Honeywell
301 Plainfield Road
Suite 330
Syracuse, NY 13212
315-552-9700
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October 28, 2013

To: Harry Warner, NYSDEC, Region 7 (1 bound)
Holly Sammon, Onondaga County Public Library (1 bound)
Samuel Sage, Atlantic States Legal Foundation (1 bound)
Cara Burton, Solvay Public Library (1 bound)
Mary Ann Coogan, Camillus Town Hall (1 bound)
Moon Library, SUNY ESF (1 bound)
Diane Carlton, NYSDEC, Region 7 (1 PDF)
Joseph J. Heath, Esq., Onondaga Nation (1 bound)
Chris Fitch, Communications (cov ltr – email)

Re: Letter of Transmittal – Onondaga Lake 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:

- SCA West Basin – Design Concepts and Operation Plan dated October 2013

Sincerely,

John P. McAuliffe by ccc

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

Enc.

cc: Timothy J. Larson - 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

October 25, 2013

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

Re: SCA West Basin - Design Concepts and Operation Plan, Dated October 2013

Dear Mr. McAuliffe:

We have received and reviewed the above-referenced document, transmitted on your behalf by Paul Schultz's (O'Brien & Gere) October 25, 2013 email addressed to my attention, and find that the revised Operations Plan has addressed our previous comments. Therefore, the SCA West Basin - Design Concepts and Operation Plan, Dated October 2013, is hereby approved. Please see that copies of the approved Plan, along with this approval letter, are transmitted to the document repositories selected for this site.

Sincerely,

Timothy J. Larson, P.E.
Project Manager

ec: B. Israel, Esq, - Arnold & Porter
R. Nunes - USEPA, NYC
M. Sergott - NYSDOH, Albany
J. Heath, Esq.
T. Joyal, Esq.
J. Shenandoah
P. Schultz - O'B&G
J. Gregg – NYSDEC
J. Davis - NYSDOL, Albany
J. Deming – NYSDOH, Albnay
F. Kirschner
C. Waterman
A. Lowry
M. McDonald - Honeywell

SCA WEST BASIN – DESIGN CONCEPTS AND OPERATIONS PLAN

Honeywell International, Inc.
Sediment Consolidation Area
Syracuse, NY





Honeywell International, Inc.
Syracuse, NY

October 2013

O'BRIEN & GERE

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- Figure 1
- 444853-200-M-024 and 444853-200-M-025

1. INTRODUCTION

During wet weather events, the flow of treated effluent water from the WTP to Metro may be prohibited. The Wet Weather Operating Plan (WWOP) is provided as Attachment 1. These events can result in a shutdown of dredging operations. A modification will be made to the WTP to allow the diversion of treated effluent to the West Basin during these events and the West Basin will be modified to store this water. At the conclusion of the wet weather event, the WTP treatment trains will be restarted to allow discharge to Metro up to 6.5 MGD. If the simultaneous discharging of treated water from the West Basin would result in a combined flow exceeding 6.5 MGD, prior approval will be obtained from Metro.

2. DESIGN DETAILS

The repurposing of the West Basin for storage of pretreated WTP effluent requires design and construction at both the West Basin and the WTP.

A pair of tie-ins will be performed at the WTP to facilitate the filling and emptying of the West Basin. Tie-in #1 (as shown on M-5) will be performed inside the WTP building on the existing out-of-spec effluent return line (#3109) to the East Basin. A new 16" diameter polyethylene line will be installed above grade to the West Basin. A manual butterfly valve (HV-3177) will be provided on the new line. A new pH instrument (AE/AIT-3110) and TSS/turbidity instrument (AE/AIT-3111) will be installed on existing line #3109, between tie-in #1 and existing HV-3113. Tie-in #2 (as shown on M-0) will be performed inside the WTP building, in the vicinity of the Effluent Pumps PU-3102/3103 discharges. A new 16" diameter PVC line will be installed from this tie-in point to the top of Effluent Monitoring Tank #1 (T-3000). A manual butterfly valve (HV-3010) will be provided on the new line.

The work within the SCA WTP is depicted on the following drawings:

- Process and Instrumentation Drawings (P&IDs) I-30 and I-31
- Mechanical Drawings M-0 and M-5
- Figure 1

The general routing between the West Basin and the WTP is depicted on drawing 444853-200-M-024. Additional tie-in(s) will be performed at the West Basin as shown on 444583-200-M-025. The discharges from the existing Godwin pumps at the West Basin will be tied into the new 16" polyethylene line to the WTP.

3. OPERATIONS

The West Basin will be operated as a storage location for pretreated effluent during Wet Weather Shutdowns. An overall process description has been provided below which describes the steps to fill and empty the West Basin.

3.1 OPERATIONAL PHILOSOPHY

3.1.1 Filling of the West Basin

WTP and SCA operations staff will collaborate in the management of flows in and out of the West Basin. After notification from Metro, normal discharge from the WTP will be halted. Other actions will be taken by the WTP operators, as necessary, to avoid upsets (e.g., overflows, deadheading of pumps, etc.) during the transition from normal to off-line flow.

At a high level in the West Basin, an alarm will be initiated at the WTP Operator Interface Terminal (OIT). This will serve as an indication that the West Basin is nearly full and that WTP operations should

be ramped down. A high-high level alarm (water level of 156 inches from bottom of West Basin sump) to the WTP OIT will be interlocked to shut down Effluent Pumps PU-3102 and PU-3103.

In the event that the West Basin is filled to its high-high level and the East Basin is filled to its maximum operating level in accordance with the approved stormwater pollution prevention plan (SWPPP) (associated with the Sediment Consolidation Area (SCA) and SCA WTP operations), all operations will be stopped.

3.1.2 Emptying of the West Basin

After notification from Metro, normal discharge from the WTP can be reestablished. Other actions will be taken by the WTP operators, as necessary to avoid upsets (e.g., overflows, deadheading of pumps, etc.) during the transition to normal operations.

The existing continuous level device (LIT-3000 or LIT/LIC-3001) at the Effluent Monitoring Tanks will be utilized to control the existing Godwin Pumps at the West Basin. The variable frequency drive(s) (VFDs) will be controlled via a signal from the LIC in order to maintain an approximate constant level in Effluent Monitoring Tank #1 (or #2, to be determined).

A new pH device (AE/AIT-3110) will be provided on the line from the West Basin to the WTP. The device will be for monitoring only and will not control the addition of any chemicals. High, high-high, low, and low-low pH alarms will be provided to the WTP OIT. In the event of an alarm, operations staff will determine the appropriate course of action. The flow of out-of-range pH water from the West Basin may be allowed to continue as long as the final WTP effluent water pH remains in compliance.

A new TSS/turbidity device (AE/AIT-3111) will be provided on the line from the West Basin to the WTP. The device will be for monitoring only. High and high-high TSS/turbidity alarms will be provided to the WTP OIT. In the event of an alarm, operations staff will determine the appropriate course of action.

Existing high and high-high flow alarms are provided on the final WTP effluent flow meter (FE/FQIT-3106). These alarms will indicate if the combined flow to Metro is exceeding the allowable rate.

A Standard Operating Procedure (SOP) document is included as Attachment 2.

4. COMMISSIONING

At the completion of construction activities, the modified system will be commissioned. The installation commissioning (IC) phase will include an exterior visual examination of the new work. During this test, the pipelines will remain empty and isolated with no flow occurring. The entire length of each of the pipelines will be walked and compared to the design drawings. Each affected vessel and equipment item will be examined. The complete installation of each component (e.g., valve, instrument, etc.) depicted on the P&IDs will be confirmed and documented. Any deviation from the P&IDs will be documented. This may include the omission or incomplete installation of any component(s). Any identified deviations must be corrected or confirmed to be acceptable prior to proceeding to the next phase of commissioning.

The operational commissioning (OC) phase is a dynamic system check. Each pipeline and affected vessel will be leak tested (pressurized or static level checks with water). The leak test will consist of a two hour test to 70 psi consistent with previous testing for the WTP 24" effluent line. The individual operation of each equipment item (e.g., pumps) and instrument (e.g., level devices, etc.) will be confirmed and documented. Instrument alarm and interlock conditions will be tested (via simulation or actual conditions).

No rigorous performance commissioning (PC) activities are envisioned. This phase typically focuses on the simultaneous operation of all components for an extended duration to achieve a treatment objective. Sample collection and analyses are often performed to demonstrate regulatory compliance. No changes are being made to the upstream treatment process. As such, no impacts to water treatment performance are anticipated.

ATTACHMENTS

ATTACHMENT 1

WET WEATHER OPERATING PLAN (WWOP)

HONEYWELL SCA WATER TREATMENT PLAN

Document Sign-off	
Representative:	Signature and Date
O'Brien & Gere	
Honeywell	John P. McAuliffe 11/30/11
	11/30/11

WET WEATHER OPERATING PLAN

The Sediment Consolidation Area (SCA) Water Treatment Plant (WTP) will be operated on a seven-day per week, 24-hour per day basis. Flow rates will vary seasonally, with the highest flows being generated during the active dredging season (that is, April through November). The pretreated effluent from the SCA WTP will be conveyed to the public sewer system using Honeywell's existing 30-inch/24-inch force main. Honeywell will provide for effluent monitoring at the SCA WTP. The acceptance of Honeywell's SCA flow shall be at the discretion of Onondaga County of Water Environment Protection (OCDWEP).

During wet weather events, dredging activities and discharge from the SCA WTP will be suspended at the request of the OCDWEP Metro Operations Staff. Subsequent to a wet weather event, and with concurrence from OCDWEP, the discharge of pretreated effluent will resume.

The following operating conditions shall be adhered to:

- Normal Operation
  - Discharge to Metro will be 6.5 MGD (average daily flow).
- Wet Weather Operations
  - OCDWEP notifies SCA WTP operations staff to suspend effluent discharge to Metro.
  - Discharge from the SCA WTP to Metro is suspended, typically within less than 1 hour.
  - Discharge from the SCA WTP will remain suspended until OCDWEP agrees that discharge may resume.
  - SCA WTP Operations Staff resumes Normal Operation.
- Flow Recovery
  - Subsequent to a wet weather event, or as operational conditions may warrant, SCA WTP operations staff may request that OCDWEP allow a discharge flow rate in excess of Normal Operation.
  - OCDWEP Operations Staff will evaluate the request relative to Metro WWTP conditions and conveyance system demands and subsequently determine when and at what flow rates Honeywell can discharge. The instantaneous flow rate will be as agreed to between OCDWEP and SCA WTP operations staff on a per event basis, up to an instantaneous flow rate of 10 MGD, for an agreed upon duration to provide for flow recovery.
  - Subsequent to the agreed upon Flow Recovery period, Normal Operation will resume.

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HONEYWELL			
John McAuliffe	315-552-9700	315-440-0859	john.mcauliffe@honeywell.com
Larry Somer	315-552-9700	201-323-9013	larry.somer@honeywell.com
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~~Frank DeOrio~~	~~315-956-6222~~	~~315-729-1883~~	~~frank.deorio@ob~~
OCDWEP OPERATIONS			
~~Metro Operator in Charge (Primary Contact)~~	~~315-435-3142~~	~~N/A~~	~~N/A~~
Stephen Bray, Primary Contact)	315-435-2260	315-263-4972	stevebray@ongov.net
Dan Jean, Operations Superintendent (Backup Contact)	315-435-2260	315-263-7467	danieljean@ongov.net

Refer to attached phone list.

New Secondary Contact:
David Colbert (315) 567-6637 davidcolbert@ongov.net

October 2013 - SCA WTP Operations Contact List

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Project Officer:
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Technical Support (Process):
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Electrical/Instrumentation:
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October 2013 – SCA/SPA Operations Contact List

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SCA Supervisor
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ATTACHMENT 2

STANDARD OPERATING PROCEDURE (SOP)

TABLE OF CONTENTS **Page**

1.0 PURPOSE

1.1 This procedure summarizes the operations of the West Basin as a storage location for pretreated effluent.

2.0 SCOPE

2.1 This Standard Operating Procedure (SOP) identifies the basic elements necessary to operate the West Basin as a storage location for pretreated effluent.

3.0 BACKGROUND OR INTRODUCTION

3.1 The West Basin was originally designed to hold stormwater and weep water from the geotextile bags in the Sediment Consolidation Area (SCA). In September 2013 the Stormwater Pollution Prevention Plan (SWPPP) was revised and the West Basin effectively repurposed to allow it to store pretreated effluent from the Water Treatment Plant (WTP) in the event of a Metro shutdown.

4.0 REFERENCES

4.1 Wet Weather Operating Plan, November 30, 2011

5.0 TERMS AND DEFINITIONS

5.1 Sediment Consolidation Area (SCA) – The area contained within the bermed area adjacent to the Sediment Processing Area (SPA) and Water Treatment Plant where the dredged sediment is dewatered and stored in Geotextile Tubes.

5.2 Stormwater Pollution Prevention Plan (SWPPP) – The plan and permit issued by NYSDEC, which regulates the amount and means for storing storm water in the event of

a 100 year storm event.

6.0 RESPONSIBILITIES

6.1 It is the responsibility of OBG to operate the WTP and to coordinate with Metro on maximum allowable flows that Metro can receive.

6.2 It is the responsibility of OBG to coordinate with Parsons and the SPA Operator to ensure sufficient capacity exists in the West Basin to accept the flow of pretreated effluent.

6.3 It is the responsibility of OBG to draw down the West Basin as soon as possible, and at the fastest rate allowable (while maintaining compliance with the Metro permit) to allow the West Basin to be utilized at the next Metro interruption of flows.

6.4 It is the responsibility of the SPA Operator to communicate with the Dredge Operator on the status of the pretreated effluent flow to the West Basin and to terminate dredge activity and initiate the lake water purge soon enough to allow sufficient storage in the West Basin.

6.5 It is the responsibility of the SPA Operator and WTP Operator to log the times of all the events relative to flows to and from the West Basin.

6.6 It is the responsibility of the Site Manager to keep the Honeywell Management Team and the NYSDEC aware of events relative to the use of the West Basin.

7.0 PROCEDURE

Assuming the Dredge, SPA and SCA are in operation and Metro calls the WTP to initiate a shutdown due to a rain event.

7.1 Operational and SWPPP Requirements:

7.1.1 The East Basin must be operated in accordance with the SWPPP requirements.

7.1.2 Culverts connecting the SPA and West Basin shall remain blinded off, such that the pretreated effluent and untreated effluent in the SPA do not comingle.

7.1.3 SCA Supervisor will review the weather forecast to determine if continuing to operate is not warranted.

7.2 Pretreated Effluent is Directed to the West Basin:

7.2.1 SPA Operator requests WTP to direct pretreated effluent to the West Basin.

7.2.2 WTP Operator confirms West Basin level has sufficient capacity to accept flows.

a) Checks WTP readings of West Basin levels,

b) WTP/Parsons Technician visually confirms West Basin level from basin staff gauge.

7.2.3 WTP Technicians establish flow path to West Basin

a) WTP Technician Opens manual valve (MV-1161) to fill West Basin

b) WTP Technician Closes manual valve (MV-1146) at discharge of West Basin Transfer Pump

c) WTP Technician Closes manual valves HV-3175 and HV-3176 on out-of-spec effluent line to East Basin
d) WTP Technician Opens manual valve HV-3177 in WTP to direct flows to the West Basin

7.2.4 WTP Operators confirm flow path is established and directs flows to West Basin.
7.2.5 WTP Operator monitors level in West Basin and communicates to the SPA operator the best estimate of volume available.
7.2.6 SPA Operator Monitors level in the West Basin and coordinates with the Dredge Operator and WTP operator on operations.
7.2.7 Either the WTP or SPA Operator determines when the West Basin has reached a level required to terminate dredging operations and requests flushing of the pipeline with Lake Water. Level is confirmed from WTP readings and confirmed visually.
7.2.8 Flow to the West Basin is terminated when, either;
a) Level indicates filling must be terminated; 1 ft of freeboard in the West Basin must be maintained (maximum water level of 156 inches),
b) Metro calls the WTP back on-line when rain event has subsided, with a transition allowance to achieve sufficient capacity to start dredging as soon as possible.

7.3 Pretreated Effluent is drawn from the West Basin:

When normal WTP operations are resumed after a rain event, discharge flow will initially be limited to flows resulting from the real time treatment of dredge water. If discharging from the West Basin combined with the SCA WTP treatment flows will exceed 6.5 MGD, the contents of the West Basin will be kept off-line until approval is requested and received from Metro to discharge additional flow from the West Basin. The combined increased flow shall not exceed 10 MGD. After Metro approval, the following steps will be followed:

7.3.1 WTP Operator determines that additional pretreated effluent can be sent to Metro, over and above that produced from dredging operations.
7.3.2 WTP Technician establishes flow path from West Basin to WTP Effluent Tanks
a) WTP Technician Closes manual valve “MV-1161” on the fill line to the West Basin
b) WTP Technician Opens manual valve “MV-1146” at discharge of West Basin Transfer Pump
c) WTP Technician Closes manual valves HV-3175 and HV-3176 on the out-of-spec effluent line to East Basin
d) WTP Technician Opens manual valves HV-3177 and HV-3010 in WTP to direct flow to the WTP effluent tanks
7.3.3 WTP Operator starts one of the West Basin Transfer Pumps P-11 or P-12; flow is sent to the WTP Effluent Tank.
7.3.4 Flow rate from the West Basin Transfer Pumps is varied in response to level control within the WTP Effluent Tanks.
7.3.5 WTP Operator will direct Pretreated Effluent to Metro in accordance with the Wet Weather Operating Plan.

7.3.6 WTP Operator continues to draw down the West Basin until the sump level is reached and West Basin Transfer Pumps P-11 or P-12 are turned off.

7.3.7 Valves should be left in the positions to allow Treated Effluent to be directed to the West Basin during the next wet weather event.

8.0 EXCEPTIONS

Not Applicable

9.0 FORMS

Example form

10.0 FIGURES (or ATTACHMENTS)

Not Applicable

11.0 APPROVALS

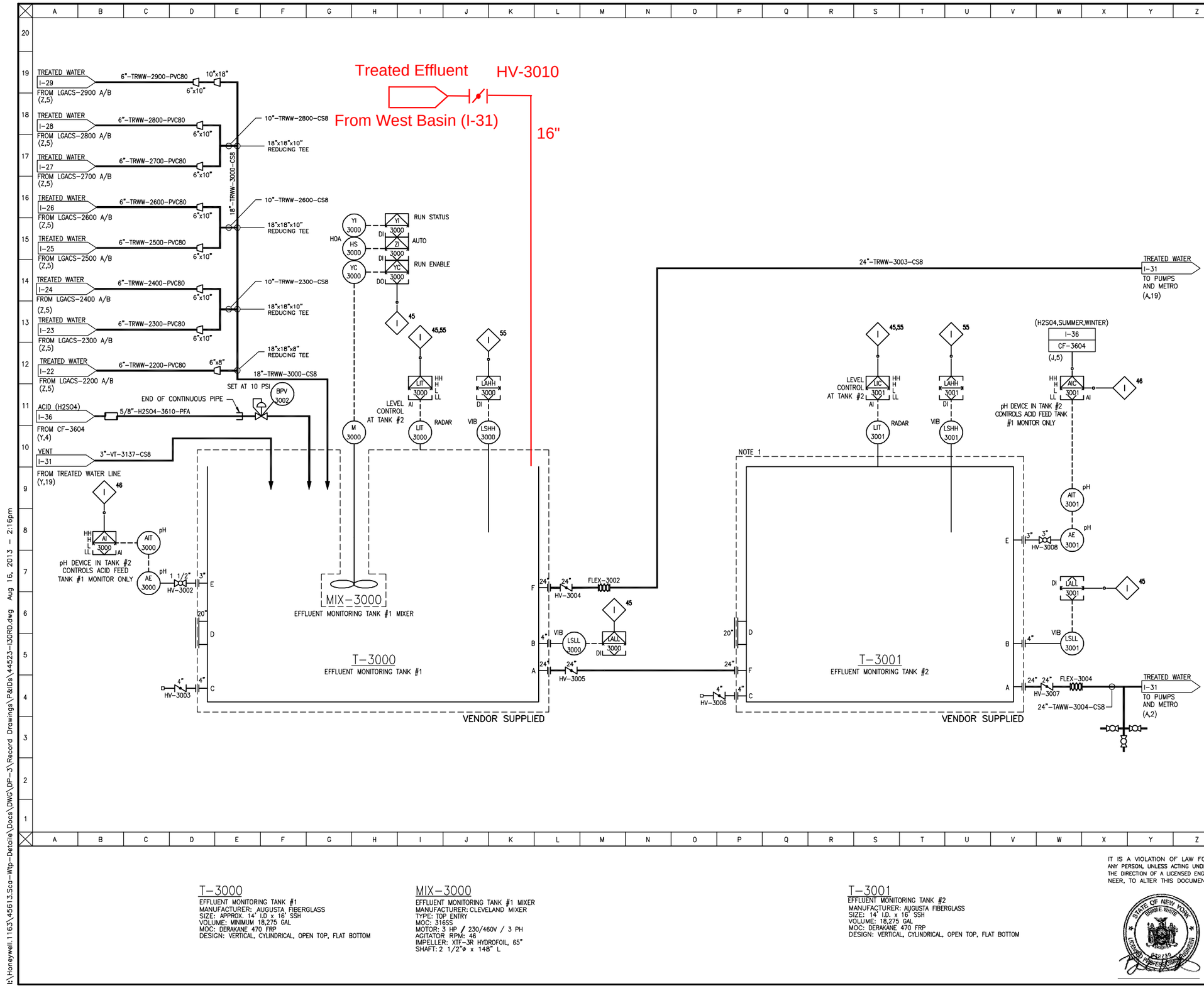
Recommended By: John Dupras

Approved By:

12.0 DOCUMENT REVISION HISTORY

Revision Number	Effective Date	Description of Changes

DRAWINGS



NOTES:

1. MIXER SUPPORT PROVIDED FOR FUTURE ADDITION OF A MIXER AS NECESSARY.
2. LOCATE CHEMICAL FEED BPV AT THE TOP OF TANK AT MINIMUM DISTANCE TO DROP INTO TANK.
3. EFFLUENT MONITORING TANKS AND ASSOCIATED PUMPS TO BE FOR SUMMER AND WINTER OPERATION.
4. INSTALL PADDLE BLANK-3000 FOR WINTER OPERATION. INSTALL PADDLE BLANK AS CLOSE AS POSSIBLE TO DOWNSTREAM TEE.
5. TUBING DIAMETERS NOTED ARE INSIDE DIAMETERS.

INTERLOCKS:

REFER TO SHEET I-C

T-3000
EFFLUENT MONITORING TANK #1
MANUFACTURER: AUGUSTA FIBERGLASS
SIZE: APPROX. 14' I.D x 16' SSH
VOLUME: MINIMUM 18,275 GAL
MOC: DERAKANE 470 FRP
DESIGN: VERTICAL, CYLINDRICAL, OPEN TOP, FLAT BOTTOM

MIX-3000
EFFLUENT MONITORING TANK #1 MIXER
MANUFACTURER: CLEVELAND MIXER
TYPE: TOP ENTRY
MOC: 316SS
MOTOR: 3 HP / 230/460V / 3 PH
AGITATOR RPM: 46
IMPELLER: XTF-3R HYDROFOIL, 65"
SHAFT: 2 1/2"ø x 148" L

T-3001
EFFLUENT MONITORING TANK #2
MANUFACTURER: AUGUSTA FIBERGLASS
SIZE: 14' I.D. x 16' SSH
VOLUME: 18,275 GAL
MOC: DERAKANE 470 FRP
DESIGN: VERTICAL, CYLINDRICAL, OPEN TOP, FLAT BOTTOM

STATE OF NEW YORK — RENEE WHITE — LICENSED PROFESSIONAL ENGINEER — 072139

RECORD DRAWINGS
To the best of our knowledge, information and belief, these record drawings substantially represent the project as constructed.
O'BRIEN & GERE ENGINEERS, INC.
By: _____
9/30/13 West Basin Modification

NO.	DATE	REVISION	INIT.
6	8/23/13	RECORD DRAWING WITH STAMP	
5	5/24/13	RECORD DRAWING	
4	02/24/12	FIELD DIRECTIVE NO.6	
3	11/11/11	FIELD DIRECTIVE NO.5	
2	09/23/11	FIELD DIRECTIVE NO.4	
1	06/17/11	ISSUED FOR CONSTRUCTION	
0	10/26/10	DP #3 FINAL DESIGN - NYSDEC SUBMITTAL	

O'BRIEN & GERE ENGINEERS INC.

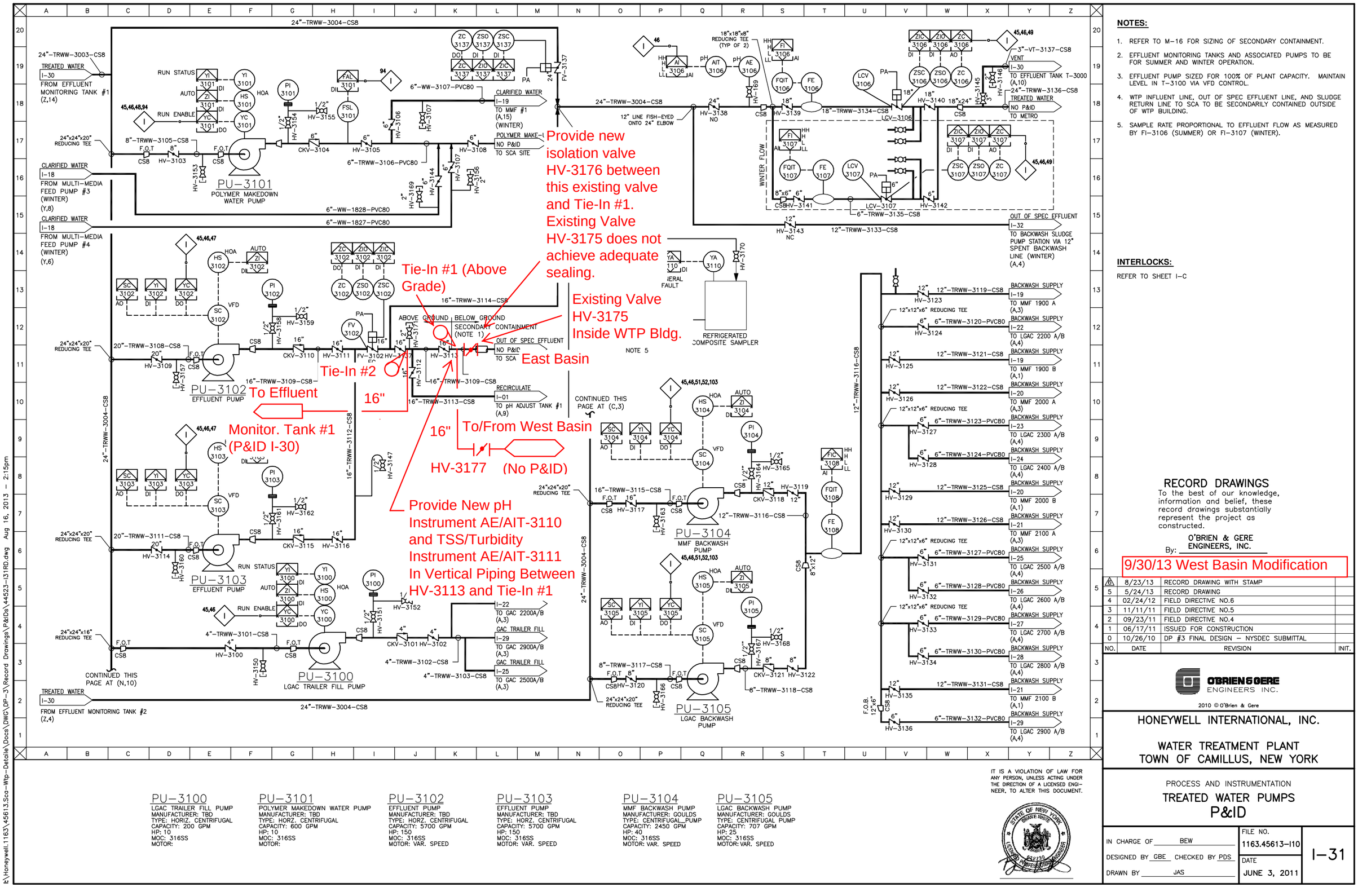
HONEYWELL INTERNATIONAL, INC.

WATER TREATMENT PLANT
TOWN OF CAMILLUS, NEW YORK

PROCESS AND INSTRUMENTATION
EFFLUENT MONITORING TANKS P&ID

IN CHARGE OF BEW
DESIGNED BY GBE CHECKED BY PDS
DRAWN BY JAS
FILE NO. 1163.45613-I30
DATE JUNE 3, 2011
I-30

I:\Honeywell.1163\45613.Sco-Wtp-Detoile\Docs\DWG\DP-3\Record Drawings\P&IDs\44523-I30RD.dwg Aug 16, 2013 - 2:16pm



NOTES:

1. REFER TO M-16 FOR SIZING OF SECONDARY CONTAINMENT.
2. EFFLUENT MONITORING TANKS AND ASSOCIATED PUMPS TO BE FOR SUMMER AND WINTER OPERATION.
3. EFFLUENT PUMP SIZED FOR 100% OF PLANT CAPACITY. MAINTAIN LEVEL IN T-3100 VIA VFD CONTROL.
4. WTP INFLUENT LINE, OUT OF SPEC EFFLUENT LINE, AND SLUDGE RETURN LINE TO SCA TO BE SECONDARILY CONTAINED OUTSIDE OF WTP BUILDING.
5. SAMPLE RATE PROPORTIONAL TO EFFLUENT FLOW AS MEASURED BY FI-3106 (SUMMER) OR FI-3107 (WINTER).

INTERLOCKS:

REFER TO SHEET I-C

PU-3100
LGAC TRAILER FILL PUMP
MANUFACTURER: TBD
TYPE: HORIZ. CENTRIFUGAL
CAPACITY: 200 GPM
HP: 10
MOC: 316SS
MOTOR:

PU-3101
POLYMER MAKEDOWN WATER PUMP
MANUFACTURER: TBD
TYPE: HORZ. CENTRIFUGAL
CAPACITY: 600 GPM
HP: 10
MOC: 316SS
MOTOR:

PU-3102
EFFLUENT PUMP
MANUFACTURER: TBD
TYPE: HORZ. CENTRIFUGAL
CAPACITY: 5700 GPM
HP: 150
MOC: 316SS
MOTOR: VAR. SPEED

PU-3103
EFFLUENT PUMP
MANUFACTURER: TBD
TYPE: HORZ. CENTRIFUGAL
CAPACITY: 5700 GPM
HP: 150
MOC: 316SS
MOTOR: VAR. SPEED

PU-3104
MMF BACKWASH PUMP
MANUFACTURER: GOULDS
TYPE: CENTRIFUGAL PUMP
CAPACITY: 2450 GPM
HP: 40
MOC: 316SS
MOTOR: VAR. SPEED

PU-3105
LGAC BACKWASH PUMP
MANUFACTURER: GOULDS
TYPE: CENTRIFUGAL PUMP
CAPACITY: 707 GPM
HP: 25
MOC: 316SS
MOTOR: VAR. SPEED

RECORD DRAWINGS
To the best of our knowledge, information and belief, these record drawings substantially represent the project as constructed.
O'BRIEN & GERE ENGINEERS, INC.
By: _____
9/30/13 West Basin Modification

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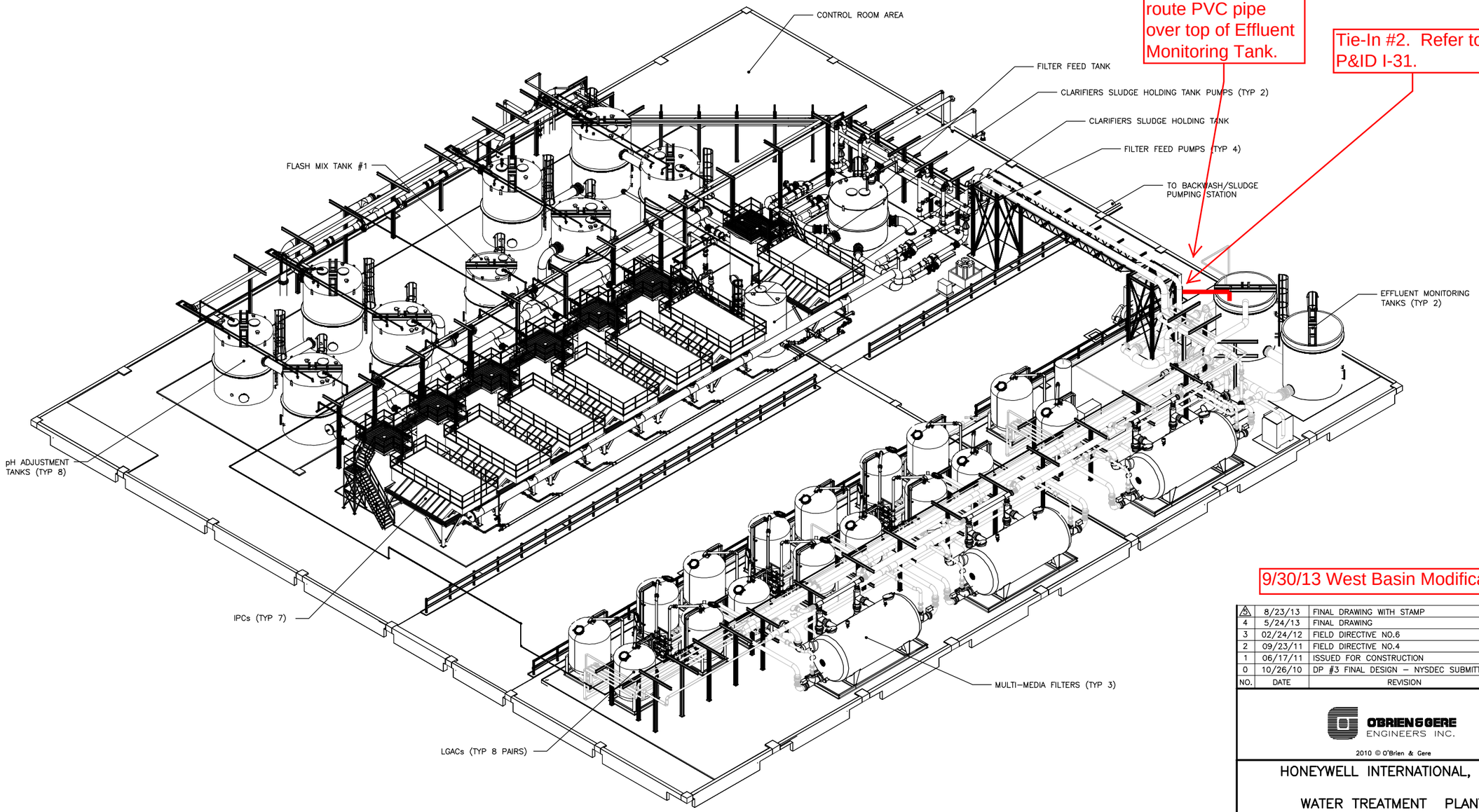
HONEYWELL INTERNATIONAL, INC.

WATER TREATMENT PLANT
TOWN OF CAMILLUS, NEW YORK

PROCESS AND INSTRUMENTATION
TREATED WATER PUMPS
P&ID

IN CHARGE OF BEW
DESIGNED BY GBE CHECKED BY PDS
DRAWN BY JAS
FILE NO. 1163.45613-I10
DATE JUNE 3, 2011
I-31



Install tee on existing treated water return line above existing valve. Add manual valve HV-3010 and route PVC pipe over top of Effluent Monitoring Tank.

Tie-In #2. Refer to P&ID I-31.

ISOMETRIC

9/30/13 West Basin Modification

NO.	DATE	REVISION	INIT.
5	8/23/13	FINAL DRAWING WITH STAMP	
4	5/24/13	FINAL DRAWING	
3	02/24/12	FIELD DIRECTIVE NO.6	
2	09/23/11	FIELD DIRECTIVE NO.4	
1	06/17/11	ISSUED FOR CONSTRUCTION	
0	10/26/10	DP #3 FINAL DESIGN – NYSDEC SUBMITTAL	

HONEYWELL INTERNATIONAL, INC.

WATER TREATMENT PLANT
TOWN OF CAMILLUS, NEW YORK

MECHANICAL

WTP ISOMETRIC

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED ENGINEER, TO ALTER THIS DOCUMENT.

STATE OF NEW YORK · BRIANE WHITE · 072136 · LICENSED PROFESSIONAL ENGINEER

IN CHARGE OF JSR
DESIGNED BY GBE CHECKED BY PDS
DRAWN BY JAS

FILE NO. 1163.45613-M0
DATE OCT. 26, 2010

M-0

T-1200
IPC-1200
T-1300
HV-1301
8"-SLUDGE-4303-PVC80
2½"-VT-1101-PVC80
8"-SLUDGE-4302-PVC80
PU-4301
PU-4302
8"-VT-3900-PVC80
8"-WW-0204-CS8
8"-VT-3900-PVC80
16"-TRWW-3109-CS8
6"-TRWW-3106-PVC80
10"-NaOH-CARRIER PIPE-PVC80
6"-COAG-CARRIER PIPE-PVC80
1½"-PA-3826-C4
HV-1201
12"-WW-1005-CS8
℄ EL. 442.33'
24"-WW-0400-CS8
T-0400
8"-VT-3900-PVC80
℄ EL. 447.19'
24"-TRWW-1001-CS8
T-0500
24"-WW-0300-CS8
T-0200
24"-WW-0105-CS8
8"-WW-0204-CS8
24"-WW-0105-CS8
HV-0209
HV-3113
HV-0207
NOTE 1
6"-TRWW-3106-PVC80
T-0900
24"-WW-0800-CS8
HV-0903
HV-0902
T-0100
HV-0108
FCV-0200
FE-0200
(6) 1"-H2S04 IN 8" CARRIER
FIELD ROUTE TO END POINTS
NOTE 2
6"-WW-0102-HDPE (WINTER FEED)
16"-TRWW-3109-CS8
T-0500
FE-0103
1½"-PA-3826-C4
HV-0111
HV-3112
HV-0107
20"-WW-0101-CS8
℄ EL. 448.25'
FV-0101
FE-0101
FCV-0102
16"-TRWW-3113-CS8
℄ EL. 448.25'
2"-VT-0106-PVC80
3"-VT-3901-PVC80

NOTES:

1. REFER TO M-16 FOR FLOOR PENETRATIONS DETAIL.
2. INSTALL 42" LONG CS8 SPOOL PIECE. INSTALL TURBIDIMETER AE-200B ON CS8 SPOOL PIECE WITH 30" UPSTREAM STRAIGHT LENGTH AND WITH 12" DOWNSTREAM STRAIGHT LENGTH.

Tap connections for TSS and pH instrumentation in the vertical

Tie-In #1. Refer to P&ID I-31.

Cut tee into existing return line to East Basin just above existing isolation valve HV-3175. Add manual valve HV-3176 above existing valve. Provide new manual valve HV-3177 on the new line exiting the building. End the new line outside the building with a flange for connection by others.

pH ADJUSTMENT TANKS ISOMETRIC (A / M-1)
NOT TO SCALE

9/30/13 West Basin Modification

NO.	DATE	REVISION	INIT.
6	8/23/13	FINAL DRAWING WITH STAMP	
5	5/24/13	FINAL DRAWING	
4	02/24/12	FIELD DIRECTIVE NO.6	
3	11/11/11	FIELD DIRECTIVE NO.5	
2	09/23/11	FIELD DIRECTIVE NO.4	
1	06/17/11	ISSUED FOR CONSTRUCTION	
0	10/26/10	DP #3 FINAL DESIGN – NYSDEC SUBMITTAL	

O'BRIEN & GERE ENGINEERS INC.

HONEYWELL INTERNATIONAL, INC.

WATER TREATMENT PLANT
TOWN OF CAMILLUS, NEW YORK

MECHANICAL

pH ADJUSTMENT TANKS ISOMETRIC

IN CHARGE OF BEW	FILE NO. 1163.45613-M5	M-5
DESIGNED BY GBE CHECKED BY PDS	DATE OCT. 26, 2010	
DRAWN BY JAS		

Figure 1

UPPER NINEMILE CREEK

AIRPORT ROAD

ROAD CROSSING

EAST SCA BASIN

PHASE III (16 ACRES)

LIQUID CONVEYANCE CULVERT

EAST SUMP

FORMER SCA WEST SUMP DISCHARGE LINE; TERMINATE AND TEE FOR NEW WTP DISCHARGE

NEW 16" WEST BASIN LINE (TO/FROM WTP)

ROAD CROSSING

WEST SUMP

WEST SCA BASIN

BLIND FLANGES BOLTED/WELDED ON BOTH ENDS OF CONVEYANCE CULVERTS

PHASE I (25 ACRES)

WTP

SEE DRAWING 444853-200-M-025 FOR PIPING DETAILS

SEE P&IDs I-30 AND I-31 FOR PIPING DETAILS

PHASE II (24 ACRES)

WASTEBED 13

WASTEBED 12

WASTEBED 14

N 1121000

N 1120000

N 1119000

E 908000

SCALE IN FEET 0 120' 240'

NOTES:

LEGEND

- 430 — EXISTING GROUND ELEVATION
- 440 — PROPOSED PERIMETER BERM
- EXISTING ROAD
- PHASE BOUNDARY

PRELIMINARY

NOT FOR CONSTRUCTION

NO.	DESCRIPTION	DATE	DRAWN	CHK'D	APPV'D
A	FOR INFORMATION ONLY	10/3/13	JTS	THA	

DRAWN BY		DATE
CHECKED BY		DATE
APPROVED BY		DATE
PROJECT MGR.		DATE

SEAL

PARSONS
COMMERCIAL TECHNOLOGY GROUP

OFFICE
301 PLAINFIELD ROAD
SYRACUSE, NY 13212
(315) 451-9560

JOB 444853

WBS

PROJECT TITLE

Honeywell
ONONDAGA LAKE
SEDIMENT MANAGEMENT DESIGN
SYRACUSE, NEW YORK

DRAWING TITLE

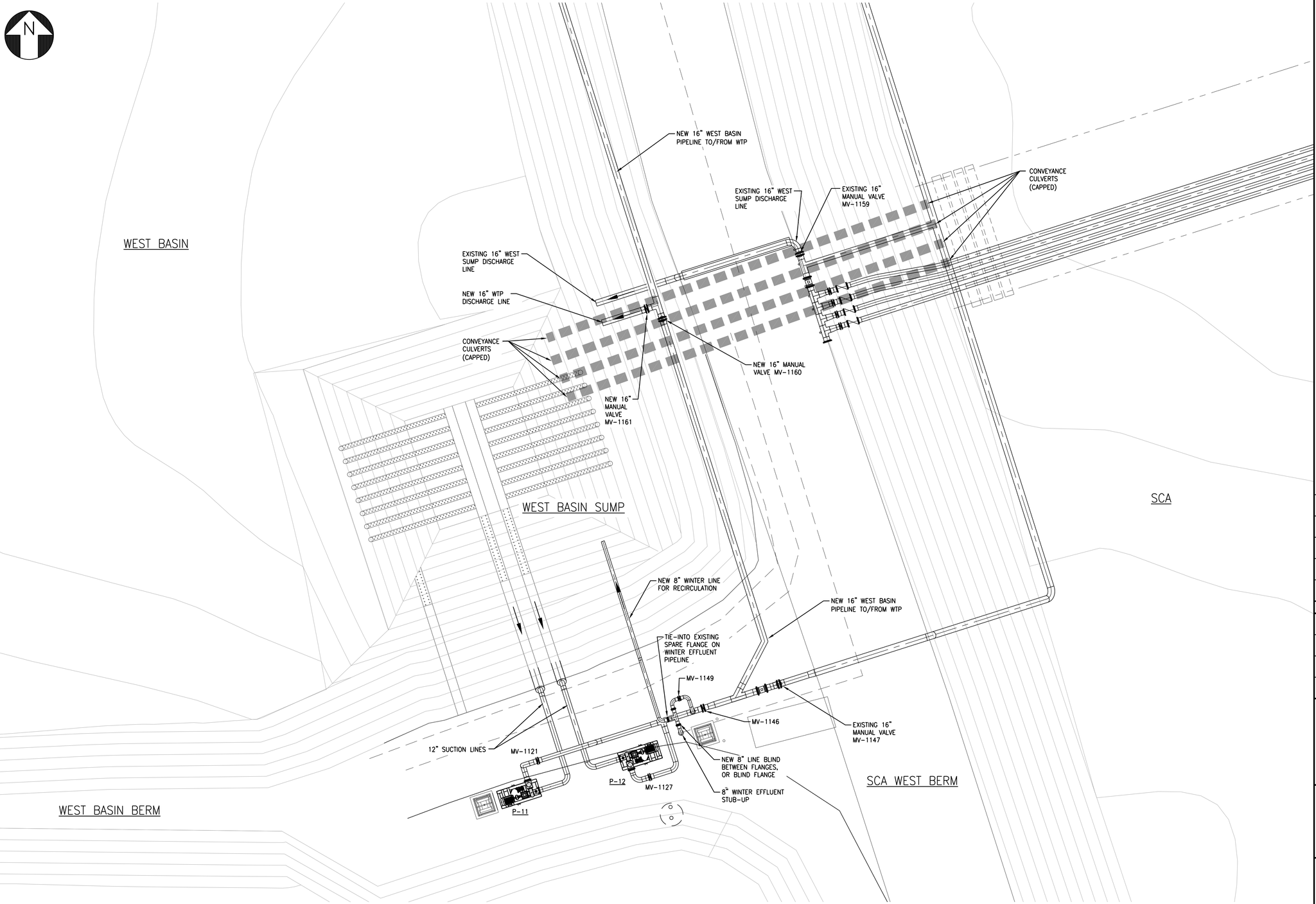
WEST BASIN PIPELINE PLAN

SCALE: 1" = 120'
(IF PRINTED ON 22x34 SHEET)

DRAWING NO. 444853-200-M-024

REV. A

FILE NAME: P:\HONEYWELL -SYR\444853 - LAKE DETAIL DESIGN\10 TECHNICAL CATEGORIES\10.1 CAD\DESIGN_TASK 200 SED-MGMT DESIGN\MECH\SCA WTP TO WEST BASIN\M-024\444853-200-M-024.DWG
PLOT DATE: ---- PLOTTED BY: SWALIA, JACK



SCA WEST BASIN TRANSFER PUMP PIPING PARTIAL PLAN

SCALE: 3/32" = 1'-0"

32 16 0 32 64

SCALE: 1/32"=1'-0"

NOTES:

PRELIMINARY

NOT FOR CONSTRUCTION

NO.	DESCRIPTION	DATE	DRAWN	CHK'D	APPV'D
A	ISSUED FOR INFORMATION	10/3/13	JTS	THA	

DRAWN BY		DATE
CHECKED BY		DATE
APPROVED BY		DATE
PROJECT MGR.		DATE

SEAL

PARSONS
COMMERCIAL TECHNOLOGY GROUP

OFFICE
301 PLAINFIELD ROAD
SYRACUSE, NY 13212
(315) 451-9560

JOB 444853

WBS 04620

PROJECT TITLE

Honeywell
ONONDAGA LAKE
SEDIMENT MANAGEMENT DESIGN
SYRACUSE, NEW YORK

DRAWING TITLE

SCA WEST BASIN
WEST BASIN PIPLINE

SCALE: SCALE 3/32" =1'-0" (IF PRINTED ON 22x34 SHEET)

DRAWING NO. 444853-200-M-025

REV. A

FILE NAME: P:\HONEYWELL -SYR\444853 - LAKE DETAIL DESIGN\10 TECHNICAL CATEGORIES\10.1 CAD\DESIGN_TASK 200 SED-MGMT DESIGN\MECH\SCA WTP TO WEST BASIN\M-025\444853-200-M-025.DWG
PLOT DATE: 10/4/13 PLOTTED BY: SIVALIA, JACK