

SITE OBSERVATION REPORT

PROJECT NO.:	170197601	DATE:	Tuesday, May 03, 2022
PROJECT:	Willets Point – Phase 1 Buildings OU-1 BCP Site No. C241146	WEATHER:	Partly Cloudy, 55-65’s °F
LOCATION:	Queens, NY	TIME:	6:30 a.m. – 3:30 p.m.
CLIENT:	Queens Development Group, LLC	BCP SITE ID:	C241146
CONTRACTOR:	AARCO Environmental Services Corp. (AARCO)	OBSERVER:	Harrison Bluestone Conrad Kieras
CONTRACTOR’S EQUIPMENT: <ul style="list-style-type: none">Two CME55 – Truck Mounted RigHand Tools	PRESENT AT SITE: <div>Langan: Harrison Bluestone, Conrad Kieras</div> <div>AARCO: (Driller): 6-person crew</div> <div>Peak Security Plus (Site Security): 1-person crew (overnight and weekend only)</div>		

PROJECT SUMMARY

Langan was on-site to observe borings in accordance with NYCBC Section 1704.7.4 and the contract documents and document the activities below in accordance with the April 29, 2022 NYSDEC-approved Geotechnical Investigation Work Plan.

*NYCBC = New York City Building Code, 2014 Edition

All elevations are referenced to the North American Vertical Datum of 1988 (NAVD88). Depths and elevations are approximate.

GENERAL OBSERVATIONS

- Langan arrived on site at 6:30 am
- Drillers mobilized to LB-1 and LB-2. AARCO hand dug the 2-foot site cap and segregated prior to drilling. Drilling began at 9:00 a.m.
- Drilling concluded for the day at LB-1 and LB-2 at 2:30 p.m. at approximately 60' and 75' respectively, below ground surface.
- Langan and AARCO left site at 3:30 p.m.

ENVIRONMENTAL OBSERVATIONS

1. Impacts Observed

- None

2. Sampling

- No environmental samples

3. Material Tracking

- None

4. Community Air Monitoring Plan Activities

- Langan performed community air monitoring at the perimeter of the work area at one upwind and one downwind locations during intrusive work. Implementation of the Community Air Monitoring Plan (CAMP) included air monitoring for particulate matter for particulates less than 10 µm in diameter (PM10) and volatile organic compounds (VOC).

Cc: Vijay Veluchamy, P.E

By: Harrison Bluestone, Conrad Kieras

SITE OBSERVATION REPORT

- b. No fugitive dust or odors associated with site activities were observed migrating from the site.

PROJECT PROGRESS

1. Geotechnical borings:

- a. Borings completed today: 0
- b. Borings in progress: 2
- c. Completed borings to date: 27 (out of 27)

2. SCPT probes:

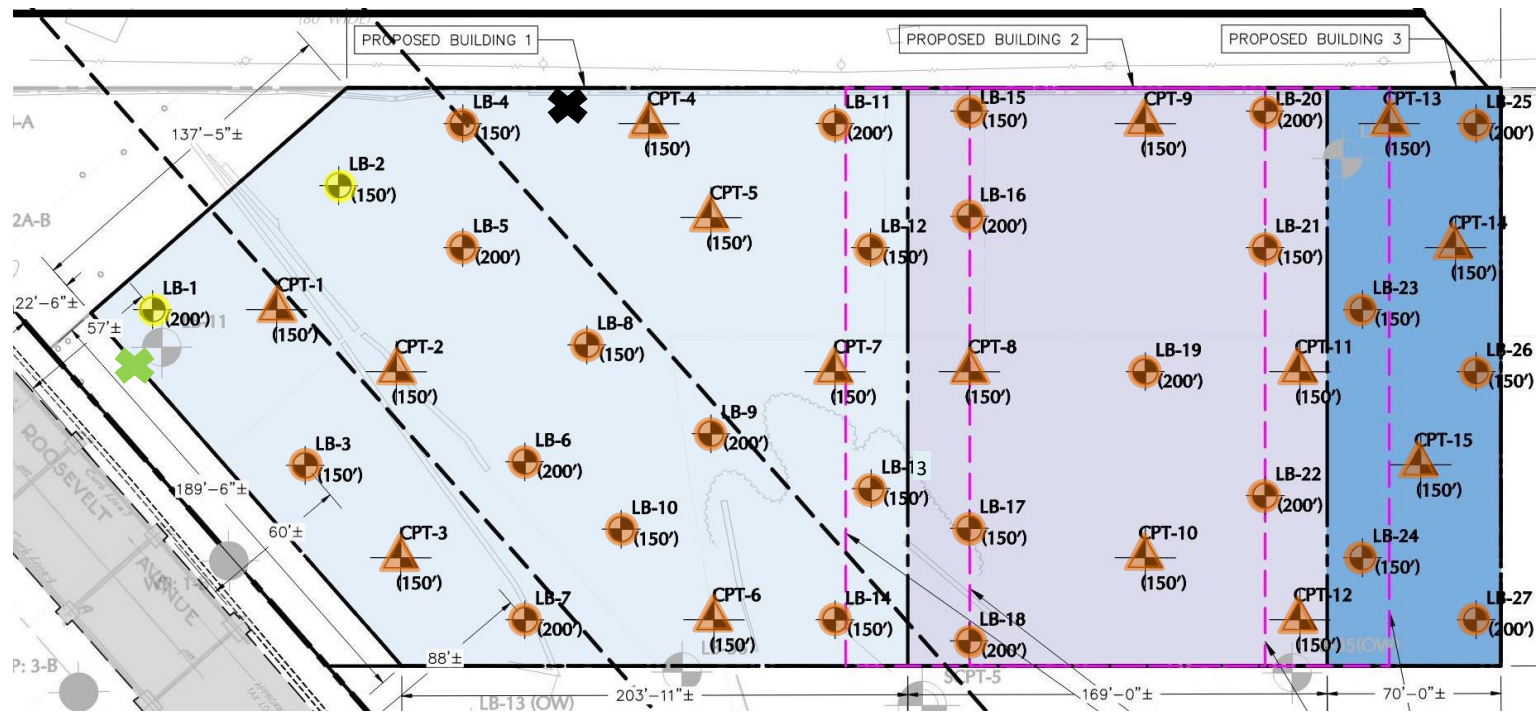
- a. SCPT probes completed today: 0
- b. SCPT probes in progress: 0
- c. Completed SCPT probes to date: 15 (out of 15)

Cc: Vijay Veluchamy, P.E.

By: Eleni Kyriacou, Karly Summerlin

SITE OBSERVATION REPORT

FIGURE 1: SUBSURFACE INVESTIGATION PLAN – Borings and SCPTs



- Boring to be Completed
- Boring in Progress
- Boring Completed

- ▲ sCPT to be Completed
- ▲ sCPT in Progress
- ▲ sCPT Completed

- ✖ CAMP Upwind
- ✖ CAMP Downwind

Cc: Vijay Veluchamy, P.E

By: Harrison Bluestone, Conrad Kieras

SITE OBSERVATION REPORT

Photos:



Photo 1: Rig Location at LB-1

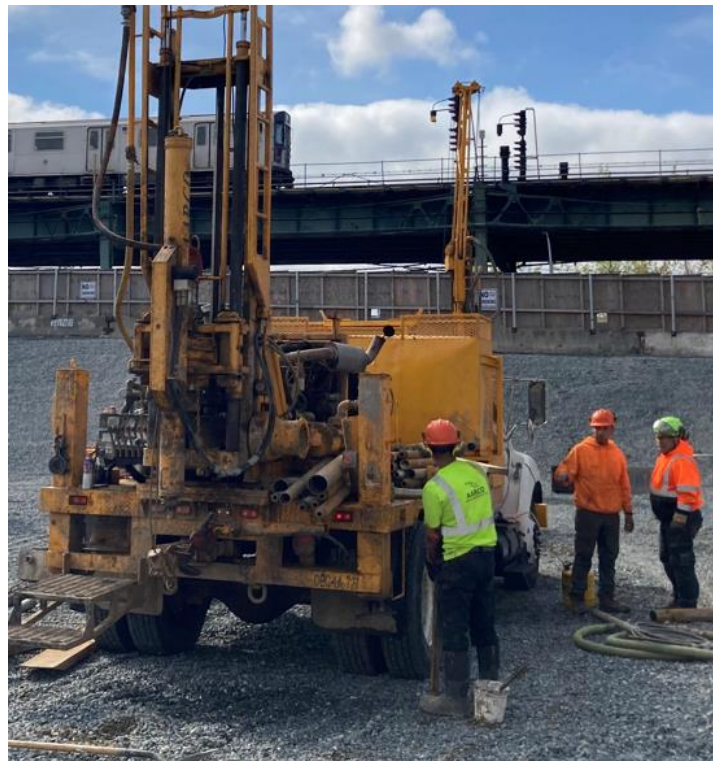


Photo 2: Rig Location at LB-2

Cc: Vijay Veluchamy, P.E

By: Harrison Bluestone, Conrad Kieras

SITE OBSERVATION REPORT

PROJECT NO.:	170197601	DATE:	Wednesday, May 04, 2022
PROJECT:	Willets Point – Phase 1 Buildings OU-1 BCP Site No. C241146	WEATHER:	Rain, 55-65’s °F
LOCATION:	Queens, NY	TIME:	6:30 a.m. – 3:30 p.m.
CLIENT:	Queens Development Group, LLC	BCP SITE ID:	C241146
CONTRACTOR:	AARCO Environmental Services Corp. (AARCO)	OBSERVER:	Harrison Bluestone Conrad Kieras
CONTRACTOR’S EQUIPMENT: <ul style="list-style-type: none">Two CME55 – Truck Mounted RigHand Tools	PRESENT AT SITE: Day 2 Langan: Harrison Bluestone, Conrad Kieras AARCO: (Driller): 6-person crew Peak Security Plus (Site Security): 1-person crew (overnight and weekend only)		

PROJECT SUMMARY

Langan was on-site to observe borings in accordance with NYCBC Section 1704.7.4 and the contract documents and document the activities below in accordance with the April 29, 2022 NYSDEC-approved Geotechnical Investigation Work Plan.

*NYCBC = New York City Building Code, 2014 Edition

All elevations are referenced to the North American Vertical Datum of 1988 (NAVD88). Depths and elevations are approximate.

GENERAL OBSERVATIONS

- Langan arrived on site at 6:30 am
- Drillers resumed drilling LB-1 and LB-2 at 7:10 am.
- Drilling concluded for the day at LB-1 and LB-2 at 3:00 p.m. at approximately 145' and 150' respectively, below ground surface.
- Boring LB-02 is complete. Upon completion, the borehole was backfilled with non-impacted drilling cuttings and clean Morie/FilPro bagged sand, from the bottom of the borehole to the bottom of the site cap. The material was left to settle overnight and the site cap will be replaced using material from the segregated stockpile tomorrow morning.
- The drill rig from LB-2 was mobilized to LB-3.
- Langan and AARCO left site at 3:30 p.m.

ENVIRONMENTAL OBSERVATIONS

1. Impacts Observed

- a. None

2. Sampling

- a. No environmental samples

3. Material Tracking

- a. None

4. Community Air Monitoring Plan Activities

Cc:	Vijay Veluchamy, P.E	By:	Harrison Bluestone, Conrad Kieras
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SITE OBSERVATION REPORT

- a. Community air monitoring was not implemented due to rain.
- b. No fugitive dust or odors associated with site activities were observed migrating from the site.

PROJECT PROGRESS

1. Geotechnical borings:

- a. Borings completed today: 1
- b. Borings in progress: 1
- c. Completed borings to date: 1 (out of 27)

2. SCPT probes:

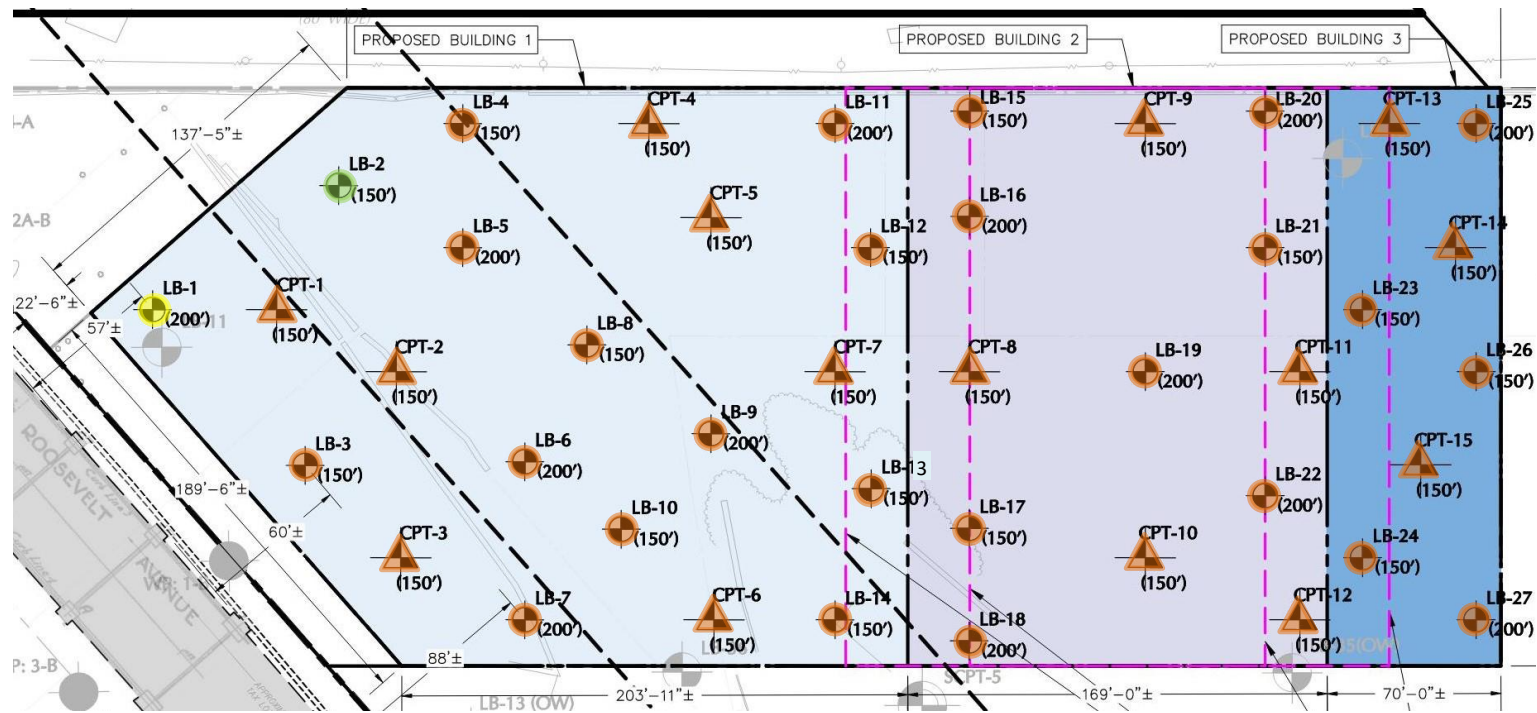
- a. SCPT probes completed today: 0
- b. SCPT probes in progress: 0
- c. Completed SCPT probes to date: 0 (out of 15)

Cc: Vijay Veluchamy, P.E.

By: Harrison Bluestone, Conrad Kieras

SITE OBSERVATION REPORT

FIGURE 1: SUBSURFACE INVESTIGATION PLAN – Borings and SCPTs



- Boring to be Completed
- Boring in Progress
- Boring Completed

- ▲ sCPT to be Completed
- ▲ sCPT in Progress
- ▲ sCPT Completed

- ✖ CAMP Upwind
- ✖ CAMP Downwind

Cc: Vijay Veluchamy, P.E

By: Harrison Bluestone, Conrad Kieras

SITE OBSERVATION REPORT

Photos:



Photo 1: Rig Location at LB-1



Photo 2: Rig Location at LB-3

Cc: Vijay Veluchamy, P.E

By: Harrison Bluestone, Conrad Kieras

SITE OBSERVATION REPORT

PROJECT NO.:	170197601	DATE:	Thursday, May 05, 2022
PROJECT:	Willeys Point – Phase 1 Buildings OU-1 BCP Site No. C241146	WEATHER:	Sunny, 55-70’s °F
LOCATION:	Queens, NY	TIME:	6:00 a.m. – 3:30 p.m.
CLIENT:	Queens Development Group, LLC	BCP SITE ID:	C241146
CONTRACTOR:	AARCO Environmental Services Corp. (AARCO)	OBSERVER:	Harrison Bluestone Conrad Kieras
CONTRACTOR’S EQUIPMENT: <ul style="list-style-type: none">Two CME55 – Truck Mounted RigHand Tools	PRESENT AT SITE: Day 3 Langan: Harrison Bluestone, Conrad Kieras AARCO: (Driller): 6-person crew Peak Security Plus (Site Security): 1-person crew (overnight and weekend only)		

PROJECT SUMMARY

Langan was on-site to observe borings in accordance with NYCBC Section 1704.7.4 and the contract documents and document the activities below in accordance with the April 29, 2022 NYSDEC-approved Geotechnical Investigation Work Plan.

*NYCBC = New York City Building Code, 2014 Edition

All elevations are referenced to the North American Vertical Datum of 1988 (NAVD88). Depths and elevations are approximate.

GENERAL OBSERVATIONS

- Langan and AARCO (two crews) arrived on site at 6:00 am.
- One crew started by replacing the site cap at LB-2, following which they resumed drilling LB-1.
- The second crew hand dug the 2-foot site cap at LB-3, segregated the excavated material and began drilling at 6:10 am.
- Drilling concluded for the day at LB-1 and LB-3 at 3:00 p.m. at approximately 200 and 116 feet below grade, respectively.
- Boring LB-1 is complete. Upon completion, the borehole was backfilled with non-impacted drilling cuttings and clean Morie/FilPro bagged sand, from the bottom of the borehole to the bottom of the site cap. The material was left to settle overnight and the site cap will be replaced using material from the segregated stockpile tomorrow morning. Boring LB-3 is in progress.
- Langan and AARCO left site at 3:30 p.m.

ENVIRONMENTAL OBSERVATIONS

1. Impacts Observed

- None

2. Sampling

- No environmental samples

3. Material Tracking

- None

Cc:	Vijay Veluchamy, P.E	By:	Harrison Bluestone, Conrad Kieras
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SITE OBSERVATION REPORT

4. Community Air Monitoring Plan Activities

- a. Langan performed community air monitoring at the perimeter of the work area at one upwind and one downwind locations during intrusive work. Implementation of the Community Air Monitoring Plan (CAMP) included air monitoring for particulate matter for particulates less than 10 μm in diameter (PM10) and volatile organic compounds (VOC).
- b. No fugitive dust or odors associated with site activities were observed migrating from the site.

PROJECT PROGRESS

1. Geotechnical borings:

- a. Borings completed today: 1
- b. Borings in progress: 1
- c. Completed borings to date: 2 (out of 27)

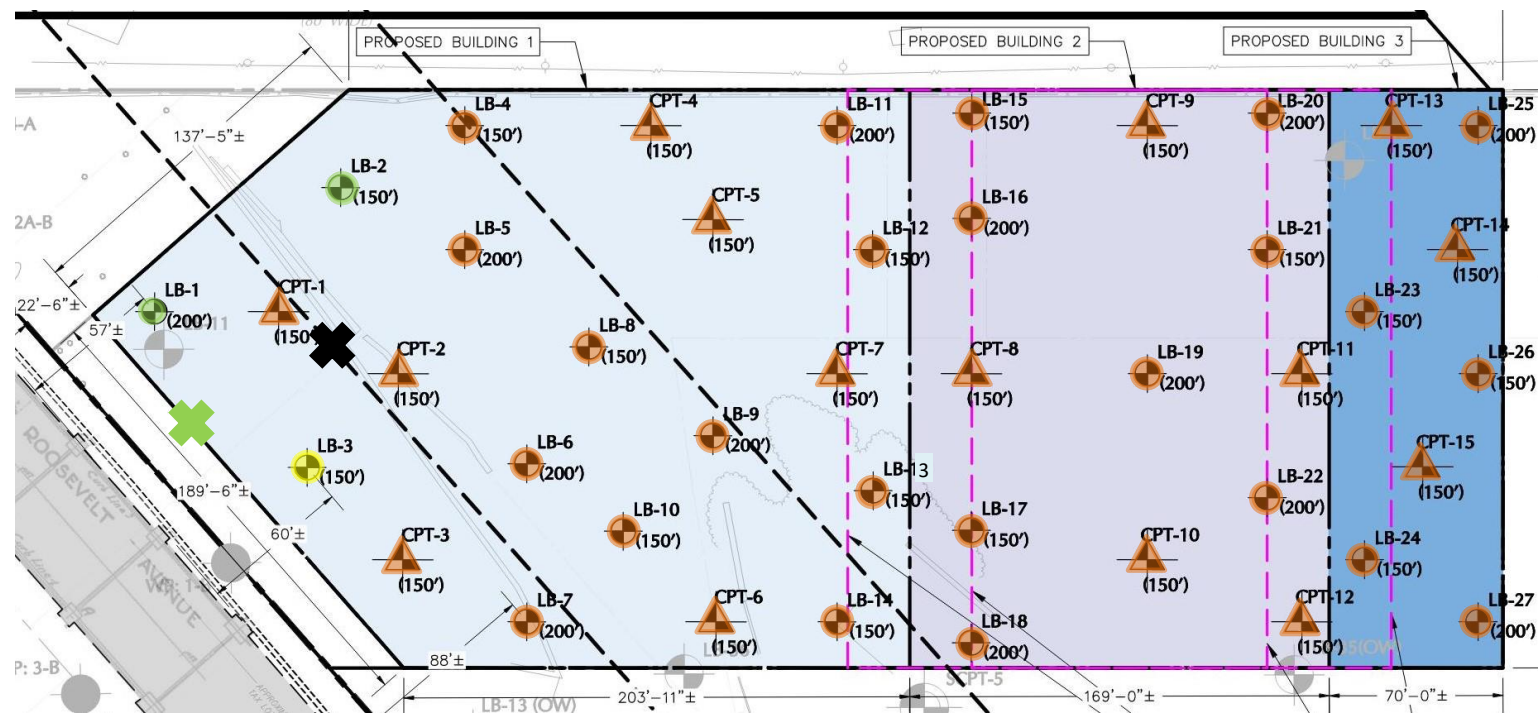
2. SCPT probes:

- a. SCPT probes completed today: 0
- b. SCPT probes in progress: 0
- c. Completed SCPT probes to date: 0 (out of 15)

Cc:	Vijay Veluchamy, P.E.	By:	Harrison Bluestone, Conrad Kieras
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SITE OBSERVATION REPORT

FIGURE 1: SUBSURFACE INVESTIGATION PLAN – Borings and SCPTs



- Boring to be Completed
- Boring in Progress
- Boring Completed

- ▲ sCPT to be Completed
- ▲ sCPT in Progress
- ▲ sCPT Completed

- ✖ CAMP Upwind
- ✖ CAMP Downwind

Cc: Vijay Veluchamy, P.E

By: Harrison Bluestone, Conrad Kieras

SITE OBSERVATION REPORT

Photos:



Photo 1: LB-02 backfilled with site cap



Photo 2 & 3: Camp Station Setups (Left is upwind, and right is downwind)

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By: Harrison Bluestone, Conrad Kieras

SITE OBSERVATION REPORT

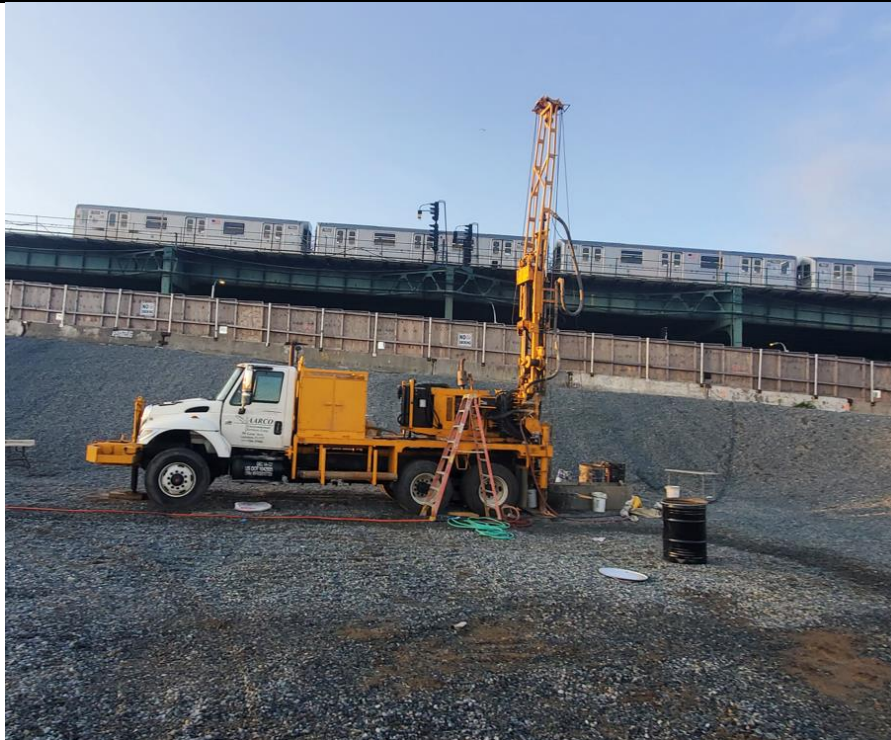


Photo 4: Truck rig over LB-01

Cc: Vijay Veluchamy, P.E.

By: Harrison Bluestone, Conrad Kieras

SITE OBSERVATION REPORT

PROJECT NO.:	170197601	DATE:	Friday, May 06, 2022
PROJECT:	Willeys Point – Phase 1 Buildings OU-1 BCP Site No. C241146	WEATHER:	Rain, 55-70's °F
LOCATION:	Queens, NY	TIME:	6:00 a.m. – 3:00 p.m.
CLIENT:	Queens Development Group, LLC	BCP SITE ID:	C241146
CONTRACTOR:	AARCO Environmental Services Corp. (AARCO)	OBSERVER:	Harrison Bluestone Conrad Kieras
CONTRACTOR'S EQUIPMENT: <ul style="list-style-type: none">Two CME55 – Truck Mounted RigHand ToolssCPT Truck Rig	PRESENT AT SITE: Day 4 Langan: Harrison Bluestone, Conrad Kieras AARCO: (Driller): 6-person crew Peak Security Plus (Site Security): 1-person crew		

PROJECT SUMMARY

Langan was on-site to observe borings in accordance with NYCBC Section 1704.7.4 and the contract documents and document the activities below in accordance with the April 29, 2022 NYSDEC-approved Geotechnical Investigation Work Plan.

*NYCBC = New York City Building Code, 2014 Edition

All elevations are referenced to the North American Vertical Datum of 1988 (NAVD88). Depths and elevations are approximate.

GENERAL OBSERVATIONS

- Langan and AARCO (two crews) arrived on site at 6:00 am.
- One crew started by replacing the site cap at LB-1 at 6:10 am. Once the site cap was replaced, they dug out the 2-foot site cap at LB-4, segregated the excavated material, and began drilling at 6:30 am.
- The ConeTec sCPT Truck Rig was dropped off on site in the morning to be ready to drill Monday morning.
- The second crew continued drilling at LB-3 and completed the boring. Upon completion, the borehole was backfilled with non-impacted drilling cuttings and clean Morie/FilPro bagged sand, from the bottom of the borehole to the bottom of the site cap. The location was then covered using the original segregated stockpile from that location. Work at this location finished by around 11:30 am at a depth of 142' below grade.
- The second crew then moved to location LB-07, dug out the 2-foot site cap, segregated the excavated material, and began drilling at 12 pm.
- Drilling concluded for the day at LB-4 and LB-7 at 2:30 pm at approximately 90' and 32' feet below grade, respectively.
- Langan and AARCO left site at 3:00 pm.

ENVIRONMENTAL OBSERVATIONS

1. Impacts Observed

- None

2. Sampling

- No environmental samples

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SITE OBSERVATION REPORT

3. Material Tracking

- a. None

4. Community Air Monitoring Plan Activities

- a. Langan performed community air monitoring at the perimeter of the work area at one upwind and one downwind locations during intrusive work. Implementation of the Community Air Monitoring Plan (CAMP) included air monitoring for particulate matter for particulates less than 10 µm in diameter (PM10) and volatile organic compounds (VOC). Community air monitoring ceased once rain began around 7:30 am.
- b. No fugitive dust or odors associated with site activities were observed migrating from the site.

PROJECT PROGRESS

1. Geotechnical borings:

- a. Borings completed today: 1
- b. Borings in progress: 2
- c. Completed borings to date: 3 (out of 27)

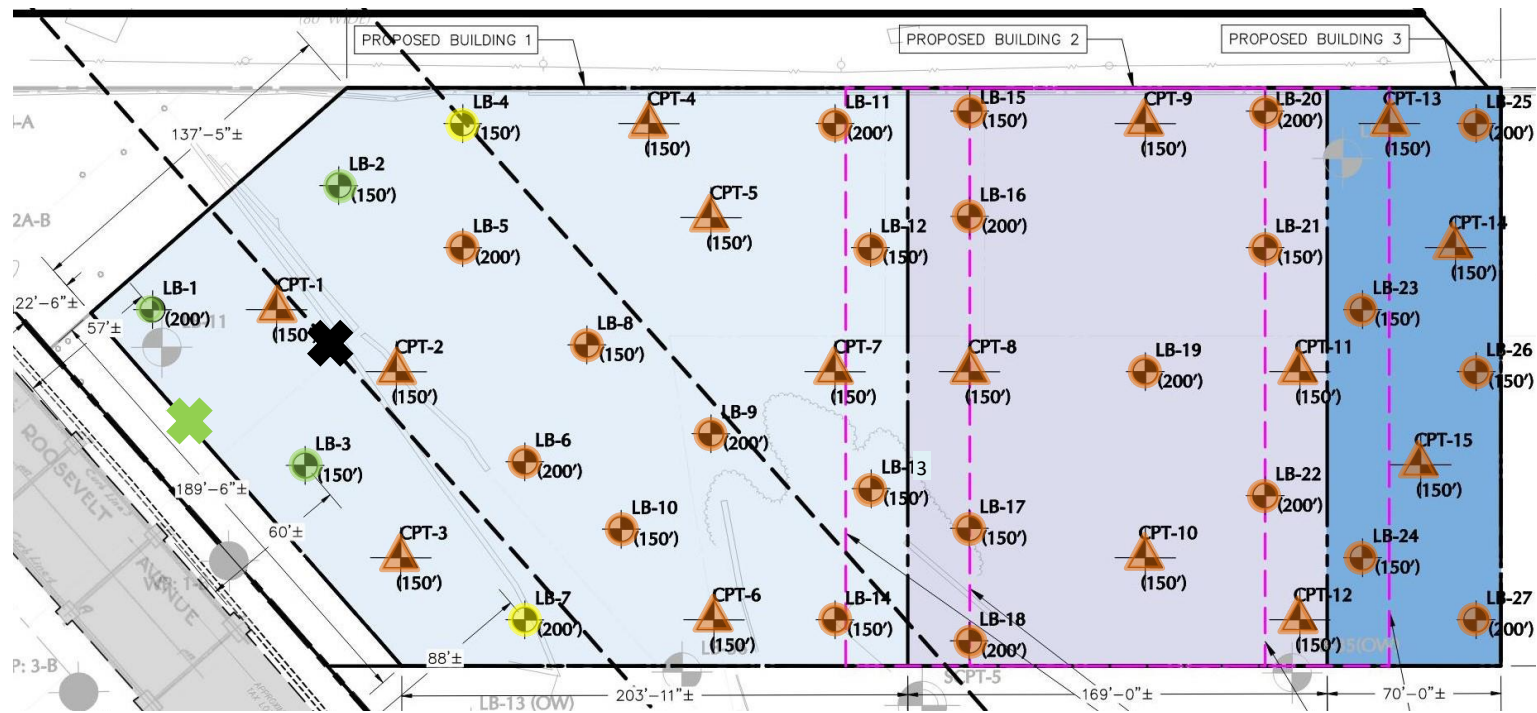
2. SCPT probes:

- a. SCPT probes completed today: 0
- b. SCPT probes in progress: 0
- c. Completed SCPT probes to date: 0 (out of 15)

Cc:	Vijay Veluchamy, P.E. Andrew Schweitzer, P.E.	By:	Harrison Bluestone, Conrad Kieras
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SITE OBSERVATION REPORT

FIGURE 1: SUBSURFACE INVESTIGATION PLAN – Borings and SCPTs



- Boring to be Completed
- Boring in Progress
- Boring Completed

- ▲ sCPT to be Completed
- ▲ sCPT in Progress
- ▲ sCPT Completed

- ✖ CAMP Upwind
- ✖ CAMP Downwind

Cc: Vijay Veluchamy, P.E.
Andrew Schweitzer, P.E.

By: Harrison Bluestone, Conrad Kieras

SITE OBSERVATION REPORT

Photos:



Photo 1: LB-01 backfilled with site cap



Photo 2: LB-03 backfilled with site cap

Cc:

Vijay Veluchamy, P.E.
Andrew Schweitzer, P.E.

By:

Harrison Bluestone, Conrad Kieras

SITE OBSERVATION REPORT



Photo 3: Truck rig over LB-04 (facing west)

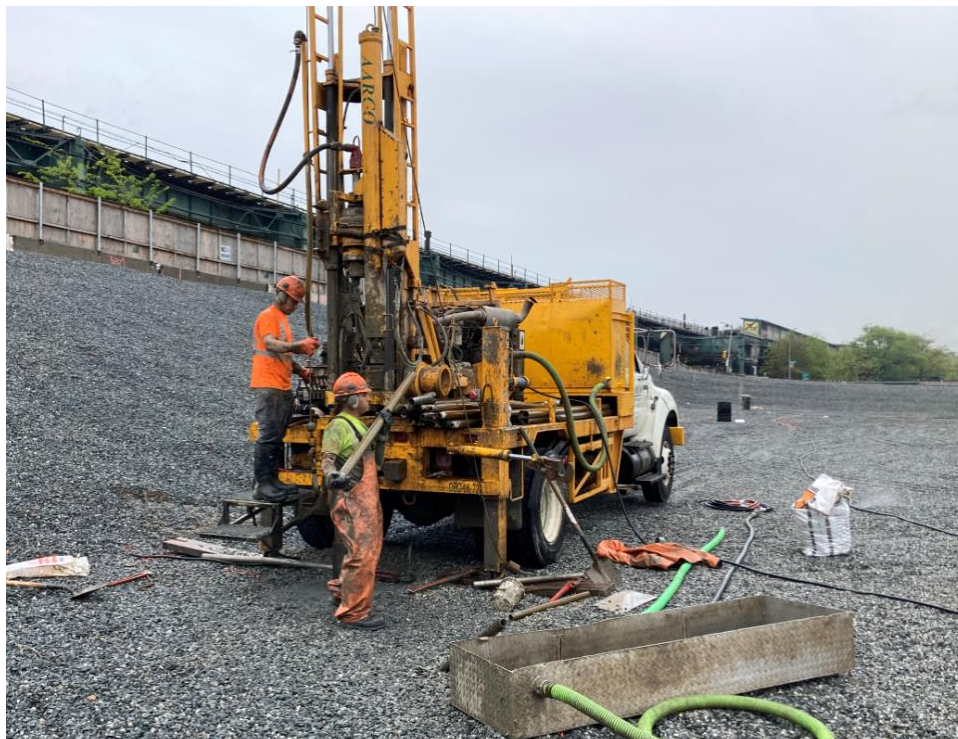


Photo 4: Truck rig over LB-07 (facing west)

Cc:	Vijay Veluchamy, P.E. Andrew Schweitzer, P.E.	By:	Harrison Bluestone, Conrad Kieras
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SITE OBSERVATION REPORT

PROJECT NO.:	170197601	DATE:	Monday, May 09, 2022
PROJECT:	Willets Point – Phase 1 Buildings OU-1 BCP Site No. C241146	WEATHER:	Clear, 50-60's °F
LOCATION:	Queens, NY	TIME:	6:00 a.m. – 4:30 p.m.
CLIENT:	Queens Development Group, LLC	BCP SITE ID:	C241146
CONTRACTOR:	AARCO Environmental Services Corp. (AARCO) ConeTec	OBSERVER:	Harrison Bluestone Conrad Kieras Nayeem Al Noman
CONTRACTOR'S EQUIPMENT:	<ul style="list-style-type: none"> Two CME55 – Truck Mounted Rig Hand Tools sCPT Truck Rig 	PRESENT AT SITE:	Day 5 Langan: Harrison Bluestone, Conrad Kieras, Nayeem Al Noman AARCO: (Driller): 6-person crew ConeTec: (Driller): 2-person crew Peak Security Plus (Site Security): 1-person crew
PROJECT SUMMARY <p>Langan was on-site to observe borings in accordance with NYCBC Section 1704.7.4 and the contract documents and document the activities below in accordance with the April 29, 2022 NYSDEC-approved Geotechnical Investigation Work Plan.</p> <p>*NYCBC = New York City Building Code, 2014 Edition</p> <p>All elevations are referenced to the North American Vertical Datum of 1988 (NAVD88). Depths and elevations are approximate.</p>			
GENERAL OBSERVATIONS <ul style="list-style-type: none"> Langan and AARCO (two crews) arrived on site at 6:00 a.m. At about 6:10 a.m., one AARCO crew resumed drilling at LB-7 and the other crew resumed drilling at LB-4. The ConeTec crew arrived on site at 8:00 a.m. and began work at 8:10 a.m. Drilling concluded for the day at LB-4 and LB-7 at 3:00 p.m. at approximately 150 and 132 feet below grade, respectively. Upon completion of LB-4, the borehole was backfilled with non-impacted drilling cuttings and clean Morie/FilPro bagged sand, from the bottom of the borehole to the bottom of the site cap. The location was then covered using the original segregated stockpile from that location. ConeTec completed three sCPTs (identified as sCPT-01, sCPT-02, and sCPT-03) by the end of the day, all to approximately 150 feet below grade. Two Langan observers and AARCO left site at 3:00 p.m. One Langan observer and ConeTec left site at 4:30 p.m. 			
ENVIRONMENTAL OBSERVATIONS <ol style="list-style-type: none"> Impacts Observed <ol style="list-style-type: none"> None Sampling <ol style="list-style-type: none"> No environmental samples Material Tracking <ol style="list-style-type: none"> None 			
Cc:	Vijay Veluchamy, P.E. Andrew Schweitzer, P.E.	By:	Harrison Bluestone, Conrad Kieras

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SITE OBSERVATION REPORT

4. Community Air Monitoring Plan Activities

- a. Langan performed community air monitoring at the perimeter of the work area at one upwind and one downwind locations during intrusive work. Implementation of the Community Air Monitoring Plan (CAMP) included air monitoring for particulate matter for particulates less than 10 µm in diameter (PM10) and volatile organic compounds (VOC).
- b. No fugitive dust or odors associated with site activities were observed migrating from the site.

PROJECT PROGRESS

1. Geotechnical borings:

- a. Borings completed today: 1
- b. Borings in progress: 1
- c. Completed borings to date: 4 (out of 27)

2. SCPT probes:

- a. SCPT probes completed today: 3
- b. SCPT probes in progress: 0
- c. Completed SCPT probes to date: 3 (out of 15)

Cc:

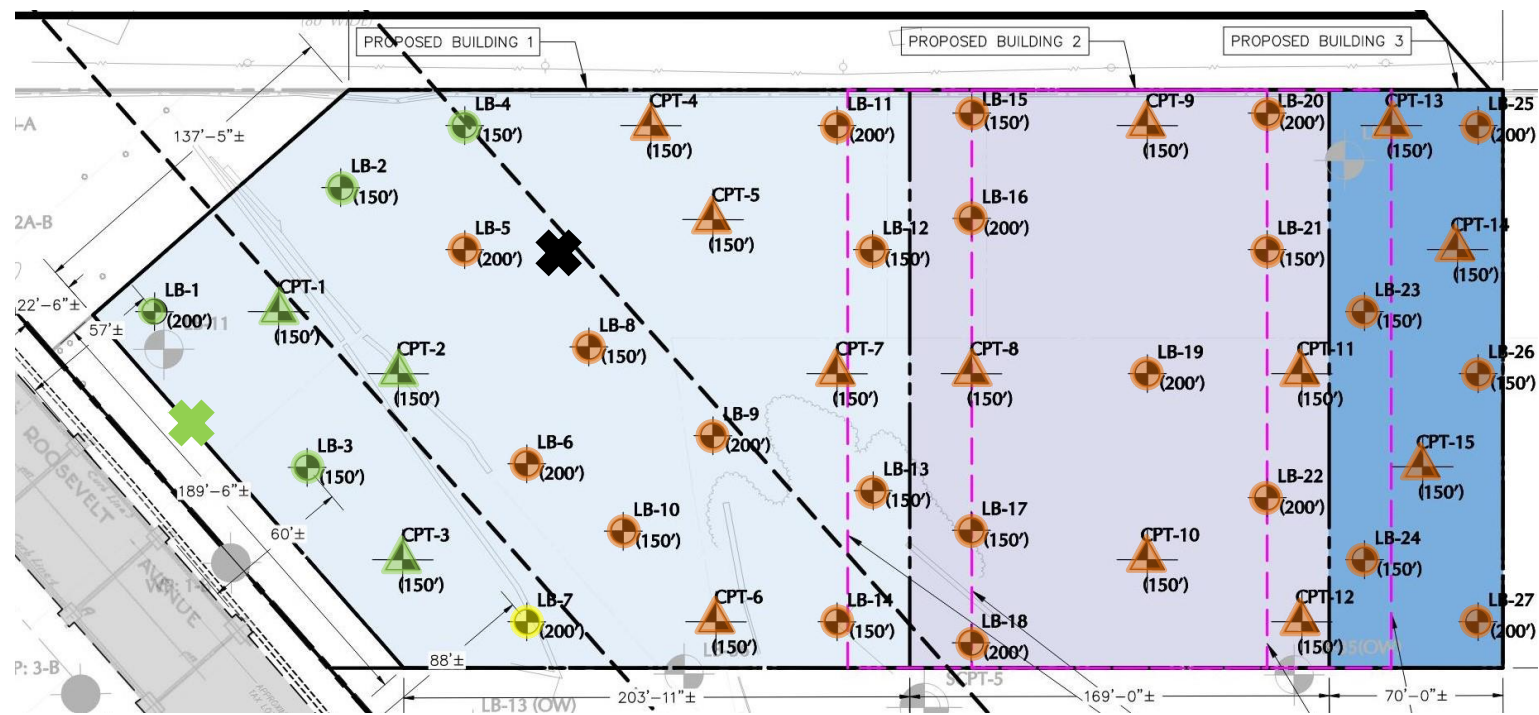
Vijay Veluchamy, P.E.
Andrew Schweitzer, P.E.

By:

Harrison Bluestone, Conrad Kieras

SITE OBSERVATION REPORT

FIGURE 1: SUBSURFACE INVESTIGATION PLAN – Borings and SCPTs



- Boring to be Completed
- Boring in Progress
- Boring Completed

- ▲ sCPT to be Completed
- ▲ sCPT in Progress
- ▲ sCPT Completed

- ✖ CAMP Upwind
- ✖ CAMP Downwind

Cc: Vijay Veluchamy, P.E. Andrew Schweitzer, P.E.	By: Harrison Bluestone, Conrad Kieras
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SITE OBSERVATION REPORT

Photos:



Photo 1: CPT truck rig over sCPT-2 (Facing South)



Photo 2: Truck rig at LB-07

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SITE OBSERVATION REPORT



Photo 3: CAMP equipment



Photo 4: CAMP equipment

Cc:

Vijay Veluchamy, P.E.
 Andrew Schweitzer, P.E.

By:

Harrison Bluestone, Conrad Kieras

SITE OBSERVATION REPORT

PROJECT NO.: 170197601		DATE: Tuesday, May 10, 2022	
PROJECT: Willets Point – Phase 1 Buildings OU-1 BCP Site No. C241146		WEATHER: Clear, 50-60's °F	
LOCATION: Queens, NY		TIME: 6:00 a.m. – 4:15 p.m.	
CLIENT: Queens Development Group, LLC		BCP SITE ID: C241146	
CONTRACTOR: AARCO Environmental Services Corp. (AARCO) ConeTec		OBSERVER: Harrison Bluestone Conrad Kieras Nayeem Al Noman	
CONTRACTOR'S EQUIPMENT: <ul style="list-style-type: none"> Two CME55 – Truck Mounted Rig Hand Tools sCPT Truck Rig 		PRESENT AT SITE: Day 6 Langan: Harrison Bluestone, Conrad Kieras, Nayeem Al Noman AARCO: (Driller): 6-person crew ConeTec: (Driller): 2-person crew Peak Security Plus (Site Security): 1-person crew	
PROJECT SUMMARY Langan was on-site to observe borings in accordance with NYCBC Section 1704.7.4 and the contract documents and document the activities below in accordance with the April 29, 2022 NYSDEC-approved Geotechnical Investigation Work Plan. <small>*NYCBC = New York City Building Code, 2014 Edition</small> All elevations are referenced to the North American Vertical Datum of 1988 (NAVD88). Depths and elevations are approximate.			
GENERAL OBSERVATIONS <ul style="list-style-type: none"> Langan and AARCO (two crews) arrived on site at 6:00 a.m. At about 6:10 a.m., one AARCO crew resumed drilling at LB-7 and the other crew started drilling at LB-25. The ConeTec crew arrived on site at 7:00 a.m. and began work at 7:10 a.m. Drilling concluded for the day at LB-25 at 3:00 p.m. and LB-7 at 4:00 p.m. at approximately 101 and 200 feet below grade, respectively. Upon completion of LB-7, the borehole was backfilled with non-impacted drilling cuttings and clean Morie/FilPro bagged sand, from the bottom of the borehole to the bottom of the site cap. The hole was left to allow the backfill to settle and it will be covered using the original segregated stockpile tomorrow. ConeTec completed two sCPTs (identified as sCPT-04, and sCPT-05) by the end of the day, at approximately 190 and 142 feet below grade respectively. Two Langan observers, ConeTec, and one AARCO crew left site at 3:00 pm. The other Langan observer and AARCO team left site at 4:15 p.m. 			
ENVIRONMENTAL OBSERVATIONS 1. Impacts Observed a. None			
Cc: Vijay Veluchamy, P.E. Andrew Schweitzer, P.E.		By: Harrison Bluestone, Conrad Kieras, Nayeem Al Noman	

SITE OBSERVATION REPORT

2. Sampling

- a. No environmental samples

3. Material Tracking

- a. None

4. Community Air Monitoring Plan Activities

- a. Langan performed community air monitoring at the perimeter of the work area at one upwind and one downwind locations during intrusive work. Implementation of the Community Air Monitoring Plan (CAMP) included air monitoring for particulate matter for particulates less than 10 µm in diameter (PM10) and volatile organic compounds (VOC).
- b. No fugitive dust or odors associated with site activities were observed migrating from the site.

PROJECT PROGRESS

1. Geotechnical borings:

- a. Borings completed today: 1
- b. Borings in progress: 1
- c. Completed borings to date: 5 (out of 27)

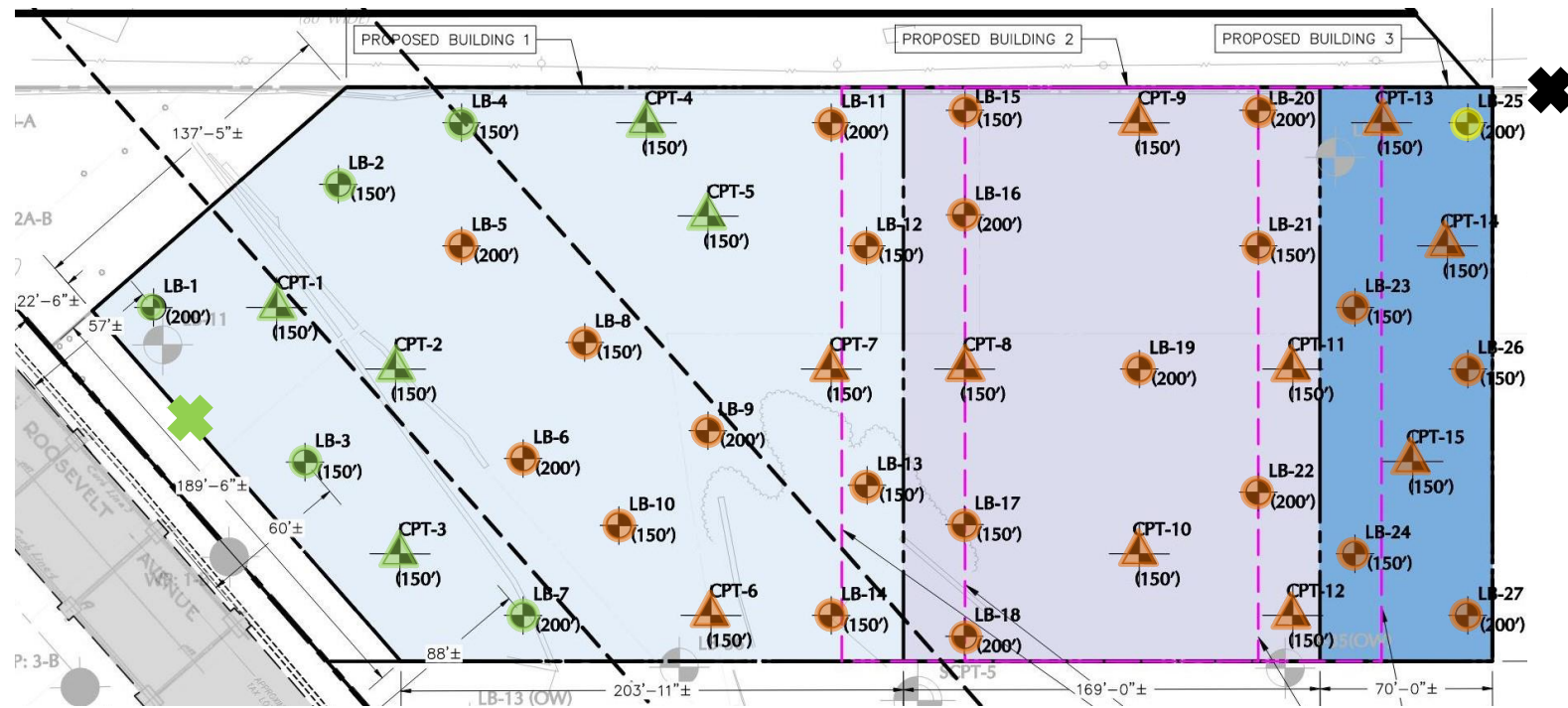
2. SCPT probes:

- a. SCPT probes completed today: 5
- b. SCPT probes in progress: 0
- c. Completed SCPT probes to date: 5 (out of 15)

Cc:	Vijay Veluchamy, P.E. Andrew Schweitzer, P.E.	By:	Harrison Bluestone, Conrad Kieras, Nayeem Al Noman
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SITE OBSERVATION REPORT

FIGURE 1: SUBSURFACE INVESTIGATION PLAN – Borings and SCPTs



- Boring to be Completed
- Boring in Progress
- Boring Completed

- ▲ sCPT to be Completed
- ▲ sCPT in Progress
- ▲ sCPT Completed

- ✖ CAMP Upwind
- ✖ CAMP Downwind

Cc: Vijay Veluchamy, P.E. Andrew Schweitzer, P.E.	By: Harrison Bluestone, Conrad Kieras, Nayeem Al Noman
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SITE OBSERVATION REPORT

Photos:



Photo 1: Truck Rig at SPT-25 (facing west)



Photo 2: CPT Rig at SCPT-04

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SITE OBSERVATION REPORT

PROJECT NO.: 170197601	DATE: Wednesday, May 11, 2022
PROJECT: Willets Point – Phase 1 Buildings OU-1 BCP Site No. C241146	WEATHER: Overcast, 50-60's °F
LOCATION: Queens, NY	TIME: 6:00 a.m. – 3:30 p.m.
CLIENT: Queens Development Group, LLC	BCP SITE ID: C241146
CONTRACTOR: AARCO Environmental Services Corp. (AARCO) ConeTec	OBSERVER: Harrison Bluestone Conrad Kieras Nayeem Al Noman
CONTRACTOR'S EQUIPMENT: <ul style="list-style-type: none"> Two CME55 – Truck Mounted Rig Hand Tools sCPT Truck Rig 	PRESENT AT SITE: Day 7 Langan: Harrison Bluestone, Conrad Kieras, Nayeem Al Noman AARCO: (Driller): 6-person crew ConeTec: (Driller): 2-person crew Peak Security Plus (Site Security): 1-person crew
PROJECT SUMMARY <p>Langan was on-site to observe borings in accordance with NYCBC Section 1704.7.4 and the contract documents and document the activities below in accordance with the April 29, 2022 NYSDEC-approved Geotechnical Investigation Work Plan.</p> <p>*NYCBC = New York City Building Code, 2014 Edition</p> <p>All elevations are referenced to the North American Vertical Datum of 1988 (NAVD88). Depths and elevations are approximate.</p>	
GENERAL OBSERVATIONS <ul style="list-style-type: none"> Langan and AARCO (two crews) arrived on site at 6:00 a.m. At about 6:10 a.m., one AARCO crew resumed drilling at LB-25 and the other crew started drilling at LB-14. The ConeTec crew arrived on site at 7:00 a.m. and began work at 7:10 a.m. Drilling concluded for the day at LB-25 and LB-14 at 3:00 p.m., at approximately 165 and 80 feet below grade, respectively. The backfill at LB-7 appears to have settled overnight. Additional clean backfill was added and the cap was matched using the original segregated stockpile. ConeTec completed two sCPTs (identified as sCPT-06, and sCPT-07) by the end of the day, at approximately 193 and 194 feet below grade, respectively. ConeTec and AARCO left at 3:00 p.m. Langan left site at 3:30 p.m. 	
ENVIRONMENTAL OBSERVATIONS <ol style="list-style-type: none"> Impacts Observed <ol style="list-style-type: none"> None Sampling <ol style="list-style-type: none"> No environmental samples 	
Cc: Vijay Veluchamy, P.E. Andrew Schweitzer, P.E.	By: Harrison Bluestone, Conrad Kieras, Nayeem Al Noman

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SITE OBSERVATION REPORT

3. Material Tracking

- a. None

4. Community Air Monitoring Plan Activities

- a. Langan performed community air monitoring at the perimeter of the work area at one upwind and one downwind locations during intrusive work. Implementation of the Community Air Monitoring Plan (CAMP) included air monitoring for particulate matter for particulates less than 10 µm in diameter (PM10) and volatile organic compounds (VOC).
- b. Upwind PID data was not recorded from 6:25 to 10:04 due to equipment malfunction.
- c. No fugitive dust or odors associated with site activities were observed migrating from the site.

PROJECT PROGRESS

1. Geotechnical borings:

- a. Borings completed today: 0
- b. Borings in progress: 2
- c. Completed borings to date: 5 (out of 27)

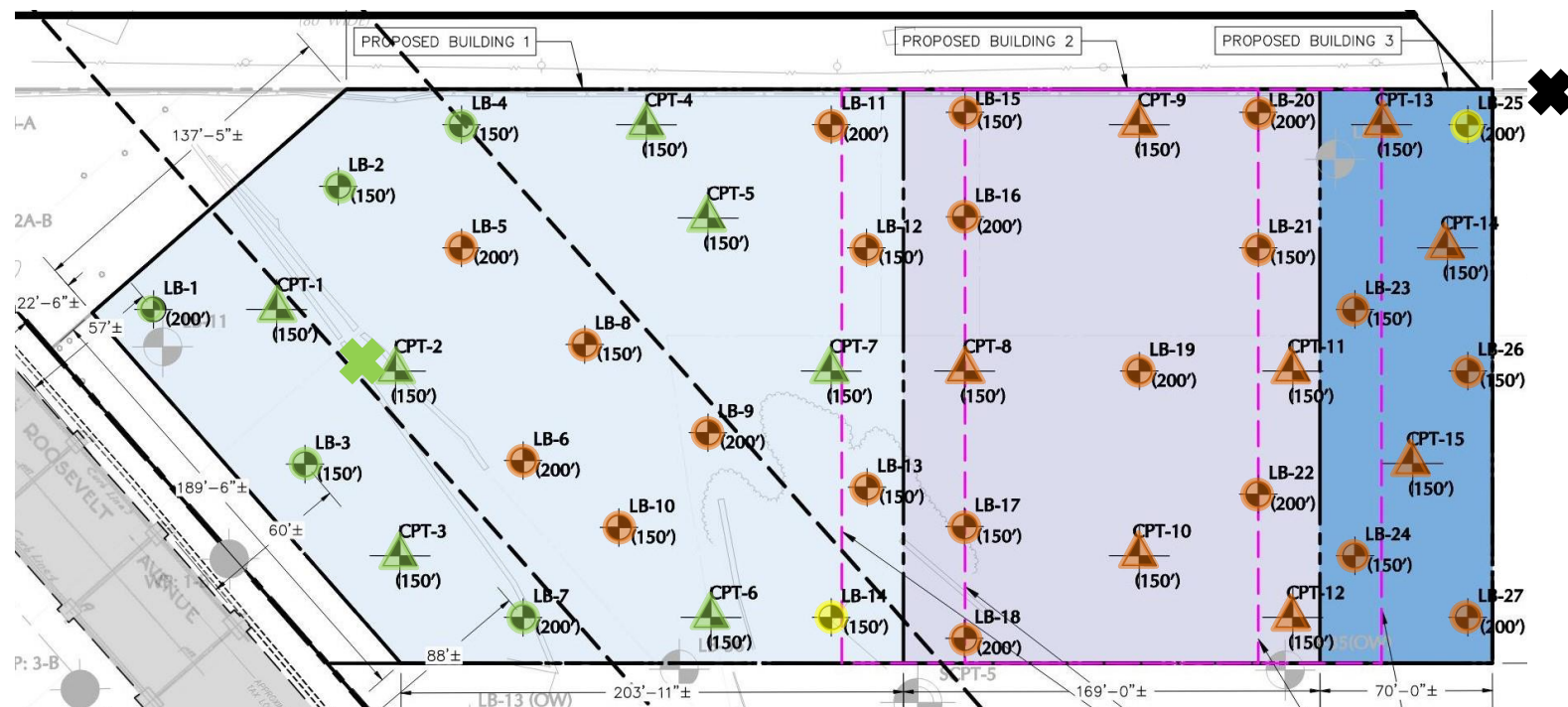
2. SCPT probes:

- a. SCPT probes completed today: 2
- b. SCPT probes in progress: 0
- c. Completed SCPT probes to date: 7 (out of 15)

Cc:	Vijay Veluchamy, P.E. Andrew Schweitzer, P.E.	By:	Harrison Bluestone, Conrad Kieras, Nayeem Al Noman
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SITE OBSERVATION REPORT

FIGURE 1: SUBSURFACE INVESTIGATION PLAN – Borings and SCPTs



- Boring to be Completed
- Boring in Progress
- Boring Completed

- ▲ sCPT to be Completed
- ▲ sCPT in Progress
- ▲ sCPT Completed

- ✖ CAMP Upwind
- ✖ CAMP Downwind

Cc: Vijay Veluchamy, P.E.
 Andrew Schweitzer, P.E.

By: Harrison Bluestone, Conrad Kieras, Nayeem Al Noman

SITE OBSERVATION REPORT

Photos:



Photo 1: Truck Rig at SPT-25 (facing west)



Photo 2: Truck Rig at SPT-14 (Facing South)

Cc:	Vijay Veluchamy, P.E. Andrew Schweitzer, P.E.	By:	Harrison Bluestone, Conrad Kieras, Nayeem Al Noman
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SITE OBSERVATION REPORT



Photo 3: CPT Rig at CPT-7 (Facing North)

Cc:	Vijay Veluchamy, P.E. Andrew Schweitzer, P.E.	By:	Harrison Bluestone, Conrad Kieras, Nayeem Al Noman
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SITE OBSERVATION REPORT

PROJECT NO.: 170197601	DATE: Thursday, May 12, 2022
PROJECT: Willets Point – Phase 1 Buildings OU-1 BCP Site No. C241146	WEATHER: Overcast, 50-60's °F
LOCATION: Queens, NY	TIME: 6:00 a.m. – 3:30 p.m.
CLIENT: Queens Development Group, LLC	BCP SITE ID: C241146
CONTRACTOR: AARCO Environmental Services Corp. (AARCO) ConeTec	OBSERVER: Harrison Bluestone Conrad Kieras Nayeem Al Noman
CONTRACTOR'S EQUIPMENT: <ul style="list-style-type: none"> Two CME55 – Truck Mounted Rig Hand Tools sCPT Truck Rig 	PRESENT AT SITE: Day 8 Langan: Harrison Bluestone, Conrad Kieras, Nayeem Al Noman AARCO: (Driller): 6-person crew ConeTec: (Driller): 2-person crew Peak Security Plus (Site Security): 1-person crew
PROJECT SUMMARY Langan was on-site to observe borings in accordance with NYCBC Section 1704.7.4 and the contract documents and document the activities below in accordance with the April 29, 2022 NYSDEC-approved Geotechnical Investigation Work Plan. <small>*NYCBC = New York City Building Code, 2014 Edition</small> All elevations are referenced to the North American Vertical Datum of 1988 (NAVD88). Depths and elevations are approximate.	
GENERAL OBSERVATIONS <ul style="list-style-type: none"> Langan and AARCO (two crews) arrived on site at 6:00 a.m. At about 6:10 a.m., one AARCO crew resumed drilling at LB-25 and the other crew resumed drilling at LB-14. The ConeTec crew arrived on site at 7:00 a.m. and began work at 7:10 a.m. Drilling concluded for the day at LB-25 at 2:30 p.m. and at LB-14 at 3:00 p.m., at approximately 200 and 150 feet below grade, respectively. Upon completion of LB-14 and LB-25, the boreholes were backfilled with non-impacted drilling cuttings and clean Morie/FilPro bagged sand, from the bottom of the boreholes to the bottom of the site cap. The material was left to settle overnight and the site cap will be replaced using material from the segregated stockpiles tomorrow. After finishing LB-25, AARCO repositioned the truck rig over LB-26. They hand dug the cap, segregated the excavated material, and started sampling. ConeTec completed one sCPT (identified as sCPT-08) by the end of the day, at approximately 169 feet below grade. ConeTec attempted sCPT-09, sCPT-12, and sCPT-15. The efforts are described below: <ul style="list-style-type: none"> sCPT-09 (first attempt): Encountered high resistance at 5 feet below grade, a 3-foot-thick void, and then refusal at 8 feet below grade. sCPT-09a (second attempt): Refusal encountered at 5 feet below grade. Did not break through due to risk of snapping the cone rod caused by deflection against the refusal. 	
Cc: Vijay Veluchamy, P.E. Andrew Schweitzer, P.E.	By: Harrison Bluestone, Conrad Kieras, Nayeem Al Noman

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SITE OBSERVATION REPORT

- sCPT-09: ConeTec returned to the initial boring location to drill through refusal with a 6 inch hollow stem auger. Refusal was encountered at 8 feet below grade.
- sCPT-12: Refusal encountered at 3 feet below grade.
- sCPT-15: Refusal encountered at 7 feet below grade.
- Langan, ConeTec, and AARCO left at 3:30 p.m.

ENVIRONMENTAL OBSERVATIONS

1. Impacts Observed

- a. Langan observed hydraulic fluid drippings in the open borehole at sCPT-09 from ConeTec's mechanical auger. ConeTec promptly cleaned up the fluid using hydrophobic fabric.
- b. Borehole at sCPT-09 was left open for further observation.
- c. No petroleum impacts observed.

2. Sampling

- a. No environmental samples

3. Material Tracking

- a. None

4. Community Air Monitoring Plan Activities

- a. Langan performed community air monitoring at the perimeter of the work area at one upwind and one downwind locations during intrusive work. Implementation of the Community Air Monitoring Plan (CAMP) included air monitoring for particulate matter for particulates less than 10 µm in diameter (PM10) and volatile organic compounds (VOC).
- b. No fugitive dust or odors associated with site activities were observed migrating from the site.

PROJECT PROGRESS

1. Geotechnical borings:

- a. Borings completed today: 2
- b. Borings in progress: 1
- c. Completed borings to date: 7 (out of 27)

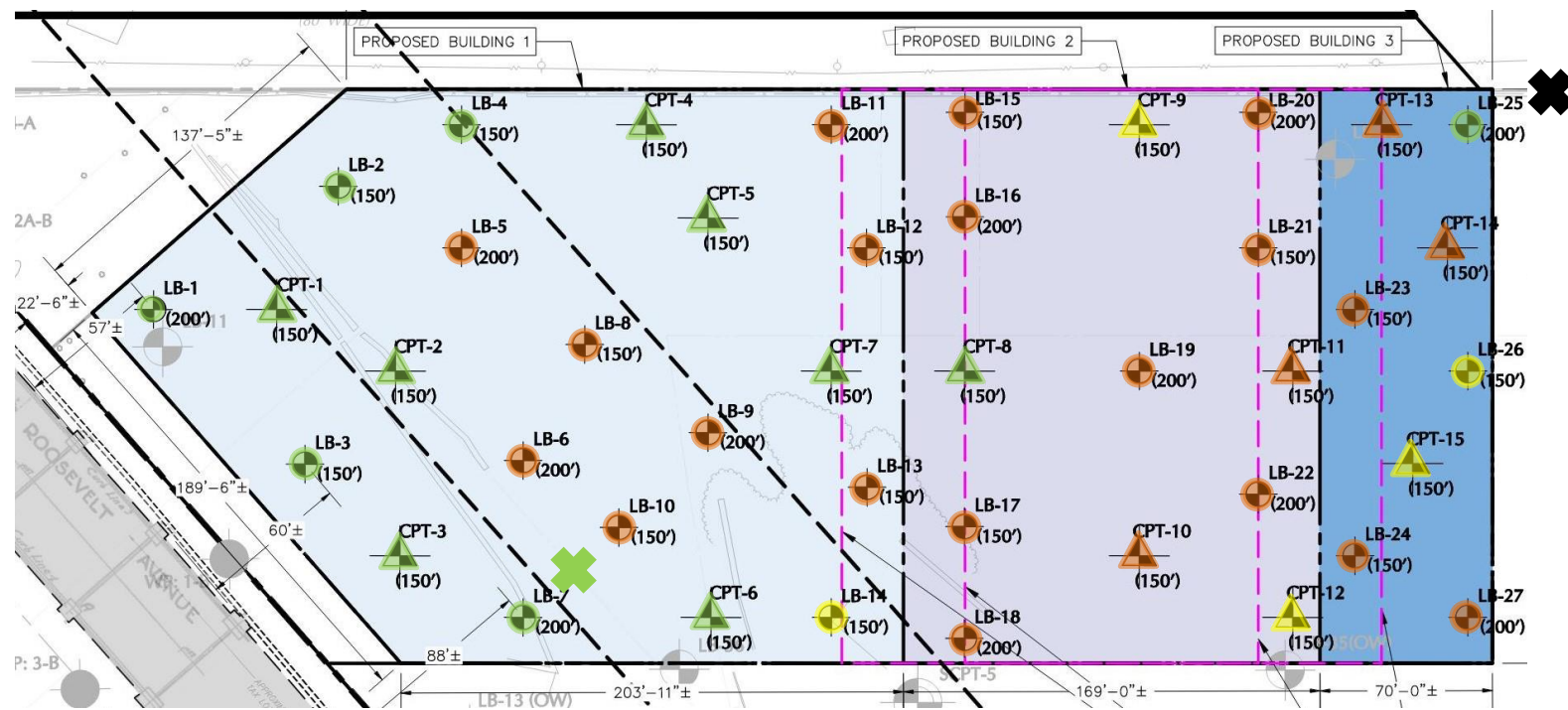
2. SCPT probes:

- a. SCPT probes completed today: 1
- b. SCPT probes in progress: 3
- c. Completed SCPT probes to date: 8 (out of 15)

Cc:	Vijay Veluchamy, P.E. Andrew Schweitzer, P.E.	By:	Harrison Bluestone, Conrad Kieras, Nayeem Al Noman
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SITE OBSERVATION REPORT

FIGURE 1: SUBSURFACE INVESTIGATION PLAN – Borings and SCPTs



- Boring to be Completed
- Boring in Progress
- Boring Completed

- ▲ sCPT to be Completed
- ▲ sCPT in Progress
- ▲ sCPT Completed

- ✖ CAMP Upwind
- ✖ CAMP Downwind

Cc: Vijay Veluchamy, P.E.
 Andrew Schweitzer, P.E.

By: Harrison Bluestone, Conrad Kieras, Nayeem Al Noman

SITE OBSERVATION REPORT

Photos:



Photo 1: Truck Rig at SPT-25 (facing west)



Photo 2: Truck Rig at SPT-14 (Facing South)

Cc:	Vijay Veluchamy, P.E. Andrew Schweitzer, P.E.	By:	Harrison Bluestone, Conrad Kieras, Nayeem Al Noman
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SITE OBSERVATION REPORT



Photo 3: SPT-26 precleared hole to water

Cc:	Vijay Veluchamy, P.E. Andrew Schweitzer, P.E.	By:	Harrison Bluestone, Conrad Kieras, Nayeem Al Noman
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SITE OBSERVATION REPORT

PROJECT NO.: 170197601	DATE: Friday, May 13, 2022
PROJECT: Willets Point – Phase 1 Buildings OU-1 BCP Site No. C241146	WEATHER: Overcast, 55-65's °F
LOCATION: Queens, NY	TIME: 6:00 a.m. – 3:30 p.m.
CLIENT: Queens Development Group, LLC	BCP SITE ID: C241146
CONTRACTOR: AARCO Environmental Services Corp. (AARCO) ConeTec	OBSERVER: Daniel Arnstein Conrad Kieras Nayeem Al Noman
CONTRACTOR'S EQUIPMENT: <ul style="list-style-type: none"> Two CME55 – Truck Mounted Rig Hand Tools sCPT Truck Rig 	PRESENT AT SITE: Day 9 Langan: Daniel Arnstein, Conrad Kieras, Nayeem Al Noman AARCO: (Driller): 6-person crew ConeTec: (Driller): 2-person crew Peak Security Plus (Site Security): 1-person crew
PROJECT SUMMARY Langan was on-site to observe borings in accordance with NYCBC Section 1704.7.4 and the contract documents and document the activities below in accordance with the April 29, 2022 NYSDEC-approved Geotechnical Investigation Work Plan. <small>*NYCBC = New York City Building Code, 2014 Edition</small> All elevations are referenced to the North American Vertical Datum of 1988 (NAVD88). Depths and elevations are approximate.	
GENERAL OBSERVATIONS <ul style="list-style-type: none"> Langan and AARCO (two crews) arrived on site at 6:00 a.m. At about 6:10 a.m., one AARCO crew resumed drilling at LB-26 and the other crew began pre-clearing four CPT locations (sCPT-12, sCPT-13, sCPT-14, and sCPT-15), each to 10 feet deep. Once pre-clearing was complete, the crew moved to LB-18. The crew hand dug the site cap at LB-18, segregated the excavated material, and started drilling. Work paused at LB-26 from 11:30 a.m. to 12:30 p.m. due to a mechanical issue with the rig. Drilling concluded for the day at LB-26 and LB-18 at 3:00 p.m., at approximately 70 and 32 feet below grade, respectively. The backfill at LB-14 and LB-25 appears to have settled overnight. Additional clean backfill was added and the cap was matched using the original segregated stockpiles. The ConeTec crew arrived on site at 7:00 a.m. and began work at 7:10 a.m. ConeTec completed one sCPT (identified as sCPT-12) by the end of the day, at approximately 154 feet below grade. ConeTec moved to sCPT-13. The probe advanced to 26 feet below surface level, but was stopped due to a large angle of deflection (14 degrees). ConeTec and AARCO left at 3:30 p.m. after putting equipment away. Langan left at 3:30 p.m. after downloading data from CAMP equipment and putting it in storage for the weekend. 	
Cc: Vijay Veluchamy, P.E. Andrew Schweitzer, P.E.	By: Harrison Bluestone, Conrad Kieras, Nayeem Al Noman

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SITE OBSERVATION REPORT

ENVIRONMENTAL OBSERVATIONS

1. Impacts Observed

- a. Borehole at sCPT-09 was left open for further observation.
- b. No petroleum impacts observed.

2. Sampling

- a. No environmental samples

3. Material Tracking

- a. None

4. Community Air Monitoring Plan Activities

- a. Langan performed community air monitoring at the perimeter of the work area at one upwind and one downwind locations during intrusive work. Implementation of the Community Air Monitoring Plan (CAMP) included air monitoring for particulate matter for particulates less than 10 µm in diameter (PM10) and volatile organic compounds (VOC).
- b. No fugitive dust or odors associated with site activities were observed migrating from the site.

PROJECT PROGRESS

1. Geotechnical borings:

- a. Borings completed today: 0
- b. Borings in progress: 2
- c. Completed borings to date: 7 (out of 27)

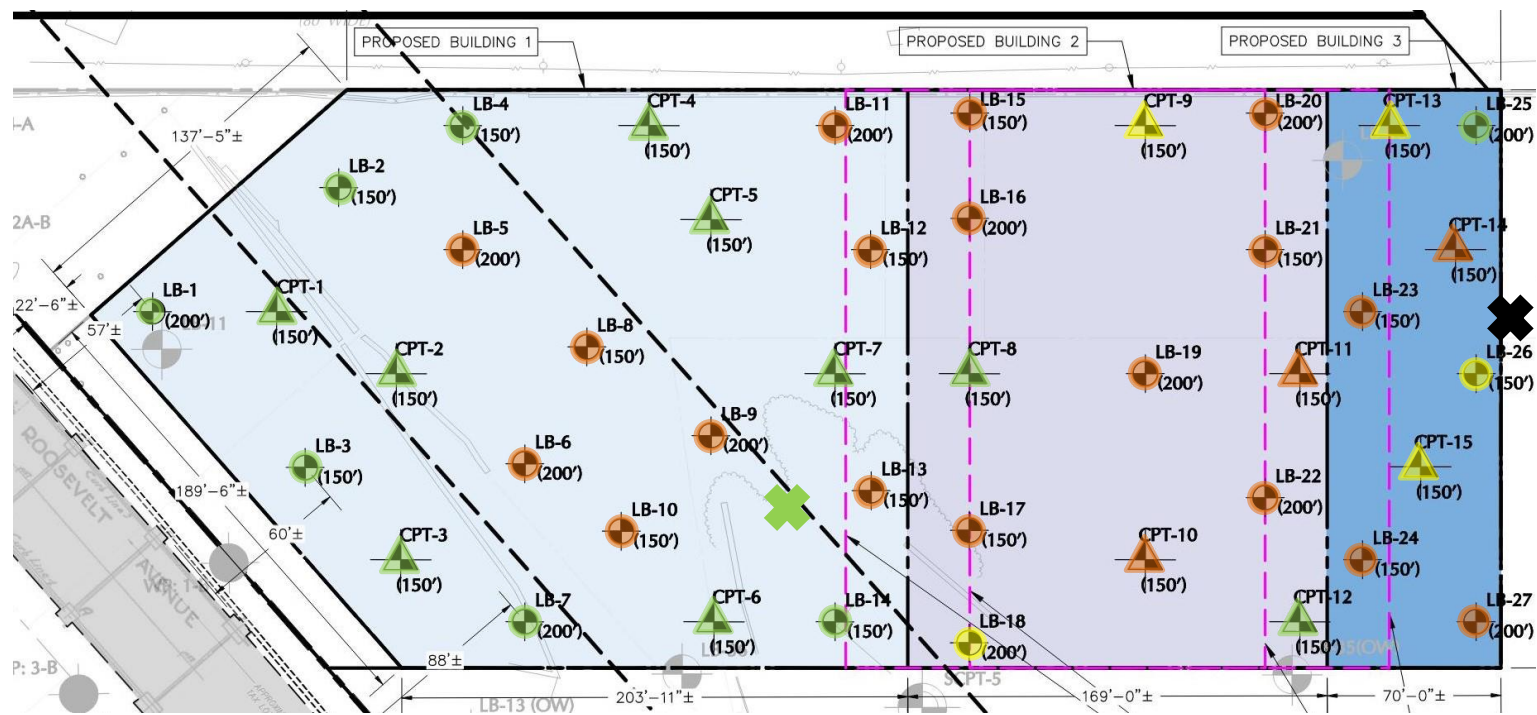
2. SCPT probes:

- a. SCPT probes completed today: 1
- b. SCPT probes in progress: 3
- c. Completed SCPT probes to date: 9 (out of 15)

Cc:	Vijay Veluchamy, P.E. Andrew Schweitzer, P.E.	By:	Harrison Bluestone, Conrad Kieras, Nayeem Al Noman
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SITE OBSERVATION REPORT

FIGURE 1: SUBSURFACE INVESTIGATION PLAN – Borings and SCPTs



- Boring to be Completed
- Boring in Progress
- Boring Completed

- ▲ sCPT to be Completed
- ▲ sCPT in Progress
- ▲ sCPT Completed

- ✖ CAMP Upwind
- ✖ CAMP Downwind

Cc: Vijay Veluchamy, P.E.
 Andrew Schweitzer, P.E.

By: Harrison Bluestone, Conrad Kieras, Nayeem Al Noman

SITE OBSERVATION REPORT

Photos:



Photo 1: Truck Rig at LB-26 (facing west)

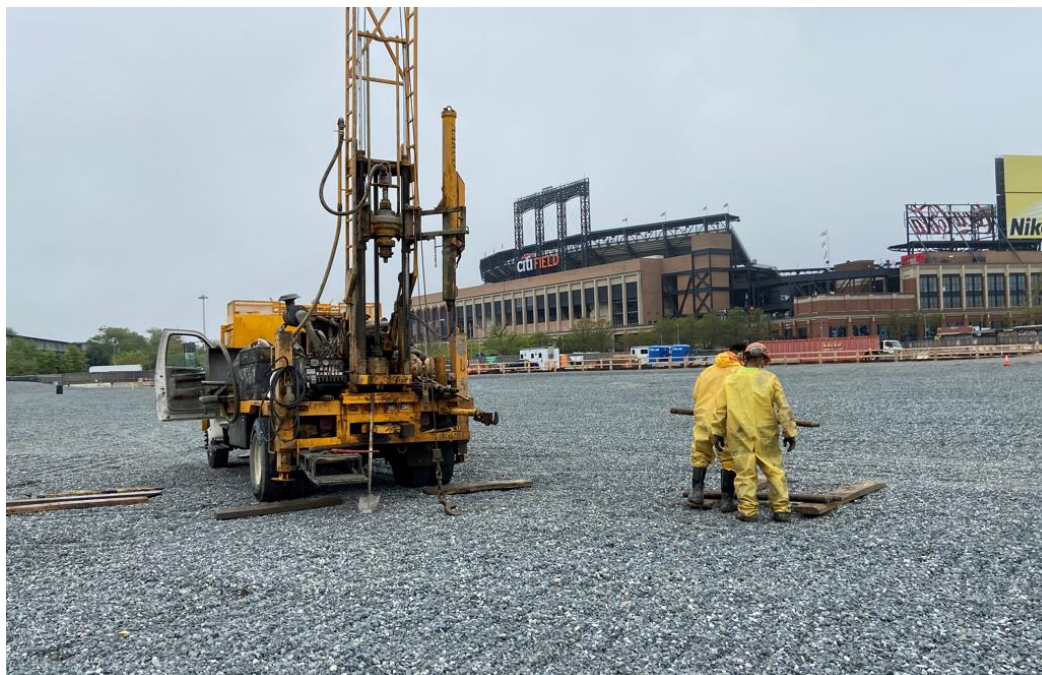


Photo 2: Truck Rig at LB-18 (Facing West)

Cc:	Vijay Veluchamy, P.E. Andrew Schweitzer, P.E.	By:	Harrison Bluestone, Conrad Kieras, Nayeem Al Noman
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SITE OBSERVATION REPORT

PROJECT NO.: 170197601	DATE: Monday, May 16, 2022
PROJECT: Willets Point – Phase 1 Buildings OU-1 BCP Site No. C241146	WEATHER: Overcast, 55-65's °F
LOCATION: Queens, NY	TIME: 6:00 a.m. – 3:30 p.m.
CLIENT: Queens Development Group, LLC	BCP SITE ID: C241146
CONTRACTOR: AARCO Environmental Services Corp. (AARCO) ConeTec	OBSERVER: Harrison Bluestone Conrad Kieras, Celine Patel Nayeem Al Noman, Patricia Wendy
CONTRACTOR'S EQUIPMENT: <ul style="list-style-type: none"> Two CME55 – Truck Mounted Rig Hand Tools sCPT Truck Rig 	PRESENT AT SITE: Day 10 Langan: Harrison Bluestone, Conrad Kieras, Celine Patel, Nayeem Al Noman, Patricia Wendy AARCO: (Driller): 6-person crew ConeTec: (Driller): 2-person crew Peak Security Plus (Site Security): 1-person crew
PROJECT SUMMARY Langan was on-site to observe borings in accordance with NYCBC Section 1704.7.4 and the contract documents and document the activities below in accordance with the April 29, 2022 NYSDEC-approved Geotechnical Investigation Work Plan. <small>*NYCBC = New York City Building Code, 2014 Edition</small> All elevations are referenced to the North American Vertical Datum of 1988 (NAVD88). Depths and elevations are approximate.	
GENERAL OBSERVATIONS <ul style="list-style-type: none"> Langan and AARCO (two crews) arrived on site at 6:00 a.m. At about 6:10 a.m., one AARCO crew resumed drilling at LB-26 and the other AARCO crew resumed drilling at LB-18. Drilling concluded for the day at LB-26 at 3:30 pm and LB-18 at 3:00 p.m., at approximately 145 and 122 feet below grade, respectively. The ConeTec crew arrived on site at 7:00 a.m. and began work at 7:10 a.m. ConeTec completed two sCPTs (identified as sCPT-14 and sCPT-15) by the end of the day, at approximately 152 and 122 feet below grade. ConeTec and AARCO left at 3:00 p.m. after putting equipment away. Langan left at 3:30 p.m. after downloading data from CAMP equipment and putting it in storage for the day. 	
ENVIRONMENTAL OBSERVATIONS <ol style="list-style-type: none"> Impacts Observed <ol style="list-style-type: none"> Borehole at sCPT-09 was left open for further observation. No petroleum impacts observed. Sampling <ol style="list-style-type: none"> No environmental samples 	
Cc: Vijay Veluchamy, P.E. Andrew Schweitzer, P.E.	By: Harrison Bluestone, Conrad Kieras, Nayeem Al Noman

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SITE OBSERVATION REPORT

3. Material Tracking

- a. None

4. Community Air Monitoring Plan Activities

- a. Langan performed community air monitoring at the perimeter of the work area at one upwind and one downwind locations during intrusive work. Implementation of the Community Air Monitoring Plan (CAMP) included air monitoring for particulate matter for particulates less than 10 µm in diameter (PM10) and volatile organic compounds (VOC). Community air monitoring ceased once rain began around 1:00 pm.
- b. No fugitive dust or odors associated with site activities were observed migrating from the site.

PROJECT PROGRESS

1. Geotechnical borings:

- a. Borings completed today: 0
- b. Borings in progress: 2
- c. Completed borings to date: 7 (out of 27)

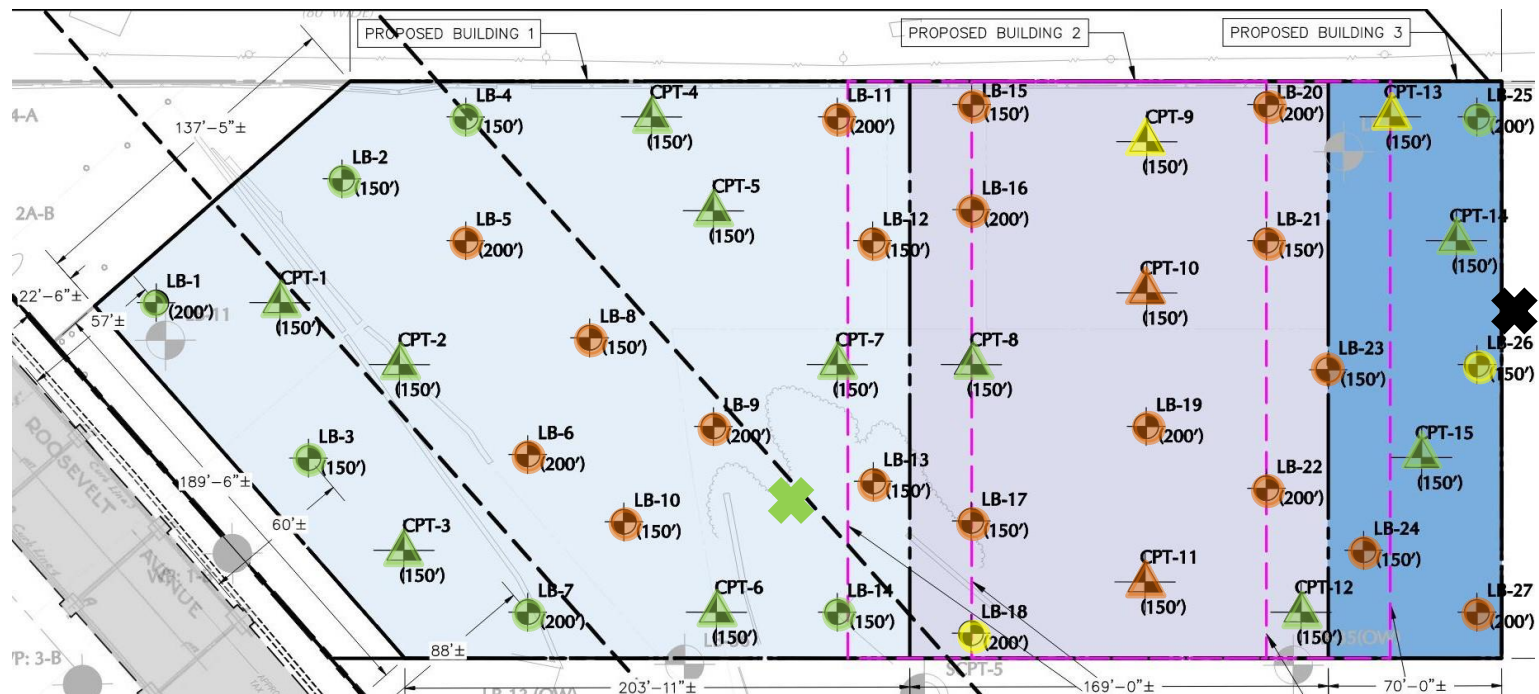
2. SCPT probes:

- a. SCPT probes completed today: 2
- b. SCPT probes in progress: 2
- c. Completed SCPT probes to date: 11 (out of 15)

Cc:	Vijay Veluchamy, P.E. Andrew Schweitzer, P.E.	By:	Harrison Bluestone, Conrad Kieras, Nayeem Al Noman
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SITE OBSERVATION REPORT

FIGURE 1: SUBSURFACE INVESTIGATION PLAN – Borings and SCPTs



- Boring to be Completed
- Boring in Progress
- Boring Completed

- ▲ sCPT to be Completed
- ▲ sCPT in Progress
- ▲ sCPT Completed

- ✖ CAMP Upwind
- ✖ CAMP Downwind

Cc:	Vijay Veluchamy, P.E. Andrew Schweitzer, P.E.	By:	Harrison Bluestone, Conrad Kieras, Nayeem Al Noman
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SITE OBSERVATION REPORT

Photos:



Photo 1: Truck Rig at LB-26 (facing south)



Photo 2: CPT truck over CPT-15 (facing north)

Cc:	Vijay Veluchamy, P.E. Andrew Schweitzer, P.E.	By: Harrison Bluestone, Conrad Kieras, Nayeem Al Noman
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SITE OBSERVATION REPORT



Photo 3: Truck Rig at SPT-18 (facing north)



Photo 4: Downwind CAMP (facing north)

Cc:	Vijay Veluchamy, P.E. Andrew Schweitzer, P.E.	By:	Harrison Bluestone, Conrad Kieras, Nayeem Al Noman
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SITE OBSERVATION REPORT



Photo 5: Upwind CAMP (facing south)

Cc:	Vijay Veluchamy, P.E. Andrew Schweitzer, P.E.	By:	Harrison Bluestone, Conrad Kieras, Nayeem Al Noman
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SITE OBSERVATION REPORT

PROJECT NO.:	170197601	DATE:	Tuesday, May 17, 2022
PROJECT:	Willets Point – Phase 1 Buildings OU-1 BCP Site No. C241146	WEATHER:	Overcast, 60-70's °F
LOCATION:	Queens, NY	TIME:	6:00 a.m. – 3:30 p.m.
CLIENT:	Queens Development Group, LLC	BCP SITE ID:	C241146
CONTRACTOR:	AARCO Environmental Services Corp. (AARCO) ConeTec	OBSERVER:	Harrison Bluestone Conrad Kieras, Celine Patel Patricia Wendy
CONTRACTOR'S EQUIPMENT:	<ul style="list-style-type: none"> Two CME55 – Truck Mounted Rig Hand Tools sCPT Truck Rig 	PRESENT AT SITE:	Day 11 Langan: Harrison Bluestone, Conrad Kieras, Celine Patel, Patricia Wendy AARCO: (Driller): 6-person crew ConeTec: (Driller): 2-person crew Peak Security Plus (Site Security): 1-person crew
PROJECT SUMMARY Langan was on-site to observe borings in accordance with NYCBC Section 1704.7.4 and the contract documents and document the activities below in accordance with the April 29, 2022 NYSDEC-approved Geotechnical Investigation Work Plan. <small>*NYCBC = New York City Building Code, 2014 Edition</small> All elevations are referenced to the North American Vertical Datum of 1988 (NAVD88). Depths and elevations are approximate.			
GENERAL OBSERVATIONS <ul style="list-style-type: none"> Langan and AARCO (two crews) arrived on site at 6:00 a.m. At about 6:10 a.m., one AARCO crew finished drilling at LB-26 before moving to LB-27, while the other AARCO crew resumed drilling at LB-18. The crew hand dug the site cap at LB-27, segregated the excavated material, and started drilling. Drilling concluded for the day at LB-26, LB-27, and LB-18 at 3:30 pm, at approximately 150, 46, and 160 feet below grade, respectively. Upon completion of LB-26 and LB-18, both boreholes were backfilled with non-impacted drilling cuttings and clean Morie/FilPro bagged sand, from the bottom of the boreholes to the bottom of the site cap. The material was left to settle overnight and the site cap will be replaced using material from the segregated stockpiles tomorrow. The ConeTec crew arrived on site at 7:00 a.m. and began work at 7:10 a.m. ConeTec completed two sCPTs (identified as sCPT-9b and sCPT-13) by the end of the day, at approximately 160 feet below grade. ConeTec and AARCO left at 3:30 p.m. after putting equipment away. Langan left at 3:30 p.m. after downloading data from CAMP equipment and putting it in storage for the day. 			
Cc:	Vijay Veluchamy, P.E. Andrew Schweitzer, P.E.	By:	Harrison Bluestone, Conrad Kieras, Nayeem Al Noman

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SITE OBSERVATION REPORT

ENVIRONMENTAL OBSERVATIONS

1. Impacts Observed

- a. No petroleum impacts observed.

2. Sampling

- a. No environmental samples

3. Material Tracking

- a. None

4. Community Air Monitoring Plan Activities

- a. Langan performed community air monitoring at the perimeter of the work area at one upwind and one downwind locations during intrusive work. Implementation of the Community Air Monitoring Plan (CAMP) included air monitoring for particulate matter for particulates less than 10 µm in diameter (PM10) and volatile organic compounds (VOC).
- b. Downwind particulate data was collected intermittently due to instrument malfunction.
- c. No fugitive dust or odors associated with site activities were observed migrating from the site.

PROJECT PROGRESS

1. Geotechnical borings:

- a. Borings completed today: 2
- b. Borings in progress: 1
- c. Completed borings to date: 9 (out of 27)

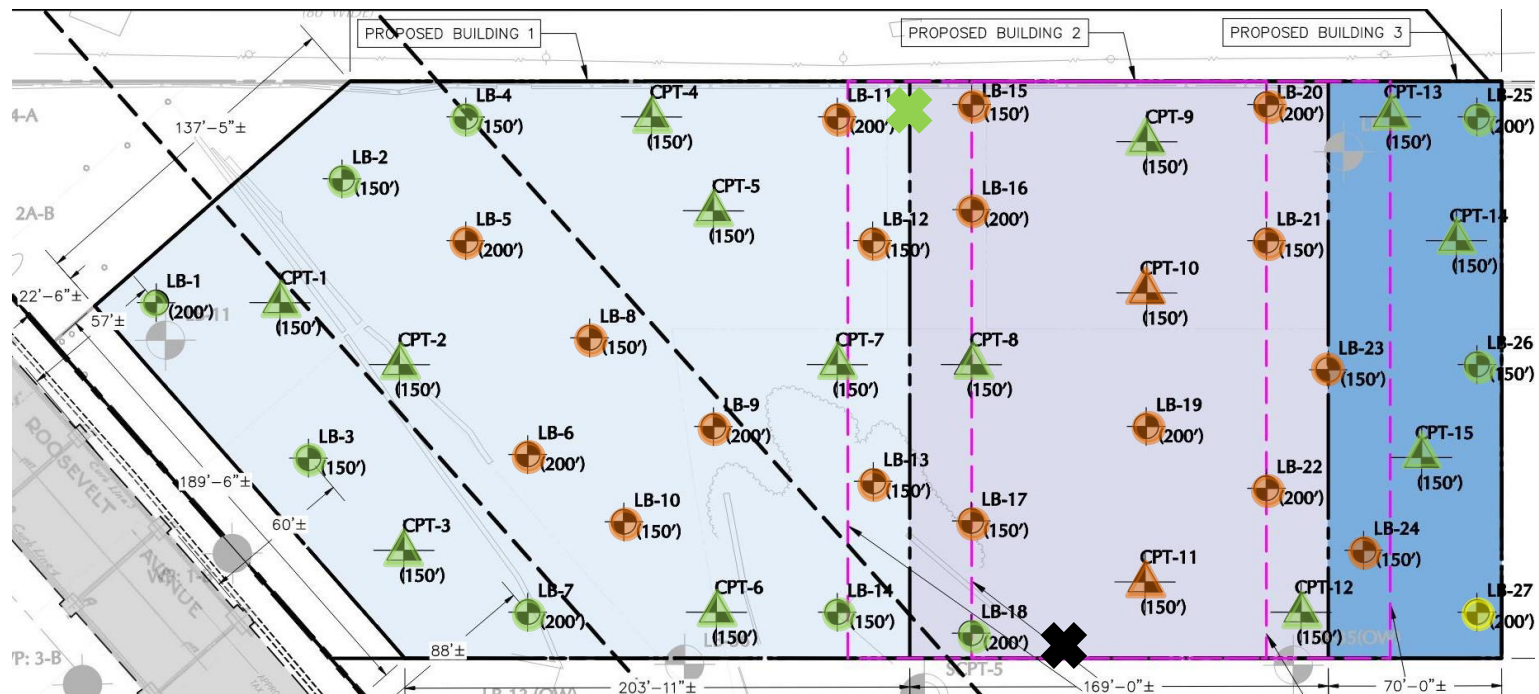
2. SCPT probes:

- a. SCPT probes completed today: 2
- b. SCPT probes in progress: 0
- c. Completed SCPT probes to date: 13 (out of 15)

Cc:	Vijay Veluchamy, P.E. Andrew Schweitzer, P.E.	By:	Harrison Bluestone, Conrad Kieras, Patricia Wendy
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SITE OBSERVATION REPORT

FIGURE 1: SUBSURFACE INVESTIGATION PLAN – Borings and SCPTs



- Boring to be Completed
- Boring in Progress
- Boring Completed

- ▲ sCPT to be Completed
- ▲ sCPT in Progress
- ▲ sCPT Completed

- ✖ CAMP Upwind
- ✖ CAMP Downwind

Cc: Vijay Veluchamy, P.E. Andrew Schweitzer, P.E.	By: Harrison Bluestone, Conrad Kieras, Nayeem Al Noman
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SITE OBSERVATION REPORT

Photos:

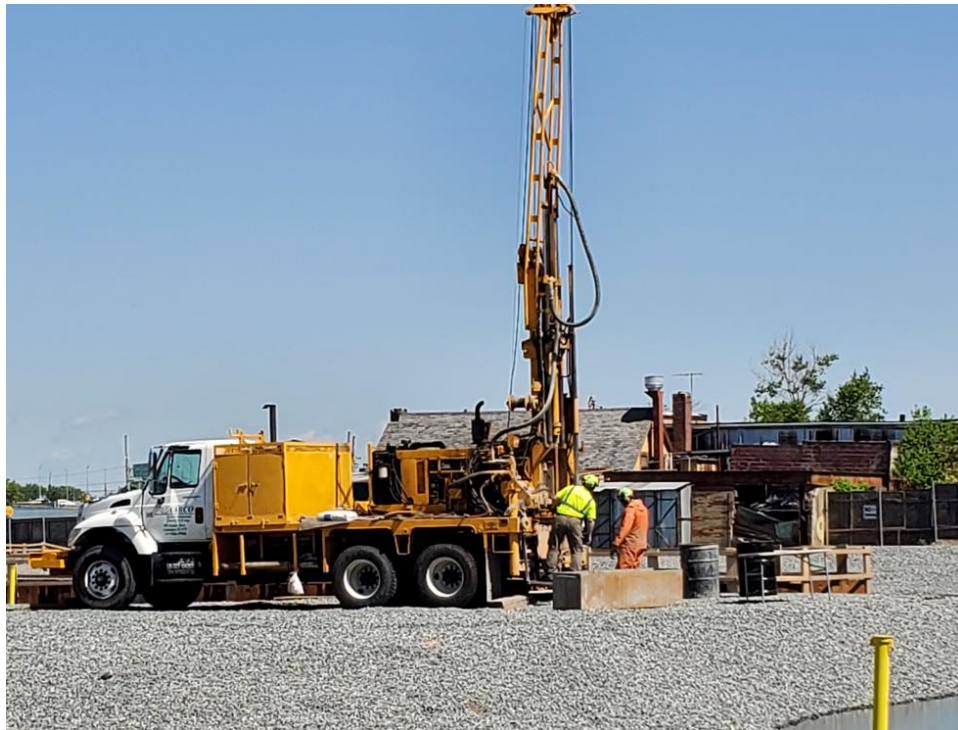


Photo 1: Truck Rig at LB-27 (facing north)



Photo 2: CPT truck at CPT-13 (facing north)

Cc: Vijay Veluchamy, P.E. Andrew Schweitzer, P.E.	By: Harrison Bluestone, Conrad Kieras, Nayeem Al Noman
File Path: \\Langan.com\data\NY\data6\170197601\Engineering Data\Geotechnical\OU-1 Building Investigation\Phase 1 Building Investigation SOR's\2022-05-17 SOR Willets Point Phase 1-Buildings (C241146) Day 11.docx	

SITE OBSERVATION REPORT

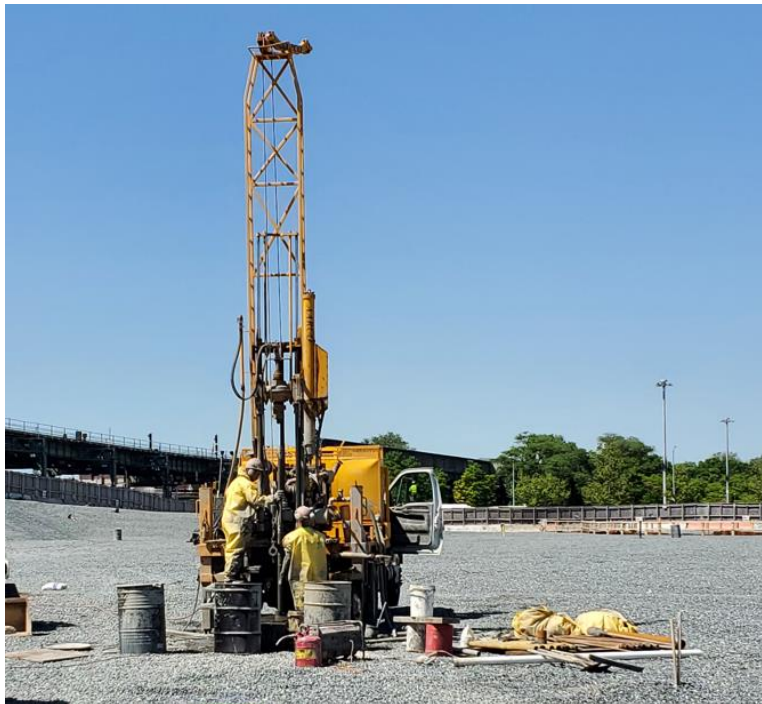


Photo 3: Truck Rig at SPT-18 (facing west)



Photo 4: upwind CAMP (facing west)

Cc:	Vijay Veluchamy, P.E. Andrew Schweitzer, P.E.	By:	Harrison Bluestone, Conrad Kieras, Patricia Wendy
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SITE OBSERVATION REPORT



Photo 5: Downwind CAMP (facing east)

Cc:	Vijay Veluchamy, P.E. Andrew Schweitzer, P.E.	By:	Harrison Bluestone, Conrad Kieras, Patricia Wendy
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SITE OBSERVATION REPORT

PROJECT NO.: 170197601	DATE: Wednesday, May 18, 2022
PROJECT: Willets Point – Phase 1 Buildings OU-1 BCP Site No. C241146	WEATHER: Overcast, 65-75's °F
LOCATION: Queens, NY	TIME: 6:00 a.m. – 3:30 p.m.
CLIENT: Queens Development Group, LLC	BCP SITE ID: C241146
CONTRACTOR: AARCO Environmental Services Corp. (AARCO) ConeTec	OBSERVER: Harrison Bluestone Conrad Kieras, Celine Patel Patricia Wendy
CONTRACTOR'S EQUIPMENT: <ul style="list-style-type: none"> Two CME55 – Truck Mounted Rig Hand Tools sCPT Truck Rig 	PRESENT AT SITE: Day 12 Langan: Harrison Bluestone, Conrad Kieras, Celine Patel, Patricia Wendy AARCO: (Driller): 6-person crew ConeTec: (Driller): 2-person crew Peak Security Plus (Site Security): 1-person crew
PROJECT SUMMARY <p>Langan was on-site to observe borings in accordance with NYCBC Section 1704.7.4 and the contract documents and document the activities below in accordance with the April 29, 2022 NYSDEC-approved Geotechnical Investigation Work Plan.</p> <p>*NYCBC = New York City Building Code, 2014 Edition</p> <p>All elevations are referenced to the North American Vertical Datum of 1988 (NAVD88). Depths and elevations are approximate.</p>	
GENERAL OBSERVATIONS <ul style="list-style-type: none"> Langan and AARCO (two crews) arrived on site at 6:00 a.m. At about 6:10 a.m., one AARCO crew resumed drilling at LB-27, while the other AARCO crew began drilling at LB-11. The other crew hand dug the site cap at LB-11, segregated the excavated material, and started drilling. Drilling concluded for the day at LB-27 and LB-11 at 3:30 pm, at approximately 125 and 102 feet below grade, respectively. The backfill at LB-26 and LB-18 did not appear to settle overnight. The site cap at the boreholes was matched using the original segregated stockpile. The ConeTec crew arrived on site at 7:00 a.m. and began work at 7:10 a.m. ConeTec completed two sCPTs (identified as sCPT-10 and sCPT-11) by the end of the day, at approximately 155 and 154 feet below grade. ConeTec and AARCO left at 3:30 p.m. after putting equipment away. Langan left at 3:30 p.m. after downloading data from CAMP equipment and putting it in storage for the day. 	
ENVIRONMENTAL OBSERVATIONS 1. Impacts Observed <ul style="list-style-type: none"> a. No petroleum impacts observed. 	
Cc: Vijay Veluchamy, P.E. Andrew Schweitzer, P.E.	By: Harrison Bluestone, Conrad Kieras, Nayeem Al Noman

SITE OBSERVATION REPORT

2. Sampling

- a. No environmental samples

3. Material Tracking

- a. None

4. Community Air Monitoring Plan Activities

- a. Langan performed community air monitoring at the perimeter of the work area at one upwind and one downwind locations during intrusive work. Implementation of the Community Air Monitoring Plan (CAMP) included air monitoring for particulate matter for particulates less than 10 µm in diameter (PM10) and volatile organic compounds (VOC).
- b. No fugitive dust or odors associated with site activities were observed migrating from the site.

PROJECT PROGRESS

1. Geotechnical borings:

- a. Borings completed today: 0
- b. Borings in progress: 2
- c. Completed borings to date: 9 (out of 27)

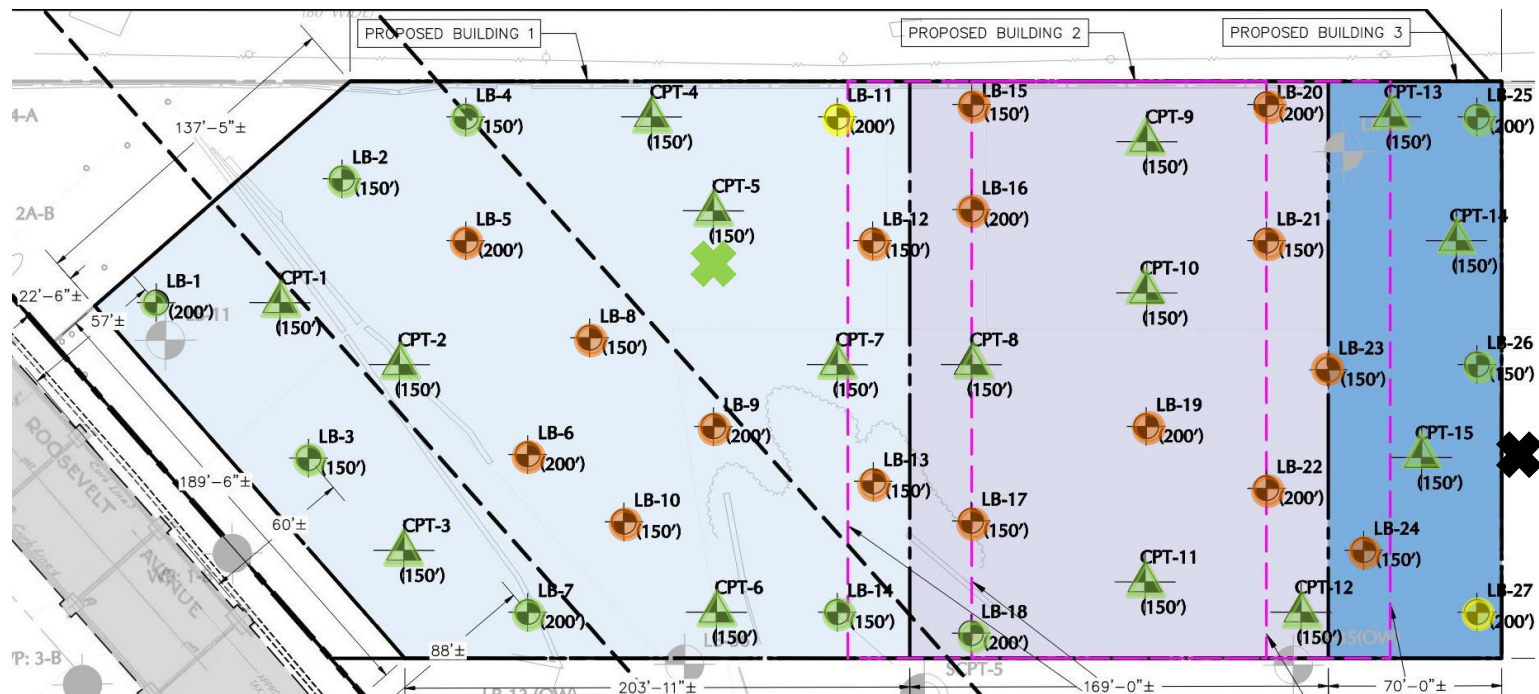
2. SCPT probes:

- a. SCPT probes completed today: 2
- b. SCPT probes in progress: 0
- c. Completed SCPT probes to date: 15 (out of 15)

Cc:	Vijay Veluchamy, P.E. Andrew Schweitzer, P.E.	By:	Harrison Bluestone, Conrad Kieras, Patricia Wendy
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SITE OBSERVATION REPORT

FIGURE 1: SUBSURFACE INVESTIGATION PLAN – Borings and SCPTs



- Boring to be Completed
- Boring in Progress
- Boring Completed

- ▲ SCPT to be Completed
- ▲ SCPT in Progress
- ▲ SCPT Completed

- ✖ CAMP Upwind
- ✖ CAMP Downwind

Cc:	Vijay Veluchamy, P.E. Andrew Schweitzer, P.E.	By:	Harrison Bluestone, Conrad Kieras, Nayeem Al Noman
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SITE OBSERVATION REPORT

Photos:

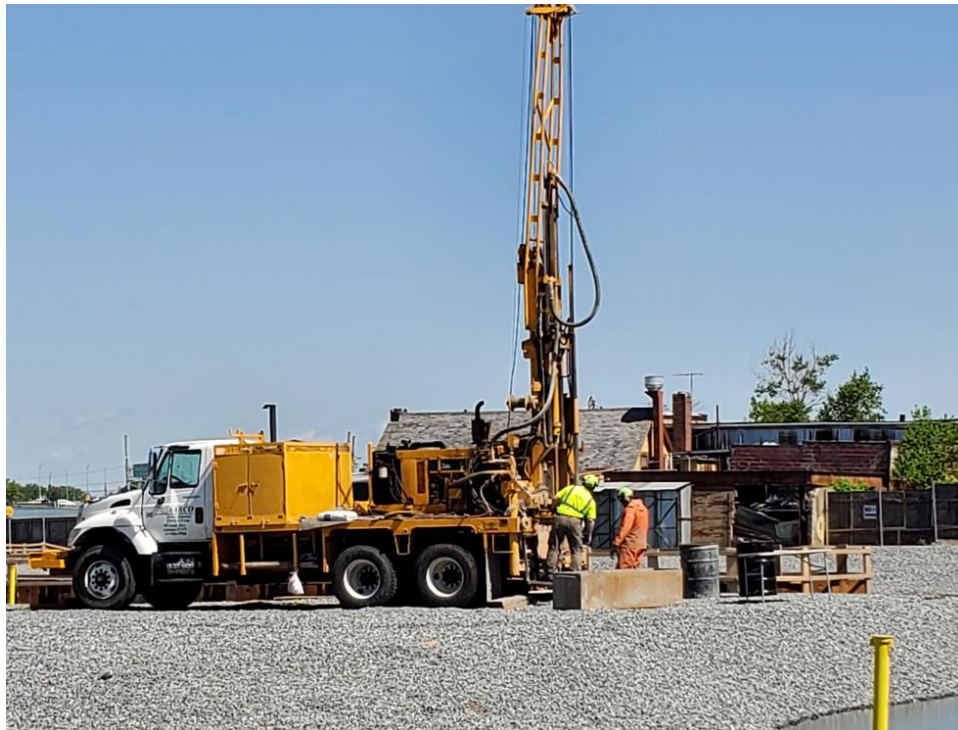


Photo 1: Truck Rig at LB-27 (facing north)

Cc:	Vijay Veluchamy, P.E. Andrew Schweitzer, P.E.	By:	Harrison Bluestone, Conrad Kieras, Nayeem Al Noman
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SITE OBSERVATION REPORT

PROJECT NO.:	170197601	DATE:	Thursday, May 19, 2022
PROJECT:	Willetts Point – Phase 1 Buildings OU-1 BCP Site No. C241146	WEATHER:	Rain, 55-65’s °F
LOCATION:	Queens, NY	TIME:	6:00 a.m. – 3:00 p.m.
CLIENT:	Queens Development Group, LLC	BCP SITE ID:	C241146
CONTRACTOR:	AARCO Environmental Services Corp. (AARCO)	OBSERVER:	Harrison Bluestone Conrad Kieras Celine Patel
CONTRACTOR’S EQUIPMENT: <ul style="list-style-type: none">Two CME55 – Truck Mounted RigHand Tools	PRESENT AT SITE: Day 13 Langan: Harrison Bluestone, Conrad Kieras, Celine Patel, AARCO: (Driller): 6-person crew Peak Security Plus (Site Security): 1-person crew		

PROJECT SUMMARY

Langan was on-site to observe borings in accordance with NYCBC Section 1704.7.4 and the contract documents and document the activities below in accordance with the April 29, 2022 NYSDEC-approved Geotechnical Investigation Work Plan.

*NYCBC = New York City Building Code, 2014 Edition

All elevations are referenced to the North American Vertical Datum of 1988 (NAVD88). Depths and elevations are approximate.

GENERAL OBSERVATIONS

- Langan and AARCO (two crews) arrived on site at 6:00 a.m.
- At about 6:10 a.m., one AARCO crew resumed drilling at LB-27, while the other AARCO crew resumed drilling at LB-11.
- At about 1:30 p.m., drilling stopped at LB-27. The rig had a mechanical issue which the AARCO crew was unable to fix on-site. The truck rig was driven off-site to be fixed at the AARCO office.
- Drilling concluded for the day at LB-27 and LB-11 at 2:45 p.m., at approximately 175 and 155 feet below grade, respectively.
- AARCO left at 3:00 p.m. and Langan left at 3:00 p.m. after downloading data from CAMP equipment and putting it in storage for the day.

ENVIRONMENTAL OBSERVATIONS

1. Impacts Observed

- No petroleum impacts observed.

2. Sampling

- No environmental samples

3. Material Tracking

- None

4. Community Air Monitoring Plan Activities

- Langan performed community air monitoring at the perimeter of the work area at one upwind and one downwind locations during intrusive work. Implementation of the Community Air Monitoring Plan (CAMP) included air monitoring for particulate matter for particulates less than 10 µm in diameter (PM10) and

Cc:	Vijay Veluchamy, P.E. Andrew Schweitzer, P.E.	By:	Harrison Bluestone, Conrad Kieras
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SITE OBSERVATION REPORT

volatile organic compounds (VOC). CAMP equipment was set up at about 11 am due to rain in the morning.

- b. No fugitive dust or odors associated with site activities were observed migrating from the site.

PROJECT PROGRESS

1. Geotechnical borings:

- a. Borings completed today: 0
- b. Borings in progress: 2
- c. Completed borings to date: 9 (out of 27)

2. SCPT probes (ALL SCPTS HAVE BEEN COMPLETED):

- a. SCPT probes completed today: 0
- b. SCPT probes in progress: 0
- c. Completed SCPT probes to date: 15 (out of 15)

Cc:

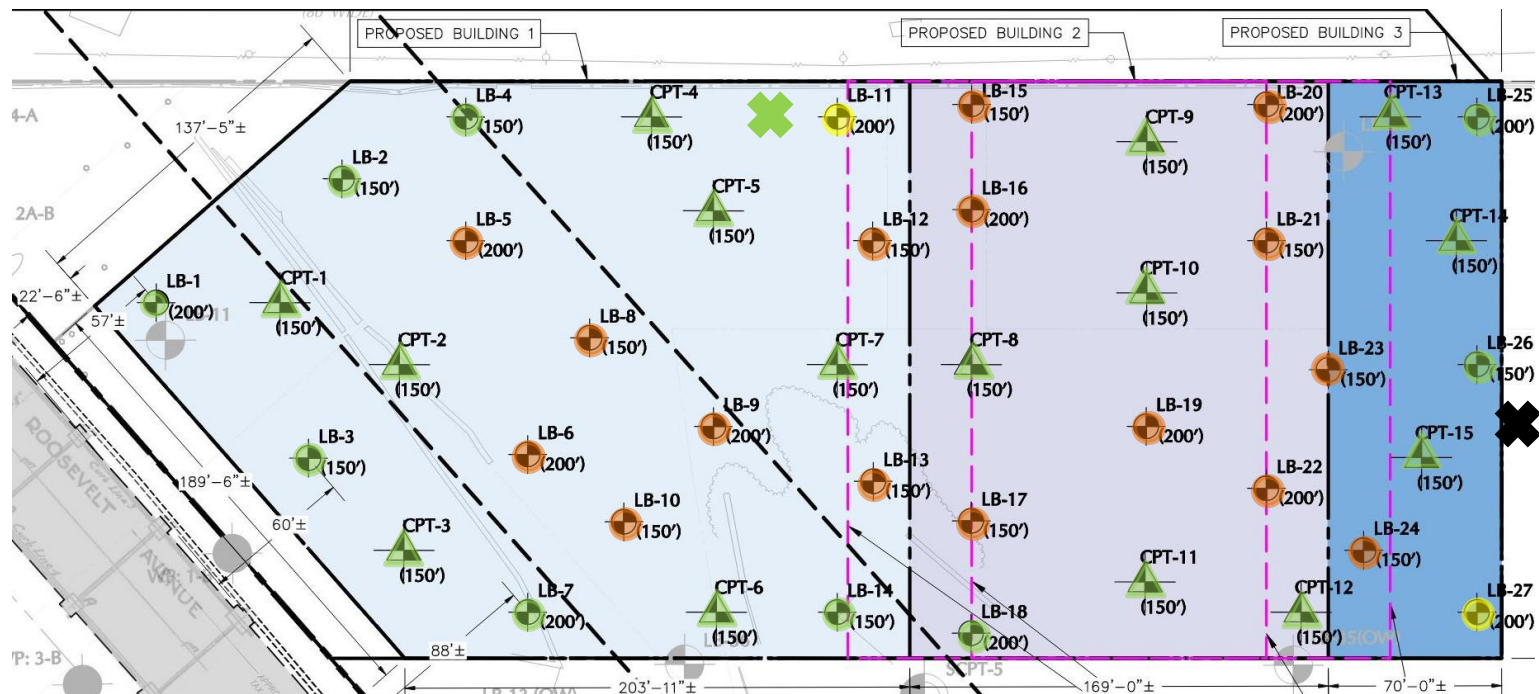
Vijay Veluchamy, P.E.
 Andrew Schweitzer, P.E.

By:

Harrison Bluestone, Conrad Kieras

SITE OBSERVATION REPORT

FIGURE 1: SUBSURFACE INVESTIGATION PLAN – Borings and SCPTs



- Boring to be Completed
- Boring in Progress
- Boring Completed

- ▲ sCPT to be Completed
- ▲ sCPT in Progress
- ▲ sCPT Completed

- ✖ CAMP Upwind
- ✖ CAMP Downwind

Cc: Vijay Veluchamy, P.E. Andrew Schweitzer, P.E.	By: Harrison Bluestone, Conrad Kieras
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SITE OBSERVATION REPORT

Photos:



Photo 1: Truck rig at LB-27 (facing north)



Photo 2: Truck rig being driven off-site

Cc:

Vijay Veluchamy, P.E.
 Andrew Schweitzer, P.E.

By:

Harrison Bluestone, Conrad Kieras

SITE OBSERVATION REPORT

PROJECT NO.:	170197601	DATE:	Friday, May 20, 2022
PROJECT:	Willetts Point – Phase 1 Buildings OU-1 BCP Site No. C241146	WEATHER:	Rain, 55-65’s °F
LOCATION:	Queens, NY	TIME:	6:00 a.m. – 3:00 p.m.
CLIENT:	Queens Development Group, LLC	BCP SITE ID:	C241146
CONTRACTOR:	AARCO Environmental Services Corp. (AARCO)	OBSERVER:	Harrison Bluestone Conrad Kieras Celine Patel
CONTRACTOR’S EQUIPMENT: <ul style="list-style-type: none">Two CME55 – Truck Mounted RigHand Tools	PRESENT AT SITE: Day 14 Langan: Harrison Bluestone, Conrad Kieras, Celine Patel, AARCO: (Driller): 6-person crew Peak Security Plus (Site Security): 1-person crew		

PROJECT SUMMARY

Langan was on-site to observe borings in accordance with NYCBC Section 1704.7.4 and the contract documents and document the activities below in accordance with the April 29, 2022 NYSDEC-approved Geotechnical Investigation Work Plan.

*NYCBC = New York City Building Code, 2014 Edition

All elevations are referenced to the North American Vertical Datum of 1988 (NAVD88). Depths and elevations are approximate.

GENERAL OBSERVATIONS

- Langan arrived on site at 6:00 a.m.
- AARCO (two crews) arrived on site at 6:30 am with a repaired truck rig and remobilized it over boring LB-27.
- At about 7:00 a.m., one AARCO crew resumed drilling at LB-27, while the other AARCO crew resumed drilling at LB-11.
- Drilling concluded for the day at LB-27 and LB-11 at 2:30 p.m., each at approximately 200 feet below grade.
- Upon completion of LB-27 and LB-11, both boreholes were backfilled with non-impacted drilling cuttings and clean Morie/FilPro bagged sand, from the bottom of the boreholes to the bottom of the site cap. The material was left to settle overnight and the site cap will be replaced using material from the segregated stockpiles on Monday.
- AARCO left at 3:00 pm after packing up and Langan left at 3:00 p.m. after downloading data from CAMP equipment and putting it in storage for the day.

ENVIRONMENTAL OBSERVATIONS

1. Impacts Observed

- No petroleum impacts observed.

2. Sampling

- No environmental samples

3. Material Tracking

- None

Cc:	Vijay Veluchamy, P.E. Andrew Schweitzer, P.E.	By:	Harrison Bluestone, Conrad Kieras
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SITE OBSERVATION REPORT

4. Community Air Monitoring Plan Activities

- a. Langan performed community air monitoring at the perimeter of the work area at one upwind and one downwind locations during intrusive work. Implementation of the Community Air Monitoring Plan (CAMP) included air monitoring for particulate matter for particulates less than 10 µm in diameter (PM10) and volatile organic compounds (VOC).
- b. No fugitive dust or odors associated with site activities were observed migrating from the site.

PROJECT PROGRESS

1. Geotechnical borings:

- a. Borings completed today: 2
- b. Borings in progress:
- c. Completed borings to date: 11 (out of 27)

2. SCPT probes (ALL SCPTS HAVE BEEN COMPLETED):

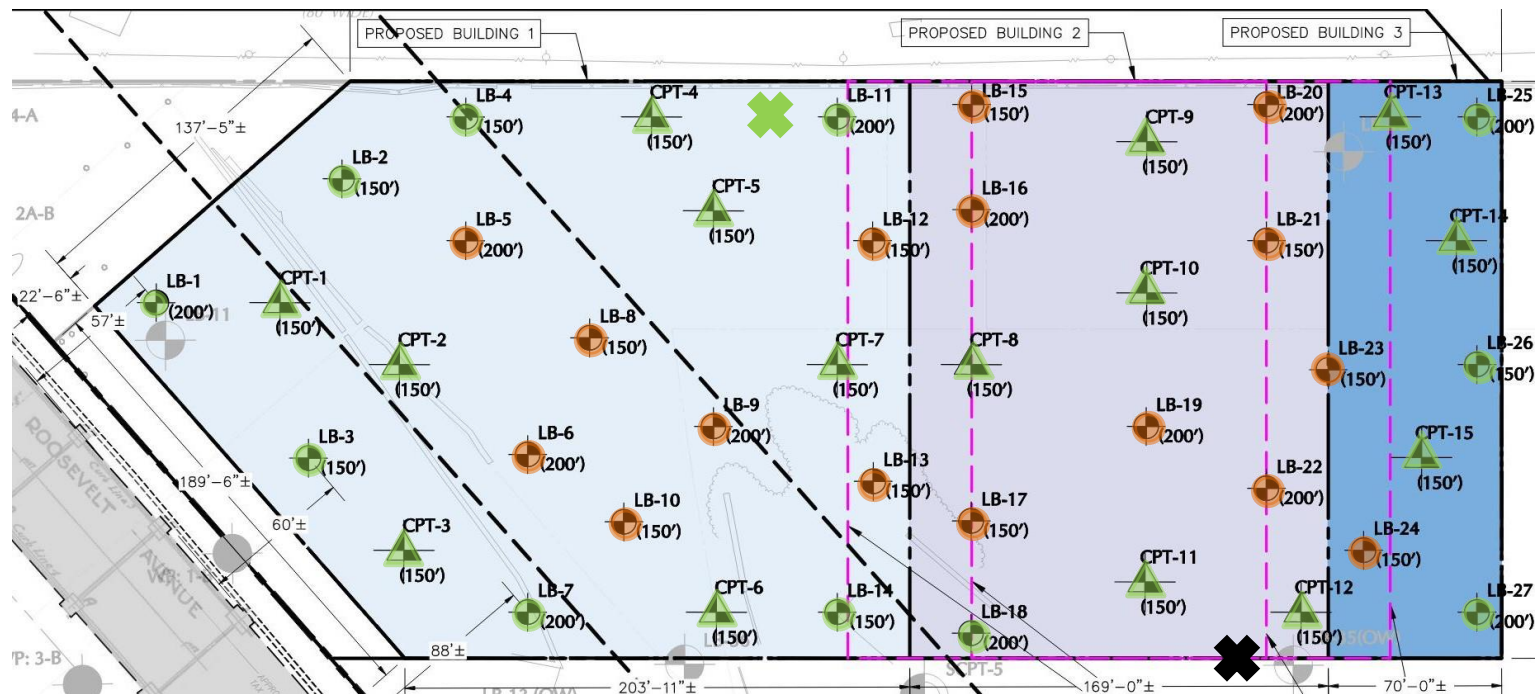
- a. SCPT probes completed today: 0
- b. SCPT probes in progress: 0
- c. Completed SCPT probes to date: 15 (out of 15)

Cc:	Vijay Veluchamy, P.E. Andrew Schweitzer, P.E.	By:	Harrison Bluestone, Conrad Kieras
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SITE OBSERVATION REPORT

FIGURE 1: SUBSURFACE INVESTIGATION PLAN – Borings and SCPTs



- Boring to be Completed
- Boring in Progress
- Boring Completed

- ▲ sCPT to be Completed
- ▲ sCPT in Progress
- ▲ sCPT Completed

- ✖ CAMP Upwind
- ✖ CAMP Downwind

Cc: Vijay Veluchamy, P.E. Andrew Schweitzer, P.E.	By: Harrison Bluestone, Conrad Kieras
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SITE OBSERVATION REPORT

Photos:



Photo 1: Truck rig at LB-27 (facing east)



Photo 2: Truck rig at LB-11 (facing east)

Cc:	Vijay Veluchamy, P.E. Andrew Schweitzer, P.E.	By:	Harrison Bluestone, Conrad Kieras
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SITE OBSERVATION REPORT



Photo 3: Camp Equipment (facing east)



Photo 4: Camp Equipment (facing west)

Cc:	Vijay Veluchamy, P.E. Andrew Schweitzer, P.E.	By:	Harrison Bluestone, Conrad Kieras
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SITE OBSERVATION REPORT

PROJECT NO.:	170197601	DATE:	Monday, May 23, 2022
PROJECT:	Willetts Point – Phase 1 Buildings OU-1 BCP Site No. C241146	WEATHER:	Partly Cloudy, 55-65’s °F
LOCATION:	Queens, NY	TIME:	6:00 a.m. – 3:30 p.m.
CLIENT:	Queens Development Group, LLC	BCP SITE ID:	C241146
CONTRACTOR:	AARCO Environmental Services Corp. (AARCO)	OBSERVER:	Harrison Bluestone Conrad Kieras Celine Patel
CONTRACTOR’S EQUIPMENT: <ul style="list-style-type: none">Two CME55 – Truck Mounted RigHand Tools	PRESENT AT SITE: Day 15 Langan: Harrison Bluestone, Conrad Kieras, Celine Patel AARCO: (Driller): 6-person crew Peak Security Plus (Site Security): 1-person crew		

PROJECT SUMMARY

Langan was on-site to observe borings in accordance with NYCBC Section 1704.7.4 and the contract documents and document the activities below in accordance with the April 29, 2022 NYSDEC-approved Geotechnical Investigation Work Plan.

*NYCBC = New York City Building Code, 2014 Edition

All elevations are referenced to the North American Vertical Datum of 1988 (NAVD88). Depths and elevations are approximate.

GENERAL OBSERVATIONS

- Langan arrived on site at 6:00 a.m.
- AARCO (two crews) arrived on site at 6:00 a.m.
- At about 6:10, one AARCO crew began drilling at LB-24. There was a casing-related mechanical issue from about 7:30 a.m. to 9:10 am and again from 11:10 a.m. to 12:10 p.m.
- The other AARCO crew worked from 6 a.m. to 8 a.m. to relocate the soil drums. At around 8:10 a.m., they began at LB-5.
- The crews hand dug the site caps at their respective locations and segregated the excavated material before they started drilling.
- AARCO broke their skid steer at around 10 a.m. and plan to fix it at a later time when they have the appropriate tools.
- Drilling concluded for the day at LB-24 at 3:15 pm and at LB-05 at 2:30 p.m., at approximately 55 and 80 feet below grade, respectively.
- One AARCO team left at 2:30 pm, and the other AARCO team left at 3:30 pm. Langan left at 3:30 p.m. after downloading data from CAMP equipment and putting it in storage for the day.

ENVIRONMENTAL OBSERVATIONS

1. Impacts Observed

- No petroleum impacts observed.

2. Sampling

- No environmental samples

Cc:	Vijay Veluchamy, P.E. Andrew Schweitzer, P.E.	By:	Harrison Bluestone, Conrad Kieras
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SITE OBSERVATION REPORT

3. Material Tracking

- a. None

4. Community Air Monitoring Plan Activities

- a. Langan performed community air monitoring at the perimeter of the work area at one upwind and one downwind locations during intrusive work. Implementation of the Community Air Monitoring Plan (CAMP) included air monitoring for particulate matter for particulates less than 10 µm in diameter (PM10) and volatile organic compounds (VOC). Downwind PID data was not collected from 6:43 to 9:18 due to equipment malfunction.
- b. No fugitive dust or odors associated with site activities were observed migrating from the site.

PROJECT PROGRESS

1. Geotechnical borings:

- a. Borings completed today: 0
- b. Borings in progress: 2
- c. Completed borings to date: 11 (out of 27)

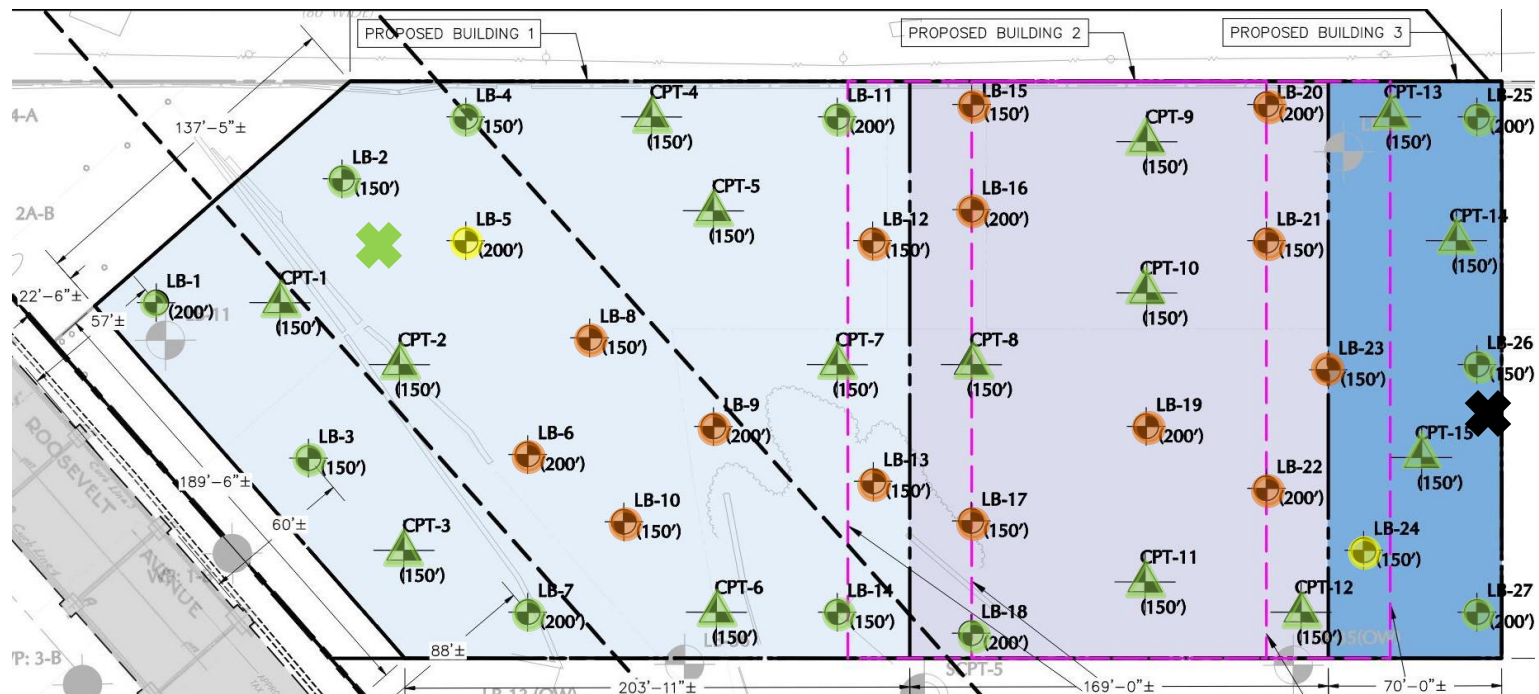
2. SCPT probes (ALL SCPTS HAVE BEEN COMPLETED):

- a. SCPT probes completed today: 0
- b. SCPT probes in progress: 0
- c. Completed SCPT probes to date: 15 (out of 15)

Cc:	Vijay Veluchamy, P.E. Andrew Schweitzer, P.E.	By:	Harrison Bluestone, Conrad Kieras
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SITE OBSERVATION REPORT

FIGURE 1: SUBSURFACE INVESTIGATION PLAN – Borings and SCPTs



- Boring to be Completed
- Boring in Progress
- Boring Completed

- ▲ sCPT to be Completed
- ▲ sCPT in Progress
- ▲ sCPT Completed

- ✖ CAMP Upwind
- ✖ CAMP Downwind

Cc: Vijay Veluchamy, P.E. Andrew Schweitzer, P.E.	By: Harrison Bluestone, Conrad Kieras
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SITE OBSERVATION REPORT

Photos:



Photo 1: Water encountered 5 ft below surface at LB-24

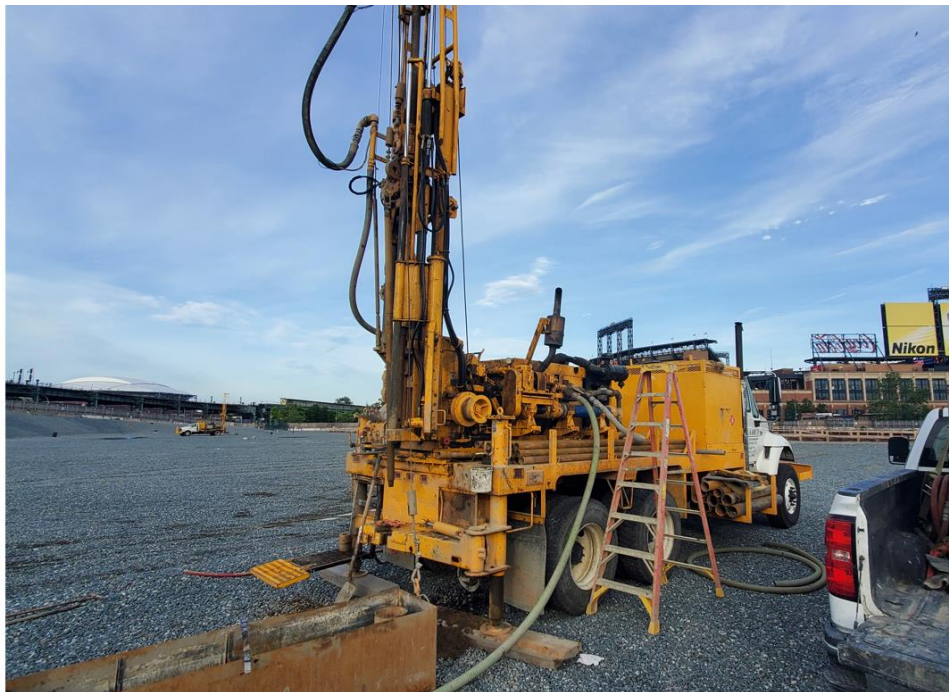


Photo 2: Truck rig at LB-24 (facing east)

Photos:

Cc:	Vijay Veluchamy, P.E. Andrew Schweitzer, P.E.	By:	Harrison Bluestone, Conrad Kieras
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SITE OBSERVATION REPORT



Photo 3: Truck rig at LB-5 (facing south)



Photo 4: Soil drums relocated behind trailer (facing west)

Cc:

Vijay Veluchamy, P.E.
 Andrew Schweitzer, P.E.

By:

Harrison Bluestone, Conrad Kieras

SITE OBSERVATION REPORT



Photo 5: CAMP Equipment (facing north)



Photo 6: CAMP Equipment (facing south)

Cc:

Vijay Veluchamy, P.E.
 Andrew Schweitzer, P.E.

By:

Harrison Bluestone, Conrad Kieras

SITE OBSERVATION REPORT

PROJECT NO.:	170197601	DATE:	Tuesday, May 24, 2022
PROJECT:	Willets Point – Phase 1 Buildings OU-1 BCP Site No. C241146	WEATHER:	Overcast, 50-60’s °F
LOCATION:	Queens, NY	TIME:	6:00 a.m. – 2:45 p.m.
CLIENT:	Queens Development Group, LLC	BCP SITE ID:	C241146
CONTRACTOR:	AARCO Environmental Services Corp. (AARCO)	OBSERVER:	Harrison Bluestone Conrad Kieras
CONTRACTOR’S EQUIPMENT: <ul style="list-style-type: none">Two CME55 – Truck Mounted RigHand Tools	PRESENT AT SITE: Day 16 Langan: Harrison Bluestone, Conrad Kieras AARCO: (Driller): 6-person crew Peak Security Plus (Site Security): 1-person crew		

PROJECT SUMMARY

Langan was on-site to observe borings in accordance with NYCBC Section 1704.7.4 and the contract documents and document the activities below in accordance with the April 29, 2022 NYSDEC-approved Geotechnical Investigation Work Plan.

*NYCBC = New York City Building Code, 2014 Edition

All elevations are referenced to the North American Vertical Datum of 1988 (NAVD88). Depths and elevations are approximate.

GENERAL OBSERVATIONS

- Langan arrived on site at 6:00 a.m.
- AARCO (two crews) arrived on site at 6:00 a.m.
- At about 6:10 a.m., one AARCO crew resumed drilling at LB-24 while the other AARCO crew resumed drilling at LB-05.
- Drilling concluded for the day at LB-24 and LB-05 at 2:30 p.m., each at approximately 150 feet below grade.
- Upon completion of LB-24, the borehole was backfilled with non-impacted drilling cuttings and clean Morie/FilPro bagged sand, from the bottom of the boreholes to the bottom of the site cap. The material was left to settle overnight and the site cap will be replaced using material from the segregated stockpiles tomorrow.
- Both AARCO teams left at 2:45 p.m. after cleaning up. Langan left at 2:45 p.m. after downloading data from CAMP equipment and putting it into storage for the day.

ENVIRONMENTAL OBSERVATIONS

1. Impacts Observed

- No petroleum impacts observed.

2. Sampling

- No environmental samples

3. Material Tracking

- None

4. Community Air Monitoring Plan Activities

- Langan performed community air monitoring at the perimeter of the work area at one upwind and one downwind locations during intrusive work. Implementation of the Community Air Monitoring Plan (CAMP)

Cc:	Vijay Veluchamy, P.E. Andrew Schweitzer, P.E.	By:	Harrison Bluestone, Conrad Kieras
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SITE OBSERVATION REPORT

included air monitoring for particulate matter for particulates less than 10 µm in diameter (PM10) and volatile organic compounds (VOC).

- b. No fugitive dust or odors associated with site activities were observed migrating from the site.

PROJECT PROGRESS

1. Geotechnical borings:

- a. Borings completed today: 1
- b. Borings in progress: 1
- c. Completed borings to date: 12 (out of 27)

2. SCPT probes (ALL SCPTS HAVE BEEN COMPLETED):

- a. SCPT probes completed today: 0
- b. SCPT probes in progress: 0
- c. Completed SCPT probes to date: 15 (out of 15)

Cc:

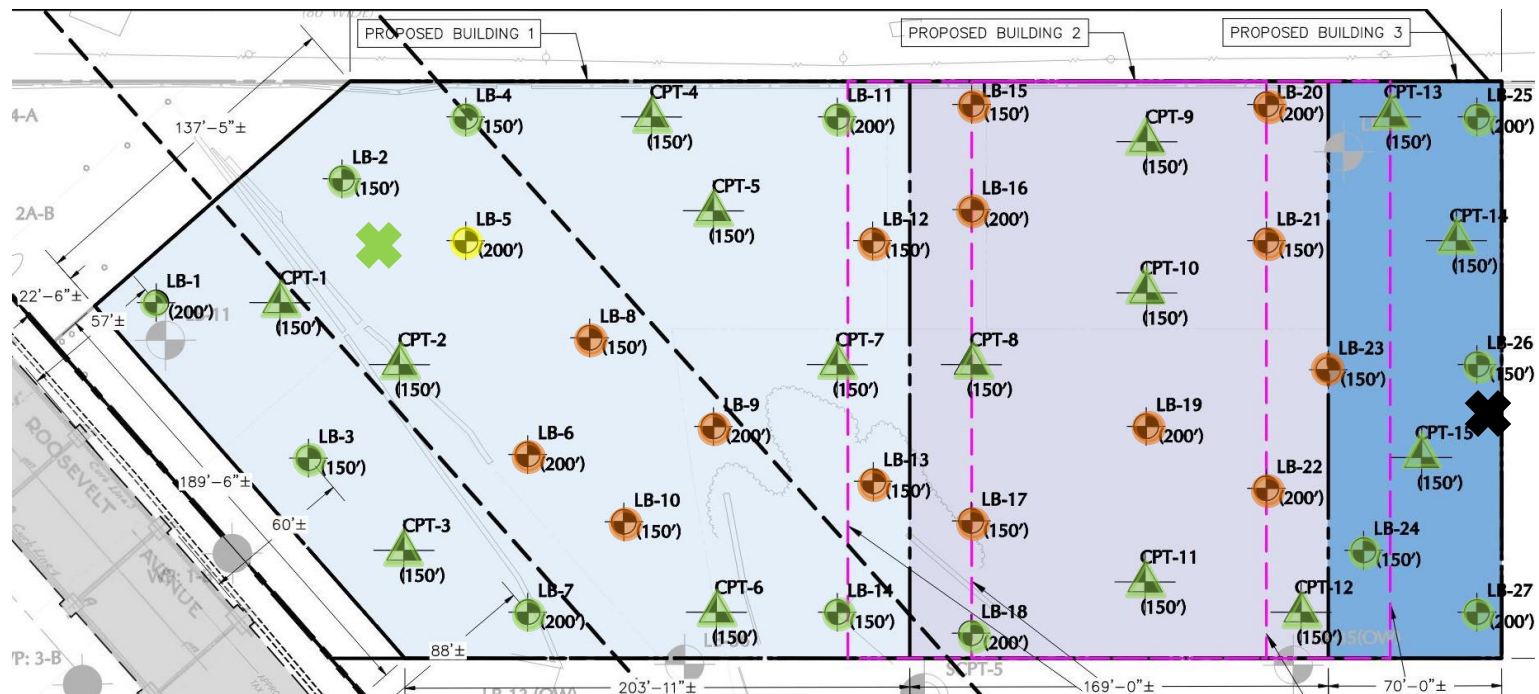
Vijay Veluchamy, P.E.
 Andrew Schweitzer, P.E.

By:

Harrison Bluestone, Conrad Kieras

SITE OBSERVATION REPORT

FIGURE 1: SUBSURFACE INVESTIGATION PLAN – Borings and SCPTs



- Boring to be Completed
- Boring in Progress
- Boring Completed

- ▲ sCPT to be Completed
- ▲ sCPT in Progress
- ▲ sCPT Completed

- ✖ CAMP Upwind
- ✖ CAMP Downwind

Cc: Vijay Veluchamy, P.E. Andrew Schweitzer, P.E.	By: Harrison Bluestone, Conrad Kieras
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SITE OBSERVATION REPORT

Photos:



Photo 1: Truck rig at LB-24 (facing south)

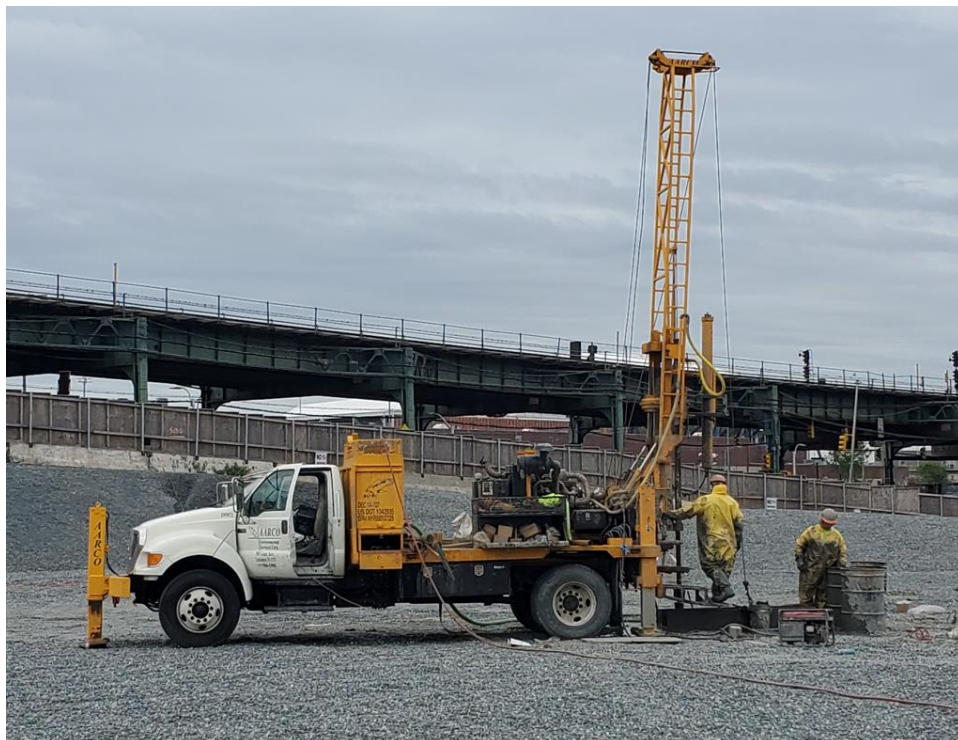


Photo 2: Truck rig at LB-5 (facing south)

Cc:

Vijay Veluchamy, P.E.
 Andrew Schweitzer, P.E.

By:

Harrison Bluestone, Conrad Kieras

SITE OBSERVATION REPORT



Photo 3: CAMP Equipment (facing north)

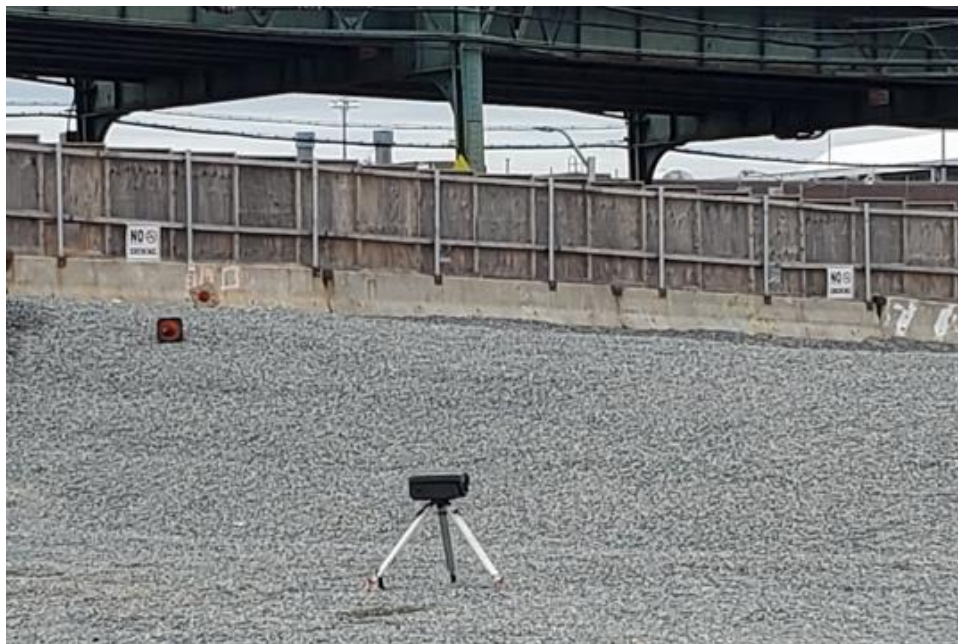


Photo 4: CAMP Equipment (facing south)

Cc: Vijay Veluchamy, P.E.
Andrew Schweitzer, P.E.

By: Harrison Bluestone, Conrad Kieras

SITE OBSERVATION REPORT

PROJECT NO.:	170197601	DATE:	Wednesday, May 25, 2022
PROJECT:	Willetts Point – Phase 1 Buildings OU-1 BCP Site No. C241146	WEATHER:	Clear Skies, 55-65’s °F
LOCATION:	Queens, NY	TIME:	6:00 a.m. – 3:00 p.m.
CLIENT:	Queens Development Group, LLC	BCP SITE ID:	C241146
CONTRACTOR:	AARCO Environmental Services Corp. (AARCO)	OBSERVER:	Harrison Bluestone Conrad Kieras
CONTRACTOR’S EQUIPMENT: <ul style="list-style-type: none">Two CME55 – Truck Mounted RigHand Tools	PRESENT AT SITE: Day 17 Langan: Harrison Bluestone, Conrad Kieras AARCO: (Driller): 6-person crew Peak Security Plus (Site Security): 1-person crew		

PROJECT SUMMARY

Langan was on-site to observe borings in accordance with NYCBC Section 1704.7.4 and the contract documents and document the activities below in accordance with the April 29, 2022 NYSDEC-approved Geotechnical Investigation Work Plan.

*NYCBC = New York City Building Code, 2014 Edition

All elevations are referenced to the North American Vertical Datum of 1988 (NAVD88). Depths and elevations are approximate.

GENERAL OBSERVATIONS

- Langan and AARCO (two crews) arrived on site at 6:00 a.m.
- At about 6:10 a.m., one AARCO crew began drilling at LB-20 while the other AARCO crew resumed drilling at LB-05.
- The crew hand dug the site caps at LB-20 and segregated the excavated material before they started drilling.
- The borehole at LB-24, which was completed yesterday, was observed to have to have settled overnight. Additional clean backfill was added and the cap was matched using the original segregated stockpile.
- Drilling concluded for the day at LB-20 and LB-05 at 2:45 p.m., at approximately 110 and 200 feet below grade, respectively.
- Upon completion of LB-05, the borehole was backfilled with non-impacted drilling cuttings and clean Morie/FilPro bagged sand, from the bottom of the boreholes to the bottom of the site cap. The material was left to settle overnight and the site cap will be replaced using material from the segregated stockpiles tomorrow.
- Both AARCO teams left at 3:00 p.m. after cleaning up. Langan left at 3:00 p.m. after downloading data from CAMP equipment and putting it into storage for the day.

ENVIRONMENTAL OBSERVATIONS

1. Impacts Observed

- No petroleum impacts observed.

2. Sampling

- No environmental samples

3. Material Tracking

- None

Cc:	Vijay Veluchamy, P.E. Andrew Schweitzer, P.E.	By:	Harrison Bluestone, Conrad Kieras
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SITE OBSERVATION REPORT

4. Community Air Monitoring Plan Activities

- a. Langan performed community air monitoring at the perimeter of the work area at one upwind and one downwind locations during intrusive work. Implementation of the Community Air Monitoring Plan (CAMP) included air monitoring for particulate matter for particulates less than 10 μm in diameter (PM10) and volatile organic compounds (VOC).
- b. No fugitive dust or odors associated with site activities were observed migrating from the site.

PROJECT PROGRESS

1. Geotechnical borings:

- a. Borings completed today: 1
- b. Borings in progress: 1
- c. Completed borings to date: 13 (out of 27)

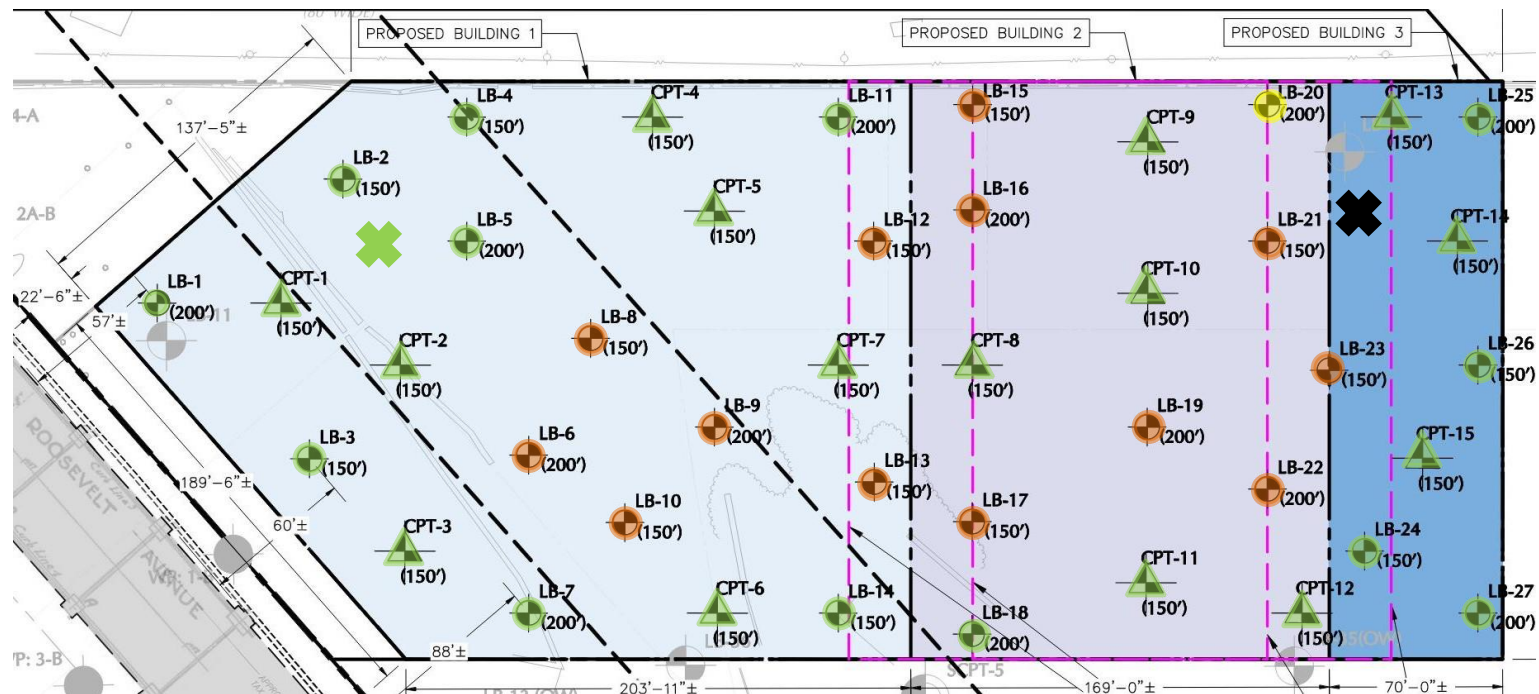
2. SCPT probes (ALL SCPTs HAVE BEEN COMPLETED):

- a. SCPT probes completed today: 0
- b. SCPT probes in progress: 0
- c. Completed SCPT probes to date: 15 (out of 15)

Cc:	Vijay Veluchamy, P.E. Andrew Schweitzer, P.E.	By:	Harrison Bluestone, Conrad Kieras
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SITE OBSERVATION REPORT

FIGURE 1: SUBSURFACE INVESTIGATION PLAN – Borings and SCPTs



- Boring to be Completed
- Boring in Progress
- Boring Completed

- ▲ sCPT to be Completed
- ▲ sCPT in Progress
- ▲ sCPT Completed

- ✖ CAMP Upwind
- ✖ CAMP Downwind

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 Andrew Schweitzer, P.E.

By: Harrison Bluestone, Conrad Kieras

SITE OBSERVATION REPORT

Photos:



Photo 1: Truck rig at LB-20 (facing east)

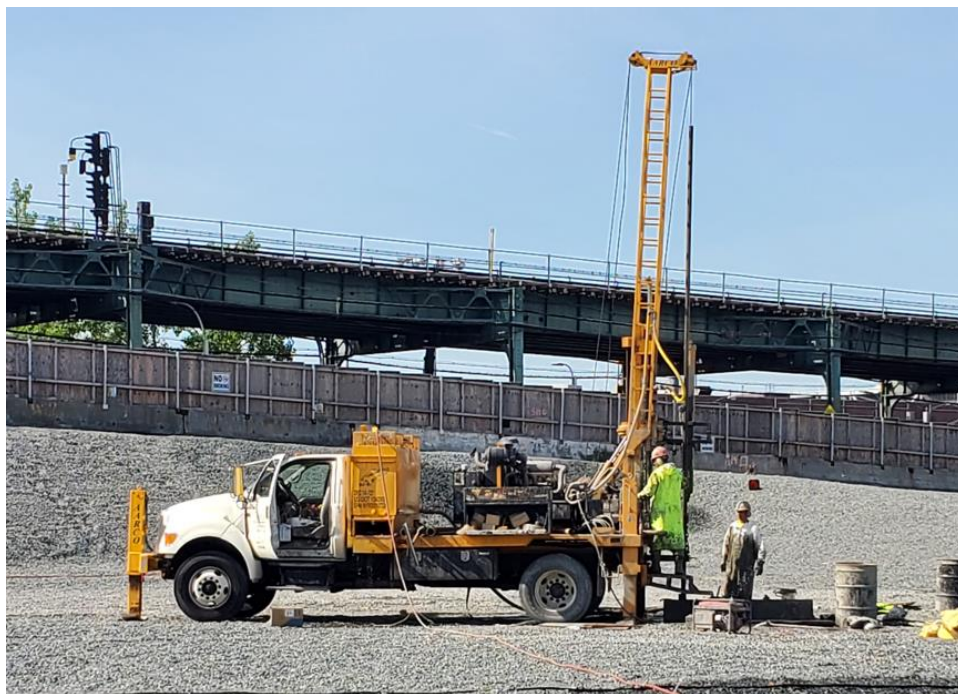


Photo 2: Truck rig at LB-5 (facing south)

Cc:

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 Andrew Schweitzer, P.E.

By:

Harrison Bluestone, Conrad Kieras

SITE OBSERVATION REPORT



Photo 3: CAMP Equipment (facing north)



Photo 4: CAMP Equipment (facing south)

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SITE OBSERVATION REPORT

PROJECT NO.:	170197601	DATE:	Thursday, May 26, 2022
PROJECT:	Willetts Point – Phase 1 Buildings OU-1 BCP Site No. C241146	WEATHER:	Clear Skies, 60-70's °F
LOCATION:	Queens, NY	TIME:	6:00 a.m. – 4:15 p.m.
CLIENT:	Queens Development Group, LLC	BCP SITE ID:	C241146
CONTRACTOR:	AARCO Environmental Services Corp. (AARCO)	OBSERVER:	Harrison Bluestone Conrad Kieras
CONTRACTOR'S EQUIPMENT: <ul style="list-style-type: none">Two CME55 – Truck Mounted RigHand Tools	PRESENT AT SITE: Day 18 Langan: Harrison Bluestone, Conrad Kieras AARCO: (Driller): 6-person crew Peak Security Plus (Site Security): 1-person crew		

PROJECT SUMMARY

Langan was on-site to observe borings in accordance with NYCBC Section 1704.7.4 and the contract documents and document the activities below in accordance with the April 29, 2022 NYSDEC-approved Geotechnical Investigation Work Plan.

*NYCBC = New York City Building Code, 2014 Edition

All elevations are referenced to the North American Vertical Datum of 1988 (NAVD88). Depths and elevations are approximate.

GENERAL OBSERVATIONS

- Langan and AARCO (two crews) arrived on site at 6:00 a.m.
- At about 6:10 a.m., one AARCO crew resumed drilling at LB-20 while the other AARCO crew began drilling at LB-06.
- The crew hand dug the site caps at LB-06 and segregated the excavated material before they started drilling.
- The borehole at LB-05, which was completed yesterday, was observed to have settled overnight. Additional clean backfill was added and the cap was matched using the original segregated stockpile.
- Drilling concluded for the day at LB-20 and LB-06 at 2:45 p.m., at approximately 160 and 140 feet below grade, respectively.
- One AARCO team left at 3:30 pm and the other AARCO team left at 4:15 p.m. after cleaning up. Langan left at 4:15 p.m. after downloading data from CAMP equipment and putting it into storage for the day.

ENVIRONMENTAL OBSERVATIONS

1. Impacts Observed

- No petroleum impacts observed.

2. Sampling

- No environmental samples

3. Material Tracking

- None

4. Community Air Monitoring Plan Activities

- Langan performed community air monitoring at the perimeter of the work area at one upwind and one downwind locations during intrusive work. Implementation of the Community Air Monitoring Plan (CAMP)

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SITE OBSERVATION REPORT

included air monitoring for particulate matter for particulates less than 10 µm in diameter (PM10) and volatile organic compounds (VOC).

- b. No fugitive dust or odors associated with site activities were observed migrating from the site.

PROJECT PROGRESS

1. Geotechnical borings:

- a. Borings completed today: 0
- b. Borings in progress: 2
- c. Completed borings to date: 13 (out of 27)

2. SCPT probes (ALL SCPTs HAVE BEEN COMPLETED):

- a. SCPT probes completed today: 0
- b. SCPT probes in progress: 0
- c. Completed SCPT probes to date: 15 (out of 15)

Cc:

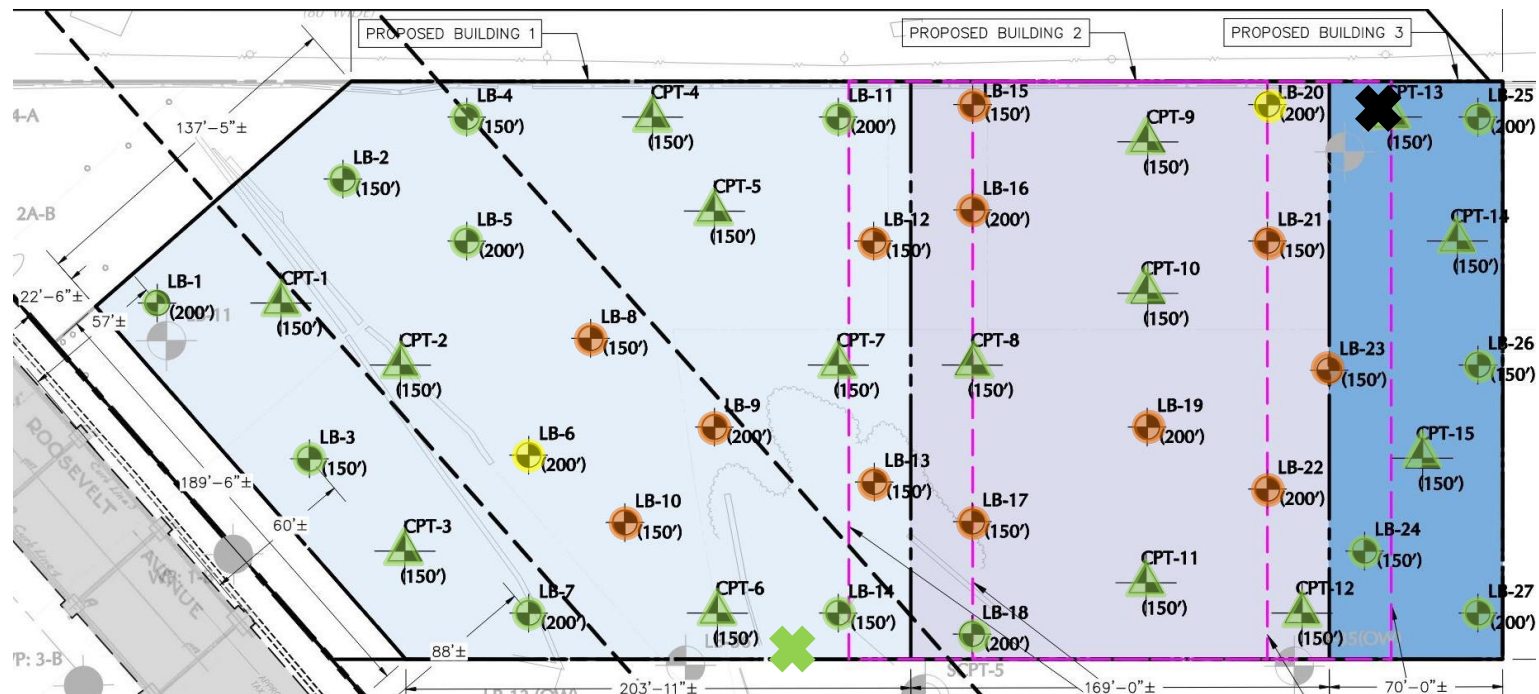
Vijay Veluchamy, P.E.
Andrew Schweitzer, P.E.

By:

Harrison Bluestone, Conrad Kieras

SITE OBSERVATION REPORT

FIGURE 1: SUBSURFACE INVESTIGATION PLAN – Borings and SCPTs



- Boring to be Completed
- Boring in Progress
- Boring Completed

- ▲ sCPT to be Completed
- ▲ sCPT in Progress
- ▲ sCPT Completed

- ✖ CAMP Upwind
- ✖ CAMP Downwind

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 Andrew Schweitzer, P.E.

By: Harrison Bluestone, Conrad Kieras

SITE OBSERVATION REPORT

Photos:



Photo 1: Truck rig at LB-20 (facing east)



Photo 2: Truck rig at LB-6 (facing south)

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Vijay Veluchamy, P.E.
 Andrew Schweitzer, P.E.

By:

Harrison Bluestone, Conrad Kieras

SITE OBSERVATION REPORT



Photo 3: CAMP Equipment (facing east)



Photo 4: CAMP Equipment (facing west)

Cc:

Vijay Veluchamy, P.E.
 Andrew Schweitzer, P.E.

By:

Harrison Bluestone, Conrad Kieras

SITE OBSERVATION REPORT

PROJECT NO.:	170197601	DATE:	Friday, May 27, 2022
PROJECT:	Willets Point – Phase 1 Buildings OU-1 BCP Site No. C241146	WEATHER:	Cloudy, 60-70’s °F
LOCATION:	Queens, NY	TIME:	5:30 a.m. – 2:45 p.m.
CLIENT:	Queens Development Group, LLC	BCP SITE ID:	C241146
CONTRACTOR:	AARCO Environmental Services Corp. (AARCO)	OBSERVER:	Harrison Bluestone Conrad Kieras
CONTRACTOR’S EQUIPMENT: <ul style="list-style-type: none">Two CME55 – Truck Mounted RigHand Tools	PRESENT AT SITE: Day 19 Langan: Harrison Bluestone, Conrad Kieras, Belal Hossen AARCO: (Driller): 6-person crew Peak Security Plus (Site Security): 1-person crew		

PROJECT SUMMARY

Langan was on-site to observe borings in accordance with NYCBC Section 1704.7.4 and the contract documents and document the activities below in accordance with the April 29, 2022 NYSDEC-approved Geotechnical Investigation Work Plan.

*NYCBC = New York City Building Code, 2014 Edition

All elevations are referenced to the North American Vertical Datum of 1988 (NAVD88). Depths and elevations are approximate.

GENERAL OBSERVATIONS

- Langan and AARCO (two crews) arrived on site at 5:30 a.m.
- At about 5:40 a.m., one AARCO crew resumed drilling at LB-20 while the other AARCO crew resumed drilling at LB-06.
- Drilling concluded for the day at LB-20 and LB-06 at 2:35 p.m., at approximately 200 and 200 feet below grade, respectively.
- Upon completion of LB-20 and LB-06, the boreholes were backfilled with non-impacted drilling cuttings and clean Morie/FilPro bagged sand, from the bottom of the boreholes to the bottom of the site cap. The material was left to settle overnight and the site cap will be replaced using material from the segregated stockpiles on Tuesday.
- Both AARCO teams left at 2:45 p.m. after cleaning up. Langan left at 2:45 p.m. after downloading data from CAMP equipment and putting it into storage for the day.

ENVIRONMENTAL OBSERVATIONS

1. Impacts Observed

- No petroleum impacts observed.

2. Sampling

- No environmental samples

3. Material Tracking

- None

Cc:	Vijay Veluchamy, P.E. Andrew Schweitzer, P.E.	By:	Harrison Bluestone, Conrad Kieras
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SITE OBSERVATION REPORT

4. Community Air Monitoring Plan Activities

- a. Langan performed community air monitoring at the perimeter of the work area at one upwind and one downwind locations during intrusive work. Implementation of the Community Air Monitoring Plan (CAMP) included air monitoring for particulate matter for particulates less than 10 µm in diameter (PM10) and volatile organic compounds (VOC).
- b. No fugitive dust or odors associated with site activities were observed migrating from the site.

PROJECT PROGRESS

1. Geotechnical borings:

- a. Borings completed today: 2
- b. Borings in progress: 0
- c. Completed borings to date: 15 (out of 27)

2. SCPT probes (ALL SCPTs HAVE BEEN COMPLETED):

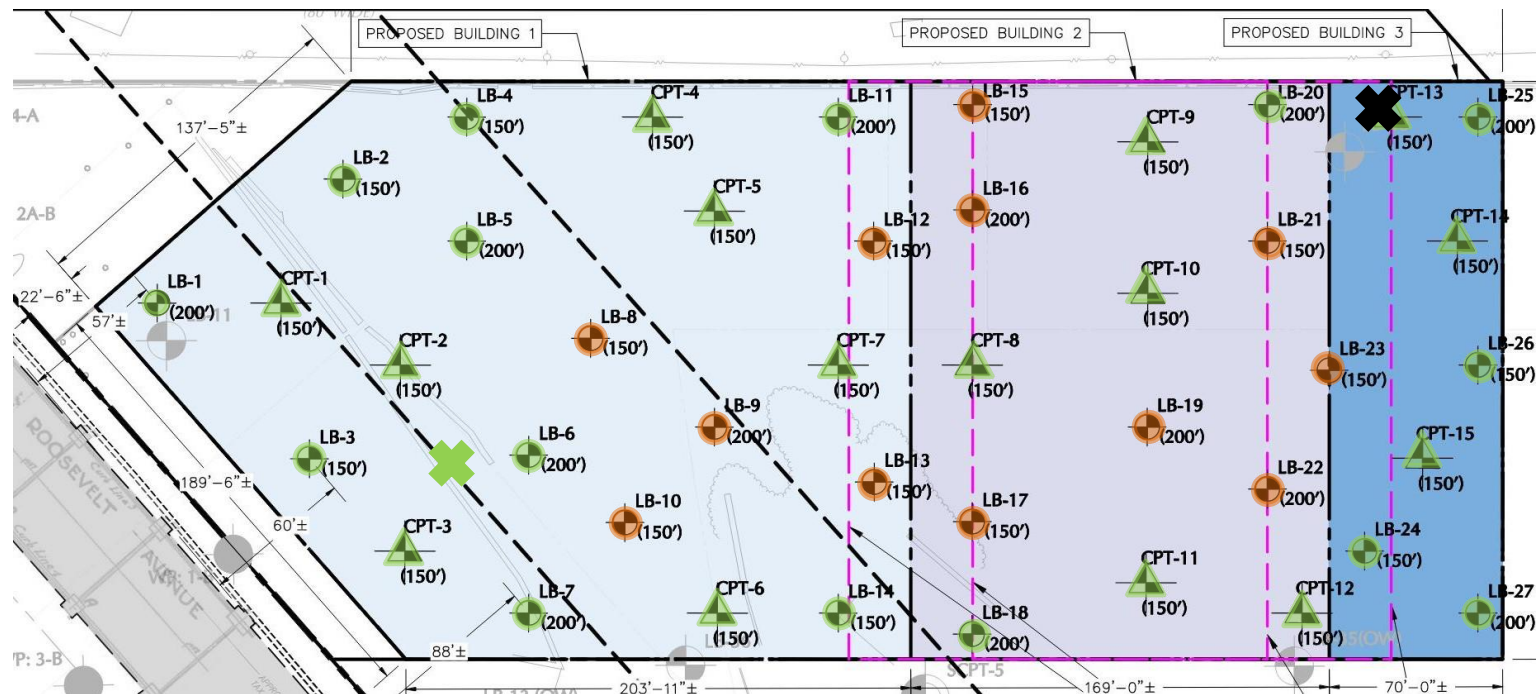
- a. SCPT probes completed today: 0
- b. SCPT probes in progress: 0
- c. Completed SCPT probes to date: 15 (out of 15)

Cc:	Vijay Veluchamy, P.E. Andrew Schweitzer, P.E.	By:	Harrison Bluestone, Conrad Kieras
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SITE OBSERVATION REPORT

FIGURE 1: SUBSURFACE INVESTIGATION PLAN – Borings and SCPTs



- Boring to be Completed
- Boring in Progress
- Boring Completed

- ▲ sCPT to be Completed
- ▲ sCPT in Progress
- ▲ sCPT Completed

- ✖ CAMP Upwind
- ✖ CAMP Downwind

Cc: Vijay Veluchamy, P.E. Andrew Schweitzer, P.E.	By: Harrison Bluestone, Conrad Kieras
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SITE OBSERVATION REPORT

Photos:



Photo 1: Truck rig at LB-20 (facing south)

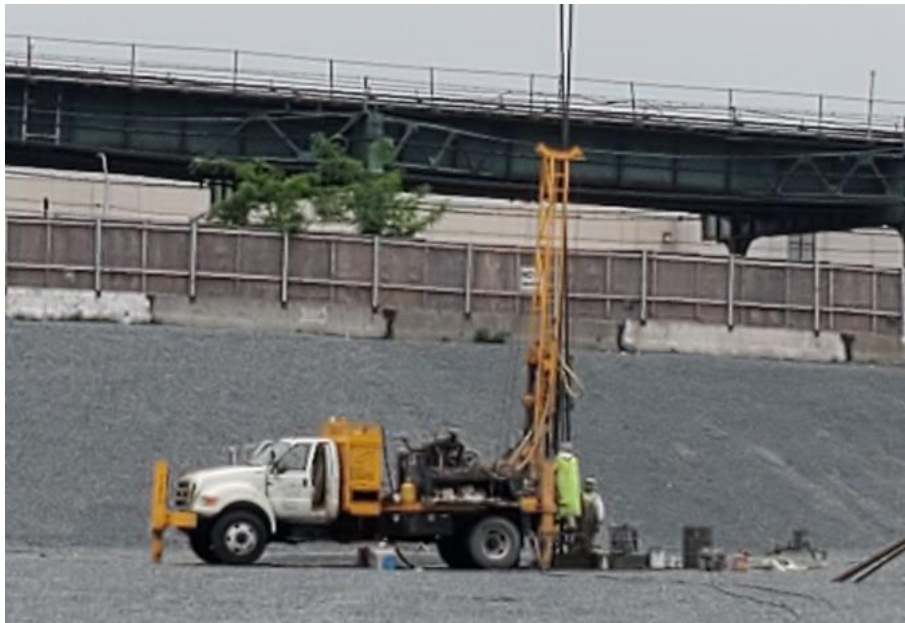


Photo 2: Truck rig at LB-6 (facing south)

Cc: Vijay Veluchamy, P.E. Andrew Schweitzer, P.E.	By: Harrison Bluestone, Conrad Kieras
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SITE OBSERVATION REPORT



Photo 3: CAMP Equipment (facing west)



Photo 4: CAMP Equipment (facing south)

Cc:

Vijay Veluchamy, P.E.
 Andrew Schweitzer, P.E.

By:

Harrison Bluestone, Conrad Kieras

SITE OBSERVATION REPORT

PROJECT NO.:	170197601	DATE:	Tuesday, May 31, 2022
PROJECT:	Willets Point – Phase 1 Buildings OU-1 BCP Site No. C241146	WEATHER:	Clear Skies, 85-95’s °F
LOCATION:	Queens, NY	TIME:	6:00 a.m. – 5:00 p.m.
CLIENT:	Queens Development Group, LLC	BCP SITE ID:	C241146
CONTRACTOR:	AARCO Environmental Services Corp. (AARCO)	OBSERVER:	Harrison Bluestone Conrad Kieras Patricia Wendy
CONTRACTOR’S EQUIPMENT: <ul style="list-style-type: none">Two CME55 – Truck Mounted RigOne CPT Truck Mounted RigHand Tools		PRESENT AT SITE: Day 20 Langan: Harrison Bluestone, Conrad Kieras, Patricia Wendy AARCO: (Driller): 6-person crew CONETEC: (Driller): 3-person crew Peak Security Plus (Site Security): 1-person crew	

PROJECT SUMMARY

Langan was on-site to observe borings in accordance with NYCBC Section 1704.7.4 and the contract documents and document the activities below in accordance with the April 29, 2022 NYSDEC-approved Geotechnical Investigation Work Plan.

*NYCBC = New York City Building Code, 2014 Edition

All elevations are referenced to the North American Vertical Datum of 1988 (NAVD88). Depths and elevations are approximate.

GENERAL OBSERVATIONS

- Langan and AARCO (two crews) arrived on site at 6:00 a.m.
- ConeTec (one crew) arrived on site at 7:00 a.m. and began work at 7:10 a.m.
- At about 6:10 a.m., both AARCO crews worked on fixing the broken Skid Steer.
- At 8:00 a.m., one AARCO crew began drilling at LB-22 while the other AARCO crew began drilling at LB-12.
- The crew hand dug the site caps at LB-22 and LB-12 and segregated the excavated material before they started drilling.
- Drilling concluded for the day at LB-22 and LB-12 at 2:30 p.m., at approximately 85 and 80 feet below grade, respectively.
- The borehole at LB-20 and LB-06, which were completed on Friday, were observed to have settled overnight. Additional clean backfill was added and the cap was matched using the original segregated stockpile.
- ConeTec completed three sCPTs (identified as sCPT-16, sCPT-17, and sCPT-18) by the end of the day, at approximately 183, 162, and 193 feet below grade. These probes replaced boring locations LB-8, LB-10, and LB-13, respectively.
- Both AARCO teams left at 3:00 p.m. after cleaning up. ConeTec left at 5:00 p.m. Langan left at 5:00 p.m. after downloading data from CAMP equipment and putting it into storage for the day.

ENVIRONMENTAL OBSERVATIONS

1. Impacts Observed

- No petroleum impacts observed.

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SITE OBSERVATION REPORT

2. Sampling

- a. No environmental samples

3. Material Tracking

- a. None

4. Community Air Monitoring Plan Activities

- a. Langan performed community air monitoring at the perimeter of the work area at one upwind and one downwind locations during intrusive work. Implementation of the Community Air Monitoring Plan (CAMP) included air monitoring for particulate matter for particulates less than 10 µm in diameter (PM10) and volatile organic compounds (VOC).
- b. No fugitive dust or odors associated with site activities were observed migrating from the site.

PROJECT PROGRESS

1. Geotechnical borings:

- a. Borings completed today: 0
- b. Borings in progress: 2
- c. Completed borings to date: 15 (out of 24)

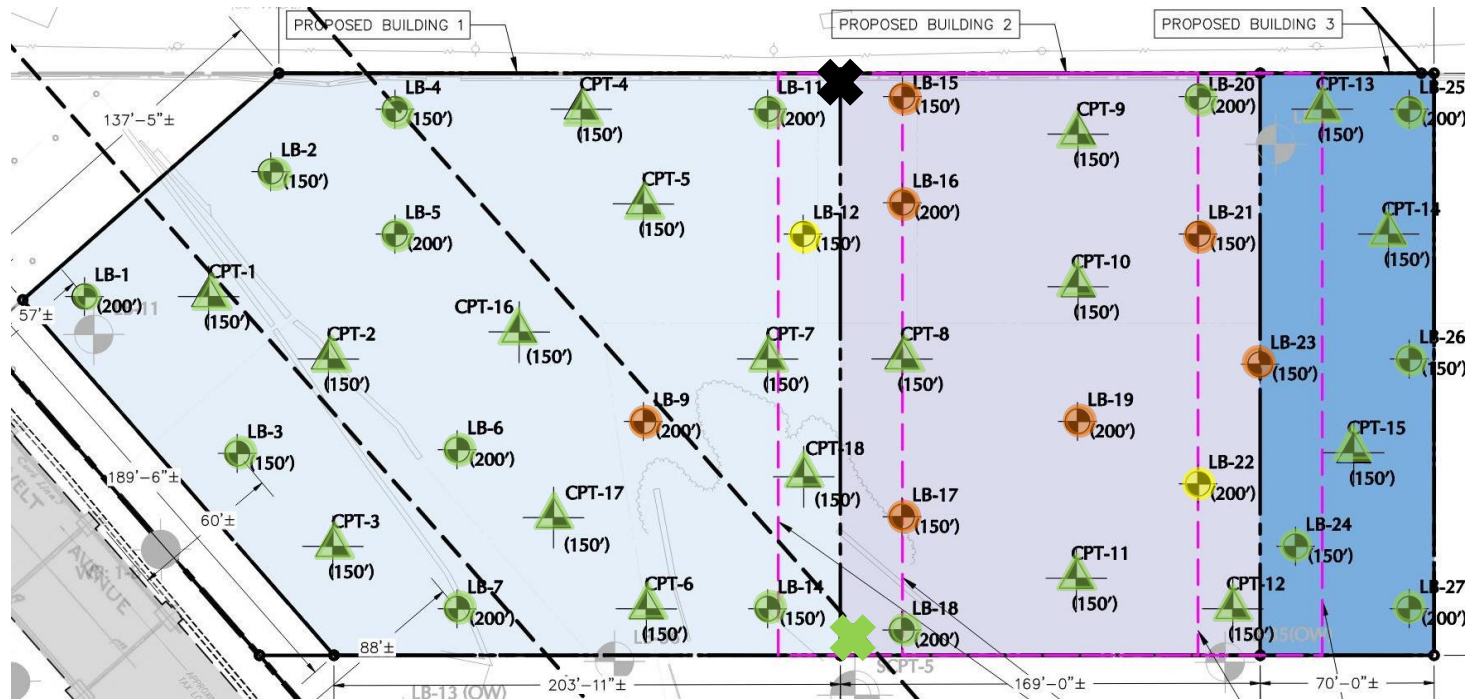
2. SCPT probes (ALL SCPTs HAVE BEEN COMPLETED):

- a. SCPT probes completed today: 3
- b. SCPT probes in progress: 0
- c. Completed SCPT probes to date: 18 (out of 18)

Cc:	Vijay Veluchamy, P.E.	By:	Harrison Bluestone, Conrad Kieras, Patricia Wendy
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SITE OBSERVATION REPORT

FIGURE 1: SUBSURFACE INVESTIGATION PLAN – Borings and SCPTs



Cc:	Vijay Veluchamy, P.E.	By:	Harrison Bluestone, Conrad Kieras, Patricia Wendy
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SITE OBSERVATION REPORT

Photos:



Photo 1: Truck rig at LB-22 (facing south)



Photo 2: Truck rig at LB-15 (facing south)

Cc: Vijay Veluchamy, P.E.

By: Harrison Bluestone, Conrad Kieras, Patricia Wendy

SITE OBSERVATION REPORT



Photo 3: CAMP Equipment (facing west)



Photo 4: CAMP Equipment (facing east)

Cc: Vijay Veluchamy, P.E.

By: Harrison Bluestone, Conrad Kieras, Patricia Wendy

SITE OBSERVATION REPORT



Photo 5: CPT Truck over CPT-18 (facing east)

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