

ESTIMATE OF QUANTITIES

FOR BIDDING

- FURNISH PIPE AND INSTALL
 - (DUCTILE IRON PUSH-ON RUBBER GASKET JOINT)
 - 694 FT. - 12" WATER MAIN
 - 11 FT. - 8" WATER MAIN
 - 48 FT. - 6" HYDRANT BRANCH
- INSTALL
 - 2 - HYDRANT
- REMOVE
 - 2 - HYDRANT / MINOR
- ABANDON
 - 1 - 12" WATER MAIN
 - 1 - 8" WATER MAIN
- SERVICES
 - 4 - CONNECT ORIGINAL SERVICE (C.O.S. - LONG)

- PERMANENT PAVEMENT
 - 855 SQ. YDS. - 9" CONCRETE (11' REPLACEMENT WIDTH - FULL PANEL)
- FURNISH AND INSTALL DOWEL BARS
 - 750 BARS
- CURB AND GUTTER
 - 50 LIN. FT. - CONCRETE
- WALK
 - 100 SQ. FT. - CONCRETE
- AGGREGATE SLURRY BACKFILL
 - 625 CU. YDS.
- BARRICADES AND TRAFFIC CONTROL
- LUMP SUM
- SAWCUTTING
 - 1450 LIN. FT. - IN CONCRETE (FULL DEPTH)
- FINISHING OF ROADWAY
- LUMP SUM
- FURNISH, INSTALL AND MAINTAIN EROSION CONTROL
- LUMP SUM

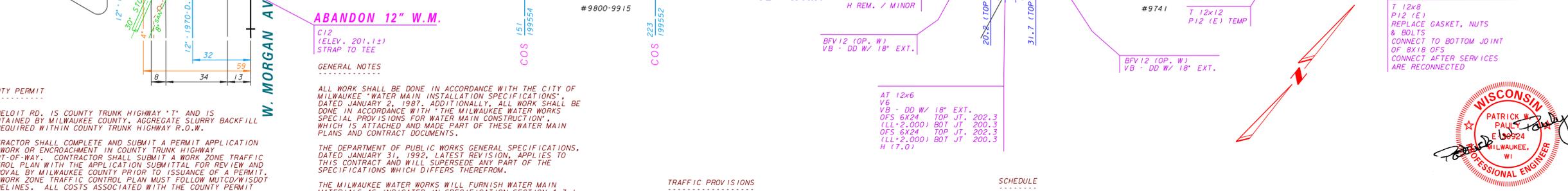
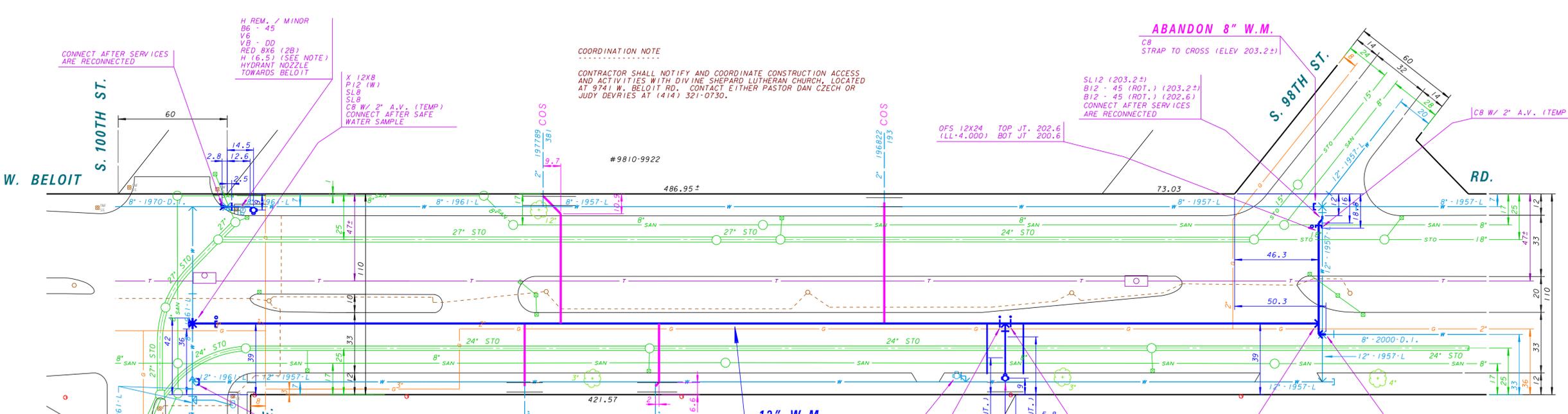
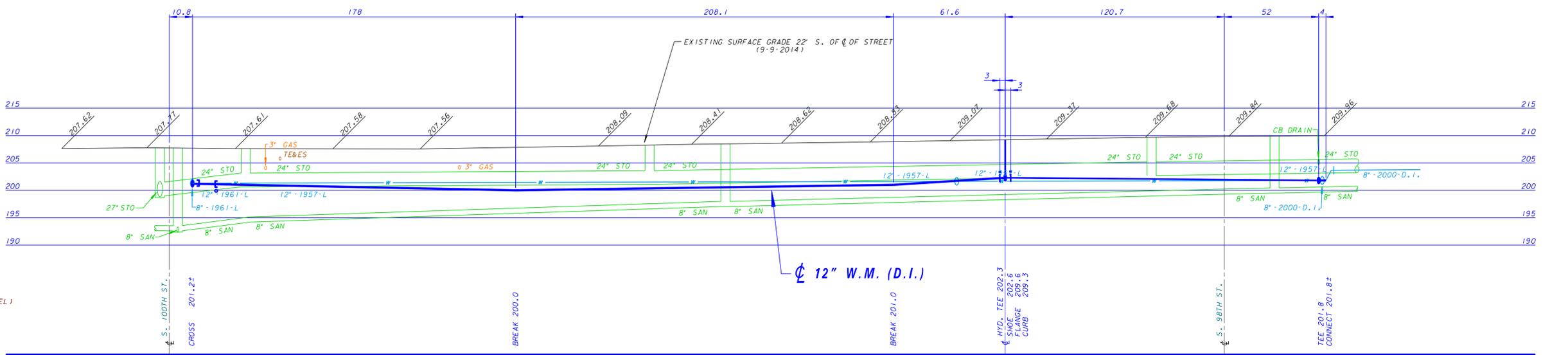
- FOLLOWING IS A LIST OF THE FITTINGS SHOWN ON THIS CONSTRUCTION PLAN THAT WILL BE PROVIDED BY THE CITY.
 - 1 - AT 12x6
 - 1 - X 12x8
 - 1 - T 12x12
 - 1 - T 12x8
 - 2 - B12-45
 - 1 - B6-45
 - 1 - OFS 6x24
 - 1 - OFS 12x24
 - 2 - BV12
 - 1 - V6
 - 1 - VB-DD
 - 3 - VALVE BOX 18" EXT.
 - 1 - C12
 - 1 - CB
 - 2 - P12
 - 1 - H (6.5)
 - 1 - H (7.0)
 - 1 - SL8
 - 2 - SL8
 - 1 - RED 8x6 (2B)
- 4 - 2" CORPORATION STOP
- 4 - 12"x2" SERVICE SADDLE

- PAVEMENT TYPE
 - EXISTING PAVEMENT IN W. BELOIT RD IS 9" CONCRETE ON 6" GRAVEL (1976).
- ABANDONMENT OF WATER MAINS, VALVES AND HYDRANTS
 - 7 FT. - 12"-2000-D.I. WATER MAIN
 - 3 FT. - 8"-2000-D.I. WATER MAIN
 - 35 FT. - 12"-1961-L WATER MAIN
 - 679 FT. - 12"-1957-L WATER MAIN
 - 116 FT. - 8"-1961-L WATER MAIN
 - 476 FT. - 8"-1957-L WATER MAIN
- 2 - HYDRANT
- 1 - 8" VALVE
- BENCHMARKS
 - HYD. - N.E. CORNER OF S. 98TH ST. & W. BELOIT RD. ELEV. 211.64
 - HYD. - SOUTH SIDE OF W. BELOIT RD. ELEV. 211.40
 - HYD. - N.E. CORNER OF S. 100TH ST. & W. BELOIT RD. ELEV. 209.61

- CONTRACTOR SHALL COMPLETE AND SUBMIT A PERMIT APPLICATION FOR WORK OR ENCROACHMENT IN COUNTY TRUNK HIGHWAY RIGHT-OF-WAY. CONTRACTOR SHALL SUBMIT A WORK ZONE TRAFFIC CONTROL PLAN WITH THE APPLICATION SUBMITTAL FOR REVIEW AND APPROVAL BY MILWAUKEE COUNTY PRIOR TO ISSUANCE OF A PERMIT. THE WORK ZONE TRAFFIC CONTROL PLAN MUST FOLLOW MUTCD/WISDOT GUIDELINES. ALL COSTS ASSOCIATED WITH THE COUNTY PERMIT SHALL BE INCLUDED IN THE UNIT PRICE BID FOR BARRICADES AND TRAFFIC CONTROL.
- CONTRACTOR SHALL CONTACT MR. VERNON SINGLETON, CONSTRUCTION COORDINATOR FOR MILWAUKEE COUNTY DOT, AT 414-257-5947 OR VERNON.SINGLETON@MILWAUKEECOUNTY.WI.GOV WITH ANY QUESTIONS REGARDING THE PERMIT AND/OR WORK ZONE TRAFFIC CONTROL PLAN.
- HYDRANT/TRAFFIC SIGNAL NOTE
 - WORK ON THE HYDRANT AT THE NEC OF W. BELOIT RD. & S. 100TH ST. WILL IMPACT THE TRAFFIC SIGNAL STANDARD. SIGNAL ENGINEERING WILL NEED TO CRIB THE SIGNAL STANDARD BEING IMPACTED BY THE HYDRANT WORK.
 - THE CONTRACTOR SHALL CONTACT JOE BONDOWSKI, 414-286-5162, OR JIM BROWN, 286-3276, OF SIGNAL ENGINEERING AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE WORK BEING DONE. ANY DAMAGE SHALL BE REPORTED TO THE SIGNAL SHOP AT 414-286-3687.

- GENERAL NOTES
 - ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE CITY OF MILWAUKEE "WATER MAIN INSTALLATION SPECIFICATIONS", DATED JANUARY 2, 1987. ADDITIONALLY, ALL WORK SHALL BE DONE IN ACCORDANCE WITH "THE MILWAUKEE WATER WORKS SPECIAL PROVISIONS FOR WATER MAIN CONSTRUCTION", WHICH IS ATTACHED AND MADE PART OF THESE WATER MAIN PLANS AND CONTRACT DOCUMENTS.
 - THE DEPARTMENT OF PUBLIC WORKS GENERAL SPECIFICATIONS, DATED JANUARY 31, 1992, LATEST REVISION, APPLIES TO THIS CONTRACT AND WILL SUPERSEDE ANY PART OF THE SPECIFICATIONS WHICH DIFFERS THEREFROM.
 - THE MILWAUKEE WATER WORKS WILL FURNISH WATER MAIN MATERIALS AS INDICATED IN SPECIFICATION SECTION 4.3.1. THE CONTRACTOR SHALL FURNISH TEMPORARY TEST CAPS AND PLUGS. THE CONTRACTOR SHALL FURNISH ALL OTHER ITEMS REQUIRED TO COMPLETE THIS PROJECT.
 - BACKFILL AND BEDDING MATERIAL
 - THE REQUIREMENTS FOR BACKFILL AND BEDDING MATERIAL SHALL BE AS STATED IN THE "MILWAUKEE WATER WORKS SPECIAL PROVISIONS FOR WATER MAIN CONSTRUCTION".
 - ABANDONMENT OF VALVE BOXES
 - IN ACCORDANCE WITH SECTION 5.14.5 OF THE CITY OF MILWAUKEE "WATER MAIN INSTALLATION SPECIFICATIONS", WHEN VALVES OR CURB STOPS ARE TO BE ABANDONED, THE CONTRACTOR SHALL REMOVE ONLY THE TOP SECTION OF THE VALVE OR SERVICE BOX AND BACKFILL THE REMAINING HOLE WITH GRAVEL. ALL VALVE AND CURB STOP BOXES ON MAINS ABANDONED AS PART OF THE CONTRACT SHALL BE ABANDONED IN THIS MANNER. THE ABANDONMENT SHALL INCLUDE ALL NECESSARY PAVEMENT OR SOD REPLACEMENT.
 - FORESTRY NOTE
 - DUE TO THE PROXIMITY OF THE PROPOSED WATER MAIN INSTALLATION TO ADJACENT CITY TREES, EXCAVATION AND CONSTRUCTION EQUIPMENT SHALL BE SELECTED, POSITIONED AND OPERATED TO AVOID DAMAGE TO TREE ROOTS, BRANCHES AND TRUNKS.
 - ANY TREE ROOTS ENCOUNTERED DURING EXCAVATION MUST BE CLEANLY CUT USING HAND TOOLS. DO NOT REMOVE ROOTS USING EXCAVATION EQUIPMENT.
- TRAFFIC PROVISIONS
 - DURING WORKING AND NON-WORKING HOURS, MAINTAIN ONE (1) 11'-0" MINIMUM TRAFFIC LANE, FOR EACH DIRECTION, ON THE PROPER SIDE OF THE ROAD.
 - USE NO PARKING ANYTIME ON SOUTH SIDE OF W. BELOIT RD.
 - USE NO PARKING 7AM TO 5PM ON NORTH SIDE OF W. BELOIT RD.
 - PAVEMENT MARKINGS MUST BE RETURNED TO ORIGINAL MATERIAL AND CONDITION.
 - PROVIDE SEVEN (7) DAYS ADVANCED NOTICE TO TRAFFIC ENGINEERING AT 286-3632 FOR THE INSTALLATION OF TEMPORARY "NO PARKING" SIGNS OR IF THERE ARE ANY QUESTIONS CONCERNING THESE COMMENTS.
 - IF TRAFFIC OR STREET SIGNS ARE TAKEN DOWN DURING CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL CONTACT MR. MIKE CHANESKE OF INFRASTRUCTURE SERVICES AT 286-5965 TO HAVE THE SIGNS RE-INSTALLED.
 - ANY PERSON WORKING IN THE PUBLIC WAY SHALL COMPLY WITH THE CITY OF MILWAUKEE, DEPARTMENT OF PUBLIC WORKS BOOKLET, "TRAFFIC CONTROL FOR CONSTRUCTION AND MAINTENANCE WORK" AND PART V1 OF THE STATE OF WISCONSIN "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES".
- SCHEDULE
 - NO WORK SHALL BEGIN UNTIL MARCH 14, 2016. ALL WORK, INCLUDING PAVEMENT RESTORATION, SHALL BE COMPLETED BY OCTOBER 14, 2016.
 - EACH PROJECT IN THIS CONTRACT IS ASSIGNED AN ALLOWABLE NUMBER OF PROJECT WORKING DAYS. A PROJECT WORKING DAY IS DEFINED AS ANY DAY THE CONTRACTOR IS ABLE TO WORK A MINIMUM OF FOUR (4) HOURS TOWARDS COMPLETION OF THE PROJECT. FOLLOWING IS A LIST OF WATER MAIN INSTALLATION PROJECTS INCLUDED IN THIS CONTRACT AND THE ALLOWABLE PROJECT WORKING DAYS FOR EACH:
 - W. BELOIT RD. FROM S. 98TH ST. TO S. 100TH ST., PLAN FILE NO. 2016001 - 22 WORKING DAYS.
 - W. BELOIT RD. (S/S) FROM S. 92ND ST. TO S. 96TH ST., PLAN FILE NOS. 2016002, 2016003, 2016004 - 26 WORKING DAYS.
 - S. 97TH ST. FROM W. OKLAHOMA AVE. TO W. BELOIT RD., PLAN FILE NOS. 2016005, 2016006, 2016007 - 47 WORKING DAYS.
 - W. ALLERTON ST. FROM S. 62ND ST. TO S. 67TH ST., PLAN FILE NOS. 2016008, 2016009 - 37 WORKING DAYS.
 - S. 95TH ST. FROM W. BELOIT RD. TO 600' S/O W. BELOIT RD., PLAN FILE NO. 2016010 - 18 WORKING DAYS.

PLAN LINE & UTILITY LEGEND			
GAS	G	SANITARY SEWER	SAN
ELECTRIC	E	STORM SEWER	STO
TELEPHONE	T	COMBINED SEWER	CMB
CABLE TELEVISION	TV	WATER MAIN	W
FIBER OPTICS	FO	WATER SERVICE	WS
PROPOSED UTILITY		PRESSURE DISTRICT	
POWER POLES	CONCRETE	ALUMINUM	WOOD
WATER MAIN VALVES	GATE	BUTTERFLY	SERVICE
UTILITIES	TRAFFIC SIGNAL	TRAFFIC CONTROL BOX	GAS VALVE
	HYDRANTS	1" NOZZLE	3" NOZZLE



WISCONSIN
PATRICK W. PAULY
19924
MILWAUKEE, WI
PROFESSIONAL ENGINEER

Milwaukee Water Works
Department of Public Works

Water Main

W. BELOIT ROAD
S. 98TH STREET
S. 100TH STREET

APPROVED: *Patrick W. Pauly* DATE: 1-8-16
 SEAL: DESIGN ENGINEER
Mark J. Schell 1-8-16
 SEAL: CHIEF DESIGN ENGINEER
Chris Williams 1-8-16
 SEAL: SPECIAL DEPUTY COMMISSIONER OF PUBLIC WORKS

PROGRAM NO. 2016-710 CONTRACT NO. C.C. FILE NO. 151289
 PROJECT NO. WT410110660 OFFICIAL NOTICE NO. 15-1-2016 DATE ADOPED 1-19-16

SHEET NO. 1 OF 1 PLAN FILE NO. 2016001