LANGAN

SITE OBSERVATION REPORT

PROJECT NO.	170384501	**CLIENT:** 550 Clinton Partners LLC/539 Vanderbilt Partners LLC	**DATE:**	Monday. Oct. 14, 2019
PROJECT:	805-825 Atlantic Avenue		**WEATHER:**	Sunny, 70s Wind: SE 5 mph
LOCATION:	805-825 Atlantic Avenue, Brooklyn, NY		**TIME:**	7:00am to 2:00 pm
CONTRACTOR:	AARCO Environmental Services, Inc. (AARCO)		**LANGAN REP. :**	Tyler Goodnough
CONTRACTOR'S EQUIPMENT: Geoprobe 8140 LC Sonic rig		**PRESENT AT SITE:** Tyler Goodnough - Langan Tom Seickel - AARCO		**Day 10**

OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.:

Langan was present to implement the August 20, 2019 Remedial Design – In-Situ Groundwater Remediation Technical Memorandum (Tech Memo) for the for BCP site C224228 at 805-825 Atlantic Avenue (Block 2010, Lots 1 and 59). Observed activities were as follows:

Site Activities

- Drilling Activity:
  - AARCO used a Geoprobe 8140 LC sonic rig to advance boring IP-03 from 45 to 80 feet below grade surface (bgs). Groundwater was observed at about 65 feet bgs. Petroleum-like odors, staining, and photoionization detector (PID) readings up to 2,270 parts per million (ppm) were observed from 67 to 75 feet bgs (max. PID reading at about 68 feet bgs).
  - AARCO used a Geoprobe 8140 LC sonic rig to advance boring IP-08 from 0 to 65 feet bgs. Groundwater was not observed. Evidence of contamination was not observed.
- Injection well IP-03 was constructed with about 65 feet of 2-inch diameter schedule-40 polyvinyl chloride (PVC) riser piping connected to 15 feet of 2-inch diameter No. 2 slotted PVC well screen. The screen interval was set from 65 to 80 feet bgs. The annulus was backfilled with No. 1 sand from 64 to 80 feet bgs, bentonite from 63 to 64 feet bgs, and the remainder of the boring was backfilled via tremie pipe with a bentonite-grout slurry to grade.

Sampling:

- None.

Cc:	K. Del Col, S. Knoop, M. Burke (Langan)	By:	Tyler Goodnough **LANGAN**

SITE OBSERVATION REPORT

CAMP Activities

- Langan performed community air monitoring at one upwind and one downwind station. No volatile organic compound (VOC) or particulate concentrations exceeded the action levels established in the site Community Air Monitoring Plan (CAMP).

Particulate Monitoring (mg/m^3)			**Organic Vapor Monitoring (ppm)**		
Averaging Period	Upwind	Downwind	Averaging Period	Upwind	Downwind
High Intervals "exceedances" (15min >1.5 + Upwind level)	NA	0	High Intervals "exceedances" (15min >5+Upwind level)	NA	0
Maximum 15-min Average	0.038	0.028	Maximum 15-min Average	0.2	0.2
Minimum 1-min Instant Reading	0.018	0.013	Minimum 1-min Instant Reading	0.0	0.0
Maximum 1-min Instant Reading	0.068	0.033	Maximum 1-min Instant Reading	0.2	0.6

mg/m^3 = micrograms per cubic meter ppm = parts per million

NA = Not Available

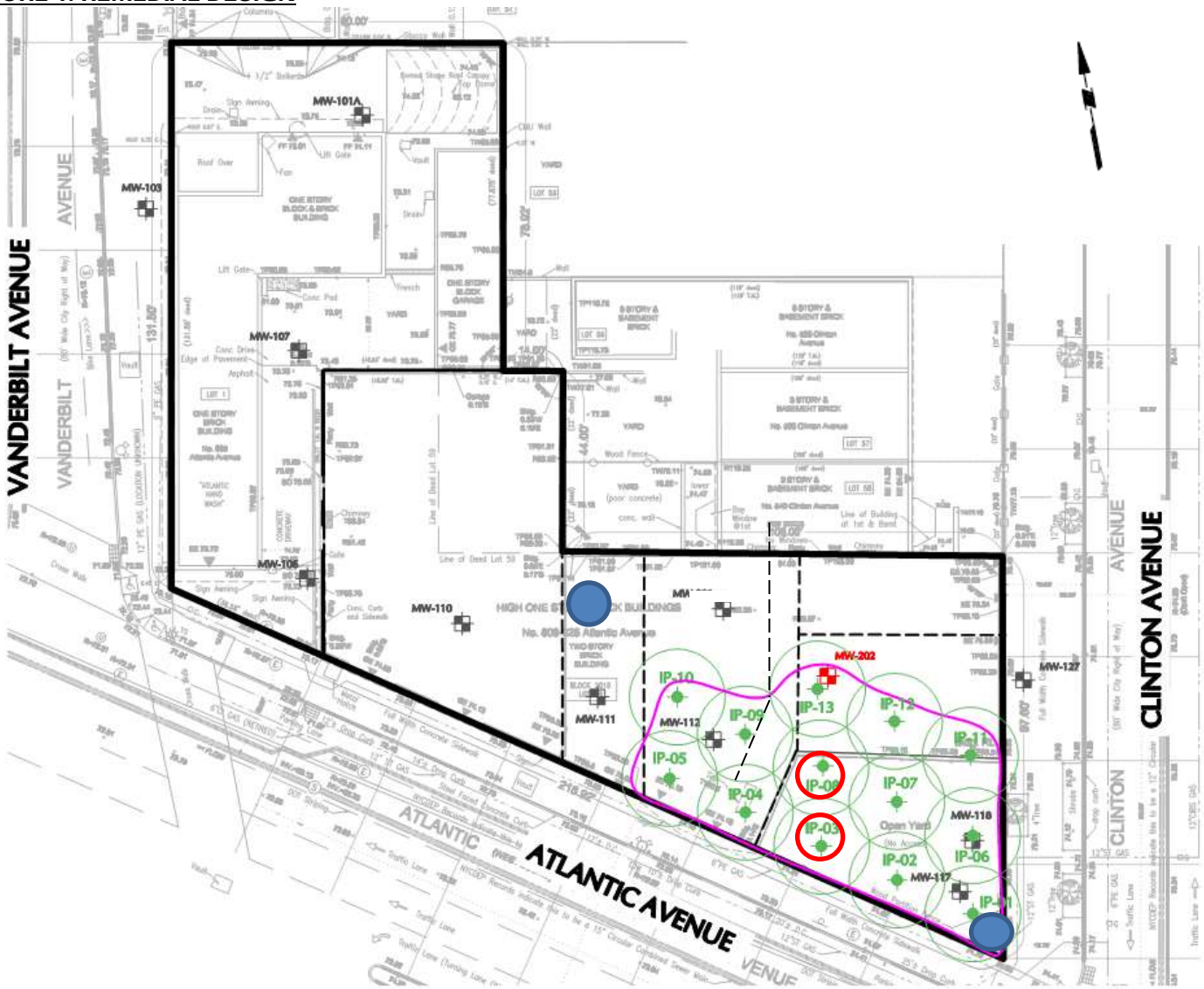
Anticipated Activities

- Complete advancement and installation of IP-08 to 80 feet bgs.
- Installation of injection well IP-08.
- Begin advancing boring IP-04.

Cc:	K. Del Col, S. Knoop, M. Burke (Langan)	By:	Tyler Goodnough
			LANGAN

SITE OBSERVATION REPORT

FIGURE 1: REMEDIAL DESIGN



Legend:

Drilling area

CAMP station locations

Cc:	K. Del Col, S. Knoop, M. Burke (Langan)	By:	Tyler Goodnough
			LANGAN

SITE OBSERVATION REPORT

SITE PHOTOGRAPHS

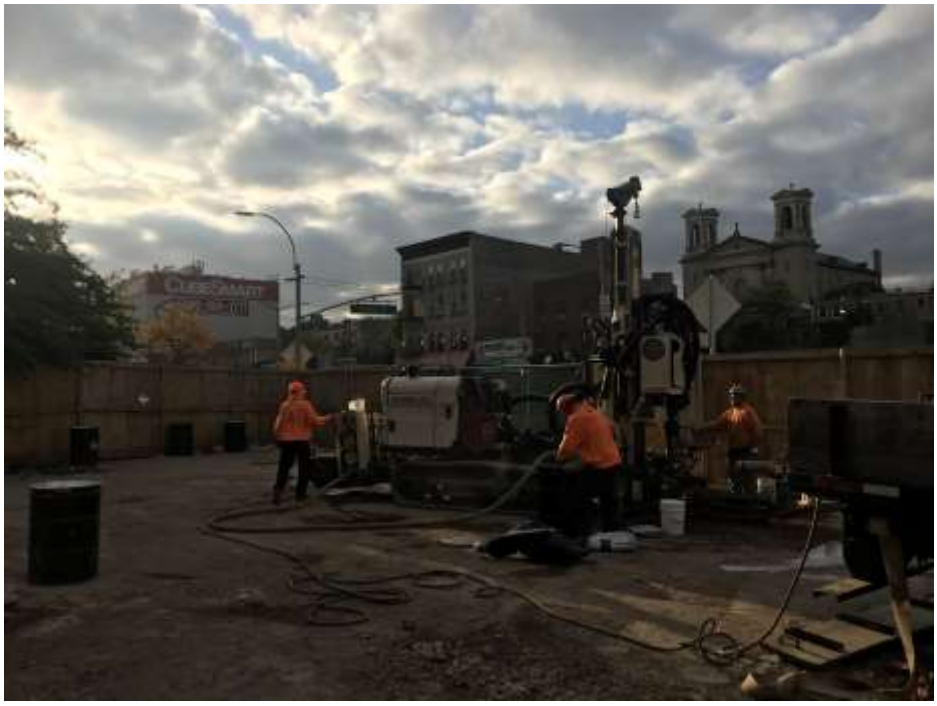


Photo 1: AARCO advancing boring IP-03 (facing southeast).

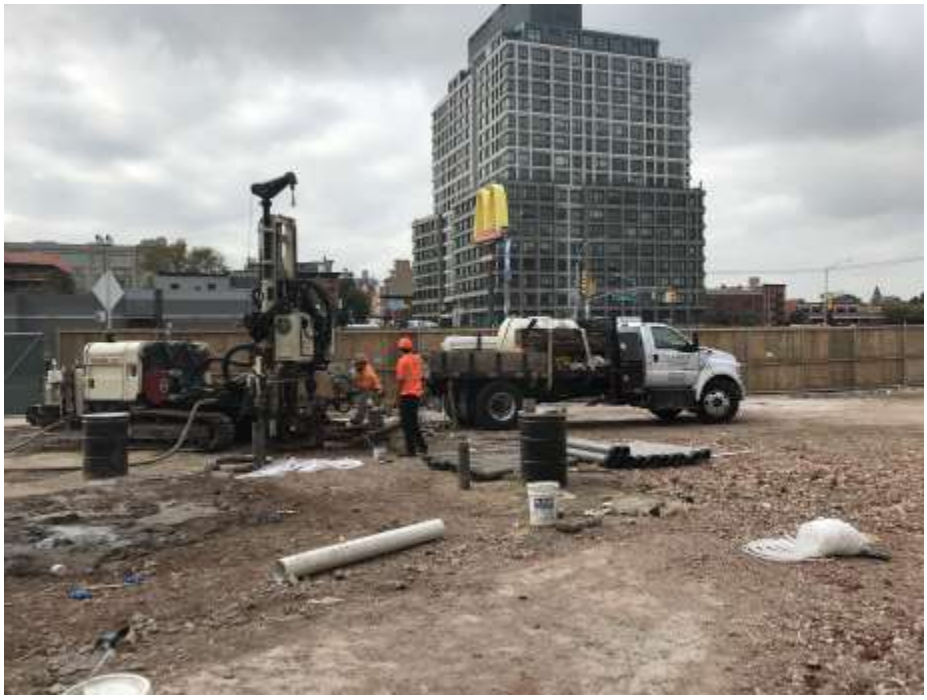


Photo 2: AARCO advancing boring IP-08 (facing south).

Cc:	K. Del Col, S. Knoop, M. Burke (Langan)	By:	Tyler Goodnough
			LANGAN

LANGAN

SITE OBSERVATION REPORT

PROJECT NO.	170384501	**CLIENT:** 550 Clinton Partners LLC/539 Vanderbilt Partners LLC	**DATE:**	Tuesday. Oct. 15, 2019
PROJECT:	805-825 Atlantic Avenue		**WEATHER:**	Sunny, 60s Wind: SE 5 mph
LOCATION:	805-825 Atlantic Avenue, Brooklyn, NY		**TIME:**	7:00am to 2:00 pm
CONTRACTOR:	AARCO Environmental Services, Inc. (AARCO)		**LANGAN REP. :**	Tyler Goodnough
CONTRACTOR'S EQUIPMENT: Geoprobe 8140 LC Sonic rig		**PRESENT AT SITE:** Tyler Goodnough - Langan Tom Seickel - AARCO		**Day 11**

OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.:

Langan was present to implement the August 20, 2019 Remedial Design – In-Situ Groundwater Remediation Technical Memorandum (Tech Memo) for the for BCP site C224228 at 805-825 Atlantic Avenue (Block 2010, Lots 1 and 59). Observed activities were as follows:

Site Activities

- Drilling Activity:
  - AARCO used a Geoprobe 8140 LC sonic rig to advance boring IP-08 from 65 to 80 feet bgs. Groundwater was observed at about 65 feet bgs. Petroleum-like odors, staining, and photoionization detector (PID) readings up to 2,532 parts per million (ppm) were observed from 66 to 75 feet bgs (max. PID reading at about 67 feet bgs).
  - AARCO used a Geoprobe 8140 LC sonic rig to advance boring IP-04 from 0 to 35 feet bgs. Groundwater was not observed. Evidence of contamination was not observed.
- Injection well IP-08 was constructed with about 65 feet of 2-inch diameter schedule-40 polyvinyl chloride (PVC) riser piping connected to 15 feet of 2-inch diameter No. 2 slotted PVC well screen. The screen interval was set from 65 to 80 feet bgs. The annulus was backfilled with No. 1 sand from 64 to 80 feet bgs, bentonite from 63 to 64 feet bgs, and the remainder of the boring was backfilled via tremie pipe with a bentonite-grout slurry to grade.

Sampling:

- None.

Cc:	K. Del Col, S. Knoop, M. Burke (Langan)	By:	Tyler Goodnough **LANGAN**

SITE OBSERVATION REPORT

CAMP Activities

- Langan performed community air monitoring at one upwind and one downwind station. No volatile organic compound (VOC) or particulate concentrations exceeded the action levels established in the site Community Air Monitoring Plan (CAMP).

Particulate Monitoring (mg/m^3)			**Organic Vapor Monitoring (ppm)**		
Averaging Period	Upwind	Downwind	Averaging Period	Upwind	Downwind
High Intervals "exceedances" (15min >1.5 + Upwind level)	NA	0	High Intervals "exceedances" (15min >5+Upwind level)	NA	0
Maximum 15-min Average	0.025	0.029	Maximum 15-min Average	0.2	0.1
Minimum 1-min Instant Reading	0.008	0.007	Minimum 1-min Instant Reading	0.0	0.0
Maximum 1-min Instant Reading	0.035	0.029	Maximum 1-min Instant Reading	0.2	0.2

mg/m^3 = micrograms per cubic meter ppm = parts per million

NA = Not Available

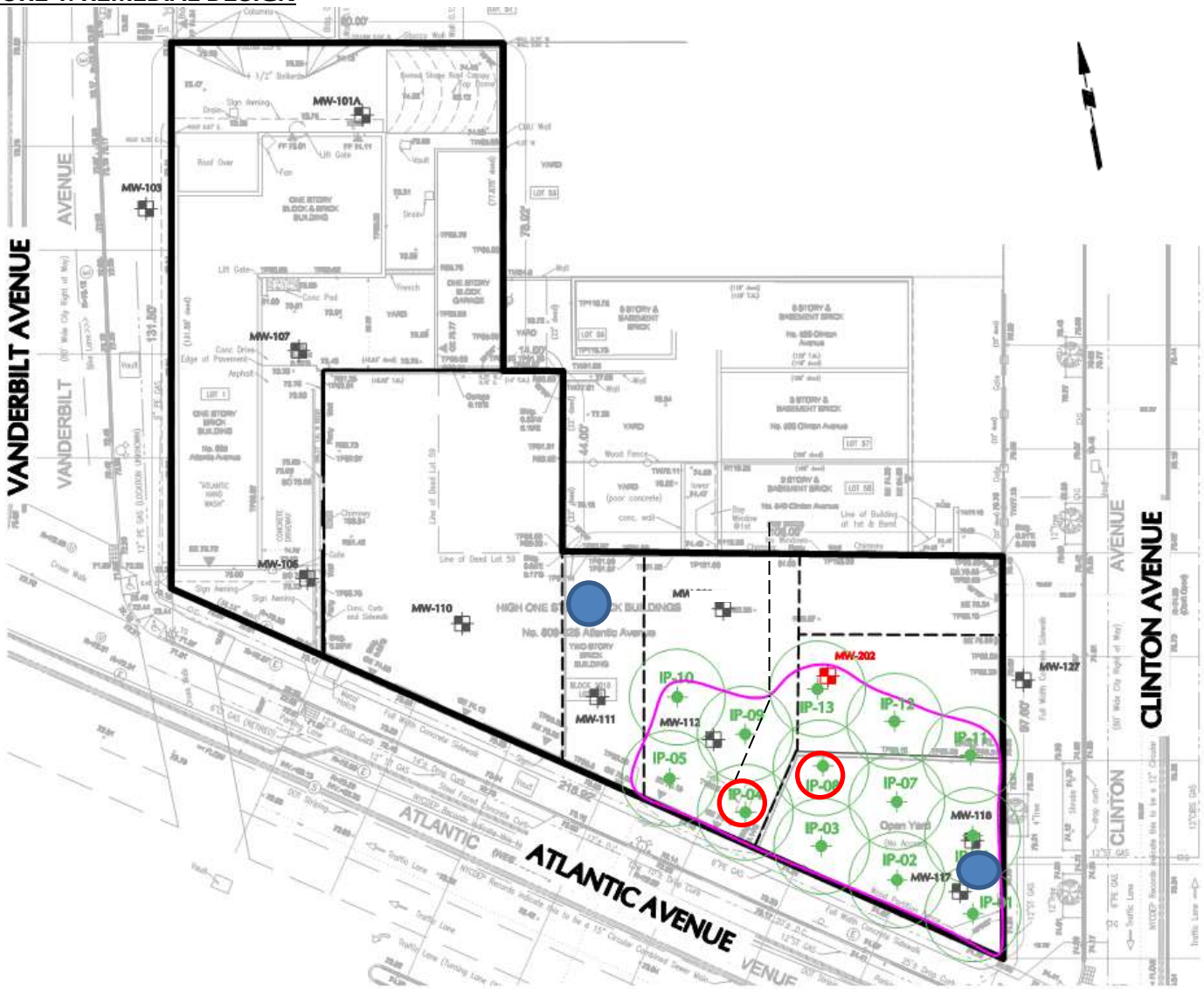
Anticipated Activities

- Complete advancement of IP-04 to 80 feet bgs.
- Installation of injection well IP-04.
- Begin advancing boring IP-05.

Cc:	K. Del Col, S. Knoop, M. Burke (Langan)	By:	Tyler Goodnough
			LANGAN

SITE OBSERVATION REPORT

FIGURE 1: REMEDIAL DESIGN



Legend:

Drilling area

CAMP station locations

Cc:	K. Del Col, S. Knoop, M. Burke (Langan)	By:	Tyler Goodnough
			LANGAN

SITE OBSERVATION REPORT

SITE PHOTOGRAPHS

Photo 1: AARCO advancing boring IP-08 (facing south).

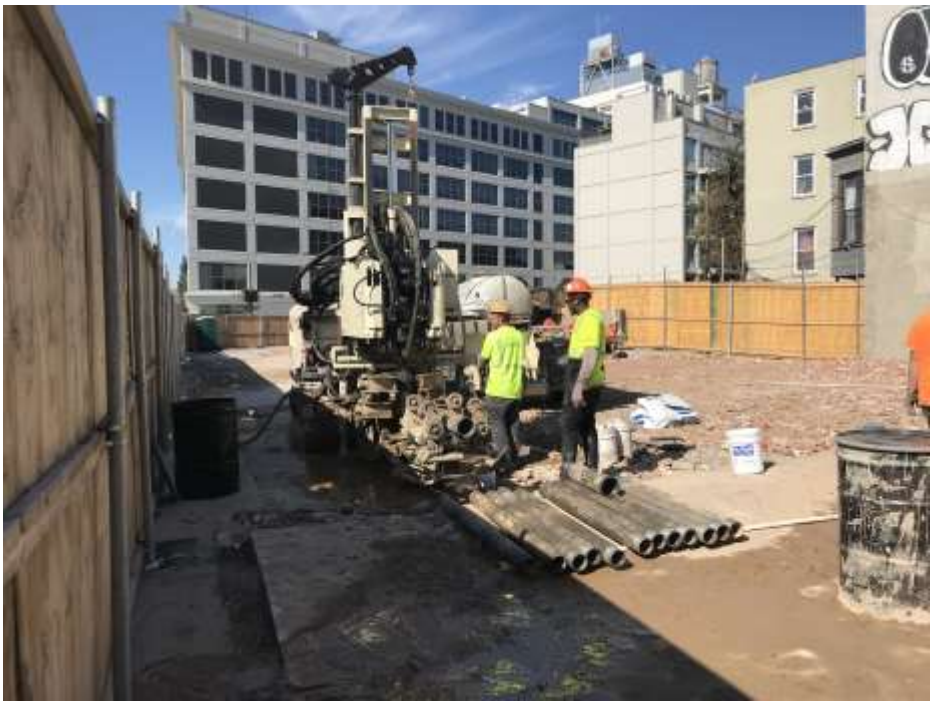


Photo 2: AARCO advancing boring IP-04 (facing west).

Cc:	K. Del Col, S. Knoop, M. Burke (Langan)	By:	Tyler Goodnough
			LANGAN

LANGAN

SITE OBSERVATION REPORT

PROJECT NO.	170384501	**CLIENT:** 550 Clinton Partners LLC/539 Vanderbilt Partners LLC	**DATE:**	Wednesday. Oct. 16, 2019
PROJECT:	805-825 Atlantic Avenue		**WEATHER:**	Cloudy, 60s Wind: SE 20 mph
LOCATION:	805-825 Atlantic Avenue, Brooklyn, NY		**TIME:**	7:00am to 2:00 pm
CONTRACTOR:	AARCO Environmental Services, Inc. (AARCO)		**LANGAN REP. :**	Tyler Goodnough
CONTRACTOR'S EQUIPMENT: Geoprobe 8140 LC Sonic rig		**PRESENT AT SITE:** Tyler Goodnough - Langan Tom Seickel - AARCO		**Day 12**

OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.:

Langan was present to implement the August 20, 2019 Remedial Design – In-Situ Groundwater Remediation Technical Memorandum (Tech Memo) for the for BCP site C224228 at 805-825 Atlantic Avenue (Block 2010, Lots 1 and 59). Observed activities were as follows:

Site Activities

- Drilling Activity:
  - AARCO used a Geoprobe 8140 LC sonic rig to advance boring IP-04 from 35 to 80 feet below grade surface (bgs). Groundwater was observed at about 65 feet bgs. Petroleum-like odors, staining, and photoionization detector (PID) readings up to 336 parts per million (ppm) were observed from 67 to 70 feet bgs (max. PID reading at about 67 feet bgs).
  - AARCO used a Geoprobe 8140 LC sonic rig to advance boring IP-05 from 0 to 55 feet bgs. Groundwater was not observed. Evidence of contamination was not observed.
- Injection well IP-04 was constructed with about 65 feet of 2-inch diameter schedule-40 polyvinyl chloride (PVC) riser piping connected to 15 feet of 2-inch diameter No. 2 slotted PVC well screen. The screen interval was set from 65 to 80 feet bgs. The annulus was backfilled with No. 1 sand from 64 to 80 feet bgs, bentonite from 63 to 64 feet bgs, and the remainder of the boring was backfilled via tremie pipe with a bentonite-grout slurry to grade.

Sampling:

- None.

Cc:	K. Del Col, S. Knoop, M. Burke (Langan)	By:	Tyler Goodnough **LANGAN**

SITE OBSERVATION REPORT

CAMP Activities

- Langan performed community air monitoring at one upwind and one downwind station. No volatile organic compound (VOC) or particulate concentrations exceeded the action levels established in the site Community Air Monitoring Plan (CAMP).

Particulate Monitoring (mg/m^3)			**Organic Vapor Monitoring (ppm)**		
Averaging Period	Upwind	Downwind	Averaging Period	Upwind	Downwind
High Intervals "exceedances" (15min >1.5 + Upwind level)	NA	0	High Intervals "exceedances" (15min >5+Upwind level)	NA	0
Maximum 15-min Average	0.016	0.018	Maximum 15-min Average	0.3	0.0
Minimum 1-min Instant Reading	0.009	0.009	Minimum 1-min Instant Reading	0.0	0.0
Maximum 1-min Instant Reading	0.031	0.032	Maximum 1-min Instant Reading	0.4	0.0

mg/m^3 = micrograms per cubic meter ppm = parts per million

NA = Not Available

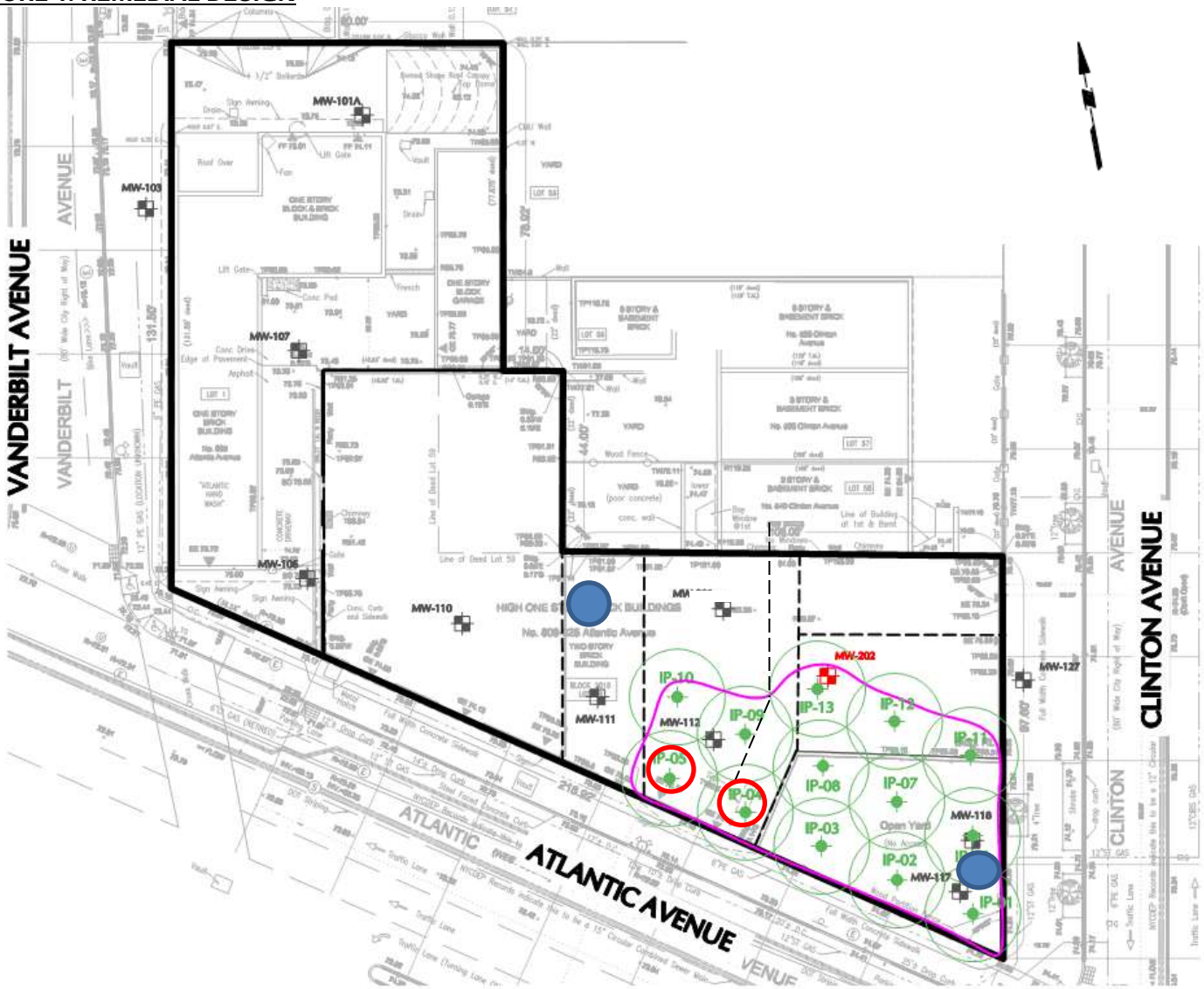
Anticipated Activities

- Complete advancement of IP-05 to 80 feet bgs.
- Construct injection well IP-05.
- Begin advancing boring IP-09.

Cc:	K. Del Col, S. Knoop, M. Burke (Langan)	By:	Tyler Goodnough
			LANGAN

SITE OBSERVATION REPORT

FIGURE 1: REMEDIAL DESIGN



Legend:

Drilling area

CAMP station locations

Cc:	K. Del Col, S. Knoop, M. Burke (Langan)	By:	Tyler Goodnough
			LANGAN

SITE OBSERVATION REPORT

SITE PHOTOGRAPHS

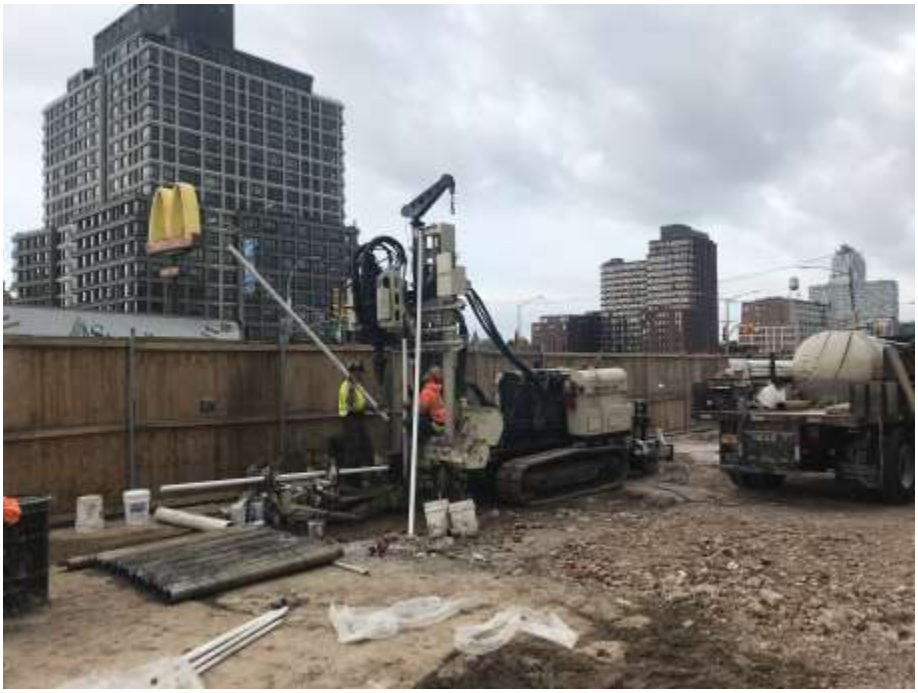


Photo 1: AARCO installing injection well IP-04 (facing southeast).

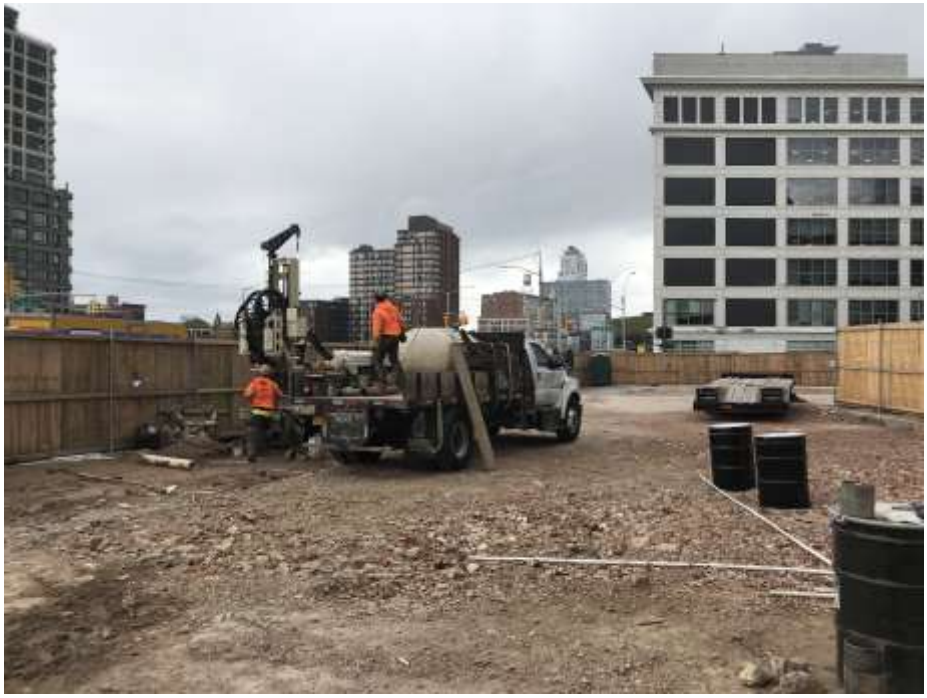


Photo 2: AARCO advancing boring IP-05 (facing west).

Cc:	K. Del Col, S. Knoop, M. Burke (Langan)	By:	Tyler Goodnough
			LANGAN

LANGAN

SITE OBSERVATION REPORT

PROJECT NO.	170384501	**CLIENT:** 550 Clinton Partners LLC/539 Vanderbilt Partners LLC	**DATE:**	Thursday. Oct. 17, 2019
PROJECT:	805-825 Atlantic Avenue		**WEATHER:**	Cloudy, 50s Wind: E 25 mph
LOCATION:	805-825 Atlantic Avenue, Brooklyn, NY		**TIME:**	7:00am to 2:00 pm
CONTRACTOR:	AARCO Environmental Services, Inc. (AARCO)		**LANGAN REP. :**	Tyler Goodnough
CONTRACTOR'S EQUIPMENT: Geoprobe 8140 LC Sonic rig		**PRESENT AT SITE:** Tyler Goodnough - Langan Tom Seickel - AARCO		**Day 13**

OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.:

Langan was present to implement the August 20, 2019 Remedial Design – In-Situ Groundwater Remediation Technical Memorandum (Tech Memo) for the for BCP site C224228 at 805-825 Atlantic Avenue (Block 2010, Lots 1 and 59). Observed activities were as follows:

Site Activities

- Drilling Activity:
  - AARCO used a Geoprobe 8140 LC sonic rig to advance boring IP-05 from 55 to 80 feet below grade surface (bgs). Groundwater was observed at about 65 feet bgs. Petroleum-like odors, staining, and photoionization detector (PID) readings up to 560 parts per million (ppm) were observed from 67 to 70 feet bgs (max. PID reading at about 67 feet bgs).
  - AARCO used a Geoprobe 8140 LC sonic rig to advance boring IP-09 from 0 to 45 feet bgs. Groundwater was not observed. Evidence of contamination was not observed.
- Injection well IP-05 was constructed with about 65 feet of 2-inch diameter schedule-40 polyvinyl chloride (PVC) riser piping connected to 15 feet of 2-inch diameter No. 2 slotted PVC well screen. The screen interval was set from 65 to 80 feet bgs. The annulus was backfilled with No. 1 sand from 64 to 80 feet bgs, bentonite from 63 to 64 feet bgs, and the remainder of the boring was backfilled via tremie pipe with a bentonite-grout slurry to grade.

Sampling:

- None.

Cc:	K. Del Col, S. Knoop, M. Burke (Langan)	By:	Tyler Goodnough **LANGAN**

SITE OBSERVATION REPORT

CAMP Activities

- Langan performed community air monitoring at one upwind and one downwind station. No volatile organic compound (VOC) or particulate concentrations exceeded the action levels established in the site Community Air Monitoring Plan (CAMP).

Particulate Monitoring (mg/m^3)			**Organic Vapor Monitoring (ppm)**		
Averaging Period	Upwind	Downwind	Averaging Period	Upwind	Downwind
High Intervals "exceedances" (15min >1.5 + Upwind level)	NA	0	High Intervals "exceedances" (15min >5+Upwind level)	NA	0
Maximum 15-min Average	0.008	0.009	Maximum 15-min Average	0.2	0.1
Minimum 1-min Instant Reading	0.002	0.002	Minimum 1-min Instant Reading	0.0	0.0
Maximum 1-min Instant Reading	0.018	0.014	Maximum 1-min Instant Reading	0.2	0.1

mg/m^3 = micrograms per cubic meter ppm = parts per million

NA = Not Available

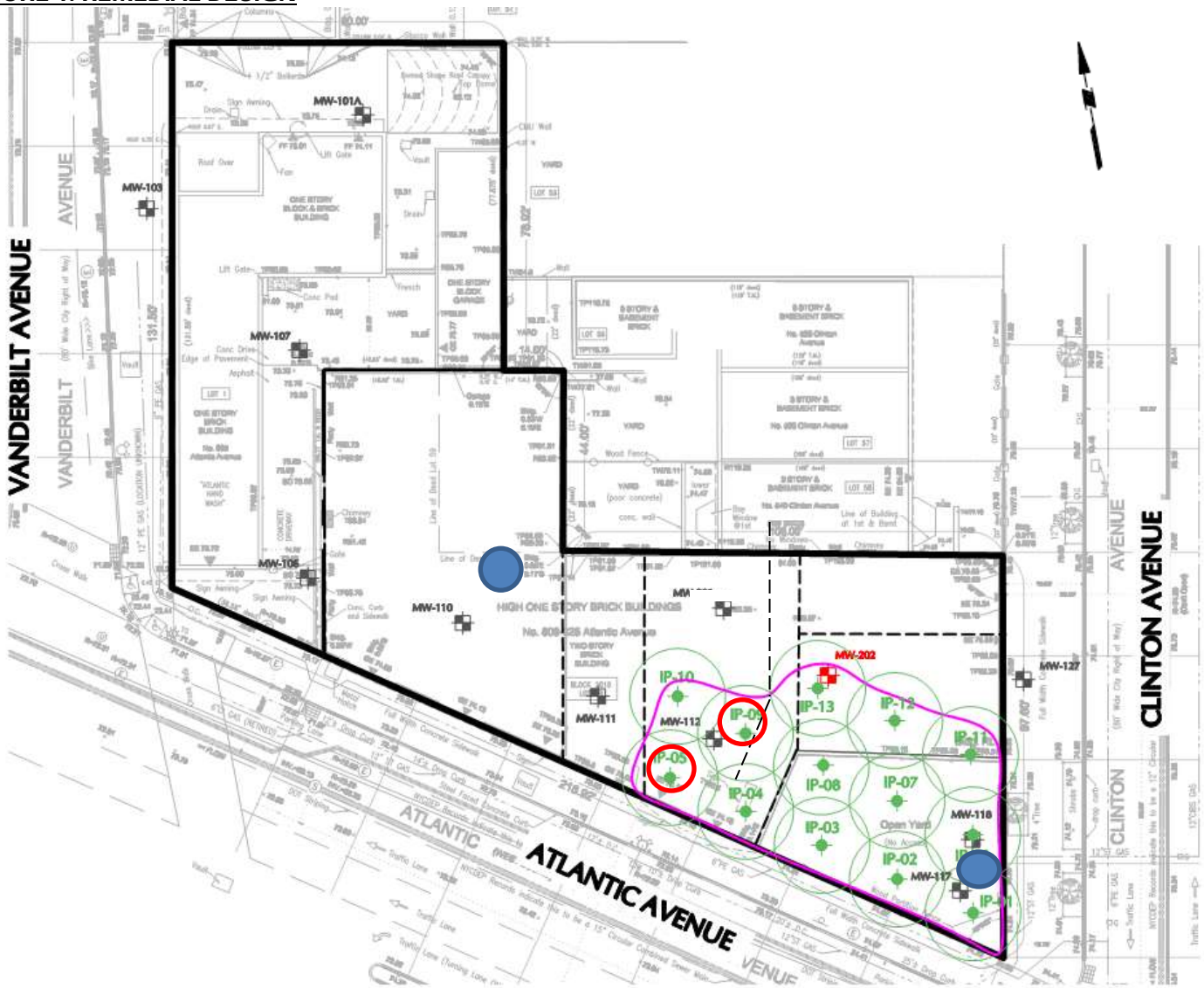
Anticipated Activities

- Complete advancement of boring IP-09 to 80 feet bgs.
- Construct injection well IP-09.
- Begin advancing boring IP-10.

Cc:	K. Del Col, S. Knoop, M. Burke (Langan)	By:	Tyler Goodnough
			LANGAN

SITE OBSERVATION REPORT

FIGURE 1: REMEDIAL DESIGN



Legend:

Drilling area

CAMP station locations

Cc:	K. Del Col, S. Knoop, M. Burke (Langan)	By:	Tyler Goodnough
			LANGAN

SITE OBSERVATION REPORT

SITE PHOTOGRAPHS

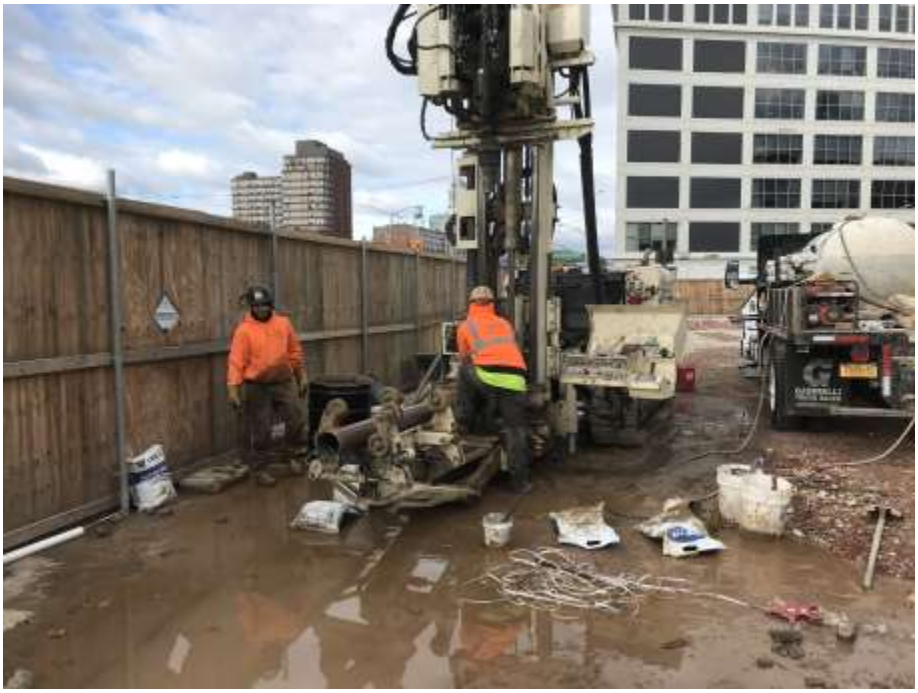


Photo 1: AARCO installing injection well IP-05 (facing west).

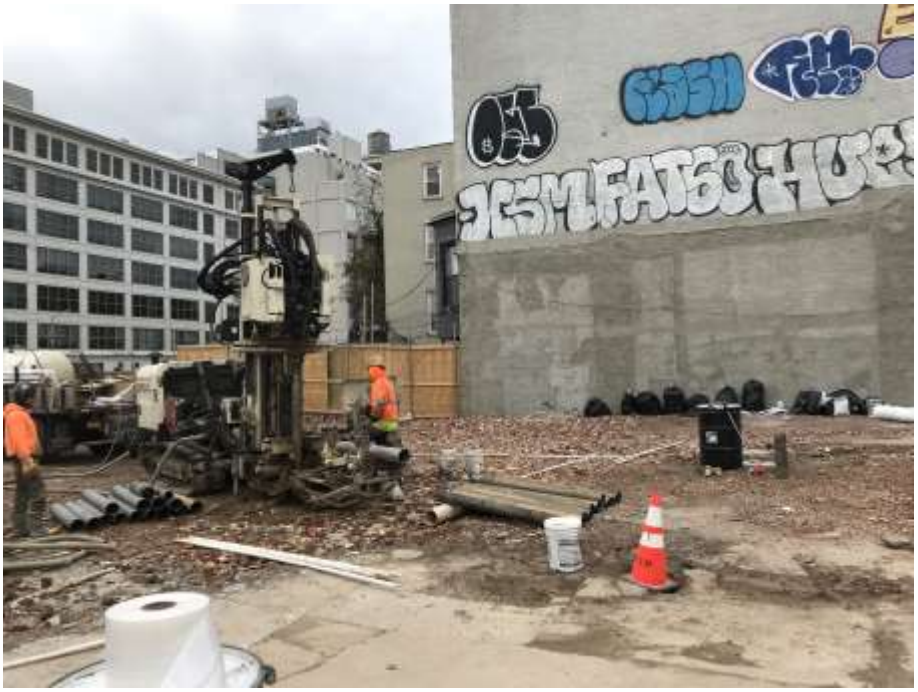


Photo 2: AARCO advancing boring IP-09 (facing northwest).

Cc:	K. Del Col, S. Knoop, M. Burke (Langan)	By:	Tyler Goodnough
			LANGAN

LANGAN

SITE OBSERVATION REPORT

PROJECT NO.	170384501	**CLIENT:** 550 Clinton Partners LLC/539 Vanderbilt Partners LLC	**DATE:**	Friday. Oct. 18, 2019
PROJECT:	805-825 Atlantic Avenue		**WEATHER:**	Sunny, 60s Wind: E 15 mph
LOCATION:	805-825 Atlantic Avenue, Brooklyn, NY		**TIME:**	7:00am to 2:00 pm
CONTRACTOR:	AARCO Environmental Services, Inc. (AARCO)		**LANGAN REP. :**	Tyler Goodnough
CONTRACTOR'S EQUIPMENT: Geoprobe 8140 LC Sonic rig		**PRESENT AT SITE:** Tyler Goodnough - Langan Tom Seickel - AARCO		**Day 14**

OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.:

Langan was present to implement the August 20, 2019 Remedial Design – In-Situ Groundwater Remediation Technical Memorandum (Tech Memo) for the for BCP site C224228 at 805-825 Atlantic Avenue (Block 2010, Lots 1 and 59). Observed activities were as follows:

Site Activities

- Drilling Activity:
  - AARCO used a Geoprobe 8140 LC sonic rig to advance boring IP-09 from 45 to 80 feet below grade surface (bgs). Groundwater was observed at about 65 feet bgs. Petroleum-like odors, staining, and photoionization detector (PID) readings up to 1,872 parts per million (ppm) were observed from 67 to 75 feet bgs (max. PID reading at about 69 feet bgs).
  - AARCO used a Geoprobe 8140 LC sonic rig to advance boring IP-10 from 0 to 25 feet bgs. Groundwater was not observed. Evidence of contamination was not observed.
- Injection well IP-09 was constructed with about 65 feet of 2-inch diameter schedule-40 polyvinyl chloride (PVC) riser piping connected to 15 feet of 2-inch diameter No. 2 slotted PVC well screen. The screen interval was set from 65 to 80 feet bgs. The annulus was backfilled with No. 1 sand from 64 to 80 feet bgs, bentonite from 63 to 64 feet bgs, and the remainder of the boring was backfilled via tremie pipe with a bentonite-grout slurry to grade.
- AARCO developed injection wells IP-01, IP-02, IP-03, IP-04, IP-05, IP-07, IP-08 and IP-12. Approximately 10 gallons of purge water was collected from each well into DOT-approved 55-gallon drums.
- AARCO constructed concrete well boxes around 8" steel drive-over covers on injection wells IP-01, IP-02, IP-03, IP-04, IP-07, IP-08, and IP-12.
- AARCO installed 2" schedule 80 PVC injection fittings on wells IP-01, IP-02, IP-03, IP-06, IP-07, IP-08, IP-11, and IP-12.

Sampling:

- None.

Cc:	K. Del Col, S. Knoop, M. Burke (Langan)	By:	Tyler Goodnough **LANGAN**

SITE OBSERVATION REPORT

CAMP Activities

- Langan performed community air monitoring at one upwind and one downwind station. No volatile organic compound (VOC) or particulate concentrations exceeded the action levels established in the site Community Air Monitoring Plan (CAMP).

Particulate Monitoring (mg/m^3)			**Organic Vapor Monitoring (ppm)**		
Averaging Period	Upwind	Downwind	Averaging Period	Upwind	Downwind
High Intervals "exceedances" (15min >1.5 + Upwind level)	NA	0	High Intervals "exceedances" (15min >5+Upwind level)	NA	0
Maximum 15-min Average	0.013	0.023	Maximum 15-min Average	0.1	0.6
Minimum 1-min Instant Reading	0.003	0.001	Minimum 1-min Instant Reading	0.0	0.0
Maximum 1-min Instant Reading	0.039	0.027	Maximum 1-min Instant Reading	0.3	4.1

mg/m^3 = micrograms per cubic meter ppm = parts per million

NA = Not Available

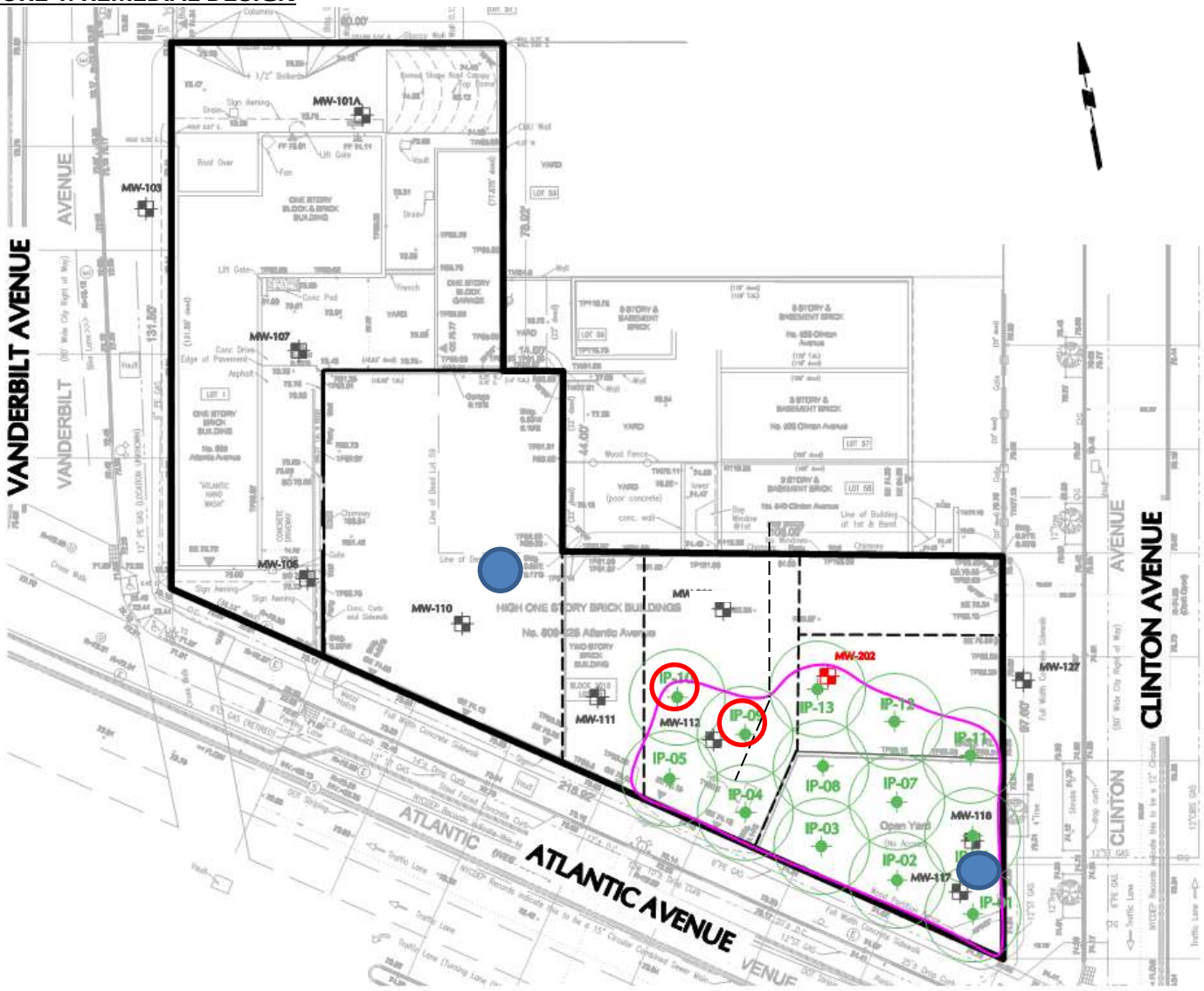
Anticipated Activities

- Complete advancement of boring IP-10 to 80 feet bgs.
- Construct injection well IP-10.
- Begin advancing boring IP-13.
- Develop remaining injection wells.
- Install remaining well boxes and injection fittings.

Cc:	K. Del Col, S. Knoop, M. Burke (Langan)	By:	Tyler Goodnough
			LANGAN

SITE OBSERVATION REPORT

FIGURE 1: REMEDIAL DESIGN



Legend:

Drilling area

CAMP station locations

Cc:	K. Del Col, S. Knoop, M. Burke (Langan)	By:	Tyler Goodnough
			LANGAN

SITE OBSERVATION REPORT

SITE PHOTOGRAPHS

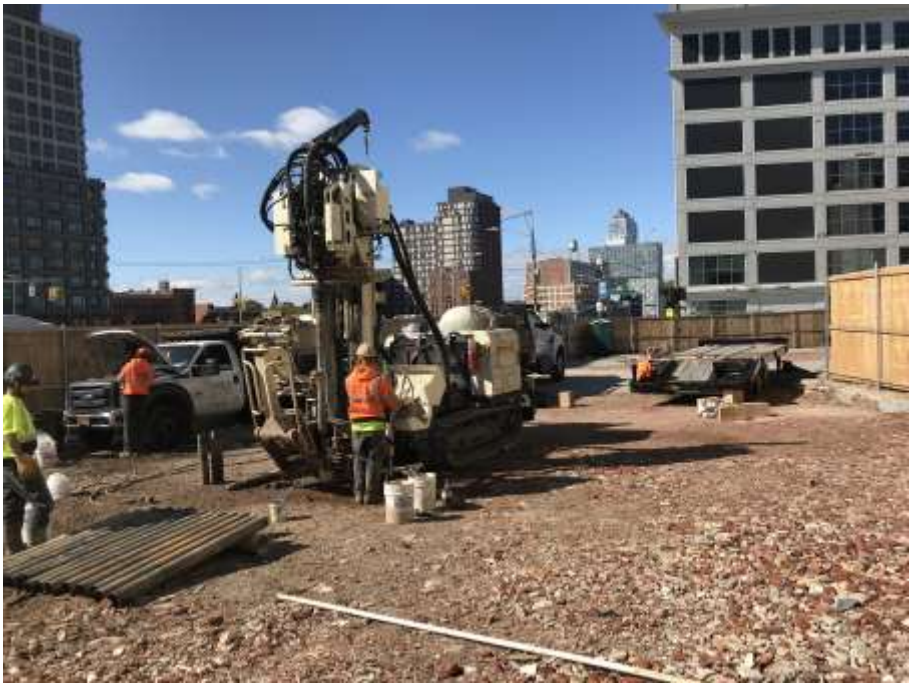


Photo 1: AARCO advancing boring IP-10 (facing west).

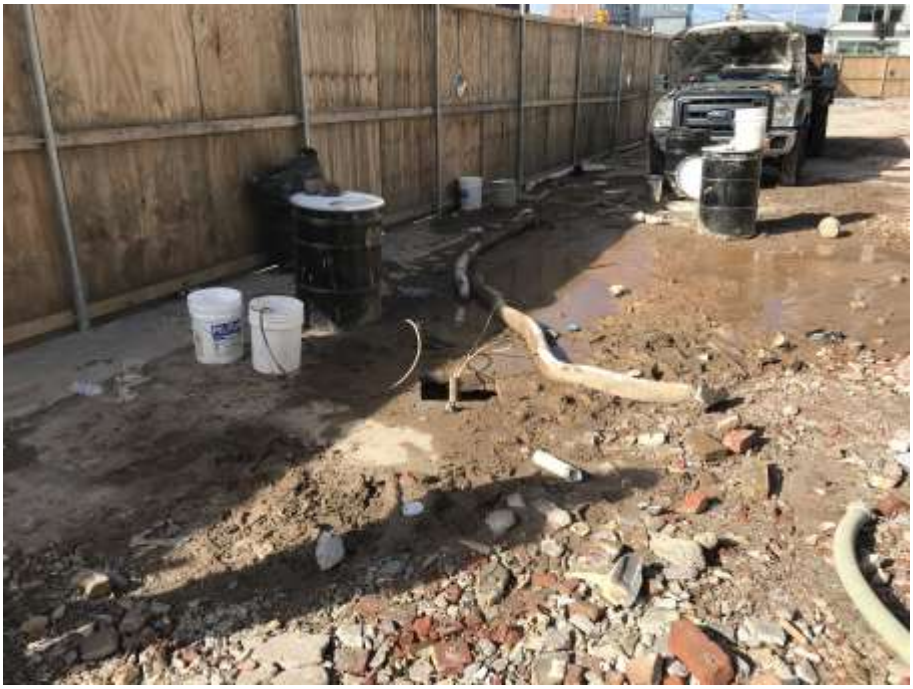


Photo 2: AARCO developing injection well IP-08 (facing west).

Cc:	K. Del Col, S. Knoop, M. Burke (Langan)	By:	Tyler Goodnough
			LANGAN