



February 15, 2021

Mr. Hal Metzler, Jr.
City of Hyattsville
4310 Gallatin Street
Hyattsville, MD 20781

RE: Proposal for As-built Survey Services for Water Main and Sewer Main
at Arundel Place, Hyattsville, MD
DPW07132015 / JMT #16-1916-058

Dear Mr. Metzler:

Johnson, Mirmiran & Thompson (JMT) is pleased to offer the as-built survey services for the newly constructed water main and sewer main on Arundel Place from Baltimore Avenue to the property line of 4633 Arundel Place (approximately 280 LF of water main and 250 LF of sewer main), as shown on the attached plan. JMT will conduct necessary surveys to prepare drawings and documents that will meet WSSC's requirements for Sewer and Water Main As-builts.

Background

In 2017, the City of Hyattsville planned to construct a new building with car wash capability adjacent to the existing Department of Public Works facility at 4633 Arundel Place. JMT designed a new water main and a new sewer main along Arundel Place for the increased water demand and sewerage flow and assisted the City to obtain a Hydraulic Planning Analysis (HPA) and System Extension Permit (SEP) from WSSC. JMT did not perform any construction management services to the City.

The construction of the new building including the new water main and sewer main along Arundel Place is nearly completed. The WSSC required Sewer and Water Main As-built package must be submitted to WSSC prior to the building commissioning. The City therefore requested JMT to perform the as-built survey to prepare the necessary as-built drawings and documents.

Scope of Work

Initial Ground Control

JMT will recover and verify previously set control. Horizontal and Vertical datum for the project will be referenced to the Maryland State Plane Coordinate System (NAD 83/91) and the National Geodetic Vertical Datum of 1929 (NGVD 29), as previously established.

Secondary control may be necessary for completion of this project within areas inaccessible by the

primary control. Secondary control will be tied into the primary network to minimize error and identify blunders.

The sewer as-builts will be based on verifying locations of the manholes and inverts obtained by traditional survey methods. The water main as built will be based on test holes and elevations of the mains found thru the test holes process.

Data Reduction and Processing

Field data will be reduced in the office and checked for obvious errors. Field notes, both on paper and electronic, will be compiled and adjusted to create a final traverse. This final traverse will be used to complete location of the field collected topographic features. The raw field data will be processed into an AutoCAD drawing file. All office calculations, drafting, data reduction or adjustments will be under the direct supervision of a Maryland Licensed Professional Land Surveyor.

Manhole and Invert Location:

JMT survey crews will field collect the X,Y & Z values for the 3 new manholes. Each manhole, to be evaluated, will be subject to interior evaluation and photographs, collection of the invert or inverts elevation and the characteristics of the Manhole Rim and Lid.

Quality Control / Quality Assessment

JMT employs many QA/QC measures to minimize the occurrence of errors inherent to the surveying process. Field collected traverse angles will be observed in a 3 direct/reverse method to minimize angular errors. Primary and secondary traverse lines will be adjusted mathematically to identify and eliminate errors. Field run topo will be reviewed by both office and field personnel to check for correctness. Prior to delivery of the final product all plats will be checked by a licensed Maryland Professional Land Surveyor.

Utility Test Holes for Water Main:

For the purposes of the proposal, JMT SUE crews will perform up to five (5) test holes using air-vacuum excavation providing the personnel, equipment, supplies, management, and supervision. The test holes will verify the depth, size and basic material of the water main. Test holes will be performed using the following procedures:

- Notify Miss Utility and coordinate with WSSC.
- Obtain permits as needed.
- Test hole set-up.
- Remove grass, asphalt and/or concrete.
- Excavate the test hole to the top of the utility; bottom for duct/rectangular structure.
- Set a reference marker at grade and record information on target utility including: horizontal and vertical position, swing-ties to three physical features, size, material, condition, depth from grade, paving material and thickness, and soil condition.
- Tie vertical to on site benchmark provided through differential leveling.
- Backfill test hole with previously excavated material.
- Compact all backfill with a pneumatic tamper.
- Patch test hole with soil core previously removed or cold patch.

Location of Test Holes:

Survey crews will survey the reference marker set, swing ties to three physical features, and benchmark used. These features will be located using the standard MD SHA coding and field procedures, and referenced to the Maryland State Plane Coordinate System, horizontally (NAD 83/91). All inverts and vertical data will be referenced to the National Geodetic Vertical Datum of 1929 (NGVD 29).

Deliverables:

Sewer and Water Main As-Built Package as per WSSC's instructions (PDF copy attached) as follows:

1. Green Line copies of Water As-built Drawings, showing the most current revisions to the Drawings and Profile, including connection permit numbers with the water survey final as-built data as specified below.
2. Red Line copies of Sewer As-built Drawings, showing the most current revisions to the Drawings and Profile, including connection permit numbers with the sewer survey final as-built data as specified below.
3. Fire Hydrant Summary Sheet. (Not Applicable as no fire hydrant was installed at Arundel Place.)
4. Sewer As-built Data Work Sheet.
5. Water and sewer grade note sheets, including field notes.

All files are in PDF format.

Total Amount Not To Exceed

\$19,470.00

Exclusions:

1. As-built survey is performed for the newly constructed water main and sewer main within public Right of Way. Survey work within the property of 4633 Arundel Place is not included.
2. Some modifications to JMT's original water main and sewer main design were made on site during construction. JMT is not responsible for rejection of as-built drawings and documents resulting from these modifications.
3. JMT is not responsible for uploading the drawings and documents to WSSC's eBuilder.

Thank you for using JOHNSON, MIRMIRAN & THOMPSON to provide these services.

Very truly yours,

JOHNSON, MIRMIRAN & THOMPSON, INC.

A handwritten signature in black ink, appearing to read 'J. Ryan', is positioned above the printed name.

Jonathan J. Ryan, PE, CCM, PMP
Senior Vice President

Enclosures

Cc: Soli Guille, JMT
Rusty Smith, JMT
Justin Hall, JMT
Brenda Hui, JMT

Johnson, Mirmiran & Thompson				
COST SUMMARY FORMAT				
PART I - GENERAL				
CLIENT: City of Hyattsville - Professional Consulting & Design Services	Hyattsville Police Relocation	DPW07132015	Task Order 058	
CONSULTANT: Johnson, Mirmiran & Thompson	JMT -16-1916-058 As-built Survey Services for Water Main and Sewer Main at Arundel Place	PROPOSAL DATE 15-Feb-21		
ADDRESS: 601 New Jersey Ave, Suite 210 Washington, DC 20001				
COST SUMMARY				
1. DIRECT LABOR (Specify labor categories)	HOURS	HOURLY RATE	ESTIMATED COST	TOTALS
Project Manager	20	\$125.00	\$ 2,500.00	
Senior Engineer	4	\$195.00	\$ 780.00	
Design Engineer	8	\$125.00	\$ 1,000.00	
CADD Technician	8	\$98.00	\$ 784.00	
Licensed Surveyor	4	\$167.00	\$ 668.00	
Survey Technician	9	\$98.00	\$ 882.00	
Party Chief - Sr. Surveyor	18	\$98.00	\$ 1,764.00	
Instrument Person	18	\$76.00	\$ 1,368.00	
Total Hours	0			
DIRECT LABOR SUBTOTAL:			\$ 9,746.00	
2. INDIRECT COSTS (Specify)	RATE	X DIRECT LABOR TOTAL =	ESTIMATED	
OVERHEAD AND PAYROLL BURDEN	0%		\$ -	
INDIRECT COSTS SUBTOTAL			\$ -	
3. TOTAL OF DIRECT LABOR & INDIRECT COSTS (Combined Sum of Items 1 & 2)				\$ 9,746.00
4. PROFIT - (Fixed Hourly Rate)				\$ -
5. TOTAL PROFESSIONAL FEE (Combined Sum of Items 3 & 4)				\$ 9,746.00
6. OTHER DIRECT COSTS (refer to attached itemization)				
7. EXPENSES	QTY.	COST	ESTIMATED COST	
a. Transportation (personal car)	400	\$ 0.56	\$ 224.00	
c. Photocopies (internal)	NA	included in contract	\$ -	
d. Photocopies (Outside Copying)	0	sheets X \$0.10/sheet	\$ -	
e. Drawing Prints		sheets X \$1/sheet	\$ -	
f. Mylar Prints		sheets X \$25/sheet		
			\$ -	
EXPENSES SUBTOTAL			\$ 224.00	
8. EQUIPMENT, MATERIALS, SUPPLIES (See attached itemization)	QTY.	COST	ESTIMATED COST	
a. Test Holes (up to 6')	5	\$1,200.00	\$ 6,000.00	
b. Test Holes (additional depth greater than 6' deep)	20	\$150.00	\$ 3,000.00	
c. Mobilization per day	2	\$250.00	\$ 500.00	
			\$ -	
EQUIPMENT SUBTOTAL:			\$ 9,500.00	
9. SUBCONSULTANT(S)			ESTIMATED COST	
			\$ -	
			\$ -	
SUBCONSULTANT(S) - SUBTOTAL:			\$ -	
10. SUBCONSULTANT MARKUP			ESTIMATED COST	
		0.10	\$ -	
		0.10	\$ -	
SUBCONSULTANT(S) - SUBTOTAL:			\$ -	
OTHER SUBTOTAL			\$ -	
OTHER DIRECT COSTS TOTAL: (Combined Sum of Items 7, 8, 9, 10)				\$ 9,724.00
TOTAL PRICE (Combined Sum of Items 5 & 10)				\$ 19,470.00