

CONSTRUCTION AGREEMENT

THIS CONSTRUCTION AGREEMENT (the "Agreement") is made and entered into as of the _____ day of _____, 2020, by and between Illinois-American Water Company, an Illinois corporation ("IAWC"), and the City of Peoria, Illinois, an Illinois municipal corporation ("Peoria"). Hereinafter, IAWC and Peoria may be referred to individually as a "Party" or together as the "Parties."

RECITALS:

- A. IAWC is engaged in furnishing water utility service within Peoria.
- B. Peoria in conjunction with the Illinois Department of Transportation ("IDOT") is planning the reconstruction of Western Avenue between approximately Adams Street and Howett Street, which reconstruction will require the relocation of IAWC's water main along a portion of Western Avenue at IAWC's cost (hereinafter referred to as the "Work").
- C. IDOT and Peoria are entering into a separate contract to conduct the Work. IDOT and Peoria are willing to perform, through IDOT's contractors, the relocation of IAWC's water main and installation of the facilities as further detailed in Exhibit 1 ("Water Main Project") in return for cost reimbursement by IAWC to Peoria, which will then reimburse IDOT for the cost of the Work, subject to the limitations set forth herein.

NOW, THEREFORE, in consideration of the mutual covenants, conditions, and agreements set forth herein, the parties hereto agree as follows:

Article I Water Service Facilities

1.1 Construction. In accordance with the approved plans and specifications attached hereto as Exhibit 1 and incorporated herein by reference, Peoria through its contract with IDOT and IDOT's contractors, shall effect the construction and installation of approximately 3,656 lineal feet of water main along the designated portion of Western Avenue, together with all valves, fittings, hydrants, and other items indicated in Exhibit 1, hereinafter collectively referred to as the "Facilities." The size, design, type and quality of materials and of the system location and manner of installation of the Facilities shall be as indicated on Exhibit 1 and shall meet the construction standards set forth in Exhibit 1. No material change shall be made in the plans and specifications for the Facilities without the prior written approval of IAWC.

1.2 Transfer of Completed Facilities. During the Work, the Facilities shall remain the property of IDOT until the construction of the Facilities is completed. Once completed, IDOT shall transfer the legal ownership of the Facilities to IAWC.

1.3 Cost Reimbursement. IAWC shall pay to Peoria all costs actually paid by Peoria associated with the construction and installation of the Facilities in accordance with Exhibit 1. An itemized total cost estimate of the Facilities to be constructed pursuant to this Agreement is outlined in blue text in the attached Exhibit 2 and incorporated herein by reference. Peoria shall advise IAWC of any material changes in the cost estimate (either increased or decreased costs). Final cost shall be determined by the unit prices of the successful bidder and quantities actually installed with IAWC's consent ("Final Cost"). Any changes to the planned Work must be approved by IAWC. Peoria shall invoice IAWC periodically as the work progresses. IAWC shall have the right to seek back up documentation for any invoice and challenge the amount of any invoice submitted. IAWC shall pay the Final Cost within ninety (90) days of receipt of an invoice and after any questions by IAWC have been resolved. Any amount not paid within ninety (90) days shall be subject to interest at ten (10) percent per annum. No interest shall accumulate if IAWC is seeking additional information or back up information about an invoice from Peoria.

Article II Rights-of-Way

Peoria shall provide to IAWC satisfactory evidence of rights-of-way for all portions of the route along which the water main is installed as may be necessary to provide water service to each parcel or lot on said route and to operate, repair, and maintain the Facilities.

Article III Performance

3.1 No Encumbrances. Copies of all releases, showing the Facilities and Work to be to be free of all security interests, liens, and encumbrances of any nature shall be conveyed to IAWC upon transfer of the Facilities in accordance with Section 1.2.

3.2 Inspection. IAWC shall have the right at all times during construction to inspect the progress of the work performed and to determine whether the Work is being performed in accordance with the plans and specifications contained in Exhibit 1. IAWC shall retain the services of an engineering firm for the purpose of inspecting and monitoring the performance of Work and to ensure compliance with the plans and specifications contained in Exhibit 1, or IAWC may utilize its own associate engineers to perform any of such services. If, in IAWC's reasonable opinion, the Work has not been, or is not being, performed in a good and workmanlike manner and in accordance with the plans and specifications contained in Exhibit 1, IAWC shall have the right to require the correction of any defects and compliance with the plans and specifications contained in Exhibit 1.

3.3 Documentation. Peoria shall deliver to IAWC a detailed itemization of all amounts paid in connection with the construction of the Facilities together with satisfactory evidence of full and final payment (or provision for payment satisfactory to IAWC) of all amounts due and payable in connection with the Work.

3.4 Indemnity. Peoria shall protect, indemnify, and hold harmless IAWC from and against any and all loss, damage, claims of damage, liability, judgments, or causes of action (including, but not limited to, court costs and reasonable attorneys' fees), caused or occasioned by or resulting from construction of the Facilities and/or any action undertaken by or on behalf of Peoria, or its agents or employees, during or following the Work and construction of the Facilities. In addition, Peoria shall cause IDOT to include the following in the contract with the general contractor retained to construct and install the Facilities to contain the following provision: "Contractor shall protect, indemnify, and hold harmless IAWC from and against any and all loss, damage, claims of damage, liability, judgments, or causes of action (including, but not limited to, court costs and reasonable attorneys' fees), caused or occasioned by or resulting from Contractor's construction of the Facilities and/or any action undertaken by or on behalf of Peoria, or its agents or employees, during or following such construction."

**Article IV
Service Connections**

IAWC shall be responsible for making all service connections from the Facilities to customers along the portions of the route in which the water main is installed. IAWC shall make the service connections in a timely manner, coordinating with the general contractor's schedule.

**Article V
Notice**

Any notice required or permitted to be given under this Agreement shall be deemed delivered and be effective on the date physically delivered to the party to whom notice is being provided or two (2) calendar days following the date on which the notice is deposited in the United States Mail, postage prepaid, certified delivery, and addressed to the party to whom notice is being provided, as follows:

IAWC:

Illinois-American Water Company
7500 N. Harker Drive
Peoria, IL 61615
Attn: Charles Barton

City of Peoria:

City of Peoria
3505 N. Dries Lane
Peoria, IL 61604
Attn: Bill Lewis

Each party shall promptly provide written notice to the other party, as provided herein, of any subsequent change of address.

**Article VI
Miscellaneous**

This Agreement shall be governed by and construed in accordance with the laws of the State of Illinois. This Agreement, together with the exhibits hereto, sets forth the entire agreement between the parties and supersedes all prior negotiations, understandings, and agreements between them. No change in, addition to, or waiver of any of the provisions of this Agreement shall be binding upon any party unless in writing and signed by the party sought to be bound. This Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective successors and assigns, provided, however, that an assignment or other transfer of this Agreement or any rights or obligations hereunder by Peoria shall not be binding upon IAWC or create any rights in the assignee until such assignment or other transfer is approved and accepted in writing by IAWC.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement by their authorized individuals to be effective as of the day, month, and year first above written.

ILLINOIS-AMERICAN WATER COMPANY

By: CHARLES BARTON

Engineering Manager – Project Delivery

CITY OF PEORIA, ILLINOIS

By: JIM ARDIS
Mayor

**Construction Agreement between the
City of Peoria
and
Illinois-American Water Company**

**Exhibit 1
Water Main Plans**

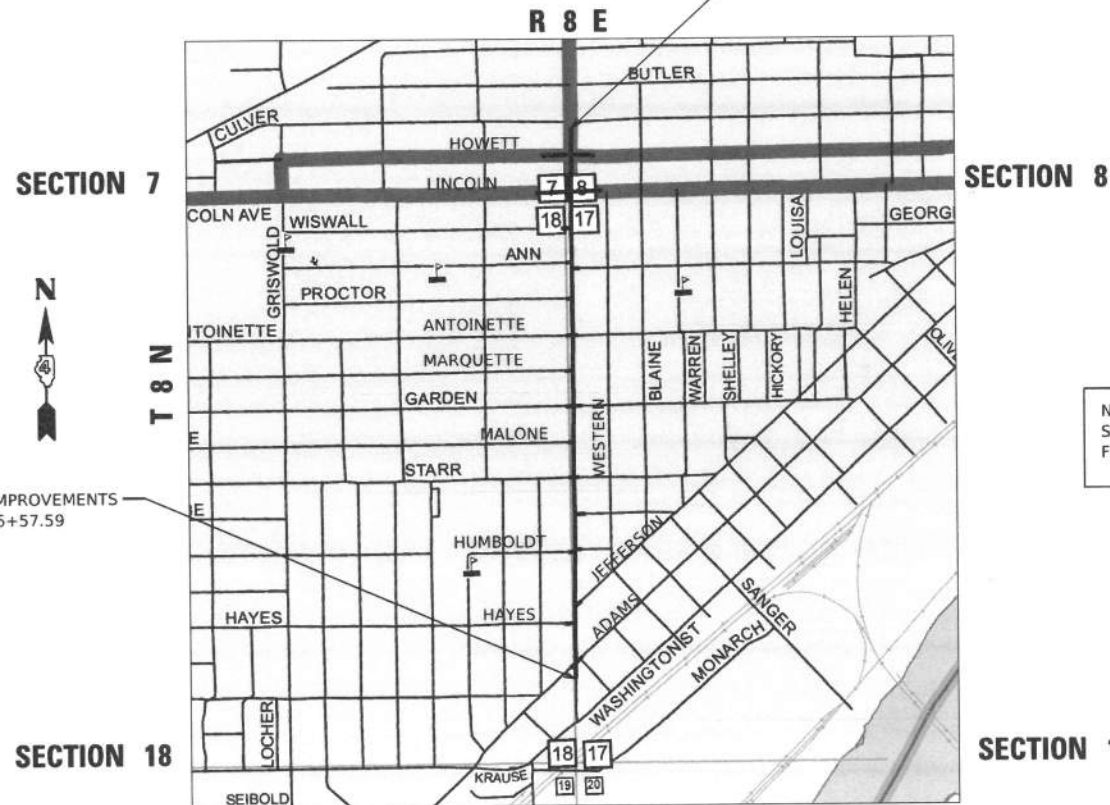
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

**PROPOSED
HIGHWAY PLANS**

FAU ROUTE 6594/FAP 671 (WESTERN AVE)
SECTION 16-00368-01-PV
FEDERAL PROJECT XMWJ(817)
CITY OF PEORIA
PEORIA COUNTY

JOB C-94-048-19

END IMPROVEMENTS
STA. 359+22.35

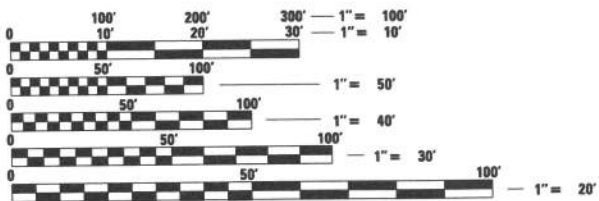


BEGIN IMPROVEMENTS
STA. 306+57.59



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FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-892-0123
OR 811

CITY OF PEORIA PROJECT ENGINEER: JANE GERDES, (309)494-8800
TERRA PROJECT MANAGER: ERIC THERKILDSEN, (309)999-0123

CONTRACT NO. 89766 CATALOG NO. 035741-01D

GROSS LENGTH = 5264.76 FT. = 0.997 MILES
NET LENGTH = 4898.31 FT. = 0.928 MILES

TERRA
ENGINEERING LTD.
401 Main Street, Suite 1560
Peoria, IL 61602
(309)999-0123

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6594	16-00368-00-EG	PEORIA	451	1
		ILLINOIS	CONTRACT NO.	89766

ERIC THERKILDSEN
062-044857
DATE SIGNED: 1/24/20
LIC. EXP. DATE: 11/30/2021

EHAB ELQAO
062-058301
DATE SIGNED:
LIC. EXP. DATE: 11/30/2021

LIGHTING
F. J. S. [Signature]

NOTE:
SEE RETAINING WALL PLANS
FOR STRUCTURAL SEALS.



LOCATION OF SECTION INDICATED THUS: - [Black bar] -

ADT 2017 = 7300, ADT (2039) = 8200, SU=3.9%, MU=2.7%
HIGHWAY CLASS: 2
FUNCTIONAL CLASSIFICATION: MINOR ARTERIAL
DESIGN SPEED: 30 MPH
POSTED SPEED LIMIT: 30 MPH
DESIGN POLICY: BLR MANUAL - URBAN

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

Approved _____
CITY OF PEORIA, CITY ENGINEER

Passed _____
DISTRICT 4 ENGINEER OF LOCAL ROADS & STREETS

Releasing for Bid Based on Limited Review _____
REGION 3 ENGINEER

GENERAL NOTES

CONTRACTOR SHALL HAVE THE RESPONSIBILITY TO VERIFY, LOCATE AND PROTECT ALL UNDERGROUND FACILITIES/UTILITIES DURING CONSTRUCTION OPERATIONS.

THE CONTRACTOR SHALL FURNISH, ERECT, AND MAINTAIN MARKINGS AND ASSOCIATED HAZARD WARNING LIGHTS, DELINEATOR FENCE, AND OTHER ASSOCIATED FACILITIES AS REQUIRED FOR OPEN TRENCHES, EXCAVATIONS, TEMPORARY STOCK PILES, AND PARKED CONSTRUCTION EQUIPMENT THAT MAY POSE A POTENTIAL HAZARD AS PART OF THE DAILY OPERATIONS AT THIS SITE. CONTRACTOR IS SOLELY RESPONSIBLE FOR SITE SAFETY.

CONTRACTOR SHALL CONTINUOUSLY COMPARE ALL LINES, GRADES, AND OTHER INFORMATION APPEARING ON THE PLANS WITH THE ACTUAL LINES, GRADES, AND SITE CONDITIONS. ANY DISCREPANCIES THAT MAY AFFECT THE PERFORMANCE OF THE WORK IN ACCORDANCE WITH THE INTENT OF THE CONTRACT DOCUMENTS SHALL BE IMMEDIATELY REPORTED TO THE OWNER AND ENGINEER IN WRITING FOR DISPOSITION BEFORE CONTRACTOR PROCEEDS WITH THE WORK. CONTRACTOR SHALL HAVE FULL RESPONSIBILITY FOR THE WORK COMPLETED PRIOR TO THE REPORT TO THE OWNER AND ENGINEER, AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR CORRECTION OF THE WORK PRIOR TO THE REPORT TO THE OWNER AND ENGINEER.

CONTRACTOR SHALL REMOVE EXISTING SURFACES, EARTHEN MATERIALS, AND STRUCTURES AS REQUIRED. ALL WASTE MATERIAL SHALL BE PROPERLY DISPOSED OFF-SITE UNLESS OTHERWISE NOTED ON PLANS IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REQUIREMENTS.

THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND ALL ASSOCIATED FEES PRIOR TO CONSTRUCTION, UNLESS NOTED. ILLINOIS AMERICAN WATER COMPANY HAS OBTAINED THE IEPA CONSTRUCTION PERMIT.

CONTRACTOR SHALL BE RESPONSIBLE FOR PREPARING AND SUBMITTING AS-BUILT DRAWINGS ON THE STANDARD DAILY CONSTRUCTION SHEETS NO LESS THAN EVERY OTHER DAY TO IAWC AND ENGINEER BEFORE RECEIPT OF THE CERTIFICATE OF SUBSTANTIAL COMPLETION.

CONSTRUCTION STAKING, LAYOUT, AND GRADING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR USING THE BASIC TOPOGRAPHIC SURVEY CONTROLS PROVIDED IN THE PLANS. CONTRACTOR SHALL VERIFY SURVEY CONTROLS PRIOR TO BEGINNING CONSTRUCTION. ANY DISCREPANCIES IN THE SURVEY CONTROLS SHALL BE REPORTED TO THE OWNER AND ENGINEER PRIOR TO CONSTRUCTION. ANY ADDITIONAL SURVEY CONTROLS REQUIRED FOR CONSTRUCTION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

ILLINOIS AMERICAN WATER COMPANY CONTACTS

NAME	PHONE	TITLE
CHARLES (TRIP) BARTON	309-566-4148	ENGINEERING MANAGER - PROJECT DELIVERY
JOSH HARKEN	309-566-4146	SENIOR PROJECT ENGINEER
*ALBERT HUFF	309-566-4114	ENGINEERING TECHNICIAN
DENISE PORCH	309-258-7270	LEAD SERVICE COORDINATOR
BRANDON HOADLEY	309-401-9885	CONSTRUCTION COORDINATOR (ILAWC CREWS)

* DENOTES PRIMARY PROJECT CONTACT

LEGEND

	EXISTING WATER MAIN
	PROPOSED WATER MAIN
	EXISTING STORM SEWER
	EXISTING STORM SEWER TO BE REMOVED PRIOR WATER MAIN INSTALLATION
	PROPOSED STORM SEWER
	EXISTING SANITARY SEWER
	PROPOSED SANITARY SEWER
	REPLACE SANITARY SEWER
	FIRE HYDRANT
	GATE VALVE
	REDUCER
	BEND FITTING

ILLINOIS AMERICAN WATER NOTES

ALL WATER MAIN (PRIVATE OR PUBLIC) INSTALLATION SHALL BE CONSTRUCTED IN ACCORDANCE WITH "THE STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS", CURRENT EDITION; THE STANDARDS AND SPECIFICATIONS OF ILLINOIS AMERICAN WATER COMPANY; AND THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY REGULATIONS 35 IAC, SUBTITLE F. IN CASE OF CONFLICT, THE MORE STRINGENT SPECIFICATION SHALL APPLY.

MAINTAIN 10 FEET HORIZONTAL CLEARANCE BETWEEN WATER MAIN AND SANITARY SEWER, STORM SEWER, AND/OR SANITARY SERVICE. AT LOCATIONS WHERE THIS IS NOT POSSIBLE, THE BOTTOM OF THE WATER MAIN SHALL BE AT LEAST 18 INCHES ABOVE THE TOP OF STORM OR SANITARY SEWERS.

WHERE NEW WATER MAIN IS TO BE INSTALLED UNDER EXISTING STORM OR SANITARY SEWERS, OR WITHIN 18" ABOVE AN EXISTING STORM OR SANITARY SEWER, THE NEW WATER MAIN SHALL BE ENCASED IN WATER MAIN QUALITY CONDUIT USING CASING SPACERS FOR A DISTANCE OF TEN (10) FEET ON EACH SIDE OF SAID STORM OR SANITARY SEWER USING OUTSIDE PIPE DIMENSIONS. THE ENDS OF THE ENCASEMENT SHALL BE SEALED WITH CEMENT MORTAR OR APPROVED EQUAL. STEEL CASING PIPE SHALL MEET OR EXCEED ASTM A-139, GRADE B. MINIMUM WALL THICKNESS SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS. OR, WHERE NEW WATER MAIN IS TO BE INSTALLED UNDER PROPOSED STORM OR SANITARY SEWER, OR WITHIN 18" ABOVE AN EXISTING STORM OR SANITARY SEWER, THE SEWER SHALL BE CONSTRUCTED WITH WATER MAIN QUALITY PIPE FROM STRUCTURE TO STRUCTURE.

CONTRACTOR SHALL COORDINATE WITH ILLINOIS AMERICAN WATER COMPANY FOR VALVE OPERATIONS, TAPS, CONNECTIONS, TEMPORARY SHUTDOWNS, OR ANY OTHER ACTIVITY THAT RELATES TO IN SERVICE MAINS OR SERVICES. CONTRACTOR SHALL COORDINATE THE REPLACEMENT AND CONNECTION OF ALL WATER SERVICES (RESIDENTIAL, COMMERCIAL, FIRE, AND OTHERWISE) WITH ILLINOIS AMERICAN WATER COMPANY. CONTRACTOR SHALL PROVIDE AMPLE TIME AND ACCESS TO ILLINOIS AMERICAN WATER COMPANY FOR THE COMPLETION OF WORK RELATED TO SAID WATER SERVICES.

ILLINOIS AMERICAN WATER COMPANY WILL PROVIDE ALL PIPING MATERIALS AS SPECIFIED IN THE CONTRACT DOCUMENTS SECTION 01000. WATER MAIN SHALL BE DUCTILE IRON PRESSURE CLASS 350, THICKNESS CLASS 54, CEMENT LINED W/ 8-MIL POLYWRAP AND MEET THE REQUIREMENTS OF ANSI/AWWA A21.51/C151. WATER MAIN JOINTS SHALL BE SLIP JOINT AND SHALL MEET THE REQUIREMENTS OF ANSI/AWWA A21.11/C111, UNLESS OTHERWISE NOTED.

ILLINOIS AMERICAN WATER COMPANY WILL PROVIDE ALL WATER MAIN PIPE AND FIRE HYDRANTS. ALL OTHER MATERIALS SHALL BE PROVIDED BY THE CONTRACTOR IN ACCORDANCE WITH THE CONTRACT REQUIREMENTS.

DEPTH OF COVER OVER WATER MAIN SHALL BE AS INDICATED ON THE DRAWINGS, BUT NO LESS THAN 42 INCHES OF COVER TO THE TOP OF THE PIPE. 42 INCH DEPTH OF COVER SHALL BE MEASURED FROM THE PROPOSED FINAL SURFACE.

ILLINOIS AMERICAN WATER COMPANY WILL PROVIDE ALL HYDRANTS AS SPECIFIED IN THE CONTRACT DOCUMENTS SECTION 01000. FIRE HYDRANTS SHALL BE 3-WAY, 5 1/4" VALVE OPENING, 4" INLET AND CONFORM TO ILLINOIS AMERICAN AND LOCAL UNIT OF GOVERNMENT STANDARDS. WATER LINE FROM MAIN TO FIRE HYDRANTS SHALL BE PRESSURE CLASS 350, 6" D.I.P.

CONTRACTOR SHALL PROVIDE PERMANENT AND TEMPORARY RESTRAINTS AND THRUST BLOCKS AS NEEDED FOR PRESSURE TESTING OF WATERMANS AND LATERALS. WRAP FITTINGS WITH VISQUEEN PRIOR TO THRUST BLOCKING WITH POURED-IN-PLACE CONCRETE. SOLID MASONRY UNITS MAY BE USED FOR THRUST BLOCKING PURPOSES. CONCRETE THRUST BLOCKS SHALL BE PROVIDED AT ALL WATER MAIN TEES, CAPS, VALVES, HYDRANTS AND BENDS 11-1/4 DEGREES OR GREATER. CONTRACTOR SHALL FILL THE PIPES SLOWLY SO AS NOT TO GENERATE MOMENTUM CHANGES AT FITTINGS. AIR IS TO BE EXPELLED UPON FILLING AND/ALL AIR IS TO BE EXPELLED PRIOR TO PRESSURE TESTING.

DISINFECTION, SAMPLING, AND TESTING OF WATER MAIN SHALL PRECEDE INSTALLATION OF SERVICES, AND SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT. SAMPLING SHALL BE COORDINATED WITH THE ILLINOIS AMERICAN WATER COMPANY DISTRICT LABORATORY.

PRIOR TO PLACING THE WATER MAIN AND EQUIPMENT INTO SERVICE, SATISFACTORY LABORATORY BACTERIOLOGICAL ANALYSIS MUST BE OBTAINED FROM THE LOCATIONS IDENTIFIED BY THE ENGINEER ON AT LEAST TWO CONSECUTIVE DAYS FROM SAMPLES COLLECTED AT LEAST 24 HOURS APART IN ACCORDANCE WITH "STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS", CURRENT EDITION.

DISINFECTION REQUIREMENTS:
 CHEMICAL USED: HTH CALCIUM HYPOCHLORITE
 INITIAL DISINFECTANT CONCENTRATION: 50 PPM - FREE CHLORINE
 FINAL DISINFECTANT CONCENTRATION: 50 PPM - FREE CHLORINE
 RETENTION TIME: 24 HOURS

CONTRACTOR SHALL COORDINATE ANY INTERRUPTION IN SERVICE WITH THE OWNER. CONTACT ALBERT HUFF WITH ILLINOIS AMERICAN WATER AT 309-566-4114. A MINIMUM OF ONE WEEK NOTICE IS REQUIRED.

WHERE THE WATER MAIN TRENCH CROSSES OR IS WITHIN TWO (2) FEET OF THE EDGE OF PAVEMENT, CURB, GUTTER, CURB AND GUTTER, OR SIDEWALK, THE TRENCH SHALL BE BACKFILLED WITH CONTROLLED LOW STRENGTH MATERIAL (FLOWABLE FILL). FLOWABLE FILL BACKFILL WILL BE PAID FOR AS TRENCH BACKFILL (SPECIAL).

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8	WATER MAIN PLAN - JEFFERSON AVENUE
9	WATER MAIN PLAN - STARR STREET
9	WATER MAIN PLAN - MAONE STREET
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10	WATER MAIN PLAN - MARQUETTE STREET
11	WATER MAIN PLAN - ANTOINETTE STREET
11	WATER MAIN PLAN - PROCTOR STREET
12	WATER MAIN PLAN - ANN STREET
13	WATER MAIN PLAN - WISWALL STREET
14 - 17	WATER MAIN DETAILS

WORK OPERATION NOTES

THE CONTRACTOR SHALL COORDINATE AND NOTIFY THE LOCAL UNIT OF GOVERNMENT & ALL UTILITY COMPANIES A MINIMUM OF 72 HOURS IN ADVANCE AS TO WHEN WORK MAY BEGIN. ILLINOIS AMERICAN WATER COMPANY SHALL BE NOTIFIED NO LESS THAN 72 HOURS IN ADVANCE FOR ANY MAIN SHUTDOWNS, TAPS, VALVE WORK, OR HYDRANT FLUSHING. THE CONTRACTOR WILL NOT BE ALLOWED TO EXERCISE OR REMOVE ANY EXISTING VALVES, WATER SERVICES OR HYDRANTS. ILLINOIS AMERICAN WATER COMPANY CONTACT WILL BE ALBERT HUFF AT 309-566-4114.

WORK SEQUENCE

THE FOLLOWING WORK SEQUENCE SHALL BE ADHERED TO IN ORDER TO COMPLY WITH THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY (IEPA) PERMIT REQUIREMENTS.

- WHERE INDICATED, EXISTING SEWERS SHALL BE REMOVED AND REPLACED WITH A PRESSURE-TESTED WATER MAIN QUALITY PIPE AS DESCRIBED BELOW.
- EXISTING STORM SEWER SHALL BE REMOVED WHERE IN CONFLICT WITH PROPOSED WATER MAIN IMPROVEMENTS. CONTRACTOR SHALL BE RESPONSIBLE FOR TEMPORARY DRAINAGE MEASURES DURING CONSTRUCTION.
- INSTALL PROPOSED WATER MAIN WITH ALL ENCASEMENTS, VALVES, FIRE HYDRANTS, AND OTHER APPURTENANCES. PROPOSED WATER MAIN SHALL BE INSTALLED IN ACCORDANCE WITH THE ASSOCIATED IEPA CONSTRUCTION PERMIT AND ILLINOIS AMERICAN WATER COMPANY (ILAWC) STANDARDS.
- COMPLETE WATER MAIN PRESSURE TESTS AND SAMPLING, AND OBTAIN PASSING BACTERIOLOGICAL TESTS.
- COORDINATE PROPOSED WATER SERVICE TRANSFERS WITH ILAWC CREWS.
- COORDINATE THE CUT, CAP, AND ABANDONMENT OF EXISTING WATER MAINS IN COORDINATION WITH ILAWC.
- INSTALL PROPOSED STORM SEWER IMPROVEMENTS. PROPOSED STORM SEWER IMPROVEMENTS MAY COMMENCE CONCURRENTLY WITH STEP 3 (ABOVE) IF PROPOSED WATER MAIN IS ADEQUATELY PROTECTED IN ACCORDANCE WITH IEPA CONSTRUCTION PERMIT AND IF COORDINATED WITH ILAWC.

EXISTING SEWER REPLACEMENT

WHERE INDICATED, EXISTING SEWERS SHALL BE REMOVED AND REPLACED WITH A WATER MAIN QUALITY POLYVINYL CHLORIDE (PVC) PIPE WITH A WALL THICKNESS OF DR18. PVC PIPE SHALL COMPLY WITH THE FOLLOWING AMERICAN WATER WORKS ASSOCIATION (AWWA) STANDARDS FOR THE RELEVANT NOMINAL PIPE SIZE.

- AWWA C900: NOMINAL PIPE SIZES 4-INCH THROUGH 12-INCH
- AWWA C905: NOMINAL PIPE SIZES 14-INCH THROUGH 48-INCH

REPLACED PIPE SHALL HAVE THE SAME INSIDE DIAMETER AS THE EXISTING SEWER THAT IS REMOVED. IF PIPE OF THE SAME INSIDE DIAMETER CANNOT BE OBTAINED, THE REPLACEMENT PIPE SHALL BE ONE (1) NOMINAL SIZE LARGER. ALL FITTINGS AND MATERIAL ASSOCIATED WITH THE CONNECTION BETWEEN EXISTING AND REPLACED SEWERS SHALL BE INCIDENTAL. REPLACED SEWERS SHALL MAINTAIN THE EXISTING SEWER FLOW LINE ELEVATIONS AND GRADES.

DURING INSTALLATION, THE REPLACED SEWER SHALL BE PRESSURE TESTED TO THE MAXIMUM EXPECTED SURCHARGE HEAD OF: 20 PSI. SEWER PRESSURE TEST SHALL BE RECORDED AND SUBMITTED TO THE ENGINEER PRIOR TO THE ASSOCIATED WATER MAIN INSTALLATION.

EXISTING WATER MAIN TO BE ABANDONED

EXISTING WATER MAIN THAT IS REMOVED FROM SERVICE SHALL BE ABANDONED IN PLACE AND BACKFILLED WITH A CONTROLLED LOW STRENGTH MATERIAL (CLSM). OPEN ENDS OF THE ABANDONED WATER MAIN PIPE SHALL BE SEALED AFTER BACKFILLING. EXISTING WATER MAIN PIPE THAT IS IN CONFLICT WITH PROPOSED IMPROVEMENTS (STORM SEWER OR OTHERWISE) MAY CUT OUT AND REMOVED. ALL WORK AND MATERIALS ASSOCIATED WITH REMOVING EXISTING WATER MAIN PIPE SHALL BE CONSIDERED INCIDENTAL TO ABANDONING EXISTING WATER MAIN.

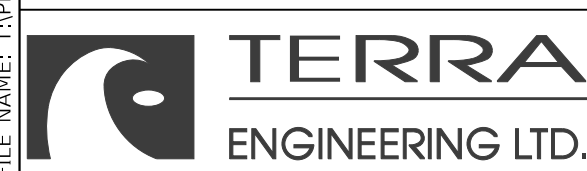
FIRE HYDRANTS

EXISTING FIRE HYDRANTS DESIGNATED FOR REMOVAL WILL BE REMOVED BY ILLINOIS AMERICAN WATER COMPANY (ILAWC). CONTRACTOR SHALL NOTIFY ILAWC A MINIMUM OF ONE (1) WEEK PRIOR TO THE EXISTING HYDRANT NEEDING TO BE REMOVED. PROPOSED FIRE HYDRANTS SHALL BE IN SERVICE BEFORE EXISTING FIRE HYDRANTS ARE REMOVED. CONTRACTOR SHALL BAG EXISTING AND PROPOSED FIRE HYDRANTS THAT ARE NOT IN SERVICE. IF PROPOSED FIRE HYDRANT LOCATIONS ARE TO DEVIATE FROM PLANS, CONTRACTOR SHALL FIRST CONTACT THE PEORIA FIRE DEPARTMENT. REVISED PROPOSED FIRE HYDRANT LOCATION SHALL BE APPROVED BY THE PEORIA FIRE DEPARTMENT AND THE ENGINEER.

NAME	PHONE	TITLE
CAPTAIN JOSH HARRIS	309-494-8726	FIRE INSPECTOR, PEORIA FIRE DEPARTMENT

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

WATER MAIN NOTES



USER NAME = colinc	DESIGNED - JH	REVISED -
FILENAME = D416187005-SHT-WATERMAIN000.dgn	DRAWN - JH	REVISED -
PLOT SCALE = 1.0000 ' / in.	CHECKED - JS	REVISED -
PLOT DATE = 1/24/2020 3:12:26 PM	DATE -	REVISED -

SCALE:	SHEET 1	OF 17	SHEETS	STA.	TO STA.	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
						6594	16-00368-01-PV	PEORIA	451	143
							WESTERN AVE RECONSTRUCTION		CONTRACT NO.	89766
								ILLINOIS	FED. AID PROJECT	

MODEL: Default
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WATER MAIN SCHEDULE OF QUANTITIES																			
PAY ITEM NUMBER	PAY ITEM DESCRIPTION	WESTERN				ADAMS	HAYES	JEFFERSON	STARR	MALONE	GARDEN	MARQUETTE	ANTOINETTE	PROCTOR	ANN	WISWALL	TOTAL QUANTITY	UNITS	
		SHEET 3	SHEET 4	SHEET 5	SHEET 6	SHEET 7	SHEET 8	SHEET 8	SHEET 9	SHEET 9	SHEET 10	SHEET 10	SHEET 11	SHEET 11	SHEET 12	SHEET 13			
56100020	MJ TEE, 8" X 8"		1		2											3	EA		
56100055	MJ TEE, 12" X 8"														1	1	EA		
56100065	MJ TEE, 12" X 12"	2														2	EA		
56101148	MJ REDUCER 8" X 4"							1								1	EA		
56101150	MJ REDUCER 8" X 6"							1		2		1		1		6	EA		
56101160	MJ REDUCER 12" X 8"	1														1	EA		
56102900	WATER MAIN, DUCTILE IRON, 4"								6							6	LF		
56103000	WATER MAIN, DUCTILE IRON, 6"		18	50	21			12	4	10	17	20	26	27	31	17	253	LF	
56103100	WATER MAIN, DUCTILE IRON, 8"	387	600	600	454			97	104	134	71		64	112	63	62	90	2838	LF
56103300	WATER MAIN, DUCTILE IRON, 12"	113						150						73		142	340	818	LF
56104900	GATE VALVE, MJ, 6"		1	2	1			1		1		1	1	1	1	1	1	11	EA
56105000	GATE VALVE, MJ, 8"			1	2			1					1		1			6	EA
56108710	TAPPING SLEEVE, 4" X 4" AND VALVE, 4"								1									1	EA
56108800	TAPPING SLEEVE, 6" X 6" AND VALVE, 6"								1	2	1	1		1		1		7	EA
56108900	TAPPING SLEEVE, 8" X 8" AND VALVE, 8"							1		1			1		1			4	EA
56108900	TAPPING SLEEVE, 8" X 12" AND VALVE, 8"											1		1				2	EA
56109100	TAPPING SLEEVE, 12" X 12" AND VALVE, 12"	1					1						2		2	2		8	EA
56109100	TAPPING SLEEVE, 12" X 20" AND VALVE, 12"						1											1	EA
56109420	MJ 45° BEND, 8"	2	10	6	2			4	1	8			4		2	2	6	47	EA
56109424	MJ 45° BEND, 12"	6						8						2		4	12	32	EA
56109430	MJ 90° BEND, 4"									1								1	EA
56109432	MJ 90° BEND, 6"									1		1	1	1				4	EA
56109434	MJ 90° BEND, 8"								1	1		1	1	1	1	1		6	EA
56109438	MJ 90° BEND, 12"	1					1						2		2			8	EA
56400600	FIRE HYDRANT INSTALLATION		1	2	1			1		1	1	1	1	1	1	1		12	EA
X5610651	ABANDON EX WM, FILL WITH CLSM	471	600	600	450	138	75	123	130	64		67	143	61	195	401		3518	LF
TBD	ENCASEMENT, WM QUALITY, 12"	20	22	27	38				45	25			31	20		24	19	271	LF
TBD	ENCASEMENT, WM QUALITY, 16"	38						24								23		85	LF
TBD	MJ ANCHOR TEE, 8" X 6"		1	2	1			1		1			1		1			9	EA
TBD	MJ ANCHOR TEE, 8" X 8"	1			1													2	EA
TBD	MJ ANCHOR TEE, 12" X 6"												1		1			2	EA
TBD	MJ ANCHOR TEE, 12" X 8"												1		1			2	EA
TBD	TRENCH BACKFILL (SPECIAL)	157	188	197	145	52	33	33	43	25	5	26	65	27	77	150		1223	CY
	FIRE HYDRANT REMOVAL (COMPLETED BY ILAWC)		1	2	1			1		1	1	1	1	1	1	1		12	EA
PAY ITEM NUMBER	PAY ITEM DESCRIPTION	WESTERN				ADAMS	HAYES	JEFFERSON	STARR	MALONE	GARDEN	MARQUETTE	ANTOINETTE	PROCTOR	ANN	WISWALL	TOTAL QUANTITY	UNITS	
		SHEET 3	SHEET 4	SHEET 5	SHEET 6	SHEET 7	SHEET 8	SHEET 8	SHEET 9	SHEET 9	SHEET 10	SHEET 10	SHEET 11	SHEET 11	SHEET 12	SHEET 13			

CONTROL POINTS TABLE			
STREET	ID	NORTHING	EASTING
WESTERN	F100	1458083.9305	2447305.4393
WESTERN	F111	1458233.7369	2447319.1721
WESTERN	F112	1458240.3359	2447325.9102
WESTERN	F116	1458603.9298	2447330.3867
WESTERN	F117	1458619.6836	2447315.0068
WESTERN	F125	1459015.6482	2447319.3079
WESTERN	F126	1459182.5854	2447321.1222
WESTERN	F127	1459196.4288	2447335.2593
WESTERN	F130	1459524.3825	2447339.2069
WESTERN	F131	1459539.6820	2447324.2756
WESTERN	F132	1459571.4462	2447324.6626
WESTERN	F133	1459586.4015	2447339.9554
WESTERN	F136	1459876.2264	2447343.4388
WESTERN	F139	1460197.9936	2447344.9505
ADAMS	F142	1458079.3331	2447232.2982
ADAMS	F151	1458176.2441	2447332.8160
HAYES	F153	1458534.8073	2447243.8211
HAYES	F157	1458555.5946	2447260.7700
JEFFERSON	F159	1458794.6834	2447390.8214
MALONE	F175	1460209.4918	2447286.2552
GARDEN	F178	1460506.8001	2447351.5532
MARQUETTE	F186	1460875.0406	2447353.5043
ANTOINETTE	F188	1461242.5244	2447291.6566
ANTOINETTE	F189	1461247.8800	2447356.5965
ANTOINETTE	F197	1461193.6656	2447356.3100
PROCTOR	F203	1461547.4597	2447358.1976
ANN	F206	1461757.5855	2447360.2402
ANN	F215	1461891.0406	2447361.3615
ANN	F218	1461877.6130	2447299.1290
WISWALL	F220	1462027.3427	2447362.3509
WISWALL	F229	1462231.4641	2447358.5434
WISWALL	F230	1462241.3911	2447368.8239
WISWALL	F236	1462352.3680	2447364.3044
WISWALL	F237	1462229.7847	2447339.3623
WISWALL	F244	1462221.8152	2447287.3490

FIRE HYDRANT SCHEDULE					
ID	WATER MAIN		ROADWAY		MIN. BURY HEIGHT
	STA	OFF	STA	OFF	
FH-101	300+53	12.0' LT	313+50	35.8' LT	5.5'
FH-102	109+53	17.9' LT	317+99	26.1' LT	5.5'
FH-103	111+90	30.6' RT	320+30	36.1' RT	4.5'
FH-104	114+65	19.5' RT	323+05	25.0' RT	4.5'
FH-105	117+97	20.7' RT	326+25	26.2' RT	4.5'
FH-106	600+25	2.1' LT	329+83	39.8' LT	5.5'
FH-107	-	-	332+90	26.0' RT	5.5'
FH-108	700+25	13.2' RT	336+45	37.0' RT	6.0'
FH-109	800+10	20.8' RT	339+78	39.4' RT	4.5'
FH-110	900+20	17.8' RT	343+13	37.0' LT	6.0'
FH-111	1001+06	30.5' RT	346+42	36.1' RT	5.5'
FH-112	1110+48	12.8' LT	350+18	32.8' LT	5.0'

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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

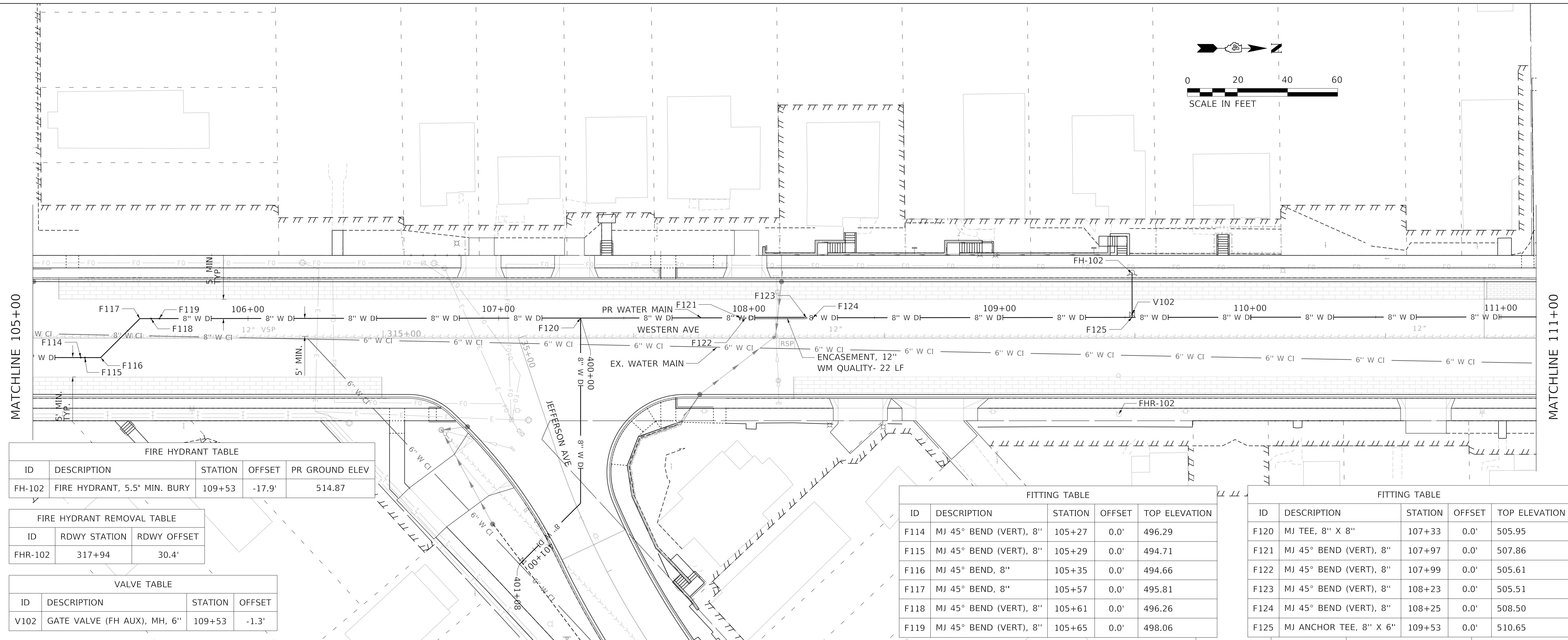
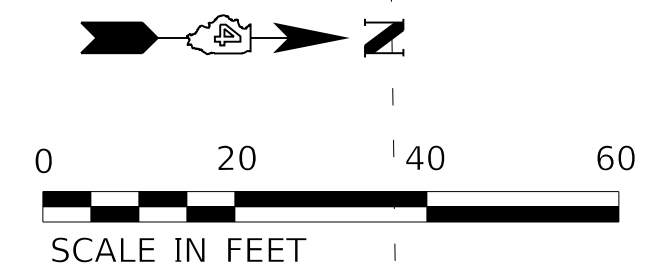
WATER MAIN SCHEDULES

SCALE: SHEET 2 OF 17 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6594	16-00368-01-PV	PEORIA	451	144
WESTERN AVE RECONSTRUCTION		CONTRACT NO. 89766		
ILLINOIS		FED. AID PROJECT		

DATE	
BY	
SURVEYED	
PLANNED	
NOTED	
NO.	

DATE	
BY	
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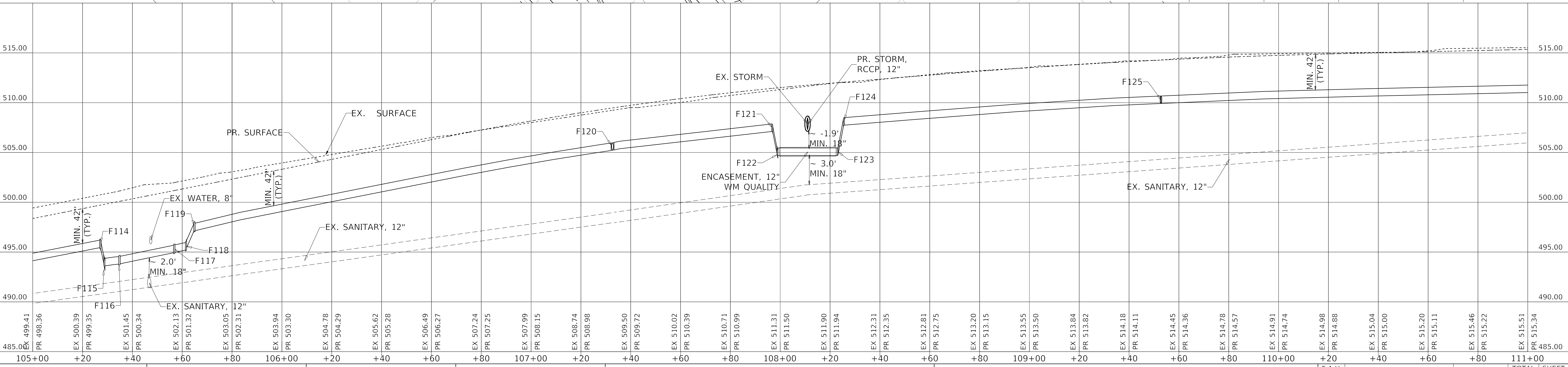
ID	DESCRIPTION	STATION	OFFSET	PR GROUND ELEV
FH-102	FIRE HYDRANT, 5.5' MIN. BURY	109+53	-17.9'	514.87

ID	RDWY STATION	RDWY OFFSET
FHR-102	317+94	30.4'

ID	DESCRIPTION	STATION	OFFSET
V102	GATE VALVE (FH AUX), MH, 6"	109+53	-1.3'

ID	DESCRIPTION	STATION	OFFSET	TOP ELEVATION
F114	MJ 45° BEND (VERT), 8"	105+27	0.0'	496.29
F115	MJ 45° BEND (VERT), 8"	105+29	0.0'	494.71
F116	MJ 45° BEND, 8"	105+35	0.0'	494.66
F117	MJ 45° BEND, 8"	105+57	0.0'	495.81
F118	MJ 45° BEND (VERT), 8"	105+61	0.0'	496.26
F119	MJ 45° BEND (VERT), 8"	105+65	0.0'	498.06

ID	DESCRIPTION	STATION	OFFSET	TOP ELEVATION
F120	MJ TEE, 8" X 8"	107+33	0.0'	505.95
F121	MJ 45° BEND (VERT), 8"	107+97	0.0'	507.86
F122	MJ 45° BEND (VERT), 8"	107+99	0.0'	505.61
F123	MJ 45° BEND (VERT), 8"	108+23	0.0'	505.51
F124	MJ 45° BEND (VERT), 8"	108+25	0.0'	508.50
F125	MJ ANCHOR TEE, 8" X 6"	109+53	0.0'	510.65



**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**WATER MAIN PLAN AND PROFILE
WESTERN AVENUE**

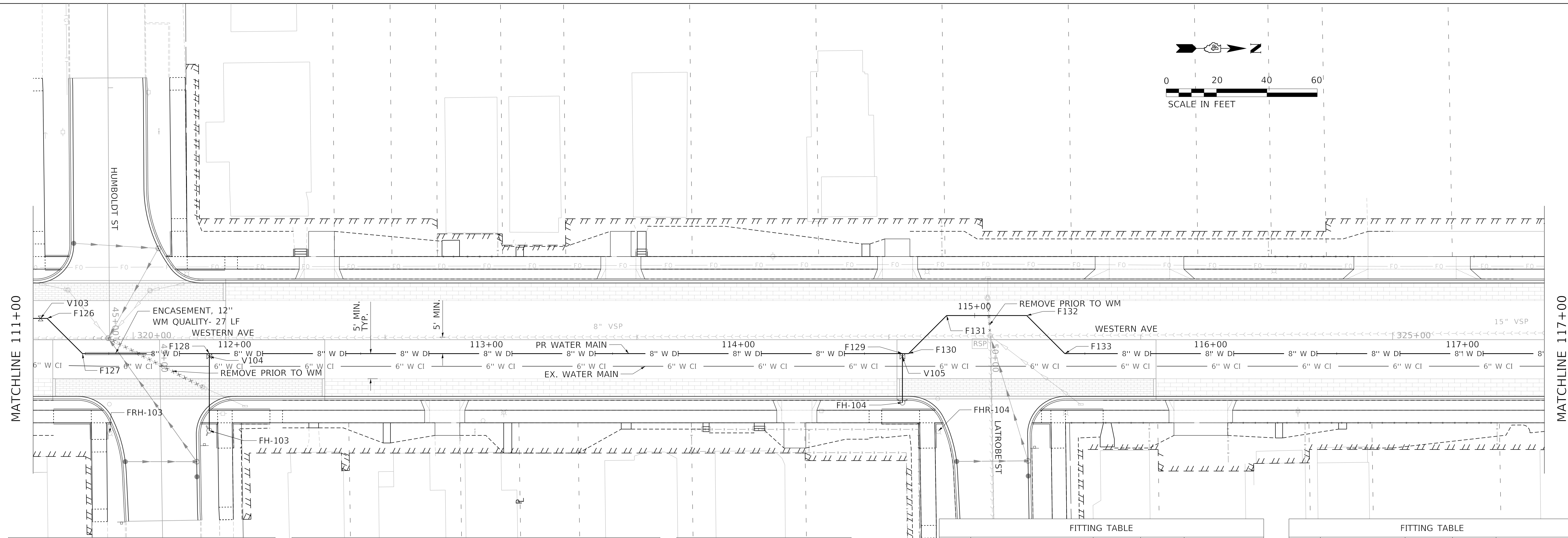
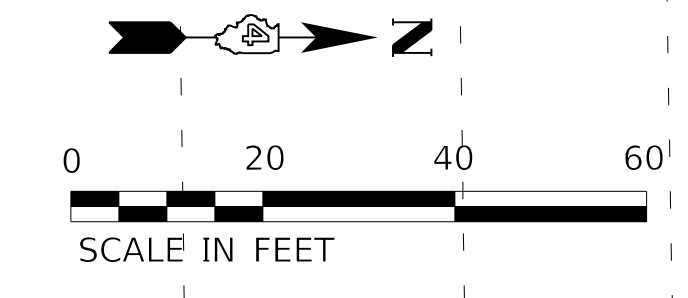
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WESTERN AVE RECONSTRUCTION		CONTRACT NO. 89766		
ILLINOIS		FED. AID PROJECT		



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SCALE: 1"=20' SHEET 4 OF 17 SHEETS STA. TO STA.

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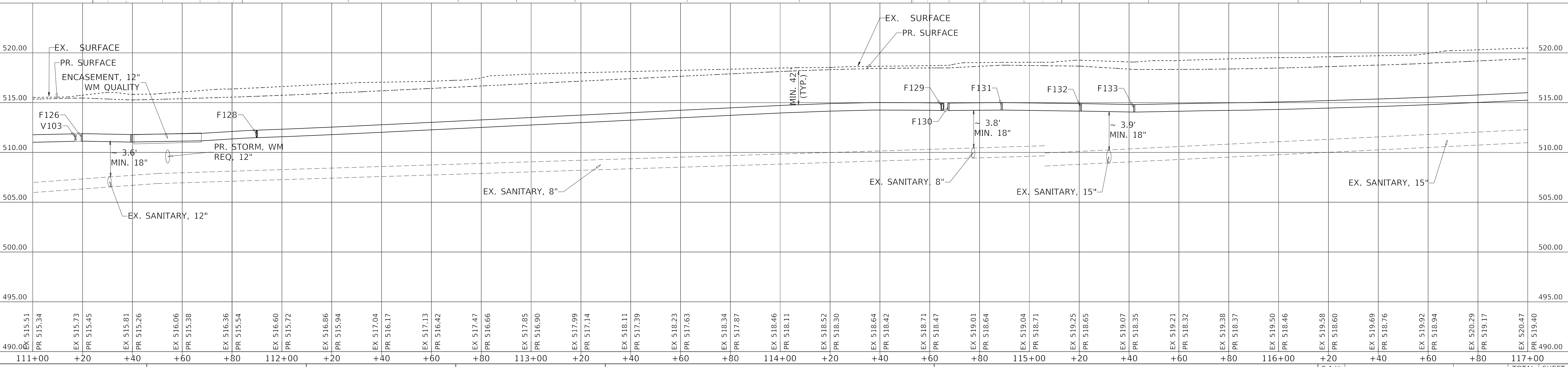
VALVE TABLE			
ID	DESCRIPTION	STATION	OFFSET
V103	GATE VALVE, MJ, 8"	111+17	0.0'
V104	GATE VALVE (FH AUX), MJ, 6"	111+90	1.1'
V105	GATE VALVE (FH AUX), MJ, 6"	114+65	1.3'

FIRE HYDRANT TABLE				
ID	DESCRIPTION	STATION	OFFSET	PR GROUND ELEV
FH-103	FIRE HYDRANT, 4.5' MIN. BURY	111+90	30.6'	515.37
FH-104	FIRE HYDRANT, 4.5' MIN. BURY	114+65	19.5'	518.59

FIRE HYDRANT REMOVAL TABLE		
ID	STATION	OFFSET
FHR-103	319+91	37.1'
FHR-104	323+20	36.4'

FITTING TABLE				
ID	DESCRIPTION	STATION	OFFSET	TOP ELEVATION
F126	MJ 45° BEND, 8"	111+20	0.0'	511.87
F127	MJ 45° BEND, 8"	111+40	0.0'	511.78
F128	MJ ANCHOR TEE, 8" X 6"	111+90	0.0'	512.21
F129	MJ ANCHOR TEE, 8" X 6"	114+65	0.0'	514.93

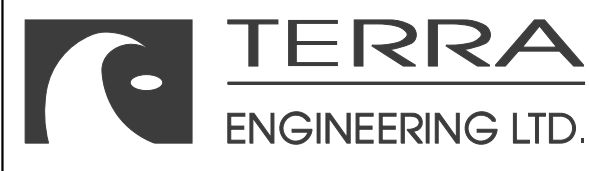
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ID	DESCRIPTION	STATION	OFFSET	TOP ELEVATION
F130	MJ 45° BEND, 8"	114+68	0.0'	514.95
F131	MJ 45° BEND, 8"	114+89	0.0'	515.00
F132	MJ 45° BEND, 8"	115+21	0.0'	514.90
F133	MJ 45° BEND, 8"	115+42	0.0'	514.79



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 SHEET: 5 OF 17



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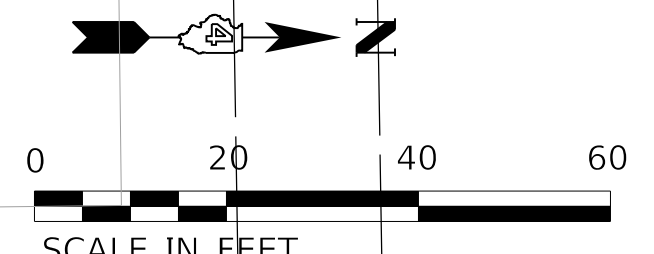
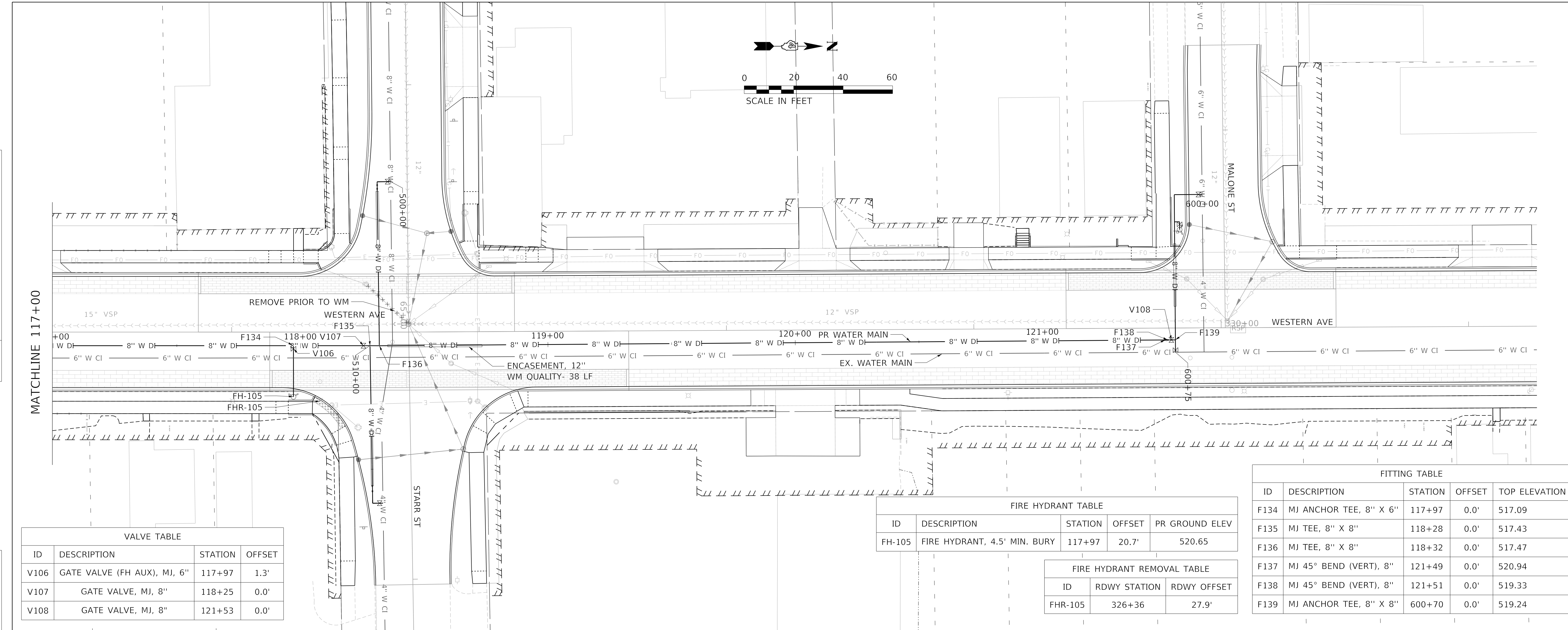
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WATER MAIN PLAN AND PROFILE			
WESTERN AVENUE			
SCALE: 1"=20'	SHEET 5	OF 17 SHEETS	STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6594	16-00368-01-PV	PEORIA	451	147
WESTERN AVE RECONSTRUCTION		CONTRACT NO. 89766		
ILLINOIS		FED. AID PROJECT		

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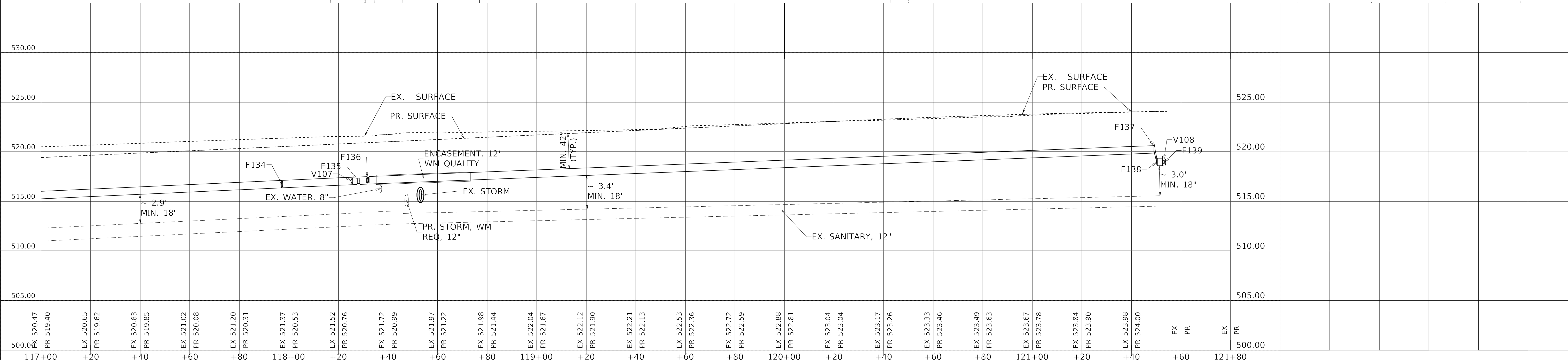
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ID	DESCRIPTION	STATION	OFFSET
V106	GATE VALVE (FH AUX), MJ, 6"	117+97	1.3'
V107	GATE VALVE, MJ, 8"	118+25	0.0'
V108	GATE VALVE, MJ, 8"	121+53	0.0'

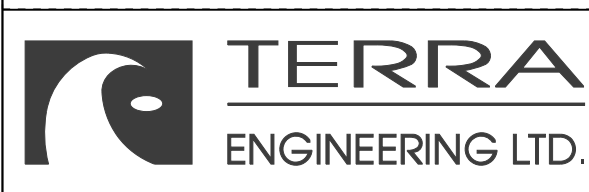
ID	DESCRIPTION	STATION	OFFSET	PR GROUND ELEV
FH-105	FIRE HYDRANT, 4.5' MIN. BURY	117+97	20.7'	520.65

ID	RDWY STATION	RDWY OFFSET
FHR-105	326+36	27.9'

ID	DESCRIPTION	STATION	OFFSET	TOP ELEVATION
F134	MJ ANCHOR TEE, 8" X 6"	117+97	0.0'	517.09
F135	MJ TEE, 8" X 8"	118+28	0.0'	517.43
F136	MJ TEE, 8" X 8"	118+32	0.0'	517.47
F137	MJ 45° BEND (VERT), 8"	121+49	0.0'	520.94
F138	MJ 45° BEND (VERT), 8"	121+51	0.0'	519.33
F139	MJ ANCHOR TEE, 8" X 8"	600+70	0.0'	519.24



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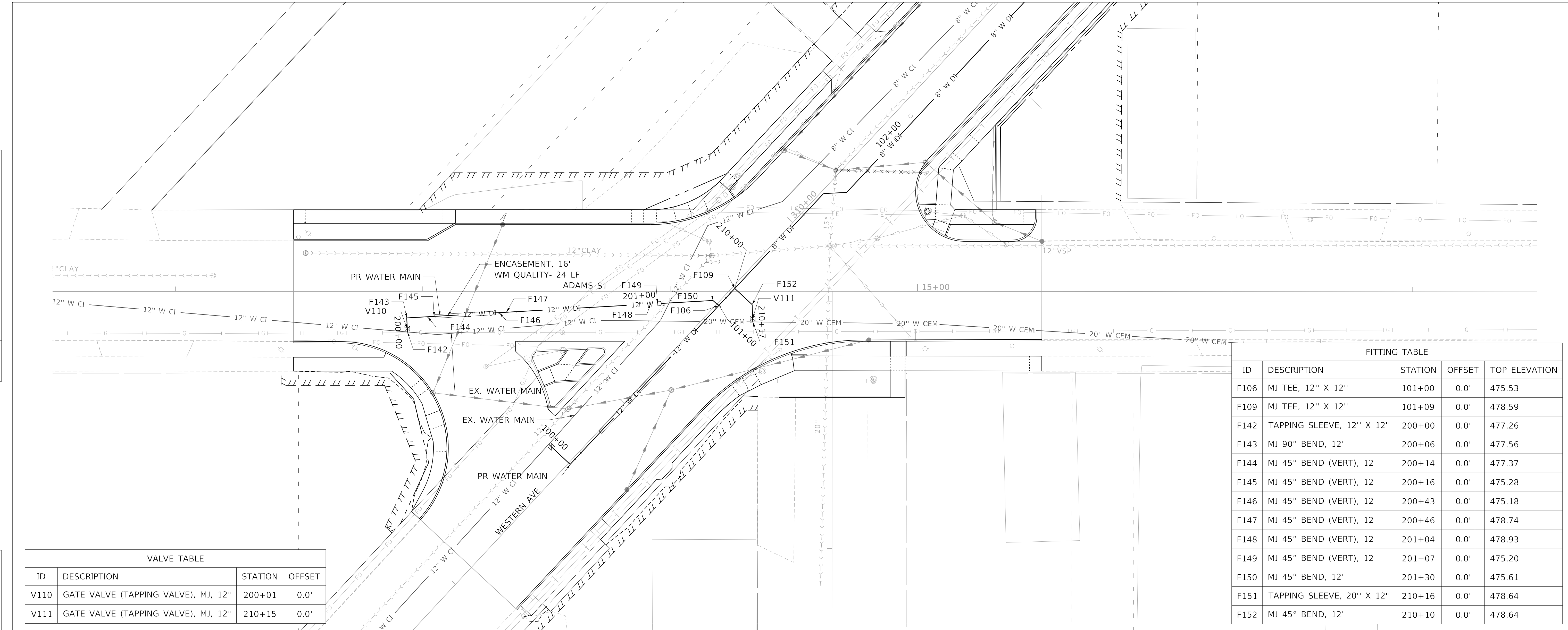
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

WATER MAIN PLAN AND PROFILE			
WESTERN AVENUE			
SCALE: 1"=20'	SHEET 6	OF 17 SHEETS	STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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WESTERN AVE RECONSTRUCTION		CONTRACT NO. 89766		
ILLINOIS		FED. AID PROJECT		

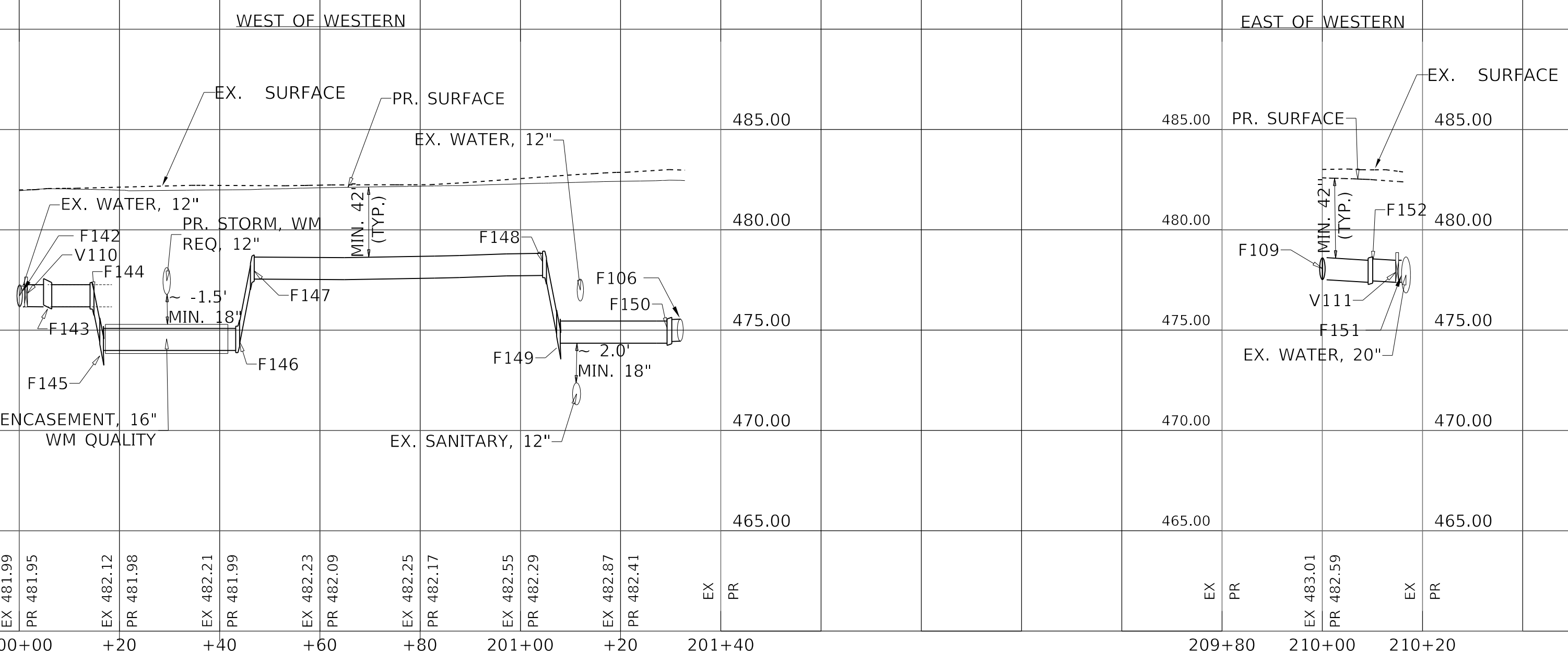
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	PLOTTED	BY
	GRADES CHECKED	
	NOTE BOOK	
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ID	DESCRIPTION	STATION	OFFSET
V110	GATE VALVE (TAPPING VALVE), MJ, 12"	200+01	0.0'
V111	GATE VALVE (TAPPING VALVE), MJ, 12"	210+15	0.0'

ID	DESCRIPTION	STATION	OFFSET	TOP ELEVATION
F106	MJ TEE, 12" X 12"	101+00	0.0'	475.53
F109	MJ TEE, 12" X 12"	101+09	0.0'	478.59
F142	TAPPING SLEEVE, 12" X 12"	200+00	0.0'	477.26
F143	MJ 90° BEND, 12"	200+06	0.0'	477.56
F144	MJ 45° BEND (VERT), 12"	200+14	0.0'	477.37
F145	MJ 45° BEND (VERT), 12"	200+16	0.0'	475.28
F146	MJ 45° BEND (VERT), 12"	200+43	0.0'	475.18
F147	MJ 45° BEND (VERT), 12"	200+46	0.0'	478.74
F148	MJ 45° BEND (VERT), 12"	201+04	0.0'	478.93
F149	MJ 45° BEND (VERT), 12"	201+07	0.0'	475.20
F150	MJ 45° BEND, 12"	201+30	0.0'	475.61
F151	TAPPING SLEEVE, 20" X 12"	210+16	0.0'	478.64
F152	MJ 45° BEND, 12"	210+10	0.0'	478.64

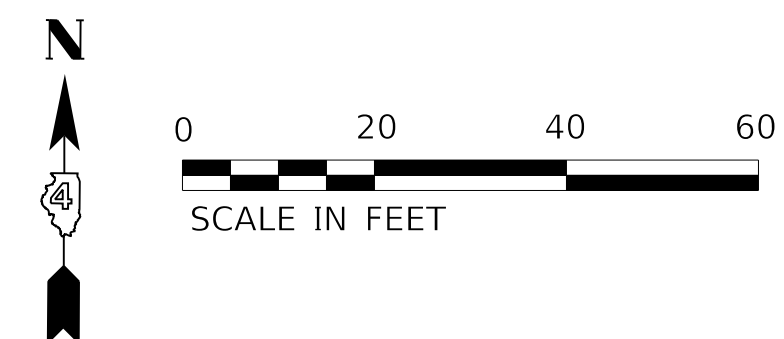
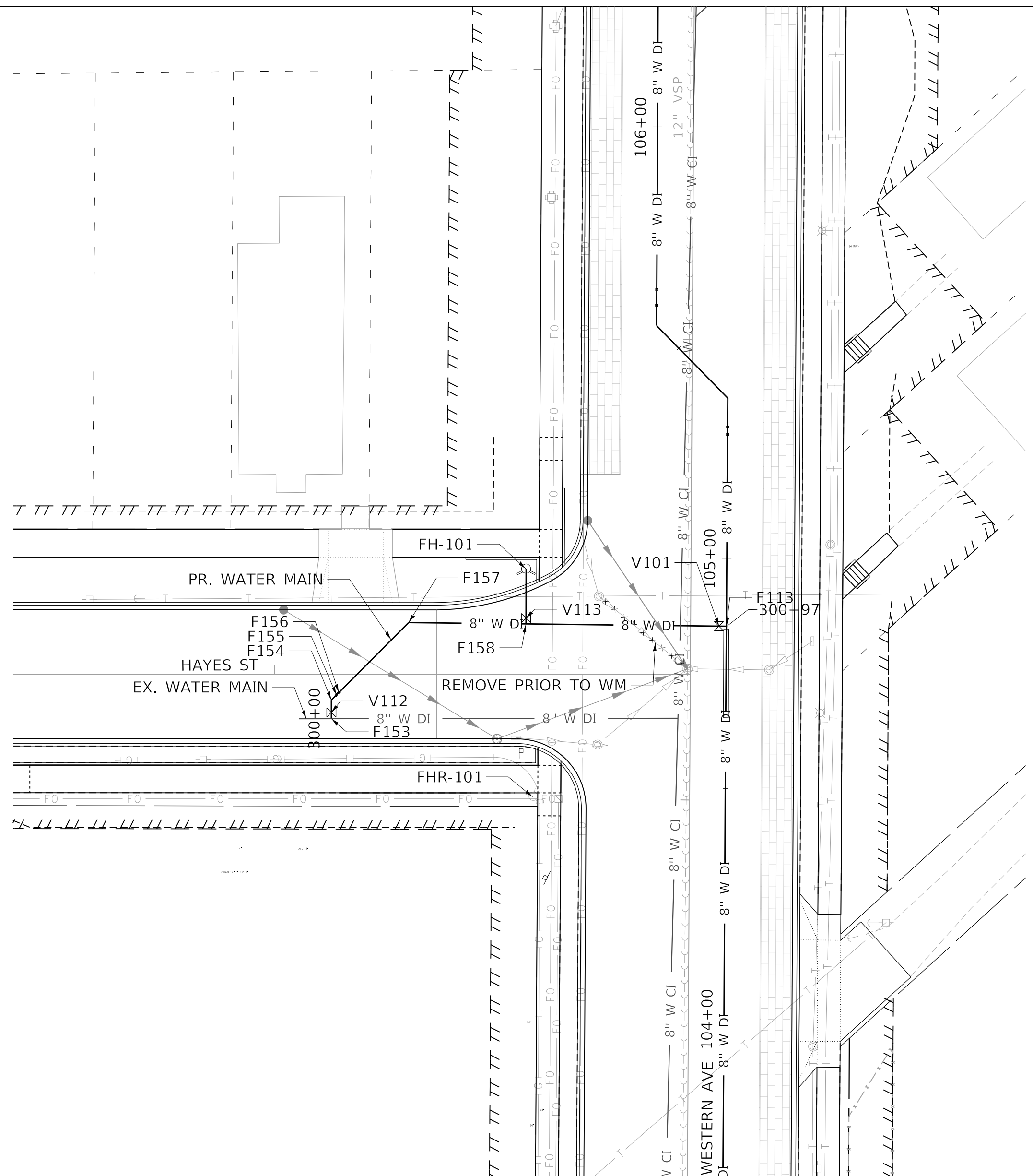


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HAYES

FITTING TABLE				
ID	DESCRIPTION	STATION	OFFSET	TOP ELEVATION
F113	MJ ANCHOR TEE, 8" X 8"	104+85	0.0'	494.14
F153	TAPPING SLEEVE, 8" X 8"	300+00	0.0'	495.33
F154	MJ 45° BEND, 8"	300+04	0.0'	495.41
F155	MJ 45° BEND (VERT), 8"	300+05	0.0'	495.42
F156	MJ 45° BEND (VERT), 8"	300+06	0.0'	496.27
F157	MJ 45° BEND, 8"	300+28	0.0'	496.25
F158	MJ ANCHOR TEE, 8" X 6"	300+53	0.0'	495.17

VALVE TABLE			
ID	DESCRIPTION	STATION	OFFSET
V101	GATE VALVE, MJ, 8"	300+96	0.0'
V112	GATE VALVE (TAPING VALVE), MJ, 8"	300+01	0.0'
V113	GATE VALVE (FH AUX), MJ, 6"	300+53	-1.3'

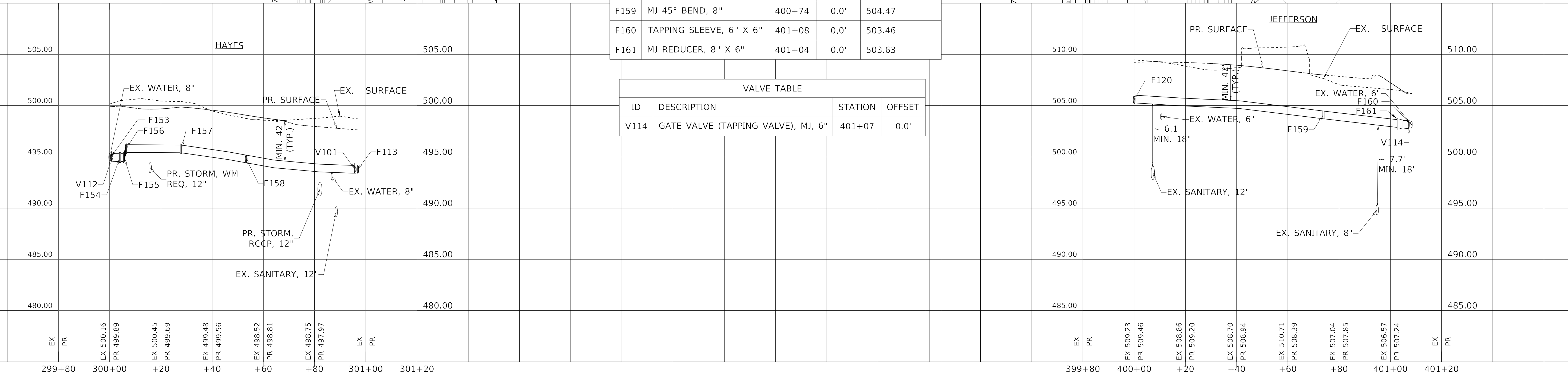
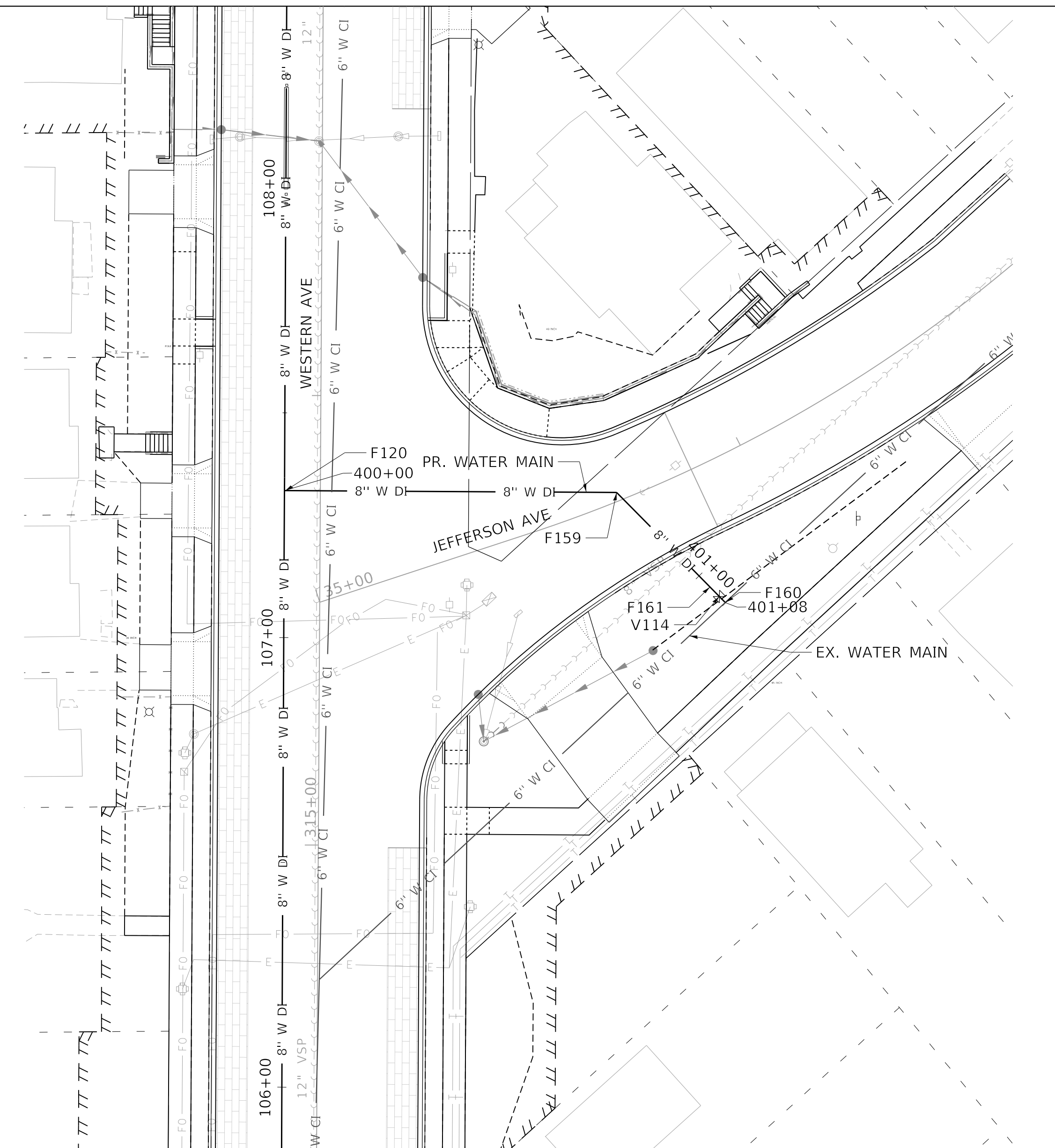
FIRE HYDRANT TABLE				
ID	DESCRIPTION	STATION	OFFSET	PR GROUND ELEV
FH-101	FIRE HYDRANT, 5.5' MIN. BURY	300+53	-12.0'	500.17

FIRE HYDRANT REMOVAL TABLE		
ID	RDWY STATION	RDWY OFFSET
FHR-101	313+01	-34.0'

JEFFERSON

FITTING TABLE				
ID	DESCRIPTION	STATION	OFFSET	TOP ELEVATION
F120	MJ TEE, 8" X 8"	107+33	0.0'	505.95
F159	MJ 45° BEND, 8"	400+74	0.0'	504.47
F160	TAPPING SLEEVE, 6" X 6"	401+08	0.0'	503.46
F161	MJ REDUCER, 8" X 6"	401+04	0.0'	503.63

VALVE TABLE			
ID	DESCRIPTION	STATION	OFFSET
V114	GATE VALVE (TAPPING VALVE), MJ, 6"	401+07	0.0'



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DESIGNED - JH
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DRAWN - JH
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CHECKED - JS
PLOT DATE = 1/24/2020 3:14:00 PM
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**WATER MAIN PLAN AND PROFILE
HAYES STREET & JEFFERSON AVENUE**

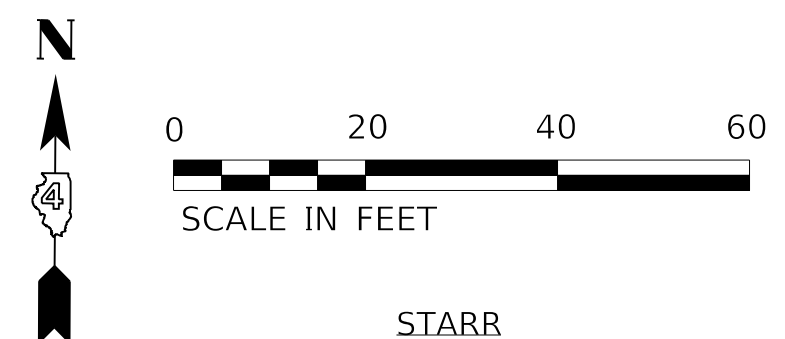
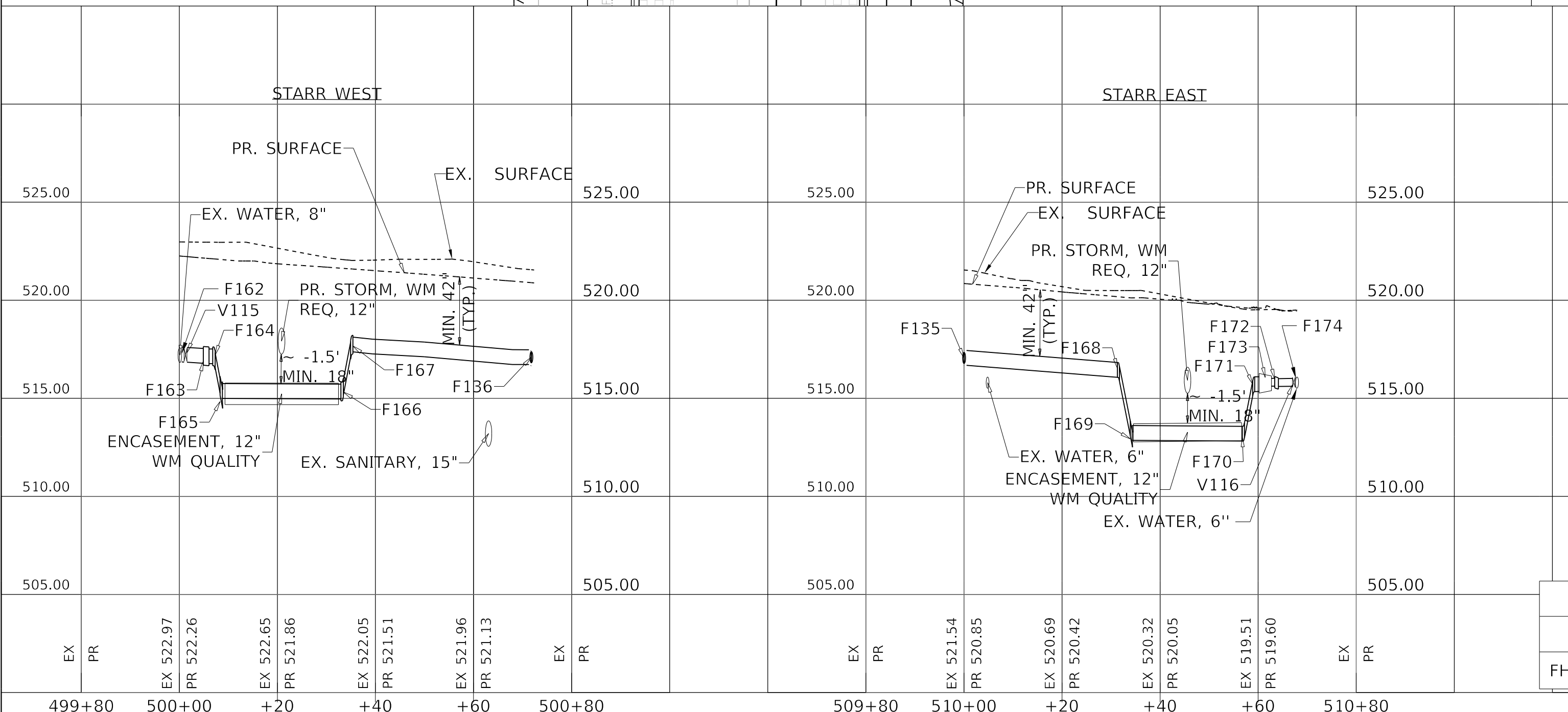
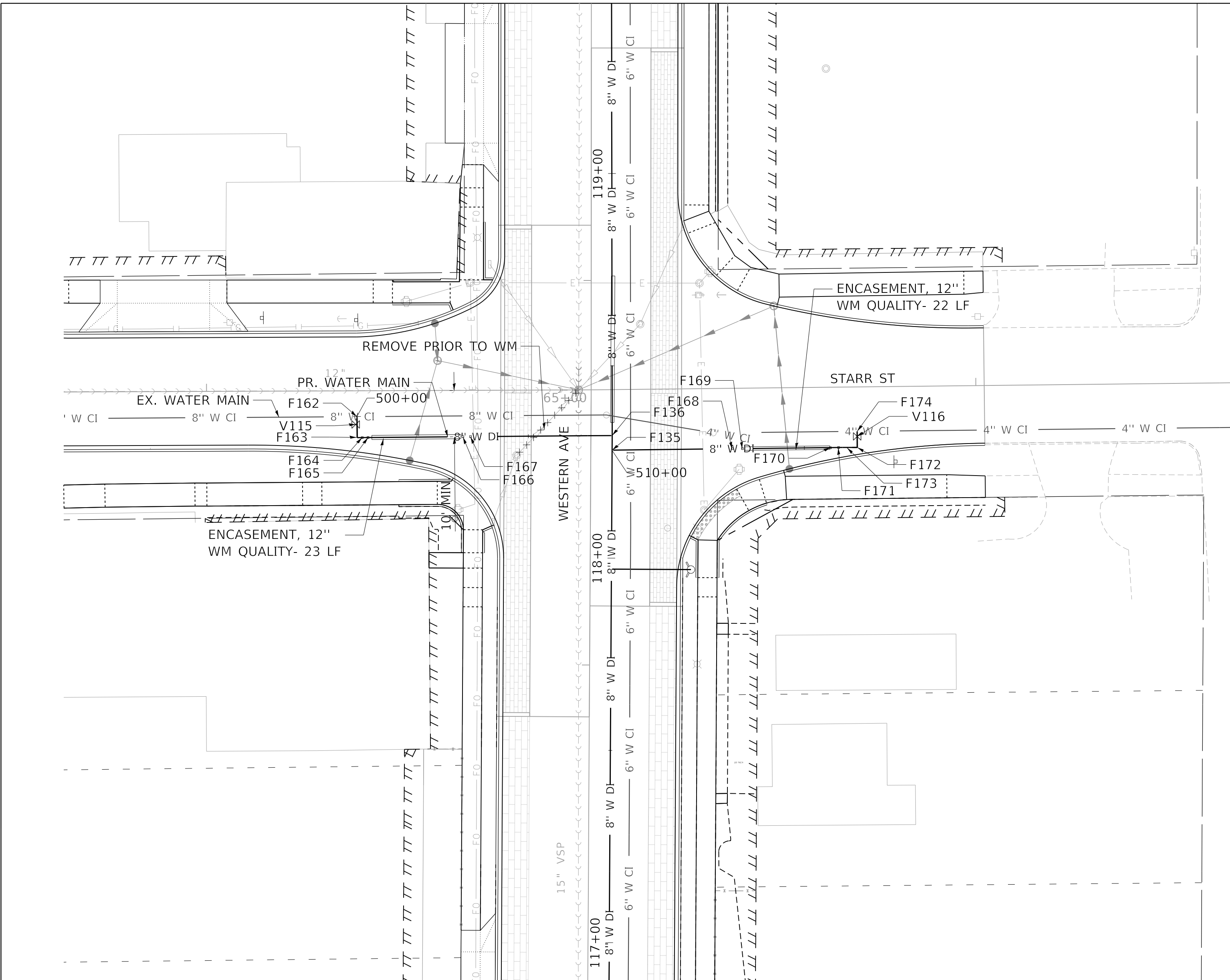
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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6594	16-00368-01-PV	PEORIA	451	150
WESTERN AVE RECONSTRUCTION			CONTRACT NO. 89766	
ILLINOIS		FED. AID PROJECT		

PLAN	SURVEYED	DATE
	PLOTTED	BY
	ALIGNMENT CHECKED	
	GRADES CHECKED	
	STRUCTURE NOTATIONS CHKD	
	CADD FILE NAME	
	NO.	

PROFILE	SURVEYED	DATE
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	GRADES CHECKED	
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 FILE NAME: T:\Projects\16-187-005 COP - Western Printing\Design\CADD\Transportation\CADD - Sheets\16-187005-SHT-WATERMAIN007.dgn



STARR

FITTING TABLE				
ID	DESCRIPTION	STATION	OFFSET	TOP ELEVATION
F135	MJ TEE, 8" X 8"	118+28	0.0'	517.43
F136	MJ TEE, 8" X 8"	118+32	0.0'	517.47
F162	TAPPING SLEEVE, 8" X 8"	500+00	0.0'	517.57
F163	MJ 90° BEND, 8"	500+05	0.0'	517.63
F164	MJ 45° BEND (VERT), 8"	500+07	0.0'	517.61
F165	MJ 45° BEND (VERT), 8"	500+08	0.0'	516.10
F166	MJ 45° BEND (VERT), 8"	500+33	0.0'	516.02
F167	MJ 45° BEND (VERT), 8"	500+35	0.0'	518.21
F168	MJ 45° BEND (VERT), 8"	510+31	0.0'	516.82
F169	MJ 45° BEND (VERT), 8"	510+34	0.0'	513.78
F170	MJ 45° BEND (VERT), 8"	510+57	0.0'	513.70
F171	MJ 45° BEND (VERT), 8"	510+59	0.0'	516.07
F172	MJ 90° BEND, 4"	510+63	0.0'	516.10
F173	MJ REDUCER, 8" X 4"	510+61	0.0'	516.27
F174	TAPPING SLEEVE, 4" X 4"	510+68	0.0'	516.08

VALVE TABLE			
ID	DESCRIPTION	STATION	OFFSET
V115	GATE VALVE (TAPPING VALVE), MJ, 8"	500+01	0.0'
V116	GATE VALVE (TAPPING VALVE), MJ, 4"	510+67	0.0'

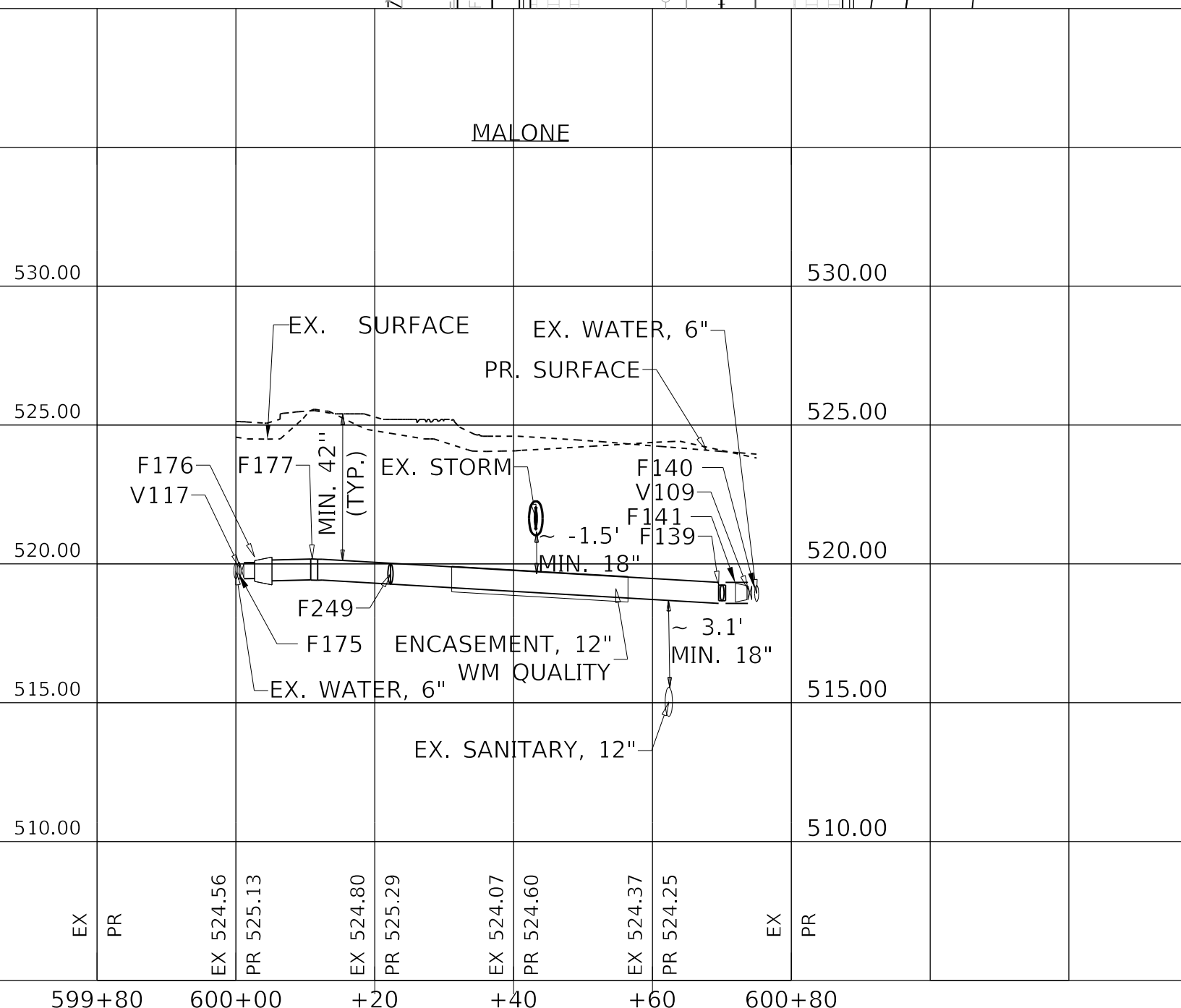
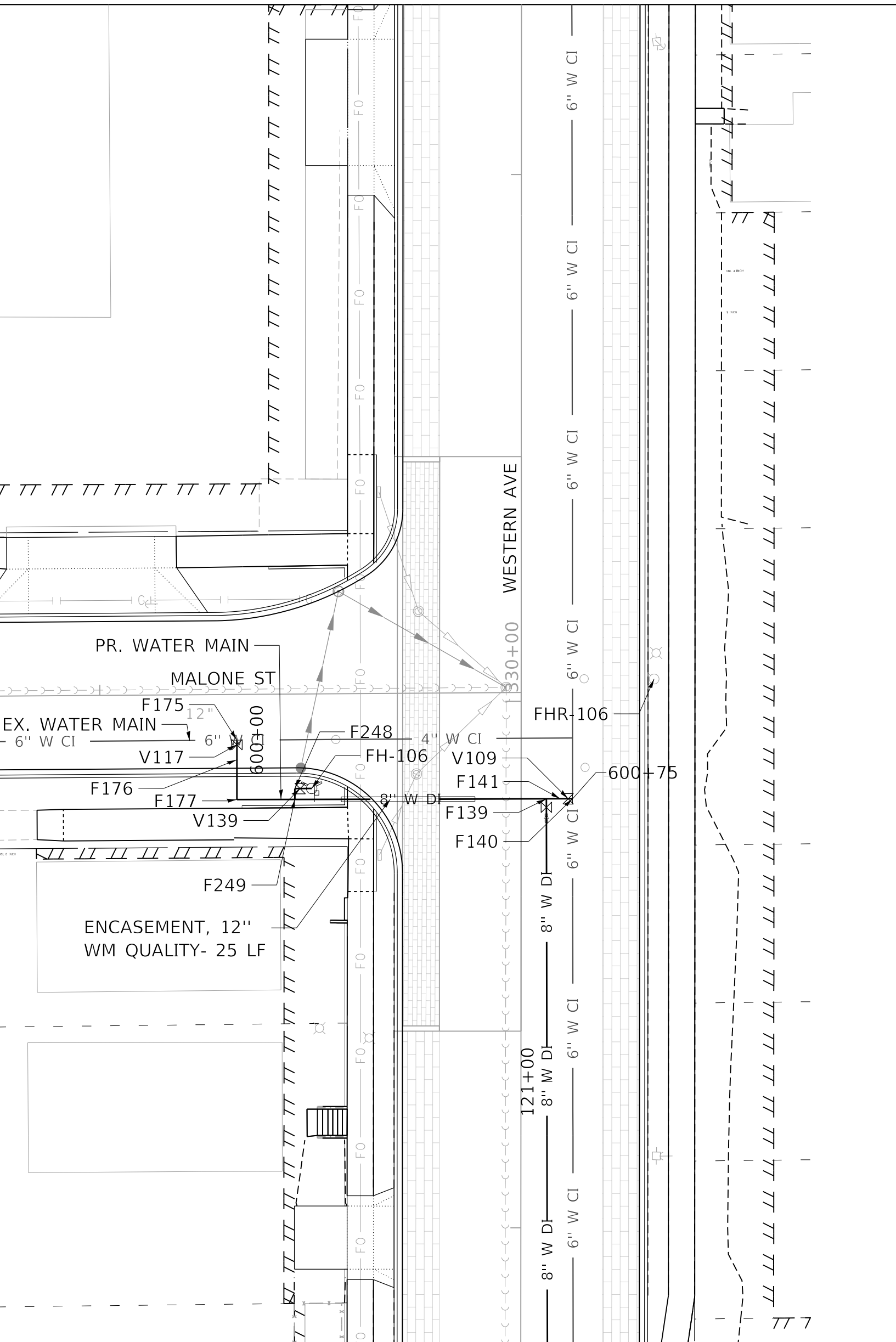
MALONE

FITTING TABLE				
ID	DESCRIPTION	STATION	OFFSET	TOP ELEVATION
F139	MJ ANCHOR TEE, 8" X 8"	600+70	0.0'	519.24
F140	TAPPING SLEEVE, 6" X 6"	600+75	0.0'	519.28
F141	MJ REUCER, 8" X 6"	600+73	0.0'	519.22
F175	TAPPING SLEEVE, 6" X 6"	600+00	0.0'	520.03
F176	MJ REDUCER, 8" X 6"	600+04	0.0'	520.18
F177	MJ 90° BEND, 8"	600+11	0.0'	520.17
F248	MJ 90° BEND, 6"	600+22	-2.1'	520.02
F249	MJ ANCHOR TEE, 8" X 6"	600+22	0.0'	520.02

VALVE TABLE			
ID	DESCRIPTION	STATION	OFFSET
V109	GATE VALVE (TAPPING VALVE), MJ, 6"	600+74	0.0'
V117	GATE VALVE (TAPPING VALVE), MJ, 6"	600+01	0.0'
V139	GATE VALVE (FH AUX), MJ, 6"	600+23	-2.1'

FIRE HYDRANT REMOVAL TABLE		
ID	RDWY STATION	RDWY OFFSET
FHR-106	330+04	25.2'

FIRE HYDRANT TABLE				
ID	DESCRIPTION	STATION	OFFSET	PR GROUND ELEV
FH-106	FIRE HYDRANT, 5.5' MIN. BURY	600+25	-2.1'	525.23



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STATE OF ILLINOIS
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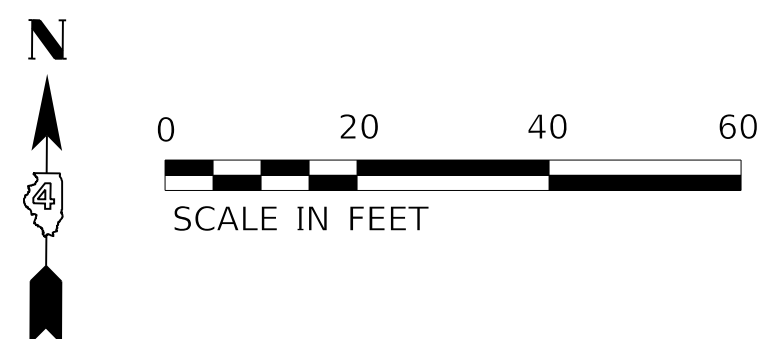
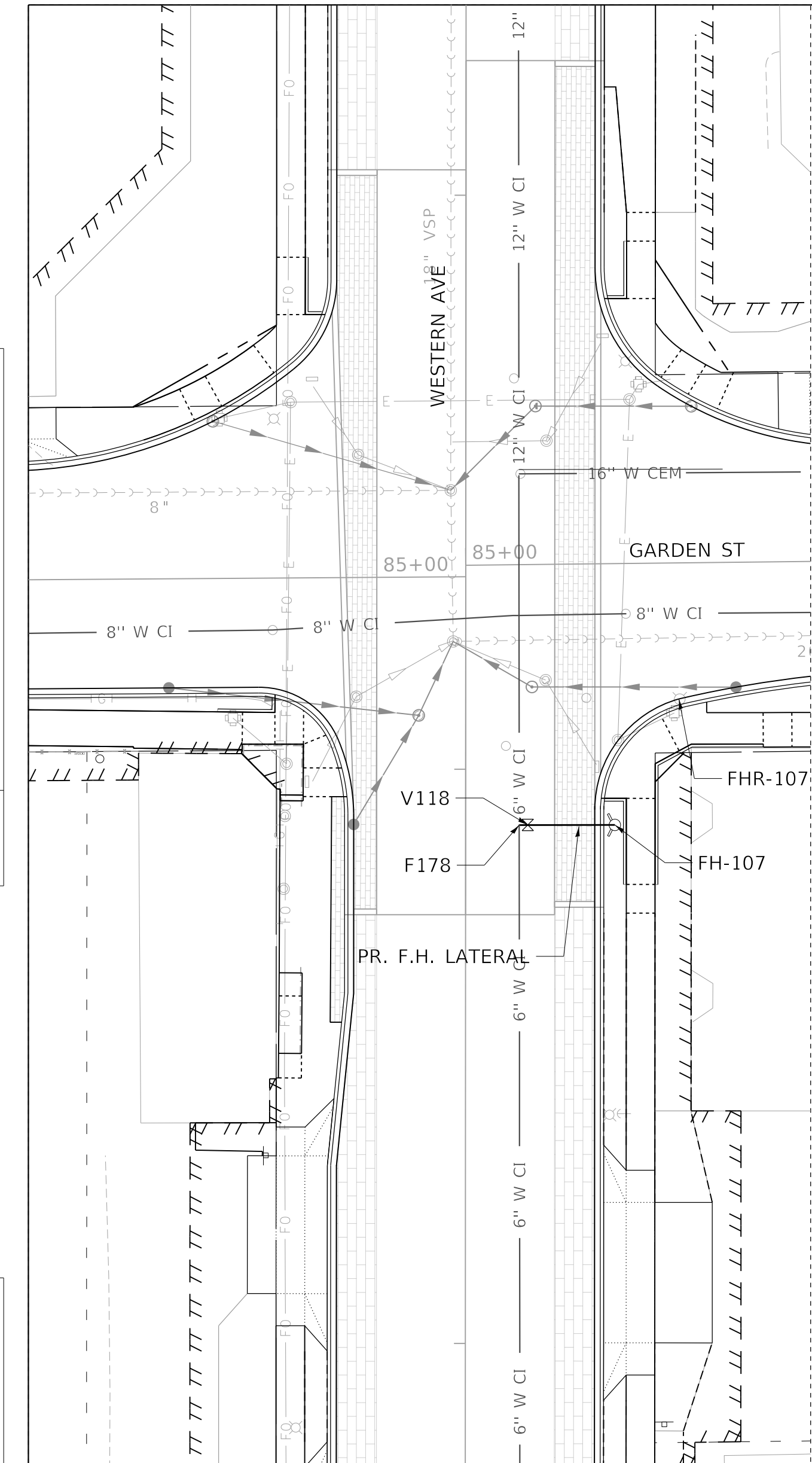
WATER MAIN PLAN AND PROFILE
 STARR STREET & MALONE STREET

SCALE: 1"=20' SHEET 9 OF 17 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6594	16-00368-01-PV	PEORIA	451	151
WESTERN AVE RECONSTRUCTION		CONTRACT NO.		89766
ILLINOIS		FED. AID PROJECT		

PLAN	SURVEYED	DATE
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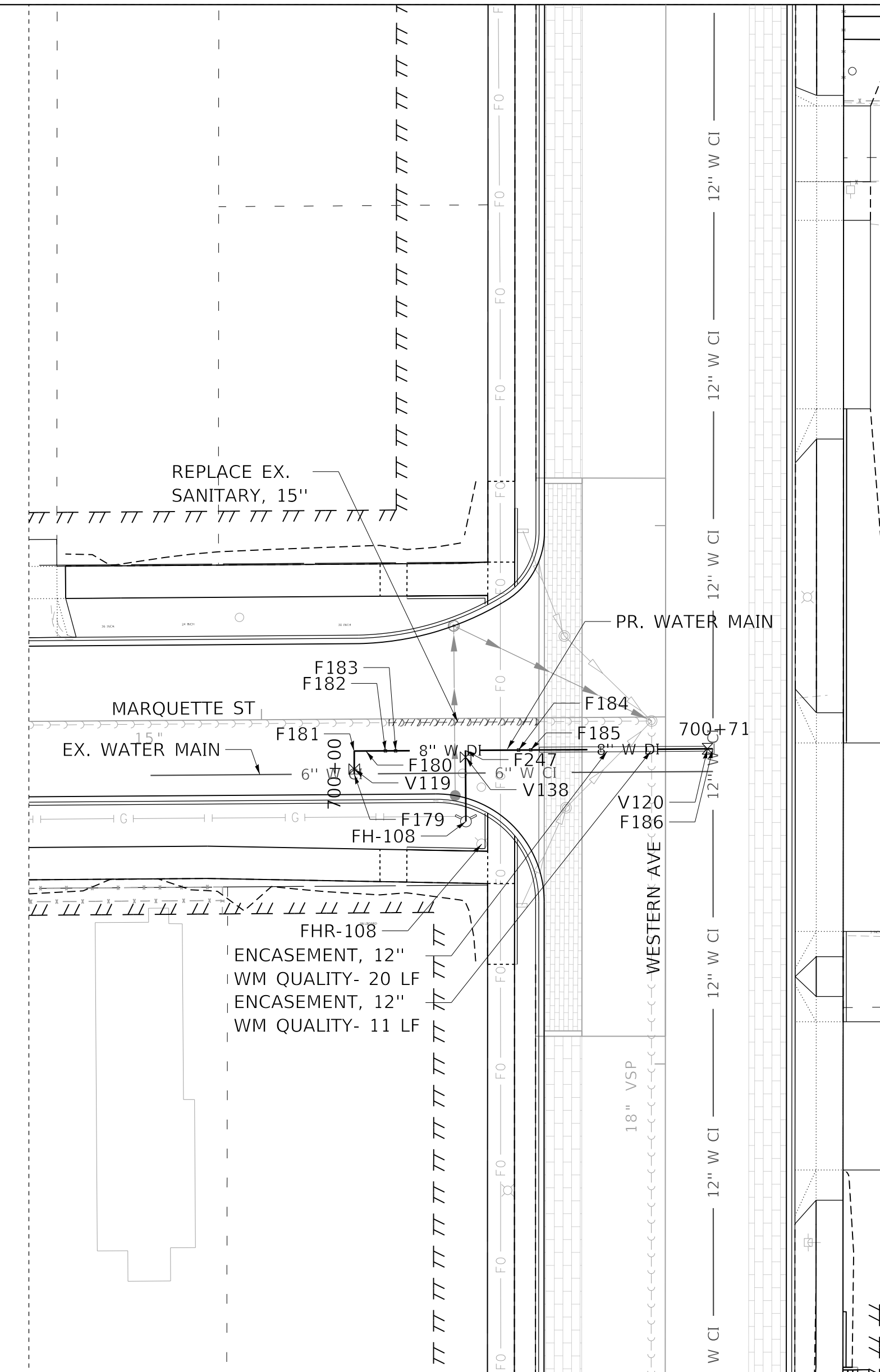


FITTING TABLE				
ID	DESCRIPTION	STATION	OFFSET	TOP ELEVATION
F178	TAPPING SLEEVE, 6" X 6"	332+90	9.3'	519.30

VALVE TABLE			
ID	DESCRIPTION	STATION	OFFSET
V118	GATE VALVE (TAPPING/ FH AUX), 6"	332+90	10.6'

FIRE HYDRANT TABLE				
ID	DESCRIPTION	STATION	OFFSET	PR GROUND ELEV
FH-107	FIRE HYDRANT, 5.5' MIN. BURY	332+90	26.0'	523.10

FIRE HYDRANT REMOVAL TABLE		
ID	STATION	OFFSET
FHR-107	333+12	37.3'



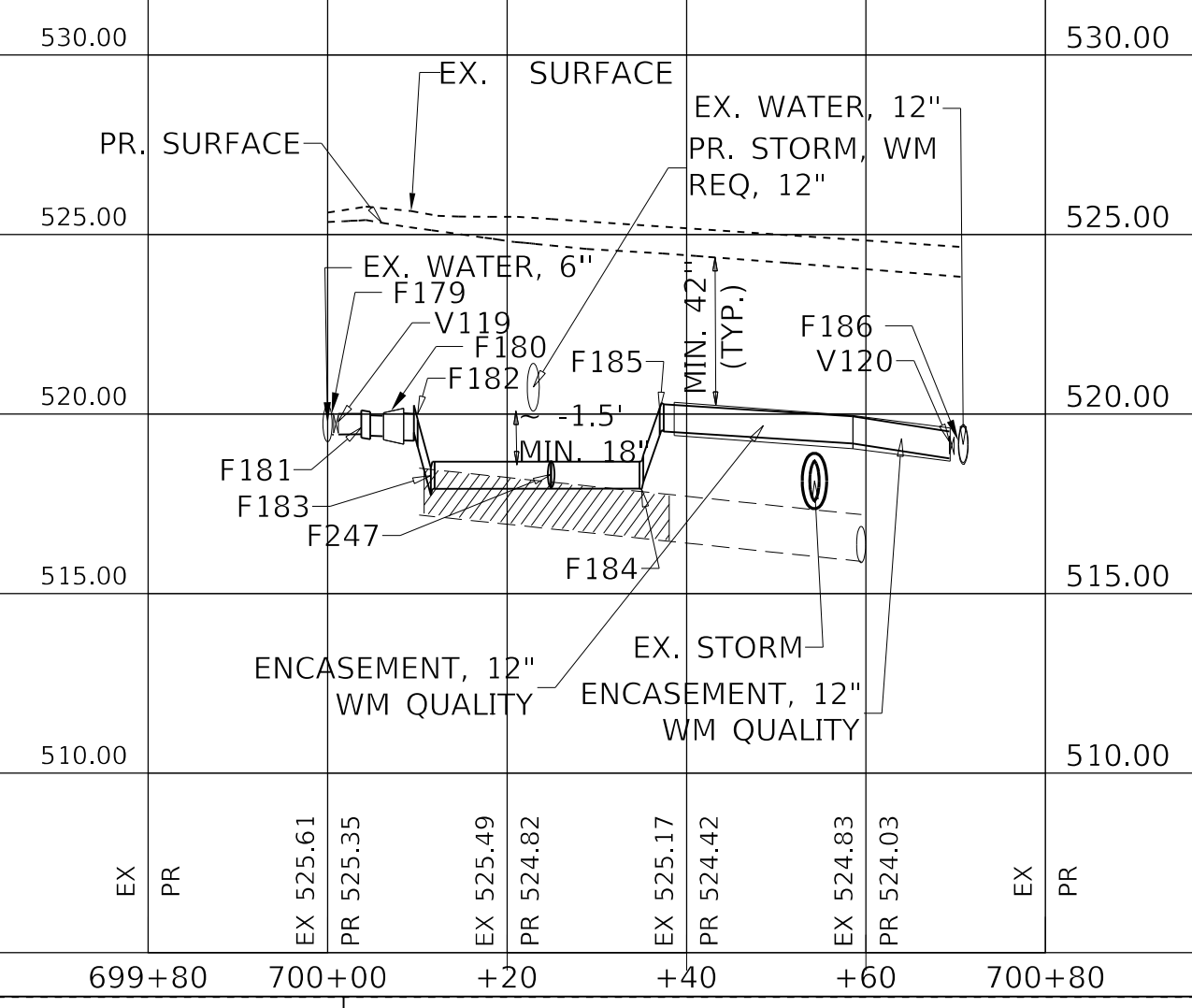
FITTING TABLE				
ID	DESCRIPTION	STATION	OFFSET	TOP ELEVATION
F179	TAPPING SLEEVE, 6" X 6"	700+00	0.0'	520.19
F180	MJ REDUCER, 8" X 6"	700+07	0.0'	520.08
F181	MJ 90° BEND, 6"	700+04	0.0'	520.09
F182	MJ 45° BEND (VERT), 8"	700+10	0.0'	520.01
F183	MJ 45° BEND (VERT), 8"	700+12	0.0'	518.67
F184	MJ 45° BEND (VERT), 8"	700+35	0.0'	518.70
F185	MJ 45° BEND (VERT), 8"	700+37	0.0'	520.30
F186	TAPPING SLEEVE, 8" X 12"	700+71	0.0'	519.70
F247	MJ ANCHOR TEE, 8" X 6"	700+25	0.0'	518.68

VALVE TABLE			
ID	DESCRIPTION	STATION	OFFSET
V119	GATE VALVE (TAPPING VALVE), MJ, 6"	700+01	0.0'
V120	GATE VALVE (TAPPING VALVE), MJ, 8"	700+70	0.0'
V138	GATE VALVE (FH AUX), 6"	700+25	1.3'

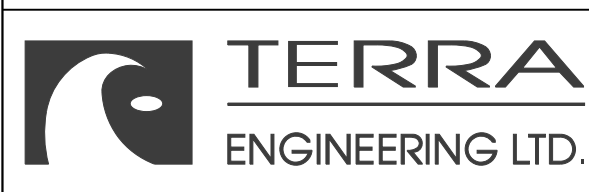
FIRE HYDRANT TABLE				
ID	DESCRIPTION	STATION	OFFSET	PR GROUND ELEV
FH-108	FIRE HYDRANT, 6.0' MIN. BURY	700+25	13.2'	525.20

FIRE HYDRANT REMOVAL TABLE		
ID	RDWY STATION	RDWY OFFSET
FHR-108	336+41	-34.1'

PROPOSED HYDRANT LATERAL ONLY, NO PROFILE



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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WATER MAIN PLAN AND PROFILE
GARDEN STREET & MARQUETTE STREET
SCALE: 1"=20'
SHEET 10 OF 17 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6594	16-00368-01-PV	PEORIA	451	152
WESTERN AVE RECONSTRUCTION		CONTRACT NO. 89766		
ILLINOIS		FED. AID PROJECT		

PLAN	SURVEYED	DATE
	PLOTTED	BY
	ALIGNMENT CHECKED	
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	STRUCTURE NOTATION	
	FILE NAME	

PROFILE	SURVEYED	DATE
	PLOTTED	BY
	GRADES CHECKED	
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	NO.	
	STRUCTURE NOTATION	
	FILE NAME	

FITTING TABLE				
ID	DESCRIPTION	STATION	OFFSET	TOP ELEVATION
F187	TAPPING SLEEVE, 8" X 8"	810+00	0.0'	519.00
F188	MJ 90° BEND, 8"	810+37	0.0'	520.10
F189	TAPPING SLEEVE, 12" X 12"	800+73	0.0'	517.85
F190	MJ 45° BEND (VERT), 12"	800+69	0.0'	517.83
F191	MJ 45° BEND (VERT), 12"	800+67	0.0'	519.34
F192	MJ 90° BEND, 12"	800+64	0.0'	519.31
F193	MJ ANCHOR TEE, 12" X 8"	800+58	0.0'	519.14
F194	MJ ANCHOR TEE, 12" X 6"	800+15	0.0'	518.61
F195	MJ 90° BEND, 6"	800+15	20.8'	518.62
F196	MJ 90° BEND, 12"	800+09	0.0'	518.51
F197	TAPPING SLEEVE, 12" X 12"	800+00	0.0'	517.56

VALVE TABLE				
ID	DESCRIPTION	STATION	OFFSET	
V121	GATE VALVE (TAPPING VALVE), MJ, 8"	810+01	0.0'	
V122	GATE VALVE (TAPPING SLEEVE), MJ, 12"	800+71	0.0'	
V123	GATE VALVE, MJ, 8"	811+09	0.0'	
V124	GATE VALVE (FH AUX), 6"	800+15	1.2'	
V125	GATE VALVE (TAPPING VALVE), MJ, 12"	800+01	0.0'	

FIRE HYDRANT TABLE				
ID	DESCRIPTION	STATION	OFFSET	PR GROUND ELEV
FH-109	FIRE HYDRANT, 4.5' MIN. BURY	800+10	20.8'	522.47

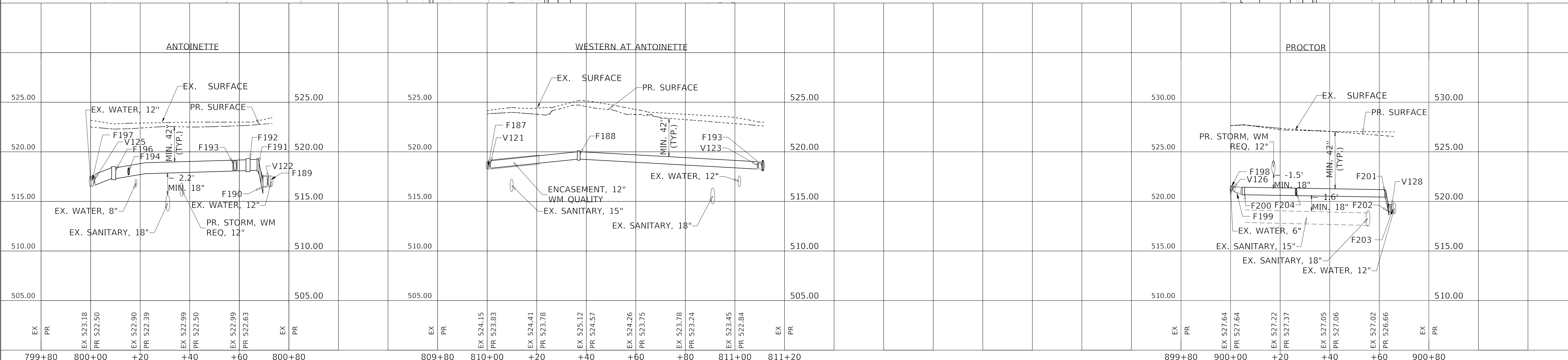
FIRE HYDRANT REMOVAL TABLE		
ID	RDWY STATION	RDWY OFFSET
FHR-109	339+78	34.1'

FITTING TABLE				
ID	DESCRIPTION	STATION	OFFSET	TOP ELEVATION
F198	TAPPING SLEEVE, 6" X 6"	900+05	0.0'	521.59
F199	MJ REDUCER, 8" X 6"	900+03	0.0'	521.44
F200	MJ 90° BEND, 8"	900+05	0.0'	521.43
F201	MJ 45° BEND (VERT), 8"	900+62	0.0'	521.17
F202	MJ 45° BEND (VERT), 8"	900+63	0.0'	519.66
F203	TAPPING SLEEVE, 12" X 8"	900+66	0.0'	519.83
F204	MJ ANCHOR TEE, 8" X 6"	900+26	0.0'	521.33
F205	MJ 90° BEND, 6"	900+26	17.8'	521.26

VALVE TABLE			
ID	DESCRIPTION	STATION	OFFSET
V126	GATE VALVE (TAPPING VALVE), MJ, 6"	900+01	0.0'
V127	GATE VALVE (FH AUX), MJ, 6"	900+26	1.3'
V128	GATE VALVE (TAPPING VALVE), MJ, 8"	900+65	0.0'

FIRE HYDRANT TABLE				
ID	DESCRIPTION	STATION	OFFSET	PR GROUND ELEV
FH-110	FIRE HYDRANT, 6.0' MIN. BURY	900+20	17.8'	527.79

FIRE HYDRANT REMOVAL TABLE		
ID	RDWY STATION	RDWY OFFSET
FHR-110	343+16	-33.8'



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DESIGNED - JH
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STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

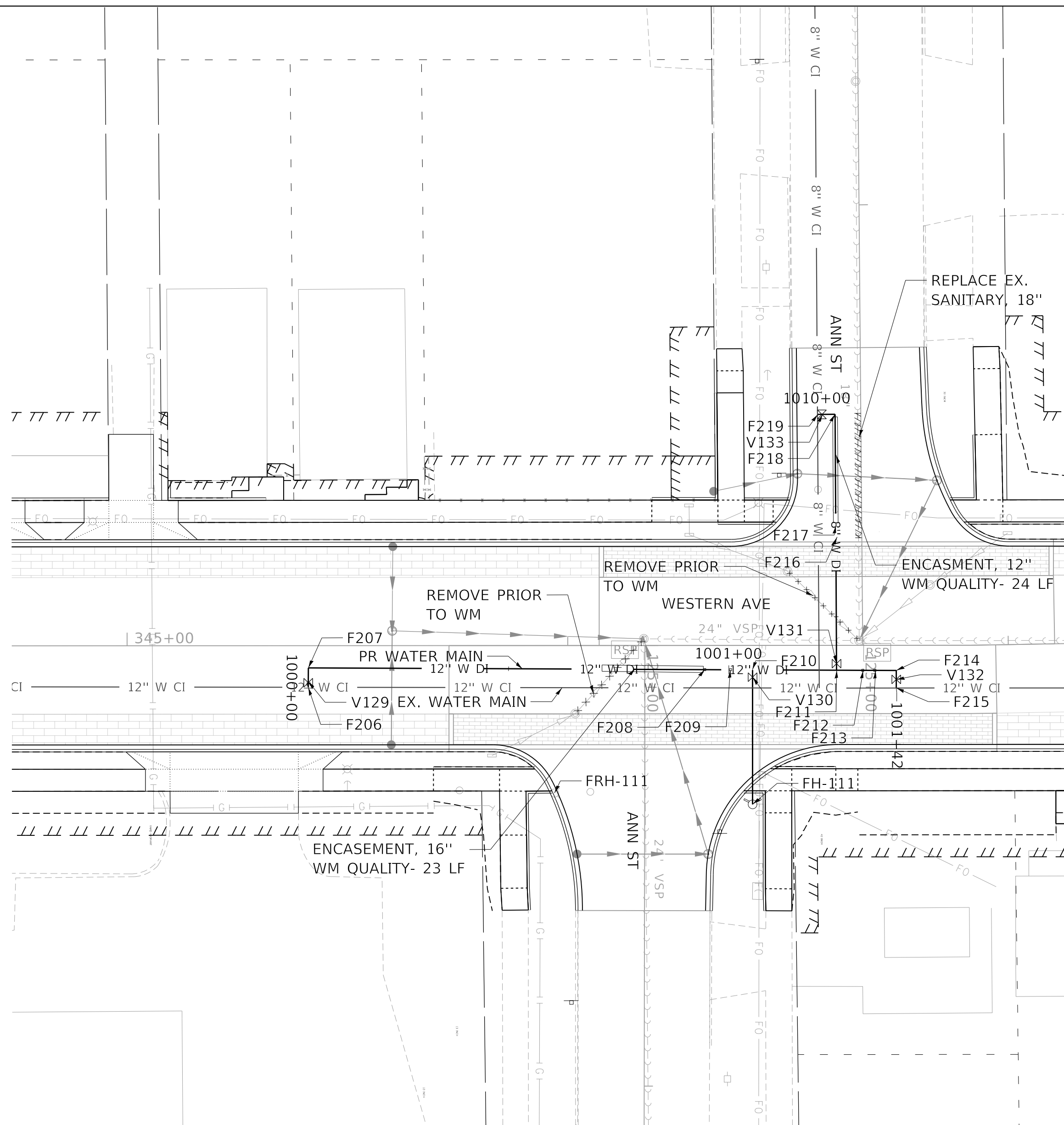
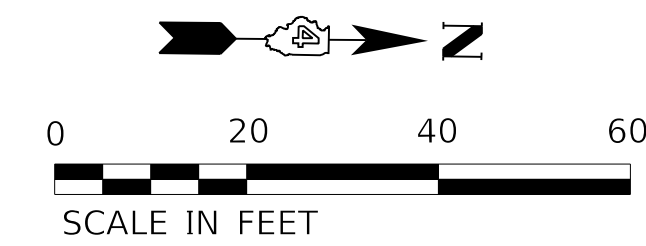
WATER MAIN PLAN AND PROFILE
 ANTOINETTE STREET & PROCTOR STREET
 SCALE: 1"=20'

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6594	16-00368-01-PV	PEORIA	451	153
WESTERN AVE RECONSTRUCTION			CONTRACT NO. 89766	
ILLINOIS			FED. AID PROJECT	

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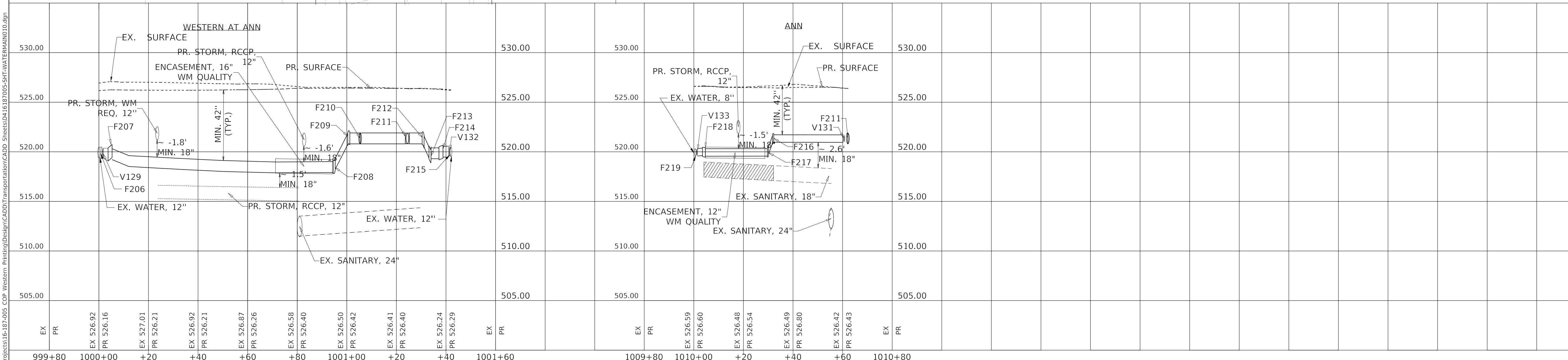


FITTING TABLE				
ID	DESCRIPTION	STATION	OFFSET	TOP ELEVATION
F206	TAPPING SLEEVE, 12" X 12"	1000+00	0.0'	520.49
F207	MJ 90° BEND, 12"	1000+05	0.0'	520.67
F208	MJ 45° BEND (VERT), 12"	1000+95	0.0'	519.23
F209	MJ 45° BEND (VERT), 12"	1001+00	0.0'	522.11
F210	MJ ANCHOR TEE, 12" X 6"	1001+05	0.0'	521.90
F211	MJ ANCHOR TEE, 12" X 8"	1001+24	0.0'	521.89
F212	MJ 45° BEND (VERT), 12"	1001+30	0.0'	522.02
F213	MJ 45° BEND (VERT), 12"	1001+33	0.0'	520.40
F214	MJ 90° BEND, 12"	1001+38	0.0'	520.61
F215	TAPPING SLEEVE, 12" X 12"	1001+42	0.0'	520.50
F216	MJ 45° BEND (VERT), 8"	1010+32	0.0'	521.86
F217	MJ 45° BEND (VERT), 8"	1010+30	0.0'	520.50
F218	MJ 90° BEND, 8"	1010+04	0.0'	520.44
F219	TAPPING SLEEVE, 8" X 8"	1010+00	0.0'	520.33

VALVE TABLE			
ID	DESCRIPTION	STATION	OFFSET
V129	GATE VALVE(TAPPING VALVE), MJ, 12"	1000+02	0.0'
V130	GATE VALVE (FH AUX), MJ, 6"	1001+05	1.7'
V131	GATE VALVE, MJ, 8"	1010+61	0.0'
V132	GATE VALVE (TAPPING VALVE), MJ, 12"	1001+41	0.0'
V133	GATE VALVE (TAPPING VALVE), MJ, 8"	1010+01	0.0'

FIRE HYDRANT TABLE				
ID	DESCRIPTION	STATION	OFFSET	PR GROUND ELEV
FH-111	FIRE HYDRANT, 5.5' MIN. BURY	1001+06	30.5'	526.52

FIRE HYDRANT REMOVAL TABLE		
ID	RDWY STATION	RDWY OFFSET
FHR-111	345+97	33.5'



**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**WATER MAIN PLAN AND PROFILE
ANN STREET**

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6594	16-00368-01-PV	PEORIA	451	154
WESTERN AVE RECONSTRUCTION		CONTRACT NO. 89766		
ILLINOIS		FED. AID PROJECT		



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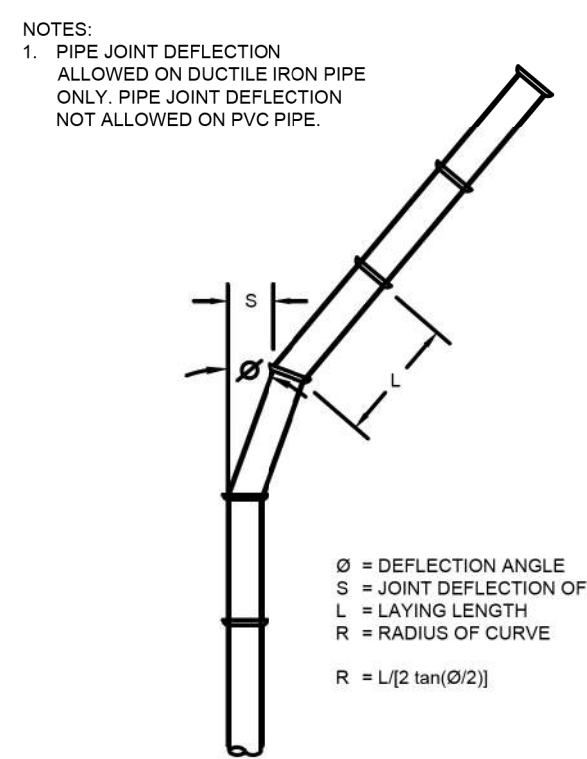
MAXIMUM JOINT DEFLECTION
FULL-LENGTH PIPE-PUSH-ON TYPE JOINT PIPE

NOMINAL PIPE SIZE INCHES	DEFLECTION ANGLE DEGREES	MAX OFFSET - S INCHES		APPROXIMATE RADIUS OF CURVATURE - R PRODUCED BY SUCCESSION OF ANGLED JOINTS FEET	
		L=18 FT	L=20 FT	L=18 FT	L=20 FT
3	4	15	17	256	285
4	4	15	17	256	285
6	4	15	17	256	285
8	4	15	17	256	285
10	4	15	17	256	285
12	4	15	17	256	285
14	4	9	10	256	285
16	2.5	9	10	429	476
18	2.5	9	10	429	476
20	2.5	9	10	429	476
24	2.5	9	10	429	476

MAXIMUM JOINT DEFLECTION DUCTILE IRON PUSH ON PIPE

NOMINAL PIPE SIZE INCHES	DEFLECTION ANGLE DEGREES	MAX OFFSET - S INCHES		APPROXIMATE RADIUS OF CURVATURE - R PRODUCED BY SUCCESSION OF ANGLED JOINTS FEET	
		L=18 FT	L=20 FT	L=18 FT	L=20 FT
3	4	15	17	256	285
4	4	15	17	256	285
6	4	15	17	256	285
8	4	15	17	256	285
10	4	15	17	256	285
12	4	15	17	256	285
14	4	9	10	256	285
16	2.5	9	10	429	476
18	2.5	9	10	429	476
20	2.5	9	10	429	476
24	2.5	9	10	429	476

*L-STANDARD LENGTH OF PIPE SECTION.

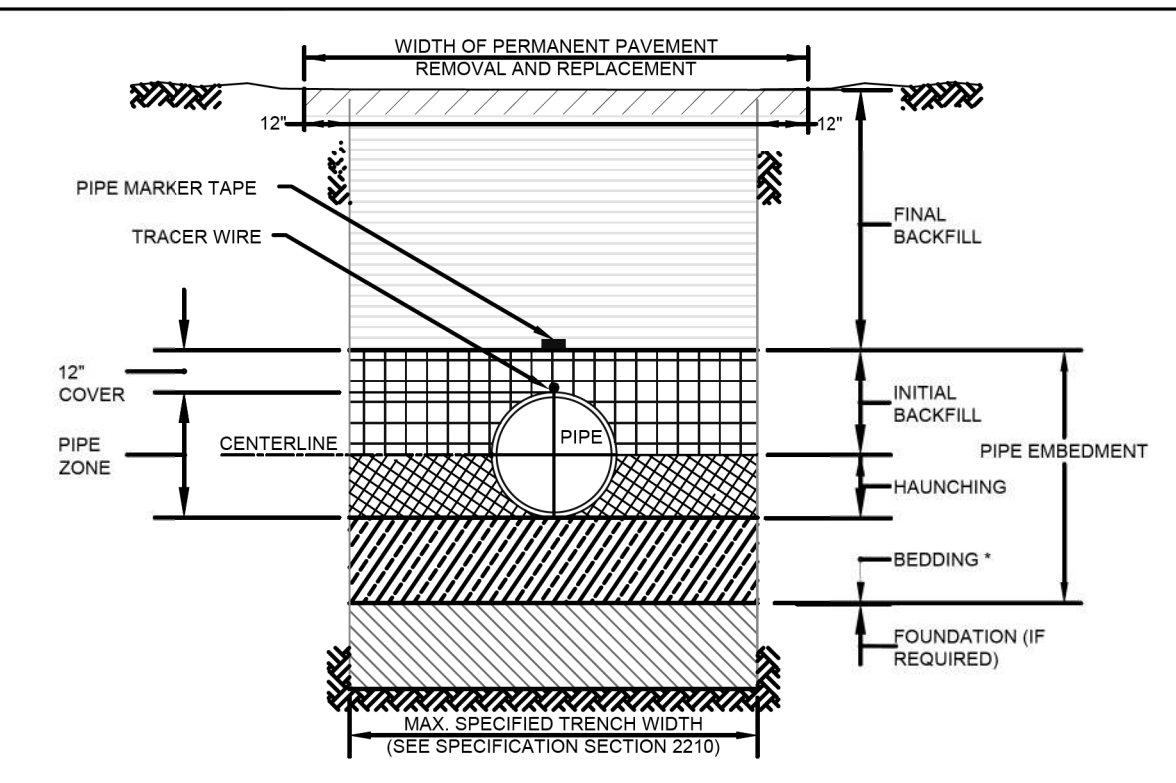


AMERICAN WATER STANDARD
CIVIL
PIPE CURVE GEOMETRY
DETAIL

AMERICAN WATER ENGINEERING
1000 CHICAGO ROAD
MOUNT LAUREL, NJ 08054

SCALE: NTS

DATE: 08/20/09
PROJECT: 0201-0601-SD32



TRENCH TERMINOLOGY

FOUNDATION: A FOUNDATION IS NECESSARY ONLY WHEN NATIVE SOILS ARE UNSTABLE. FOR SUCH CONDITIONS, THE TRENCH IS OVER EXCAVATED AND A LAYER OF SUPPORTIVE MATERIAL IS PLACED AND COMPACTED TO PROVIDE A FIRM FOUNDATION FOR THE SUBSEQUENT PIPE EMBEDMENT MATERIALS.

EMBEDMENT: THIS ZONE IS THE MOST IMPORTANT IN TERMS OF PIPE PERFORMANCE. IT IS DIVIDED INTO THE FOLLOWING SUB ZONES:

- BEDDING:** TYPICALLY SIX INCHES OF SUPPORTIVE, COMPACTED MATERIAL. THIS ZONE PROVIDES EVEN SUPPORT FOR THE PIPE AND BRINGS IT TO GRADE.
- HAUNCHING:** EXTENDS FROM THE BOTTOM OF THE PIPE TO THE CENTERLINE OF THE PIPE. IT PROVIDES THE MOST RESISTANCE TO PIPE DEFLECTION. SPECIFYING PROPER MATERIALS AND COMPACTION ARE MOST IMPORTANT FOR THIS ZONE. IN MOST CASES NATIVE MATERIAL IS ACCEPTABLE. MATERIAL SHALL BE FREE OF ROCKS AND BE PLACED BY HAND TO PROTECT POLYETHYLENE ENCASING.
- INITIAL BACKFILL:** EXTENDS FROM THE SPRINGLINE TO A POINT ABOVE THE TOP OF THE PIPE. THIS ZONE PROVIDES SOME PIPE SUPPORT AND HELPS TO PREVENT DAMAGE TO THE PIPE DURING PLACEMENT OF THE FINAL BACKFILL. THE COVER EXTENDS FROM THE TOP OF THE PIPE TO THE TOP OF THE INITIAL BACKFILL. THE DEPTH OF COVER SHOULD BE AS MUCH AS NECESSARY TO PROTECT THE PIPE DURING PLACEMENT OF THE FINAL BACKFILL. TWELVE INCHES IS A COMMON DEPTH OF COVER.

FINAL BACKFILL: THIS ZONE EXTENDS FROM THE TOP OF THE INITIAL BACKFILL TO THE TOP OF THE TRENCH. THIS ZONE HAS LITTLE INFLUENCE ON PIPE PERFORMANCE, BUT CAN BE IMPORTANT TO THE INTEGRITY OF ROADS AND STRUCTURES.

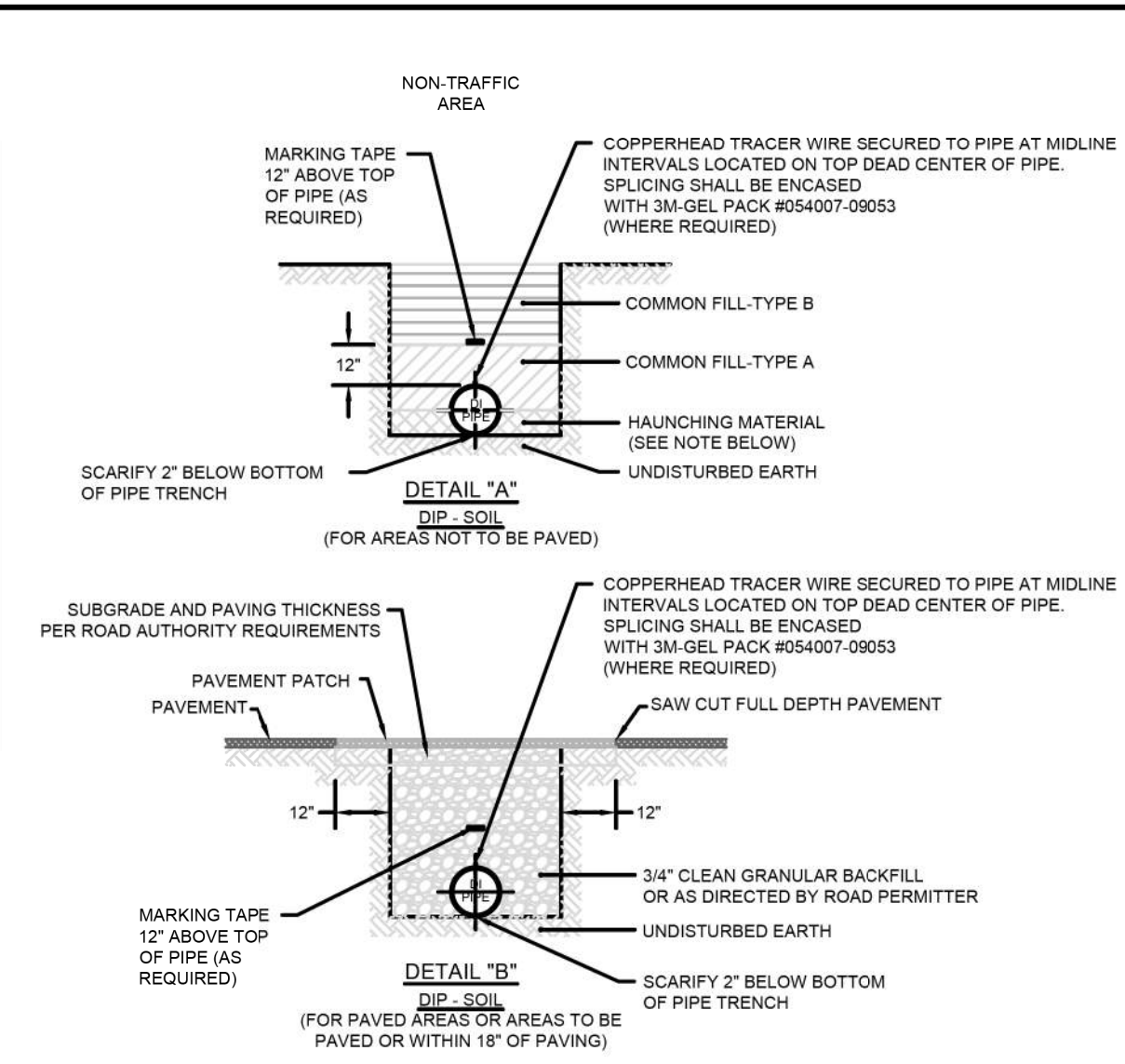
* UNLESS OTHERWISE DIRECTED BY COMPANY, OR FIELD CONDITIONS REQUIRE, BEDDING IS NOT REQUIRED FOR DUCTILE IRON MAIN. CONTRACTOR SHALL SCARIFY 2" BELOW BOTTOM OF PIPE.

AMERICAN WATER STANDARD
CIVIL
PIPE TRENCH TERMINOLOGY
DETAIL

AMERICAN WATER ENGINEERING
1000 CHICAGO ROAD
MOUNT LAUREL, NJ 08054

SCALE: NTS

DATE: 08/20/09
PROJECT: 0201-0601-SD53



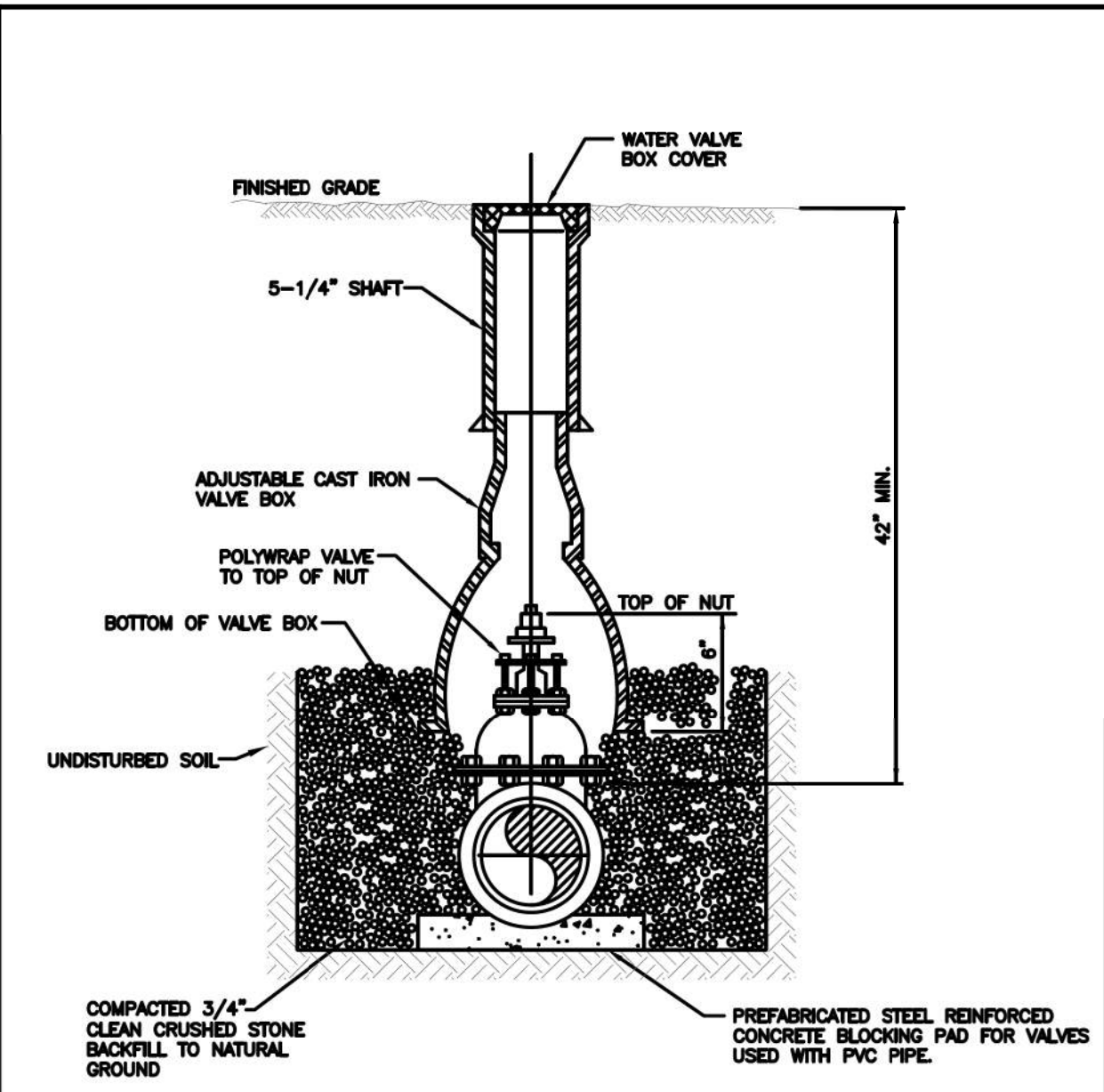
NOTES:
1. CAUTION MUST BE EXERCISED TO ENSURE PROPER PLACEMENT OF EMBEDMENT MATERIAL UNDER THE HAUNCHES OF THE PIPE. NATIVE SOIL IS ACCEPTABLE UNLESS DIRECTED BY COMPANY.
2. POLYETHYLENE ENCASING ON ALL D.I. PIPE, FITTINGS, VALVES & APPURTENANCES IN CORROSIVE SOILS.
3. SEE SPECIFICATION SECTION 02210 FOR DESCRIPTION OF BACKFILL AND BEDDING MATERIAL.

AMERICAN WATER STANDARD
CIVIL
TRENCH - D.I. PIPE IN SOIL
DETAIL

AMERICAN WATER ENGINEERING
1000 CHICAGO ROAD
MOUNT LAUREL, NJ 08054

SCALE: NTS

DATE: 08/20/09
PROJECT: 0201-0601-SD55

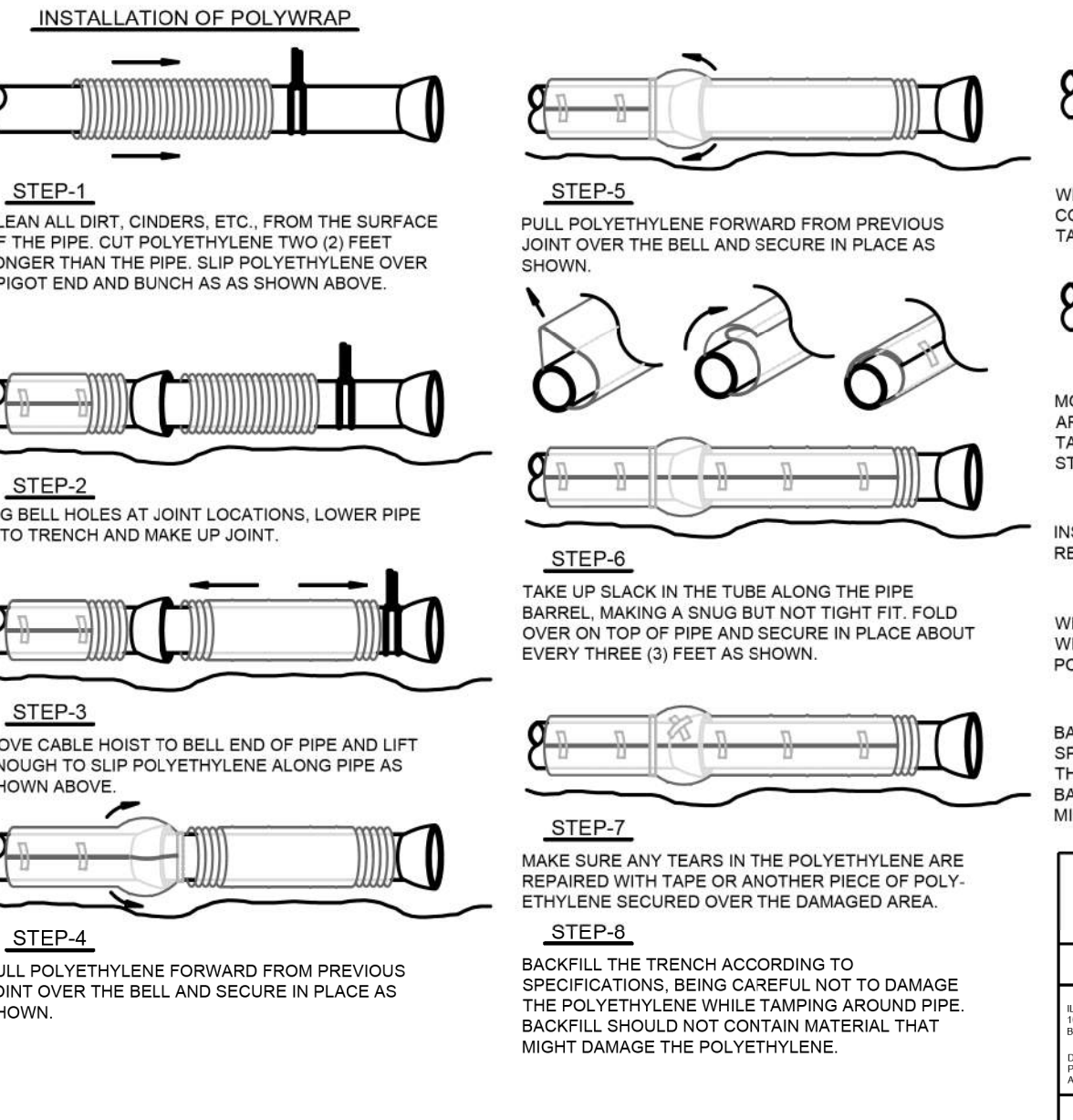


AMERICAN WATER STANDARD
CIVIL
VALVE BOX INSTALLATION
DETAIL

AMERICAN WATER ENGINEERING
1000 CHICAGO ROAD
MOUNT LAUREL, NJ 08054

SCALE: NTS

DATE: 08/20/09
PROJECT: 0201-0601-SD59



AMERICAN WATER STANDARD
CIVIL
POLYWRAP INSTALLATION AND TAPPING - DETAIL

ILLINOIS AMERICAN WATER
BELLEVILLE, IL 62223

SCALE: NTS

DATE: 08/20/09
PROJECT: 0201-0601-IH23

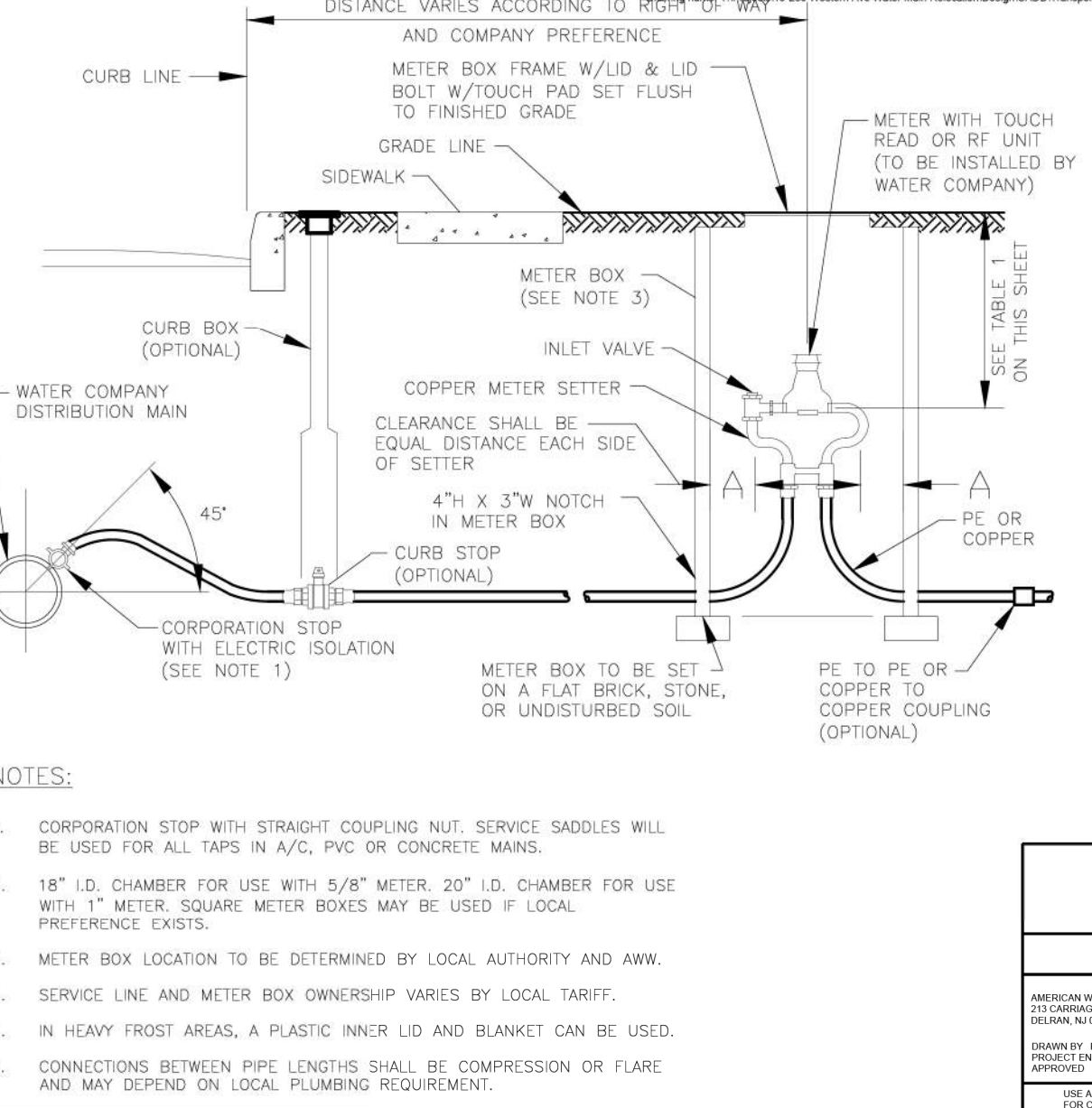


TABLE 1

DISTRICT	DEPTH
CAIRO	18"
INTERURBAN	18"
ALTON	18"
CHAMPAIGN	18"
LINCOLN	18"
PEKIN	18"
PEORIA	18"
CHICAGO METRO	18"
PONTIAC	18"
STREATOR	18"
STERLING	18"

AMERICAN WATER STANDARD
CIVIL
3/4", 1" & 2" WATER SERVICE
INSTALLATION DETAIL

AMERICAN WATER ENGINEERING
1000 CHICAGO ROAD
MOUNT LAUREL, NJ 08054

SCALE: NTS

DATE: 08/20/09
PROJECT: 0201-0601-SD47

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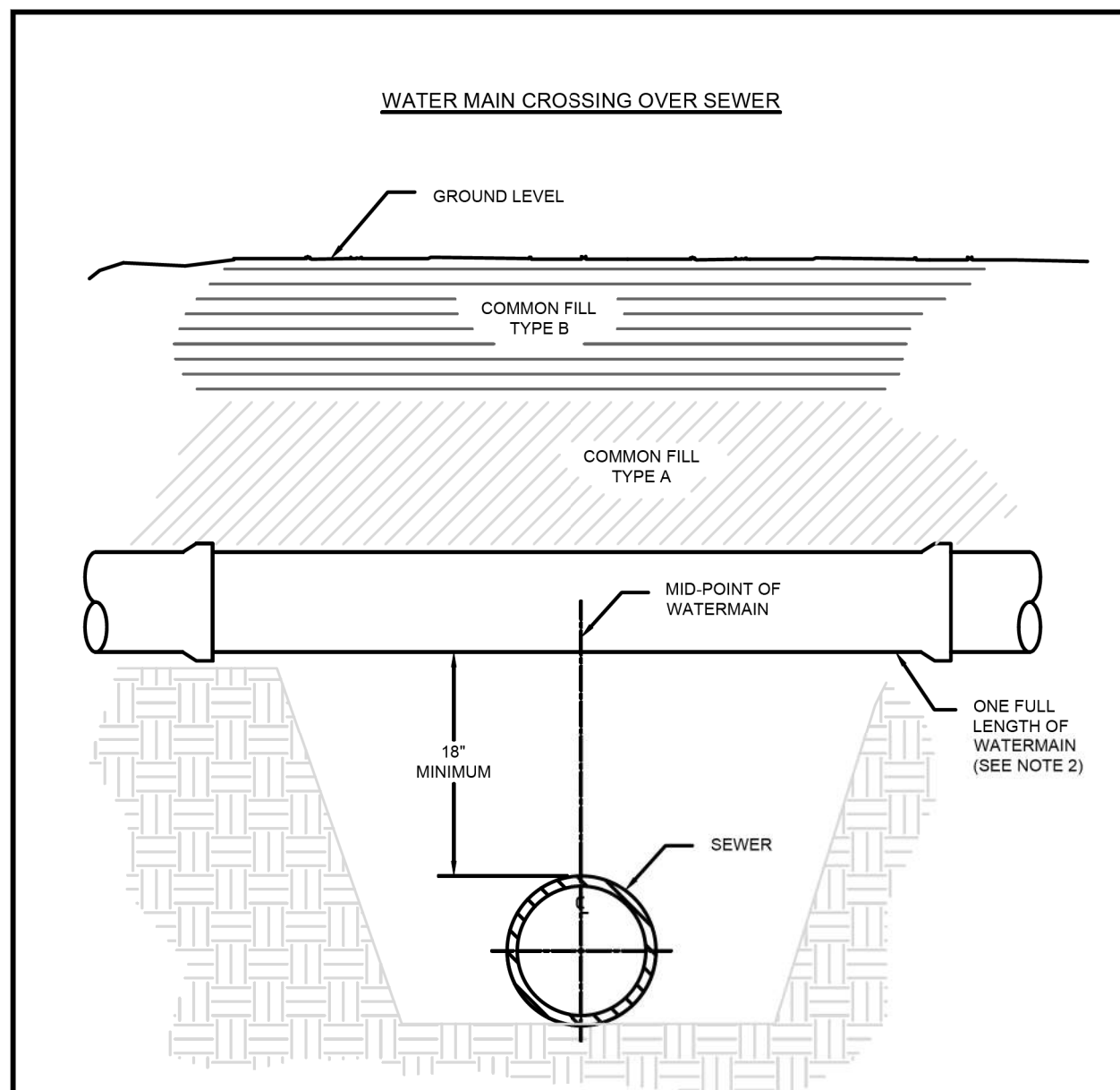
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WATER MAIN DETAILS

SCALE: SHEET 14 OF 17 SHEETS STA. TO STA.

F.A. RTE. 6594 SECTION 16-00368-01-PV COUNTY PEORIA TOTAL SHEETS 451 SHEET NO. 156
WESTERN AVE RECONSTRUCTION CONTRACT NO. 89766
ILLINOIS FED. AID PROJECT



OPTION A - PRESSURE CLASS SEWER MAIN

1. REPLACE EXISTING SEWER WITH A PRESSURE CLASS MAIN A MINIMUM OF 10' EACH SIDE OF THE WATER MAIN.

OPTION B - WATER MAIN INSTALLATION

1. MID-POINT OF ONE FULL LENGTH OF WATER MAIN IS TO BE CENTERED ABOVE SEWER LINE
2. PROVIDE ADEQUATE SUPPORT FOR THE WATER MAIN TO PREVENT DAMAGE DUE TO SETTLEMENT.

- NOTES:**
1. FOLLOW TRENCH MATERIAL DETAIL WHEN BACK-FILLING WATER MAIN.
 2. THE SELECTED OPTION MUST BE APPROVED BY AN IL-AWC REPRESENTATIVE.

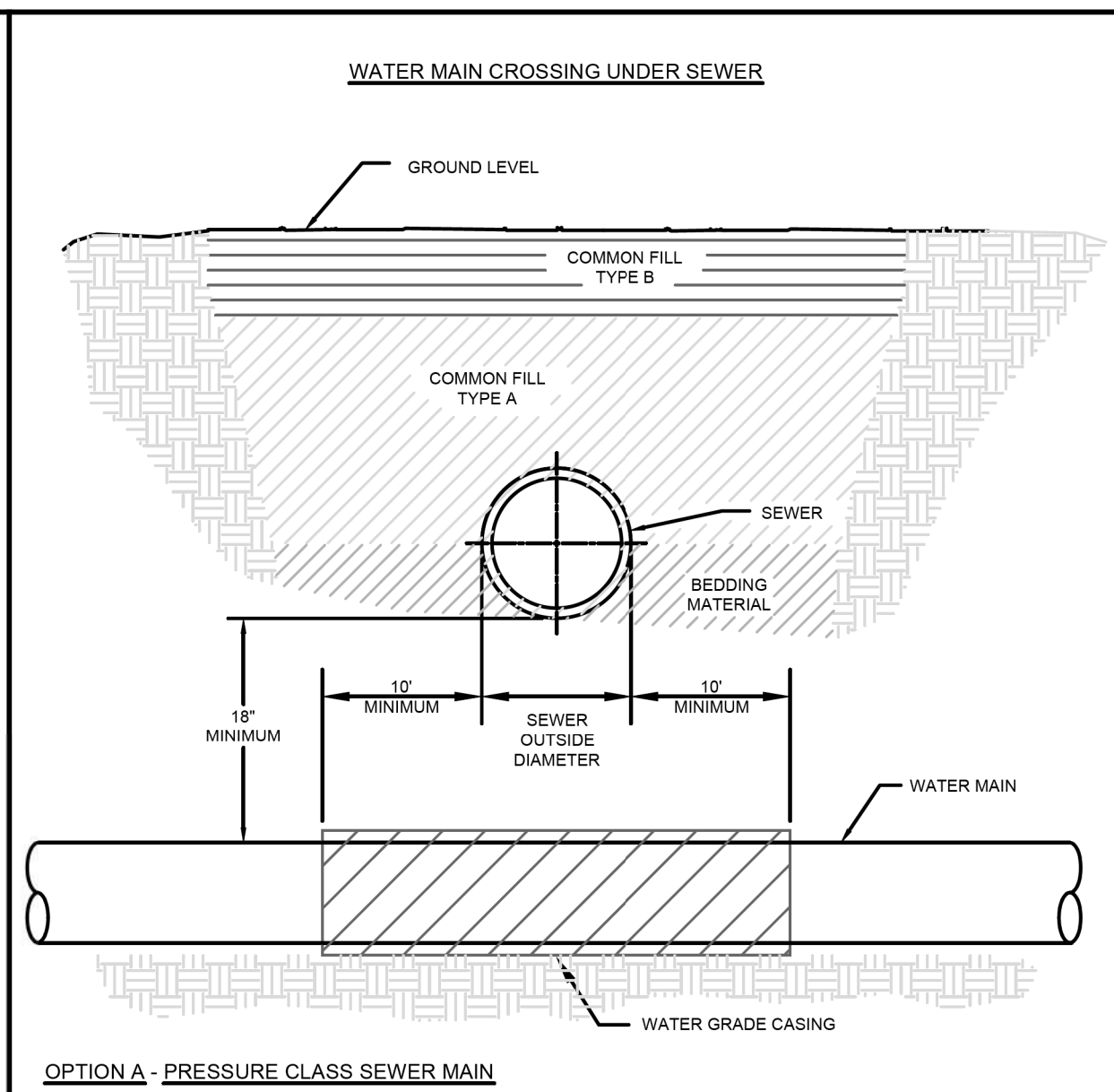
AMERICAN WATER STANDARD CIVIL WATER MAIN CROSSING OVER SEWER DETAIL

ILLINOIS AMERICAN WATER ENGINEERING
BELLVILLE, IL 62223

AMERICAN WATER

DATE: 01-05-11
PROJECT: 0201-0601-JH10A

USE DIMENSIONS ONLY FOR CONSTRUCTION PURPOSES



OPTION A - PRESSURE CLASS SEWER MAIN

1. REPLACE EXISTING SEWER WITH A PRESSURE CLASS MAIN IN LIEU OF CASING THE WATER MAIN.
2. THE SEWER SHALL BE REPLACED A MINIMUM OF 10' EACH SIDE OF THE WATERMAIN.

OPTION B - WATER MAIN CASING INSTALLATION

1. PROVIDE ADEQUATE SUPPORT FOR THE EXISTING SEWER TO PREVENT DAMAGE DUE TO SETTLEMENT.

- NOTES:**
1. FOLLOW TRENCH MATERIAL DETAIL WHEN BACK-FILLING WATER MAIN.
 2. THE SELECTED OPTION MUST BE APPROVED BY AN IL-AWC REPRESENTATIVE.

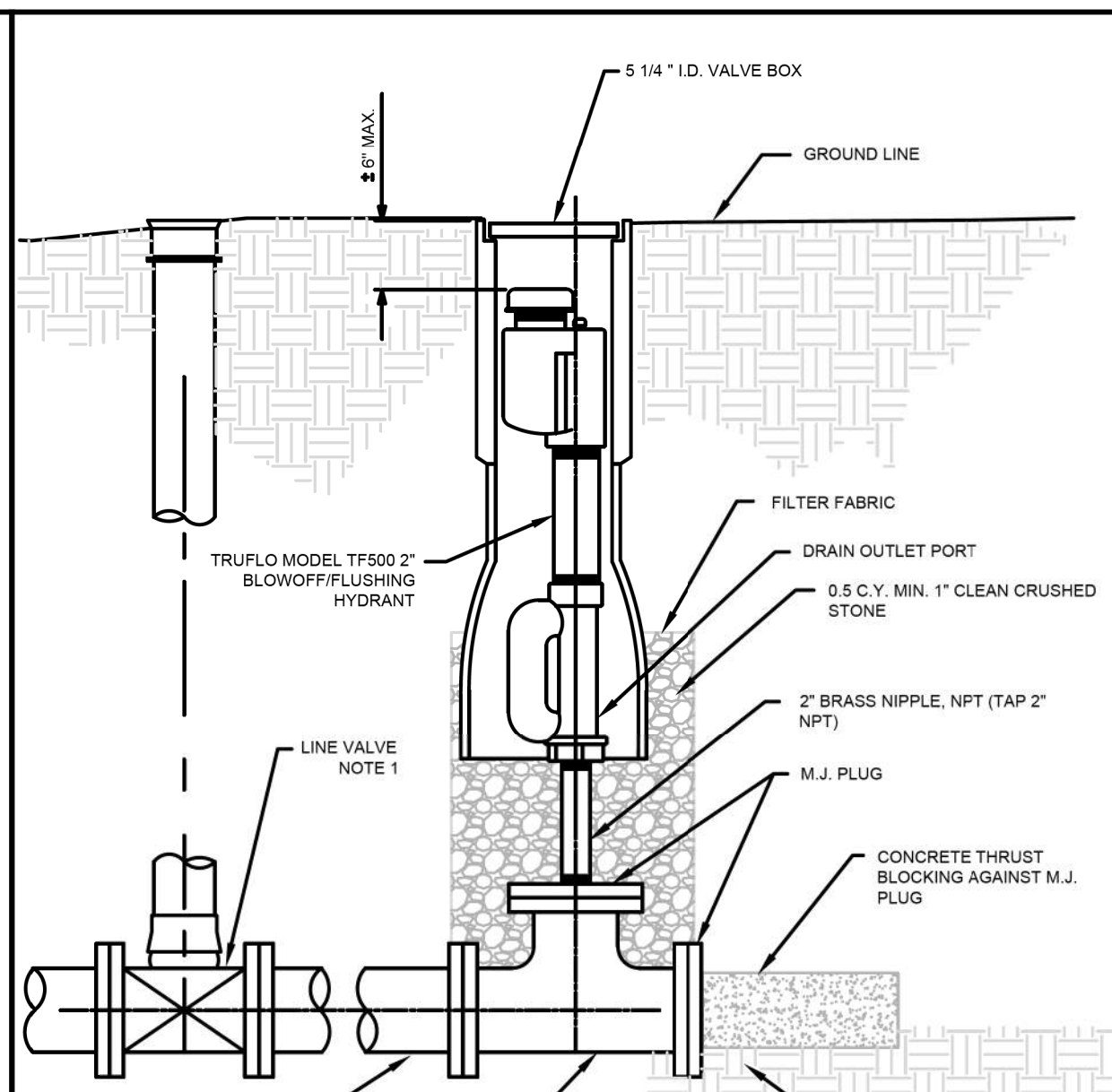
AMERICAN WATER STANDARD CIVIL WATER MAIN CROSSING UNDER SEWER DETAIL

ILLINOIS AMERICAN WATER ENGINEERING
BELLVILLE, IL 62223

AMERICAN WATER

DATE: 01-05-11
PROJECT: 0201-0601-JH10B

USE DIMENSIONS ONLY FOR CONSTRUCTION PURPOSES



- NOTES:**
1. LINE VALVE REQUIRES TWO (2) LENGTHS PRIOR TO BLOWOFF.

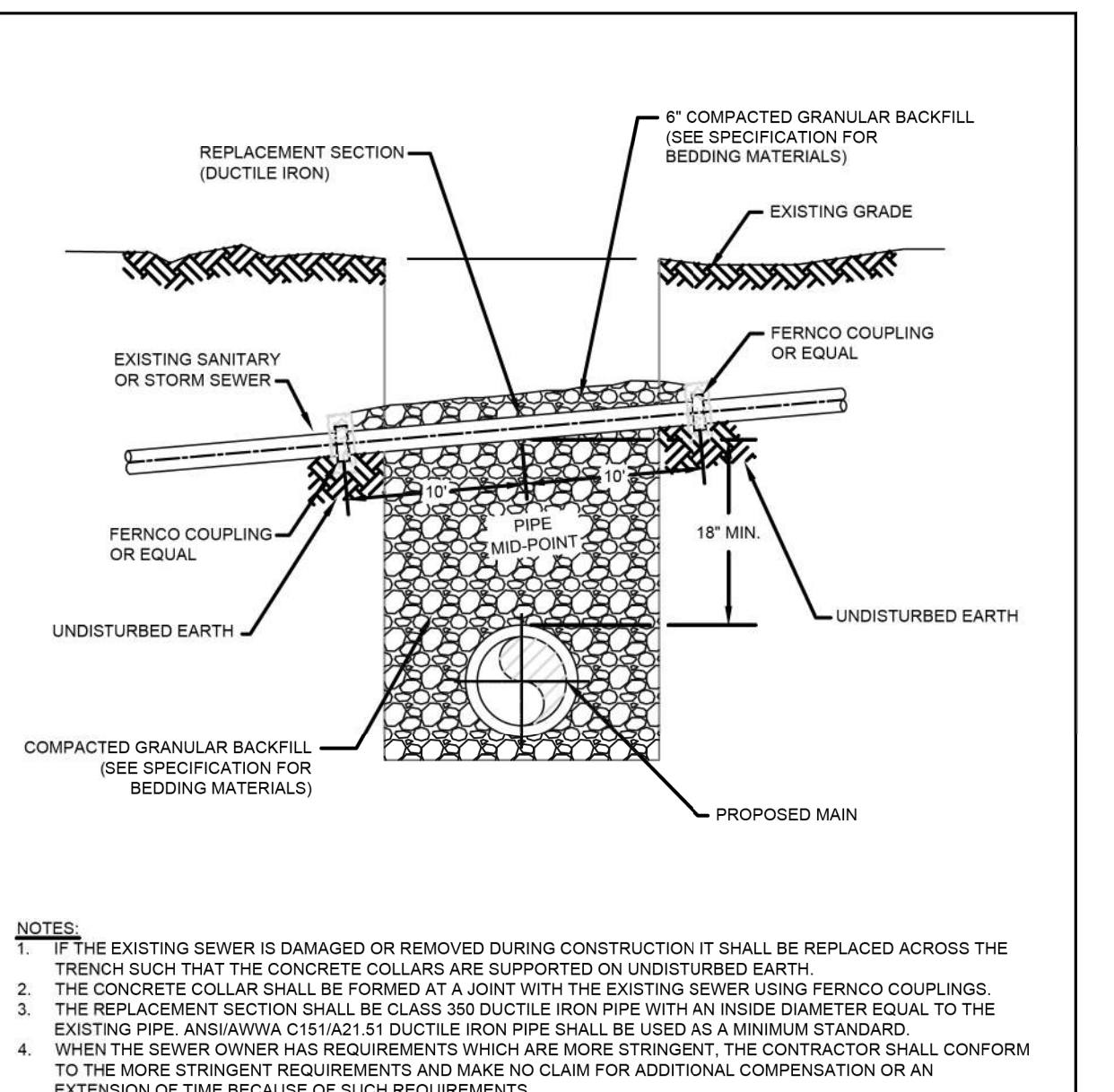
AMERICAN WATER STANDARD CIVIL PERMANENT BLOWOFF ASSEMBLY DETAIL

ILLINOIS AMERICAN WATER ENGINEERING
BELLVILLE, IL 62223

AMERICAN WATER

DATE: 01-05-11
PROJECT: 0201-0601-JH18

USE DIMENSIONS ONLY FOR CONSTRUCTION PURPOSES



- NOTES:**
1. IF THE EXISTING SEWER IS DAMAGED OR REMOVED DURING CONSTRUCTION IT SHALL BE REPLACED ACROSS THE TRENCH SUCH THAT THE CONCRETE COLLARS ARE SUPPORTED ON UNDISTURBED EARTH.
 2. THE CONCRETE COLLAR SHALL BE FORMED AT A JOINT WITH THE EXISTING SEWER USING FERNCO COUPLINGS.
 3. THE REPLACEMENT SECTION SHALL BE CLASS 350 DUCTILE IRON PIPE WITH AN INSIDE DIAMETER EQUAL TO THE EXISTING PIPE. ANSII/AWWA C151/A21.51 DUCTILE IRON PIPE SHALL BE USED AS A MINIMUM STANDARD.
 4. WHEN THE SEWER OWNER HAS REQUIREMENTS WHICH ARE MORE STRINGENT, THE CONTRACTOR SHALL CONFORM TO THE MORE STRINGENT REQUIREMENTS AND MAKE NO CLAIM FOR ADDITIONAL COMPENSATION OR AN EXTENSION OF TIME BECAUSE OF SUCH REQUIREMENTS.

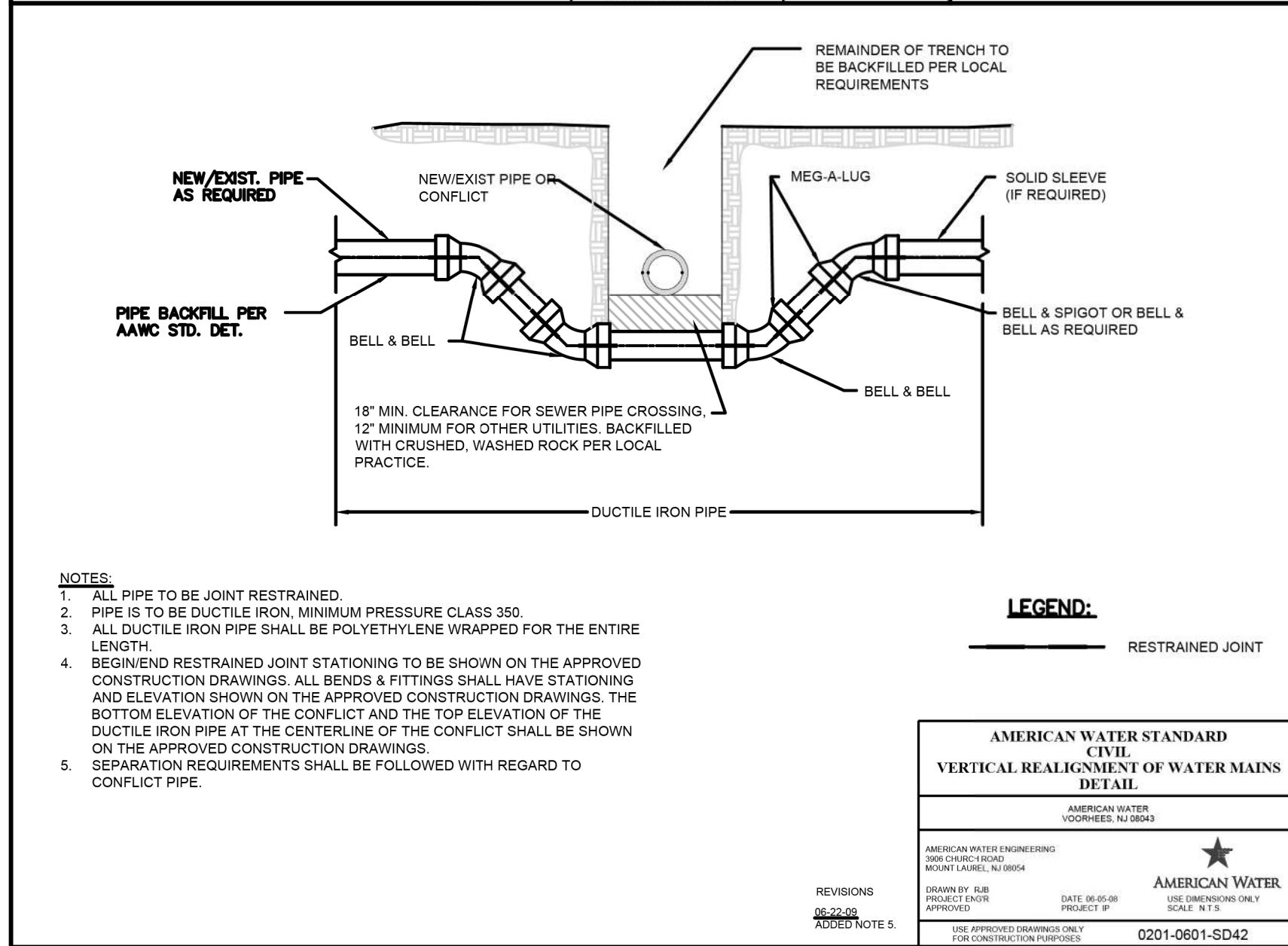
AMERICAN WATER STANDARD CIVIL SEWER REPLACEMENT DETAIL

ILLINOIS AMERICAN WATER ENGINEERING
BELLVILLE, IL 62223

AMERICAN WATER

DATE: 03-05-07
PROJECT: 0201-0601-SD44

USE DIMENSIONS ONLY FOR CONSTRUCTION PURPOSES



- NOTES:**
1. ALL PIPE TO BE JOINT RESTRAINED.
 2. PIPE IS TO BE DUCTILE IRON, MINIMUM PRESSURE CLASS 350.
 3. ALL DUCTILE IRON PIPE SHALL BE POLYETHYLENE WRAPPED FOR THE ENTIRE LENGTH.
 4. BEGIN/END RESTRAINED JOINT STATIONING TO BE SHOWN ON THE APPROVED CONSTRUCTION DRAWINGS. ALL BENDS & FITTINGS SHALL HAVE STATIONING AND ELEVATION SHOWN ON THE APPROVED CONSTRUCTION DRAWINGS. THE BOTTOM ELEVATION OF THE CONFLICT AND THE TOP ELEVATION OF THE DUCTILE IRON PIPE AT THE CENTERLINE OF THE CONFLICT SHALL BE SHOWN ON THE APPROVED CONSTRUCTION DRAWINGS.
 5. SEPARATION REQUIREMENTS SHALL BE FOLLOWED WITH REGARD TO CONFLICT PIPE.

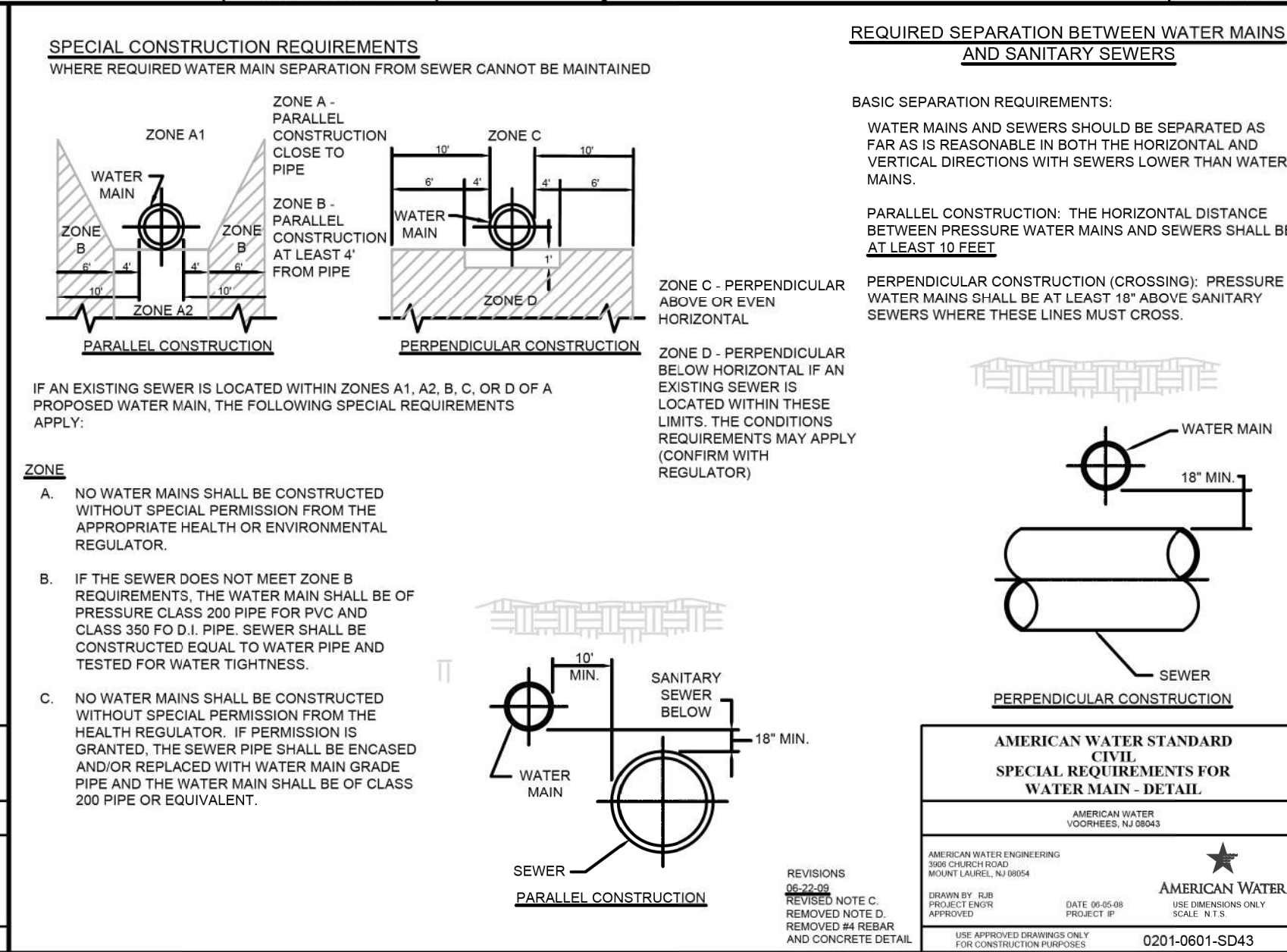
AMERICAN WATER STANDARD CIVIL VERTICAL REALIGNMENT OF WATER MAINS DETAIL

ILLINOIS AMERICAN WATER ENGINEERING
BELLVILLE, IL 62223

AMERICAN WATER

DATE: 06-29-06
PROJECT: 0201-0601-SD42

USE DIMENSIONS ONLY FOR CONSTRUCTION PURPOSES



- IF AN EXISTING SEWER IS LOCATED WITHIN ZONES A1, A2, B, C, OR D OF A PROPOSED WATER MAIN, THE FOLLOWING SPECIAL REQUIREMENTS APPLY:**
- ZONE**
- NO WATER MAINS SHALL BE CONSTRUCTED WITHOUT SPECIAL PERMISSION FROM THE APPROPRIATE HEALTH OR ENVIRONMENTAL REGULATOR.
 - IF THE SEWER DOES NOT MEET ZONE B REQUIREMENTS, THE WATER MAIN SHALL BE OF PRESSURE CLASS 200 PIPE FOR PVC AND CLASS 350 F.O.D.I. PIPE. SEWER SHALL BE CONSTRUCTED EQUAL TO WATER PIPE AND TESTED FOR WATER TIGHTNESS.
 - NO WATER MAINS SHALL BE CONSTRUCTED WITHOUT SPECIAL PERMISSION FROM THE HEALTH REGULATOR. IF PERMISSION IS GRANTED, THE SEWER PIPE SHALL BE ENCASED AND/OR REPLACED WITH WATER MAIN GRADE PIPE AND THE WATER MAIN SHALL BE OF CLASS 200 PIPE OR EQUIVALENT.

AMERICAN WATER STANDARD CIVIL SPECIAL REQUIREMENTS FOR WATER MAIN - DETAIL

ILLINOIS AMERICAN WATER ENGINEERING
BELLVILLE, IL 62223

AMERICAN WATER

DATE: 06-29-06
PROJECT: 0201-0601-SD43

USE DIMENSIONS ONLY FOR CONSTRUCTION PURPOSES

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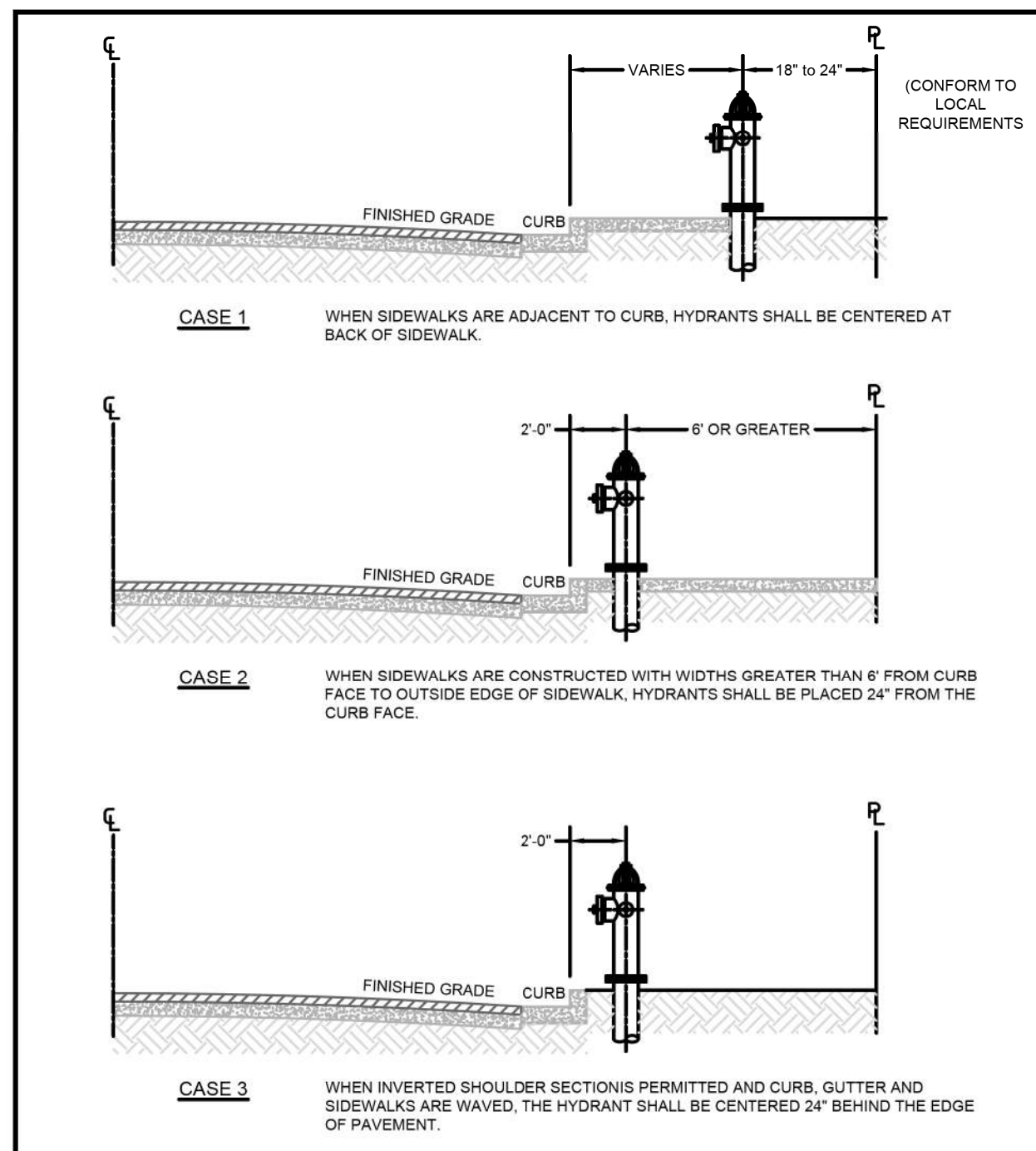
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STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

WATER MAIN DETAILS

SCALE: SHEET 15 OF 17 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6594	16-00368-01-PV	PEORIA	451	157
WESTERN AVE RECONSTRUCTION		CONTRACT NO. 89766		
ILLINOIS		FED. AID PROJECT		



NOTES:
 1. REQUIREMENTS OF LOCAL AUTHORITY HAVING JURISDICTION SHALL PREVAIL. IN THEIR ABSENCE, THE INSTALLATIONS SHOWN MAY BE USED.
 2. EXACT HYDRANT LOCATION TO BE FIELD DETERMINED BY LOCAL AUTHORITY HAVING JURISDICTION.

AMERICAN WATER STANDARD CIVIL FIRE HYDRANT LOCATION DETAIL

ILLINOIS AMERICAN WATER BELLEVILLE, IL 62223

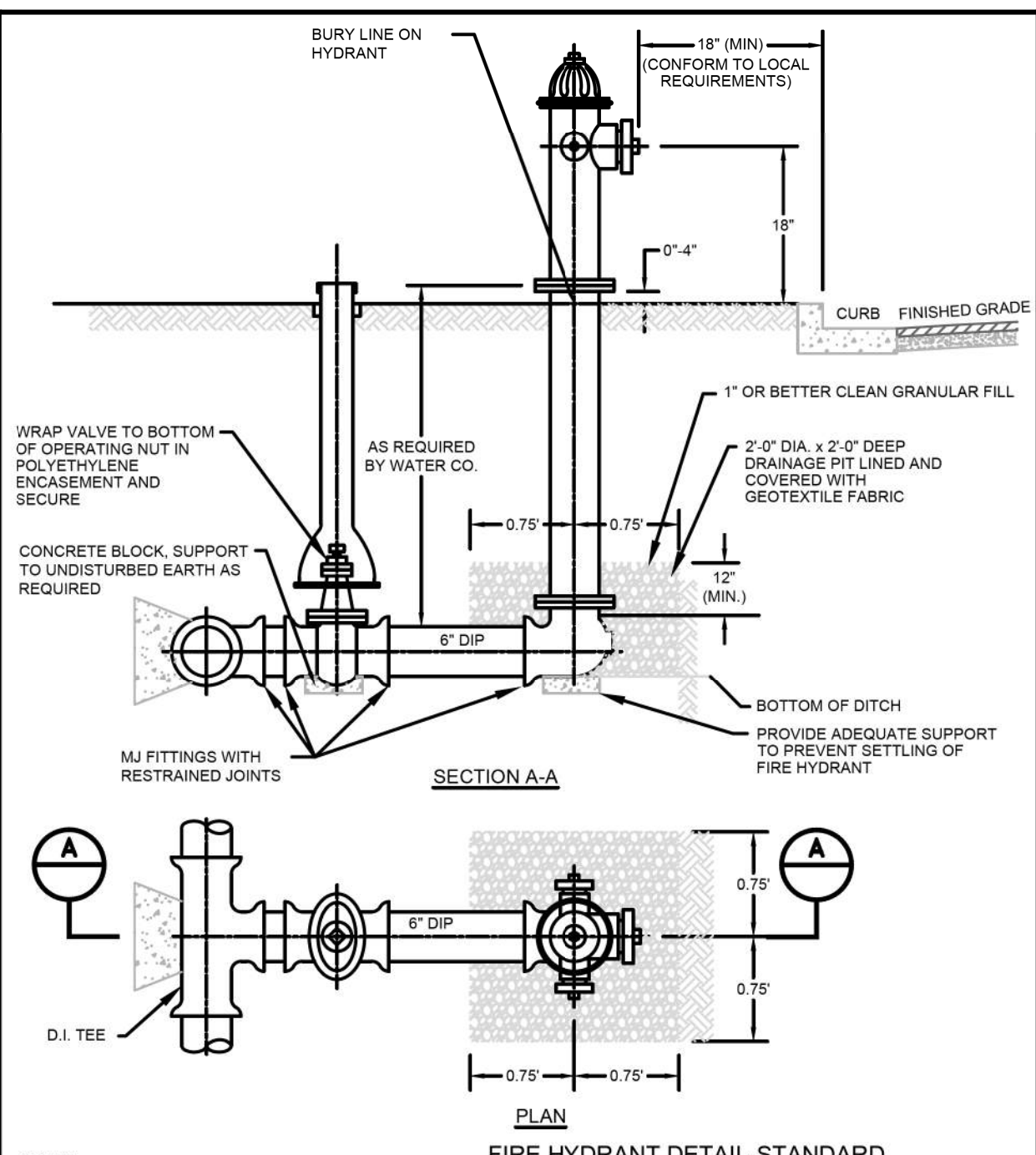
AMERICAN WATER

DESIGNED BY: JHM DATE: 08/21/20 DATE OF REVISION: 08/21/20 PROJECT NO.: 16-187-005 SHEET: WATERMAIN014

SCALE: N.T.S.

USE APPROVED DIMENSIONS ONLY FOR CONSTRUCTION PURPOSES

0201-0601-IH12



NOTES:
 1. CONTRACTOR TO SUBMIT RESTRAINED DESIGN.
 2. PAINT HYDRANT TO BURY LINE (AND CAN BE DONE PRIOR TO INSTALLATION).
 3. APPLY TOUCH UP PAINT AS REQUIRED AFTER INSTALLATION.
 4. OPTION IS TO USE DI MJ SWIVEL TEE TO CONNECT DIRECTLY TO MJ 6" HYDRANT VALVE.
 5. DI TEE AND VALVE CAN BE REPLACED WITH A TAPPING SLEEVE AND VALVE.
 6. THE USE OF AN ANCHOR TEE IS ACCEPTABLE.

AMERICAN WATER STANDARD CIVIL DRY BARREL FIRE HYDRANT DETAIL

ILLINOIS AMERICAN WATER BELLEVILLE, IL 62223

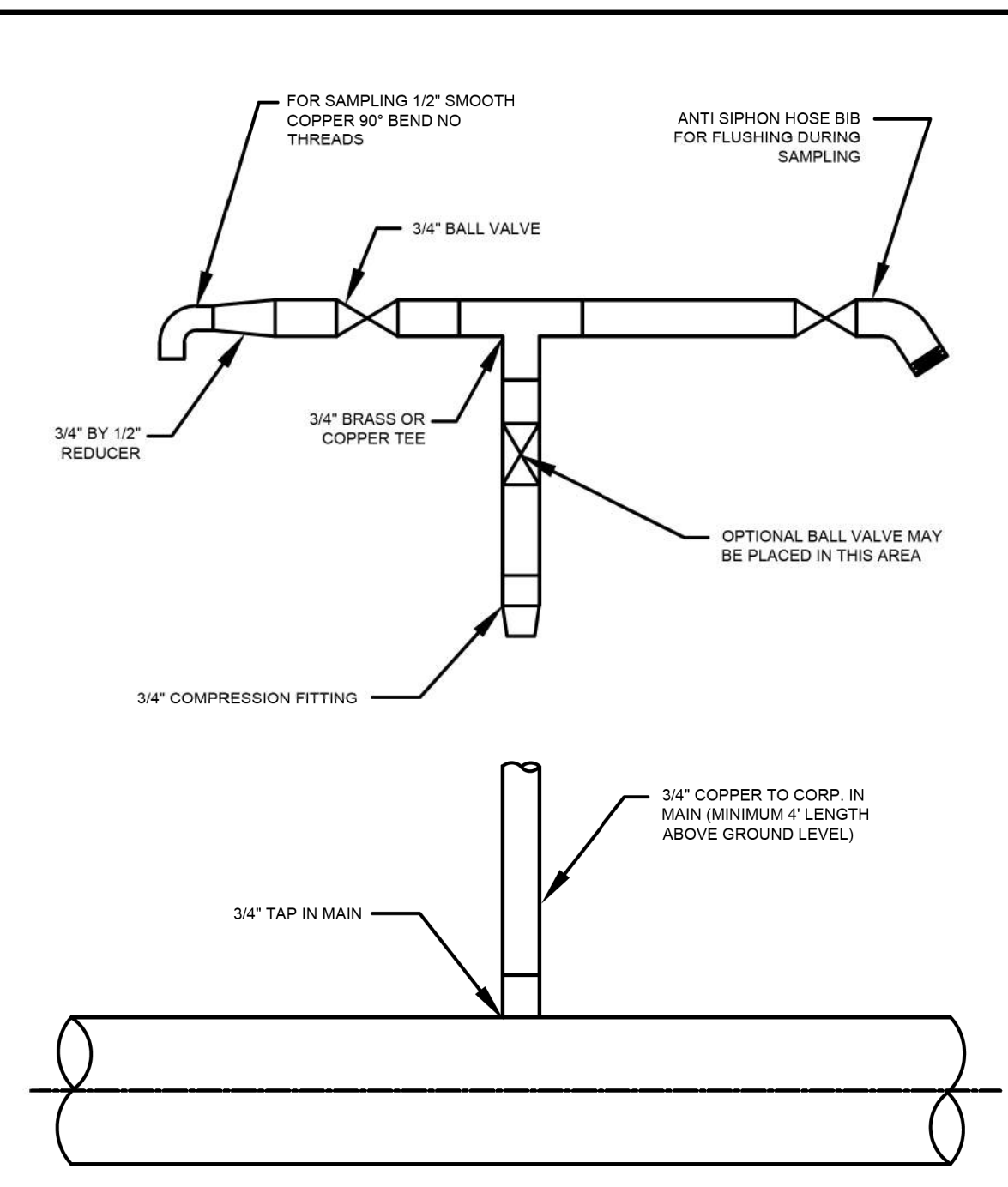
AMERICAN WATER

DESIGNED BY: JHM DATE: 08/21/20 DATE OF REVISION: 08/21/20 PROJECT NO.: 16-187-005 SHEET: WATERMAIN014

SCALE: N.T.S.

USE APPROVED DIMENSIONS ONLY FOR CONSTRUCTION PURPOSES

0201-0601-SD31



NOTES:
 1. PREFERRED SAMPLE DEVICE FOR NEW MAINS. LOCAL OFFICE MAY ALLOW AN APPROVED ALTERNATIVE.

AMERICAN WATER STANDARD CIVIL WATER QUALITY SAMPLING DEVICE DETAIL

ILLINOIS AMERICAN WATER BELLEVILLE, IL 62223

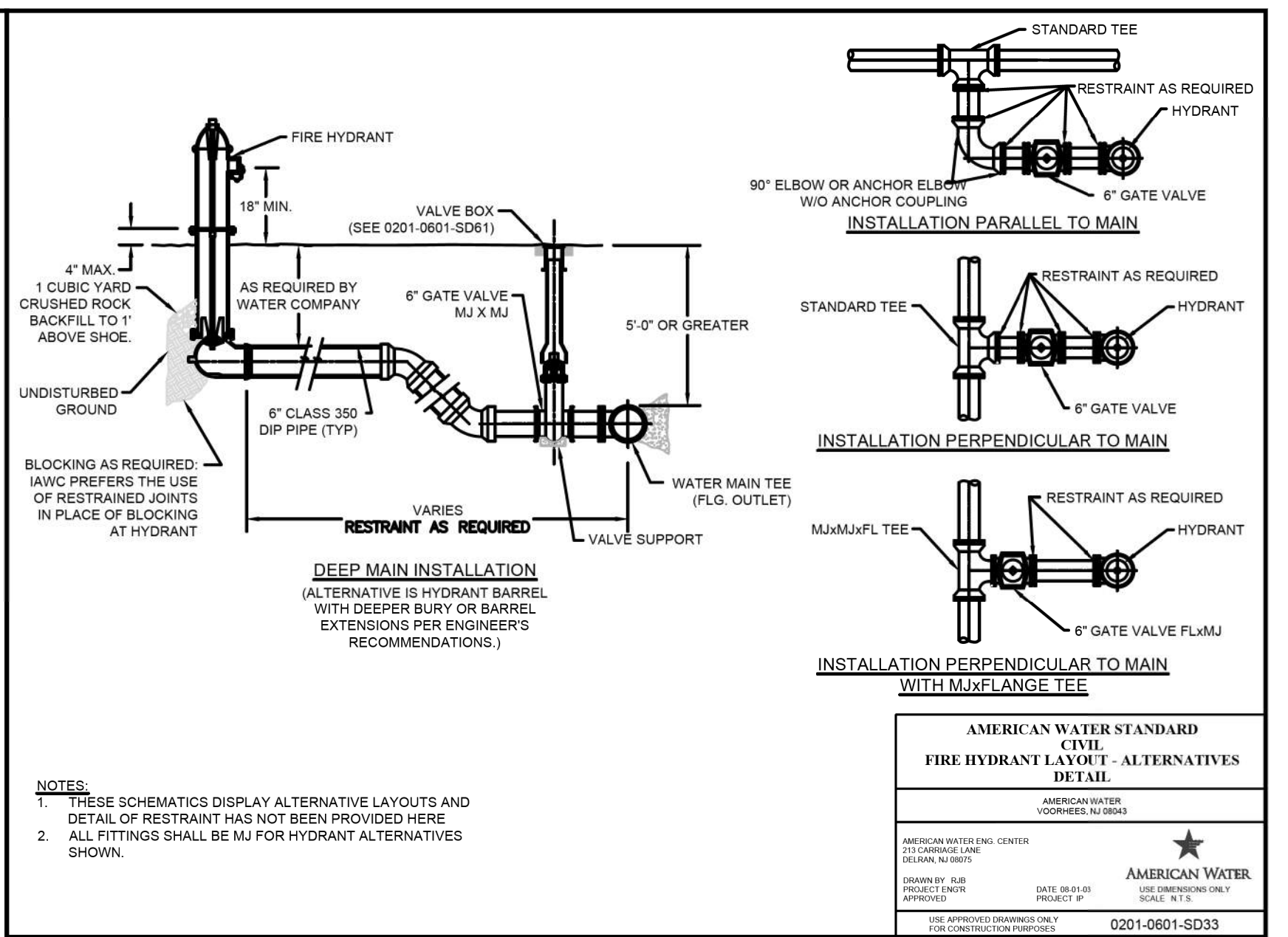
AMERICAN WATER

DESIGNED BY: JHM DATE: 08/21/20 DATE OF REVISION: 08/21/20 PROJECT NO.: 16-187-005 SHEET: WATERMAIN014

SCALE: N.T.S.

USE APPROVED DIMENSIONS ONLY FOR CONSTRUCTION PURPOSES

0201-0601-IH21



NOTES:
 1. THESE SCHEMATICS DISPLAY ALTERNATIVE LAYOUTS AND DETAIL OF RESTRAINT HAS NOT BEEN PROVIDED HERE.
 2. ALL FITTINGS SHALL BE MJ FOR HYDRANT ALTERNATIVES SHOWN.

AMERICAN WATER STANDARD CIVIL FIRE HYDRANT LAYOUT - ALTERNATIVES DETAIL

ILLINOIS AMERICAN WATER BELLEVILLE, IL 62223

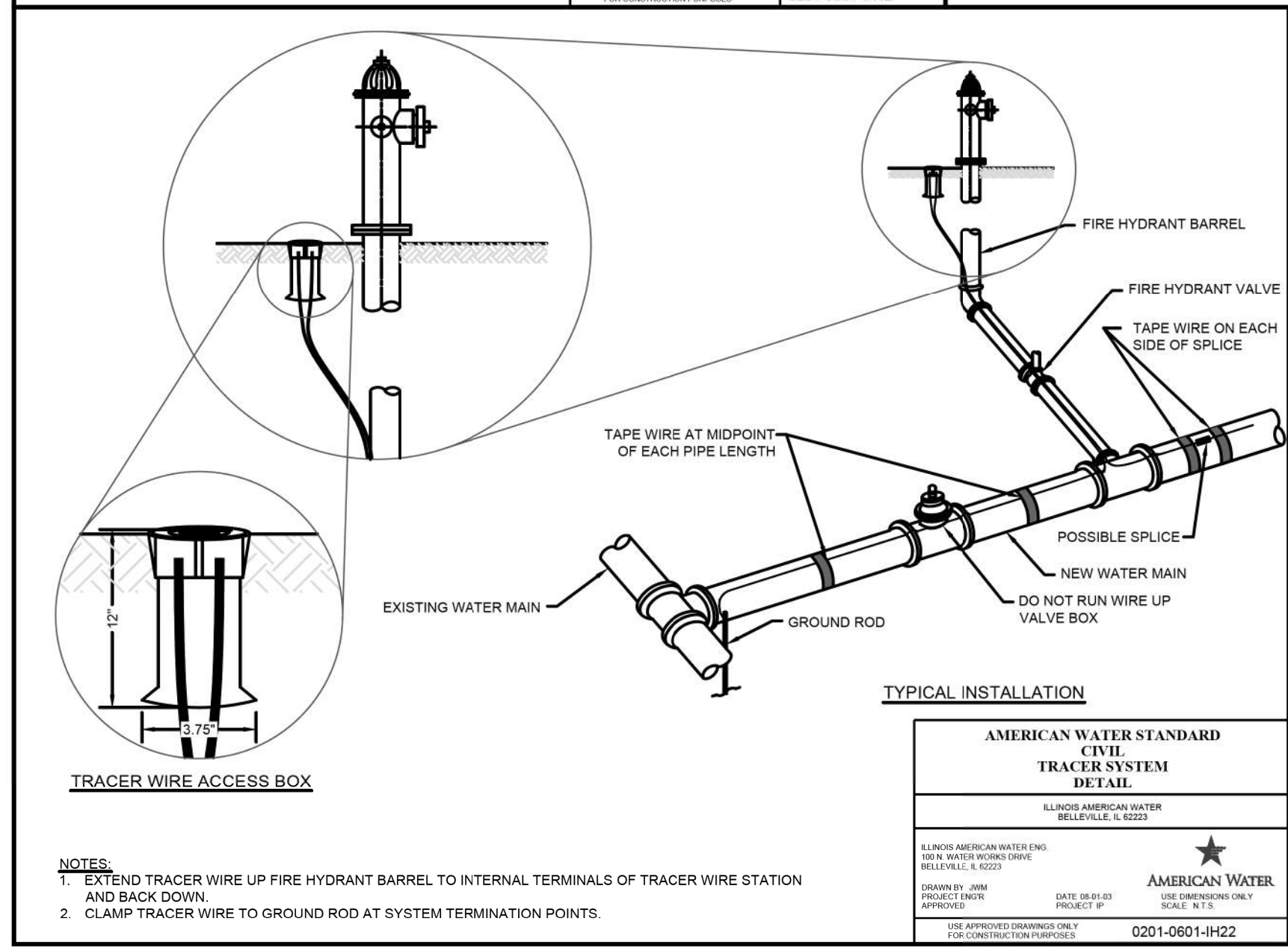
AMERICAN WATER

DESIGNED BY: JHM DATE: 08/21/20 DATE OF REVISION: 08/21/20 PROJECT NO.: 16-187-005 SHEET: WATERMAIN014

SCALE: N.T.S.

USE APPROVED DIMENSIONS ONLY FOR CONSTRUCTION PURPOSES

0201-0601-SD33



AMERICAN WATER STANDARD CIVIL TRACER SYSTEM DETAIL

ILLINOIS AMERICAN WATER BELLEVILLE, IL 62223

AMERICAN WATER

DESIGNED BY: JHM DATE: 08/21/20 DATE OF REVISION: 08/21/20 PROJECT NO.: 16-187-005 SHEET: WATERMAIN014

SCALE: N.T.S.

USE APPROVED DIMENSIONS ONLY FOR CONSTRUCTION PURPOSES

0201-0601-IH22

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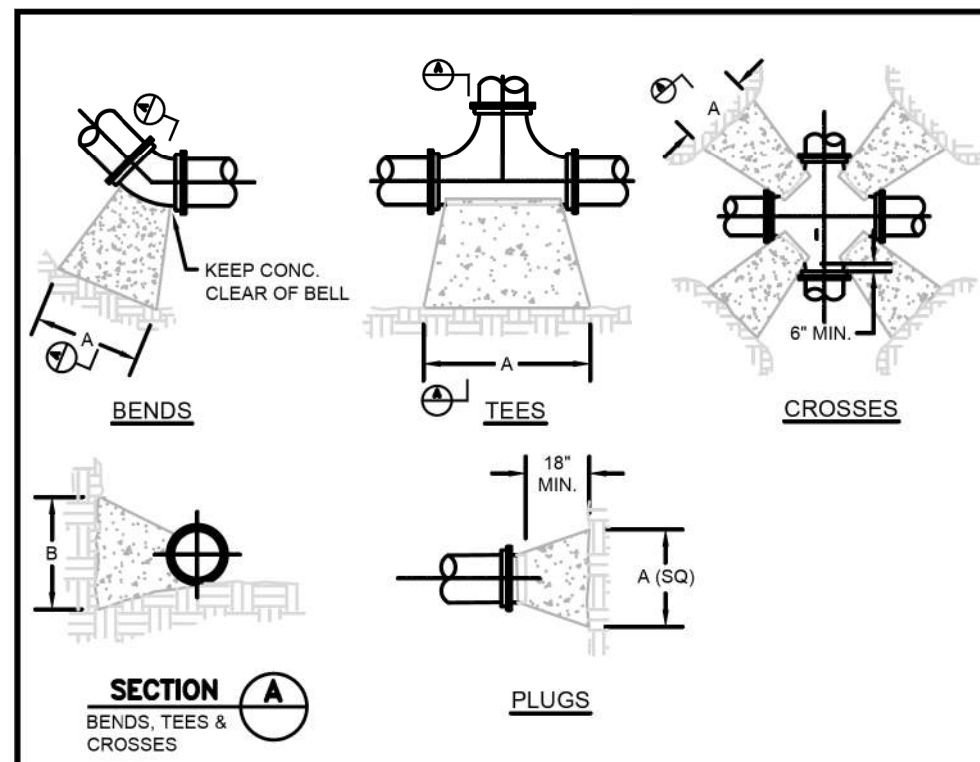
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

WATER MAIN DETAILS

SCALE: SHEET 16 OF 17 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6594	16-00368-01-PV	PEORIA	451	158
WESTERN AVE RECONSTRUCTION		CONTRACT NO. 89766		
ILLINOIS / FED. AID PROJECT				

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- NOTES:**
- COVER OVER TOP OF PIPE SHALL BE BELOW FROST LINE OR 30" MINIMUM, 72" MAXIMUM ACCORDING TO REGULATORY REQUIREMENTS. IF GRADING PLANS RECEIVED BY THE ENGINEER/OWNER WITH THE REQUEST FOR WATER MAIN LAYOUT, INDICATE ADJUSTMENTS TO EXISTING GRADE. THEN PIPE SHALL BE INSTALLED TO MEET MINIMUM AND MAXIMUM COVER FROM PROPOSED GRADES SHOWN ON SAID PLANS.
 - THRUST BLOCKS SHALL BE BUILT AGAINST UNDISTURBED SOIL WITH ADEQUATE BACKING TO PREVENT MOVEMENT OF FITTING.
 - NO THRUST BLOCKS TO BE PLACED IN SEWER LATERAL DITCHES.
 - THRUST BLOCKING MUST FIT IN EASEMENT, IN SOME CASES ADDITIONAL RESTRAINT MAY BE REQUIRED.
 - BASED ON 200 PSI (150 PSI STATIC PRESSURE PLUS 50 PSI WATER HAMMER) AND 2000 PSF SOIL BEARING.
 - POLYETHYLENE ENCASUREMENT ON ALL D.I. PIPE AND FITTINGS.
 - PIPE JOINTS AND BOLTS MUST BE ACCESSIBLE.
 - ALLOW SUFFICIENT CLEARANCE BETWEEN CONCRETE AND BOLTS FOR FUTURE MAINTENANCE.
 - ALL ANCHOR BOLTS SHALL BE COR-BLUE, MINIMUM 1/2" DIAMETER, COAT EXPOSED ROD WITH ASPHALT CEMENT AFTER CONCRETE HAS SET.
 - ALL M.J. AND FLG. FITTINGS TO RECEIVE THRUST BLOCKS SHALL HAVE THE FASTENER AREAS FELT WRAPPED AND TAPED PRIOR TO THE CONCRETE POUR TO ALLOW FUTURE ACCESS TO THE FASTENERS AT THE JOINTS.
 - THRUST BLOCKING DETAILS ARE SHOWN HERE FOR TYPICAL INSTALLATIONS. IN SOME CASES, ADDITIONAL RESTRAINT MAY BE REQUIRED.
 - PORTLAND CEMENT CONCRETE USED FOR THRUST BLOCKS SHALL BE MIN 3000 PSI CONCRETE.
 - FOR UNSTABLE SOIL CONDITIONS, CHECK WITH ENGINEER FOR THRUST BLOCK DIMENSIONS.
 - FOR MAIN SIZES GREATER THAN 16", SEE ENGINEER FOR THRUST BLOCK DIMENSIONS.

PIPE SIZE	90 DEGREE BENDS				45 DEGREE BENDS				11.25 DEGREE BENDS				22.5 DEGREE BENDS				TEES/PLUGS									
	AREA (sq ft)	"A"	"B"	"C"	AREA (sq ft)	"A"	"B"	"C"	AREA (sq ft)	"A"	"B"	"C"	AREA (sq ft)	"A"	"B"	"C"	AREA (sq ft)	"A"	"B"							
6	5.3	43"	18"	2.5	23"	10"	3.7	6"	1.5	12"	10"	3.7	3.7	30"	24"	1.3	8"	24"	2.5	15"	24"	9.4	39"	24"		
8	9.2	50"	24"	5.0	30"	24"	1.3	8"	2.5	15"	24"	9.4	39"	24"	1.3	8"	24"	2.5	15"	24"	11.8	50"	30"	13.8	55"	36"
10	13.8	60"	30"	7.5	36"	30"	1.9	9"	3.8	18"	30"	13.8	50"	30"	1.9	9"	30"	3.8	18"	30"	13.8	50"	30"	13.8	55"	36"
12	19.4	70"	36"	10.8	42"	36"	2.7	11"	5.3	21"	36"	19.4	60"	36"	2.7	11"	36"	5.3	21"	36"	19.4	60"	36"	19.4	65"	42"
14	26.9	80"	42"	14.6	50"	42"	3.6	12"	7.2	25"	42"	26.9	70"	42"	3.6	12"	42"	7.2	25"	42"	26.9	70"	42"	26.9	75"	48"
16	35.7	101"	48"	18.5	55"	48"	4.7	14"	9.4	28"	48"	35.7	80"	48"	4.7	14"	48"	9.4	28"	48"	35.7	80"	48"	35.7	85"	54"

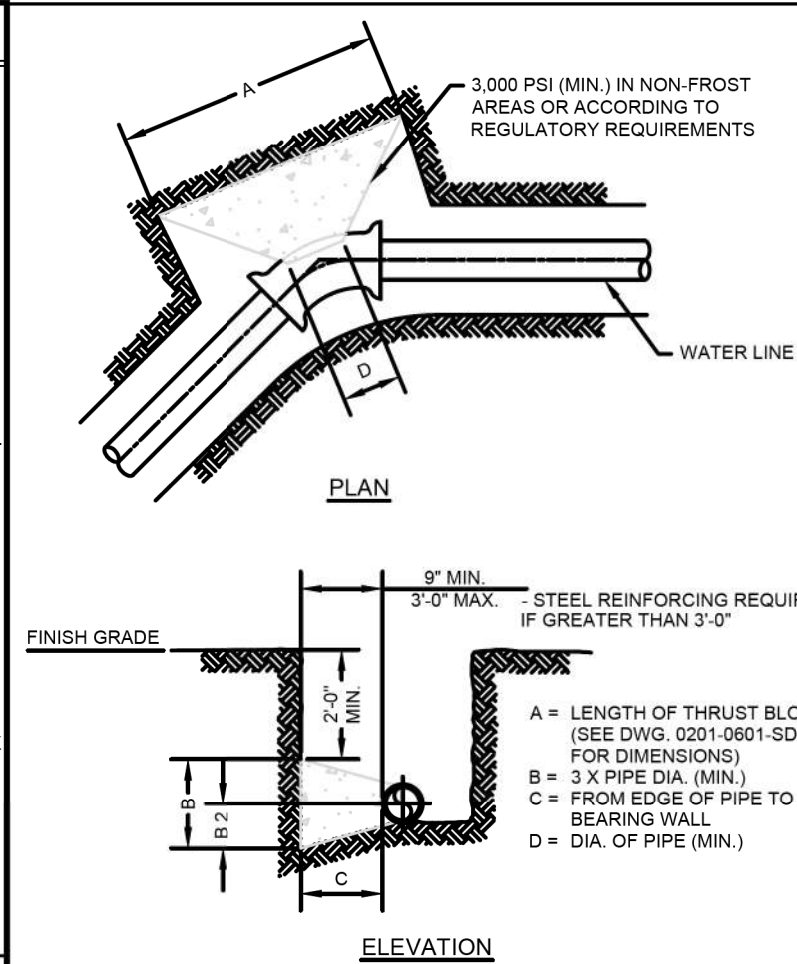
Area in square feet "A" and "B" in inches
 Bearing table area is based on 200 psi maximum with soil bearing capacity of 2000 lbs/square foot.
 For higher water pressures or lower soil capacities, consult Engineer for adjustments.
 Bearing table area does not include a safety factor.
 A safety factor and additional bearing area may be required as directed by the Engineer.

AMERICAN WATER STANDARD
CIVIL
THRUST BLOCK
DETAILS
AMERICAN WATER
 VOORHEES, NJ 08043

AMERICAN WATER ENGINEERING
 211 CHURCH LANE
 MOUNT LAUREL, NJ 08054

DRAWN BY: RLB
 PROJECT NO.: 16-187-005
 DATE: 02/21/20
 APPROVED: [Signature] SCALE: N.T.S.

SEE APPROVED DIMENSIONS ONLY FOR CONSTRUCTION PURPOSES **0201-0601-SD6**



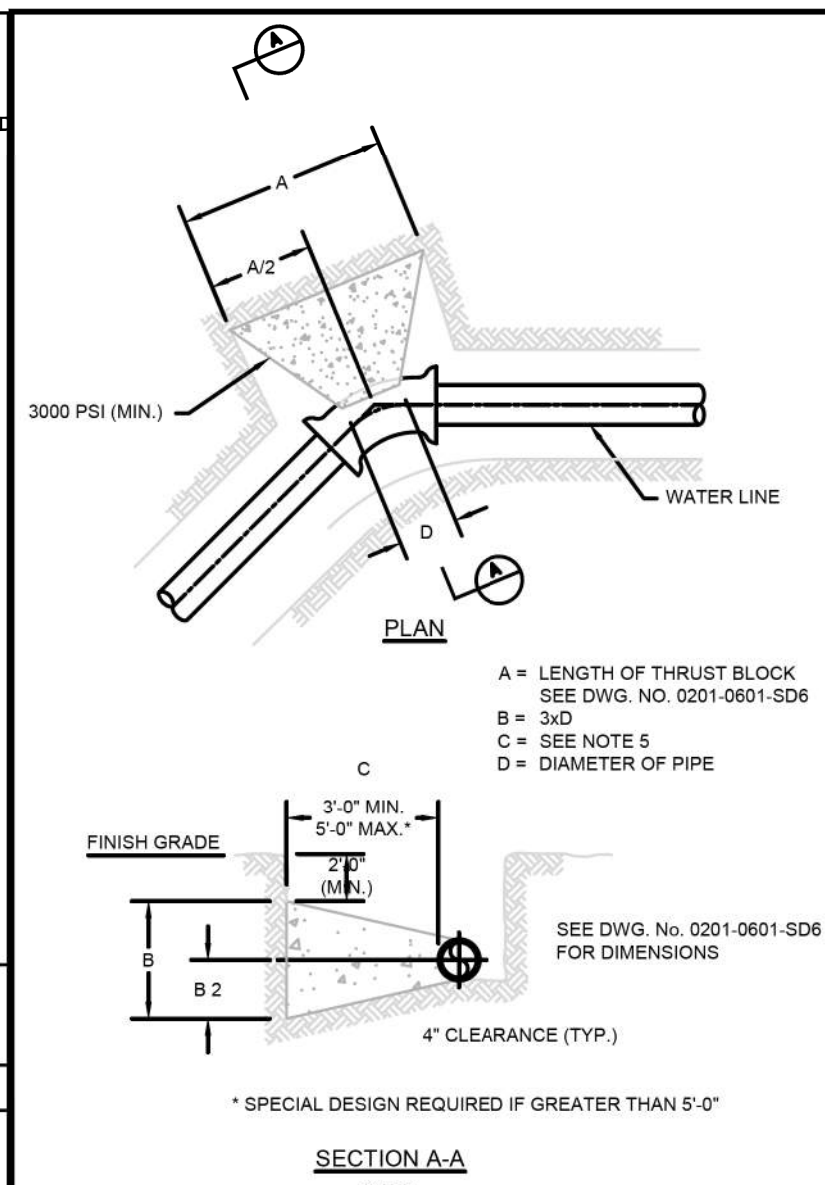
- NOTES:**
- COVER OVER TOP OF PIPE SHALL BE BELOW FROST LINE OR MINIMUM 30" IN NON-FROST AREAS OR ACCORDING TO REGULATORY REQUIREMENTS. IF GRADING PLANS RECEIVED BY THE ENGINEER/OWNER WITH THE REQUEST FOR WATER MAIN LAYOUT, INDICATE ADJUSTMENTS TO EXISTING GRADE. THEN PIPE SHALL BE INSTALLED TO MEET MINIMUM AND MAXIMUM COVER FROM PROPOSED GRADES SHOWN ON SAID PLANS.
 - THRUST BLOCKS SHALL BE BUILT AGAINST UNDISTURBED SOIL WITH ADEQUATE BACKING TO PREVENT MOVEMENT OF FITTING.
 - NO THRUST BLOCKS TO BE PLACED IN SEWER LATERAL DITCHES.
 - THRUST BLOCKING MUST FIT IN EASEMENT, IN SOME CASES ADDITIONAL RESTRAINT MAY BE REQUIRED.
 - DIMENSION "C" BASED ON MINIMUM BEARING AREA 18" MINIMUM.
 - POLYETHYLENE ENCASUREMENT ON ALL D.I. PIPE AND FITTINGS.
 - PIPE JOINTS AND BOLTS MUST BE ACCESSIBLE.
 - ALL ANCHOR BOLTS SHALL BE COR-BLUE, MINIMUM 1/2" DIAMETER, COAT EXPOSED ROD WITH APPROVED MATERIAL AFTER CONCRETE HAS SET.
 - ALLOW SUFFICIENT CLEARANCE BETWEEN CONCRETE AND BOLTS FOR FUTURE MAINTENANCE.
 - ALL M.J. AND FLG. FITTINGS TO RECEIVE THRUST BLOCKS SHALL HAVE THE FASTENER AREAS FELT WRAPPED AND TAPED PRIOR TO THE CONCRETE POUR TO ALLOW FUTURE ACCESS TO THE FASTENERS AT THE JOINTS.
 - THRUST BLOCKING DETAILS ARE SHOWN HERE FOR TYPICAL INSTALLATIONS. IN SOME CASES, ADDITIONAL RESTRAINT MAY BE REQUIRED.
 - PORTLAND CEMENT CONCRETE USED FOR THRUST BLOCKS SHALL BE 3000 PSI CONCRETE (MIN.).
 - BEARING AREAS ARE BASED ON SOIL HAVING AN ALLOWABLE SAFE LATERAL BEARING OF 2000 POUNDS PER SQUARE FOOT AND 200 PSI TEST PRESSURE. AREA MUST BE REVISED FOR SOILS WITH A LOWER BEARING CAPACITY OR HIGHER TEST PRESSURE.

AMERICAN WATER STANDARD
CIVIL
THRUST BLOCK AT HORIZONTAL BENDS
(LESS THAN 3 FEET IN THICKNESS)-DETAIL
AMERICAN WATER
 VOORHEES, NJ 08043

AMERICAN WATER ENG. CENTER
 211 CHURCH LANE
 MOUNT LAUREL, NJ 08054

DRAWN BY: RLB
 PROJECT NO.: 16-187-005
 DATE: 02/21/20
 APPROVED: [Signature] SCALE: N.T.S.

SEE APPROVED DIMENSIONS ONLY FOR CONSTRUCTION PURPOSES **0201-0601-SD19**



- NOTES:**
- COVER OVER TOP OF PIPE SHALL BE BELOW FROST LINE OR MINIMUM 30" IN NON-FROST AREAS OR ACCORDING TO REGULATORY REQUIREMENTS. IF GRADING PLANS RECEIVED BY THE ENGINEER/OWNER WITH THE REQUEST FOR WATER MAIN LAYOUT, INDICATE ADJUSTMENTS TO EXISTING GRADE. THEN PIPE SHALL BE INSTALLED TO MEET MINIMUM AND MAXIMUM COVER FROM PROPOSED GRADES SHOWN ON SAID PLANS.
 - THRUST BLOCKS SHALL BE BUILT AGAINST UNDISTURBED SOIL WITH ADEQUATE BACKING TO PREVENT MOVEMENT OF FITTING.
 - NO THRUST BLOCKS TO BE PLACED IN SEWER LATERAL DITCHES.
 - THRUST BLOCKING MUST FIT IN EASEMENT, IN SOME CASES ADDITIONAL RESTRAINT MAY BE REQUIRED.
 - DIMENSION "C" BASED ON MINIMUM BEARING AREA 18" MINIMUM.
 - POLYETHYLENE ENCASUREMENT ON ALL D.I. PIPE AND FITTINGS.
 - PIPE JOINTS AND BOLTS MUST BE ACCESSIBLE.
 - ALL ANCHOR BOLTS SHALL BE COR-BLUE, MINIMUM 1/2" DIAMETER, COAT EXPOSED ROD WITH APPROVED MATERIAL AFTER CONCRETE HAS SET.
 - ALLOW SUFFICIENT CLEARANCE BETWEEN CONCRETE AND BOLTS FOR FUTURE MAINTENANCE.
 - ALL M.J. AND FLG. FITTINGS TO RECEIVE THRUST BLOCKS SHALL HAVE THE FASTENER AREAS FELT WRAPPED AND TAPED PRIOR TO THE CONCRETE POUR TO ALLOW FUTURE ACCESS TO THE FASTENERS AT THE JOINTS.
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AMERICAN WATER STANDARD
CIVIL
THRUST BLOCK AT HORIZONTAL BENDS
(EXCEEDING 3 FEET IN THICKNESS)-DETAIL
AMERICAN WATER
 VOORHEES, NJ 08043

AMERICAN WATER ENG. CENTER
 211 CHURCH LANE
 MOUNT LAUREL, NJ 08054

DRAWN BY: RLB
 PROJECT NO.: 16-187-005
 DATE: 02/21/20
 APPROVED: [Signature] SCALE: N.T.S.

SEE APPROVED DIMENSIONS ONLY FOR CONSTRUCTION PURPOSES **0201-0601-SD20**



USER NAME = colinc
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WATER MAIN DETAILS

SCALE: SHEET 17 OF 17 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6594	16-00368-01-PV	PEORIA	451	159
WESTERN AVE RECONSTRUCTION		CONTRACT NO. 89766		
		ILLINOIS FED. AID PROJECT		

**Construction Agreement between the City of Peoria and Illinois-American Water Company
Exhibit 2**

Estimated "City" Water Main Cost

SP	Item Number	Item Description	Quantity	Unit	Est. Unit Cost	Est. Total Cost
	20800150	Trench Backfill	91	Cu Yd	\$ 50.00	\$ 4,550.00
*	56100020	Ductile Iron Water Main Tee, 8" X 8"	3	Each	\$ 350.00	\$ 1,050.00
*	56100055	Ductile Iron Water Main Tee, 12" X 8"	1	Each	\$ 375.00	\$ 375.00
*	56100065	Ductile Iron Water Main Tee, 12" X 12"	2	Each	\$ 400.00	\$ 800.00
*	56101148	Ductile Iron Water Main Reducer, 8" X 4"	1	Each	\$ 225.00	\$ 225.00
*	56101150	Ductile Iron Water Main Reducer, 8" X 6"	6	Each	\$ 250.00	\$ 1,500.00
*	56101160	Ductile Iron Water Main Reducer, 12" X 8"	1	Each	\$ 275.00	\$ 275.00
*	56102900	Ductile Iron Water Main 4"	6	Foot	\$ 65.00	\$ 390.00
*	56103000	Ductile Iron Water Main 6"	253	Foot	\$ 70.00	\$ 17,710.00
*	56103100	Ductile Iron Water Main 8"	2838	Foot	\$ 76.00	\$ 215,688.00
*	56103300	Ductile Iron Water Main 12"	818	Foot	\$ 80.00	\$ 65,440.00
*	56104900	Water Valves 6"	11	Each	\$ 1,800.00	\$ 19,800.00
*	56105000	Water Valves 8"	6	Each	\$ 2,000.00	\$ 12,000.00
*	56108710	Tapping Valves And Sleeves 4"	1	Each	\$ 4,129.00	\$ 4,129.00
*	56108800	Tapping Valves And Sleeves 6"	7	Each	\$ 4,500.00	\$ 31,500.00
*	56108900	Tapping Valves And Sleeves 8"	2	Each	\$ 5,000.00	\$ 10,000.00
*	56109100	Tapping Valves And Sleeves 12"	11	Each	\$ 6,500.00	\$ 71,500.00
*	56109420	Ductile Iron Water Main Fittings 8" 45.00 Degree Bend	47	Each	\$ 250.00	\$ 11,750.00
*	56109424	Ductile Iron Water Main Fittings 12" 45.00 Degree Bend	32	Each	\$ 300.00	\$ 9,600.00
*	56109430	Ductile Iron Water Main Fittings 4" 90.00 Degree Bend	1	Each	\$ 225.00	\$ 225.00
*	56109432	Ductile Iron Water Main Fittings 6" 90.00 Degree Bend	4	Each	\$ 250.00	\$ 1,000.00
*	56109434	Ductile Iron Water Main Fittings 8" 90.00 Degree Bend	6	Each	\$ 275.00	\$ 1,650.00
*	56109438	Ductile Iron Water Main Fittings 12" 90.00 Degree Bend	8	Each	\$ 350.00	\$ 2,800.00
*	56400600	Fire Hydrants	12	Each	\$ 5,000.00	\$ 60,000.00
	60218400	Manholes, Type A, 4'-Diameter, Type 1 Frame, Closed Lid	2	Each	\$ 3,100.00	\$ 6,200.00
*	TBD	Trench Backfill (Special)	1223	Cu Yd	\$ 80.00	\$ 97,840.00
*	TBD	Ductile Iron Water Main Anchor Tee, 8" X 6"	9	Each	\$ 325.00	\$ 2,925.00
*	TBD	Ductile Iron Water Main Anchor Tee, 8" X 8"	2	Each	\$ 350.00	\$ 700.00
*	TBD	Ductile Iron Water Main Anchor Tee, 12" X 6"	2	Each	\$ 400.00	\$ 800.00
*	TBD	Ductile Iron Water Main Anchor Tee, 12" X 8"	2	Each	\$ 400.00	\$ 800.00
*	TBD	Sanitary Sewer 15", Special	28	Foot	\$ 150.00	\$ 4,200.00
*	TBD	Sanitary Sewer 18", Special	29	Foot	\$ 150.00	\$ 4,350.00
*	TBD	Sanitary Sewer 24", Special	15	Foot	\$ 150.00	\$ 2,250.00
*	X0327747	Water Main Encasement	356	Foot	\$ 80.00	\$ 28,480.00
*	X0487850	Sanitary Sewer Removal 15"	28	Foot	\$ 50.00	\$ 1,400.00
*	X0323814	Sanitary Sewer Removal, 18"	29	Foot	\$ 25.00	\$ 725.00
*	X1200067	Sanitary Sewer Removal 24"	15	Foot	\$ 55.00	\$ 825.00
*	X5610651	Abandon Existing Water Main, Fill With CLSM	3517	Foot	\$ 10.00	\$ 35,170.00
					Subtotal	\$ 730,622.00
					Prorated Share of traffic control and mobilization items	\$ 49,423.00
					TOTAL ESTIMATED "CITY" WATER MAIN COST	\$ 780,045.00