MAY 21, 2018

ADDENDUM NO. 2 TO THE CONTRACT DOCUMENTS

SYRACUSE HANCOCK INTERNATIONAL AIRPORT REHABILITATION OF DEICING STORAGE FACILITIES

FAA AIP PROJECTS NO. 3-36-0114-XXX-18

SYRACUSE REGIONAL AIRPORT AUTHORITY IFB REFERENCE #2018-02

TO ALL HOLDERS OF THE CONTRACT DOCUMENTS:

This addendum is part of the Contract Documents in accordance with the provisions of the Agreement and Information for Bidders.

A. TABLE OF CONTENTS:

- 1. <u>Division 40 Process Integration</u>, after "Section 40 05 53"
 - a. <u>Insert</u>: "Section 40 05 86 Combination Air Valves for Wastewater Service"

B. SECTION 10 - ADVERTISEMENT AND NOTICE TO CONTRACTORS

- 1. Third line after, "until 1:30 pm, local time, on ..."
 - a. <u>Delete:</u> "May 24, 2018"

Insert: "May 29, 2018"

C. SECTION 100 – INSTRUCTIONS TO BIDDERS

- 1. Second and Third line, after, "until 1:30 p.m. on ..."
 - a. <u>Delete</u>: "May 24, 2018"

Insert: "May 29, 2018"

D. SECTION 300 - FORM OF PROPOSAL:

- 1. Bid, Page 300-1, Top of the page:
 - a. <u>Delete</u>: "DO NOT DETACH--FILL IN—SIGN AND RETURN ENTIRE BOOK AS YOUR BID FORM OF PROPOSAL"

E. IN THE CONTRACT TECHNICAL SPECIFICATIONS:

- 1. Section 03 00 05, Part 3.9A, at the end of Item 1.
 - a. Insert:

"OWNER shall employ independent testing laboratory to perform field quality control testing for miscellaneous concrete and items specified within this section. The CONTRACTOR shall provide testing for concrete materials specified within Section 33 16 13.16."

- 2. Section 40 05 86
 - a. Insert: Attached Section 40 05 86
- 3. Section 40 70 05, Data Sheets: "Flow Meter-Magnetic Flow Tube", Item 18:
 - a. Delete: "6""

Insert: "4""

- 4. Section 46 33 45, Part 2.1.D, under column "Speed Range (rpm)"
 - a. <u>Delete:</u> "4.3 43 (max)"

Insert: "10 - 100 (max)"

F. IN THE CONTRACT DRAWINGS:

- 1. Contract Drawing G-100, After Note 1:
 - a. Insert:
 - "2. THE FOLLOWING REPRESENTS ESTIMATES FOR EARTHWORK: TOTAL GENERAL FILL TO BE EXCAVATED IS +/- 11,500 CY. TOTAL GENERAL FILL TO BE PLACED AND COMPACTED IS +/- 10,000 CY. TOTAL EXCESS FILL IS +/-1,500 CY. CONTRACTOR SHALL MAKE HIS/HER OWN ESTIMATE OF EARTHWORK QTYS BASED ON THE CONTRACT DOCUMENTS"
- 2. Contract Drawing G-101:
 - a. <u>Delete:</u> Contract Drawing G-101 in its entirety

Insert: Attached Contract Drawing G-101

- 3. Contract Drawing G-102:
 - a. <u>Delete:</u> Contract Drawing G-102 in its entirety

Insert: Attached Contract Drawing G-102

- 4. Contract Drawing G-106:
 - a. Insert: Attached Figure 1: "SEWER CLEANOUT AND VENT DETAIL"

G. CLARIFICATIONS:

1. General

a. Question: Do American Iron and Steel (AIS) requirements apply to this project?

Answer: The project is funded by federal dollars through the FAA AIP program, therefore "Buy American" does apply as specified in Section 100-01, Part B.

b. Question: Who is responsible to retain the third party testing & inspection agency? The specifications are ambiguous as to whether the Owner provides or the General contractor.

Answer: Material testing, miscellaneous concrete, compaction, etc. will be provided by the Owner. Specification Section 31 20 00, Part 3.13.A. states that the Owner shall employ a testing laboratory. Refer to Section E, Item 1 of this Addendum.

2. Technical Specifications:

a. Question: The revised tank specification section 33 16 13.16, paragraph 1.5.B.1.c.1 provided with Addendum No. 1 references a downdrag load on the piles. Please provide the magnitude of this load and identify which piles will be affected. Please also provide the magnitude of any seismic induced downdrag loads due to settlements.

Answer: The downdrag loading on piles will depend on several factors, such as, but not limited to, type and size of pile, installation method and sequence, tank pad fill material type and placement procedures, preloading period (if any), etc. and shall be determined by the Contractor's professional engineer for the Delegated Design foundation system.

b. Question: Will you need 30 GPM max flow from the peristaltic hose pump as stated in the specification? To achieve 30 GPM with a 40MM hose pump, the pump would need to run at roughly 86 RPM. 86 RPM is acceptable for intermittent use (*Minimum of 1 hour stop after 2 hours use*) but not recommended. At the stated 43 RPM's the max flow will be roughly 15.09 GPM.

Answer: The pump shall be sized to provide 30 GPM and rated for intermittent use. Refer to Section E, Item 4 of this Addendum.

3. Contract Drawings:

a. Question: With the extensive grading on this job, could I get the CAD file or "First Generation" PDF Drawings?

Answer: CAD files cannot be distributed during the Bid Period, however, the awarded contractor can get the CAD files at that time. First Generation PDFs can be provided to Plan Holders that request these. In addition, Refer to Section F, Item 1 of this Addendum.

b. Question: The flow meter data sheet in the specification lists a 6" meter. A 6" meter is shown on drawing M-002, but drawing M-200 shows a 4" meter. Can you please clarify?

Answer: The "FLOW METER" size is not called out on Contract Drawing M-002. The size of 4" as called out on Contract Drawing M-200 is correct. Refer to Section E, Item 3 of this addendum for correction to the flow meter data sheet.

c. Question: Air Release Valves are shown on the drawings but not specified. Where is the specification provided?

Answer: Refer to Section E, Item 2 of this addendum.

d. Question: Drawing E-006 and spec section both reference pole mounted cameras, but I don't see them on any of the plans.

Answer: A forthcoming addendum will show the location of these pole mounted cameras on Contract Drawing E-006.

e. Question: A combination starter shown on the drawing for the Peristaltic Pump, but no VFD? Should include a VFD be included?

Answer: A VFD is not required for this project component.

Sincerely,

Arcadis of New York

John C. Perriello, PE Project Manager

SECTION 40 05 86

COMBINATION AIR VALVES FOR WASTEWATER SERVICE

PART 1 – GENERAL

1.1 DESCRIPTION

A. Scope:

1. CONTRACTOR shall provide all labor, materials, equipment, and incidentals as shown, specified, and required to furnish, install, and test Air Valves for water and wastewater service complete with appurtenances.

B. Coordination:

- 1. Review installation procedures for this and other Specification sections and coordinate Work that must be installed with or before Work under this Section.
- 2. If this is a multiple-prime contract project, provide timely advance notification of schedule of work to other contractors who may need to install items at same time or before Work included in this Section.

C. Related Sections:

- 1. Section 09 91 00, Painting.
- 2. Section 40 05 53, Process Valves, Four-inch Diameter and Larger.
- 3. Section 40 05 56, Process Valves, Smaller Than Four-inch Diameter.

1.2 REFERENCES

A. Standards referenced in this Section are:

- 1. ANSI/AWWA C512, Air Release, Air Vacuum and Combination Air Valves for Waterworks Service.
- 2. ANSI/AWWA C550, Protective Interior Coatings for Valves and Hydrants.
- 3. ANSI/NSF 61 Drinking Water Components Health Effects.

1.3 QUALITY ASSURANCE

A. Manufacturer's Qualifications:

1. Manufacturer shall be able to provide documentation of at least five installations of substantially similar equipment to that specified, in satisfactory operation for at least five years.

B. Component Supply and Compatibility:

1. Valves of the same type, including specified accessories, shall be products of or furnished by a single air valve manufacturer.

1.4 SUBMITTALS

A. Action Submittals.

- 1. Product Data: Submit the following for each type and size of valve specified:
 - Product data sheet.
 - b. Complete catalog information, including dimensions, weight, performance data, Orifice size, specifications, and identification of materials of each part.

B. Informational Submittals:

- 1. Certifications:
 - Submit a certificate signed by manufacturer of each product stating that product conforms to applicable referenced standards and specified requirements.
- 2. Test Reports:
 - a. Provide results of successful factory tests prior to shipping products to the Site
- 3. Manufacturer's Reports:
 - a. Submit written report of results of each visit to Site by a manufacturer's serviceman, including purpose and time of visit, tasks performed, and results obtained.

C. Closeout Submittals.

- 1. Operation and Maintenance Data:
 - a. Submit complete operation and maintenance manual for all Air Valves in the Contract, including maintenance data and schedules in sufficient detail for disassembly and assembly of valve, and identifying parts that can be replaced.
 - b. Furnish operation and maintenance manuals per Section 01 78 23, Operations and Maintenance Data.
- 2. Spare Parts:
 - a. Provide spare parts and list of recommended spare parts as specified in this Section.

1.5 DELIVERY, STORAGE, AND HANDING

- A. Packing, Shipping, Handling, and Unloading:
 - 1. Prepare valves for shipping per Section 6.2 of ANSI/AWWA C512.
 - 2. Conform to Section 01 65 00, Product Delivery Requirements.
- B. Acceptance at Site:
 - 1. Inspect all boxes, crates, and packages upon delivery to Site and notify ENGINEER in writing of loss or damage to products. Promptly remedy loss and damage to new condition per manufacturer's instructions.
- C. Storage and Protection:
 - 1. Keep all products off ground using pallets, platforms, or other supports. Protect products from corrosion and deterioration.

2. Conform to Section 01 66 00, Product Storage and Handling Requirements.

1.6 MAINTENANCE

A. Extra Materials

- 1. Furnish complete uninstalled spare valve to OWNER.
- 2. Provide list of manufacturer's recommended spare parts, based on the quantity of each size and type of valve provided, including current pricing and delivery time. Provide recommendations for the number of spare valves based on the same criteria, including pricing and delivery time.

PART 2 – PRODUCTS

2.1 GENERAL

A. Extent:

1. Provide valves included in this Section.

B. Requirements:

- 1. Valve Design Conditions: Unless otherwise specified, Valve Design Pressure shall be equal to or exceed design pressure of pipe or equipment on which the valve is installed. Valve shall be suitable for flow rates of 450 gpm.
- 2. Materials: Air Valve materials shall be suitable for long-term use in the service specified.
- 3. Connections.
 - a. Comply with valve connection requirements in Section 4.3 of ANSI/AWWA C512.
- 4. Operating Pressure Range: Valves shall be suitable for pressure of 740 psig.
- 5. Air Valves in water service shall comply with ANSI/AWWA C512 unless otherwise shown or specified.

C. Markings:

- 1. Mark valves per Section 6.1 of ANSI/AWWA C512.
- D. Manufacturers and Model Numbers: Provide products of one of the following:
 - 1. Val-Matic Series 201
 - 2. Or Equal

2.2 ACCESSORIES

A. Isolating Valves:

- 1. Provide isolating valves as shown on Contract Drawings.
- 2. Valve Design Pressure of isolating valve shall equal or exceed Valve Design Pressure of the connected Air Valve.

B Anti-Slam Devices:

- 1. Provide anti-slam devices on inlet to air/vacuum valves and combination air valves where indicated.
- 2. Pressure rating of anti-slam device shall equal or exceed Valve Design Pressure of connected Air Valve.
- 3. Ends shall be as required for connecting to Air Valve.
- 4. Anti-slam devices shall be as normally furnished by specified Air Valve manufacturers and be cast iron or ductile iron with bronze or stainless steel disc and trim

C. Back-flush Attachments:

- 1. Unless otherwise indicated, provide back-flush attachment for Air Valves in sewage service
- 2. Back-flush attachments shall be as normally furnished by specified Air Valve manufacturer. Provide ports in the Air Valve body for flushing and discharge, each with an isolating valve and quick-connect for attaching hoses.
- 3. Provide five-foot length of rubber hose with quick-connect for connecting to flushing discharge port.
- 4. Provide a plugged NPT port at bottom of Air Valve body for removal of solids.

D. Throttling Devices

- 1. Provide throttling device on discharges of Air/Vacuum Valves where indicated.
- 2. Throttling device shall have a field-adjustable Orifice and be as normally furnished by Air Valve manufacturer.

E. Inflow Prevention Devices:

- 1. Extent: Provide where indicated.
- 2. Design: System shall allow connected Air Valve to function normally under normal (non-flooded) conditions.
- 3. Size: Venting capacity shall be equal to or greater than connected Air Valve:
- 4. Connections: Provide female threaded connections for Air Valve of 1 to 4 inches.

2.3 FACTORY PAINTING

A. Interior Surfaces

- 1. Extent: Paint ferrous surfaces except stainless steel surfaces.
- 2. Paint: Paint shall be as normally provided by Air Valve manufacturer for the specified application, except for potable water service valves which shall be coated with paint complying with ANSI/AWWA C550.

B. Exterior Surfaces

- 1. Exterior surfaces of cast-iron, ductile iron, and steel other than stainless steel, except machined surfaces of valves and appurtenances, shall be finish painted.
- 2. Surface preparation, painting, and field touch-up painting shall be per Section 09 91 00, Painting.
- 3. Furnish valve with only a prime coat if so indicated.

2.4 SOURCE QUALITY CONTROL

A. Test and inspect Air Valves per Section 5 of ANSI/AWWA C512. Do not ship valves that are not successfully tested.

PART 3- EXECUTION

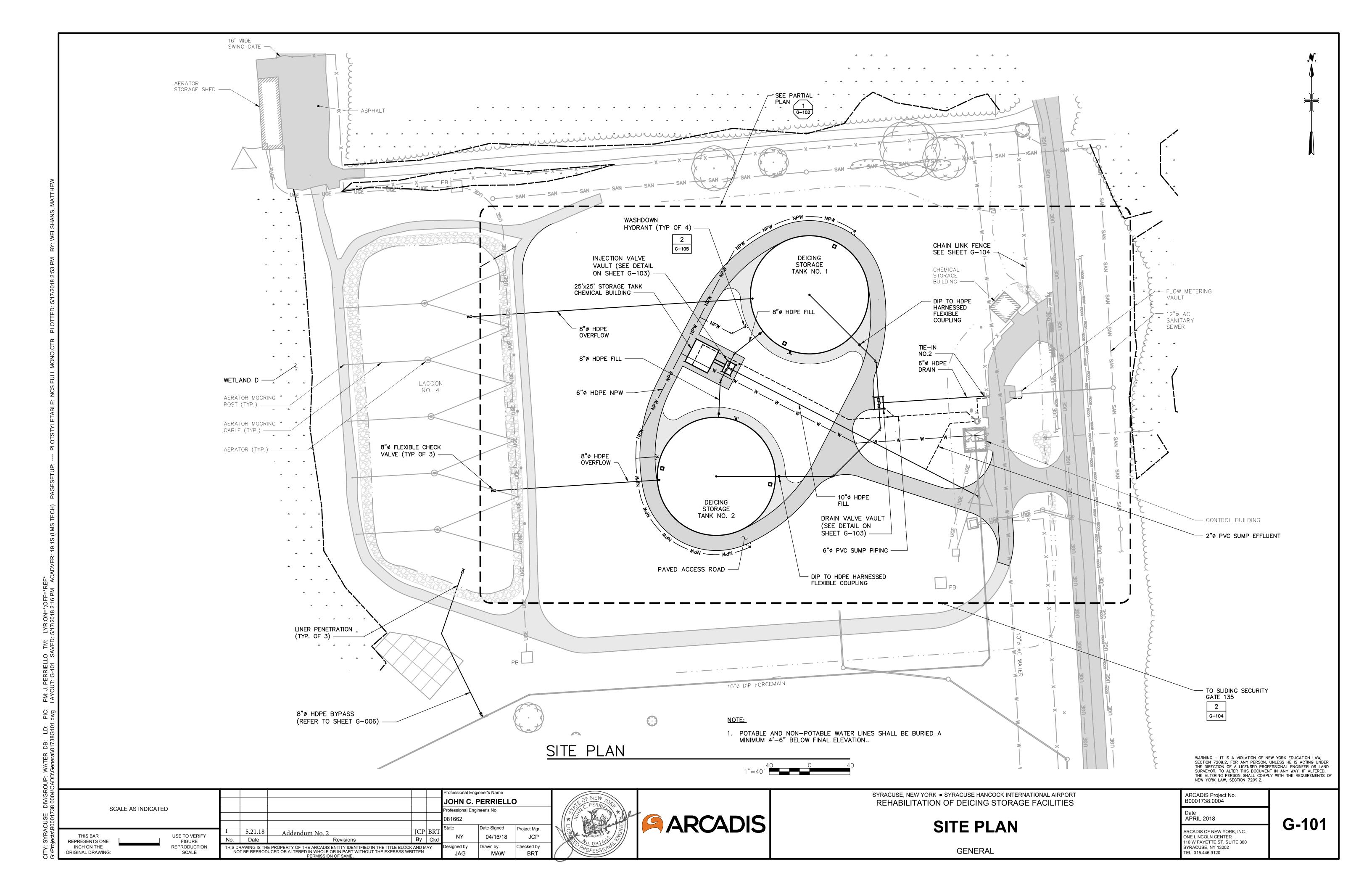
3.1 INSPECTION

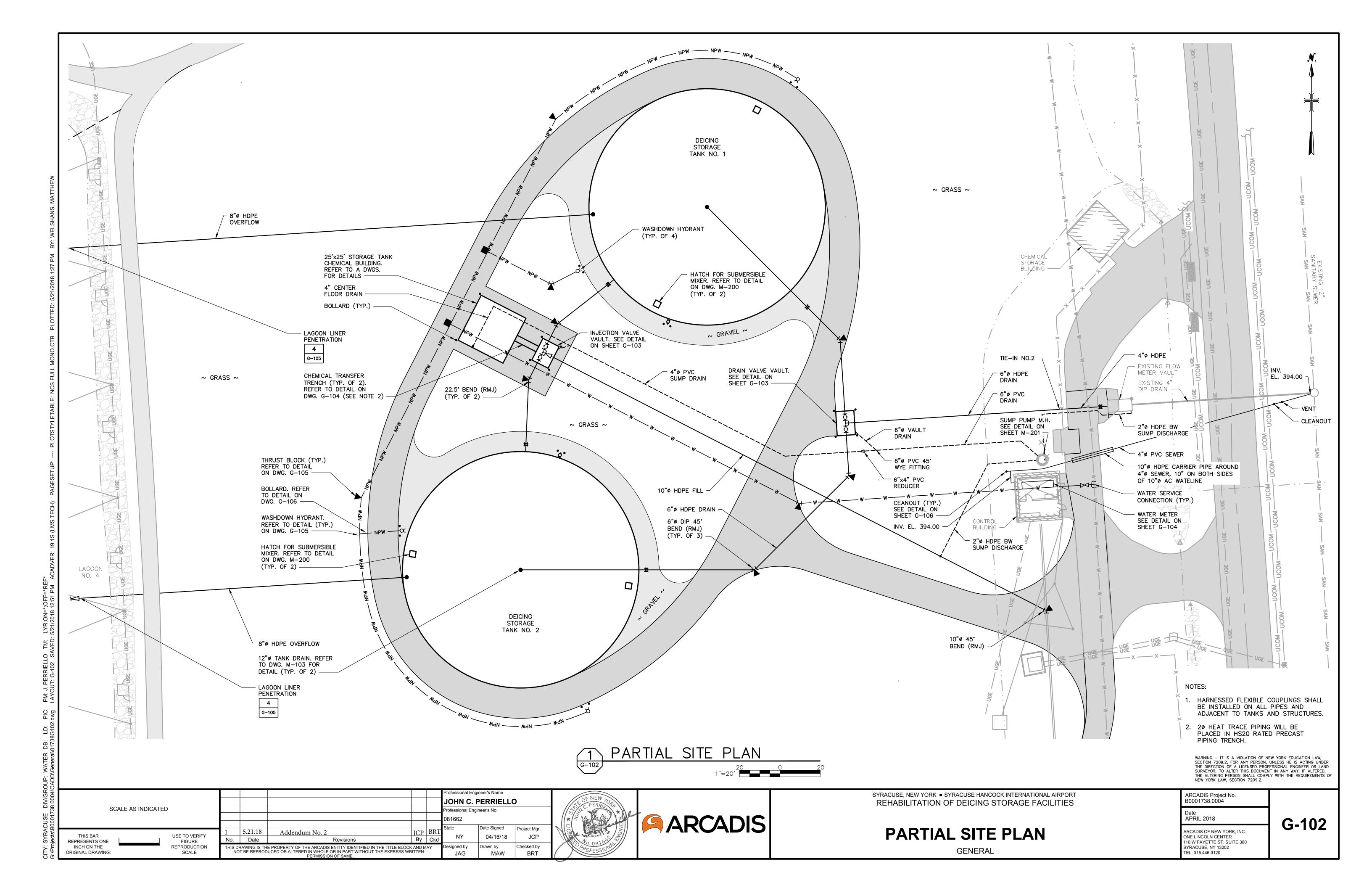
- A. Examine conditions under which Work is to be installed and notify ENGINEER in writing of conditions detrimental to proper and timely completion of Work. Do not proceed with Work until unsatisfactory conditions have been corrected.
- B. Examine valves and remove packing and foreign materials from interior of valve. Report defects to ENGINEER

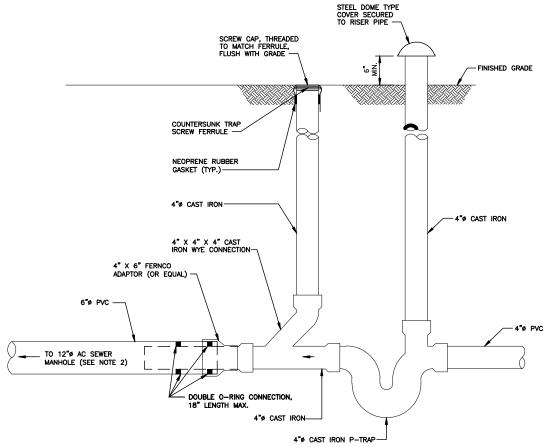
3.2 INSTALLATION

- A. Install valves and appurtenances as shown on the Drawings and per Air Valve manufacturer's recommendations, approved Shop Drawings, and applicable codes and standards.
- B. Install valves plumb and vertical.
- C. Install with an isolating valve. Remove isolating valve's operating handle or lever and deliver to OWNER.
- D. Adjust throttling devices, if provided, for smooth, non-slam and waterhammer-free operation.

++ END OF SECTION ++







NOTES

- PROVIDE AND INSTALL CAST IRON SEWER PIPE SIZED TO MATCH EXISTING. HOWEVER PIPE SHALL BE 4"Ø, MINIMUM, FOR THE PRIVATE SEWER LATERAL AND 6"Ø, MINIMUM, FOR THE PUBLIC SEWER LATERAL.
- 2. MATCH INVERT ON G-102.
- ANY WORK PERFORMED ON THE PRIVATE SEWER LATERAL SHALL BE SUBJECT TO AN ONONDAGA COUNTY PLUMBING CONTROL PERMIT.
 THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL REQUIREMENTS AND FEES ASSOCIATED WITH THIS PERMIT.
- 4. IN LIEU OF A STEEL DOME TYPE COVER, A 4-INCH DIAMETER CLEAN OUT AND VENT MAY BE INSTALLED BENEATH A VENT MANHOLE RING, FLUSH WITH GRADE, AT NO ADDITIONAL COST TO THE OWNER.
- 5. ALL CAST IRON PIPE AND FITTINGS SHALL BE EXTRA HEAVY WITH 1/2" MIN. WALL THICKNESS.

SEWER CLEANOUT AND OFFSET SEWER VENT DETAIL

NOT TO SCALE



REHABILITATION OF DEICING STORAGE FACILITIES SYRACUSE HANCOCK INTERNATIONAL AIRPORT SYRACUSE, NEW YORK

FIGURE No. 1: ADDENDUM NO. 2
SEWER CLEANOUT AND OFFSET
SEWER VENT DETAIL