



AECOM
100 S. Wacker Drive, Suite 500
Chicago, Illinois 60606

312-939-1000 tel
312-939-4198 fax

July 12, 2018

Mr. Fred Comes
Reliable Contracting & Equipment Co.
4100 S. Emerald Avenue
Chicago, IL. 60609

RE: Fill Soil Radiological Screening Results
Permit No.: CDOT929865
Permit Address: 302 E. North Water St., Chicago, Illinois
AECOM Project No. 60571224

Dear Mr. Comes:

Pursuant to conditions specified in a permit (see attached) 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 from May 1 and June 13, 2018. The monitoring was necessary for installation of new sewer and water service lines from East Lower Water Street to the esplanade.

Surveying was performed on the urban fill exposed after the removal of the existing concrete in the parking lot area of the site and in subsequent excavations to install the water and sewer lines from the street to the esplanade. The work included a trench excavation for the sewer line approximately 11.5 feet below ground surface (bgs) in the parking lot area and about 3.5 feet bgs in the esplanade area. A second trench was excavated for the water line extending down approximately 8.5 feet bgs in the parking lot area and 3.5 feet bgs in the esplanade area. In the esplanade area, the trenches went through both paved (sidewalk) and unpaved (tree planter) areas as can be seen in the annotated drawing (attached). In several locations in both the parking lot and esplanade areas, buried foundations were encountered which required additional days for breaking and removal. The areas where foundations were discovered are noted in the "Material" column of the Gamma Results table (attached).

The monitoring did not indicate that the fill soils were above the removal action level established by the USEPA for the Streeterville area of Chicago. The USEPA removal action level for Chicago's Streeterville area is 7.1 picocuries per gram (pCi/g) total radium (Ra-226 + Ra-228). Gamma radiation count measurements for the project were recorded using Ludlum Models 2221 survey meter and an unshielded 2 x 2 inch NaI probe (Model 44-10). For the instrument used, the gamma count threshold indicative of the 7.1 pCi/g removal action level was 6,367 (S/N: 176944) cpm shielded.

The field gamma measurements within the excavation during the excavation process did not exceed the instrument threshold previously stated and ranged from a minimum of 1,600 cpm to a maximum of 3,700 cpm shielded. The general subsurface stratigraphy in the parking lot area was composed of urban fill, bricks, and buried concrete foundations underneath the surface concrete. Based on field observations there was no indication of the presence of radiologically-contaminated fill and/or an exceedance of the USEPA removal action level of 7.1 pCi/g total radium. A copy of the CDPH permit and an annotated drawing documenting the area where work was performed have been included as attachments.

As part of the permit conditions, this letter has been forwarded to:

Chicago Department of Public Health
Attention: Mr. Terry Sheahan
333 South State Street, Room 200
Chicago, Illinois 60604

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

Regards,



Lauren Cannon, EIT
Environmental Engineer



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

cc: Terry Sheahan, Chicago Department of Public Health
Verneta Simon, USEPA

Attachments: CDPH Permit
Annotated Drawing
Gamma Results

CDPH PERMIT



DEPARTMENT OF PUBLIC HEALTH
CITY OF CHICAGO

(STREETERVILLE Right-of-Way)

Notice is hereby given that the site you have requested a permit for is recorded with the City of Chicago Department of Public Health (CDPH) as potentially having environmental contamination on the site and adjacent right-of way. This environmental contamination could present a threat to human health and safety in connection with work performed at the site, or in the adjacent right-of-way, if proper safeguards are not employed.

A file containing detailed information regarding the aforementioned environmental contamination is available for review at CDPH at 333 S. State St., Room 200, Chicago, Illinois 60604 during normal business hours (8:30AM-4:30PM, Monday through Friday). Contact (312) 745-3152 for an appointment. This file must be reviewed and the remainder of this form completed before the permit can be issued if the ground is exposed or excavated. Please note that for some locations, additional health and safety procedures may be required by law.

Please complete the following:

I have reviewed and understand the documents, maintained by CDPH, regarding environmental contamination of the site and adjacent right-of-way. Further, I will ensure that all work at the subject site and adjacent right-of-way, and any monitoring required including but not limited to radiation monitoring, will be performed in a manner that is protective of human health and the environment and in compliance with all applicable local, state, and federal laws, rules, and regulations, especially those pertaining to worker safety and waste management. I will ensure that the results of any radiation monitoring and/or surveying conducted shall be provided to the CDPH and the United States Environmental Protection Agency within two (2) weeks of their completion. If any elevated levels of radioactive material are detected, I will immediately contact the United States Environmental Protection Agency at (800) 424-8802.

Applicant Name (print): Fred Comes (Reliable Contracting) Signature: [Signature]
Site Address and Work Location (Describe exact site location and attach map): 302 E. North water Street (Lower)

Nature of Work: Installing new sewer and water services to boat Dock. From East Lower water Street to Esplanade
Company Name, Address, Phone No.: Reliable contracting, 4100 S. Emerald, 312-666-3626

General / Prime Contractor Name, Address, Phone No.: 4100 S Emerald, 312-666-3626
Include subcontractor information if applicable
Safety Officer / Phone No. Fred Comes, 312-666-3626

Radiation Contractor / Phone No. and email address (if applicable) Aecom, Steve Keinder, Steve.Keinder@aecom.com

Check if City Department Work Department Name: _____

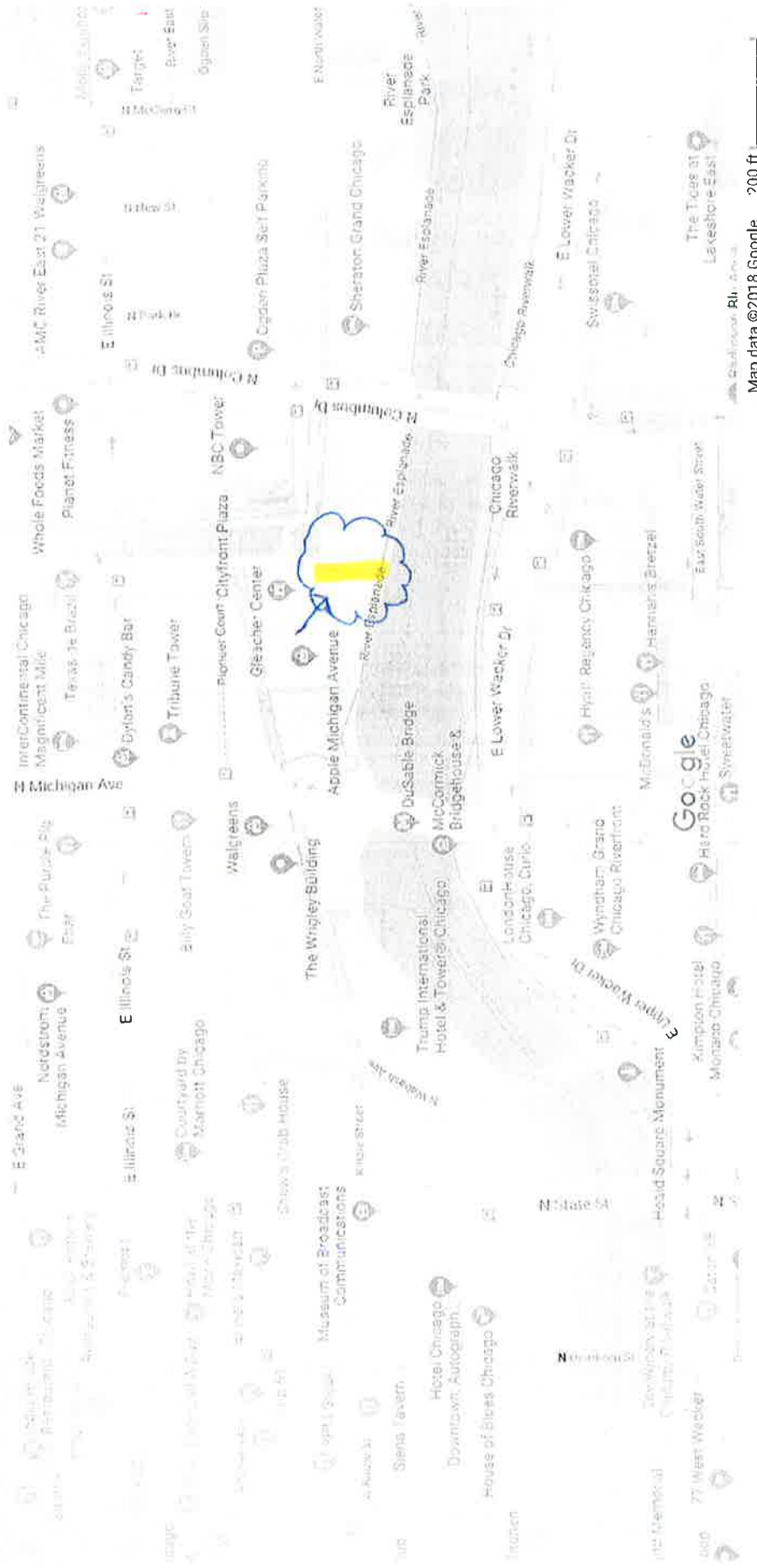
CDOT Permit No.: Dot929865

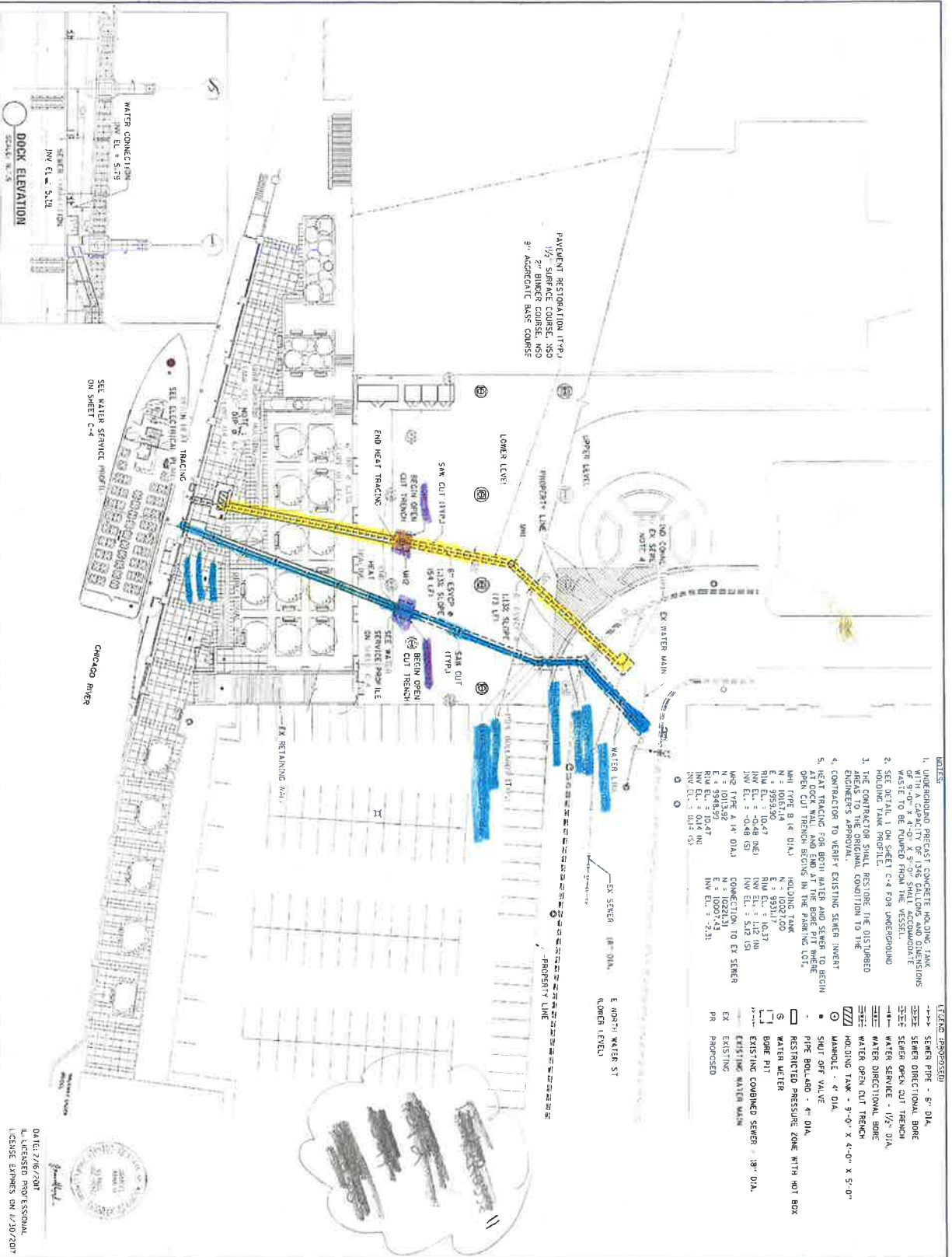
Today's Date: 4/4/18 Expected Start Date: 4/23/18 CDPH Approval / Date: [Signature] 4-4-18

Please return this completed form to the Chicago Department of Transportation, Division of Infrastructure Management, Public Way Permit Office, City Hall - Room 905, 121 N. LaSalle St., Chicago, Illinois 60602 during normal business hours (8:30 AM - 4:30 PM, Monday through Friday)

For CDPH Use Only

Google Maps





- NOTES:**
- UNDERGROUND PRECAST CONCRETE HOLDING TANK WITH A CAPACITY OF 1346 GALLONS AND DIMENSIONS AS SHOWN SHALL BE INSTALLED TO RECEIVE WASTE WATER TO BE PUMPED FROM THE VESSEL.
 - SEE DETAIL 1 ON SHEET C-4 FOR UNDERGROUND HOLDING TANK PROFILE.
 - THE CONTRACTOR SHALL RESTORE THE DISTURBED AREAS TO THE ORIGINAL CONDITION TO THE ENGINEER'S APPROVAL.
 - CONTRACTOR TO VERIFY EXISTING SEWER INVERT.
 - HEAT TRACING FOR BOTH WATER AND SEWER AS BEYOND THE PROPERTY LINE SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
- HEAT TRACING:**
- W1: 1" TYPE A (4" DIA) HOLDING TANK N = 10287.00 INV EL. = -0.48 (NE) INV EL. = -0.48 (SE)
 - W2: 1" TYPE A (4" DIA) CONNECTION TO EX. SEWER N = 10287.00 INV EL. = 1.12 (W) INV EL. = 1.12 (E)
 - W3: 1" TYPE A (4" DIA) EX. SEWER N = 10287.00 INV EL. = 1.12 (W) INV EL. = 1.12 (E)
- SEWER:**
- EX. SEWER (8" DIA) LOWER LEVEL
 - EX. SEWER (18" DIA) LOWER LEVEL
- PROPERTY LINE**

DATE: 7/16/2017
BY: L. LICENSSED PROFESSIONAL
SCALE: EXHIBITS ON 1/30/2017

ODYSSEY CRUISE CHICAGO RIVER BOAT DOCK AND RELATED FACILITIES

302 E NORTH WATERS ST
 CHICAGO, ILLINOIS 60611

ENTITLED TO THE ENGINEER'S SERVICES:
 PUSKAS, JOHNSON, GOBEL, ARCHITECTS, INC.
 400 N. LAUREL STREET, SUITE 200
 CHICAGO, ILLINOIS 60610

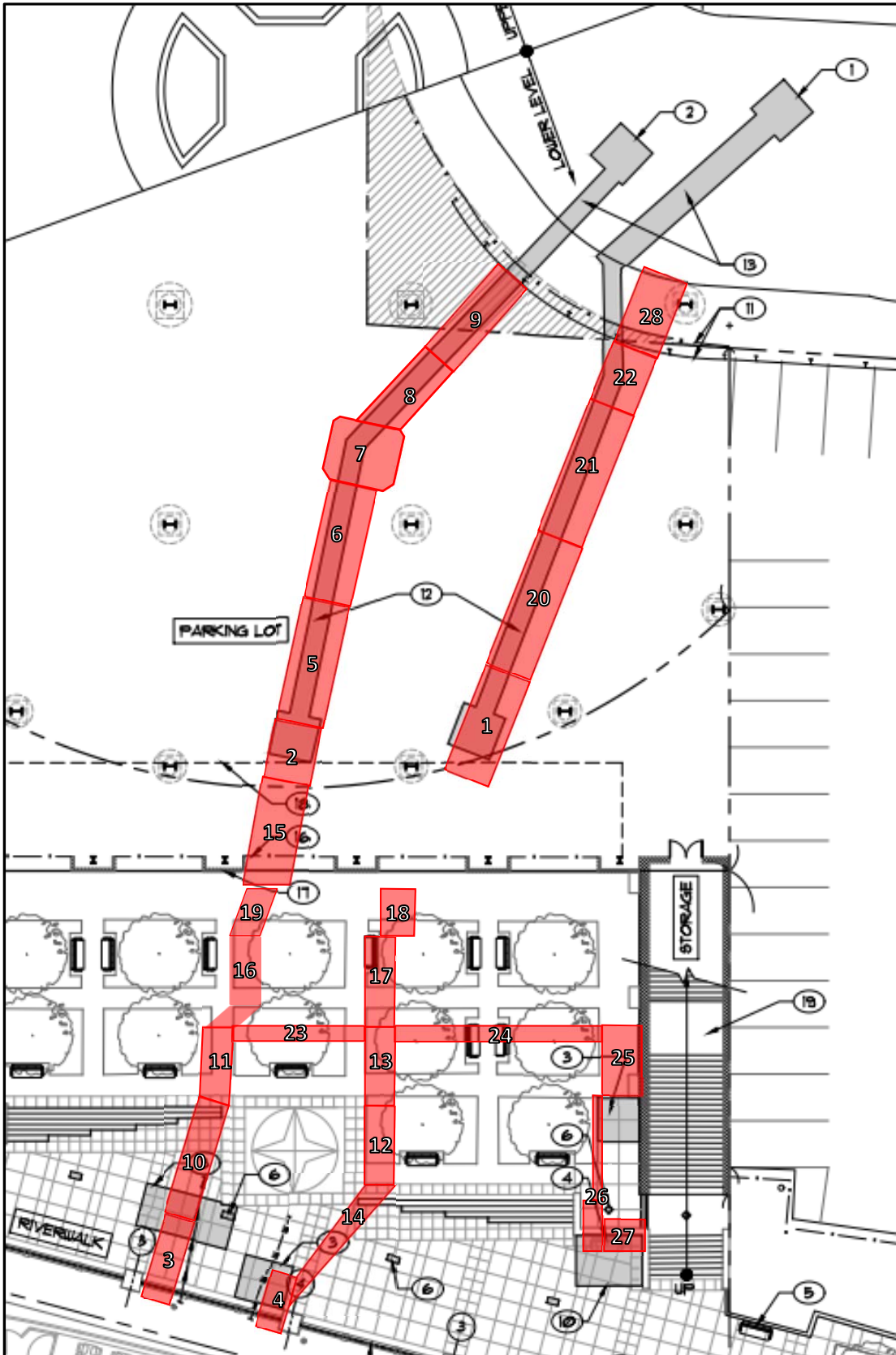
DATE: 7/16/2017

UTILITY PLAN

C-3

ANNOTATED DRAWING

302 E. North Water St., Chicago, Illinois
CDOT 929865



GAMMA RESULTS

302 E North Water Gamma Survey Results

Section	Depth	CPM	Material	Section	Depth	CPM	Material
1	0-6"	--	Concrete	11	0-18"	1400-1900	Rocks, top soil
	6-24"	1400-1900	Gravel/fill		18-36"	1600-2200	Fill
	24-42"	1600-2300	Fill		36+"	1500-1800	Fill
	42-60"	2200-3000	Fill	12	0-18"	1600-1900	Rocks, top soil
	60-78"	2200-2600	Fill		18-36"	1800-2100	Fill
	78-96"	1500-2000	Fill		36+"	1400-1900	Fill
	96+"	1600-2100	Fill		0-18"	1200-1080	Top soil/fill
2	0-6"	--	Concrete	13	18-36"	1500-1900	Fill
	6-24"	1800-2500	Fill		36+"	1100-1800	Fill
	24-42"	2600-3000	Fill		14	0-6"	--
	42-60"	1800-2200	Fill	6-24"		1600-2400	Fill
	60-78"	1400-1900	Fill	24-42"		2100-2600	Fill
	78-96"	1700-2100	Fill	42+"		1800-2400	Fill
	96-114"	1500-1800	Fill	15		0-12"	--
	114-132"	1900-2500	Fill		12-30"	1400-1800	Fill
132+"	1600-1900	Fill	30-48"		1500-1800	Fill	
3	0-6"	--	Concrete	16	48-66"	1400-1900	Fill
	6-24"	1600-2400	Fill		66-84"	1700-2000	Fill
	24-36"	1900-2600	Fill		84-102"	1800-2100	Fill
	36+"	1800-2500	Fill		0-18"	1400-1700	Top soil, fill
4	0-6"	--	Concrete	17	18-36"	2000-2400	Top soil, fill
	6-24"	1500-2400	Fill		36-54"	1700-2100	Fill
	24-36"	1100-1800	Fill		54+"	1400-1900	Fill
	36+"	--	Concrete foundation		18	0-6"	--
5	0-6"	--	Concrete	6-24"		1900-2400	Top soil, fill
	6-12"	1200-1700	Gravel/fill	24-42"		1700-2500	Top soil, fill
	12-30"	--	Concrete foundation	42+"		1400-2100	Fill
	30-48"	1300-1500	Fill	19	0-6"	--	Concrete, gravel
	48-66"	900-1500	Fill		6-24"	1500-1800	Stone, fill
	66-84"	1200-1800	Fill		24-42"	1600-2000	Fill
	84-102"	1100-2000	Fill		42-60"	1700-2000	Fill
	102-120"	1300-1900	Fill	20	60+"	1700-2000	Fill
120+"	1100-1600	Fill	0-12"		--	Concrete, gravel	
6	0-12"	--	Concrete		12-24"	1400-1700	Fill
	12-24"	1500-2100	Gravel/fill		24-30"	--	Concrete
	24-36"	--	Concrete foundation		30-48"	2100-2600	Fill
	36-48"	--	Concrete foundation		48-66"	1900-2700	Fill
	48-66"	1600-1900	Fill		66-84"	2200-2600	Fill
	66-84"	1100-1800	Fill		84+"	1900-2200	Fill
	84-102"	1200-1800	Fill	21	0-12"	--	Concrete, gravel
	102-120"	1400-1700	Fill		12-24"	1200-1700	Fill
120+"	1100-1600	Fill	24-30"		--	Concrete	
7	0-12"	--	Concrete		30-48"	1300-1800	Fill
	12-30"	1200-2200	Gravel/fill		48-66"	1500-2200	Fill
	30-38"	--	Concrete		66-84"	1400-1900	Fill
	38-56"	1400-1900	Fill		84+"	1400-2100	Fill
	56-74"	2100-3000	Fill		22	0-12"	--
	74-92"	1200-1900	Fill	12-24"		1200-1700	Fill
	92-110"	1100-1700	Fill	24-30"		--	Concrete
	110-128"	1000-1500	Fill	30-48"		1300-1800	Fill
128+"	1300-1700	Fill		48-66"	1500-2200	Fill	

Section	Depth	CPM	Material	Section	Depth	CPM	Material
8	0-18"	--	Concrete, gravel		12-30"	1300-1700	Fill
	18-36"	2200-2600	Fill		30-48"	1100-1500	Fill
	36-54"	2100-2400	Fill		48-66"	1200-1500	Fill
	54-72"	1400-1800	Fill		66-84"	1300-2200	Fill
	72-90"	1400-1700	Fill	23	0-18"	2000-2400	Stone, soil
	90-108"	1600-2100	Fill	24	0-18"	1700-2100	Stone, soil
	108-126"	1200-1800	Fill	25	0-6"	--	Concrete
9	0-12"	--	Concrete, gravel	26	0-4"	--	Concrete
	12-30"	1100-1500	Fill		4+"	2000-2600	Fill
	30-48"	1200-1700	Fill	27	0-4"	--	Concrete
	48-66"	1000-2000	Fill		4+"	2900-3700	Fill
	66-84"	1600-2100	Fill	28	0-4"	--	Concrete
	84-102"	1400-1800	Fill		4-22"	1500	Fill
	102-120"	1400-1900	Fill		22-40"	2000	Fill
120+"	1500-2000	Fill	10-58"		2100	Fill	
10	0-6"	--	Concrete	58-74"	1500	Fill	
	6-24"	1400-1900	Gravel/fill				
	24-42"	1600-2100	Fill				
	42+"	1600-2200	Fill				

Notes:

- Refer to annotated drawing for the Section locations.
- Gamma readings recorded using Ludlum Models 2221 survey meter (S/N: 176944) and a shielded 2 x 2 inch NaI probe (Model 44-10).
- For the instrument used the gamma count indicative of the 7.1 pCi/g removal action level was 6,367 cpm shielded.