November 7, 2018

Public Building Commission of Chicago
50 West Washington Street, Room 200
Chicago, Illinois 60602
Attn: Miguel F. Fernandez
Email:miguel.fernandez@cityofchicago.org

ECS Project No. 16:12609

Reference: Geotechnical Engineering Draft Report, PBC Decatur Elementary School Annex (Project No.: 05215), 7030 North Sacramento Avenue, Chicago, Illinois

Dear Mr. Fernandez:

The below sections summarize our geotechnical subsurface exploration and draft geotechnical recommendations for foundations, slabs and hardscapes at the proposed PBC Decatur Elementary School Annex to be constructed at 7030 North Sacramento Avenue in Chicago, Illinois. Our scope of work was performed in general accordance with ECS' Proposal No. 16:18350-GP, dated September 28, 2018.

Project Description

The project site is located at 7030 North Sacramento Avenue in Chicago, Illinois. The project site is bound to the north by baseball fields, to the south by park space, to the east by North Sacramento Avenue and the west by high-rise residential towers.

Based on ECS' current understanding, the proposed construction at the project site will consist of the following:

- New Annex addition, approximately 50,000 sft in total, to the south and southwest of the existing school building. The new addition will be constructed adjacent to the southern elevation of the existing building. The new building addition appears to consist of two above grade levels. The existing school building also appears to consist of 1 above grade levels.
    - It is unknown to ECS at this time if either the existing or new construction has basement levels. For the purposes of this draft report, ECS assumes that neither the existing or proposed buildings have basement levels
    - The at-grade footprint of the new building occupies about 25,000 square feet.

- The reported column loading estimates include typical column loads of about 200 kips at the new structure. Interior slab loads at grade have been reported to be about 100 to 150 psf.

- It has been reported to ECS that the existing building is supported on deep foundations (caissons) at a depth of about 45 feet below grades. It has been reported to ECS that the existing caissons are designed utilizing and maximum allowable soil bearing pressure of 12,000 psf.

- We also understand that an exterior enclosure will be constructed on shallow foundations to house a chiller and trash compactor. The enclosure will be constructed of 8 inch CMU blocks to a height of 8 feet. The pressures applied at grade for the chiller pad has been reported to be about 100 psf and about 300 psf at trash compactor pad.

- Site improvements consist of a new playground to be constructed to the northwest of the building addition. Also the existing pavement area is proposed to be reconfigured in the southern, western and northern limits of the site.

- Although not identified on the RFP documents, ECS anticipates that new storm water management will be included in the project footprint. *Please notify ECS if storm water management systems are planned including proposed location and invert depths.*

If our understanding of the proposed development is inaccurate or if the design changes, please contact ECS immediately so we can modify our geotechnical recommendations accordingly in the subsequent final report.

SPT Soil Borings

ECS' subcontracted drilling crew (Union MBE) performed 14 SPT soil borings at the project site to depths ranging from 7½ to 60 feet below grades. The approximate as-drilled boring locations are shown on the Boring Location Diagram (attached).

Standard penetration tests (SPTs) were conducted in the borings at regular intervals in general accordance with ASTM D 1586. Split spoon sampling was performed at 2½ foot intervals in the first 15 feet and every 5 feet thereafter to the termination depth of the borings. Small representative samples were obtained during these tests and were used to classify the soils encountered. The standard penetration resistances obtained provide a general indication of soil shear strength and compressibility.

The boreholes were backfilled with spoils after the completion of drilling. Borehole backfill settlement or expansion can and will occur over time. Monitoring the boreholes after the initial drilling activities is not within our Scope. Settlement or expansion of the borehole backfill can create a hazard and should be carefully monitored by the client or property owner.

The subsurface soils generally consisted of the following:

- Typically 11 to 15 inches of topsoil and/or existing pavement section materials.

- Typically granular fill soils to a depth of 3 to 8 feet below existing grades. Existing granular fill materials consist of Sand and Gravel Fill, Sand Fill, Clayey Sand Fill, Silty Sand Fill. The existing granular fill soils contained some degrees of fractured construction debris (i.e., fragments of bricks, glass and wood).
    - Existing cohesive fill soils were observed at borings B-4 and B-13 to depth of about 3 to 4 feet below grade.
- Debris Fill materials were observed across the site to a depths of about 10 feet (at shallow borings) to 25 feet below grade, typically to a maximum depth of about 18 feet below grades. The debris fill materials predominately consisted of slag and wood with varying degrees of clay, sand and gravel. At several boring locations, a Petro Chemical odor was noticed within the Debris fill layer (the nature and extent of the petro chemical odor is beyond the scope of ECS' geotechnical services)
    - Ground water was typically observed during drilling within the debris fill layer at depths of about 5 to 8 feet below existing grades.
- Stiff Clay Crust from about from about 18 to 22 below grade.
- Soft to firm Clay from 22 to 41 feet.
- Stiff to Hard Silty Clay was observed from about 41 feet to 60 feet below grade (maximum termination depth of borings at 60 feet). Hard Silty Clay soils were observed at boring B-6 at a depth of about 60 feet below grade.

Additional Soils Testing and Field Testing

The results of ECS infiltration testing and soils laboratory testing (including select grain size analysis, Atterberg limits, and unconfined compressive strength testing) will be delivered under a separate cover.

Deep Foundation at School Building Pad

Preliminarily, ECS recommends that the new school building be supported on deep foundations. For preliminary design considerations, the project team could consider designing caissons to bear about 45 feet below grades utilizing a maximum allowable soil bearing pressure of 12,000 psf. However, based on our current subsurface exploration, particularly near soil boring B-1, the bottom of the caissons may need to extend to depths greater than 60 feet below grade.

In order for ECS to finalize our foundation recommendation at the new school building pad, we recommend the following:

- ECS should be authorize to drill at least 3 to 4 additional soil borings to a depth about 75 feet below grades.
- ECS should be authorized to perform about in situ pressuremeter testing within the anticipated zone of bearing influence.

- ECS should be authorized to perform a series of in situ vane shear tests within the firm to soft clay layer to help better understand the squeeze potential for caisson installation construction procedures.
- A series of environmental CCDD analyses should be performed on the debris fill to help the project team budget for the removal of drilled shaft spoils.

Due the presence of Debris fill materials to a depth of about 18 feet (and up to at least 25 feet at about B-2), drilled shaft installation should consist of temporary casing be advanced to at least two feet into native clay soils to help provide a dry excavation. That is, temporary casing to about 22 feet (or greater) at each drilled shaft location.

ECS can provide further drilled shaft installation recommendations after additional soil borings are performed and final drilled shaft recommendations are developed.

Shallow Foundations at Exterior Enclosure

At the exterior enclosure, consideration can be given to supporting the chiller and trash compactor enclosure on shallow foundation systems supported above the debris fill. The owner must be willing to accept additional risk of settlement (possibly greater than 1 inch) and premature distress at foundations/slabs supported about the existing debris fill soils. If the trash enclosure is supported above the debris fill soils, ECS recommends the following:

- Shallow foundation elements should bear at frost depth (i.e., 3½ feet below finished exterior grades.
- Maximum allowable soil bearing pressure of 1,000 psf at the base of shallow foundations.
- Initially undercut about 16 inches below foundation bearing subgrades, densify exposed undercuts to the best degree possible, and then place 2 lifts of compacted CA-6 to the design foundation subgrade elevation.
    - If soft spots are identified at the initially exposed 16 inch undercuts, the soft spots should be undercut an additional 1 foot and backfilled with compacted CA-6. Total undercuts could be limited to about 28 inches below foundation subgrade.
    - Further soil reinforcement could be achieved by placing and geogrid layer at the bottom of the initial undercuts with compacted CA-6 placed above the geogrid layer. Please note that this option may not reduce the total settlement of foundations supported above the existing fill materials.
- The contractor should be prepared to manage water at the foundation excavations and the foundation concrete should be placed in the dry.
- ECS should be on site to observe/document placement of shallow foundation supported above the debris fill.

Adjacent Existing Foundations

Care must be taken to protect the existing structure. Excavations must be done so as to not undermine the existing construction, or otherwise adversely affect the structural integrity of the existing building. Excavations should not extend below adjacent existing foundation unless underpinning or other forms of support are provided. It is unknown if additional load will be placed on the existing footings from the new addition. ECS must be contacted if existing foundations will be subjected to additional loads. Additional load added to the existing footings will result in some additional settlement. The actual settlement will depend on the added load, the existing load, size of the existing footings, and strength and settlement characteristics of the support soil.

The foundations for the addition are recommended to bear at the same elevation as the existing nearby foundations. When the actual existing and proposed building foundation systems and depths can be confirmed, contact ECS to evaluate whether our recommendations need to be altered to accommodate the existing foundation system accordingly.

Floor Slabs

The anticipated soils near the anticipated slab subgrade elevation (within 1 or 2 feet of existing grades) appear consist of existing fill soils. Typically, ECS would recommend complete removal and replacement of existing fill soils or the design of structural slab. However, we understand that complete removal and replacement of existing fill soils (to depths of up to 18 feet or greater) and a structural slab option are likely cost probative.

If the owner is willing to accept increased risk of slab movement and premature distress, the school building slabs could be supported above the existing fill materials.

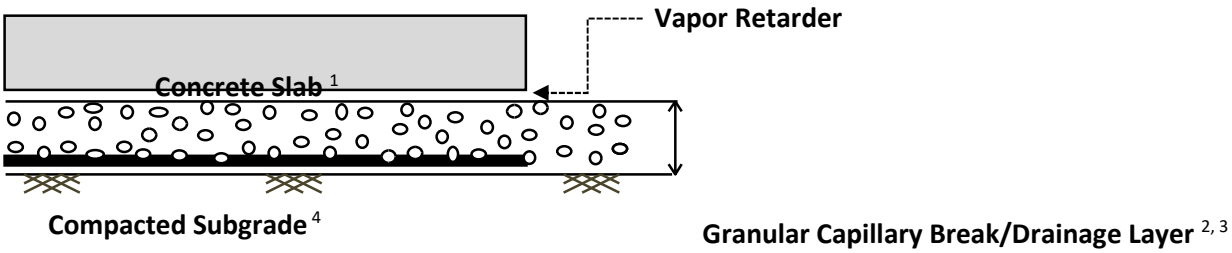
If slabs are supported above the existing fills, ECS recommends that following be considered.

- Initially strip to a depth of 1 foot below design slab subgrade.

- Proofroll with a minimum 10 ton axle load. Multiple passes should be performed in orthogonal directions. Soft spots repaired in 6 inch increments to a maximum depth of 2 feet below design slab subgrade. Soft spots repaired with compacted engineered fill soils.

- A non-woven geotextile fabric could also be considered. The geotextile fabric should be placed at the bottom of the initial 1 foot undercut with new engineered fill placed above to the design slab subgrade. The textile could help reduce the migration of fines between the existing fill and new engineering fill layers. New engineered fill should consist materials and placement as described in the **Engineered Fill** section below.

- The below diagram illustrates ECS recommend slab section, including granular chocking layer.



1. **Concrete Slab:** Minimum 5 inches thick
2. **Drainage Layer:** Minimum 6 inches thick
3. **Drainage Layer Material:** GRAVEL (GP, GW) having a maximum aggregate size of 1½ inches and no more than 5 percent passing the No. 200 sieve. Locally available IDOT CA-6 material could be used as base course material. Material meeting ASTM D448 Size Nos. 467, 57 or 67 could also be used.
4. **Compacted Subgrade:** Compacted to at least 95 percent of the maximum dry density per ASTM D1557.

We recommend slabs-on-grade be underlain by a granular drainage layer placed on a properly prepared subgrade. The granular material will serve as a capillary break, which if properly designed and installed, can sometimes eliminate the need for a moisture retarder and can assist in more uniform curing of concrete. If the anticipated finish floor slab areas are at or about the existing site grade (El. 592), a vapor retarder would not be necessary, however, if significant grade changes are anticipated or a basement option is considered, then a vapor retarder should be considered to provide additional moisture protection. In the area of vapor retarder give special attention to the surface curing of the slabs to reduce uneven drying of the slabs and associated cracking and/or slab curling. The use of a blotter or cushion layer above the vapor retarder can also be considered for project specific reasons. Refer to ACI 302.1R04 Guide for Concrete Floor and Slab Construction and ASTM E 1643 Standard Practice for Installation of Water Vapor Retarders Used in Contact with Earth or Granular Fill Under Concrete Slabs for additional guidance on these issues. Implement positive drainage around the perimeter of the proposed structures to reduce the potential for water accumulation under the floor slab and foundation elements. Slope exterior grades adjacent to the building such that runoff is directed away from the building walls. Direct building downspouts away from the building walls/foundations. Direct slab and pavement surface runoff to appropriate stormwater infrastructure.

Provided the Subgrade is prepared, and any Engineered Fill and the Granular Drainage Layer are placed as recommended in this report, design the slabs assuming a modulus of subgrade reaction, k of 100 psi/in (pounds per square inch per inch). This modulus of subgrade reaction value assumed is based on the recommended minimum drainage base thickness and a 1 foot by 1 foot plate load test.

Ground-supported slabs should be isolated from the foundations and foundation-supported elements of the structure so that differential movement between the foundations and slab will not induce excessive shear and bending stresses in the floor slab.

Engineered Fill

All fills should consist of approved materials, free of organic matter and debris, particles greater than 3-inches and have a Liquid Limit and Plasticity Index less than 40 and 15, respectively. Unacceptable fill materials include topsoil and organic materials (OH, OL, PT), high plasticity silts and clays (CH, MH), and low-plasticity silts (ML). Under no circumstances should high plasticity soils be used as fill material in proposed structural areas or close to site slopes.

On site soils that could be considered for re-use are typically found in the upper 4 feet. If these existing fill soils (upper 4 feet of existing material) are considered for reuse as engineered fill, they should initially be screened of organics and construction debris. It may also be necessary to condition these materials for proper moisture contents.

On-site soil used as Engineered Fill must not contain an adverse amount of organic matter, and must be free of frozen matter, deleterious materials, over-sized material (maximum 3-inch particle diameter), or chemicals that may result in the material being classified as "contaminated." Depending on the conditions at the time of construction, the use of on-site soil may not be practical, and use of an imported, high quality, less moisture sensitive granular material may be needed. The material used as Engineered Fill must be considered low volume change material with a maximum Liquid Limit of 40 and maximum Plasticity Index of 15, unless specifically tested and found to have low volume change properties and approved by ECS. The soils must be compacted within a narrow range of the materials optimum moisture content. Some of the soil samples had relatively high moisture contents so some drying of on-site soil prior to reuse as Engineered Fill is expected to be needed. The soil should not be compacted too dry as it may lose its apparent stability if it later becomes wet. The suitability of Engineered Fill materials is recommended to be checked by ECS prior to placement.

Engineered fill within the expanded building limits should be placed in maximum 8-inch thick loose lifts, moisture conditioned as necessary to between ±2 percent of the soil's optimum moisture content, and be compacted with suitable equipment to a dry density of at least 95 percent of the Modified Proctor maximum dry density (ASTM D1557). Beyond these areas, compaction of at least 90 percent should be achieved. Considering the moisture sensitivity of the soil the moisture requirements should be given as much importance as the density requirements during placement and compaction. ECS should be called on to check and document that proper fill compaction has been achieved.

The expanded footprint of the proposed structure pad and fill areas should be well defined, including the limits of the fill zones at the time of fill placement. Grade control should be maintained throughout the fill placement operations. All fill operations should be observed on a full-time basis by ECS to check that the specified compaction requirements are being met. A minimum of one compaction test per 2,500 square foot area or 50 linear feet of trench should be tested in each lift placed with a minimum of 3 tests per lift. The elevation and location of the tests should be clearly identified at the time of fill placement.

Site Temporary Dewatering

The estimated water level is about 5 to 8 feet below existing grade. Seasonal variations in precipitation and site drainage conditions can cause the accumulation of water in the upper soils, particularly within existing If water control cannot be maintained with sump pumps, or where excavations extend more

than 2 feet below the groundwater level, dewatering likely will require installation of a well-point system or some other dewatering system to aid in maintaining the groundwater level below the excavation bottom. A qualified dewatering contractor should be consulted if groundwater cannot be satisfactorily controlled through the use of sump pumps. Lowering the static groundwater level can adversely affect nearby structures, utilities and other construction. ECS recommends any dewatering scheme be reviewed by us and a contractor who specializes in this type of work prior to its implementation.

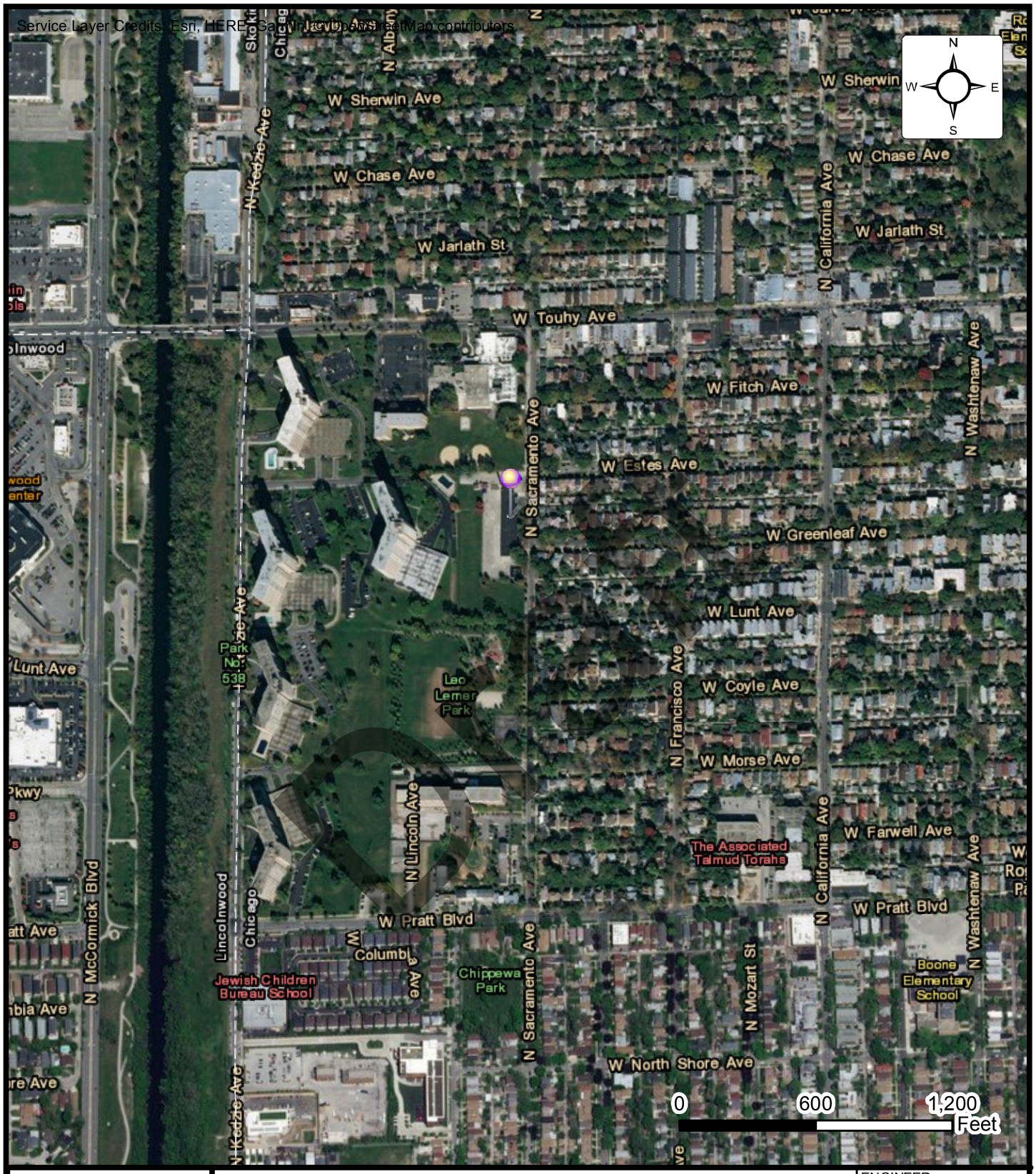
Closing

We appreciate the opportunity to be of service to PBC during the design and construction phase of this project. If you have questions with regard to the information and recommendations contained in this report, please do not hesitate to contact the undersigned.

Respectfully,
ECS Midwest, LLC

Eric E. Borys, P.E
Senior Geotechnical Project Manager
Illinois PE Renews 11/30/19

Enclosed: Boring Location Diagram
SPT Soil Boring Logs

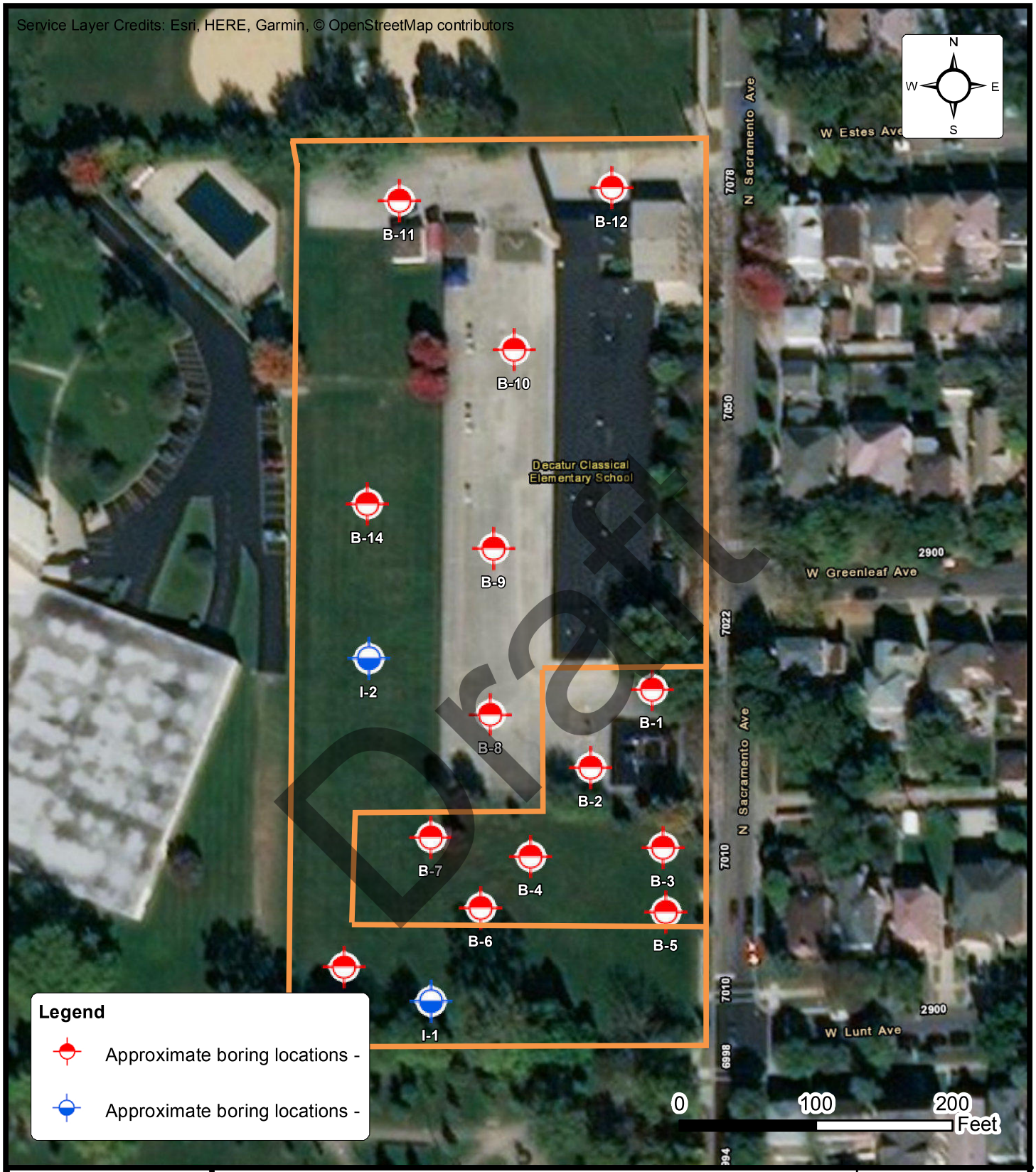


Site Location Diagram
PBC DECATUR ELEMENTARY SCHOOL

7030 NORTH SACREMENTO AVENUE, CHICAGO, IL

PUBLIC BUILDING COMMISSION OF CHICAGO

ENGINEER	KSC
SCALE	1 " = 600 '
PROJECT NO.	16:12609
SHEET	1 OF 1
DATE	11/7/2018



Boring Location Diagram
PBC DECATUR ELEMENTARY SCHOOL

7030 NORTH SACREMENTO AVENUE, CHICAGO, IL

PUBLIC BUILDING COMMISSION OF CHICAGO

ENGINEER	KSC
SCALE	1 " = 100 '
PROJECT NO.	16:12609
SHEET	1 OF 1
DATE	11/7/2018

CLIENT	Job #:	BORING #	SHEET
Public Building Commission of Chicago	16:12609	B-1	1 OF 2

PROJECT NAME: PBC Decatur Elementary School Annex (PO 05215)

ARCHITECT-ENGINEER:

SITE LOCATION: 7030 North Sacremento Avenue, Chicago, Cook, IL

NORTHING | EASTING | STATION

CALIBRATED PENETROMETER TONS/FT^2

ROCK QUALITY DESIGNATION & RECOVERY
RQD% – — – REC% ———

PLASTIC LIMIT% | WATER CONTENT% | LIQUID LIMIT%

STANDARD PENETRATION BLOWS/FT

DESCRIPTION OF MATERIAL — ENGLISH UNITS

BOTTOM OF CASING | LOSS OF CIRCULATION

SURFACE ELEVATION 594 +/-

DEPTH (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	ELEVATION (FT)	BLOWS/6"
0						
						Asphalt Thickness [3" +/-]
						Subbase Gravel Thickness [9" +/-]
	S-1	SS	18	14		(SP FILL) FILL, SAND WITH GRAVEL, trace clay, some glass and wood, black, moist — 19, 9, 27
	S-2	SS	18	10	590	3, 2, 2
5						(DEBRIS FILL), Slag, some sand, trace gravel, black, moist to wet at 6 feet
	S-3	SS	18	14		2, 2, 2
	S-4	SS	18	2	585	1, 2, woh
10						
	S-5	SS	18	4		1, 1, 1
	S-6	SS	18	12	580	(CL FILL) FILL, SANDY LEAN CLAY, petro chemical odor, black, moist — 5, 10, 14
15						
						(CL) LEAN CLAY, trace gravel, trace sand, gray, moist, stiff
	S-7	SS	18	8	575	2, 2, 3
20						
						(CL) LEAN CLAY, trace gravel, trace sand, gray, moist, firm to soft
	S-8	SS	18	18	570	woh, woh, woh
25						
	S-9	SS	18	18	565	woh, 1, 1
30						

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THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL.

WL 6 WS ☐ WD ☒	BORING STARTED 10/23/18	CAVE IN DEPTH
WL(SHW) WL(ACR)	BORING COMPLETED 10/23/18	HAMMER TYPE Auto
WL	RIG Truck FOREMAN Rob	DRILLING METHOD HSA

CLIENT	Job #:	BORING #	SHEET
Public Building Commission of Chicago	16:12609	B-1	2 OF 2

PROJECT NAME: PBC Decatur Elementary School Annex (PO 05215)

ARCHITECT-ENGINEER:

SITE LOCATION: 7030 North Sacremento Avenue, Chicago, Cook, IL

NORTHING | EASTING | STATION

CALIBRATED PENETROMETER TONS/FT^2

ROCK QUALITY DESIGNATION & RECOVERY
RQD% – — – REC% ———

PLASTIC LIMIT% | WATER CONTENT% | LIQUID LIMIT%

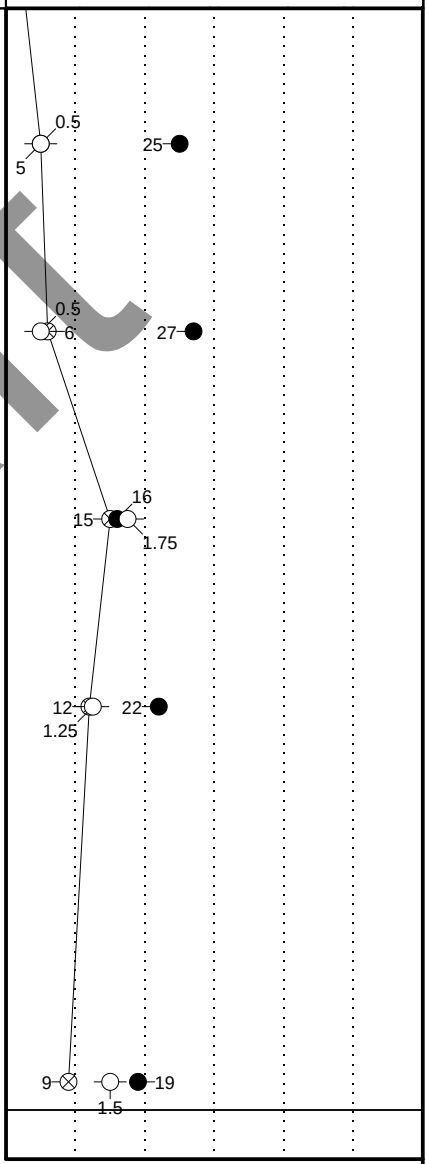
STANDARD PENETRATION BLOWS/FT

ENGLISH UNITS

BOTTOM OF CASING | LOSS OF CIRCULATION

SURFACE ELEVATION 594 +/-

DEPTH (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL	WATER LEVELS	ELEVATION (FT)	BLOWS/6"
					(CL) LEAN CLAY, trace gravel, trace sand, gray, moist, firm to soft			
35	S-10	SS	18	18			560	woh 2 3
40	S-11	SS	18	18			555	1 2 4
					(CL/ML) SILTY CLAY, trace gravel, trace sand, gray, moist, stiff			
45	S-12	SS	18	18			550	5 6 9
50	S-13	SS	18	18			545	3 5 7
55							540	
60	S-14	SS	18	12			535	4 4 5
					END OF BORING @ 60'			



THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL.

WL 6 WS ☐ WD ☒	BORING STARTED 10/23/18	CAVE IN DEPTH
WL(SHW) WL(ACR)	BORING COMPLETED 10/23/18	HAMMER TYPE Auto
WL	RIG Truck FOREMAN Rob	DRILLING METHOD HSA

CLIENT	Job #:	BORING #	SHEET
Public Building Commission of Chicago	16:12609	B-2	1 OF 1

PROJECT NAME: PBC Decatur Elementary School Annex (PO 05215)

ARCHITECT-ENGINEER:

SITE LOCATION: 7030 North Sacremento Avenue, Chicago, Cook, IL

NORTHING | EASTING | STATION

CALIBRATED PENETROMETER TONS/FT^2

ROCK QUALITY DESIGNATION & RECOVERY
RQD% – — – REC% ———

PLASTIC LIMIT% | WATER CONTENT% | LIQUID LIMIT%

STANDARD PENETRATION BLOWS/FT

DESCRIPTION OF MATERIAL — ENGLISH UNITS

BOTTOM OF CASING | LOSS OF CIRCULATION

SURFACE ELEVATION 592 +/-

DEPTH (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL	WATER LEVELS	ELEVATION (FT)	BLOWS/6"
0					Asphalt Thickness [3" +/-]			
					Subbase Gravel Thickness [8" +/-]			
	S-1	SS	18	12	(SP FILL) FILL, SAND WITH GRAVEL, trace clay, some wood and brick, black, moist		590	7 7 5
	S-2	SS	18	5				3 2 1
5					(DEBRIS FILL), Slag, some gravel, some sand, trace clay, black, wet			
	S-3	SS	18	12			585	2 2 1
	S-4	SS	18	14				2 1 7
10								
	S-5	SS	18	3			580	1 1 1
	S-6	SS	18	5				3 5 3
15								
					(CL FILL) FILL, LEAN CLAY, trace gravel, trace sand, gray, moist, stiff		575	
	S-7	SS	18	14				2 3 3
20								
					(DEBRIS FILL), Slag, black, wet		570	
	S-8	SS	18	18				woh 1 1
25					END OF BORING @ 25'			
							565	
30								

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL.

WL 4.5 WS ☐ WD ☒	BORING STARTED 10/23/18	CAVE IN DEPTH
WL(SHW) WL(ACR) 7.0	BORING COMPLETED 10/23/18	HAMMER TYPE Auto
WL	RIG Truck FOREMAN Rob	DRILLING METHOD HSA

CLIENT	Job #:	BORING #	SHEET
Public Building Commission of Chicago	16:12609	B-3	1 OF 2

PROJECT NAME: PBC Decatur Elementary School Annex (PO 05215)

ARCHITECT-ENGINEER:

SITE LOCATION: 7030 North Sacremento Avenue, Chicago, Cook, IL

NORTHING | EASTING | STATION

CALIBRATED PENETROMETER TONS/FT^2

ROCK QUALITY DESIGNATION & RECOVERY
RQD% – — – REC% ———

PLASTIC LIMIT% | WATER CONTENT% | LIQUID LIMIT%

STANDARD PENETRATION BLOWS/FT

DESCRIPTION OF MATERIAL — ENGLISH UNITS

BOTTOM OF CASING | LOSS OF CIRCULATION

SURFACE ELEVATION 592 +/-

DEPTH (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	WATER LEVELS	ELEVATION (FT)	BLOWS/6"
0							
						Topsoil Thickness [12" +/-]	
	S-1	SS	18	14		(SC FILL) FILL, CLAYEY SAND WITH GRAVEL, trace brick and roots, dark brown, moist	3 3 1
	S-2	SS	18	10		(DEBRIS FILL), Slag and wood, Some gravel and sand, black, moist to wet at 6 feet	2 2 2
5							
	S-3	SS	18	10			2 1 3
	S-4	SS	18	4			2 3 5
10							
	S-5	SS	18	3			2 2 2
	S-6	SS	18	10			2 1 2
15							
						(CL) LEAN CLAY, trace gravel, trace sand, gray, moist, stiff	
	S-7	SS	18	14			2 3 3
20							
						(CL) LEAN CLAY, trace gravel, trace sand, gray, moist, soft to stiff to soft	
	S-8	SS	18	18			2 2 3
25							
	S-9	SS	18	18			2 6 3
30							

590 585 580 575 570 565

4 4 4 8 4 3 6 1.5 22 0.5 23 5 0.25 9 22

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THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL.

WL 6 WS ☐ WD ☒	BORING STARTED 10/19/18	CAVE IN DEPTH
WL(SHW) WL(ACR)	BORING COMPLETED 10/19/18	HAMMER TYPE Manual
WL	RIG Truck FOREMAN Rob	DRILLING METHOD HSA

CLIENT	Job #:	BORING #	SHEET
Public Building Commission of Chicago	16:12609	B-3	2 OF 2

PROJECT NAME: PBC Decatur Elementary School Annex (PO 05215)

ARCHITECT-ENGINEER:

SITE LOCATION: 7030 North Sacremento Avenue, Chicago, Cook, IL

NORTHING | EASTING | STATION

CALIBRATED PENETROMETER TONS/FT^2

ROCK QUALITY DESIGNATION & RECOVERY
RQD% – — – REC% ———

PLASTIC LIMIT% | WATER CONTENT% | LIQUID LIMIT%

STANDARD PENETRATION BLOWS/FT

DESCRIPTION OF MATERIAL — ENGLISH UNITS

BOTTOM OF CASING | LOSS OF CIRCULATION

SURFACE ELEVATION 592 +/-

DEPTH (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	WATER LEVELS	ELEVATION (FT)	BLOWS/6"
						560	
35	S-10	SS	18	18		555	2 3 5
40	S-11	SS	18	18		550	2 4 5
45	S-12	SS	18	6		545	7 9 14
50						540	
55						535	
60							

(CL) LEAN CLAY, trace gravel, trace sand, gray, moist, soft to stiff to soft

END OF BORING @ 45'

0.5 8 22

1.0 9 22

0.5 17 23

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL.

WL 6 WS ☐ WD ☒	BORING STARTED 10/19/18	CAVE IN DEPTH
WL(SHW) WL(ACR)	BORING COMPLETED 10/19/18	HAMMER TYPE Manual
WL	RIG Truck FOREMAN Rob	DRILLING METHOD HSA

CLIENT	Job #:	BORING #	SHEET
Public Building Commission of Chicago	16:12609	B-4	1 OF 1

PROJECT NAME: PBC Decatur Elementary School Annex (PO 05215)

ARCHITECT-ENGINEER:

SITE LOCATION: 7030 North Sacremento Avenue, Chicago, Cook, IL

NORTHING | EASTING | STATION

CALIBRATED PENETROMETER TONS/FT^2

ROCK QUALITY DESIGNATION & RECOVERY
RQD% – — – REC% ———

PLASTIC LIMIT% | WATER CONTENT% | LIQUID LIMIT%

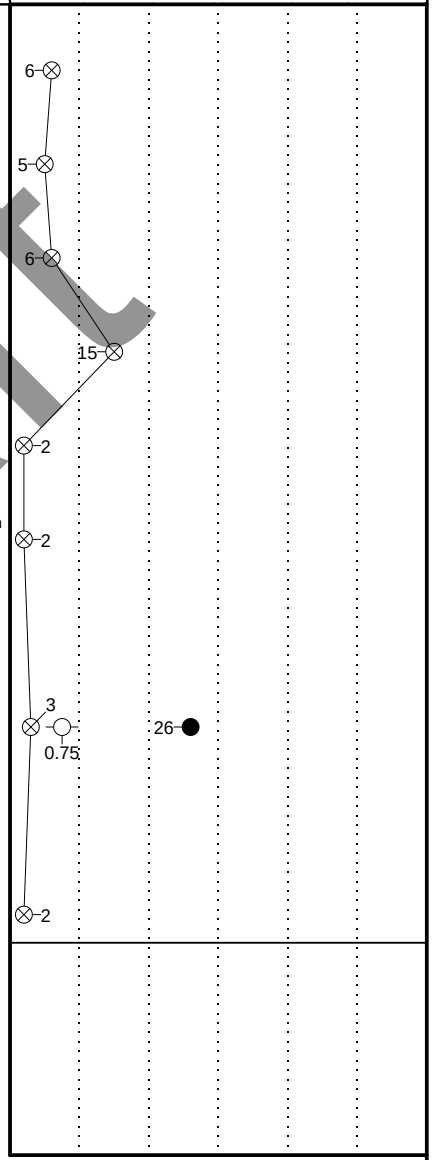
STANDARD PENETRATION BLOWS/FT

DESCRIPTION OF MATERIAL — ENGLISH UNITS

BOTTOM OF CASING | LOSS OF CIRCULATION

SURFACE ELEVATION 591 +/-

DEPTH (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL	WATER LEVELS	ELEVATION (FT)	BLOWS/6"
0					Topsoil Thickness [12" +/-]		590	
	S-1	SS	18	14	(CL FILL) FILL, LEAN CLAY, trace brick, orangish brown, moist			2 2 4
	S-2	SS	18	8	(DEBRIS FILL), Slag and Wood, Some clay, black, wet	▽		2 2 3
5	S-3	SS	18	6			585	5 5 1
	S-4	SS	18	8				3 8 7
10	S-5	SS	18	4		▽	580	1 1 1
	S-6	SS	18	3				woh 1 1
15							575	
	S-7	SS	18	10	(CL) LEAN CLAY, trace gravel, trace sand, gray, moist, firm to soft			2 1 2
20							570	
	S-8	SS	18	2				1 1 1
25					END OF BORING @ 25'		565	
30								



THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL.

▽ WL 4.5 WS ☐ WD ☒	BORING STARTED 10/22/18	CAVE IN DEPTH
▽ WL(SHW) ▽ WL(ACR) 11.0	BORING COMPLETED 10/22/18	HAMMER TYPE Auto
▽ WL	RIG Truck FOREMAN Rob	DRILLING METHOD HSA

CLIENT	Job #:	BORING #	SHEET
Public Building Commission of Chicago	16:12609	B-5	1 OF 1

PROJECT NAME: PBC Decatur Elementary School Annex (PO 05215)

ARCHITECT-ENGINEER:

SITE LOCATION: 7030 North Sacremento Avenue, Chicago, Cook, IL

NORTHING | EASTING | STATION

CALIBRATED PENETROMETER TONS/FT²

ROCK QUALITY DESIGNATION & RECOVERY
RQD% – — – REC% ———

PLASTIC LIMIT% | WATER CONTENT% | LIQUID LIMIT%

STANDARD PENETRATION BLOWS/FT

DESCRIPTION OF MATERIAL — ENGLISH UNITS

BOTTOM OF CASING | LOSS OF CIRCULATION

SURFACE ELEVATION 591 +/-

DEPTH (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	WATER LEVELS	ELEVATION (FT)	BLOWS/6"
0							
	S-1	SS	18	14		590	2 4 3
	S-2	SS	18	10			2 4 4
5						585	
	S-3	SS	18	6			4 3 4
	S-4	SS	18	4			2 3 4
10						580	
	S-5	SS	18	0			2 2 2
	S-6	SS	18	6			2 7 1
15						575	
	S-7	SS	18	10			2 3 2
20						570	
	S-8	ST	0	0			
25						565	
30							

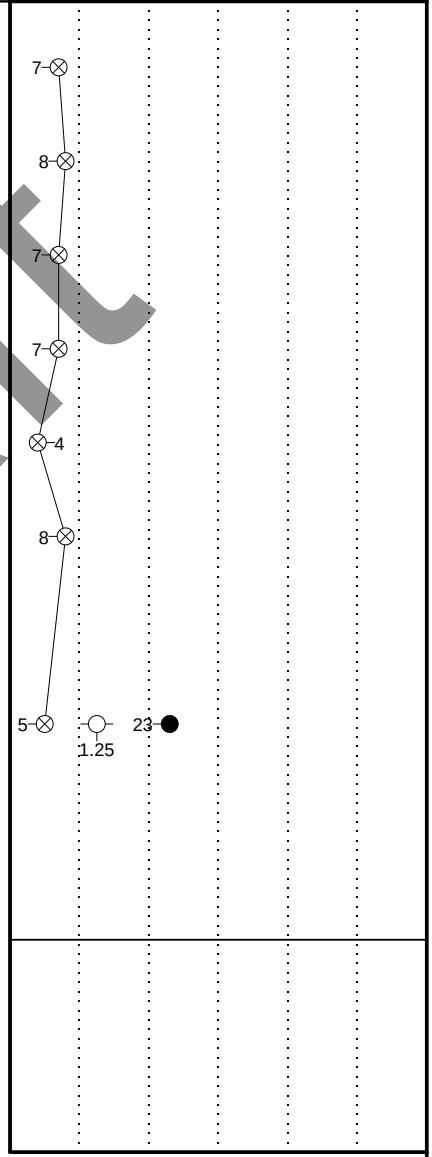
Topsoil Thickness [14" +/-]

(SC FILL) FILL, CLAYEY SAND WITH GRAVEL, brown and black, moist

(DEBRIS FILL), Slag and trace wood, petro chemical odor, black, wet

(CL) LEAN CLAY, trace gravel, trace sand, gray, moist, stiff to firm

END OF BORING @ 25'



THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL.

WL 4.5 WS ☐ WD ☒	BORING STARTED 10/22/18	CAVE IN DEPTH
WL(SHW) WL(ACR) 9.0	BORING COMPLETED 10/22/18	HAMMER TYPE Auto
WL	RIG Truck FOREMAN Rob	DRILLING METHOD HSA

CLIENT	Job #:	BORING #	SHEET
Public Building Commission of Chicago	16:12609	B-6	1 OF 2

PROJECT NAME: PBC Decatur Elementary School Annex (PO 05215)

ARCHITECT-ENGINEER:

SITE LOCATION: 7030 North Sacremento Avenue, Chicago, Cook, IL

NORTHING | EASTING | STATION

CALIBRATED PENETROMETER TONS/FT^2

ROCK QUALITY DESIGNATION & RECOVERY
RQD% – — – REC% ———

PLASTIC LIMIT% | WATER CONTENT% | LIQUID LIMIT%

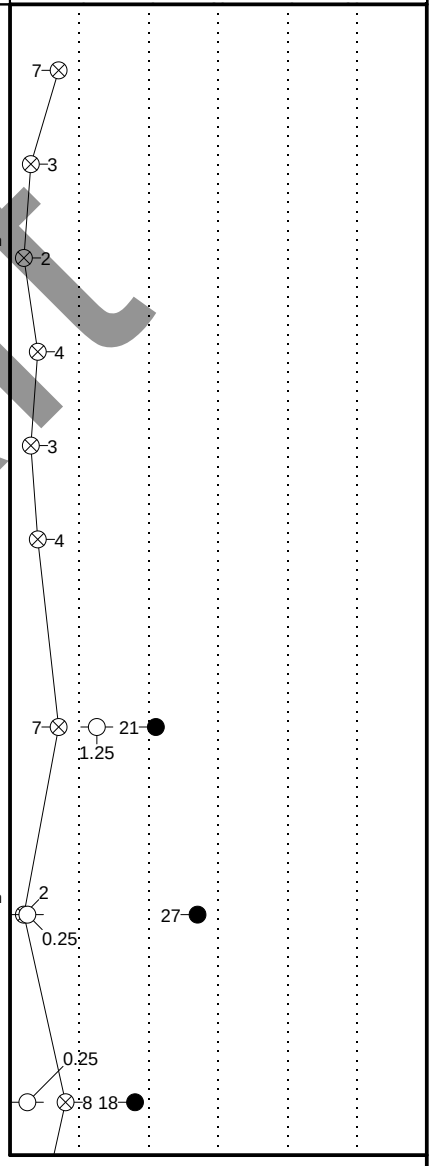
STANDARD PENETRATION BLOWS/FT

DESCRIPTION OF MATERIAL — ENGLISH UNITS

BOTTOM OF CASING | LOSS OF CIRCULATION

SURFACE ELEVATION 592 +/-

DEPTH (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL	WATER LEVELS	ELEVATION (FT)	BLOWS/6"
0					Topsoil Thickness [12" +/-]			
	S-1	SS	18	14	(SP FILL) FILL, SAND WITH GRAVEL, some clay, trace wood, brown, moist		590	2 3 4
	S-2	SS	18	8	(DEBRIS FILL), Slag and some wood trace gravel, black, moist to wet at 6 feet			1 1 2
5	S-3	SS	18	2			585	woh 1 1
	S-4	SS	18	8				1 2 2
10	S-5	SS	18	8			580	9 2 1
	S-6	SS	18	6				1 2 2
15							575	
	S-7	SS	18	14	(CL) LEAN CLAY, trace gravel, trace sand, gray, moist, stiff			2 3 4
20							570	
	S-8	SS	18	18	(CL) LEAN CLAY, trace gravel, trace sand, gray, moist, firm to soft			woh 1 1
25							565	
	S-9	SS	18	18				2 3 5
30								



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THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL.

WL 6 WS ☐ WD ☒	BORING STARTED 10/19/18	CAVE IN DEPTH
WL(SHW) WL(ACR)	BORING COMPLETED 10/19/18	HAMMER TYPE Auto
WL	RIG Truck FOREMAN Rob	DRILLING METHOD HSA

CLIENT	Job #:	BORING #	SHEET
Public Building Commission of Chicago	16:12609	B-6	2 OF 2

PROJECT NAME: PBC Decatur Elementary School Annex (PO 05215)

ARCHITECT-ENGINEER:

SITE LOCATION: 7030 North Sacremento Avenue, Chicago, Cook, IL

NORTHING | EASTING | STATION

CALIBRATED PENETROMETER TONS/FT^2

ROCK QUALITY DESIGNATION & RECOVERY
RQD% – — – REC% ———

PLASTIC LIMIT% | WATER CONTENT% | LIQUID LIMIT%

STANDARD PENETRATION BLOWS/FT

DESCRIPTION OF MATERIAL — ENGLISH UNITS

BOTTOM OF CASING | LOSS OF CIRCULATION

SURFACE ELEVATION 592 +/-

DEPTH (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	WATER LEVELS	ELEVATION (FT)	BLOWS/6"
						560	
35	S-10	SS	18	18			woh 1 1
						555	
40	S-11	SS	18	18			2 3 5
						550	
45	S-12	SS	18	18			5 10 11
						545	
50	S-13	SS	18	18			3 5 6
						540	
55							
						535	
60	S-14	SS	18	18			6 10 13

(CL) LEAN CLAY, trace gravel, trace sand, gray, moist, firm to soft

(CL/ML) SILTY CLAY, trace gravel, trace sand, gray, moist, stiff to hard

END OF BORING @ 60'

0.5 2 21

8 24

0.5

16 21 3.0

11 21

1.5

11 23 4.75

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL.

WL 6 WS ☐ WD ☒	BORING STARTED 10/19/18	CAVE IN DEPTH
WL(SHW) WL(ACR)	BORING COMPLETED 10/19/18	HAMMER TYPE Auto
WL	RIG Truck FOREMAN Rob	DRILLING METHOD HSA

CLIENT	Job #:	BORING #	SHEET
Public Building Commission of Chicago	16:12609	B-7	1 OF 1

PROJECT NAME: PBC Decatur Elementary School Annex (PO 05215)

ARCHITECT-ENGINEER:

SITE LOCATION: 7030 North Sacremento Avenue, Chicago, Cook, IL

NORTHING | EASTING | STATION

CALIBRATED PENETROMETER TONS/FT^2

ROCK QUALITY DESIGNATION & RECOVERY
RQD% – — – REC% ———

PLASTIC LIMIT% | WATER CONTENT% | LIQUID LIMIT%

STANDARD PENETRATION BLOWS/FT

DESCRIPTION OF MATERIAL — ENGLISH UNITS

BOTTOM OF CASING | LOSS OF CIRCULATION

SURFACE ELEVATION 592 +/-

DEPTH (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL	WATER LEVELS	ELEVATION (FT)	BLOWS/6"
0					Topsoil Thickness [24" +/-]			
	S-1	SS	18	3	(SP FILL) FILL, SAND, trace gravel, brown and orange, moist, loose		590	2 woh 1
	S-2	SS	18	12				woh 1 4
5					(DEBRIS FILL), Slag and some wood trace gravel and sand, black, wet			
	S-3	SS	18	8			585	2 3 1
	S-4	SS	18	2				5 7 2
10								
	S-5	SS	18	1			580	3 3 3
	S-6	SS	18	8				4 11 3
15							575	
	S-7	SS	18	14	(CL) LEAN CLAY, trace gravel, trace sand, gray, moist, stiff to soft			2 4 7
20							570	
25	S-8	ST	0	0				
					END OF BORING @ 26'		565	
30								

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL.

WL 4 WS ☐ WD ☒	BORING STARTED 10/22/18	CAVE IN DEPTH
WL(SHW) WL(ACR) 14	BORING COMPLETED 10/22/18	HAMMER TYPE Auto
WL	RIG Truck FOREMAN Rob	DRILLING METHOD HSA

CLIENT	Job #:	BORING #	SHEET
Public Building Commission of Chicago	16:12609	B-8	1 OF 1

PROJECT NAME: PBC Decatur Elementary School Annex (PO 05215)

ARCHITECT-ENGINEER:

SITE LOCATION: 7030 North Sacremento Avenue, Chicago, Cook, IL

NORTHING | EASTING | STATION

CALIBRATED PENETROMETER TONS/FT^2

ROCK QUALITY DESIGNATION & RECOVERY
RQD% – — – REC% ———

PLASTIC LIMIT% | WATER CONTENT% | LIQUID LIMIT%

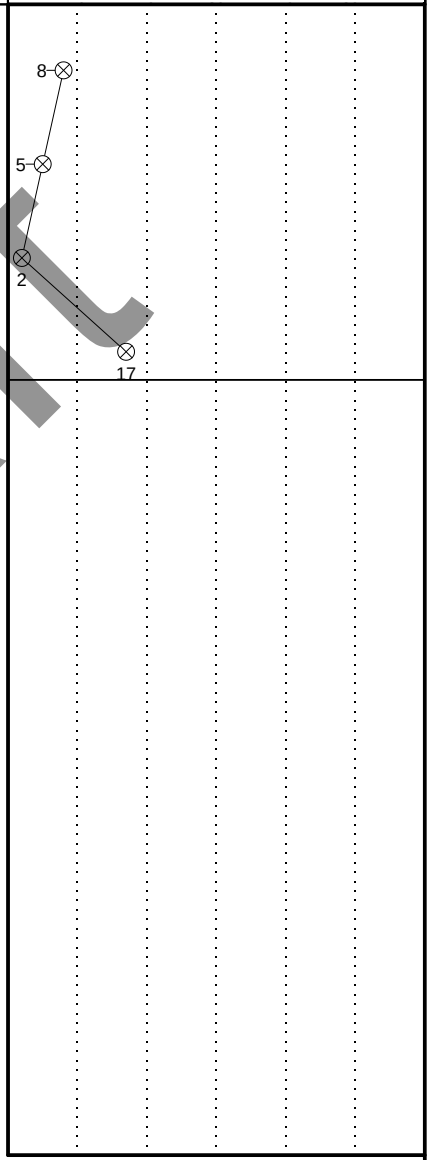
STANDARD PENETRATION BLOWS/FT

ENGLISH UNITS

BOTTOM OF CASING | LOSS OF CIRCULATION

SURFACE ELEVATION 590 +/-

DEPTH (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL	WATER LEVELS	ELEVATION (FT)	BLOWS/6"
0					Asphalt Thickness [3" +/-]		590	
					Subbase Gravel Thickness [8" +/-]			
	S-1	SS	18	5	(SM FILL) FILL, SILTY SAND WITH GRAVEL, trace clay, gray, moist, loose			10 4 4
	S-2	SS	18	8				8 2 3
5					(DEBRIS FILL), Slag and some wood trace gravel, black, wet		585	
	S-3	SS	18	6				2 1 1
	S-4	SS	18	6				5 10 7
10					END OF BORING @ 10'		580	
15							575	
20							570	
25							565	
30							560	



THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL.

WL 5 WS ☐ WD ☒	BORING STARTED 10/23/18	CAVE IN DEPTH
WL(SHW) WL(ACR) 5	BORING COMPLETED 10/23/18	HAMMER TYPE Auto
WL	RIG Truck FOREMAN Rob	DRILLING METHOD HSA

CLIENT	Job #:	BORING #	SHEET
Public Building Commission of Chicago	16:12609	B-9	1 OF 1

PROJECT NAME: PBC Decatur Elementary School Annex (PO 05215)

ARCHITECT-ENGINEER:

SITE LOCATION: 7030 North Sacremento Avenue, Chicago, Cook, IL

NORTHING | EASTING | STATION

CALIBRATED PENETROMETER TONS/FT^2

ROCK QUALITY DESIGNATION & RECOVERY
RQD% – — – REC% ———

PLASTIC LIMIT% | WATER CONTENT% | LIQUID LIMIT%

STANDARD PENETRATION BLOWS/FT

DESCRIPTION OF MATERIAL — ENGLISH UNITS

BOTTOM OF CASING | LOSS OF CIRCULATION

SURFACE ELEVATION 591 +/-

DEPTH (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	WATER LEVELS	ELEVATION (FT)	BLOWS/6"
0							
						590	
	S-1	SS	18	12			19 10 6
	S-2	SS	18	8			3 2 1
5							
						585	
	S-3	SS	18	10			1 2 8
10						580	
15						575	
20						570	
25						565	
30							

Asphalt Thickness [3" +/-]
Gravel Thickness [8" +/-]
(SP FILL) FILL, SAND WITH GRAVEL, some clay, dark brown, moist, medium dense to loose

(DEBRIS FILL),Wood and Slag, black, wet

END OF BORING @ 7.5'

16
3
10

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL.

WL 4.5 WS ☐ WD ☒	BORING STARTED 10/23/18	CAVE IN DEPTH
WL(SHW) WL(ACR) 6.0	BORING COMPLETED 10/23/18	HAMMER TYPE Auto
WL	RIG Truck FOREMAN Rob	DRILLING METHOD HSA

CLIENT	Job #:	BORING #	SHEET
Public Building Commission of Chicago	16:12609	B-10	1 OF 1

PROJECT NAME: PBC Decatur Elementary School Annex (PO 05215)

ARCHITECT-ENGINEER:

SITE LOCATION: 7030 North Sacremento Avenue, Chicago, Cook, IL

NORTHING | EASTING | STATION

CALIBRATED PENETROMETER TONS/FT^2

ROCK QUALITY DESIGNATION & RECOVERY
RQD% – — – REC% ———

PLASTIC LIMIT% | WATER CONTENT% | LIQUID LIMIT%

STANDARD PENETRATION BLOWS/FT

ENGLISH UNITS

BOTTOM OF CASING | LOSS OF CIRCULATION

SURFACE ELEVATION 592 +/-

DEPTH (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL	WATER LEVELS	ELEVATION (FT)	BLOWS/6"
0					Asphalt Thickness [3" +/-]			
					Subbase Gravel Thickness [8" +/-]			
	S-1	SS	18	8	(SM FILL) FILL, SILTY SAND WITH GRAVEL, gray, moist, medium dense		590	7 10 14
					(CL FILL) FILL, LEAN CLAY, contains construction debris and trace brick, dark brown, moist			
	S-2	SS	18	10				2 1 1
5								
	S-3	SS	18	4	(DEBRIS FILL), Slag, black, wet		585	4 5 7
	S-4	SS	18	10				2 2 2
10					END OF BORING @ 10'		580	
15							575	
20							570	
25							565	
30								

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL.

WL 6 WS ☐ WD ☒	BORING STARTED 10/23/18	CAVE IN DEPTH
WL(SHW) WL(ACR) 7	BORING COMPLETED 10/23/18	HAMMER TYPE Auto
WL	RIG Truck FOREMAN Rob	DRILLING METHOD HSA

CLIENT	Job #:	BORING #	SHEET
Public Building Commission of Chicago	16:12609	B-11	1 OF 1

PROJECT NAME: PBC Decatur Elementary School Annex (PO 05215)

ARCHITECT-ENGINEER:

SITE LOCATION: 7030 North Sacremento Avenue, Chicago, Cook, IL

NORTHING | EASTING | STATION

CALIBRATED PENETROMETER TONS/FT^2

ROCK QUALITY DESIGNATION & RECOVERY
RQD% – — – REC% ———

PLASTIC LIMIT% | WATER CONTENT% | LIQUID LIMIT%

STANDARD PENETRATION BLOWS/FT

DESCRIPTION OF MATERIAL — ENGLISH UNITS

BOTTOM OF CASING | LOSS OF CIRCULATION

SURFACE ELEVATION 594 +/-

DEPTH (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	WATER LEVELS	ELEVATION (FT)	BLOWS/6"
0							
							Asphalt Thickness [2" +/-]
							Subbase Gravel Thickness [8" +/-]
	S-1	SS	18	12			(SC FILL) FILL, CLAYEY SAND WITH GRAVEL, trace slag and brick, brown and black, moist — 2 2 3
	S-2	SS	18	14		590	1 2 4
5							
	S-3	SS	18	10			1 3 3
							(DEBRIS FILL), Slag, black, wet
	S-4	SS	18	8		585	2 3 2
10							END OF BORING @ 10'
						580	
15							
						575	
20							
						570	
25							
						565	
30							

5 — 6 — 6 — 5

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL.

WL 6 WS ☐ WD ☒	BORING STARTED 10/22/18	CAVE IN DEPTH
WL(SHW) WL(ACR) 7	BORING COMPLETED 10/22/18	HAMMER TYPE Auto
WL	RIG Truck FOREMAN Rob	DRILLING METHOD HSA

CLIENT	Job #:	BORING #	SHEET
Public Building Commission of Chicago	16:12609	B-12	1 OF 1

PROJECT NAME: PBC Decatur Elementary School Annex (PO 05215)

ARCHITECT-ENGINEER:

SITE LOCATION: 7030 North Sacremento Avenue, Chicago, Cook, IL

NORTHING | EASTING | STATION

CALIBRATED PENETROMETER TONS/FT^2

ROCK QUALITY DESIGNATION & RECOVERY
RQD% – — – REC% ———

PLASTIC LIMIT% | WATER CONTENT% | LIQUID LIMIT%

STANDARD PENETRATION BLOWS/FT

DESCRIPTION OF MATERIAL — ENGLISH UNITS

BOTTOM OF CASING | LOSS OF CIRCULATION

SURFACE ELEVATION 592 +/-

DEPTH (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL	WATER LEVELS	ELEVATION (FT)	BLOWS/6"
0					Asphalt Thickness [3" +/-]			
					Subbase Gravel Thickness [8"]			
	S-1	SS	18	18	(GP FILL) FILL, GRAVEL WITH SAND, dark brown, moist, very loose		590	4 1 2
	S-2	SS	18	12	(DEBRIS FILL), Slag and trace wood, black, moist to wet at 6 feet			2 2 1
5	S-3	SS	18	8			585	2 1 woh
					END OF BORING @ 7.5'			
10							580	
15							575	
20							570	
25							565	
30								

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL.

WL 6 WS ☐ WD ☒	BORING STARTED 10/22/18	CAVE IN DEPTH
WL(SHW) WL(ACR) 6	BORING COMPLETED 10/22/18	HAMMER TYPE Auto
WL	RIG Truck FOREMAN Rob	DRILLING METHOD HSA

CLIENT	Job #:	BORING #	SHEET
Public Building Commission of Chicago	16:12609	B-13	1 OF 1

PROJECT NAME: PBC Decatur Elementary School Annex (PO 05215)

ARCHITECT-ENGINEER:

SITE LOCATION: 7030 North Sacremento Avenue, Chicago, Cook, IL

NORTHING | EASTING | STATION

CALIBRATED PENETROMETER TONS/FT^2

ROCK QUALITY DESIGNATION & RECOVERY
RQD% – — – REC% ———

PLASTIC LIMIT% | WATER CONTENT% | LIQUID LIMIT%

STANDARD PENETRATION BLOWS/FT

DESCRIPTION OF MATERIAL — ENGLISH UNITS

BOTTOM OF CASING | LOSS OF CIRCULATION

SURFACE ELEVATION 593 +/-

DEPTH (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL	WATER LEVELS	ELEVATION (FT)	BLOWS/6"
0					Topsoil Thickness [12" +/-]			
	S-1	SS	18	6	(OL/CL FILL) FILL, CLAYEY ORGANIC SOIL, contains roots, black, moist			woh 1 1
							590	
	S-2	SS	18	14	(DEBRIS FILL), Clay, Slag, Wood and Glass, Petro Chemical Odor, black, moist to wet at 5 feet			1 1 1
5								
	S-3	SS	18	6				1 2 4
							585	
	S-4	SS	18	10				2 2 3
10					END OF BORING @ 10'			
							580	
15								
							575	
20								
							570	
25								
							565	
30								

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL.

WL 7 WS ☐ WD ☒	BORING STARTED 10/22/18	CAVE IN DEPTH
WL(SHW) WL(ACR) 7	BORING COMPLETED 10/22/18	HAMMER TYPE Auto
WL	RIG Truck FOREMAN Rob	DRILLING METHOD HSA

CLIENT	Job #:	BORING #	SHEET
Public Building Commission of Chicago	16:12609	B-14	1 OF 1

PROJECT NAME: PBC Decatur Elementary School Annex (PO 05215)

ARCHITECT-ENGINEER:

SITE LOCATION: 7030 North Sacremento Avenue, Chicago, Cook, IL

NORTHING | EASTING | STATION

CALIBRATED PENETROMETER TONS/FT^2

ROCK QUALITY DESIGNATION & RECOVERY
RQD% – — – REC% ———

PLASTIC LIMIT% | WATER CONTENT% | LIQUID LIMIT%

STANDARD PENETRATION BLOWS/FT

ENGLISH UNITS

BOTTOM OF CASING | LOSS OF CIRCULATION

SURFACE ELEVATION 593 +/-

DEPTH (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL	WATER LEVELS	ELEVATION (FT)	BLOWS/6"
0					Topsoil Thickness [15" +/-]			
	S-1	SS	18	8	(SC FILL) FILL, CLAYEY SAND WITH GRAVEL, trace brick, dark brown, moist, medium dense to loose		590	2 2 woh
	S-2	SS	18	6				2 8 11
5								
	S-3	SS	18	10				1 1 2
	S-4	SS	18	3	(DEBRIS FILL), Contains asphalt, black, wet		585	3 1 2
10					END OF BORING @ 10'			
							580	
15								
							575	
20								
							570	
25								
							565	
30								

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL.

WL 8.5 WS ☐ WD ☒	BORING STARTED 10/22/18	CAVE IN DEPTH
WL(SHW) WL(ACR) 8.5	BORING COMPLETED 10/22/18	HAMMER TYPE Auto
WL	RIG Truck FOREMAN Rob	DRILLING METHOD HSA