badger
1460 E 17th St N Wichita, KS 67214 (100A)	11+96.23	Short	3/4"	3/4"	Badger
1460 E 17th St N Wichita, KS 67214 (100B)	11+98.72	Short	3/4"	3/4"	Badger
1815 N Mathewson Wichita, KS 67214	12+86.09	Short	3/4"	5/8" - 3/4"	Badger
1501 E 17th St N Wichita, KS 67214	7+12.14	Short	3/4"	5/8" - 3/4"	Badger
1507 E 17th St N Wichita, KS 67214	7+61.38	Short	3/4"	5/8" - 3/4"	Badger
1511 E 17th St N Wichita, KS 67214	8+10.55	Short	3/4"	5/8" - 3/4"	Badger
1517 E 17th St N Wichita, KS 67214	8+59.88	Short	3/4"	5/8" - 3/4"	Badger
1523 E 17th St N Wichita, KS 67214	9+09.41	Short	3/4"	5/8" - 3/4"	Badger
1601 E 17th St N Wichita, KS 67214	9+60.54	Short	3/4"	5/8" - 3/4"	Badger

GENERAL NOTES:

- Contractor to remove existing water meter, setter, meter box, cap existing service line, and backfill. Paid for under the Bid Item "Water Meter Removed".
- No fittings shall be installed under Pavement.
- Meter setter shall be the same size as the one removed. Contractor to confirm sizes prior to construction.
- No Sharkbite fittings or equivalent shall be permitted.
- Install new service tap minimum 2' from existing service tap, new corp stop, meter box, and copper service tubing as needed. Existing water meter to be reused. Paid for under the Bid Item "Short/Long Service".



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CITY OF WICHITA
17TH STREET

METER RELOCATIONS

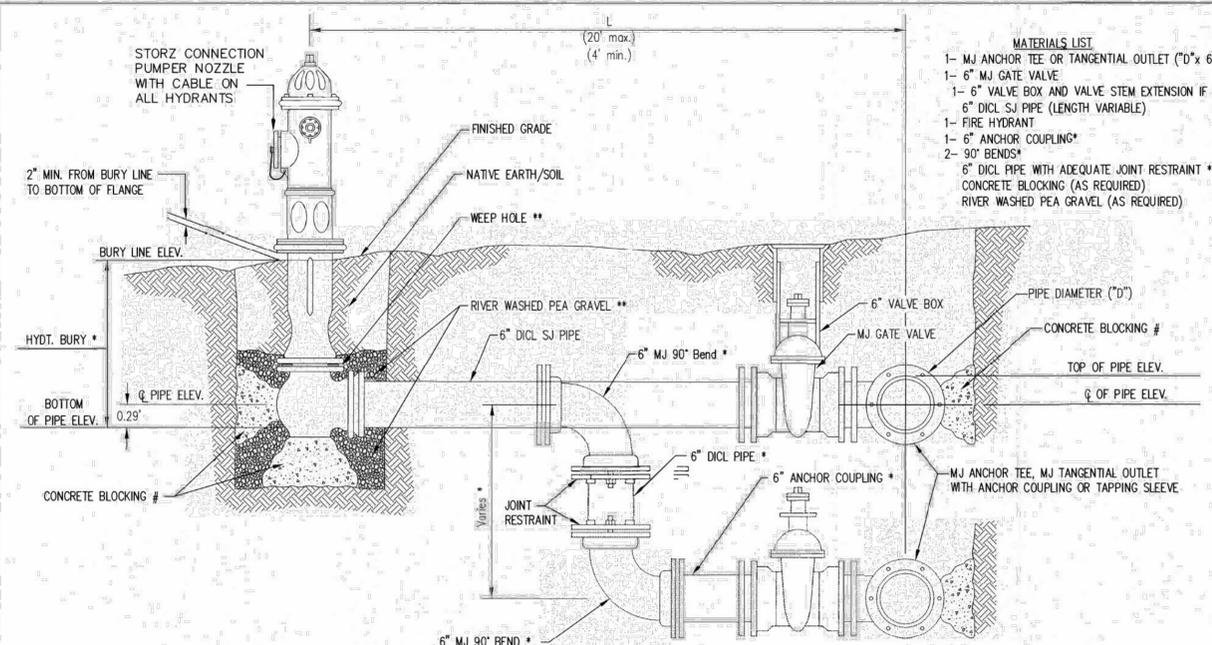
WATERLINE PLANS

PROJECT NUMBER:
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DESIGN: BDC DRAWN: BDC

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SHEET OF
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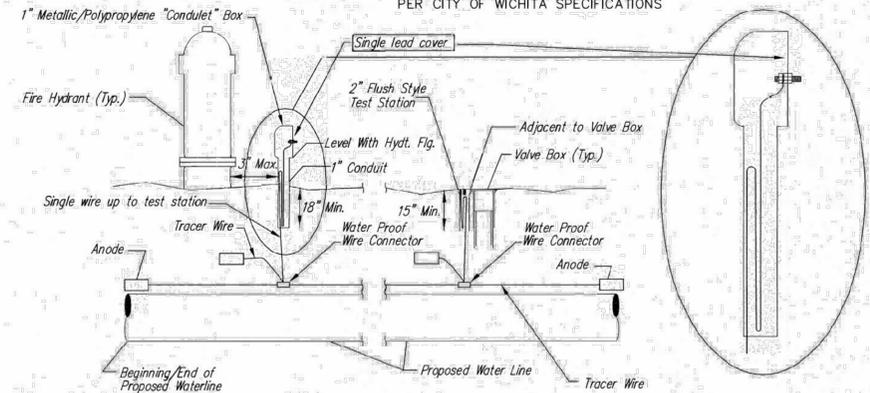
- MATERIALS LIST**
- 1- MJ ANCHOR TEE OR TANGENTIAL OUTLET ("D" x 6")
 - 1- 6" MJ GATE VALVE
 - 1- 6" VALVE BOX AND VALVE STEM EXTENSION IF REQUIRED *
 - 6" DICL SJ PIPE (LENGTH VARIABLE)
 - 1- FIRE HYDRANT
 - 1- 6" ANCHOR COUPLING*
 - 2- 90° BENDS*
 - 6" DICL PIPE WITH ADEQUATE JOINT RESTRAINT *
 - 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" DICL 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.

WIRES
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 # T2PH7B1LP 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.

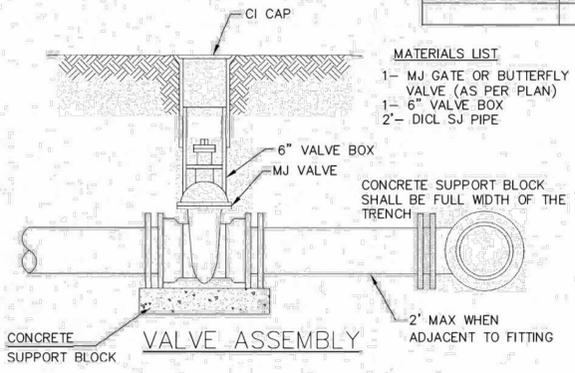
ANODES
The anodes shall be 3 lb. bare zinc or magnesium. The anodes shall be buried at the same elevation as the waterline at each test station. The anodes shall be connected to 12 AWG CCS which shall be extended to the test station.

TRACER WIRE DETAIL
COST IS SUBSIDIARY TO PIPE INSTALLATION

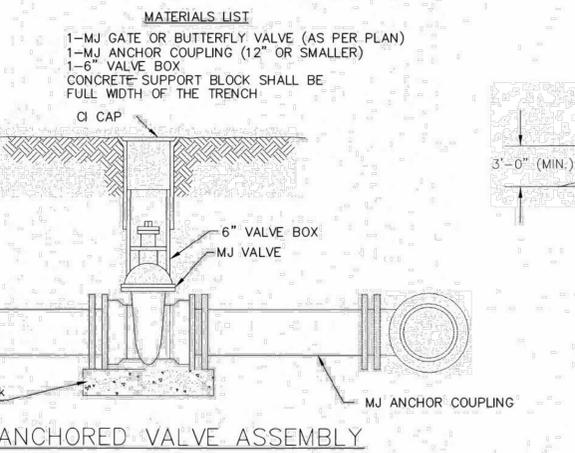
*Contractor to field locate existing waterline to determine depth and stem length prior to construction.

FIRE HYDRANTS REQUIRED

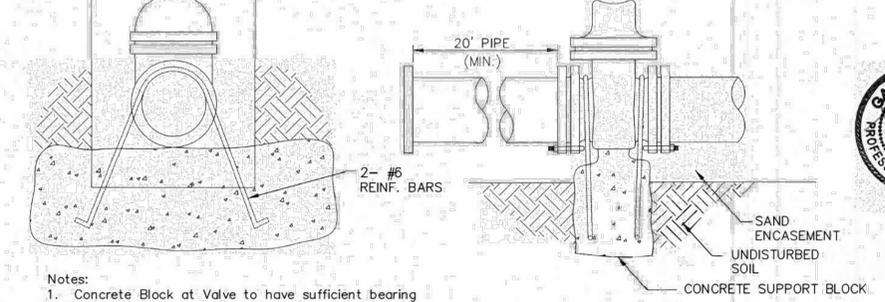
STATION	BURY LINE ELEVATION	TOP OF PIPE ELEVATION	FIRE HYDRANT BURY REQUIRED*	VALVE STEM EXT. REQUIRED (ft)*
10+66, Line 1	1306.36	1301.98	5.0'	
13+20, Line 1	1306.84	1303.46	4.0'	
16+03.04, 17th St	1306.50	Field Verify	4.0'	
22+36.55, 17th St	1307.10	Field Verify	4.0'	
29+67.70, 17th St	1307.33	Field Verify	4.0'	
32+51.85, 17th St	1308.05	Field Verify	4.0'	



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



- MATERIALS LIST**
- 1- MJ GATE OR BUTTERFLY VALVE (AS PER PLAN)
 - 1- CI MJ 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

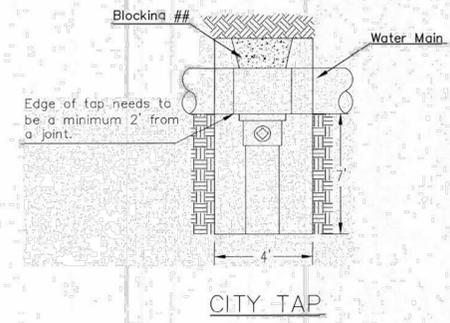


Notes:

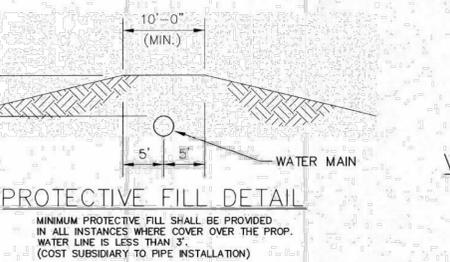
- Concrete Block at Valve to have sufficient bearing in undisturbed soil to prevent thrust movement as shown in table at right. Field Engineer to determine thrust loading of undisturbed soil and final size of thrust block.
- The thrust block shall be constructed such that bolts, nuts, and other MJ accessories 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

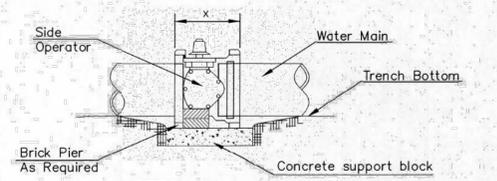
VALVE	THRUST AT 150 #/sq
4"	1809 lbs.
6"	4245 lbs.
8"	7540 lbs.
12"	16965 lbs.



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



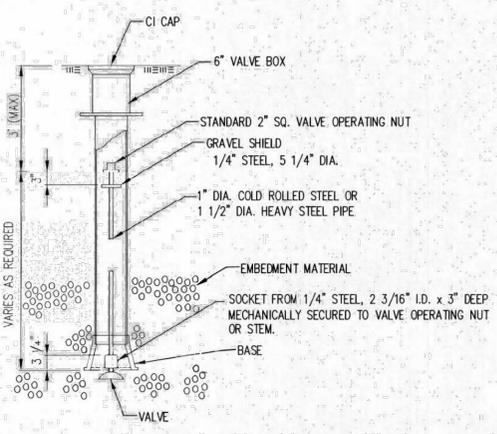
MINIMUM PROTECTIVE FILL SHALL BE PROVIDED IN ALL INSTANCES WHERE COVER OVER THE PROP. WATER LINE IS LESS THAN 3". (COST SUBSIDIARY TO PIPE INSTALLATION)



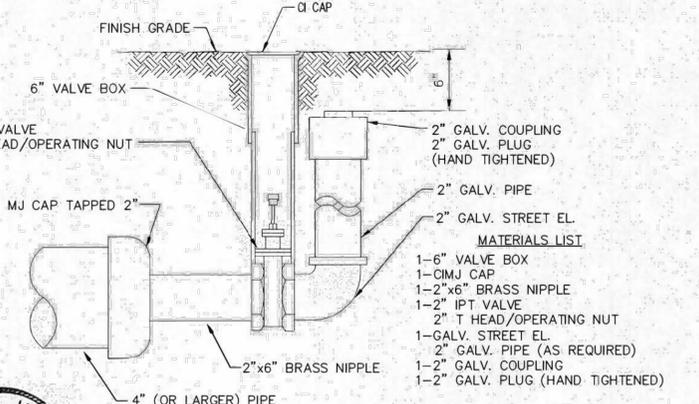
NOTES

- 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'.



- MATERIALS LIST**
- 1- 6" VALVE BOX
 - 1- CI MJ CAP
 - 1- 2"x6" BRASS NIPPLE
 - 1- 2" IPT VALVE
 - 2" T HEAD/OPERATING NUT
 - 1- GALV. STREET EL.
 - 2" GALV. PIPE (AS REQUIRED)
 - 1- 2" GALV. COUPLING
 - 1- 2" GALV. PLUG (HAND TIGHTENED)

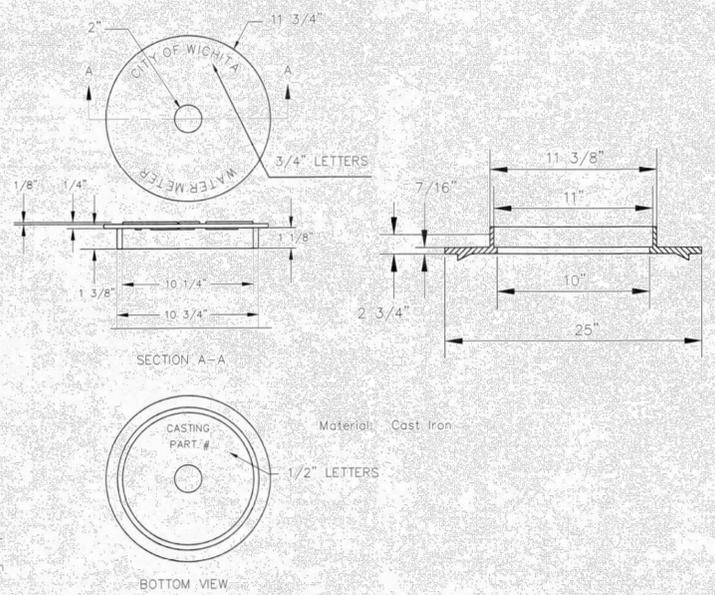
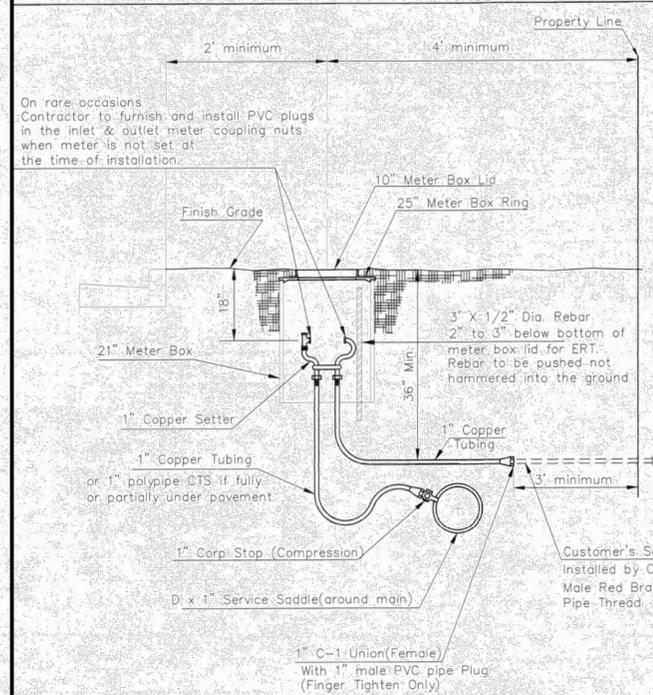


CITY OF WICHITA
PUBLIC WORKS & UTILITIES ENGINEERING DIVISION

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

PROJECT NUMBER 472-2023-085860	OCA NUMBER 40107823	DATE 8/5/25
CITY ENGINEER'S OFFICE CITY HALL - SEVENTH FLOOR 455 NORTH MAIN STREET WICHITA, KANSAS 67202-1620 (316) 268-4501		SHEET 8

REVISED: OCTOBER 2016



NOT TRAFFIC RATED RING & LID FOR 1" METER BOX

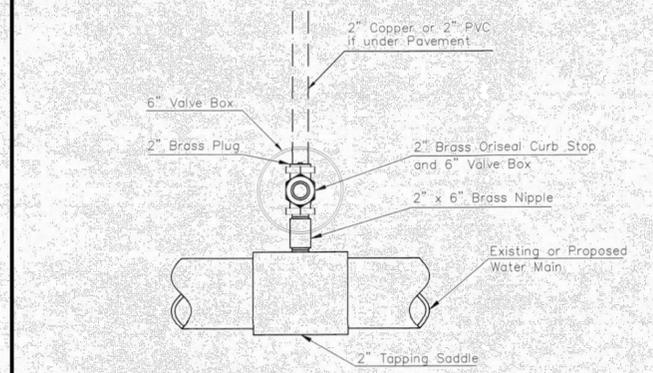
Minimum length of pigtail on consumer side is 36" of copper tubing from meter set.
Bore hole under paving shall be a maximum of 2" in diameter and a minimum of 3/6" below top of pavement.
Service Saddles are required on all mains.
Meter boxes will be located on each lot to be served, as indicated in the SPECIAL PROVISIONS.

TYPICAL 1" METER SETTING

- 1 - Ø Mueller Thread Corporation Stop
- 1 - Ø Type "K" Copper Tubing
- 1 - Ø Copper to Iron Union (Male)
- 1 - Ø Brass Curb Stop (Iron to Iron)
- 2 - Øx4" Brass Nipple
- Air Release
- 2 - Ø Brass Elbows (90°)
- 1 - 1"x6" Brass Nipple
- 1 - 30" Monitor Cover
- 1 - 20" Meter Lid

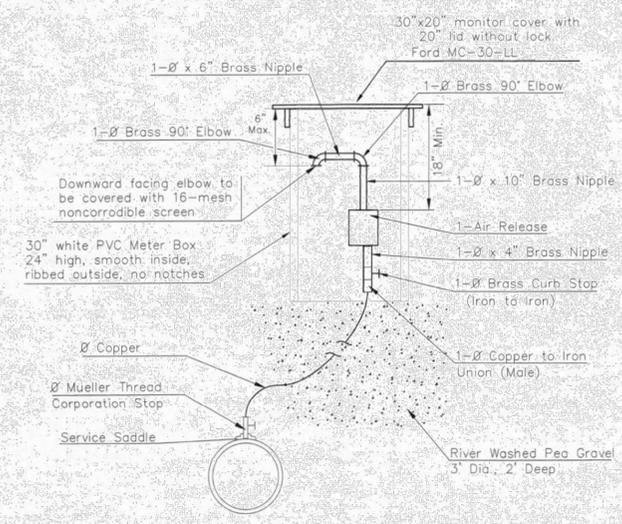
NOTE:

THE 1"/2" AIR RELEASE ASSEMBLY WILL TYPICALLY BE USED ON WATER MAINS 24" AND SMALLER, AS SPECIFICALLY DESIGNATED IN THE PLANS. COMBINATION AIR RELEASE ASSEMBLIES WILL BE SPECIFICALLY DESIGNED FOR PROJECTS WITH LARGER MAINS, AND WILL BE INCLUDED IN THE PLANS.

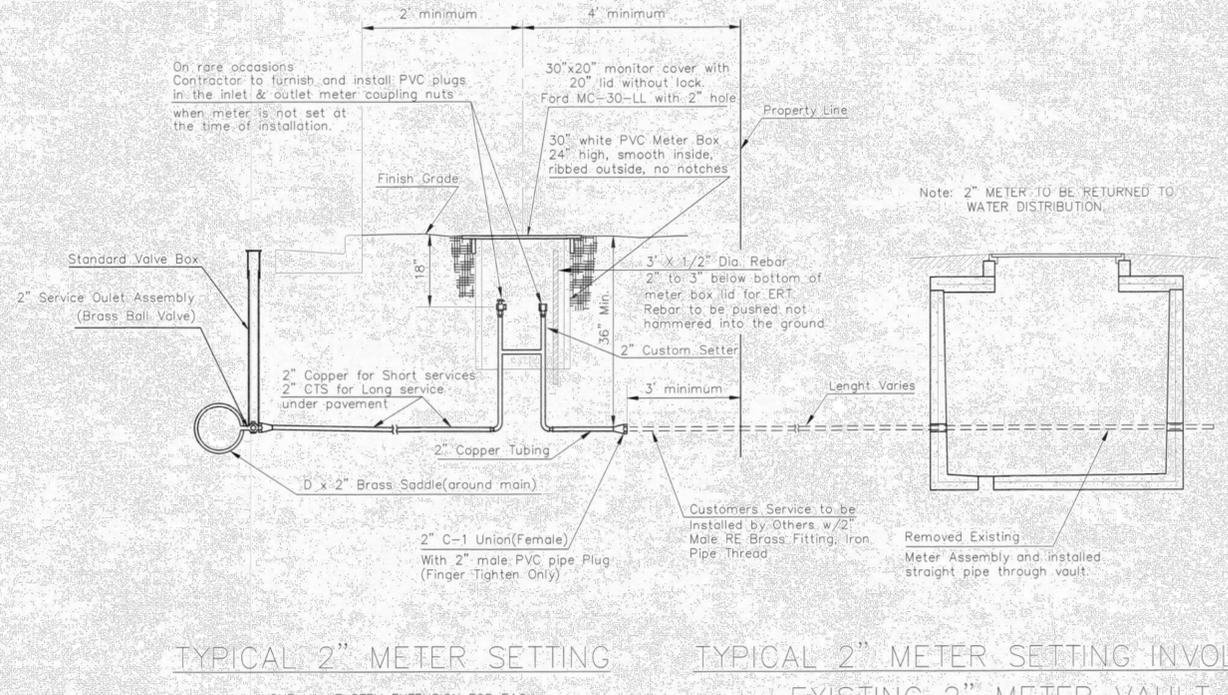


Note: Where the 2" Service Outlet Assembly is to be used to connect a 2" main to another main, the 2" valve shall be a 2" IPT Gate Valve. 2" ball or globe valves shall not be approved for this use.

2" SERVICE OUTLET ASSEMBLY TOP VIEW



MATERIALS FOR 1" or 2" AIR RELEASE ASSEMBLY Ø = 1" or 2"

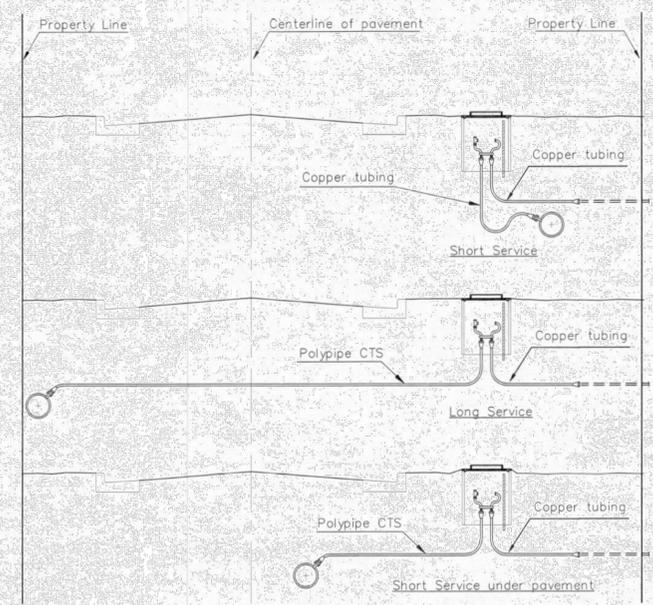


TYPICAL 2" METER SETTING

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

TYPICAL 2" METER SETTING INVOLVING EXISTING 2" METER VAULT

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



SERVICE TYPES

REVISED: NOVEMBER 2019 TM 3"x1/2" REBAR IN 1" & 2" METER SETTINGS FOR ERT.



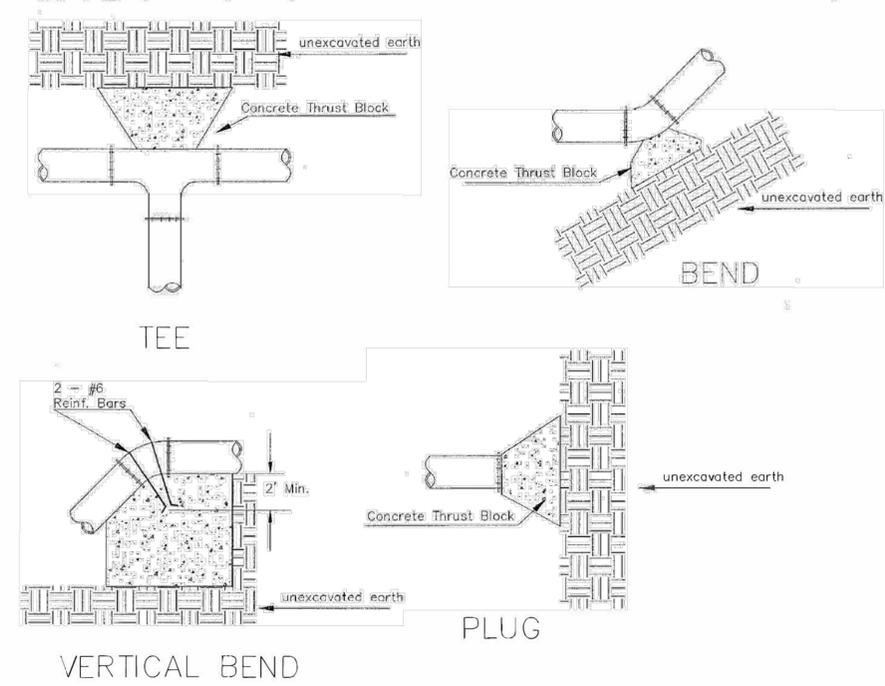
CITY OF WICHITA
PUBLIC WORKS & UTILITIES ENGINEERING DIVISION

STANDARD WATER SERVICE DETAIL
CITY ENGINEER
GARY JANZEN, P.E.

PROJECT NUMBER 472-2023-085860 23-04-E484	OCA NUMBER 40107823	DATE 8/5/25
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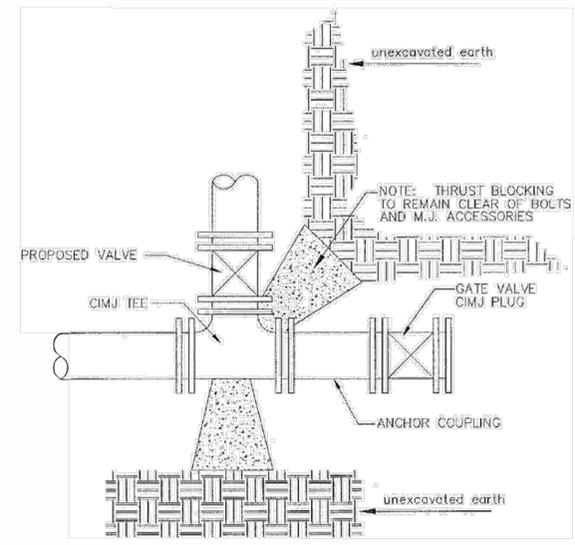
CITY ENGINEER'S OFFICE
CITY HALL - SEVENTH FLOOR
455 NORTH MAIN STREET
WICHITA, KANSAS 67202-1620
(316) 268-4501

SHEET
9

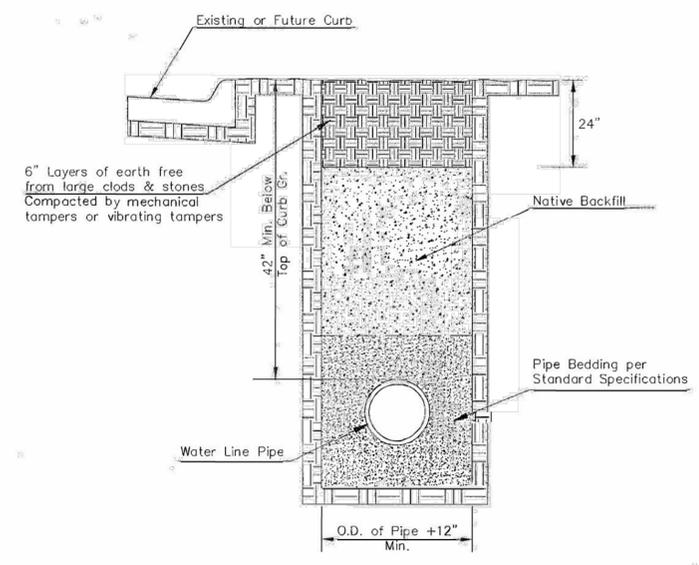


PIPE SIZE	THRUST AT FITTINGS IN TONS - AT 150#/IN ² P					
	PLUG	90°	45°	22 1/2°	11 1/4°	TEE
6"	2.8	3.95	2.15	1.09	.55	2.8
8"	4.9	6.95	3.75	1.90	.96	4.9
12"	11.4	16.1	8.75	4.45	2.25	11.4
16"	20.15	28.5	15.4	7.85	3.95	20.15
20"	31.15	44.0	23.85	12.15	6.10	31.15
24"	44.55	63.0	34.1	17.4	8.75	44.55

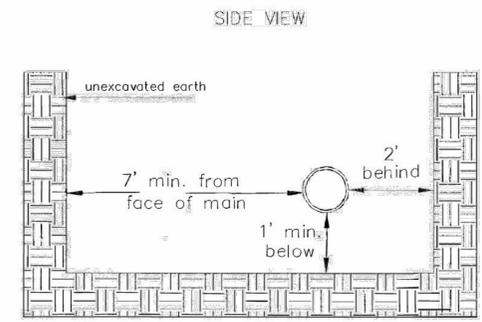
TYPICAL THRUST BLOCKS



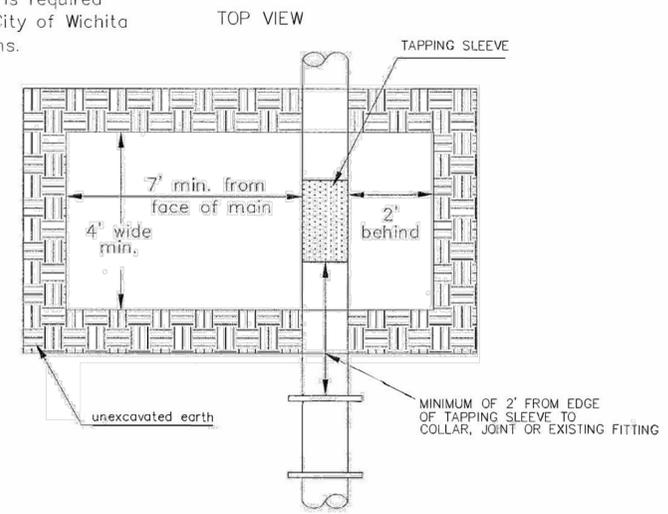
* PLANS GOVERN
UNLESS OTHERWISE NOTED ON PLANS



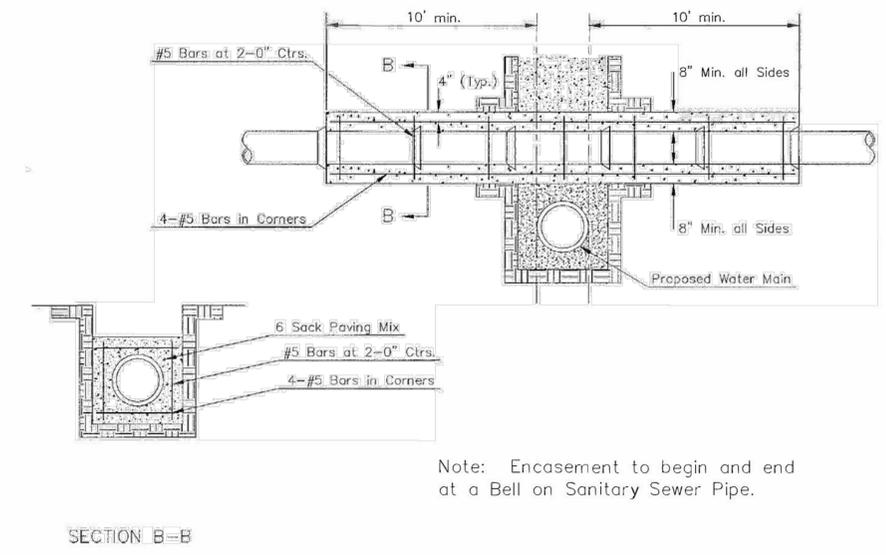
TRENCH COMPACTION IN ROAD RIGHT-OF-WAY



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

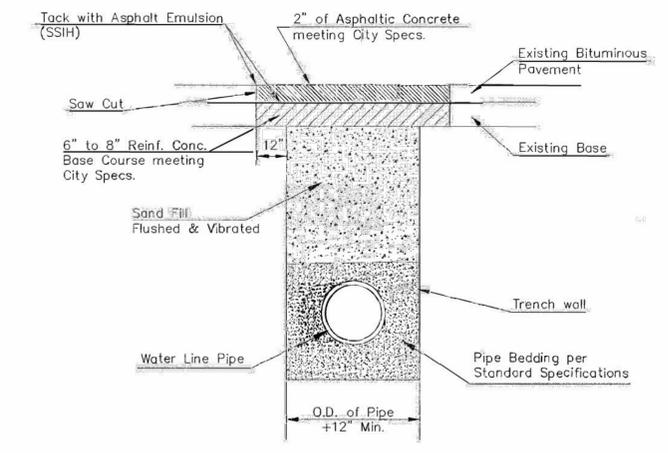


EXCAVATION FOR WET TAP



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

REINFORCED CONCRETE ENCASEMENT OF SANITARY SEWER



PAVEMENT REPLACEMENT & TRENCH COMPACTION UNDER EXISTING AND PROPOSED CITY ROADS



CITY OF WICHITA

PUBLIC WORKS & UTILITIES ENGINEERING DIVISION

REVISD: JULY 2015

MISCELLANEOUS WATER DETAILS

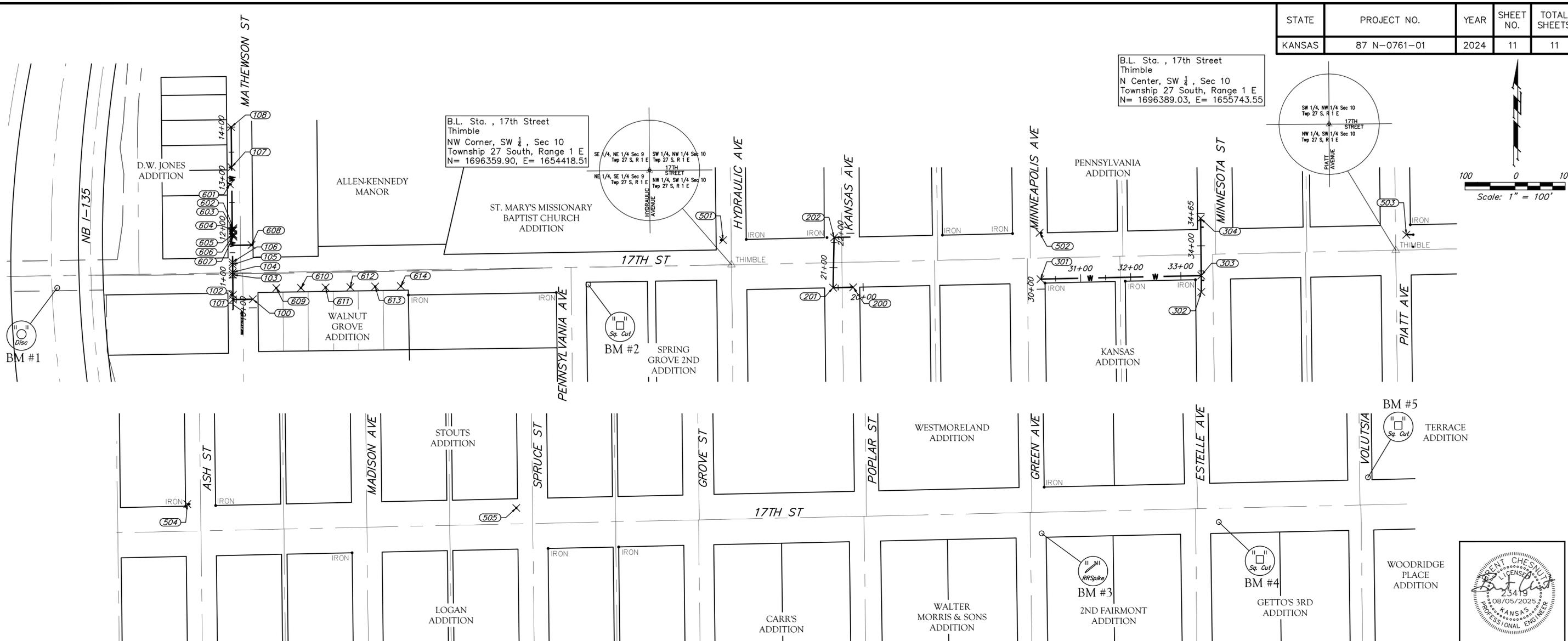
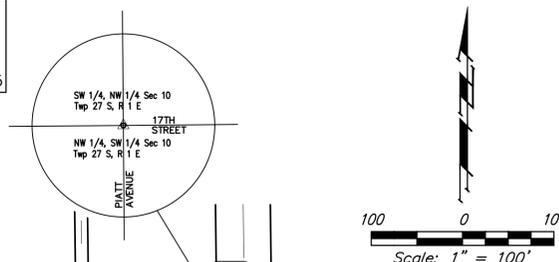
CITY ENGINEER
GARY JANZEN, P.E.

PROJECT NUMBER 472-2023-085860 23-04-E484	OCA NUMBER 40107823	DATE 8/5/25
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CITY ENGINEER'S OFFICE
CITY HALL - SEVENTH FLOOR
455 NORTH MAIN STREET
WICHITA, KANSAS 67202-1620
(316) 268-4501

SHEET
10

B.L. Sta. , 17th Street
Thimble
N Center, SW 1/4, Sec 10
Township 27 South, Range 1 E
N= 1696389.03, E= 1655743.55



BENCHMARKS:

BM #1: COW disc on top of curb, south side of 17th St. N., ~370' west of Mathewson. Elev. = 1312.48 NAVD88

BM #2: "□" on highline pole, SE corner of 17th St. N. & Pennsylvania Ave. Elev. = 1308.25 NAVD88

BM #3: Railroad spike on power pole, SE corner of 17th St. N. & Green St. Elev. = 1318.81 NAVD88

BM #4: "□" on top of curb inlet, east end of return, SE corner of 17th St. N. & Estelle. Elev. = 1324.66 NAVD88

BM #5: "□" on top of curb, north end of return, NE corner of 17th St. N. & Volutsia. Elev. = 1331.33 NAVD88

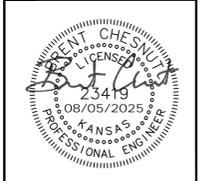
COORDINATE POINT TABLE			
Point #	Northing	Easting	Raw Description
100	1696291.4319	1653463.6995	WL1 - Tee
101	1696290.7965	1653424.1107	WL1 - Tee
102	1696300.1130	1653424.0156	WL1 - FH Tee
103	1696340.1109	1653423.6073	WL1 - Vert Bend
104	1696345.1107	1653423.5563	WL1 - Vert Bend
105	1696360.1099	1653423.4032	WL1 - Vert Bend
106	1696365.1096	1653423.3522	WL1 - Vert Bend
107	1696554.0998	1653421.4230	WL1 - FH Tee
108	1696634.0956	1653420.6065	WL1 - Blow Off Valve

COORDINATE POINT TABLE			
Point #	Northing	Easting	Raw Description
200	1696315.2026	1654661.1513	WL2 - Cap
201	1696314.3227	1654621.1610	WL2 - Bend
202	1696414.3912	1654623.1748	WL2 - Cap

COORDINATE POINT TABLE			
Point #	Northing	Easting	Raw Description
301	1696331.4261	1655034.8306	WL3 - Tee
302	1696305.8722	1655355.5941	WL3 - Blow Off Valve
303	1696338.4812	1655355.4945	WL3 - Tee
304	1696452.3855	1655354.3137	WL3 - Blow Off Valve

COORDINATE POINT TABLE			
Point #	Northing	Easting	Raw Description
501	1696409.2045	1654401.7162	FH Tee
502	1696423.4842	1655033.0518	FH Tee
503	1696419.9239	1655764.4610	FH Tee
504	1696449.7521	1656048.0212	FH Tee
505	1696442.1086	1656704.1608	FH

COORDINATE POINT TABLE			
Point #	Northing	Easting	Raw Description
601	1696520.1526	1653418.0837	Meter
602	1696432.8075	1653424.7613	Meter
603	1696430.3560	1653424.6863	Meter
604	1696427.9046	1653424.7114	Meter
605	1696420.7133	1653424.7848	Meter
606	1696418.2619	1653424.8098	Meter
607	1696415.8104	1653424.8348	Meter
608	1696399.3654	1653461.2272	Meter
609	1696313.7459	1653510.5324	Meter
610	1696313.9955	1653559.7774	Meter
611	1696314.8676	1653608.9343	Meter
612	1696315.7428	1653658.2634	Meter
613	1696316.6213	1653707.7805	Meter
614	1696317.5284	1653758.9090	Meter



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

CITY OF WICHITA
17TH STREET

WL COORDINATE SHEET

WATERLINE PLANS
PROJECT NUMBER:
472-2024-003398
23-04-E485
DESIGN: BDC DRAWN: BDC
DATE: August 5, 2025
SHEET OF
11 11

File: E:\Projects\Wichita 17th St. L-135 to Hillside (23-04-E484)\Engineering\DWG\WL P&F.dwg