

**ADDENDUM #2**  
2015 DOWNTOWN 12" GAS MAIN CONSTRUCTION AND WATER MAIN REPLACEMENT  
CITY OF DULUTH  
PROJECT No. 1408  
BID No. 15-0122  
May 28, 2015

**NOTICE**

This Addendum is issued to modify, explain or correct the original drawings, specifications and/or previous addenda and is hereby made a part of the Contract Documents. Please attach this Addendum to the specification and note receipt of this Addendum on the Request for Bid.

**DRAWINGS**

1. REPLACE sheet no. 2 with the attached sheet no. 2 revised May 28, 2015.
  
2. ADD note 3 on sheet no. 14 with the following:
  - “ 3. The Contractor may request the Engineering Department and City Parking Officials for short duration and localized closure of the north parking lane to provide greater space for specific and scheduled construction activities. “
  
3. This plan set included duplicates of sheet no. 27, DISREGARD the second of the two sheets as they appear in the plans.
  
4. DISREGARD the location noted as “optional directional drill gas main installation area” in the piping profile on sheet no. 28.
  
5. ADD the following note to sheet no. 28:
  - “ 2. Gas main installations crossing Superior Street may be, at the Contractor’s preference, installed with directional drilling between stations 6+32 and 6+68. “
  
6. ADD the following note to sheet no. 28:
  - “ 3. Gas main installation crossing the steam pipes on Superior Street shall cross below the steam pipes regardless of depth.“

**SPECIFICATIONS**

1. REPLACE the “Exhibit A” bid form with the attached “Exhibit A – Addendum Revision”.
  
2. REPLACE the seventh paragraph of SP-15 (1710) Traffic Control regarding pedestrian traffic control during construction with the following:

“ On 4<sup>th</sup> Street pedestrian traffic shall be detoured around the project with the appropriate signage. The southern sidewalk shall be closed for multiple blocks at a time where pipe is being installed. This also includes the intersection crossings at the beginning and end of each block where pipe is being installed. Generally it is the intent for the Contractor to detour pedestrians from the closed sidewalks to the north side of 4<sup>th</sup> Street where construction is not occurring. Pedestrian traffic on the impacted avenues shall be directed west or east to the next available avenue intersection open for pedestrian traffic. “

3. REPLACE Special Provision SP-18 (1807) Failure to Complete Work on Time with the following:

“ The provisions of MN/DOT 1807 shall apply in full to both the Substantial Completion Date and the Final Completion Date. For this project liquidated damages have been set at \$1,500 per day. “

4. REPLACE item no. 4 from Special Provision SP-26 (2505) Gas Main with the revised paragraph:

“ 4. The Contractor shall utilize air for testing the new gas main. The air shall be introduced through a 2” electrofusion tap tee at approximately station 1+65 of the pipe alignment. If the Contractor wishes to test the gas main in multiple segments a plan to do so much be approved by the Engineer. Once testing of the new gas main is completed by the Contractor, the gas main shall remain pressurized with air at approximately 20 PSI, and the 2” tap tee capped. The gas main shall be backfilled pressurized with air. “

## **INFORMATION TO BIDDERS**

1. Attached is the Pre-Bid Meeting Agenda including notes and attendance list for informational purposes.

END OF ADDENDUM

STATEMENT OF ESTIMATED QUANTITIES						
LINE	NOTES	SPEC NO	SAWING BITUMINOUS PAVEMENT (FULL DEPTH)	UNIT	WATER FUND 510	GAS FUND 520
1		2021.501	MOBILIZATION	LUMP SUM		1
2		2104.501	REMOVE 6" CI WATER MAIN	LN FT	940	
3		2104.503	REMOVE CONCRETE PAVEMENT	SQ YD		423
4	9	2104.503	REMOVE BITUMINOUS PAVEMENT	SQ YD		1210
5		2104.503	REMOVE BRICK PAVEMENT	SQ YD		1217
6		2104.509	REMOVE MANHOLE	EACH	1	
7		2104.525	FILL AND ABANDON 6" WATER MAIN	LN FT	282	
8	7	2104.602	DISCONNECT AND PLUG EXISTING WATER MAINS	EACH	2	
9	14	2104.511	SAWING CONCRETE PAVEMENT (FULL DEPTH)	LIN FT		297
10	2	2104.513	SAWING BITUMINOUS PAVEMENT (FULL DEPTH)	LIN FT		1151
11		2104.618	SAWING BRICK PAVEMENT (FULL DEPTH)	LIN FT		726
12		2105.503	ROCK EXCAVATION (TRENCH)	CU YD		28
13		2105.522	SELECT GRANULAR BORROW (CV)	P CU YD		80
14		2201.503	CONCRETE BASE PAVEMENT	CU YD		304
15		2211.503	AGGREGATE BASE (CV) CLASS 5	CU YD		270
16	15	2301.501	STRUCTURAL CONCRETE (3Y43)	CU YD		112
17		2301.602	DRILL & GROUT DOWEL BAR (EPOXY COATED) 1" DIA X 18" LONG	EACH		200
18	11	2360.501	TYPE SP 9.5 WEARING COURSE MIXTURE (3,C)	TON		218
19	11	2360.501	TYPE SP 12.5 NON WEARING COURSE MIXTURE (3,C)	TON		145
20		2388.601	BRICK PAVING	SQ YD		1217
21		2451.607	FURNISH GRANULAR BACKFILL (CV)	CU YD		2700
22	17	2504.602	WATERMAIN CONNECTION #1	LUMP SUM	1	
23	18	2504.602	WATERMAIN CONNECTION #2	LUMP SUM	1	
24		2504.602	WATERMAIN CONNECTION #3	LUMP SUM	1	
25	19	2504.602	WATERMAIN CONNECTION #4	LUMP SUM	1	
26	20	2504.602	WATERMAIN CONNECTION #5	LUMP SUM	1	
27	21	2504.602	WATERMAIN CONNECTION #6	LUMP SUM	1	
28	4	2504.602	4" GATE VALVE AND BOX	EACH	1	
29	4	2504.602	6" GATE VALVE AND BOX	EACH	6	
30	4	2504.602	8" GATE VALVE AND BOX	EACH	9	
31	8	2504.602	RECONNECT EXISTING 1" OR SMALLER WATER SERVICE	EACH	11	
32	10	2504.602	RECONNECT EXISTING 4" WATER SERVICE	EACH	1	
33	10	2504.602	RECONNECT EXISTING 6" WATER SERVICE OR HYDRANT LEAD	EACH	5	
34		2504.602	1" CURB STOP AND BOX	EACH	1	
35		2504.602	HDPE THRUST COLLAR ENCASED IN CONCRETE	EACH	3	
36	3	2504.603	HYDRANT ASSEMBLY	EACH	1	
37	16	2504.603	1" HDPE SDR 11 SERVICE PIPE	LIN FT	30	
38		2504.603	4" HDPE SDR 11 SERVICE PIPE	LIN FT	7	
39		2504.603	6" HDPE SDR 11 SERVICE PIPE	LIN FT	32	
40		2504.603	8" HDPE SDR 11 WATER MAIN	LIN FT	1205	
41		2504.603	12" HDPE SDR 11 WATER MAIN	LIN FT	14	
42		2505.602	EXCAVATE AND INSULATE 8" PE GAS 8' LONG @ STEAM CROSSING	EACH		2
43		2503.603	12" PE GAS MAIN (DRILLED)	LN FT		1937
44	1,13	2505.603	12" PE GAS MAIN (OPEN CUT)	LN FT		2222
45		2505.604	3" POLYSTYRENE INSULATION	SQ FT		100
46	5	2531.501	CONCRETE CURB & GUTTER DESIGN B624	LIN FT		233
47	6	2531.501	4" CONCRETE SIDEWALK (INCLUDES 4" GRAVEL BASE)	SQ FT		1468
48		2563.601	TRAFFIC CONTROL	LUMP SUM		1
49		2531.618	TRUNCATED DOMES	SQ FT		144
50	12	2573.533	SEDIMENT CONTROL LOG TYPE ROCK	EACH		27
51	12	2573.533	STORM DRAIN INLET PROTECTION	EACH		46
52	12	2575.533	INLET SAND BAG DIVERSION	EACH		27
53		2575.555	TURF ESTABLISHMENT	SQ YD		208

NOTES	
1	REMOVAL OF THE EXISTING ABANDONED LOW PRESSURE CAST IRON GAS PIPING SHALL BE INCIDENTAL TO THIS BID ITEM.
2	THIS ITEM INCLUDES SAW CUTTING BRICK PAVEMENT SURFACES WITH BITUMINOUS BASE.
3	NEW HYDRANT ASSEMBLY BID ITEM SHALL INCLUDE REMOVAL AND DISPOSAL OF EXISTING HYDRANT.
4	NEW WATER VALVE INSTALLATION BID ITEM SHALL INCLUDE REMOVAL AND DISPOSAL OF THE EXISTING
5	NEW CURB INSTALLATION BID ITEM SHALL INCLUDE REMOVAL AND DISPOSAL OF EXISTING CURB.
6	NEW SIDEWALK INSTALLATION BID ITEM SHALL INCLUDE REMOVAL AND DISPOSAL OF EXISTING SIDEWALK.
7	THIS BID ITEM SHALL INCLUDE PLACEMENT OF CONCRETE THRUST BLOCKS AT PLUGGED ENDS.
8	THE SERVICE RECONNECTION ITEM SHALL INCLUDE INSTALLATION OF A NEW ELECTROFUSION TAPPING SADDLE, HDPE SERVICE PIPING, TRANSITION COUPLERS, ADAPTERS, AND REDUCING FITTINGS NECESSARY TO RECONNECT EXISTING WATER SERVICES.
9	REMOVAL OF CONCRETE STREET BASE UNDER A BITUMINOUS SURFACE SHALL BE INCIDENTAL TO THE BITUMINOUS PAVEMENT REMOVAL.
10	THIS BID ITEM SHALL INCLUDE THE ASSOCIATED REDUCER FITTINGS, MJ CONNECTIONS, PIPE COUPLERS, TRANSITIONS, AND SHORT DUCTILE IRON PIPE SEGMENTS NECESSARY FOR THE CONNECTION.
11	ASPHALT PAVEMENT MIX COMPUTED AT 120 LBS/SQ YRD/IN OF THICKNESS
12	INCLUDES INSPECTION AND MAINTENANCE OF THESE ITEMS ON A WEEKLY BASIS AND AFTER EACH STORM EVENT INCIDENTAL TO THIS BID ITEM.
13	INCLUDES DISPOSAL OF UNSUITABLE OR SURPLUS EXCAVATED MATERIALS.
14	SAWING CONCRETE CURB AND GUTTER SHALL BE INCLUDED WITH THIS PAY ITEM.
15	STEEL REINFORCING FABRIC WHERE DETAILED ON THE PLANS IS INCIDENTAL TO THIS BID ITEM.

REVISED FOR ADDENDUM NO. 2

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

SIGNATURE: *Howard D. Smith, P.E.*

HOWARD D. SMITH P.E.  
TYPE NAME

DATE: 5/28/2015

LIC. NO.: 46875



CITY OF DULUTH  
ENGINEERING DIVISION  
411 W. 1ST ST. STE. 211  
DULUTH, MN 55802

2015 DOWNTOWN 12" GAS MAIN CONSTRUCTION & WATERMAIN REPLACEMENT  
(1ST AVE W. FROM MICHIGAN ST TO W 4TH ST AND W 4TH ST FROM 1ST AVE W TO 4TH AVE E)

CITY PROJECT NO.: 1408

STATE AID PROJECT NO.:

DRAWN BY: KLM

STATEMENT OF ESTIMATED QUANTITIES

SHEET NO. 2 OF 40



City of Duluth  
DEPARTMENT OF PUBLIC WORKS/UTILITIES  
Engineering Division  
211 City Hall • Duluth MN 55802  
(218) 730-5200 Fax: (218) 730-5907

# PRE-BID MEETING AGENDA

*(additions during meeting italicized)*

**RE: City Project 1408 – 12” Downtown Gas Main and Water Main Replacement**

**TIME:** 10:00 A.M.

**DATE:** May 27, 2015

**LOCATION:** City Hall Room 106A

**ATTENDEES:** See Sign in List

- 
1. Project Scope Review
  2. Bidding Schedule
    - a. June 3rd at 2:00 P.M.
    - b. To be approved at June 15th City Council Meeting
    - c. Target Notice to Proceed will be June 29th
  3. Addendum Items
    - a. Will be re-issuing the bid Exhibit A for corrections, additions, and deletions.
    - b. Sheet 27 clarification
    - c. Sheet 28 will have an addendum regarding directional drill limits (pertains to SP-26.5)
    - d. Clarification of 1” HDPE Water Service bid item, applies only to lead replacements
    - e. Clarification of liquidated damages of \$1,500/day.
    - f. Pedestrian Traffic Control clarifications in the specials
  4. References to Standard Construction Specifications heavily, many changes this year.
    - a. *Asphalt and brick repair specifications are updated and reminder issued that the inspector must be notified of the bituminous installation otherwise if uninspected it will not be paid.*
  5. City Involvement
    - a. Exact Gas main alignment provided by the City Inspector.
  6. Construction Schedule
    - a. Target Start Date June 29th
    - b. Substantial Completion is October 31<sup>st</sup>, which means all new water is online, gas main completed and pressurized with air, and all street restoration is completed.
    - c. No work Saturday and holiday restrictions.
      - i. July 3<sup>rd</sup> and September 12th
    - d. Final Completion June 10, 2016, which means all restoration is complete
  7. Contractor Requirements
    - a. Drug and Alcohol Plan and testing program
    - b. Operator Qualifications Program
  8. Horizontal and Directional Drilling
    - a. The project is designed with drilling required, review SP-23

- b. If drilled areas are open cut, then Contractor pays the cost of restorations in the identified drill areas.
  - c. Contractor may directional drill more than indicated on the plans (4<sup>th</sup> Street Intersections)
9. Steam Crossings
- a. SP-27 note insulation is provided by the City
    - i. Crossing at Superior Street (*gas must go under the steam piping*)
    - ii. Crossing at 1<sup>st</sup> Street
10. Traffic Control (SP-17)
- a. Traffic Control plan needs to be submitted
  - b. 4<sup>th</sup> street open at all times with lane shifts
  - c. Two 4<sup>th</sup> Street intersections closed at a time
  - d. 1<sup>st</sup> Avenue West closed in segments
  - e. Two blocks permitted closed at any time
  - f. 1<sup>st</sup> Street intersection night time closure
  - g. Optional Superior Street closure (night time only)
  - h. All other intersections remain partially open
  - i. Pedestrian Traffic
    - i. 4<sup>th</sup> Street detour to north side of street
    - ii. 1<sup>st</sup> Ave West fence off sidewalks, which shall remain open. Crosswalks closed as needed
11. Erosion Control
- a. PERMITS – NPDES and City MS4 are the only permits on the job
  - b. Erosion Control must be set up prior to surface disturbing tasks
  - c. Unit priced erosion control items
12. Rock Removal
- a. No blasting
  - b. No hour restrictions
13. Project removals: removal limits shown on plans were the basis for quantities on bid tab
14. Salvaging onsite suitable material
- a. SP-22 states these costs are incidental to the relevant items, will remain this way.
15. All turf restorations will be 4" of imported topsoil and sod
- a. May want to consider this in scheduling
16. SP-30 Duration for Pavement Restoration
17. Optional does anybody want to review the water construction/connection procedures
18. Other Issues
- a. *An electrofuse on the water piping must receive prior approval from the engineer*
  - b. *Engineer will review closing parking on north side of 4<sup>th</sup> street to provide more room*
19. Questions
- a. *Engineer will verify brick replacement quantity in addendum*
  - b. *Engineer will clarify requirements for high early strength concrete*
  - c. *Engineer to review specifics of tap on gas main for testing purposes*
20. *Sidewalk Days scheduled for July 8 to 10, no work occurs prior to this event between Michigan Street and 2<sup>nd</sup> Street Alley.*

PRE-CONSTRUCTION MEETING ATTENDANCE LIST

City Project: 1408

Date: May 27, 2015

<u>Name</u>	<u>Company</u>	<u>Phone</u>	<u>Email Address</u>
Howard Smith	City of Duluth	218-730-5092	hsmith@duluthmn.gov
Jeff Cottew	HANCO	218-348-6464	jcottew.hanco@hanco.com
Brandt S	HANCO	218-590-6295	brandberg@hanco.com
ERIE S	DULUTH	730-5072	ESHAFER@DULUTHMN.GOV
Russ Chapin	COID	218 730-5083	rchapin@duluthmn.gov
Kristin Majchrzak	COID	218 730-5086	<del>ksob</del> kmajchrzak@duluthmn.gov