

**SOUTH ORANGE VILLAGE**  
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## **RESOLUTION #2021-228**

**August 9, 2021**

### **RESOLUTION ACCEPTING AND AUTHORIZING THE PROPOSAL AND TASK ORDER 2021-02 OF HDR, INC. FOR PROFESSIONAL ENGINEERING SERVICES TO ENGINEER, SUPPORT AND PROJECT MANAGE IMPLEMENTATION OF AN AUTOMATED METERING INFRASTRUCTURE IN AN AMOUNT NOT TO EXCEED \$199,814.00**

**WHEREAS**, the Township of South Orange Village (the "Village") has a need for professional engineering services; and

**WHEREAS**, HDR, Inc. is experienced and qualified in providing the needed engineering services and was previously contracted by the Village, through Village Counsel, to provide consulting services; and

**WHEREAS**, the Village has received from HDR, Inc. Task Order 2021-02 for additional services by HDR, Inc. to engineer, support and project manage the implementation of an Automated Metering Infrastructure that will analysis and monitor the Village's public water system needs and operations to provide more efficiency and accountability; and

**WHEREAS**, as a result of prior consulting services, the HDR, Inc. services in the attached Task Order 2021-02 constitute Additional Professional Services pursuant to §27-23.B of the Village Code as amended; and

**WHEREAS**, the Village Treasurer has certified below that the funds are available for this contract.

**NOW, THEREFORE, BE IT RESOLVED** by the Board of Trustees of the Township of South Orange Village that it hereby accepts and authorizes Task Order 2021-02 and awards a contract to HDR, Inc. in an amount not to exceed \$199,814.00; and

**BE IT FURTHER RESOLVED** that the Village President or Village Administrator and Village Clerk are hereby authorized to execute a Task Order/contract for said services in a form to be approved by Village Counsel.



**CERTIFICATION OF AVAILABLE FUNDS**

As required by N.J.S.A. 40A:4-57, N.J.A.C. 5:34-5.1 et seq. and any other applicable requirement, I, Gregory Bock, Village Treasurer of the Township of South Orange Village, have ascertained that there are available sufficient uncommitted funds in the line item specified below to award the contract specified in the above resolution, in the amount specified below. I further certify that I will encumber these funds upon the passage of this resolution.

06-2150-21-0300-000      AMI INFRASTRUCTURE      NJE \$ 199,814.<sup>00</sup>

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Line Item      Description      Amount

*[Signature]*           8/4/2021

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Gregory Bock, Village Treasurer      Date

Trustee Member	Motion	Second	Ayes	Nays	Abstain	Absent
Brown			X			
Coallier		X	X			
Haskins			X			
Hartshorn Hilton	X		X			
Jones						X
Zuckerman			X			

**CERTIFICATION**

I, Ojetti E. Davis, Acting Village Clerk of the Township of South Orange Village, County of Essex, State of New Jersey, do hereby certify that this is a true and correct copy of the Resolution adopted by the Board of Trustees at their regular meeting held on Monday, August 9, 2021.

*[Signature]*

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Ojetti E. Davis  
Acting Village Clerk

## TOWNSHIP OF SOUTH ORANGE VILLAGE

### TASK ORDER 2021-02

#### AMI IMPLEMENTATION, PROJECT MANAGEMENT SERVICES

#### **PROJECT: AMI IMPLEMENTATION Amendment**

This Task Order pertains to an Agreement by and between The Township of South Orange Village ("Owner") and HDR Engineering, Inc. ("Engineer"), dated June 8, 2017 ("Agreement") and extended for calendar year 2018 through 2021. Upon execution, this Task Order shall supplement the Agreement as it pertains to the project described below.

#### **PART 1.0 PROJECT DESCRIPTION**

Engineer is providing professional engineering services to support implementation of Automated Metering Infrastructure (AMI) for the Owner. This project supports the Water Quality Accountability Act requirement for the development of a lost water index.

The Owner's plan to implement AMI infrastructure that will achieve meter standardization; finer, i.e., more accurate water usage measurement; customer interface/ access web portal; system data analysis for improved process decision making plus improved reliability, operability, maintainability and regulatory compliance.

Engineer's role is to provide project management services to Owner for AMI implementation:

#### **PART 2.0 ENGINEER'S SCOPE OF SERVICES**

Refer to Attachment 1 – Detailed Scope of Work

#### **PART 3.0 OWNER'S RESPONSIBILITIES**

Owner authorizes this Task Order request and provides Engineer with access to the past reports, existing records for all assets, and operational information from the Village licensed operator (NJAW), and other relevant project data.

#### **PART 4.0 PERIODS OF SERVICE**

The Engineer has been providing ongoing technical support to the Owner in support of design of capital improvements and is prepared to proceed immediately upon approval from the Owner.

Project duration is 18 months from task order authorization is basis. Engineer will work with Owner to amend this Task Order if Project exceeds 18 months.

**PART 5.0 ENGINEER'S FEE**

The lump sum Engineer's fee for AMI Implementation, Project Management Services is summarized below.

Task.	Description	Labor Hours	Labor (\$)	ODCs (\$)	Total (\$)
1	Develop Meter installation scope of work either RFP or Co-Op (pending Co-Op spec available) and Provide Bid Phase Support	208	38,185	575	38,760
2	Prepare integration software scope of work, operating procedures and programming specifications. Provide Bid Phase Support	110	20,226	-	20,226
3	Project management , permitting/NJIB support and construction administration activities that relate to both Tasks 1 and 2	775	140,828	-	140,828
	<b>Total</b>	1093	199,239	575	199,814

**AUTHORIZATION**

**Township of South Orange Village**

**HDR Engineering Inc.**

By: \_\_\_\_\_

By: \_\_\_\_\_

Print: \_\_\_\_\_

Print: Yiannoulla Charalambous

Title: \_\_\_\_\_

Title: Senior Vice President

Date: \_\_\_\_\_

Date: \_\_\_\_\_

## ATTACHMENT 1

### DETAILED SCOPE OF WORK FOR TASK ORDER 2020-01 AMI IMPLEMENTATION, PROJECT MANAGEMENT SERVICES

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#### Overview

South Orange Village has approximately 4,500<sup>1</sup> accounts. Most of the existing water meters support radio communication where the readings are collected using 'drive by' collectors. Over 90% of the existing meters are nearing the end of their useful life and the Village has decided to replace the existing meters with AMI.

The current billing and collection applications are provided by New Jersey American Water (NJAW) under their O&M contract with the Village. Billing is done quarterly with a third of account readings collected each month.

The Project objective will meet NJ Statute 58:31-1 (Water Quality Accountability Act) requirement for asset management program and determination of a water loss index.

#### Task 1 –Prepare meter installation contract scope of work / RFP and provide bid phase support

- Develop contract specifications and provide bid phase technical support to solicit competitive pricing for meter installation.
- Contract specifications will include:
  - Project specific installation specifications
  - Village's front-end documents. HDR will coordinate with the Village to develop the front end, i.e., Division 00 – Procurement and Contracting Requirements specifications and the general requirement specifications, i.e., Division 01 including instructions to bidders, measurement and payment, contract dates, and bid form.
  - NJDEP H2Loans reporting requirements.
    - Note – HDR will coordinate with the Village and NJDEP H2Loans for I-Bank requirements. HDR will incorporate H2Loans requirements into contract specifications
    - HDR assumes up to two meetings for this effort
  - Procedures for installation contractor includes:
    - Developing and maintaining a project schedule
    - Issuing weekly progress reports
    - Participating in weekly progress meeting
    - Time stamp – for the start and finish of installation
    - Meter installation test certification
    - Photos pre and post installation conditions
    - Document components needed/used per installation

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<sup>1</sup> NJ Drinking Water Watch cites 4,621 service connection, web link:  
[https://www9.state.nj.us/DEP\\_WaterWatch\\_public/JSP/WSDetail.jsp?tinwsys=132](https://www9.state.nj.us/DEP_WaterWatch_public/JSP/WSDetail.jsp?tinwsys=132)

- Test to determine customer supply side pipe material for lead
  - Note: Where lead lines are identified,
    - the homeowner will be notified in writing as to the presence of lead and recommendation for replacement
    - Homeowner will be added to six-month home filter database
- Licensing requirements
- Plan for identifying and documenting existing conditions that would interrupt water meter replacement, e.g., non-operable main shutoff valve, corroded customer side piping, non-code compliant or un-safe conditions, etc.
  - Defining procedures for determining, communicating, and coordinating shutting off service where necessary:
  - Valve prior to meter: Determine if functional or If requires replacement:
  - Valve at Curb stop – NJAW (may require cleanout/replacement – if done document utility side service material)
- Procedures for recording meter reading / serial number (old and New)
- Procedures for disconnecting and installing new meter – note any special situations for this location
- Process to test and confirm continuity / communication with Neptune\_360
- Testing & Commissioning – approach for testing system including data validation, deliverables and sign-off; identify staff and predecessors
- Training – identify staff to be trained and define training requirements including delivery and content.
- Plan for customer communication and scheduling appointments including requirements for contractor to
  - Generate mailing to notify customers – using web, door tags & direct mailing
  - Develop a replacement schedule - replace by zone/street conduct installations in groups, e.g., Ten South Orange Neighborhoods
  - Create a street / zone replacement dashboard and post to Village's website
  - Removing and disposing old meters and fittings in safe, legal manner.
- HDR assumes up to two revisions for the specification deliverable.
- Provide bid phase support including attending a pre-bid meeting, preparing pre-bid meeting minutes, preparing bid addenda (note – HDR has allowed for two addendums) provide technical support to the Village for recommendation for award.

**Task 2 – Prepare integration software scope of work / RFP and provide bid phase support**

- Develop contract specifications and provide bid phase technical support to solicit competitive pricing for software support and AMI system integration.
- Contract Specifications will include:
  - Specific installation specifications

- Village's front-end documents. HDR will coordinate with the Village to develop the front end, i.e., Division 00 – Procurement and Contracting Requirements specifications and the general requirement specifications, i.e., Division 01 including instructions to bidders, measurement and payment, contract dates, and bid form.
- NJDEP's reporting requirements. HDR will coordinate with the Village and NJDEP H2Loans for I-Bank requirements HDR will incorporate H2Loans requirements into contract specifications.
- Procedures for contractor to interface with Neptune\_360 cloud-based software platform (procured by Owner)
- Procedures for contractor including:
  - Developing and maintaining a project schedule
  - Issuing weekly progress reports
  - Participating in weekly progress meeting
  - Setting up the Neptune\_360 system, collaboration and coordination between RIO, Neptune, HDR & Vertex
  - Process to update Vertex database
  - Process to update Neptune\_360
  - Coordination between Neptune\_360 platform and existing Vertex software platform including identifying and overseeing software programming scripts necessary to allow the two software platforms to communicate
  - Implementation procedures and programming to account for customer information updates and reconciling of partial period meter reads.
  - Testing & Commissioning – approach for testing system including data validation, deliverables and sign-off; identify staff and predecessors
  - Training – identify staff to be trained and define training requirements including delivery and content.
  - Developing a system maintenance plan
  - Developing and implementing a system security program and data integrity plan
  - Uploading initial data base (Neptune translates data upload to Neptune\_360 data base
  - Auditing and verify data elements are collected, reported are communicated correctly. HDR to lead with input / collaboration from Neptune, NJAW and/or Vertex)
  - Access to and Training on Neptune\_360 for the Village & HDR
  - Test and collect meter reads from the existing meter population
  - Identify meter accounts not picked up by Neptune\_360 and map for understanding propagation holes.
  - Develop an action plan to address gaps
  - Reconcile current AMR collection to AMI accounts.
- Provide bid phase support including attending a pre-bid meeting, preparing pre-bid meeting minutes, preparing bid addenda (note – HDR has allowed for two addendums) provide technical support to the Village for recommendation for award.

**Task 3 – Project management and administrative activities for AMI Implementation including Task 1 and 2:**

- Project Management include
  - Interfacing with the contractors, NJAW, Neptune, and the Village including attending bi-weekly progress meetings.
  - Monitoring contractor progress, schedule, and customer signoffs
  - Preparing monthly reports for Village and NJDEP – H2Loans group
  - Supporting Village Water Administrator, attending weekly meetings with the contractor, and preparing biweekly updates and participating in the Village's bi-weekly Water Utility meetings.
  - Reviewing and recommending monthly contractor invoices.