

GENERAL NOTES:

1. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE SAFETY REGULATIONS. ALL CONSTRUCTION SHALL BE COMPLETED FOLLOWING CURRENT CITY STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.
2. 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:

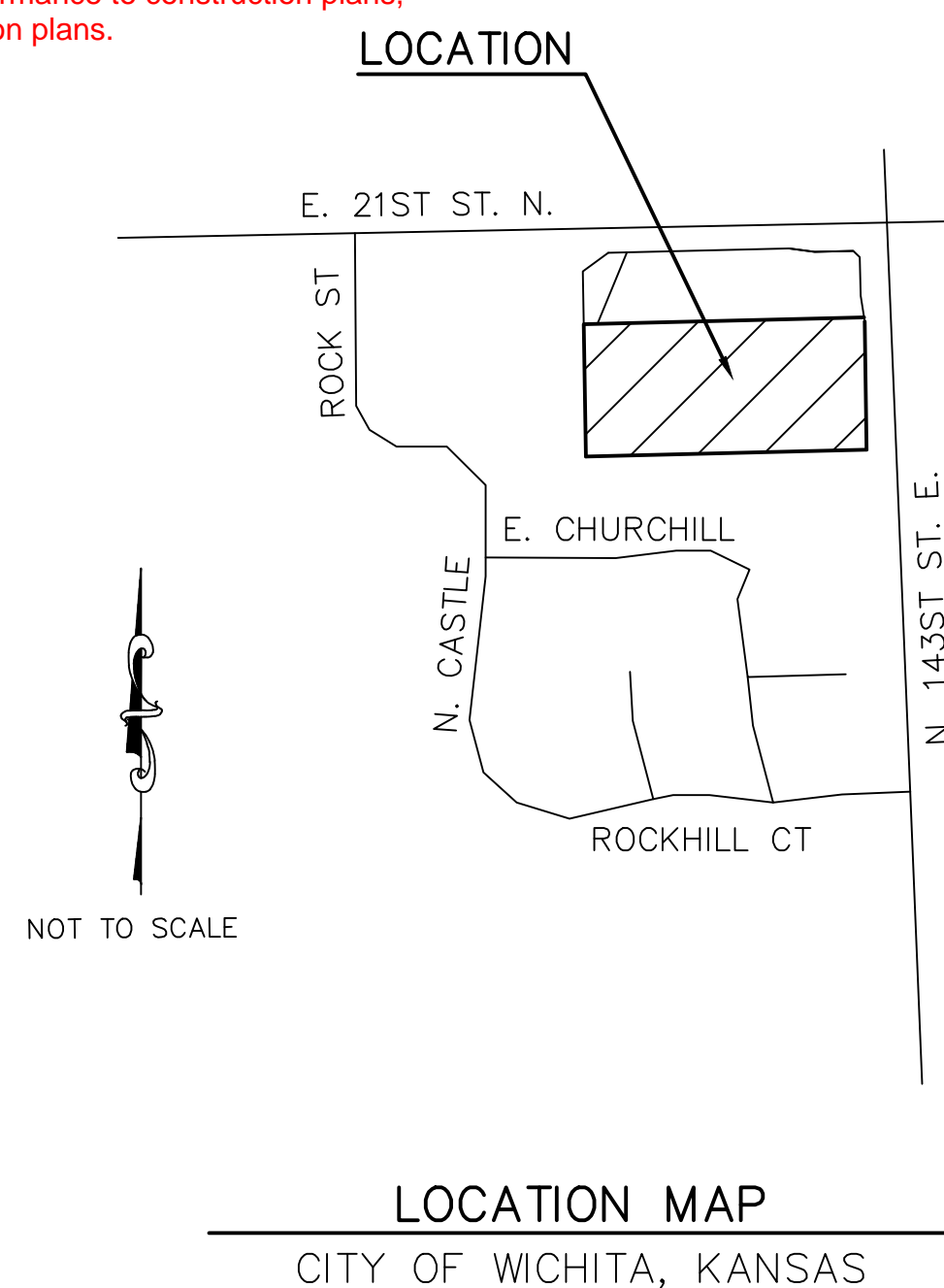
AT&T	1-800-246-8464
BLACK HILLS ENERGY	1-800-694-8989
CITY OF WICHITA WATER & SEWER	1-316-219-8921
CITY OF WICHITA STORMWATER	1-316-268-4090
CITY OF WICHITA TRAFFIC	1-316-268-4034
COX COMMUNICATIONS	1-888-249-3530
KANSAS GAS SERVICE	1-888-482-4950
EVERGY	1-800-544-4857

3. 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.
4. 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.
5. TREES AND SHRUBS IN PUBLIC RIGHT-OF-WAY WHICH ARE IN DIRECT CONFLICT WITH PROPOSED NEW CONSTRUCTION SHALL BE REMOVED BY THE CONTRACTOR WITH THE ENGINEER'S APPROVAL. TREES AND SHRUBS WHICH ARE NOT IN DIRECT CONFLICT WITH PROPOSED NEW CONSTRUCTION SHALL BE SAVED AND PROTECTED FROM DAMAGE.
6. 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.
7. 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.
8. THE ENGINEERING DIVISION SHALL FIELD LOCATE WATER VALVES 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 FINAL GRADES BY THE CONTRACTOR.
9. THE CONTRACTOR SHALL NOTIFY THE CONSULTANT ENGINEER AND DAWNITA REINHARDT WITH THE CITY AT 316-268-4574 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.
10. 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 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 THE 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 RESPONSIBLY.
11. ALL ELEVATIONS SHOWN ARE NAVD 88.
12. ALL AREAS DISTURBED DURING CONSTRUCTION THAT WILL NOT BE UNDER PROPOSED PAVEMENT SHALL BE RESTORED TO MATCH EXISTING CONDITIONS.
13. 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.
14. ALL APPLICABLE FEES (TAP, EQUITY, IN LIEU OF & MAIN BENEFIT) MUST BE PAID BEFORE ANY WORK ON THIS PROJECT CAN COMMENCE.
15. CITY MAINTENANCE OF WATER MAINS ENDS AT RIGHT-OF-WAY OR EASEMENT LINE OR WITHIN TWO FEET OF VAULT.
16. 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.
17. 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.
18. 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.
19. 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 PREFORMED DURING NON-PEAK HOURS.
20. 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.
21. DEFLECTIONS AT PIPE JOINT OR COUPLINGS SHALL NOT EXCEED THE PIPE MANUFACTURERS RECOMMENDED MAXIMUM. WHERE DEFLECTIONS ARE GREATER THAN THE MAXIMUM ALLOWED, THE CONTRACTOR SHALL UTILIZE FITTINGS.
22. ANY EXISTING JOINT EXPOSED DURING EXCAVATION SHALL BE REPLACED IF WITHIN FOUR FEET OF PROPOSED JOINT.
23. VALVES 12 INCH AND LARGER ARE TO BE OPERATED BY THE CITY WATER DISTRIBUTION DIVISION, 48 HOURS OF ADVANCE NOTICE IS REQUIRED WITH THE WATER DISPATCH AT 316-291-8921.
24. 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.
25. THE CONTRACTOR SHALL PROTECT FROM DAMAGE AND SUPPORT EXISTING UTILITIES THROUGH CONSTRUCTIONS AS APPROVED BY THE UTILITY OWNER AND THE ENGINEER AT THE CONTRACTORS EXPENSE.
26. CONTRACTOR SHALL LIMIT THE EXTENT OF TRENCH OPENINGS OVERNIGHT AND WEEKENDS TO LESS THAN 50 FEET.
27. WICHITA FIRE DEPARTMENT INSPECTIONS MAY BE SCHEDULED BY CALLING DAWNITA REINHARDT 316-268-4441.
28. 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.
29. SITE RESTORATION AND PREPARATION SHALL BE SUBSIDIARY TO THE PROJECT.
30. THE CONTRACTOR SHALL USE BEST MANAGEMENT PRACTICES (BMP'S) TO PREVENT ERODED SOIL FROM ENTERING DITCHES, CULVERTS, AND DRAINAGE AREAS. STANDARD DETAILS FOR EROSION BMP'S ARE AVAILABLE FROM THE ENGINEER. THE CONTRACTOR SHALL FOLLOW THE INTENT OF THE BMP'S WHICH ACT AS A GUIDELINE.
31. EACH BIDDER SHALL VISIT THE SITE OF THE PROJECT THROUGHOUT ITS ENTIRE EXTENT BEFORE SUBMITTING A PROPOSAL IN ORDER TO BECOME BETTER INFORMED OF THE EXISTING FIELD CONDITIONS AND OBSTACLES WHICH MIGHT BE ENCOUNTERED DURING CONSTRUCTION. EACH BIDDER SHOULD UNDERSTAND THAT NO ADDITIONAL COMPENSATION WILL BE AWARDED FOR EXTRA WORK THAT SHOULD HAVE BEEN EVALUATED PRIOR TO BIDDING.
32. ALL WATER PIPE TRENCHING IN PAVEMENT OR DRIVEWAYS, WHICH WILL BE REQUIRED TO CARRY TRAFFIC UNTIL PERMANENT PAVING REPLACEMENT, SHALL BE TOPPED WITH A MINIMUM OF 6" CRUSHED ROCK (COMPACTED) TO BE INCIDENTAL TO THE PROJECT. CONTRACTOR SHALL BE REQUIRED TO MAINTAIN TEMPORARY CRUSHED ROCK UNTIL PERMANENT PAVEMENT IS INSTALLED.
33. CONTRACTOR TO FIELD VERIFY LOCATION AND DEPTH OF ALL UTILITIES PRIOR TO CONSTRUCTION AND REPORT FINDINGS TO PROJECT ENGINEER. LOCATION INFORMATION HAS BEEN OBTAINED FROM VARIOUS COMPANIES AND IS EITHER FROM COMPANY UTILITY DRAWINGS OR COMPANY PROVIDED FIELD LOCATIONS. THE PLAN LOCATIONS SHOWN ARE NOT GUARANTEED. ADDITIONAL EXISTING UTILITIES MAY BE ENCOUNTERED.
34. CONTRACTOR TO FOLLOW STANDARD CITY OF WICHITA BEST MANAGEMENT PRACTICES FOR EROSION CONTROL.
35. ALL PROPOSED WATER STRUCTURES TO BE INSTALLED PER CITY OF WICHITA STANDARD DETAILS/ SPECIFICATIONS.
36. 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.
37. 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.
38. MAINTAIN A MINIMUM OF 2-FOOT VERTICAL SEPARATION BETWEEN ALL WATER LINES (MAIN AND SERVICES) AND ALL PRESSURIZED SANITARY SEWER LINES (FORCED 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.

WATER LINE IMPROVEMENTS FOR LOT 10, BLOCK 1, KRUG SOUTH COMMERCIAL ADDITION WICHITA, KANSAS NOVEMBER 2021

GARY JANZEN, P.E. CITY ENGINEER
PROJECT NUMBER
2021-028563PPW (183021)

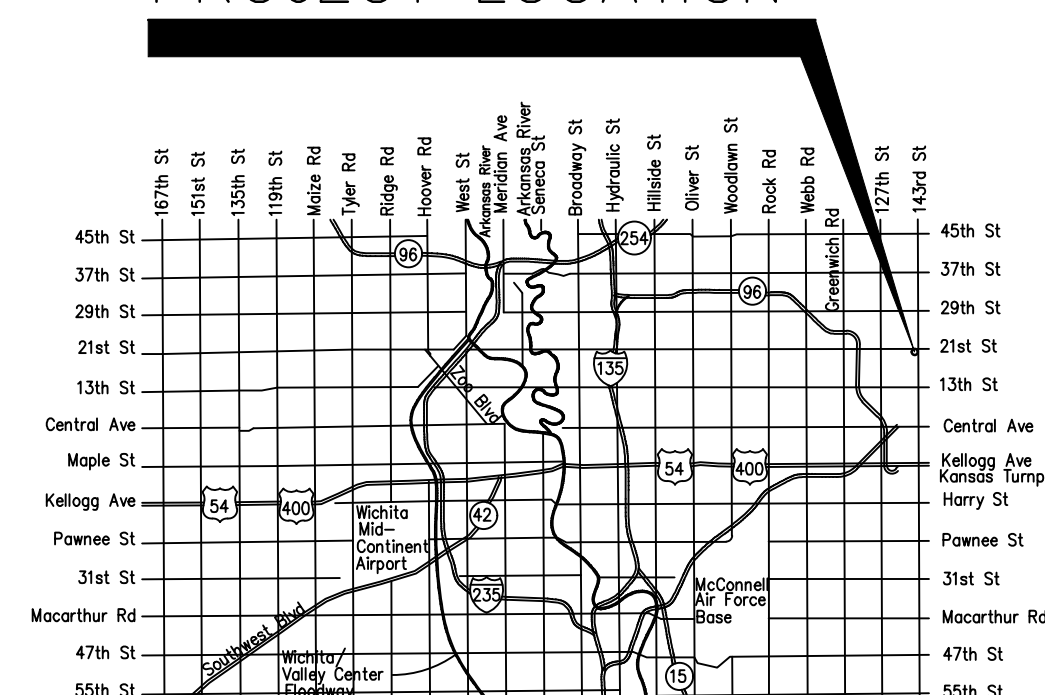
Date: 2021-12-20
Inspector: A.Thompson: M. Collins
Design/Inspecting Firm: Kaw Valley Engineering, Inc.
Contractor: O'Reilly's Construction Group
Subcontractor: Sooter Excavating LLC
Built in general conformance to construction plans,
except where noted on plans.



INDEX TO SHEETS:

- | | |
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| 06 | WATER LINE C - PLAN AND PROFILE |
| 07 | WATER LINE C - PLAN AND PROFILE |
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| 10 | WATER DETAIL SHEET |
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PROJECT LOCATION



VICINITY MAP

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

Engineering approved by Ben Ferguson 11/16/2021
Utilities approved by Greg Lolley 11/16/2021
Fire Dept. approved by Jose Ocadiz 11/16/2021

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 or Wichita Specifications and Standards and Special Provision (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.

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BENCHMARKS

BM #1: CHISELED SQUARE AT NORTHEAST CORNER OF INLET ON SOUTH SIDE OF WILLIAMSGATE OVER BRIDGE IN HAWTHORNE ADDITION.
ELEV. = 1356.24 (NAVD 88)

BM #2: RAILROAD SPIKE IN SOUTH FACE OF POWER POLE, 3RD POWER POLE WEST OF 143RD STREET (799' FROM CENTERLINE) SOUTH SIDE OF 21ST STREET (49' FROM CENTERLINE)
ELEV. = 1362.67 (NAVD 88)

BM #3: FIRE HYDRANT BOLT W/ TAG ON TOP FLANGE, WEST SIDE OF 143RD STREET NORTHWEST OF DRIVE (23' FROM CENTERLINE)
ELEV. = 1383.31 (NAVD 88)

	FOR FINAL	SRB	CHK
	CITY REVIEW	JML	SRB
		EAM	DWN
		EAM	CHK

REV	DATE	DESCRIPTION
1	11-01-21	
A	8-9-21	

SHAWN R. BRYAN
ENGINEER
KS # 17899

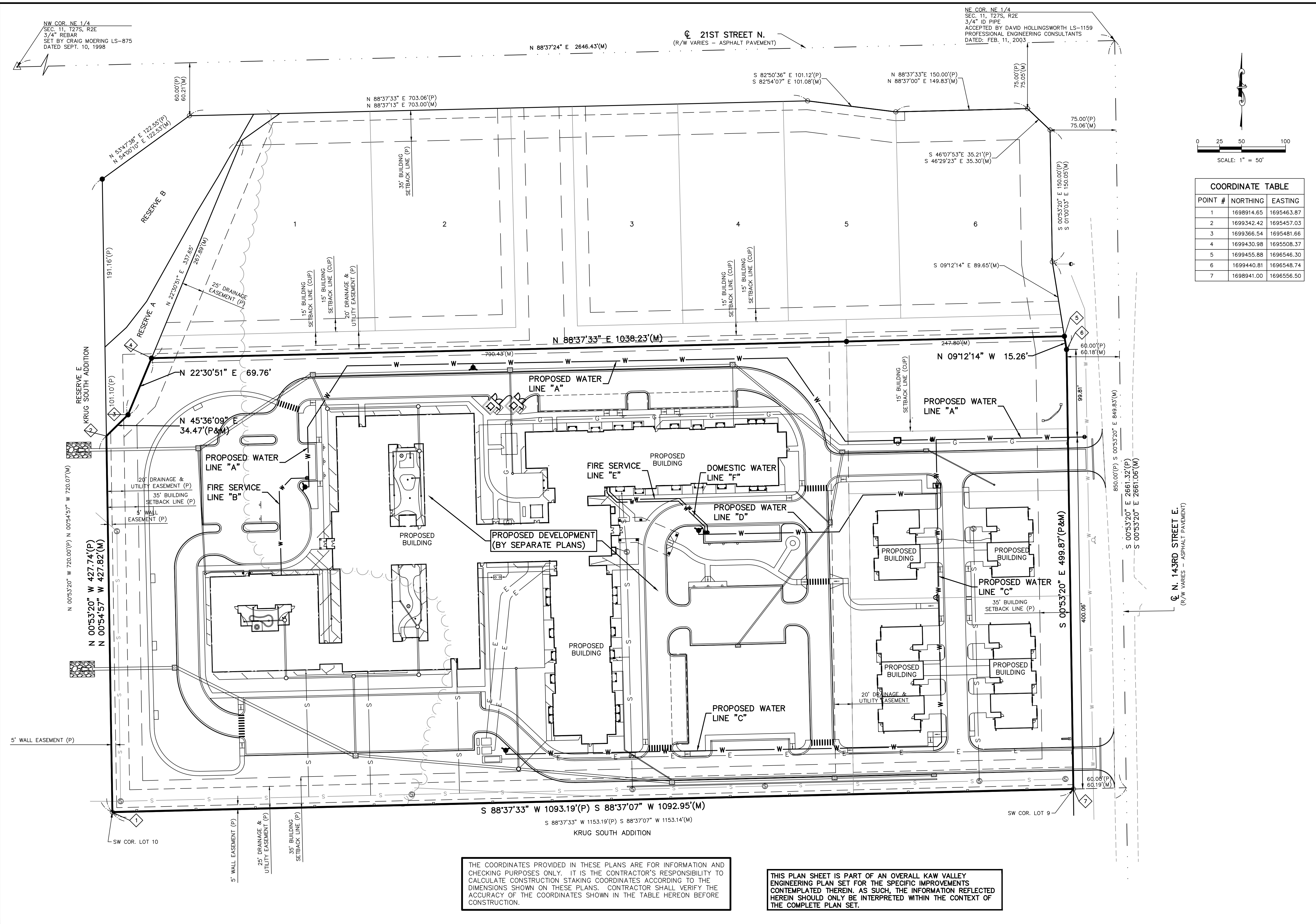
200 N. EMPORIA, SUITE 100
WICHITA, KANSAS 67202
PH. (316) 440-4304 | FAX (316) 440-4309
www.kaweng.com | www.kaweng.com

KAW VALLEY ENGINEERING
KAW VALLEY ENGINEERING, INC., IS AUTHORIZED TO OFFER ENGINEERING SERVICES BY KANSAS STATE CERTIFICATE OF AUTHORIZATION # E-11.3, EXPIRES 12/31/22

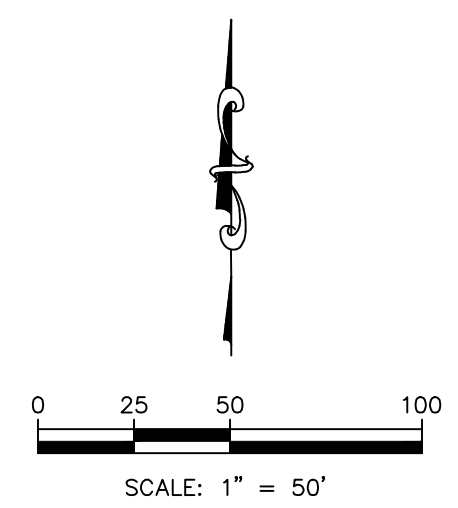
THE RUSHWOOD
143RD ST. E. AND 21ST ST. N.
WICHITA, KANSAS

WATER LINE IMPROVEMENT PLANS
TITLE SHEET

PROJ. NO.	620 1494-1	
DESIGNER	SRB	DRAWN BY JML
CFN	1494-1WTS	
SHEET	01	REV 1

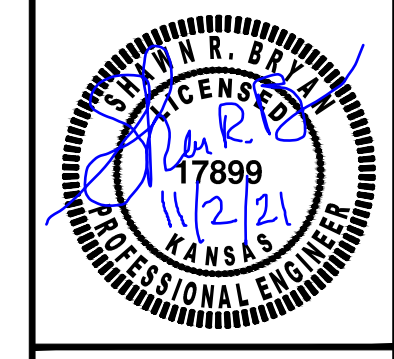


NE COR. NE 1/4
 SEC. 11, T27S, R2E
 3/4" ID PIPE
 ACCEPTED BY DAVID HOLLINGSWORTH LS-1159
 PROFESSIONAL ENGINEERING CONSULTANTS
 DATED: FEB. 11, 2003



COORDINATE TABLE		
POINT #	NORTHING	EASTING
1	1698914.65	1695463.87
2	1699342.42	1695457.03
3	1699366.54	1695481.66
4	1699430.98	1695508.37
5	1699455.88	1695546.30
6	1699440.81	1695548.74
7	1698941.00	1695556.50

REV	DATE	DESCRIPTION
1	11-01-21	FOR FINAL
A	8-9-21	CITY REVIEW



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 KS # 17899

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THE RUSHWOOD
 143RD ST. E. AND 21ST ST. N.
 WICHITA, KANSAS

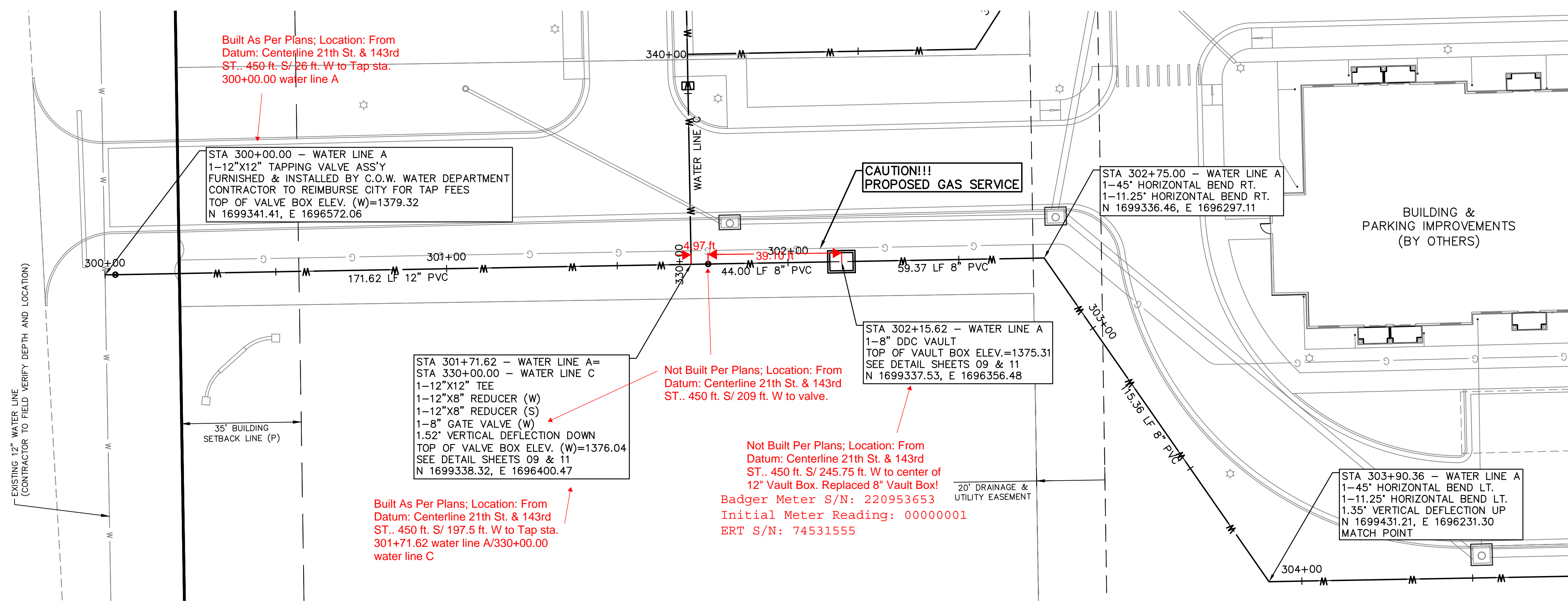
WATER LINE IMPROVEMENT PLANS
GENERAL LAYOUT SHEET

PROJ. NO. **G20-1494-1**
 DESIGNER **SRB** DRAWN BY **JML**
 CFN **1494-1WGLS**
 SHEET **02** REV **1**

THE COORDINATES PROVIDED IN THESE PLANS ARE FOR INFORMATION AND CHECKING PURPOSES ONLY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CALCULATE CONSTRUCTION STAKING COORDINATES ACCORDING TO THE DIMENSIONS SHOWN ON THESE PLANS. CONTRACTOR SHALL VERIFY THE ACCURACY OF THE COORDINATES SHOWN IN THE TABLE HEREON BEFORE CONSTRUCTION.

THIS PLAN SHEET IS PART OF AN OVERALL KAW VALLEY ENGINEERING PLAN SET FOR THE SPECIFIC IMPROVEMENTS CONTEMPLATED THEREIN. AS SUCH, THE INFORMATION REFLECTED HEREIN SHOULD ONLY BE INTERPRETED WITHIN THE CONTEXT OF THE COMPLETE PLAN SET.

Q. N. 143RD STREET E.
(R/W VARIES - ASPHALT PAVEMENT)



Built As Per Plans; Location: From Datum: Centerline 21th St. & 143rd ST... 450 ft. S/ 26 ft. W to Tap sta. 300+00.00 water line A

STA 300+00.00 - WATER LINE A
1-12\"/>

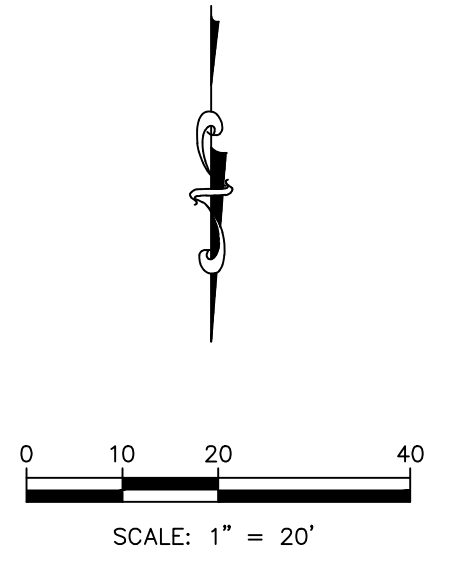
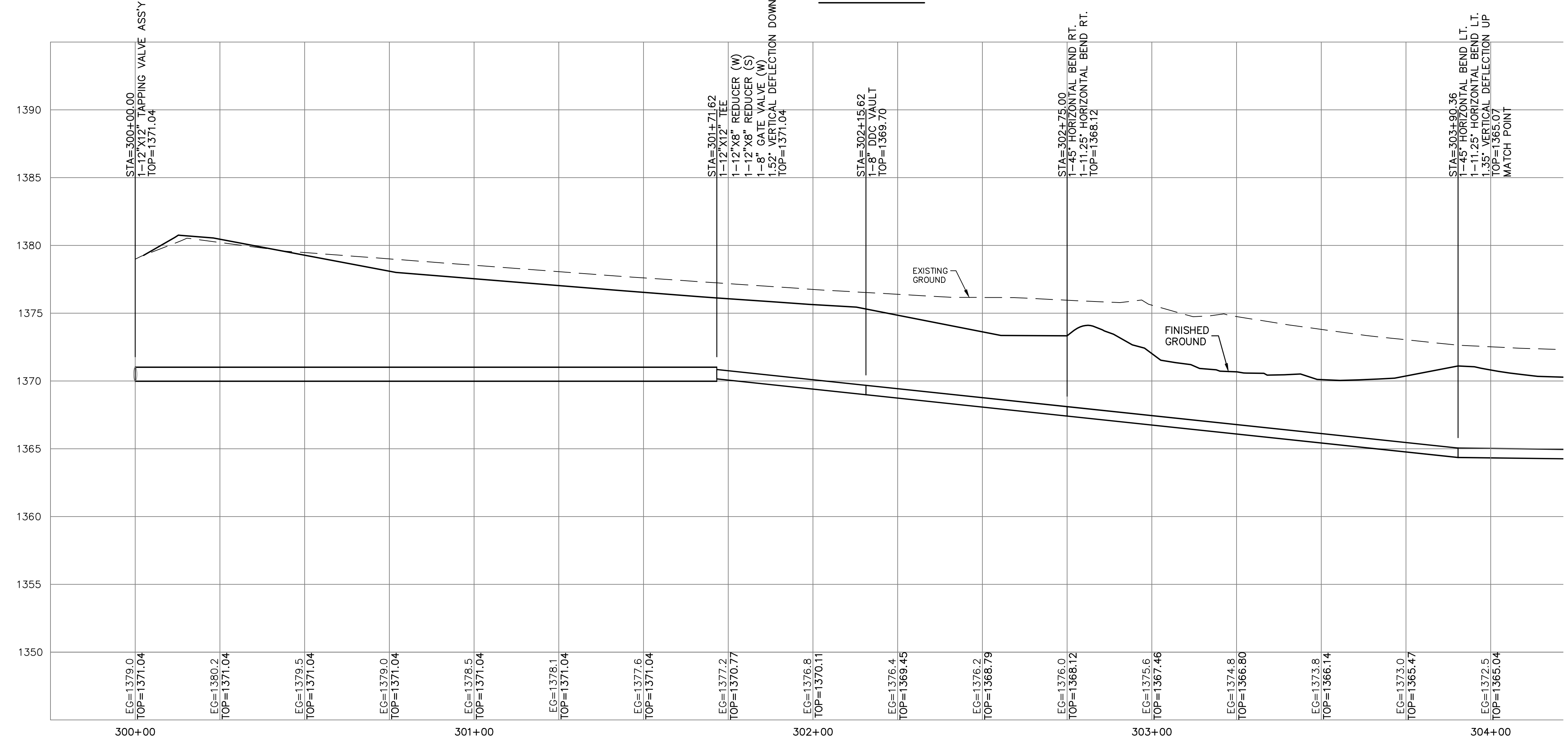
STA 301+71.62 - WATER LINE A =
STA 330+00.00 - WATER LINE C
1-12\"/>

Not Built Per Plans; Location: From Datum: Centerline 21th St. & 143rd ST... 450 ft. S/ 209 ft. W to valve.

Not Built Per Plans; Location: From Datum: Centerline 21th St. & 143rd ST... 450 ft. S/ 245.75 ft. W to center of 12\"/>

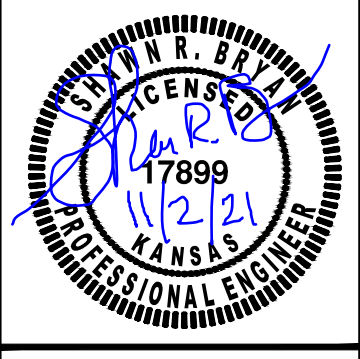
Built As Per Plans; Location: From Datum: Centerline 21th St. & 143rd ST... 450 ft. S/ 197.5 ft. W to Tap sta. 301+71.62 water line A/330+00.00 water line C

WATER LINE A



SRB	CHK
EAM	DWN
JML	SRB
EAM	SRB

REV	DATE	DESCRIPTION
1	11-01-21	FOR FINAL
A	8-9-21	CITY REVIEW



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KAW VALLEY ENGINEERING

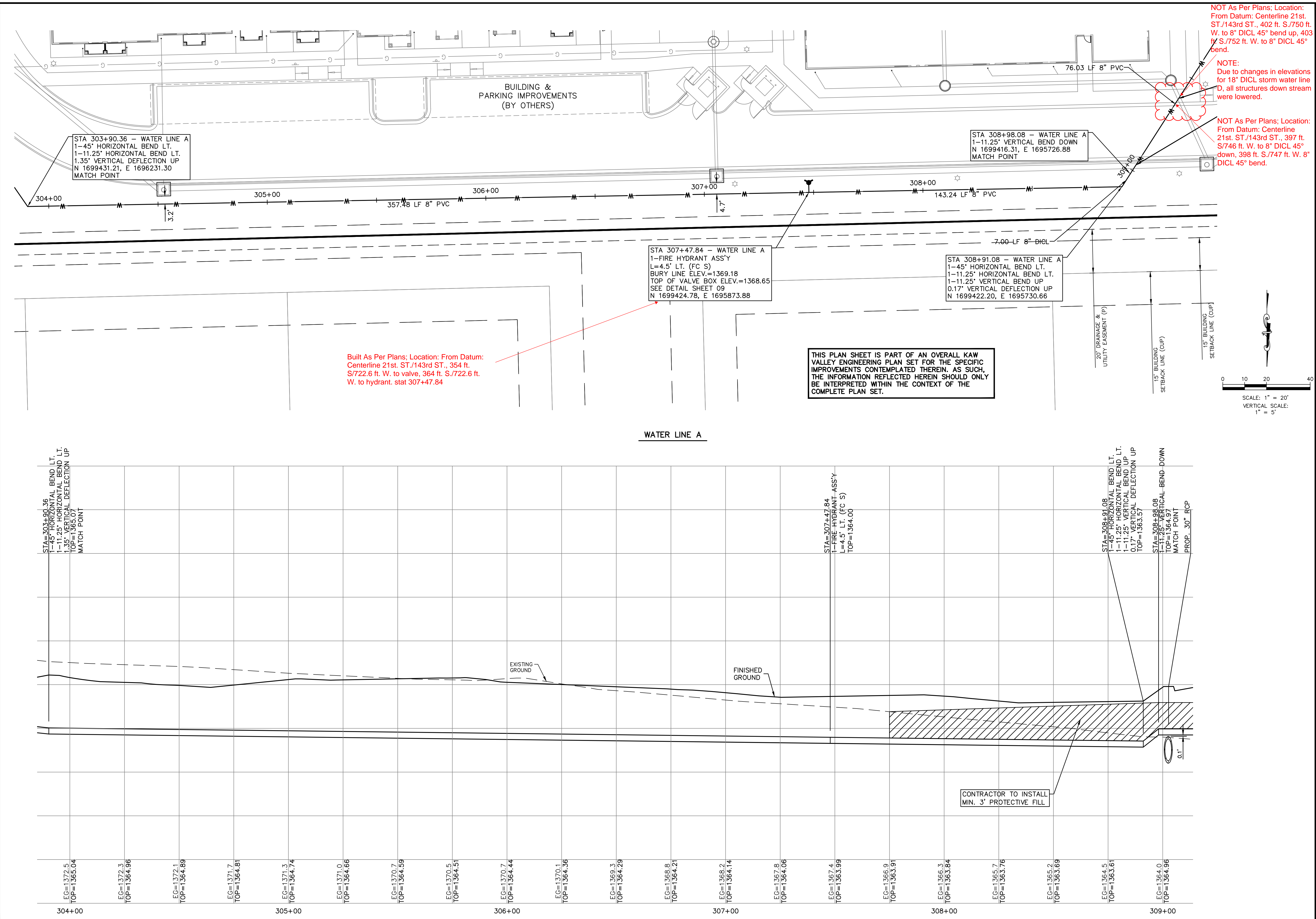
KAW VALLEY ENGINEERING, INC., IS AUTHORIZED TO OFFER ENGINEERING SERVICES BY KANSAS STATE CERTIFICATE OF AUTHORIZATION # E-113. EXPIRES 12/31/22

THE RUSHWOOD
143RD ST. E. AND 21ST ST. N.
WICHITA, KANSAS

WATER LINE IMPROVEMENT PLANS
WATER LINE A - PLAN AND PROFILE

PROJ. NO.	620-1494-1
DESIGNER	SRB
DRAWN BY	JML
CFN	1494-1-WPPP
SHEET	REV
03	1

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NOT As Per Plans; Location:
From Datum: Centerline 21st.
ST./143rd ST., 402 ft. S./750 ft.
W. to 8" DI CL 45° bend up, 403
ft. S./752 ft. W. to 8" DI CL 45°
bend.

NOTE:
Due to changes in elevations
for 18" DI CL storm water line
D, all structures down stream
were lowered.

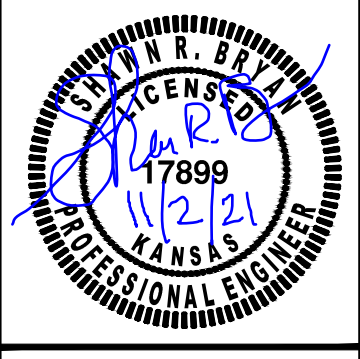
NOT As Per Plans; Location:
From Datum: Centerline
21st. ST./143rd ST., 397 ft.
S./746 ft. W. to 8" DI CL 45°
down, 398 ft. S./747 ft. W. 8"
DI CL 45° bend.

Built As Per Plans; Location: From Datum:
Centerline 21st. ST./143rd ST., 354 ft.
S./722.6 ft. W. to valve, 364 ft. S./722.6 ft.
W. to hydrant. stat 307+47.84

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COMPLETE PLAN SET.

SRB	SRB
EAM	JML
EAM	DSN
EAM	DWN
EAM	CHK

REV	DATE	DESCRIPTION
1	11-01-21	FOR FINAL
A	8-9-21	CITY REVIEW



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SERVICES BY KANSAS STATE CERTIFICATE OF AUTHORIZATION # E-113.
EXPIRES 12/31/22

THE RUSHWOOD
143RD ST. E. AND 21ST ST. N.
WICHITA, KANSAS

WATER LINE IMPROVEMENT PLANS
WATER LINE A - PLAN AND PROFILE

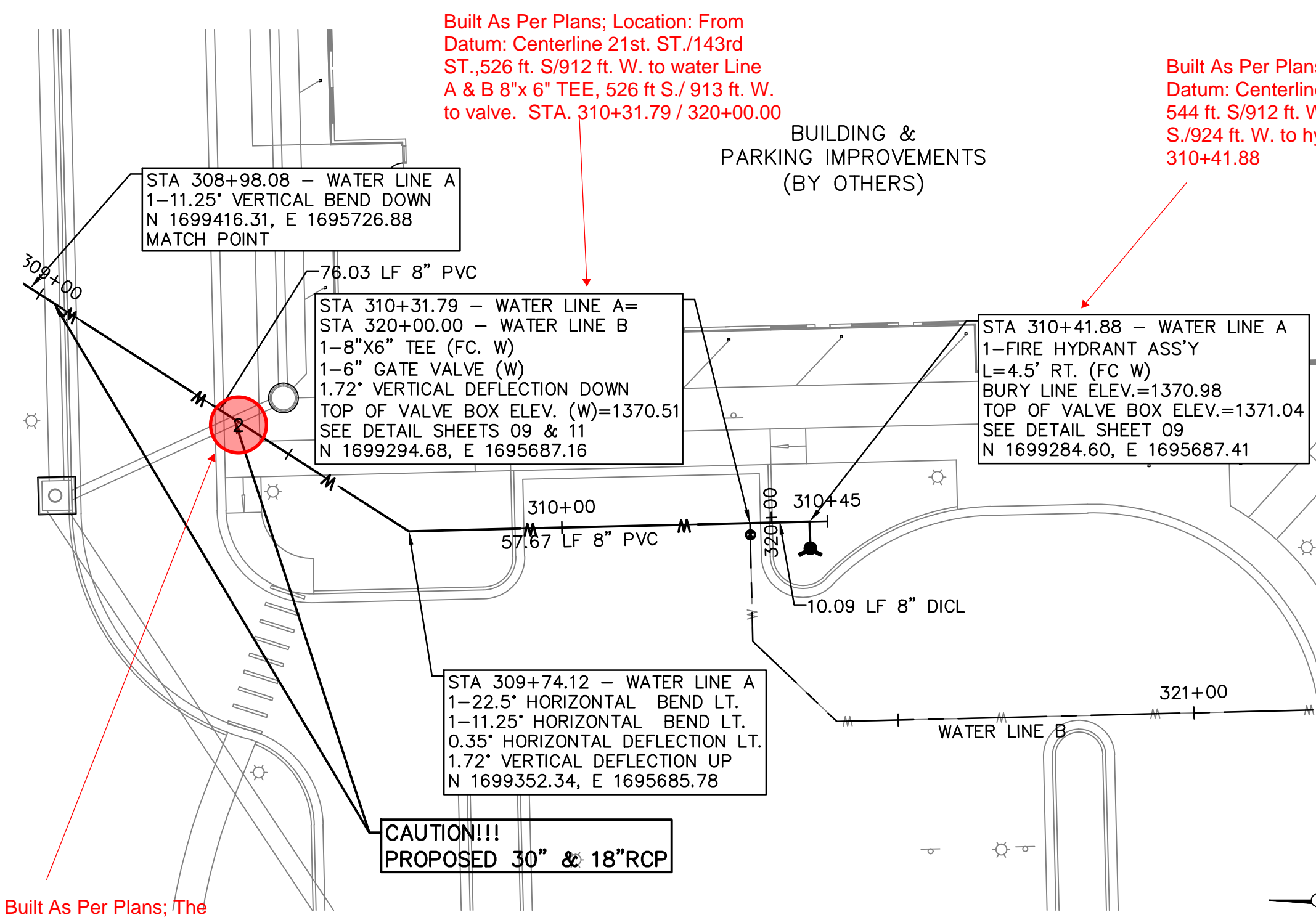
PROJ. NO. **620 1494-1**

DESIGNER **SRB** DRAWN BY **JML**

CFN **1494-1WPP**

SHEET **04** REV **1**

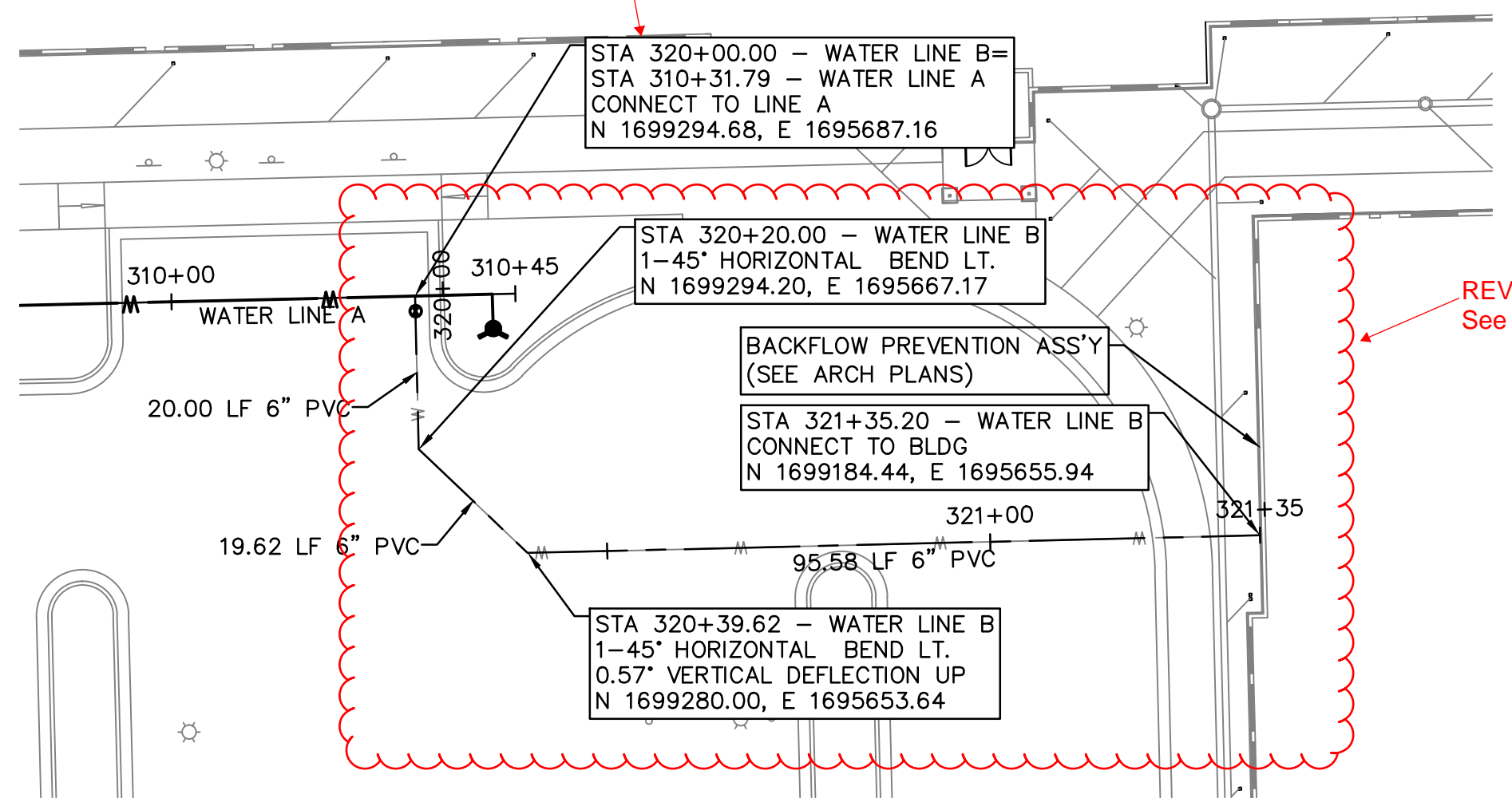
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Built As Per Plans; Location: From Datum: Centerline 21st. ST./143rd ST., 526 ft. S/912 ft. W. to water Line A & B 8"x 6" TEE, 526 ft S./913 ft. W. to valve. STA. 310+31.79 / 320+00.00

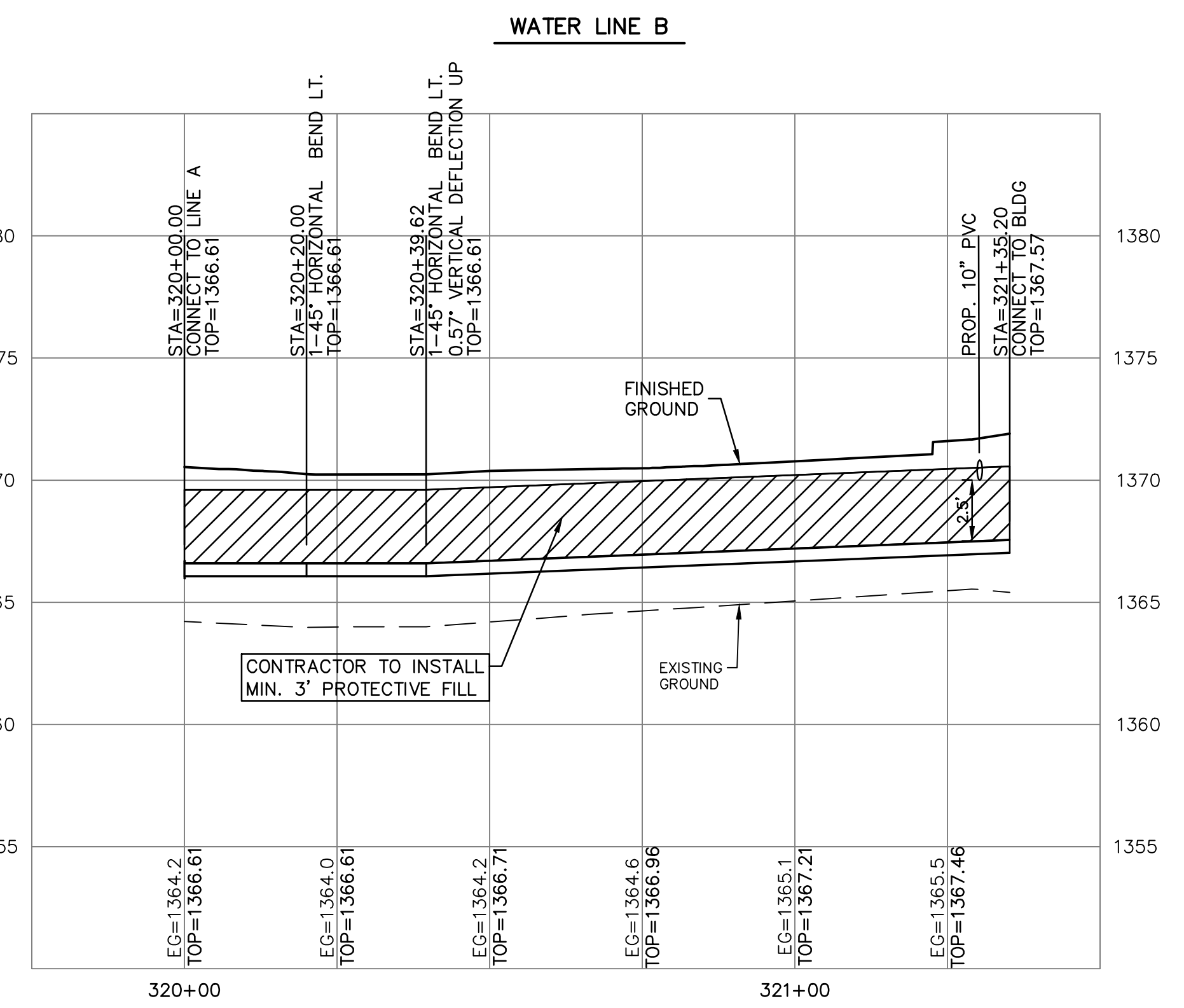
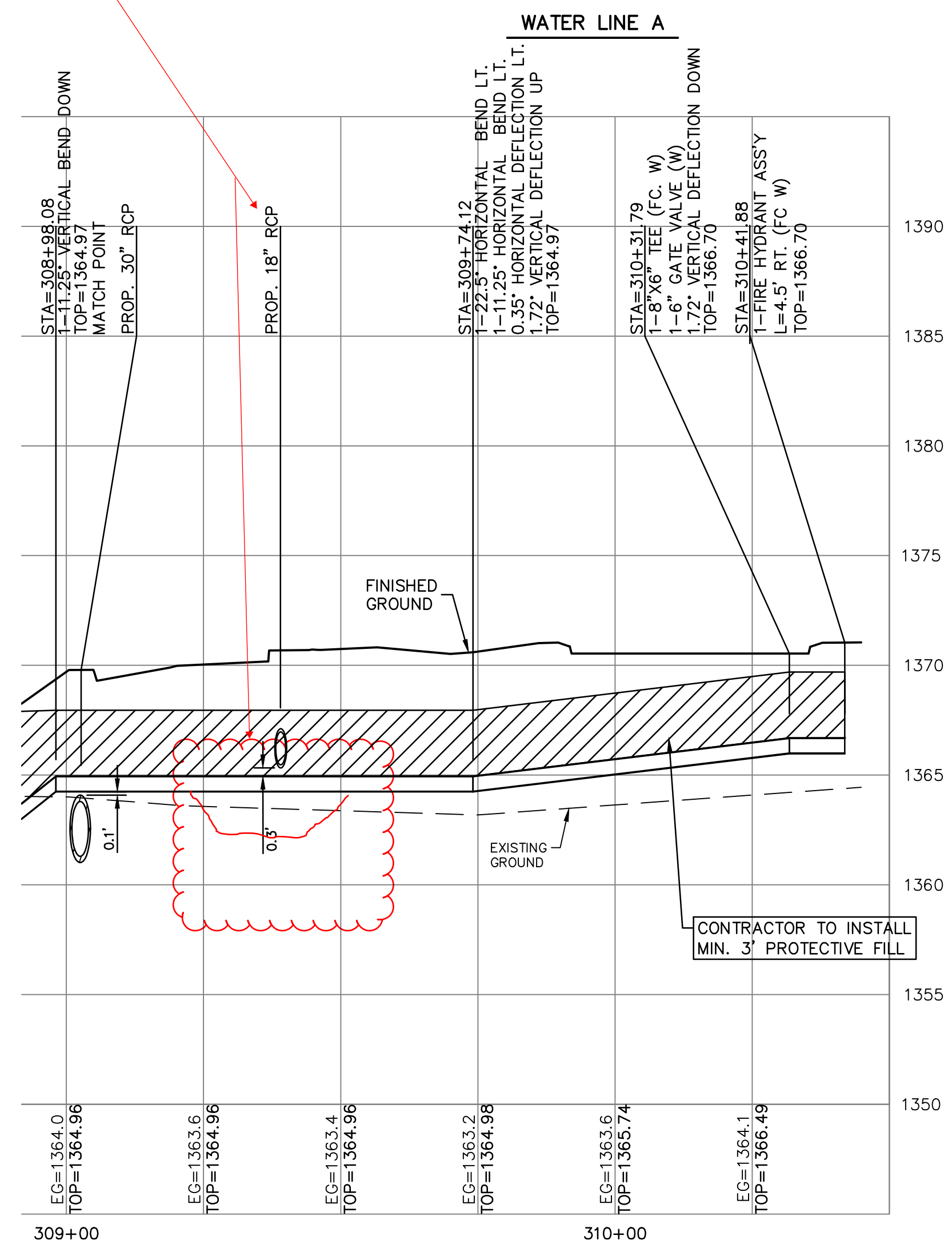
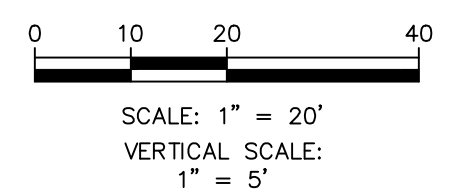
Built As Per Plans; Location: From Datum: Centerline 21st. ST./143rd st., 544 ft. S/912 ft. W to valve, 544 ft. S/924 ft. W. to hydrant STA. 310+41.88

Built As Per Plans; Location: From Datum: Centerline 21st. ST./143rd ST., 526 ft. S/912 ft. W. to water Line A & B 8"x 6" TEE, 526 ft S./913 ft. W. to valve. STA. 310+31.79 / 320+00.00



REVISED PLANS:
See Revised Plans for Water Line B

NOTE: Not Built As Per Plans; The water Line A was dropped 3 ft. to clear the 18" RCP storm line at this location. See pictures for 2022-06-20.



	SRB	CHK
	EAM	DWN
	JML	
	EAM	DSN

REV	DATE	DESCRIPTION
1	11-01-21	FOR FINAL
A	8-9-21	CITY REVIEW



SHAWN R. BRYAN
ENGINEER
KS # 17899

200 N. EMPORIA, SUITE 100
WICHITA, KANSAS 67202
PH. (316) 440-4304 | FAX. (316) 440-4309
www.kaveing.com | www.kveing.com

KAW VALLEY ENGINEERING

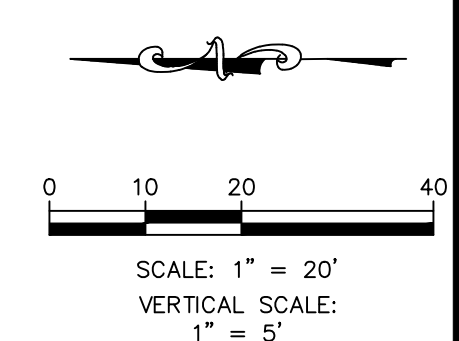
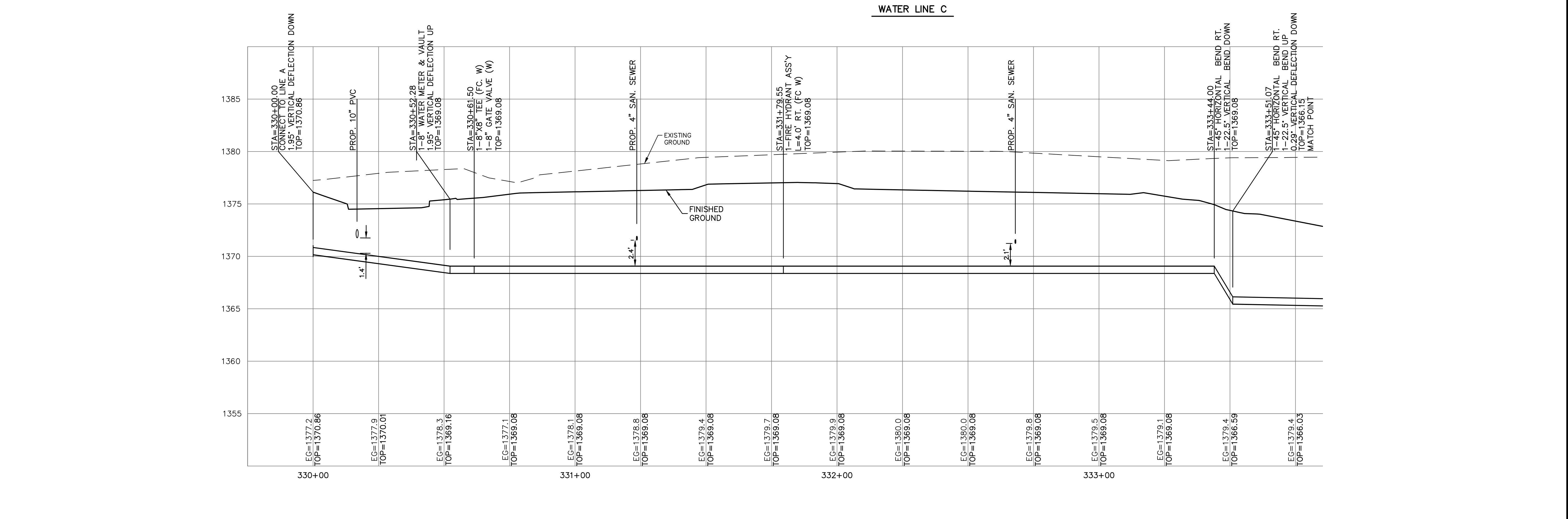
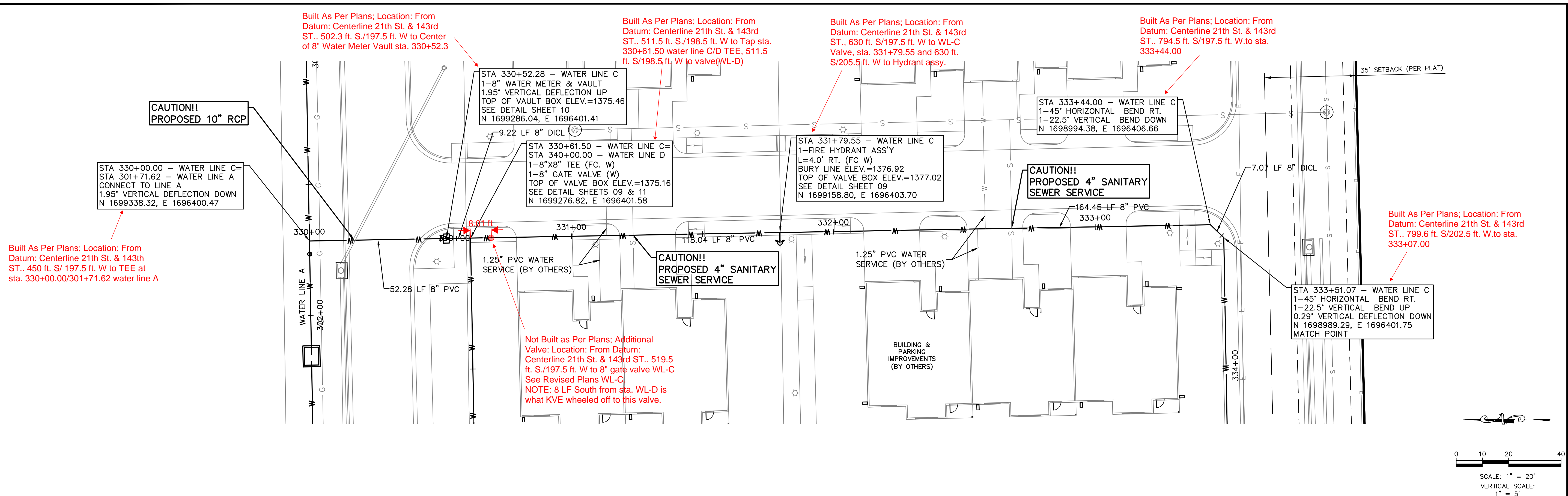
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THE RUSHWOOD
143RD ST. E. AND 21ST ST. N.
WICHITA, KANSAS

WATER LINE IMPROVEMENT PLANS
WATER LINE A&B- PLAN AND PROFILE

PROJ. NO.	G20-1494-1
DESIGNER	SRB
DRAWN BY	JML
CFN	1494-1WPP
SHEET	REV
05	1

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SRB	SRB	CHK
EAM	JML	DWN
EAM	EAM	DSN
FOR FINAL	CITY REVIEW	DESCRIPTION
11-01-21	8-9-21	REV DATE
A		REV

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KAW VALLEY ENGINEERING

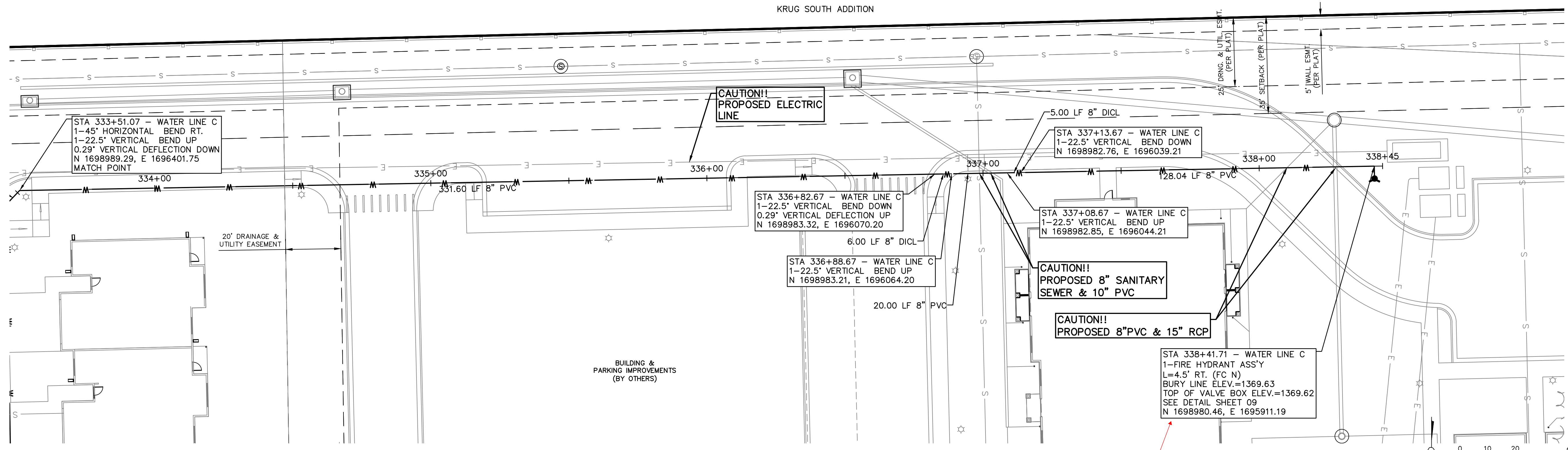
KAW VALLEY ENGINEERING, INC. IS AUTHORIZED TO OFFER ENGINEERING SERVICES BY KANSAS STATE CERTIFICATE OF AUTHORIZATION # E-113. EXPIRES 12/31/22

THE RUSHWOOD
143RD ST. E. AND 21ST ST. N.
WICHITA, KANSAS

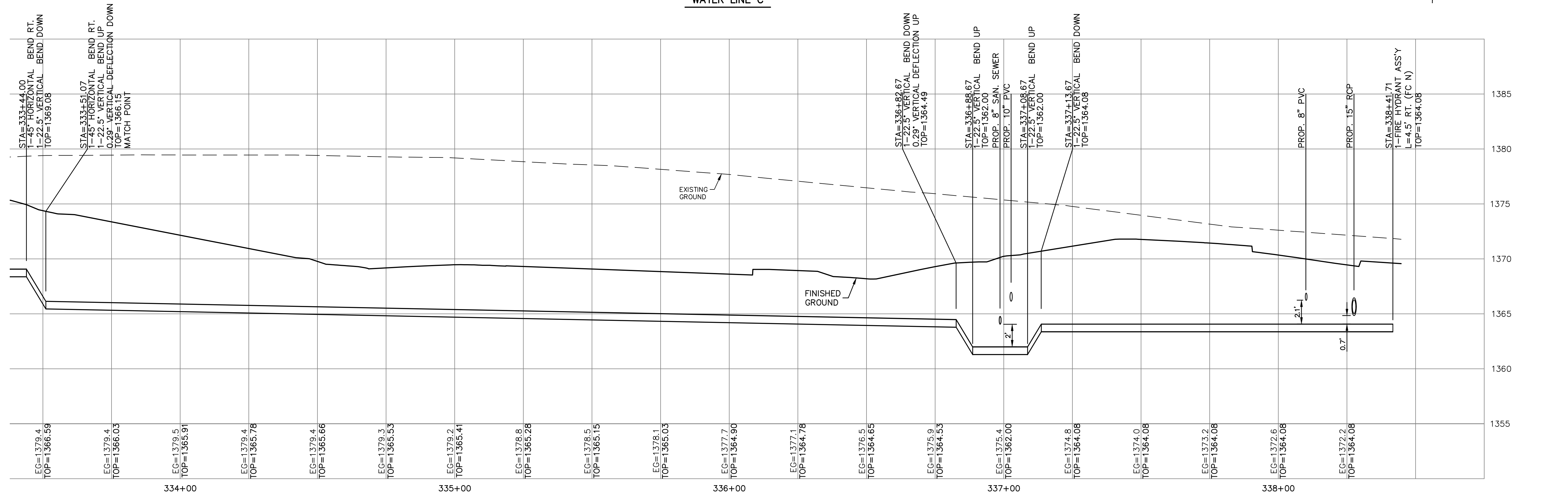
WATER LINE IMPROVEMENT PLANS
WATER LINE C - PLAN AND PROFILE

PROJ. NO.	G20 1494-1
DESIGNER	SRB
DRAWN BY	JML
CFN	1494-1WPP
SHEET	06
REV	1

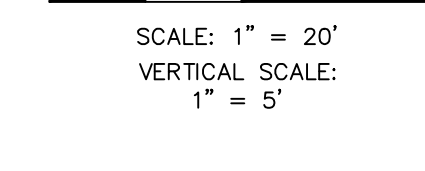
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WATER LINE C

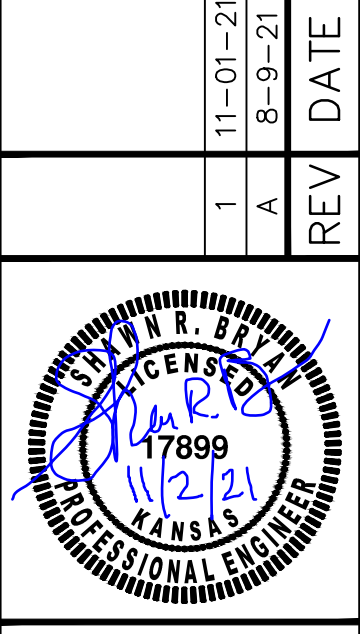


Built As Per Plans; Location: From Datum: Centerline 21st St. & 143rd St., 800 ft S/ 692 ft. W ft. to WL-C Valve, sta. 338+41.71 and 807.2 ft S/ 695 ft. W to WL-C Fire Hydrant Assy



SRB	CHK
EAM	DWN
JML	SRB

FOR FINAL	DESCRIPTION
CITY REVIEW	
11-01-21	REV DATE
A	8-9-21
1	11-01-21



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THE RUSHWOOD
143RD ST. E. AND 21ST ST. N.
WICHITA, KANSAS

WATER LINE IMPROVEMENT PLANS
WATER LINE C - PLAN AND PROFILE

PROJ. NO.	G20-1494-1
DESIGNER	SRB
DRAWN BY	JML
CFN	1494-1WPP
SHEET	07
REV	1

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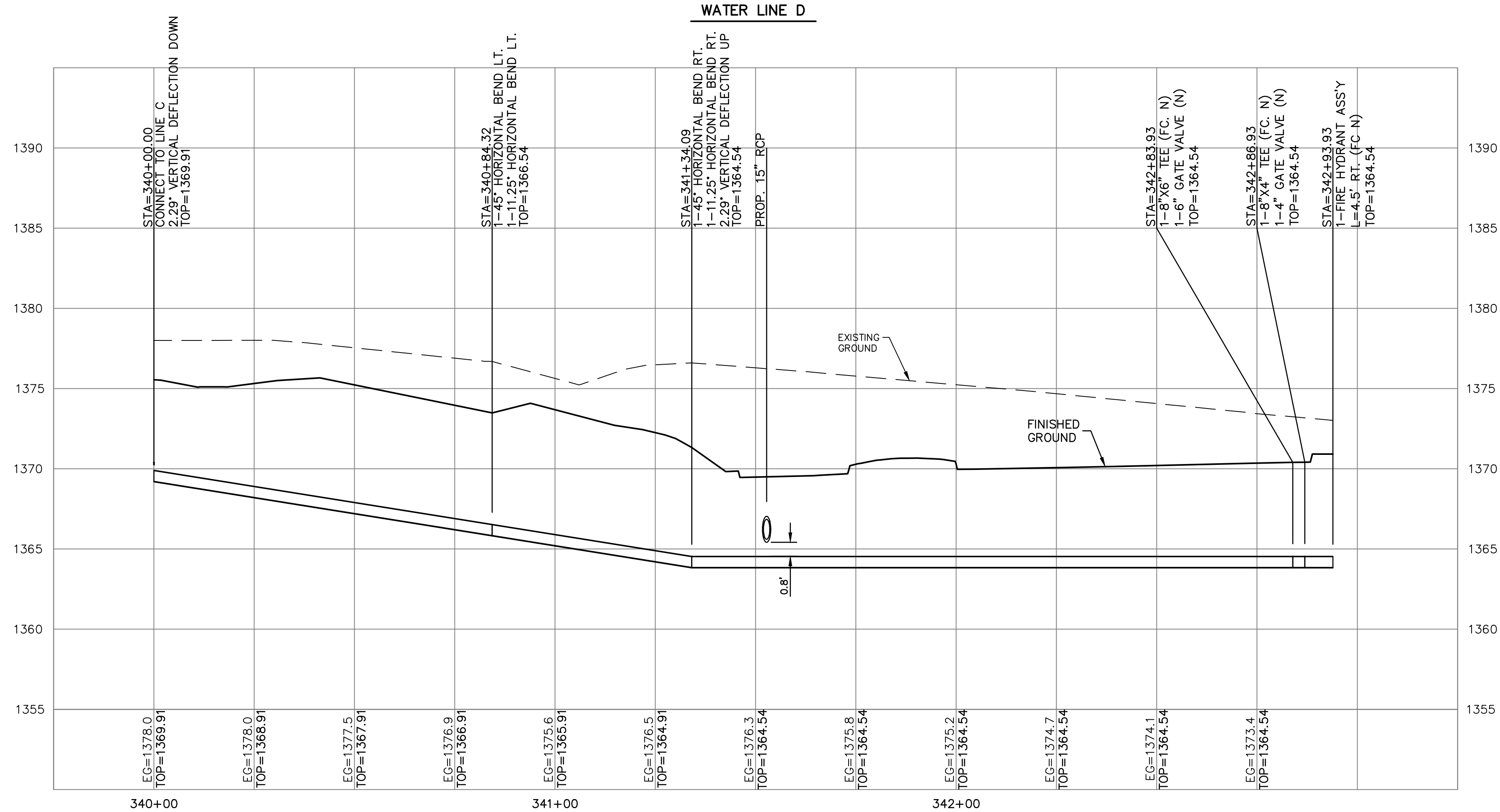
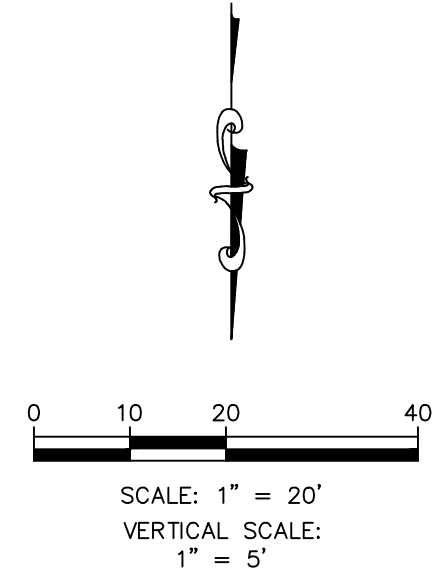
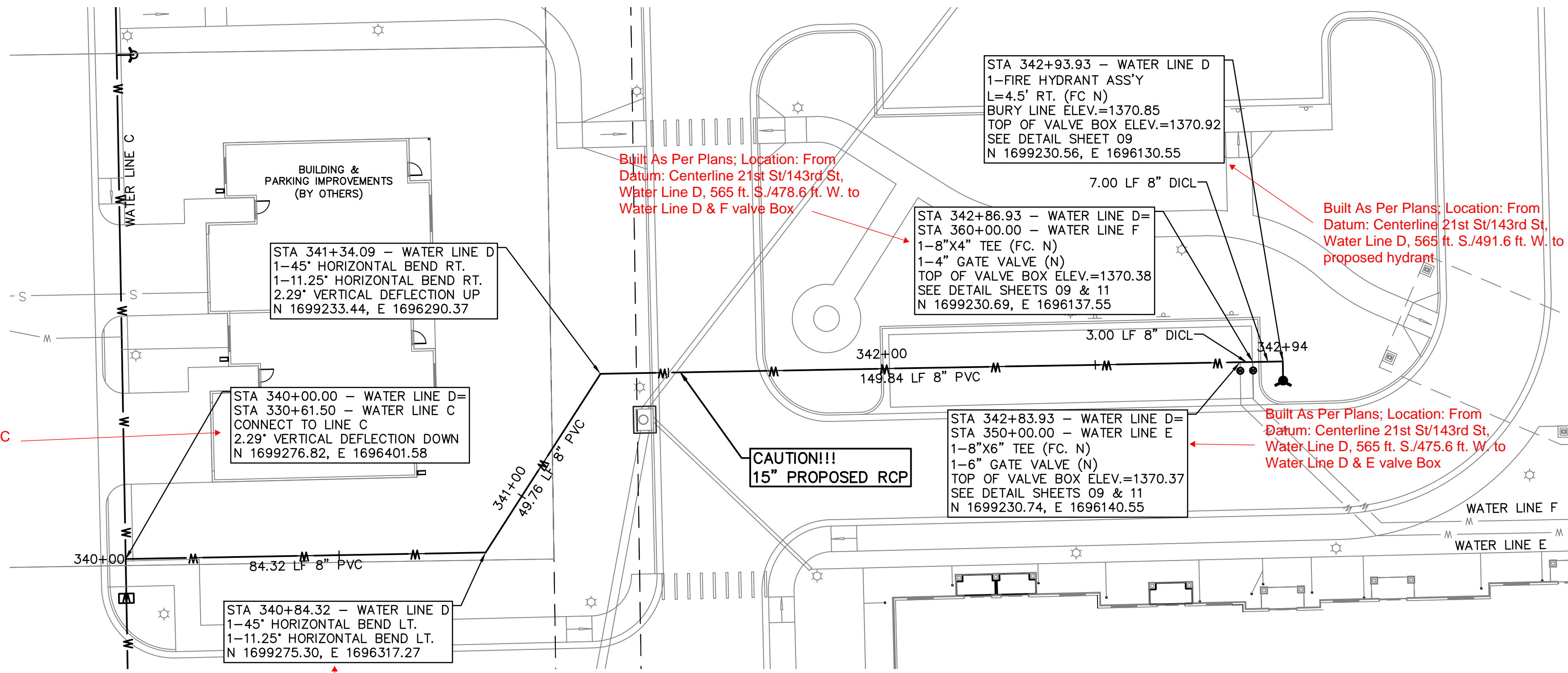
Built As Per Plans; Location: From Datum: Centerline 21st St/143rd St, Water Line D, connect to Water Line C, 511.5 ft. S./197.6 ft. W to sta. 340+00.00 WL-D/sta.330+61.50 WL-C 8" DICL TEE

Built As Per Plans; Location: From Datum: Centerline 21st St/143rd St, Water Line D, 511.5 ft. S./281.9 ft. W. to 8" DICL 45 degree bend sta. 340+84.32

Built As Per Plans; Location: From Datum: Centerline 21st St/143rd St, Water Line D, 565 ft. S./478.6 ft. W. to Water Line D & F valve Box

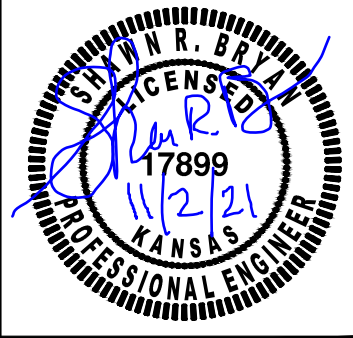
Built As Per Plans; Location: From Datum: Centerline 21st St/143rd St, Water Line D, 565 ft. S./491.6 ft. W. to proposed hydrant

Built As Per Plans; Location: From Datum: Centerline 21st St/143rd St, Water Line D, 565 ft. S./475.6 ft. W. to Water Line D & E valve Box



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SRB	CHK
EAM	DWN
JML	
FOR FINAL	DESCRIPTION
CITY REVIEW	
11-01-21	REV DATE
8-9-21	
A	
1	



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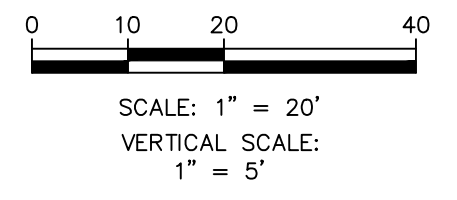
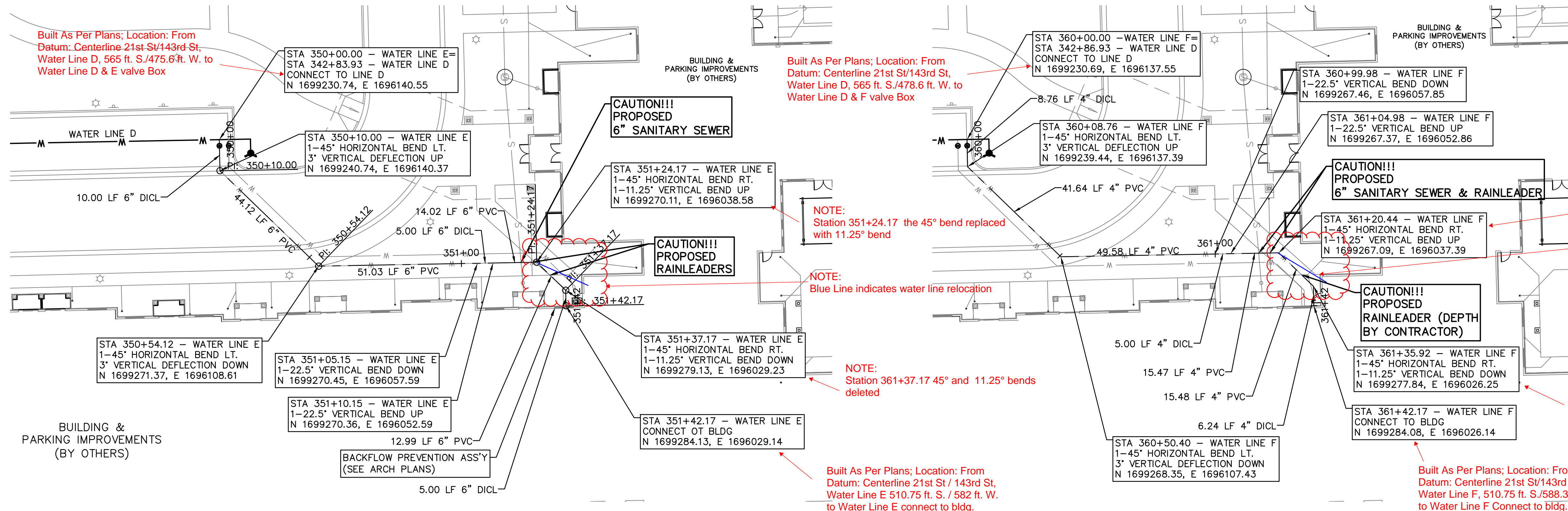
KAW VALLEY ENGINEERING

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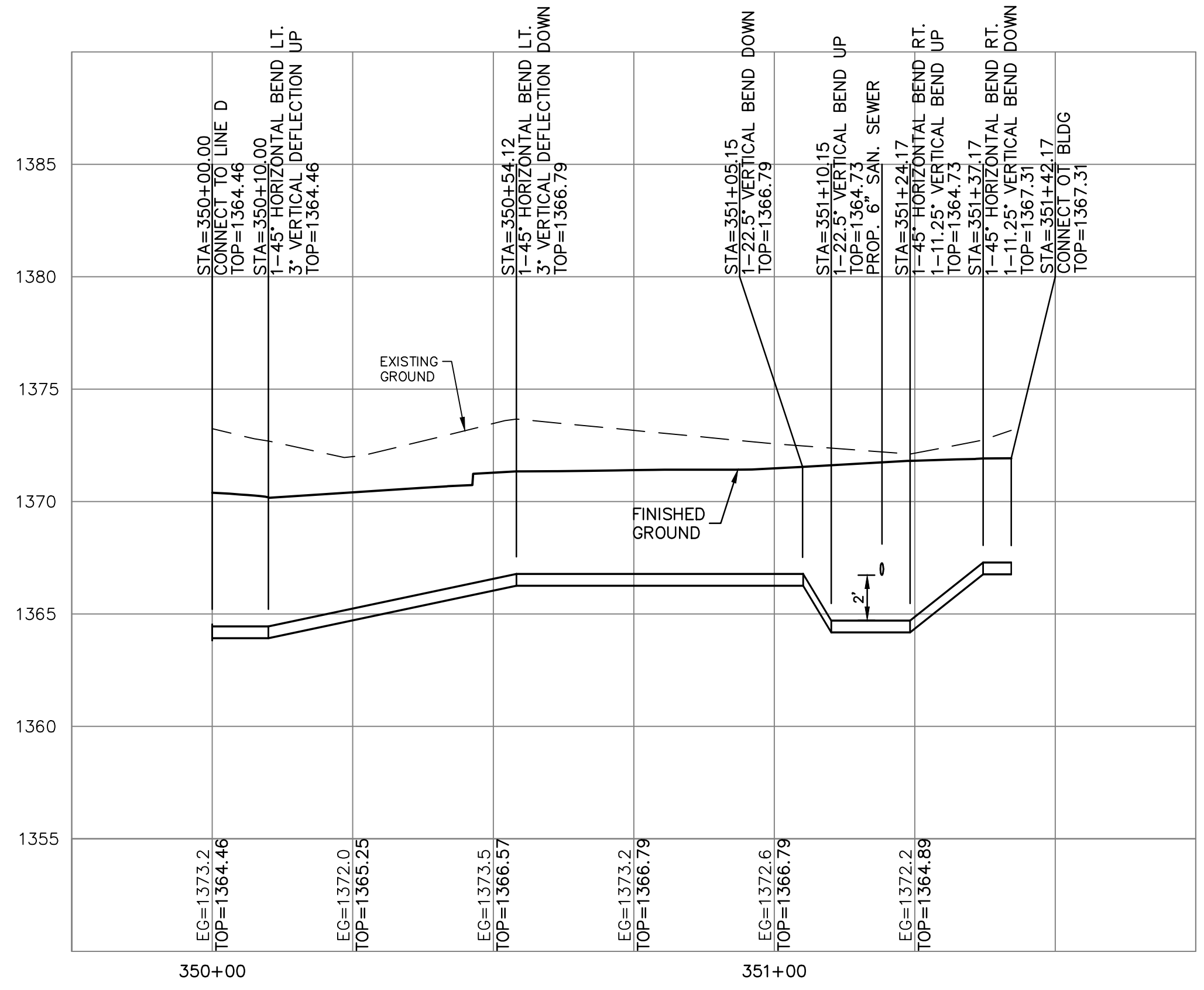
THE RUSHWOOD
143RD ST. E. AND 21ST ST. N.
WICHITA, KANSAS

WATER LINE IMPROVEMENT PLANS
WATER LINE D - PLAN & PROFILE

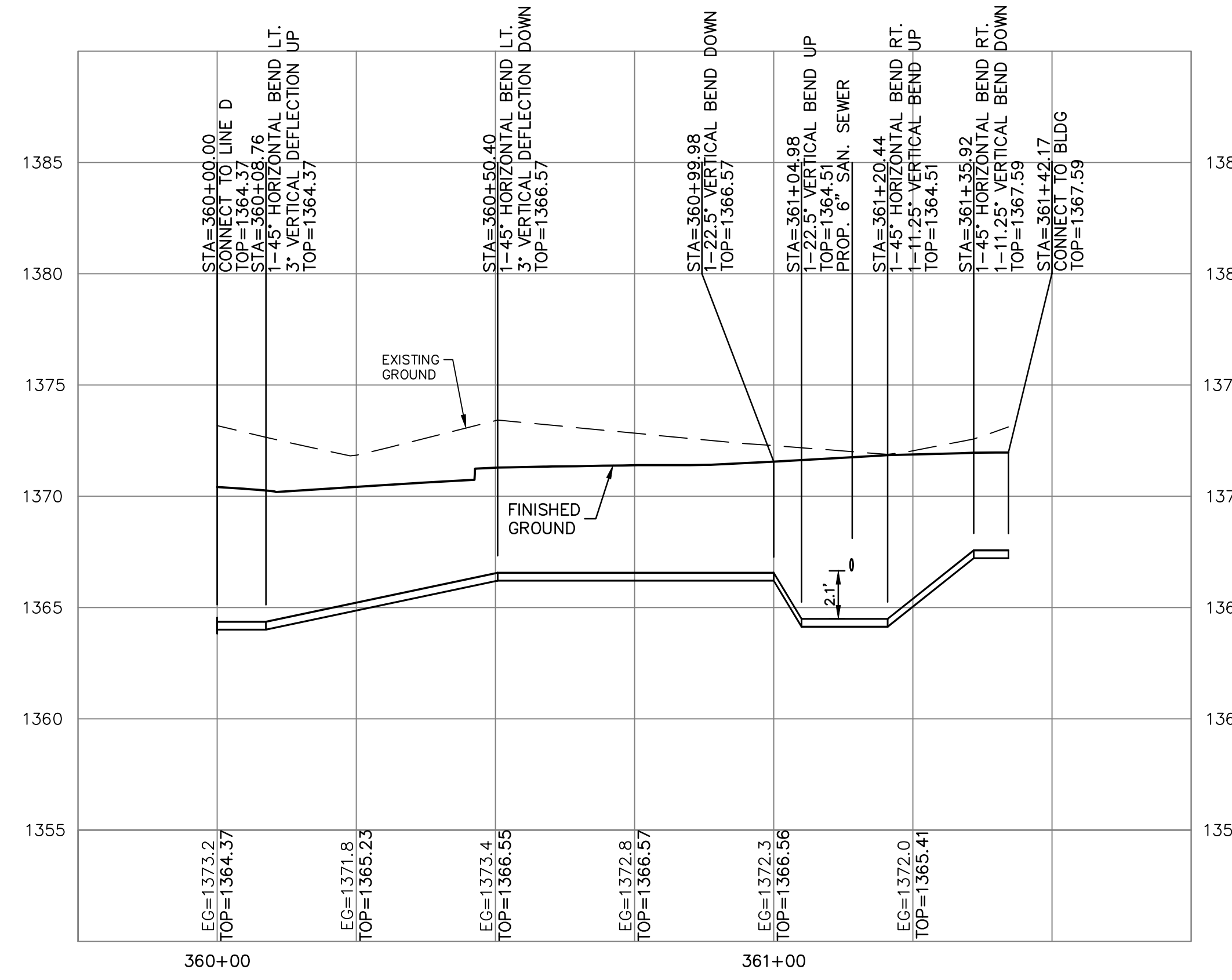
PROJ. NO.	G20-1494-1
DESIGNER	SRB
DRAWN BY	JML
CFN	1494-1WPP
SHEET	REV
08	1



WATER LINE E



WATER LINE F



REV	DATE	DESCRIPTION
1	11-01-21	FOR FINAL
A	8-9-21	CITY REVIEW

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KS # 17899

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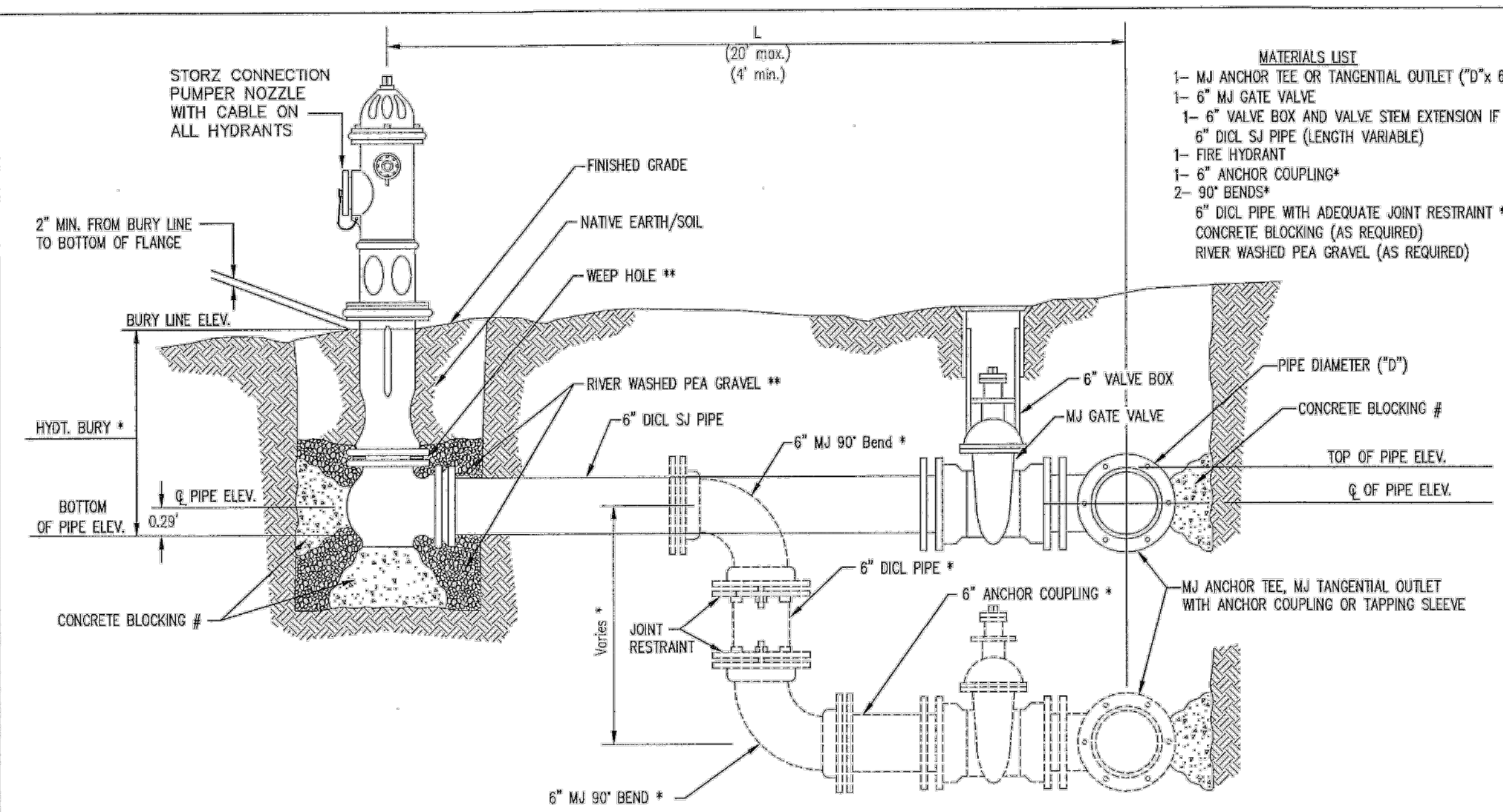
THE RUSHWOOD
143RD ST. E. AND 21ST ST. N.
WICHITA, KANSAS

WATER LINE IMPROVEMENT PLANS
WATER LINES E&F - PLAN & PROFILE

PROJ. NO. **G20 1494-1**
DESIGNER **SRB** DRAWN BY **JML**
CFN **1494-1WPP**
SHEET **09** REV **1**

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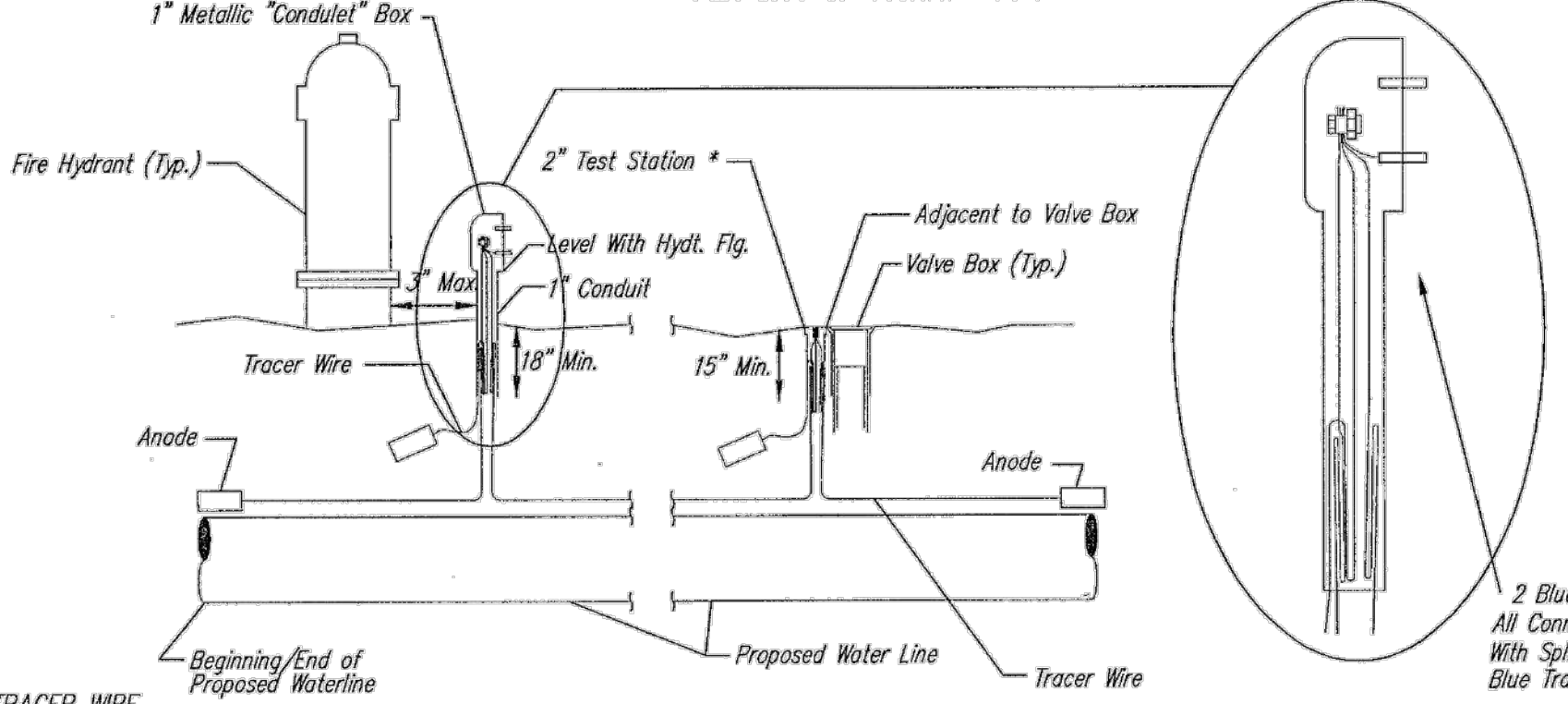
- MATERIALS LIST**
- 1- MJ ANCHOR TEE OR TANGENTIAL OUTLET ("D"x 6")
 - 1- 6" MJ GATE VALVE
 - 1- 6" VALVE BOX AND VALVE STEM EXTENSION IF REQUIRED *
 - 6" DI CL SJ PIPE (LENGTH VARIABLE)
 - 1- FIRE HYDRANT
 - 1- 6" ANCHOR COUPLING*
 - 2- 90° BENDS*
 - 6" DI CL PIPE WITH ADEQUATE JOINT RESTRAINT *
 - 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. Test stations shall be installed adjacent to all fire hydrants along the waterline and at blowoffs or valves near the ends of waterlines. Any exception to the location shall be approved by the engineer. At each test station, the tracer wire shall be connected to a 3 lb. Zinc or magnesium anode. Anodes shall also be attached to the tracer wire at both the beginning and the end of the proposed waterline. A typical layout of the tracer wire and test station is provided in the above figure.

WIRE
The tracer wire shall be Blue No. 12 AWG CCS with 3045 mil HDPE insulation. The insulation shall be heat, oil, and gasoline resistant as manufactured by Temple Electric or approved equal. To allow for grade adjustment, a minimum of 12" of excess wire shall be coiled at the bottom of the test station for all wires. The insulation sheathing shall be removed such that 1" bare copper wire at all points of connection. Contractor shall attach wire being installed with proposed water main to any tracer wire installed with adjacent waterline projects.

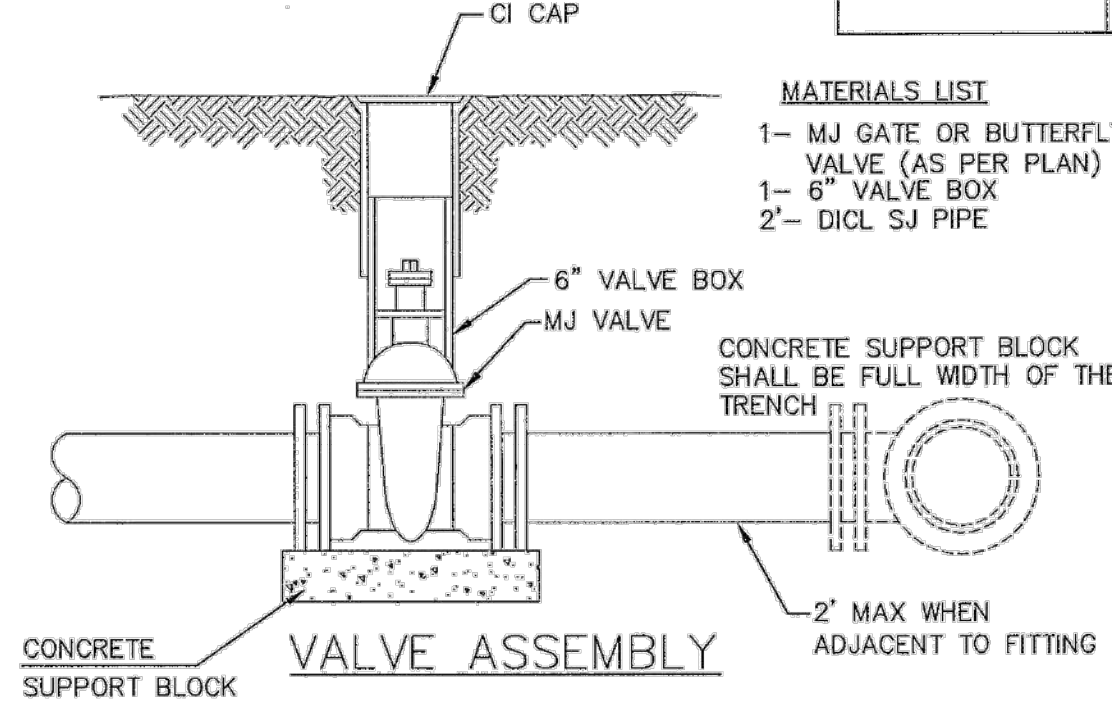
TEST STATIONS
A complete list of approved Tracer Wire can be found on City of Wichita's website at www.wichita.gov. The test station for fire hydrant applications shall be a 1 inch galvanized "condulet" style test station as manufactured by AGRA Industries with a removable solid cover having two leads extending from the face or approved equal. The test station for valve applications shall be 2 inch flush style test station T2PS3B as manufactured by HANDLEY Industries or approved equal. The "condulet" style test station shall be attached to a 1 inch rigid galvanized conduit with a minimum length of 36" and plastic end bushing. The flush style shall have the word "WATER" stamped or molded into the lid. All test stations shall be manufactured using molded blue tops or sufficiently coated with blue enamel paint. The tracer wire and the anode wire shall be installed to allow 10 inches of wire within the test station. In concrete environments such as sidewalks or in the downtown area the contractor shall use the flush style test station. The location of all test stations shall be approved by the engineer, recorded, and shown in the as-built drawings.

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

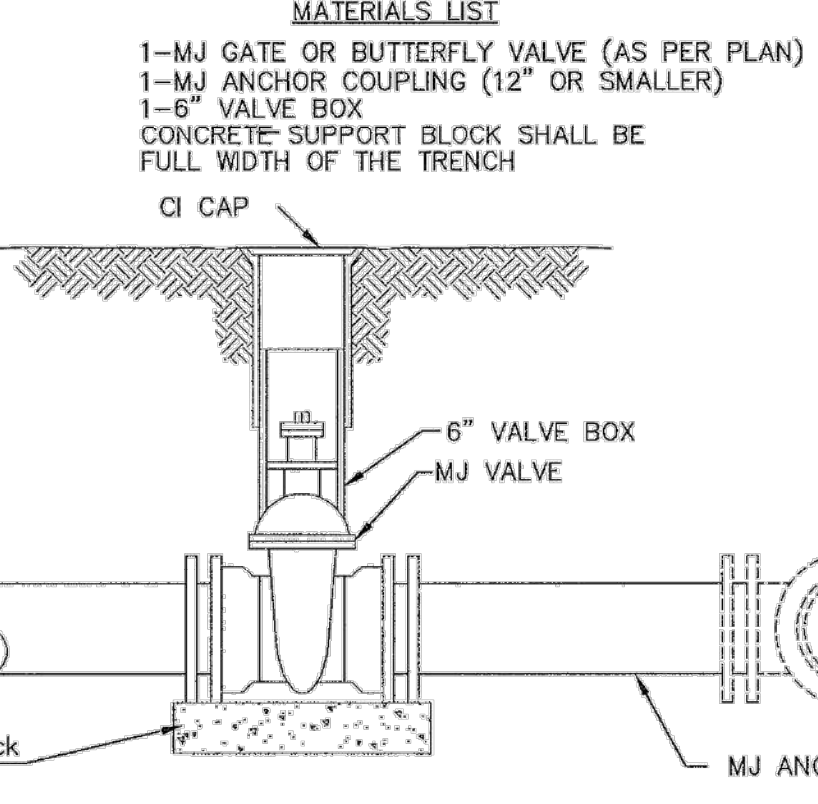
TRACER WIRE DETAIL
COST IS SUBSIDIARY TO PIPE INSTALLATION

FIRE HYDRANTS REQUIRED

STATION	BURY LINE ELEVATION	TOP OF PIPE ELEVATION	FIRE HYDRANT BURY REQUIRED*	VALVE STEM EXT. REQUIRED (ft)*
307+47.84	1369.18	1364.00	6.0'	
310+41.88	1370.98	1366.70	5.0'	
342+93.93	1370.85	1364.55	7.0'	
331+79.55	1376.92	1369.93	5.0'	3.0'
338+41.71	1369.63	1364.11	6.5'	

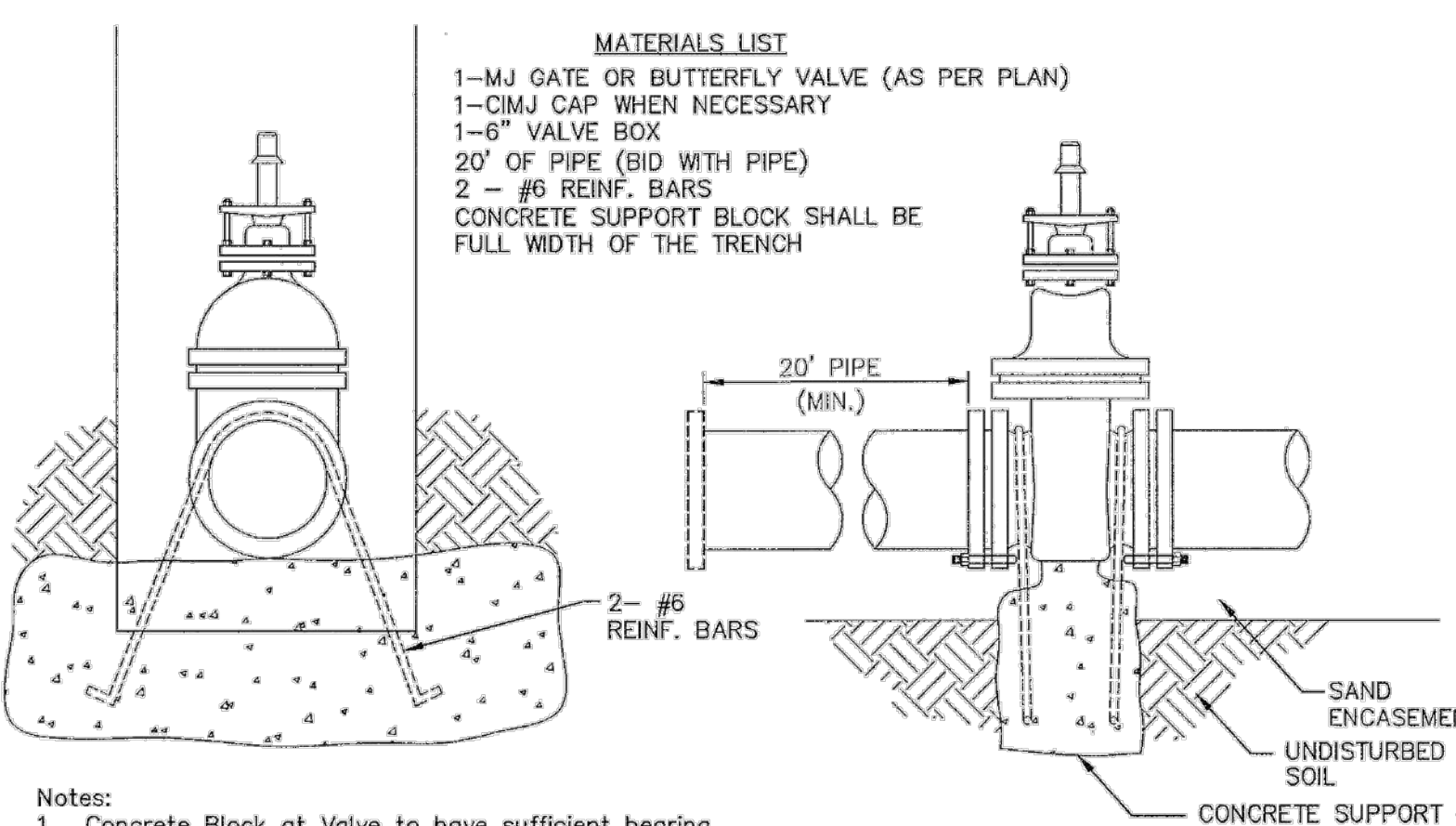


- MATERIALS LIST**
- 1- MJ GATE OR BUTTERFLY VALVE (AS PER PLAN)
 - 1- 6" VALVE BOX
 - 2"- DI CL SJ PIPE



- 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

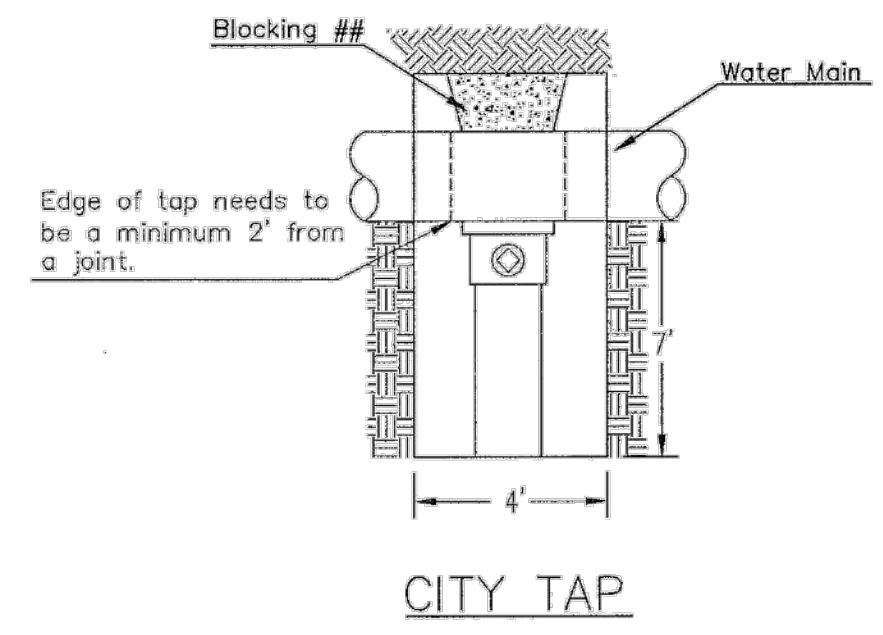
Notes:

- 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.

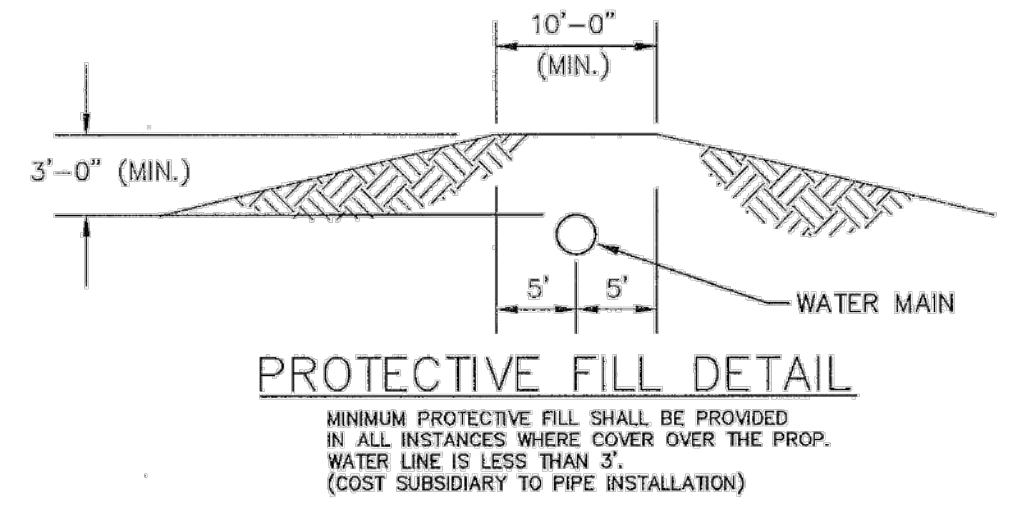
THRUST AT VALVES

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

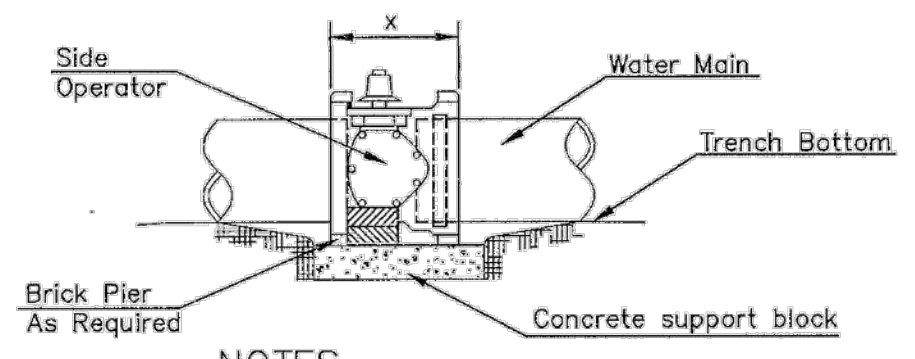
ANCHORED VALVE ASSEMBLY, SPECIAL



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



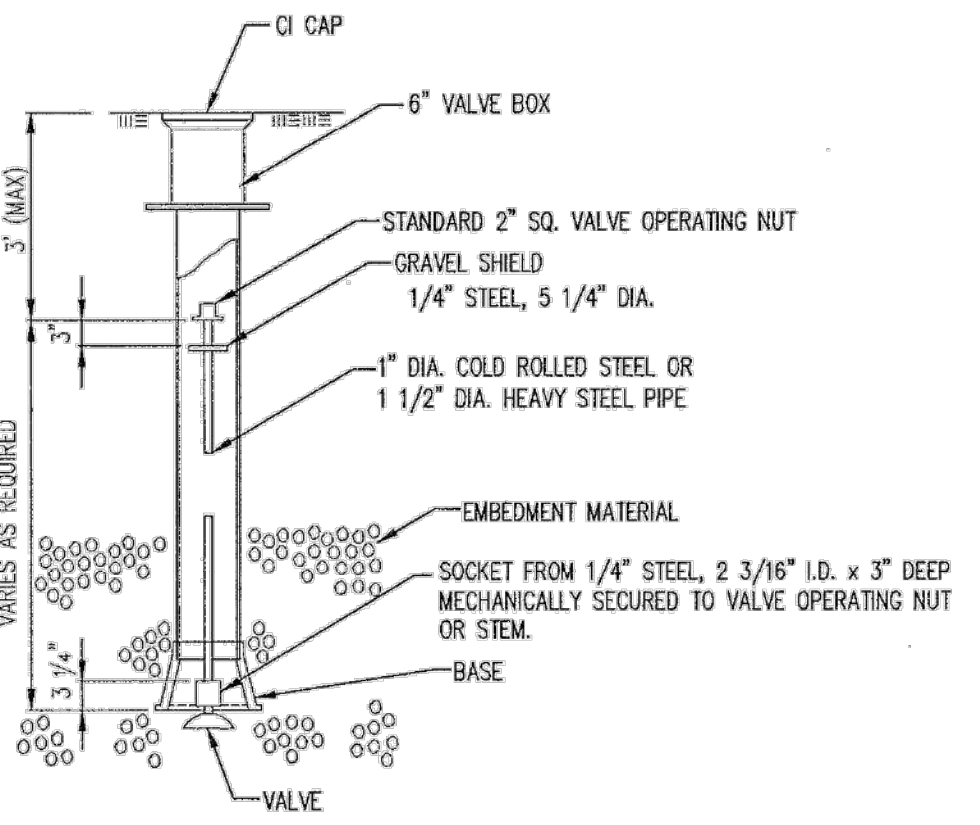
PROTECTIVE FILL DETAIL



NOTES

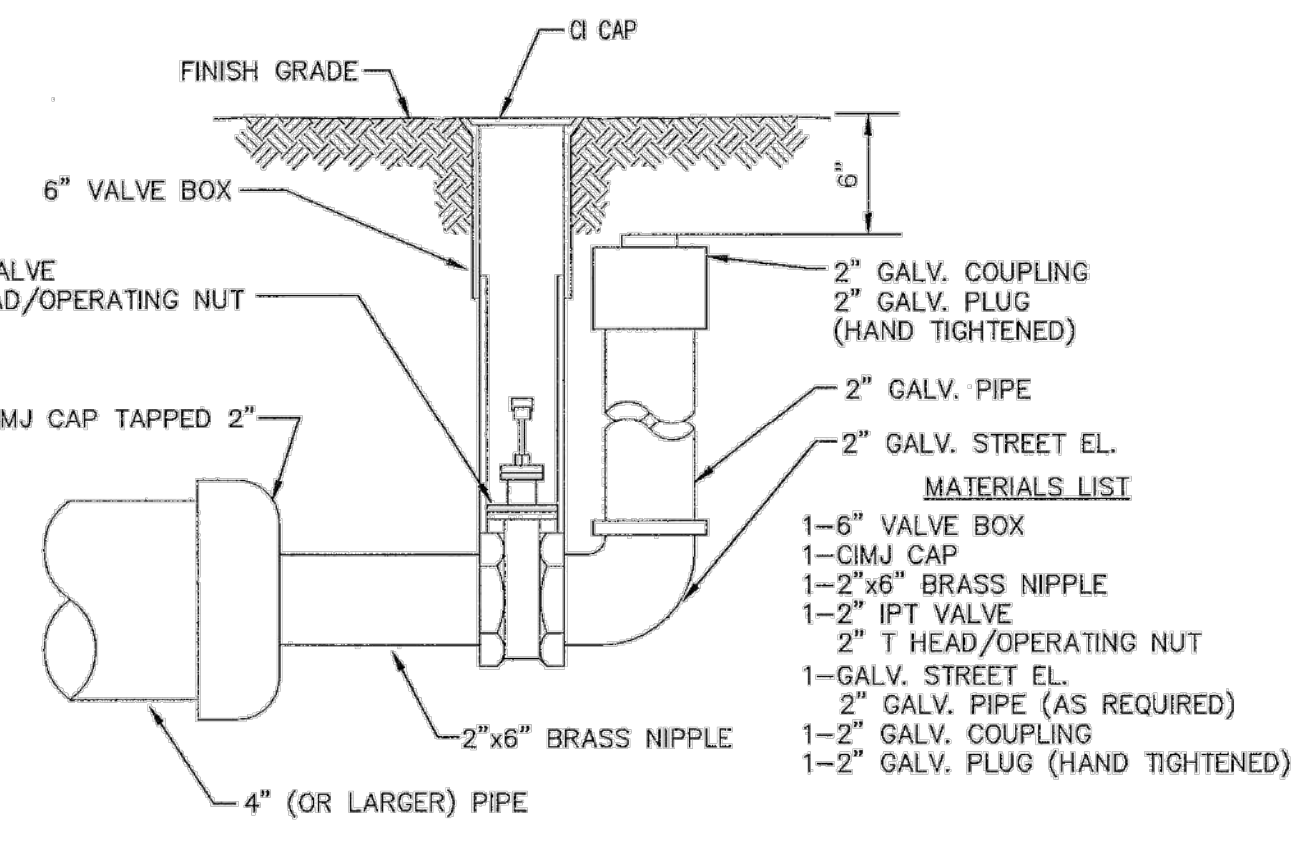
- This detail covers Butterfly Valve installation, inclusive, regardless of type of pipe or joint used. 24" and larger lines to be detailed on plans.
- 6" Valve Box and Cover required per City of Wichita Std. Specifications.
- Conc. Support Block to be full width of trench.

CONCRETE SUPPORT BLOCKING FOR BUTTERFLY VALVE INSTALLATION



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: SHEET:

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

THE RUSHWOOD
143RD ST. E. AND 21ST ST. N.
WICHITA, KANSAS

WATER LINE IMPROVEMENT PLANS
WATER DETAIL SHEET

PROJ. NO. G20-1494-1
DESIGNER SRB DRAWN BY JML
CFN 1494-1WDET
SHEET 09 REV 1

REV DATE DESCRIPTION
1 11-01-21 FOR FINAL
A 8-9-21 CITY REVIEW

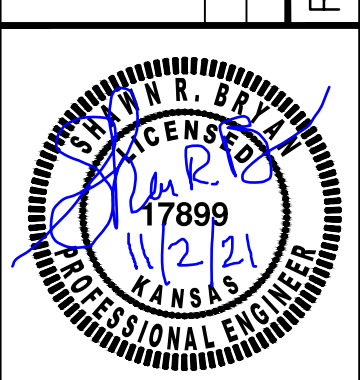
SRB
EAM
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DWN
CHK

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PROFESSIONAL ENGINEER
17899
11/21/21
KANSAS



SHAWN R. BRYAN
ENGINEER
KS # 17899

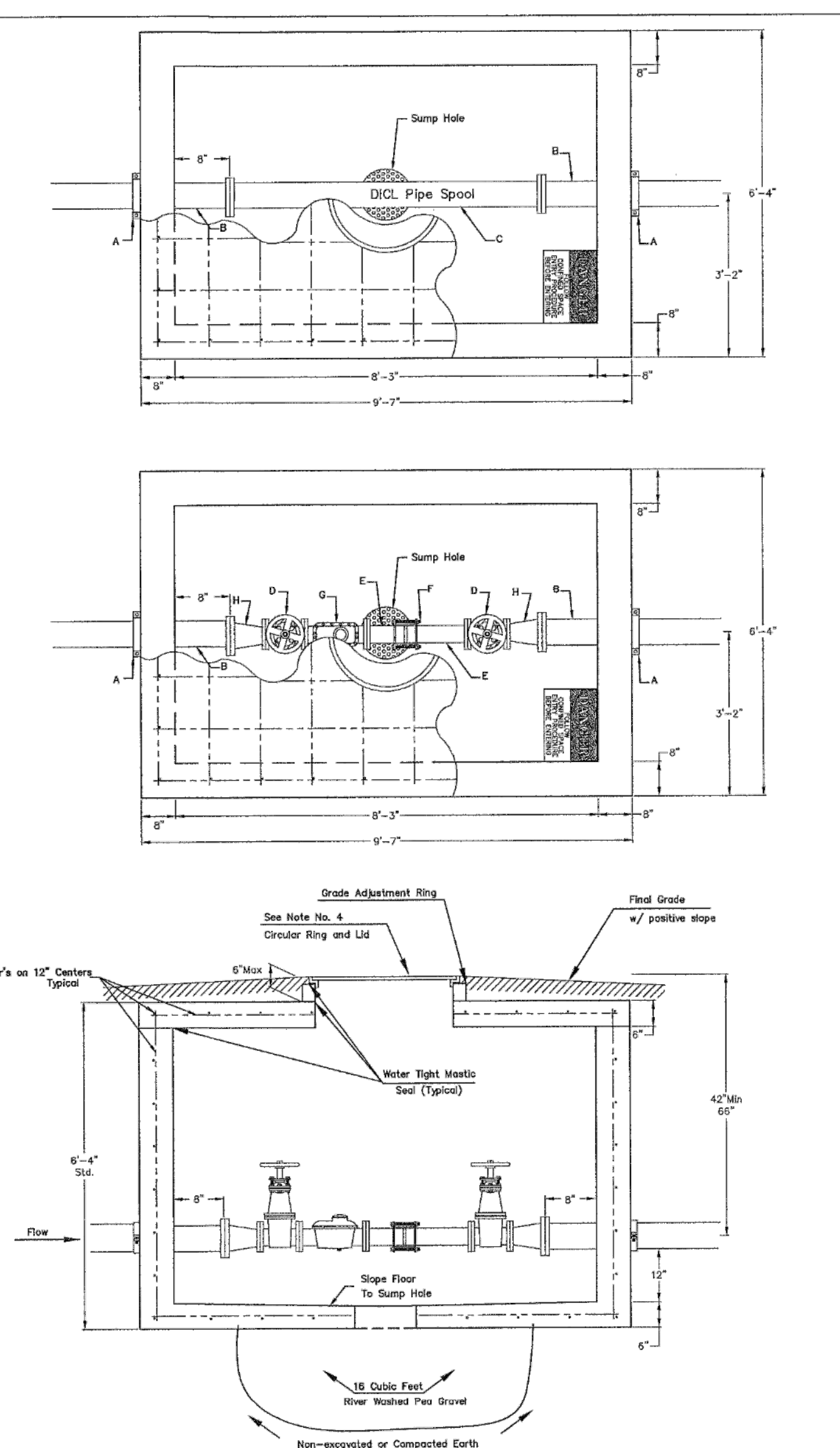
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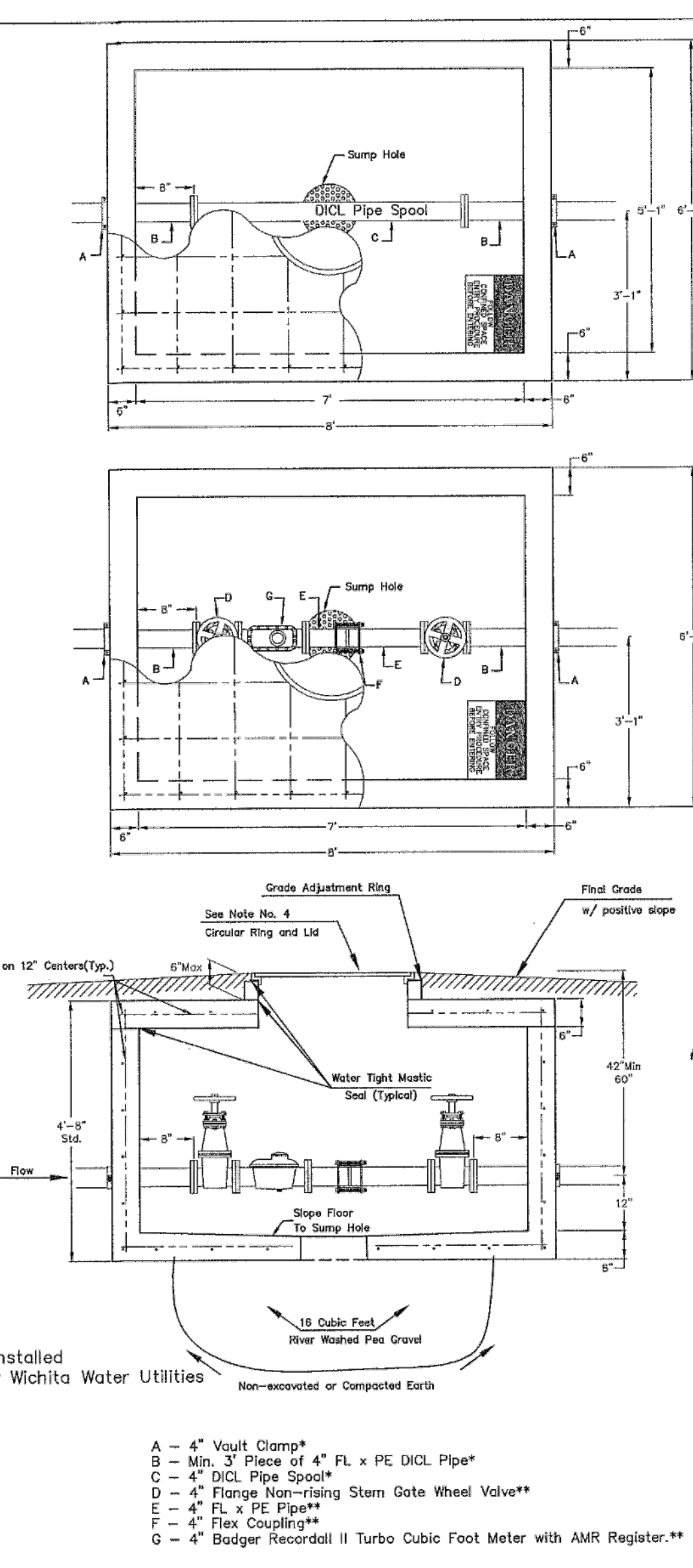
THE RUSHWOOD
143RD ST. E. AND 21ST ST. N.
WICHITA, KANSAS

WATER LINE IMPROVEMENT PLANS
WATER DETAIL SHEET

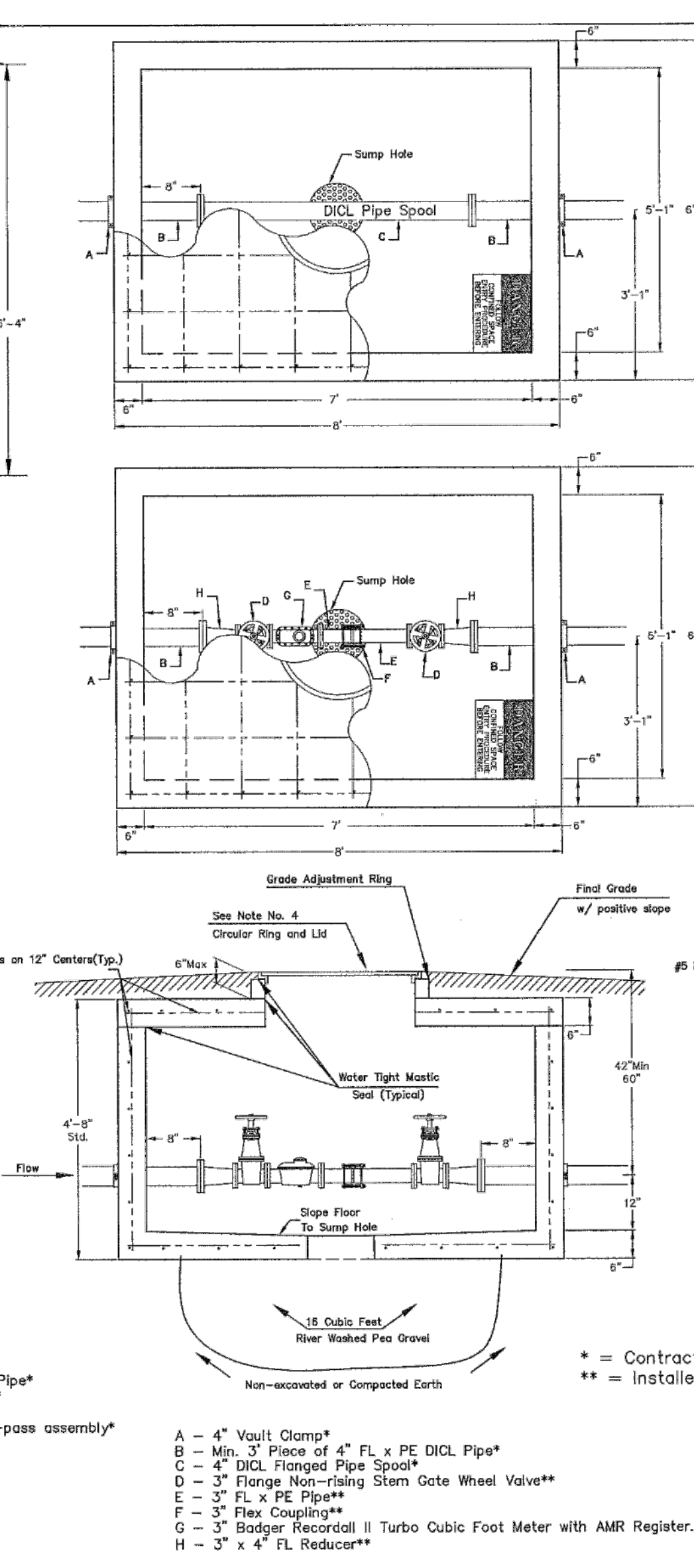
PROJ. NO. **G20-1494-1**
DESIGNER **SRB** DRAWN BY **JML**
CFN **1494-1WDET**
SHEET **10** REV **1**



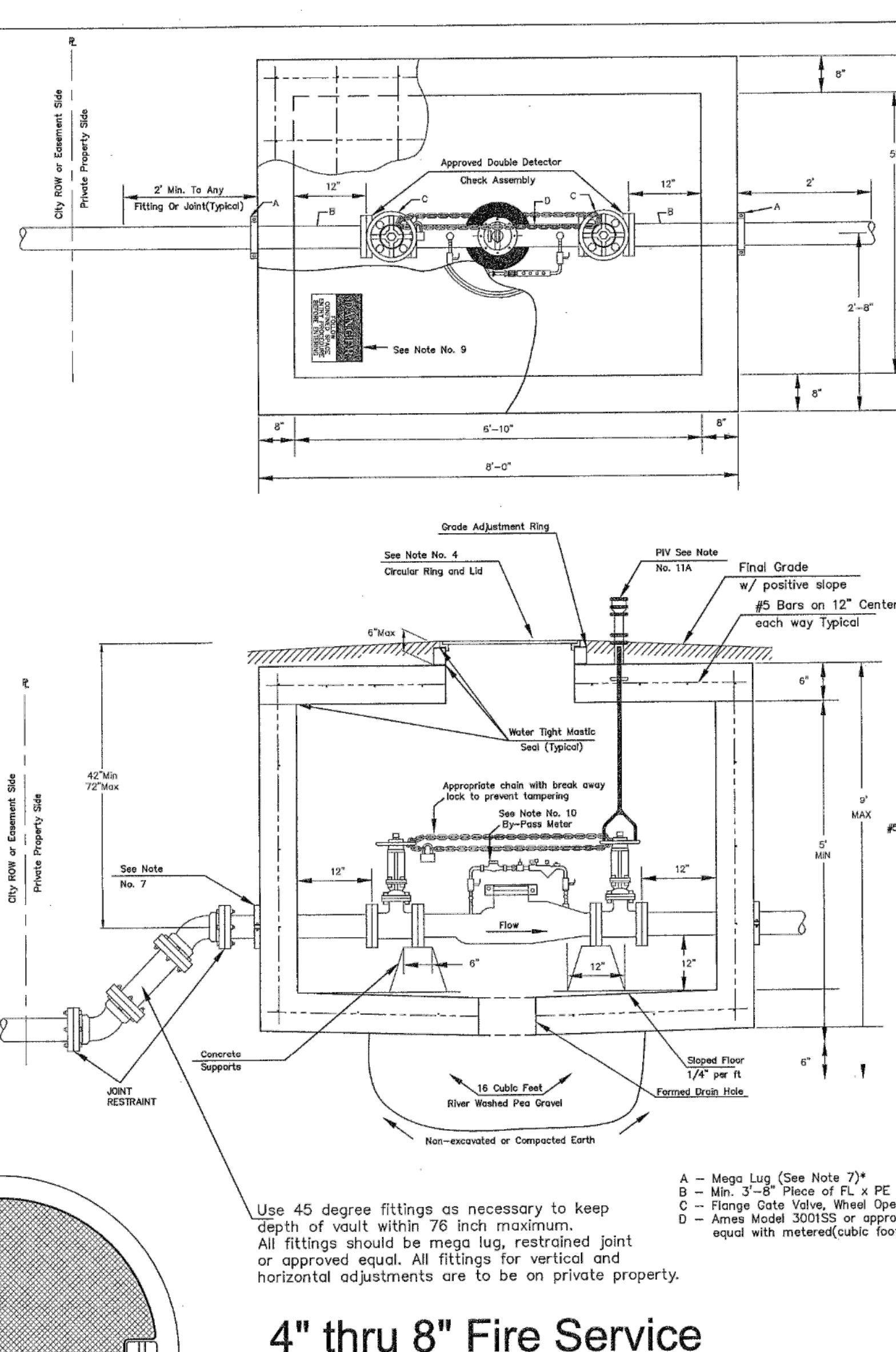
- A - 6" Mega Lug (See Note 7)*
- B - Min. 3' Piece of 6" FL x PE DICL Pipe*
- C - 4" DICL Pipe Spool*
- D - 4" Flange Non-rising Stem Gate Wheel Valve**
- E - 4" FL x PE Pipe**
- F - 4" Flex Coupling**
- G - 4" Badger Recordall II Turbo Cubic Foot Meter with AMR Register**
- H - 6" x 4" Flange Reducer**



- A - 4" Vault Clamp*
- B - Min. 3' Piece of 4" FL x PE DICL Pipe*
- C - 4" DICL Flanged Pipe Spool*
- D - 3" Flange Non-rising Stem Gate Wheel Valve**
- E - 3" FL x PE Pipe**
- F - 3" Flex Coupling**
- G - 3" Badger Recordall II Turbo Cubic Foot Meter with AMR Register**
- H - 3" x 4" FL Reducer**



- A - 4" Vault Clamp*
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- G - 3" Badger Recordall II Turbo Cubic Foot Meter with AMR Register**
- H - 3" x 4" FL Reducer**



- A - Mega Lug (See Note 7)*
- B - Min. 3'-8" Piece of FL x PE DICL Pipe*
- C - Flange Gate Valve, Wheel Operated*
- D - Ames Model 300ISS or approved equal with metered (cubic foot) by-pass assembly*

4" thru 8" Fire Service
Detail A
Vault Lid

Use 45 degree fittings as necessary to keep depth of vault within 76 inch maximum. All fittings should be mega lug, restrained joint or approved equal. All fittings for vertical and horizontal adjustments are to be on private property.

NOTE:
Domestic Services larger than 6" shall be custom designed by Consultant Engineer.

NOTE:
INSPECTOR FROM PUBLIC WORKS AND UTILITIES TO BE CONTACTED 24 HOURS PRIOR TO INSTALLATION TO SET VAULT
CONTACT: 316-219-8928 OR 316-219-8929



CITY OF WICHITA
PUBLIC WORKS & UTILITIES ENGINEERING DIVISION

STANDARD VAULT DETAILS AND METER ASSEMBLIES

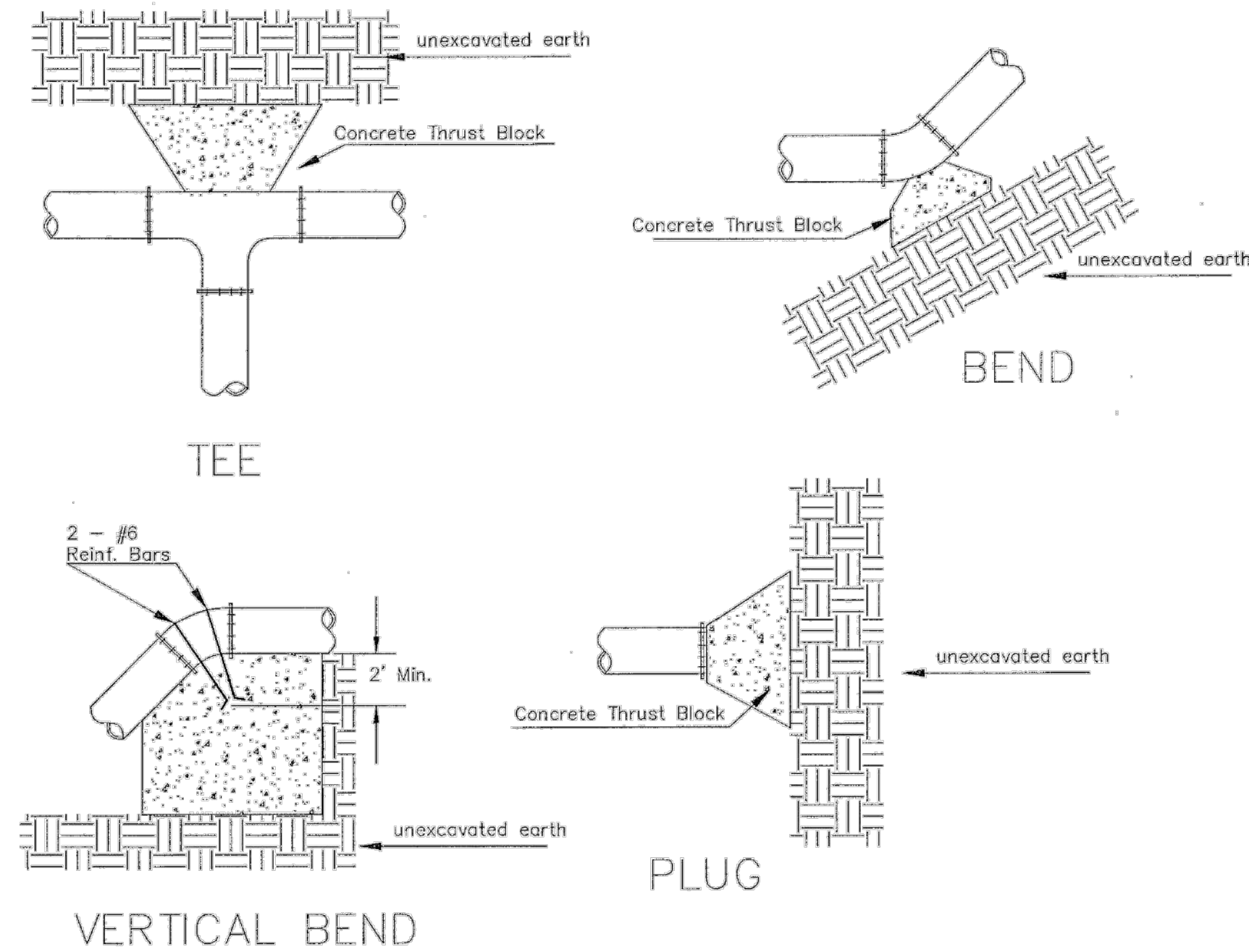
CITY ENGINEER
GARY JANZEN, P.E.

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	

- Notes For All Services - 3" thru 12":
- When the standard vault dimensions are not applicable, such as when additional space is required for special pipe, fittings, additional meters, etc. the consultant design engineering shall design a vault with the required dimensions for Public Works and Utilities approval.
 - The vault shall be poured concrete, cement blocks (voids to be completely filled with 2500 P.S.I. concrete), or approved precast structure. The intent of these details shall not be limited by drawings or standards of precast structures.
 - Vault location to be determined by Public Works and Utilities prior to construction and approved by Departments's field supervisor prior to installation. A final inspection will be required for acceptance. Vault location standards include but not limited to: not to be located where subjected to vehicular loads unless vault is H20 traffic rated, not to be located in any right-of-way or utility easement, and must be located on the property being served.
 - The manhole ring and lid shall be Neenah R-6034 Frame with Type "C" Solid Lid and Drop Down Handle or US Foundry APS-30x30 (Aluminum) or Deeter 1261 or EJ 1936z1 (with pick hole(s) as shown in Detail A). Where applicable the standard 10" Public Works and Utilities pattern meter reading lid and ring shall be located directly above water meter register. All joints of concrete to concrete or metal to concrete in the construction of the vault shall have an approved water tight mastic joint seal.

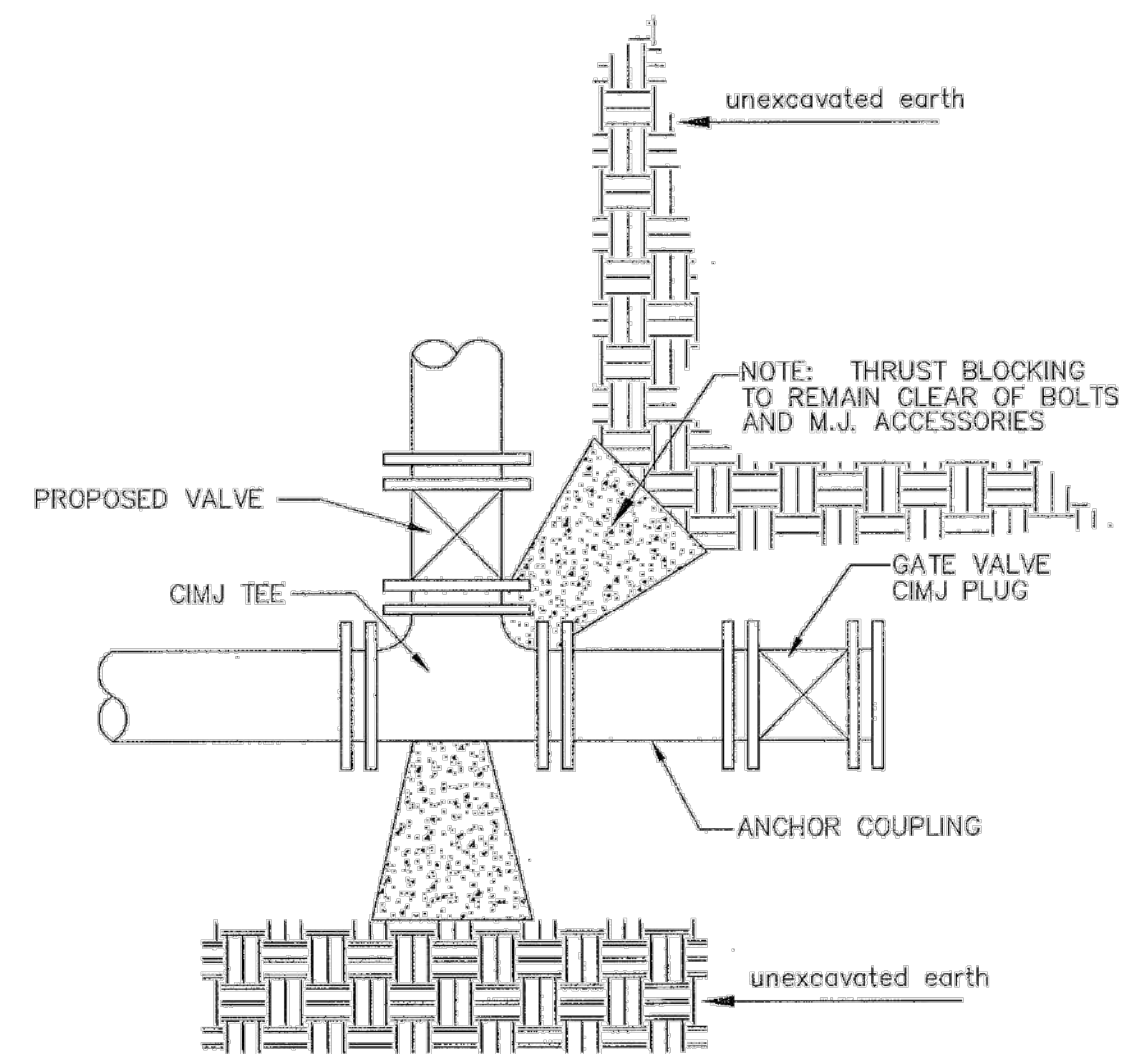
- Any fittings or appurtenances required to achieve proper elevation of pipe through the vault shall be provided by the contractor and appropriately noted on the as-builts submitted by the inspecting engineer. Such fittings shall be a minimum of 2' from the exterior wall of vault.
- For all domestic services larger than 3" the contractor shall provide an outlet flange connection as shown 8" from the inside wall. Inlet and outlet wall sleeves shall be provided and installed by the contractor and shall be in alignment with one another. The inlet and outlet pipe shall be ductile iron pipe, cement lined, Class 150 per Standard Specifications and shall be continuous through vault and joint no less than 2' from the exterior wall of vault. Flanges of inlet and outlet pipe shall be in proper alignment and bolt pattern shall be rotated in such a way that valves and other fittings shall be in their proper vertical alignment when installed.
- For all services 4" and larger the contractor shall install a mega lug, restrained joint, or approved equal on the exterior walls of the vault, which shall be manufactured of ductile iron conforming ASTM A 536-80, heat treated to a minimum hardness of 370 BHN and have a working pressure of a least 250 P.S.I. For a services smaller than 4" the contractor shall install an approved vault clamp on the exterior walls of the vault.
- All valves, meters, assemblies and fitting shall be provided with sufficient concrete or other approved supports to the vault floor.
- The "Confined Space Warning" sign shall be fastened to the top of all vaults. If necessary for landscaping or site consideration, the sign may be fastened to the vault lid if it does not impede access to the handle. Acceptable materials: Aluminum 73415HH, Plastic 73439HH or S.A. Vinyl 73463HH.

- All meters shall have an electronic read register compatible with the current City of Wichita meter reading system. All detector meters shall be on 5/8 cubic foot Badger meter with ADE register and 25' long iron cord and plug or approved equal. Gallon meters shall not be accepted.
- Additional Notes For Fire Services
 - A post indicator valve (PIV) is an option for the outlet valve. It is not required by the City of Wichita ordinance, it can be requested by the owner and will be allowed at the discretion of the City Engineer.
 - When Siamese connections are required by the Wichita Fire Department, refer to the current City Code Section 15.
 - If due to any reason the completed vault retains ground or drainage water in excess of 4" in depth from the floor of the vault, the property owner shall be responsible for providing and installing an appropriate automatic sump pump or approved equal, as well as any other appurtenances required to make such system function as intended.



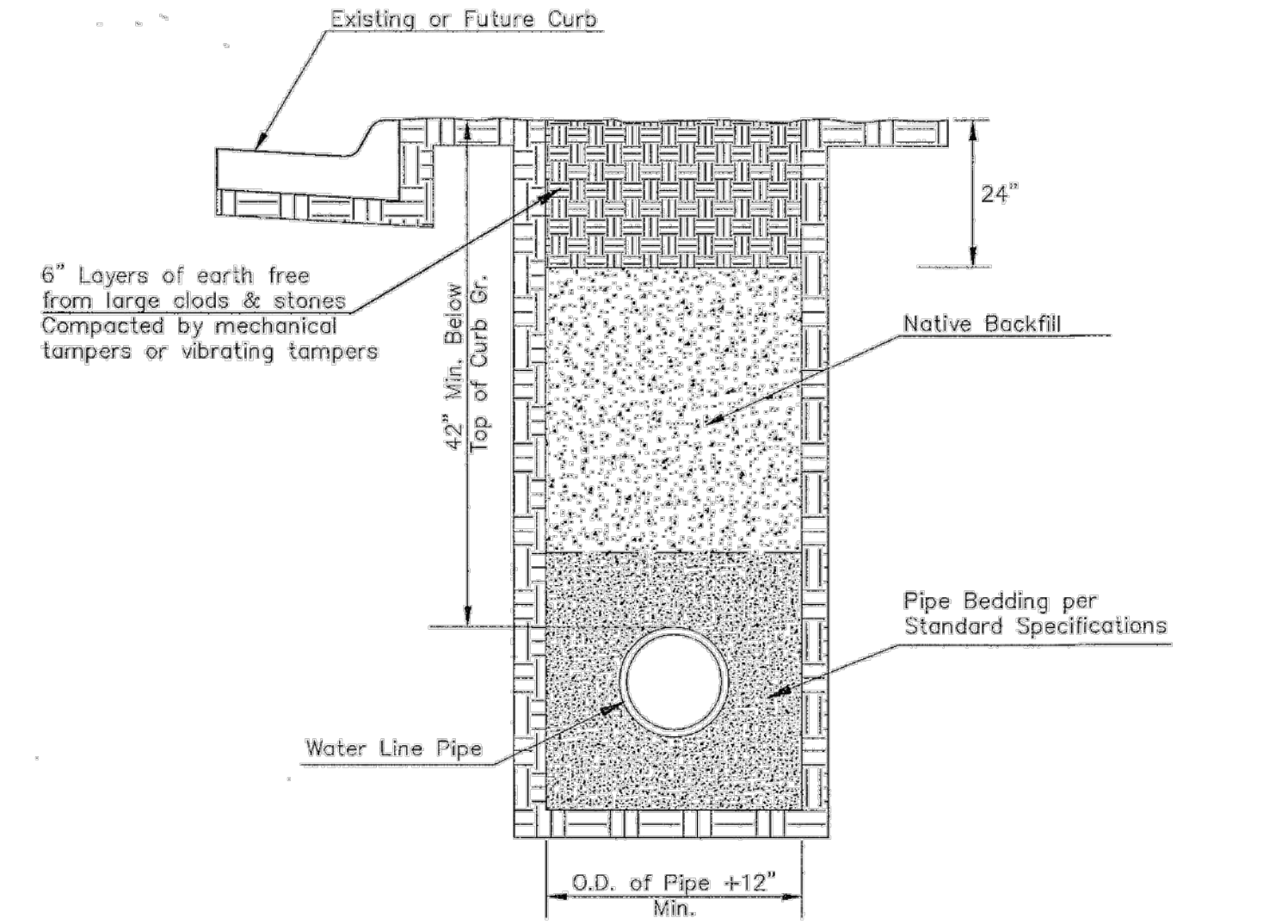
PIPE SIZE	THRUST AT FITTINGS IN TONS—AT 150#/IN ² P					
	PLUG	90°	45°	22 1/2°	11 1/4°	TEE
6"	2.8	3.95	2.15	1.09	.55	2.8
8"	4.9	6.95	3.75	1.90	.96	4.9
12"	11.4	16.1	8.75	4.45	2.25	11.4
16"	20.15	28.5	15.4	7.85	3.95	20.15
20"	31.15	44.0	23.85	12.15	6.10	31.15
24"	44.55	63.0	34.1	17.4	8.75	44.55

TYPICAL THRUST BLOCKS

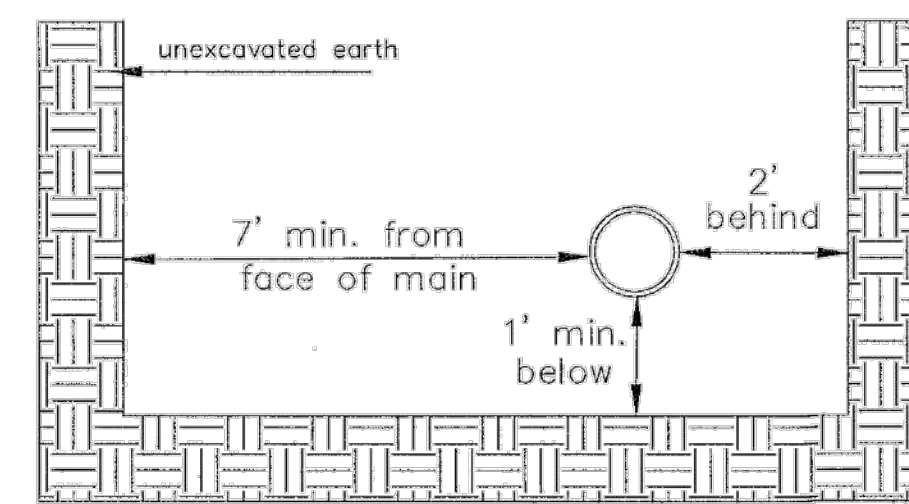


KEY BLOCK DETAIL

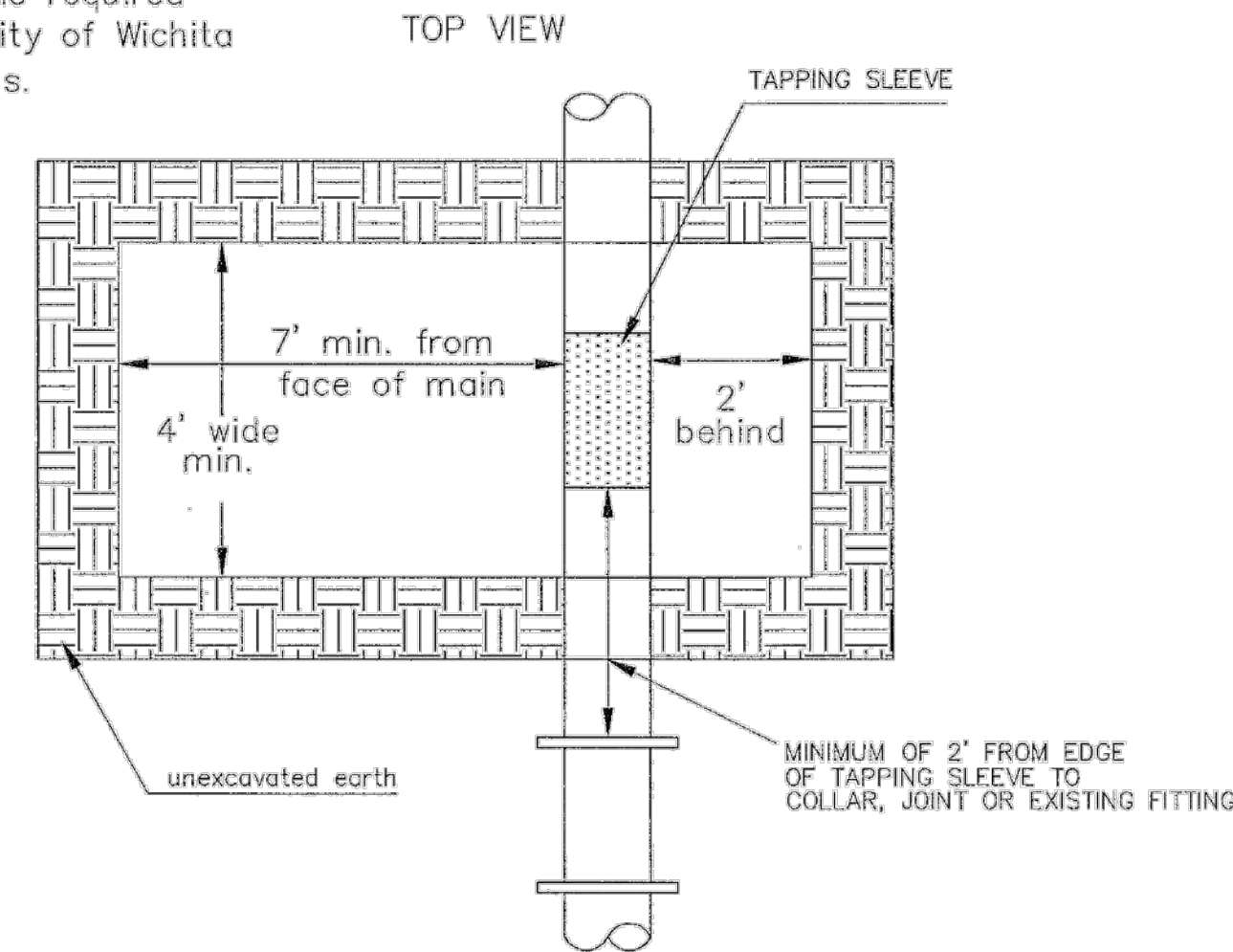
* PLANS GOVERN
UNLESS OTHERWISE NOTED ON PLANS



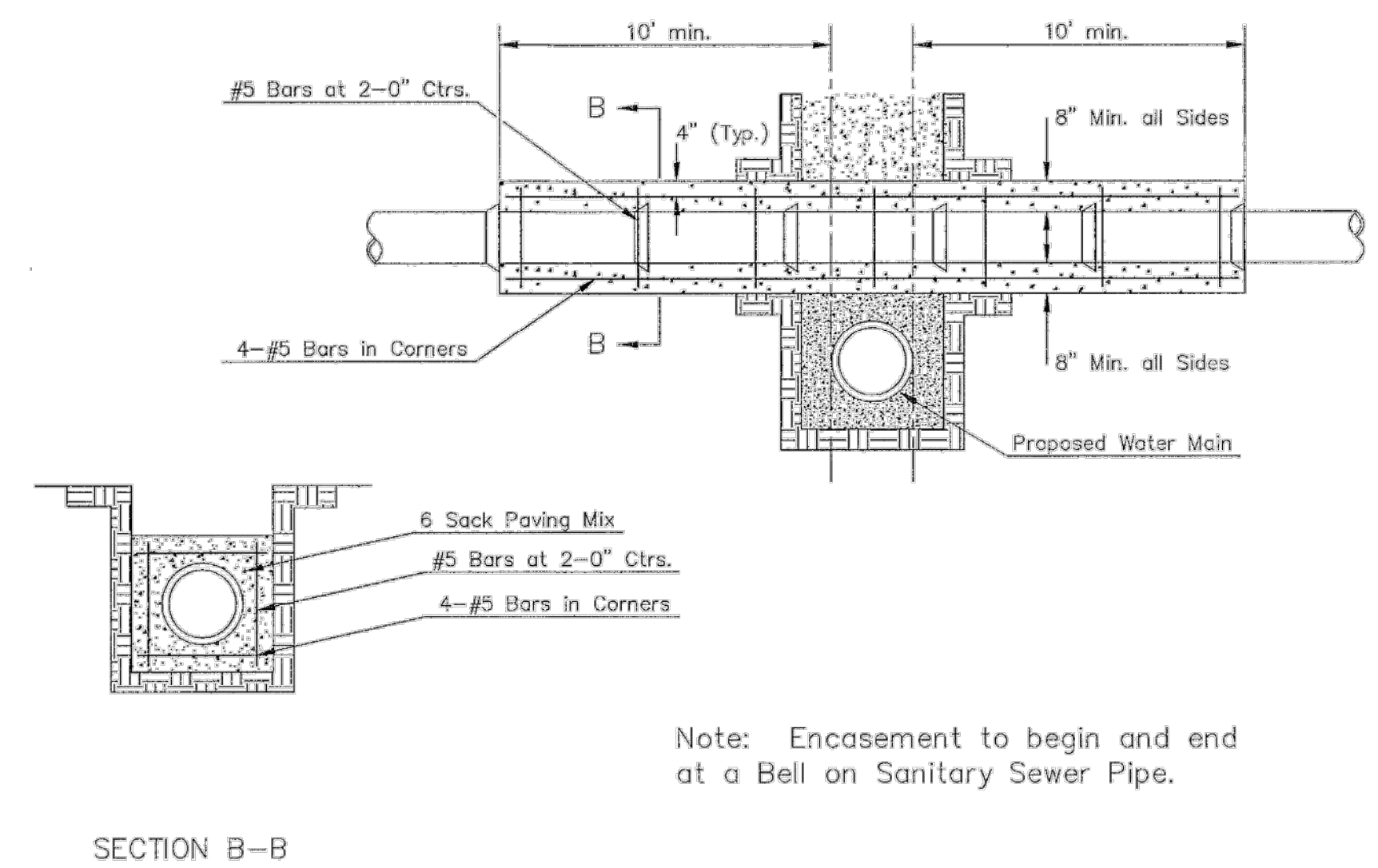
TRENCH COMPACTION IN ROAD RIGHT-OF-WAY



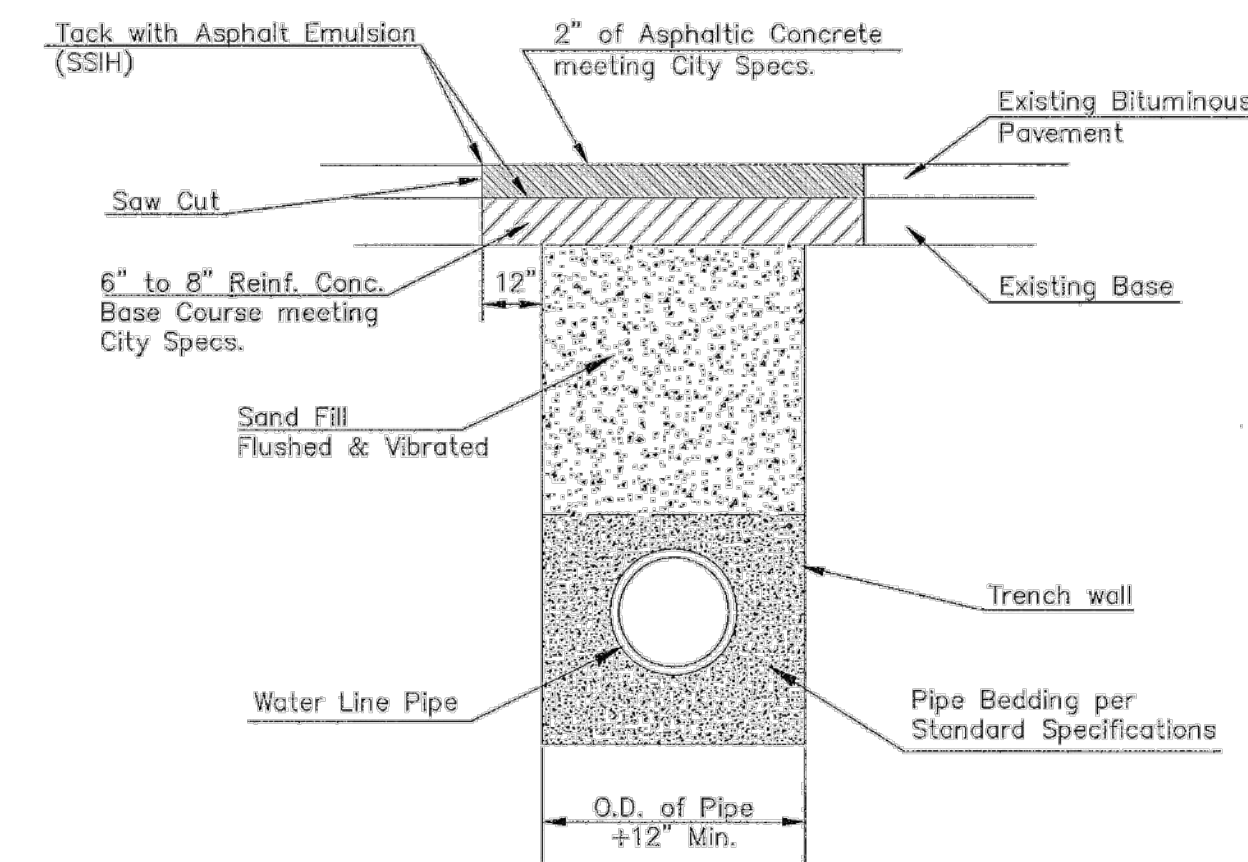
Note: When shoring is required it is to be per The City of Wichita Standard Specifications.



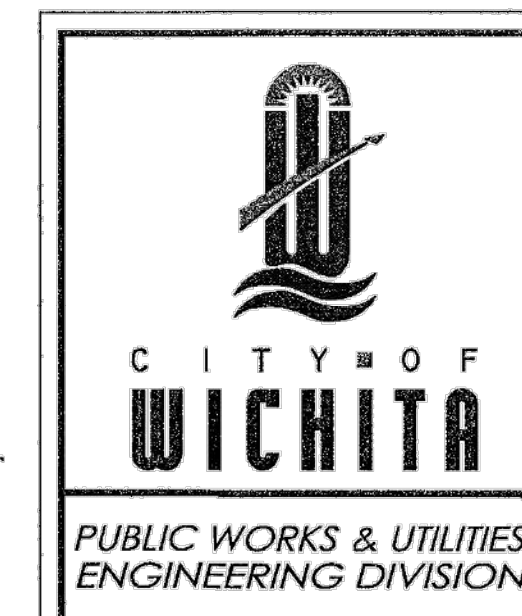
EXCAVATION FOR WET TAP



REINFORCED CONCRETE ENCASEMENT OF SANITARY SEWER



PAVEMENT REPLACEMENT & TRENCH COMPACTION UNDER EXISTING AND PROPOSED CITY ROADS



MISCELLANEOUS WATER DETAILS

CITY ENGINEER
GARY JANZEN, P.E.

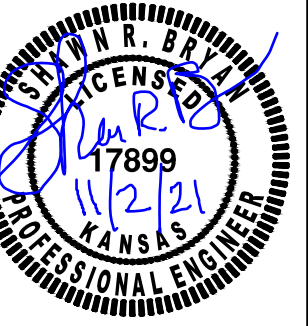
PROJECT NUMBER: _____ OCA NUMBER: _____ DATE: _____

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

SHEET: _____

SRB	CHK
EAM	DWN
EAM	JML

1	11-01-21	FOR FINAL	DESCRIPTION
A	8-9-21	CITY REVIEW	REV DATE



SHAWN R. BRYAN
ENGINEER
KS # 17899

200 N. EMPORIA, SUITE 100
WICHITA, KANSAS 67202
PH. (316) 440-4304 | FAX. (316) 440-4309
www.kawvalley.com | www.kveing.com

KAW VALLEY ENGINEERING

KAW VALLEY ENGINEERING, INC., IS AUTHORIZED TO OFFER ENGINEERING SERVICES BY KANSAS STATE CERTIFICATE OF AUTHORIZATION # E-113. EXPIRES 12/31/22

THE RUSHWOOD
143RD ST. E. AND 21ST ST. N.
WICHITA, KANSAS

WATER LINE IMPROVEMENT PLANS
WATER DETAIL SHEET

WL-104

PROJ. NO.	G20-1494-1
DESIGNER	SRB
DRAWN BY	JML
CFN	1494-1WDET
SHEET	REV
11	1

CERTIFICATE OF SURVEY

I, Gregory J. Allison, a registered land surveyor in Kansas, do hereby certify that I have been in responsible charge of surveying and plotting of "KRUG SOUTH COMMERCIAL ADDITION", an addition to Wichita, Sedgwick County, Kansas, into Lots, Reserves, and a Block, the same being accurately set forth in the accompanying plat and described herein.

A tract of land lying in the Northeast Quarter of Section 11, Township 27 South, Range 2 East of the Sixth Principal Meridian, Wichita, Sedgwick County, Kansas; said tract being more particularly described as follows:

BEGINNING at the northeast corner of said Northeast Quarter, thence along the east line of said Northeast Quarter on a Kansas coordinate system of 1983 south zone grid bearing of S00°53'20"E, 850.00 feet; thence S88°37'33"W, 60.00 feet to the northeast corner of Lot 13, Block 1, Krug South Addition, an addition to Wichita, Sedgwick County, Kansas; thence along a northerly line of said Block 1, said addition, S88°37'33"W, 1093.19 feet to the southeast corner of Reserve "E", said addition; thence along the east line of said Reserve "E", N00°53'20"W, 720.00 feet; thence continuing along said east line of said Reserve "E", N53°47'38"E, 122.53 feet to the northeast corner of said Reserve "E", thence N01°22'27"W, 60.00 feet to the north line of said Northeast Quarter; thence along said north line, N88°37'33"E, 1053.70 feet to the POINT OF BEGINNING.

All reserves, streets, utility easements, building setbacks, access control, together with a Right-Of-Way Agreement, recorded in Book Misc. 308, Page 329; together with an Easement for roadway, recorded in Book 1970, Page 228; together with an Easement for Right-Of-Way, recorded in Book 1462, Page 1105; together with a Drainage easement, recorded in DOC#FLM-PG-28942793, together with a Dedication for street purposes, recorded in DOC#FLM-PG-28844671, together with Utility and Drainage easement, recorded in DOC#FLM-PG-28971911, within the above described property are hereby vacated and replatted by virtue of K.S.A. 12-512(b).

I hereby certify that the details of this plat are correct to the best of my knowledge and belief this 12th day of May, 2009.

Gregory J. Allison, PE, LS #1257
MKEC Engineering Consultants, Inc.
411 North Webb Road
Wichita, Kansas 67206

OWNER'S CERTIFICATE

Know all men by these presents that we the undersigned property owners of the land above set forth in the Registered Land Surveyor's Certificate, have caused the same to be surveyed and plotted into Lots, Reserves, and a Block, the same to be known as "KRUG SOUTH COMMERCIAL ADDITION", an addition to Wichita, Sedgwick County, Kansas.

Easements for the construction and maintenance of drainage, as indicated on the accompanying plat are hereby granted to the public. The private well easements along south line of Lots 9 and 10, and along west line of said Lot 10, are hereby planned for the construction and maintenance of private wells. Public utility lines may cross under and over the private well easement within appropriate utility easements. Private utility service lines may cross under and over the private well easement; said crossings shall be at right angles to the private well alignment. Private screening fences, walls, and associated appurtenances may cross drainage, utility, and sewer easements.

The streets are hereby dedicated to and for the use of the public.

All abutters rights of access to or from E. 143rd Street over and across the east line of "KRUG SOUTH COMMERCIAL ADDITION," are hereby granted to the appropriate governing body, as indicated hereon. All abutters right to access to or from 21st Street N. over and across the north line of "KRUG SOUTH COMMERCIAL ADDITION," are hereby granted to the appropriate governing body, as indicated hereon.

A drainage plan has been developed for this plat. All drainage easements, rights-of-way, and reserves shall remain at established grades or as modified with the approval of the applicable City or County Engineer, and unobstructed to allow for the conveyance of storm water.

Lots 1 and 10, Block 1, are required to adhere to the minimum pad elevation as shown on the "Minimum Pad Elevations".

This plat shall adhere and conform to the recitals of C.U.P. DP-302 as approved and recorded at the Wichita-Sedgwick County Metropolitan Area Planning Department.

Reserve "A" is platted for a public drainage easement granted to the public, drainage facilities, utilities confined by easements, sidewalks, monuments, landscaping, irrigation, and open space. Reserve "B" is platted for a public drainage easement granted to the public, drainage facilities, utilities confined by easements, sidewalks, landscaping, irrigation, and open space. Reserve "B" is also granted as a permanent easement to the public for the purpose of constructing and financing stormwater mitigation, drainage, and detention improvements. Reserve "A" shall be owned and maintained by the undersigned developer (Bristol Square, LLC), and/or its successors or assigns or a Lot Owner's Association and is reserved for the stated uses. The Reserve "B" shall be owned and maintained by the undersigned developer (Bristol Square, LLC), and/or its successors or assigns or a Home Owner's Association and is reserved for the stated uses. The floodway, as indicated, shall be the responsibility of the owners until such time as the appropriate governing body exercising jurisdiction elects to assume the responsibility for the maintenance and improvements of the drainage, provided further, that no structure shall be constructed on or within said floodway, nor shall any fill, change of grade, creation of a channel or any other work be carried out without the permission of the City Engineer.

As to Lots 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, Block 1, and Reserve "A"
BRISTOL SQUARE, LLC, a Kansas limited liability company

Gary L. Osborne, Managing Member

As to Reserve "B"
RITCHE ASSOCIATES, INC., a Kansas corporation

James R. Stockton, Vice President

STATE OF KANSAS, SEDGWICK COUNTY ss:

This instrument was acknowledged before me on 10th day of May, 2009, by Gary L. Osborne, Managing Member, Bristol Square, LLC, a Kansas limited liability company.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal, the day and year last above written.

CYNTHIA A. WOMACK, Notary Public, State of Kansas, My Term Expires 7/2013

STATE OF KANSAS, SEDGWICK COUNTY ss:

This instrument was acknowledged before me on 10th day of May, 2009, by James R. Stockton, Vice President, Ritchie Associates, Inc., a Kansas corporation.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal, the day and year last above written.

CYNTHIA A. WOMACK, Notary Public, State of Kansas, My Term Expires 7/2013

MORTGAGE CERTIFICATE

Legacy Bank, holder of a mortgage on the above described property, does hereby consent to the plat of "KRUG SOUTH COMMERCIAL ADDITION".

Brice Malloy, Vice President

This instrument was acknowledged before me on the 14th day of May, 2009, by Brice Malloy, Vice President, Legacy Bank.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal, the day and year last above written.

LISA A. PISKA, Notary Public, State of Kansas, My Term Expires 01-12-2013

PLANNING COMMISSION CERTIFICATE

This plat of "KRUG SOUTH COMMERCIAL ADDITION" has been submitted to and approved by the Wichita-Sedgwick County Metropolitan Area Planning Commission, Wichita, Kansas.

Dated this 9th day of June, 2009

WICHITA-SEDGWICK COUNTY METROPOLITAN AREA PLANNING COMMISSION

Darrell A. Downing, Chair

John L. Schaefer, Secretary

GOVERNING BODY CERTIFICATE

The dedications shown on this plat are hereby accepted and this plat is hereby approved by the governing body of the City of Wichita, Kansas.

Dated this 14th day of July, 2009

At the direction of the City Council.

Mayor, Kelly B. Arnold, County Clerk

TRANSFER RECORD

STATE OF KANSAS, SEDGWICK COUNTY ss:

Entered on transfer record this 22nd day of July, 2009.

Kelly B. Arnold, County Clerk

REGISTER OF DEEDS CERTIFICATE

This is to certify that this instrument was filed for record in the Register of Deeds office this 24th day of July, 2009, at 3:30:13 o'clock AM and is duly recorded.

Long Bucking, Register of Deeds

Recorded in Register of Deeds - Bill Meek, DOC#FLM-PG: 29078636, Date Recorded: 7/24/2009 8:38:13 AM

COUNTY SURVEYOR

Reviewed in accordance with K.S.A. 58-2005 on this 24th day of July, 2009.

TRICIA L. ROSELLI, LS-1246, Deputy County Surveyor

FINAL PLAT
KRUG SOUTH COMMERCIAL ADDITION
AN ADDITION TO WICHITA, SEDGWICK COUNTY, KANSAS

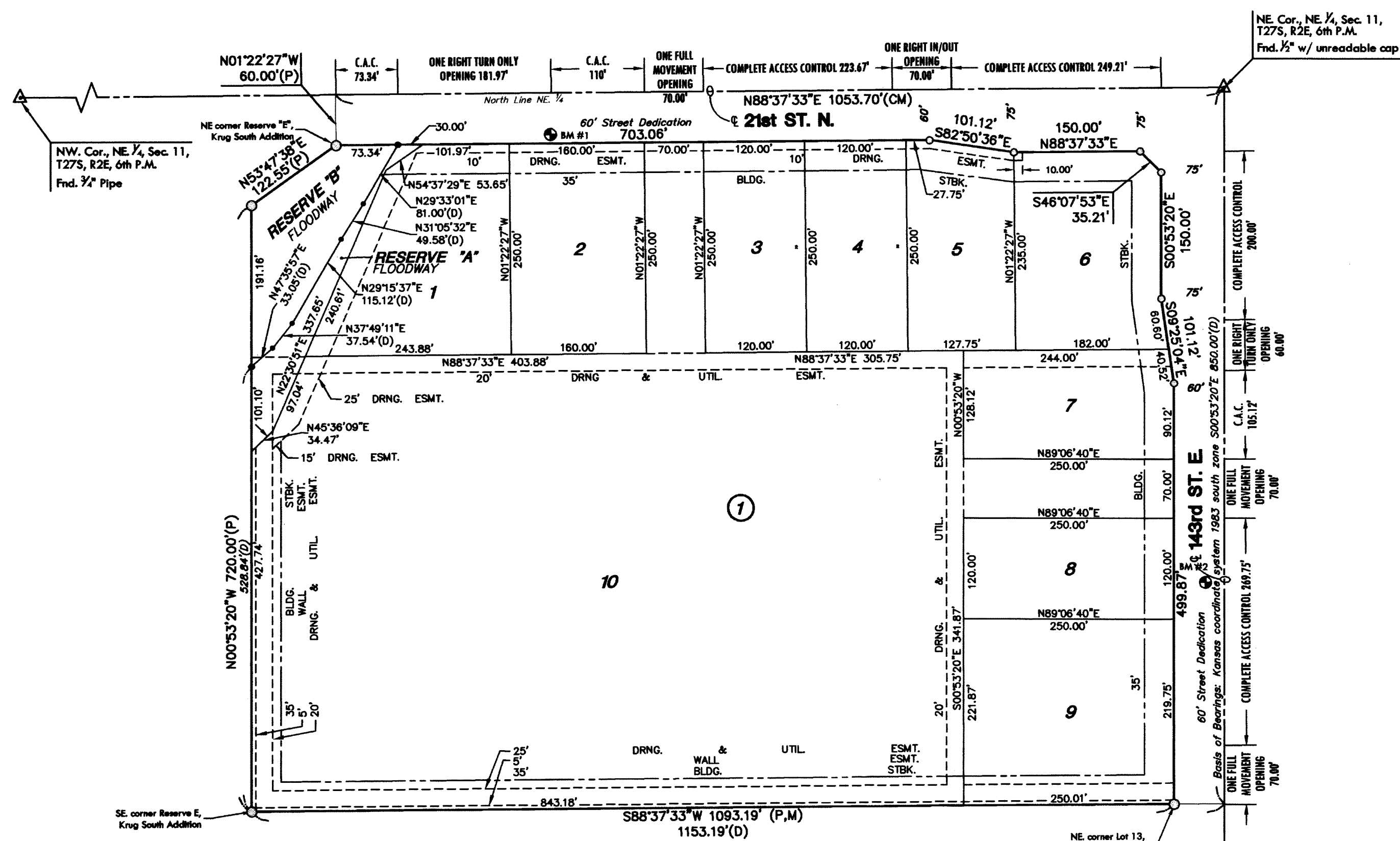
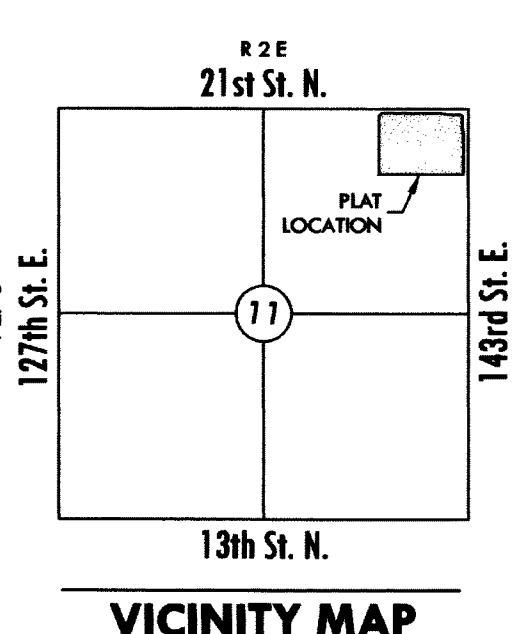


Table with 3 columns: LOTS (inclusive), BLOCK, ELEVATION. Row 1: 1 and 10, 1, 1362.0 (NAVD 88). Row 2: 1 and 10, 1, 1361.5 (NAVD 29).

- BENCH MARKS: BM#1 RR spike in S. face of PP, 3rd PP W. of 143rd St. (799' from CL) S. side of 21st St. (49' from CL) Elev.= 1362.17(NGVD 29) 1362.67 (NAVD 88). BM#2 FH NE bolt w/ tag on top of flange, W. side of 143rd St. NW of drive. (23' from CL) Elev.=1382.81(NGVD 29) 1383.31 (NAVD 88).



- LEGEND: Section Corner Monument Found, Found 3/8" Rebar w/ MKEC CLS 39 id. cap, Set 3/8" Rebar w/ MKEC CLS 39 id. cap, Measured, Platted, Deeded or Described, Calculated from measured, Complete Access Control.

NOTE: Zoning: This plat shall adhere and conform to the recitals of CUP DP-302 as approved and recorded at the Wichita-Sedgwick County Metropolitan Planning Area Department.

MKEC ENGINEERING CONSULTANTS, INC. 411 N. WEBB ROAD WICHITA, K.S. 67206 316-684-9600

Professional Engineer Seal for Shaw R. Bryan, Engineer, KS # 17899. Includes project information: THE RUSHWOOD 143RD ST. E. AND 21ST ST. N. WICHITA, KANSAS WATER LINE IMPROVEMENT PLANS PLAT. Revision table with columns for REV, DATE, DESCRIPTION.