Honeywell
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July 31, 2012

To: Joseph J. Heath, Esq., Onondaga Nation (cover ltr only)
Diane Carlton, NYSDEC, Region 7 (1 PDF)
Holly Sammon, Onondaga County Public Library (1 bound)
Samuel Sage, Atlantic States Legal Foundation (1 bound)

Re: Letter of Transmittal – Willis/Semet Repository Addition

The below document has been approved by the New York State Department of Environmental Conservation (NYSDEC) and is enclosed for your document holdings:

- Willis/Semet Tar Beds Site IRM I-690 Storm Drainage Phase 4 Rehabilitation Construction Work Plan dated July 2012

Sincerely,

John P. McAuliffe, P.E.
Program Director, Syracuse

Enc.

cc: Donald Hesler - NYSDEC

New York State Department of Environmental Conservation
Division of Environmental Remediation
Remedial Bureau D, 12th Floor
625 Broadway, Albany, New York 12233-7013
Phone: (518) 402-9676 • **Fax:** (518) 402-9020
Website: www.dec.ny.gov

Joe Martens
Commissioner

July 18, 2012

Mr. John P. McAuliffe, P.E.
Program Director, Syracuse
Honeywell
301 Plainfield Road, Suite 330
Syracuse, NY 13212

Re: Phase 4 of the I-690 Storm Drain Rehabilitation

Dear Mr. McAuliffe:

The New York State Department of Environmental Conservation (NYSDEC) has reviewed the revised construction work plan that was submitted with your July 12, 2012 cover letter. The work plan is hereby approved.

Please notify me in advance of the start of the work. If you have any questions, please contact me at (518) 402-9772.

Sincerely,

Donald J. Hesler
Section Chief, Section B
Remedial Bureau D
Division of Environmental Remediation

ec: John McAuliffe - Honeywell
Robert Nunes - USEPA, NYC
Mark Sergott - NYSDOH
John Davis, NYSDOL
Joseph Heath, Esq. - Onondaga Nation
Heidi Kuhl - Onondaga Nation
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Thane Joyal, Esq. - Onondaga Nation
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July 12, 2012

Mr. Donald Hesler
New York State Department of Environmental Conservation
Remedial Bureau D
625 Broadway
Albany, New York 12233-7016

Re: Willis/Semet Tar Beds Site IRM I-690 Storm Drainage Phase 4 Rehabilitation Construction Work Plan

Dear Mr. Hesler:

This attached work plan was prepared by O'Brien & Gere on behalf of Honeywell. This is the Revised Construction Work Plan for the Willis/Semet Tar Beds Site IRM I-690 Storm Drainage Phase 4 Rehabilitation. This work plan has been revised based on NYSDEC's July 5, 2012 comments.

Please contact Tom Conklin of O'Brien & Gere or me if you have any questions or comments.

Sincerely,

John P. McAuliffe

John P. McAuliffe, P.E.
Program Director, Syracuse

cc:	Argie Cirillo, Esq.	USEPA (ltr only)
	Mr. Robert Nunes	USEPA, Region II (ec)
	Ms. Tara Blum	NYSDEC, Region 7 (ec)
	Ms. Sandy Lizlovs	NYSDEC, Region 7 (ec)
	Mr. Steven Bates	NYSDOH (ec)
	Mr. Geoffrey Laccetti	NYSDOH (ec)
	Brian D. Israel, Esq.	Arnold & Porter (ec)
	Mr. William Hague	Honeywell (ec)
	Mr. John Davis	NYSDOL (ec)
	Joseph J. Heath, Esq.	Onondaga Nation (ec)
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	Ms. Jeanne Shenandoah	Onondaga Nation (ec)
	Mr. Fred Kirshner	AESE, Inc. (ec)
	Mr. Curtis Waterman	Onondaga Nation (ec)
	Ms. Alma Lowry	Onondaga Nation (ec)
	Mr. Steven Miller	Parsons (CD/ec)
	Mr. Thomas Conklin	O'Brien & Gere (ec)
	Mr. Christopher Calkins	O'Brien & Gere (ec)
	Mr. Brian White	O'Brien & Gere (ec)
	Mr. Steve Pierce	O'Brien & Gere (ec)

CONSTRUCTION WORK PLAN

I-690 Storm Drainage Phase 4 Rehabilitation
Willis/Semet Tar Beds Site IRM
Geddes, NY

Honeywell

July 2012

O'BRIEN & GERE

TABLE OF CONTENTS

FIGURES

1 INTRODUCTION

This Construction Work Plan (CWP) has been prepared to present O'Brien & Gere's proposed approach to executing the work depicted on the Contract Documents regarding the I-690 Storm Drainage Phase 4 Rehabilitation Project.

1.1 SUMMARY

This CWP is organized as follows:

Section 2 – Project Management Staffing

Section 3 – Health and Safety, Air Quality Monitoring and General Conditions

Section 4 – Lateral Cleaning, CCTV and Liner Installation

Section 5 – Catch Basin and Manhole Rehabilitation

Section 6 – Material Handling and Soils Management Plan

Section 7 – Construction Water Management

Section 8 – QC/Post-Construction Sampling Plan

1.2 PROJECT BACKGROUND

The I-690 Storm Drain IRM has been a phased remediation. This remediation was undertaken to address groundwater influences to the eastern and western storm drain systems down-gradient of the Willis Avenue and Semet Ponds Sites. To date three phases have been completed and a fourth phase is scheduled to be implemented between July and September 2012.

Work completed to date includes the following:

Phase 1 – Eastern Portion

- Grouted joints and sealed catch basins
- Installed new manholes MH-1 and MH-2
- Rerouted Tap to DR-42
- Installed new 18-inch ductile iron pipe from DR-42x to DR-42
- Installed cured in-place pipe (CIPP) from DR-42 to MH-1

Phase 1 – Western Portion

- Installed CIPP at off-set joint down-gradient of DR-40

Phase 2 – Eastern Portion

- Re-routed taps down-gradient of catch basins DR-44 and DR-46 into catch basins

The I-690 Storm Drainage System Phase 2 Under-drain Pilot Study was completed in July 2005. Sampling of under-drain water indicated that this water was a source of contamination and as such, needed to be separated from storm water discharges.

Phase 3 of the I-690 Storm Drain Modification/Temporary Trench Installation Project involved decommissioning of the under-drain isolation pilot study system in the eastern storm drain system, and installation of cured in-place pipe (CIPP) and under-drain conveyance piping in portions of the eastern storm drain system. Also, CIPP was installed in a portion of the western storm drainage system. A site plan presenting the eastern and western storm drain systems is included as **Figure 1**.

The May 22, 2009 letter from Honeywell to NYSDEC, regarding the Willis Ave/Semet Tar Beds IRM I-690 Storm Drain Modifications/Temporary Trench Installation Phase 3 – Post Construction Inspection and Sampling, summarized the results of the post-construction sampling and presented recommendations

for corrective actions. The recommendations were for further inspection of manhole MH-1, corrective action for catch basins DR-41 and DR-45, and additional sampling. These corrective actions were performed in the summer and fall of 2009. A letter was submitted to the NYSDEC on May 3, 2010 summarizing the repair work and presenting recommendations for additional sampling. The NYSDEC approved this work plan on July 8, 2010.

The Phase 3 – Post Construction repair sampling included additional storm water samples being collected in the eastern and western storm drainage systems in August 2010. The storm water samples were found to contain benzene, chlorinated benzenes, and mercury. These data were submitted to the NYSDEC in a letter dated October 21, 2010. The sampling results and CCTV inspection showed that water was entering into the storm water system via infiltration into the catch basins and directly from the State Fair Boulevard drainage ditch.

A bench scale study was conducted in the summer and fall of 2011 to evaluate the effectiveness of multiple catch basin lining and coating systems. Based on these results, a field pilot was conducted which comprised the installation of the most effective bench test coating system in catch basin DR-44. The conclusion of the pilot at Catch basin DR-44 was that the epoxy coating and injections was effective at stopping groundwater infiltration into the structure. Catch basin DR-44 was inspected during the winter of 2011/2012 and in the spring of 2012 and appeared to have no visual groundwater infiltration. Based on visual observations the epoxy coatings and injections were effective at preventing groundwater infiltration into the structure and these results of the pilot study were used to refine the Phase 4 design.

2 PROJECT MANAGEMENT STAFFING

Assignments and responsibilities of the project team are summarized in the descriptions below:

2.1 PROJECT MANAGEMENT STAFF

NYSDEC PROJECT MANAGER – RICHARD A. MUSTICO, P.E.

HONEYWELL CONSTRUCTION MANAGER – STEPHEN J. MILLER, P.E.

The Honeywell Construction Manager is responsible for quality control review of the project funding process (i.e., TARs and Change Notifications), review of remedial cost estimates and deliverables, and may attend selected project meetings.

PROJECT OFFICER – BRIAN WHITE, P.E.

The role of the Project Officer is to ensure that Honeywell's expectations for project quality, safety, schedule, and performance are met or exceeded. In addition, the Project Officer will periodically attend construction review meetings, and will be available on an as-needed basis to the project team.

PROJECT MANAGER (CONSTRUCTION MANAGER) – STEVEN PIERCE

The Project Manager will manage the procurement and construction phases of the project on a day-to-day basis, monitor and evaluate project controls throughout all phases of the project, and ensure the technical and quality objectives established during the design phase of the project are realized in the construction project. The Project Manger will serve as the primary contact between the Honeywell Project Manager and O'Brien & Gere.

ENGINEERING MANAGER – JEFFREY MARSH

The primary responsibilities of the Engineering Manager will be to manage overall engineering during construction. The Engineering Manager will attend weekly construction progress update meetings, and provide quality reviews and value engineering throughout the construction phase of the project.

HEALTH AND SAFETY MANAGER – STEVEN THOMPSON

The primary responsibilities of the Health and Safety Manager will be to develop, implement and enforce the Site Specific Health and Safety Plan for the project.

3 HEALTH AND SAFETY, AIR QUALITY MONITORING AND GENERAL CONDITIONS

This section summarizes O'Brien & Gere's proposed approach to health and safety, air quality monitoring and general conditions.

3.1 HEALTH AND SAFETY

As with all O'Brien & Gere projects, safety will be a top priority. Health and safety excellence is a core value of Honeywell and O'Brien & Gere. O'Brien & Gere believes that all injuries and occupational illnesses, as well as safety and environmental incidents are preventable. We will adhere to high standards for the safe implementation of this project and the protection of the environment, employees and the people in the community. There will not be any compromise with the safety and health of our employees, visitors, subcontractors, and any other persons who may come under our supervision.

O'Brien & Gere believes that with effective employee involvement, training, project planning and auditing that all accidents are preventable. Training and planning tools, which will be utilized and implemented by O'Brien & Gere safety staff will include the following:

- Project Health and Safety Plan:

  O'Brien & Gere will develop a project site specific Health & Safety Plan (HASP), including job safety analyses (JSA), for the scope of work associated with this project. The HASP will be reviewed as part of the site orientation training and all direct hire personnel/subcontractors will be required to follow the requirements of the HASP. This HASP will be in accordance with Honeywell's Syracuse Portfolio Health and Safety Program (HSP^2).

- Subcontractor Safety Pre-Qualifications:

  Each potential subcontractor who will be working for O'Brien & Gere on this project will be required to submit a completed Honeywell Safety Questionnaire Form for approval by Honeywell prior to initiating work on-site. O'Brien & Gere holds subcontractors to the same safety standards to which O'Brien & Gere is held accountable.

- Drug and Alcohol Testing:

  O'Brien & Gere believes in a drug and alcohol free workplace. Drug and alcohol testing is a condition for work on Honeywell projects covered by the HSP^2. All employees will participate in a pre-project drug screening prior to beginning work on the project.

- Pre-Work Health and Safety Kickoff Meeting

  A pre-work Health and Safety kickoff meeting will be scheduled with the project team.

- Site Orientation Training:

  Personnel working on this project will be required to attend a site orientation training session administered by O'Brien & Gere's safety supervisor prior to engaging in any work activities and/or entering the work zone.

- Daily Pre-Task Planners and Weekly Toolbox Safety Meetings:

  Daily safety talks are documented utilizing a Daily Pre-Task Planner form found in the Honeywell Syracuse Portfolio Health and Safety Program HSP2 Document. Pre-Task Planners are prepared on a daily basis or prior to initiating a new task and will be reviewed with the work crew focusing on any changes in equipment, tools, work methods or site conditions as well as key hazards and safety controls.

  Project personnel must attend a project Weekly Toolbox Safety Meeting. These meetings are an opportunity to conduct field safety training, distribute key safety information, reinforce safety as a priority and/or review recent inspection results directly with project personnel.

O'Brien & Gere understands the chemical and physical properties of site contaminants. Based on previous experiences with intrusive work at this particular site, we plan to perform work in modified level D protection. However, we will be prepared to upgrade to Level C protection should conditions warrant. The actual level of protection used will be based on results of our air monitoring program.

3.2 AIR QUALITY MONITORING

O'Brien & Gere will implement an employee work zone air monitoring program with 5-gas PID monitors. This program will be detailed in the site specific health and safety plan.

3.3 GENERAL CONDITIONS

O'Brien & Gere will provide labor, equipment and coordination necessary to perform the following general work associated with the project.

3.3.1 Mobilization

O'Brien & Gere will mobilize equipment, personnel, materials and supplies necessary to perform the proposed work. Equipment will be mobilized as needed.

We anticipate the mobilization to include the following:

- Temporary Site Facilities including portable toilets, and equipment and material storage trailer, *etc*.
- Vacuum Truck
- Frac Tanks and Water Management Equipment
- Air Monitoring Equipment
- Safety and Personal Protective Equipment including all necessary Confined Space Entry equipment, and
- Miscellaneous Hand Tools and Portable Equipment

3.3.2 Site Security

The Construction Supervisor will be responsible for site security during working hours. On site personnel and visitors will be required to sign-in and sign-out at the O'Brien & Gere field office trailer located behind the Honeywell Willis Avenue Groundwater Treatment Plant.

Access to the majority of the work will be within active expressway traffic lanes (New York Interstate 690). The subcontractor executing the work shall implement traffic control measures. The subcontractor will be responsible for upkeep of traffic barriers throughout the duration of the work to ensure worker safety while accessing catch basins and manholes. The sequencing of the work will be planned such that mobilization, demobilization and rearrangement of traffic lane closures are minimized.

3.3.3 Bypass Pumping

During lining and rehabilitation work, segments of the drainage system will be isolated from storm water to allow safe working environments, as well as allow the lining and sealing materials to cure in as dry of an environment as possible. Existing infrastructure shall be utilized, along with necessary pipe plugs / flow-through plugs for bypass pumping and isolation.

3.3.4 Demobilization

Following completion of work including startup and testing of the system, temporary site facilities described above will be removed and demobilized from the site.

4 CLEANING, CCTV, AND LINER INSTALLATION

4.1 12", 15" AND 18" RCP CLEANING

Prior to video documentation and new Cured-In-Place Pipe (CIPP) liner installation, segments of the storm drain system will be flushed and cleaned. Additionally, other portions of the storm system that are not part of the rehabilitation phase of this project will be flushed and cleaned. Cleaning the entire system is intended to help avoid any uncertainty of sources in case post-construction sampling reveals a continuing impact. Outlined below are the segments of storm lines that will be flushed and cleaned.

The following 18" line segments will be cleaned (approximately totaling 435 linear feet) and subsequently lined:

- Segment between catch basins DR38 and DR37 (approx. 65')
- Segment between catch basins DR37 and DR39 (approx. 225')
- Segment between catch basins DR39 and DR39A (approx. 65')
- Segment between catch basins DR39A and DR39B (approx. 40')
- Segment between catch basins DR40A and DR40B (approx. 40')

The following 18" line segments will be cleaned (approximately 635 linear feet) but will not be lined:

- Segment between catch basins DR39 and DR40 (approx. 110') (CIPP-lined during Phase 3)
- Segment between catch basins DR40A and DR40 (approx. 30') (CIPP-lined during Phase 3)
- Segment between catch basin DR40 and manhole MH2 (approx. 60') (CIPP-lined during Phase 1)
- Segment between manholes MH2 and MH3 (approx. 45') (CIPP-lined during Phase 3)
- Segment between manhole MH3 and Onondaga Lake outfall (approx. 35') (New line installed during Phase 3)
- Segment between manholes MH2 and MH1 (approx. 155') (New line installed during Phase 3)
- Segment between manhole MH1 and catch basin DR41 (approx. 50') (CIPP-lined during Phase 3)
- Segment between catch basins DR41 and DR42 (approx. 30') (CIPP-lined during Phase 3)
- Segment between catch basins DR41 and DR43 (approx. 120') (CIPP-lined during Phase 3)

The following 15" line segment will be cleaned but not lined.

- Segment between catch basins DR43 and DR45 (approx. 115') (CIPP-lined during Phase 3)

The following 12" line segments will be cleaned (approximately totaling 280 linear feet) and subsequently lined:

- Segment between catch basins DR46 and DR46X (approx. 250')
- Segment between catch basins DR46 and DR46A (approx. 20')
- Segment between catch basins DR44 and DR44A (approx. 10')

The following 12" line segments will be cleaned (approximately totaling 50 linear feet) but will not be lined:

- Segment between catch basins DR43 and DR44 (approx. 25') (CIPP-lined during Phase 3)
- Segment between catch basins DR45 and DR46 (approx. 25') (CIPP-lined during Phase 3)

The lines may not necessarily be cleaned in this order. As described in Section 3, the sequencing of the work will be coordinated such that rearrangement of traffic lane closures is minimized. To clean each line segment, equipment will be staged at each catch basin. Flush/cleaning water will be captured with a vacuum truck along with sediment and debris after exiting the downstream portion of the line. Debris and water will not be allowed to travel downstream.

A network of under-drain collection piping between catch basins DR41, DR42, DR43, DR44, DR45, and DR46 that is believed to have blockage will be cleaned. The lines can be accessed via cleanouts in these catch basins. As with all other cleaning work on this project, flush water and debris will be captured using a vacuum truck and handled according to the procedure as described in section 6 & 7 below.

Additionally, other portions of the storm system that are not part of the rehabilitation phase of this project will be flushed and cleaned. This will include approximately 800 feet of storm drain piping. This is intended to help avoid any uncertainty of sources in case post-construction sampling reveals continuing impact.

4.2 12" AND 18" RCP CCTV DOCUMENTATION

Upon completion of cleaning and flushing of the lines described above, the lines will be inspected via closed circuit television and the inspection will be recorded to document condition and confirm dimensions. The level of cleaning that will be considered satisfactory will be determined by the engineer, and will be adequate for proper installation of the liner. This information will then be utilized in the design for new liner fabrication and installation.

4.3 12" AND 18" RCP CIPP LINER INSTALLATION

The data collected during the CCTV documentation will be utilized in design and procurement of CIPP liner materials. Having access at each end of a storm drain line segment, the new CIPP liner system will be installed from catch basin to catch basin. The terminations at each end of the liner segments shall have gaskets, seals, injection ports, or other approved means to create a zero leakage seal and facilitate the catch basin rehabilitation work.

5 CATCH BASIN AND MANHOLE REHABILITATION

A total of 16 catch basins and 3 manholes will be rehabilitated to mitigate future groundwater intrusion and infiltration into the storm drain system. The success of this phase of the work will be based on verification that no leaks remain within the catch basins and manholes. The following catch basins and manholes are to be rehabilitated as part of this project:

- DR-38
- DR-37
- DR-39
- DR-39A
- DR-39B
- DR-40
- DR-40A
- DR-40B
- DR-41
- DR-42
- DR-42X
- DR-43
- DR-44A
- DR-45
- DR-46
- DR-46A
- MH-1
- MH-2
- MH-3

It is important to note, that catch basin DR-44 was repaired during a field pilot study conducted in the fall of 2011. Also, catch basin DR42X has limited accessibility due to the size and orientation of the top. This catch basin is located on the shoulder area along State Fair Boulevard. For this structure, the entire top will be removed to gain access. In catch basins DR-41 through DR-46, existing FRP piping integral to the under-drain system prohibits access to the horizontal surfaces of the structures. In these cases, the pipe will be temporarily removed and capped. Upon completion of each catch basin repair, the FRP pipe will be reinstalled to pre-work condition.

To allow safe and orderly working conditions in each manhole and catch basin, bypass pumping of storm flows will be performed. The repair for each catch basin and manhole will consist of removal of deteriorated cementitious coatings, repair of deteriorated concrete surfaces, mechanical surface preparation of interior surfaces and parging of concrete surfaces with EpoxyTec CPP. All loose material that is removed will be collected and disposed of as indicated in Section 6. The ends of all newly lined RCP laterals shall have gaskets, seals, injection ports, or other approved means to create a zero leakage seal and facilitate the catch basin rehabilitation work. The ditch remediation and collection trench portion of this work was pulled from the scope of this project and will be performed during the Willis/Semet/Ditch Site Improvements and Landscaping Project.

6 MATERIAL HANDLING AND SOILS MANAGEMENT PLAN

The Material Handling and Disposal Plan describes procedures for handling materials during execution of the work. The goal of these procedures is to: minimize contamination of clean materials or areas, minimize recontamination of cleaned areas, minimize tracking of contaminated material to uncontaminated areas, and minimizing generation of dust.

Solids from the vacuum truck collected during line cleaning work, as well as solids cleaned from the frac tanks will be stored in the staging area as described below. Solids will be stockpiled until they are characterized.

Waste characterization samples will be collected of the staged material. It is anticipated that less than 20 cubic yards of material will be generated during this work. One composite sample consisting of 3 to 4 subsamples will be collected and analyzed from both the Eastern and Western Storm Drainage systems. Samples will be analyzed for the following:

- Total and TCLP VOC's by Method 8260B and 1311/8260B, respectively
- Total and TCLP SVOC's by Method 8270C and 1311/8270C, respectively
- Total and TCLP Mercury by Method 7471A and 1311/7470A, respectively
- Total and TCLP Metals by Method 6010A and 1311/6010A, respectively
- Total PCBs by Method 8082A
- Ignitability, by EPA Method 1010
- Reactivity, (Cyanide and Sulfide) by Methods 7.3.3.2 and 7.3.4.1
- Corrosivity, by Method 9045C, and
- Percent Moisture, by Method D2216

Soils will be transported and staged at the Willis Avenue Soil Storage Area. Materials will be staged on a double layer of 10-mil polyethylene sheeting and covered with one layer of the same. A sump will be installed in the lowest corner to pump off drained water. This water will be collected and treated as described in Section 7 – Construction Water Management.

If the materials are characteristically hazardous or visibly contaminated (*e.g.*, NAPLs, grossly stained soils), they will be segregated and transported off-site for disposal at a permitted disposal facility.

7 CONSTRUCTION WATER MANAGEMENT

Construction and groundwater/storm water management will be a key component of this project. Storm water will be pumped to adjacent and/or downstream catch basins. Storm water bypass pumping will occur during all activities where workers enter the catch basins and manholes and will be accomplished with an appropriately sized pump.

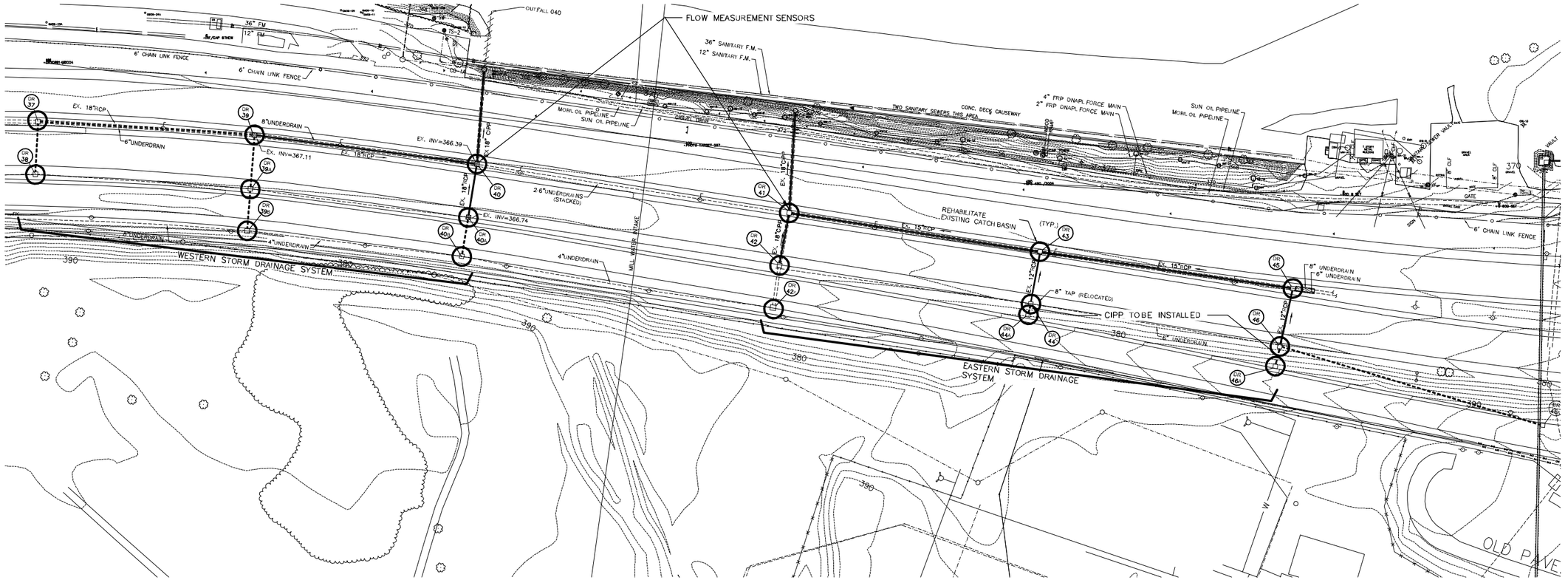
Water generated during cleaning and lining activities will be captured with a vacuum truck and pumped into frac tanks staged at the Willis/Semet site. Water from the frac tanks will be pre-treated with bag filters and/or other necessary equipment to meet the visually clean standard of the Willis Avenue GWTP, where it will be treated. Water extracted from the spoils staging area sump will also be captured and treated the same way.

8 QC / POST-CONSTRUCTION SAMPLING PLAN

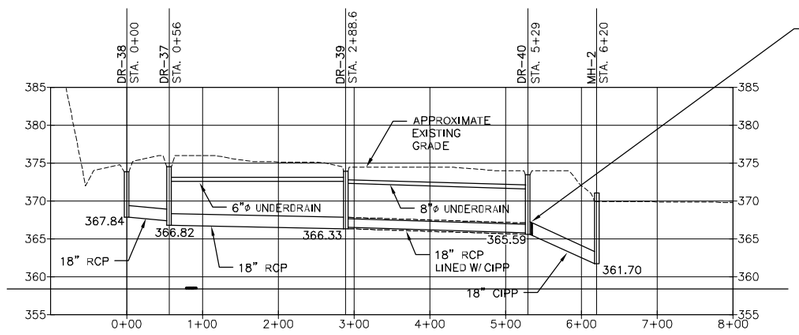
The measure of the effectiveness of the work will be based on the complete elimination of leaks, specifically, that of groundwater entering the catch basin and manhole structures.

Post-construction storm water samples will be collected within the eastern and western portions of the I-690 storm drainage system to evaluate this system and the success of the Phase 4 efforts. Post-construction storm water samples will be collected from catch basins DR-40, DR-41, DR-42, and DR-43. Two samples from these catch basins, (one wet weather and one dry weather event), will be collected each month for a three month duration. A wet weather event will be collected when a precipitation event of greater than 0.1 inches occurs during a three hour period and a dry weather event will be collected when no precipitation event greater than 0.1 inches has occurred for a minimum of 3 days. Additional samples will be collected upstream of these locations if the analytic results exceed NYS Class C surface water criteria. If lake level causes manholes DR-40 and DR-41 to surcharge then samples will be collected from alternate locations. Samples will be collected at DR-39 and DR-40A if DR-40 is surcharged, and samples will be collected at DR-42 and DR-43 if DR-41 is surcharged. The samples will be analyzed for the full USEPA TCL list for VOCs and mercury (high resolution) using USEPA methods 8260B and 1631, respectively.

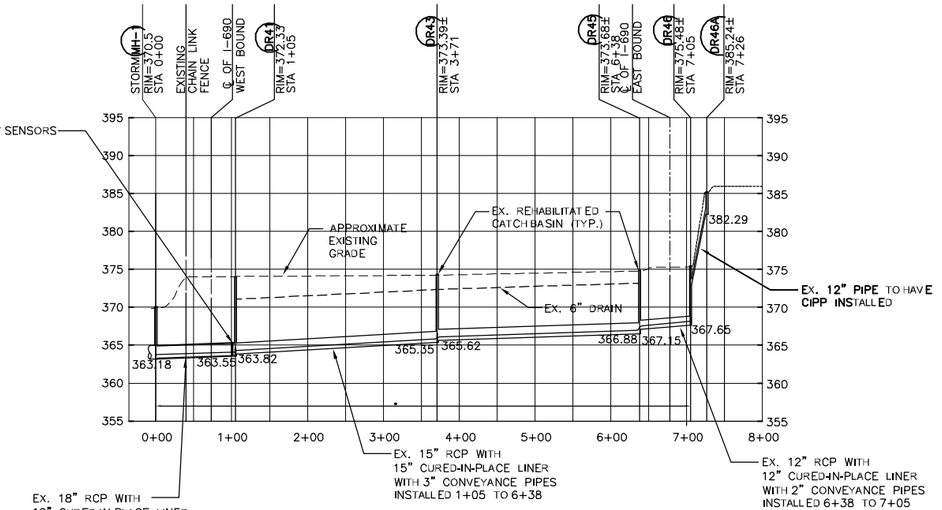
Jul 11, 2012 - 10:26am



PLAN
SCALE: 1"=60'



DR-38 TO MH-2
EXISTING STORM DRAIN PROFILE
SCALE: HORIZ. 1"=100'
VERT. 1"=10'



MH-1 TO DR46A
EXISTING STORM DRAIN PROFILE
SCALE: HORIZ. 1"=100'
VERT. 1"=10'

FIGURE 1

LEGEND

- CIPP TO BE INSTALLED
- CIPP CURRENTLY INSTALLED

HONEYWELL INTERNATIONAL INC.
I-690 PHASE 4
STORM DRAINAGE SYSTEM

I-690 STORM DRAIN STYSTEM PROPOSED PHASE 4 LOCATIONS

FILE NO. 1163.46699-015
JULY 2012

O'BRIEN & GERE

I:\Honeywell.1163\46699.I690-Storm-Drai\Docs\DWG\Sheets\46699-015-FIG1.dwg