FINAL DESIGN
FOR BIDDING

CITY OF JOLIET, ILLINOIS

TWIN OAKS WATER MAIN IMPROVEMENTS

CITY OF JOLIET CONTRACT NO. 2860-0125



VICINITY MAP

Sheet List Table	
Sheet Number	Sheet Title
G000	COVER
G001	SHEET KEY
G002	LEGENDS, BENCHMARKS, AND ABBREVIATIONS
G003	GENERAL NOTES AND SUMMARY OF QUANTITIES
G004	MAINTENANCE OF TRAFFIC GENERAL NOTES, SEQUENCE OF CONSTRUCTION, NOTES, AND STANDARDS
C001	HERITAGE DRIVE STA. 10+00 TO STA. 15+00 PLAN AND PROFILE
C002	HERITAGE DRIVE STA. 15+00 TO STA. 20+00 PLAN AND PROFILE
C003	HERITAGE DRIVE STA. 20+00 TO STA. 24+00 PLAN AND PROFILE
C004	TWIN OAKS DRIVE STA. 30+00 TO STA. 35+00 PLAN AND PROFILE
C005	TWIN OAKS DRIVE STA. 35+00 TO STA. 40+00 PLAN AND PROFILE
C006	TWIN OAKS DRIVE STA. 40+00 TO STA. 44+00 PLAN AND PROFILE
C007	DEERPATH DRIVE STA. 50+00 TO STA. 55+00 PLAN AND PROFILE
C008	DEERPATH DRIVE STA. 55+00 TO STA. 60+00 PLAN AND PROFILE
C009	DEERPATH DRIVE STA. 60+00 TO STA. 63+00 PLAN AND PROFILE
C010	ROBERT COURT STA. 70+00 TO STA. 75+00 PLAN AND PROFILE
C011	CRABAPPLE COURT STA. 80+00 TO STA. 84+00 PLAN AND PROFILE
C012	CRANBERRY COURT 90+00 TO STA. 93+00 PLAN AND PROFILE
C013	REBECCA ROAD STA. 100+00 TO STA. 105+00 PLAN AND PROFILE
C014	ESSINGTON ROAD STA. 27+50 TO STA 33+00 PLAN AND PROFILE
C015	ESSINGTON ROAD STA. 40+00 TO STA 45+00 PLAN AND PROFILE
C016	ESSINGTON ROAD STA. 28+75 TO STA. 31+97 CROSS SECTIONS
C017	CONSTRUCTION DETAILS
C018	CONSTRUCTION DETAILS
C019	CONSTRUCTION DETAILS

EXISTING UTILITIES: X233611174

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.

Call Before You Dig
JULIE ILLINOIS ONE-CALL SYSTEM
Simply Call 811

COPYRIGHT © 2024, BY BAXTER & WOODMAN, INC.
ALL RIGHTS RESERVED. NO PART OF THESE DRAWINGS MAY BE REPRODUCED, OR OTHERWISE REVISED WITHOUT WRITTEN PERMISSION OF BAXTER & WOODMAN, INC.

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

MICHAEL KENNY
062-70246
LICENSED PROFESSIONAL ENGINEER OF
STATE OF ILLINOIS

PROJECT MANAGER
"LICENSE EXPIRES 11-30-2025"

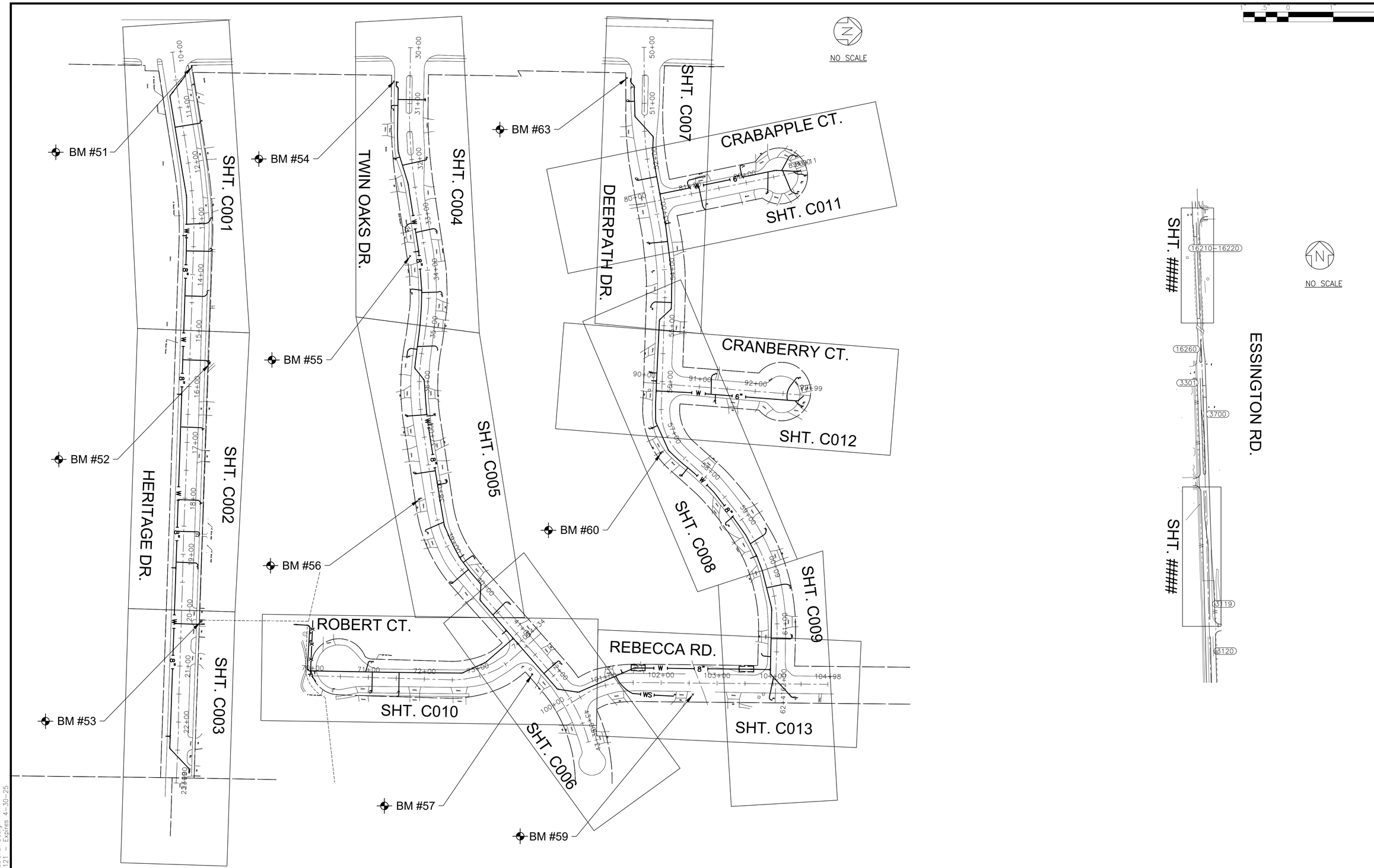
PROJECT ENGINEER

BAXTER & WOODMAN
Consulting Engineers
www.baxterwoodman.com

BAXTER & WOODMAN, INC.
STATE OF ILLINOIS - PROFESSIONAL DESIGN FIRM
LICENSE NO. - 184-001121 - EXPIRES 4/30/2025

PROJECT NO.: 2325880 DATE: 10/24/2024

P:\JOLTC\2325880-2025 WATER MAIN\CAD\TWIN OAKS PHASE 1\01_CIVIL 3D\01_SHTS-PLANS\2325880-TWIN_OAKS_P1-COVER_SHEETS.DWG Cover
Plotted: 10/22/2024 11:27 AM By: AMCMANN



FINAL DESIGN
FOR BIDDING

BAXTER & WOODMAN Consulting Engineers	CONSULTANTS	REVISED –	CITY OF JOLIET, ILLINOIS TWIN OAKS WATER MAIN IMPROVEMENTS CITY OF JOLIET CONTRACT NO. 2860-0125
		REVISED –	
		REVISED –	
		REVISED –	

SHEET KEY

SCALE: AS NOTED | PROJECT NO: 2325880

DESIGNED – ACM	TOTAL SHEETS	SHEET NO.
DRAWN – ABN	24	G001
CHECKED – MJK		
DATE – 10/24/2024		

P:\JOLITC\2325880-2025 WATER MAIN\CAD\TWIN OAKS PHASE 1\01_CIVIL 30\01_SHTS-PLANS\2325880-TWIN_OAKS_P1-SHEET_KEY.DWG sheet key
Plotted: 10/22/2024 11:29 AM By: AMCMANN
Copyright © 2024, By Baxter & Woodman, Inc.
State of Illinois – Professional Design Firm
License No. – 184-001121 – Expires 4-30-25

LEGEND

EXISTING		PROPOSED
	SANITARY SEWER OR SERVICE	
	STORM SEWER OR SERVICE	
W W	WATER MAIN OR SERVICE	W W
FM FM	FORCE MAIN	FM 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	
	WATER SERVICE BOX OR CURB STOP	BB
	WATER TEE FITTING	
	WATER SLEEVE FITTING	
	WATER 90° FITTING	
	WATER 45° FITTING	
	WATER REDUCER FITTING	
	CAP FITTING	
	WATER CROSS FITTING	
WM	WATER METER	
	CLEAN OUT	
	SEPTIC VENT	
	TO BE ABANDONED AND/OR REMOVED	
	STRUCTURE TO BE ABANDONED	
G 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 T	TELEPHONE CABLE	
TD TD	TELEPHONE DUCT	
TEL	TELEPHONE VAULT	
TR	TELEPHONE RISER	
CTV CTV	CABLE TELEVISION (BURIED)	
CTV	CABLE T.V. RISER	
CTV	CABLE T.V. VAULT	
E 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 X X	FENCE	
	GUARD RAIL	
	CULVERT (CMP UNLESS NOTED)	
DL DL	DITCH	
EXIST. R.O.W.	RIGHT OF WAY (ROW)	
ROW	RIGHT OF WAY MONUMENT	
P.L. 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 OH	OVERHEAD ELECTRICAL	
	SUMMIT	
	RIPRAP	
	ROADWAY DITCH FLOW	
	SWALE	

BENCHMARKS (NAVD 88 DATUM)

B.M. # 51 — MINI RAILROAD SPIKE SET IN SOUTH FACE OF POWER POLE LOCATED AT NORTHEAST CORNER OF HERITAGE DRIVE AND ESSINGTON ROAD
ELEV. = 601.243

B.M. # 52 — NORTHWEST ARROW BOLT SET IN FIRE HYDRANT LOCATED AT ADDRESS 3101 HERITAGE DRIVE
ELEV. = 614.223

B.M. # 53 — NORTHWEST ARROW BOLT SET IN FIRE HYDRANT LOCATED AT WEST ENTRANCE OF ADDRESS 3001 HERITAGE DRIVE
ELEV. = 620.413

B.M. # 54 — NORTHWEST ARROW BOLT SET IN FIRE HYDRANT LOCATED AT ADDRESS 3116 TWIN OAKS DRIVE
ELEV. = 606.383

B.M. # 55 — SOUTHWEST ARROW BOLT SET IN FIRE HYDRANT LOCATED SOUTH OF TWIN OAKS ROAD BETWEEN ADDRESS 3106 TWIN OAKS ROAD AND 3108 TWIN OAKS ROAD
ELEV. = 612.076

B.M. # 56 — SOUTHEAST ARROW BOLT SET IN FIRE HYDRANT LOCATED AT ADDRESS 3006 TWIN OAKS DRIVE
ELEV. = 612.327

B.M. # 57 — SOUTHEAST ARROW BOLT SET IN FIRE HYDRANT LOCATED ON SOUTHEAST CORNER OF TWIN OAKS DRIVE AND ROBERT COURT
ELEV. = 613.632

B.M. # 59 — CHISELED SQUARE SET IN EAST HEADWALL ON BRIDGE LOCATED AT SOUTHEAST CORNER NORTH OF ADDRESS OF 3000 DEERPATH DRIVE
ELEV. = 614.823

B.M. # 60 — SOUTHWEST ARROW BOLT SET IN FIRE HYDRANT LOCATED AT ADDRESS OF 3012 DEERPATH DRIVE
ELEV. = 615.30

B.M. # 63 — NORTHWEST ARROW BOLT SET IN FIRE HYDRANT LOCATED AT SOUTHEST CORNER OF DEERPATH DRIVE AND ESSINGTON ROAD
ELEV. = 609.308

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
FOR BIDDING

BAXTER & WOODMAN consulting engineers

CONSULTANTS	REVISED –
	REVISED –
	REVISED –
	REVISED –

CITY OF JOLIET, ILLINOIS
TWIN OAKS WATER MAIN IMPROVEMENTS
CITY OF JOLIET CONTRACT NO. 2860-0125

LEGENDS, BENCHMARKS, AND ABBREVIATIONS

SCALE: AS NOTED | PROJECT NO: 2325880

DESIGNED – ACM
DRAWN – ABN
CHECKED – MJK
DATE – 10/24/2024

TOTAL SHEETS: 24 | SHEET NO.: G002

P:\JOLIT\2325880-2025 WATER MAIN\CAD\TWIN OAKS PHASE 1\01_CIVIL 3D\01_SHTS-PLANS\2325880-TWIN_OAKS_P1-COVER_SHEETS.DWG Legend
Plotted: 10/22/2024 11:29 AM By: AMCMANN
Copyright © 2024, By Baxter & Woodman, Inc.
State of Illinois – Professional Design Firm
License No. – 184-001121 – Expires 4-30-25

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.

- HERITAGE DRIVE, TWIN OAKS DRIVE, DEERPATH DRIVE, CRANBERRY COURT, CRABAPPLE COURT, ROBERT COURT, AND REBECCA ROAD SHALL HAVE 2.5 INCHES OF BINDER AND 1.5 INCHES OF SURFACE COURSE.
- ESSINGTON ROAD SHALL HAVE 4 INCHES OF BINDER AND 2 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
	BASE BID – WATER MAIN IMPROVEMENTS		
1	TRAFFIC CONTROL AND PROTECTION	LSUM	1
2	GRANULAR TRENCH BACKFILL	CUYD	3,300
3	WATER MAIN (OPEN CUT), 6–INCH DI	FOOT	153
4	WATER MAIN (OPEN CUT), 6–INCH	FOOT	1,048
5	WATER MAIN (OPEN CUT), 8–INCH DI	FOOT	106
6	WATER MAIN (OPEN CUT), 8–INCH	FOOT	3,839
7	WATER MAIN (DIRECTIONALLY DRILLED), 8–INCH HDPE	FOOT	160
8	ADDITIONAL ACCESS PIT	EACH	2
9	MISCELLANEOUS FITTINGS	POUND	6,500
10	CONNECT TO WATER MAIN (NON–PRESSURE), 6–INCH	EACH	3
11	CONNECT TO WATER MAIN (NON–PRESSURE), 8–INCH	EACH	4
12	GATE VALVE, 6–INCH	EACH	3
13	GATE VALVE, 8–INCH	EACH	12
14	VALVE VAULT, 4–FOOT DIAMETER	EACH	15
15	VALVE VAULT (ADDITIONAL DEPTH), 4–FOOT DIAMETER	VFT	3
16	FIRE HYDRANT	EACH	16
17	FIRE HYDRANT BARREL EXTENSION	VFT	3
18	LINE STOP, 6–INCH	EACH	2
19	LINE STOP, 8–INCH	EACH	1
20	ABANDONMENT OF EXISTING WATER MAINS AND APPURTENANCES	LSUM	1
21	WATER SERVICE CONNECTION TO WATER MAIN AND CURB STOP, 1–INCH	EACH	49
22	WATER SERVICE CONNECTION TO WATER MAIN AND CURB STOP, 1.5–INCH	EACH	1
23	WATER SERVICE CONNECTION TO WATER MAIN AND CURB STOP, 2–INCH	EACH	8
24	WATER SERVICE LINE TYPE K – OPEN CUT, 1–INCH	FOOT	542
25	WATER SERVICE LINE TYPE K – OPEN CUT, 1.5–INCH	FOOT	20
26	WATER SERVICE LINE TYPE K – OPEN CUT, 2–INCH	FOOT	20
27	WATER SERVICE LINE TYPE K – DIRECTIONAL DRILLING, 1–INCH	FOOT	1,278
28	WATER SERVICE LINE TYPE K – DIRECTIONAL DRILLING, 1.5–INCH	FOOT	20
29	WATER SERVICE LINE TYPE K – DIRECTIONAL DRILLING, 2–INCH	FOOT	416
30	WATER SERVICE CASING PIPE	FOOT	130
31	PROJECT MANAGEMENT	HOUR	3
32	UTILITY LOCATION – PRIVATE PROPERTY	EACH	1
33	LANDSCAPING PROJECT MANAGEMENT	HOUR	2
34	LANDSCAPING RESTORATION ALLOWANCE	EACH	1
35	SHRUB AND BRUSH DISPOSAL	EACH	2
36	FENCE TO BE REMOVED AND RE–ERECTED	FOOT	120
37	CLEARING	LSUM	1
38	REMOVE AND REPLACE DRAIN TILES, 6–INCH THROUGH 12–INCH	FOOT	130
39	ADJUSTING SANITARY SEWER SERVICE LINE	EACH	5
40	EXPLORATORY EXCAVATION	EACH	1
41	INLET PROTECTION FILTER	EACH	26
42	RESTORATION OF LAWNS AND PARKWAYS	SQYD	1,100
43	TEMPORARY HOT–MIX ASPHALT PAVEMENT	SQYD	50
44	HOT–MIX ASPHALT REMOVAL AND REPLACEMENT, 2.5–INCH BINDER 1.5–INCH SURFACE	SQYD	4,100
45	HOT–MIX ASPHALT DRIVEWAY REMOVAL AND REPLACEMENT, 3–INCH	SQYD	100
46	PCC DRIVEWAY REMOVAL AND REPLACEMENT, 6–INCH	SQYD	300
47	GRAVEL DRIVEWAY REMOVAL AND REPLACEMENT	SQYD	50
48	GRAVEL SHOULDER RESTORATION	SQYD	50
49	CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	700
50	PCC SIDEWALK REMOVAL AND REPLACEMENT	SQFT	700
51	BRICK SIDEWALK REMOVAL AND REPLACEMENT	SQFT	100
52	DETECTABLE WARNINGS	SQFT	10
53	PAVEMENT MARKING – LINE, 4–INCH (THERMOPLASTIC)	FOOT	20
54	PAVEMENT MARKING – LINE, 6–INCH (THERMOPLASTIC)	FOOT	20
55	PAVEMENT MARKING – LINE, 12–INCH (THERMOPLASTIC)	FOOT	20
56	PAVEMENT MARKING – LINE, 24–INCH (THERMOPLASTIC)	FOOT	20
57	REMOVAL AND REPLACEMENT OF SIGNS	EACH	2
58	TREE ROOT PRUNING	EACH	16
59	TREE TRIMMING	LSUM	1
60	DUST CONTROL	DAY	45
61	REMOVAL AND REPLACEMENT OF UNSUITABLE MATERIAL	CUYD	62
62	SOIL TESTS FOR CONTAMINANTS	EACH	9
63	CONTAMINATED WASTE DISPOSAL	CUYD	62
	ALTERNATE #1 – ESSINGTON ROAD WATER MAIN IMPROVEMENTS		
64	TRAFFIC CONTROL AND PROTECTION	LSUM	1
65	GRANULAR TRENCH BACKFILL	CUYD	100
66	WATER MAIN REMOVAL, 8–INCH	FOOT	456
67	WATER MAIN (OPEN CUT), 8–INCH DI	FOOT	65
68	WATER MAIN (OPEN CUT), 12–INCH DI	FOOT	15
69	MISCELLANEOUS FITTINGS	POUND	500
70	CONNECT TO WATER MAIN (NON–PRESSURE), 8–INCH	EACH	1
71	CONNECT TO WATER MAIN (NON–PRESSURE), 12–INCH	EACH	1
72	GATE VALVE, 8–INCH	EACH	1
73	GATE VALVE, 12–INCH	EACH	1
74	VALVE BOX	EACH	1
75	VALVE VAULT, 5–FOOT DIAMETER	EACH	1
76	LINE STOP, 12–INCH	EACH	1
77	FILLING OF EXISTING PIPE FOR ABANDONMENT	CUYD	10
78	ABANDONMENT OF EXISTING WATER MAINS AND APPURTENANCES	LSUM	1
79	EXPLORATORY EXCAVATION	EACH	1
80	INLET PROTECTION FILTER	EACH	5
81	RESTORATION OF LAWNS AND PARKWAYS	SQYD	400
82	HOT–MIX ASPHALT REMOVAL AND REPLACEMENT, 4–INCH BINDER 2–INCH SURFACE	SQYD	200
83	CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	150
84	PCC SIDEWALK REMOVAL AND REPLACEMENT	SQFT	100

FINAL DESIGN FOR BIDDING

P:\JOLTC\2325880–2025 WATER MAIN\CAD\TWIN OAKS PHASE 1\01_CIVIL 3D\01_SHTS–PLANS\2325880–TWIN_OAKS_P1–COVER_SHEETS.DWG Gen Notes
Plotted: 10/22/2024 11:29 AM By: AMCMANN
Copyright © 2024, By Baxter & Woodman, Inc.
State of Illinois – Professional Design Firm
License No. – 184–001121 – Expires 4–30–25

BAXTER & WOODMAN Consulting Engineers

CONSULTANTS	REVISED –
	REVISED –
	REVISED –
	REVISED –

CITY OF JOLIET, ILLINOIS
TWIN OAKS WATER MAIN IMPROVEMENTS
CITY OF JOLIET CONTRACT NO. 2860-0125

GENERAL NOTES AND SUMMARY OF QUANTITIES

SCALE: AS NOTED | PROJECT NO: 2325880

		TOTAL SHEETS	SHEET NO.
DESIGNED – ACM			
DRAWN – ABN		24	G003
CHECKED – MJK			
DATE – 10/24/2024			

MAINTENANCE OF TRAFFIC NOTES

1. THE SUGGESTED MAINTENANCE OF TRAFFIC CONTROL IS THE MINIMUM REQUIREMENT. ADDITIONAL TRAFFIC CONTROL DEVICES AS SPECIFIED BY THE CURRENT VERSION OF THE IDOT HIGHWAY STANDARDS, THE CURRENT VERSION OF THE ILLINOIS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, THE SPECIAL PROVISIONS AND AS DIRECTED BY THE ENGINEER SHALL BE PLACED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER.
2. THE CONTRACTOR SHALL SUBMIT A PREPLANNED SEQUENCE OF WORK PRIOR TO THE START OF WORK FOR REVIEW AND APPROVAL. NO WORK SHALL COMMENCE UNTIL PREPLANNED SEQUENCE OF WORK HAS BEEN APPROVED BY THE CITY. WORK SHALL BE SCHEDULED TO MINIMIZE INCONVENIENCE TO BUSINESSES AND MAINTAIN A REASONABLE LEVEL OF CONSTRUCTION EFFICIENCY. THE CITY AND/OR ENGINEER RESERVES THE RIGHT TO RESTRICT WORK IN ANY SEGMENT IF CONSTRUCTION OPERATIONS ON A PREVIOUS SEGMENT ARE UNACCEPTABLE OR TRAFFIC CONTROL OPERATIONS BECOME UNACCEPTABLE.
3. THE ENGINEER AND THE CITY SHALL BE NOTIFIED OF ANY CHANGES TO CONSTRUCTION STAGING. ALL CHANGES TO CONSTRUCTION STAGING MUST BE APPROVED BY THE ENGINEER PRIOR TO IMPLEMENTATION.
4. ALL LANE CLOSURES SHALL BE IN ACCORDANCE WITH THE APPLICABLE HIGHWAY STANDARDS.
5. ALL ROADWAY CLOSURES THAT LAST MORE THAN TWENTY (20) MINUTES THAT DO NOT HAVE A DETOUR IN PLACE REQUIRE A ROADWAY CLOSURE PERMIT APPROVED BY THE CITY PRIOR TO CLOSURE. THE ROADWAY CLOSURE PERMIT SHALL BE SUBMITTED TO THE CITY FOR REVIEW A MINIMUM OF SEVEN (7) BUSINESS DAYS PRIOR TO THE ANTICIPATED CLOSURE. IF A ROADWAY IS TO BE CLOSED FOR NO MORE THAN TWENTY (20) MINUTES THE CONTRACTOR SHALL NOTIFY ALL EMERGENCY DEPARTMENTS WITHIN THE CITY PRIOR TO ANY LANE CLOSURE. SEE SPECIFICATION SECTION 01 41 26 FOR DETAILS.
6. ALL TRENCHES, HOLES, AND PITS SHALL BE FILLED OR STEEL PLATED AT THE END OF EACH DAY.
7. REFER TO DISTRICT DETAIL TC-10 FOR SIGNAGE FOR TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS AND DRIVEWAYS.
8. ALL FLAGGERS REQUIRED FOR MAINTENANCE OF TRAFFIC, INCLUDING ANY FLAGGERS NEEDED TO MAINTAIN TRAFFIC FOR SIDE STREETS AND COMMERCIAL DRIVEWAYS, SHALL BE INCLUDED IN THE COST OF TRAFFIC CONTROL AND PROTECTION.
9. EMERGENCY VEHICLE AND LOCAL TRAFFIC ACCESS SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION. ANY SIGNIFICANT CHANGE IN TRAFFIC CONTROL SHALL HAVE A PRIOR APPROVAL BY THE ENGINEER. THE CONTRACTOR SHALL PROVIDE A MINIMUM OF THREE (3) DAYS' NOTICE IN ADVANCE OF CONSTRUCTION ACTIVITIES WHICH IMPACT EMERGENCY SERVICES.
10. THE FURNISHING, INSTALLING, AND RELOCATING OF ALL TRAFFIC SIGNS WILL BE INCLUDED IN THE COST OF TRAFFIC CONTROL AND PROTECTION. ALL CONFLICTING TRAFFIC SIGNS SHALL BE COVERED AS DIRECTED BY THE ENGINEER. THIS WILL BE INCLUDED IN THE COST OF TRAFFIC CONTROL AND PROTECTION.
11. EXISTING TRAFFIC CONTROL DEVICES WITHIN THE LIMITS OF CONSTRUCTION ARE TO BE PROTECTED FROM DAMAGE BY THE CONTRACTOR. ANY DAMAGED SIGNS CAUSED BY THIS WORK SHALL BE REPLACED BY THE CONTRACTOR.
12. THE COST OF ADDITIONAL DEPLOYMENTS, SETUPS AND/OR MOBILIZATIONS NEEDED FOR STAGED CONSTRUCTION SHALL BE INCLUDED IN THE COST OF TRAFFIC CONTROL AND PROTECTION AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
13. CONSTRUCTION VEHICLES AND/OR EQUIPMENT SHALL NOT BE PARKED OVERNIGHT WITHIN RIGHT-OF-WAY ADJACENT TO OR IN FRONT OF COMMERCIAL BUSINESS PROPERTIES. THE ENGINEER WILL ASSIST THE CONTRACTOR IN IDENTIFYING CONSTRUCTION STAGING LOCATIONS AT THE START OF CONSTRUCTION.
14. PROVIDE ACCESS TO PRIVATE DRIVEWAYS AT ALL TIMES EXCEPT DURING PIPELINE INSTALLATION ACROSS A DRIVEWAY. NOTIFY HOMEOWNERS OR BUSINESSES AT LEAST 24 HOURS, BUT NOT MORE THAN 48 HOURS IN ADVANCE OF AN ANTICIPATED DRIVEWAY CLOSURE, AND AGAIN JUST PRIOR TO CLOSING TO ALLOW HOMEOWNERS TO MOVE THEIR VEHICLES. MAINTAIN ACCESS FOR EMERGENCY VEHICLES AT ALL TIMES.
15. ALL TRENCHES CROSSING DRIVEWAYS OR SIDEWALKS SHALL HAVE ACCESS RESTORED AT THE END OF THE WORK DAY.
16. ALL TRENCHES CROSSING EXISTING ROADWAYS OUTSIDE OF THE CLOSED LANES SHALL BE PATCHED OR PLATED AT THE END OF THE WORK DAY.
17. SEE SPECIFICATIONS FOR GRANULAR TRENCH BACKFILL AND PAVEMENT PATCHING REQUIREMENTS.
18. THE CONTRACTOR MUST OBTAIN PRIOR APPROVAL FROM THE CITY BEFORE COMPLETING NIGHT WORK ON THE WEEKENDS.
19. DROP-OFFS ADJACENT TO THE TRAVEL LANE SHALL BE KEPT TO A MINIMUM. PROTECTION OF THE DROP-OFF SHALL BE ACCORDING TO THE IDOT BUREAU OF SAFETY PROGRAMS AND ENGINEERING, SAFETY ENGINEERING POLICY MEMORANDUM 4-21. TEMPORARY CONCRETE BARRIER WALL IS SHOWN ON THE PLANS WHERE THE DROP-OFF REQUIREMENTS FOR USING BARRICADES CANNOT BE MET. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT THE DROP-OFFS ALONG THE REMAINING AREAS MEET THE OFFSET, HEIGHT, AND DURATION REQUIREMENTS TO USE BARRICADES. THIS MAY REQUIRE THE CONTRACTOR TO REPLACE OR PLACE SUFFICIENT MATERIAL IN THE EXCAVATION TO REDUCE THE DROP-OFF TO BE COMPLIANT WITH THE REQUIREMENTS FOR USE OF BARRICADES. NO ADDITIONAL COMPENSATION SHALL BE ALLOWED TO COMPLY WITH THIS REQUIREMENT.
20. THE "ROAD CONSTRUCTION AHEAD" SIGNS SHALL REMAIN INSTALLED UNTIL THE COMPLETION OF THE PROJECT OR UNTIL NO ROADWAY HAZARDS REMAIN WITHIN THE WORK ZONE.
21. CHANGEABLE MESSAGE SIGNS SHALL BE INSTALLED TWO WEEKS PRIOR TO ALL ROAD CLOSURE, TRAFFIC STAGE CHANGES, AND NEW TRAFFIC SIGNAL TURN-ON EVENTS ON EACH APPROACH OF THE EFFECTED ROADWAY TO WARN MOTORISTS OF THE UPCOMING EVENT. THE SIGNS SHALL BE REMOVED TWO WEEKS THEREAFTER UNLESS THE SIGNS ARE NEEDED AGAIN FOR A SUBSEQUENT FUTURE EVENT THAT WILL OCCUR WITHIN TWO (2) WEEKS ON THE SAME APPROACH OF THE AFFECTED ROADWAY. THE SIGN LOCATIONS SHALL BE (DETERMINED BY THE ENGINEER) PLACED AS DIRECTED BY THE ENGINEER.

SEQUENCE OF CONSTRUCTION NOTES

1. SEE CONSTRUCTION PHASING INFORMATION AND EXHIBIT FOUND IN SECTION 01 31 13.16 PROJECT COORDINATION AND CONSTRUCTION PHASING OF THE PROJECT MANUAL FOR SPECIFIC GUIDANCE ON WORK AREA BREAKDOWN AND CONSTRUCTION SEQUENCING.

IDOT STANDARD DRAWINGS

701006-05 OFF-RD OPERATIONS, 2L, 2W, 15' TO 24" FROM PAVEMENT EDGE
701501-06 URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
701801-06 SIDEWALK, CORNER OR CROSSWALK CLOSURE
701901-09 TRAFFIC CONTROL DEVICES
780001-05 TYPICAL PAVEMENT MARKINGS

IDOT DISTRICT ONE STANDARDS

TC-10 TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS AND DRIVEWAYS
TC-13 DISTRICT ONE TYPICAL PAVEMENT MARKINGS

FINAL DESIGN
FOR BIDDING

P:\JOLTC\2325880-2025 WATER MAIN\CAD\TWIN OAKS PHASE 1\01_CIVIL 3D\01_SHTS-PLANS\2325880-TWIN_OAKS_P1-COVER_SHEETS.DWG MOT NOTES
Plotted: 10/22/2024 11:29 AM By: AMCMANN
Copyright © 2024 By Baxter & Woodman, Inc.
State of Illinois - Professional Design Firm
License No. - 184-001121 - Expires 4-30-25

BAXTER & WOODMAN Consulting Engineers

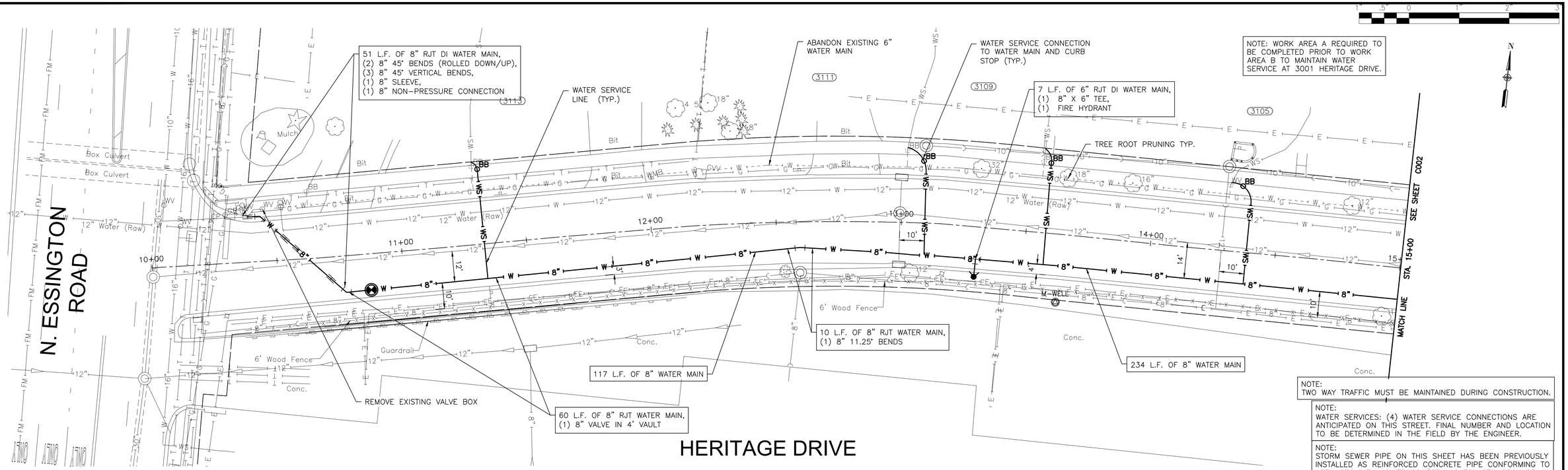
CONSULTANTS	REVISED –
	REVISED –
	REVISED –
	REVISED –

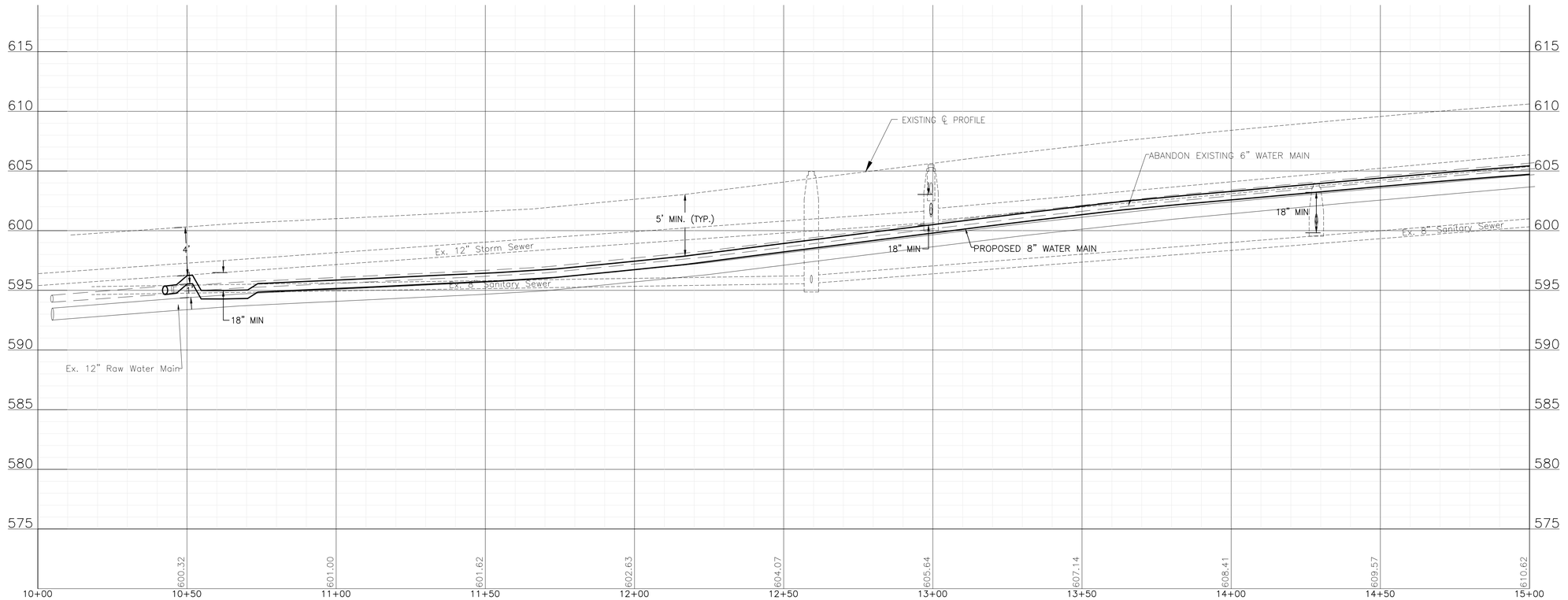
CITY OF JOLIET, ILLINOIS
TWIN OAKS WATER MAIN IMPROVEMENTS
CITY OF JOLIET CONTRACT NO. 2860-0125

MAINTENANCE OF TRAFFIC GENERAL NOTES, SEQUENCE OF CONSTRUCTION, NOTES, AND STANDARDS

SCALE: AS NOTED | PROJECT NO: 2325880

		TOTAL SHEETS	SHEET NO.
DESIGNED – ACM			
DRAWN – ABN			
CHECKED – MJK		24	G004
DATE – 10/24/2024			





FINAL DESIGN FOR BIDDING

BAXTER & WOODMAN Consulting Engineers

CONSULTANTS	REVISED –
	REVISED –
	REVISED –
	REVISED –

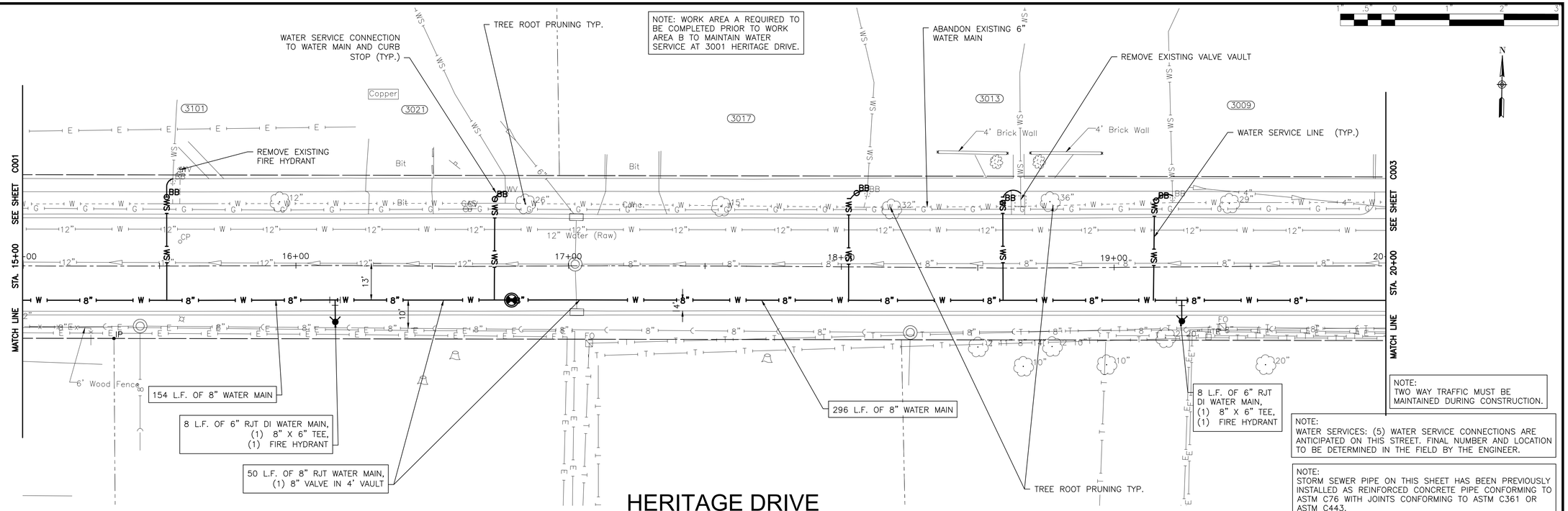
CITY OF JOLIET, ILLINOIS
TWIN OAKS WATER MAIN IMPROVEMENTS
CITY OF JOLIET CONTRACT NO. 2860-0125

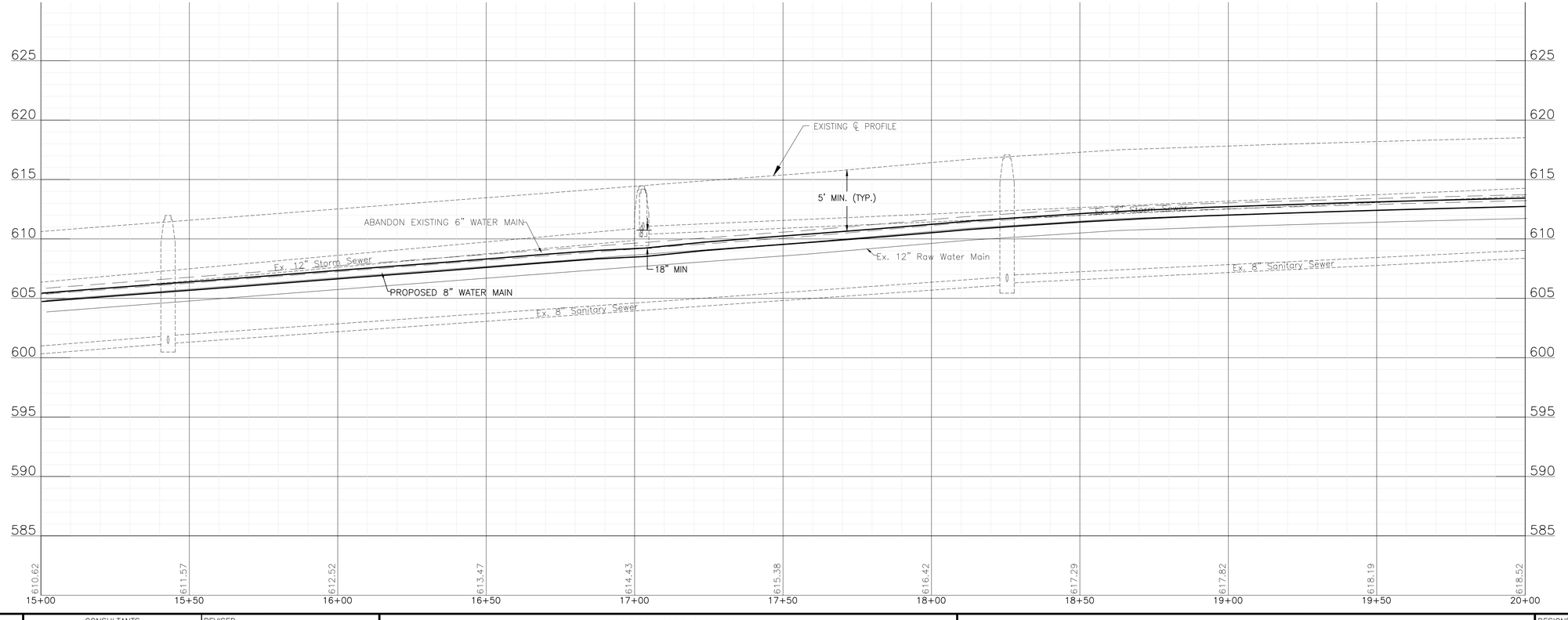
HERITAGE DRIVE STA. 10+00 TO STA. 15+00 PLAN AND PROFILE

SCALE: HORIZ 1"=20' / VERT 1"=5' | PROJECT NO: 2325880

		TOTAL SHEETS	SHEET NO.
DESIGNED – ACM		24	C001
DRAWN – ABN			
CHECKED – MJK			
DATE – 10/24/2024			

P:\JOLTC\2325880-2025 WATER MAIN\CAD\TWIN OAKS PHASE 1\01_CIVIL 3D\01_SHTS-PLANS\2325880-TWIN OAKS_PH1-DESIGN_SHEETS.DWG 10+00
Plotted: 10/22/2024 11:30 AM By: AMCMANN
Copyright © 2024, By Baxter & Woodman, Inc.
State of Illinois - Professional Design Firm
License No. - 184-001121 - Expires 4-30-25



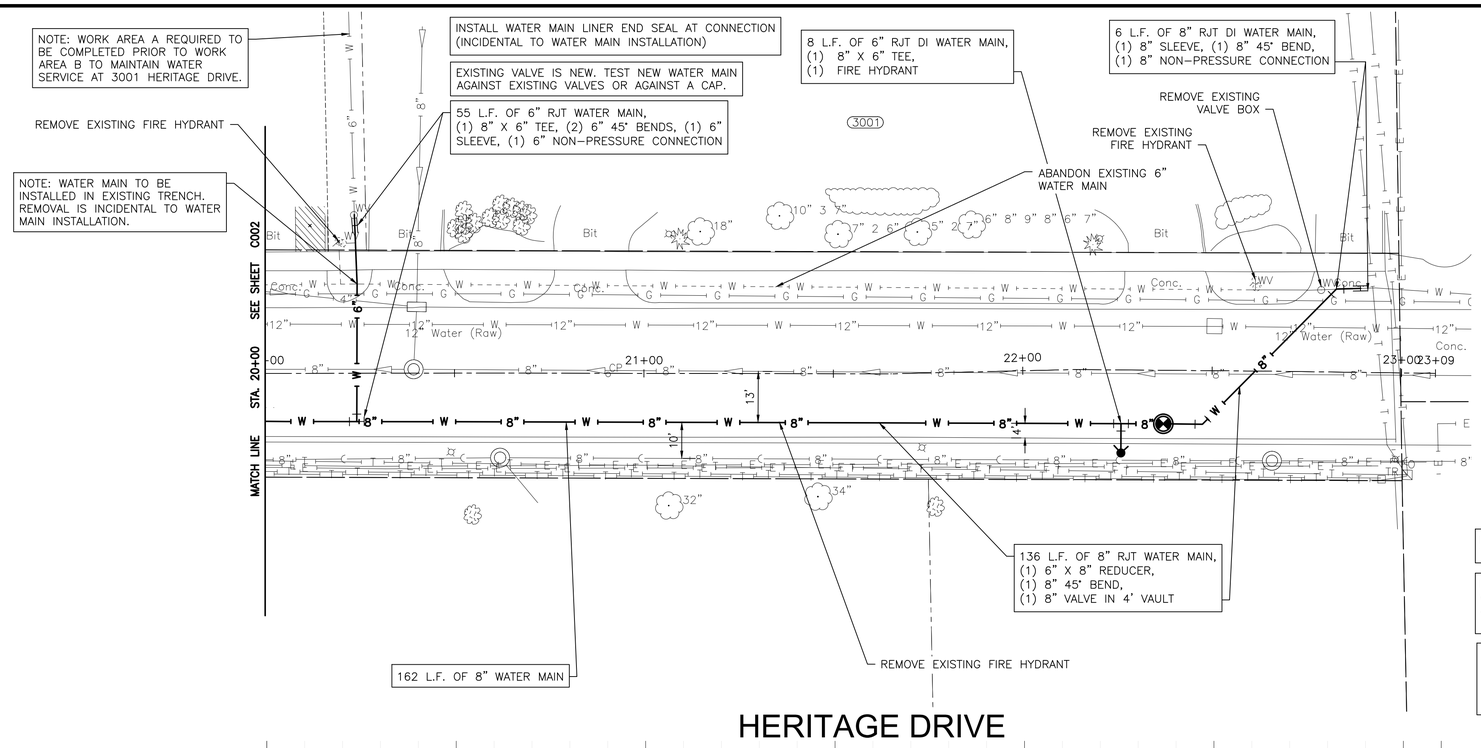


FINAL DESIGN FOR BIDDING

BAXTER & WOODMAN Consulting Engineers	CONSULTANTS REVISED – REVISED – REVISED – REVISED –	CITY OF JOLIET, ILLINOIS TWIN OAKS WATER MAIN IMPROVEMENTS CITY OF JOLIET CONTRACT NO. 2860-0125	HERITAGE DRIVE STA. 15+00 TO STA. 20+00 PLAN AND PROFILE SCALE: HORIZ 1"=20' / VERT 1"=5' PROJECT NO: 2325880

DESIGNED – ACM	TOTAL SHEETS	SHEET NO.
DRAWN – ABN	24	C002
CHECKED – MJK		
DATE – 10/24/2024		

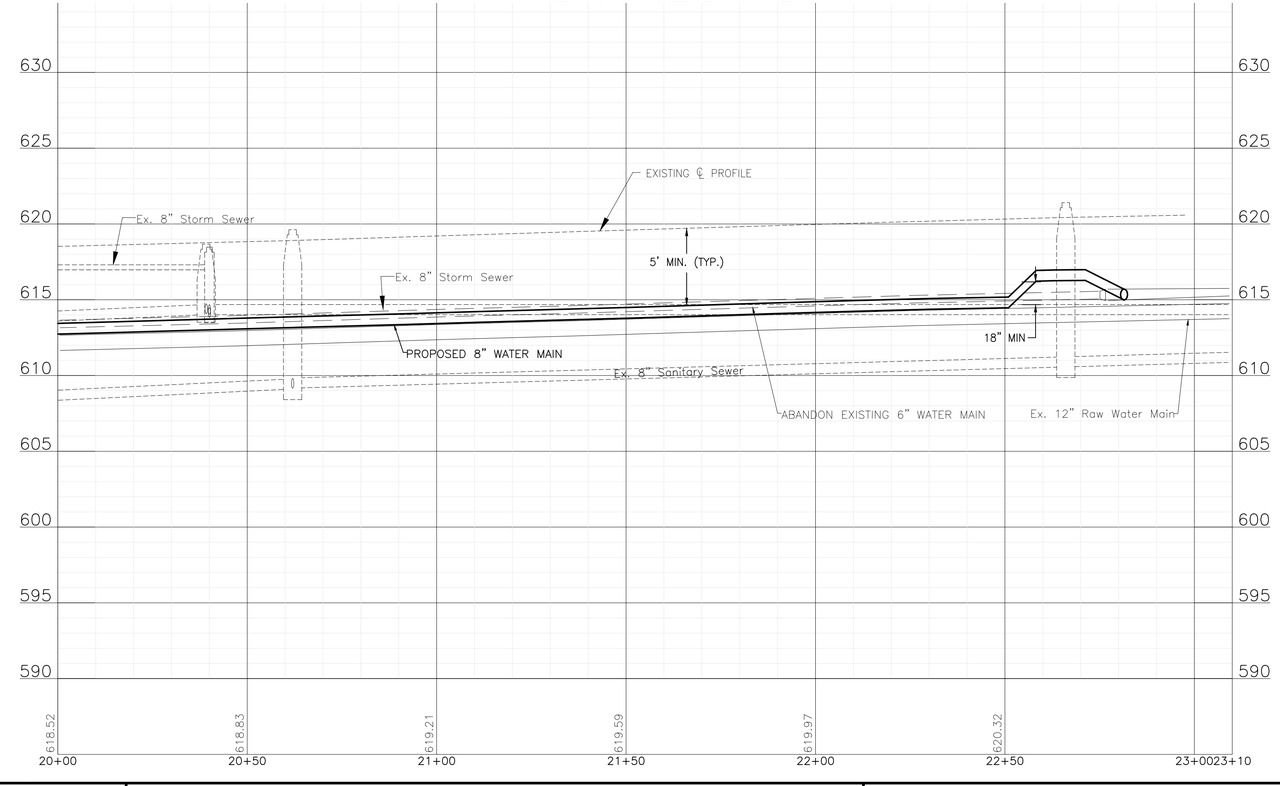
P:\JOLIT\2325880-2025 WATER MAIN\CAD\TWIN OAKS PHASE 1\01_CIVIL 3D\01_SHTS-PLANS\2325880-TWIN OAKS_PH1-DESIGN_SHEETS.DWG 15+00
Plotted: 10/22/2024 11:30 AM By: AMCMANN
Copyright © 2024, By Baxter & Woodman, Inc.
State of Illinois – Professional Design Firm
License No. – 184-001121 – Expires 4-30-25



NOTE:
TWO WAY TRAFFIC MUST BE MAINTAINED DURING CONSTRUCTION.

NOTE:
WATER SERVICES: (0) WATER SERVICE CONNECTIONS ARE ANTICIPATED ON THIS STREET. FINAL NUMBER AND LOCATION TO BE DETERMINED IN THE FIELD BY THE ENGINEER.

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.



FINAL DESIGN
FOR BIDDING

BAXTER & WOODMAN Consulting Engineers

CONSULTANTS	REVISED –
	REVISED –
	REVISED –
	REVISED –

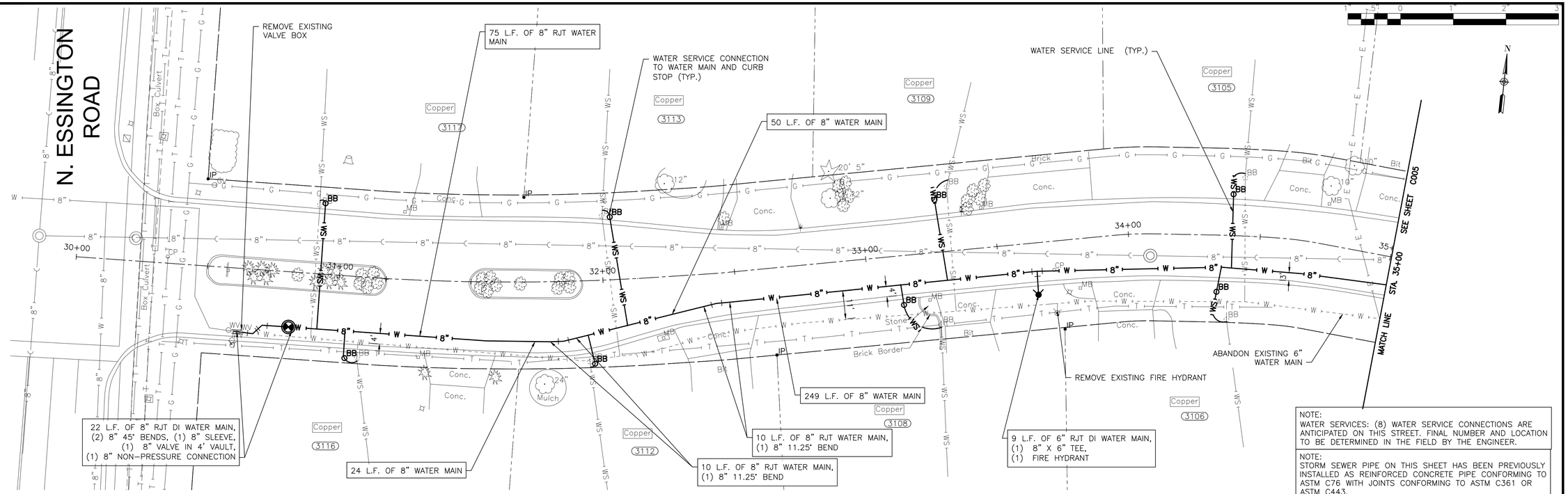
CITY OF JOLIET, ILLINOIS
TWIN OAKS WATER MAIN IMPROVEMENTS
CITY OF JOLIET CONTRACT NO. 2860-0125

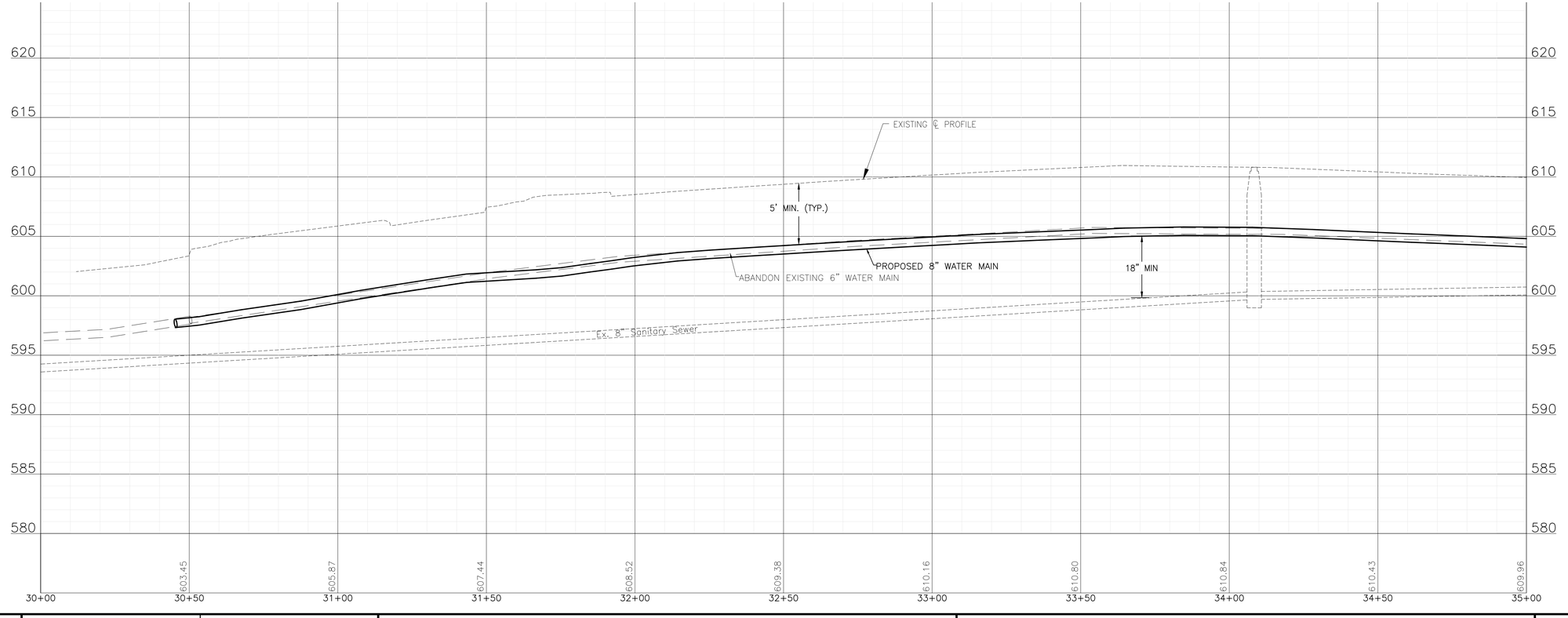
HERITAGE DRIVE STA. 20+00 TO STA. 24+00 PLAN AND PROFILE

SCALE: HORIZ 1"=20' / VERT 1"=5'
PROJECT NO: 2325880

		TOTAL SHEETS	SHEET NO.
DESIGNED – ACM			
DRAWN – ABN		24	C003
CHECKED – MJK			
DATE – 10/24/2024			

P:\JOLITC\2325880-2025 WATER MAIN\CAD\TWIN OAKS PHASE 1\01_CIVIL 3D\01_SHTS-PLANS\2325880-TWIN OAKS_PH1-DESIGN_SHEETS.DWG 20+00
Plotted: 10/22/2024 11:30 AM By: AMCMANN
Copyright © 2024, By Baxter & Woodman, Inc.
State of Illinois – Professional Design Firm
License No. – 184-001121 – Expires 4-30-25





FINAL DESIGN FOR BIDDING

BAXTER & WOODMAN Consulting Engineers

CONSULTANTS	REVISED –
	REVISED –
	REVISED –
	REVISED –

CITY OF JOLIET, ILLINOIS
TWIN OAKS WATER MAIN IMPROVEMENTS
CITY OF JOLIET CONTRACT NO. 2860-0125

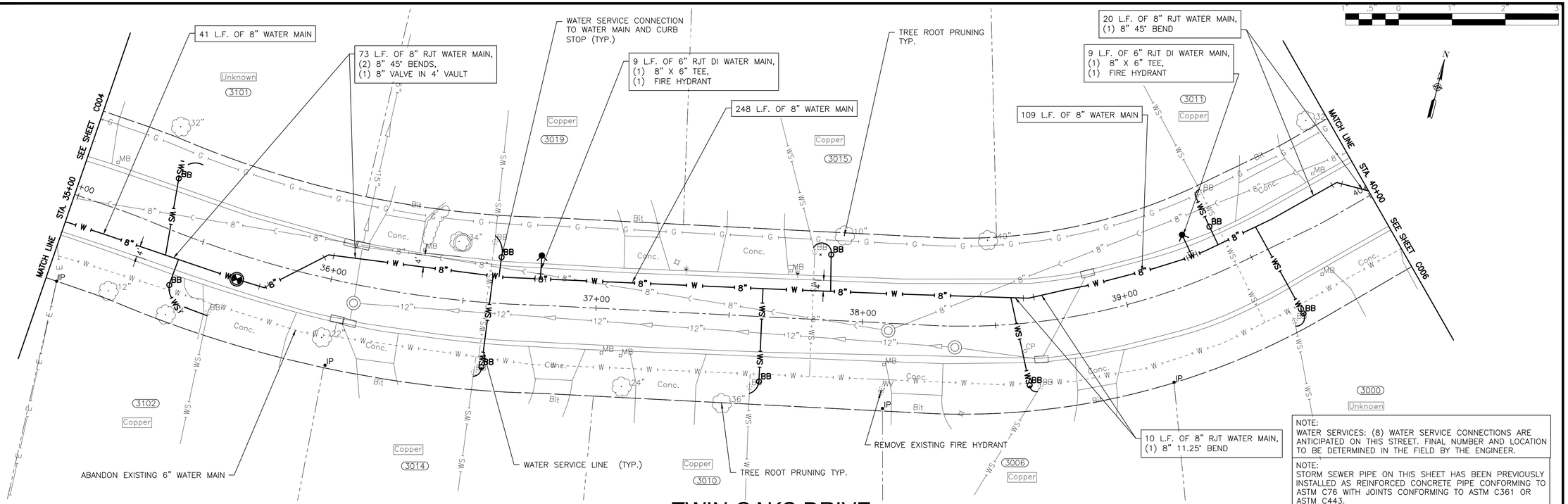
TWIN OAKS DRIVE STA. 30+00 TO STA. 35+00 PLAN AND PROFILE

SCALE: HORIZ 1"=20' / VERT 1"=5' | PROJECT NO: 2325880

DESIGNED – ACM	
DRAWN – ABN	
CHECKED – MJK	
DATE – 10/24/2024	

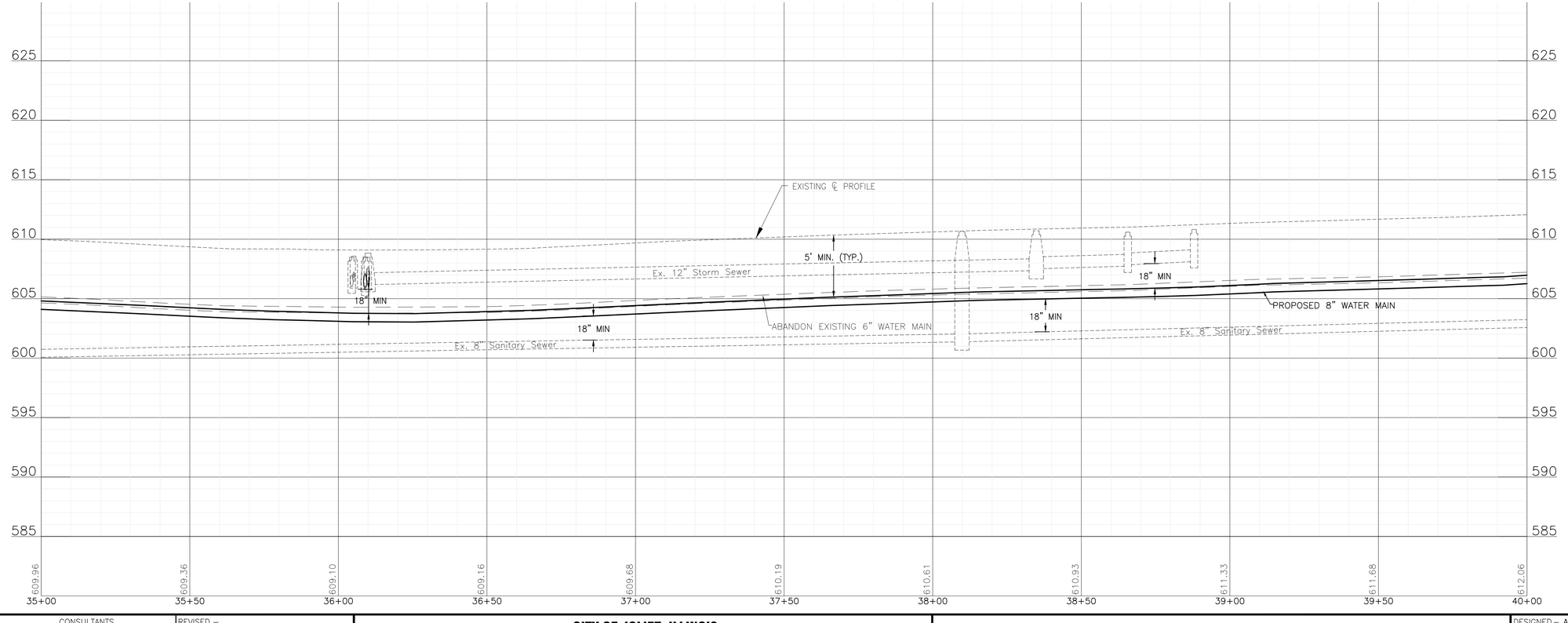
TOTAL SHEETS	SHEET NO.
24	C004

P:\JOLITC\2325880-2025 WATER MAIN\CAD\TWIN OAKS PHASE 1\01_CIVIL 30\01_SHTS-PLANS\2325880-TWIN OAKS_PH1-DESIGN_SHEETS.DWG 30+00
Plotted: 10/22/2024 11:31 AM By: AMCMANN
Copyright © 2024, By Baxter & Woodman, Inc.
State of Illinois – Professional Design Firm
License No. – 184-001121 – Expires 4-30-25



NOTE:
WATER SERVICES: (8) WATER SERVICE CONNECTIONS ARE ANTICIPATED ON THIS STREET. FINAL NUMBER AND LOCATION TO BE DETERMINED IN THE FIELD BY THE ENGINEER.

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.



FINAL DESIGN FOR BIDDING

BAXTER & WOODMAN Consulting Engineers

CONSULTANTS	REVISED –
	REVISED –
	REVISED –
	REVISED –

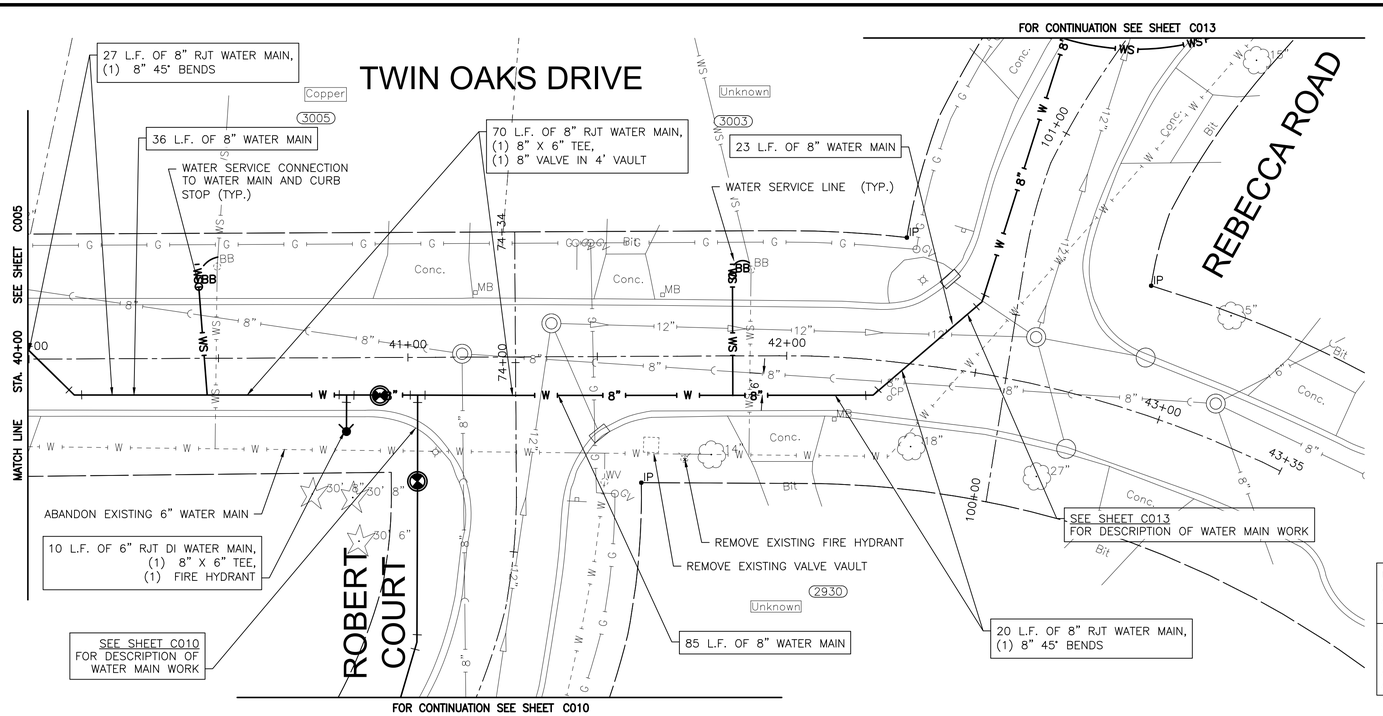
CITY OF JOLIET, ILLINOIS
TWIN OAKS WATER MAIN IMPROVEMENTS
CITY OF JOLIET CONTRACT NO. 2860-0125

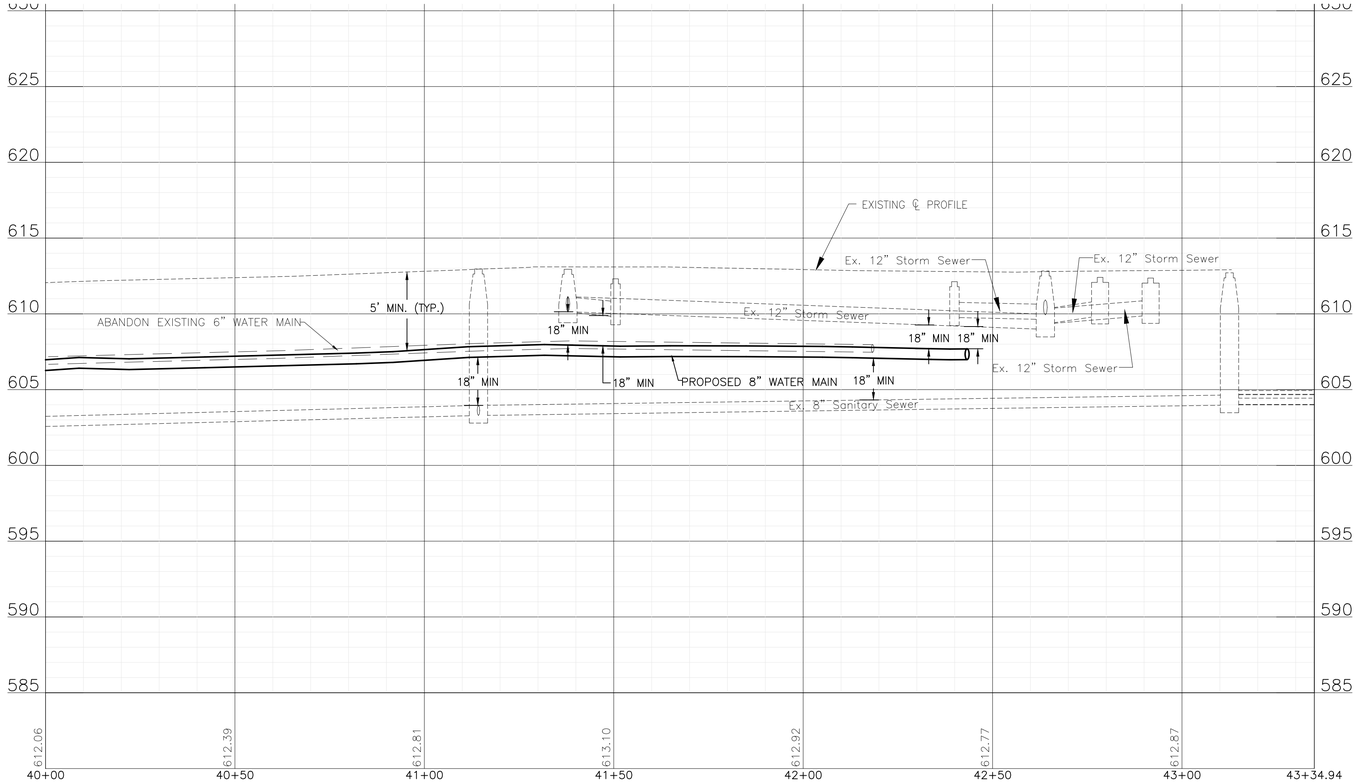
TWIN OAKS DRIVE STA. 35+00 TO STA. 40+00 PLAN AND PROFILE

SCALE: HORIZ 1"=20' / VERT 1"=5' | PROJECT NO: 2325880

		TOTAL SHEETS	SHEET NO.
DESIGNED – ACM			
DRAWN – ABN		24	C005
CHECKED – MJK			
DATE – 10/24/2024			

P:\JOLITC\2325880-2025 WATER MAIN\CAD\TWIN OAKS PHASE 1\01_CIVIL 3D\01_SHTS-PLANS\2325880-TWIN OAKS_PH1-DESIGN_SHEETS.DWG 35+00
Plotted: 10/22/2024 11:31 AM By: AMCMANN
Copyright © 2024, By Baxter & Woodman, Inc.
State of Illinois – Professional Design Firm
License No. – 184-001121 – Expires 4-30-25





NOTE:
WATER SERVICES: (2) WATER SERVICE CONNECTIONS ARE ANTICIPATED ON THIS STREET. FINAL NUMBER AND LOCATION TO BE DETERMINED IN THE FIELD BY THE ENGINEER.

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.

FINAL DESIGN
FOR BIDDING

P:\JOLTC\2325880-2025 WATER MAIN\CAD\TWIN OAKS PHASE 1\01_CIVIL 3D\01_SHTS-PLANS\2325880-TWIN OAKS_PH1-DESIGN_SHEETS.DWG 40+00
Plotted: 10/22/2024 11:31 AM By: AMCMANN
Copyright © 2024, By Baxter & Woodman, Inc.
State of Illinois - Professional Design Firm
License No. - 184-001121 - Expires 4-30-25

BAXTER & WOODMAN Consulting Engineers

CONSULTANTS	REVISED –
	REVISED –
	REVISED –
	REVISED –

CITY OF JOLIET, ILLINOIS
TWIN OAKS WATER MAIN IMPROVEMENTS
CITY OF JOLIET CONTRACT NO. 2860-0125

TWIN OAKS DRIVE STA. 40+00 TO STA. 44+00 PLAN AND PROFILE

SCALE: HORIZ 1"=20' / VERT 1"=5'
PROJECT NO: 2325880

DESIGNED – ACM	
DRAWN – ABN	
CHECKED – MJK	
DATE – 10/24/2024	

TOTAL SHEETS	SHEET NO.
24	C006

FOR CONTINUATION SEE SHEET C011

ESSINGTON ROAD

CRABAPPLE COURT

DEERPATH DRIVE

10 L.F. OF 8" RJT WATER MAIN, (1) 8" 11.25° BENDS

17 L.F. OF 8" WATER MAIN

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

103 L.F. OF 8" RJT WATER MAIN, (2) 8" 45° BENDS

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

50 L.F. OF 8" RJT WATER MAIN, (1) 8" X 6" TEE, (1) 8" VALVE IN 4' VAULT

ABANDON EXISTING 6" WATER MAIN

142 L.F. OF 8" WATER MAIN

REMOVE EXISTING FIRE HYDRANT

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

49 L.F. OF 8" RJT WATER MAIN, (2) 8" 45° BENDS

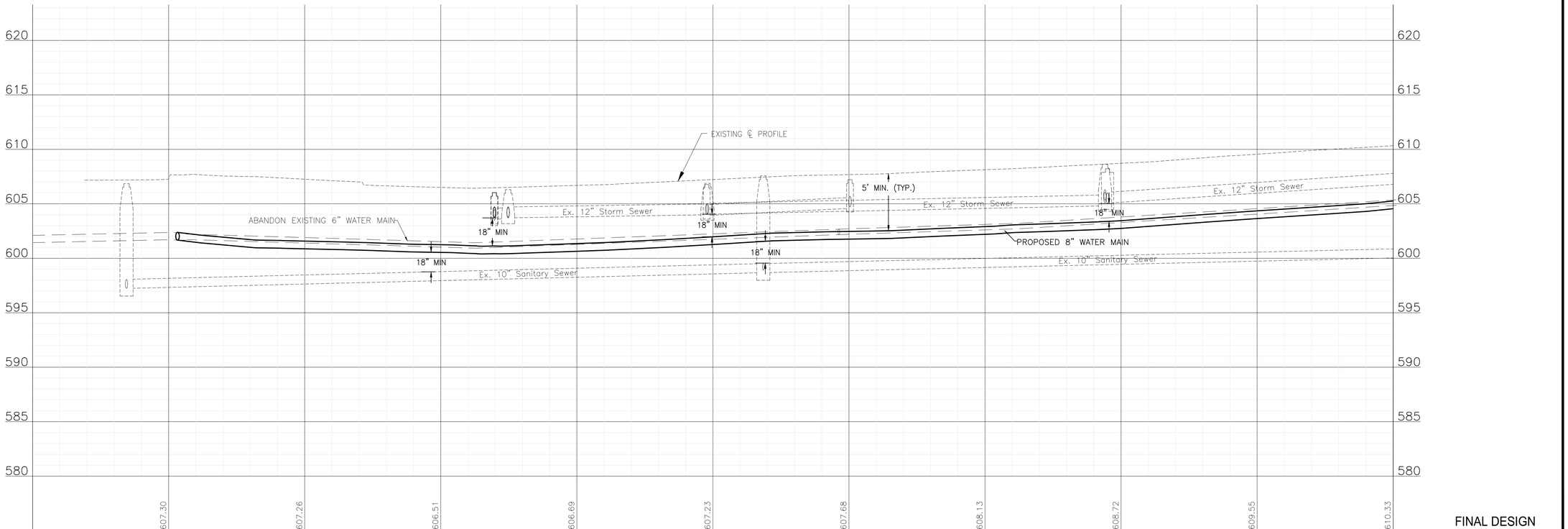
WATER SERVICE LINE (TYP.)

SEE SHEET C011 FOR DESCRIPTION OF WATER MAIN WORK

SEE SHEET C008 STA. 55+00 MATCH LINE

NOTE:
WATER SERVICES: (4) WATER SERVICE CONNECTIONS ARE ANTICIPATED ON THIS STREET. FINAL NUMBER AND LOCATION TO BE DETERMINED IN THE FIELD BY THE ENGINEER.

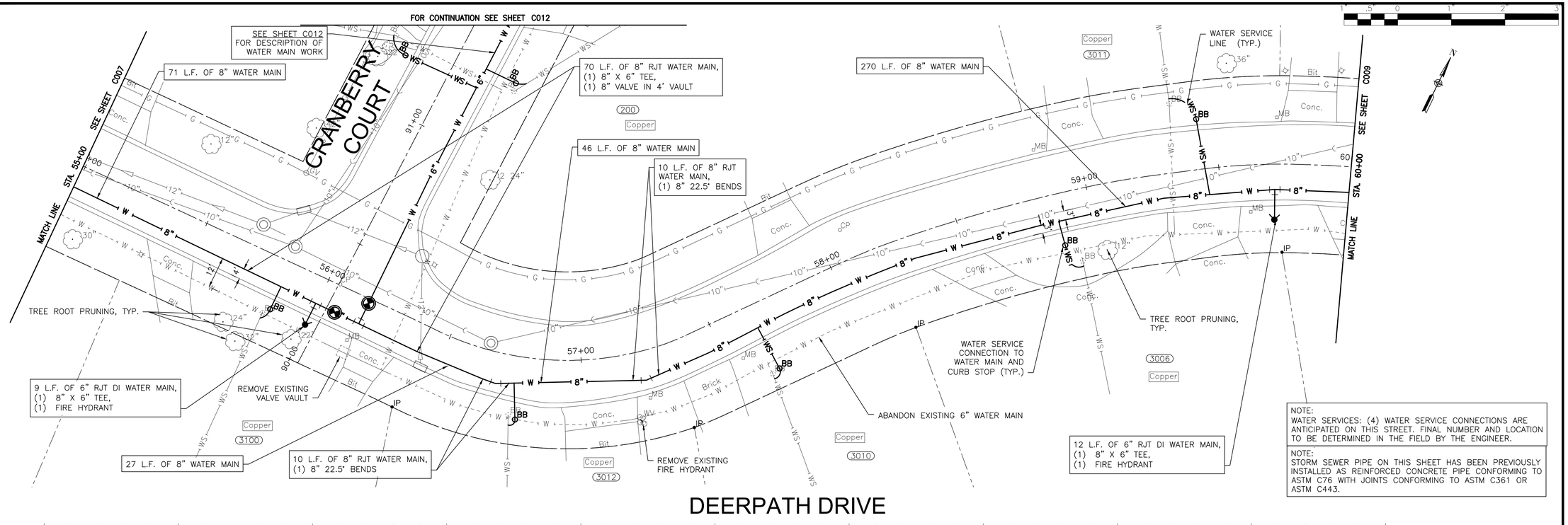
NOTE:
STORM SEWER PIPE ON THIS SHEET HAS BEEN PREVIOUSLY INSTALLED AS REINFORCED CONCRETE PIPE CONFORMING TO ASTM C76 WITH JOINTS CONFORMING TO ASTM C361 OR ASTM C443.



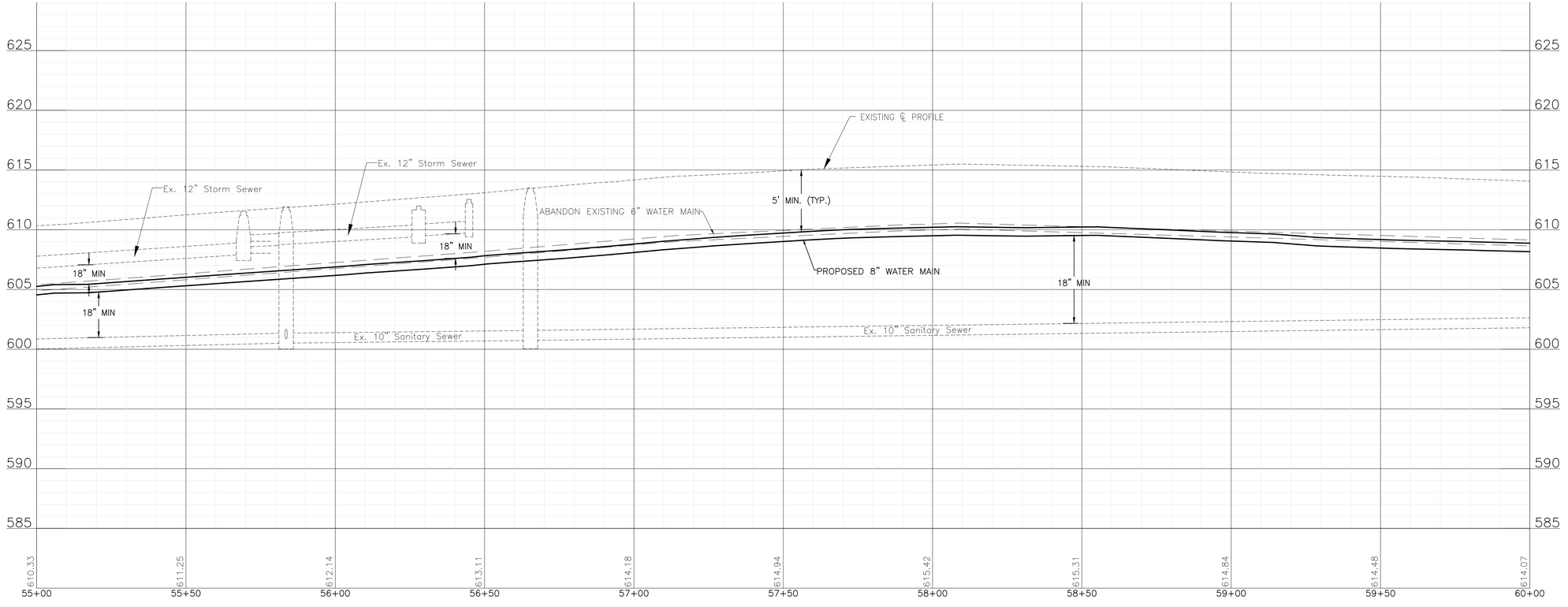
FINAL DESIGN FOR BIDDING

BAXTER & WOODMAN Consulting Engineers	CONSULTANTS	REVISED –	CITY OF JOLIET, ILLINOIS TWIN OAKS WATER MAIN IMPROVEMENTS CITY OF JOLIET CONTRACT NO. 2860-0125	DEERPATH DRIVE STA. 50+00 TO STA. 55+00 PLAN AND PROFILE	DESIGNED – ACM	TOTAL SHEETS	SHEET NO.
		REVISED –			DRAWN – ABN		
		REVISED –			CHECKED – MJK	24	C007
		REVISED –		SCALE: HORIZ 1"=20' / VERT 1"=5' PROJECT NO: 2325880	DATE – 10/24/2024		

P:\JOLTC\2325880-2025 WATER MAIN\CAD\TWIN OAKS PHASE 1\01_CIVIL 3D\01_SHTS-PLANS\2325880-TWIN OAKS_PH1-DESIGN_SHEETS.DWG 50+00
Plotted: 10/22/2024 11:32 AM By: AMCMANN
Copyright © 2024, By Baxter & Woodman, Inc.
State of Illinois – Professional Design Firm
License No. – 184-001121 – Expires 4-30-25



DEERPATH DRIVE



FINAL DESIGN FOR BIDDING

BAXTER & WOODMAN Consulting Engineers

CONSULTANTS	REVISED –
	REVISED –
	REVISED –
	REVISED –

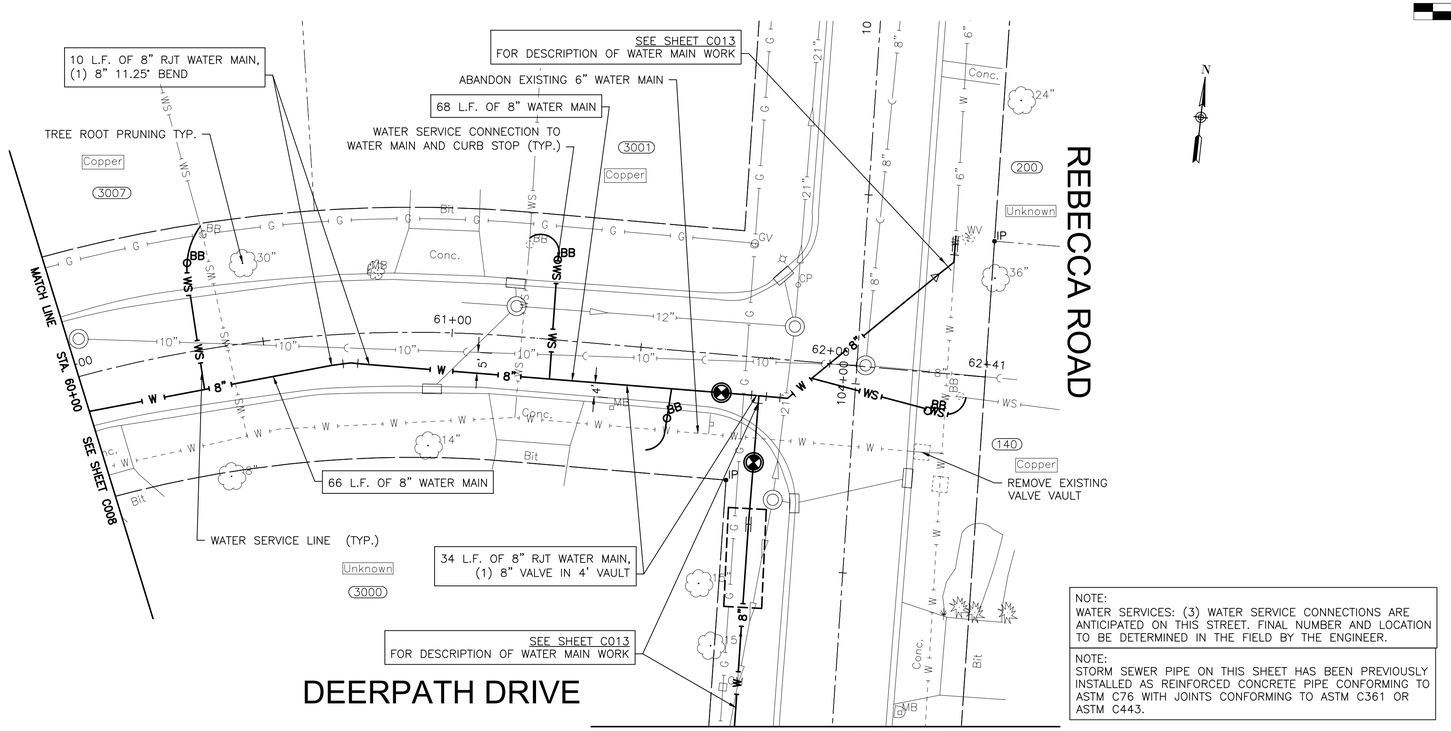
CITY OF JOLIET, ILLINOIS
TWIN OAKS WATER MAIN IMPROVEMENTS
CITY OF JOLIET CONTRACT NO. 2860-0125

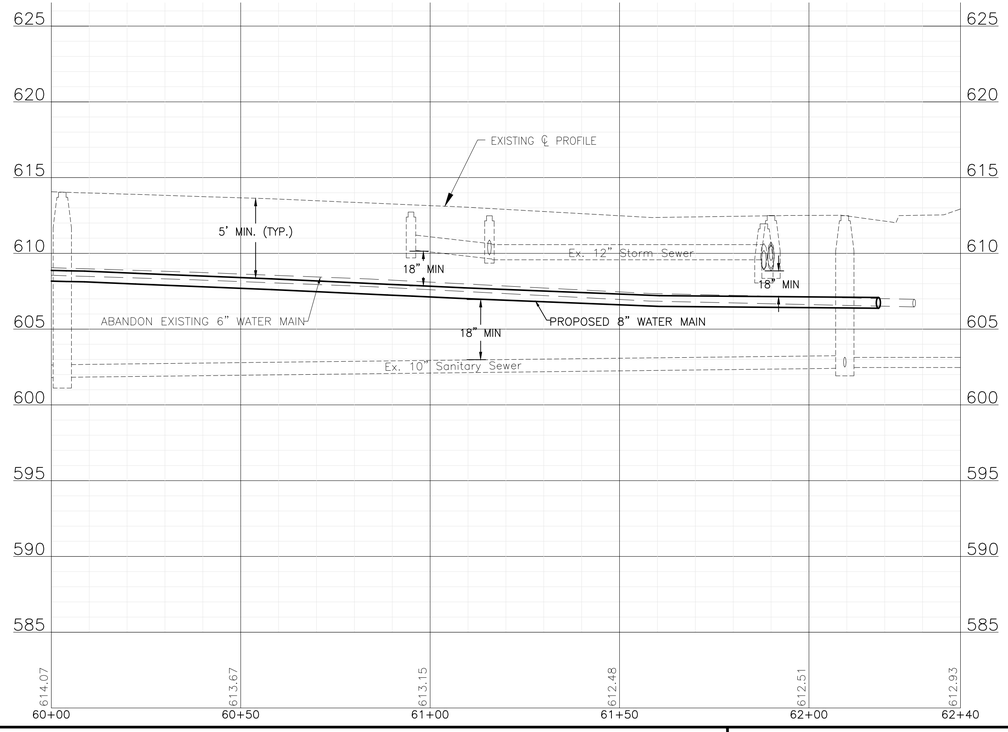
DEERPATH DRIVE STA. 55+00 TO STA. 60+00 PLAN AND PROFILE

SCALE: HORIZ 1"=20' / VERT 1"=5' | PROJECT NO: 2325880

		TOTAL SHEETS	SHEET NO.
DESIGNED – ACM			
DRAWN – ABN		24	C008
CHECKED – MJK			
DATE – 10/24/2024			

P:\JOLITC\2325880-2025 WATER MAIN\CAD\TWIN OAKS PHASE 1\01_CIVIL 3D\01_SHTS-PLANS\2325880-TWIN OAKS_PH1-DESIGN_SHEETS.DWG 55+00
Plotted: 10/22/2024 11:32 AM By: AMCMANN
Copyright © 2024, By Baxter & Woodman, Inc.
State of Illinois – Professional Design Firm
License No. – 184-001121 – Expires 4-30-25





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.

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.

FINAL DESIGN
FOR BIDDING

BAXTER & WOODMAN Consulting Engineers

CONSULTANTS	REVISED –
	REVISED –
	REVISED –
	REVISED –

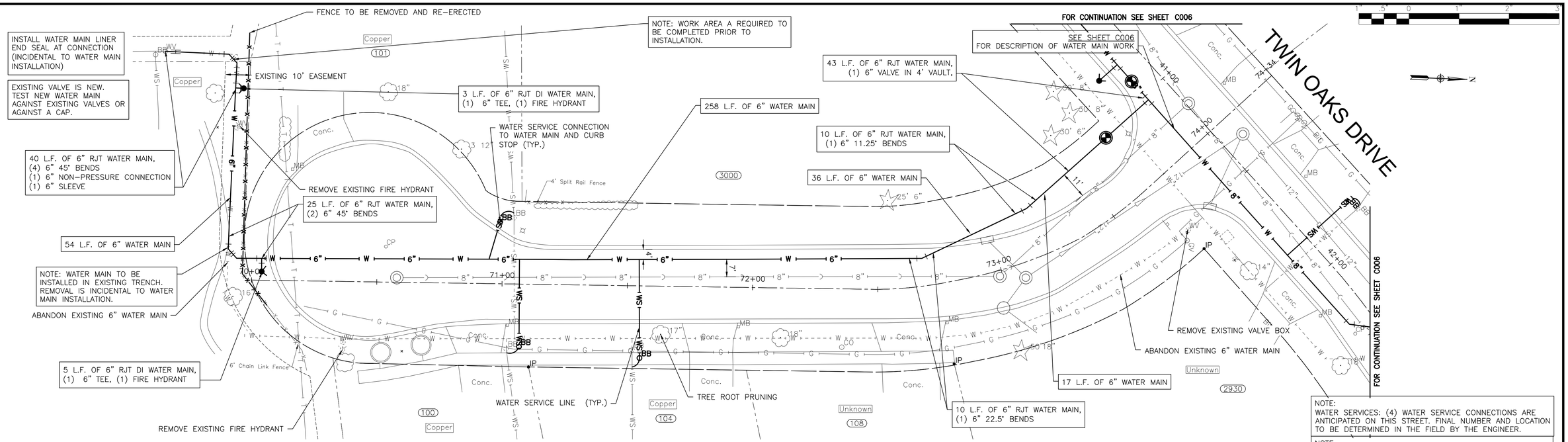
CITY OF JOLIET, ILLINOIS
TWIN OAKS WATER MAIN IMPROVEMENTS
CITY OF JOLIET CONTRACT NO. 2860-0125

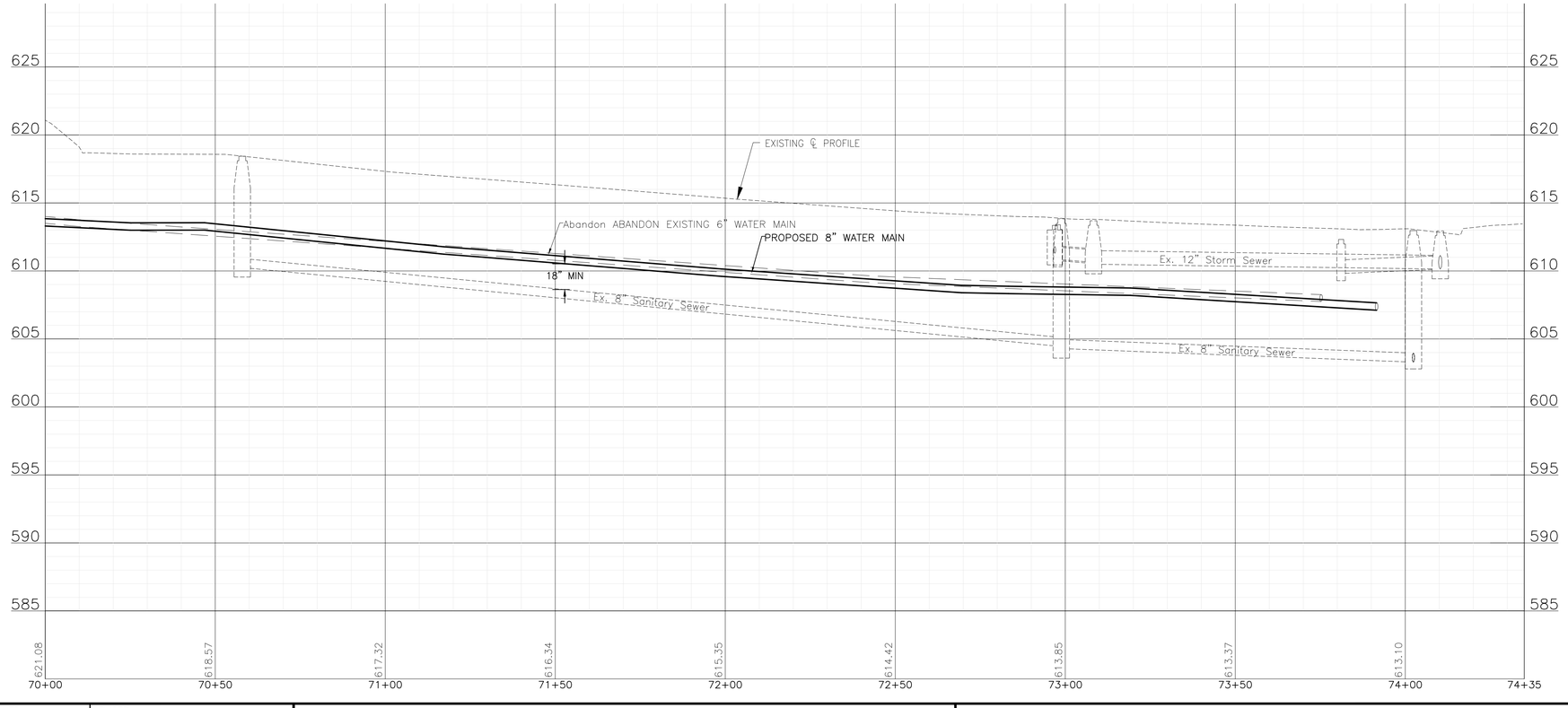
DEERPATH DRIVE STA. 60+00 TO STA. 63+00 PLAN AND PROFILE

SCALE: HORIZ 1"=20' / VERT 1"=5'
PROJECT NO: 2325880

		TOTAL SHEETS	SHEET NO.
DESIGNED – ACM			
DRAWN – ABN		24	C009
CHECKED – MJK			
DATE – 10/24/2024			

P:\JOLITC\2325880-2025 WATER MAIN\CAD\TWIN OAKS PHASE 1\01_CIVIL 3D\01_SHTS-PLANS\2325880-TWIN OAKS_PH1-DESIGN_SHEETS.DWG 60+00
Plotted: 10/22/2024 11:32 AM By: AMCMANN
Copyright © 2024, By Baxter & Woodman, Inc.
State of Illinois – Professional Design Firm
License No. – 184-001121 – Expires 4-30-25





FINAL DESIGN FOR BIDDING

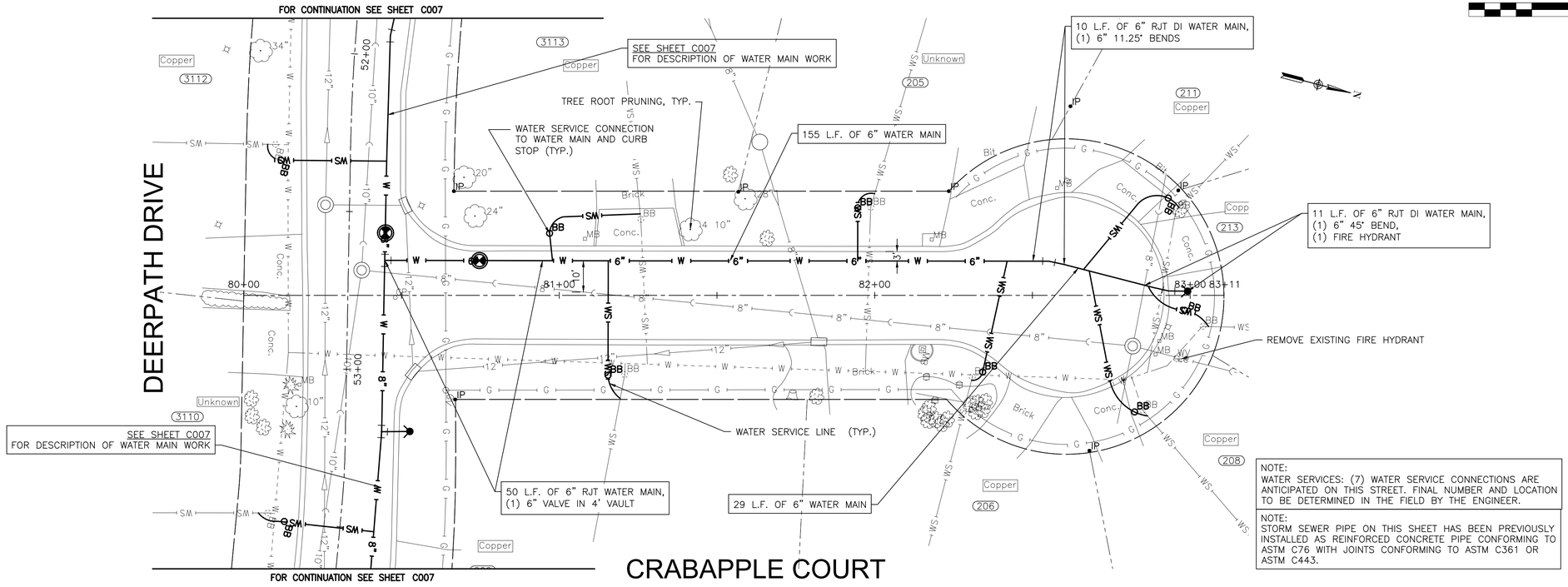
BAXTER & WOODMAN Consulting Engineers	CONSULTANTS	REVISED –	CITY OF JOLIET, ILLINOIS TWIN OAKS WATER MAIN IMPROVEMENTS CITY OF JOLIET CONTRACT NO. 2860-0125
		REVISED –	
		REVISED –	
		REVISED –	

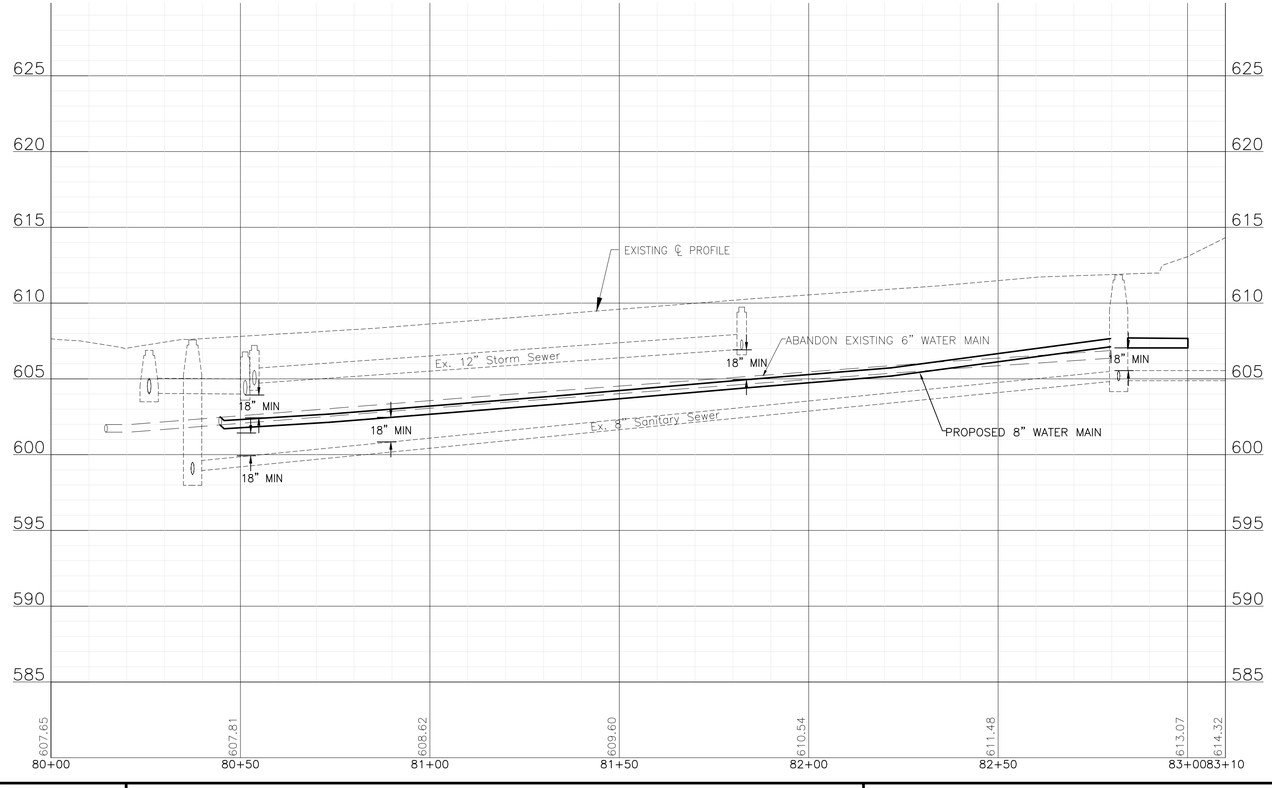
ROBERT COURT STA. 70+00 TO STA. 75+00 PLAN AND PROFILE

SCALE: HORIZ 1"=20' / VERT 1"=5' | PROJECT NO: 2325880

		TOTAL SHEETS	SHEET NO.
DESIGNED – ACM			
DRAWN – ABN		24	C010
CHECKED – MJK			
DATE – 10/24/2024			

P:\JOLITC\2325880-2025 WATER MAIN\CAD\TWIN OAKS PHASE 1\01_CIVIL 3D\01_SHTS-PLANS\2325880-TWIN OAKS_PH1-DESIGN_SHEETS.DWG 70+00
Plotted: 10/22/2024 11:33 AM By: AMCMANN
Copyright © 2024, By Baxter & Woodman, Inc.
State of Illinois – Professional Design Firm
License No. – 184-001121 – Expires 4-30-25



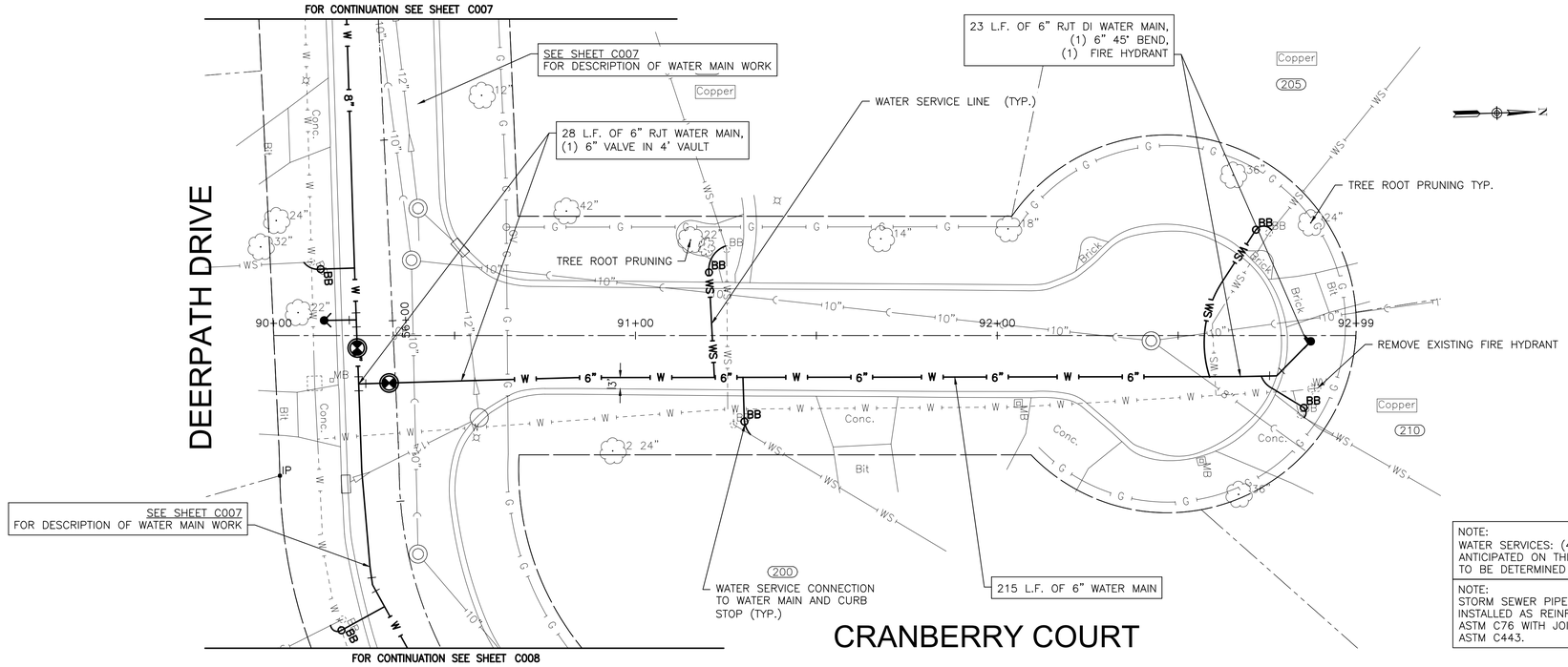


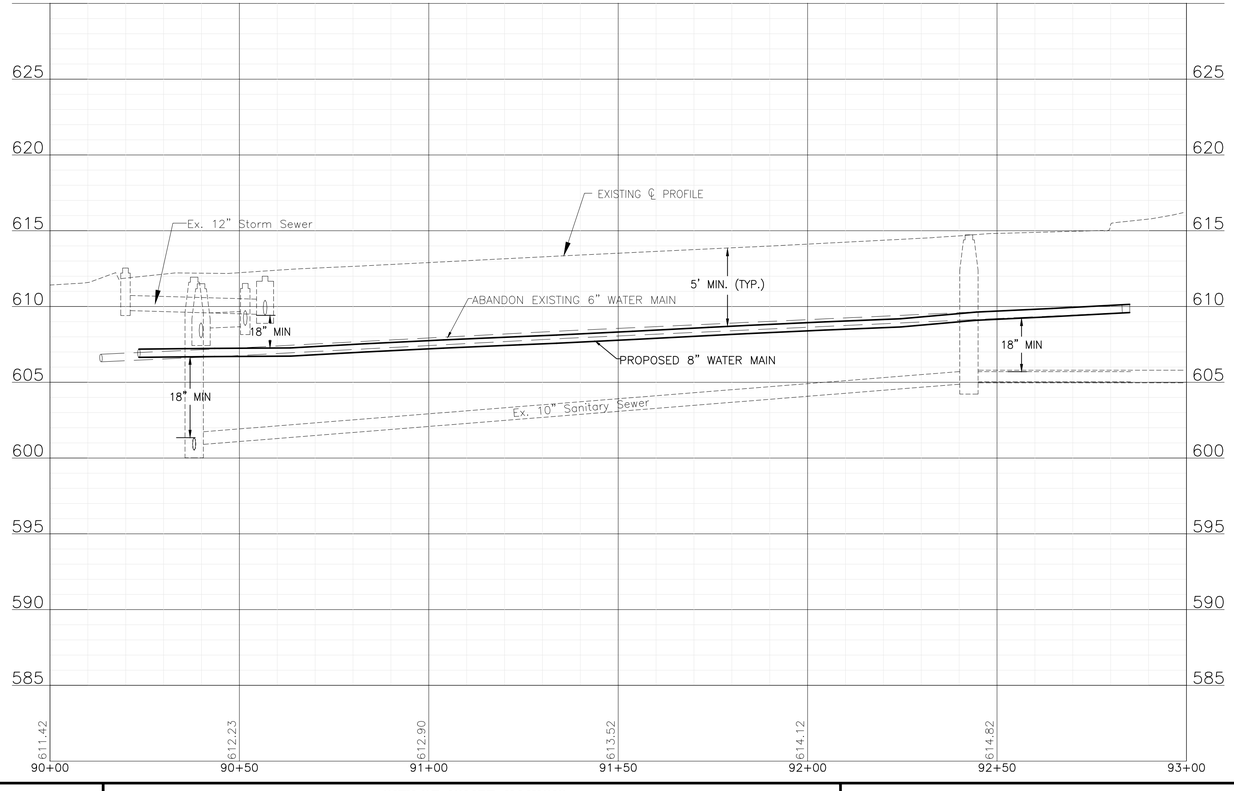
FINAL DESIGN
FOR BIDDING

BAXTER & WOODMAN Consulting Engineers	CONSULTANTS / REVISED –	CITY OF JOLIET, ILLINOIS TWIN OAKS WATER MAIN IMPROVEMENTS CITY OF JOLIET CONTRACT NO. 2860-0125	CRABAPPLE COURT STA. 80+00 TO STA. 84+00 PLAN AND PROFILE SCALE: HORIZ 1"=20' / VERT 1"=5' PROJECT NO: 2325880

DESIGNED – ACM	TOTAL SHEETS	SHEET NO.	
DRAWN – ABN	24	C011	
CHECKED – MJK			
DATE – 10/24/2024			

P:\JOLITC\2325880-2025 WATER MAIN\CAD\TWIN OAKS PHASE 1\01_CIVIL 30\01_SHTS-PLANS\2325880-TWIN OAKS_PH1-DESIGN_SHEETS.DWG 80+00
Plotted: 10/22/2024 11:33 AM By: AMCMANN
Copyright © 2024, By Baxter & Woodman, Inc.
State of Illinois – Professional Design Firm
License No. – 184-001121 – Expires 4-30-25





FINAL DESIGN
FOR BIDDING

BAXTER & WOODMAN Consulting Engineers	CONSULTANTS / REVISED – / REVISED – / REVISED – / REVISED –	CITY OF JOLIET, ILLINOIS TWIN OAKS WATER MAIN IMPROVEMENTS CITY OF JOLIET CONTRACT NO. 2860-0125	CRANBERRY COURT 90+00 TO STA. 93+00 PLAN AND PROFILE SCALE: HORIZ 1"=20' / VERT 1"=5' PROJECT NO: 2325880

DESIGNED – ACM	TOTAL SHEETS	SHEET NO.	
DRAWN – ABN	24	C012	
CHECKED – MJK			
DATE – 10/24/2024			

P:\JOLIT\2325880-2025 WATER MAIN\CAD\TWIN OAKS PHASE 1\01_CIVIL 3D\01_SHTS-PLANS\2325880-TWIN OAKS_PH1-DESIGN_SHEETS.DWG 90+00
Plotted: 10/22/2024 11:33 AM By: AMCMANN
Copyright © 2024, By Baxter & Woodman, Inc.
State of Illinois – Professional Design Firm
License No. – 184-001121 – Expires 4-30-25

FOR CONTINUATION SEE SHEET C006

SEE SHEET C006
FOR DESCRIPTION OF WATER MAIN WORK

10 L.F. OF 8" RJT WATER MAIN,
(1) 8" 22.5° BEND

APPROXIMATE PIT LOCATION

204 L.F. OF 8" HDPE WATER MAIN
(HORIZONTALLY DIRECTIONALLY DRILLED),
(2) 8" TRANSITION FITTINGS

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

FOR CONTINUATION SEE SHEET C009

SEE SHEET C009
FOR DESCRIPTION OF WATER MAIN WORK

APPROXIMATE PIT LOCATION

12 L.F. OF 6" RJT WATER MAIN,
(1) 6" 45° BEND, (1) 6" SLEEVE
(1) 6" NON-PRESSURE CONNECTION

109 L.F. OF 8" RJT WATER MAIN,
(1) 8" 22.5° BEND,
(1) 8" VALVE IN 5' VAULT

34 L.F. OF 8" RJT WATER MAIN,
(1) 8" VALVE IN 5' VAULT,
(1) 8" TEE

59 L.F. OF 8" RJT WATER MAIN,
(1) 8" 45° BEND,
(1) 8" X 6" REDUCER

TREE ROOT PRUNING TYP.

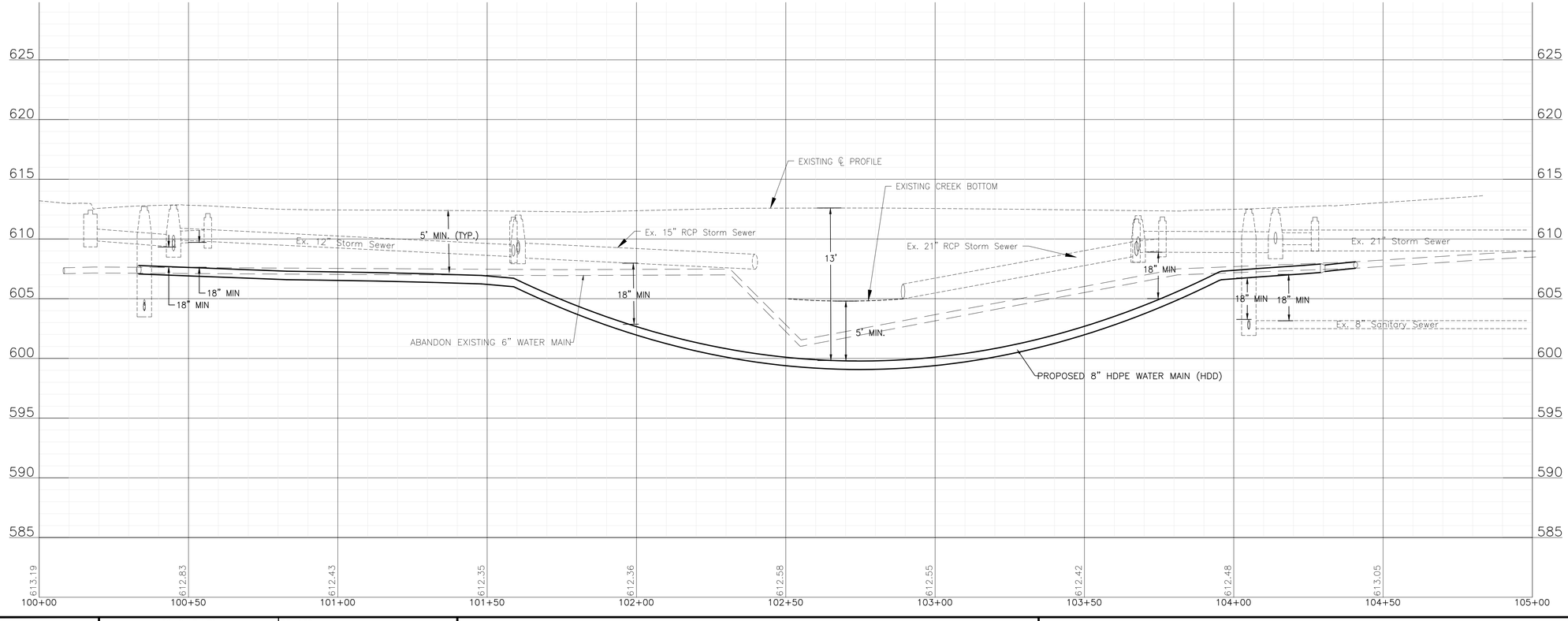
TWIN OAKS DRIVE

DEERPATH DRIVE

REBECCA ROAD

NOTE:
WATER SERVICES: (2) WATER SERVICE CONNECTIONS ARE ANTICIPATED ON THIS STREET. FINAL NUMBER AND LOCATION TO BE DETERMINED IN THE FIELD BY THE ENGINEER.

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.



FINAL DESIGN
FOR BIDDING

BAXTER & WOODMAN Consulting Engineers	CONSULTANTS	REVISED –
		REVISED –
		REVISED –
		REVISED –

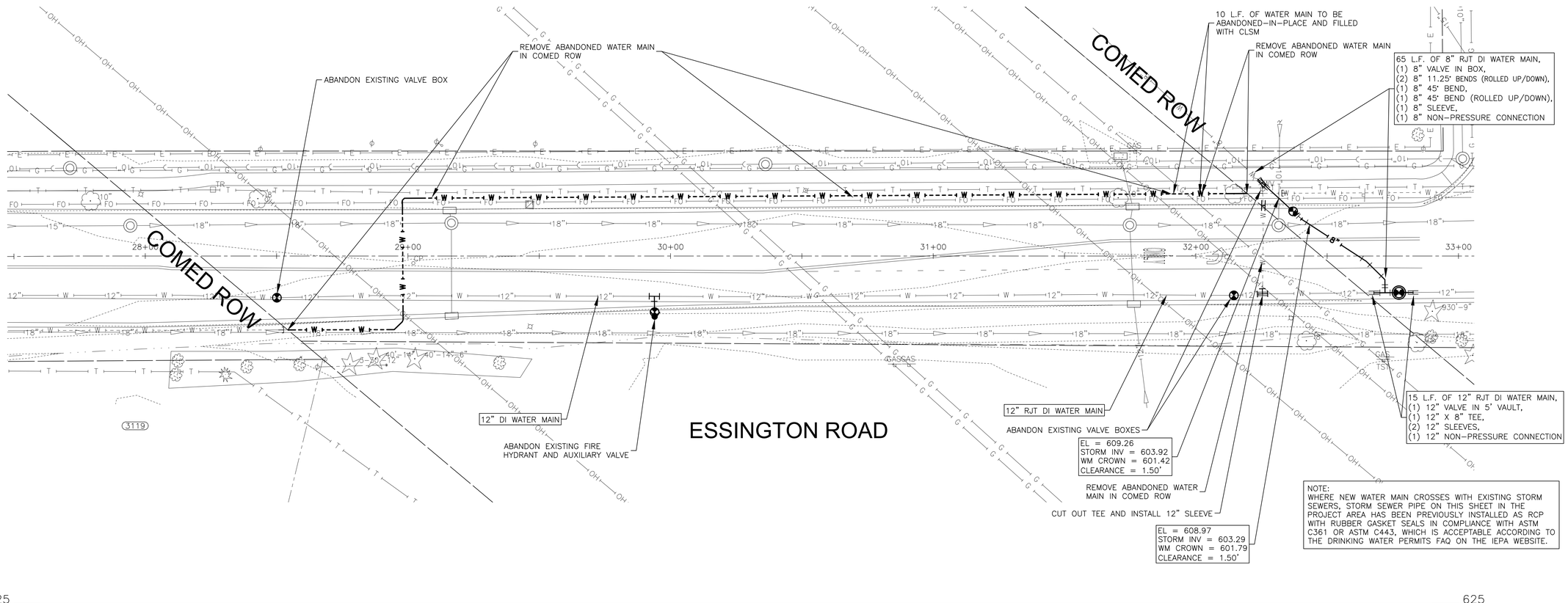
CITY OF JOLIET, ILLINOIS
TWIN OAKS WATER MAIN IMPROVEMENTS
CITY OF JOLIET CONTRACT NO. 2860-0125

REBECCA ROAD STA. 100+00 TO STA. 105+00 PLAN AND PROFILE

SCALE: HORIZ 1"=20' / VERT 1"=5'
PROJECT NO: 2325880

		TOTAL SHEETS	SHEET NO.
DESIGNED – ACM			
DRAWN – ABN		24	C013
CHECKED – MJK			
DATE – 10/24/2024			

P:\JOLIT\2325880-2025 WATER MAIN\CAD\TWIN OAKS PHASE 1\01_CIVIL 3D\01_SHTS-PLANS\2325880-TWIN OAKS_PH1-DESIGN_SHEETS.DWG 100+00
Plotted: 10/22/2024 11:34 AM By: AMCMANN
Copyright © 2024, By Baxter & Woodman, Inc.
State of Illinois – Professional Design Firm
License No. – 184-001121 – Expires 4-30-25



FINAL DESIGN FOR BIDDING

P:\JOLTC\2325880-2025 WATER MAIN\CAD\TWIN OAKS PHASE 1\01_CIVIL 3D\01_SHTS-PLANS\2325880-ESSINGTON_COMED_-DESIGN_SHEETS.DWG ESSINGTON ROAD STA. 27+50 TO STA 33+00 PLAN AND PROFILE
Plotted: 10/22/2024 - 11:35 AM By: AMCMAHON
Copyright © 2024, Baxter & Woodman, Inc.
State of Illinois - Professional Design Firm
License No. - 184-001121 - Expires 4-30-21

BAXTER & WOODMAN Consulting Engineers

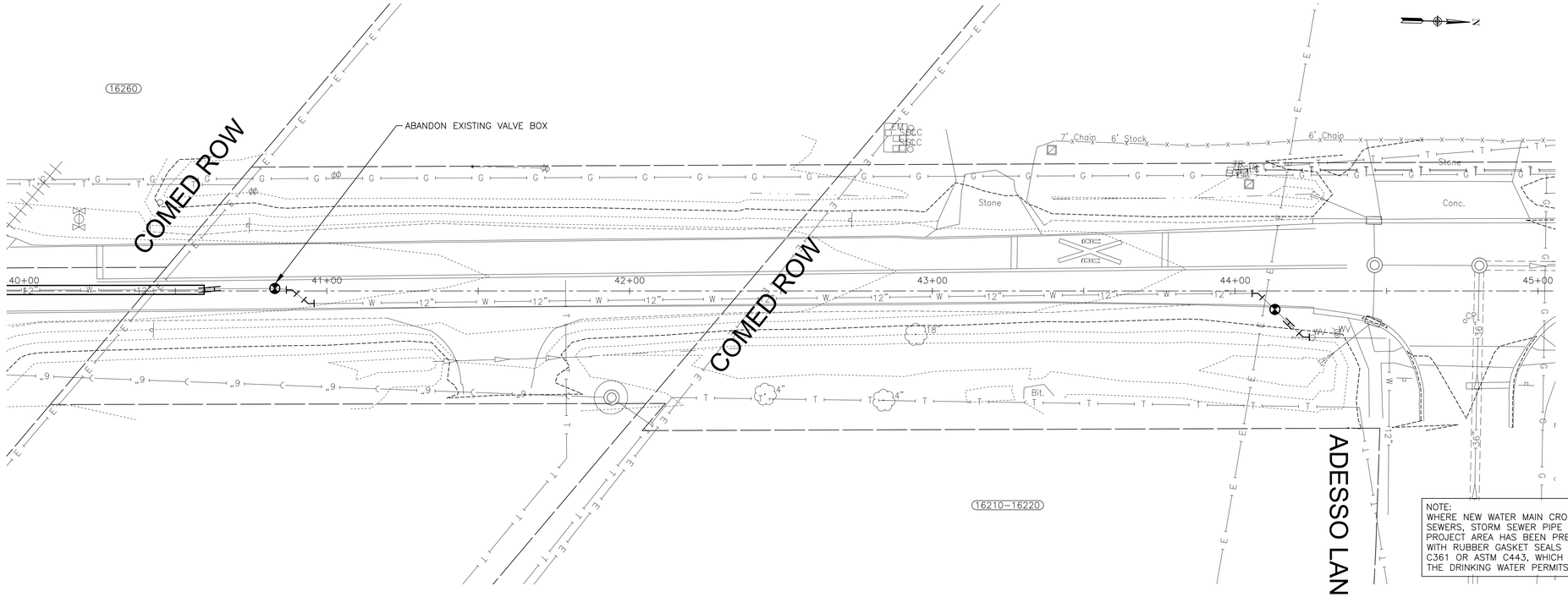
CONSULTANTS	REVISED –
	REVISED –
	REVISED –
	REVISED –

CITY OF JOLIET, ILLINOIS
TWIN OAKS WATER MAIN IMPROVEMENTS
CITY OF JOLIET CONTRACT NO. 2860-0125

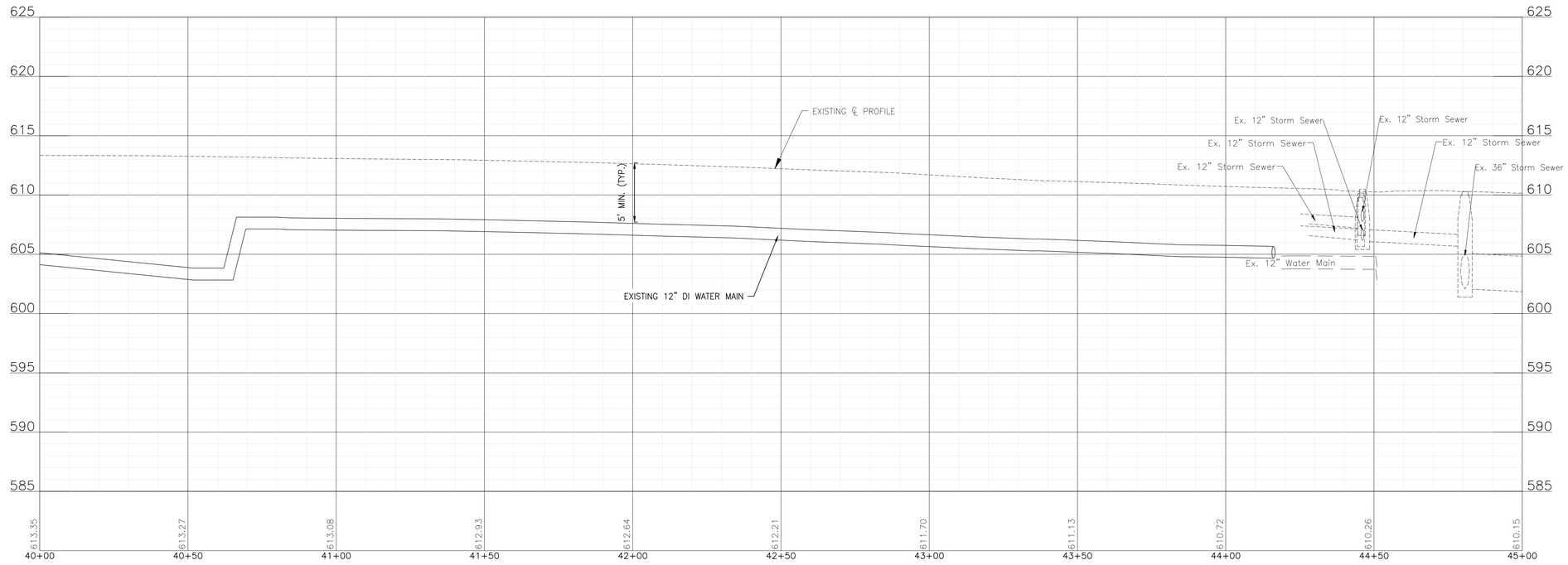
ESSINGTON ROAD STA. 27+50 TO STA 33+00 PLAN AND PROFILE

SCALE: HORIZ 1"=20' / VERT 1"=5' | PROJECT NO: 2325880

		TOTAL SHEETS	SHEET NO.
DESIGNED – ACM			
DRAWN – ABN		24	C014
CHECKED – MJK			
DATE – 10/24/2024			



NOTE:
WHERE NEW WATER MAIN CROSSES WITH EXISTING STORM SEWERS, STORM SEWER PIPE ON THIS SHEET IN THE PROJECT AREA HAS BEEN PREVIOUSLY INSTALLED AS RCP WITH RUBBER GASKET SEALS IN COMPLIANCE WITH ASTM C361 OR ASTM C443, WHICH IS ACCEPTABLE ACCORDING TO THE DRINKING WATER PERMITS FAQ ON THE IEPA WEBSITE.



FINAL DESIGN
FOR BIDDING

P:\JOLIET\2325880-2025 WATER MAIN\CAD\TWIN OAKS PHASE 1\01_CIVIL 3D\01_SHTS-PLANS\2325880-ESSINGTON_COMED_-DESIGN_SHEETS.DWG ESSINGTON ROAD STA. 40+00 TO STA 45+00 PLAN AND PROFILE
Plotted: 10/22/2024 11:35 AM By: AMOMANN
Copyright © 2024 Baxter & Woodman, Inc.
State of Illinois – Professional Design Firm
License No. – 184-001121 – Expires 4-30-21

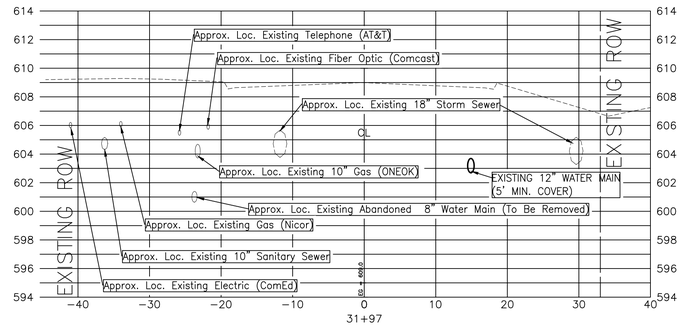
BAXTER & WOODMAN Consulting Engineers	CONSULTANTS	REVISED –
		REVISED –
		REVISED –
		REVISED –

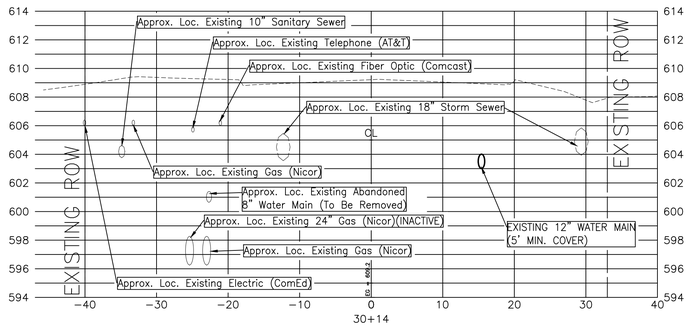
CITY OF JOLIET, ILLINOIS
TWIN OAKS WATER MAIN IMPROVEMENTS
CITY OF JOLIET CONTRACT NO. 2860-0125

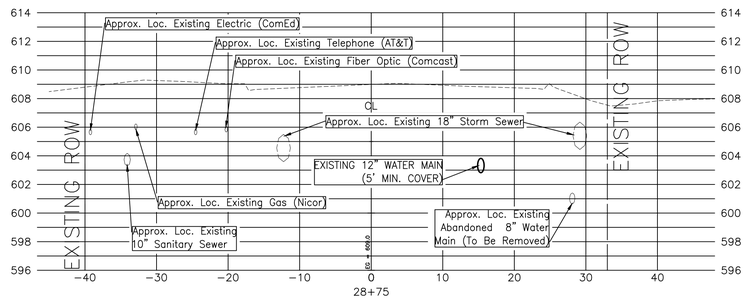
ESSINGTON ROAD STA. 40+00 TO STA 45+00 PLAN AND PROFILE

SCALE: HORIZ 1"=20' / VERT 1"=5' | PROJECT NO: 2325880

DESIGNED – ACM	TOTAL SHEETS	SHEET NO.
DRAWN – ABN	24	C015
CHECKED – MJK		
DATE – 10/24/2024		







ESSINGTON ROAD

FINAL DESIGN
FOR BIDDING

BAXTER & WOODMAN Consulting Engineers	CONSULTANTS	REVISED –	CITY OF JOLIET, ILLINOIS TWIN OAKS WATER MAIN IMPROVEMENTS CITY OF JOLIET CONTRACT NO. 2860-0125
		REVISED –	
		REVISED –	
		REVISED –	

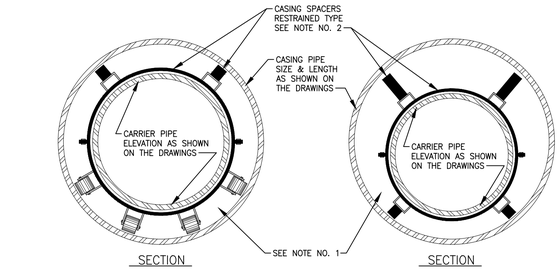
ESSINGTON ROAD STA. 28+75 TO STA. 31+97 CROSS SECTIONS

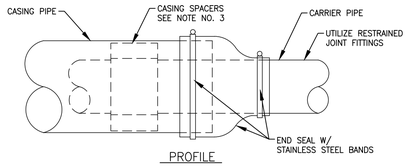
SCALE: HORIZ 1"=10' / VERT 1"=5'

PROJECT NO: 2325880

DESIGNED – ACM	TOTAL SHEETS	SHEET NO.
DRAWN – ABN	24	C016
CHECKED – MJK		
DATE – 10/24/2024		

P:\JOLIET\2325880-2025 WATER MAIN\CAD\TWIN OAKS PHASE 1\01_CIVIL 3D\01_SHTS-PLANS\23258800 ESSINGTON_COMED_XSEC_SHEET.DWG cross sections
Plotted: 10/22/2024 11:36 AM By: AMCMANN
Copyright © 2024 By Baxter & Woodman Consultants, Inc.
State of Illinois – Professional Design Firm
License No. – 184-001121 – Expires 4-30-21





NOTES

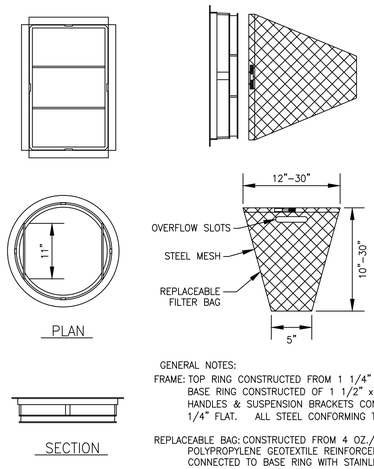
1. FILLING OF ANNULAR SPACE BETWEEN CARRIER PIPE AND CASING PIPE WITH SAND OR PEA GRAVEL IS NOT REQUIRED WHEN UTILIZING CASING SPACERS, UNLESS CONTRACTOR IS INSTRUCTED TO DO SO ON DRAWINGS OR IN SPECIFICATIONS.
2. WHERE CARRIER PIPE IS NOT CENTERED IN CASING PIPE, PROVIDE CASING SPACERS WITH LEGS THAT 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.

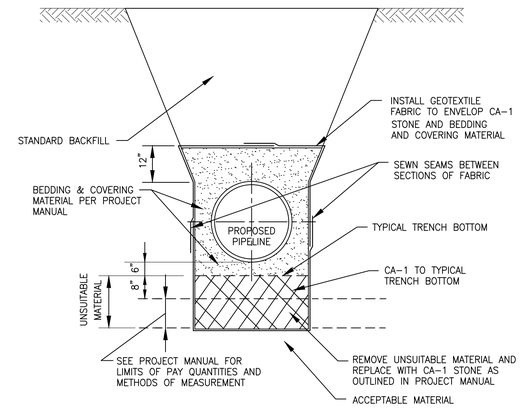
STEEL MESH: REMOVABLE STAINLESS STEEL MESH STRAINER BASKET. 1/4" DIA. HOLE SIZE, 58% OPEN AREA.

NOT TO SCALE

CITY OF JOLIET, ILLINOIS

INLET PROTECTION
FILTER DETAIL
GEN-02

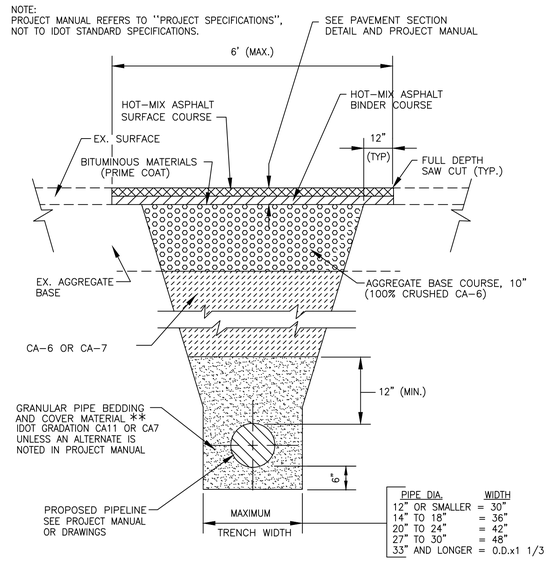
DATE: OCT. 2017



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.



PIPE DIA.	WIDTH
12" OR SMALLER	= 30"
14" TO 18"	= 36"
20" TO 24"	= 42"
27" TO 30"	= 48"
33" AND LONGER	= O.D.x1 1/3

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)

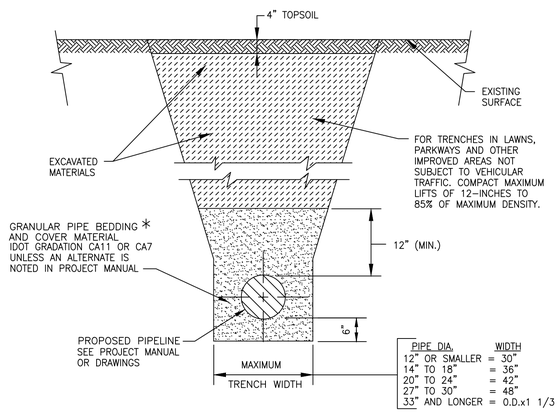
FOR RIGID PIPE COMPLY WITH ASTM C12, BEDDING CLASS B.

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.



PIPE DIA.	WIDTH
12" OR SMALLER	= 30"
14" TO 18"	= 36"
20" TO 24"	= 42"
27" TO 30"	= 48"
33" AND LONGER	= O.D.x1 1/3

FOR NON-PAVED AREAS

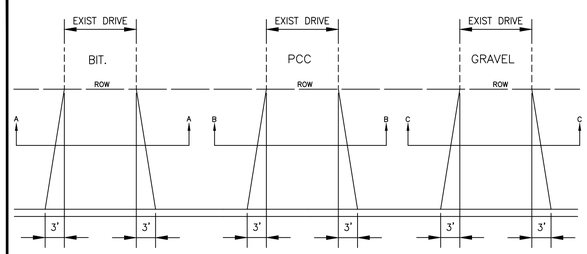
* FOR HDPE PIPE COMPLY WITH ASTM 2321, CLASS I OR II.
FOR RIGID PIPE COMPLY WITH ASTM C12, BEDDING CLASS B.

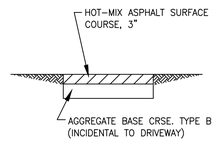
NOT TO SCALE

CITY OF JOLIET, ILLINOIS

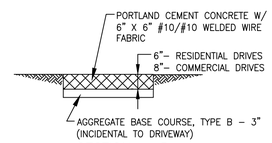
TYPICAL TRENCH DETAIL
NON PAVED AREAS
GEN-05

DATE: OCT. 2017

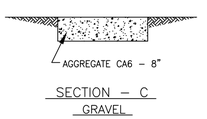




SECTION - A
HOT-MIX ASPHALT



SECTION - B
P.C.C



SECTION - C
GRAVEL

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

FINAL DESIGN
FOR BIDDING

BAXTER & WOODMAN Consulting Engineers

CONSULTANTS	REVISED -
	REVISED -
	REVISED -
	REVISED -

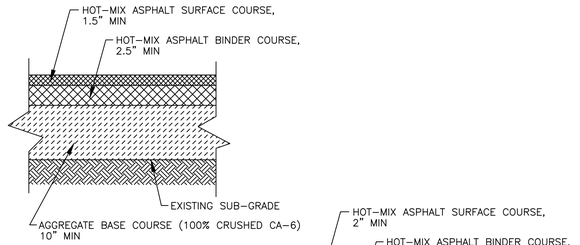
CITY OF JOLIET, ILLINOIS
TWIN OAKS WATER MAIN IMPROVEMENTS
CITY OF JOLIET CONTRACT NO. 2860-0125

CONSTRUCTION DETAILS

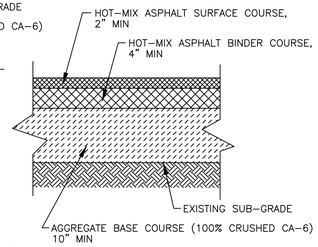
SCALE: AS NOTED | PROJECT NO: 2325880

DESIGNED - ACM	TOTAL SHEETS: 24
DRAWN - ABN	SHEET NO.: C017
CHECKED - MJK	
DATE - 10/24/2024	

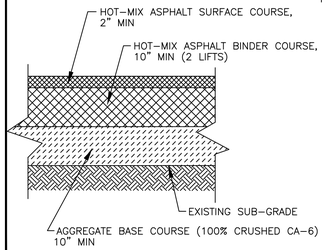
P:\JOLTC\2325880-2025 WATER MAIN\CAD\TWIN OAKS PHASE 1\01_CIVIL 3D\01_SHTS-PLANS\2325880-TWIN_OAKS_P1-COVER_SHEETS.DWG Details
Plotted: 10/22/2024 11:36 AM By: AMCMANN
Copyright © 2024, By Baxter & Woodman, Inc.
State of Illinois - Professional Design Firm
License No. - 184-001121 - Expires 4-30-25



MINOR RESIDENTIAL STREETS



ARTERIAL STREETS



MAJOR ARTERIAL STREETS

NOTES:

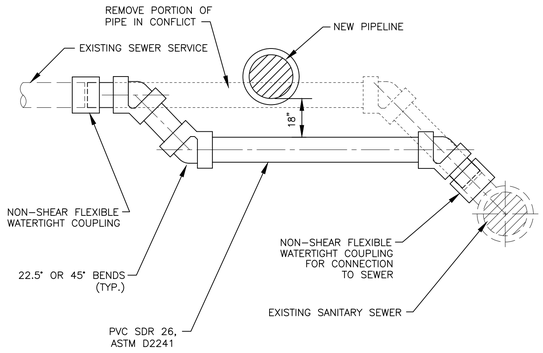
1. ALL PAVEMENT PATCHES SHALL BE SAWCUT FULL-DEPTH.
2. MAXIMUM ALLOWABLE WIDTH USED FOR TRENCH RESTORATION PAY QUANTITY CALCULATIONS SHALL BE 6'.
3. DETAILS APPLY UNLESS OTHERWISE NOTED ON PLANS.

NOT TO SCALE

CITY OF JOLIET, ILLINOIS

TYPICAL PAVEMENT SECTION
PVT-02

DATE: OCT. 2017

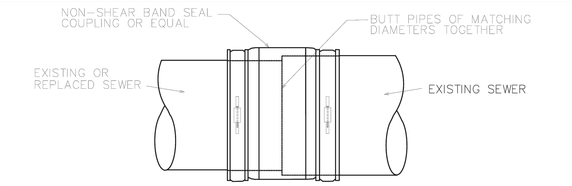


NOT TO SCALE

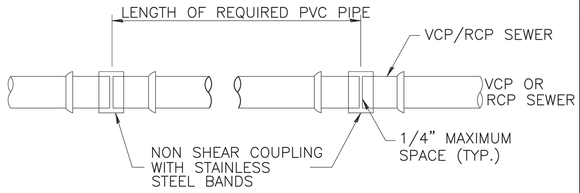
CITY OF JOLIET, ILLINOIS

SANITARY SEWER SERVICE RELOCATION
SAN-03

DATE: OCT. 2017



PIPE COUPLING DETAIL



NOTES:

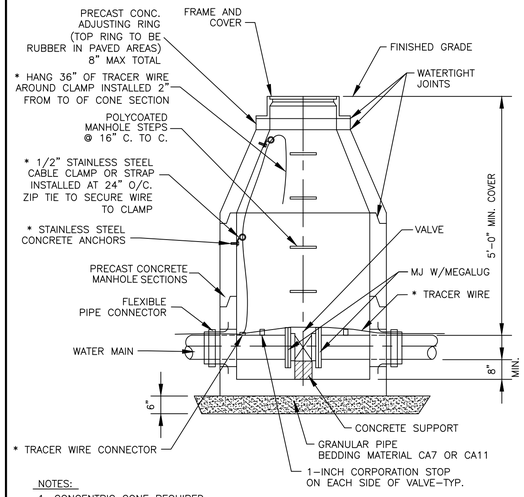
1. CONNECTION TO CIPP LINING SHALL BE NON-SHEAR COUPLINGS THAT ARE MADE SPECIFICALLY TO FIT THE OUTSIDE DIAMETER OF CURED-IN-PLACE PIPE (CIPP)

NOT TO SCALE

CITY OF JOLIET, ILLINOIS

CONNECTING SEWER PIPES OF DISSIMILAR MATERIAL
SAN-14

DATE: NOVEMBER 2022



NOTES:

1. CONCENTRIC CONE REQUIRED FOR GATE VALVES, ECCENTRIC CONE REQUIRED FOR BUTTERFLY VALVES.
2. USE 4'-0" DIAMETER FOR WATER MAIN SIZES 4" THROUGH 10", 5'-0" FOR SIZES 12" THROUGH 16", 6'-0" FOR SIZES 20" 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.

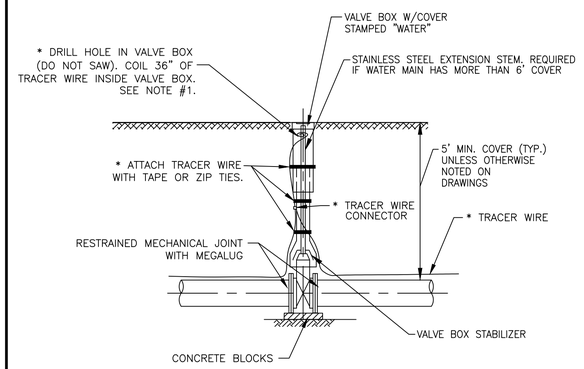
* FOR PVC WATER MAIN INSTALLATION ONLY

NOT TO SCALE

CITY OF JOLIET, ILLINOIS

WATER VALVE VAULT DETAIL
WTR-01

DATE: NOVEMBER. 2022



NOTES:

* 1. 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.

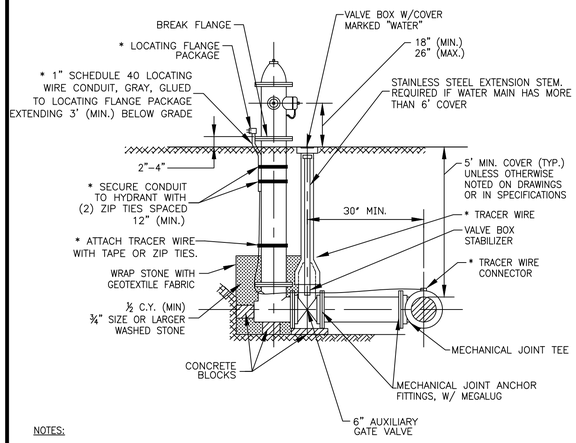
* FOR PVC WATER MAIN INSTALLATION ONLY

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

FINAL DESIGN FOR BIDDING

BAXTER & WOODMAN Consulting Engineers

CONSULTANTS	REVISED –
	REVISED –
	REVISED –
	REVISED –

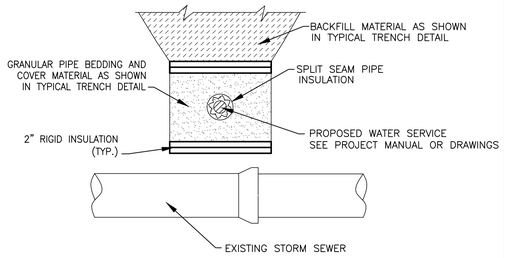
CITY OF JOLIET, ILLINOIS
TWIN OAKS WATER MAIN IMPROVEMENTS
CITY OF JOLIET CONTRACT NO. 2860-0125

CONSTRUCTION DETAILS

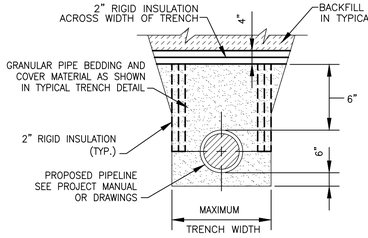
SCALE: AS NOTED | PROJECT NO: 2325880

DESIGNED – ACM	TOTAL SHEETS: 24
DRAWN – ABN	SHEET NO.: C018
CHECKED – MJK	
DATE – 10/24/2024	

P:\JOLTC\2325880-2025 WATER MAIN\CAD\TWIN OAKS PHASE 1\01_CIVIL 3D\01_SHTS-PLANS\2325880-TWIN_OAKS_P1-COVER_SHEETS.DWG Details (2)
Plotted: 10/22/2024 11:36 AM By: AMCMANN
Copyright © 2024, By Baxter & Woodman, Inc.
State of Illinois – Professional Design Firm
License No. – 184-001121 – Expires 4-30-25



WATER SERVICE



WATER MAIN

NOTES:

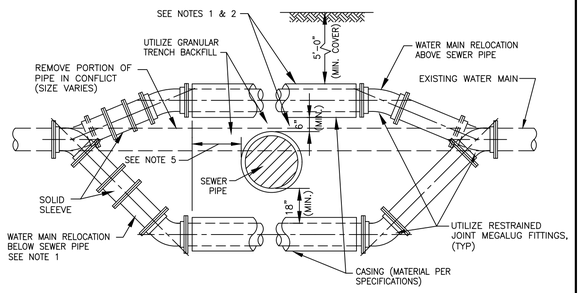
1. TO BE USED WHEN WATER MAIN AND / OR WATER SERVICE BURY DEPTH IS < 4' OR WHEN WATER SERVICE CROSSES ABOVE STORM SEWER.

NOT TO SCALE

CITY OF JOLIET, ILLINOIS

PIPE INSULATION DETAIL
WTR-04

DATE: OCT. 2017



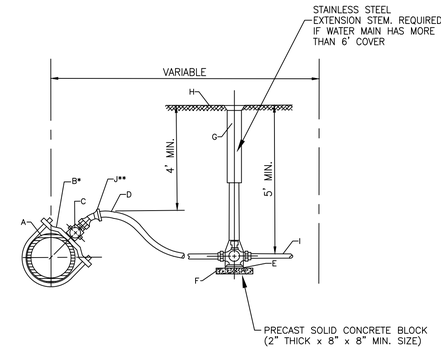
NOTES:
1. ONLY TO BE USED IF WATER MAIN CANNOT CROSS ABOVE PROPOSED SEWER AND MAINTAIN THE REQUIRED 18" OF SEPARATION AS SHOWN ON DRAWING, OR APPROVED BY ENGINEER IN FIELD.
2. WHEN WATER MAIN CROSSES ABOVE SEWER AND MAINTAINS THE REQUIRED 18" OF SEPARATION, THE CASING PIPE IS NOT REQUIRED.
3. WATER MAIN 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

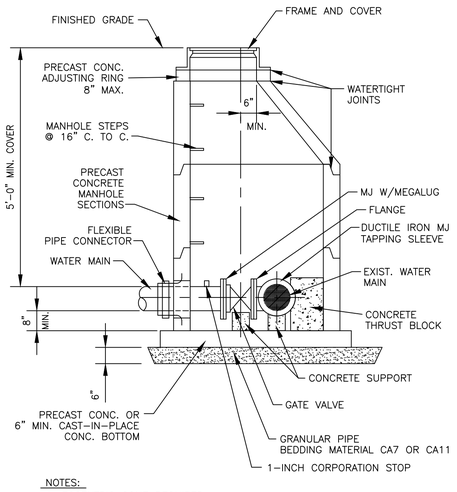
NOTE: FOR 1 1/2" OR 2" SERVICE, ADD ENLARGED BASE FOR SERVICE BOX.

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"	20"
HORIZONTAL BEND							
11.25°	5	5	5	5	5	5	5
22.5°	5	5	5	5	10	10	10
45°	5	10	10	10	15	15	20
90°	15	20	20	25	30	40	45
VERTICAL BEND							
45°	20	25	35	40	45	60	70
TEE	5	5	5	5	5	5	5
VALVE (OPERATING PRESSURE)	20	30	35	45	50	65	80
VALVE (TESTING PRESSURE)	40	60	75	90	105	135	165
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	–	–
20" NOMINAL PIPE	160	150	135	125	105	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-08

DATE: NOVEMBER 2022

PVC–RESTRAINT JOINT TYPE PIPE LENGTH (FEET)

FITTING TYPE	DIAMETER (IN)						
	4"	6"	8"	10"	12"	16"	20"
HORIZONTAL BEND							
11.25°	5	5	5	5	5	5	5
22.5°	5	5	5	5	5	10	10
45°	5	10	10	10	15	15	20
90°	10	15	15	20	25	35	40
VERTICAL BEND							
45°	15	15	20	25	30	40	45
TEE	5	5	5	5	5	5	5
VALVE (OPERATING PRESSURE)	15	20	25	30	35	45	50
VALVE (TESTING PRESSURE)	30	40	50	60	70	90	110
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	–	–
20" NOMINAL PIPE	105	95	90	80	70	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

BAXTER & WOODMAN Consulting Engineers

CONSULTANTS	REVISED –
	REVISED –
	REVISED –
	REVISED –

CITY OF JOLIET, ILLINOIS
TWIN OAKS WATER MAIN IMPROVEMENTS
CITY OF JOLIET CONTRACT NO. 2860-0125

CONSTRUCTION DETAILS

SCALE: AS NOTED | PROJECT NO: 2325880

DESIGNED – ACM	TOTAL SHEETS: 24
DRAWN – ABN	SHEET NO.: C019
CHECKED – MJK	
DATE – 10/24/2024	

P:\JOLIT\2325880-2025 WATER MAIN\CAD\TWIN OAKS PHASE 1\01_CIVIL 3D\01_SHTS-PLANS\2325880-TWIN_OAKS_P1-COVER_SHEETS.DWG Details (3)
Plotted: 10/22/2024 11:36 AM By: AMCMANN
Copyright © 2024, By: Baxter & Woodman, Inc.
State of Illinois – Professional Design Firm
License No. – 184-001121 – Expires 4-30-25