ESTIMATE OF QUANTITIES

FOR BIDDING

FURNISH PIPE AND INSTALL

(DUCTILE IRON PUSH-ON RUBBER GASKET JOINT)

686 FT. - 8" WATER MAIN

SERVICES

10 - CONNECT ORIGINAL SERVICE (C.O.S.)

PERMANENT PAVEMENT

395 SQ. YDS. - 8" CONCRETE (FULL SLAB 6' WIDTH)
60 SQ. YDS. - 3" ASPHALTIC CONCRETE
60 SQ. YDS. - 8" CONCRETE BASE

FURNISH AND INSTALL DOWEL BARS

690 BARS

BARRICADES AND TRAFFIC CONTROL

LUMP SUM

CURB AND GUTTER

570 LIN. FT. - CONCRETE

SAWCUTTING

200 LIN. FT. - IN ASPHALT ON CONCRETE BASE (FULL DEPTH)

FINISHING OF ROADWAY

LUMP SUM

FURNISH, INSTALL, AND MAINTAIN EROSION CONTROL

LUMP SUM

465 CU. YDS. EXCESS EXCAVATED MATERIAL

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

1 - T 8x8
2 - B8-45
2 - V8
2 - VB-D
2 - SL8

8 - 1" CORPORATION STOP
2 - 1 1/2" CORPORATION STOP
2 - 8"x1 1/2" SERVICE SADDLE

PAVEMENT TYPE

EXISTING PAVEMENT IN S. 60TH ST. FROM W. HOWARD AVE. NORTH IS V.T.A.C (2003) ON 8" (1969) CONCRETE - REINFORCED

EXISTING PAVEMENT IN S. 60TH ST. FROM W. HOWARD AVE. TO W. NORWICH ST. IS 8" (1969) CONCRETE - REINFORCED

EXISTING PAVEMENT IN S. 60TH ST. FROM W. NORWICH ST. TO W. WATERFORD AVE. IS 8" (1963) CONCRETE - REINFORCED

EXISTING PAVEMENT IN S. 60TH ST. SOUTH OF W. WATERFORD AVE. IS V.T.A.C. (1989) ON 8" (1973) CONCRETE - REINFORCED

ABANDONMENT OF WATER MAINS, VALVES, AND HYDRANT BRANCHES

16' - 8"-1968-DI WATER MAIN
344' - 8"-1959-L WATER MAIN
328' - 8"-1957-L WATER MAIN
2 - 8" VALVE

BENCHMARKS

HYD. - N.E. CORNER OF S. 60TH AND W. HOWARD AVE.
ELEVATION 199.718

HYD. - N.W. CORNER OF S. 60TH AND W. HOWARD AVE.
ELEVATION 197.346

HYD. - S.E. CORNER OF S. 60TH AND W. HOWARD AVE.
ELEVATION 200.033

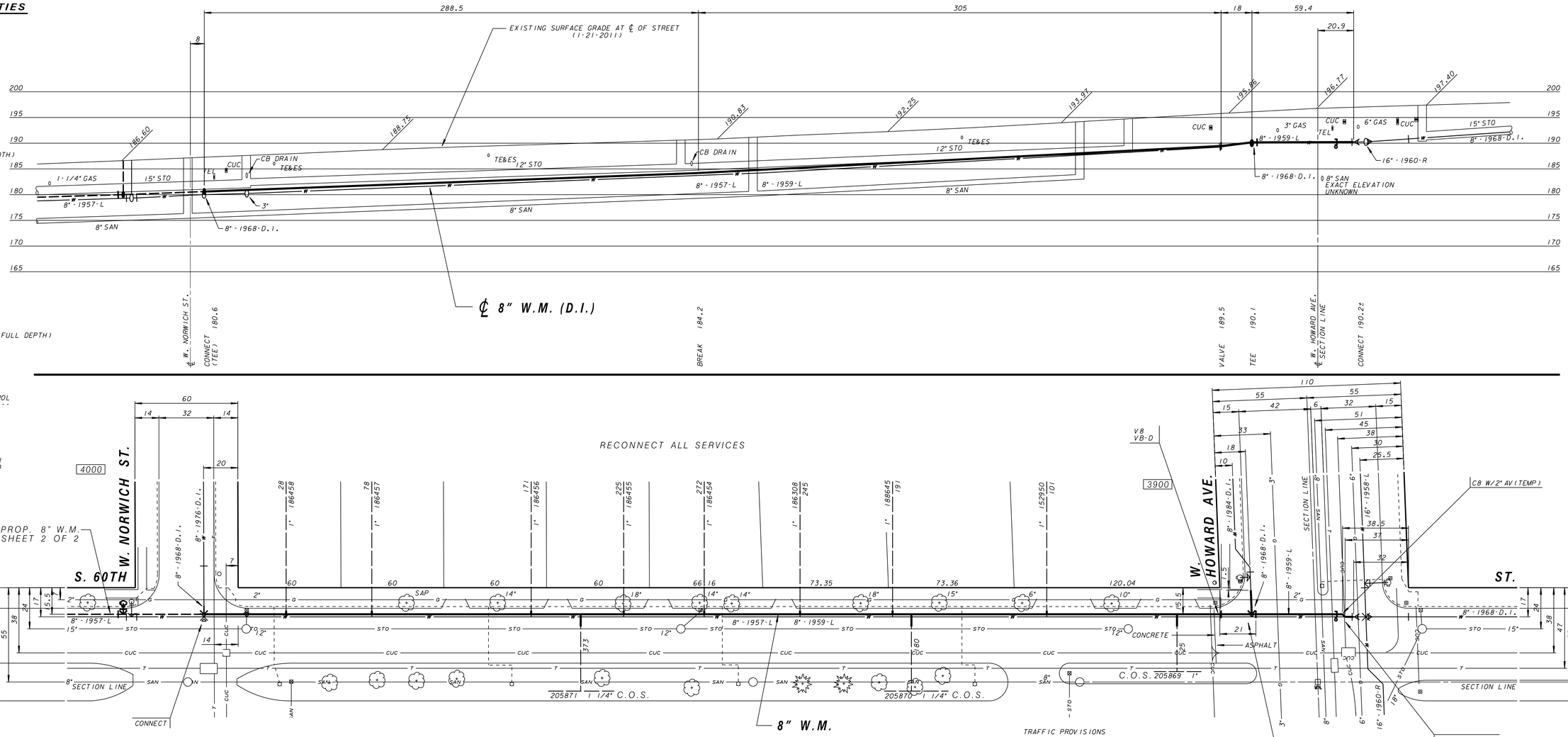
HYD. - S.W. CORNER OF S. 60TH AND W. HOWARD AVE.
ELEVATION 197.180

QUARTER SECTION PLUG @ S. 60TH ST. AND W. HOWARD AVE.
ELEVATION 197.16

HYD. - S.W. CORNER OF S. 60TH AND W. NORWICH ST.
ELEVATION 187.612

HYD. - S.W. CORNER OF S. 60TH ST. AND W. WATERFORD AVE.
ELEVATION 181.417

HYD. - N.E. CORNER OF S. 60TH ST. AND W. PLAINFIELD AVE.
ELEVATION 180.251



SCHEDULE

TIME FOR COMPLETION: 75 TOTAL WORKING DAYS. NO WORK SHALL BEGIN PRIOR TO MARCH 18, 2013. ALL WORK IN THIS CONTRACT SHALL BE COMPLETED BY JULY 12, 2013.

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:

S. 60TH ST. FROM W. HOWARD AVE. TO W. WATERFORD AVE., PLAN FILE NO. S 2013008 AND 2013009 - 38 WORKING DAYS.
S. 60TH ST. FROM W. MORGAN AVE. TO W. FOREST HOME AVE., PLAN FILE NO. S 2013010 AND 2013011 - 36 WORKING DAYS.

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 STANDARD PLAN NOTES REGARDING 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.

VALVE BOX BASE ADAPTERS

ALL VALVE BOXES SHALL BE INSTALLED ON GATE VALVES WITH THE USE OF THE VALVE BOX BASE ADAPTERS, "ADAPTOR 11" AS MANUFACTURED BY ADAPTOR INC. OR AN APPROVED EQUAL. THE ADAPTER SHALL BE INSTALLED IN ADDITION TO THE HARDWOOD BLOCKING. COST OF THE ADAPTER SHALL BE INCLUDED IN THE UNIT BID PRICE TO FURNISH AND INSTALL WATER MAIN.

BACKFILL AND BEDDING MATERIAL

THE REQUIREMENTS FOR BACKFILL AND BEDDING MATERIAL SHALL BE AS STATED IN THE "THE MILWAUKEE WATER WORKS STANDARD PLAN NOTES REGARDING WATER MAIN CONSTRUCTION".

HYDRANTS

THE CONTRACTOR SHALL RETURN ALL ABANDONED HYDRANTS TO THE DPW FIELD HEADQUARTERS - INFRASTRUCTURE, OPERATIONS, WATER WORKS. CONTACT MR. BEN GLATZEL AT 414-708-2839 FOR ADDITIONAL INFORMATION.

HYDRANT PERMITS

A $65.00 HYDRANT PERMIT/USE FEE WILL BE PART OF THE HYDRANT USE PERMIT. THIS FEE IS PER HYDRANT PER WEEK.

IT IS THE INTENTION OF THE CITY OF MILWAUKEE TO METER AND RECORD ALL WATER USE ON THIS CONTRACT. THE CONTRACTOR MUST OBTAIN A HYDRANT PERMIT FOR THIS CONTRACT WHICH INCLUDES THE REQUIREMENT OF A METER TO MEASURE WATER USAGE. THIS PERMIT CAN BE OBTAINED FROM THE CITY'S DEVELOPMENT CENTER LOCATED AT 809 N. BROADWAY.

IF IT IS FOUND THAT THE CONTRACTOR IS NOT FOLLOWING THE STANDARD HYDRANT PERMIT USE RULES, THE CITY OF MILWAUKEE WILL TAKE NORMAL ENFORCEMENT ACTION.

THE PERMIT REQUIRES THE CONTRACTOR TO PLACE A REFUNDABLE $675.00 DEPOSIT FOR EACH METER TO BE USED. THE CONTRACTOR WILL NOT BE REQUIRED TO PAY $325.00 FOR THE SETUP OF THE METER. THE $65.00 HYDRANT PERMIT/USE FEE WILL BE WAIVED BY THE UTILITY. THE CONTRACTOR WILL NOT BE CHARGED FOR THE VOLUME OF WATER USED.

QUESTIONS, ARRANGING INSTALLATIONS, AND READINGS

MWW METER SERVICES DISPATCHER, 414-286-2865
MR. TIM GARCZYNSKI, WATER METER PROJECT MANAGER, 414-286-8119

JOINT RESTRAINT OPTION

DUCTILE IRON PIPE AND FITTINGS (EXCEPT HYDRANT BRANCHES) MAY BE RESTRAINED USING FIELDLOK OR MJ FIELDLOK RESTRAINT. BUTTRESSING MAY BE REQUIRED IN ADDITION TO THE FIELD LOK RESTRAINT.

CONTRACTOR SHALL NOTIFY MWW 414-286-2427 IF FIELD LOK RESTRAINT WILL BE USED PRIOR TO THE REQUIRED EROSION CONTROL SUBMITTAL. ADDITIONAL REQUIREMENTS FOR USE OF FIELD LOK RESTRAINT IS DETAILED IN THE STANDARD PLAN NOTES INCLUDED IN BID DOCUMENTS.

RESIDENT / BUSINESS NOTIFICATION

WITHIN TEN (10) WORKING DAYS FOLLOWING AWARD OF THIS CONTRACT, THE SUCCESSFUL BIDDER SHALL MAIL A NOTICE OF THE PROJECTS TO ALL AFFECTED AREA RESIDENTS AND BUSINESSES. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT ALL NOTICES ARE CONVEYED TO THE PUBLIC REGARDING THIS PROJECT. A SAMPLE NOTICE HAS BEEN INCLUDED IN THE BID PACKAGE. ANY CHANGES TO THE NOTICE MUST BE REVIEWED BY THE WATER ENGINEERING SECTION OF MWW. ALL COSTS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR FURNISH AND INSTALL WATER MAIN.

C.O.S. NOTE

TAPS REQUIRED FOR RE-CONNECTING SERVICES SHALL BE MADE BY THE CONTRACTOR. TAPS SHALL BE MADE AND CORPORATION STOPS INSTALLED PRIOR TO PRESSURE TEST. ALL COSTS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR CONNECT ORIGINAL SERVICE.

TRAFFIC PROVISIONS

S. 60TH ST.

DURING WORKING AND NON WORKING HOURS MAINTAIN ONE (1) 11'-0" MINIMUM TRAFFIC LANE, FOR SOUTHBOUND TRAFFIC, ON THE PROPER SIDE OF THE ROAD.

USE TEMPORARY NO PARKING ANY TIME SIGNS (SOUTHBOUND)

W. HOWARD AVE.

DURING WORKING AND NON WORKING HOURS MAINTAIN ONE (1) 11'-0" MINIMUM TRAFFIC LANE, FOR EACH DIRECTION, ON THE PROPER SIDE OF THE ROAD.

PAVEMENT MARKINGS MUST BE RETURNED TO ORIGINAL MATERIAL AND CONDITION.

PLEASE CONTACT TRAFFIC ENGINEERING AT 286-3632 FOR THE INSTALLATION OF TEMPORARY "NO PARKING" SIGNS OR IF THERE ARE ANY QUESTIONS CONCERNING THESE COMMENTS.

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".

STREET LIGHTING NOTE

STREET LIGHTING HAS PIPES AND CABLES CROSSING WITHIN THE PROJECT LIMITS. THESE PIPES AND CABLES SHALL BE SUPPORTED IF OPEN CUT TRENCHING IS USED. DAMAGES SHALL BE REPORTED TO THE STREET LIGHTING SHOP AT 414-286-3481.

IF THERE ARE ANY IMPACTS TO CITY OF MILWAUKEE STREET LIGHTING EQUIPMENT, THE CONTRACTOR SHALL CONTACT ENG-KIE LEE IN ENGINEERING AT 414-286-2174 FOR NECESSARY ALTERATIONS.

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.

PLAN LINE & UTILITY LEGEND

GAS ..... G	SANITARY SEWER	STREET LIGHTING .....
ELECTRIC ..... E	STORM SEWER	CITY UNDERGROUND CONDUIT — CUC —
TELEPHONE ..... T	COMBINED SEWER	PROPOSED CURB / PVMT
CABLE TELEVISION ..... TV	WATER MAIN ..... W	PAVING LIMITS ..... X X X X
FIBER OPTICS ..... FO	WATER SERVICE	STRUCTURE / BUILDING
PROPOSED UTILITY	PRESSURE DISTRICT ..	FENCE ..... ×

POWER POLES ○-CONCRETE ○-ALUMINUM ○-WOOD
WATER MAIN VALVES —|—-GATE —|—-BUTTERFLY ○-SERVICE
UTILITIES ⊠-TRAFFIC SIGNAL ⊠-TRAFFIC CONTROL BOX G-GAS VALVE
HYDRANTS 1-NOZZLE 3-NOZZLE

CALL DIGGERS HOTLINE
1-800-242-8511
TOLL FREE TO OBTAIN LOCATION OF UNDERGROUND BEFORE YOU DIG. WISCONSIN STATUTE 182.0175 REQUIRES MIN. OF 3 WORK DAYS NOTICE BEFORE YOU EXCAVATE

NO.	BY	REVISION	DATE

WISCONSIN MARK SCHELLER E-32034 MILWAUKEE, WI PROFESSIONAL ENGINEER

Milwaukee Water Works — Water Engineering, Department of Public Works

WATER MAIN

IN S. 60TH ST.
FROM W. HOWARD AVE.
TO W. WATERFORD AVE.

		APPROVED	DATE
SCALE HORIZONTAL	1" = 30'		12-28-12 MAINS DESIGN ENGINEER
SCALE VERTICAL	1" = 10'		12-28-12 CHIEF DESIGN ENGINEER
1/4 SEC. NO.	572, 557		12-28-12 SPECIAL DEPUTY COMMISSIONER OF PUBLIC WORKS
PLAN DATE	1-11-11		
DRAWN BY	S. MILLER		
CHECKED BY	P.W.P.		
SURVEY BY	CONST. SECTION		

PROGRAM NO.	2010-654	CONTRACT NO.	C.C. FILE NO. 100961
WORK ORDER	WT410101054	O.N. & PROJECT NO. 13-11-1	DATE ADOPTED 12-21-10

SHEET NO. 1 OF 2 PLAN FILE NO. 2013008