

**ESTIMATE OF QUANTITIES**

FOR BIDDING

- FURNISH PIPE AND INSTALL
  - (DUCTILE IRON PUSH-ON RUBBER GASKET JOINT)
  - 765 FT. - 8" WATER MAIN
  - 14 FT. - 6" HYDRANT BRANCH
- INSTALL
  - 1 - HYDRANT
- REMOVE
  - 1 - HYDRANT / MINOR
- SERVICES
  - 10 - CONNECT ORIGINAL SERVICE (C.O.S.)
- PERMANENT PAVEMENT
  - 515 SQ. YDS. - 8" CONCRETE (6' WIDTH)
- CURB AND GUTTER
  - 465 LIN. FT. - CONCRETE
- FURNISH AND INSTALL DOWEL BARS
  - 780 BARS
- BARRICADES AND TRAFFIC CONTROL
  - LUMP SUM
- SAWCUTTING
  - 305 LIN. FT. - IN CONCRETE (FULL DEPTH)
- FINISHING OF ROADWAY
  - LUMP SUM
- FURNISH, INSTALL, AND MAINTAIN EROSION CONTROL
  - LUMP SUM

- 575 CU. YDS. EXCESS EXCAVATED MATERIAL
- PAVEMENT TYPE
  - EXISTING PAVEMENT IN W. HOWARD AVE. IS 8" REINFORCED CONCRETE (1964)
- ABANDONMENT OF WATER MAINS, VALVES, AND HYDRANTS
  - 753 FT. - 8" - 1959-L WATER MAIN
  - 14 FT. - 1964-R WATER MAIN
  - 9 FT. - 8" - 2009-D.1. WATER MAIN
- FOLLOWING IS A LIST OF THE FITTINGS SHOWN ON THIS CONSTRUCTION PLAN THAT WILL BE PROVIDED BY THE CITY.
  - 1 - AT 8x6
  - 4 - BB-45
  - 1 - V6
  - 2 - VB-DD
  - 1 - CB
  - 1 - W (6.5)
  - 2 - SLB
  - 9 - 1" CORPORATION STOP
  - 1 - 1/4" CORPORATION STOP



**SCHEDULE**

TIME FOR COMPLETION: 20 TOTAL WORKING DAYS. ALL WORK IN W. WEDGEWOOD AVE. PLAN FILE NO. S 2012020 AND 2012021. SHALL BE COMPLETED BY JULY 13, 2012. ALL OTHER WORK IN THIS CONTRACT SHALL BE COMPLETED BY SEPTEMBER 28, 2012.

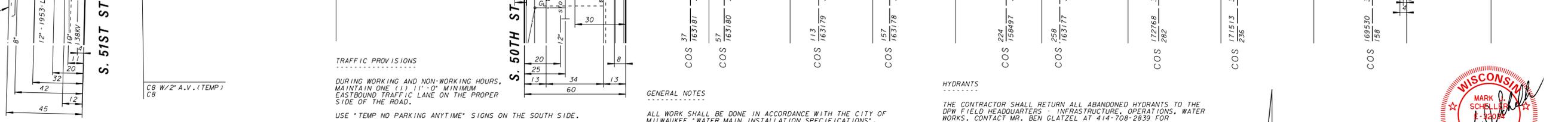
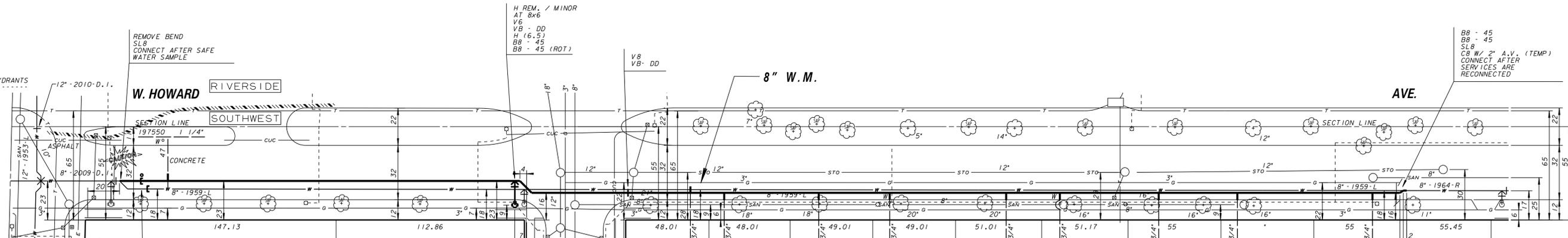
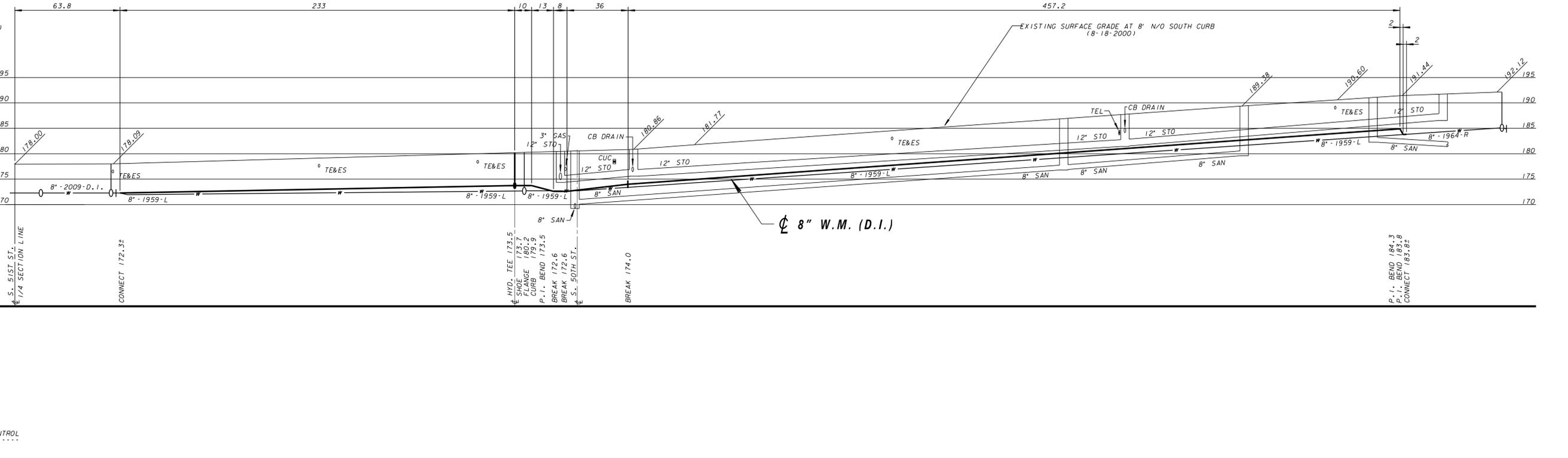
EACH PROJECT IN THIS CONTRACT IS ASSIGNED AN ALLOWABLE NUMBER OF PROJECT WORKING DAYS. A PROJECT WORKING DAY IS DEFINED AS ANY DAY THE CONTRACTOR IS ABLE TO WORK A MINIMUM OF FOUR (4) HOURS TOWARDS COMPLETION OF THE PROJECT. FOLLOWING IS A LIST OF WATER MAIN INSTALLATION PROJECTS INCLUDED IN THIS CONTRACT AND THE ALLOWABLE PROJECT WORKING DAYS FOR EACH:

- W. HOWARD AVE. FROM 460' E/O S. 50TH ST. TO 20' E/O S. 51ST ST., PLAN FILE NO. 2012018 - 22 WORKING DAYS.
- S. 57TH ST. FROM W. HOWARD AVE. TO W. NORWICH ST., PLAN FILE NO. 2012019 - 19 WORKING DAYS.
- W. WEDGEWOOD DR. FROM S. SUNSET DR. TO S. MASSACHUSETTS AVE., PLAN FILE NO. S 2012020 & 2012021 - 34 WORKING DAYS.

- BENCHMARKS**
- S.E. CORNER OF S. 51ST ST. & W. HOWARD AVE. 17' S/O & 2.4' E/O CURBS ELEV. 177.791
  - HYD. - S.W. CORNER OF S. 50TH ST. & W. HOWARD AVE. ELEV. 181.33
  - HYD. - N.E. CORNER OF S. 48TH ST. & W. HOWARD AVE. ELEV. 193.28

**PLAN LINE & UTILITY LEGEND**

GAS	○	SANITARY SEWER	—	STREET LIGHTING	—
ELECTRIC	—	STORM SEWER	—	CITY UNDERGROUND CONDUIT	—
TELEPHONE	—	COMBINED SEWER	—	PROPOSED CURB / PAVT	—
CABLE TELEVISION	—	WATER MAIN	—	PAVING LIMITS	—
FIBER OPTICS	—	WATER SERVICE	—	STRUCTURE / BUILDING	—
PROPOSED UTILITY	—	PRESSURE DISTRICT	—	FENCE	—
POWER POLES	○	CONCRETE	□	ALUMINUM	○
WOOD	○	WATER MAIN VALVES	+	GATE	+
BUTTERFLY	+	W-SERVICE	+		
UTILITIES	□	TRAFFIC SIGNAL	□	TRAFFIC CONTROL BOX	□
○	GAS VALVE	HYDRANTS	○	1 NOZZLE	○
				3 NOZZLE	○



**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 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.

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 MW 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 MW. ALL COSTS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR FURNISH AND INSTALL WATER MAIN.

VALVE BOX BASE ADAPTERS

ALL VALVE BOXES SHALL BE INSTALLED ON GATE VALVES WITH THE USE OF THE VALVE BOX BASE ADAPTERS. ADAPTOR 1" 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".

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.

**Milwaukee Water Works Water Engineering**  
Department of Public Works

**WATER MAIN**

**IN W. HOWARD AVENUE**

**FROM 460' E/O S. 50TH STREET**

**TO 20' E/O S. 51ST STREET**

SCALE: HORIZONTAL 1" = 30', VERTICAL 1" = 10'

DATE: 3-26-12

DESIGNED BY: [Signature] 3-26-12

CHECKED BY: [Signature] 3-26-12

PROGRAM NO. 2010-652 CONTRACT NO. C.C. FILE NO. 100961

WORK ORDER WT410101052 D.W. & PROJECT NO. 12-54-1 DATE ADDED 12-21-10

**SHEET NO. 1 OF 1 PLAN FILE NO. 2012018**

CALL DIGGERS HOTLINE 1-800-242-8511

TOLL FREE TO OBTAIN LOCATION OF UNDERGROUND BEFORE YOU DIG. WISCONSIN STATUTE (IRC.015) REQUIRES MIN. OF 3 WORK DAYS NOTICE BEFORE YOU EXCAVATE

NO.	BY	REVISION	DATE

