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May 15, 2014

Mr. Dan Martinez
Project Manager, Lakefront Trail Improvement
F.H. Paschen
5515 N. East River Road
Chicago, IL 60656

RE: Bi-weekly Letter Report Update # 2
Lakefront Trail Improvement, Chicago, IL
AECOM Project No. 60318016

Dear Mr. Martinez:

Pursuant to conditions specified in a permit issued by the City of Chicago, radiation monitoring was required to be performed at the above referenced site. AECOM Technical Services, Inc. (AECOM) provided the required radiation surveillance. The initial Updated Letter was issued on May 1, 2014 and summarized the surveying of excavation work performed between April 10 and May 1, 2014. This update letter provides a summary of the radiological surveying performed between May 1, 2014 and May 14, 2014.

Gamma radiation count measurements were made using Ludlum Model 2221 survey meter and an unshielded 2 x 2 inch Nal probe (Model 44-10). The U. S. Environmental Protection Agency (USEPA) cleanup value for Chicago's Streeterville area is 7.1 picocuries per gram (pCi/g) total radium (Ra-226 + Ra-228). The field meter gamma count equivalent to 7.1 pCi/g was 19,598 counts per minute (cpm) unshielded. Monitoring between May 1 and 14, 2014 revealed potential indications of soil in two locations above the specified clean-up threshold established by the USEPA for the Streeterville area of Chicago.

Directional Drilling – Ogden Slip

On May 2, 2014 AECOM surveyed the excavations at each end of the directional drilling performed on the Ogden Slip. For the instrument used, the gamma count threshold indicative of the 7.1 pCi/g cleanup value is 19,958 counts per minute (cpm) unshielded. The field gamma background for the area was measured at approximately 4,766 cpm unshielded. The field gamma measurements within the excavations and the spoil materials generated during the excavation process did not exceed the respective instrument threshold previously stated and ranged from a minimum of 6,500 cpm to a maximum of 6,900 cpm unshielded. Thus, there was no indication of the presence of radiologically-contaminated material and/or an exceedance of the USEPA cleanup value of 7.1 pCi/g total radium.

Truck Fuel Delivery Pad – Ogden Slip

On May 2, 2014 surveying was performed for the soil removed from an excavation for the Truck Fuel Delivery Pad that extends across the site north-south from Illinois Street to the Ogden Slip. The excavation consisted was approximate 12-foot wide by 140-foot long to the depth of approximately 9-12 inches below ground surface (bgs). For the instrument used, the gamma count threshold indicative of the 7.1 pCi/g cleanup value is 19,958 cpm unshielded. The field gamma background for the area was measured at approximately 4,766 cpm unshielded. The field gamma measurements within the majority of the shallow excavation, and for the spoil materials generated during the excavation process, did not exceed the respective instrument threshold previously stated and ranged from a minimum of 6,000 cpm to a maximum of 8,000 cpm unshielded. However, at the northern end of the excavation an approximate 150 ft^2 area with exhibited elevated gamma readings was identified. After removal of the 9-12 inches of top soil, elevated gamma readings above twice background were observed over most of the exposed surface. In several spots these exceeded the field instrument threshold (19,958 cpm). Work was halted in this area and the USEPA was notified. On Monday May 5, 2014 the USEPA visited the site. Based on surveying conducted, it appears that the thin layer of uncontaminated soil still overlays contaminated fill soil. At the USEPA's request, a soil sample was collected approximately 18-24 inches below the original ground surface. Gamma readings at the depth from which the sample was collected

were approximately 96,000 cpm. The sample was taken to RSSI in Morton Grove for gamma spectroscopy. The area was covered with plastic sheeting and jersey barriers to prevent contact and/or disturbance of the area. Discussions with the USEPA for this are ongoing.

Bike Trail Pad – Jane Addams

On May 5, 2014 surveying was performed for the soil removed from an excavation for the Bike Trail Pad that extends south from the sidewalk that runs beneath the viaduct under Lake Shore Drive on Jane Addams Park. The excavation was approximate 10-foot wide by 105-foot long and approximately 12-15 inches below ground surface (bgs). For the instrument used, the gamma count threshold indicative of the 7.1 pCi/g cleanup value is 19,958 counts per minute (cpm) unshielded. The field gamma background for the area was measured at approximately 4,766 cpm unshielded. The field gamma measurements within a majority of the excavation, and for the spoil materials generated during the excavation process, did not exceed the respective instrument threshold previously stated and ranged from a minimum of 6,000 cpm to a maximum of 10,000 cpm unshielded.

A small 15 ft^2 area with a maximum gamma reading of 22,000 cpm was observed adjacent to the northern excavation wall. When this area was discovered, the USEPA was already on its way to the site to view the elevated gamma readings observed in the vicinity of Ogden Slip. Therefore, the USEPA also assessed this area and recommended the collection of a sample for gamma spectroscopy. A sample of the material from which the elevated readings were recorded was collected and submitted to RSSI in Morton Grove for gamma spectroscopy analysis.

The gamma spectroscopy data did not indicate the presence of total radium activities that would be consistent with Lindsay Light material. The results did show the presence of potassium-40, which would noticeably increase the field gamma readings. Therefore, the elevated gamma readings do not indicate the presence of Lindsay Light material that requires remediation. A proposal that this area be further delineated and explored to determine confirm the absence of gamma readings greater than those already observed has been approved by the USEPA. If this delineation does not indicate elevated gamma readings appreciably greater than those already observed, this fill soil will not be consider being radiologically-contaminated and the area be approved for continued construction activities.

Retaining Wall C – Ogden Slip

Surveying of the soil removed from an excavation located in the area of “Retaining Wall C” is ongoing. Between May 7 and May 14, 2014 an approximate 9-foot wide by 394-foot excavation was performed. For the instrument used, the gamma count threshold indicative of the 7.1 pCi/g cleanup value is 19,958 (cpm) unshielded. The field gamma background for the area is approximately 4,766 cpm unshielded. The field gamma measurements within the excavation and the spoil materials generated during the excavation process did not exceed the respective instrument threshold previously stated and ranged from a minimum of 4,000 cpm to a maximum of 11,500 cpm unshielded. Thus, there was no indication of the presence of radiologically-contaminated material and/or an exceedance of the USEPA cleanup value of 7.1 pCi/g total radium.

Please contact us with any questions you have regarding this letter or the reported results.

Regards,

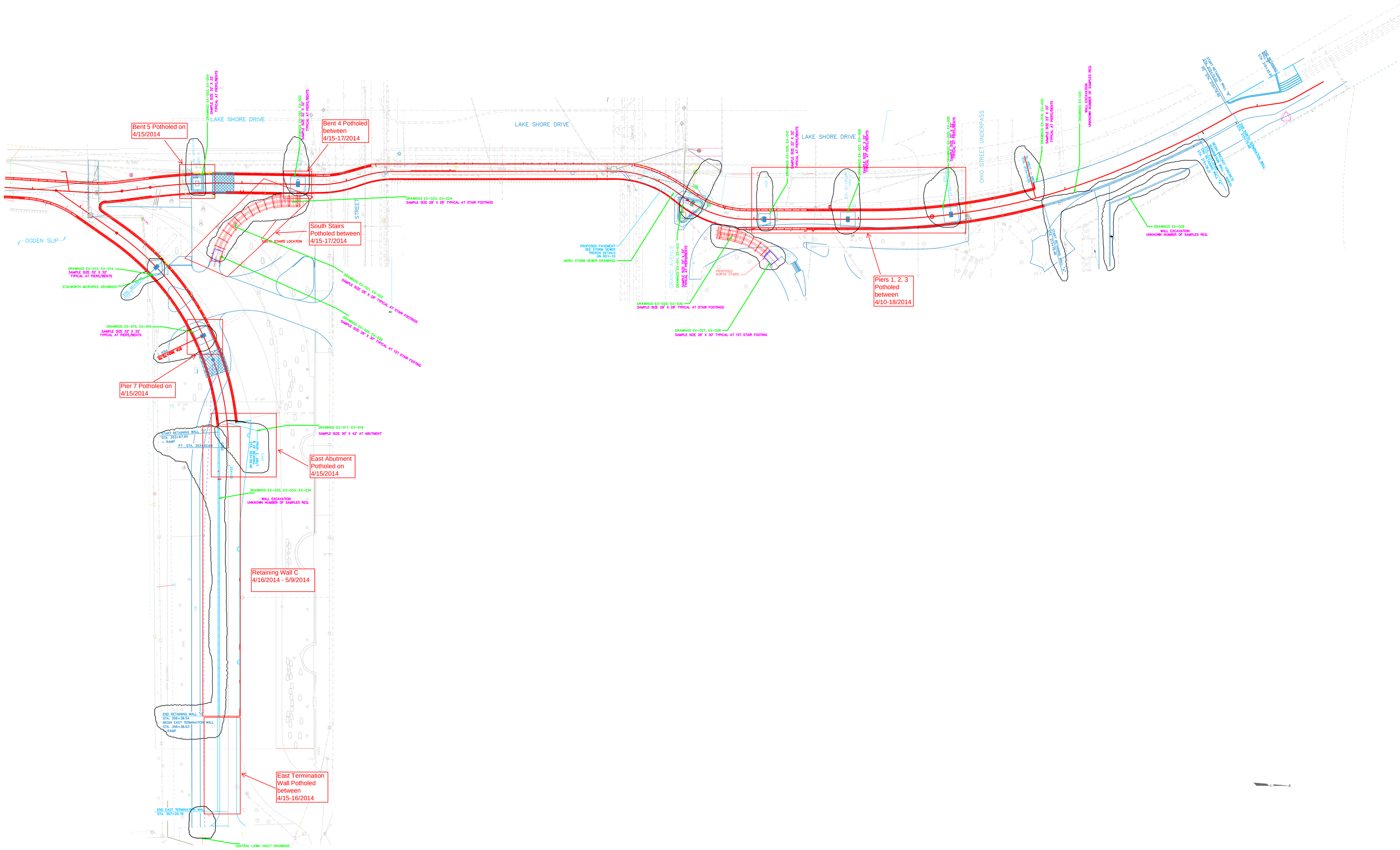
Steve T. Newlin
Senior Project Geologist

Steven C. Kornder, Ph.D.
Senior Project Geoscientist

cc: Chris Tryka, F.H. Paschen

Attachments: Location Maps
Data Spreadsheet

LOCATION MAPS



LAKEFRONT TRAIL IMPROVEMENT FROM JANE ADDAMS PARK TO OGDEN SLIP

OVERALL PROJECT PLAN AECOM EXCAVATION PITS

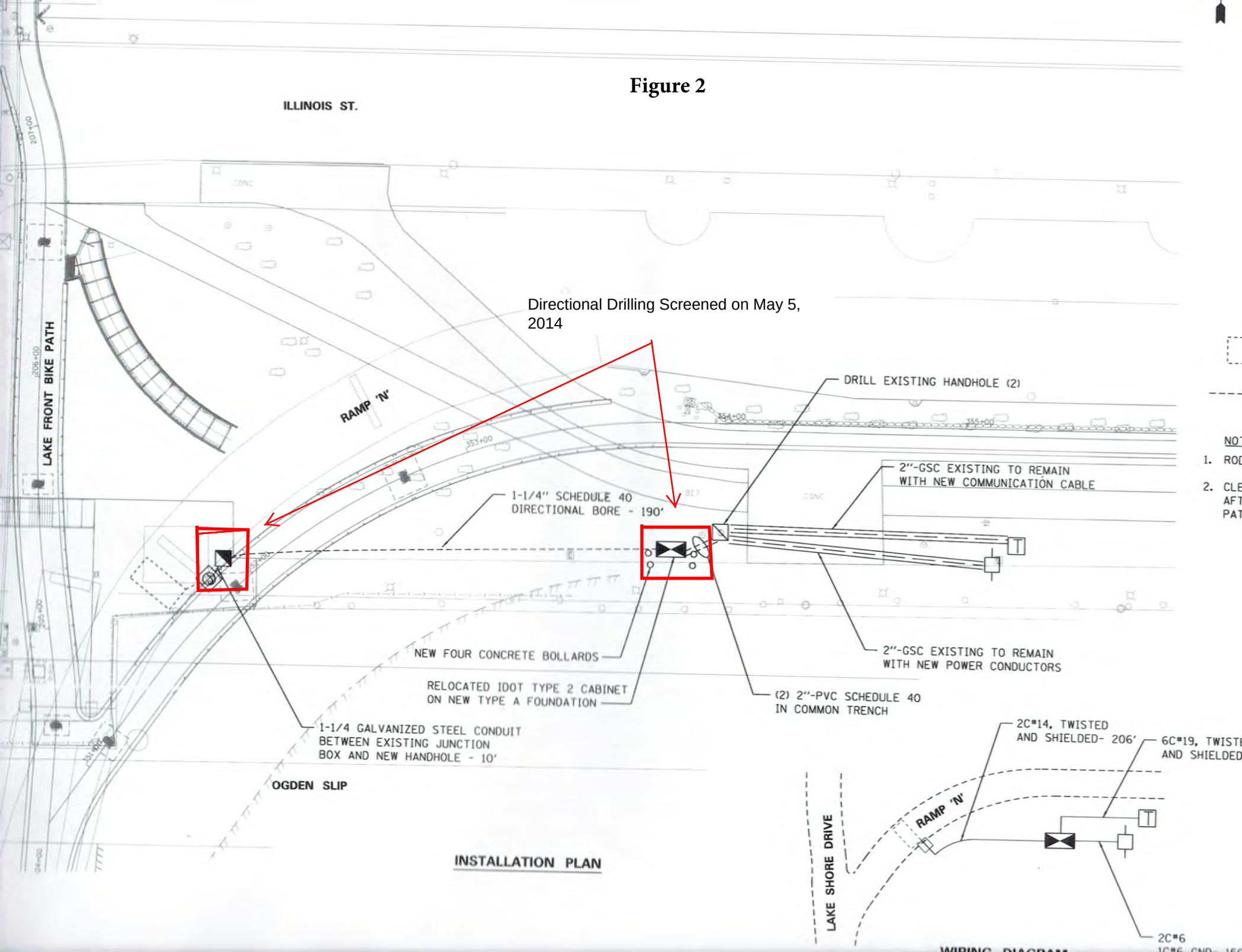
REVISIONS

NO.	BY	DATE	DESCRIPTION

F.H. PASCHEN, S.N. NIELSEN & ASSOCIATES LLC
GENERAL CONTRACTORS

DATE: 11/11/2013 | SCALE: N.T.S. | DRAWING: G-001

Figure 2


ILLINOIS ST.
LAKE FRONT BIKE PATH
RAMP 'N'
Directional Drilling Screened on May 5, 2014
DRILL EXISTING HANDHOLE (2)
2"-GSC EXISTING TO REMAIN WITH NEW COMMUNICATION CABLE
1-1/4" SCHEDULE 40 DIRECTIONAL BORE - 190'
NEW FOUR CONCRETE BOLLARDS
RELOCATED IDOT TYPE 2 CABINET ON NEW TYPE A FOUNDATION
2"-GSC EXISTING TO REMAIN WITH NEW POWER CONDUCTORS
(2) 2"-PVC SCHEDULE 40 IN COMMON TRENCH
1-1/4 GALVANIZED STEEL CONDUIT BETWEEN EXISTING JUNCTION BOX AND NEW HANDHOLE - 10'
OGDEN SLIP
INSTALLATION PLAN
2C#14, TWISTED AND SHIELDED- 206'
6C#19, TWISTED AND SHIELDED
LAKE SHORE DRIVE
RAMP 'N'
2C#6

DATA SPREADSHEET

Radiological Soil Survey
Excavation ID Table
Lakefront Trail/Navy Pier Flyover Improvement
Chicago, IL

Excavation ID	Approx. Starting Elevation (CCD)	Date Screened	Actual Excavation Width (ft)	Actual Excavation Length (ft)	Actual Excavation Depth (ft)	Maximum Gamma Value (cpm)	Range of Majority of Gamma Readings (cpm)	Background Value (cpm)
Bent 4 Footer	+14.75	4/15/2014	5	5	3	9000	7400-8800	8180
Bent 4 Footer	+14.75	4/17/2014	20	20	8	9000	7400-8800	8180
Bent 5 Footer	+10.75	4/15/2014	5	5	3	8600	7000-8200	7749
Pier 1 Footer	+3.50	4/10/2014	2	4	6	9500	7500-9000	5291
Pier 1 Footer	+3.50	4/18/2014	6	6	2	8000	6000-8000	5291
Pier 2 Footer	+8.25	4/18/2014	6	6	2	10000	7500-10000	5291
Pier 3 Footer	+8.0	4/18/2014	6	6	2	7500	5000-7500	5291
Pier 4 Footer	+5.25							
Pier 6 Footer	+7.0							
Pier 7 Footer	+10.0	4/15/2014	5	5	3	9400	7000-9000	7047
East Abutment	+8.50	4/15/2014	5	5	4	8400	5500-7500	7634
North Abutment	+8.50							
South Stairs Center Footing	+12.0	4/15/2014	5	5	3	9000	7000-8500	8066
South Stairs Center Footing	+12.0	4/17/2014	8	15	12	9000	7000-8500	8066
North Stairs Eastern Footing	+14.22							
North Stairs Western Footing	+7.30							
Retaining Wall A	+6.59							
Retaining Wall C - Potholing	+7.50	4/16/2014	7	*	5	11,500	4000-11,500	4766
Retaining Wall C - Excavation	+7.50	5/7/2014 - present	7	394	5	11,500	4000-11,500	4766
East Termination Wall	+9.0	4/15/2014	3	5	4	7300	5500-7000	4757
East Termination Wall	+9.0	4/16/2014	3	15	6	7500	5800-7000	4757
Retaining Wall w/ Bicycle Railing	+3.4							
South Stairs Northern Footing	+13.0							
South Stairs Southern Footing	+10.68							
Truck Delivery Fueling Pad		5/2/2014	12	140	0.75	**96,000***	6,000 - 8,000	4766
				* - Area of elevated gamma readings identified - refer to text				
Directional Drilling		5/2/2014	8	8	5	6,900	6,500 - 6,900	4766
Bike Trail Pad		5/5/2014	10	105	1.2	**22000***	6,000-10,000	4766
				* - Area of elevated gamma readings identified - refer to text				

Notes:
- All excavations surveyed with a Ludlum-2221 w/ 2x2 inch NaI Probe (unshielded)