#### 21-040

# RESOLUTION AUTHORIZING CONTRACT MODIFICATION #01 FOR THE BOULEVARD EAST COMBINED SEWER IMPROVEMENTS PROJECT

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MOTIONED BY: MAROTTA SECONDED BY: KAPPOCK

**WHEREAS,** the North Hudson Sewerage Authority (hereinafter "Authority") is a public body, duly formed under the Sewerage Authorities law, constituting Chapter 138 of the Laws of New Jersey of 1946, as amended (Chapter 14A of Title 40 of the New Jersey Statutes Annotated) and possesses the powers set forth therein; and

WHEREAS, Matt MacDonald has been selected under resolution 20-102 to provide engineering services for the Boulevard East Combined Sewer Improvements Project; and

WHEREAS, Mott MacDonald has submitted a contract modification (Exhibit "A") for additional compensation in the amount of \$268,000 related to the planning and design for the Boulevard East Combined Sewer Improvements Project; and

**WHEREAS**, the Authority has determined that the total estimated cost of the Project will be an amount not to exceed \$268,000; and

**WHEREAS,** the Chief Financial Officer has certified that funding is available through the Authority's Capital Improvement Program; and

WHEREAS, the capital budget of the Authority is hereby amended to conform with the provisions of this resolution to the extent of any inconsistency herewith; and

**WHEREAS**, the Facilities Review Board has reviewed the proposal and recommends the approval of the request.

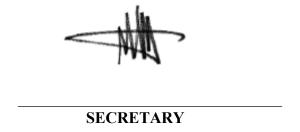
**NOW THEREFORE, BE IT RESOLVED** that the Authority, as recommended by the Facilities Review Board, approves of Mott MacDonald provision of additional professional engineering and construction services as outlined in Exhibit "A" and shall be compensated in an amount not to exceed an additional \$268,000.

# **DATED: MAY 20, 2021**

# **RECORD OF COMMISSIONERS' VOTE**

	YES	NO	<b>ABSENT</b>
Commissioner Soares	X		
Commissioner Kappock	X		
Commissioner Marotta	X		
Commissioner Gardiner	X		
Commissioner Friedrich	X		
Commissioner Guzman	X		
Commissioner Velazquez	X		
Commissioner Barrera	X		
Commissioner White	X		

THIS IS TO CERTIFY THAT THIS RESOLUTION WAS DULY ADOPTED BY THE NORTH HUDSON BOARD OF COMMISSIONERS ON MAY 20, 2021.





Mr. Fredric J. Pocci, PE Authority Engineer North Hudson Sewerage Authority 1600 Adams Road Hoboken, New Jersey 07040

Your Reference Services Boulevard East Combined Sewer Improvements

Our Reference 507101715TO12 North Hudson Sewerage Authority Request for Contract Modification Boulevard East Combined Sewer Improvements

May 10, 2021

Dear Mr Pocci:

Mott MacDonald is pleased to submit this Request for a Contract Modification to our General Engineering Contract with the North Hudson Sewerage Authority (NHSA).

The reason that we are requesting this modification is anticipate expending a great deal of effort to complete the design of the Boulevard East Combined Sewer System Improvements. It is our understanding that this project area experiences intense flooding resulting from deficiencies in the sewer system size. The Authority has researched the potential improvements and has come up with the best solution to avoid impacts to private properties and improve the drainage deficiencies. We have been a part of this planning process and understand the urgency to address the drainage concerns.

# **PROJECT DESCRIPTION**

This project includes drainage and collection system improvements throughout Weehawken, including improvements along Hamilton Avenue, Boulevard East, Highwood Avenue, and Hudson Place.

Combined Sewer Improvements along the full extent of Hamilton Avenue (between King Street and Boulevard East) include replacement of the existing 18-inch diameter pipe network with 30-inch diameter pipe. On Boulevard East, 700 linear feet of the combined sewer system downstream of Hamilton Avenue, northward will also be increased from 24-inch diameter pipe to 48-inches. A two hundred seventy-five linear feet of 15-inch storm sewer shall be constructed on Hamilton Avenue and connect to an existing downstream storm inlet, designed to alleviate street flooding and surcharging of the combined sewer system.

A new high-level storm water collection system shall be constructed on Highwood Avenue between and El Dorado Place and Highwood Terrace to alleviate street flooding and surcharges to the undersized combined sewer system. The collection system will drain to a new 17 million gallon per day (MGD) wet weather pumping station where the storm flow will be pumped away from the drainage area and to the NHSA combined sewer within Boulevard East.



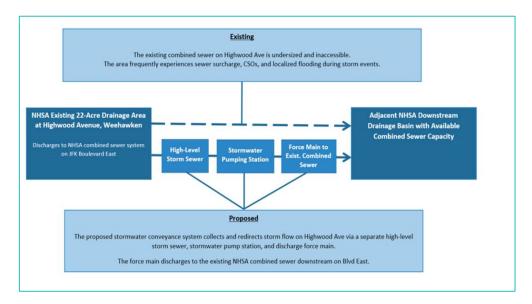


Figure 1: Proposed Drainage Improvements on Highwood Avenue

Finally, due to the age and condition of the existing combined sewer within Hudson Place, the combined sewer will be reconstructed. Figure 2 provides a map of the project area and proposed improvements

NHSA intends to finance the project with a low interest load obtained through the New Jersey Environmental Infrastructure Trust (NJEIT).

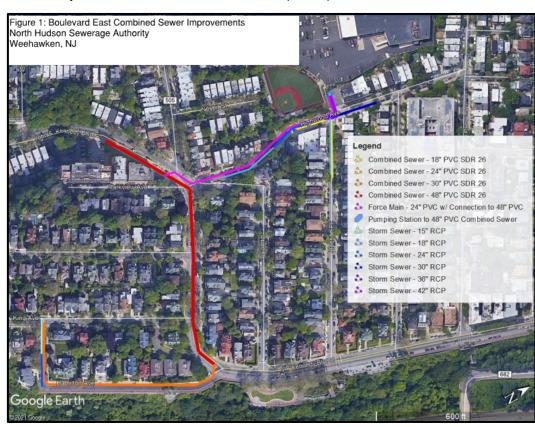


Figure 2: Boulevard East Combined Sewer Improvements



## **PROJECT APPROACH**

Design services will include field investigations in support of the final design, close coordination with the NHSA management team, and the preparation of Contract Documents (plans and specifications) as well as the preparation of permit applications, NJEIT Loan assistance, bid and construction phase services.

Construction Phase Engineering services will include construction administration, review of shop drawings, response to contractor Requests for Information (RFI's), consultation and advice to the Authority during construction, review of proposed substitutions, full-time observation of construction progress, attendance at meetings, review of contractor pay estimates, and the preparation of record drawings and an O&M Manual for the project. As MM has worked with the NHSA management team and has knowledge of the challenges of working within the NHSA urban area, all contract work and scheduling will be closely monitored and communicated throughout the Construction Process.

#### **ESTIMATED CONSTRUCTION COST**

Based upon our knowledge of the scope of the project, the results of recent bid receipts, and our experience, the preliminary construction cost for the project is estimated at approximately \$12 Million. This value does not include surveys, field investigations, engineering, permitting or construction administration fees.

#### SCOPE OF ENGINEERING SERVICES

Mott MacDonald will undertake the necessary activities to complete the contract drawing and specification documents, assist with permitting, NJEIT financing and provide bid phase services. A general description of these services is provided below:

#### 1 Field Investigations

Mott MacDonald will undertake the following field investigations required for the proposed project.

 Field location survey to locate utilities, other roadway topographic features have already been completed within the project areas. Additional field measurements if needed would require collection of additional survey information by the Mott MacDonald survey crews.

#### 2 Design Services

Under this task, Mott MacDonald will complete the contract documents for bidding and construction. Design activities are closely coordinated with the NHSA management team to assist with the design and address issues as they arise. Therefore, as these tasks are carried out, our plan includes routine collaboration with the NHSA management team to provide feedback and ensure the design meets the needs of all stakeholders. Included under this task are as follows:

- Finalize the force main route, hydraulic calculations, new sewer sizing and alignment relative to existing utilities and topographic features.
- Coordinate with Suez Water and other utilities if relocation is required.
- Select criteria for the new pumping station, including pump flow and system pressure, select design specifications for the pumping system, wet well and valve requirements.
- Identify size and specify a back-up generator for the proposed pump station.



- Include design and specification for a remotely controlled automated valve to manage stormwater flows originating from the ballfield prior to discharge to the existing combined sewer network.
- Prepare Contract Drawings suitable for obtaining public bids for construction
  of the project to depict the work of sufficient detail for a general contractor to
  bid and construct the proposed facilities.
  - General Sheets (Title Sheet, Index, General Notes, Location Plan, etc.)
  - Civil Sheets (Site plans, Staging Areas, Environmental details, site details,)
  - Pump Station plan and sections
  - o Force main and Gravity Sewer plan and profile sheets
  - o Construction detail sheets
  - Structural plans and details for the pumping station and generator
  - o Electrical plan and details
- We will prepare the following Contract Specifications:
  - Front End Documents (Information for Bidders, Contract, State Wage Rates, etc.) in conformance with NJEIT criteria
  - o Bid Proposal pages with Bid Item(s).
  - Technical Specifications
- Prepare an updated Construction Cost Estimate

## 3 Permitting Assistance

Mott MacDonald will prepare the following permit application packages for the project:

- NJDEP Treatment Works Approval (TWA) Application, including the preparation of a preliminary design report (PDR).
- Hudson County Soil Conservation District

# 4 NJEIT Loan Assistance

Mott MacDonald will assist the Authority in obtaining a NJEIT loan for planning and design and for construction. The following activities are included under this task:

- Preliminary Design Phase, Mott MacDonald will initiate a NJEIT Loan Application for Planning & Design Phase funding
- Design Phase, Mott MacDonald will complete a NJEIT Loan Application for Construction funding which will include the following:
  - o Preparation of online loan application and forms
  - Level 2 Environmental Review
  - Environmental Planning Document according to NJAC 7:22-10.5
  - Public Participation as required under NJAC 7:22-10.10
  - Submission of Contract Documents for NJDEP review and comment
  - o Revisions to Contract Documents based on NJDEP review
- Bidding Phase, Mott MacDonald will prepare the required NJEIT Conditions and Assurances package for NJDEP review and approval.

#### 5 Bidding Phase Services

Mott MacDonald will assist the Authority during the project bid phase as follows:

Print Contract Documents for distribution by the NHSA



- Assist the Authority during bid advertisement
- Attend a Pre-Bid meeting with potential contractors.
- Prepare Notice to Bidders to contract advertising agencies.
- Prepare addenda for the Authority to distribute to bidders
- Prepare for and the attend bid opening.
- Prepare Report on Bids received and recommendations to Award the Contract.:

## Items Excluded from Scope of Work:

- 1. This Scope of Work does not include Construction Engineering Services, only preparation of the RFP for the Authority's Use.
- 2. Preparation of permit applications other than those listed in the scope of work.
- 3. Preparation of local building and road opening permit applications. These permits will be obtained by the General Contractor Prior to construction.
- 4. Permit application fees or any other fees that may be required by regulatory agencies.
- 5. Placement of legal notice required for bid advertisement. Mott MacDonald will provide the Authority with the Notice to Bidders for the project for placement in its designated legal newspaper(s).
- 6. Stenographer services for the Public Hearing required by the NJEIT for a Level 2 Environmental Review
- 7. Stage IB or Stage II Cultural Resources Surveys

#### PROJECT SCHEDULE

As we have discussed with the Authority, this project schedule is based on bidding in the Summer of 2021 and to begin construction immediately. As such, Mott MacDonald has commenced this work on a time and material basis to complete the permitting and funding and Contract Drawings and Specifications. As such we have identified the following schedule:

Project Bid July 2021

Project Award August 2021

Contractor Notice to Proceed September 2021

Complete Construction September 2022

#### RECOMMENDED BUDGET FOR ENGINEERING SERVICES

Mott MacDonald proposes to complete the services outlined above on a time & materials basis in accordance with Mott MacDonald's Rate Schedule with the NHSA in effect at the time that services are provided, not to exceed the fee shown without written authorization from the Authority.

All work would be completed in accordance with the terms and conditions of the current General Consulting Engineering Services Agreement between Authority and Mott MacDonald.



1.	Survey	\$ 14,000.00
2.	Design Phase Services	\$ 189,000.00
3.	Permitting	\$ 27,000.00
4.	NJEIT Loan Assistance	\$ 16,000.00
5.	Bidding Phase Services	\$ 12,000.00
6.	Develop Construction Engineering (RFP)	\$ 10,000.00

Total: \$268,000.00

It is important to note that the construction estimate for this project is approximately \$12,000,000.00 and our request only represents 2.23% of this estimate which is very competitive.

#### CONCLUSION

Mott MacDonald will provide the Engineering Services in accordance with our existing general consulting agreement.

Please note that the cost to perform the work may be more or less than the amounts shown above. The proposed budget is based on several assumptions, each of which could have a significant impact on the cost estimate provided herein.

We look forward to working with you on this project and are available to discuss the details of the above at your convenience. Should you have any questions regarding the above, please do not hesitate to contact us.

Very truly yours,

Mott MacDonald

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