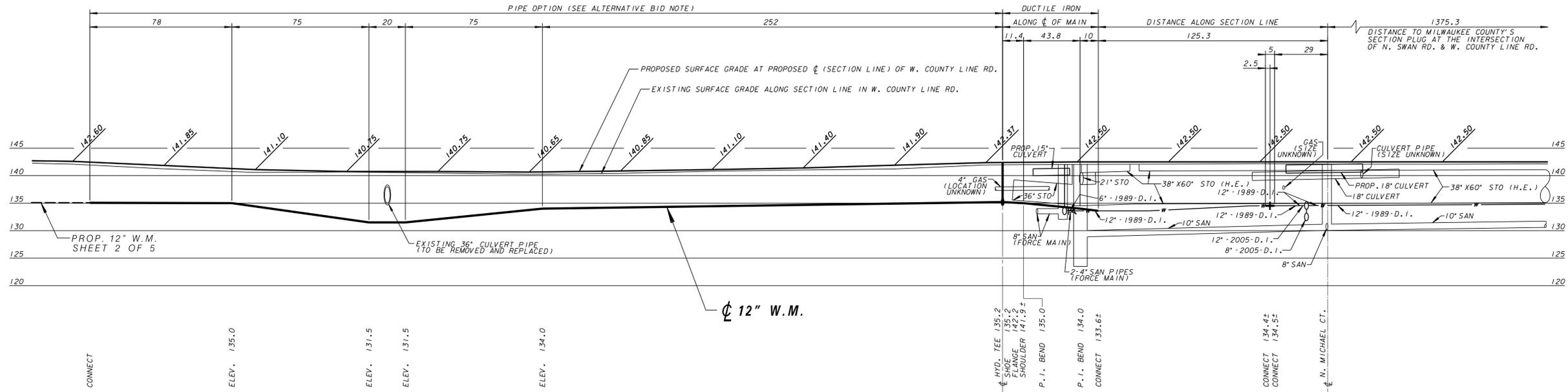


ESTIMATE OF QUANTITIES

FOR BIDDING

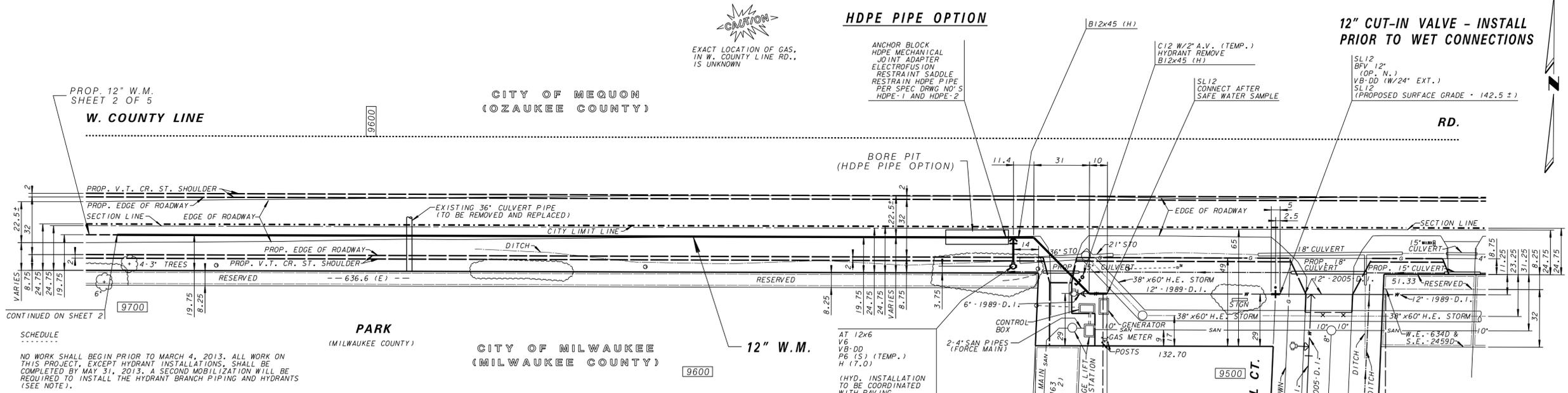
ALTERNATE #1

- FURNISH PIPE AND INSTALL
(DUCTILE IRON PUSH-ON RUBBER GASKET JOINT)
566 FT. - 12" WATER MAIN
16 FT. - 6" HYDRANT BRANCH
INSTALL
1 - 12" CUT-IN VALVE
1 - HYDRANT
PERMANENT PAVEMENT
225 SQ. YDS. - 4" ASPHALTIC CONCRETE (SEE PAVEMENT NOTE)
BARRICADES AND TRAFFIC CONTROL
LUMP SUM
SAWCUTTING
510 LIN. FT. - IN ASPHALT
FINISHING OF ROADWAY
LUMP SUM
FURNISH, INSTALL, AND MAINTAIN EROSION CONTROL
LUMP SUM
500 CU. YDS. EXCESS EXCAVATED MATERIAL



ALTERNATE #2

- FURNISH PIPE AND INSTALL
(HIGH-DENSITY POLYETHYLENE (DR11))
(DIRECTIONAL DRILL INSTALLATION)
500 FT. - 12" WATER MAIN
(DUCTILE IRON PUSH-ON RUBBER GASKET JOINT)
66 FT. - 12" WATER MAIN
16 FT. - 6" HYDRANT BRANCH
INSTALL
1 - 12" CUT-IN VALVE
1 - HYDRANT
PERMANENT PAVEMENT
20 SQ. YDS. - 4" ASPHALTIC CONCRETE (SEE PAVEMENT NOTE)
BARRICADES AND TRAFFIC CONTROL
LUMP SUM
SAWCUTTING
60 LIN. FT. - IN ASPHALT
FINISHING OF ROADWAY
LUMP SUM
FURNISH, INSTALL, AND MAINTAIN EROSION CONTROL
LUMP SUM
100 CU. YDS. EXCESS EXCAVATED MATERIAL
PAVEMENT TYPE
W. COUNTY LINE RD. IS ON THE 2013 PAVING PROGRAM.
EXISTING PAVEMENT IN W. COUNTY LINE RD. IS V.T. ASPHALT (1978), ON V.T. ASPHALT (1959)
ABANDONMENT OF WATER MAINS, VALVES, AND HYDRANTS
14 FT. - 12" 1989-D.I. WATER MAIN
1 - HYDRANT
FOLLOWING IS A LIST OF THE FITTINGS SHOWN ON THIS CONSTRUCTION PLAN THAT WILL BE PROVIDED BY THE CITY.
1 - AT 12x6
2 - B12-45
1 - BV 12
1 - V8-DD
1 - VALVE BOX 24" EXT.
1 - H (7.0)
3 - SL12
BENCHMARKS
HYD. - HOUSE #9335 W. COUNTY LINE RD. (W/L)
ELEV. 144.79
SUB STD. - HOUSE #9439 W. COUNTY LINE RD., ON W/S & N/END OF N/LY BWS
ELEV. 147.12
WOOD POLE - POLE #89-00041 (LARGE SPIKE) (9700 BLOCK)
ELEV. 141.73



SCHEDULE
NO WORK SHALL BEGIN PRIOR TO MARCH 4, 2013. ALL WORK ON THIS PROJECT, EXCEPT HYDRANT INSTALLATIONS, SHALL BE COMPLETED BY MAY 31, 2013. A SECOND MOBILIZATION WILL BE REQUIRED TO INSTALL THE HYDRANT BRANCH PIPING AND HYDRANTS (SEE NOTE).
PRE-BID MEETING
A MANDATORY PRE-BID MEETING WILL BE HELD ON WEDNESDAY, NOVEMBER 14, 2012 AT 9:30AM IN THE MWW CONFERENCE ROOM (412) OF THE ZEIDLER MUNICIPAL BUILDING.
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".
THE PROPOSED WATER MAIN WILL BE LOCATED UNDER FUTURE ROADWAY PAVEMENT. EXCAVATED MATERIAL WILL NOT BE ALLOWED AS BACKFILL.
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.

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.
ALTERNATIVE BID NOTE
THERE IS A PIPE MATERIAL AND INSTALLATION METHOD OPTION FOR SECTIONS OF THIS PROJECT. THE LIMITS OF THE OPTION ARE DEFINED IN THE PROFILE OF THE PLANS. BID ITEMS FOR THIS PROJECT HAVE BEEN ESTIMATED FOR THE TWO ALTERNATIVES. ALTERNATE #1 IS TO INSTALL DUCTILE IRON PIPE BY OPEN CUT CONSTRUCTION WITHIN THE PIPE OPTION LIMITS. ALTERNATE #2 IS TO INSTALL HDPE PIPE BY HORIZONTAL DIRECTIONAL DRILLING WITHIN THE PIPE OPTION LIMITS. BIDDERS ARE ALLOWED TO SUBMIT BIDS FOR EITHER OR BOTH ALTERNATIVES.

HIGH-DENSITY POLYETHYLENE PIPE NOTE
HIGH-DENSITY POLYETHYLENE (HDPE) PIPE SHALL BE MANUFACTURED AND INSTALLED PER SPECIFICATION NO. 4-4V, DATED MAY 9, 2012, TITLED "PIPE, POLYETHYLENE 4 INCH THROUGH 16 INCH" AND PER THE SPECIFICATION FOR HORIZONTAL DIRECTION DRILLING, DATED MAY 9, 2012. COPIES OF THESE SPECIFICATION ARE INCLUDED IN THE CONTRACT DOCUMENTS.
THE HDPE PIPE SHALL BE INSTALLED USING THE DIRECTIONAL DRILL METHOD WITH MINIMAL DISRUPTION OF ADJACENT AREAS AND FACILITIES. ANY REMOVAL AND/OR ALTERATION TO PUBLIC OR PRIVATE FACILITIES DUE TO THIS METHOD IS THE RESPONSIBILITY OF THE CONTRACTOR.
THE CONTRACTOR SHALL PROVIDE AN EMERGENCY ACTION PLAN (EAP) FOR THE DIRECTIONAL DRILL OPERATIONS. THE EAP SHALL ADDRESS THE PROCEDURES TO MITIGATE A WETLAND AND/OR WATERWAY FRAC OUT AND THE EQUIPMENT WHICH WILL BE ON-SITE READY FOR USE IN AN EMERGENCY.
THE CONTRACTOR SHALL FURNISH AND INSTALL THE HDPE MECHANICAL JOINT ADAPTERS AND ALL OTHER MATERIALS REQUIRED TO MAKE THE HDPE-DUCTILE IRON PIPE CONNECTIONS.
THE 2" AIR VENT TAP SHALL BE MADE USING A BRASS ELECTROFUSION CORP SADDLE. THE CONTRACTOR SHALL FURNISH AND INSTALL THE CORP SADDLE AND ALL OTHER MATERIALS REQUIRED TO MAKE THE AIR VENT CONNECTION.
THE HDPE PIPE SHALL BE PRESSURE TESTED USING THE "NON-MONITORED MAKE-UP WATER TEST" PER "THE PLASTIC PIPE INSTITUTE HANDBOOK OF POLYETHYLENE PIPE"

PLAN LINE & UTILITY LEGEND table with columns for Gas, Electric, Telephone, Cable Television, Fiber Optics, Proposed Utility, Power Poles, and Utilities.

QUESTIONS, ARRANGING INSTALLATIONS, AND READINGS
MWW METER SERVICES DISPATCHER, 414-286-2865
MR. TIM GARCZYNSKI, WATER METER PROJECT MANAGER, 414-286-8119
PLAN NOTES ARE CONTINUED ON SHEET 2 OF 5, PLAN FILE NO. 2012043.

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

Table with columns for No., By, Revision, and Date.



Milwaukee Water Works Water Engineering Department of Public Works. WATER MAIN W. COUNTY LINE RD. 105 FT. WEST OF N. MICHAEL CT. 470 FT. EAST OF N. 107TH ST. Includes project details, dates, and signatures.