FINAL DESIGN
FOR BIDDING

CITY OF JOLIET, ILLINOIS

GARNSEY PARK PHASE 5A WATER MAIN IMPROVEMENTS

CITY OF JOLIET CONTRACT NO. 2777-0124

WATER MAIN REPLACEMENT IPEA LOAN NO. L17-6075

LEAD SERVICE REPLACEMENT IEPA LOAN NO. L17-5747



VICINITY MAP

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J.U.L.I.E. DESIGN STAGE REQUEST
DIG NO. A223322131
EXISTING UTILITIES:
WHERE THE DRAWINGS INCLUDE INFORMATION PERTAINING TO THE LOCATION OF UNDERGROUND UTILITY FACILITIES, SUCH INFORMATION REPRESENTS ONLY THE OPINION OF THE ENGINEER AS TO THE LOCATION OF SUCH UTILITIES. THE INFORMATION IS INCLUDED ONLY FOR THE CONVENIENCE OF THE CONTRACTOR. THE UTILITY LOCATIONS WERE DETERMINED FROM THE BEST AVAILABLE RECORDS. THE ENGINEER AND OWNER ASSUME NO RESPONSIBILITY WHATEVER WITH RESPECT TO THE SUFFICIENCY OR ACCURACY OF THE INFORMATION SHOWN ON THE DRAWINGS REGARDING THE LOCATION OF UNDERGROUND UTILITY FACILITIES OR THE MANNER IN WHICH THEY ARE TO BE REMOVED OR ADJUSTED. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE ACTUAL LOCATION OF ALL SUCH FACILITIES. THE CONTRACTOR SHALL OBTAIN FROM THE RESPECTIVE UTILITY COMPANIES DETAILED INFORMATION REGARDING THE LOCATION OF THE UTILITY FACILITIES AND THE WORKING SCHEDULES OF THE UTILITY COMPANIES FOR REMOVING OR ADJUSTING THE FACILITIES.

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1" .5" 0 1" 2" 3"

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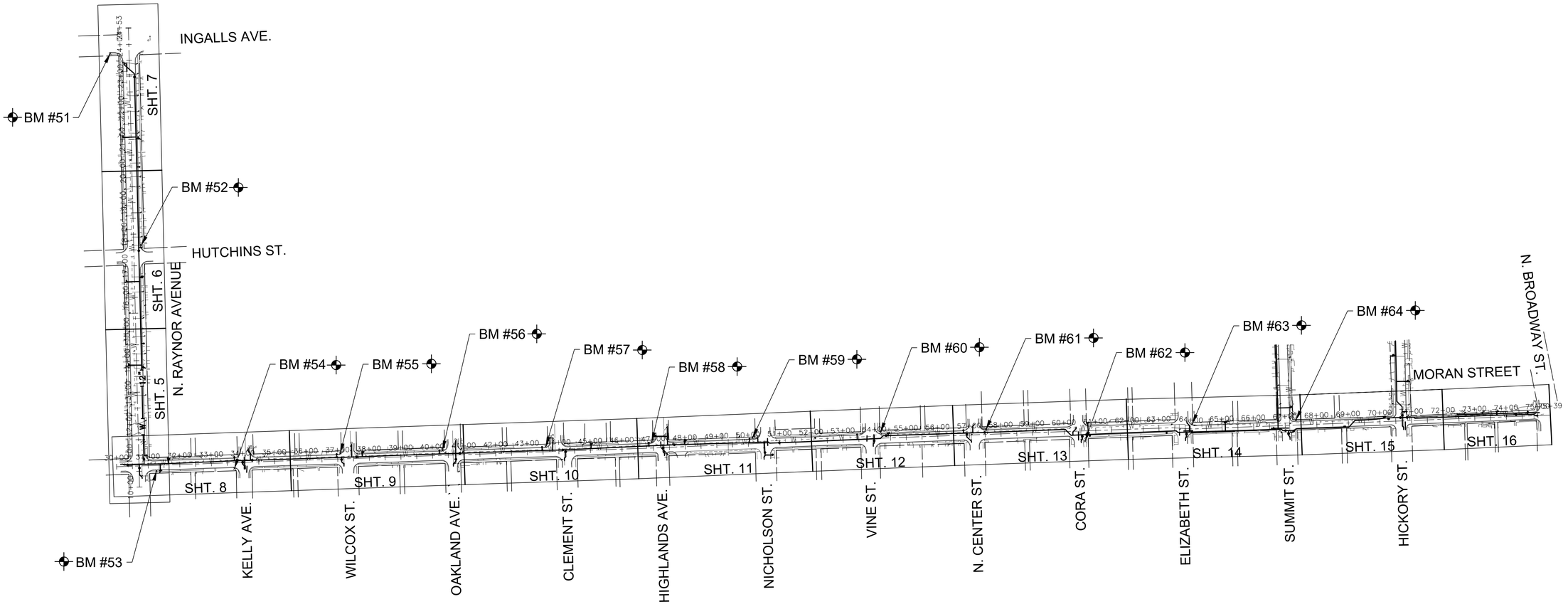
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1" .5" 0 1" 2" 3"

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CITY OF JOLIET, ILLINOIS
GARNSEY PARK PHASE 5A WATER MAIN IMPROVEMENTS
CITY OF JOLIET CONTRACT NO. 2777-0124

SHEET KEY

SCALE: AS NOTED PROJECT NO: 221587.40

DESIGNED – MJK	
DRAWN – JJS	
CHECKED – LMS	
DATE – 10/26/2023	

TOTAL SHEETS	SHEET NO.
21	2

P:\JOLTC\221587-2024 WATER MAIN SURV\CAD\GARNSEY PARK PHASE 5\01_CIVIL 3D\01_SHTS-PLANS\221587-GARNSEY PARK PHASE 5_SHEET KEY A.DWG SHEET KEY A
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LEGEND

EXISTING		PROPOSED
	SANITARY SEWER OR SERVICE	
	STORM SEWER OR SERVICE	
W	WATER MAIN OR SERVICE	W
FM	FORCE MAIN	FM
	MANHOLE	
	CATCH BASIN	
	INLET	
	DRYWELL	
	CULVERT END SECTION	
WV	FIRE HYDRANT W/ AUX. VALVE, VALVE BOX, AND COVER	
	WATER VALVE W/ BOX AND COVER	
BB	WATER VALVE VAULT	BB
	WATER SERVICE BOX OR CURB STOP	
	WATER TEE FITTING	
	WATER SLEEVE FITTING	
	WATER 90° FITTING	
	WATER 45° FITTING	
	WATER REDUCER FITTING	
	CAP FITTING	
	WATER CROSS FITTING	
WM	WATER METER	
CO	CLEAN OUT	
	SEPTIC VENT	
	TO BE ABANDONED AND/OR REMOVED	
	STRUCTURE TO BE ABANDONED	
G	GAS LINE	
GV	GAS VALVE W/ BOX AND COVER	
GVV	GAS VALVE VAULT	
GM	GAS METER	
GR	GAS RISER	
GAS	GAS SERVICE VALVE	
T	TELEPHONE CABLE	
TD	TELEPHONE DUCT	
TEL	TELEPHONE VAULT	
TR	TELEPHONE RISER	
CTV	CABLE TELEVISION (BURIED)	
CTV	CABLE T.V. RISER	
CTV	CABLE T.V. VAULT	
E	UNDERGROUND ELECTRICAL	

LEGEND

EXISTING		PROPOSED
EM	ELECTRIC METER	
ET	PAD MOUNTED TRANSFORMER	
EV	ELECTRIC VAULT	
JB	JUNCTION BOX	
	UTILITY POLE	
	UTILITY POLE w/ GUY ANCHOR	
	UTILITY POLE w/ LIGHT	
	LIGHT STANDARD	
MB	MAIL BOX	
	STREET SIGN	
	RAILROAD SIGNAL	
	TRAFFIC SIGNAL CONTROLLER	
	TRAFFIC SIGNAL POST W/ SIGNAL HEAD	
	HANDHOLE	
12"	DECIDUOUS TREE (W/ TRUNK INCH DIA.)	12" (HATCHED SHALL BE REMOVED)
16"	CONIFEROUS TREE (W/ HEIGHT)	16" (HATCHED SHALL BE REMOVED)
	DECIDUOUS BUSH	
	CONIFEROUS BUSH	
	DEFINING EDGE OF BRUSH OR FORESTED AREA	
X X	FENCE	
	GUARD RAIL	
	CULVERT (CMP UNLESS NOTED)	
DL	DITCH	
EXIST. R.O.W.	RIGHT OF WAY (ROW)	
ROW	RIGHT OF WAY MONUMENT	
P.L.	UNFENCED PROPERTY LINE	
IP	IRON PIPE (PROPERTY CORNER)	
	CENTER LINE	
625.35 / 625.9 +25	PROPOSED EL./EXISTING EL. and STATION	
#	SOIL BORING AND NUMBER	
B.M. CP	BENCH MARK	
	SURVEY CONTROL POINT	
OH	OVERHEAD ELECTRICAL	
	SUMMIT	
	RIPRAP	
	ROADWAY DITCH FLOW	
	SWALE	

BENCHMARKS (NAVD 88 DATUM)

B.M. # 51	RAILROAD SPIKE SET IN NORTH FACE HALF POWER POLE AT THE SOUTH WEST CORNER OF RAYNOR AVENUE AND INGALLS AVENUE ELEV. = 654.924
B.M. # 52	SOUTHEAST ARROW BOLT ON FIRE HYDRANT LOCATED AT THE NORTHEAST CORNER OF RAYNOR AVENUE AND HUTCHINS STREET ELEV. = 657.714
B.M. # 53	RAILROAD SPIKE SET IN NORTHWEST FACE POWER POLE AT THE SOUTH EAST CORNER OF RAYNOR AVENUE AND MORAN STREET ELEV. = 656.015
B.M. # 54	RAILROAD SPIKE SET IN NORTHWEST FACE POWER POLE AT THE SOUTHWEST CORNER OF MORAN STREET AND KELLY AVENUE ELEV. = 658.346
B.M. # 55	RAILROAD SPIKE SET IN SOUTHEAST FACE POWER POLE WITH LIGHT AT THE NORTHWEST CORNER OF MORAN STREET AND WILCOX STREET ELEV. = 657.498
B.M. # 56	RAILROAD SPIKE SET IN SOUTHEAST FACE POWER POLE WITH LIGHT AT THE NORTHWEST CORNER OF MORAN STREET AND OAKLAND AVENUE ELEV. = 653.508
B.M. # 57	RAILROAD SPIKE SET IN SOUTHEAST FACE POWER POLE AT THE NORTHWEST CORNER OF MORAN STREET AND CLEMENT STREET ELEV. = 650.499
B.M. # 58	RAILROAD SPIKE SET IN SOUTHEAST FACE POWER POLE AT THE NORTHWEST CORNER OF MORAN STREET AND HIGHLAND AVENUE ELEV. = 643.983
B.M. # 59	RAILROAD SPIKE SET IN EAST FACE POWER POLE AT THE NORTHWEST CORNER OF MORAN STREET AND NICHOLSON STREET ELEV. = 643.336
B.M. # 60	RAILROAD SPIKE SET IN SOUTHWEST FACE POWER POLE WITH LIGHT AT THE NORTHEAST CORNER OF MORAN STREET AND VINE STREET ELEV. = 644.47
B.M. # 62	NORTHWEST FLANGE BOLT ON FIRE HYDRANT LOCATED AT THE SOUTHEAST CORNER OF MORAN STREET AND CORA STREET ELEV. = 630.813
B.M. # 63	RAILROAD SPIKE SET IN WEST FACE POWER POLE AT THE NORTHEAST CORNER OF MORAN STREET AND ELIZABETH STREET ELEV. = 616.611
B.M. # 64	RAILROAD SPIKE SET IN SOUTHWEST FACE POWER POLE WITH LIGHT AT THE NORTHEAST CORNER OF MORAN STREET AND SUMMIT STREET ELEV. = 603.045
B.M. # 68	RAILROAD SPIKE SET IN SOUTHWEST FACE POWER POLE WITH LIGHT AT THE NORTHEAST CORNER OF MORAN STREET AND CENTER STREET ELEV. = 639.01
B.M. # 71	RAILROAD SPIKE SET IN WEST FACE POWER POLE WITH LIGHT AT THE NORTHEAST CORNER OF ELIZABETH STREET AND HUTCHINS STREET ELEV. = 621.292

ABBREVIATIONS

CONC	PORTLAND CEMENT CONCRETE	C&G	CURB AND GUTTER	X=	EXTERNAL DISTANCE OF VERTICAL CURVE
CL	CENTERLINE	BC	BACK OF CURB	PC	POINT OF CURVATURE
BIT	BITUMINOUS PAVEMENT	EOP	EDGE OF PAVEMENT	PI	POINT OF INTERSECTION
GR	GRAVEL	PL	PROPERTY LINE	PT	POINT OF TANGENCY
CMP	CORRUGATED METAL PIPE	ROW	RIGHT OF WAY	POT	POINT ON TANGENT
FH	FIRE HYDRANT	FL	FLOW LINE	PCC	POINT OF COMPOUND CURVATURE
CI	CAST IRON	TF	TOP OF FRAME	PRC	POINT OF REVERSE CURVE
DI	DUCTILE IRON	TC	TOP OF CURB OR CONCRETE	VC	VERTICAL CURVE
F–F	FACE–TO–FACE	R	STRUCTURE TO BE RECONSTRUCTED	N&W	NAIL AND WASHER
E–E	EDGE–TO–EDGE	A	STRUCTURE TO BE ADJUSTED	TCE	TEMPORARY CONSTRUCTION EASEMENT
B–B	BACK–TO–BACK	▲	CENTRAL ANGLE	SS	STORM SEWER
BM	BENCH MARK	D=	DEGREE OF CURVE	SAN SEW	SANITARY SEWER
INV EL	INVERT ELEVATION	T=	TANGENT LENGTH	PROP	PROPOSED
CL EL	CENTERLINE ELEVATION	L=	CURVE LENGTH	STN STL	STAINLESS STEEL
P	POINT	R=	RADIUS OF CURVE	RJT	RESTRAINED JOINT
G	GUTTER	E=	EXTERNAL DISTANCE	HDD	HORIZONTAL DIRECTIONALLY DRILLED
C	CURB	SE=	SUPERELEVATION (FT. PER FT. OF WIDTH)	LF	LINEAR FEET

FINAL DESIGN
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BAXTER & WOODMAN consulting engineers

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	REVISED –
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CITY OF JOLIET, ILLINOIS
GARNSEY PARK PHASE 5A WATER MAIN IMPROVEMENTS
CITY OF JOLIET CONTRACT NO. 2777-0124

LEGEND, BENCHMARKS AND ABBREVIATIONS

SCALE: AS NOTED | PROJECT NO: 221587.40

DESIGNED – MJK	TOTAL SHEETS: 21
DRAWN – JJS	SHEET NO.: 3
CHECKED – LMS	
DATE – 10/26/2023	

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CITY OF JOLIET WATER SYSTEM GENERAL NOTES

1. VERIFY LOCATION, SIZE, AND DEPTH OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION OF THE WATER MAIN. THE LOCATIONS OF EXISTING UTILITIES AS SHOWN ON THE DRAWINGS HAVE BEEN DETERMINED FROM THE BEST AVAILABLE INFORMATION AND IS GIVEN FOR THE CONVENIENCE OF THE CONTRACTOR. THE ENGINEER AND OWNER DO NOT ASSUME RESPONSIBILITY FOR THE ACCURACY OF THE LOCATION SHOWN. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONTACT ALL UTILITY COMPANIES AND LOCATE UTILITIES PRIOR TO ANY WORK.

2. WHENEVER IT BECOMES NECESSARY TO RELOCATE UNDERGROUND GAS MAINS, TELEPHONE CONDUIT, OR ELECTRICAL LINES OR SUPPORT OR RELOCATE UTILITY POLES, THE UTILITY COMPANY INVOLVED WILL MAKE SUCH RELOCATION OR PROVIDE POLE SUPPORT. NOTIFY THE UTILITY COMPANY PROMPTLY. THIS WORK WILL BE INCIDENTAL TO THE CONTRACT

3. WHEREVER OBSTRUCTIONS NOT SHOWN ON THE DRAWINGS ARE ENCOUNTERED DURING THE PROGRESS OF THE WORK AND INTERFERE TO SUCH AN EXTENT 'THAT ALTERATIONS TO THE DRAWINGS ARE REQUIRED, THE ENGINEER SHALL BE NOTIFIED PRIOR TO ANY CHANGES.

4. HORIZONTAL AND VERTICAL SEPARATION OF WATER MAINS AND SEWER LINES SHALL BE DONE IN ACCORDANCE WITH THE LATEST EDITION OF THE "STANDARD SPECIFICATION FOR WATER AND SEWER CONSTRUCTION IN ILLINOIS".

5. PROVIDE 48 HOURS ADVANCE NOTICE TO THE CITY WHEN CONNECTION TO AN EXISTING WATER MAIN WILL BE MADE. COORDINATE SHUTDOWN OF EXISTING WATER MAINS WHEN REQUIRED WITH THE CITY. SCHEDULE THE WORK TO MINIMIZE THE NUMBER AND LENGTH OF SHUTDOWNS. PROVIDE WRITTEN NOTIFICATION OF SHUTDOWNS TO WATER USERS AFFECTED 24 HOURS IN ADVANCE.

6. NOTIFY THE CITY'S PUBLIC UTILITIES DEPARTMENT IMMEDIATELY IF EXISTING LEAD WATER SERVICES ARE DISCOVERED.

7. PROVIDE PROPERTY OWNERS ADVANCE NOTICE OF CONSTRUCTION ACTIVITIES THAT WILL RESTRICT THE USE OF THEIR DRIVEWAYS.

8. DO NOT STORE BEDDING AND BACKFILL MATERIALS, PIPES, FITTINGS, VAULTS, OR OTHER MATERIALS IN AREAS THAT WILL OBSTRUCT SIGHT LINES FOR STREETS AND DRIVEWAYS.

9. ALL PROPOSED WATER MAIN AND SERVICES UNDER AND WITHIN 2' OF PAVEMENT OR SIDEWALK SHALL BE BACKFILLED WITH TRENCH BACKFILL WHICH SHALL BE CRUSHED STONE, GRADATION CA 6 OR CA 7.

10. INSTALL NEW WATER MAIN WITH A MINIMUM OF 5' COVER BELOW EXISTING OR PROPOSED GROUND SURFACE UNLESS GREATER DEPTH IS REQUIRED TO AVOID EXISTING UTILITIES OR WHERE INDICATED ON THE DRAWINGS.

11. PROVIDE COMPRESSION TYPE FIRE HYDRANTS WITH A 5¼-INCH MINIMUM SIZE MAIN VALVE ASSEMBLY, O-RING SEALS, TWO 2½-INCH HOSE NOZZLES, AND A 4½-INCH PUMPER NOZZLE WITH NATIONAL STANDARD THREADS, A NATIONAL STANDARD OPERATING NUT, AND AN ABOVE GROUND BREAK FLANGE. COLOR FOR HYDRANTS ON POTABLE DISTRIBUTION MAINS SHALL BE RED, HYDRANTS ON RAW WATER MAINS SHALL BE GREEN. COLOR FOR PRIVATE SYSTEM HYDRANTS SHALL BE YELLOW. ACCEPTABLE MANUFACTURERS ARE CLOW MEDALLION, EJ 5BR250, OR MUELLER CENTURION A423.

12. PROVIDE A TEMPORARY COVERING OVER ALL NEW FIRE HYDRANTS UNTIL ALL NEW WATER MAINS ARE PUT INTO SERVICE AND NEW FIRE HYDRANTS ARE OPERABLE.

13. GATE VALVES SHALL BE IN ACCORDANCE WITH AWWA C515 (DUCTILE IRON BODY), BRONZE FITTED, RESILIENT WEDGE AND SEAT TYPE WITH NON-RISING STEM AND O-RING PACKING. ALL INTERNAL AND EXTERNAL SURFACES SHALL HAVE A FUSION BONDED EPOXY COATING. ACCEPTABLE VALVE MANUFACTURERS ARE AMERICAN FLOW CONTROL, CLOW, AND EJ.

14. BUTTERFLY VALVES SHALL BE IN ACCORDANCE WITH AWWA C504 FOR PRESSURE CLASS 150B, CAST IRON BODY, RUBBER-SEATED, TIGHT CLOSING TYPE SUITABLE FOR BURIED SERVICE. ACCEPTABLE VALVE MANUFACTURERS ARE AMERICAN FLOW CONTROL, CLOW, AND EJ.

15. LOCATE PRESSURE CONNECTIONS, IF INDICATED ON THE DRAWINGS OR WHEN DIRECTED BY THE ENGINEER, A MINIMUM OF 2' FROM ANY EXISTING REPAIR SLEEVES OR PIPE JOINTS.

16. THE CITY OF JOLIET WATER DEPARTMENT SHALL BE RESPONSIBLE FOR COMPLETING ALL TAPS TO EXISTING WATER MAINS. CONTRACTOR WILL BE RESPONSIBLE FOR CALLING 815-724-4230 TO SCHEDULE AN APPOINTMENT WITH THE CITY WATER DEPARTMENT. APPOINTMENTS ARE AVAILABLE ON TUESDAYS AND THURSDAYS.

17. SUCCESSFULLY TEST, DISINFECT, AND FLUSH WATER MAIN, AND OBTAIN ACCEPTANCE OF THE WATER MAIN BY THE CITY OF JOLIET, PRIOR TO MAKING WATER SERVICE CONNECTIONS. FLUSH PIPELINES TO OBTAIN A VELOCITY OF 2.5 FT/S PER AWWA STANDARD C651.

18. CITY OF JOLIET WILL ALLOW TESTING NEW WATER MAIN AGAINST EXISTING VALVES OR AGAINST A CAP WHERE A NEW VALVE IS NOT PRESENT.

19. USE MECHANICAL JOINT FITTINGS TO PLUG/CAP EXISTING WATER MAINS TO REMAIN IN SERVICE AND FOR EXISTING WATER MAINS TO BE ABANDONED. PLUGS/CAPS ON WATER MAIN TO REMAIN IN SERVICE SHALL INCLUDE AN ADEQUATELY SIZED CAST-IN-PLACE CONCRETE THRUST BLOCK.

20. AS-BUILT DRAWINGS SHALL BE PREPARED BY THE CONTRACTOR AND SUBMITTED TO THE ENGINEER AS SOON AS THE PROJECT IS COMPLETED. ANY CHANGE IN THE LENGTH, LOCATION, OR ALIGNMENT SHALL BE SHOWN IN RED.

21. EROSION CONTROL WILL BE CONSTRUCTED IN ACCORDANCE WITH STANDARD SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL AS CONTAINED IN IEPA/WPC/87-012 OR CURRENT EDITION.

22. REPLACE ALL CONCRETE SIDEWALKS DISTURBED BY CONSTRUCTION TO THE NEAREST CONSTRUCTION JOINT. A MAXIMUM LENGTH OF TEN LINEAL FEET PER CROSSING WILL BE UTILIZED FOR PAY QUANTITY CALCULATIONS.

23. PAVEMENT RESTORATION WILL BE MEASURED IN PLACE AND THE AREA COMPUTED IN SQUARE YARDS. ALL AREAS DISTURBED WILL BE REPLACED, BUT THE MAXIMUM ALLOWABLE WIDTHS USED FOR PAY QUANTITY CALCULATIONS WILL BE 6 FEET CENTERED ON THE PIPE. IF THE CONTRACTOR RELOCATES THE TRENCH AWAY FROM THE CURB AND GUTTER, THE PAVEMENT PATCH WILL EXTEND FROM THE SAWCUT IN THE EXISTING PAVEMENT TO THE FACE OF THE GUTTER AND THE MAXIMUM ALLOWABLE WIDTH OF 6 FEET WILL BE USED FOR PAY QUANTITY CALCULATIONS.

    - N. RAYNOR AVENUE, MORAN STREET TO INGALLS AVENUE SHALL HAVE 5 INCHES OF BINDER AND 2 INCHES OF SURFACE COURSE.
    - MORAN STREET, BROADWAY STREET TO N. RAYNOR AVENUE SHALL HAVE 2.5 INCHES OF BINDER AND 1.5 INCHES OF SURFACE COURSE.

23. IT SHALL BE THE CONTRACTOR'S DUTY AND RESPONSIBILITY TO ASCERTAIN AND EXECUTE THE MEANS, METHODS, AND SEQUENCE OF CONSTRUCTION IN ACCORDANCE WITH THE DRAWINGS, SPECIFICATIONS, AND OTHER CONTRACT DOCUMENTS. THIS SHALL INCLUDE, BUT SHALL NOT BE LIMITED TO, THE EXCLUSIVE DUTY AND RESPONSIBILITY TO PROVIDE FOR WORKPLACE SAFETY AND WORKER SUPERVISION. IT SHALL EXCLUSIVELY BE THE CONTRACTOR'S DUTY AND RESPONSIBILITY TO INVESTIGATE AND ASCERTAIN THE CURRENT PHYSICAL STATE AND OPERATIONAL STATUS OF THE CITY'S WATER SUPPLY SYSTEM AND THE CITY'S SANITARY SEWER SYSTEM, INCLUDING WHETHER A WATER MAIN OR OTHER VESSEL IS OPERATIONAL, CONTAINS WATER, IS PRESSURIZED, OR IS OTHERWISE SAFE TO ALTER. ANY INFORMATION PROVIDED BY THE CITY, OR ITS EMPLOYEES AND CONSULTANTS, REGARDING THE STATE OF ITS WATER SUPPLY AND SANITARY SEWER SYSTEMS IS PROVIDED AS A COURTESY TO THE CONTRACTOR BUT IS NOT WARRANTED TO BE TRUE AND MAY NOT BE RELIED ON BY THE CONTRACTOR IN SATISFACTION OF, OR TO DIMINISH, ITS EXCLUSIVE DUTY TO ASCERTAIN AND EXECUTE THE MEANS, METHODS, AND SEQUENCES OF CONSTRUCTION IN ACCORDANCE WITH THE DRAWINGS, SPECIFICATIONS, AND OTHER CONTRACT DOCUMENTS AND ITS EXCLUSIVE RESPONSIBILITY TO PROVIDE FOR WORKPLACE SAFETY AND WORKER SUPERVISION.

24. CONTRACTOR TO COMPLY WITH PROJECT MILESTONES AND REQUIREMENTS SPECIFIED IN SUPPLEMENTARY CONDITIONS AND SECTION 01 31 13.16

25. CONTRACTOR TO DISTRIBUTE DOOR HANGERS AT VARIOUS MILESTONES DURING THE PROJECT. DOOR HANGERS WILL BE PROVIDED BY THE OWNER. DOOR HANGERS MUST BE DISTRIBUTED AT THE FOLLOWING MILESTONES:
    - ONE WEEK PRIOR TO THE START OF CONSTRUCTION.
    - 48 HOURS IN ADVANCE OF WATER MAIN SHUTDOWNS TO ALL AFFECTED STRUCTURES (THE SAME STRUCTURE MAY RECEIVE MORE THAN ONE DOOR HANGER).
    - 48 HOURS IN ADVANCE OF WATER SERVICE LINE REPLACEMENTS.
    - ONE WEEK PRIOR TO RESTORATION ACTIVITIES ON ANY STREET.

26. CONTRACTOR SHALL COORDINATE WITH CITY ARBORIST IN AREAS WHERE THE WATER MAIN IS TO BE INSTALLED WITH TREE TUNNELING OR WHERE TREE REMOVAL IS NECESSARY FOR THE INSTALLATION OF THE WATER MAIN.

SUMMARY OF QUANTITIES

No.	PAY ITEM	UNIT	QUANTITY
PART A – WATER MAIN IMPROVEMENTS			
1	PRECONSTRUCTION VIDEO RECORDING	LSUM	1
2	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	LSUM	1
3	GRANULAR TRENCH BACKFILL	CUYD	4,600
4	TRENCH BACKFILL (SPECIAL)	CUYD	25
5	WATER MAIN (OPEN CUT), 6-INCH DI	FOOT	164
6	WATER MAIN (OPEN CUT), 8-INCH	FOOT	4,593
7	WATER MAIN (OPEN CUT), 8-INCH DI	FOOT	450
8	WATER MAIN (OPEN CUT), 12-INCH	FOOT	1,288
9	WATER MAIN (OPEN CUT), 12-INCH DI	FOOT	155
10	CASING PIPE (TUNNELING UNDER SEWER), 16-INCH	FOOT	74
11	MISCELLANEOUS FITTINGS	POUND	6,000
12	CONNECT TO WATER MAIN (NON-PRESSURE), 6-INCH	EACH	13
13	CONNECT TO WATER MAIN (NON-PRESSURE), 8-INCH	EACH	9
14	CONNECT TO WATER MAIN (NON-PRESSURE), 10-INCH	EACH	2
15	CONNECT TO WATER MAIN (NON-PRESSURE), 12-INCH	EACH	1
16	CONNECT TO WATER MAIN (PRESSURE), 8-INCH X 8-INCH	EACH	1
17	GATE VALVE, 8-INCH	EACH	25
18	GATE VALVE, 12-INCH	EACH	5
19	VALVE BOX	EACH	1
20	VALVE VAULT, 4-FOOT DIAMETER	EACH	25
21	VALVE VAULT, 5-FOOT DIAMETER	EACH	5
22	VALVE VAULT (ADDITIONAL DEPTH), 4-FOOT DIAMETER	VFT	2
23	VALVE VAULT (ADDITIONAL DEPTH), 5-FOOT DIAMETER	VFT	5
24	FIRE HYDRANT	EACH	16
25	FIRE HYDRANT BARREL EXTENSION	VFT	2
26	LINE STOP, 6-INCH	EACH	1
27	LINE STOP, 8-INCH	EACH	1
28	LINE STOP, 10-INCH	EACH	1
29	LINE STOP, 12-INCH	EACH	1
30	SANITARY SEWER REMOVAL AND REPLACEMENT, 8-INCH	FOOT	26
31	SANITARY SEWER REMOVAL AND REPLACEMENT, 10-INCH	FOOT	144
32	SANITARY SEWER REMOVAL AND REPLACEMENT, 12-INCH	FOOT	71
33	STORM SEWER REMOVAL AND REPLACEMENT, 12-INCH	FOOT	41
34	REMOVE AND REPLACE INLET, 2-FOOT DIAMETER, TYPE A	EACH	3
35	REMOVE AND REPLACE STORM MANHOLE, 4-FOOT DIAMETER, 0 TO 8 FEET DEEP	EACH	1
36	SANITARY SEWER (OPEN CUT), 8-INCH, PVC, 0 TO 8 FEET DEEP	FOOT	259
37	CONNECTION TO EXISTING SANITARY SEWER MANHOLE, 8-INCH	EACH	1
38	SANITARY SERVICE LINES, 6-INCH	FOOT	105
39	TELEVISING OF NEW SEWER FOR FINAL INSPECTION	FOOT	364
40	ABANDONMENT OF EXISTING WATER MAINS AND APPURTENANCES	LSUM	1
41	WATER SERVICE CONNECTION TO WATER MAIN AND CURB STOP, 1-INCH	EACH	72
42	WATER SERVICE CONNECTION TO WATER MAIN AND CURB STOP, 1.5-INCH	EACH	2
43	WATER SERVICE CONNECTION TO WATER MAIN AND CURB STOP, 2-INCH	EACH	2
44	WATER SERVICE LINE TYPE K – OPEN CUT, 1-INCH	FOOT	630
45	WATER SERVICE LINE TYPE K – OPEN CUT, 1.5-INCH	FOOT	15
46	WATER SERVICE LINE TYPE K – OPEN CUT, 2-INCH	FOOT	35
47	WATER SERVICE LINE TYPE K – DIRECTIONAL DRILLING, 1-INCH	FOOT	1,390
48	WATER SERVICE LINE TYPE K – DIRECTIONAL DRILLING, 1.5-INCH	FOOT	35
49	WATER SERVICE LINE TYPE K – DIRECTIONAL DRILLING, 2-INCH	FOOT	35
50	WATER SERVICE CASING PIPE	FOOT	240
51	TEMPORARY WATER DISTRIBUTION SYSTEM	LSUM	1
52	REMOVE AND REPLACE DRAIN TILES, 6-INCH THROUGH 12-INCH	FOOT	120
53	ADJUSTING SANITARY SEWER SERVICE LINE	EACH	21
54	EXPLORATORY EXCAVATION	EACH	9
55	INLET PROTECTION FILTER	EACH	96
56	RESTORATION OF LAWNS AND PARKWAYS	SQYD	500
57	CLASS B PATCH	SQYD	80
58	HOT-MIX ASPHALT REMOVAL AND REPLACEMENT, 2.5-INCH BINDER 1.5-INCH SURFACE	SQYD	3,800
59	HOT-MIX ASPHALT REMOVAL AND REPLACEMENT, 5.5-INCH BINDER 1.5-INCH SURFACE	SQYD	1,100
60	HOT-MIX ASPHALT DRIVEWAY REMOVAL AND REPLACEMENT, 3-INCH	SQYD	30
61	PCC DRIVEWAY REMOVAL AND REPLACEMENT, 6-INCH	SQYD	140
62	CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	1,600
63	PCC SIDEWALK REMOVAL AND REPLACEMENT	SQFT	4,000
64	FENCE TO BE REMOVED AND RE-ERECTED	FOOT	30
65	DETECTABLE WARNINGS	SQFT	90
66	PAVEMENT MARKING – LINE, 4-INCH (THERMOPLASTIC)	FOOT	150
67	PAVEMENT MARKING – LINE, 6-INCH (THERMOPLASTIC)	FOOT	2,300
68	PAVEMENT MARKING – LINE, 12-INCH (THERMOPLASTIC)	FOOT	350
69	PAVEMENT MARKING – LINE, 24-INCH (THERMOPLASTIC)	FOOT	160
70	EPOXY PAVEMENT MARKING – LINE, 24-INCH	FOOT	20
71	PAVEMENT MARKING REMOVAL, WATER BLASTING	SQFT	10
72	TREE ROOT PRUNING	EACH	29
73	TREE TRIMMING	LSUM	1
74	TREE REMOVAL AND REPLACEMENT, 6-INCH THROUGH 12-INCH	EACH	1
75	TREE REMOVAL AND REPLACEMENT, OVER 12 INCH	EACH	1
76	DUST CONTROL	DAY	25
77	ROCK EXCAVATION	CUYD	350
78	REMOVAL AND REPLACEMENT OF UNSUITABLE MATERIAL	CUYD	87
79	SOIL TESTS FOR CONTAMINANTS	EACH	13
80	CONTAMINATED WASTE DISPOSAL	CUYD	87
PART B – LEAD SERVICE LINE IMPROVEMENTS			
81	PROJECT MANAGEMENT (LEAD SERVICE REPLACEMENT)	HOUR	30
85	WATER SERVICE LINE TYPE K – DIRECTIONAL DRILLING, 1-INCH (LEAD SERVICE REPLACEMENT)	FOOT	240
86	WATER SERVICE LINE TYPE K – DIRECTIONAL DRILLING, 1.5-INCH (LEAD SERVICE REPLACEMENT)	FOOT	30
87	WATER SERVICE LINE TYPE K – DIRECTIONAL DRILLING, 2-INCH (LEAD SERVICE REPLACEMENT)	FOOT	30
88	WATER SERVICE LINE TYPE L (LEAD SERVICE REPLACEMENT), 3/4-INCH	FOOT	25
89	WATER SERVICE LINE TYPE L (LEAD SERVICE REPLACEMENT), 1-INCH	FOOT	25
90	WATER SERVICE LINE TYPE L (LEAD SERVICE REPLACEMENT), 1.5-INCH	FOOT	25
91	WATER SERVICE LINE TYPE L (LEAD SERVICE REPLACEMENT), 2-INCH	FOOT	25
92	WATER SERVICE CASING PIPE (LEAD SERVICE REPLACEMENT), 2-INCH	FOOT	100
93	WATER SERVICE CONNECTION ON PRIVATE PROPERTY – BASEMENT OR CRAWL SPACE (LEAD SERVICE REPLACEMENT)	EACH	5
94	WATER SERVICE CONNECTION ON PRIVATE PROPERTY – SLAB (LEAD SERVICE REPLACEMENT)	EACH	5
95	UTILITY LOCATION – PRIVATE PROPERTY (LEAD SERVICE REPLACEMENT)	EACH	10
96	WATER METER RELOCATION (LEAD SERVICE REPLACEMENT)	EACH	10
97	WATER METER REPLACEMENT (LEAD SERVICE REPLACEMENT)	EACH	10
98	LANDSCAPING PROJECT MANAGEMENT (LEAD SERVICE REPLACEMENT)	HOUR	20
99	LANDSCAPING RESTORATION ALLOWANCE (LEAD SERVICE REPLACEMENT)	EACH	10
100	SHRUB AND BRUSH DISPOSAL (LEAD SERVICE REPLACEMENT)	EACH	20
101	FENCE TO BE REMOVED AND RE-ERECTED (LEAD SERVICE REPLACEMENT)	FOOT	50
102	RESTORATION OF LAWNS AND PARKWAYS (LEAD SERVICE REPLACEMENT)	SQYD	60
103	PCC DRIVEWAY REMOVAL AND REPLACEMENT, 6-INCH (LEAD SERVICE REPLACEMENT)	SQYD	20
104	PCC SIDEWALK REMOVAL AND REPLACEMENT (LEAD SERVICE REPLACEMENT)	SQFT	450
PART C – SEWER IMPROVEMENTS			
105	SANITARY SEWER MANHOLE BUILT OVER EXISTING SEWER, TYPE A, 4-FOOT DIAMETER, 0 TO 8 FEET DEEP	EACH	2

FINAL DESIGN
FOR BIDDING

P:\JOLTC\221587-2024 WATER MAIN SURV\CAD\GARNSEY PARK PHASE 5\01_CIVIL 3D\01_SHTS-PLANS\221587-GARNSEY PARK PHASE 5_COVER_GEN_DETS.DWG GENERAL NOTES AND SOQ
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CITY OF JOLIET, ILLINOIS
GARNSEY PARK PHASE 5A WATER MAIN IMPROVEMENTS
CITY OF JOLIET CONTRACT NO. 2777-0124

GENERAL NOTES AND SUMMARY OF QUANTITIES

SCALE: AS NOTED | PROJECT NO: 221587.40

DESIGNED – MJK
DRAWN – JJS
CHECKED – LMS
DATE – 10/26/2023

TOTAL SHEETS: 21 | SHEET NO.: 4

NOTE:
STORM SEWER PIPE ON THIS SHEET HAS BEEN PREVIOUSLY INSTALLED AS REINFORCED CONCRETE PIPE CONFORMING TO ASTM C76 WITH JOINTS CONFORMING TO ASTM C361 OR ASTM C443.

SEE SHEET 8
FOR DESCRIPTION OF WATER MAIN WORK

ABANDON EXISTING VALVE BOX
ABANDON EXISTING VALVE VAULT

9 L.F. OF 6" RJT DI WATER MAIN,
(1) 12" X 6" TEE,
(1) FIRE HYDRANT

WATER SERVICE CONNECTION TO WATER MAIN AND CURB STOP (TYP.)

WATER SERVICE LINE (TYP.)

ABANDON EXISTING VALVE BOX
ABANDON EXISTING FIRE HYDRANT

10 L.F. OF 6" RJT DI WATER MAIN,
(1) 12" X 6" TEE,
(1) FIRE HYDRANT

TREE ROOT PRUNING

ABANDON EXISTING FIRE HYDRANT

66 L.F. OF 12" RJT WATER MAIN,
30 L.F. OF 12" PIPE INSULATION,
(1) 12" VALVE IN 5' DIA. VAULT

SEE SHEET 8
FOR DESCRIPTION OF WATER MAIN WORK

44 L.F. OF 12" RJT DI WATER MAIN,
(2) 12" 45° BENDS,
(1) 12" VALVE IN 5' DIA. VAULT,
(1) 6" NON-PRESSURE CONNECTION,
(1) 12" x 6" REDUCER,
(1) 12" SLEEVE

ABANDON EXISTING 6" WATER MAIN

363 L.F. OF 12" WATER MAIN

CONTRACTOR TO COORDINATE TEMPORARY BRACING OF UTILITY POLE WITH COMED, CONSIDERED INCIDENTAL TO THE COST OF CONSTRUCTION

NOTE:
WATER SERVICES: (15) WATER SERVICE CONNECTIONS ARE ANTICIPATED ON THIS STREET. FINAL NUMBER AND LOCATION TO BE DETERMINED IN THE FIELD BY THE ENGINEER.

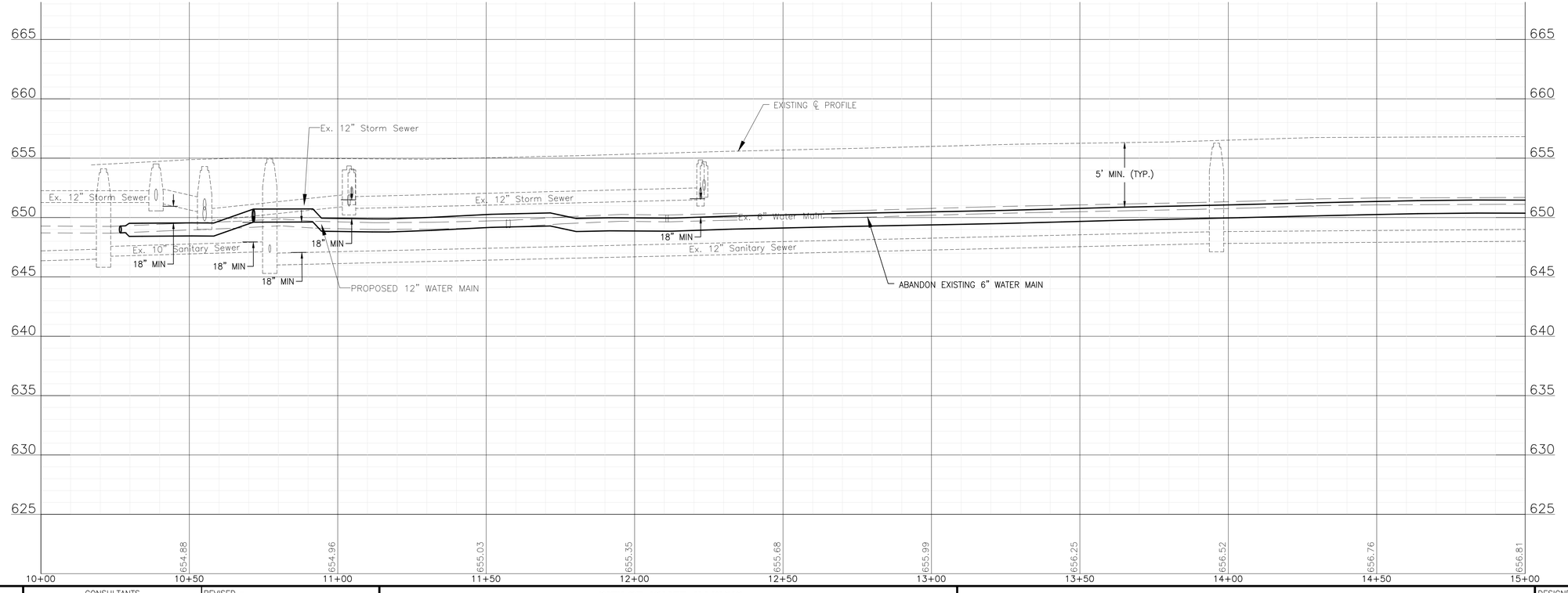
MORAN STREET

N. RAYNOR AVENUE

FOR CONTINUATION SEE SHEET 8

SEE SHEET 6

MATCH LINE STA. 15+00



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	REVISED –

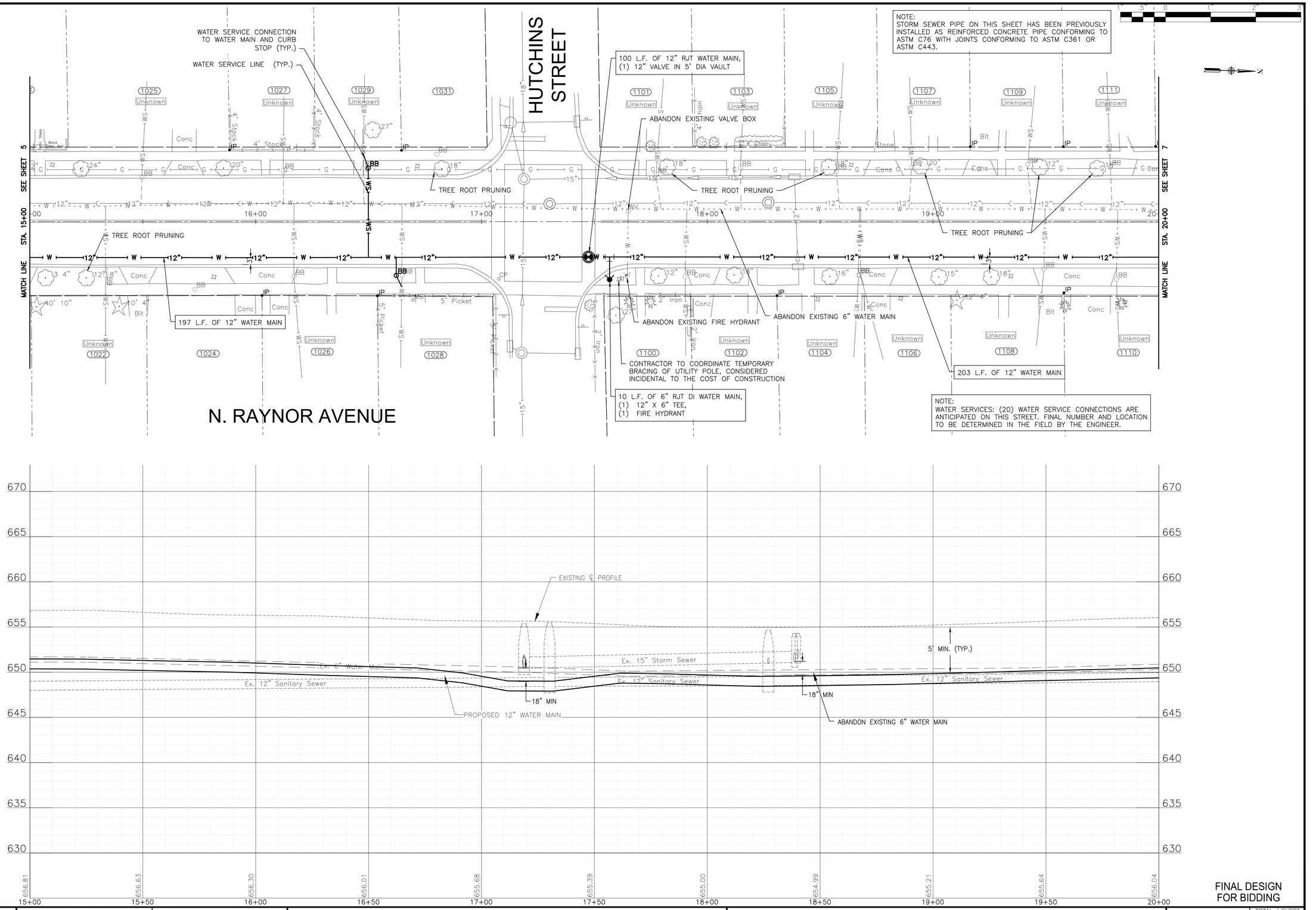
CITY OF JOLIET, ILLINOIS
GARNSEY PARK PHASE 5A WATER MAIN IMPROVEMENTS
CITY OF JOLIET CONTRACT NO. 2777-0124

NORTH RAYNOR AVENUE STA. 10+00 TO STA. 15+00 PLAN AND PROFILE

SCALE: HORIZ 1"=20' / VERT 1"=5' | PROJECT NO: 221587.40

		TOTAL SHEETS	SHEET NO.
DESIGNED – MJK			
DRAWN – JJS		21	5
CHECKED – LMS			
DATE – 10/26/2023			

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CITY OF JOLIET, ILLINOIS
GARNSEY PARK PHASE 5A WATER MAIN IMPROVEMENTS
CITY OF JOLIET CONTRACT NO. 2777-0124

NORTH RAYNOR AVENUE STA. 15+00 TO STA. 20+00 PLAN AND PROFILE

SCALE: HORIZ 1"=20' / VERT 1"=5' | PROJECT NO: 221587.40

DESIGNED – MJK	
DRAWN – JJS	
CHECKED – LMS	
DATE – 10/26/2023	

TOTAL SHEETS	SHEET NO.
21	6

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189 L.F. OF 12" WATER MAIN

WATER SERVICE CONNECTION TO WATER MAIN AND CURB STOP (TYP.)

WATER SERVICE LINE (TYP.)

48 L.F. OF 12" RJT DI WATER MAIN,
(1) 10" NON-PRESSURE CONNECTION,
(2) 12" 45° BENDS,
(4) 12" 45° VERTICAL BENDS,
(1) 12" x 10" REDUCER,
(1) 12" SLEEVE

ABANDON EXISTING 10" WATER MAIN

TREE ROOT PRUNING

TREE ROOT PRUNING

TREE ROOT PRUNING

ABANDON EXISTING VALVE BOX

ABANDON EXISTING FIRE HYDRANT

9 L.F. OF 6" RJT DI WATER MAIN,
(1) 12" X 6" TEE,
(1) FIRE HYDRANT

ABANDON EXISTING 6" WATER MAIN

119 L.F. OF 12" RJT WATER MAIN,
(1) 12" VALVE IN 5' DIA. VAULT

REMOVE AND REPLACE 26 L.F. OF 12" SANITARY SEWER WITH WMQ PIPE

NOTE:
WATER SERVICES: (14) WATER SERVICE CONNECTIONS ARE ANTICIPATED ON THIS STREET. FINAL NUMBER AND LOCATION TO BE DETERMINED IN THE FIELD BY THE ENGINEER.

NORTH RAYNOR AVENUE

INGALLS AVENUE

SEE SHEET 6

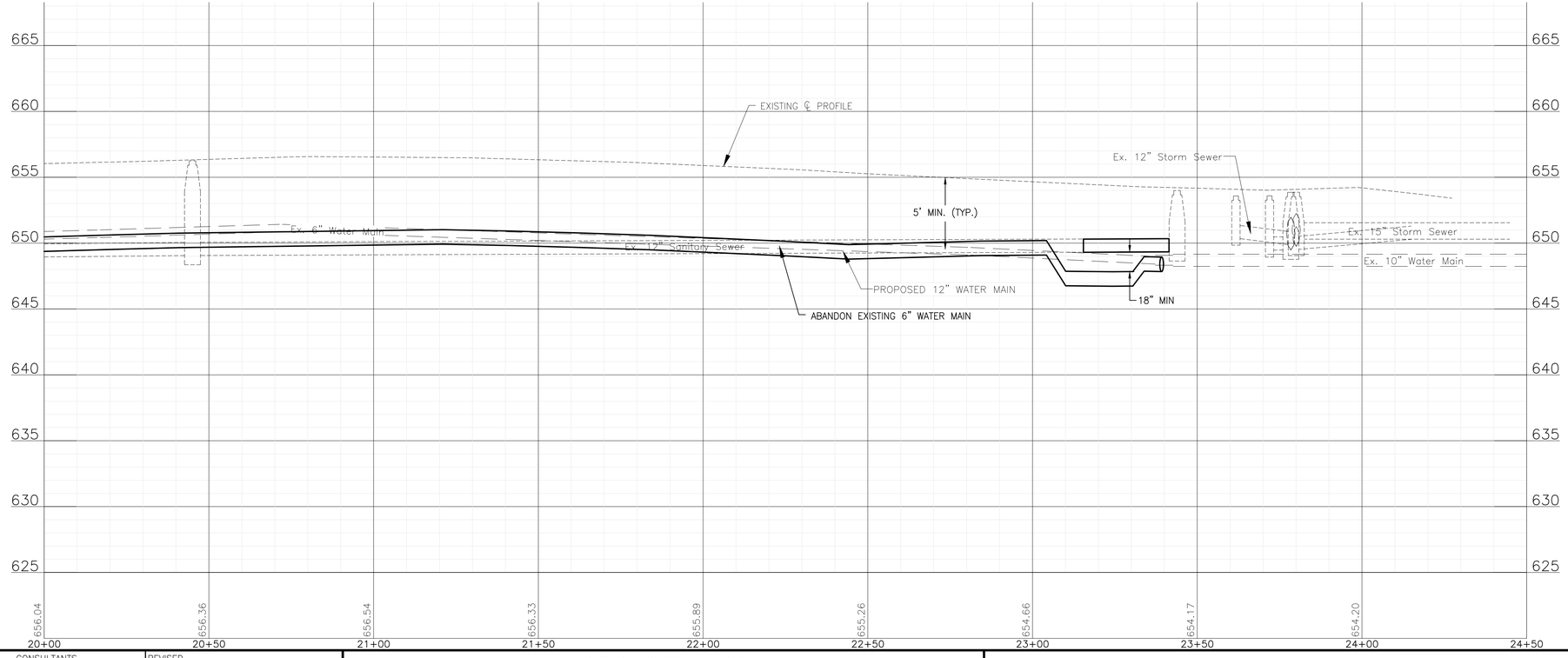
MATCH LINE

STA. 20+00

20+00 21+00 22+00 23+00 24+00 24+53

1113 1115 1116 1118 1119 1120 1121 1122 1123 1124 1125 1126 1127 1129

Unknown



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	REVISED –

CITY OF JOLIET, ILLINOIS
GARNSEY PARK PHASE 5A WATER MAIN IMPROVEMENTS
CITY OF JOLIET CONTRACT NO. 2777-0124

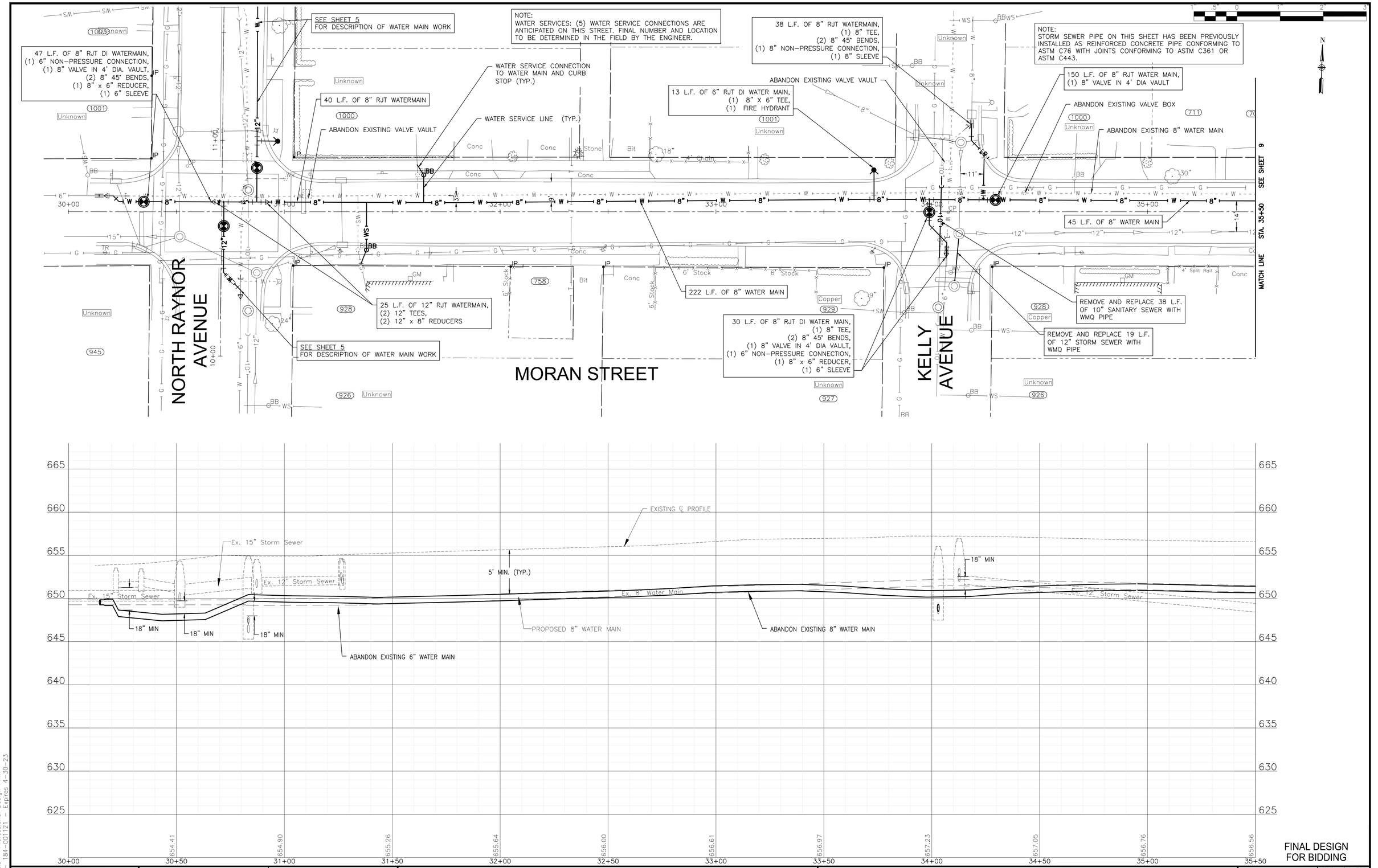
NORTH RAYNOR AVENUE STA. 20+00 TO STA. 25+00 PLAN AND PROFILE

SCALE: HORIZ 1"=20' / VERT 1"=5'

PROJECT NO: 221587.40

		TOTAL SHEETS	SHEET NO.
DESIGNED – MJK			
DRAWN – JJS			
CHECKED – LMS		21	7
DATE – 10/26/2023			

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		REVISED –	
		REVISED –	
		REVISED –	

MORAN STREET STA. 30+00 TO STA. 35+50 PLAN AND PROFILE

SCALE: HORIZ 1"=20' / VERT 1"=5' PROJECT NO: 221587.40

DESIGNED – MJK	TOTAL SHEETS	SHEET NO.	
DRAWN – JJS	21	8	
CHECKED – LMS			
DATE – 10/26/2023			

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NOTE:
STORM SEWER PIPE ON THIS SHEET HAS BEEN PREVIOUSLY INSTALLED AS REINFORCED CONCRETE PIPE CONFORMING TO ASTM C76 WITH JOINTS CONFORMING TO ASTM C361 OR ASTM C443.

39 L.F. OF 8" RJT WATER MAIN,
(1) 8" NON-PRESSURE CONNECTION,
(1) 8" SLEEVE

ABANDON EXISTING VALVE BOX

12 L.F. OF 6" RJT DI WATER MAIN,
(1) 8" X 6" TEE,
(1) FIRE HYDRANT

WATER SERVICE CONNECTION TO WATER MAIN AND CURB STOP (TYP.)

WATER SERVICE LINE (TYP.)

ABANDON EXISTING 8" WATER MAIN

39 L.F. OF 8" RJT WATER MAIN,
(1) 8" NON-PRESSURE CONNECTION,
(2) 8" 45° VERTICAL BENDS,,
(1) 8" SLEEVE

88 L.F. OF 8" RJT WATER MAIN,
22 L.F. OF 16" PIPE CASING (TUNNELING),
(1) 8" VALVE IN 4' DIA VAULT,
(4) 8" 45° VERTICAL BENDS,
(1) 8" CROSS

12 L.F. OF 6" RJT DI WATER MAIN,
(1) 8" X 6" TEE,
(1) FIRE HYDRANT

SEE SHEET 8 STA. 35+50 MATCH LINE

SEE SHEET 10 STA. 41+00 MATCH LINE

135 L.F. OF 8" WATER MAIN

150 L.F. OF 8" RJT WATER MAIN,
60 L.F. OF 8" PIPE INSULATION,
(2) 8" TEES,
(1) 8" VALVE IN 4' DIA VAULT

176 L.F. OF 8" WATER MAIN

28 L.F. OF 8" RJT DI WATER MAIN,
(1) 8" VALVE IN 4' DIA VAULT,
(2) 8" 45° BENDS,
(1) 6" NON-PRESSURE CONNECTION,
(1) 8" x 6" REDUCER,
(1) 6" SLEEVE

36 L.F. OF 8" RJT DI WATER MAIN,
(1) 6" NON-PRESSURE CONNECTION,
(2) 8" 45° VERTICAL BENDS,
(2) 8" 45° BENDS,
(1) 8" VALVE IN 4' DIA VAULT,
(1) 8" x 6" REDUCER,
(1) 6" SLEEVE

ABANDON EXISTING VALVE BOX

ABANDON EXISTING VALVE BOXES

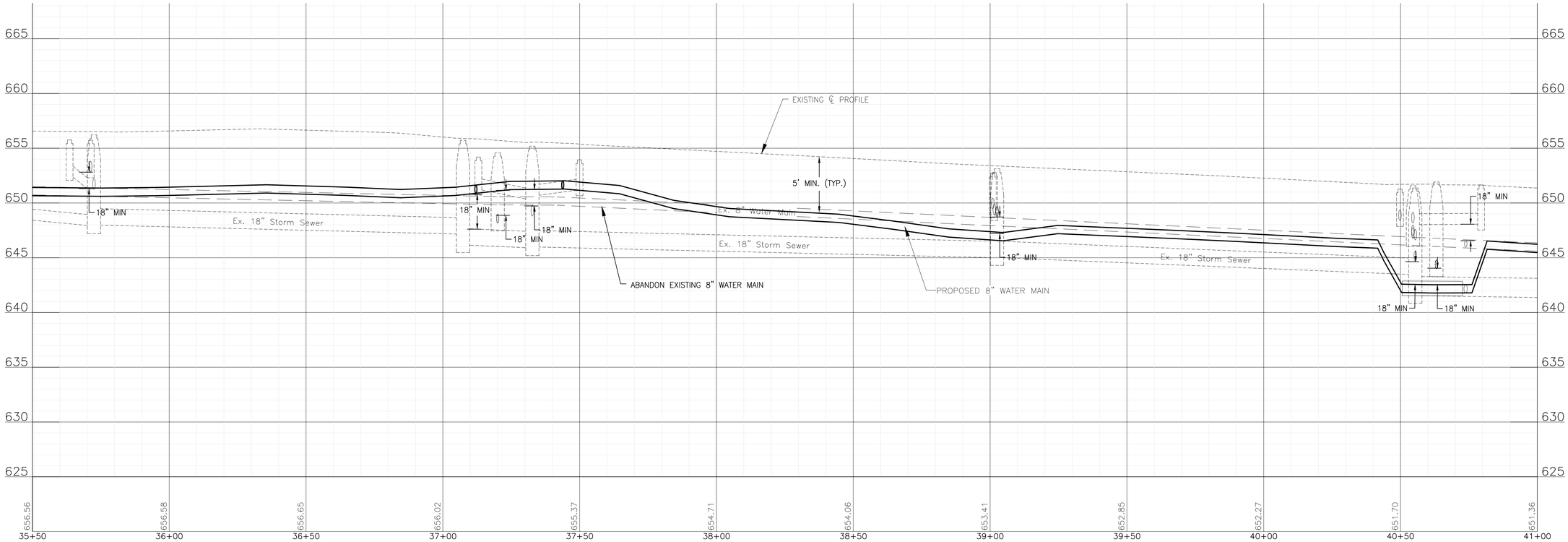
ABANDON EXISTING FIRE HYDRANT

NOTE:
WATER SERVICES: (1) WATER SERVICE CONNECTION IS ANTICIPATED ON THIS STREET. FINAL NUMBER AND LOCATION TO BE DETERMINED IN THE FIELD BY THE ENGINEER.

WILCOX STREET

MORAN STREET

OAKLAND AVENUE



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	REVISED –
	REVISED –

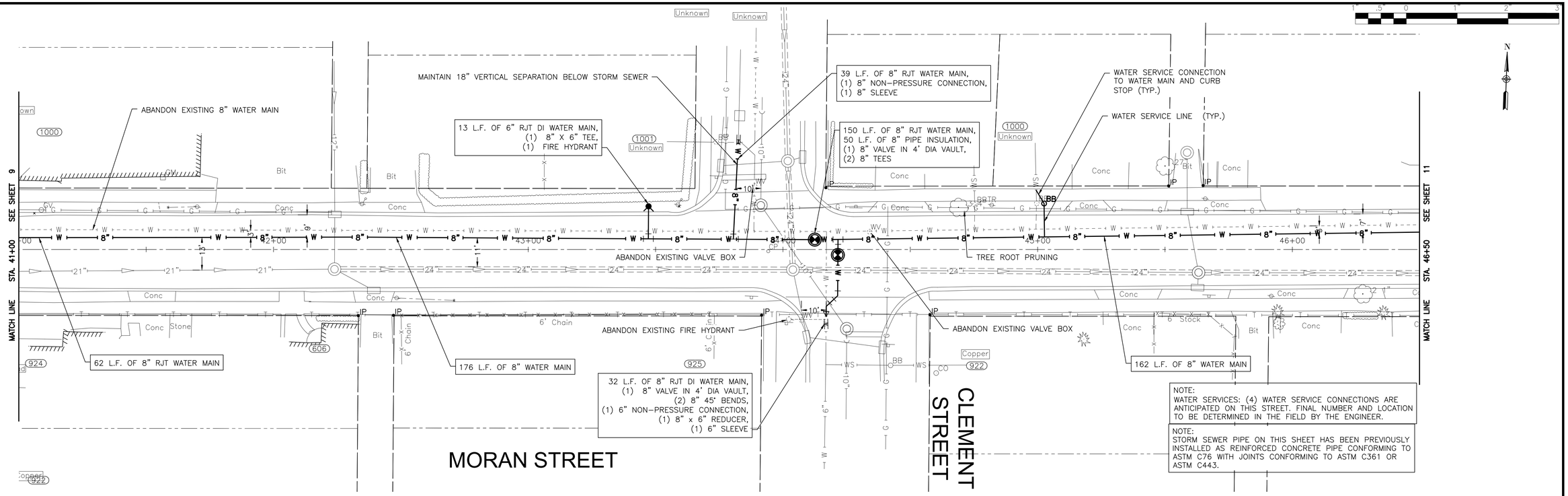
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GARNSEY PARK PHASE 5A WATER MAIN IMPROVEMENTS
CITY OF JOLIET CONTRACT NO. 2777-0124

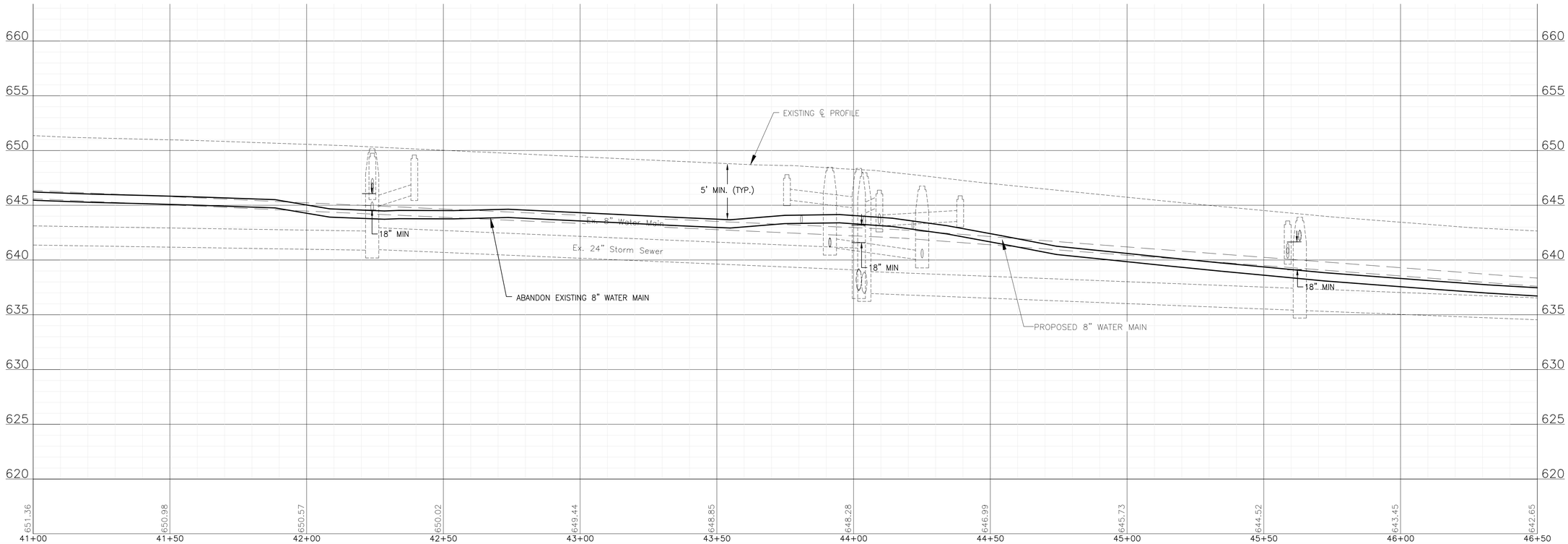
MORAN STREET STA. 35+50 TO STA. 41+00 PLAN AND PROFILE

SCALE: HORIZ 1"=20' / VERT 1"=5" | PROJECT NO: 221587.40

		TOTAL SHEETS	SHEET NO.
DESIGNED – MJK		21	9
DRAWN – JJS			
CHECKED – LMS			
DATE – 10/26/2023			

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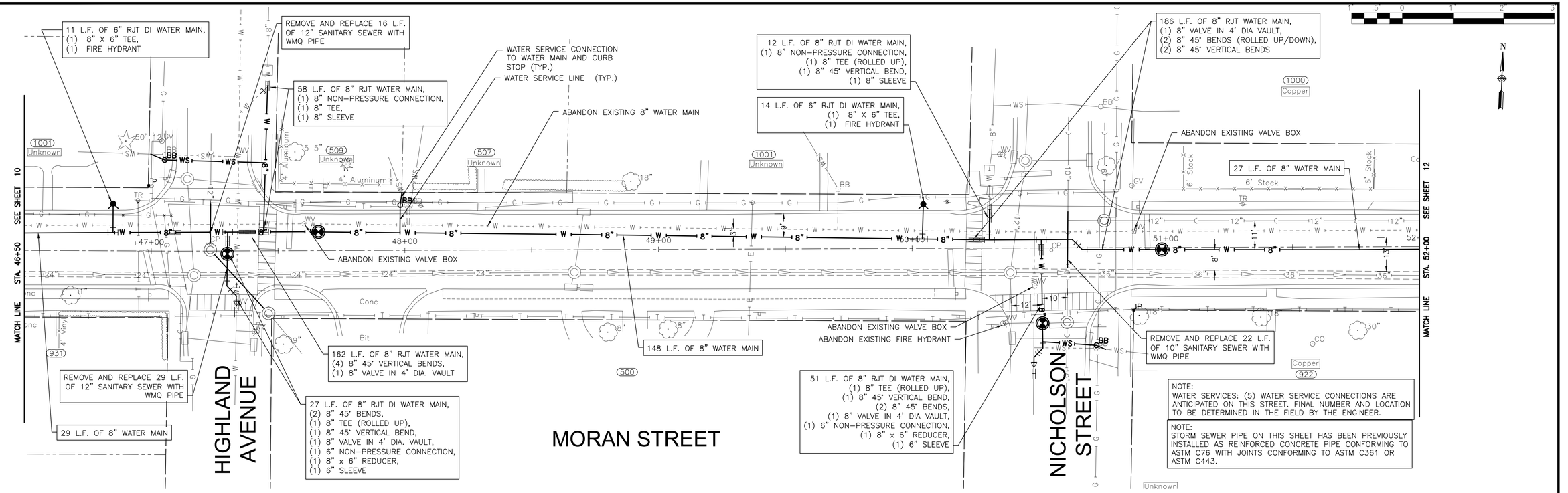




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BAXTER & WOODMAN Consulting Engineers	CONSULTANTS	REVISED –	CITY OF JOLIET, ILLINOIS GARNSEY PARK PHASE 5A WATER MAIN IMPROVEMENTS CITY OF JOLIET CONTRACT NO. 2777-0124	MORAN STREET STA. 41+00 TO STA. 46+50 PLAN AND PROFILE	DESIGNED – MJK DRAWN – JJS CHECKED – LMS DATE – 10/26/2023
		REVISED –			
		REVISED –		SCALE: HORIZ 1"=20' / VERT 1"=5' PROJECT NO: 221587.40	TOTAL SHEETS: 21
		REVISED –			SHEET NO.: 10

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		REVISED –			
		REVISED –		SCALE: HORIZ 1"=20' / VERT 1"=5' PROJECT NO: 221587.40	TOTAL SHEETS: 21
		REVISED –			SHEET NO.: 11

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NOTE:
STORM SEWER PIPE ON THIS SHEET HAS BEEN PREVIOUSLY INSTALLED AS REINFORCED CONCRETE PIPE CONFORMING TO ASTM C76 WITH JOINTS CONFORMING TO ASTM C361 OR ASTM C443.

12 L.F. OF 8" RJT DI WATER MAIN,
(1) 8" NON-PRESSURE CONNECTION,
(1) 8" SLEEVE

17 L.F. OF 6" RJT DI WATER MAIN,
(1) 8" X 6" TEE,
(1) FIRE HYDRANT

146 L.F. OF 8" RJT WATER MAIN,
(2) 8" 45° BENDS,
(1) 8" VALVE IN 4' DIA VAULT,
(2) 8" TEES

WATER SERVICE CONNECTION TO WATER MAIN AND CURB STOP (TYP.)

WATER SERVICE LINE (TYP.)

ABANDON EXISTING 8" WATER MAIN

P-SAN – (1)-MH-1
SANITARY MANHOLE, 4' DIA.

VINE STREET

MORAN STREET

169 L.F. OF 8" WATER MAIN
Copper
921

REMOVE AND REPLACE 17 L.F. OF 12" STORM SEWER WITH WMQ PIPE

18 L.F. OF 8" RJT DI WATER MAIN,
(2) 8" 45° BENDS,
(1) 8" VALVE IN 4' DIA VAULT,
(1) 6" NON-PRESSURE CONNECTION,
(1) 8" x 6" REDUCER,
(1) 6" SLEEVE
Copper
924

139 L.F. OF 8" WATER MAIN

1001 Copper
1000 Lead
1001 Unknown
Unknown 406
Copper 400

SEE SHEET 11
STA. 52+00
MATCH LINE

SEE SHEET 13
STA. 56+50
MATCH LINE

NOTE:
WATER SERVICES: (1) WATER SERVICE CONNECTIONS ARE ANTICIPATED ON THIS STREET. FINAL NUMBER AND LOCATION TO BE DETERMINED IN THE FIELD BY THE ENGINEER.

N

INSTALL 4' DIA. MANHOLE AT BLIND TEE
EXISTING ℄ PROFILE
18" MIN
5' MIN. (TYP.)
Ex. 8" Water Main
Ex. 12" Storm Sewer
18" MIN
PROPOSED 8" WATER MAIN
ABANDON EXISTING 8" WATER MAIN
18" MIN
Ex. 36" Storm Sewer

655 650 645 640 635 630 625 620 615

642.87 642.96 643.06 643.43 643.60 642.97 642.64 642.20 641.75 640.81

52+00 52+50 53+00 53+50 54+00 54+50 55+00 55+50 56+00 56+50

FINAL DESIGN
FOR BIDDING

P:\JOLTC\221587-2024 WATER MAIN SURV\CAD\GARNSEY PARK PHASE 5\01_CIVIL 3D\01_SHTS-PLANS\221587-GARNSEY PARK PHASE 5_DESIGN_SHEETS.DWG 52+00.00
Plotted: 10/24/2023 10:55 AM By: ANACINO
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	REVISED –
	REVISED –

CITY OF JOLIET, ILLINOIS
GARNSEY PARK PHASE 5A WATER MAIN IMPROVEMENTS
CITY OF JOLIET CONTRACT NO. 2777-0124

MORAN STREET STA. 52+00 TO STA. 56+50 PLAN AND PROFILE

SCALE: HORIZ 1"=20' / VERT 1"=5'
PROJECT NO: 221587.40

		TOTAL SHEETS	SHEET NO.
DESIGNED – MJK			
DRAWN – JJS			
CHECKED – LMS		21	12
DATE – 10/26/2023			

11 L.F. OF 6" RJT DI WATER MAIN,
(1) 8" X 6" TEE,
(1) FIRE HYDRANT

38 L.F. OF 8" WATER MAIN

ABANDON EXISTING VALVE VAULT

28 L.F. OF 12" RJT DI WATER MAIN,
(1) 12" NON-PRESSURE CONNECTION,
(1) 12" 45° BEND,
(1) 12" SLEEVE

NOTE:
WATER SERVICES: (1) WATER SERVICE CONNECTIONS ARE ANTICIPATED ON THIS STREET. FINAL NUMBER AND LOCATION TO BE DETERMINED IN THE FIELD BY THE ENGINEER.

29 L.F. OF 8" RJT DI WATER MAIN,
(1) 8" TEE, (1) 8" SLEEVE,
(2) 8" 45° BENDS,
(1) 8" NON-PRESSURE CONNECTION

REMOVE AND REPLACE 26 L.F. OF 8" SANITARY SEWER WITH WMQ PIPE

WATER SERVICE CONNECTION TO WATER MAIN AND CURB STOP (TYP.)

WATER SERVICE LINE (TYP.)

ABANDON EXISTING 8" WATER MAIN

ABANDON EXISTING VALVE BOX

109 L.F. OF 8" RJT WATER MAIN,
(1) 8" VALVE IN 4' DIA VAULT

SEE SHEET 12

SEE SHEET 14

MATCH LINE STA. 56+50

MATCH LINE STA. 62+00

NORTH CENTER STREET

MORAN STREET

CORA STREET

ABANDON EXISTING VALVE BOX

26 L.F. OF 12" RJT WATER MAIN,
(2) 12" TEES,
(2) 12" x 8" REDUCERS

NOTE:
STORM SEWER PIPE ON THIS SHEET HAS BEEN PREVIOUSLY INSTALLED AS REINFORCED CONCRETE PIPE CONFORMING TO ASTM C76 WITH JOINTS CONFORMING TO ASTM C361 OR ASTM C443.

170 L.F. OF 8" WATER MAIN

156 L.F. OF 8" RJT WATER MAIN,
(2) 8" 45° BENDS,
(1) 8" VALVE IN 4' DIA VAULT

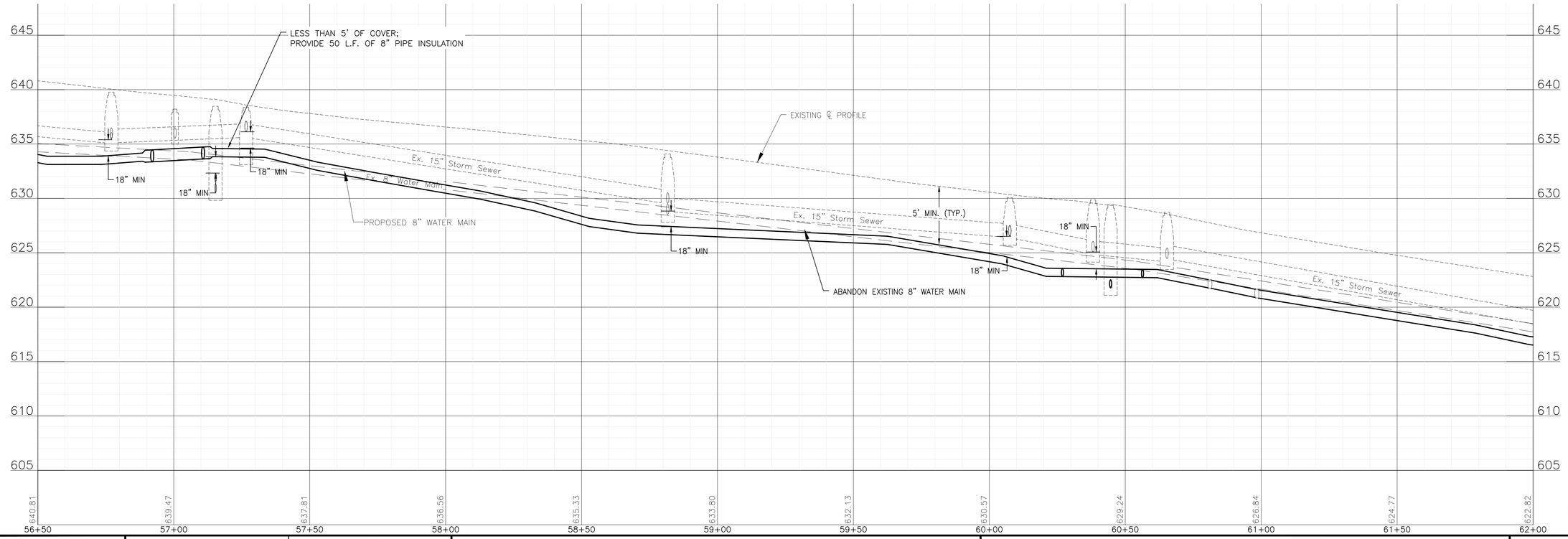
59 L.F. OF 8" WATER MAIN

6 L.F. OF 6" RJT DI WATER MAIN,
(1) 8" X 6" TEE,
(1) FIRE HYDRANT

ABANDON EXISTING FIRE HYDRANT

20 L.F. OF 8" RJT DI WATER MAIN,
(1) 8" VALVE IN 4' DIA. VAULT,
(1) 6" NON-PRESSURE CONNECTION,
(2) 8" 45° BENDS,
(1) 8" TEE,
(1) 8" x 6" REDUCER,
(1) 6" SLEEVE

35 L.F. OF 12" RJT DI WATER MAIN,
(2) 12" 45° BENDS,
(1) 12" VALVE IN 5' DIA VAULT,
(1) 6" NON-PRESSURE CONNECTION,
(1) 12" x 6" REDUCER,
(1) 12" SLEEVE



FINAL DESIGN FOR BIDDING

BAXTER & WOODMAN Consulting Engineers

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	REVISED –

CITY OF JOLIET, ILLINOIS
GARNSEY PARK PHASE 5A WATER MAIN IMPROVEMENTS
CITY OF JOLIET CONTRACT NO. 2777-0124

MORAN STREET STA. 56+50 TO STA. 62+00 PLAN AND PROFILE

SCALE: HORIZ 1"=20' / VERT 1"=5'
PROJECT NO: 221587.40

		TOTAL SHEETS	SHEET NO.
DESIGNED – MJK			
DRAWN – JJS		21	13
CHECKED – LMS			
DATE – 10/26/2023			

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NOTE:
WATER SERVICES: (3) WATER SERVICE CONNECTIONS ARE ANTICIPATED ON THIS STREET. FINAL NUMBER AND LOCATION TO BE DETERMINED IN THE FIELD BY THE ENGINEER.

REMOVE AND REPLACE 28 L.F. OF 10" SANITARY SEWER WITH WMQ PIPE

ABANDON EXISTING VALVE BOX

32 L.F. OF 8" RJT DI WATER MAIN,
(1) 8" NON-PRESSURE CONNECTION,
(1) 8" TEE (ROLLED DOWN),
(1) 8" 45° VERTICAL BEND,
(2) 8" 45° BENDS (ROLLED UP/DOWN),
(1) 8" SLEEVE

ABANDON EXISTING VALVE BOX

WATER SERVICE CONNECTION TO WATER MAIN AND CURB STOP (TYP.)

WATER SERVICE LINE (TYP.)

WATER MAIN INSTALLATION INCLUDED IN GARNSEY PARK PHASE 5B PROJECT

ABANDON EXISTING VALVE BOX

REMOVE AND REPLACE 56 L.F. OF 10" SANITARY SEWER WITH WMQ PIPE

REMOVE AND REPLACE 5 L.F. OF 12" STORM SEWER WITH WMQ PIPE

SEE SHEET 13 — STA. 62+00 — MATCH LINE

SEE SHEET 15 — STA. 67+50 — MATCH LINE

7 L.F. OF 6" RJT DI WATER MAIN,
(1) 8" X 6" TEE,
(1) FIRE HYDRANT

129 L.F. OF 8" WATER MAIN

4 L.F. OF 8" RJT DI WATER MAIN,
(1) 10" NON-PRESSURE CONNECTION,
(1) 10" x 8" REDUCER,
(1) 10" SLEEVE

NOTE:
STORM SEWER PIPE ON THIS SHEET HAS BEEN PREVIOUSLY INSTALLED AS REINFORCED CONCRETE PIPE CONFORMING TO ASTM C76 WITH JOINTS CONFORMING TO ASTM C361 OR ASTM C443.

ELIZABETH STREET

152 L.F. OF 8" RJT WATER MAIN,
(2) 8" 45° BENDS,
(1) 8" 11.25° VERTICAL BEND,
(1) 8" VALVE IN 4' DIA VAULT,
(2) 8" TEES

ABANDON EXISTING FIRE HYDRANT

20 L.F. OF 8" RJT DI WATER MAIN,
(1) 6" NON-PRESSURE CONNECTION,
(2) 8" 45° BENDS,
(1) 8" VALVE IN 4' DIA VAULT,
(1) 8" x 6" REDUCER,
(1) 6" SLEEVE

ABANDON EXISTING 10" WATER MAIN

REMOVE AND REPLACE INLET

MORAN STREET

140 L.F. OF 8" WATER MAIN

REMOVE AND REPLACE INLET

134 L.F. OF 8" RJT WATER MAIN,
(1) 8" VALVE IN 4' DIA VAULT,
(2) 8" TEES,
(2) 8" 45° VERTICAL BENDS,
(2) 8" 45° BENDS (ROLLED UP/DOWN),
(2) 8" 45° BENDS

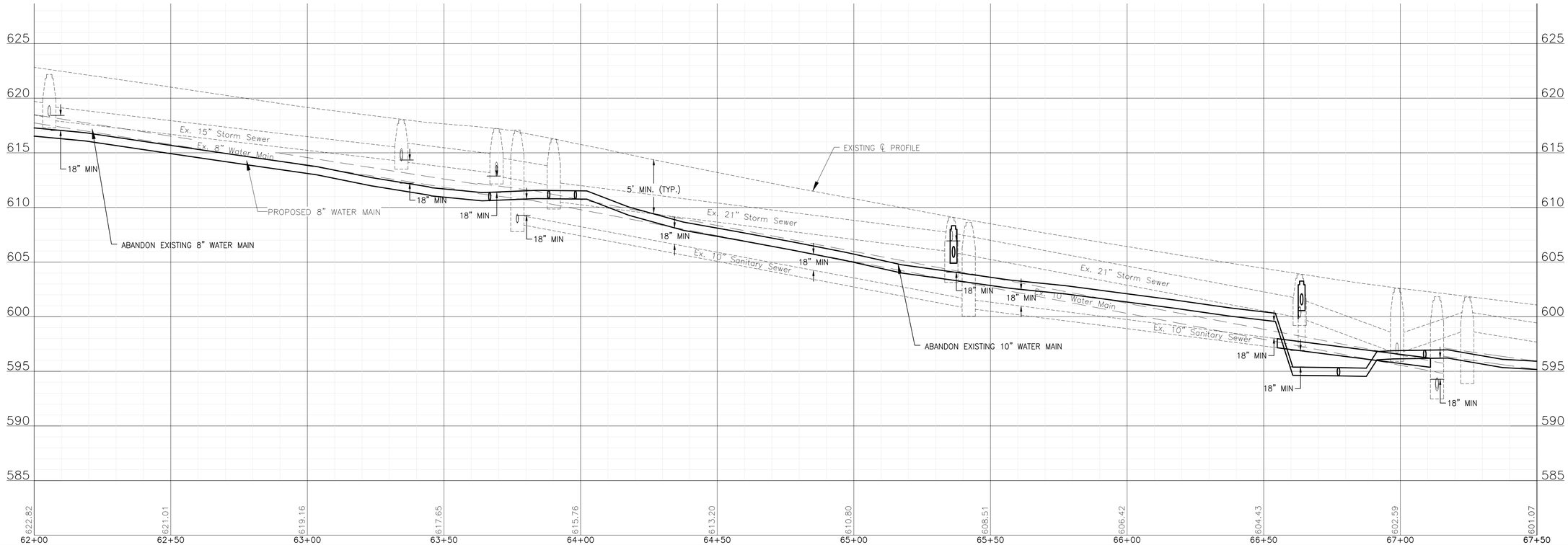
22 L.F. OF 8" RJT DI WATER MAIN,
(1) 8" VALVE IN 4' DIA VAULT,
(2) 8" 45° BENDS,
(1) 8" x 6" REDUCER,
(1) 6" SLEEVE,
(1) 6" NON-PRESSURE CONNECTION

SUMMIT STREET

5 L.F. OF 6" RJT DI WATER MAIN,
(1) 8" X 6" TEE,
(1) FIRE HYDRANT

ABANDON EXISTING FIRE HYDRANT

TREE ROOT PRUNING



FINAL DESIGN FOR BIDDING

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	REVISED –
	REVISED –

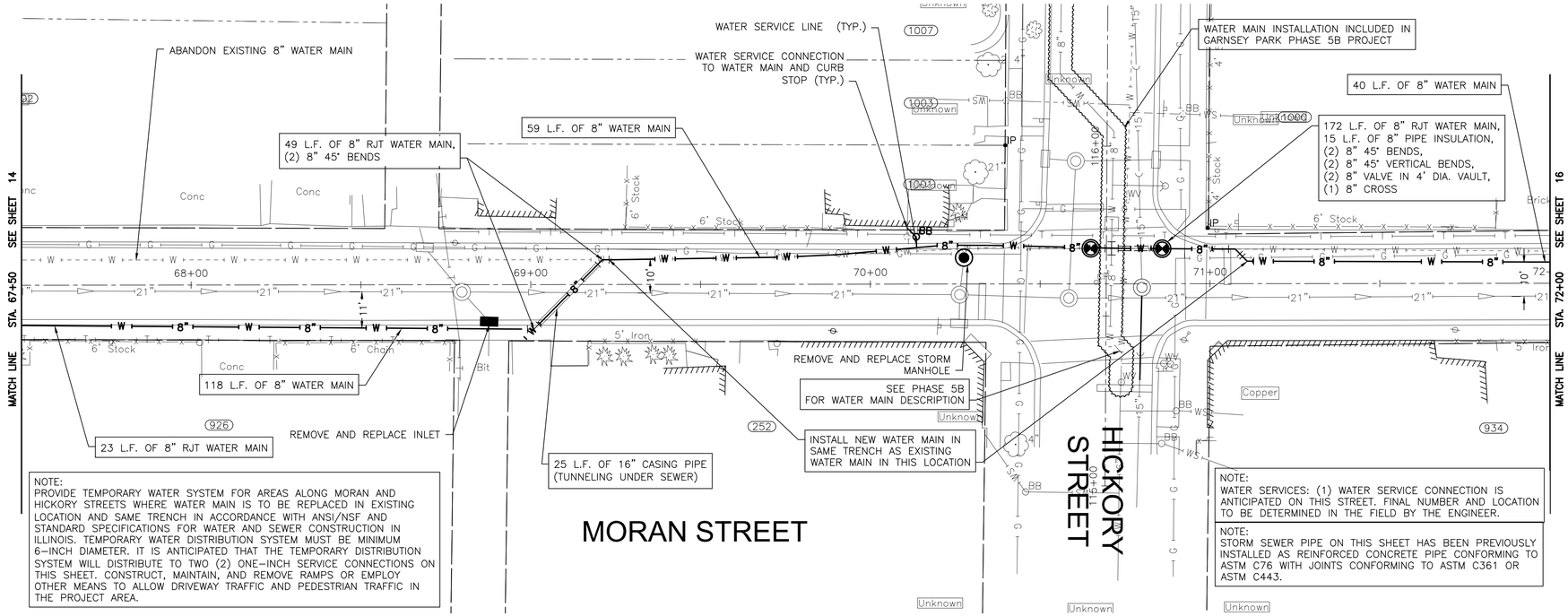
CITY OF JOLIET, ILLINOIS
GARNSEY PARK PHASE 5A WATER MAIN IMPROVEMENTS
CITY OF JOLIET CONTRACT NO. 2777-0124

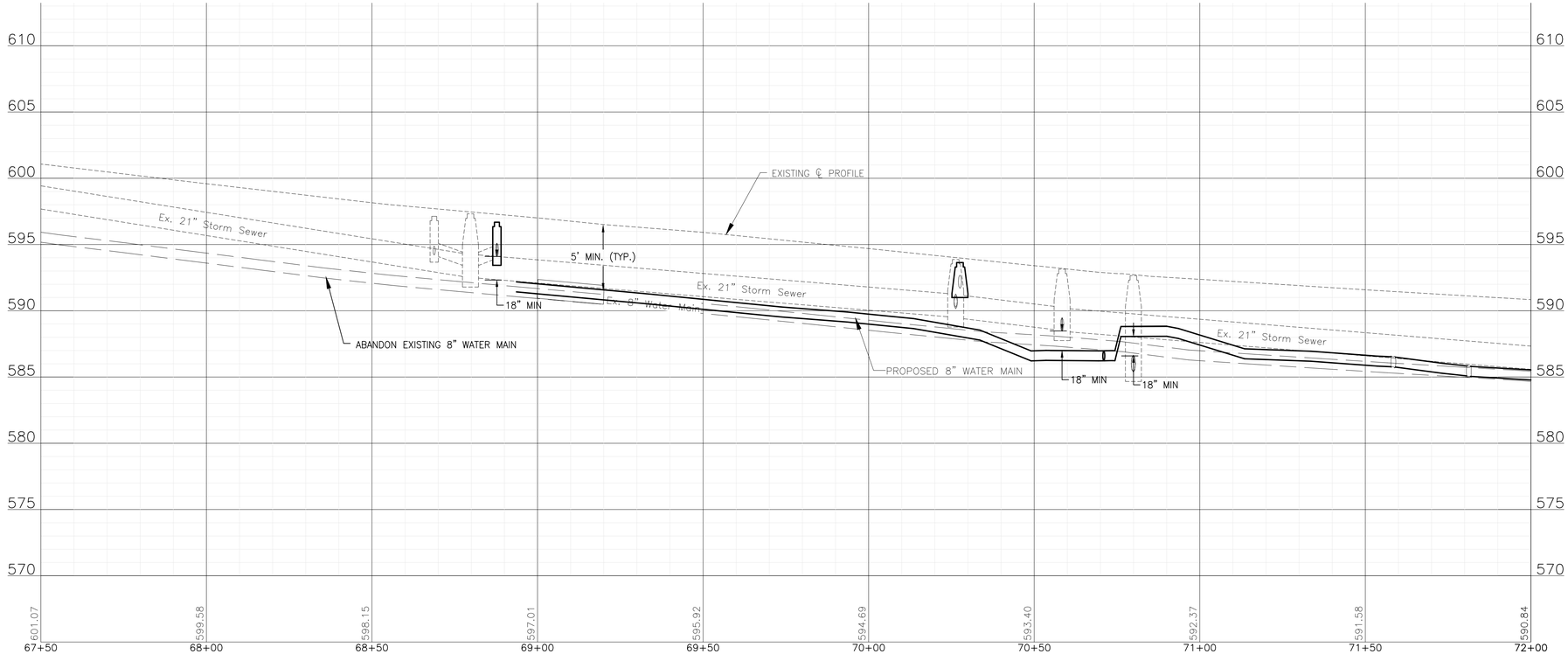
MORAN STREET STA. 62+00 TO STA. 67+50 PLAN AND PROFILE

SCALE: HORIZ 1"=20' / VERT 1"=5'
PROJECT NO: 221587.40

		TOTAL SHEETS	SHEET NO.
DESIGNED – MJK		21	14
DRAWN – JJS			
CHECKED – LMS			
DATE – 10/26/2023			

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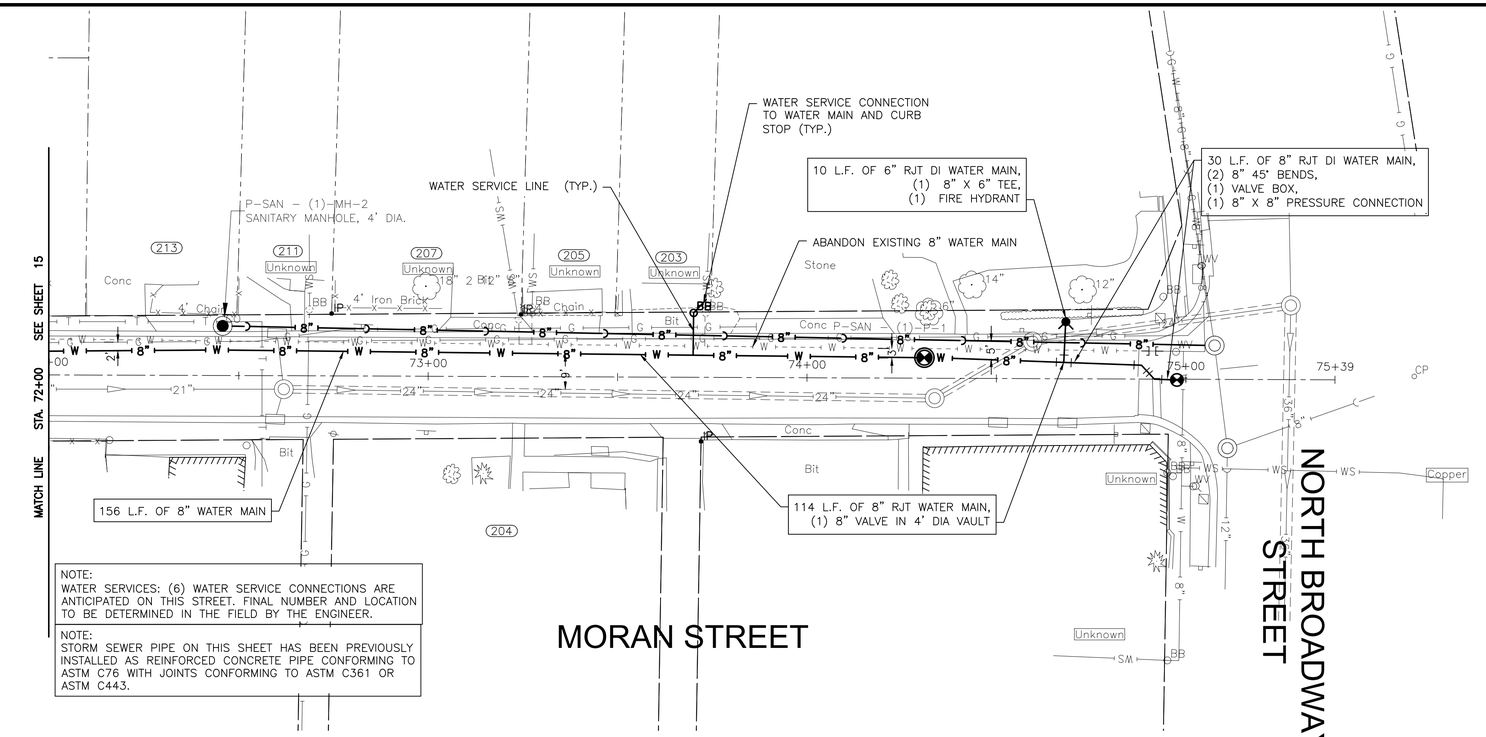


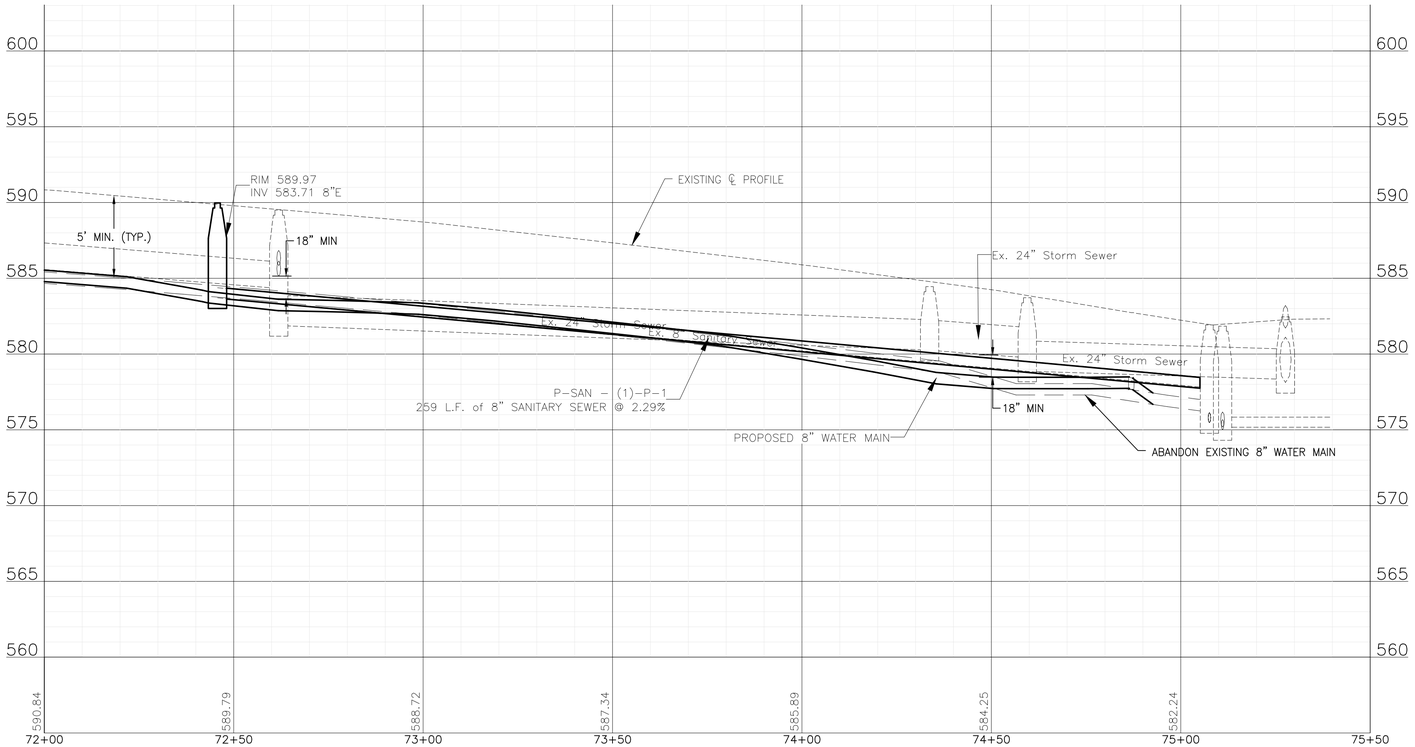


FINAL DESIGN FOR BIDDING

BAXTER & WOODMAN Consulting Engineers	CONSULTANTS / REVISED –	CITY OF JOLIET, ILLINOIS GARNSEY PARK PHASE 5A WATER MAIN IMPROVEMENTS CITY OF JOLIET CONTRACT NO. 2777-0124	MORAN STREET STA. 67+50 TO STA. 72+00 PLAN AND PROFILE SCALE: HORIZ 1"=20' / VERT 1"=5' PROJECT NO: 221587.40	DESIGNED – MJK DRAWN – JJS CHECKED – LMS DATE – 10/26/2023 TOTAL SHEETS 21 SHEET NO. 15

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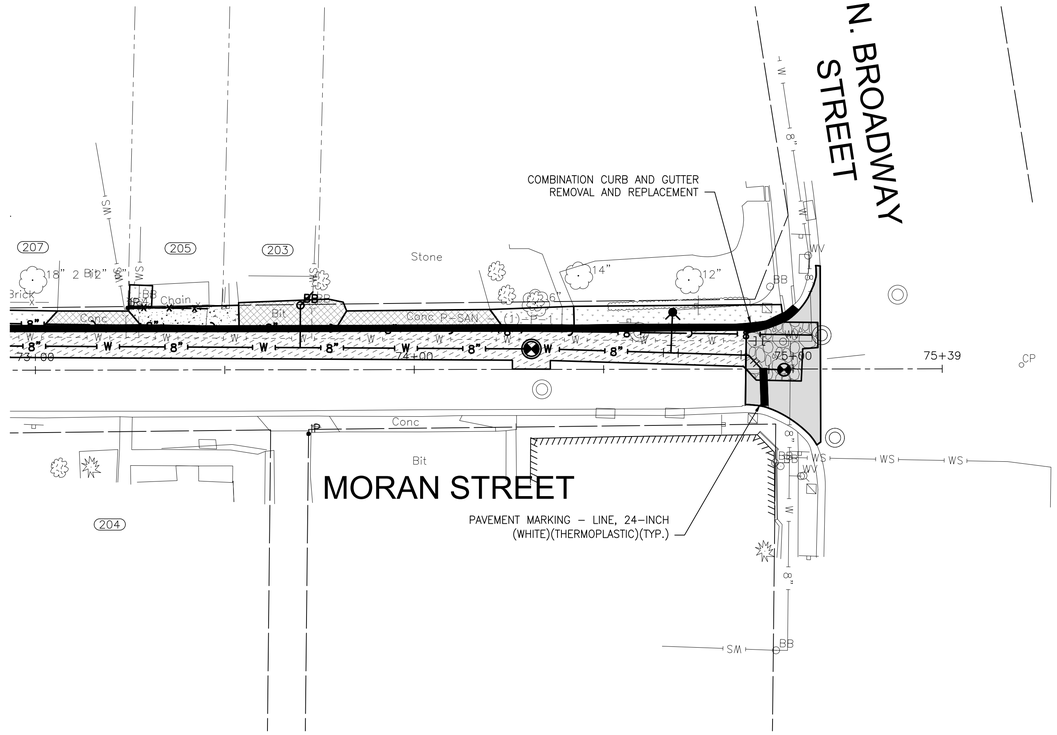
BAXTER & WOODMAN Consulting Engineers	CONSULTANTS	REVISED –	CITY OF JOLIET, ILLINOIS GARNSEY PARK PHASE 5A WATER MAIN IMPROVEMENTS CITY OF JOLIET CONTRACT NO. 2777-0124
		REVISED –	
		REVISED –	
		REVISED –	

MORAN STREET STA. 72+00 TO STA. 75+50 PLAN AND PROFILE

SCALE: HORIZ 1"=20' / VERT 1"=5' | PROJECT NO: 221587.40

DESIGNED – MJK	TOTAL SHEETS	SHEET NO.	
DRAWN – JJS	21	16	
CHECKED – LMS			
DATE – 10/26/2023			

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RESTORATION LEGEND

- TRENCH AND TEMPORARY PAVEMENT
- CLASS B PATCH
- HMA REMOVAL AND REPLACEMENT
- RESTORATION OF LAWNS AND PARKWAYS
- PCC SIDEWALK REMOVAL AND REPLACEMENT
- DRIVEWAY REMOVAL AND REPLACEMENT

FINAL DESIGN
FOR BIDDING

BAXTER & WOODMAN Consulting Engineers

CONSULTANTS	REVISED –
	REVISED –
	REVISED –
	REVISED –

CITY OF JOLIET, ILLINOIS
GARNSEY PARK PHASE 5A WATER MAIN IMPROVEMENTS
CITY OF JOLIET CONTRACT NO. 2777-0124

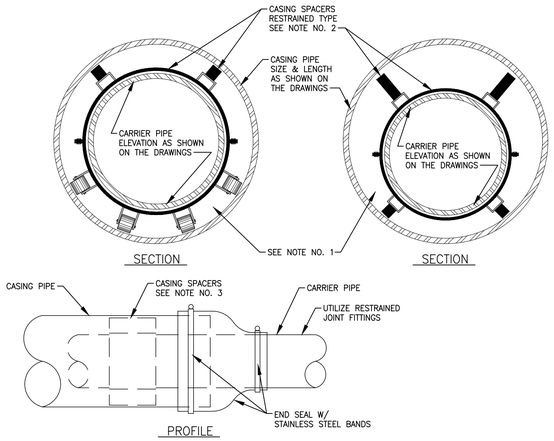
MORAN STREET STA. 73+00 TO STA. 75+39 RESTORATION PLAN

SCALE: 1" = 20' | PROJECT NO: 221587.40

DESIGNED – MJK	
DRAWN – JJS	
CHECKED – LMS	
DATE – 10/26/2023	

TOTAL SHEETS	SHEET NO.
21	17

P:\JOLITC\221587–2024 WATER MAIN SURV\CAD\GARNSEY PARK PHASE 5\01_CIVIL 3D\01_SHTS–PLANS\221587–GARNSEY PARK PHASE 5_RESTORATION_SHEETS.DWG RESTORATION 2
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NOTES

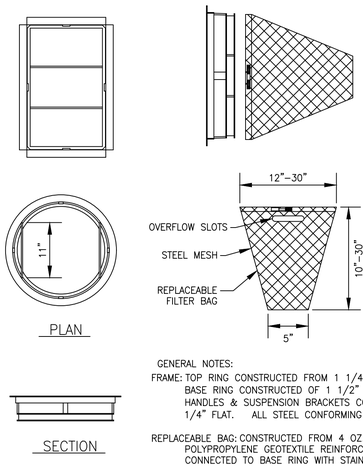
1. FILLING OF ANNULAR SPACE BETWEEN CARRIER PIPE AND CASING PIPE WITH SAND OR PEA GRAVEL IS NOT REQUIRED WHEN UTILIZING CASING SPACERS, UNLESS CONTRACTOR IS INSTRUCTED TO DO SO ON DRAWINGS OR IN SPECIFICATIONS.
2. WHERE CARRIER PIPE IS NOT CENTERED IN CASING PIPE, PROVIDE CASING SPACERS WITH LEGS THAT EXTEND TO WITHIN 1–INCH OF CASING INSIDE DIAMETER ON ALL SIDES (RESTRAINED TYPE).
3. PROVIDE NUMBER OF SPACERS AS INSTRUCTED BY SPACER MANUFACTURER, WITH A MINIMUM OF ONE SPACER ON EACH SIDE OF A PIPE JOINT, AND ONE SPACER BETWEEN JOINTS. (THREE (MIN.) PER PIPE LENGTH)
4. ALL CARRIER PIPE INSTALLED WITHIN CASING PIPE TO BE RESTRAINED JOINT TYPE

NOT TO SCALE

CITY OF JOLIET, ILLINOIS

CASING DETAIL
GEN–01

DATE: OCT. 2017



GENERAL NOTES:

FRAME: TOP RING CONSTRUCTED FROM 1 1/4" x 1 1/4" x 1/8" ANGLE. BASE RING CONSTRUCTED OF 1 1/2" x 1/2" x 1/8" CHANNEL. HANDLES & SUSPENSION BRACKETS CONSTRUCTED FROM 1/4" x 1 1/4" FLAT. ALL STEEL CONFORMING TO ASTM–A36.

REPLACEABLE BAG: CONSTRUCTED FROM 4 OZ./SQ. YD. NON–WOVEN POLYPROPYLENE GEOTEXTILE REINFORCED WITH POLYESTER MESH. CONNECTED TO BASE RING WITH STAINLESS STEEL STRAP & LOCK.

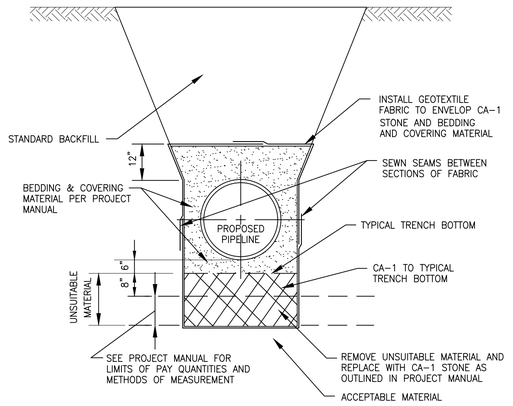
STEEL MESH: REMOVABLE STAINLESS STEEL MESH STRAINER BASKET. 1/4" DIA. HOLE SIZE, 58% OPEN AREA.

NOT TO SCALE

CITY OF JOLIET, ILLINOIS

INLET PROTECTION
FILTER DETAIL
GEN–02

DATE: OCT. 2017



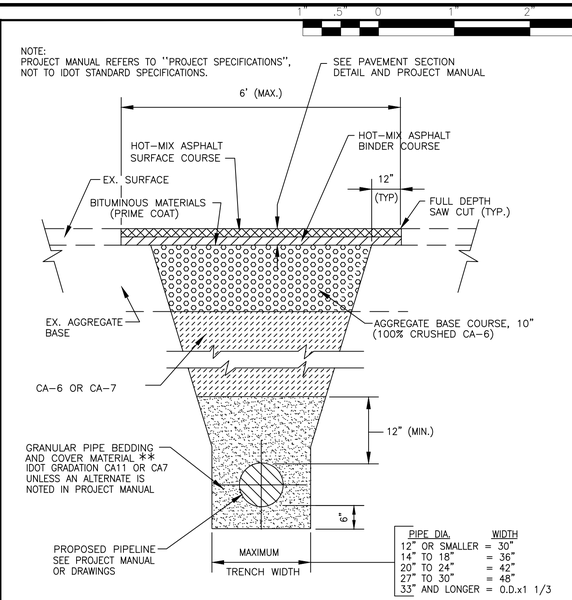
NOT TO SCALE

CITY OF JOLIET, ILLINOIS

OPEN CUT PIPELINE
INSTALLATION UNSUITABLE
MATERIAL
REMOVAL/REPLACEMENT
GEN–03

DATE: OCT. 2017

NOTE:
PROJECT MANUAL REFERS TO "PROJECT SPECIFICATIONS", NOT TO IDOT STANDARD SPECIFICATIONS.



FOR PAVEMENT WITH AGGREGATE BASE AND COMPACTED GRANULAR BACKFILL MATERIAL

** FOR FLEXIBLE THERMOPLASTIC PIPE COMPLY WITH ASTM D2321, CLASS IA, IB, OR II., (IDOT GRADATION CA15)

FOR RIGID PIPE COMPLY WITH ASTM C12, BEDDING CLASS B.

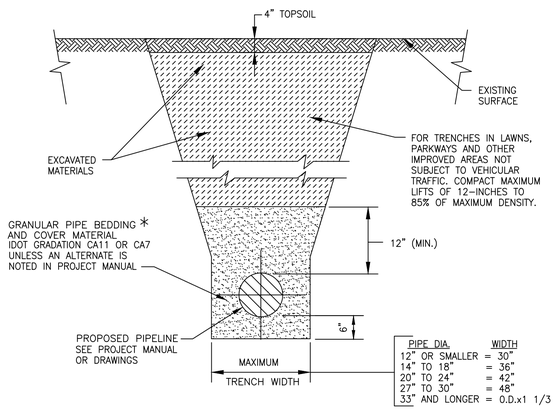
NOT TO SCALE

CITY OF JOLIET, ILLINOIS

TYPICAL TRENCH DETAIL
PAVEMENT AREA
AGGREGATE BASE
GEN–04

DATE: OCT. 2017

NOTES:
1. PROJECT MANUAL REFERS TO "PROJECT SPECIFICATIONS", NOT TO IDOT STANDARD SPECIFICATIONS.
2. FARM FIELDS, GARDENS, AND WETLAND AREAS MAY REQUIRE STRIPPING, STOCKPILING, AND REPLACING ORIGINAL MATERIAL TO A SPECIFIC DEPTH. SEE PROJECT MANUAL OR GENERAL NOTES FOR REQUIREMENTS.



FOR NON–PAVED AREAS

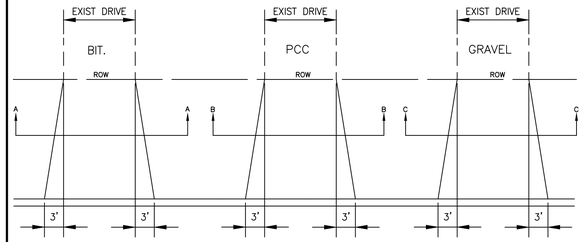
* FOR HDPE PIPE COMPLY WITH ASTM 2321, CLASS I OR II.
FOR RIGID PIPE COMPLY WITH ASTM C12, BEDDING CLASS B.

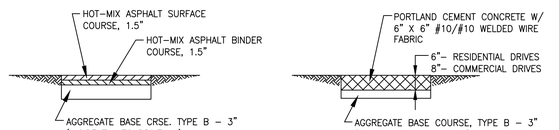
NOT TO SCALE

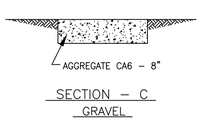
CITY OF JOLIET, ILLINOIS

TYPICAL TRENCH DETAIL
NON PAVED AREAS
GEN–05

DATE: OCT. 2017







NOTES:

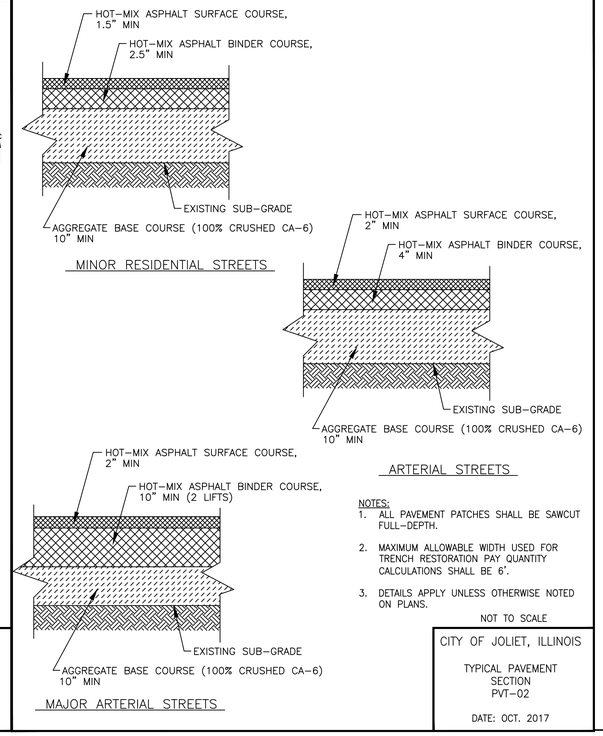
1. APRON: 8:1 SLOPE FROM FRONT OF SIDEWALK TO BACK OF CURB.
2. SIDEWALK: 1/4" / FT SLOPE

NOT TO SCALE

CITY OF JOLIET, ILLINOIS

DRIVEWAY PAVEMENT
DETAIL
PVT–01

DATE: OCT. 2017



NOTES:

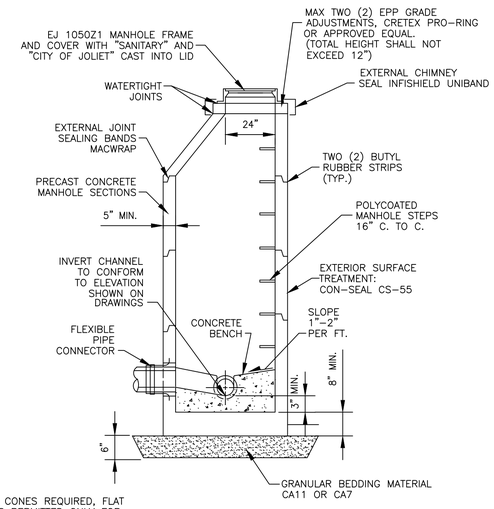
1. ALL PAVEMENT PATCHES SHALL BE SAWCUT FULL–DEPTH.
2. MAXIMUM ALLOWABLE WIDTH USED FOR TRENCH RESTORATION PAY QUANTITY CALCULATIONS SHALL BE 6'.
3. DETAILS APPLY UNLESS OTHERWISE NOTED ON PLANS.

NOT TO SCALE

CITY OF JOLIET, ILLINOIS

TYPICAL PAVEMENT
SECTION
PVT–02

DATE: OCT. 2017



NOTE:

1. ECCENTRIC CONES REQUIRED, FLAT SLAB TOPS PERMITTED ONLY FOR MANHOLES TOO SHALLOW FOR CONES.
2. MANHOLE DIAMETER SHALL BE DETERMINED BY THE SEWER DEPTH, THE SEWER OUTSIDE DIAMETER, RELATIVE ANGLES OF SEWERS TO EACH OTHER, THE SIZE OF HOLES CORED/CAST FOR BOOTS, AND A MINIMUM OF 8" BETWEEN CORED/CAST HOLES. FOR SEWER SIZES 8" THROUGH 15", USE 4'–0" DIAMETER. FOR SEWER DEPTHS 15' AND GREATER, USE 5'–0" DIAMETER.
3. ALL LIFT HOLES ARE TO BE GROUTED FROM THE INSIDE AND OUTSIDE BEFORE BACKFILLING.
4. MANHOLES THAT HAVE FORCE MAINS DISCHARGING INTO THEM SHALL BE COATED WITH SHERWIN WILLIAMS DURAPLATE 6100 OR RAVEN 405

NOT TO SCALE

CITY OF JOLIET, ILLINOIS

SANITARY MANHOLE DETAIL
SAN–01

DATE: OCT. 2017

FINAL DESIGN FOR BIDDING

BAXTER & WOODMAN Consulting Engineers

CONSULTANTS	REVISED –
	REVISED –
	REVISED –
	REVISED –

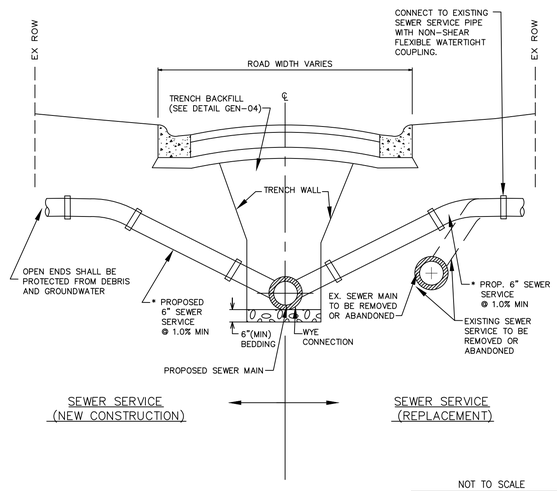
CITY OF JOLIET, ILLINOIS
GARNSEY PARK PHASE 5A WATER MAIN IMPROVEMENTS
CITY OF JOLIET CONTRACT NO. 2777-0124

CONSTRUCTION DETAILS

SCALE: AS NOTED | PROJECT NO: 221587.40

DESIGNED – MJK	TOTAL SHEETS	SHEET NO.
DRAWN – JJS	21	18
CHECKED – LMS		
DATE – 10/26/2023		

P:\JOLTC\221587-2024 WATER MAIN SURV\CAD\GARNSEY PARK PHASE 5\01_CIVIL 3D\01_SHTS-PLANS\221587-GARNSEY PARK PHASE 5_COVER_GEN_DETS.DWG DETAILS
Plotted: 10/24/2023 10:56 AM By: ANACINO
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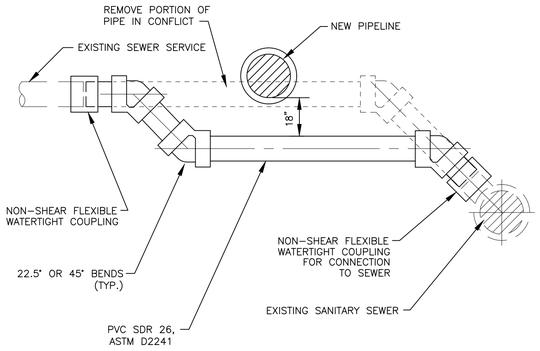
* SERVICE PIPE MATERIAL: PVC SDR 26, ASTM D2241

NOT TO SCALE

CITY OF JOLIET, ILLINOIS

SANITARY SEWER SERVICE
SAN-02

DATE: OCT. 2017

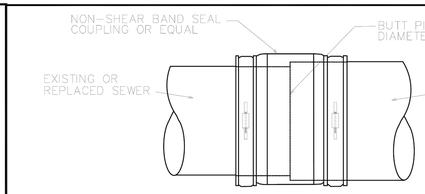


NOT TO SCALE

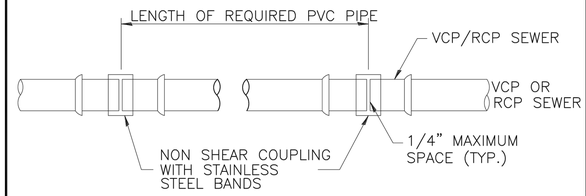
CITY OF JOLIET, ILLINOIS

SANITARY SEWER SERVICE RELOCATION
SAN-03

DATE: OCT. 2017



PIPE COUPLING DETAIL



NOTES:

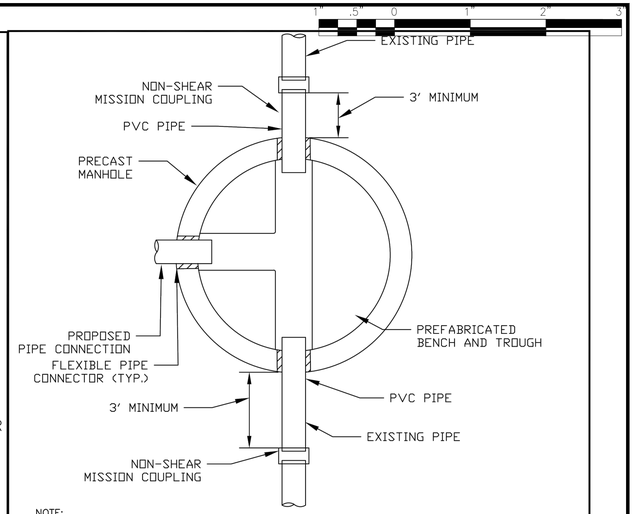
1. CONNECTION TO CIPP LINING SHALL BE NON-SHEAR COUPLINGS THAT ARE MADE SPECIFICALLY TO FIT THE OUTSIDE DIAMETER OF CURED-IN-PLACE PIPE (CIPP)

NOT TO SCALE

CITY OF JOLIET, ILLINOIS

CONNECTING SEWER PIPES OF DISSIMILAR MATERIAL
SAN-14

DATE: NOVEMBER 2022



NOTE:

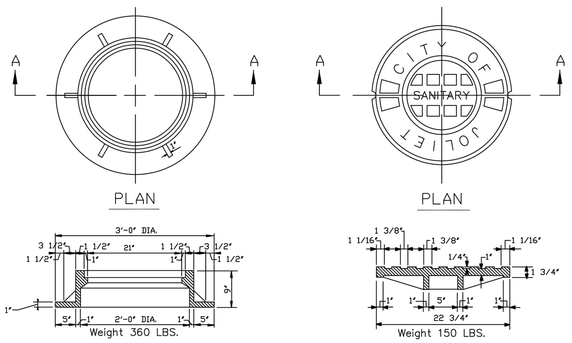
1. MANHOLE INSTALLATION MUST CONFORM TO CITY OF JOLIET STANDARD MANHOLE DETAIL (SAN-01).
2. EXTERNAL DROP CONNECTION MUST BE PROVIDED IF INVERT OF CONNECTING SEWER IS 24" OR MORE ABOVE THE INVERT OF OUTLET.
3. DOGHOUSE MANHOLES WILL NOT BE ACCEPTED UNLESS APPROVED BY THE ENGINEER.

NOT TO SCALE

CITY OF JOLIET, ILLINOIS

NEW SANITARY MANHOLE ON EXISTING SANITARY MAIN DETAIL
SAN-17

DATE: NOVEMBER 2022



Section A-A

Plan - Manhole

No Scale

Section A-A

Standard Closed Lid

No Scale

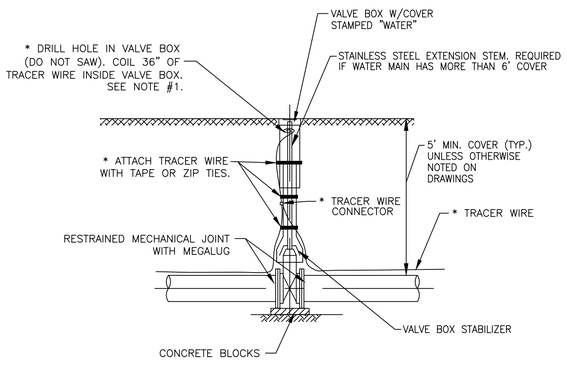
Sanitary Sewer:
East Jordan 1020 AGS cover and 1050Z1 frame W/Watertight Lid

NOT TO SCALE

CITY OF JOLIET, ILLINOIS

FRAME AND COVER CASTING
SAN-19

DATE: NOVEMBER 2022



* FOR PVC WATER MAIN INSTALLATION ONLY

NOTES:

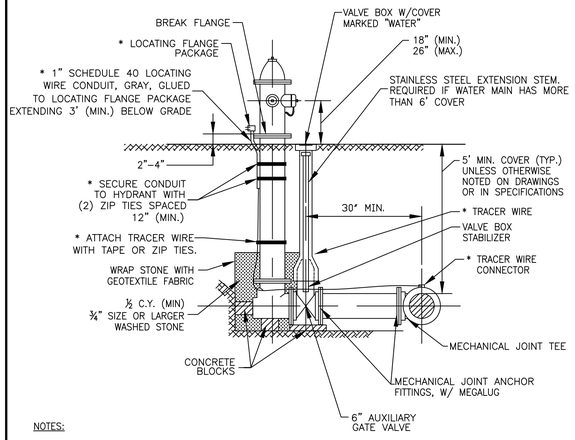
* 1. ATTACH TRACER WIRE TO OUTSIDE OF VALVE BOX USING TAPE OR ZIP TIES. DRILL 5/8" DIA. HOLE IN VALVE BOX 6" FROM TOP OF VALVE BOX.

NOT TO SCALE

CITY OF JOLIET, ILLINOIS

WATER VALVE BOX DETAIL
WTR-02

DATE: NOVEMBER 2022



NOTES:

1. MUELLER CENTURION A423, CLOW MEDALLION OR E.J. 5BR250 (RED FOR MUNICIPAL TREATED WATER, GREEN FOR RAW WATER, YELLOW FOR PRIVATE HYDRANTS)
2. HYDRANTS SHALL BE LOCATED A MINIMUM OF 2 FEET BEHIND THE BACK OF CURB IN LOCATIONS SHOWN ON THE DRAWINGS
3. USE SWIVEL TEE AS CALLED OUT ON PLANS. 30" MINIMUM SEPARATION DOES NOT APPLY WHEN USING SWIVEL TEES.
*4. LOCATING WIRE CONDUIT TO BE RIGID PIPE FORMED TO HYDRANT OR TOP 18" TO BE RIGID, WITH 12" (MAX.) FLEXIBLE CONDUIT BELOW, TRANSITIONING BACK TO RIGID CONDUIT.
*5. LOCATING FLANGE PACKAGE TO BE RED COLOR COPPERHEAD INDUSTRIES COBRA HYDRANT PACKAGE PART # T1-FLPKG OR APPROVED EQUAL

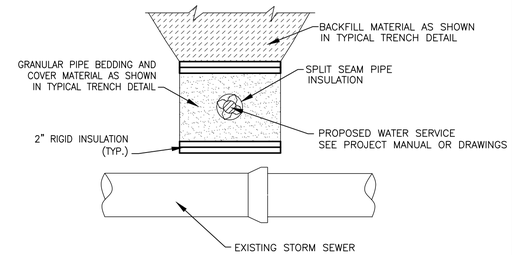
* FOR PVC WATER MAIN INSTALLATION ONLY

NOT TO SCALE

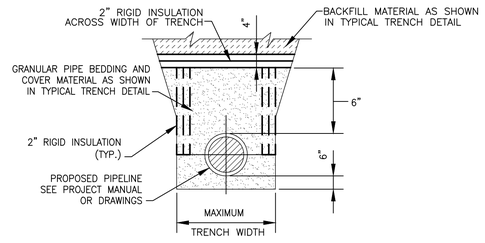
CITY OF JOLIET, ILLINOIS

FIRE HYDRANT DETAIL
WTR-03

DATE: NOVEMBER 2022



WATER SERVICE



WATER MAIN

NOTES:

1. TO BE USED WHEN WATER MAIN AND / OR WATER SERVICE BURY DEPTH IS < 4' OR WHEN WATER SERVICE CROSSES ABOVE STORM SEWER.

NOT TO SCALE

CITY OF JOLIET, ILLINOIS

PIPE INSULATION DETAIL
WTR-04

DATE: OCT. 2017

FINAL DESIGN FOR BIDDING

BAXTER & WOODMAN Consulting Engineers

CONSULTANTS	REVISED –
	REVISED –
	REVISED –
	REVISED –

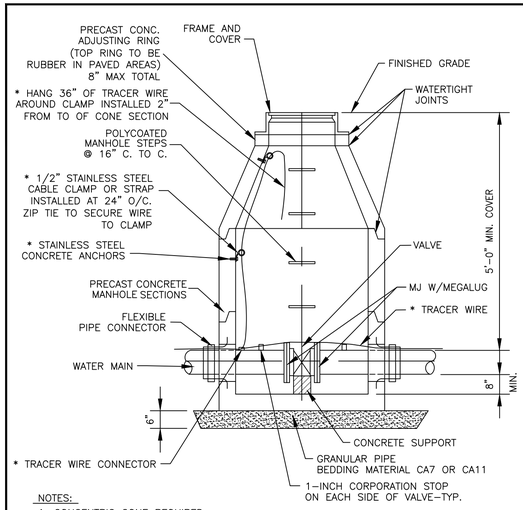
CITY OF JOLIET, ILLINOIS
GARNSEY PARK PHASE 5A WATER MAIN IMPROVEMENTS
CITY OF JOLIET CONTRACT NO. 2777-0124

CONSTRUCTION DETAILS

SCALE: AS NOTED | PROJECT NO: 221587.40

		TOTAL SHEETS	SHEET NO.
DESIGNED – MJK			
DRAWN – JJS			
CHECKED – LMS		21	19
DATE – 10/26/2023			

P:\JOLITC\221587-2024 WATER MAIN SURV\CAD\GARNSEY PARK PHASE 5\01_CIVIL 3D\01_SHTS-PLANS\221587-GARNSEY PARK PHASE 5_COVER_GEN_DETS.DWG DETAILS (2)
Plotted: 10/24/2023 10:56 AM By: ANACINO
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NOTES:

1. CONCENTRIC CONE REQUIRED FOR GATE VALVES, ECCENTRIC CONE REQUIRED FOR BUTTERFLY VALVES.
2. USE 4'-0" DIAMETER FOR WATER MAIN SIZES 4" THRU 10", 5'-0" FOR SIZES 12" OR GREATER
3. PROVIDE CAST IRON FRAME AND COVER WITH HEAVY DUTY LID, STAMPED WITH "CITY OF JOLIET" AND "WATER". EJ 1050Z1 OR NEENAH R170
* 4. ATTACH TRACER WIRE TO MAINTAIN MIN. 24" AWAY FROM STEPS
* 5. SECURE STAINLESS STEEL CABLE CLAMPS TO VAULT WALL WITH TAPCON 0.25" X 1.5" (MIN.) EMBEDMENT STAINLESS STEEL SCREW ANCHORS, OR APPROVED EQUAL.

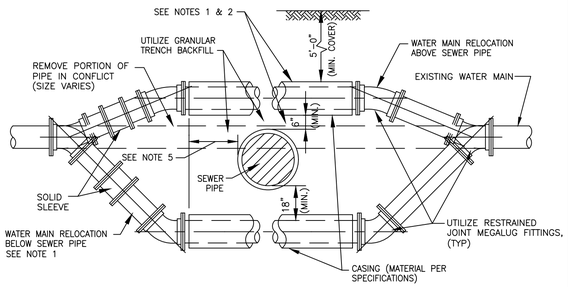
* FOR PVC WATER MAIN INSTALLATION ONLY

NOT TO SCALE

CITY OF JOLIET, ILLINOIS

WATER VALVE VAULT DETAIL
WTR-01

DATE: NOVEMBER. 2022



NOTES:

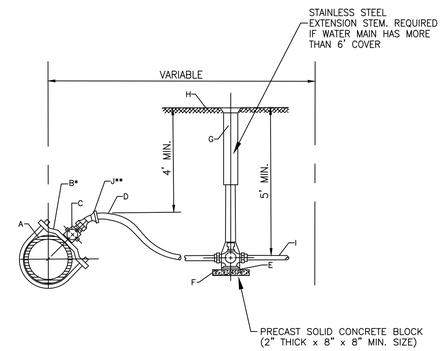
1. ONLY TO BE USED IF WATER MAIN CANNOT CROSS ABOVE PROPOSED SEWER AND MAINTAIN THE REQUIRED 18" OF SEPARATION AS SHOWN ON DRAWING, OR APPROVED BY ENGINEER IN FIELD.
2. WHEN WATER MAIN CROSSES ABOVE SEWER AND MAINTAINS THE REQUIRED 18" OF SEPARATION, THE CASING PIPE IS NOT REQUIRED.
3. WATER MAIN RELOCATIONS ARE SUBJECT TO INSPECTION AT NORMAL SYSTEM PRESSURE BEFORE BURIAL.
4. USE ONLY 45 DEGREE BENDS UNLESS OTHERWISE PERMITTED BY THE ENGINEER.
5. CASING MUST EXTEND A MINIMUM OF 10 FEET BEYOND OUTSIDE EDGE OF SEWER PIPE – ON BOTH SIDES OF SEWER.

NOT TO SCALE

CITY OF JOLIET, ILLINOIS

WATER MAIN RELOCATION DETAIL
WTR-05

DATE: OCT. 2017



*REQUIRED FOR SERVICES LARGER THAN 1"
**REQUIRED FOR SERVICES WITH LESS THAN 4' COVER

CONSTRUCTION NOTES

A. WATER MAIN
B. DUCTILE IRON, EPOXY COATED BODIES WITH DOUBLE ALLOY STEEL STRAPS AND DOUBLE BOLTS (FOUR BOLTS TOTAL). MUELLER DR2A SERIES OR EQUAL
C. CORPORATION STOP, A.Y. MCDONALD 74701 BQ
D. SERVICE PIPE, SEAMLESS SOFT TEMPERED COPPER TYPE – TYPE "K" 1" OR LARGER
E. CURB STOP, A.Y. MCDONALD 76104Q
F. CONCRETE BRICK SUPPORT
G. TYLER 6500 WITH BBAF VALVE BOX STABILIZER OR APPROVED EQUAL
H. FINISHED GRADE
I. CONNECT TO EXISTING SERVICE, PROVIDE ADAPTERS AS REQUIRED
J. EIGHTH BEND COMPRESSION COUPLING – UNION

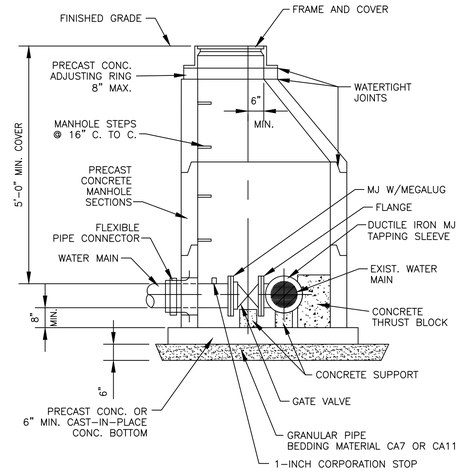
NOTE: FOR 1 1/2" OR 2" SERVICE, ADD ENLARGED BASE FOR SERVICE BOX.

NOT TO SCALE

CITY OF JOLIET, ILLINOIS

WATER SERVICE CONNECTION DETAIL
WTR-06

DATE: OCT. 2020



NOTES:

1. ECCENTRIC CONE REQUIRED
2. USE 4'-0" DIAMETER FOR WATER MAIN SIZES 4" THRU 8", USE 5'-0" DIAMETER FOR WATER MAIN SIZES 10" THRU 14", USE 6'-0" DIAMETER (OR LARGER PER DESIGNER) FOR WATER MAIN SIZES 16" OR GREATER.
3. PROVIDE CAST IRON FRAME AND COVER WITH HEAVY DUTY LID, STAMPED WITH "CITY OF JOLIET" AND "WATER". EJ 1050Z1

NOT TO SCALE

CITY OF JOLIET, ILLINOIS

PRESSURE CONNECTION DETAIL
WTR-07

DATE: OCT. 2017

DUCTILE IRON-RESTRAINT JOINT TYPE PIPE LENGTH (FEET)

FITTING TYPE	DIAMETER (IN)					
	4"	6"	8"	10"	12"	16"
HORIZONTAL BEND						
11.25°	5	5	5	5	5	5
22.5°	5	5	5	5	10	10
45°	5	10	10	10	15	15
90°	15	20	20	25	30	40
VERTICAL BEND						
45°	20	25	35	40	45	60
TEE	5	5	5	5	5	5
VALVE (OPERATING PRESSURE)	20	30	35	45	50	65
VALVE (TESTING PRESSURE)	40	60	75	90	105	135
REDUCER						
6" NOMINAL PIPE	30	–	–	–	–	–
8" NOMINAL PIPE	55	35	–	–	–	–
10" NOMINAL PIPE	75	55	30	–	–	–
12" NOMINAL PIPE	90	80	55	35	–	–
16" NOMINAL PIPE	125	115	100	80	60	–

NOTE:
RJT LENGTHS MAY VARY DEPENDING ON SITE CONDITIONS. LENGTHS SHOWN ARE MINIMUM PER 5' BURY DEPTH OF WATER MAIN AND, AGGREGATE PIPE BACKFILL.

NOT TO SCALE

CITY OF JOLIET, ILLINOIS

POLYWRAPPED DI RJT DETAIL

WTR-09

DATE: NOVEMBER 2022

PVC-RESTRAINT JOINT TYPE PIPE LENGTH (FEET)

FITTING TYPE	DIAMETER (IN)					
	4"	6"	8"	10"	12"	16"
HORIZONTAL BEND						
11.25°	5	5	5	5	5	5
22.5°	5	5	5	5	5	10
45°	5	10	10	10	15	15
90°	10	15	15	20	25	35
VERTICAL BEND						
45°	15	15	20	25	30	40
TEE	5	5	5	5	5	5
VALVE (OPERATING PRESSURE)	15	20	25	30	35	45
VALVE (TESTING PRESSURE)	30	40	50	60	70	90
REDUCER						
6" NOMINAL PIPE	20	–	–	–	–	–
8" NOMINAL PIPE	35	20	–	–	–	–
10" NOMINAL PIPE	50	35	20	–	–	–
12" NOMINAL PIPE	60	50	40	20	–	–
16" NOMINAL PIPE	80	75	65	55	40	–

NOTE:
RJT LENGTHS MAY VARY DEPENDING ON SITE CONDITIONS. LENGTHS SHOWN ARE MINIMUM PER 5' BURY DEPTH OF WATER MAIN AND, AGGREGATE PIPE BACKFILL.

NOT TO SCALE

CITY OF JOLIET, ILLINOIS

PVC RJT DETAIL
WTR-09

DATE: NOVEMBER 2022

FINAL DESIGN FOR BIDDING

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BAXTER & WOODMAN consulting engineers

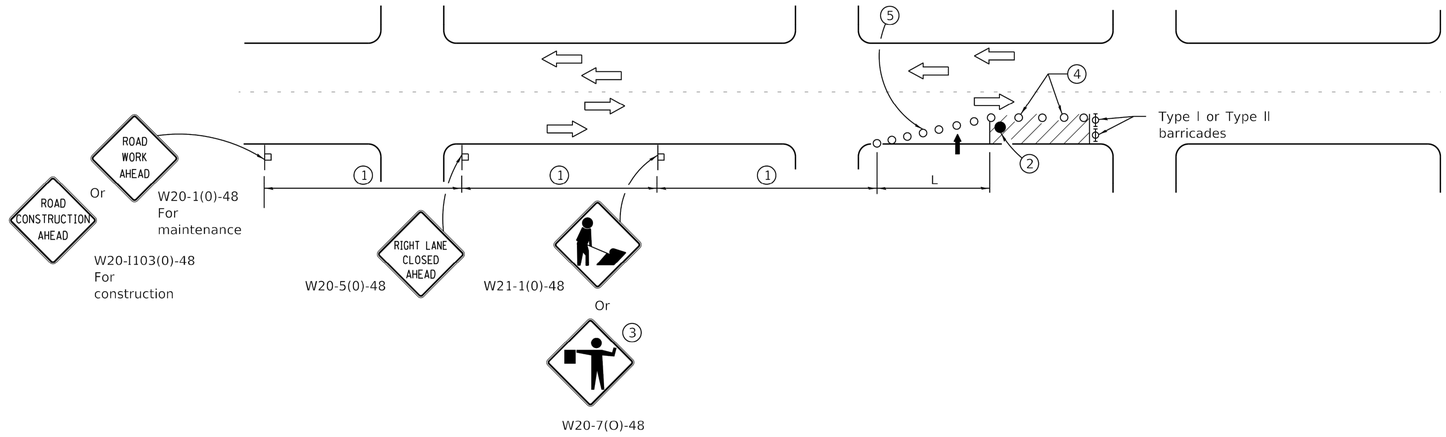
CONSULTANTS	REVISED –
	REVISED –
	REVISED –
	REVISED –

CITY OF JOLIET, ILLINOIS
GARNSEY PARK PHASE 5A WATER MAIN IMPROVEMENTS
CITY OF JOLIET CONTRACT NO. 2777-0124

CONSTRUCTION DETAILS

SCALE: AS NOTED | PROJECT NO: 221587.40

		TOTAL SHEETS	SHEET NO.
DESIGNED – MJK			
DRAWN – JJS			
CHECKED – LMS		21	20
DATE – 10/26/2023			



SIGN SPACING	
Posted Speed	Sign Spacing
55	500' (150 m)
50-45	350' (100 m)
<45	200' (60 m)

SYMBOLS

- Arrow board
- Cone, drum or barricade
- Sign on portable or permanent support
- Work area
- Barricade or drum with flashing light
- Flagger with traffic control sign.

1. Refer to SIGN SPACING TABLE for distances.
2. Required for speeds > 40 mph.
3. Use flagger sign only when flagger is present.
4. Cones at 25' (8 m) centers for 250' (75 m). Additional cones may be placed at 50' (15 m) centers. When drums or Type I or Type II barricades are used, the interval between devices may be doubled.
5. Cones, drums or barricades at 20' (6 m) centers in taper.

GENERAL NOTES

This Standard is used where at any time, day or night, any vehicle, equipment, workers or their activities encroach on the pavement requiring the closure of one traffic lane in an Urban area.

Calculate L as follows:

SPEED LIMIT	FORMULAS	
	English	(Metric)
40 mph (70 km/h) or less:	$L=\frac{WS^2}{60}$	$L=\frac{WS^2}{150}$
45 mph (80 km/h) or greater:	L=(W)(S)	L=0.65(W)(S)

W = Width of offset in feet (meters).

S = Normal posted speed mph (km/h).

All dimensions are in inches (millimeters) unless otherwise shown.

Illinois Department of Transportation

PASSED January 1, 2015
ENGINEER OF SAFETY ENGINEERING

APPROVED January 1, 2015
ENGINEER OF DESIGN AND ENVIRONMENT

ISSUED 1-1-97

DATE	REVISIONS
1-1-15	Renamed standard. Moved
	case on Sheet 2 to new
	Highway Standard.
1-1-14	Revised workers sign
	number to agree with
	current MUTCD.

URBAN SINGLE LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN

STANDARD 701606-10

FINAL DESIGN FOR BIDDING

BAXTER & WOODMAN Consulting Engineers

CONSULTANTS | REVISED – | REVISED – | REVISED – | REVISED –

CITY OF JOLIET, ILLINOIS
GARNSEY PARK PHASE 5A WATER MAIN IMPROVEMENTS
CITY OF JOLIET CONTRACT NO. 2777-0124

IDOT DETAILS

SCALE: AS NOTED | PROJECT NO: 221587.40

DESIGNED – MJK
DRAWN – JJS
CHECKED – LMS
DATE – 10/26/2023

TOTAL SHEETS	SHEET NO.
21	21

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