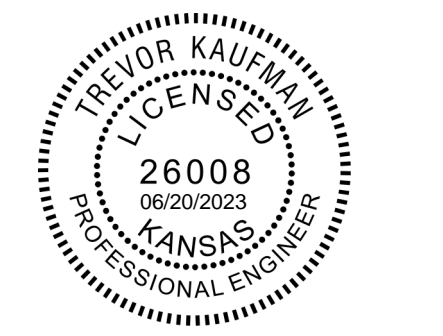


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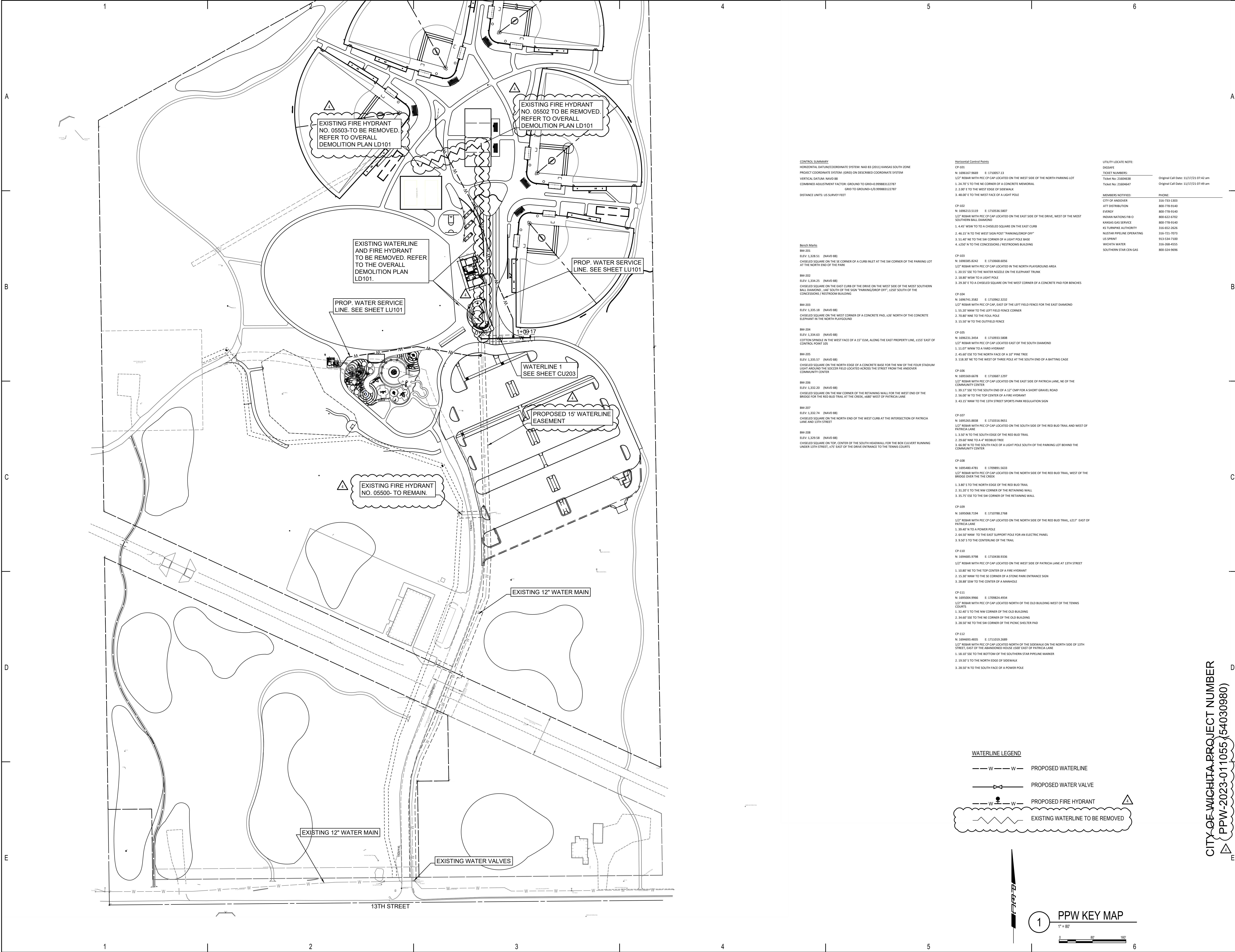
13TH STREET PARK IMPROVEMENTS
1008 E. 13TH STREET
ANDOVER KANSAS, 67002

CITY OF WICHITA PROJECT NUMBER
PPW-2023-011055 (54030980)

ISSUE:		
BID SET	03/17/23	
4 ASI #2	06/20/23	
JOB NO.	210720-001	
DATE	11 APRIL 2023	
PM	NLS	
DESIGNED BY	NLS	
DRAWN BY	RFT	
CHECKED BY	JAG	

PPW KEY MAP

CU202



CONTROL SUMMARY
 HORIZONTAL DATUM/COORDINATE SYSTEM: NAD 83 (2011) KANSAS SOUTH ZONE
 PROJECT COORDINATE SYSTEM: GRID ON DESCRIBED COORDINATE SYSTEM
 VERTICAL DATUM: NAVD 88
 COMBINED ADJUSTMENT FACTOR: GROUND TO GRID=0.99988122787
 GRID TO GROUND=1/0.99988122787
 DISTANCE UNITS: US SURVEY FEET

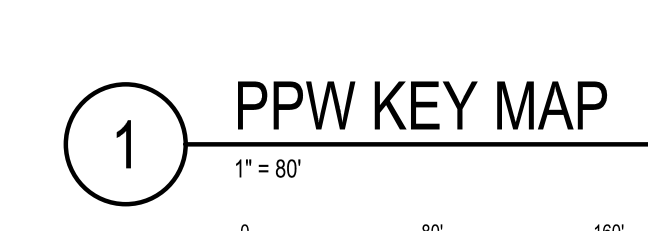
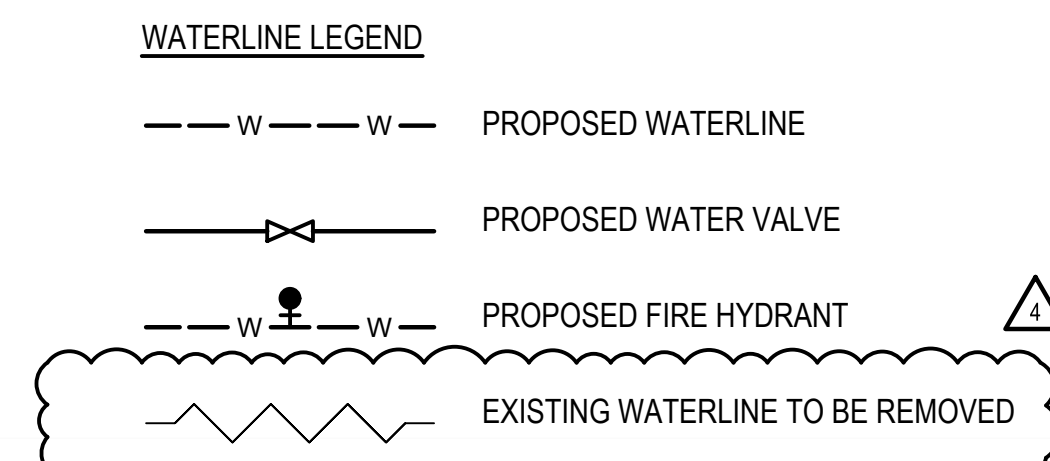
- Bench Marks**
- BM 201
ELEV: 1.328.51 (NAVD 88)
CHISELED SQUARE ON THE SE CORNER OF A CURB INLET AT THE SW CORNER OF THE PARKING LOT AT THE NORTH END OF THE PARK
 - BM 202
ELEV: 1.334.25 (NAVD 88)
CHISELED SQUARE ON THE EAST CURB OF THE DRIVE ON THE WEST SIDE OF THE MOST SOUTHERN BALL DIAMOND, 4.80' SOUTH OF THE SIGN "PARKING/DROP OFF", 25.50' SOUTH OF THE CONCESSIONS / RESTROOM BUILDING
 - BM 203
ELEV: 1.330.38 (NAVD 88)
CHISELED SQUARE ON THE WEST CORNER OF A CONCRETE PAD, 426' NORTH OF THE CONCRETE ELEPHANT IN THE NORTH PLAYGROUND
 - BM 204
ELEV: 1.334.63 (NAVD 88)
COTTON SPRING IN THE WEST FACE OF A 15' ELEM. ALONG THE EAST PROPERTY LINE, 2155' EAST OF CONTROL POINT 107
 - BM 205
ELEV: 1.335.57 (NAVD 88)
CHISELED SQUARE ON THE NORTH EDGE OF A CONCRETE BASE FOR THE NW OF THE FOUR STADIUM LIGHT AROUND THE SOCCER FIELD LOCATED ACROSS THE STREET FROM THE ANDOVER COMMUNITY CENTER
 - BM 206
ELEV: 1.332.20 (NAVD 88)
CHISELED SQUARE ON THE NW CORNER OF THE RETAINING WALL FOR THE WEST END OF THE BRIDGE FOR THE RED BUD TRAIL AT THE CREEK, 1680' WEST OF PATRICIA LANE
 - BM 207
ELEV: 1.332.74 (NAVD 88)
CHISELED SQUARE ON THE NORTH END OF THE WEST CURB AT THE INTERSECTION OF PATRICIA LANE AND 13TH STREET
 - BM 208
ELEV: 1.328.58 (NAVD 88)
CHISELED SQUARE ON TOP, CENTER OF THE SOUTH HEADWALL FOR THE BOX CULVERT RUNNING UNDER 13TH STREET, 675' EAST OF THE DRIVE ENTRANCE TO THE TENNIS COURTS

- Horizontal Control Points**
- CP 101
N: 186825.9660 E: 171007.13
1/2" REBAR WITH PEC CP CAP LOCATED ON THE WEST SIDE OF THE NORTH PARKING LOT
1. 24.70' S TO THE NE CORNER OF A CONCRETE MEMORIAL
2. 2.00' E TO THE WEST EDGE OF SIDEWALK
3. 4.800' E TO THE WEST FACE OF A LIGHT POLE
 - CP 102
N: 186823.5110 E: 1710536.5807
1/2" REBAR WITH PEC CP CAP LOCATED ON THE EAST SIDE OF THE DRIVE, WEST OF THE MOST SOUTHERN BALL DIAMOND
1. 4.40' WSW TO A CHISELED SQUARE ON THE EAST CURB
2. 46.10' N TO THE WEST SIDE POST "PARKING/DROP OFF"
3. 51.40' NE TO THE SW CORNER OF A LIGHT POLE BASE
4. 12.00' N TO THE CONCESSIONS / RESTROOMS BUILDING
 - CP 103
N: 186808.8242 E: 172068.6054
1/2" REBAR WITH PEC CP CAP LOCATED IN THE NORTH PLAYGROUND AREA
1. 20.55' SSE TO THE WATER NOZZLE ON THE ELEPHANT TRUNK
2. 18.80' WSW TO A LIGHT POLE
3. 29.30' E TO A CHISELED SQUARE ON THE WEST CORNER OF A CONCRETE PAD FOR BENCHES
 - CP 104
N: 1868743.3582 E: 172092.3232
1/2" REBAR WITH PEC CP CAP, EAST OF THE LEFT FIELD FENCE FOR THE EAST DIAMOND
1. 55.20' NNW TO THE LEFT FIELD FENCE CORNER
2. 70.80' NE TO THE TOLL POLE
3. 15.50' W TO THE OUTFIELD FENCE
 - CP 105
N: 1868231.3454 E: 172093.5808
1/2" REBAR WITH PEC CP CAP LOCATED EAST OF THE SOUTH DIAMOND
1. 11.07' NNW TO A YARD HYDRANT
2. 45.40' ESE TO THE NORTH FACE OF A 10" PINE TREE
3. 118.30' NE TO THE WEST OF THREE POLE AT THE SOUTH END OF A BATTING CAGE
 - CP 106
N: 1869569.6678 E: 172087.1297
1/2" REBAR WITH PEC CP CAP LOCATED ON THE EAST SIDE OF PATRICIA LANE, NE OF THE COMMUNITY CENTER
1. 35.17' SSE TO THE SOUTH END OF A 12" CMP FOR A SHORT GRAVEL ROAD
2. 56.00' W TO THE TOP CENTER OF A FIRE HYDRANT
3. 43.15' NNW TO THE 13TH STREET SPORTS PARK REGULATION SIGN
 - CP 107
N: 1869205.8838 E: 1720316.9651
1/2" REBAR WITH PEC CP CAP LOCATED ON THE SOUTH SIDE OF THE RED BUD TRAIL AND WEST OF PATRICIA LANE
1. 3.50' N TO THE SOUTH EDGE OF THE RED BUD TRAIL
2. 29.40' NNW TO A 4" REDWOOD TREE
3. 66.80' N TO THE SOUTH FACE OF A LIGHT POLE SOUTH OF THE PARKING LOT BEHIND THE COMMUNITY CENTER
 - CP 108
N: 1865480.4783 E: 1728891.5633
1/2" REBAR WITH PEC CP CAP LOCATED ON THE NORTH SIDE OF THE RED BUD TRAIL, WEST OF THE BRIDGE OVER THE CREEK
1. 9.40' S TO THE NORTH EDGE OF THE RED BUD TRAIL
2. 31.20' E TO THE NW CORNER OF THE RETAINING WALL
3. 35.75' ESE TO THE SW CORNER OF THE RETAINING WALL
 - CP 109
N: 1869508.7394 E: 1720788.2768
1/2" REBAR WITH PEC CP CAP LOCATED ON THE NORTH SIDE OF THE RED BUD TRAIL, 237' EAST OF PATRICIA LANE
1. 39.40' W TO A POWER POLE
2. 64.50' NNW TO THE EAST SUPPORT POLE FOR AN ELECTRIC PANEL
3. 9.50' S TO THE CENTERLINE OF THE TRAIL
 - CP 110
N: 1869485.9788 E: 1720438.9336
1/2" REBAR WITH PEC CP CAP LOCATED ON THE WEST SIDE OF PATRICIA LANE AT 13TH STREET
1. 10.80' NE TO THE TOP CENTER OF A FIRE HYDRANT
2. 15.30' NNW TO THE SE CORNER OF A STONE PARK ENTRANCE SIGN
3. 28.88' SW TO THE CENTER OF A MANHOLE
 - CP 111
N: 1869508.9960 E: 1728824.4034
1/2" REBAR WITH PEC CP CAP LOCATED NORTH OF THE OLD BUILDING WEST OF THE TENNIS COURTS
1. 32.40' E TO THE NW CORNER OF THE OLD BUILDING
2. 34.40' SSE TO THE NE CORNER OF THE OLD BUILDING
3. 28.50' NE TO THE SW CORNER OF THE PICNIC SHELTER PAD
 - CP 112
N: 1869483.4835 E: 1711013.2889
1/2" REBAR WITH PEC CP CAP LOCATED NORTH OF THE SIDEWALK ON THE NORTH SIDE OF 13TH STREET, EAST OF THE AMATEUR HOUSE, 1000' EAST OF PATRICIA LANE
1. 18.10' SSE TO THE BOTTOM OF THE SOUTHERN STAR PIPELINE MARKER
2. 19.50' S TO THE NORTH EDGE OF SIDEWALK
3. 28.50' N TO THE SOUTH FACE OF A POWER POLE

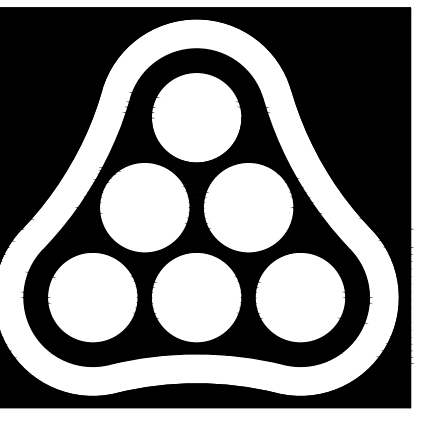
UTILITY LOCATE NOTE:
 ENGAGE
 TICKET NUMBERS:
 Ticket No: 23604638
 Original Call Date: 11/17/21 07:42 am
 Ticket No: 23604647
 Original Call Date: 11/17/21 07:49 am

MEMBERS NOTIFIED:

CITY OF ANDOVER	PHONE:
ATT DISTRIBUTION	800-778-9140
ENVIRO	800-778-9140
INDIAN NATIONS FIB O	800-424-6702
KANSAS GAS SERVICE	800-778-9140
KS TURNPIRE AUTHORITY	316-652-2626
NATURA PIPELINE OPERATING	316-512-2913
US SPRINT	913-534-7100
WICHITA WATER	316-268-4555
SOUTHERN STAR GEN GAS	800-324-9696



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PLOTTED 6/20/2023 11:33:39 AM BY SAMANTHA WARKINS
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KANSAS

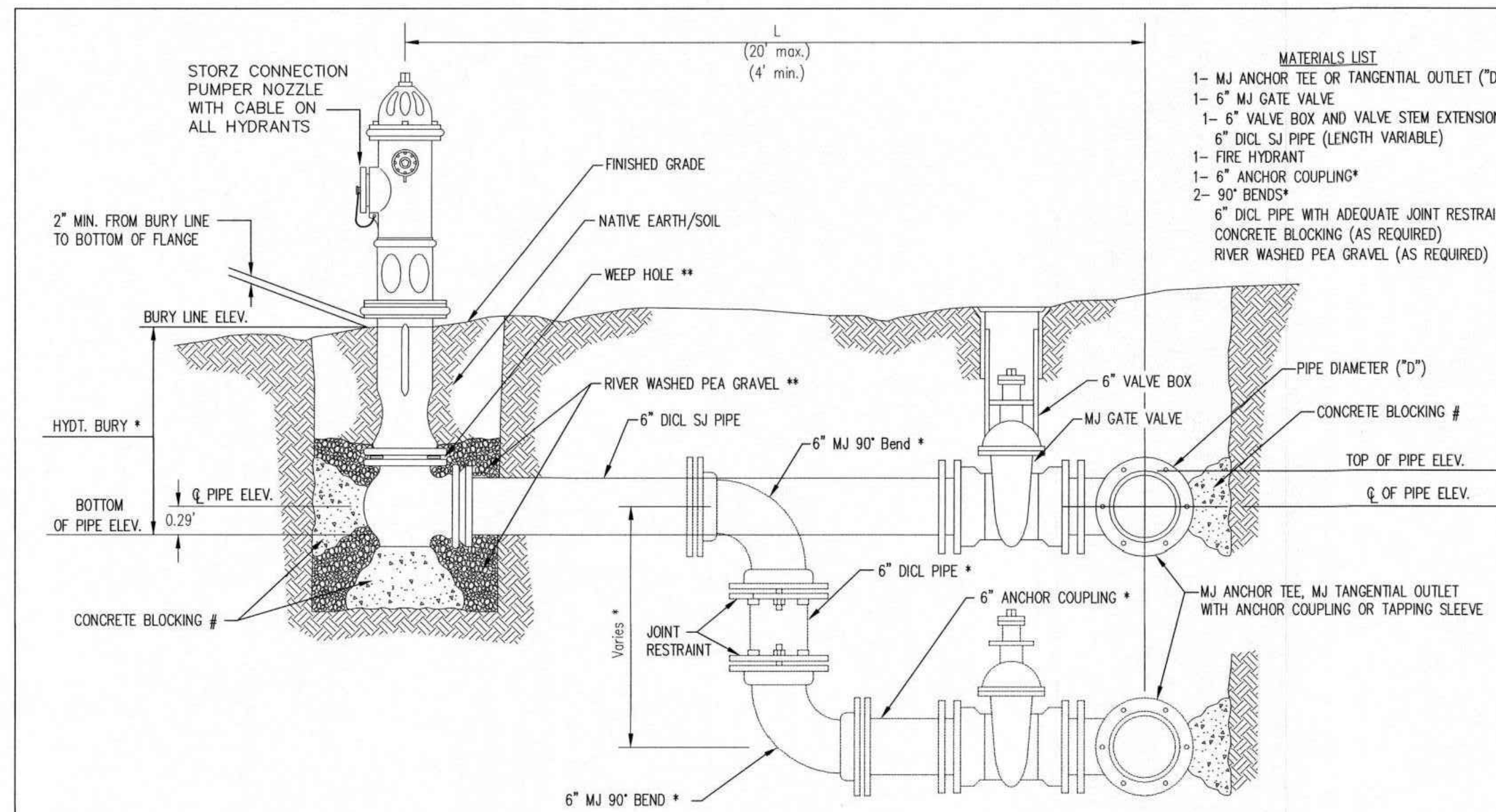
13TH STREET PARK IMPROVEMENTS

1008 E. 13TH STREET
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WATERLINE DETAILS

CU204

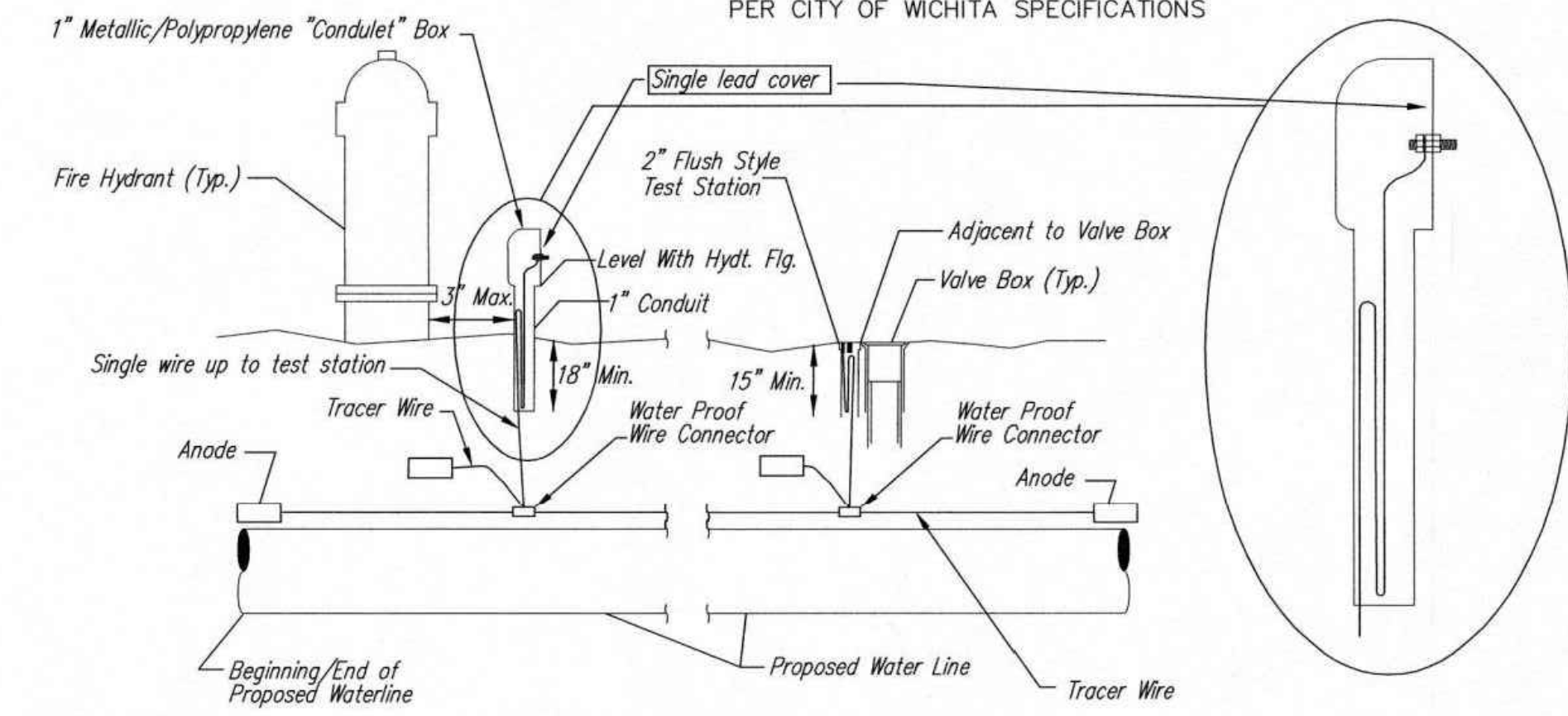


- MATERIALS LIST**
- 1- MJ ANCHOR TEE OR TANGENTIAL OUTLET (10" x 6")
 - 1- 6" MJ GATE VALVE
 - 1- 6" VALVE BOX AND VALVE STEM EXTENSION IF REQUIRED *
 - 6" DCL SJ PIPE (LENGTH VARIABLE)
 - 1- FIRE HYDRANT
 - 1- 6" ANCHOR COUPLING*
 - 2- 90° BENDS*
 - 6" DCL PIPE WITH ADEQUATE JOINT RESTRAINT *
 - CONCRETE 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" DCL PIPE AS NECESSARY FOR VERTICAL ADJUSTMENT. THE CONTRACTOR SHALL PROVIDE ADEQUATE THRUST BLOCKING AT HYDRANT AND MEGLUGS, 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.



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.

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.

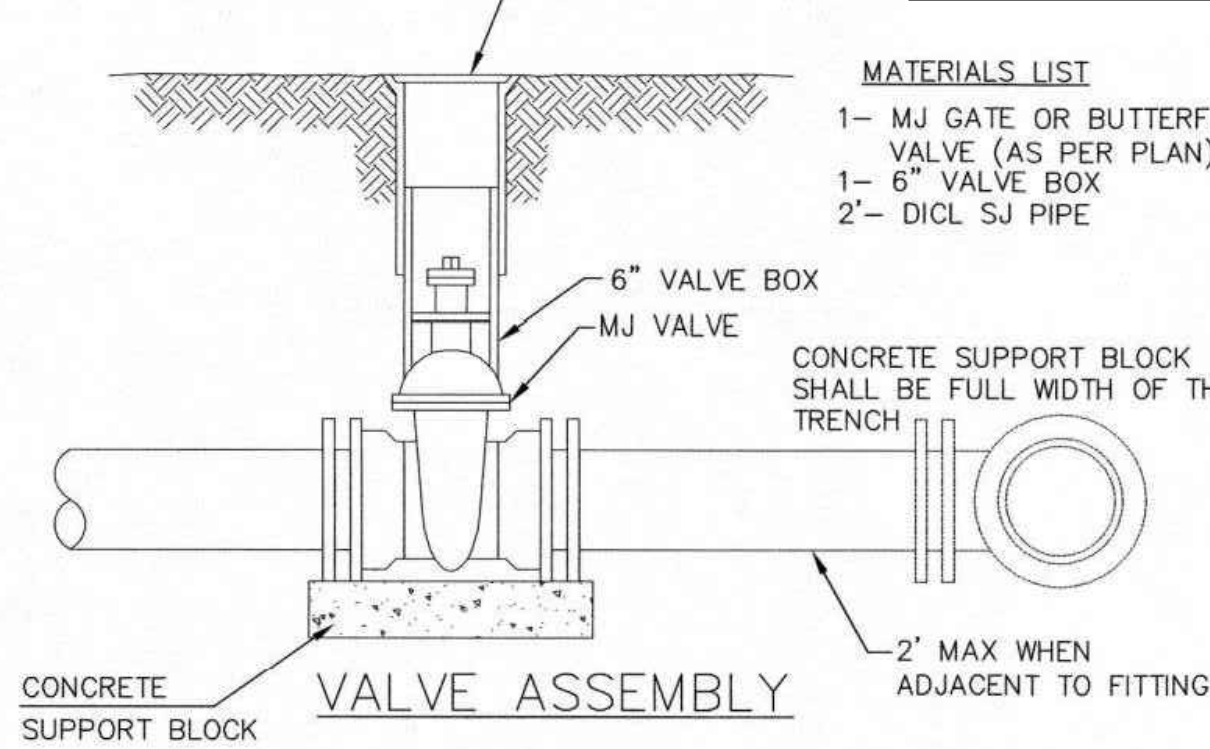
TEST STATIONS
The test station for fire hydrant application shall be a 1" "conduit" style station as manufactured by AGRA Industries with a removable solid cover having a single lead extending from the face or approved equal. The "conduit" style test station shall be attached to a 1" rigid galvanized 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 # T2PH/781LP 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.

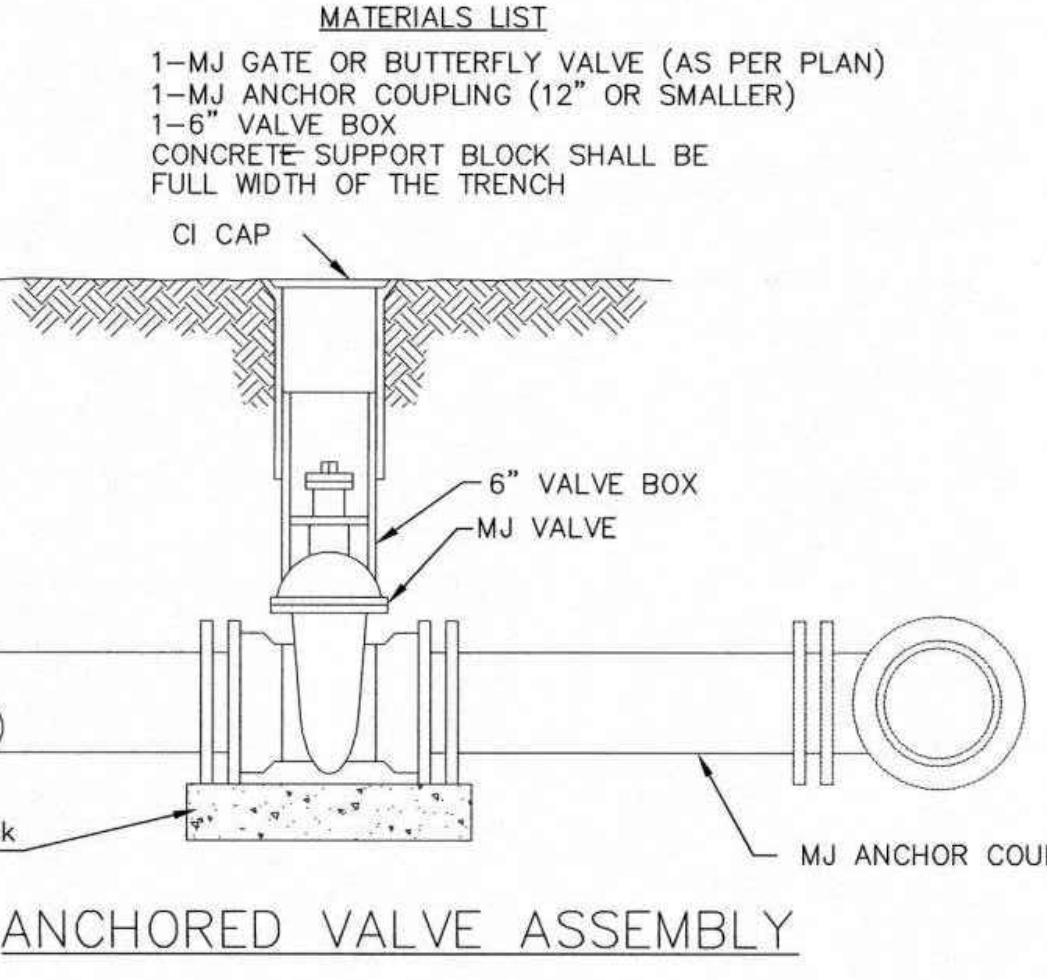
TRACER WIRE DETAIL
COST IS SUBSIDIARY TO PIPE INSTALLATION

FIRE HYDRANTS REQUIRED

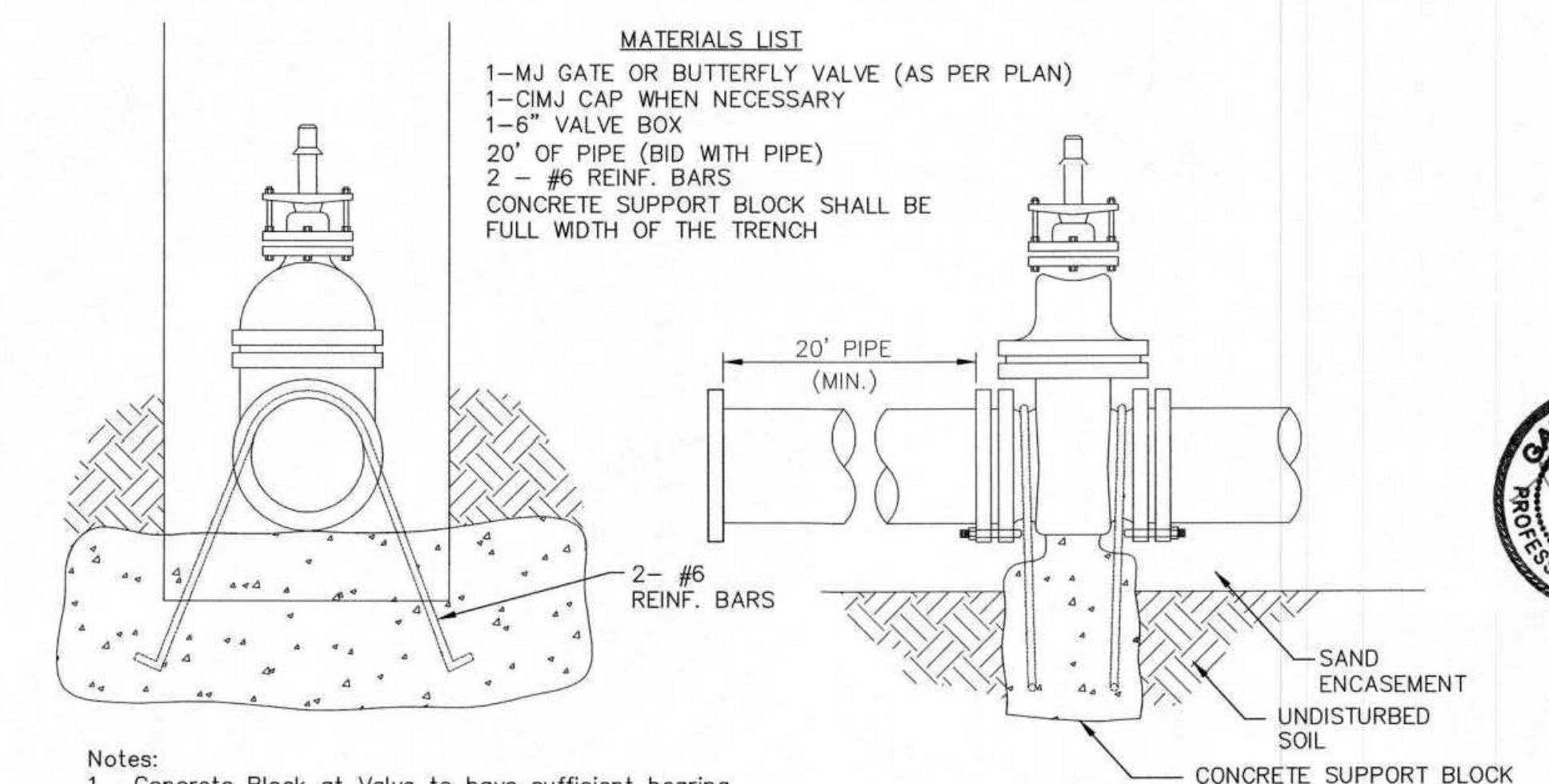
STATION	BURY LINE ELEVATION	TOP OF PIPE ELEVATION	FIRE HYDRANT BURY REQUIRED*	VALVE STEM EXT. REQUIRED (ft)*
1+17.31	1333.40	1329.58	4'	N/A



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

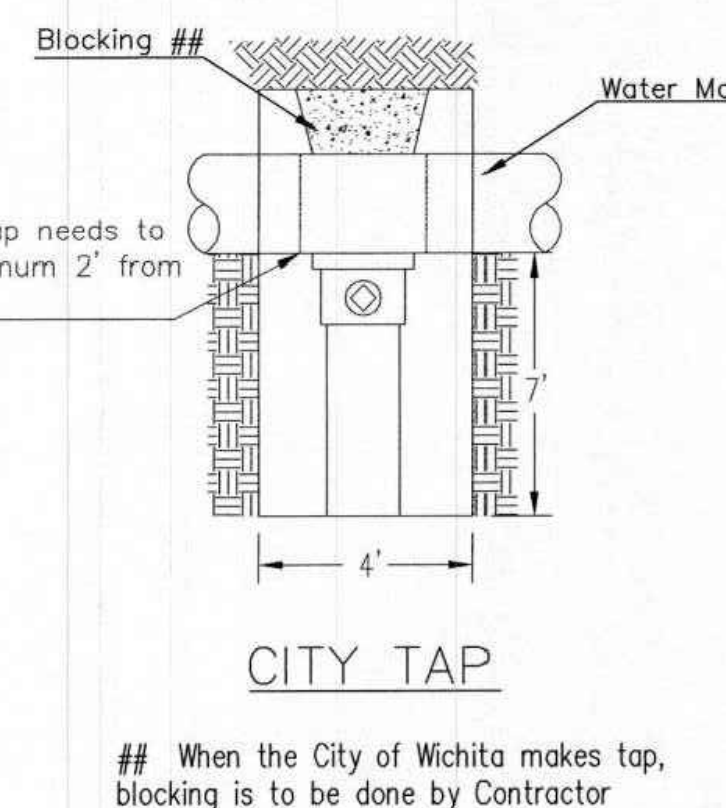


- Notes:**
1. Concrete Block at Valve to have sufficient bearing in undisturbed soil to prevent thrust movement as shown in table at right. Field Engineer to determine thrust loading of undisturbed soil and final size of thrust block.
 2. The thrust block shall be constructed such that bolts, nuts, and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

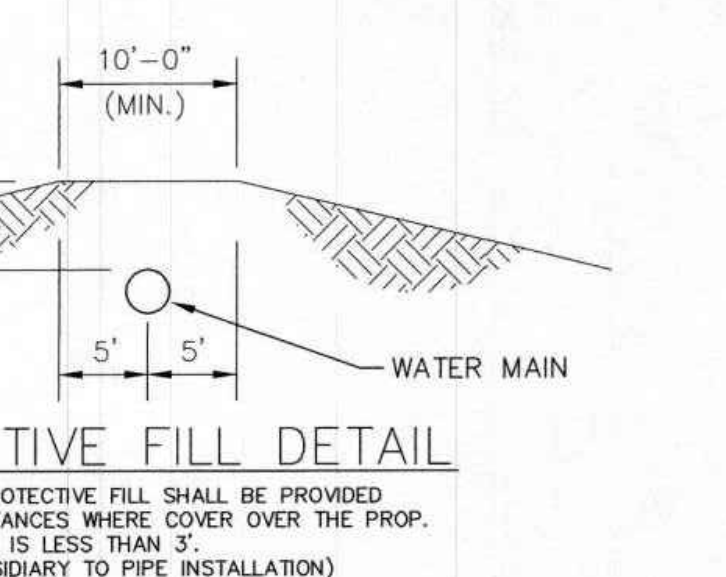
THRUST AT VALVES

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

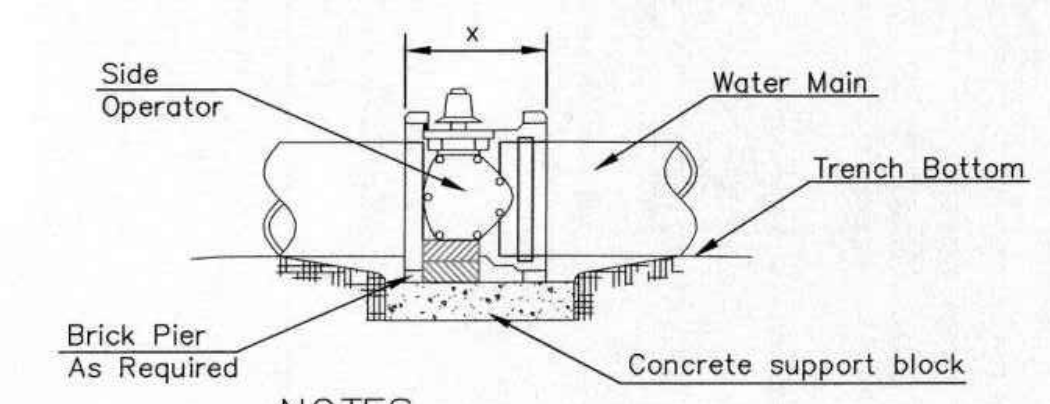
ANCHORED VALVE ASSEMBLY, SPECIAL



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

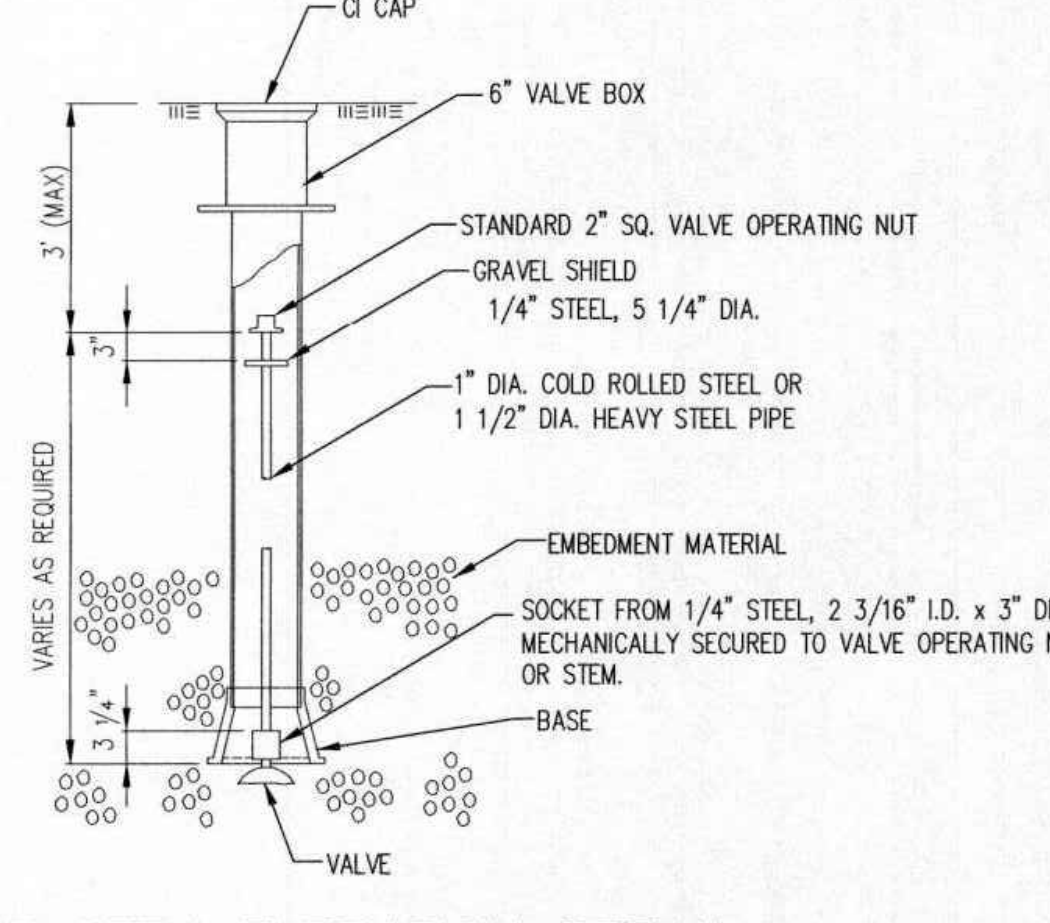


PROTECTIVE FILL DETAIL
MINIMUM PROTECTIVE FILL SHALL BE PROVIDED IN ALL INSTANCES WHERE COVER OVER THE PROP. WATER LINE IS LESS THAN 3". (COST SUBSIDIARY TO PIPE INSTALLATION)

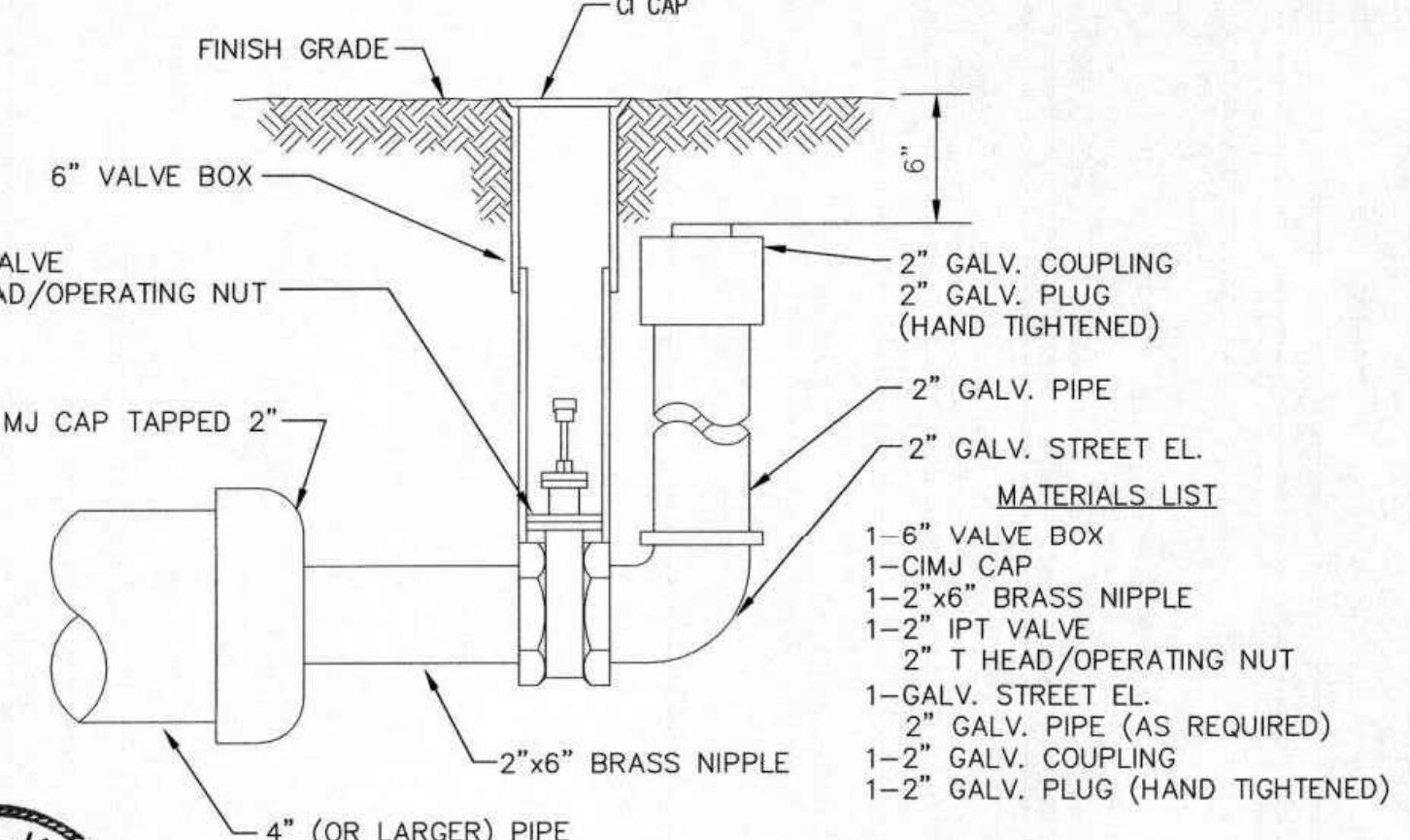


- NOTES**
1. This detail covers Butterfly Valve installation, inclusive, regardless of type of pipe or joint used. 24" and larger lines to be detailed on plans.
 2. 6" Valve Box and Cover required per City of Wichita Std. Specifications.
 3. Conc. Support Block to be full width of trench.

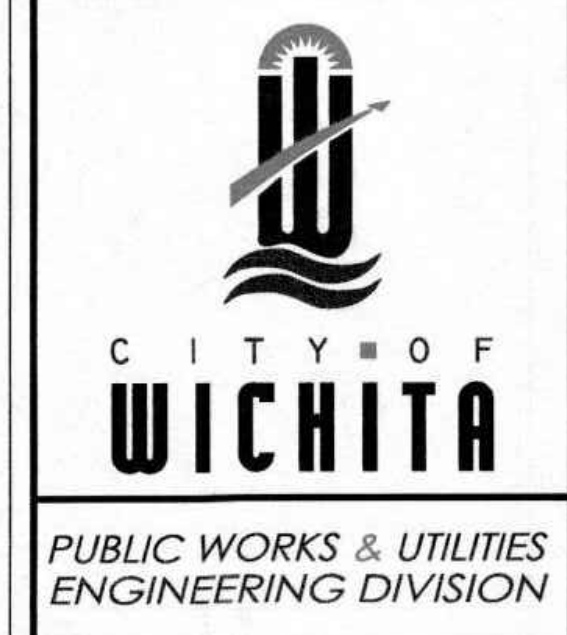
CONCRETE SUPPORT BLOCKING FOR BUTTERFLY VALVE INSTALLATION



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



2" BLOWOFF ASSEMBLY



STANDARD WATER ASSEMBLY DETAIL

CITY ENGINEER
GARY JANZEN, P.E.

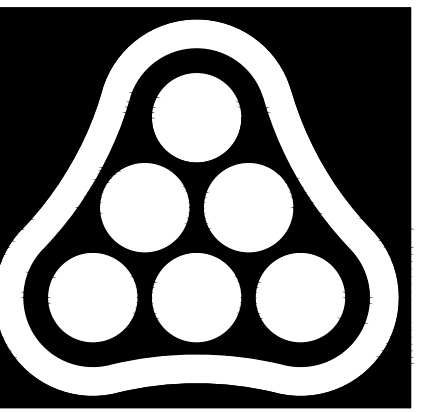
PROJECT NUMBER	OCA NUMBER	DATE
2023-011055	53030982	

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

REVISED: OCTOBER 2016

WL-101

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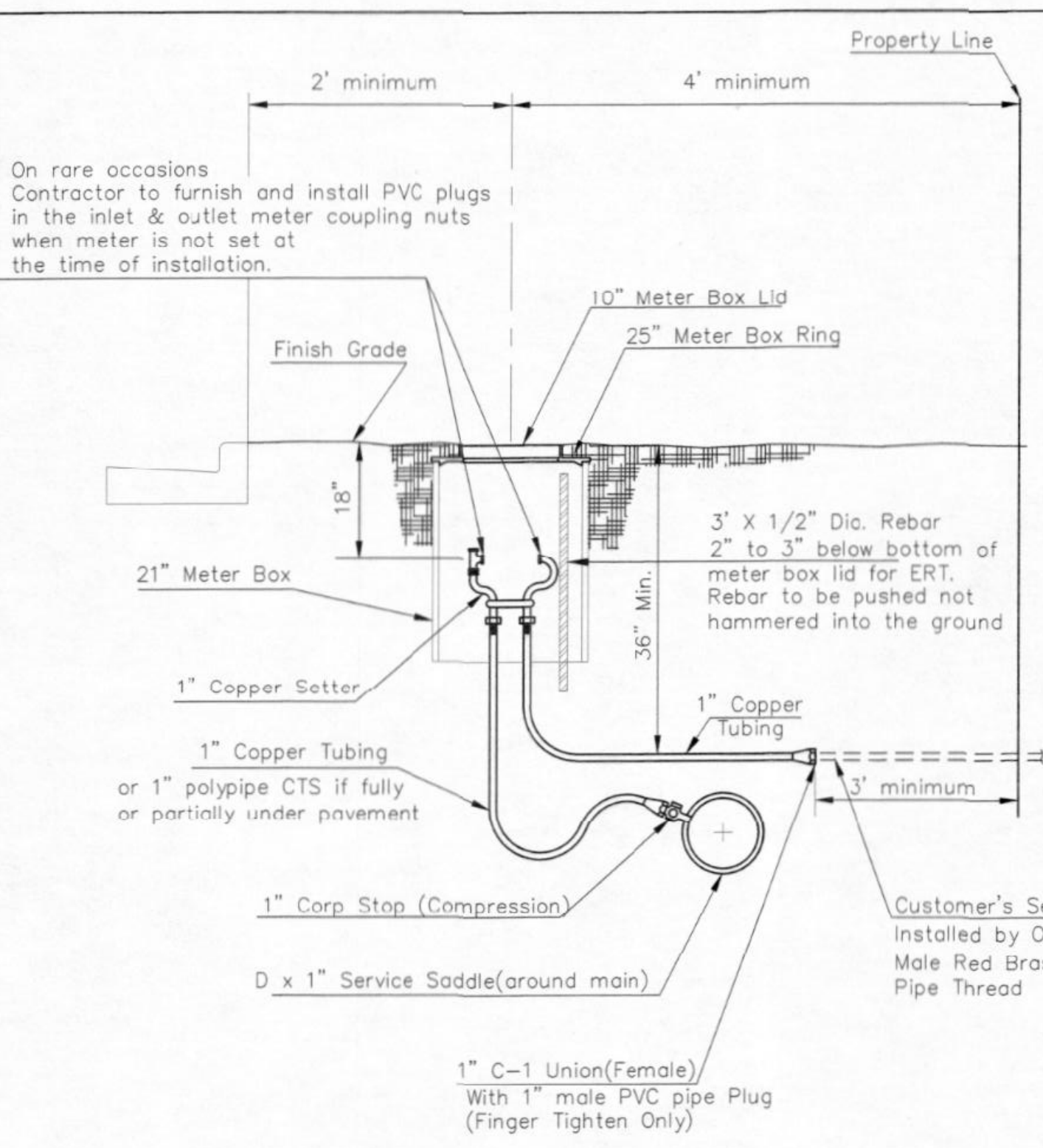


13TH STREET PARK IMPROVEMENTS
1008 E. 13TH STREET
ANDOVER KANSAS, 67002

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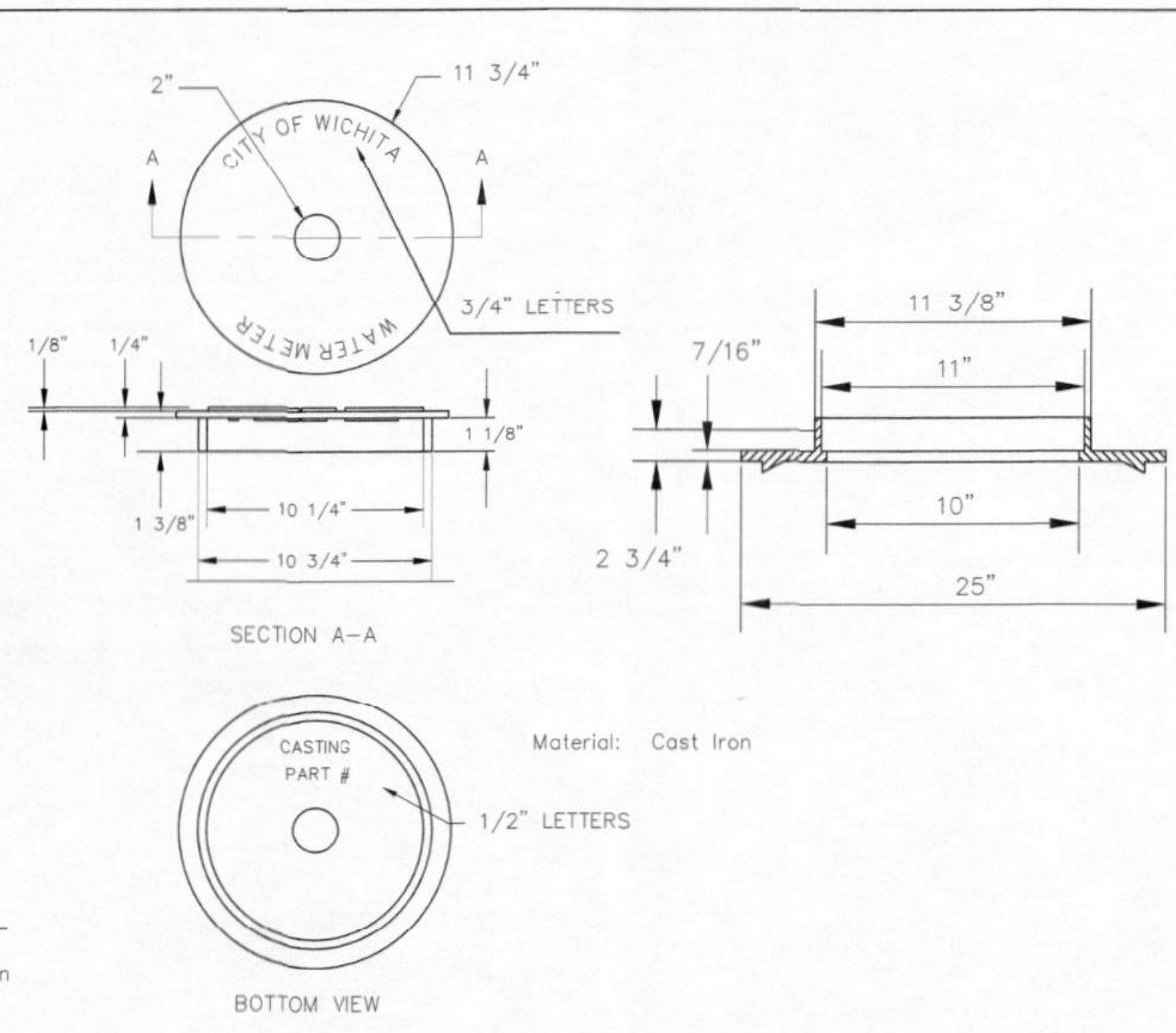
STANDARD WATER SERVICE DETAILS

CU205



TYPICAL 1" METER SETTING

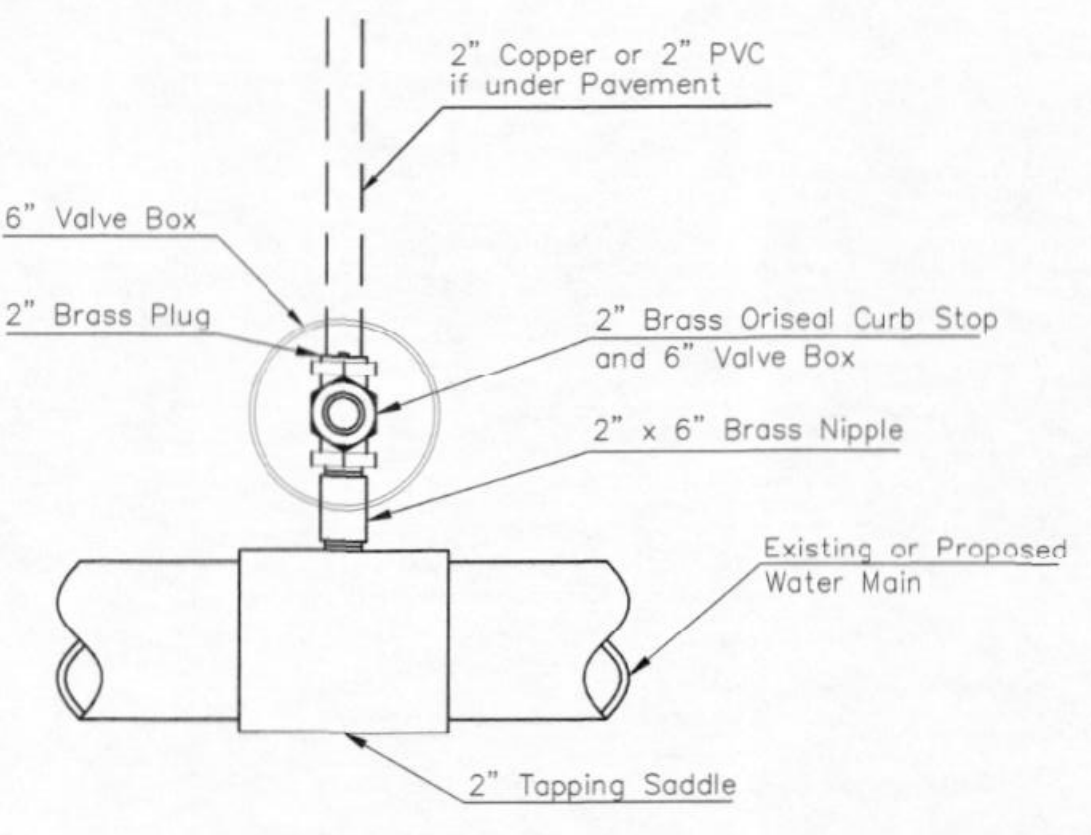
Minimum length of pigtail on consumer side is 36" of copper tubing from meter set.
Bore hole under paving shall be a maximum of 2" in diameter and a minimum of 36" below top of pavement.
Service Saddles are required on all mains.
Meter boxes will be located on each lot to be served, as indicated in the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



NOT TRAFFIC RATED RING & LID FOR 1" METER BOX

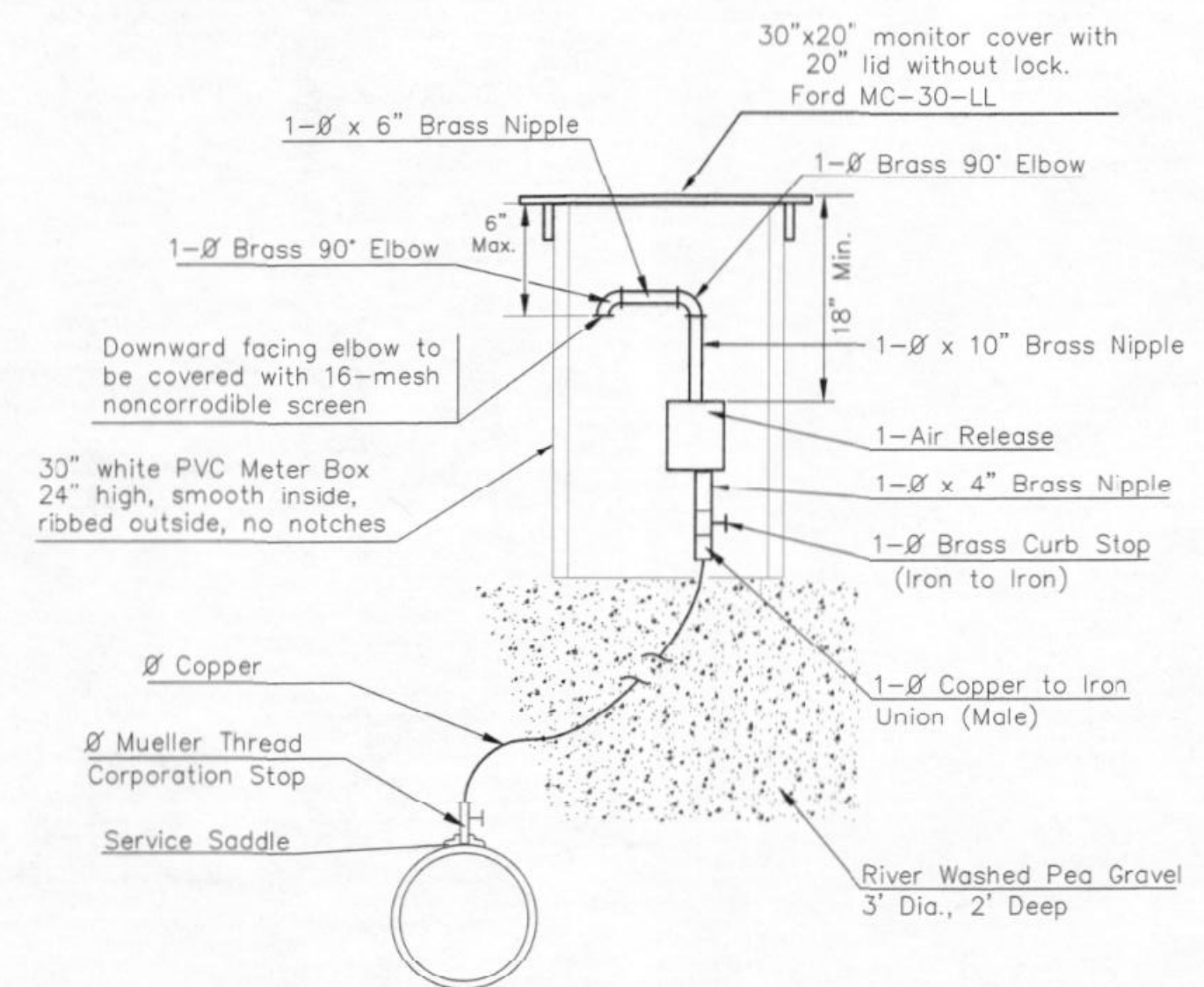
- 1 - 1/2" Mueller Thread Corporation Stop
- 1 - 1/2" Type "K" Copper Tubing
- 1 - 1/2" Copper to Iron Union (Male)
- 1 - 1/2" Brass Curb Stop (Iron to Iron)
- 2 - 1/2" x 1/4" Brass Nipple
- Air Release
- 2 - 1/2" Brass Elbows (90°)
- 1 - 1" x 1/2" Brass Nipple
- 1 - 30" Monitor Cover
- 1 - 20" Meter 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.



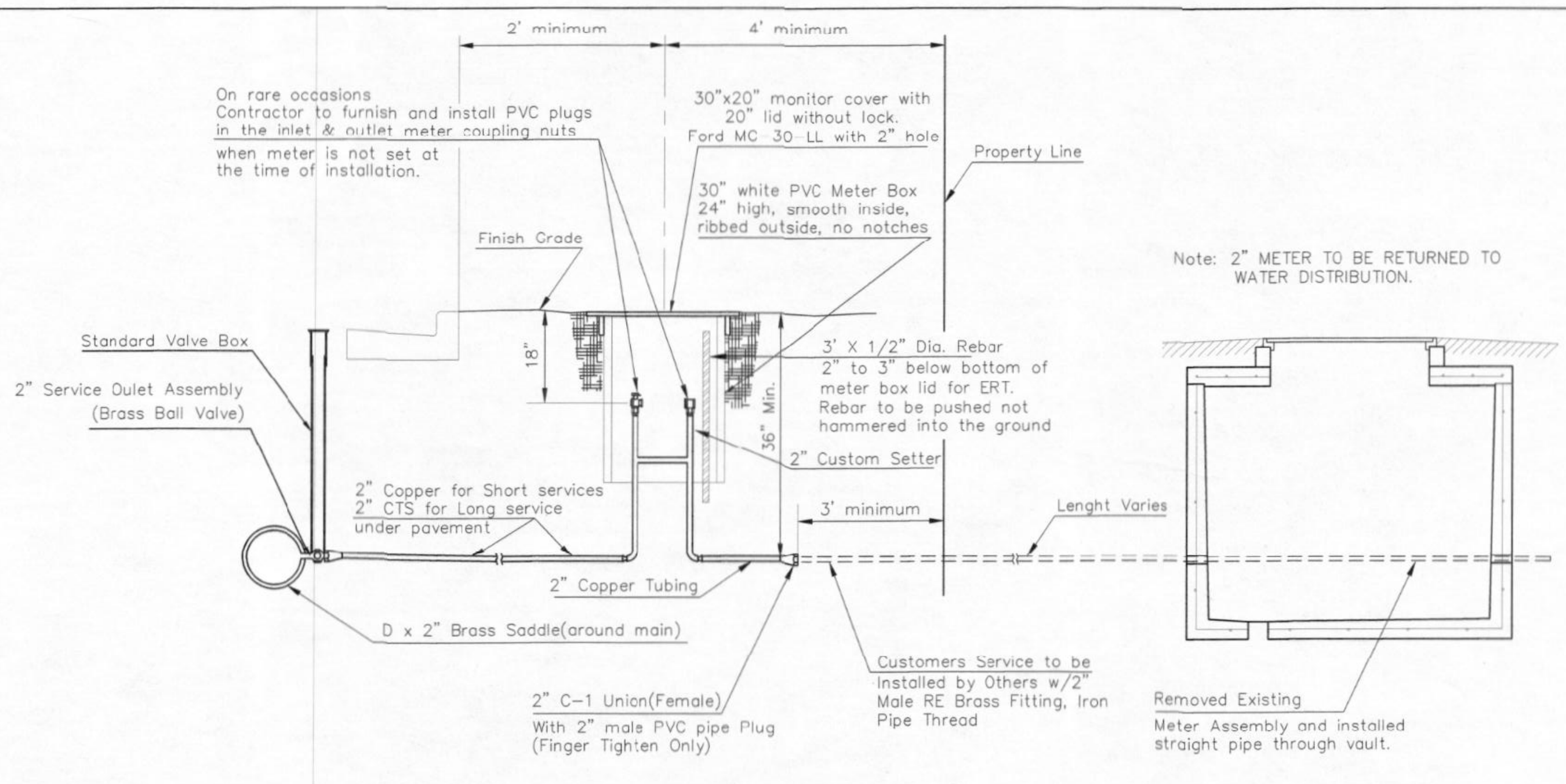
2" SERVICE OUTLET ASSEMBLY

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.



MATERIALS FOR 1" or 2" AIR RELEASE ASSEMBLY

Ø = 1" or 2"

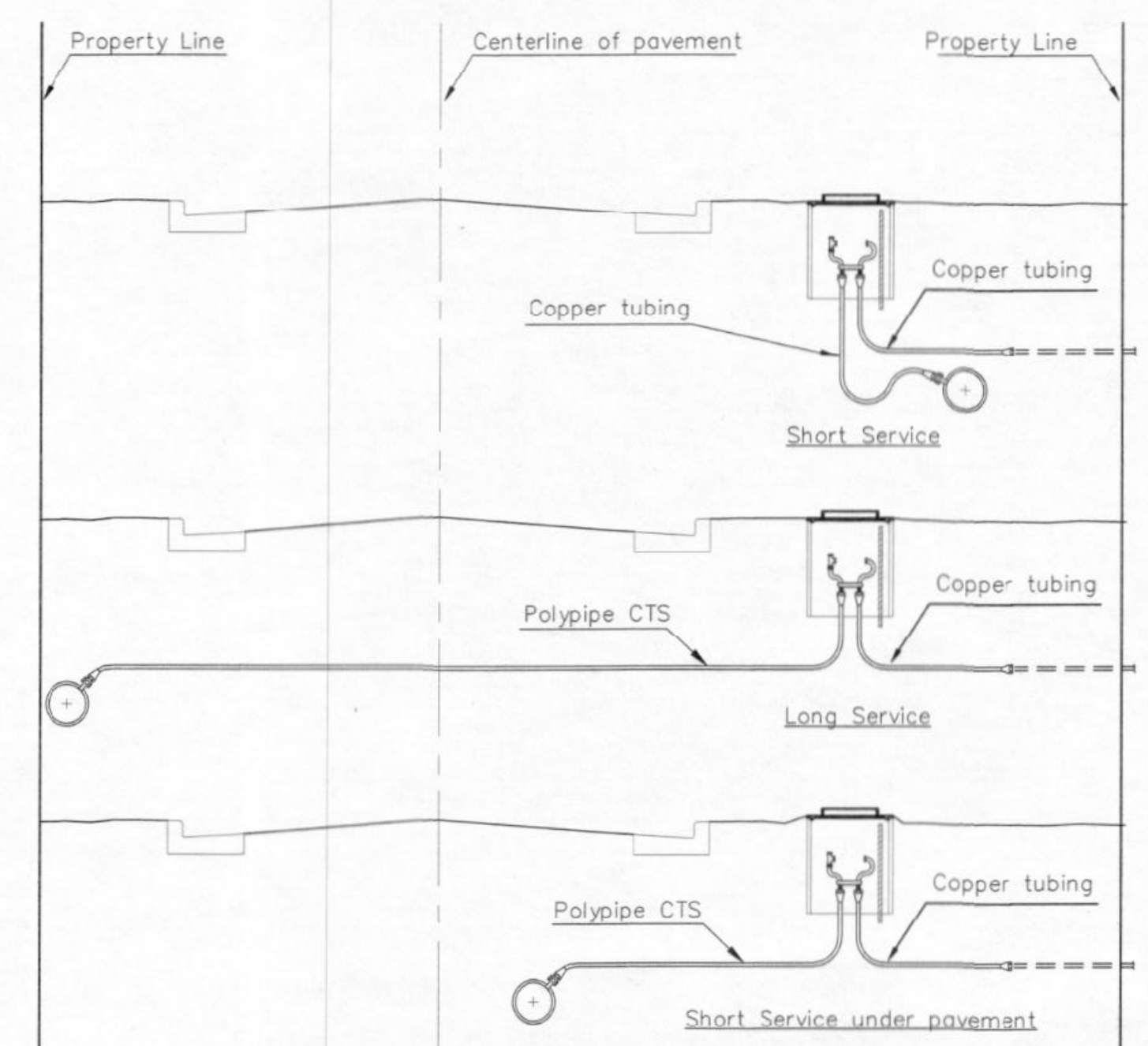


TYPICAL 2" METER SETTING

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.

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

PROJECT NUMBER	2023-011055	OCA NUMBER	53030982	DATE	
CITY ENGINEER'S OFFICE				SHEET	
CITY HALL - SEVENTH FLOOR				_ of _	
433 NORTH MAIN STREET					
WICHITA, KANSAS 67202-1620					
(316) 268-4501					

WL-102

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