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MEMORANDUM

To: Greater New Haven Water Pollution Control Authority
From: James M. Pretti, Jr., P.E.
Date: 4/9/2018
Re: Humphrey St & Mitchell Dr. Pump Station Rehab. Project – Addendum #2
CE File No: 2017.043 & 2017.044
cc: file

Please issue the attached Asset Management Information specification and sample forms as Addendum #2. Electronic copies of the forms will be made available to the successful bidder.

SECTION 01780
ASSET MANAGEMENT INFORMATION

PART 1 GENERAL

1.01 DEFINITIONS

- A. Preliminary Asset Summary Information: Initial and subsequent submissions for Engineer's review.
- B. Final Asset Summary Information: Engineer-accepted data, submitted as specified herein.
- C. Preliminary Maintenance Summary Information: Initial and subsequent submissions for Engineer's review.
- D. Final Maintenance Summary Information: Engineer-accepted data, submitted as specified herein.
- E. Maintenance Tasks: As used on Maintenance Summary Form is defined to mean any routine operation required to ensure satisfactory performance and longevity of equipment. Examples of typical maintenance operations are lubrication, belt tensioning, adjustment of pump packing glands, and routine adjustments.

1.02 SEQUENCING AND SCHEDULING

- A. Asset Data:
 - 1. Preliminary Asset Summary Information: Submit no later than 30 days after equipment installation. Preliminary Asset Summary Information requires approval by the Engineer prior to manufacturer's startup.
 - 2. Final Asset Summary Information: Submit no later than 30 days after manufacturer startup.
- B. Maintenance Data:
 - 1. Preliminary Maintenance Summary Information: Do not submit until Shop Drawing for equipment or system has been reviewed and approved by Engineer. Preliminary Maintenance Summary Information requires approval by the Engineer prior to manufacturer's startup.
 - 2. Final Maintenance Summary Information: Submit no later than 30 days after manufacturer startup.

1.03 SUBMITTALS

- A. All information submitted to the Engineer for review shall be prepared and submitted in accordance with Section 01300.
- B. Prepare Preliminary Information:
 - 1. Submit completed Asset Summary Form and Maintenance Summary Form in an electronic format.
 - a. See Attachments A & B for examples.
 - 2. Submit attachments in an electronic format.
- C. Prepare Final Information in a Compilation Format:
 - 1. Compile all Engineer-accepted preliminary Asset Summary Information and Maintenance Information into separate hard-copy, hard-bound sets, with USB for electronic files.
 - 2. Each set shall consist of the following:
 - a. Engineer approved Asset Summary Form, hardcopy and Excel file format
 - b. Engineer approved Maintenance Summary Form, hardcopy and Excel file format
 - c. Attachments
 - 1) Engineer approved Startup Report
 - 2) Engineer approved O&M Manual, PDF format divided into files not to exceed 50 mb.
 - 3) Digital Photograph of Installed Asset not to exceed 1 mb.

1.04 DATA FOR EQUIPMENT AND SYSTEMS

- A. Asset Summary Forms:
 - 1. Compile individual Asset Summary Forms for each applicable equipment item, respective unit or system, and for components or sub-units.
 - 2. Format:
 - a. An electronic copy of the Asset Summary Form can be provided by the Engineer upon request.
 - b. Each Asset Summary Form may take as many pages as required.
 - c. Use only 8-1/2-inch by 11-inch size pages.
 - d. All files submitted to the Engineer shall be in Excel and/or PDF Format. Files submitted shall be fully functional and viewable in most recent version of Adobe Acrobat. No handwritten forms will be accepted.
 - 3. Required Information
 - a. All relevant fields on the Asset Summary Form are to be filled out in their entirety before submission to the engineer for review. Incomplete forms will not be accepted by the engineer.
 - b. Information fields on the form that are not relevant to the installed equipment are to be entered with "Not Applicable".

- c. Engineer holds the right to determine information relevance or to request additional information based on equipment/asset type.

B. Maintenance Summary Forms:

1. Compile individual Maintenance Summary Forms for each applicable equipment item, respective unit or system, and for components or sub-units.
2. Format:
 - a. An electronic copy of the Maintenance Summary Form can be provided by the Engineer upon request.
 - b. Each Maintenance Summary may take as many pages as required.
 - c. Use only 8-1/2-inch by 11-inch size pages.
 - d. All files submitted to the Engineer shall be in PDF Format. Files submitted shall be fully functional and viewable in most recent version of Adobe Acrobat. No handwritten forms will be accepted.
3. Include detailed lubrication instructions and diagrams showing points to be greased or oiled; recommend type, grade, and temperature range of lubricants and frequency of lubrication.
4. Recommended Spare Parts:
 - a. Data to be consistent with manufacturer's Bill of Materials/Parts List furnished in O&M manuals.

1.05 SUPPLEMENTS

- A. The supplements listed below, following "End of Section," are part of this Specification.
 1. Forms: Asset Summary Form, Maintenance Summary Form.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION

ASSET SUMMARY FORM - EXAMPLE 1 - ATTACHMENT A

Owner Name: GNHWPCA **Project Number/Name:** CWF2010-01

General:

Description: Return Activiated Sludge Pump 6 Tag #: P-32-1-06

Type: Centrifugal Pump Horizontal

Area: North Basement

Building/Room: Facility 52 Activated Sludge Pump Station

Vendor: Rodnev Co. Website: www.rodnevco.com/

Manufacturer: GNH Pumps Website: www.gnhpumps.com/

Model #: K250-400/G-3-F Serial #: 315707 Mfg Job #: _____
if serial # is unavailable

Install Date: 1/1/2016 Purchase Date: 12/1/2014

Start-up Date: 3/5/2016

Specification(s):

Pump Size/Size	Pump Flow	Pump Head	Pump Media
10" X 10"	3475 gom	40	RAS

HP	Frame	RPM	Voltage
50		1180	460

Component(s):

ID	Component Name	Specifications (if applicable)			
		HP	Frame	RPM	Voltage
1	Horizontal Motor - WEG	50	365T	1180	460
2	Coupling Drive				
3	Check Valve - Surge Buster				
4	Discharge Plug Valve - Milliken				
5	Suction Plug Valve - Milliken				

ASSET SUMMARY FORM cont.

Attachment(s):

ID	Attachment Name
1	RAS Pump O&M Manual
2	Electronic Photo - Pump 6
3	Start up/COPI

Existing Asset(s):

If replacing existing asset, record the tag and description of each existing asset:

Tag	Description
Ex29765	Auma Centrifugal Pump Horizontal

Contact Information:

General Contr.: _____

Email: _____

Phone: _____

Design Engineer: _____

Email: _____

Phone: _____

Sub-Contractor: _____

Email: _____

Phone: _____

For Owner Use Only:

Representative: _____

CMMS Upload Date: _____

MAINTENANCE SUMMARY FORM - Example 1 - ATTACHMENT A

Manufacturer's Local Rep: Rodnev Co.

Name: John Daley

Address: 345 Main St. New Haven, CT 06511

Telephone: 203-555-5555

Weight of Individual Components (Over 100 Pounds): 2850 lbs

Maintenance Requirements:

Maintenance Task	Frequency	Lubricants
List each maintenance operation required and refer to specific information in the manufacturer's standard maintenance manual, if applicable. (Reference to manufacturer's catalog or sales literature is not acceptable.)	List required frequency of each maintenance operation	Refer by symbol to lubricant required.
Inspect Coupling Rubber inserts for wear	1/yr	NA
Grease Motor Bearings	1-2 years or 15,000 hrs	mobil polyrex em
Change seal oil	1-2 years or 10,000 hrs	Vegetable oil or any SAE 30 non detergent oil

ASSET SUMMARY FORM - EXAMPLE 2 - ATTACHMENT B

Owner Name: GNHWPCA **Project Number/Name:** CWF2010-01

General:

Description: Air Flow Control Valve Tag #: FCV-21-4 - 1

Type: Flow Control Valve

Area: BRB Basin 1 - Zone 3

Building/Room: Facility 50 - BRB Basins

Vendor: Rodnev Co. Website: www.rodnevco.com/

Manufacturer: GNH Autovalve Website: www.gnhvalve.com/

Model #: Series 400 Serial #: AH145900 Mfg Job #: _____
if serial # is unavailable

Install Date: 7/27/2015 Purchase Date: 5/27/2015

Start-up Date: 7/27/2015

Specification(s):

Pump Size/Size	Pump Flow	Pump Head	Pump Media
6"			

HP	Frame	RPM	Voltage

Component(s):

Component(s)		Specifications (if applicable)			
ID	Component Name	HP	Frame	RPM	Voltage
1	Electric Valve Actuator - GNH				460
2					
3					
4					
5					

ASSET SUMMARY FORM cont.

Attachment(s):

ID	Attachment Name
1	Valve O&M Manual
2	Electronic Photo - ABZ Valve
3	Start up/COPI

Existing Asset(s):

If replacing existing asset, record the tag and description of each existing asset:

Tag	Description

Contact Information:

General Contr.: _____

Email: _____

Phone: _____

Design Engineer: _____

Email: _____

Phone: _____

Sub-Contractor: _____

Email: _____

Phone: _____

For Owner Use Only:

Representative: _____

CMMS Upload Date: _____

MAINTENANCE SUMMARY FORM - Example 2 - ATTACHMENT B

Manufacturer's Local Rep: Rodnev Co.

Name: John Daley

Address: 345 Main St. New Haven, CT 06511

Telephone: 203-555-5555

Weight of Individual Components (Over 100 Pounds): N/A

Maintenance Requirements:

Maintenance Task	Frequency	Lubricants
List each maintenance operation required and refer to specific information in the manufacturer's standard maintenance manual, if applicable. (Reference to manufacturer's catalog or sales literature is not acceptable.)	List required frequency of each maintenance operation	Refer by symbol to lubricant required.
Verify position feed back to actual valve position	1/yr	NA

