

ESTIMATE OF QUANTITIES

FOR BIDDING

FURNISH PIPE AND INSTALL
(DUCTILE IRON PUSH-ON RUBBER GASKET JOINT)

557 FT. - 8" WATER MAIN
7 FT. - 6" HYDRANT BRANCH
9 FT. - 4" BRANCH PIPE

INSTALL

1 - HYDRANT

REMOVE

1 - HYDRANT / MINOR
1 - TREE (SEE NOTE)

SERVICES

2 - CONNECT ORIGINAL SERVICE (C.O.S. - SHORT)

PERMANENT PAVEMENT

70 SQ. YDS. - 9" CONCRETE

FURNISH AND INSTALL DOWEL BARS

100 BARS

CURB AND GUTTER

60 LIN. FT. - CONCRETE

WALK

2500 SQ. FT. - CONCRETE

AGGREGATE SLURRY BACKFILL

50 CU. YDS.

BARRICADES AND TRAFFIC CONTROL

LUMP SUM

SAWCUTTING

200 LIN. FT. - IN CONCRETE

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 8x6
- 1 - T 8x8
- 1 - T 8x4
- 2 - BB-45
- 1 - BB-22 1/2
- 1 - BB-11 1/4
- 2 - B4-90
- 1 - V8
- 1 - V6
- 1 - V4
- 1 - VB-DD
- 4 - VALVE BOX 18" EXT.
- 1 - H (6.5)
- 1 - C8
- 3 - SL8
- 1 - SL4

2 - 1" CORPORATION STOP

FOLLOWING IS A LIST OF THE FITTINGS SHOWN ON THIS CONSTRUCTION PLAN THAT WILL BE PROVIDED BY THE CONTRACTOR.

2 - 4" FOSTER ADAPTOR

BENCHMARKS

HYD. - S.E. CORNER OF S. 96TH ST. & W. BELOIT RD.
ELEV. 222.10

R/R SPIKE IN WOOD POLE @ HOUSE# 9519
ELEV. 226.38

HYD. - S.E. CORNER OF S. 95TH ST. & W. BELOIT RD.
ELEV. 231.28

HYD. - N/S OF W. BELOIT RD. @ ST. MATTHIAS CHURCH
ELEV. 234.64

HYD. - S.E. CORNER OF S. 93RD ST. & W. BELOIT RD.
OPERATING NUT ELEV. 239.24

HYD. - S.E. CORNER OF S. 92ND ST. & W. BELOIT RD.
ELEV. 233.46

PAVEMENT TYPE

EXISTING PAVEMENT IN W. BELOIT RD. & N. 92ND ST.
IS 9" CONCRETE (1976).

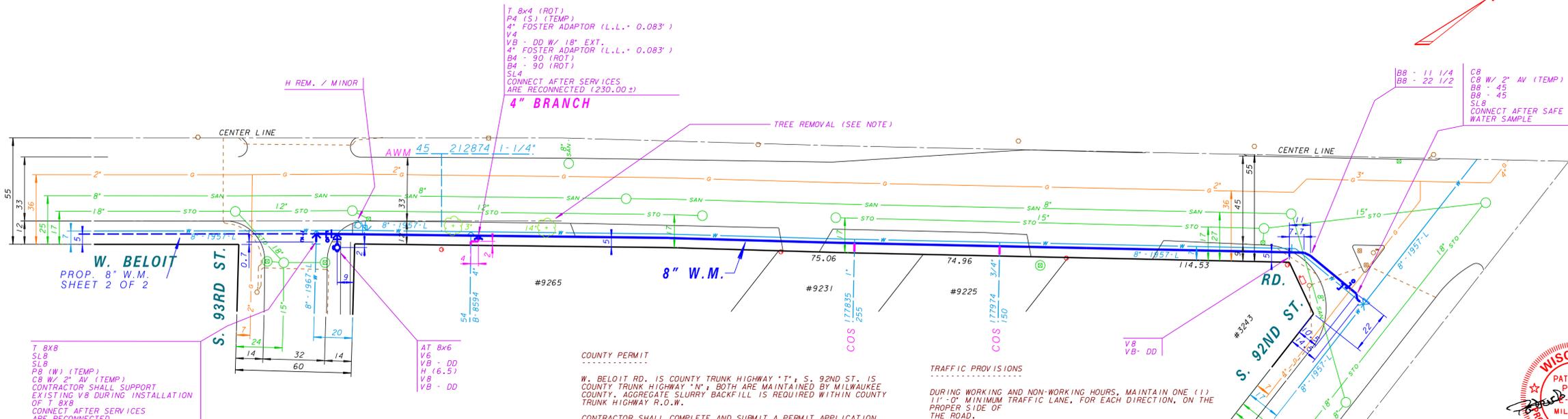
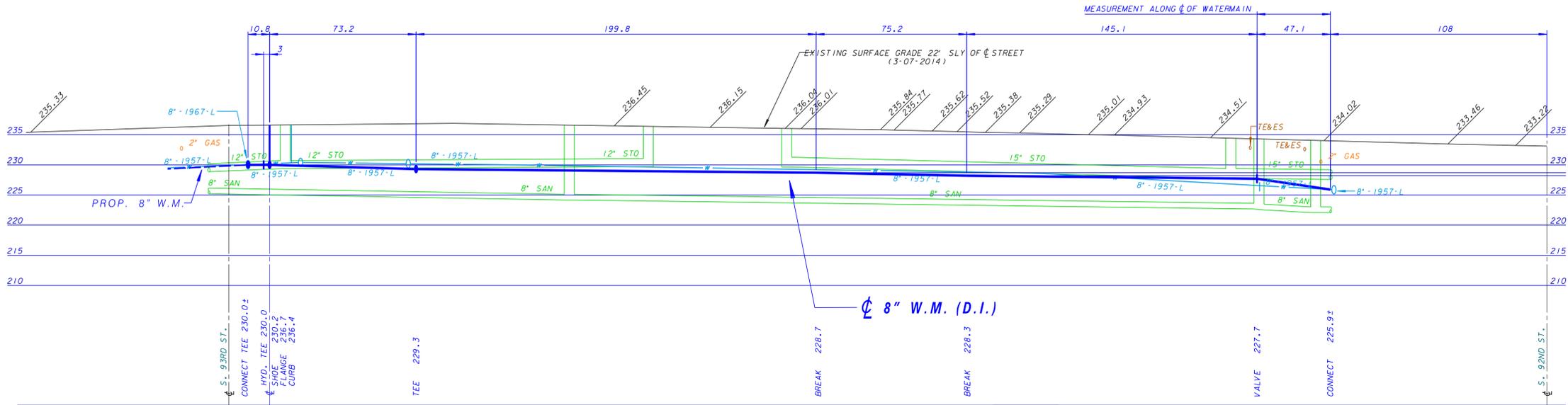
ABANDONMENT OF WATER MAINS, VALVES AND HYDRANTS

5 FT. - 8" 1967-L WATER MAIN
551 FT. - 8" 1957-L WATER MAIN

1 - HYDRANT
2 - 8" VALVE

PLAN LINE & UTILITY LEGEND

GAS	G	SANITARY SEWER	SAN	STREET LIGHTING	---
ELECTRIC	E	STORM SEWER	STO	CITY UNDERGROUND CONDUIT	CUC
TELEPHONE	T	COMBINED SEWER	CMB	PROPOSED CURB / PAVT	---
CABLE TELEVISION	TV	WATER MAIN	W	PAVING LIMITS	X X X X X
FIBER OPTICS	FO	WATER SERVICE	WS	STRUCTURE / BUILDING	---
PROPOSED UTILITY	---	PRESSURE DISTRICT	---	FENCE	X
POWER POLES	○	CONCRETE	○	ALUMINUM	○
	○	WOOD	○	WATER MAIN VALVES	+
	+	GATE	+	BUTTERFLY	+
	+	WATER SERVICE	+	WATER SERVICE	+
UTILITIES	⊠	TRAFFIC SIGNAL	⊠	TRAFFIC CONTROL BOX	⊠
	⊠	GAS VALVE	⊠	HYDRANTS	⊠
	⊠	NOZZLE	⊠	NOZZLE	⊠
	⊠	3 NOZZLE	⊠	3 NOZZLE	⊠



FOR START OF PLAN NOTES SEE W. BELOIT RD., SHEET 1 OF 1, PLAN FILE NO. 2016001.

FORESTRY NOTE

THERE ARE EXISTING CITY OF MILWAUKEE TREES WITHIN THE PROJECT LIMITS. THERE ARE FIVE (5) TREES THAT WILL NEED TO BE REMOVED PRIOR TO EXCAVATION. ALL WORK AND MATERIALS NECESSARY TO REMOVE THE EXISTING TREES SHALL BE INCLUDED IN THE UNIT PRICE BID FOR TREE REMOVAL. THE WORK SHALL INCLUDE, BUT NOT BE LIMITED TO, A COMPLETE REMOVAL OF THE EXISTING TREE AND COMPLETE CLEANING OF THE AREA OF THE STUMP AND ALL SURFACE ROOTS. TREE WORK SHALL BE DONE BY A LICENSED, INSURED AND CERTIFIED TREE CARE PROFESSIONAL.

THE NINE (9) REMAINING TREES SHALL HAVE A TREE PROTECTION ZONE INSTALLED AROUND THE TRUNKS. SPECIFICATIONS FOR THE TREE PROTECTION ZONE CAN INCLUDE ORANGE CONSTRUCTION BARRELS WITH CAUTION TAPE OR SIMILAR FENCING.

DUE TO THE PROXIMITY OF THE PROPOSED WATER MAIN INSTALLATION TO ADJACENT CITY STREET 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.

COUNTY PERMIT

W. BELOIT RD. IS COUNTY TRUNK HIGHWAY *N*, S. 92ND ST. IS COUNTY TRUNK HIGHWAY *N*, BOTH ARE MAINTAINED BY MILWAUKEE COUNTY. AGGREGATE SLURRY BACKFILL IS REQUIRED WITHIN COUNTY TRUNK HIGHWAY R.O.W.

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 SUBMITAL 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@MILWAUKEECOUNTYWI.GOV WITH ANY QUESTIONS REGARDING THE PERMIT AND/OR WORK ZONE TRAFFIC CONTROL PLAN.

FOSTER ADAPTOR NOTE

WHERE NOTED ON THE PLANS, MECHANICAL JOINT VALVES AND FITTINGS SHALL BE CONNECTED USING A BOLT-THROUGH POSITIVE RESTRAINT MECHANISM MANUFACTURED OF USA DUCTILE IRON CONFORMING TO ASTM A536, 65-45-12. THE POSITIVE RESTRAINT DEVICE SHALL CONNECT THE VALVES AND/OR FITTINGS AT A LINEAR DISTANCE NOT TO EXCEED THREE (3) INCHES AND WITHOUT ATTACHMENT TO PIPE. THE DEVICE SHALL COME COMPLETE WITH ALL ACCESSORIES. THE BOLT-THROUGH POSITIVE RESTRAINING DEVICE AND THE DUCTILE IRON SPACERS SHALL BE SUPPLIED WITH AN NSF61 ASPHALTIC COATING IN ACCORDANCE WITH ANSI/AWWA C104/A214. THE BOLTS AND NUTS SHALL BE ASTM A193 TYPE 304 OR 316 STAINLESS STEEL, AND SHALL BE ORDERED WITH LONG-BOLT ACCESSORY PAKS FOR USE WITH AWWA C110 FULL-BODY FITTINGS. THE DEVICE SHALL BE USED WITH STANDARD MECHANICAL JOINT FITTINGS (AWWA C110) AND VALVES. THE DEVICE SHALL BE INFLECT CORPORATION FOSTER ADAPTOR OR EQUAL.

ANY FOSTER ADAPTORS PROVIDED PER PLAN AND NOT USED ARE TO BE PROPERTY OF MILWAUKEE WATER WORKS.

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 VI OF THE STATE OF WISCONSIN "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES".

TRAFFIC SIGNAL NOTE

IF THERE ARE ANY IMPACTS TO CITY OF MILWAUKEE TRAFFIC SIGNAL EQUIPMENT, THE CONTRACTOR SHALL CONTACT SIGNAL ENGINEERING AT 414-286-5162 FOR NECESSARY ALTERATIONS. A FIVE WORKING DAY NOTICE IS REQUIRED. REPORT DAMAGE TO THE SIGNAL SHOP AT 414-286-3687.



CALL DIGGERS HOTLINE
1-800-242-8511

TOLL FREE TO OBTAIN LOCATION OF UNDERGROUND BEFORE YOU DIG. WISCONSIN STATUTE 182.0715 REQUIRES MIN. OF 3 WORK DAYS NOTICE BEFORE YOU EXCAVATE

NO.	BY	REVISION	DATE



Milwaukee Water Works
Department of Public Works

Water Engineering

WATER MAIN

W. BELOIT RD. (S/S)

S. 92ND STREET

S. 96TH STREET

APPROVED: *Patrick W. Rudy* DATE: 1-8-16
DESIGN ENGINEER

CHECKED BY: *Mark J. Kelly* DATE: 1-8-16
CHIEF DESIGN ENGINEER

SURVEY BY: TAM DATE: 1-8-16
SPECIAL DEPUTY COMMISSIONER OF PUBLIC WORKS

PROGRAM NO. 2016-712 CONTRACT NO. C.C. FILE NO. 151289
PROJECT NO. WT410110661 OFFICIAL NOTICE NO. 15-1-2016 DATE ADOPED 1-19-16

SHEET NO. 1 OF 3 PLAN FILE NO. 2016002