
**ROADWAY GEOTECHNICAL REPORT
BARRINGTON ROAD
FROM ALGONQUIN ROAD TO CENTRAL ROAD
IDOT JOB No. D-91-312-20
COOK COUNTY, ILLINOIS**

**For
Ardmore Roderick
1500 W Carroll Avenue, Suite 300
Chicago, IL 60607
(312) 795-1400**

**Submitted by
Wang Engineering, Inc.
1145 North Main Street
Lombard, IL 60148
(630) 953-9928**

**Original Report: February 16, 2023
Revised Report: July 19, 2024**

Technical Report Documentation Page

1. Title and Subtitle Roadway Geotechnical Report, Barrington Road from Algonquin Road to Central Road		2. Report Date February 16, 2023, July 19, 2024
		3. Report Type ☐ SGR ☒ RGR ☒ Draft ☐ Final ☐ Revised
4. Route / Section / County FAP 362 / 2019-161-W / Cook		5. Project Numbers D-91-312-20 Contract No. 62K33
6. PTB / Item No. 194/001	7. Existing Structure Number(s) n.a.	8. Proposed Structure Number(s) n.a.
9. Prepared by Wang Engineering, Inc. 1145 N Main Street Lombard, IL 60148	Contributor(s) Author: Andri A. Kurnia, PE Jessica Bensen, PG QA/QC: Corina T. Farez, PE, PG Project Manager: Andri Kurnia, PE	Contact Phone Number (630) 785-6226 akurnia@wangeng.com
10. Prepared for Ardmore Roderick 1500 W Carroll Ave Suite 300 Chicago, IL 60607	Design Engineer/ Project Manager Jeffrey Ehrhart, P.E. Carmen Dean, PE	Contact Phone Number ((312) 795-1400 jehrhart@ardmoreroderick.com cdean@ardmoreroderick.com
11. Abstract This report presents subsurface investigation results and recommendations for the widening and reconstruction of Barrington Road that extends for about 2 miles from Central Road to north of Algonquin Road. The improvements also include construction of a detention basin and traffic signals. The subsurface investigation showed 2- to 45-inch thick silty clay to sandy loam topsoil. The soil along the proposed roadway improvements consists of up to 12.0 feet of cohesive or granular fill. At elevations of 801 to 870 feet bgs, 0.3 to 23 feet bgs, the borings advanced through medium stiff to hard, clay, silty clay to silty clay loam. Along the wetland areas, between Station 80+00 and Station 87+50, the subgrade soils include up to 17 feet of peat and very soft to medium stiff organic silty clay followed by very soft to very stiff silty clay to clay loam. The peat and organic soils rest on stiff to very stiff silty clay. The topsoil should be stripped for the full length and width of the proposed roadway improvements; we estimate a topsoil thickness of 11 inches should be used for estimating purposes. The pavement sections should be designed based on a SSR of POOR or an IBR value of 2. In general, the subgrade will exhibit poor drainage characteristics and we recommend including longitudinal underdrain on both sides of the roadway and transverse underdrains every 300 feet and at the low points in the profile grade and at the base of any undercuts. The areas outside the wetland will undergo less than 1.0 inch of long-term settlement and will meet the minimum slope stability factor of safety requirements. Within the delineated 750 feet of very compressible peat and organic soils, ground improvement consisting of pile supported embankment is recommended. Excavated materials may be reused along the length of the proposed improvements if they conform to the requirements outlined in the IDOT District One Special Provisions.		
12. Path to archived file N:_WANGLegacy\SHARED\Netprojects\10640101\Reports\RGR\V_02\RPT_Wang_AAK_10640101BarringtonRoadRGRV02_20240719.doc		

TABLE OF CONTENTS

1.0	INTRODUCTION	1
2.0	GEOLOGIC SETTING	2
2.1	PHYSIOGRAPHY	2
2.2	PEDOLOGICAL FEATURES	2
2.3	SURFICIAL COVER	3
2.4	BEDROCK	3
2.5	CLIMATE DATA	4
3.0	METHODS OF INVESTIGATION.....	6
3.1	SUBSURFACE INVESTIGATION	6
3.2	LABORATORY TESTING	7
4.0	RESULTS OF FIELD AND LABORATORY INVESTIGATIONS.....	8
4.1	SURFACE CONDITIONS	8
4.2	SOIL CONDITIONS	8
4.3	GROUNDWATER CONDITIONS	10
5.0	ENGINEERING ANALYSIS AND RECOMMENDATIONS	10
5.1	SITE PREPARATION AND EARTHWORK	10
5.2	SUBGRADE TREATMENT AND RECOMMENDATIONS	11
5.3	SUBGRADE SUPPORT RATING	14
5.4	ROADWAY DRAINAGE.....	14
5.5	EMBANKMENT AND CUT SECTIONS.....	14
5.5.1	Settlement.....	14
5.5.2	Global Stability.....	14
5.6	GROUND IMPROVEMENT	15
5.7	DETENTION POND.....	18
5.8	TRAFFIC SIGNALS	18
6.0	CONSTRUCTION CONSIDERATIONS	18
6.1	EXCAVATION AND DEWATERING	18
6.2	FILLING AND BACKFILLING	19

6.3	REUSE OF EXCAVATED MATERIALS	19
6.4	EARTHWORK OPERATIONS	19
7.0	QUALIFICATIONS	20
REFERENCES		
EXHIBITS		
	1. Site Location Map	
	2. Pedology Map and Data	
	3. Site and Regional Geology	
	4. Subgrade Support Rating Chart	
APPENDIX A		
	Boring Logs	
APPENDIX B		
	IDOT BMPR 507A and 508A Forms	
APPENDIX C		
	Laboratory Test Results	
APPENDIX D		
	IDOT Benching Detail and Typical Sections	
APPENDIX E		
	Global Stability Analyses	
APPENDIX F		
	Boring Location Plans and Soil Profiles	
APPENDIX G		
	Cross Section In The Soft Soil And Peat	

**ROADWAY GEOTECHNICAL REPORT
BARRINGTON ROAD
FROM ALGONQUIN ROAD TO CENTRAL ROAD
IDOT JOB No. D-91-312-20
COOK COUNTY, ILLINOIS
FOR
ARDMORE RODERICK**

1.0 INTRODUCTION

This report presents the results of our geotechnical subsurface investigation, laboratory testing, and engineering analysis and evaluations for the widening and reconstruction of Barrington Road from Central Road to north of Algonquin Road (IL Route 62) in Cook County, Illinois. A *Site Location Map* is presented as Exhibit 1.

Roadway design drawings provided to Wang Engineering, Inc., a Terracon Company (Wang) by Ardmore Roderick indicate the scope of improvements includes:

Widening and reconstruction of

- Barrington Road, between Station 43+41.23 and Station 116+62.09;

Replacement and construction of

- Culvert over Poplar Creek at Station 83+30;
- Traffic Signals at Barrington Road and Algonquin Road intersection; and

Construction of

- Detention Basin, between Station 81+00 and Station 92+00;
- Retaining Wall 1, between Station 75+25 and Station 78+00, RT;
- Retaining Wall 2, between Station 76+25 and Station 77+82, LT;
- Retaining Wall 3, between Station 98+90 and Station 99+30, LT;
- Retaining Wall, between Station 81+00 and Station 83+00, LT.

In addition to the roadway widening and reconstruction, a multi-use path on the west side of Barrington Road is proposed. Traffic signals at the intersection of Barrington Road and Algonquin Road and the culvert carrying Poplar Creek under the Barrington Road will be replaced.

The purpose of the investigation was to characterize the site soil and groundwater conditions and provide geotechnical analyses and recommendations for the design and construction of the proposed roadway and multi-use path, detention basin, and traffic signals. The new retaining walls and the replacement of box culvert are addressed in separate geotechnical reports.

2.0 SITE AND REGIONAL GEOLOGY

The project area is located in Barrington Township, Cook County, Illinois. On the USGS Streamwood 7.5 Minute Series Quadrangle map, the project runs through SE $\frac{1}{4}$ of Section 23, SW $\frac{1}{4}$ of Section 24, W $\frac{1}{2}$ of Sections 26 and 35, and E $\frac{1}{2}$ of Sections 25 and 36, Tier 42 N, Range 9 E of the Third Principal Meridian.

The following review of published geologic data, with emphasis on factors that might influence the design and construction of the proposed engineering works, is meant to place the project area within a geological framework and confirm the dependability and consistency of the subsurface investigation results. For the study of the regional geologic framework, Wang considered northeastern Illinois in general and Cook County in particular. Exhibit 3 illustrates the *Site and Regional Geology*.

2.1 Physiography

The Wheaton Morainal Country Physiographic Subsection (Leighton et al. 1948) extends through northwestern Cook County. The project site runs along the Valparaiso Moraine. The morainic surface is marked by kettle depressions left behind by ice blocks that were, in time, filled with lacustrine and organic sediments giving the topography a hummocky look.

In general, the relief within the project area is flat and occasionally hummocky. Poplar Creek flows east to west through the northern section of project. The surface elevations vary from 820 feet to 871 feet.

2.2 Pedological Features

After the Wisconsin glaciation, several types of soils developed through weathering of glacial sediments. In Cook County, the soil types were surveyed by the USDA (2023). A summary of the USDA soil types present within the project area, including their relevant geotechnical index properties and suitability as subgrade and road fill are shown in Exhibits 2-1 to 2-3. The soil information provided by USDA is meant to be used as a general reference in the absence of a site-specific investigation. In this instance, our findings regarding soil features affecting suitability for

highway and street construction are not necessarily in agreement with the information presented in the exhibits.

2.3 Surficial Cover

The project area was shaped during the Wisconsin-age glaciation and about 175- to 250-foot thick overburden covers the bedrock. The glacial deposits were emplaced during pulsating advances and retreats of an icesheet lobe responsible for the formation of end moraines and associated low-relief till and lake plains (Hansel and Johnson 1996). The surficial cover within the project area consists of up to 20 feet thick of organic silt and clay, peat, and marl of the Grayslake Peat, found discontinuously throughout the project area. The Grayslake Peat overlies either the clay and silt of the Equality Formation, or the silty clayey diamicton of the Wadsworth Formation. The Equality Formation, up to 30 feet thick, consists of brown to gray, bedded fine sand, silt, and clay lacustrine deposits. The Wadsworth Formation, up to 160 feet thick, consists of gray silty clay to silty clay loam diamicton that contains lenses of gravel, sand, silt, and clay. Below the Wadsworth Formation lies the silty clayey diamicton of the Lemont Formation. The Lemont Formation consists of yellowish brown to gray silty clay to silty clay loam diamicton with lenses of sand, gravel, silt, and clay. Below the Lemont Formation lies sandy loam to loamy diamicton of the Glasford Formation and/or older sediments containing gravelly sand outwash of the Henry Formation above the Silurian-age dolostone (Hansel and Johnson 1996, Stumpf 2007).

From a geotechnical viewpoint, the Wadsworth Formation is characterized by medium to low plasticity, medium to low moisture content and medium to very stiff consistency. The Lemont Formation is characterized by low to moderate plasticity, high strength, and low to moderate moisture content (Wickham et al. 1988, Bauer et al. 1991).

2.4 Bedrock

In Cook County, the surficial cover rests unconformably on top of Silurian-age dolostone bedrock. The top of the bedrock lies about 170 to 200 feet below the ground surface (bgs) in the southern half of the project and about 210 to 255 feet bgs in the northern half. Structurally, the site is located on the eastern flank of the Wisconsin Arch (Willman 1971). No active faults or underground mines are known in the area.

Our subsurface investigation results fit into the local geologic context. The borings drilled in the project area encountered native sediments consisting of organic rich silt and clay of the Grayslake Peat, occasionally interbedded lacustrine clay, silt and sand of the Equality Formation, and silty clay

diamicton of the Wadsworth Formation. None of the borings were deep enough to encounter bedrock.

2.5 Climate Data

The subsurface investigation was performed from January to July of 2022 and April to May, 2024. To assess the possible effects of temperature and precipitation on water table data and soil moisture, the climatic conditions for the investigation period and three months prior to the start of the investigation are summarized graphically in Figures 1 to 4. The precipitation and temperature data for the investigation period are compared against thirty-year monthly data (1981 to 2010) in box-and-whiskers format to show deviations from “normal” climate conditions during the current investigation. Local climate data were obtained from the O’Hare Station (NCDC 2024).

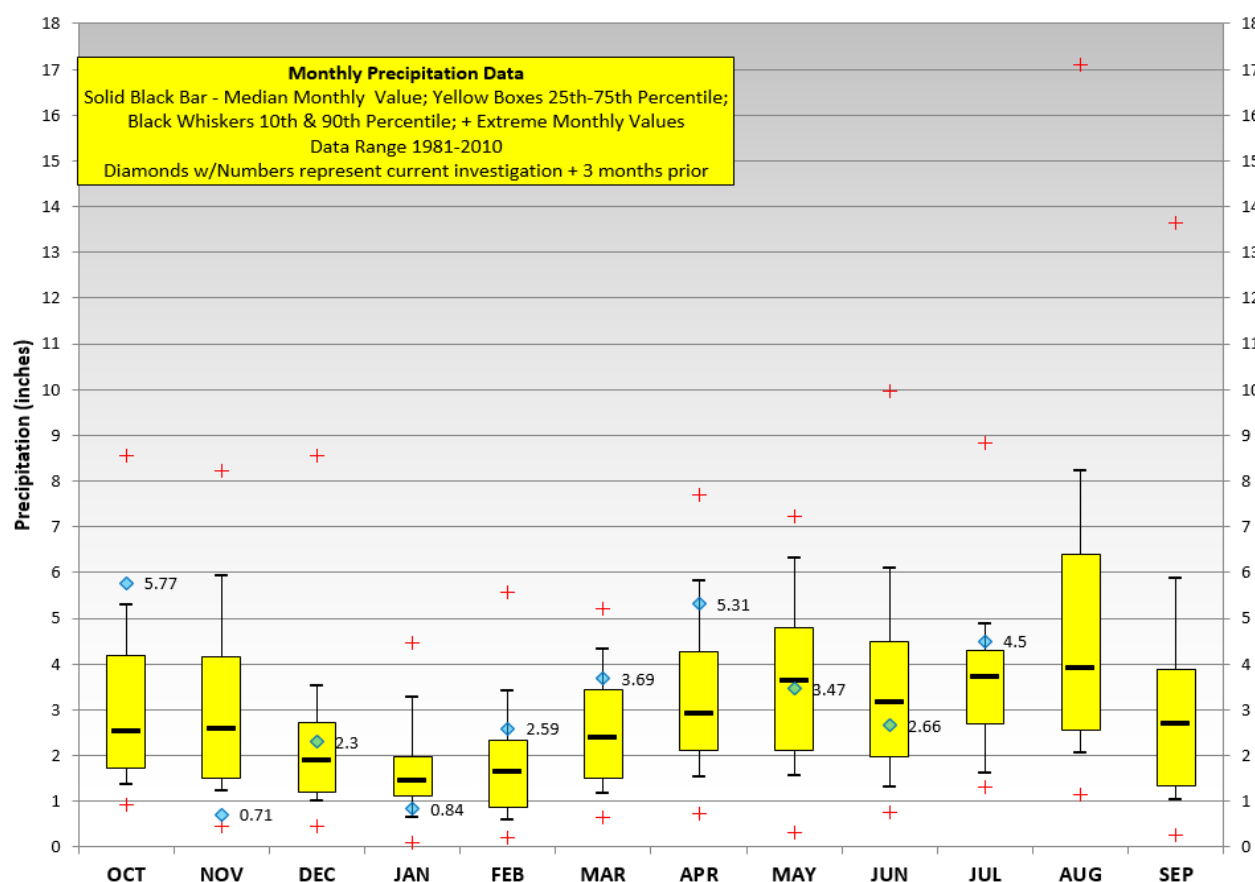


Figure 1: Monthly Precipitation Data for 2021 and 2022

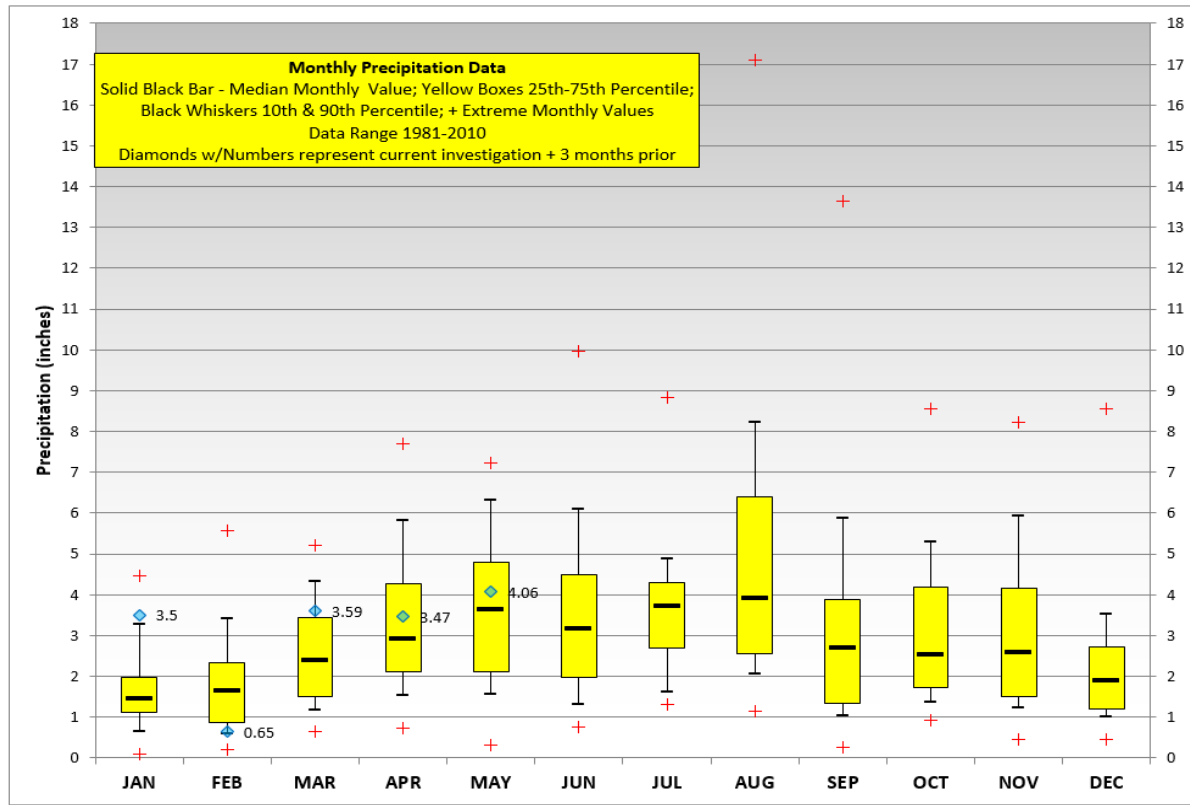


Figure 2: Monthly Precipitation Data for 2024

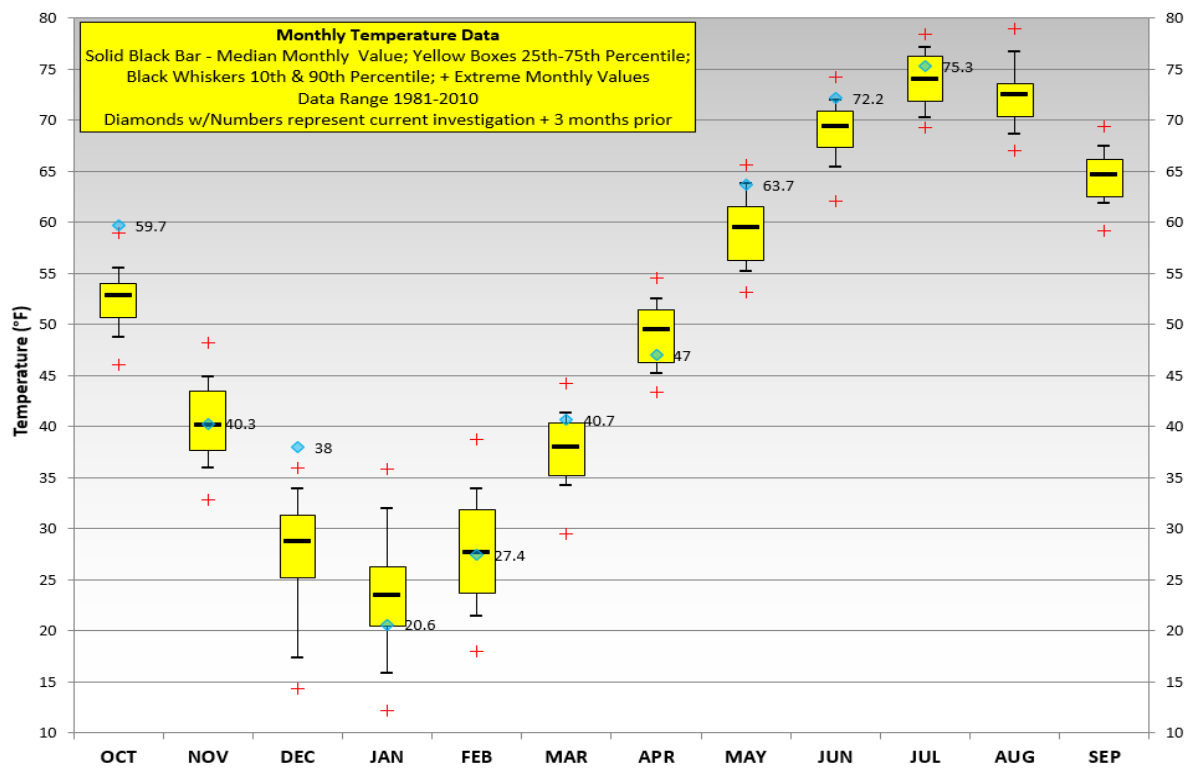


Figure 3: Monthly Temperature Data for 2021 to 2022

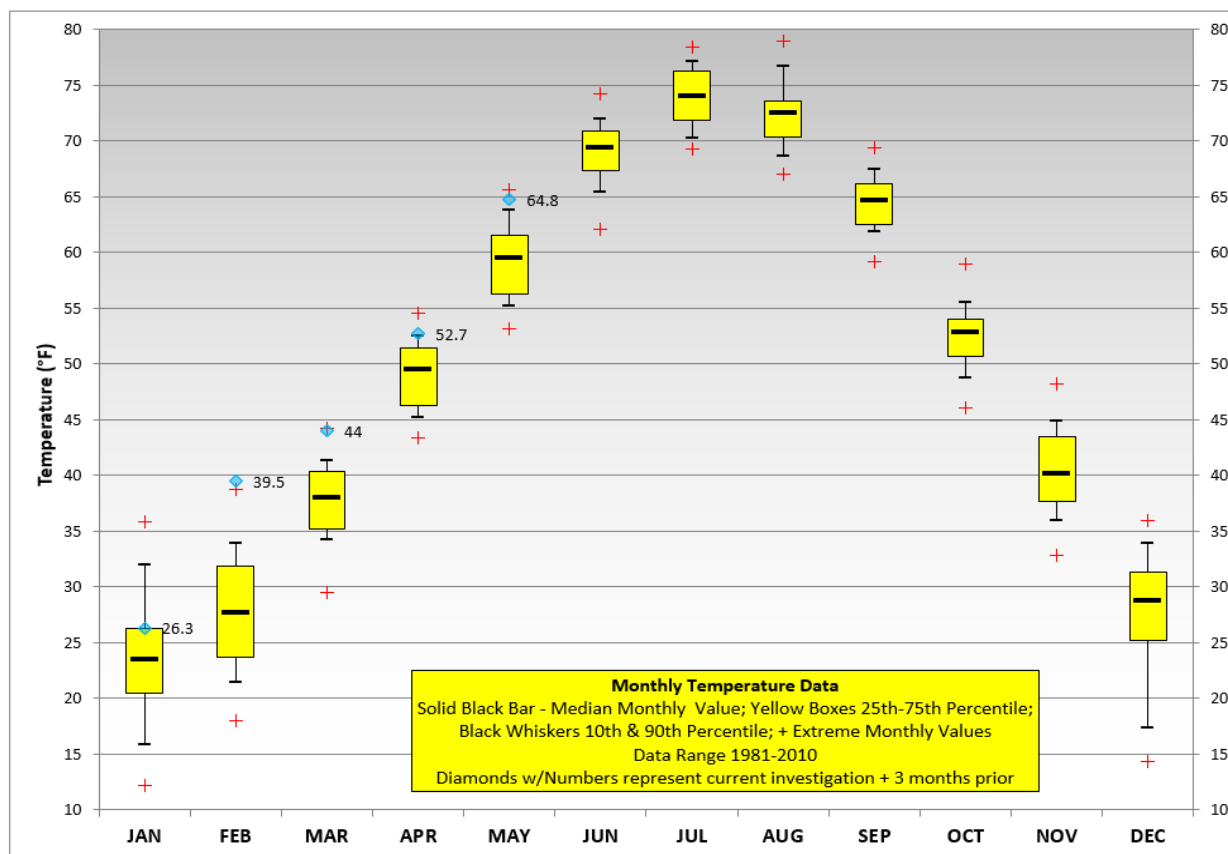


Figure 4: Monthly Temperature Data for 2024

The deviations from the historical 30-year climate data show the investigation period was characterized in general by average precipitations and temperature except for record high temperatures and precipitation in October 2021, record high precipitation in January 2024, record low precipitation in November 2021 and February 2024, and record high temperatures in December 2021 and February to March 2024. Observations of perched water within the granular fill may have been influenced by these climate factors.

3.0 METHODS OF INVESTIGATION

The following sections outline the methods of subsurface and laboratory investigations. Elevations in this report are based on NAVD 1988.

3.1 Subsurface Investigation

From January to July, 2022 and April to May, 2024, Wang completed 96 Standard Penetration Test (SPT) borings and four Shelby Tube (ST) borings to characterize the soil and groundwater conditions. For our analyses for roadway subgrade evaluations we considered data from subgrade borings (NB-

SGB-01 through NB-SGB-11, SB-SGB-01 through SB-SGB-21, SB-01 through SB-10, and SB-07-HA through SB-10-HA), detention pond borings (DPB-01 through DPB-06, DPB-01-ST, DPB-02-ST, and DPB-03-ST), peat delineation borings (PT-01 through PT-13, and PSE-01 through PSE-10), culvert borings (CUL-01 and CUL-02), retaining wall borings (RWB-01 through RWB-12 and RWB-03-ST), and traffic sign borings (TSB-01, TSB-01-Alt, and TSB-02) drilled for this project.

The northing and easting coordinates were surveyed by Wang with a mapping-grade GPS unit. Boring elevations, and stations and offsets were provided by Ardmore Roderick. The boring location data are presented in the *Boring Logs* (Appendix A) and the as-drilled locations are shown in the *Boring Location Plan and Soil Profiles* (Appendix F).

Truck- and ATV-mounted drilling rigs equipped with hollow stem augers and mud rotary equipment were used to advance and maintain open boreholes. Soil sampling was collected according to AASHTO T 206, "*Penetration Test and Split Barrel Sampling of Soils.*" The soil was sampled continuously in the SGB and PT borings. The structure borings were sampled at 2.5-foot intervals to 30 feet bgs and 5-foot intervals to boring's termination depths. Near the peat delineation areas, drill rig access was not possible due to soft ground conditions. A jackhammer driven Geoprobe sampler was used to continuously sample soils in the PT and SB borings to 8.0 to 20.0 feet depths. Soil samples collected from each sampling interval were placed in sealed jars. At selected locations, Shelby tube samples were collected according to AASHTO T207. The samples were transported to Wang Geotechnical Laboratory for further examination and laboratory testing.

Field boring logs, prepared and maintained by a Wang field geologist, include lithological descriptions, visual-manual soil classifications, results of Rimac and pocket penetrometer unconfined compressive strength tests, and results of Standard Penetration Tests (SPT), recorded as blows per 6 inches of penetration.

Groundwater observations were made in each boring during and at the completion of drilling operations. The borings were backfilled with soil cuttings and/or bentonite after completion, and the pavement was restored as close as possible to its original condition.

3.2 Laboratory Testing

The soil samples were tested in the laboratory for moisture content (AASHTO T-265). Organic content (AASHTO T267), Atterberg limits (AASHTO T 89/T 90), and particle size (AASHTO T 88) analyses were performed to classify selected samples. One dimensional consolidation tests (AASHTO T 208) were performed on selected Shelby tube samples. Field visual descriptions of the soil samples were

verified in the laboratory. The soils were classified according to the IDH Soil Classification System. Laboratory test results are shown on the *Boring Logs* (Appendix A), IDOT forms BMPR 507A and BMPR 508A (Appendix B), and in the *Laboratory Test Results* (Appendix C).

4.0 RESULTS OF FIELD AND LABORATORY INVESTIGATIONS

Detailed descriptions of the soil conditions encountered during the subsurface investigation are presented on the attached *Boring Logs* (Appendix A) and on the *Boring Location Plans and Soil Profiles* (Appendix F). Please note that strata contact lines represent approximate boundaries between soil types. The actual transition between soil types in the field may be gradual in horizontal and vertical directions.

4.1 Surface Conditions

The borings were drilled primarily off the existing roadway pavement and encountered black, brown, and dark brown silty clay, silty clay loam, silty loam, sandy loam, clay, and clay loam topsoil. The topsoil has thickness of 0.5 to 45 inches; for estimation purposes, the topsoil thickness to be stripped is 11 inches, which representing the 75th percentile. Borings drilled along the existing pavement revealed 9 to 15 inches of asphalt or 7 to 9 inches concrete pavement overlying fill material.

4.2 Soil Conditions

Beneath the surface, in descending order, the general lithologic succession encountered includes: 1) man-made ground (fill); 2) very soft to stiff peat/organic clay, silty clay, silty clay loam, silty loam, and sandy loam; 3) very soft to very stiff clay, clay loam, silty clay to silty clay loam; and 4) medium stiff to hard clay, clay loam, loam, silty clay to silty clay loam.

1) Man-made ground (fill)

From the surface or beneath the surface conditions, borings encountered up to 15 feet of cohesive and granular fill. Cohesive fill consists of very soft to hard clay, clay loam, loam, silty clay to silty clay loam with unconfined compressive strength (Q_u) values of less than 0.2 to 8.0 tsf, with an average of 2.3 tsf, and moisture content values of 9 to 60%, with an average of 21%. The granular fill consists of loose to medium dense, damp to saturated loam, sandy loam, sand, gravelly sand, gravelly loam, and sandy gravel with SPT N-values of 6 and 25 blows per foot, with an average of 16 blows per foot. Laboratory index tests conducted on selected samples show liquid limit (L_L) values of 33 to 47% and plastic limit (P_L) values of 16 to 20%. The soil belongs primarily to the A-7-6 and A-6 groups in accordance with AASHTO.

Below the fill at elevations of 817 to 855 feet, 1.7 to 8 feet bgs, borings encountered 0.5 to 2.5 feet of buried topsoil. The buried topsoil consists of stiff to very stiff clay, silty clay to silty clay loam with Q_u values of 1.0 to 2.9 tsf, an average of 1.8 tsf, and moisture content values of 29 to 37%, an average of 33%, a L_L value of 49%, and a P_L value of 17%. The soil belongs primarily to the A-7-6 group.

2) Very soft to stiff peat/organic clay, silty clay, silty clay loam, silty loam, and sandy loam

Between Station 79+75 and Station 87+50, at elevations of 813 to 851 feet, from the surface to 17 feet bgs, borings advanced through 1 to 17 feet of very soft to stiff, black, dark brown, dark gray, brown, and gray peat and organic clay, silty clay, and silty loam with moist to saturated loam, silty loam, sand, and sandy loam interbedded layers. This unit has Q_u values of less than 0.1 to 1.3 tsf, with an average of 0.3 tsf, moisture content values of 24 to 752%, with an average of 219%, and organic content values of 13 to 211%. Laboratory index testing conducted on samples from this layer shows L_L values of 39 to 120% and P_L values of 19 to 101%. These soils classify in the A-4, A-6, A-7-5, and A-7-6 groups.

3) Very soft to very stiff clay, clay loam, silty clay to silty clay loam

Between Station 79+00 and Station 87+50, at elevations of 803 to 855 feet, 0.1 to 23 feet bgs, borings encountered 0.8 to 9.5 feet of very soft to very stiff, brown, black, and gray clay, clay loam, silty clay to silty clay loam. This unit is characterized by Q_u values of less than 0.2 to 3.5 tsf, an average of 1.2 tsf, moisture content values of 16 to 39%, an average of 26%, and an organic content value of 8%. Laboratory index testing conducted on samples from this unit shows L_L values of 32 to 46% and P_L values of 15 to 20%. This unit belongs to the A-7-6 and A-6 groups.

At elevations of 818 to 854 feet, 0.7 to 17 feet bgs, damp to saturated granular interbedded layers with thicknesses of 0.8 to 4 feet were noted throughout this unit. The interbeds have SPT N-values of 0 to 7 blows per foot, with an average of 3 blows per foot.

4) Medium stiff to hard clay, clay loam, loam, silty clay to silty clay loam

At elevations of 801 to 870 feet bgs, 0.3 to 24.5 feet bgs, the borings advanced through medium stiff to hard, clay, clay loam, loam, silty clay to silty clay loam. This unit has Q_u values of 0.5 to greater than 10.3 tsf, an average of 2.9 tsf, and moisture content values of 6 to 33%, an average of 18%. Laboratory index testing conducted on samples from this unit shows L_L values of 31 to 42% and P_L values of 15 to 18%. This unit belongs to the A-7-6 and A-6 groups.

Interbeds of loose to medium dense, damp to saturated sand, gravelly sand, silt, silty loam to gravelly silty loam were encountered at elevations of 794 to 866 feet, 4 to 44.5 feet bgs. These layers have SPT N-values of 9 to 19 blows per foot, average of 14 blows per foot, a L_L value of 18%, and a P_L value of 13%.

A pile supported embankment and load transfer platform is proposed as a ground stabilization for the construction of the embankment spanning Units 2 and 3 between Stations 79+50 and 87+50.

4.3 Groundwater Conditions

Groundwater was observed in 59 out of 96 borings during drilling at elevations of 796 to 866 feet (0 to 46.5 feet bgs). After drilling the groundwater was measured in 23 borings at elevations of 794 to 844 feet (0 to 48 feet bgs). The granular interbeds and granular fill was often encountered moist to saturated; if excavations are made into or through these layers, dewatering efforts should be anticipated. During periods of precipitation, we anticipate that perched groundwater may pond within the sag and peat areas and will impact the roadway or pavement design.

5.0 ENGINEERING ANALYSIS AND RECOMMENDATIONS

According to the plans and cross-section drawings provided by Ardmore Roderick, the alignments generally follow the existing ground elevation with little change in grade. Embankment fill will be placed within the widening areas, along Barrington Road, mostly between Stations 71+00 and 97+00. The new design includes embankment fills of up to 10 feet (Station 80+00) and cuts as deep as 8 feet (Station 76+00). In general, the embankments and cut sections will have maximum side slopes of 1:2.5 (V: H).

5.1 Site Preparation and Earthwork

It is recommended that the existing topsoil, pavement, vegetation, and debris be stripped within the limits of the proposed improvements. For estimating purposes, the topsoil thickness to be stripped is 11 inches. The actual need for topsoil removal should be determined in the field. It is recommended the stripped topsoil be stockpiled, sorted, and reused for the proposed landscaping improvements. According to IDOT District One policy, a shrinkage factor of 15% should be used to estimate borrowed and furnished excavation quantities. We recommend the Contractor create sufficient runoff drainage to prevent excess pooling of precipitation and facilitate runoff in the event of extended construction delays.

After the surface removal, the stability of the exposed subgrade should be immediately observed for the presence of any unsuitable and/or unstable soils to determine if remedial treatment is necessary. The subgrade should be proofrolled to observe the amount of deflection and rutting under the wheels of heavy construction equipment, such as a fully loaded dump truck. Using either static or dynamic cone penetrometer tests, subgrade areas should be tested and evaluated according to the IDOT Subgrade Stability Manual (IDOT 2005).

Where existing embankments are to be widened, the existing slopes should be deeply plowed or benched according to Section 205 (IDOT 2022). We recommend including the IDOT District One benching detail (Appendix D) in the contract plans.

5.2 Subgrade Treatment and Recommendations

The new roadway pavement will be supported on the existing cohesive subgrade or on new compacted fill material. We assume the proposed roadway sections will consist of asphalt or concrete pavement followed by 12 inches of aggregate subgrade improvement. Thus, any additional subgrade improvements identified in this report shall be placed beyond the proposed 12 inches of aggregate subgrade.

Along the investigated alignments, the subgrade soils have Q_u values generally greater than 1.0 tsf, moisture contents less than 25%, and liquid limit (L_L) values below 50%. Overall, the subgrade will provide a stable working platform, with the exception of specific areas along the alignments. If removal and replacement is considered, we recommend providing geotechnical fabric for ground stabilization before placement of replacement material. The limits of the areas with unstable soils requiring subgrade treatment are summarized in Table 1.

Table 1: Summary of Subgrade Treatment Recommendations

Limits Station to Station	Treatment Width ⁽¹⁾	Treatment Type	Treatment Depth/Elevation (feet) ⁽²⁾	Reference Borings/ Subgrade Concerns
66+00 to 69+50	Entire pavement and multi-use path width	Aggregate Subgrade Improvement and Geofabric	2.0/853	SB-SGB-13, NB-SGB-05, NB-SGB-06 ($Q_u=0.66$ tsf, MC=37%)

Limits Station to Station	Treatment Width ⁽¹⁾	Treatment Type	Treatment Depth/Elevation (feet) ⁽²⁾	Reference Borings/ Subgrade Concerns
79+50 to 80+25	40' LT to 80' LT	Pile Supported Embankment ⁽²⁾	6.0/834	PT-01 ($Q_u < 0.25$ tsf, MC=30%)
80+25 to 84+25	40' LT to 60' LT	Pile Supported Embankment ⁽²⁾	Up to 15.0/820.7	PT-02 to PT-06, RWB-03 to RWB-05, CUL-01, CUL-02 ($Q_u < 0.25$ tsf, MC up to 595%)
79+00 to 82+75	20' RT to 60' RT	Pile Supported Embankment ⁽²⁾	12.0/828	SB-03 to SB-06, PT-07, DPB-01 ($Q_u < 0.25$ tsf, MC= up to 371%)
82+75 to 86+75	10' RT to 60' RT	Pile Supported Embankment ⁽²⁾	18.0 /818	PT-08 to PT-11, DPB-02 and DPB-03, CUL- 02 ($Q_u < 0.25$ tsf, MC= up to 752%)
86+75 to 87+50	20' RT to 50' RT	Pile Supported Embankment ⁽²⁾	5.0/833	PT-12 ($Q_u = 0.5$ tsf, MC= 45%)

(1) The base of the undercuts should extend away from the pavement at a minimum slope of 1:1 (V: H).

(2) See Section 5.6 for ground improvement recommendations.

The actual need for removal and replacement of unstable and unsuitable soils, including the required width and depth of improvement shown in Table 1, should be determined in the field at the time of construction. It is possible that undercuts may be required in areas not reached by our investigation. Undercut determinations should be made by a qualified soils inspector at the time of construction. We recommend that a provisional quantity be included for removal and replacement in the contract to account for unknown subgrade treatment areas. The provisional quantity should be 10 percent of the

remaining plan pavement areas not included in Table 1 assuming 12 inches of thickness for the full width of the pavement.

Several of the unstable areas specified in Table 1 include highly compressible organic silts, organic clays, and peat where the depth of removal for undercut option exceeds 12 feet and may not be an economical solution. The widened sections in these areas will be constructed on new embankments with an average height of about 5 to 7 feet. Ground improvement options, other than removal and replacement option, are discussed in Section 5.6.

The replacement material should be in accordance with the IDOT District One Special Provision *Aggregate Subgrade Improvement (D-1)*. We recommend including a separate pay item for the *Aggregate Subgrade Improvement* material as follows:

Item 1 Aggregate Subgrade Improvement (CU YD) this will be below Pavement Section in the areas where removal and replacement is recommended.

The following or similar notes should also be included in the contract document.

The removal and replacement areas shown on the plans are estimated from the borings information. The actual extent of the removal and replacement shall be determined and either verified or adjusted to the conditions encountered in the field at the time of construction by a qualified soils inspector.

A provisional Aggregate Subgrade Improvement quantity of _____ Cubic Yard and Geotechnical Fabric for Ground Stabilization _____ Square Yard is included in the total quantity to account for subgrade treatment in areas outside of areas shown on the Plans. Any material not needed during the construction will be deleted from the contract with no extra compensation to the contractor.

The frost depth for pavement design in northeastern Illinois is 42 inches. Within the frost depths, the subgrade samples tested in the laboratory measured silt and fine sand contents less than 65% and had plasticity indices (PI) of greater than 12%. The subgrade borings mainly did not encounter groundwater or encountered groundwater below the frost depth; therefore, the subgrade soil will exhibit low frost susceptibility. Adequate drainage will suffice to alleviate any frost heave. Any highly moist soils, if not otherwise unsuitable or unstable, encountered within the exposed roadway subgrade should be disked or tilled, dried, and compacted before placing the new pavement structure.

5.3 Subgrade Support Rating

The proposed pavement will be supported mainly on stiff to hard clayey soils or compacted borrow material. Laboratory testing on selected subgrade samples shows a Subgrade Support Rating (SSR) of POOR to FAIR (Exhibit 4). Considering the worst subgrade conditions, we recommend that an SSR of POOR be used for the design of the pavement. The pavement could also be designed using an IBR value of 2 based on correlations to the A-7-6 soil classification provided in the *IDOT Geotechnical Manual* (2020).

5.4 Roadway Drainage

The proposed subgrade and pavement should have proper surface grading to prevent the pooling of water. The soils encountered beneath the proposed subgrade will exhibit poor to fair drainage characteristics. The fill material to be placed in support of the widening will likely be cohesive and will exhibit poor drainage characteristics. We recommend installing longitudinal pipe underdrains under the edge of new pavement in widening areas, and transverse pipe underdrains using a spacing of 300-foot, at the low points in the profile, and at the base of any undercuts. The pipe underdrains should be 4 inches in diameter and should be installed according to Standard Specification Specifications Section 601 and Highway Standard 601001-05 and shall consist of Type 2 underdrains. Top of pipe underdrains shall be placed 6 inches below the subgrade or undercut.

5.5 Embankment and Cut Sections

The construction of the roadway will have both fill and cut sections. For this roadway contract, the highest embankment fill is expected to be about 10 feet and the deepest cut sections is expected to be about 8 feet. We have evaluated the potential long-term settlement and global slope stability of the cut and fill sections along the proposed improvements.

5.5.1 Settlement

In general we do not anticipate excessive settlement except in the wetland areas where the borings encountered organic soils and peat. We performed settlement analysis at Station 72+00 based on the soil profile from Boring NB-SGB-07. Our evaluations show estimated long-term settlements of 0.5 inch. Settlement evaluations performed for the organic soil and peat areas and treatment options are discussed in Section 5.6.

5.5.2 Global Stability

The proposed embankment side slopes will be graded at 1:2.5 to 1:3 (V: H). The global stability of an embankment at Station 72+00 for the high fill section was analyzed based on the soil information from the nearest borings. The analysis indicates that the factors of safety (FOS) meet IDOT's

minimum requirement of 1.5. Slope stability analyses results are included in Appendix E. Global stability analyses for the cut sections were performed as part of our report for retaining wall at Sta. 75+75. The analyses indicate the FOS meet IDOT's minimum requirement of 1.7 for a cut section.

5.6 Ground Improvement

The subsurface investigation revealed the presence of highly compressible organic soils and peat. These compressible soils were encountered mainly between Station 79+50 and Station 87+50. The widened roadway along the wetland areas will be constructed on new embankments with new fill heights of about 5 to 7 feet. A new retaining wall and a culvert replacement are proposed within the peat areas between Station 80+75 and Station 83+43.

We performed settlement analyses at three locations in the soft soil and peat areas using the FoSSA computer program. Our evaluations show estimated long-term settlements of 2.4 to 7.5 inches. The summary of settlement analyses is presented in Table 2.

Table 2: Summary of settlement analyses

Station	Direction/Fill Height (feet)	Reference Borings	Settlement (inches)
84+00	Northbound/ 7.0	DPB-02, CUL-01	7.2
84+00	Southbound/5.0	PT-05 and PT-06	2.4
86+00	Northbound/6.5	DPB-03	7.5

In addition to settlement issues, our slope stability analyses show the FOS do not meet the IDOT's minimum requirement. Therefore, to mitigate long-term settlement issues and to meet the minimum slope stability factor of safety, the peat areas between Station 79+00 and Station 87+50 will require ground improvements. The ground improvement should also be considered for retaining wall between Station 81+00 and Station 83+00, left offset and Poplar Creek Culvert at Station 83+30.

We do not recommend constructing the embankment from lightweight materials, such as expanded polystyrene (EPS) or lightweight cellular concrete due to the possibility of buoyancy during periods of high water and difficulty to predict the secondary settlement resulting from new overburden embankment load. Prefabricated vertical drains (PVD) option would be able to accelerate the primary consolidation. However, we do not recommend PVD because it will not improve the soil strength to alleviate the slope stability issue and it will not accelerate the secondary consolidation.

Aggregate columns improvement may not be an ideal option due to the limited lateral confinement provided by the peat.

The proposed roadway widening over the very deformable soil area could be constructed as geosynthetically-reinforced pile supported embankments (PSE). The PSE system has been used at several locations within the State of Illinois to successfully support both roadway embankments as well as earth retaining structures. As discussed in our scope for Supplement 1, we understand that IDOT D1 geotechnical unit recommended that we proceed with utilizing a PSE system. A design memorandum is being prepared to address the pile supported embankment design and construction.

The improvement areas that can be considered for pile supported embankment are summarized in Table 3. Please note that the treatment widths shown in Table 3 is the minimum limits that we recommend. However, it is our opinion that the ground improvement should be applied to the entire embankment width to mitigate any potential differential settlement issue between the existing and the proposed embankments. One boring drilled on the center of the existing embankment encountered about 9 feet of peat and organic soils below the existing embankment fill. The presence of these peat and organic soil may indicate that secondary in the existing embankment is still continuing over time due to organic deterioration (secondary compression).

Table 3: Summary of Area Suitable for Pile Supported Embankment

Limits Station to Station	Treatment Width	Treatment Depth/Elevation (feet)	Reference Borings/ Subgrade Concerns
79+50 to 80+25	40' LT to 80' LT	6.0/834	PT-01 ($Q_u < 0.25$ tsf, MC=30%)
80+25 to 84+25	40' LT to 60' LT	Up to 15.0/820.7	PT-02 to PT-06, RWB-03 to RWB-05, CUL-01, CUL-02 ($Q_u < 0.25$ tsf, MC up to 595%)

Limits Station to Station	Treatment Width	Treatment Depth/Elevation (feet)	Reference Borings/ Subgrade Concerns
79+00 to 82+75	20' RT to 60' RT	12.0/828	SB-03 to SB-06, PT-07, DPB-01 ($Q_u < 0.25$ tsf, MC= up to 371%)
82+75 to 86+75	10' RT to 60' RT	18.0 /818	PT-08 to PT-11, DPB-02 and DPB-03, CUL- 02 ($Q_u < 0.25$ tsf, MC= up to 752%)
86+75 to 87+50	20' RT to 50' RT	5.0/833	PT-12 ($Q_u = 0.5$ tsf, MC= 45%)

The construction of the PSE would require a working platform to be established along the length of both widening areas. The wetland along the Barrington Road will need to be temporarily dewatered to establish the platform. The existing embankments would be benched or cut down to establish a level elevation for pile driving.

We recommend monitoring the settlement by installing settlement plates. The plates should be installed at the top of the sand blanket with rod extending up through the embankment to the finished top elevation. Care should be taken by the Contractor not to impact the rod either during or after construction. The settlement should then be monitored once a week for 4 weeks followed by once every two weeks until the monitoring curve shows a residual settlement of 1.0 inch. When the settlement monitoring shows 1 inch of residual settlement, the embankment should be leveled off with additional compacted embankment fill and the tasks related to the sidewalk, guardrail, and pavement construction can be completed. The IDOT Special Provision for *Settlement Waiting Period and Settlement Platforms* should be included in the contract.

5.7 Detention Pond

A detention pond is proposed on the right offset of Barrington Road between Station 81+00 and Station 92+00. The proposed detention basin base elevations are mostly between elevation 835 and 838 feet. Between Station 81+00 and Station 87+50, the base of the detention basin generally consists of very soft to medium stiff organic silty clay. Between Station 87+50 and Station 92+00, the base of the detention basin generally consists of stiff to hard silty clay to silty clay loam. Groundwater was generally encountered just slightly below the proposed base of the detention basins. Standing water was observed while drilling Boring DPB-02 at Station 84+35. Groundwater should be expected during and after construction. The Contractor needs to prepare working on soft ground during the construction of detention basin. The slope surfaces will require permanent protection to prevent erosion and storm water runoff. Slope protections such as riprap or seeding can be considered.

The proposed embankment slopes of 1:2.5 to 1:3 (V:H) at the widening are between Station 81+00 and Station 87+50 are expected to be unstable during and after construction due to presence of organic soils and peat. The analysis indicates that the factors of safety does not meet IDOT's minimum requirement of 1.5. Ground improvement will be needed in this area as discussed in Section 5.6

5.8 Traffic Signals

Two traffic signal borings (TSB-01 and TSB-02) were drilled at the intersection of Barrington Road and Algonquin Road intersection. The soil from these soil borings consists primarily of stiff to very stiff silty clay to silty clay loam with an average Q_u value of 2.3 tsf. Proposed traffic lights foundation depths can be determined using IDOT Highway Standard for traffic signals (878001-10).

6.0 CONSTRUCTION CONSIDERATIONS

6.1 Excavation, Dewatering, and Utilities

The excavations should be performed in accordance with local, state, and federal regulations. The potential effect of ground movements upon nearby structures, utilities, and pavements should be considered during construction. Temporary excavations should be sloped at no greater than 1:2 (V: H).

Excavations required for cuts and undercutting will require dewatering as the water table is occasionally seated above the excavation depths. The Contractor should ensure proper surface grading to prevent the pooling of runoff into open excavations. Any water allowed to enter excavations should immediately be removed. Due to groundwater presence at the surface and slope stability control,

excavation in deformable soil area between Station 79+50 and Station 87+50 will be a major construction issue and added construction cost.

6.2 Filling and Backfilling

Fill material used to attain the final design elevations should be structural fill material. Coarse aggregate of IDOT gradation CA-6 or pre-approved, compacted, cohesive or granular soil conforming to Section 204 would be acceptable as structural fill (IDOT, 2022). The fill material should be free of organic matter and debris and should be placed in lifts and compacted according to IDOT Section 205, *Embankment* (IDOT, 2022).

6.3 Reuse of Excavated Materials

Excavated soils and granular subbase material from within the project limits may be reused in embankments if it meets requirements of IDOT Standard Specifications Section 204 and IDOT District One Special Provision *Embankment I*.

6.4 Earthwork Operations

The required earthwork can be accomplished with conventional construction equipment. Moisture and traffic will cause deterioration of exposed subgrade soils. Precautions should be taken by the Contractor to prevent water erosion of the exposed subgrade. A compacted subgrade will minimize water run-off erosion. Earth moving operations should be scheduled to avoid excessive cold or wet weather (early spring, late fall or winter). Any soil allowed to freeze or soften due to the standing water should be removed. Wet weather can cause problems with subgrade compaction.

It is recommended that an experienced geotechnical engineer be retained to inspect the exposed subgrade, monitor earthwork operations, and provide material inspection services during the construction phase of this project.

7.0 QUALIFICATIONS

The analysis and recommendations submitted in this report are based upon the data obtained from the borings drilled at the locations shown on the boring logs and in Appendix F. This report does not reflect any variations that may occur between the borings or elsewhere on the site, variations whose nature and extent may not become evident until the course of construction. In the event that any changes in the design and/or location of the roadway are planned, we should be timely informed so that our recommendations can be adjusted accordingly.

It has been a pleasure to assist Ardmore Roderick and the Illinois Department of Transportation on this project. Please call if there are any questions, or if we can be of further service.

Respectfully Submitted,

WANG ENGINEERING, INC.

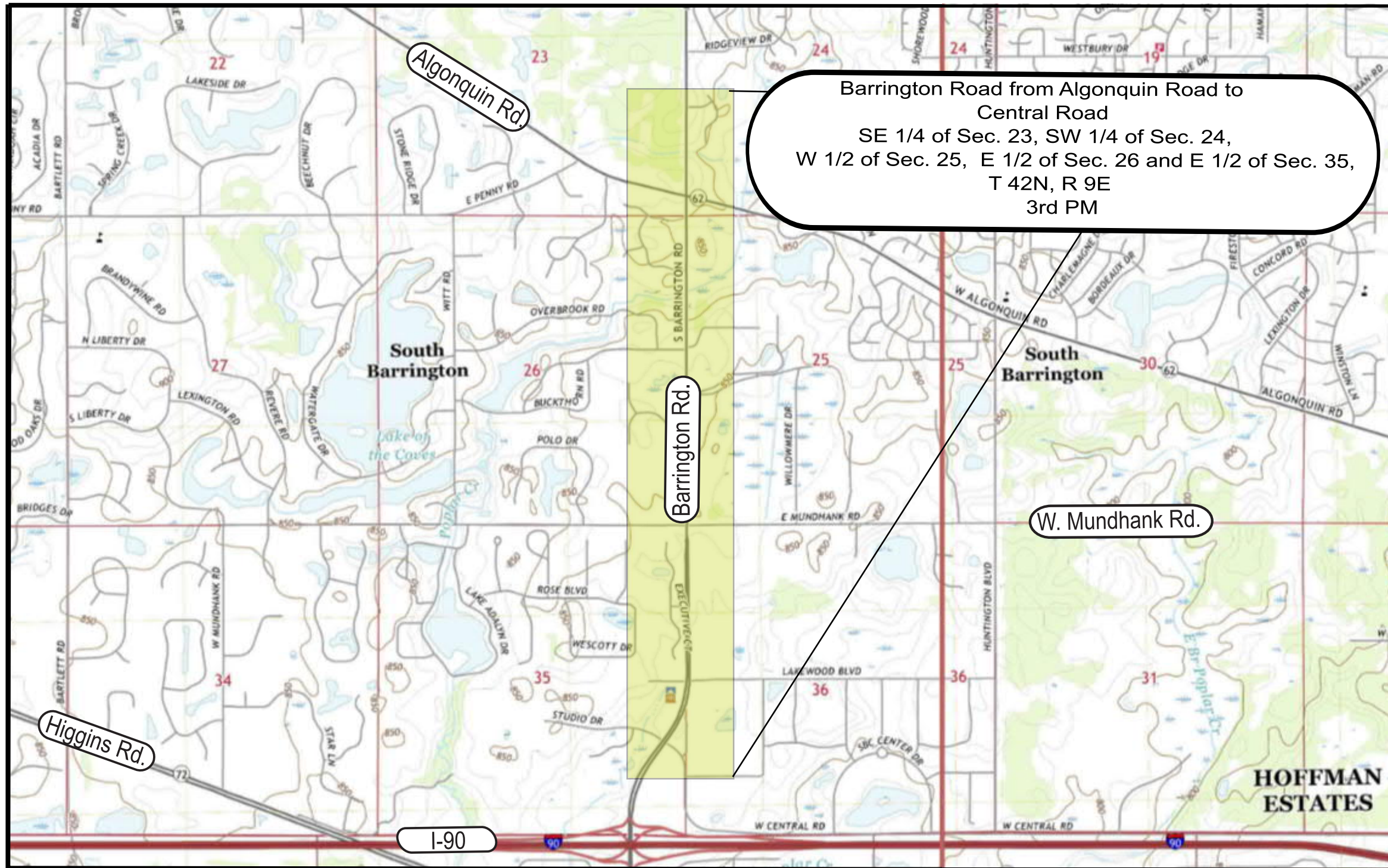
Andri A. Kurnia, P.E.
Senior Engineer

Corina T. Farez, P.E., P.G.
QC/QA Reviewer

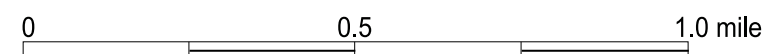
REFERENCES

- BAUER, R.A., CURRY, B.B., GRAESE, A.M., VAIDEN, R.C., SU, W.J., and HASEK, M.J., 1991, *Geotechnical Properties of Selected Pleistocene, Silurian, and Ordovician Deposits of Northeastern Illinois*: Environmental Geology 139, Illinois State Geological Survey, 69 p.
- STUMPF A.J., 2007, *Surficial Geology of Streamwood Quadrangle, Kane and Cook Counties, Illinois*: Illinois State Geological Survey, USGS-STATEMAP contract report, 2 sheets, 1:24,000.
- HANSEL, A.K., and JOHNSON, W.H. (1996) *Wedron and Mason Groups: Lithostratigraphic Reclassification of the Wisconsin Episode, Lake Michigan Lobe Area: ISGS Bulletin 104*. Illinois State Geological Survey, Champaign, IL. 116 p.
- ILLINOIS DEPARTMENT OF TRANSPORTATION (2020) *Geotechnical Manual*. IDOT Bureau of Materials and Physical Research, Springfield, IL.
- ILLINOIS DEPARTMENT OF TRANSPORTATION (2022) *Standard Specifications for Road and Bridge Construction*. IDOT Division of Highways, Springfield, IL.
- LEIGHTON, M.M., EKBLAW, G.E., and HORBERG, L. (1948) *Physiographic Divisions of Illinois*. The Journal of Geology, v. 56, p. 16-33.
- ILLINOIS DEPARTMENT OF TRANSPORTATION (2005) *Subgrade Stability Manual*. IDOT Bureau of Bridges and Structures.
- NCDC (2022) National Climatic Data Center: Global Historical Climatological Network Data, <http://www.ncdc.noaa.gov/ghcn/ghcn.SELECT.html>.
- WICKHAM, S.S., W.H. JOHNSON, AND H.D. GLASS (1988) *Regional Geology of the Tiskilwa Till Member, Weadron Formation, Northeastern Illinois*, Illinois State Geological Survey, Circular 543; Champaign, IL.
- WILLMAN, H.B., ATHERTON, E., BUSCHBACH, T.C., COLLINSON, C., FRYE, J.C., HOPKINS, M.E., LINEBACK, J.A., and SIMON, J.A., 1971, *Handbook of Illinois Stratigraphy*: ISGS Bulletin 95: Urbana, Illinois State Geological Survey, 261 p.

EXHIBITS



Scale



SITE LOCATION MAP: BARRINGTON ROAD FROM ALGONQUIN ROAD TO CENTRAL ROAD; COOK COUNTY, ILLINOIS		
SCALE: GRAPHICAL	EXHIBIT 1	DRAWN BY: J. Bensen CHECKED BY: A. Kurnia
 A ierracon Company		1145 N. Main Street Lombard, IL 60148 www.wangeng.com
FOR ARDMORE RODERICK		1064-01-01 KE225002



Organic Soil Matter

- | | |
|--|--|
| ■ <=1.70 | ■ >5.00 and <=6.20 |
| ■ >1.70 and <=3.25 | ■ >6.20 and <=75.00 |
| ■ >3.25 and <=5.00 | ■ Not rated or not available |

SITE PEDOLOGICAL MAP: BARRINGTON ROAD FROM ALGONQUIN ROAD TO CENTRAL ROAD; COOK COUNTY, ILLINOIS		
SCALE: GRAPHICAL	EXHIBIT 2-1	DRAWN BY: J. Bensen CHECKED BY: A. Kurnia
 A Terracon Company		1145 N. Main Street Lombard, IL 60148 www.wangeng.com
FOR ARDMORE RODERICK		1064-01-01 KE225002



Organic Soil Matter

- | | |
|---|--|
| ■ ≤1.70 | ■ >5.00 and ≤6.20 |
| ■ >1.70 and ≤3.25 | ■ >6.20 and ≤75.00 |
| ■ >3.25 and ≤5.00 | ■ Not rated or not available |

SITE PEDOLOGICAL MAP: BARRINGTON ROAD FROM ALGONQUIN ROAD TO
CENTRAL ROAD; COOK COUNTY, ILLINOIS

SCALE: GRAPHICAL

EXHIBIT 2-2

DRAWN BY: J. Bensen
CHECKED BY: A. Kurnia



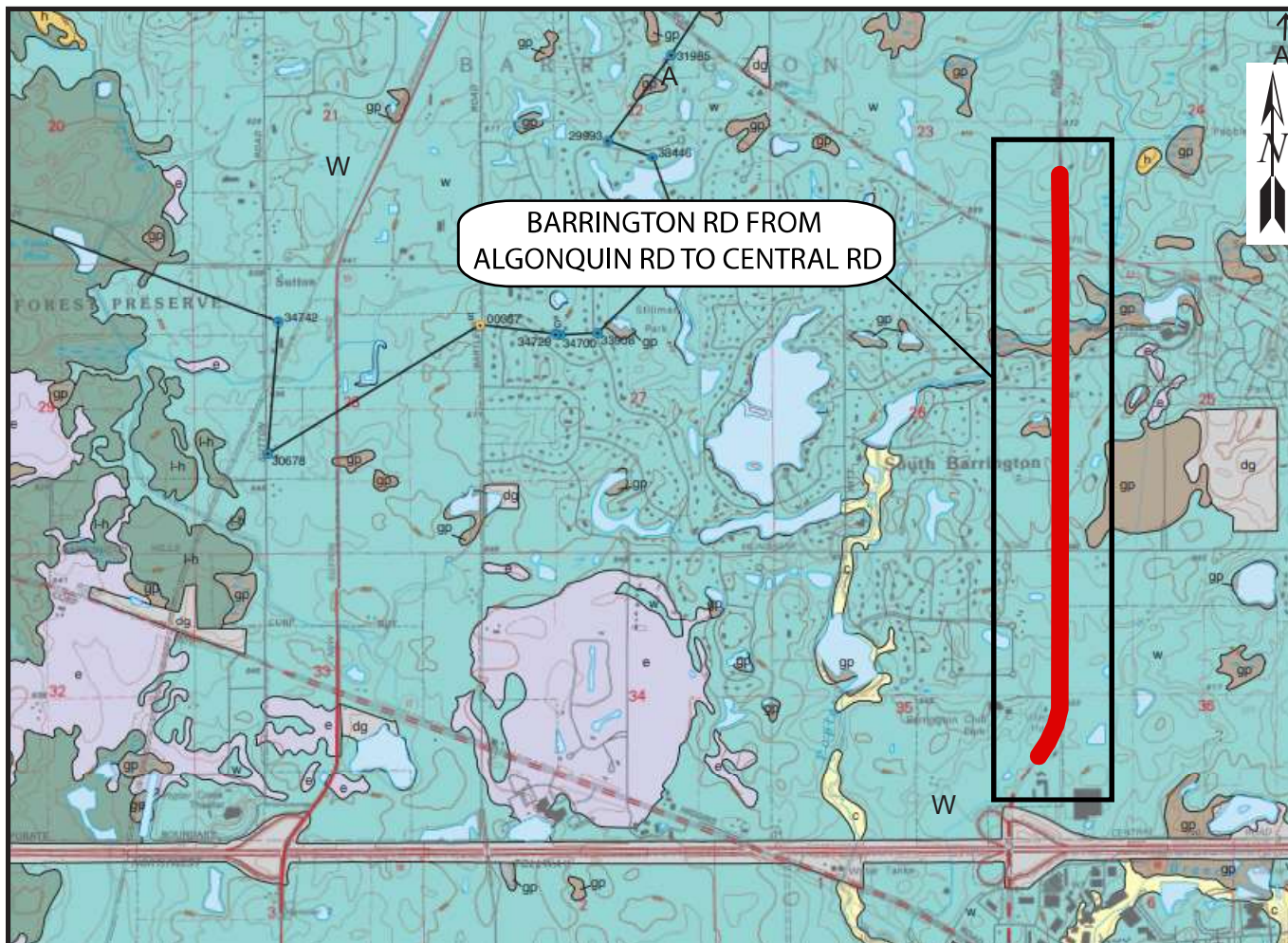
1145 N. Main Street
Lombard, IL 60148
www.wangeng.com

FOR ARDMORE RODERICK

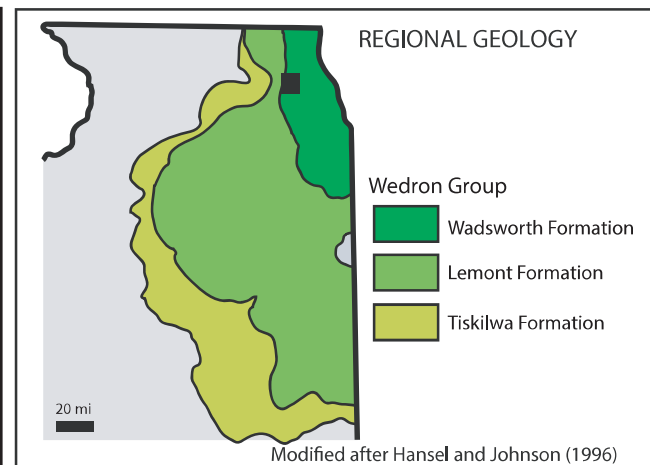
1064-01-01
KE225002

Map unit symbol and soil name	Depth	USDA texture	Classification	Pct Fragments		Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Organic matter	Liquid limit	Plasticity index	Erosion factors			Potential as a source of roadfill	Local Roads and Streets	Shallow Excavations
			AASHTO	>10 inches	3-10 inches									Kw	Kf	T	Rating class; and Limiting features	Rating class; and Limiting features	Rating class; and Limiting features
	In			L-R-H	L-R-H	Pct	Pct	Pct	g/cc	micro m/sec	Pct	L-R-H	L-R-H						
232A—Ashkum silty clay loam, 0 to 2 percent slopes																			
Ashkum, drained	0-12	Silty clay loam	A-7-5, A-7-6	0- 0- 0	0- 0- 0	1-8-15	45-55-64	35-37-40	1.20-1.35-1.45	1.41-2.82-4.23	3.0-5.0-8.0	51-58-67	25-26-28	0.20	0.20	5	Poor; Low strength, Wetness, Dusty, Shrink-swell	Very limited; Frost action, Low strength, Depth to saturated zone, Ponding, Shrink-swell	Very limited; Depth to saturated zone, Dusty, Unstable excavation walls, Ponding, Too clayey
	12-29	Silty clay loam, silty clay	A-7-6	0- 0- 0	0- 0- 0	2-8-15	43-51-63	35-41-42	1.30-1.40-1.50	1.41-2.82-4.23	0.5-1.3-2.5	46-54-58	25-30-30	0.32	0.32				
	29-54	Silty clay loam, silty clay	A-6, A-7-6	0- 0- 0	0-0-1	5-9-20	40-58-65	30-33-42	1.50-1.60-1.70	1.41-2.82-4.23	0.1-0.3-1.0	39-43-53	21-23-30	0.43	0.43				
	54-60	Silty clay loam	A-6, A-7-6	0- 0- 0	0-0-1	5-9-20	45-61-68	27-30-35	1.55-1.65-1.75	1.41-2.82-4.23	0.0-0.3-1.0	37-41-47	19-21-25	0.43	0.43				
294B—Symerton silt loam, 2 to 5 percent slopes																			
Symerton	0-15	Silt loam	A-7-6, A-6	0- 0- 0	0- 0- 0	10-25-30	50-51-70	20-24-27	1.30-1.40-1.50	4.23-9.17-14.11	2.5-3.3-4.0	35-41-46	13-16-19	0.24	0.24	5	Poor; Low strength, Shrink-swell, Dusty, Wetness	Somewhat limited; Frost action, Low strength, Shrink-swell	Somewhat limited; Depth to saturated zone, Dusty, Unstable excavation walls
	15-19	Silty clay loam	A-7-6, A-6	0- 0- 0	0- 0- 0	10-15-20	45-53-63	27-32-35	1.40-1.50-1.60	4.23-9.17-14.11	0.5-1.3-2.0	38-44-49	19-22-25	0.24	0.24				
	19-35	Gravelly loam, loam, gravelly clay loam, clay	A-7-6, A-6	0- 0- 0	0-1-3	25-34-50	15-36-50	24-30-35	1.45-1.55-1.70	4.23-9.17-14.11	0.1-0.6-1.0	34-41-47	16-21-25	0.32	0.32				
	35-39	Silty clay loam, silt loam	A-7-6, A-6	0- 0- 0	0-0-1	2-9-20	45-61-74	24-30-35	1.50-1.60-1.70	1.41-2.82-4.23	0.1-0.3-0.5	34-40-46	16-20-25	0.49	0.49				
	39-79	Silty clay loam, silt loam	A-7-6, A-6	0- 0- 0	0-0-1	2-10-20	48-62-78	20-28-32	1.60-1.70-1.80	0.42-0.92-1.41	0.0-0.3-0.5	30-38-43	13-19-23	0.49	0.49				
330A—Peotone silty clay loam, 0 to 2 percent slopes																			
Peotone, drained	0-7	Silty clay loam	A-7-5, A-7-6	0- 0- 0	0- 0- 0	1-5-10	50-60-67	32-35-40	1.20-1.30-1.40	1.41-2.82-4.23	4.5-6.2-7.5	50-57-65	22-25-28	0.24	0.24	5	Poor; Wetness, Low strength, Shrink-swell, Dusty	Very limited; Ponding, Frost action, Low strength, Shrink-swell, Depth to saturated zone	Very limited; Ponding, Depth to saturated zone, Dusty, Unstable excavation walls, Too clayey
	7-27	Silty clay loam, silty clay	A-7-5, A-7-6	0- 0- 0	0- 0- 0	1-5-10	45-56-64	35-39-45	1.30-1.40-1.55	1.41-2.82-4.23	1.5-3.2-6.0	48-56-68	25-28-32	0.28	0.28				
	27-50	Silty clay loam, silty clay	A-7-6	0- 0- 0	0-0-1	1-6-12	43-53-66	33-41-45	1.35-1.45-1.60	1.41-2.82-4.23	0.5-1.3-2.7	43-54-61	23-29-33	0.32	0.32				
	50-60	Silty clay loam, silt loam	A-7-6, A-6	0- 0- 0	0-0-3	1-11-20	40-55-74	25-34-40	1.40-1.53-1.65	1.41-2.82-4.23	0.0-0.5-1.2	34-44-52	17-24-29	0.37	0.37				
530D2—Ozaukee silt loam, 6 to 12 percent slopes, eroded																			
Ozaukee, eroded	0-7	Silt loam	A-7-6, A-6	0- 0- 0	0-0-1	7-14-23	52-65-73	18-21-27	1.30-1.45-1.55	4.23-9.17-14.11	1.0-1.7-2.5	30-35-42	12-15-19	0.43	0.43	3	Fair; Dusty, Low strength, Wetness	Somewhat limited; Frost action, Low strength, Slope, Depth to saturated zone	Somewhat limited; Depth to saturated zone, Dusty, Unstable excavation walls, Slope, Too clayey
	7-11	Silty clay loam, silt loam	A-7-6, A-6	0- 0- 0	0-0-1	5-10-18	50-59-69	24-31-34	1.40-1.50-1.60	4.23-9.17-14.11	0.3-0.6-1.0	34-41-45	16-21-24	0.43	0.43				
	11-27	Silty clay, silty clay loam, clay	A-7-6, A-6	0-0-1	0-1-4	5-11-18	34-48-58	35-41-50	1.45-1.55-1.65	0.42-2.33-4.23	0.2-0.5-0.9	30-38-52	15-19-26	0.32	0.32				
	27-32	Silty clay loam, silty clay	A-6	0-1-2	0-1-5	5-12-20	40-52-64	29-36-42	1.55-1.65-1.70	0.42-0.92-1.41	0.1-0.3-0.6	24-31-37	11-15-19	0.37	0.37				
	32-60	Silty clay loam, clay loam	A-4, A-6	0-1-2	0-2-7	7-14-23	50-55-64	27-31-35	1.65-1.75-1.85	0.42-0.75-1.41	0.0-0.2-0.5	21-26-31	9-12-15	0.43	0.43				
530D3—Ozaukee silty clay loam, 6 to 12 percent slopes, severely eroded																			
Ozaukee, severely eroded	0-7	Silty clay loam	A-6	0-0-0	0-0-1	5-11-20	44-57-66	27-32-38	1.40-1.50-1.60	1.41-3.29-4.23	0.5-0.8-1.2	27-32-40	11-14-18	0.37	0.37	2	Fair; Low Strength, Dusty, Wetness	Somewhat limited; Frost action, Low strength, Slope, Depth to saturated zone	Very limited; Slope, Depth to saturated zone, Dusty, Unstable excavation walls, Too clayey, Dense layer
	7-20	Silty clay loam, clay, silty clay	A-7-6, A-6	0-0-1	0-1-4	5-11-18	34-48-58	35-41-50	1.45-1.55-1.65	0.42-2.33-4.23	0.2-0.5-0.9	30-37-51	15-19-26	0.32	0.32				
	20-25	Silty clay loam, silty clay	A-6	0-1-2	0-1-5	5-12-20	40-52-64	29-36-42	1.55-1.65-1.70	0.42-0.92-1.41	0.1-0.3-0.6	24-31-37	11-15-19	0.37	0.37				
	25-60	Silty clay loam, clay loam	A-4, A-6	0-1-2	0-2-7	7-14-23	50-55-64	27-31-35	1.65-1.75-1.85	0.42-0.75-1.41	0.0-0.2-0.5	21-26-31	9-12-15	0.43	0.43				
531B—Markham silt loam, 2 to 4 percent slopes																			
Markham	0-8	Silt loam	A-7-6, A-6	0-0-0	0-0-1	5-10-15	58-66-75	20-24-27	1.30-1.40-1.50	4.23-9.17-14.11	2.0-3.0-4.0	34-41-46	13-16-19	0.37	0.37	3	Poor; Low Strength, Dusty, Wetness	Very limited; Depth to saturated zone, Ponding, Frost action, Low strength, Shrink-swell	Very limited; Depth to saturated zone, Dusty, Unstable excavation walls, Ponding, Too clayey
	8-21	Clay, silty clay, silty clay loam	A-7-6	0-0-1	0-1-4	5-12-20	30-49-60	35-39-50	1.40-1.50-1.60	0.42-2.33-4.23	0.2-0.6-1.0	43-48-60	25-28-36	0.37	0.37				
	21-32	Silty clay loam, silty clay	A-7-6, A-6	0-1-1	0-3-4	5-12-20	40-52-65	30-36-45	1.55-1.65-1.75	0.42-0.92-1.41	0.1-0.3-0.5	37-44-53	19-25-32	0.37	0.37				
	32-60	Clay loam, silty clay loam	A-7-6, A-6	0-1-1	0-2-4	5-15-25	40-53-68	27-32-38	1.65-1.75-1.85	0.42-0.92-1.41	0.0-0.3-0.5	34-40-47	17-22-27	0.43	0.43				
531C2—Markham silt loam, 4 to 6 percent slopes, eroded																			
Markham, eroded	0-8	Silt loam	A-7-6, A-6	0-0-0	0-0-1	5-10-15	58-66-75	20-24-27	1.30-1.40-1.50	4.23-9.17-14.11	2.0-2.5-3.0	34-39-43	13-16-19	0.37	0.37	3	Poor; Low Strength, Dusty, Wetness	Very limited; Depth to saturated zone, Frost action, Low strength, Shrink-swell, Ponding	Very limited; Depth to saturated zone, Dusty, Unstable excavation walls, Ponding, Too clayey
	8-21	Silty clay, silty clay loam, clay	A-7-6	0-0-1	0-1-4	5-12-20	30-49-60	35-39-50	1.40-1.50-1.60	0.42-2.33-4.23	0.2-0.6-1.0	43-48-60	25-28-36	0.37	0.37				
	21-32	Silty clay loam, silty clay	A-7-6, A-6	0-1-1	0-3-4	5-12-20	40-52-65	30-36-45	1.55-1.65-1.75	0.42-0.92-1.41	0.1-0.3-0.5	37-44-53	19-25-32	0.37	0.37				
	32-60	Clay loam, silty clay loam	A-7-6, A-6	0-1-1	0-2-4	5-15-25	40-53-68	27-32-38	1.65-1.75-1.85	0.42-0.92-1.41	0.0-0.3-0.5	34-40-47	17-22-27	0.43	0.43				
903A—Muskego and Houghton mucks, 0 to 2 percent slopes																			
Muskego	0-5	Muck	A-8	-	-	-	-	-	0.10-0.16-0.21	4.23-23.29-42.34	60.0-75.0-90.0	0-0-0	NP			1	Poor; Wetness, Low Strength, Dusty, Shrink-swell	Very limited; Ponding, Depth to saturated zone, Subsidence, Frost action, Low strength, Shrink-swell	Very limited; Ponding, Depth to saturated zone, Organic matter content, Dusty, Unstable excavation walls
	5-36	Muck	A-8	-	-	-	-	-	0.10-0.16-0.21	4.23-23.29-42.34	60.0-75.0-90.0	0-0-0	NP						
	36-80	Coprogenous silt loam, coprogenous silty clay loam, coprogenous earth	A-7-5	0-0-0	0-0-0	4-14-25	40-60-78	18-26-35	0.30-0.70-1.10	0.42-0.92-1.41	6.0-13.0-20.0	42-64-86	12-17-23	0.37	0.37				
Houghton	0-19	Muck	A-8	-	-	-	-	-	0.20-0.28-0.35	1.41-21.88-42.34	70.0-84.5-99.0	0-0-0	NP			2	Poor; Wetness, Dusty	Very limited; Depth to saturated zone, Ponding, Subsidence, Shrink-swell, Frost action, Low strength	Very limited; Ponding, Depth to saturated zone, Organic matter content, Dusty, Unstable excavation walls
	19-60	Muck	A-8	-	-	-	-	-	0.15-0.20-0.25	1.41-21.88-42.34	70.0-84.5-99.0	0-0-0	NP						
1903A—Muskego and Houghton mucks, undrained, 0 to 2 percent slopes																			
Muskego	0-5	Muck	A-8	-	-	-	-	-	0.10-0.16-0.21	4.23-23.29-42.34	60.0-75.0-90.0	0-0-0	NP			1	Poor; Wetness, Low Strength, Dusty, Shrink-swell	Very limited; Ponding, Depth to saturated zone, Subsidence, Frost action, Low strength, Shrink-swell	Very limited; Ponding, Depth to saturated zone, Organic matter content, Dusty, Unstable excavation walls
	5-27	Muck	A-8	-	-	-	-	-	0.10-0.16-0.21	4.23-23.29-42.34	60.0-75.0-90.0	0-0-0	NP						
	27-60	Coprogenous silt loam, coprogenous silty clay loam, coprogenous earth	A-7-5	0-0-0	0-0-0	4-14-25	40-60-78	18-26-35	0.30-0.70-1.10	0.42-0.92-1.41	6.0-13.0-20.0	42-64-86	12-17-23	0.37	0.37				
Houghton	0-19	Muck	A-8	-	-	-	-	-	0.20-0.28-0.35	1.41-21.88-42.34	70.0-84.5-99.0	0-0-0	NP			2	Poor; Wetness, Dusty	Very limited; Depth to saturated zone, Ponding, Subsidence, Shrink-swell, Frost action, Low strength	Very limited; Ponding, Depth to saturated zone, Organic matter content, Dusty, Unstable excavation walls
	19-60	Muck	A-8	-	-	-	-	-	0.15-0.20-0.25	1.41-21.88-42.34	70.0-84.5-99.0	0-0-0	NP						

Source: USDA, Natural Resources Conservation



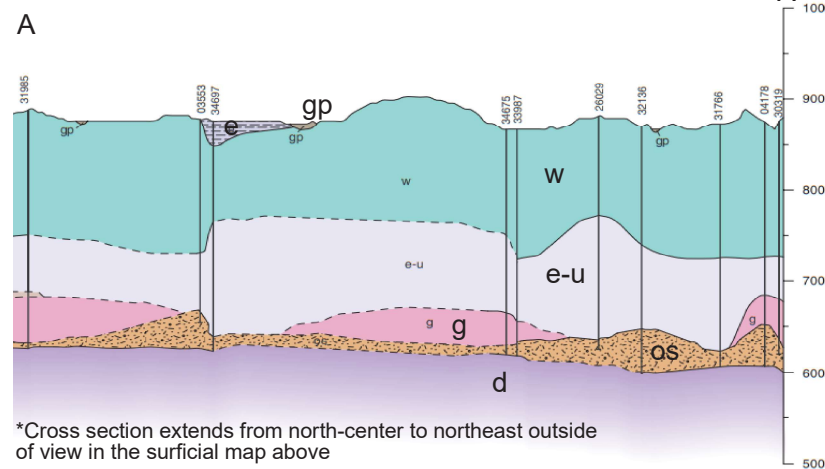
BARRINGTON RD FROM
ALGONQUIN RD TO CENTRAL RD



LEGEND

- Disturbed Ground**
dg Fill, compacted land, or other disturbed material; found in gravel pits, retention ponds, along highway right-of-ways, and other excavations and landfills.
- Cahokia Formation**
c Stratified silt and clay with occasional sand lenses; typically 5 to 20 feet thick; alluvium in floodplains and channels of modern rivers and streams.
- Grayslake Peat**
gp Peat, muck and organic-rich sediment that may contain interbeds of silt, clay and some fine sand; typically 5 to 20 feet thick; organic deposits accumulated in depressions, drainage-ways, and on floodplains.
- Equality Formation**
e Silt or clay, massive to bedded, some interbeds of sand and organic material; typically 5 to 30 feet thick; postglacial and proglacial lake deposits that infill low-lying areas.
- Henry Formation**
h Sand and gravel, massive or stratified; typically 5 to 15 feet thick; Proglacial outwash deposits.
- Wadsworth Formation**
w Diamicton, silty clay loam to silty clay; thickness ranges from 50 to 160 feet.
- Lemont Formation**
l-h Diamicton, Sandy loam to loam; thickness ranges from 10 to 40 feet.
- Equality Formation Undivided (cross section only)**
e-u Interstratified silt, clay and fine sand with intervals of coarser sand or loamy diamicton; typically 50 to 140 feet thick.
- Glasford Formation (cross section only)**
g Diamicton, Sandy loam to loam; thickness ranges from 20 to 60 feet.
- Older Sediment Undifferentiated (cross section only)**
os Sand, gravel, diamicton, and silt; thickness ranges from 10 to 50 feet.
- Bedrock (cross section only)**
d Dolostone; cherty and shaly in places.

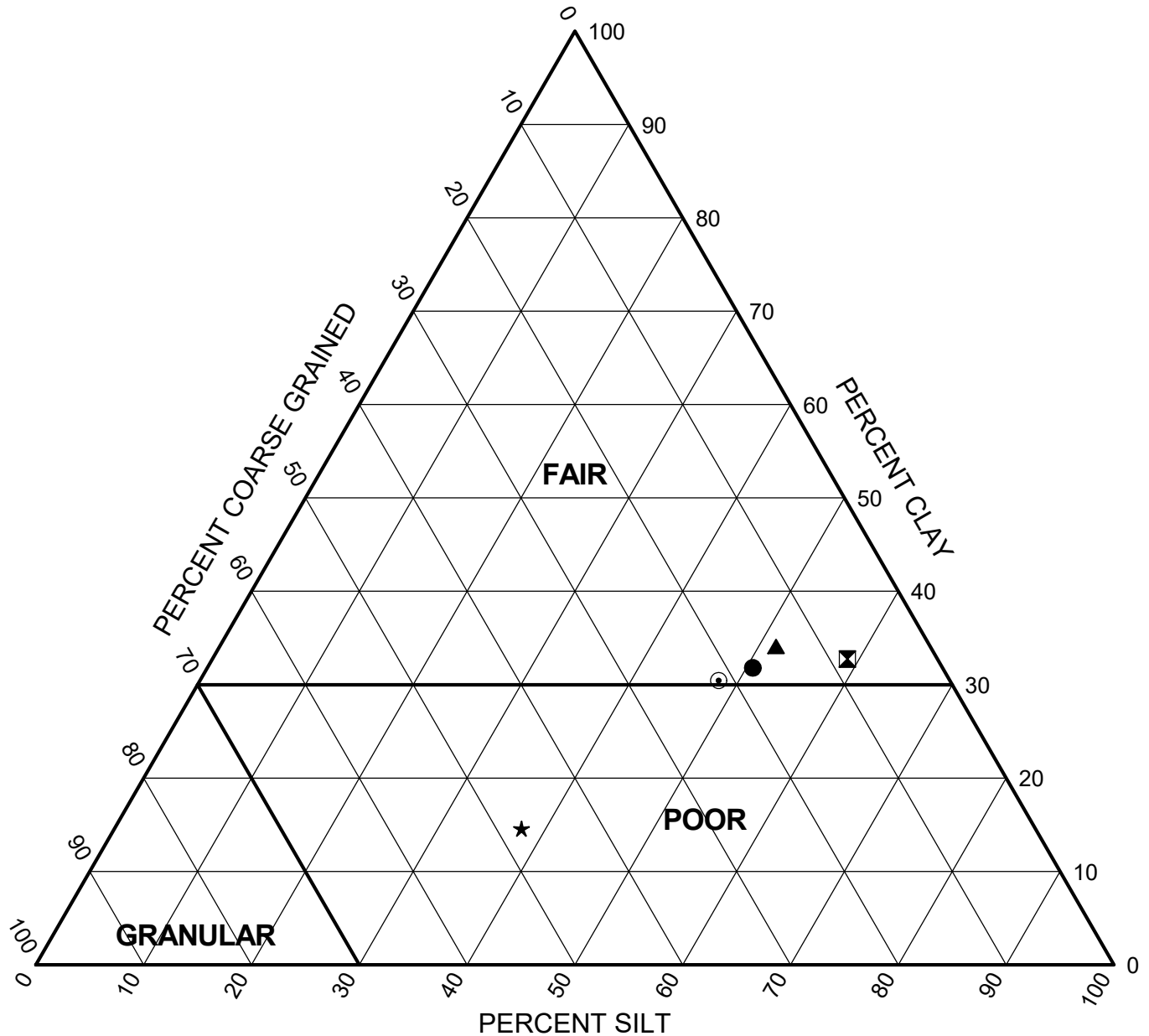
Modified after A.J. Stumpf 2007



*Cross section extends from north-center to northeast outside of view in the surficial map above

SITE AND REGIONAL GEOLOGY: BARRINGTON ROAD FROM ALGONQUIN ROAD TO CENTRAL ROAD; COOK COUNTY, ILLINOIS

SCALE: GRAPHICAL	EXHIBIT 3	DRAWN BY: J. Bensen CHECKED BY: A. Kurnia
Wang Engineering A Terracon Company		1145 N. Main Street Lombard, IL 60148 www.wangeng.com
FOR ARDMORE RODERICK		1064-01-01 KE225002



Sample	Depth (ft)	Coarse (%)	Silt (%)	Clay (%)	Classification		
					IL DOT	AASHTO	RATING
●NB-SGB-02#2	2.0	17.6	50.6	31.8	Silty Clay	A-7-6 (25)	FAIR
⊠NB-SGB-06#2	2.0	8.4	58.9	32.8	Silty Clay	A-7-6 (29)	FAIR
▲SB-SGB-08#2	2.0	14.3	51.6	34.1	Silty Clay	A-6 (19)	FAIR
★SB-SGB-10#2	2.0	47.7	37.8	14.6	Loam	A-7-6 (10)	POOR
⊙SB-SGB-20#2	2.0	21.4	48.1	30.4	Silty Clay	A-6 (17)	FAIR



Terracon

Telephone:
Fax:

Subgrade Support Rating Chart

Project: Barrington Rd from Algonquin Rd to Central Rd

Location: Cook County, IL

Number: 1064-01-01

APPENDIX A



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG CUL-01

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
Project **Barrington Rd from Algonquin Rd to Central Rd**
Location **Cook County, IL**

Datum: NAVD 88
Elevation: 841.55 ft
North: 1976246.54 ft
East: 1036428.95 ft
Station: 83+06.05
Offset: 9.78 LT

Page 1 of 1

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	840.3	15-inch thick ASPHALT --PAVEMENT--								821.1	Stiff to very stiff, gray SILTY CLAY to SILTY CLAY LOAM, trace gravel; moist						
		Stiff to hard, brown and gray CLAY LOAM to SILTY CLAY LOAM, trace gravel; moist			1	8 7 7	5.33 B	18			--RDR 2--			9	4 5 5	1.97 B	16
		--FILL-- --RDR 2 to 3--															
			5		2	3 3 4	1.00 P	17				25		10	4 4 6	2.62 B	18
	836.1	Medium stiff, gray SILTY CLAY, trace gravel; moist															
		--FILL-- --RDR 2--			3	3 2 4	0.74 B	25						11	3 4 6	2.05 B	17
	833.6	Stiff (1.0P), gray CLAY to SILTY CLAY; moist															
	832.8	--RDR 2--	10		4	2 2 2	0.50 P	107				30		12	4 4 8	1.48 B	19
		Soft to medium stiff, black Organic SILTY LOAM; moist															
		--RDR 1-- --L _L (%)=120, P _L (%)=101-- --%Gravel=0.0-- --%Sand=31.5-- --%Silt=58.7-- --%Clay=9.9-- --A-7-5 (25)--			5	2 2 2	0.25 B	161						13	4 5 9	1.80 B	18
	829.7	Very soft, black and brown PEAT; moist															
	827.2	--RDR 1--	15		6	2 1 2	< 0.25 P	291				35		14	4 6 6	1.39 B	19
		Very soft to medium stiff, gray Organic SILTY CLAY; moist															
		--RDR 2--															
					7	2 3 4	0.57 B	73						15	3 6 9	1.80 B	18
	823.6	Very stiff, gray SILTY CLAY to SILTY CLAY LOAM, trace gravel; moist															
		--RDR 2--	20		8	4 6 7	2.38 B	25		801.6		40		16	7 8 9	1.80 B	19

Boring terminated at 40.00 ft

GENERAL NOTES

Begin Drilling **02-08-2022** Complete Drilling **02-08-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **21D50A [84%]**
Driller **KS&AP** Logger **A. Scifers** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; Boring backfilled upon completion**

WATER LEVEL DATA

While Drilling **▽** **Dry**
At Completion of Drilling **▼** **Dry**
Time After Drilling **NA**
Depth to Water **▽** **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG CUL-02

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
Project **Barrington Rd from Algonquin Rd to Central Rd**
Location **Cook County, IL**

Datum: NAVD 88
Elevation: 836.08 ft
North: 1976235.54 ft
East: 1036487.22 ft
Station: 82+94.80
Offset: 48.44 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	834.9	Black SANDY LOAM --TOPSOIL--															
		Very soft to medium stiff, gray to green Organic SILTY CLAY; damp			1	1 1 1	0.50 P	72						9	5 6 7	1.07 B	16
	832.3	Very soft, black PEAT, trace gravel; moist			2	1 2 2	< 0.25 P	405				25		10	4 4 5	1.48 B	17
	830.1	Very soft, gray SILTY CLAY LOAM to PEAT, trace gravel; moist			3	0 0 0	< 0.25 P	73						11	4 6 8	1.89	16
	829.1	--RDR 1-- --L _c (%)=59, P _L (%)=29-- --%Gravel=1.8-- --%Sand=15.8-- --%Silt=57.9-- --%Clay=24.4-- --A-7-6 (27)--			4	0 0 0	0.66 B	57				30		12	4 6 8	2.30 B	14
	825.6	Very soft, black PEAT; moist			5	2 2 3	1.15 B	24						13	5 7 8	1.56 B	15
		Medium stiff, gray SILTY CLAY, trace organic matter; moist			6	3 3 5	1.56 B	21				35		14	5 6 9	2.05 B	17
		Medium stiff to stiff, gray CLAY to SILTY CLAY; moist			7	4 4 6	0.98 B	23						15	4 8 10	NP	16
	818.1	Medium stiff to very stiff, gray SILTY CLAY to SILTY CLAY LOAM, trace gravel; moist			8	4 5 5	0.98 B	16				40		16	7 6 11	2.05 B	19

GENERAL NOTES

Begin Drilling **02-07-2022** Complete Drilling **02-07-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **21D50A [84%]**
Driller **KS&AP** Logger **A. Scifers** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; Boring backfilled upon completion**

WATER LEVEL DATA

While Drilling **3.50 ft**
At Completion of Drilling **Dry**
Time After Drilling **NA**
Depth to Water **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG CUL-02

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
Project **Barrington Rd from Algonquin Rd to Central Rd**
Location **Cook County, IL**

Datum: NAVD 88
Elevation: 836.08 ft
North: 1976235.54 ft
East: 1036487.22 ft
Station: 82+94.80
Offset: 48.44 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		--RDR 2-- Boring terminated at 40.00 ft	45														
			50														
			55														
			60														

GENERAL NOTES

Begin Drilling **02-07-2022** Complete Drilling **02-07-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **21D50A [84%]**
Driller **KS&AP** Logger **A. Scifers** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; Boring backfilled upon completion**

WATER LEVEL DATA

While Drilling **3.50 ft**
At Completion of Drilling **Dry**
Time After Drilling **NA**
Depth to Water **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG DPB-01

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
Project **Barrington Rd from Algonquin Rd to Central Rd**
Location **Cook County, IL**

Datum: NAVD 88
Elevation: 837.23 ft
North: 1976194.26 ft
East: 1036480.11 ft
Station: 82+53.54
Offset: 41.16 RT

Page 1 of 1

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	837.03	3-inch thick TOPSOIL															
		Soft, black to gray Organic SILTY CLAY, trace gravel; moist			1	5 1 2 1	0.25 B	79									
		--RDR 1--															
					2	3 1 2	NA	77									
		--L _L (%)=44, P _L (%)=20--															
		--%Gravel=2.5--															
		--%Sand=11.2--															
		--%Silt=52.8--															
		--%Clay=33.5--															
		--A-7-6 (21)--			3	2 2 2	0.25 B	61									
	830.2	Black PEAT; wet															
	830.0	Soft, black and gray Organic SILTY CLAY; damp															
	828.0	--RDR 1--			4	0 0 3	0.41 B	52									
		Stiff, gray SILTY CLAY, trace gravel; moist															
		--RDR 2--															
					5	3 2 4	1.15 B	24									
					6	5 5 6	1.48 B	21									
		--silt seam--															
					7	6 7 8	1.48 B	20									
					8	5 7 9	1.48 B	18									
	817.2	Boring terminated at 20.00 ft															

GENERAL NOTES

Begin Drilling **02-07-2022** Complete Drilling **02-07-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **21D50A [84%]**
Driller **KS&AP** Logger **A. Scifers** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; Boring backfilled upon completion**

WATER LEVEL DATA

While Drilling **NA**
At Completion of Drilling **NA**
Time After Drilling **NA**
Depth to Water **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG DPB-01-ST

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
Project **Barrington Rd from Algonquin Rd to Central Rd**
Location **Cook County, IL**

Datum: NAVD 88
Elevation: 837.19 ft
North: 1976199.26 ft
East: 1036480.11 ft
Station: 82+58.54
Offset: 41.18 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		Medium stiff, black PEAT to Organic SILTY CLAY			1	PUSH	0.50 P										
	832.2	Medium stiff, black PEAT to Organic SANDY LOAM	5		2	PUSH	0.50 P	449									
	829.2	--wet shelly tube-- --organic content: 211.4%-- --L _t (%)=NP, P _t (%)=NP-- --%Gravel=0.0-- --%Sand=60.3-- --%Silt=31.5-- --%Clay=8.2-- --A-4 (0)--															
		Boring terminated at 8.00 ft	10														
			15														
			20														

GENERAL NOTES

Begin Drilling **02-07-2022** Complete Drilling **02-07-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **21D50A [84%]**
Driller **KS&AP** Logger **A. Scifers** Checked by **C. Marin**
Drilling Method **3" ID Shelby Tube; Boring backfilled upon completion**

WATER LEVEL DATA

While Drilling **6.00 ft**
At Completion of Drilling **Dry**
Time After Drilling **NA**
Depth to Water **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG DPB-02

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
Project **Barrington Rd from Algonquin Rd to Central Rd**
Location **Cook County, IL**

Datum: NAVD 88
Elevation: 835.49 ft
North: 1976376.70 ft
East: 1036486.50 ft
Station: 84+35.96
Offset: 48.34 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	834.7	WATER								815.0							
		Soft, black and gray Organic SILTY CLAY, trace gravel; moist --1-in peat-- --RDR 1--			1	2 0 1	0.25 P	106			Stiff to very stiff, gray SILTY CLAY, trace gravel; moist --RDR 2--			9	3 4 6	1.07 B	23
	832.5	Very soft to soft, black PEAT, trace gravel; moist --RDR 1--			2	0 0 0	< 0.25 P	230						10	4 4 9	3.44 B	21
			5							810.5	Boring terminated at 25.00 ft	25					
					3	0 0 0	< 0.25 P	286									
		--methane odor--			4	0 0 0	< 0.25 P	337									
		--L _L (%)=NP, P _L (%)=NP-- --%Gravel=0.0-- --%Sand=52.6-- --%Silt=45.1-- --%Clay=2.3-- --A-4 (0)-- --methane odor--			5	0 0 0	< 0.25 P	752									
					6	0 0 0	< 0.25 P	232									
			15														
	818.4	Very loose, gray SILT, trace gravel; moist to wet --RDR 1--			7	0 0 0	< 0.25 P	140									
					8	0 0 0	< 0.25 P	18									
			20														

GENERAL NOTES

Begin Drilling **02-04-2022** Complete Drilling **02-04-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **21D50A [84%]**
Driller **KS&AP** Logger **A. Scifers** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; Boring backfilled upon completion**

WATER LEVEL DATA

While Drilling **0.50 ft**
At Completion of Drilling **0.50 ft**
Time After Drilling **NA**
Depth to Water **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG DPB-02-ST

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
Project **Barrington Rd from Algonquin Rd to Central Rd**
Location **Cook County, IL**

Datum: NAVD 88
Elevation: 835.53 ft
North: 1976381.70 ft
East: 1036486.50 ft
Station: 84+40.96
Offset: 48.36 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		Very soft, black PEAT to Organic CLAY LOAM, trace gravel; moist to saturated --organic content: 48.4%--	0		1	PUSH	< 0.25 P	265									
			5														
		--organic content: 200.0%-- --L _L (%)=NP, P _L (%)=NP-- --%Gravel=0.2-- --%Sand=36.4-- --%Silt=42.4-- --%Clay=21.0-- --A-4 (0)--			2	PUSH	< 0.25 P	440									
	826.0	Very soft, black PEAT to Organic SILTY CLAY, trace gravel; moist to saturated --organic content: 56.4%--	10		3	PUSH	< 0.25 P	506									
			15														
					4	PUSH	< 0.25 P										
	817.5	Boring terminated at 18.00 ft	20														

GENERAL NOTES

Begin Drilling **02-07-2022** Complete Drilling **02-07-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **21D50A [84%]**
Driller **KS&AP** Logger **A. Scifers** Checked by **C. Marin**
Drilling Method **3" ID Shelby Tube; Boring backfilled upon completion**

WATER LEVEL DATA

While Drilling **0.50 ft**
At Completion of Drilling **0.50 ft**
Time After Drilling **NA**
Depth to Water **NA**
The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG DPB-03

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
Project **Barrington Rd from Algonquin Rd to Central Rd**
Location **Cook County, IL**

Datum: NAVD 88
Elevation: 836.71 ft
North: 1976550.22 ft
East: 1036490.90 ft
Station: 86+09.46
Offset: 53.48 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	836.1	7-inch thick, black SILTY CLAY, trace gravel															
		--TOPSOIL--															
		Soft, black and gray Organic SILTY CLAY, trace gravel; moist			1	2 1 2	0.49 B	73									
	833.7	Very soft, black PEAT, trace gravel; moist to saturated			2	1 1 1	< 0.25 P	597									
		--RDR 1--	5														
		--methane odor--			3	0 0 0	< 0.25 P	662									
		--methane odor--			4	0 0 0	< 0.25 P	445									
	826.2	Very soft, black Organic SILTY CLAY; moist			5	0 0 0	< 0.25 P	135									
	823.7	Soft, gray CLAY to SILTY CLAY; moist			6	0 0 0	0.49 B	21									
	821.2	Stiff, gray SILTY CLAY, trace gravel; moist			7	3 4 6	1.48 B	20									
		--RDR 2--	15														
		--RDR 2--	20		8	2 3 4	1.48 B	24									
	816.7	Boring terminated at 20.00 ft															

GENERAL NOTES

Begin Drilling **02-04-2022** Complete Drilling **02-04-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **21D50A [84%]**
Driller **KS&AP** Logger **A. Scifers** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; Boring backfilled upon completion**

WATER LEVEL DATA

While Drilling **3.50 ft**
At Completion of Drilling **Dry**
Time After Drilling **NA**
Depth to Water **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG DPB-03-ST

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
Project **Barrington Rd from Algonquin Rd to Central Rd**
Location **Cook County, IL**

Datum: NAVD 88
Elevation: 836.76 ft
North: 1976555.22 ft
East: 1036490.90 ft
Station: 86+14.46
Offset: 53.51 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	836.0	9-inch thick TOPSOIL															
		Very soft, black PEAT, trace gravel; moist --organic content: 32.8%--			1	PUSH	< 0.25 P	142									
			5														
		--organic content: 61.0%--			2	PUSH	< 0.25 P	508									
	827.3	Very soft, dark gray PEAT to Organic SILTY CLAY, trace gravel; moist --organic content: 12.8%--	10		3	PUSH	< 0.25 P	118									
	823.8	Boring terminated at 13.00 ft															
			15														
			20														

GENERAL NOTES

Begin Drilling **02-07-2022** Complete Drilling **02-07-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **21D50A [84%]**
Driller **KS&AP** Logger **A. Scifers** Checked by **C. Marin**
Drilling Method **3" ID Shelby Tube; Boring backfilled upon completion**

WATER LEVEL DATA

While Drilling **NA**
At Completion of Drilling **NA**
Time After Drilling **NA**
Depth to Water **NA**
The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG DPB-04

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
Project **Barrington Rd from Algonquin Rd to Central Rd**
Location **Cook County, IL**

Datum: NAVD 88
Elevation: 838.41 ft
North: 1976724.08 ft
East: 1036488.32 ft
Station: 87+82.89
Offset: 52.36 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	837.4	12-inch thick, black SILTY CLAY, trace gravel															
		--TOPSOIL--															
		Stiff to hard, brown to gray SILTY CLAY, trace gravel; moist			1	3 4 5	2.46 B	23									
		--RDR 2--															
		--wet spoon--			2	2 3 6	2.87 B	22									
			5														
					3	7 8 12	5.00 B	20									
					4	4 5 8	2.38 B	18									
			10														
					5	3 4 6	1.23 B	18									
					6	5 9 12	2.50 P	15									
	823.8	Gray SILT, trace gravel; saturated	15														
		--RDR 2--			7	5 6 8	0.90 B	14									
	822.3	Medium stiff, gray SILTY CLAY, trace gravel; moist															
		--RDR 2--			8	5 6 9	1.72 B	12									
	820.4	Stiff, gray SILTY LOAM to SILTY CLAY LOAM, trace gravel; moist															
		--RDR 2--															
	818.4		20														
		Boring terminated at 20.00 ft															

GENERAL NOTES

Begin Drilling **02-04-2022** Complete Drilling **02-04-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **21D50A [84%]**
Driller **KS&AP** Logger **A. Scifers** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; Boring backfilled upon completion**

WATER LEVEL DATA

While Drilling **3.50 ft**
At Completion of Drilling **Dry**
Time After Drilling **NA**
Depth to Water **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG DPB-05

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
Project **Barrington Rd from Algonquin Rd to Central Rd**
Location **Cook County, IL**

Datum: NAVD 88
Elevation: 840.43 ft
North: 1976895.29 ft
East: 1036491.71 ft
Station: 89+54.04
Offset: 57.92 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	839.4	12-inch thick, black SILTY CLAY, trace gravel															
		--TOPSOIL--															
		Stiff, black SILTY CLAY, some organic matter; moist			1	4 4 3	1.00 P	42									
		--RDR 2--															
					2	4 2 3	1.15 B	34									
	834.9	Very stiff to hard, gray SILTY CLAY, trace gravel; moist															
		--RDR 2--			3	3 4 6	3.12 B	22									
					4	3 7 9	4.18 B	20									
		--wet spoon--			5	6 8 9	3.28 B	20									
					6	3 6 11	4.26 B	19									
					7	3 6 8	2.05 B	20									
					8	4 5 11	3.44 B	18									
	820.4	Boring terminated at 20.00 ft	20														

GENERAL NOTES

Begin Drilling **02-04-2022** Complete Drilling **02-04-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **21D50A [84%]**
Driller **KS&AP** Logger **A. Scifers** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; Boring backfilled upon completion**

WATER LEVEL DATA

While Drilling **11.00 ft**
At Completion of Drilling **Dry**
Time After Drilling **NA**
Depth to Water **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG DPB-06

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
Project **Barrington Rd from Algonquin Rd to Central Rd**
Location **Cook County, IL**

Datum: NAVD 88
Elevation: 842.69 ft
North: 1977075.45 ft
East: 1036494.09 ft
Station: 91+34.16
Offset: 62.60 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	841.7	12-inch thick, black CLAY LOAM; damp															
		--TOPSOIL--															
		Stiff, black and gray SANDY LOAM, trace gravel and few brick fragments; moist			1	12 10 9	1.00 P	21									
	839.7	--FILL--															
		--RDR 2--															
		Very stiff, black SILTY CLAY, trace organic matter; moist			2	6 5 5	2.21 B	36									
		--Buried TOPSOIL--															
		--RDR 2--			5												
	837.2	Medium stiff, brown and gray CLAY to SILTY CLAY, trace gravel; moist			3	5 4 3	0.66 B	30									
		--RDR 2--															
		--L _L (%)=46, P _L (%)=17--															
		--%Gravel=2.5--															
		--%Sand=9.9--															
		--%Silt=55.4--															
		--%Clay=32.2--															
		--A-7-6 (21)--															
	834.7	Stiff to hard, gray SILTY CLAY to SILTY CLAY LOAM, trace gravel; damp			4	7 8 12	1.56 B	19									
		--RDR 2--															
					5	7 8 10	4.43 B	17									
		--wet spoon--															
					6	6 10 9	3.20 B	18									
					7	5 7 11	3.85 B	15									
					8	6 8 12	3.12 B	15									
	822.7	Boring terminated at 20.00 ft															

GENERAL NOTES

Begin Drilling **02-03-2022** Complete Drilling **02-03-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **21D50A [84%]**
Driller **KS&AP** Logger **A. Scifers** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; Boring backfilled upon completion**

WATER LEVEL DATA

While Drilling **13.50 ft**
At Completion of Drilling **Dry**
Time After Drilling **NA**
Depth to Water **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG NB-SGB-01

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
 Project **Barrington Rd from Algonquin Rd to Central Rd**
 Location **Cook County, IL**

Datum: NAVD 88
Elevation: 848.67 ft
North: 1972633.82 ft
East: 1036501.15 ft
Station: 46+92.98
Offset: 54.74 RT

[illegible]



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG NB-SGB-02

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
Project **Barrington Rd from Algonquin Rd to Central Rd**
Location **Cook County, IL**

Datum: NAVD 88
Elevation: 845.46 ft
North: 1973228.16 ft
East: 1036480.01 ft
Station: 52+88.27
Offset: 32.50 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	844.8	8-inch thick, black SILTY CLAY --TOPSOIL-- Stiff to very stiff, black and brown SILTY CLAY, trace gravel; moist --FILL-- --RDR 2-- --L _L (%)=47, P _L (%)=16-- --%Gravel=3.2-- --%Sand=14.4-- --%Silt=50.6-- --%Clay=31.8-- --A-7-6 (25)--			1	11 6 4 5	2.05 B	22									
	841.7				2	3 3 4 5	1.39 B	26									
	840.0	Medium stiff, brown and gray CLAY to SILTY CLAY; moist --RDR 2-- Very stiff to hard, brown to gray SILTY CLAY, trace gravel; moist --RDR 2--			3	2 3 4 4	0.98 B	25									
					4	5 8 10 10	4.10 B	15									
					5	5 9 11 13	4.43 B	21									
					6	10 11 12 12	4.00 P	15									
					7	5 8 9 11	4.10 B	17									
					8	7 8 10 12	2.62 B	16									
	829.5	Boring terminated at 16.00 ft															

GENERAL NOTES

Begin Drilling **02-14-2022** Complete Drilling **02-14-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **21D50A [84%]**
Driller **KS&AP** Logger **A. Scifers** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; Boring backfilled upon completion**

WATER LEVEL DATA

While Drilling **▼** **Dry**
At Completion of Drilling **▼** **Dry**
Time After Drilling **NA**
Depth to Water **▼** **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG NB-SGB-03

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
 Project **Barrington Rd from Algonquin Rd to Central Rd**
 Location **Cook County, IL**

Datum: NAVD 88
Elevation: 853.37 ft
North: 1973830.19 ft
East: 1036482.19 ft
Station: 58+89.49
Offset: 32.97 RT

[illegible]

GENERAL NOTES

Begin Drilling	02-14-2022	Complete Drilling	02-14-2022
Drilling Contractor	Wang Testing Services	Drill Rig	21D50A [84%]
Driller	KS&AP	Logger	A. Scifers
		Checked by	C. Marin
Drilling Method	2.25" ID HSA; Boring backfilled upon completion		

WATER LEVEL DATA

While Drilling		Dry
At Completion of Drilling		Dry
Time After Drilling	NA	
Depth to Water		NA

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG NB-SGB-04

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
Project **Barrington Rd from Algonquin Rd to Central Rd**
Location **Cook County, IL**

Datum: NAVD 88
Elevation: 854.84 ft
North: 1974451.30 ft
East: 1036478.83 ft
Station: 65+10.61
Offset: 32.31 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	854.3	7-inch thick, black SILTY CLAY; moist				3											
		--TOPSOIL--			1	1	0.98	45									
	853.1	Medium stiff, black and brown SILTY CLAY, trace gravel; moist				3	B										
		--FILL--				4											
		--RDR 2--			2	5	4.51	18									
	851.3	Hard, brown and gray CLAY LOAM to SILTY CLAY LOAM, trace gravel; moist				4	B										
		--FILL--				5											
		--RDR 2--			3	6	0.57	75									
	849.3	Medium stiff, gray Gravelly SILTY CLAY, trace organic matter; moist				9	B										
		--RDR 2--				11											
		--L _L (%)=39, P _L (%)=19--				13											
		--%Gravel=20.8--				5	4.35	19									
		--%Sand=11.9--				9	B										
		--%Silt=41.2--				11											
		--%Clay=26.2--				16											
	846.1	Very stiff to hard, gray SILTY CLAY, trace gravel; moist			5	5	NP	14									
		--RDR 2--				6											
	844.4	Medium dense, gray SILT, trace gravel; moist				7	NP	15									
		--RDR 2--			6	10											
		Stiff to very stiff, gray SILTY CLAY, trace gravel; moist				8	1.31	18									
		--RDR 2--			7	4	B										
						4											
						8	1.23	19									
						8	B										
	838.8	Boring terminated at 16.00 ft				9											

GENERAL NOTES

Begin Drilling **02-14-2022** Complete Drilling **02-14-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **21D50A [84%]**
Driller **KS&AP** Logger **A. Scifers** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; Boring backfilled upon completion**

WATER LEVEL DATA

While Drilling **▽** **Dry**
At Completion of Drilling **▼** **Dry**
Time After Drilling **NA**
Depth to Water **▼** **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG NB-SGB-05

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
 Project **Barrington Rd from Algonquin Rd to Central Rd**
 Location **Cook County, IL**

Datum: NAVD 88
Elevation: 855.21 ft
North: 1974671.25 ft
East: 1036485.72 ft
Station: 67+30.53
Offset: 40.16 RT

[illegible]

GENERAL NOTES

Begin Drilling **02-15-2022** Complete Drilling **02-15-2022**
 Drilling Contractor **Wang Testing Services** Drill Rig **21D50A [84%]**
 Driller **KS&AP** Logger **A. Scifers** Checked by **C. Marin**
 Drilling Method **2.25" ID HSA; Boring backfilled upon completion**

WATER LEVEL DATA

While Drilling		12.00 ft
At Completion of Drilling		Dry
Time After Drilling	NA	
Depth to Water		NA

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG NB-SGB-06

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
Project **Barrington Rd from Algonquin Rd to Central Rd**
Location **Cook County, IL**

Datum: NAVD 88
Elevation: 854.39 ft
North: 1974758.06 ft
East: 1036483.55 ft
Station: 68+17.34
Offset: 38.36 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	853.7	8-inch thick, stiff, black SILTY CLAY				6											
	852.9	--TOPSOIL--			1	2	1.00	68									
		Black LOAM to SANDY LOAM, trace gravel				2											
		Medium stiff, brown and gray CLAY to SILTY CLAY; moist			2	3	0.75	32									
	850.9	--RDR 2--				2											
		--L _L (%)=46, P _L (%)=15--				2											
		--%Gravel=0.6--				4											
		--%Sand=7.8--				3											
		--%Silt=58.9--			3	4	1.97	21									
		--%Clay=32.8--				6											
		--A-7-6 (29)--				7											
		Stiff to very stiff, brown to gray SILTY CLAY to SILTY CLAY LOAM, trace gravel; moist			4	4	2.13	17									
		--RDR 2--				6											
					5	6	2.71	17									
						9											
						10											
					6	11	3.12	17									
						10											
						14											
					7	4	2.21	17									
						4											
						8											
						10											
					8	8	2.46	18									
						8											
						10											
	838.4	Boring terminated at 16.00 ft															

GENERAL NOTES

Begin Drilling **02-15-2022** Complete Drilling **02-15-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **21D50A [84%]**
Driller **KS&AP** Logger **A. Scifers** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; Boring backfilled upon completion**

WATER LEVEL DATA

While Drilling **▼** **Dry**
At Completion of Drilling **▼** **Dry**
Time After Drilling **NA**
Depth to Water **▼** **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG NB-SGB-07

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
Project **Barrington Rd from Algonquin Rd to Central Rd**
Location **Cook County, IL**

Datum: NAVD 88
Elevation: 863.31 ft
North: 1975042.29 ft
East: 1036456.54 ft
Station: 71+01.69
Offset: 12.58 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	
	863.04	4-inch thick, black SANDY LOAM, some gravel; damp --TOPSOIL-- Stiff to hard, black and dark gray to brown and gray SILTY CLAY, trace to little gravel; moist --FILL-- --RDR 2-- --sand seam--			1	37 11 6 12	> 4.50 P	19										
				2	7 4 5 7	1.97 B												20
					3		4 5 7 10	3.94 B										
					4	8 11 16 18	8.04 B											20
					5	10 11 16 17		7.22 B										
	853.6	Hard, brown to gray SILTY CLAY, trace gravel; moist --RDR 2--	10		6	12 14 19 21	6.15 B											17
					7	3 12 12 10		4.02 B										
						8	10 11 15 14											5.82 B
	847.3		Boring terminated at 16.00 ft															



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG NB-SGB-08

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
Project **Barrington Rd from Algonquin Rd to Central Rd**
Location **Cook County, IL**

Datum: NAVD 88
Elevation: 861.60 ft
North: 1975636.88 ft
East: 1036450.28 ft
Station: 76+96.30
Offset: 8.90 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type <i>recovery</i>	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type <i>recovery</i>	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	861.43	1.43-inch thick, black SILTY CLAY --TOPSOIL-- Stiff to hard, brown to gray SILTY CLAY to SILTY CLAY LOAM, trace gravel; damp to moist --RDR 2-- --gravelly sand seam; wet--	0	X	1	22 31 21 8	> P 4.50	8									
			~1.5	X	2	6 5 9 12	B 4.26	21									
			5	X	3	2 3 7 9	B 3.53	19									
			~6.5	X	4	5 7 9 10	B 3.94	16									
			~9.5	X	5	5 7 8 10	B 3.28	14									
			10	X	6	5 9 10 9	B 1.97	16									
			~13.5	X	7	2 4 6 8	B 1.56	17									
			15	X	8	4 7 6 8	B 1.97	18									
	845.6	Boring terminated at 16.00 ft															
GENERAL NOTES										WATER LEVEL DATA							
Begin Drilling 02-15-2022 Complete Drilling 02-15-2022										While Drilling ▽..... Dry							
Drilling Contractor Wang Testing Services Drill Rig 21D50A [84%]										At Completion of Drilling ▼..... Dry							
Driller KS&AP Logger A. Scifers Checked by C. Marin										Time After Drilling NA							
Drilling Method 2.25" ID HSA; Boring backfilled upon completion										Depth to Water ▾..... NA							
The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual																	



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG NB-SGB-09

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
Project **Barrington Rd from Algonquin Rd to Central Rd**
Location **Cook County, IL**

Datum: NAVD 88
Elevation: 849.58 ft
North: 1977449.65 ft
East: 1036465.12 ft
Station: 95+08.69
Offset: 38.38 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	848.8	9-inch thick TOPSOIL				13											
		Stiff to hard, black and gray to brown and gray CLAY LOAM to SILTY CLAY LOAM, trace gravel; moist			1	9 6 7	3.44 B	16									
		--FILL-- --RDR 2--			2	5 7 11 11	5.99 B	15									
		--sand seams; wet--															
	844.1		5		3	3 4 3 3	1.31 B	12									
		Medium stiff, gray to black and gray SILTY CLAY to SILTY CLAY LOAM, trace gravel; moist															
		--RDR 2--			4	2 2 2 3	0.66 B	18									
		--L _L (%)=36, P _L (%)=17-- --%Gravel=2.6-- --%Sand=13.6-- --%Silt=53.3-- --%Clay=30.6--			5	2 3 4 4	0.98 B	26									
	839.8	--A-6 (15)--	10														
		Medium stiff to stiff, black, dark gray, and gray CLAY to SILTY CLAY, trace gravel; moist			6	6 5 6 5	1.23 B	29									
		--RDR 2--															
					7	4 5 4 6	0.82 B	24									
	835.7																
		Very stiff, gray SILTY CLAY to SILTY CLAY LOAM, trace gravel; moist															
		--RDR 2--	15		8	5 5 9 9	3.20 B	18									
	833.6																
		Boring terminated at 16.00 ft															

GENERAL NOTES

Begin Drilling **02-01-2022** Complete Drilling **02-01-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **21D50A [84%]**
Driller **KS&AP** Logger **A. Scifers** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; Boring backfilled upon completion**

WATER LEVEL DATA

While Drilling **▽** **Dry**
At Completion of Drilling **▼** **Dry**
Time After Drilling **NA**
Depth to Water **▼** **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG NB-SGB-10

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
Project **Barrington Rd from Algonquin Rd to Central Rd**
Location **Cook County, IL**

Datum: NAVD 88
Elevation: 864.76 ft
North: 1978337.45 ft
East: 1036465.58 ft
Station: 103+96.92
Offset: 42.00 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	863.8	12-inch thick, hard, black and brown SILTY CLAY, trace gravel; moist --TOPSOIL--			1	13 5 6 8	4.50 P	17									
		Stiff to hard, brown to gray SILTY CLAY, trace gravel; damp to moist --RDR 2--			2	6 7 11 15	7.13 B	18									
			5		3	4 7 10 12	5.25 B	19									
					4	5 9 11 11	4.43 B	18									
					5	4 7 10 12	6.97 B	20									
			10		6	7 10 11 12	4.02 B	17									
					7	2 4 6 8	2.79 B	16									
			15		8	5 5 7 8	1.80 B	17									
	848.8	Boring terminated at 16.00 ft															
			20														

GENERAL NOTES

Begin Drilling **01-27-2022** Complete Drilling **01-27-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **21D50A [84%]**
Driller **KS&AP** Logger **A. Scifers** Checked by **C. Marin**
Drilling Method **3.25" ID HSA; Boring backfilled upon completion**

WATER LEVEL DATA

While Drilling **▽** **Dry**
At Completion of Drilling **▼** **Dry**
Time After Drilling **NA**
Depth to Water **▼** **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG NB-SGB-11

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
Project **Barrington Rd from Algonquin Rd to Central Rd**
Location **Cook County, IL**

Datum: NAVD 88
Elevation: 861.54 ft
North: 1978925.76 ft
East: 1036454.33 ft
Station: 109+85.25
Offset: 31.81 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	861.0	7-inch thick TOPSOIL				36											
		Hard, brown and gray SILTY CLAY to CLAY LOAM, trace gravel; damp to moist			1	14 8 11	5.25 B	18									
		--FILL-- --RDR 2--			2	8 9 14 18	5.99 B	19									
			5		3	4 6 9 12	4.92 B	20									
	855.5	Stiff to hard, gray SILTY CLAY, trace gravel; moist			4	6 9 13 17	5.90 B	17									
		--RDR 2--			5	4 5 9 10	4.26 B	17									
		--brown and gray--	10		6	16 9 14 11	5.00 S	17									
					7	6 6 7 8	1.89 B	19									
			15		8	6 5 6 7	2.71 B	18									
	845.5	Boring terminated at 16.00 ft															
			20														

GENERAL NOTES

Begin Drilling **01-27-2022** Complete Drilling **01-27-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **21D50A [84%]**
Driller **KS&AP** Logger **A. Scifers** Checked by **C. Marin**
Drilling Method **3.25" ID HSA; Boring backfilled upon completion**

WATER LEVEL DATA

While Drilling **▽** **Dry**
At Completion of Drilling **▼** **Dry**
Time After Drilling **NA**
Depth to Water **▼** **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG PSE-01

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
Project **Barrington Rd from Algonquin Rd to Central Rd**
Location **Cook County, IL**

Datum: NAVD 88
Elevation: 849.54 ft
North: 1975883.52 ft
East: 1036403.87 ft
Station: 79+43.14 R2
Offset: 36.43 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type <i>recovery</i>	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type <i>recovery</i>	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	
	849.1	5-inch thick, black SILTY CLAY --TOPSOIL--																
	848.6	6-inch thick SANDY GRAVEL --FILL--																
		Stiff to very stiff, brown and gray SILTY CLAY, trace gravel; damp --FILL-- --RDR 2--			1	3 2 3	2.00 P	18						9	5 5 7	2.05 B	24	
			5		2	3 3 4	1.50 P	22				25		10	4 5 7	2.87 B	22	
					3	2 4 6	2.62 B	20						11	4 5 7	1.80 B	19	
	840.5	Medium stiff (0.50P), black CLAY, trace gravel, fibers and organics --RDR 2--	10		4	2 5 7	1.50 P	24				30		12	5 4 8	1.39 B	19	
	839.0	Loose, brown and gray LOAM, trace gravel; damp --RDR 2--			5	4 4 3	3.00 P	7										
	836.5	Hard, brown and gray SILTY CLAY LOAM, trace gravel; damp --RDR 2--	15		6	10 13 10	7.71 B	15				35		13	5 5 5	1.31 B	21	
				7	6 7 11	4.51 B	17											
831.5	Medium stiff to very stiff, brown to gray SILTY CLAY, trace gravel; damp --RDR 2--	20		8	5 7 11	3.44 B	20						14	3 3 5	0.90 B	22		
											--L _L (%)=32, P _L (%)=16-- --%Gravel=2.3-- --%Sand=8.9--							

GENERAL NOTES

Begin Drilling **04-18-2024** Complete Drilling **04-18-2024**
 Drilling Contractor **Wang Testing Services** Drill Rig **20D50T [80%]**
 Driller **RH&JD** Logger **M. Rojo** Checked by **J. Bensen**
 Drilling Method **3.25" ID HSA; Boring backfilled upon completion**

WATER LEVEL DATA

While Drilling		Dry
At Completion of Drilling		Dry
Time After Drilling	NA	
Depth to Water		NA

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG PSE-01

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
Project **Barrington Rd from Algonquin Rd to Central Rd**
Location **Cook County, IL**

Datum: NAVD 88
Elevation: 849.54 ft
North: 1975883.52 ft
East: 1036403.87 ft
Station: 79+43.14 R2
Offset: 36.43 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		--%Silt=52.8-- --%Clay=35.9-- --A-6 (13)--															
			45		15	7 11 13	NR			784.5		65		19	11 9 10	2.05 B	20
											Boring terminated at 65.00 ft						
			50		16	8 5 6	1.50 P	18				70					
			55		17	7 8 9	1.97 B	19				75					
			60		18	6 8 9	2.05 B	21				80					

GENERAL NOTES

Begin Drilling **04-18-2024** Complete Drilling **04-18-2024**
Drilling Contractor **Wang Testing Services** Drill Rig **20D50T [80%]**
Driller **RH&JD** Logger **M. Rojo** Checked by **J. Bensen**
Drilling Method **3.25" ID HSA; Boring backfilled upon completion**

WATER LEVEL DATA

While Drilling **▽** **Dry**
At Completion of Drilling **▼** **Dry**
Time After Drilling **NA**
Depth to Water **▼** **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG PSE-02

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
Project **Barrington Rd from Algonquin Rd to Central Rd**
Location **Cook County, IL**

Datum: NAVD 88
Elevation: 846.19 ft
North: 1975958.12 ft
East: 1036400.08 ft
Station: 80+17.75 R2
Offset: 39.90 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	846.02	0.2-inch thick, black SILTY LOAM															
	845.2	--TOPSOIL--															
		10-inch thick, gray Gravelly LOAM															
		Medium stiff to stiff, brown, gray, and black CLAY to SILTY CLAY, trace gravel			1	3 3 3	1.00 P	19						9	3 4 6	2.21 B	16
		--FILL--															
		--RDR 1-2--			2	1 3 3	0.75 P	22						10	4 6 7	3.20 B	13
			5														
					3	2 2 4	0.82 B	26						11	2 4 5	1.64 B	19
					4	4 5 5	1.89 B	29						12	3 4 5	1.48 B	22
			10														
	835.7	Medium stiff, dark brown Organic CLAY; wet															
		--2-inch thick sand seam; wet--			5	1 1 1	0.57 B	75									
		--RDR 1--															
					6	1 1 2	0.57 B	87						13	2 4 8	1.56 B	20
			15														
	830.7	Stiff to very stiff, gray SILTY CLAY to SILTY CLAY LOAM, trace gravel; damp															
		--RDR-2--			7	2 3 5	1.64 B	20									
					8	4 7 9	1.62 B	19						14	5 5 7	1.48 B	20
			20														

GENERAL NOTES

Begin Drilling **04-16-2024** Complete Drilling **04-18-2024**
Drilling Contractor **Wang Testing Services** Drill Rig **20D50T [80%]**
Driller **RH&JD** Logger **F. Bozga** Checked by **J. Bensen**
Drilling Method **2.25" ID HSA; Boring backfilled upon completion**

WATER LEVEL DATA

While Drilling **11.50 ft**
At Completion of Drilling **mud**
Time After Drilling **NA**
Depth to Water **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG PSE-02

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
Project **Barrington Rd from Algonquin Rd to Central Rd**
Location **Cook County, IL**

Datum: NAVD 88
Elevation: 846.19 ft
North: 1975958.12 ft
East: 1036400.08 ft
Station: 80+17.75 R2
Offset: 39.90 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
			45		15	5 5 6	1.31 B	20		781.2		65		19	6 10 11	1.23 B	21
											Boring terminated at 65.00 ft						
			50		16	4 7 9	1.64 B	17				70					
			55		17	8 9 11	3.20 B	21				75					
			60		18	7 9 9	2.05 B	20				80					

GENERAL NOTES

Begin Drilling **04-16-2024** Complete Drilling **04-18-2024**
Drilling Contractor **Wang Testing Services** Drill Rig **20D50T [80%]**
Driller **RH&JD** Logger **F. Bozga** Checked by **J. Bensen**
Drilling Method **2.25" ID HSA; Boring backfilled upon completion**

WATER LEVEL DATA

While Drilling **11.50 ft**
At Completion of Drilling **mud**
Time After Drilling **NA**
Depth to Water **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG PSE-03

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
Project **Barrington Rd from Algonquin Rd to Central Rd**
Location **Cook County, IL**

Datum: NAVD 88
Elevation: 843.05 ft
North: 1976037.92 ft
East: 1036399.03 ft
Station: 80+97.56 R2
Offset: 40.60 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	842.74	14-inch thick, black SILTY CLAY									--RDR 1--						
	842.1	--TOPSOIL--															
		8-inch thick, gray SANDY GRAVEL; damp			1	2 3 4	1.75 P	20						9	0 0 1	0.66 B	67
		--FILL--															
		Stiff, brown and gray SILTY CLAY, trace gravel															
		--FILL--															
		--RDR 1-2--			2	2 2 2	1.07 B	18						10	1 2 5	0.49 B	25
	837.6	Medium stiff to stiff, brown and gray CLAY, trace gravel															
		--FILL--															
		--RDR 1-2--			3	2 2 4	0.75 P	22						11	3 4 6	1.64 B	19
		--L _L (%)=46, P _L (%)=19--															
		--%Gravel=1.7--															
		--%Sand=10.8--															
		--%Silt=45.2--															
		--%Clay=42.3--															
		--A-7-6 (24)--															
		--brown, gray, and black--															
	827.6	Medium stiff to stiff, dark brown PEAT															
		--RDR 1--															
	824.1	Medium stiff, dark gray to dark brown Organic CLAY															
					8	0 0 0	0.82 B	70						14	5 7 9	2.38 B	18

GENERAL NOTES

Begin Drilling **04-16-2024** Complete Drilling **04-16-2024**
Drilling Contractor **Wang Testing Services** Drill Rig **20D50T [80%]**
Driller **RH&JD** Logger **F. Bozga** Checked by **J. Bensen**
Drilling Method **3.25" ID HSA; Boring backfilled upon completion**

WATER LEVEL DATA

While Drilling **▽** **Dry**
At Completion of Drilling **▼** **Dry**
Time After Drilling **NA**
Depth to Water **▼** **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG PSE-03

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
Project **Barrington Rd from Algonquin Rd to Central Rd**
Location **Cook County, IL**

Datum: NAVD 88
Elevation: 843.05 ft
North: 1976037.92 ft
East: 1036399.03 ft
Station: 80+97.56 R2
Offset: 40.60 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
			45		15	6 6 7	2.13 B	16		778.1		65		19	6 8 10	2.21 B	17
											Boring terminated at 65.00 ft						
			50		16	4 5 7	1.64 B	18				70					
			55		17	6 9 10	1.89 B	18				75					
			60		18	8 8 12	3.28 B	16				80					

GENERAL NOTES

Begin Drilling **04-16-2024** Complete Drilling **04-16-2024**
Drilling Contractor **Wang Testing Services** Drill Rig **20D50T [80%]**
Driller **RH&JD** Logger **F. Bozga** Checked by **J. Bensen**
Drilling Method **3.25" ID HSA; Boring backfilled upon completion**

WATER LEVEL DATA

While Drilling **▽** **Dry**
At Completion of Drilling **▼** **Dry**
Time After Drilling **NA**
Depth to Water **▼** **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG PSE-04

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
Project **Barrington Rd from Algonquin Rd to Central Rd**
Location **Cook County, IL**

Datum: NAVD 88
Elevation: 842.11 ft
North: 1976102.67 ft
East: 1036397.25 ft
Station: 81+62.32 R2
Offset: 42.11 LT

Page 1 of 2

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	842.1	10.5-inch thick TOPSOIL									--RDR 2--						
	841.2	10-inch thick Gravelly SAND															
		--FILL--															
		Medium stiff to stiff, gray CLAY LOAM, some gravel; damp			1	3 3 4	0.50 P	10						9	3 4 7	2.87 B	18
		--FILL--															
					2	2 2 2	1.00 P	11						10	3 4 5	3.12 B	18
	836.6	Soft to stiff, gray and brown CLAY, trace to some gravel; damp															
		--FILL--			3	2 1 3	0.41 B	22						11	4 6 12	2.95 B	21
		--RDR 2--															
					4	2 3 3	1.89 B	23						12	4 6 8	6.72 B	15
					5	2 2 3	1.50 P	23									
	828.5	Soft, brown PEAT; damp															
		--RDR 2--			6	1 2 3	0.41 B	123						13	4 7 9	4.92 B	18
	826.6	Gray SILTY LOAM; damp															
	826.0	Soft, brown PEAT; damp															
		--RDR 2--			7	0 0 3	0.25 P	126									
	823.0	Stiff to hard, brown to gray SILTY CLAY, trace to little gravel; damp															
					8	1 4 6	1.48 B	17						14	4 5 7	2.21 B	18

GENERAL NOTES

Begin Drilling **04-15-2024** Complete Drilling **04-16-2024**
Drilling Contractor **Wang Testing Services** Drill Rig **20D50T [80%]**
Driller **RH&JD** Logger **I. Romero** Checked by **J. Bensen**
Drilling Method **3.25" ID HSA; Boring backfilled upon completion**

WATER LEVEL DATA

While Drilling **46.50 ft**
At Completion of Drilling **48.00 ft**
Time After Drilling **NA**
Depth to Water **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG PSE-04

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
Project **Barrington Rd from Algonquin Rd to Central Rd**
Location **Cook County, IL**

Datum: NAVD 88
Elevation: 842.11 ft
North: 1976102.67 ft
East: 1036397.25 ft
Station: 81+62.32 R2
Offset: 42.11 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
			45		15	4 6 9	1.97 B	19		777.1		65		19	7 11 14	2.13 B	21
		--wet rods; possible granular lens--									Boring terminated at 65.00 ft						
			50		16	50/6"	2.54 B	18				70					
			55		17	5 8 10	3.20 B	19				75					
			60		18	5 9 10	2.21 B	20				80					

GENERAL NOTES

Begin Drilling **04-15-2024** Complete Drilling **04-16-2024**
Drilling Contractor **Wang Testing Services** Drill Rig **20D50T [80%]**
Driller **RH&JD** Logger **I. Romero** Checked by **J. Bensen**
Drilling Method **3.25" ID HSA; Boring backfilled upon completion**

WATER LEVEL DATA

While Drilling **46.50 ft**
At Completion of Drilling **48.00 ft**
Time After Drilling **NA**
Depth to Water **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG PSE-05

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
Project **Barrington Rd from Algonquin Rd to Central Rd**
Location **Cook County, IL**

Datum: NAVD 88
Elevation: 841.02 ft
North: 1976182.25 ft
East: 1036398.06 ft
Station: 82+41.89 R2
Offset: 40.95 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	840.92	2-inch thick, black TOPSOIL															
	840.28	28-inch thick Gravelly SAND															
		--FILL--															
		Very soft to medium stiff, gray and brown CLAY to SILTY CLAY, trace to little gravel; moist			1	3 3 3	0.16 B	22						9	3 5 7	2.54 B	18
		--FILL--															
		--RDR 2--															
					2	2 2 2	0.57 B	21						10	3 3 5	0.57 B	16
			5														
		--L _L (%)=44, P _L (%)=18--															
		--%Gravel=4.0--															
		--%Sand=9.9--															
		--%Silt=47.0--															
		--%Clay=39.2--															
		--A-7-6 (23)--															
					3	1 3 3	0.82 B	27						11	3 4 5	1.07 B	18
					4	2 3 4	0.98 B	25						12	6 9 5	1.00 P	12
			10														
	830.5	Medium stiff, brown PEAT, trace gravel and organics; damp															
		--RDR-2--															
					5	1 2 2	0.50 P	209									
	828.0	Medium stiff, gray SILTY CLAY, little gravel; damp															
		--RDR-2--															
					6	2 2 2	0.66 B	19						13	11 4 5	0.66 B	8
			15														
	825.5	Very loose, gray SILT; saturated															
		--RDR-2--															
					7	1 1 2	0.25 P	38									
	823.0	Medium stiff to very stiff, gray SILTY CLAY, trace gravel; damp to moist															
		--RDR-2--															
					8	2 4 5	1.39 B	22						14	8 10 9	NP	16
			20														

GENERAL NOTES

Begin Drilling **04-15-2024** Complete Drilling **04-15-2024**
Drilling Contractor **Wang Testing Services** Drill Rig **20D50T [80%]**
Driller **RH&JD** Logger **I. Romero** Checked by **J. Bensen**
Drilling Method **2.25" ID HSA to 16', mud rotary thereafter; Boring**
backfilled upon completion

WATER LEVEL DATA

While Drilling **15.50 ft**
At Completion of Drilling **mud**
Time After Drilling **NA**
Depth to Water **NA**
The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG PSE-05

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
Project **Barrington Rd from Algonquin Rd to Central Rd**
Location **Cook County, IL**

Datum: NAVD 88
Elevation: 841.02 ft
North: 1976182.25 ft
East: 1036398.06 ft
Station: 82+41.89 R2
Offset: 40.95 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	799.3	Very stiff to hard, gray SILTY CLAY, trace to little gravel; damp --RDR-2--								779.3	Medium stiff, gray SILTY CLAY LOAM, trace gravel; damp --RDR-2--						
			45		15	5 8 10	2.05 B	19				65		19	6 8 9	0.98 B	16
										776.0	Boring terminated at 65.00 ft						
			50		16	6 8 12	2.13 B	18				70					
			55		17	8 15 14	3.28 B	20				75					
			60		18	9 16 23	5.17 B	18				80					

GENERAL NOTES

Begin Drilling **04-15-2024** Complete Drilling **04-15-2024**
Drilling Contractor **Wang Testing Services** Drill Rig **20D50T [80%]**
Driller **RH&JD** Logger **I. Romero** Checked by **J. Bensen**
Drilling Method **2.25" ID HSA to 16', mud rotary thereafter; Boring backfilled upon completion**

WATER LEVEL DATA

While Drilling **15.50 ft**
At Completion of Drilling **mud**
Time After Drilling **NA**
Depth to Water **NA**
The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG PSE-06

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
Project **Barrington Rd from Algonquin Rd to Central Rd**
Location **Cook County, IL**

Datum: NAVD 88
Elevation: 840.83 ft
North: 1976249.47 ft
East: 1036455.08 ft
Station: 83+08.86 R2
Offset: 16.37' RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	840.1	9-inch thick ASPHALT --PAVEMENT--															
		Stiff to very stiff, brown and gray SILTY CLAY, trace gravel and glass fragments; damp			1	9 8 6	2.50 P	19						9	1 2 4	1.72 B	17
		--FILL-- --RDR 2--			2	3 1 4	2.00 P	19				25		10	3 4 5	1.39 B	13
	834.2	--Qu: 1.97B--			3	1 1 2	0.50 P	144						11	0 2 4	0.98 B	18
		Medium stiff, black Organic SILTY LOAM, trace gravel and organics; damp			4	1 3 3	0.50 P	157				30		12	2 3 6	1.15 B	19
		--RDR 1--			5	0 1 2	0.50 P	365									
	830.3	Medium stiff, brown PEAT, trace organics; moist			6	0 0 2	0.74 B	19				35		13	4 7 9	1.56 B	18
		--RDR 1--			7	1 3 5	1.80 B	22									
	827.8	Medium stiff to very stiff, gray SILTY CLAY to SILTY CLAY LOAM, trace gravel; damp to moist			8	2 5 7	2.13 B	21				40		14	5 6 5	1.39 B	16
		--RDR 2--15								801.1							

GENERAL NOTES

Begin Drilling **05-02-2024** Complete Drilling **05-02-2024**
Drilling Contractor **Wang Testing Services** Drill Rig **20D50T [80%]**
Driller **RH&JD** Logger **M. Rojo** Checked by **J. Bensen**
Drilling Method **3.25" ID HSA; Boring backfilled upon completion**

WATER LEVEL DATA

While Drilling **41.75 ft**
At Completion of Drilling **Dry**
Time After Drilling **NA**
Depth to Water **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG PSE-06

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
Project **Barrington Rd from Algonquin Rd to Central Rd**
Location **Cook County, IL**

Datum: NAVD 88
Elevation: 840.83 ft
North: 1976249.47 ft
East: 1036455.08 ft
Station: 83+08.86 R2
Offset: 16.37' RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		Gray SILTY LOAM; damp --RDR 2--															
	799.1																
		Medium dense, gray Gravelly SAND; saturated --RDR 2--															
			45		15	15 8 4	NP	15				65		19	11 16 9	1.80 B	18
										775.8	Boring terminated at 65.00 ft						
	794.1																
		Stiff to very stiff, gray SILTY CLAY to SILTY CLAY LOAM, trace gravel; damp --RDR 2--															
			50		16	5 7 13	2.62 B	17				70					
			55		17	9 11 10	2.46 B	13				75					
			60		18	5 6 8	2.30 B	20				80					

GENERAL NOTES

Begin Drilling **05-02-2024** Complete Drilling **05-02-2024**
Drilling Contractor **Wang Testing Services** Drill Rig **20D50T [80%]**
Driller **RH&JD** Logger **M. Rojo** Checked by **J. Bensen**
Drilling Method **3.25" ID HSA; Boring backfilled upon completion**

WATER LEVEL DATA

While Drilling **41.75 ft**
At Completion of Drilling **Dry**
Time After Drilling **NA**
Depth to Water **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG PSE-07

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
Project **Barrington Rd from Algonquin Rd to Central Rd**
Location **Cook County, IL**

Datum: NAVD 88
Elevation: 838.68 ft
North: 1976342.88 ft
East: 1036453.47 ft
Station: 84+02.28 R2
Offset: 15.16' RT

Page 1 of 2

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	838.1	7-inch thick CONCRETE --PAVEMENT-- Medium stiff to very stiff, brown and gray SILTY CLAY to CLAY, trace gravel; damp --FILL-- --RDR 2--			1	5 6 11	2.50 P	20		818.2	Stiff to hard, gray SILTY CLAY, trace gravel; damp --RDR 2--			9	3 4 5	2.21 B	20
			5		2	5 3 4	NR					25		10	4 7 10	4.10 B	17
					3	2 2 3	1.15 B	28						11	5 5 7	4.43 B	21
			10		4	2 2 4	0.90 B	31				30		12	5 7 9	5.33 B	17
	828.2	Medium stiff, black and gray CLAY, trace gravel and organics; moist --RDR 1--			5	1 3 2	0.50 P	28									
			15		6	2 2 3	0.50 P	26				35		13	4 4 6	2.46 B	18
	823.2	Medium stiff, gray SILTY CLAY, trace gravel; damp --RDR 2--			7	0 2 3	0.90 B	19									
			20		8	0 2 4	0.98 B	19				40		14	7 6 8	1.97 B	17

GENERAL NOTES

Begin Drilling **05-01-2024** Complete Drilling **05-01-2024**
Drilling Contractor **Wang Testing Services** Drill Rig **20D50T [80%]**
Driller **RH&JD** Logger **M. Rojo** Checked by **J. Bensen**
Drilling Method **3.25" ID HSA; Boring backfilled upon completion**

WATER LEVEL DATA

While Drilling **Dry**
At Completion of Drilling **Dry**
Time After Drilling **NA**
Depth to Water **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG PSE-07

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
Project **Barrington Rd from Algonquin Rd to Central Rd**
Location **Cook County, IL**

Datum: NAVD 88
Elevation: 838.68 ft
North: 1976342.88 ft
East: 1036453.47 ft
Station: 84+02.28 R2
Offset: 15.16' RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	796.9	Stiff, gray SILTY CLAY LOAM to SILTY LOAM, trace gravel; damp --RDR 2--															
	794.2	Gray SILTY LOAM, trace gravel; damp to moist --RDR 2--	45		15	6 5 5	1.31 B	12		773.7	Boring terminated at 65.00 ft	65		19	6 10 12	3.03 B	19
	791.9	Very stiff to hard, gray SILTY CLAY, trace gravel; damp --RDR 2--															
			50		16	5 7 8	2.79 B	16				70					
			55		17	7 9 12	4.10 B	17				75					
			60		18	7 8 10	2.05 B	19				80					

GENERAL NOTES

Begin Drilling **05-01-2024** Complete Drilling **05-01-2024**
Drilling Contractor **Wang Testing Services** Drill Rig **20D50T [80%]**
Driller **RH&JD** Logger **M. Rojo** Checked by **J. Bensen**
Drilling Method **3.25" ID HSA; Boring backfilled upon completion**

WATER LEVEL DATA

While Drilling **Dry**
At Completion of Drilling **Dry**
Time After Drilling **NA**
Depth to Water **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG PSE-08

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
Project **Barrington Rd from Algonquin Rd to Central Rd**
Location **Cook County, IL**

Datum: NAVD 88
Elevation: 838.77 ft
North: 1976403.46 ft
East: 1036455.36 ft
Station: 84+62.85 R2
Offset: 17.31' RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	838.1	8-inch thick CONCRETE --PAVEMENT--															
		Medium stiff to very stiff, brown and gray SILTY CLAY to CLAY, trace gravel; damp			1	6 7 4	3.00 P	12						9	3 5 5	1.97 B	19
		--FILL-- --RDR 2--			2	2 3 3	0.90 B	20				25		10	4 5 6	2.62 B	21
					3	1 2 4	1.56 B	26						11	3 5 9	3.69 B	19
					4	2 2 5	0.66 B	28				30		12	4 4 5	2.30 B	19
	827.0	Medium stiff, gray and black CLAY, trace gravel and organics; damp			5	5 4 5	NR										
		--RDR 2--			6	2 2 3	0.50 P	24				35		13	4 4 7	1.56 B	19
	823.3	Medium stiff to very stiff, gray SILTY CLAY, trace gravel; damp to moist			7	1 2 3	0.74 B	21									
		--RDR 2--			8	2 3 6	0.90 B	21				40		14	3 5 7	0.98 B	19

GENERAL NOTES

Begin Drilling **04-30-2024** Complete Drilling **04-30-2024**
Drilling Contractor **Wang Testing Services** Drill Rig **21D50R[87%]**
Driller **RH&JD** Logger **M. Rojo** Checked by **J. Bensen**
Drilling Method **2.25" ID HSA; Boring backfilled upon completion**

WATER LEVEL DATA

While Drilling **▽ Dry**
At Completion of Drilling **▼ Dry**
Time After Drilling **NA**
Depth to Water **▼ NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG PSE-08

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
Project **Barrington Rd from Algonquin Rd to Central Rd**
Location **Cook County, IL**

Datum: NAVD 88
Elevation: 838.77 ft
North: 1976403.46 ft
East: 1036455.36 ft
Station: 84+62.85 R2
Offset: 17.31' RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
			45		15	4 5 8	1.89 B	18		773.8		65		19	7 8 10	2.87 B	19
											Boring terminated at 65.00 ft						
			50		16	5 7 6	1.97 B	17				70					
			55		17	8 9 10	2.05 B	16				75					
			60		18	5 6 10	2.30 B	20				80					

GENERAL NOTES

Begin Drilling **04-30-2024** Complete Drilling **04-30-2024**
Drilling Contractor **Wang Testing Services** Drill Rig **21D50R[87%]**
Driller **RH&JD** Logger **M. Rojo** Checked by **J. Bensen**
Drilling Method **2.25" ID HSA; Boring backfilled upon completion**

WATER LEVEL DATA

While Drilling **▽** **Dry**
At Completion of Drilling **▼** **Dry**
Time After Drilling **NA**
Depth to Water **▼** **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG PSE-09

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
Project **Barrington Rd from Algonquin Rd to Central Rd**
Location **Cook County, IL**

Datum: NAVD 88
Elevation: 840.12 ft
North: 1976477.88 ft
East: 1036455.41 ft
Station: 85+37.27 R2
Offset: 17.69' RT

Page 1 of 2

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	839.5	8-inch thick CONCRETE --PAVEMENT--								819.6	Stiff, gray SILTY CLAY, trace gravel; damp						
		Loose, brown and gray SANDY GRAVEL; wet			1	4 6 2	NP	17			--RDR 2--			9	4 5 8	1.80 B	19
	837.1	--FILL-- --RDR 1--									--rig chatter--						
		Stiff, gray and brown SILTY CLAY to CLAY, trace gravel; moist			2	2 1 3	1.50 P	20						10	5 4 4	NR	
		--FILL-- --RDR 1--			5												
					3	0 2 2	1.50 P	30						11	4 4 6	NR	
	832.1	Medium stiff, black and gray CLAY, trace gravel and organics; moist			4	3 2 0	0.50 P	32						12	5 6 7	1.64 B	20
	829.6	--RDR 1--															
		Medium stiff to stiff, gray SILTY CLAY, trace gravel; damp to moist			5	1 2 3	0.90 B	23									
		--RDR 2--															
					6	3 5 6	1.15 B	22						13	4 5 5	NR	
					7	4 3 4	1.15 B	18									
	822.1	Stiff, gray SILTY CLAY LOAM, trace gravel; damp			8	3 5 8	1.07 B	15						14	6 5 7	1.72 B	17
		--RDR 2--															

GENERAL NOTES

Begin Drilling **04-29-2024** Complete Drilling **04-29-2024**
Drilling Contractor **Wang Testing Services** Drill Rig **21D50R[87%]**
Driller **RH&JD** Logger **M. Rojo** Checked by **J. Bensen**
Drilling Method **2.25" ID HSA to 7.5'; Mud rotary for remainder;**
Boring backfilled upon completion

WATER LEVEL DATA

While Drilling **1.00 ft**
At Completion of Drilling **12' mud**
Time After Drilling **NA**
Depth to Water **NA**
The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG PSE-09

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
Project **Barrington Rd from Algonquin Rd to Central Rd**
Location **Cook County, IL**

Datum: NAVD 88
Elevation: 840.12 ft
North: 1976477.88 ft
East: 1036455.41 ft
Station: 85+37.27 R2
Offset: 17.69' RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		--L _L (%)=31, P _L (%)=16-- --%Gravel=2.7-- --%Sand=8.8-- --%Silt=50.9-- --%Clay=37.6-- --A-6 (12)--	45		15	8 5 10	1.00 P	25		775.1		65		19	8 10 17	1.80 B	21
			50		16	4 6 7	1.72 B	22			Boring terminated at 65.00 ft						
			55		17	5 5 7	1.89 B	23									
			60		18	7 6 8	1.64 B	22									

GENERAL NOTES

Begin Drilling **04-29-2024** Complete Drilling **04-29-2024**
Drilling Contractor **Wang Testing Services** Drill Rig **21D50R[87%]**
Driller **RH&JD** Logger **M. Rojo** Checked by **J. Bensen**
Drilling Method **2.25" ID HSA to 7.5'; Mud rotary for remainder;**
Boring backfilled upon completion

WATER LEVEL DATA

While Drilling **1.00 ft**
At Completion of Drilling **12' mud**
Time After Drilling **NA**
Depth to Water **NA**
The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG PSE-10

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
Project **Barrington Rd from Algonquin Rd to Central Rd**
Location **Cook County, IL**

Datum: NAVD 88
Elevation: 841.31 ft
North: 1976564.98 ft
East: 1036453.97 ft
Station: 86+24.38 R2
Offset: 16.62' RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	840.6	9-inch thick CONCRETE --PAVEMENT--															
		Medium dense, brown and gray SANDY GRAVEL --FILL--			1	15 12 4	NP	11						9	5 5 8	2.54 B	23
	838.3	Very soft to very stiff, brown and gray SILTY CLAY to CLAY, trace gravel; moist --FILL-- --RDR 1--			2	3 2 2	2.50 P	16				25		10	4 3 4	1.72 B	24
		--wet spoon; possible granular lens--			3	0 2 1	0.00 B	22						11	3 3 4	1.80 B	21
	833.3	Soft, gray Organic CLAY, trace gravel; moist --RDR 1--			4	0 0 0	0.49 B	79						12	4 5 7	1.89 B	20
	830.8	Medium stiff to very stiff, gray SILTY CLAY, trace gravel; damp to moist --RDR 1-2--			5	0 2 3	0.57 B	19									
					6	0 3 2	0.82 B	21						13	4 6 6	2.13 B	19
					7	4 5 5	2.62 B	19		804.6	Stiff, gray SILTY CLAY LOAM, trace gravel; damp --RDR 2-3-- --rig chatter--			14	6 8 9	1.50 P	14
					8	4 6 6	3.12 B	21				40					

GENERAL NOTES

Begin Drilling **04-29-2024** Complete Drilling **04-29-2024**
Drilling Contractor **Wang Testing Services** Drill Rig **21D50R[87%]**
Driller **RH&JD** Logger **M. Rojo** Checked by **J. Bensen**
Drilling Method **3.25" ID HSA to 15'; Mud rotary for remainder;**
Boring backfilled upon completion

WATER LEVEL DATA

While Drilling **5.50 ft**
At Completion of Drilling **12' mud**
Time After Drilling **NA**
Depth to Water **NA**
The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG PSE-10

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
Project **Barrington Rd from Algonquin Rd to Central Rd**
Location **Cook County, IL**

Datum: NAVD 88
Elevation: 841.31 ft
North: 1976564.98 ft
East: 1036453.97 ft
Station: 86+24.38 R2
Offset: 16.62' RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	799.6	Stiff to hard, gray SILTY CLAY, trace gravel; damp --RDR 2--															
			45		15	5 7 7	1.89 B	17		776.3		65		19	9 9 10	1.97 B	22
											Boring terminated at 65.00 ft						
			50		16	6 7 14	4.43 B	18				70					
			55		17	6 11 10	3.77 B	20				75					
			60		18	7 6 11	2.21 B	21				80					

GENERAL NOTES

Begin Drilling **04-29-2024** Complete Drilling **04-29-2024**
Drilling Contractor **Wang Testing Services** Drill Rig **21D50R[87%]**
Driller **RH&JD** Logger **M. Rojo** Checked by **J. Bensen**
Drilling Method **3.25" ID HSA to 15'; Mud rotary for remainder;**
Boring backfilled upon completion

WATER LEVEL DATA

While Drilling **5.50 ft**
At Completion of Drilling **12' mud**
Time After Drilling **NA**
Depth to Water **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG PT-01

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
Project **Barrington Rd from Algonquin Rd to Central Rd**
Location **Cook County, IL**

Datum: NAVD 88
Elevation: 839.96 ft
North: 1975941.15 ft
East: 1036380.68 ft
Station: 80+00.87
Offset: 59.37 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	838.2	Brown SANDY LOAM, trace to little gravel; moist --FILL--			1	P U S H	NP	23									
	836.0	Very soft, black SILTY CLAY to SILTY CLAY LOAM, trace gravel; moist --FILL--			2	P U S H	< 0.25 P	22									
	835.1	Very soft, gray and brown CLAY to SILTY CLAY; moist	5		3	P U S H	< 0.25 P	30									
	834.1	Very soft, dark gray SILTY CLAY, trace organic matter; moist															
		Stiff to hard, brown to gray SILTY CLAY, trace gravel; moist			4	P U S H	1.00 P	20									
					5	P U S H	3.00 P	21									
			10		6	P U S H	4.00 P	17									
					7	P U S H	2.50 P	17									
			15		8	P U S H	1.00 P	17									
					9	P U S H	1.50 P	19									
					10	P U S H	1.50 P	20									
	820.0		20														

Boring terminated at 20.00 ft

GENERAL NOTES

Begin Drilling **07-05-2022** Complete Drilling **07-05-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **Geoprobe HA**
Driller **AG&TC** Logger **A. Scifers** Checked by **C. Marin**
Drilling Method **1" ID HSA; Boring backfilled upon completion**

WATER LEVEL DATA

While Drilling **6.00 ft**
At Completion of Drilling **NA**
Time After Drilling **NA**
Depth to Water **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG PT-02

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
Project **Barrington Rd from Algonquin Rd to Central Rd**
Location **Cook County, IL**

Datum: NAVD 88
Elevation: 838.12 ft
North: 1975993.57 ft
East: 1036372.61 ft
Station: 80+53.33
Offset: 67.22 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	837.93	3-inch thick, dark brown SILTY CLAY LOAM; damp			1	PUSH	2.00 P	29									
		--TOPSOIL--															
	836.3	Very stiff, gray SILTY CLAY, trace gravel; damp				PUSH											
		--FILL--															
	834.8	Black LOAM to SANDY LOAM, trace gravel; moist			2	PUSH	NP	44									
		Gray, medium to coarse SAND, trace gravel; damp to saturated				PUSH											
	832.5	Very soft, black PEAT, trace gravel and organics; moist to wet			3	PUSH	< 0.25 P	30									
					4	PUSH	< 0.25 P	349									
	829.0	Gray, organic SILT; moist			5	PUSH	< 0.25 P	277									
	828.3	Very soft (<0.25P), black PEAT; wet				PUSH											
	827.0	Gray, organic SILT; moist			6	PUSH	NP	76									
	826.3	Very soft (<0.25P), dark brown PEAT; wet				PUSH											
	825.0	Stiff, gray CLAY to SILTY CLAY; moist			7	PUSH	1.00 P	21									
	824.1	Very soft (<0.25P), black PEAT; wet				PUSH											
	823.5	Stiff to very stiff, gray SILTY CLAY, trace gravel; moist			8	PUSH	1.00 P	19									
					9	PUSH	1.00 P	19									
					10	PUSH	2.00 P	26									
	818.1	Boring terminated at 20.00 ft	20														

GENERAL NOTES

Begin Drilling **06-28-2022** Complete Drilling **06-28-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **Geoprobe HA**
Driller **KS&PH** Logger **A. Scifers** Checked by **C. Marin**
Drilling Method **1" ID HSA; Boring backfilled upon completion**

WATER LEVEL DATA

While Drilling **4.00 ft**
At Completion of Drilling **Dry**
Time After Drilling **NA**
Depth to Water **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



BORING LOG PT-03

wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
 Project **Barrington Rd from Algonquin Rd to Central Rd**
 Location **Cook County, IL**

Datum: NAVD 88
Elevation: 836.08 ft
North: 1976092.45 ft
East: 1036370.94 ft
Station: 81+52.21
Offset: 68.46 LT

[illegible]

GENERAL NOTES

Begin Drilling	06-28-2022	Complete Drilling	06-28-2022
Drilling Contractor	Wang Testing Services	Drill Rig	Geoprobe HA
Driller	KS&PH	Logger	A. Scifers
		Checked by	C. Marin
Drilling Method	1" ID HSA; Boring backfilled upon completion		

WATER LEVEL DATA

While Drilling		7.75 ft
At Completion of Drilling		Dry
Time After Drilling	NA	
Depth to Water		NA

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG PT-04

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
Project **Barrington Rd from Algonquin Rd to Central Rd**
Location **Cook County, IL**

Datum: NAVD 88
Elevation: 836.05 ft
North: 1976186.85 ft
East: 1036378.86 ft
Station: 82+46.58
Offset: 60.13 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	834.8	Gray CLAY to SILTY CLAY, trace organic matter; moist			1	PUSH	NA	44									
		Black to dark brown PEAT; moist			2	PUSH	NP	137									
			5		3	PUSH	NP	535									
	829.5	Brown and gray ORGANIC SILT, few sand seams; moist			4	PUSH	NP	292									
	826.8				5	PUSH	NP	103									
		Gray SAND, trace gravel; moist to saturated	10		6	PUSH	NP	49									
	823.2				7	PUSH	0.50 P	23									
		Medium stiff to very stiff, gray SILTY CLAY, trace gravel; moist	15		8	PUSH	2.00 P	19									
					9	PUSH	1.50 P	16									
					10	PUSH	3.00 P	19									
	816.1		20														
Boring terminated at 20.00 ft																	

GENERAL NOTES

Begin Drilling **07-05-2022** Complete Drilling **07-05-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **Geoprobe HA**
Driller **AG&TC** Logger **A. Scifers** Checked by **C. Marin**
Drilling Method **1" ID HSA; Boring backfilled upon completion**

WATER LEVEL DATA

While Drilling **0.00 ft**
At Completion of Drilling **NA**
Time After Drilling **NA**
Depth to Water **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG PT-05

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
Project **Barrington Rd from Algonquin Rd to Central Rd**
Location **Cook County, IL**

Datum: NAVD 88
Elevation: 838.01 ft
North: 1976294.47 ft
East: 1036365.89 ft
Station: 83+54.25
Offset: 72.63 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		Very soft, black SILTY CLAY, trace to little gravel; moist --TOPSOIL--			1	P U S H	< 0.25 P	36									
		--trace organic matter--			2	P U S H	< 0.25 P	37									
	834.3	Very soft to medium stiff, black to dark brown to gray Organic SILTY CLAY; moist to wet	5		3	P U S H	< 0.25 P	42									
					4	P U S H	NR										
					5	P U S H	< 0.25 P	72									
	827.5	Stiff to very stiff, gray SILTY CLAY, trace gravel; moist	10		6	P U S H	0.50 P	21									
					7	P U S H	1.50 P	22									
			15		8	P U S H	2.00 P	21									
	822.0	Boring terminated at 16.00 ft															
			20														

GENERAL NOTES

Begin Drilling **07-06-2022** Complete Drilling **07-06-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **Geoprobe HA**
Driller **AG&TC** Logger **A. Scifers** Checked by **C. Marin**
Drilling Method **1" ID HSA; Boring backfilled upon completion**

WATER LEVEL DATA

While Drilling **6.00 ft**
At Completion of Drilling **NA**
Time After Drilling **NA**
Depth to Water **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG PT-06

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
Project **Barrington Rd from Algonquin Rd to Central Rd**
Location **Cook County, IL**

Datum: NAVD 88
Elevation: 838.87 ft
North: 1976345.43 ft
East: 1036371.93 ft
Station: 84+05.19
Offset: 66.37 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	837.9	Stiff, black and dark brown SILTY CLAY, trace gravel; moist --TOPSOIL--			1	PUSH	0.50 P	24									
		Very stiff, brown and gray SILTY CLAY, trace gravel; damp to moist --FILL--			2	PUSH	2.50 P	19									
	835.0																
	833.9	Very soft, dark brown Organic SILTY CLAY; moist	5		3	PUSH	< 0.25 P	55									
		Stiff (1.0P) to very stiff, brown to gray SILTY CLAY, trace gravel; moist			4	PUSH	3.00 P	20									
					5	PUSH	3.00 P	21									
	828.9	Boring terminated at 10.00 ft	10														
			15														
			20														

GENERAL NOTES

Begin Drilling **07-06-2022** Complete Drilling **07-06-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **Geoprobe HA**
Driller **AG&TC** Logger **A. Scifers** Checked by **C. Marin**
Drilling Method **1" ID HSA; Boring backfilled upon completion**

WATER LEVEL DATA

While Drilling **6.00 ft**
At Completion of Drilling **NA**
Time After Drilling **NA**
Depth to Water **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG PT-07

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
Project **Barrington Rd from Algonquin Rd to Central Rd**
Location **Cook County, IL**

Datum: NAVD 88
Elevation: 838.71 ft
North: 1976134.67 ft
East: 1036480.37 ft
Station: 81+93.95
Offset: 41.16 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	838.1	8-inch thick, black SILTY CLAY LOAM			1	PUSH	1.25 P	50									
		--TOPSOIL--															
		Stiff, black, brown and gray SILTY CLAY LOAM to SILTY CLAY, trace peat; damp to saturated			2	PUSH	1.25 P	29									
	833.5	Soft, brown PEAT; moist	5		3	PUSH	0.25 P	108									
					4	PUSH	0.25 P	371									
	830.3	Very soft, brown and greenish gray Organic SILTY CLAY, few peat; damp to moist	10		5	PUSH	< 0.25 P	146									
	828.1	Stiff to very stiff, gray SILTY CLAY; damp			6	PUSH	1.50 P	20									
					7	PUSH	2.00 P	23									
	824.7	Boring terminated at 14.00 ft	15														
			20														

GENERAL NOTES

Begin Drilling **07-26-2022** Complete Drilling **07-26-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **Geoprobe HA**
Driller **KS&AG** Logger **E. Greenwood** Checked by **C. Marin**
Drilling Method **1" ID HSA; Boring backfilled upon completion**

WATER LEVEL DATA

While Drilling **1.75 ft**
At Completion of Drilling **0.50 ft**
Time After Drilling **NA**
Depth to Water **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG PT-08

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
Project **Barrington Rd from Algonquin Rd to Central Rd**
Location **Cook County, IL**

Datum: NAVD 88
Elevation: 835.47 ft
North: 1976302.23 ft
East: 1036484.96 ft
Station: 83+61.49
Offset: 46.47 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	835.0	6-inch thick, black SILTY LOAM; damp			1	PUSH	1.00 P	32									
		--TOPSOIL--															
		Soft to stiff, black, gray and green SILTY CLAY, trace brick fragments; damp			2	PUSH	0.25 P	60									
	832.5	--FILL--															
		Very soft, black and brown PEAT; moist to saturated			3	PUSH	< 0.25 P	208									
			5		4	PUSH	< 0.25 P	538									
					5	PUSH	< 0.25 P	634									
			10		6	PUSH	< 0.25 P	640									
					7	PUSH	< 0.25 P	561									
					8	PUSH	1.25 P	19									
	820.5	Stiff to very stiff, gray SILTY CLAY, trace gravel; damp	15		9	PUSH	2.00 P	21									
					10	PUSH	2.50 P	22									
	815.5		20														
		Boring terminated at 20.00 ft															

GENERAL NOTES

Begin Drilling **07-27-2022** Complete Drilling **07-27-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **Geoprobe HA**
Driller **KS&AG** Logger **E. Greenwood** Checked by **C. Marin**
Drilling Method **1" ID HSA; Boring backfilled upon completion**

WATER LEVEL DATA

While Drilling **2.00 ft**
At Completion of Drilling **2.00 ft**
Time After Drilling **NA**
Depth to Water **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG PT-09

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
Project **Barrington Rd from Algonquin Rd to Central Rd**
Location **Cook County, IL**

Datum: NAVD 88
Elevation: 835.83 ft
North: 1976417.50 ft
East: 1036483.35 ft
Station: 84+76.76
Offset: 45.36 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		Very soft to soft, dark brown Organic CLAY; wet			1	PUSH	0.25 P	144									
	832.3				2	PUSH	< 0.25 P	144									
		Very soft, brown and black PEAT; moist to saturated	5		3	PUSH	< 0.25 P	360									
					4	PUSH	< 0.25 P	307									
					5	PUSH	< 0.25 P	596									
			10		6	PUSH	< 0.25 P	617									
					7	PUSH	< 0.25 P	478									
			15		8	PUSH	< 0.25 P	588									
	819.9	Stiff, gray and green SILTY CLAY, trace gravel; damp			9	PUSH	1.00 P	24									
					10	PUSH	1.00 P	21									
	815.8		20														
Boring terminated at 20.00 ft																	

GENERAL NOTES

Begin Drilling **07-27-2022** Complete Drilling **07-27-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **Geoprobe HA**
Driller **KS&AG** Logger **E. Greenwood** Checked by **C. Marin**
Drilling Method **1" ID HSA; Boring backfilled upon completion**

WATER LEVEL DATA

While Drilling **2.00 ft**
At Completion of Drilling **1.50 ft**
Time After Drilling **NA**
Depth to Water **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG PT-10

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
Project **Barrington Rd from Algonquin Rd to Central Rd**
Location **Cook County, IL**

Datum: NAVD 88
Elevation: 836.26 ft
North: 1976475.78 ft
East: 1036480.21 ft
Station: 85+35.06
Offset: 42.48 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	834.8	Very soft, brown and black Organic CLAY; moist to saturated			1	PUSH	< 0.25 P	101									
		Very soft, brown to green PEAT; moist to wet			2	PUSH	< 0.25 P	243									
			5		3	PUSH	< 0.25 P	211									
					4	PUSH	< 0.25 P	421									
					5	PUSH	< 0.25 P	594									
			10		6	PUSH	< 0.25 P	321									
					7	PUSH	< 0.25 P	225									
			15		8	PUSH	0.75 P	20									
	820.8	Medium stiff to stiff, gray SILTY CLAY, trace gravel; damp			9	PUSH	1.50 P	21									
					10	PUSH	1.50 P	21									
	816.3		20														
Boring terminated at 20.00 ft																	

GENERAL NOTES

Begin Drilling **07-27-2022** Complete Drilling **07-27-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **Geoprobe HA**
Driller **KS&AG** Logger **E. Greenwood** Checked by **C. Marin**
Drilling Method **1" ID HSA; Boring backfilled upon completion**

WATER LEVEL DATA

While Drilling **2.00 ft**
At Completion of Drilling **0.50 ft**
Time After Drilling **NA**
Depth to Water **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG PT-11

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
Project **Barrington Rd from Algonquin Rd to Central Rd**
Location **Cook County, IL**

Datum: NAVD 88
Elevation: 837.11 ft
North: 1976578.30 ft
East: 1036485.67 ft
Station: 86+37.56
Offset: 48.38 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	836.5	7-inch thick, brown CLAY, some organic matter; moist --TOPSOIL-- Medium stiff, black SILTY CLAY, trace peat; moist			1	PUSH	NA	106									
					2	PUSH	0.75 P	123									
			5		3	PUSH	0.75 P	118									
	831.6	Very soft, black and greenish brown PEAT; moist to saturated			4	PUSH	< 0.25 P	180									
					5	PUSH	< 0.25 P	196									
			10		6	PUSH	< 0.25 P	175									
	825.6	Medium stiff to very stiff, brown SILTY CLAY, trace to little gravel; damp			7	PUSH	0.50 P	20									
			15		8	PUSH	2.50 P	19									
	821.1	Boring terminated at 16.00 ft															
			20														

GENERAL NOTES

Begin Drilling **07-26-2022** Complete Drilling **07-26-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **Geoprobe HA**
Driller **KS&AG** Logger **E. Greenwood** Checked by **C. Marin**
Drilling Method **1" ID HSA; Boring backfilled upon completion**

WATER LEVEL DATA

While Drilling **2.00 ft**
At Completion of Drilling **0.70 ft**
Time After Drilling **NA**
Depth to Water **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG PT-12

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
Project **Barrington Rd from Algonquin Rd to Central Rd**
Location **Cook County, IL**

Datum: NAVD 88
Elevation: 837.74 ft
North: 1976651.53 ft
East: 1036492.65 ft
Station: 87+10.29
Offset: 55.77 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	837.2	7-inch thick, black SILTY CLAY LOAM			1	PUSH	2.00 P	32									
	836.0	--TOPSOIL-- Very stiff, black and brown SILTY CLAY LOAM; damp			2	PUSH	0.75 P	45									
		--FILL-- Medium stiff, black SILTY CLAY, trace organic matter; damp			3	PUSH	0.50 P	24									
	833.2	Very stiff, brown and gray SILTY CLAY LOAM to SILTY CLAY, trace to little gravel; damp	5		4	PUSH	3.00 P	17									
					5	PUSH	3.50 P	19									
			10		6	PUSH	3.00 P	21									
		--sand seam; wet--			7	PUSH	3.00 P	13									
	823.7	Boring terminated at 14.00 ft	15														
			20														

GENERAL NOTES

Begin Drilling **07-26-2022** Complete Drilling **07-26-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **Geoprobe HA**
Driller **KS&AG** Logger **E. Greenwood** Checked by **C. Marin**
Drilling Method **1" ID HSA; Boring backfilled upon completion**

WATER LEVEL DATA

While Drilling **2.00 ft**
At Completion of Drilling **3.00 ft**
Time After Drilling **NA**
Depth to Water **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG PT-13

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
Project **Barrington Rd from Algonquin Rd to Central Rd**
Location **Cook County, IL**

Datum: NAVD 88
Elevation: 838.78 ft
North: 1976775.55 ft
East: 1036495.15 ft
Station: 88+34.27
Offset: 59.84 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	838.0	9-inch thick, brown SILTY CLAY LOAM; damp			1	PUSH	4.50 P	15									
		--TOPSOIL--															
		Hard, brown and gray CLAY LOAM to SILTY CLAY LOAM, trace to little gravel; damp to wet			2	PUSH	4.00 P	18									
		--FILL--															
			5		3	PUSH	4.50 P	17									
		--sand lenses--															
					4	PUSH	4.00 P	13									
	830.8	Very stiff to hard, brown and gray SILTY CLAY, trace gravel			5	PUSH	4.50 P	17									
			10		6	PUSH	4.50 P	18									
					7	PUSH	3.75 P	20									
	824.8	Boring terminated at 14.00 ft															
			15														
			20														

GENERAL NOTES

Begin Drilling **07-26-2022** Complete Drilling **07-26-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **Geoprobe HA**
Driller **KS&AG** Logger **E. Greenwood** Checked by **C. Marin**
Drilling Method **1" ID HSA; Boring backfilled upon completion**

WATER LEVEL DATA

While Drilling **2.00 ft**
At Completion of Drilling **6.50 ft**
Time After Drilling **NA**
Depth to Water **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG RWB-01

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
Project **Barrington Rd from Algonquin Rd to Central Rd**
Location **Cook County, IL**

Datum: NAVD 88
Elevation: 868.93 ft
North: 1975473.74 ft
East: 1036477.91 ft
Station: 75+33.04
Offset: 35.82 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	868.1	10-inch thick organic SILTY CLAY															
		--TOPSOIL--															
		Very stiff to hard, brown to gray SILTY CLAY to SILTY CLAY LOAM, trace gravel; damp			1	4 4 5	2.54 B	19									
		--RDR 2--															
		--trace organic matter--															
			5		2	4 7 11	4.92 B	15									
					3	7 11 15	7.54 B	15									
		--RDR 2 to 3--															
		--coarse gravel--	10		4	10 10 10	4.25 P	15									
					5	7 10 12	5.33 B	16									
			15		6	5 6 7	3.69 B	17									
		--L _L (%)=31, P _L (%)=15--															
		--%Gravel=6.8--			7	4 4 7	2.71 B	18									
		--%Sand=10.3--															
		--%Silt=52.7--															
		--%Clay=30.2--															
		--A-6 (12)--															
					8	4 4 7	2.75 P	15									
	848.9		20														

Boring terminated at 20.00 ft

GENERAL NOTES

Begin Drilling **03-08-2022** Complete Drilling **03-08-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **21GeoA[96%]**
Driller **A&C** Logger **M. Sadowski** Checked by **C. Marin**
Drilling Method **3.25" ID HSA; Boring backfilled upon completion**

WATER LEVEL DATA

While Drilling **▼** **Dry**
At Completion of Drilling **▼** **Dry**
Time After Drilling **NA**
Depth to Water **▼** **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG RWB-02

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
Project **Barrington Rd from Algonquin Rd to Central Rd**
Location **Cook County, IL**

Datum: NAVD 88
Elevation: 871.15 ft
North: 1975535.46 ft
East: 1036484.81 ft
Station: 75+94.73
Offset: 43.00 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	870.2	11-inch thick SILTY CLAY --TOPSOIL--															
		Very stiff, brown and gray CLAY to SILTY CLAY, trace organic matter; damp			1	2 2 4	3.25 P	22									
	868.2	--RDR 2--															
		Very stiff to hard, brown to gray SILTY CLAY to SILTY CLAY LOAM, trace to little gravel ; damp			2	4 9 9	5.00 S	17									
		--RDR 2--	5														
					3	17 12 18	4.50 P	13									
					4	7 10 11	7.30 B	16									
			10														
					5	5 10 12	8.04 B	15									
					6	16 8 11	6.31 B	16									
			15														
		--some rig chatter, 15 to 16 ft-- --possible coarse gravel or cobbles--			7	4 5 6	2.46 B	16									
					8	3 6 7	2.21 B	15									
	851.2		20														

Boring terminated at 20.00 ft

GENERAL NOTES

Begin Drilling **03-08-2022** Complete Drilling **03-08-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **21GeoA[96%]**
Driller **A&C** Logger **M. Sadowski** Checked by **C. Marin**
Drilling Method **3.25" ID HSA; Boring backfilled upon completion**

WATER LEVEL DATA

While Drilling **▽** **Dry**
At Completion of Drilling **▼** **Dry**
Time After Drilling **NA**
Depth to Water **▽** **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG RWB-03

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
Project **Barrington Rd from Algonquin Rd to Central Rd**
Location **Cook County, IL**

Datum: NAVD 88
Elevation: 843.68 ft
North: 1976044.28 ft
East: 1036395.93 ft
Station: 81+03.93
Offset: 43.67 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	843.2	6-inch thick, brown SANDY LOAM, trace gravel --TOPSOIL-- Medium stiff to very stiff, gray CLAY LOAM to SILTY CLAY, trace gravel; moist --FILL-- --RDR 2--			1	4 3 4	2.46 B	19		820.7	Stiff to very stiff, gray SILTY CLAY to SILTY CLAY LOAM, trace gravel; moist --RDR 2--			9	2 3 4	< 0.25 P	77
			5		2	2 2 4	0.82 B	21				25		10	4 6 6	1.64 B	17
		--silt seams--			3	3 3 5	1.23 B	22						11	4 5 8	2.05 B	21
			10		4	3 3 3	1.23 B	25		813.7	Boring terminated at 30.00 ft	30		12	6 7 10	2.46 B	19
	833.2	Soft, gray SILTY CLAY, trace gravel; moist --RDR 2-- --L _L (%)=43, P _L (%)=20-- --%Gravel=2.0-- --%Sand=12.8-- --%Silt=52.2-- --%Clay=33.0-- --A-7-6 (20)--			5	3 4 5	0.49 B	33									
	830.7				6	3 4 3	1.00 P	154				35					
	829.4	Stiff, gray Organic SILTY CLAY; moist --RDR 2--	15														
	827.7	Very soft (<0.25P), black PEAT; moist Very soft to medium stiff, dark gray to gray Organic SILTY CLAY, few peat lenses; moist --RDR 2--			7	3 1 2	0.98 B	150									
			20		8	1 1 1	0.33 B	43				40					

GENERAL NOTES

Begin Drilling **02-08-2022** Complete Drilling **02-08-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **21D50A [84%]**
Driller **KS&AP** Logger **A. Scifers** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; Boring backfilled upon completion**

WATER LEVEL DATA

While Drilling **1.00 ft**
At Completion of Drilling **Dry**
Time After Drilling **NA**
Depth to Water **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG RWB-03-ST

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
Project **Barrington Rd from Algonquin Rd to Central Rd**
Location **Cook County, IL**

Datum: NAVD 88
Elevation: 843.51 ft
North: 1976049.28 ft
East: 1036395.93 ft
Station: 81+08.93
Offset: 43.65 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		--blind drilling, 0 to 14 feet --															
			5														
			10														
	830.5	Stiff, gray SILTY CLAY, trace gravel; moist --organic content: 7.9%-- -- L_L (%)=45, P_L (%)=17-- --%Gravel=1.2-- --%Sand=11.4-- --%Silt=50.2-- --%Clay=37.2-- --A-7-6 (25)--	15		1		1.00	27	PUSH								
	827.5																
	825.2	Very soft, black and gray PEAT --organic content: 189%--															
	823.5	Very soft, gray Organic SILTY CLAY, trace gravel; moist --organic content: 43.8%--	20		2		< 0.25	276	PUSH								
		Boring terminated at 20.00 ft															

GENERAL NOTES

Begin Drilling **02-15-2022** Complete Drilling **02-15-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **21D50A [84%]**
Driller **KS&AP** Logger **A. Scifers** Checked by **C. Marin**
Drilling Method **3.25" ID HSA; Boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ∇ **Dry**
At Completion of Drilling ∇ **Dry**
Time After Drilling **NA**
Depth to Water ∇ **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG RWB-04

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
Project **Barrington Rd from Algonquin Rd to Central Rd**
Location **Cook County, IL**

Datum: NAVD 88
Elevation: 841.20 ft
North: 1976142.83 ft
East: 1036396.44 ft
Station: 82+02.48
Offset: 42.74 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	839.8	17-inch thick, black SILTY CLAY; moist --TOPSOIL--															
		Soft to stiff, brown and gray SILTY CLAY, trace gravel; moist --FILL-- --RDR 1 to 2-- --L _L (%)=43, P _L (%)=20-- --%Gravel=2.7-- --%Sand=11.0-- --%Silt=53.0-- --%Clay=33.3-- --A-7-6 (20)--			1	2 3 3	1.50 P	22									
					2	2 3 3	0.41 B	21									
					3	3 4 4	1.39 B	23									
		--wet spoon--			4	4 3 2	1.72 B	26									
					5	3 3 4	0.98 B	24									
	828.2	Medium stiff, dark gray SILTY CLAY LOAM, some organic matter; wet --sand seams-- --RDR 2--15			6	2 3 3	0.57 B	51									
	825.7	Very soft (<0.25P), dark gray CLAY to SILTY CLAY; moist --silt seams; saturated-- --RDR 1--			7	3 4 6	2.13 B	17									
	824.8	Stiff to very stiff, gray SILTY CLAY to SILTY CLAY LOAM, trace gravel; moist --RDR 2--			8	4 6 9	1.80 B	18									
	821.2		20														

Boring terminated at 20.00 ft

GENERAL NOTES

WATER LEVEL DATA

Begin Drilling **02-08-2022** Complete Drilling **02-08-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **21D50A [84%]**
Driller **KS&AP** Logger **A. Scifers** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; Boring backfilled upon completion**

While Drilling **8.50 ft**
At Completion of Drilling **Dry**
Time After Drilling **NA**
Depth to Water **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG RWB-05

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
Project **Barrington Rd from Algonquin Rd to Central Rd**
Location **Cook County, IL**

Datum: NAVD 88
Elevation: 840.41 ft
North: 1976238.74 ft
East: 1036396.46 ft
Station: 82+98.38
Offset: 42.30 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	839.6	10-inch thick, black SANDY LOAM; moist															
		--TOPSOIL--															
		Stiff to very stiff, black and gray CLAY LOAM to SILTY CLAY, trace to some gravel; moist			1	5 2 4	1.48 B	17									
		--FILL--															
		--RDR 2--			2	3 6 4	3.20 B	16									
		--wet spoon--															
			5														
					3	3 3 3	1.56 B	21									
	832.4	Medium stiff, black PEAT; interbedded with Organic Silty Clay; wet			4	3 1 2	0.82 B	237									
		--RDR 2--	10														
	829.9	Medium stiff, gray Organic SILTY CLAY; wet			5	0 0 0	0.57 B	161									
		--RDR 1--															
	827.4	Medium stiff, light gray CLAY to SILTY CLAY LOAM, trace gravel; moist			6	2 2 2	0.57 B	24									
		--RDR 2--	15														
	824.9	Very stiff, gray SILTY CLAY, trace gravel; moist			7	4 5 6	2.05 B	18									
		--RDR 2--															
					8	5 6 9	2.62 B	21									
	820.4		20														
		Boring terminated at 20.00 ft															

GENERAL NOTES

Begin Drilling **02-08-2022** Complete Drilling **02-08-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **21D50A [84%]**
Driller **KS&AP** Logger **A. Scifers** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; Boring backfilled upon completion**

WATER LEVEL DATA

While Drilling **3.50 ft**
At Completion of Drilling **Dry**
Time After Drilling **NA**
Depth to Water **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG RWB-06

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
Project **Barrington Rd from Algonquin Rd to Central Rd**
Location **Cook County, IL**

Datum: NAVD 88
Elevation: 861.65 ft
North: 1975635.10 ft
East: 1036451.45 ft
Station: 76+94.52 R2
Offset: 10.07 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	860.7	11-inch thick ASPHALT --PAVEMENT--															
		Hard, brown and gray SILTY CLAY, trace gravel; damp --FILL-- --RDR 2--			1	5 7 7	4.50 P	14									
	858.6	Very stiff to hard, brown to gray SILTY CLAY to SILTY CLAY LOAM, trace gravel; damp --RDR 2--			2	4 5 8	5.17 B	17									
			5														
					3	4 7 9	5.17 B	15									
					4	3 6 8	4.51 B	16									
			10														
		--L _L (%)=35, P _L (%)=17-- --%Gravel=2.2-- --%Sand=9.4-- --%Silt=53.0-- --%Clay=35.4-- --A-6 (15)--			5	4 5 7	2.62 B	20									
					6	5 5 5	3.44 B	18									
			15														
	846.1	Medium dense, gray, gravelly SILTY LOAM; wet --RDR 2--			7	8 8 11	NP	11									
					8	9 8 8	NP	9									
	841.6		20														
		Boring terminated at 20.00 ft															

GENERAL NOTES

Begin Drilling **05-08-2024** Complete Drilling **05-08-2024**
Drilling Contractor **Wang Testing Services** Drill Rig **21GeoT[92%]**
Driller **AG&TC** Logger **M. Rojo** Checked by **J. Bensen**
Drilling Method **2.25" ID HSA; Boring backfilled upon completion**

WATER LEVEL DATA

While Drilling **15.50 ft**
At Completion of Drilling **Dry**
Time After Drilling **NA**
Depth to Water **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG RWB-07

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
Project **Barrington Rd from Algonquin Rd to Central Rd**
Location **Cook County, IL**

Datum: NAVD 88
Elevation: 856.85 ft
North: 1975736.40 ft
East: 1036451.88 ft
Station: 77+95.81 R2
Offset: 10.93 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	855.9	11-inch thick ASPHALT															
	855.9	--PAVEMENT--															
	855.9	1-inch thick GRAVEL															
		--BASE COURSE--															
		Very stiff, black and brown CLAY, trace gravel and organics; damp			1	3 3 6	2.50 P	25									
	853.9	Stiff to hard, brown to gray SILTY CLAY to SILTY CLAY LOAM, trace gravel; damp			2	4 6 10	7.38 B	18									
		--RDR 2--	5														
					3	4 7 10	6.97 B	18									
					4	8 9 13	2.50 P	15									
			10		5	6 9 9	3.69 B	17									
					6	4 7 10	4.76 B	18									
			15		7	5 6 7	1.80 B	18									
					8	3 6 7	1.80 B	18									
	836.9		20														

Boring terminated at 20.00 ft

GENERAL NOTES

Begin Drilling **05-08-2024** Complete Drilling **05-08-2024**
Drilling Contractor **Wang Testing Services** Drill Rig **21GeoT[92%]**
Driller **AG&TC** Logger **M. Rojo** Checked by **J. Bensen**
Drilling Method **2.25" ID HSA; Boring backfilled upon completion**

WATER LEVEL DATA

While Drilling **▼** **Dry**
At Completion of Drilling **▼** **Dry**
Time After Drilling **NA**
Depth to Water **▼** **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG RWB-08

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
Project **Barrington Rd from Algonquin Rd to Central Rd**
Location **Cook County, IL**

Datum: NAVD 88
Elevation: 864.00 ft
North: 1975557.78 ft
East: 1036407.53 ft
Station: 76+17.38 R2
Offset: 34.19 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	863.83	3-inch thick, black SILTY CLAY --TOPSOIL-- Hard, brown and gray CLAY, trace gravel; damp			1	3 5 7	4.50 P	17			gravel; damp Boring terminated at 20.00 ft						
	861.0	--FILL-- --L _L (%)=33, P _L (%)=16-- --%Gravel=3.0-- --%Sand=11.1-- --%Silt=46.8-- --%Clay=39.0-- --A-6 (13)-- Very stiff, brown and gray SILTY CLAY, trace gravel; damp	5		2	5 5 12	2.95 B	17				25					
	858.5	Very stiff, brown LOAM, trace gravel; damp			3	6 7 8	2.62 B	7									
	856.0	Stiff to very stiff, gray SILTY CLAY, trace gravel; damp --RDR 2--	10		4	6 6 9	2.54 B	16				30					
					5	5 7 8	1.64 B	17									
			15		6	5 5 7	2.05 B	18				35					
	848.5	Medium dense, gray SILTY LOAM, trace gravel; damp to moist --L _L (%)=18, P _L (%)=13-- --%Gravel=10.4-- --%Sand=28.4-- --%Silt=48.9-- --%Clay=12.0-- --A-4 (0)--			7	3 4 6	0.90 B	10									
	846.0	Stiff, gray SILTY CLAY, trace			8	4 4 6	1.39 B	19				40					
	844.0		20														

GENERAL NOTES

Begin Drilling **04-19-2024** Complete Drilling **04-19-2024**
Drilling Contractor **Wang Testing Services** Drill Rig **17D50T [81%]**
Driller **RH&JD** Logger **M. Rojo** Checked by **J. Bensen**
Drilling Method **2.25" ID HSA; Boring backfilled upon completion**

WATER LEVEL DATA

While Drilling **▼** **Dry**
At Completion of Drilling **▼** **Dry**
Time After Drilling **NA**
Depth to Water **▼** **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG RWB-09

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
Project **Barrington Rd from Algonquin Rd to Central Rd**
Location **Cook County, IL**

Datum: NAVD 88
Elevation: 861.79 ft
North: 1975631.43 ft
East: 1036408.26 ft
Station: 76+91.03 R2
Offset: 33.14 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type <i>recovery</i>	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type <i>recovery</i>	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	861.54	4-inch thick, gray SANDY GRAVEL															
		--FILL--															
		Hard, brown and gray CLAY, trace gravel; damp			1	6 4 6	4.50 P	18									
		--FILL--															
	858.8	Stiff to very stiff, brown to gray CLAY to SILTY CLAY, trace gravel; damp			2	6 8 10	2.50 P	22									
		--RDR 2-- --L _L (%)=37, P _L (%)=17-- --%Gravel=5.3-- --%Sand=12.7-- --%Silt=41.5-- --%Clay=40.4-- --A-6 (15)--			3	11 10 10	2.00 P	17									
					4	7 8 8	1.97 B	18									
					5	4 5 6	1.80 B	19									
				6	6 4 7	1.64 B	19										
				7	2 4 3	2.21 B	18										
				8	4 5 9	1.80 B	19										
	841.8	Boring terminated at 20.00 ft	20														

GENERAL NOTES

Begin Drilling **04-19-2024** Complete Drilling **04-19-2024**
Drilling Contractor **Wang Testing Services** Drill Rig **17D50T [81%]**
Driller **RH&JD** Logger **M. Rojo** Checked by **J. Bensen**
Drilling Method **2.25" ID HSA; Boring backfilled upon completion**

WATER LEVEL DATA

While Drilling **Dry**
At Completion of Drilling **Dry**
Time After Drilling **NA**
Depth to Water **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG RWB-10

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
Project **Barrington Rd from Algonquin Rd to Central Rd**
Location **Cook County, IL**

Datum: NAVD 88
Elevation: 858.30 ft
North: 1975709.13 ft
East: 1036404.97 ft
Station: 77+68.75 R2
Offset: 36.09 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	858.12	12-inch thick, black SILTY CLAY															
	857.5	--TOPSOIL--															
		8-inch thick, gray SANDY GRAVEL															
		--FILL--			1	5 6 6	4.00 P	18									
		Hard, brown and gray SILTY CLAY, trace gravel; damp															
	855.3	--FILL--			2	6 6 7	3.03 B	18									
		Stiff to hard, brown to gray SILTY CLAY, trace gravel; damp															
		--RDR 2--	5														
					3	5 9 11	7.46 B	15									
					4	3 8 10	2.21 B	18									
			10														
					5	3 4 10	2.54 B	20									
					6	4 5 6	1.39 B	18									
			15														
					7	4 4 6	1.64 B	19									
					8	6 5 6	2.05 B	20									
	838.3		20														

Boring terminated at 20.00 ft

GENERAL NOTES

Begin Drilling **04-19-2024** Complete Drilling **04-19-2024**
Drilling Contractor **Wang Testing Services** Drill Rig **17D50T [81%]**
Driller **RH&JD** Logger **M. Rojo** Checked by **J. Bensen**
Drilling Method **2.25" ID HSA; Boring backfilled upon completion**

WATER LEVEL DATA

While Drilling **▽** **Dry**
At Completion of Drilling **▼** **Dry**
Time After Drilling **NA**
Depth to Water **▼** **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG RWB-11

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
Project **Barrington Rd from Algonquin Rd to Central Rd**
Location **Cook County, IL**

Datum: NAVD 88
Elevation: 860.86 ft
North: 1977816.28 ft
East: 1036372.03 ft
Station: 98+75.92 R2
Offset: 52.48 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	860.4	6-inch thick, black SILTY CLAY LOAM															
		--TOPSOIL--															
		Hard, brown SILTY CLAY, trace gravel; damp			1	5 7 9	5.17 B	18									
		--FILL--															
	857.9	--RDR 2--															
		Stiff to hard, brown to gray SILTY CLAY to SILTY CLAY LOAM, trace gravel; damp			2	4 5 9	5.17 B	19									
		--RDR 2--	5														
					3	4 5 4	3.44 B	25									
					4	5 11 13	4.10 B	20									
			10														
					5	6 9 10	NR										
					6	3 6 4	1.64 B	15									
			15														
					7	4 5 7	2.21 B	18									
					8	4 7 8	2.05 B	15									
	840.9		20														

Boring terminated at 20.00 ft

GENERAL NOTES

Begin Drilling **05-21-2024** Complete Drilling **05-21-2024**
Drilling Contractor **Wang Testing Services** Drill Rig **20D50T [80%]**
Driller **RH&JD** Logger **M. Rojo** Checked by **J. Bensen**
Drilling Method **2.25" ID HSA; Boring backfilled upon completion**

WATER LEVEL DATA

While Drilling **▽** **Dry**
At Completion of Drilling **▼** **Dry**
Time After Drilling **NA**
Depth to Water **▼** **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG RWB-12

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
Project **Barrington Rd from Algonquin Rd to Central Rd**
Location **Cook County, IL**

Datum: NAVD 88
Elevation: 861.82 ft
North: 1977841.27 ft
East: 1036373.38 ft
Station: 99+00.91 R2
Offset: 51.09 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	860.8	12-inch thick, black SILTY CLAY LOAM															
		--TOPSOIL--															
		Very stiff, brown SILTY CLAY LOAM, damp			1	5 12 15	3.12 B	17									
		--FILL--															
	858.8	--RDR 2--															
		Stiff to hard, brown to gray SILTY CLAY to SILTY CLAY LOAM, trace gravel; damp			2	6 7 9	5.49 B	17									
		--RDR 2--	5														
					3	5 6 5	3.44 B	21									
					4	4 5 8	3.28 B	22									
			10														
					5	4 6 7	1.64 B	16									
					6	5 9 9	1.80 B	16									
			15														
					7	2 3 6	1.64 B	15									
					8	5 5 8	1.48 B	15									
	841.8		20														

Boring terminated at 20.00 ft

GENERAL NOTES

Begin Drilling **05-21-2024** Complete Drilling **05-21-2024**
Drilling Contractor **Wang Testing Services** Drill Rig **20D50T [80%]**
Driller **RH&JD** Logger **M. Rojo** Checked by **J. Bensen**
Drilling Method **2.25" ID HSA; Boring backfilled upon completion**

WATER LEVEL DATA

While Drilling **▽** **Dry**
At Completion of Drilling **▼** **Dry**
Time After Drilling **NA**
Depth to Water **▽** **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG SB-01

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
Project **Barrington Rd from Algonquin Rd to Central Rd**
Location **Cook County, IL**

Datum: NAVD 88
Elevation: 851.91 ft
North: 1975834.15 ft
East: 1036404.32 ft
Station: 78+93.77 R2
Offset: 36.20 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	851.64	14-inch thick, black SILTY CLAY															
	851.0	--TOPSOIL--															
		7-inch thick, gray SANDY GRAVEL															
		--FILL--			1	5 3 2	1.50 P	26						9	15 13 9	1.97 B	17
		Stiff, brown and gray CLAY, trace gravel; damp															
		--FILL--															
					2	4 4 4	1.50 P	22						10	11 8 13	1.23 B	15
	846.4	Very stiff, brown and gray LOAM, trace gravel; damp								826.9							
		--RDR 2--			3	3 5 8	3.85 B	6			Boring terminated at 25.00 ft						
	843.9	Stiff to hard, brown to gray SILTY CLAY, trace gravel; damp															
		--RDR 2--			4	8 9 12	6.89 B	16									
					5	7 9 15	5.00 B	17									
					6	7 9 12	4.02 B	16									
					7	6 8 8	3.94 B	18									
					8	5 5 12	2.95 B	18									

GENERAL NOTES

Begin Drilling **04-19-2024** Complete Drilling **04-19-2024**
Drilling Contractor **Wang Testing Services** Drill Rig **17D50T [81%]**
Driller **RH&JD** Logger **M. Rojo** Checked by **J. Bensen**
Drilling Method **2.25" ID HSA; Boring backfilled upon completion**

WATER LEVEL DATA

While Drilling **▽** **Dry**
At Completion of Drilling **▼** **Dry**
Time After Drilling **NA**
Depth to Water **▼** **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG SB-02

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
Project **Barrington Rd from Algonquin Rd to Central Rd**
Location **Cook County, IL**

Datum: NAVD 88
Elevation: 847.44 ft
North: 1975827.70 ft
East: 1036479.45 ft
Station: 78+86.99 R2
Offset: 38.71' RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	846.7	9-inch thick, dark brown SILTY CLAY --TOPSOIL-- Very stiff to hard, brown to gray SILTY CLAY to CLAY, trace gravel; moist --RDR 2--			1	3 3 5	4.10 B	26						9	3 4 6	2.46 B	20
			5		2	4 7 7	8.61 B	18		822.4		25		10	3 5 7	2.21 B	28
					3	5 18 12	9.84 B	17			Boring terminated at 25.00 ft						
		--4-inch thick, brown sand lens--	10		4	5 11 14	6.97 B	19									
					5	5 11 14	9.43 B	19									
			15		6	6 11 14	9.84 B	19									
					7	6 11 13	7.79 B	17									
			20		8	6 5 9	2.46 B	18									

GENERAL NOTES

Begin Drilling **05-01-2024** Complete Drilling **05-01-2024**
Drilling Contractor **Wang Testing Services** Drill Rig **21GeoT[92%]**
Driller **AG&TC** Logger **L. Corral** Checked by **J. Bensen**
Drilling Method **2.25" ID HSA; Boring backfilled upon completion**

WATER LEVEL DATA

While Drilling **▽ Dry**
At Completion of Drilling **▼ Dry**
Time After Drilling **NA**
Depth to Water **▼ NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG SB-03

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
Project **Barrington Rd from Algonquin Rd to Central Rd**
Location **Cook County, IL**

Datum: NAVD 88
Elevation: 843.76 ft
North: 1975880.10 ft
East: 1036478.86 ft
Station: 79+39.39 R2
Offset: 38.54' RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	843.71	1-inch thick, dark brown SILTY CLAY --TOPSOIL-- Medium stiff, brown CLAY, trace gravel; moist			1	0 0 2	0.50 P	39		822.0	Stiff, gray CLAY LOAM, trace gravel; moist --RDR 2--			9	6 7 9	NR	
	840.8	Loose, brown SANDY LOAM, trace gravel; moist --RDR 2--	5		2	1 3 2	0.08 B	20		25				10	4 6 8	1.00 P	12
	838.3	Soft, brown and gray CLAY, trace gravel; moist --RDR 2--			3	2 1 3	0.41 B	30		818.3	Stiff, gray SILTY CLAY, trace gravel; moist --RDR 2--			11	4 5 7	NA	19
	835.8	Very stiff to hard, brown SILTY CLAY, trace gravel; moist --RDR 2--	10		4	4 4 7	4.92 B	20		30				12	4 4 7	1.80 B	20
		--wet spoon; possible sand lens--			5	4 6 9	5.33 B	20			Boring terminated at 30.00 ft						
					6	8 8 11	5.74 B	17									
					7	5 7 9	4.51 B	22									
					8	4 6 8	3.03 B	16									

GENERAL NOTES

Begin Drilling **05-01-2024** Complete Drilling **05-01-2024**
Drilling Contractor **Wang Testing Services** Drill Rig **21GeoT[92%]**
Driller **AG&TC** Logger **L. Corral** Checked by **J. Bensen**
Drilling Method **2.25" ID HSA; Boring backfilled upon completion**

WATER LEVEL DATA

While Drilling **10.50 ft**
At Completion of Drilling **3.00 ft**
Time After Drilling **NA**
Depth to Water **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG SB-04

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
Project **Barrington Rd from Algonquin Rd to Central Rd**
Location **Cook County, IL**

Datum: NAVD 88
Elevation: 840.29 ft
North: 1975938.45 ft
East: 1036482.24 ft
Station: 79+97.73 R2
Offset: 42.17' RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	840.21	1-inch thick, black SILTY CLAY --TOPSOIL-- Medium stiff, brown SILTY CLAY, trace gravel; moist --RDR 2--			1	1 1 2	0.57 B	20						9	3 4 7	3.28 B	17
	837.3	Very loose, dark brown to black SANDY LOAM --RDR 2--	5		2	1 1 1	0.16 B	23			--wet spoon; possible sand lens--			10	6 5 5	2.46 B	19
	834.8	Soft to medium stiff, dark brown to gray Organic CLAY; moist --RDR 2--			3	2 1 1	0.57 B	123			Boring terminated at 25.00 ft	25					
			10		4	0 0 1	0.33 B	66				30					
	829.8	Medium stiff, gray SILTY CLAY; moist --L _L (%)=33, P _L (%)=17-- --%Gravel=1.2-- --%Sand=10.2-- --%Silt=50.8-- --%Clay=37.7-- --A-6 (13)--			5	0 2 3	0.57 B	20									
	827.3	Very stiff to hard, brown SILTY CLAY, trace gravel; moist --RDR 2--	15		6	2 5 6	2.87 B	20				35					
					7	4 6 8	4.10 B	18									
			20		8	5 7 8	5.33 B	15				40					

GENERAL NOTES

Begin Drilling **05-02-2024** Complete Drilling **05-02-2024**
Drilling Contractor **Wang Testing Services** Drill Rig **21GeoT[92%]**
Driller **AG&TC** Logger **L. Corral** Checked by **J. Bensen**
Drilling Method **2.25" ID HSA; Boring backfilled upon completion**

WATER LEVEL DATA

While Drilling **23.00 ft**
At Completion of Drilling **23.50 ft**
Time After Drilling **NA**
Depth to Water **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG SB-05

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
Project **Barrington Rd from Algonquin Rd to Central Rd**
Location **Cook County, IL**

Datum: NAVD 88
Elevation: 839.40 ft
North: 1975979.43 ft
East: 1036482.12 ft
Station: 80+38.71 R2
Offset: 42.23' RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	838.4	12-inch thick Gravelly SAND															
		Soft, dark brown to brown CLAY to SILTY CLAY, trace gravel and wood fragments; moist --RDR 2--		X	1	1 1 2	0.49 B	29					X	9	2 4 6	2.46 B	21
				X	2	0 1 1	0.49 B	34					X	10	2 4 4	3.03 B	18
	833.9		5							814.4	Boring terminated at 25.00 ft	25					
		Very loose, gray Gravelly SAND; saturated --RDR 2--		X	3	2 1 1	NP	21									
	831.4			X	4	0 0 1	< 0.25 P	254									
		Very soft to medium stiff, dark brown PEAT; moist --RDR 2--		X	5	0 0 0	0.82 B	270									
	826.4			X	6	0 0 0	0.33 B	67									
	823.9		15														
		Soft, gray CLAY, trace gravel; moist --RDR 2--		X	7	0 0 1	0.33 B	27									
	821.4			X	8	1 5 3	0.50 P	19									
		Medium stiff to very stiff, gray and brown SILTY CLAY, trace to little gravel; moist --RDR 2--		X													
			20														

GENERAL NOTES

Begin Drilling **05-02-2024** Complete Drilling **05-02-2024**
Drilling Contractor **Wang Testing Services** Drill Rig **21GeoT[92%]**
Driller **AG&TC** Logger **L. Corral** Checked by **J. Bensen**
Drilling Method **2.25" ID HSA; Boring backfilled upon completion**

WATER LEVEL DATA

While Drilling **5.50 ft**
At Completion of Drilling **Dry**
Time After Drilling **NA**
Depth to Water **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG SB-06

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
Project **Barrington Rd from Algonquin Rd to Central Rd**
Location **Cook County, IL**

Datum: NAVD 88
Elevation: 838.22 ft
North: 1976037.80 ft
East: 1036487.54 ft
Station: 80+97.06 R2
Offset: 47.91' RT

Page 1 of 1

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	837.2	12-inch thick SILTY CLAY --TOPSOIL-- Very soft, gray to black CLAY, trace gravel and organics; moist --RDR 2--			1	0 0 1	NA	71		817.7	Very stiff, gray SILTY CLAY, trace gravel; moist --RDR 2--			9	2 4 6	2.87 B	22
			5		2	0 0 1	< 0.25 P	45		813.2		25		10	2 4 4	2.46 B	19
	832.7	Loose, gray SAND, trace gravel; wet --RDR 2--			3	4 3 1	NP	21			Boring terminated at 25.00 ft						
	830.2	Very soft, dark brown PEAT; moist --RDR 2--	10		4	0 1 1	< 0.25 P	366				30					
					5	0 0 0	0.16 B	262									
	825.2	Very soft, dark gray Organic CLAY; moist --RDR 2--	15		6	0 0 0	0.08 B	94				35					
	822.7	Soft, light gray CLAY, trace gravel; moist --RDR 2--			7	0 0 0	0.33 B	32									
	820.2	Gray Gravelly LOAM; moist --RDR 2--	20		8	3 1 2	NA	9				40					

GENERAL NOTES

Begin Drilling **05-02-2024** Complete Drilling **05-02-2024**
Drilling Contractor **Wang Testing Services** Drill Rig **21GeoT[92%]**
Driller **AG&TC** Logger **L. Corral** Checked by **J. Bensen**
Drilling Method **2.25" ID HSA; Boring backfilled upon completion**

WATER LEVEL DATA

While Drilling **5.50 ft**
At Completion of Drilling **Dry**
Time After Drilling **NA**
Depth to Water **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



BORING LOG SB-07

WEI Job No.: 1064-01-01

wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

Client **Ardmore Roderick**
 Project **Barrington Rd from Algonquin Rd to Central Rd**
 Location **Cook County, IL**

Datum: NAVD 88
Elevation: 841.02 ft
North: 1976387.54 ft
East: 1036397.52 ft
Station: 84+47.18 R2
Offset: 40.60 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type <i>recovery</i>	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type <i>recovery</i>	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	840.91	1-inch thick, black SILTY CLAY --TOPSOIL--			1	4	3.00 P	18		816.0	Boring terminated at 25.00 ft			9	7	2.21 B	19
	840.5	5-inch thick, gray GRAVEL --FILL-- Very stiff, brown and gray SILTY CLAY, trace gravel; damp --FILL--				5						6			9		
	837.1	Medium dense, brown Gravelly SAND; wet --FILL--	5	2	11 15 14	2.50 P	18					10	5 6 7	1.31 B	19		
	834.3	Very stiff, brown and gray CLAY, trace gravel and organics; moist --RDR 2--		3	4 5 1	NR											
			10	4	2 2 3	2.00 P	30										
	830.5	Stiff to very stiff, brown to gray SILTY CLAY, trace gravel; damp to moist --RDR 2--		5	3 3 5	1.23 B	22										
			15	6	3 5 8	1.64 B	19										
				7	4 6 9	2.46 B	16										
		20	8	5 8 8	1.89 B	18											

GENERAL NOTES

Begin Drilling	04-12-2024	Complete Drilling	04-12-2024
Drilling Contractor	Wang Testing Services	Drill Rig	17D50T [81%]
Driller	RH&JD	Logger	M. Rojo
		Checked by	J. Bensen
Drilling Method	2.25" ID HSA; Boring backfilled upon completion		

WATER LEVEL DATA

While Drilling		5.00 ft
At Completion of Drilling		6.00 ft
Time After Drilling	NA	
Depth to Water		NA

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG SB-07-HA

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
Project **Barrington Rd from Algonquin Rd to Central Rd**
Location **Cook County, IL**

Datum: NAVD 88
Elevation: 838.06 ft
North: 1976390.58 ft
East: 1036375.90 ft
Station: 84+50.31 R2
Offset: 62.20 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	837.3	9-inch thick, black SILTY CLAY --TOPSOIL-- --wet spoon-- Stiff to very stiff, brown and gray SILTY CLAY, trace gravel			1	PUSH	2.00 P	17									
					2	PUSH	1.91 P	20									
			5		3	PUSH	2.10 B	21									
					4	PUSH	2.29 B	20									
	830.1	Boring terminated at 8.00 ft															
			10														
			15														
			20														

GENERAL NOTES

Begin Drilling **05-21-2024** Complete Drilling **05-21-2024**
Drilling Contractor **Wang Testing Services** Drill Rig
Driller **F. Bozga** Checked by **J. Bensen**
Drilling Method **1" ID HSA; Boring backfilled upon completion**

WATER LEVEL DATA

While Drilling **1.00 ft**
At Completion of Drilling **1.00 ft**
Time After Drilling **NA**
Depth to Water **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



BORING LOG SB-08

WEI Job No.: 1064-01-01

wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

Client **Ardmore Roderick**
 Project **Barrington Rd from Algonquin Rd to Central Rd**
 Location **Cook County, IL**

Datum: NAVD 88
Elevation: 841.14 ft
North: 1976429.40 ft
East: 1036397.66 ft
Station: 84+89.04 R2
Offset: 40.28 LT

[illegible]

GENERAL NOTES

Begin Drilling **04-12-2024** Complete Drilling **04-12-2024**
 Drilling Contractor **Wang Testing Services** Drill Rig **17D50T [81%]**
 Driller **RH&JD** Logger **M. Rojo** Checked by **J. Bensen**
 Drilling Method **2.25" ID HSA; Boring backfilled upon completion**

WATER LEVEL DATA

While Drilling		5.00 ft
At Completion of Drilling		7.00 ft
Time After Drilling	NA	
Depth to Water		NA

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG SB-08-HA

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
Project **Barrington Rd from Algonquin Rd to Central Rd**
Location **Cook County, IL**

Datum: NAVD 88
Elevation: 838.46 ft
North: 1976438.16 ft
East: 1036378.06 ft
Station: 84+97.89 R2
Offset: 59.84 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	838.0	6-inch thick, soft, black and dark brown SILTY CLAY			1	PUSH	0.25 P	83									
	837.2	--TOPSOIL--			2	PUSH	1.75 P	28									
		Possible GRAVEL; wet			3	PUSH	1.72 B	30									
		Stiff, brown SILTY CLAY to CLAY, trace gravel			4	PUSH	1.50 P	15									
	830.5	Boring terminated at 8.00 ft															

GENERAL NOTES

WATER LEVEL DATA

Begin Drilling **05-21-2024** Complete Drilling **05-21-2024**
Drilling Contractor **Wang Testing Services** Drill Rig
Driller **F. Bozga** Checked by **J. Bensen**
Drilling Method **1" ID HSA; Boring backfilled upon completion**

While Drilling **1.00 ft**
At Completion of Drilling **0.50 ft**
Time After Drilling **NA**
Depth to Water **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



BORING LOG SB-09

WEI Job No.: 1064-01-01

wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

Client **Ardmore Roderick**
 Project **Barrington Rd from Algonquin Rd to Central Rd**
 Location **Cook County, IL**

Datum: NAVD 88
Elevation: 841.25 ft
North: 1976482.39 ft
East: 1036398.03 ft
Station: 85+42.03 R2
Offset: 39.67 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type <i>recovery</i>	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type <i>recovery</i>	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	
	841.0	3-inch thick, black SILTY CLAY --TOPSOIL--																
	840.5	6-inch thick, gray GRAVEL --FILL--																
		Very stiff to hard, brown and gray SILTY CLAY, trace gravel; damp --FILL--		X	1	4 8 7	4.00 P	17						X	9	4 4 7	1.23 B	19
	837.2	Medium dense, brown Gravelly SAND; moist --FILL--		X	2	10 14 10	2.00 P	13						X	10	4 4 9	1.00 P	17
	834.5	Medium stiff to very stiff, brown to gray SILTY CLAY, trace gravel; damp --RDR 2--			3	3 3 4	NR											
			10	X	4	3 8 5	1.64 B	20										
				X	5	5 4 5	2.13 B	20										
			15	X	6	4 8 6	2.05 B	17										
		--4-inch thick silt seam--		X	7	4 4 6	0.82 B	18										
			20	X	8	5 4 5	0.90 B	20										

GENERAL NOTES

Begin Drilling	04-12-2024	Complete Drilling	04-12-2024
Drilling Contractor	Wang Testing Services	Drill Rig	17D50T [81%]
Driller	RH&JD	Logger	M. Rojo
		Checked by	J. Bensen
Drilling Method	2.25" ID HSA; Boring backfilled upon completion		

WATER LEVEL DATA

While Drilling		6.00 ft
At Completion of Drilling		7.00 ft
Time After Drilling	NA	
Depth to Water		NA

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG SB-09-HA

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
Project **Barrington Rd from Algonquin Rd to Central Rd**
Location **Cook County, IL**

Datum: NAVD 88
Elevation: 839.97 ft
North: 1976487.76 ft
East: 1036378.70 ft
Station: 85+47.48 R2
Offset: 58.98 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	839.3	8-inch thick, dark brown SILTY CLAY --TOPSOIL-- Medium stiff to very stiff, brown and gray SILTY CLAY to CLAY, trace gravel			1	PUSH	0.75 P	27									
					2	PUSH	1.00 P	26									
			5		3	PUSH	3.06 B	18									
					4	PUSH	3.63 B	18									
	832.0	Boring terminated at 8.00 ft															
			10														
			15														
			20														

GENERAL NOTES

Begin Drilling **05-21-2024** Complete Drilling **05-21-2024**
Drilling Contractor **Wang Testing Services** Drill Rig
Driller **F. Bozga** Checked by **J. Bensen**
Drilling Method **1" ID HSA; Boring backfilled upon completion**

WATER LEVEL DATA

While Drilling **0.00 ft**
At Completion of Drilling **0.00 ft**
Time After Drilling **NA**
Depth to Water **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG SB-10

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
Project **Barrington Rd from Algonquin Rd to Central Rd**
Location **Cook County, IL**

Datum: NAVD 88
Elevation: 841.47 ft
North: 1976584.32 ft
East: 1036396.08 ft
Station: 86+43.97 R2
Offset: 41.19 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	840.9	7-inch thick CONCRETE --PAVEMENT--															
		Medium dense, gray GRAVEL; moist --FILL--			1	7 7 8	NP	18						9	3 7 7	1.23 B	19
	838.5	Very stiff, brown and gray SILTY CLAY LOAM, trace gravel; damp --FILL--			2	5 6 21	3.50 P	11						10	5 5 6	1.31 B	20
	837.6	Gray, fine SAND; wet --FILL--			5					816.5	Boring terminated at 25.00 ft	25					
	836.0	Stiff, brown and gray SILTY CLAY, trace gravel and brick fragments; damp to moist --FILL--			3	3 3 2	1.07 B	22									
	833.5	Stiff to hard, brown to gray SILTY CLAY, trace gravel; damp to moist --RDR 2--			4	3 7 9	5.74 B	19									
			10		5	4 6 7	2.38 B	20									
					6	5 5 9	1.97 B	19									
			15		7	5 5 6	1.23 B	19									
		--3-inch thick silt seam--			8	7 5 10	2.13 B	20									
			20														

GENERAL NOTES

Begin Drilling **04-12-2024** Complete Drilling **04-12-2024**
Drilling Contractor **Wang Testing Services** Drill Rig **17D50T [81%]**
Driller **RH&JD** Logger **M. Rojo** Checked by **J. Bensen**
Drilling Method **2.25" ID HSA; Boring backfilled upon completion**

WATER LEVEL DATA

While Drilling **4.75 ft**
At Completion of Drilling **6.00 ft**
Time After Drilling **NA**
Depth to Water **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG SB-10-HA

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
Project **Barrington Rd from Algonquin Rd to Central Rd**
Location **Cook County, IL**

Datum: NAVD 88
Elevation: 840.89 ft
North: 1976552.55 ft
East: 1036377.80 ft
Station: 86+12.27 R2
Offset: 59.60 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	840.5	5-inch thick, black SILTY CLAY --TOPSOIL--			1	P U S H	0.75 P	29									
	839.1	Medium stiff, dark brown and gray SILTY CLAY, trace gravel --FILL--			2	P U S H	0.25 P	28									
	838.4	Gray GRAVEL; saturated Soft to very stiff, brown and gray SILTY CLAY to CLAY, trace gravel			3	P U S H	2.67 B	19									
			5		4	P U S H	3.63 B	20									
					5	P U S H	2.00 P	17									
			10		6	P U S H	NR										
	828.9	Boring terminated at 12.00 ft															
			15														
			20														

GENERAL NOTES

Begin Drilling **05-21-2024** Complete Drilling **05-21-2024**
Drilling Contractor **Wang Testing Services** Drill Rig
Driller **F. Bozga** Logger **J. Bensen**
Drilling Method **1" ID HSA; Boring backfilled upon completion**

WATER LEVEL DATA

While Drilling **0.00 ft**
At Completion of Drilling **0.00 ft**
Time After Drilling **NA**
Depth to Water **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG SB-SGB-01

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
Project **Barrington Rd from Algonquin Rd to Central Rd**
Location **Cook County, IL**

Datum: NAVD 88
Elevation: 823.66 ft
North: 1968812.74 ft
East: 1036090.28 ft
Station: 7+66.54
Offset: 69.75 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	823.5	2-inch thick, dark brown SILTY CLAY --TOPSOIL-- Medium stiff to very stiff, gray CLAY to SILTY CLAY; damp --FILL-- --RDR 2--			1	12 6 5 5	3.00 P	24									
	820.4	Very stiff, brown SILTY CLAY, trace gravel; moist --RDR 2--			2	6 8 4 3	0.82 B	25									
	818.2	Medium stiff, gray SILTY LOAM to SILTY CLAY LOAM, trace gravel; wet to saturated --RDR 2--			3	4 5 6 4	3.53 B	18									
	816.2	Stiff to hard, gray SILTY CLAY to SILTY CLAY LOAM, trace to little gravel; moist --RDR 2--			4	2 2 3 2	0.50 P	24									
					5	2 5 10 12	4.10 B	17									
					6	7 8 8 9	3.44 B	16									
					7	6 6 7 10	3.44 B	26									
					8	5 6 8 8	1.97 B	17									
	807.7	Boring terminated at 16.00 ft															

GENERAL NOTES

Begin Drilling **02-14-2022** Complete Drilling **02-14-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **21D50A [84%]**
Driller **KS&AP** Logger **A. Scifers** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; Boring backfilled upon completion**

WATER LEVEL DATA

While Drilling **5.50 ft**
At Completion of Drilling **8.00 ft**
Time After Drilling **NA**
Depth to Water **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG SB-SGB-02

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
Project **Barrington Rd from Algonquin Rd to Central Rd**
Location **Cook County, IL**

Datum: NAVD 88
Elevation: 822.30 ft
North: 1969339.88 ft
East: 1036349.64 ft
Station: 13+79.95
Offset: 59.29 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	821.6	9-inch thick TOPSOIL				12											
		Stiff to hard, black, brown and gray SILTY CLAY, trace gravel; damp			1	8 6 7	4.50 P	25									
		--FILL-- --RDR 2--			2	11 8 9 6	2.25 P	18									
		--1.00 P--															
	817.3		5		3	9 7 7 9	NP	19									
	816.5	Medium dense, gray SANDY LOAM, trace gravel; moist															
		--FILL-- --RDR 2--															
	815.1	Very stiff, black SILTY CLAY; damp			4	4 7 8 6	2.50 P	33									
		--Buried TOPSOIL-- --RDR 2--															
		--silt seams; wet--			5	4 5 8 10	3.53 B	18									
		Very stiff to hard, gray SILTY CLAY to SILTY CLAY LOAM, trace gravel; moist	10														
		--RDR 2--			6	9 9 11 10	4.26 B	20									
					7	3 5 8 12	4.43 B	17									
			15		8	4 8 10 12	6.15 B	15									
	806.3	Boring terminated at 16.00 ft															

GENERAL NOTES

Begin Drilling **02-14-2022** Complete Drilling **02-14-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **21D50A [84%]**
Driller **KS&AP** Logger **A. Scifers** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; Boring backfilled upon completion**

WATER LEVEL DATA

While Drilling **8.00 ft**
At Completion of Drilling **Dry**
Time After Drilling **NA**
Depth to Water **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG SB-SGB-03

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
Project **Barrington Rd from Algonquin Rd to Central Rd**
Location **Cook County, IL**

Datum: NAVD 88
Elevation: 820.36 ft
North: 1969916.08 ft
East: 1036415.91 ft
Station: 19+75.63
Offset: 42.77 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	820.04	4-inch thick, very stiff, black and gray SILTY CLAY, trace gravel; moist --TOPSOIL--			1	2 2 4 7	2.46 B	14			Medium stiff to stiff, gray SILTY CLAY to SILTY CLAY LOAM, trace gravel; moist --RDR 2--			11	3 2 4 4	0.49 B	20
		Stiff to very stiff, gray CLAY LOAM to SILTY CLAY, trace gravel; moist --FILL-- --RDR 2--			2	5 6 6 8	2.62 B	28		796.4				12	3 4 7 8	1.72 B	16
			5		3	8 7 9 7	2.95 B	18			Boring terminated at 24.00 ft	25					
	813.6	Medium dense, gray Gravelly SAND; moist --FILL--			4	6 11 10 5	NP	9									
	812.6	Very soft, brown to black PEAT, trace gravel; moist --RDR 2--			5	2 0 1 1	0.16 B	155									
		--RDR 1--	10		6	1 1 1 1	0.16 B	216									
	808.9	Very soft, black Organic SILTY CLAY LOAM, some PEAT beds; moist --RDR 1--			7	1 0 1 0	< 0.25 P	87									
			15		8	0 0 0 0	< 0.25 P	72									
					9	0 0 0 0	< 0.25 P	100									
	802.9	--wet spoon-- Soft, gray CLAY to SILTY CLAY LOAM, trace organic matter; moist --RDR 1 to 2--			10	5 6 6 5	0.33 B	36									
	800.9		20									40					

GENERAL NOTES

Begin Drilling **02-11-2022** Complete Drilling **02-11-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **21D50A [84%]**
Driller **KS&AP** Logger **A. Scifers** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; Boring backfilled upon completion**

WATER LEVEL DATA

While Drilling **18.00 ft**
At Completion of Drilling **Dry**
Time After Drilling **NA**
Depth to Water **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG SB-SGB-04

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
Project **Barrington Rd from Algonquin Rd to Central Rd**
Location **Cook County, IL**

Datum: NAVD 88
Elevation: 830.02 ft
North: 1970534.93 ft
East: 1036410.29 ft
Station: 25+94.50
Offset: 45.64 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	828.9	14-inch thick, hard, black SILTY CLAY, trace gravel; damp to moist			1	7 5 20 6	4.43 B	38									
	828.3	--TOPSOIL--															
		Black Gravelly SANDY LOAM; damp			2	5 7 12 14	2.21 B	22									
		--FILL--															
		Very stiff to hard, brown to gray SILTY CLAY to SILTY CLAY LOAM, trace gravel; damp to moist			3	7 10 11 11	3.85 B	22									
		--RDR 2--															
					4	6 10 15 10	4.84 B	17									
					5	5 7 12 14	7.87 B	17									
					6	4 5 8 13	4.50 P	18									
					7	9 13 28 19	4.10 B	18									
					8	9 8 14 14	3.03 B	17									
	814.0	Boring terminated at 16.00 ft															

GENERAL NOTES

Begin Drilling **02-11-2022** Complete Drilling **02-11-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **21D50A [84%]**
Driller **KS&AP** Logger **A. Scifers** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; Boring backfilled upon completion**

WATER LEVEL DATA

While Drilling **▼** **Dry**
At Completion of Drilling **▼** **Dry**
Time After Drilling **NA**
Depth to Water **▼** **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG SB-SGB-05

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
Project **Barrington Rd from Algonquin Rd to Central Rd**
Location **Cook County, IL**

Datum: NAVD 88
Elevation: 833.12 ft
North: 1971185.40 ft
East: 1036394.63 ft
Station: 32+45.04
Offset: 58.40 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	832.1	12-inch thick, hard, black SILTY CLAY, trace gravel; moist			1	7 4 4 5	4.10 B	19									
		--TOPSOIL--															
	830.6	Medium stiff (0.5P), brown and gray SILTY CLAY LOAM; damp			2	4 4 7 9	2.87 B	30									
		--FILL--															
		--RDR 2--															
	829.4	Very stiff, black CLAY to SILTY CLAY, trace gravel; damp			3	4 4 3 7	1.64 B	19									
		--Buried TOPSOIL--															
		--L _L (%)=49, P _L (%)=17--															
		--%Gravel=4.6--															
		--%Sand=12.4--															
		--%Silt=48.6--															
		--%Clay=34.4--															
		--A-7-6 (27)--															
		Stiff to hard, brown to gray SILTY CLAY to SILTY CLAY LOAM, trace gravel; moist			4	7 3 8 10	5.49 B	18									
		--RDR 2--															
					5	6 8 10 11	5.25 B	19									
					6	11 11 12 11	3.77 B	18									
					7	5 5 5 6	2.46 B	21									
					8	7 9 11 12	3.94 B	16									
	817.1	Boring terminated at 16.00 ft															

GENERAL NOTES

Begin Drilling **02-11-2022** Complete Drilling **02-11-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **21D50A [84%]**
Driller **KS&AP** Logger **A. Scifers** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; Boring backfilled upon completion**

WATER LEVEL DATA

While Drilling **▽** **Dry**
At Completion of Drilling **▼** **Dry**
Time After Drilling **NA**
Depth to Water **▽** **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG SB-SGB-06

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
 Project **Barrington Rd from Algonquin Rd to Central Rd**
 Location **Cook County, IL**

Datum: NAVD 88
Elevation: 832.29 ft
North: 1971732.69 ft
East: 1036403.05 ft
Station: 37+92.28
Offset: 47.54 LT

[illegible]

GENERAL NOTES

Begin Drilling **02-11-2022** Complete Drilling **02-11-2022**
 Drilling Contractor **Wang Testing Services** Drill Rig **21D50A [84%]**
 Driller **KS&AP** Logger **A. Scifers** Checked by **C. Marin**
 Drilling Method **2.25" ID HSA; Boring backfilled upon completion**

WATER LEVEL DATA

While Drilling		Dry
At Completion of Drilling		Dry
Time After Drilling	NA	
Depth to Water		NA

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG SB-SGB-07

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
Project **Barrington Rd from Algonquin Rd to Central Rd**
Location **Cook County, IL**

Datum: NAVD 88
Elevation: 839.11 ft
North: 1972273.88 ft
East: 1036391.77 ft
Station: 43+33.52
Offset: 56.42 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	837.7	17-inch thick, hard, black and gray SILTY CLAY, trace gravel; damp			1	8 6 8 9	5.82 B	23									
		--TOPSOIL--															
		Very stiff, brown and gray SILTY CLAY, trace gravel; damp to moist			2	5 6 8 9	3.28 B	24									
		--FILL--															
		--RDR 2--															
	834.6	Medium dense, brown Gravelly SANDY LOAM to LOAM; damp to moist	5		3	6 8 10 13	NP	9									
		--FILL--															
		--RDR 2--															
	831.9	Stiff to very stiff, gray SILTY CLAY to SILTY CLAY LOAM, trace gravel; damp to moist			4	10 10 8 13	NP	14									
		--RDR 2--															
		--wet spoon--	10		5	9 12 14 15	2.62 B	17									
					6	11 14 17 16	3.69 B	18									
					7	3 3 10 10	1.80 B	12									
			15		8	15 13 13 15	2.21 B	19									
	823.1	Boring terminated at 16.00 ft															

GENERAL NOTES

Begin Drilling **02-11-2022** Complete Drilling **02-11-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **21D50A [84%]**
Driller **KS&AP** Logger **A. Scifers** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; Boring backfilled upon completion**

WATER LEVEL DATA

While Drilling **10.00 ft**
At Completion of Drilling **Dry**
Time After Drilling **NA**
Depth to Water **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG SB-SGB-08

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
Project **Barrington Rd from Algonquin Rd to Central Rd**
Location **Cook County, IL**

Datum: NAVD 88
Elevation: 846.79 ft
North: 1972927.21 ft
East: 1036411.62 ft
Station: 49+86.75
Offset: 33.51 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	845.3	Medium stiff, black SILTY CLAY, trace gravel; moist --TOPSOIL--			1	3 2 2 4	0.75 P	25									
		Very stiff to hard, brown to gray SILTY CLAY to SILTY CLAY LOAM, trace gravel; moist --RDR 2-- --L _L (%)=39, P _L (%)=16-- --%Gravel=2.2-- --%Sand=12.1-- --%Silt=51.6-- --%Clay=34.1-- --A-6 (19)--			2	4 6 7 9	2.62 B	25									
			5		3	3 5 5 9	5.49 B	20									
					4	5 9 13 17	6.72 B	18									
					5	5 6 10 10	3.20 B	16									
			10		6	12 11 12 12	NA	17									
		--sand seam; damp--			7	6 6 6 9	3.03 B	16									
			15		8	5 7 9 10	2.54 B	16									
	830.8	Boring terminated at 16.00 ft															
			20														

GENERAL NOTES

Begin Drilling **02-10-2022** Complete Drilling **02-10-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **21D50A [84%]**
Driller **KS&AP** Logger **A. Scifers** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; Boring backfilled upon completion**

WATER LEVEL DATA

While Drilling **▼** **Dry**
At Completion of Drilling **▼** **Dry**
Time After Drilling **NA**
Depth to Water **▼** **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG SB-SGB-09

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
Project **Barrington Rd from Algonquin Rd to Central Rd**
Location **Cook County, IL**

Datum: NAVD 88
Elevation: 845.34 ft
North: 1973265.07 ft
East: 1036414.34 ft
Station: 53+23.80
Offset: 33.95 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	844.7	8-inch thick, black SANDY LOAM, little gravel			1	5	1.48	20									
		--TOPSOIL--			2	2											
		Stiff to very stiff, black and gray CLAY to SILTY CLAY, trace gravel; moist			3	3											
		--RDR 2--			4	4	1.80	32									
					5	6											
	839.8	Medium stiff, black and gray to black and green SILTY CLAY to SILTY CLAY LOAM, trace gravel; moist			6	7	2.13	29									
		--RDR 2--			7	7											
		--L _L (%)=32, P _L (%)=16--			8	2	0.57	29									
		--%Gravel=0.6--			9	2											
		--%Sand=13.9--			10	2											
		--%Silt=60.2--			11	3	0.82	19									
		--%Clay=25.3--			12	5											
	835.6	--A-6 (12)--			13	6											
		Stiff to very stiff, gray SILTY CLAY, trace gravel; moist			14	5	3.85	18									
		--RDR 2--			15	6											
		--wet spoon--			16	8	1.00	22									
					17	7											
					18	7	1.64	16									
					19	9											
					20	10											
	829.3	Boring terminated at 16.00 ft															

GENERAL NOTES

Begin Drilling **02-10-2022** Complete Drilling **02-10-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **21D50A [84%]**
Driller **KS&AP** Logger **A. Scifers** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; Boring backfilled upon completion**

WATER LEVEL DATA

While Drilling **12.00 ft**
At Completion of Drilling **Dry**
Time After Drilling **NA**
Depth to Water **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG SB-SGB-10

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
Project **Barrington Rd from Algonquin Rd to Central Rd**
Location **Cook County, IL**

Datum: NAVD 88
Elevation: 847.59 ft
North: 1973389.64 ft
East: 1036416.73 ft
Station: 54+48.77
Offset: 33.38 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	847.33	3-inch thick, black SANDY LOAM				2											
		--TOPSOIL--			1	3	2.50	18									
	846.1	Very stiff, black and gray SILTY CLAY, trace gravel; moist				7	P										
		--FILL--				4											
		--RDR 2--			2	2	0.49	9									
		Soft, black LOAM to CLAY				4	B										
	843.7	LOAM, trace gravel; moist				5											
		--FILL--				3											
		--RDR 2--				4											
		--L _L (%)=46, P _L (%)=20--			3	6	1.31	29									
		--%Gravel=14.7--				10	B										
		--%Sand=33.0--				7											
		--%Silt=37.8--				8											
		--%Clay=14.6--				8	3.44	17									
	841.8	--A-7-6 (10)--			4	12	B										
		Stiff, black SILTY CLAY; moist				7											
		--Buried TOPSOIL--				10											
		--RDR 2--			5	12	6.97	13									
		Very stiff to hard, black, brown to gray SILTY CLAY to SILTY CLAY LOAM, trace gravel; damp to moist				14											
		--RDR 2--			6	12	8.12	17									
						16	B										
						15											
					7	10	8.36	13									
						14	B										
						14											
						5											
					8	6	3.20	16									
						9	B										
						11											
	831.6	Boring terminated at 16.00 ft															

GENERAL NOTES

Begin Drilling **02-10-2022** Complete Drilling **02-10-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **21D50A [84%]**
Driller **KS&AP** Logger **A. Scifers** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; Boring backfilled upon completion**

WATER LEVEL DATA

While Drilling **▽** **Dry**
At Completion of Drilling **▼** **Dry**
Time After Drilling **NA**
Depth to Water **▼** **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



BORING LOG SB-SGB-11

wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
 Project **Barrington Rd from Algonquin Rd to Central Rd**
 Location **Cook County, IL**

Datum: NAVD 88
Elevation: 848.99 ft
North: 1973525.51 ft
East: 1036414.64 ft
Station: 55+85.06
Offset: 35.89 LT

[illegible]



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG SB-SGB-12

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
 Project **Barrington Rd from Algonquin Rd to Central Rd**
 Location **Cook County, IL**

Datum: NAVD 88
Elevation: 855.83 ft
North: 1974141.90 ft
East: 1036407.15 ft
Station: 62+01.52
Offset: 40.71 LT

[illegible]

GENERAL NOTES

Begin Drilling	02-10-2022	Complete Drilling	02-10-2022
Drilling Contractor	Wang Testing Services	Drill Rig	21D50A [84%]
Driller	KS&AP	Logger	A. Scifers
		Checked by	C. Marin
Drilling Method	2.25" ID HSA; Boring backfilled upon completion		

WATER LEVEL DATA

While Drilling		Dry
At Completion of Drilling		Dry
Time After Drilling	NA	
Depth to Water		NA

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG SB-SGB-13

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
 Project **Barrington Rd from Algonquin Rd to Central Rd**
 Location **Cook County, IL**

Datum: NAVD 88
Elevation: 856.59 ft
North: 1974734.02 ft
East: 1036407.06 ft
Station: 67+93.64
Offset: 38.23 LT

[illegible]

GENERAL NOTES

Begin Drilling	02-10-2022	Complete Drilling	02-10-2022
Drilling Contractor	Wang Testing Services	Drill Rig	21D50A [84%]
Driller	KS&AP	Logger	A. Scifers
		Checked by	C. Marin
Drilling Method	2.25" ID HSA; Boring backfilled upon completion		

WATER LEVEL DATA

While Drilling		Dry
At Completion of Drilling		Dry
Time After Drilling	NA	
Depth to Water		NA

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG SB-SGB-14

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
Project **Barrington Rd from Algonquin Rd to Central Rd**
Location **Cook County, IL**

Datum: NAVD 88
Elevation: 867.10 ft
North: 1975376.28 ft
East: 1036404.35 ft
Station: 74+35.91
Offset: 38.15 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	866.7	5-inch thick TOPSOIL															
		Very stiff to hard, black, brown, and gray CLAY to SILTY CLAY, trace gravel; moist			1	8 5 6 7	3.50 P	21									
		--RDR 2--			2	5 6 9 14	4.10 B	21									
	863.4	Very stiff to hard, brown to gray SILTY CLAY to SILTY CLAY LOAM, trace gravel; damp to moist			3	4 7 10 14	4.10 B	19									
		--RDR 2--			4	12 15 20 25	2.21 B	20									
					5	16 15 18 21	4.67 S	15									
					6	15 17 15 17	2.79 B	18									
					7	8 9 11 12	2.05 B	17									
					8	6 7 10 11	2.54 B	17									
	851.1	Boring terminated at 16.00 ft															

GENERAL NOTES

Begin Drilling **02-10-2022** Complete Drilling **02-10-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **21D50A [84%]**
Driller **KS&AP** Logger **A. Scifers** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; Boring backfilled upon completion**

WATER LEVEL DATA

While Drilling **7.00 ft**
At Completion of Drilling **Dry**
Time After Drilling **NA**
Depth to Water **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG SB-SGB-15

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
 Project **Barrington Rd from Algonquin Rd to Central Rd**
 Location **Cook County, IL**

Datum: NAVD 88
Elevation: 841.06 ft
North: 1976534.71 ft
East: 1036392.35 ft
Station: 85+94.38
Offset: 45.13 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	840.3	9-inch thick, soft, black SILTY CLAY --TOPSOIL-- Very stiff, black and gray SILTY CLAY LOAM, trace gravel; moist --FILL-- --RDR 2--		X	1	8 4 4 4	0.49 B	23
				X	2	4 3 5 5	2.54 B	15
	837.3	--gravel seam; saturated-- Medium stiff, black and green CLAY LOAM to SILTY CLAY, trace gravel; moist	5	X	3	8 5 4 2	0.57 B	16
	835.6	--RDR 2-- --L _L (%)=33, P _L (%)=15-- --%Gravel=5.4-- --%Sand=19.2-- --%Silt=47.2-- --%Clay=28.2-- --A-6 (11)-- Stiff to very stiff, gray SILTY CLAY to SILTY CLAY LOAM, trace gravel; moist --RDR 2--		X	4	3 4 7 8	1.89 B	15
				X	5	4 7 9 9	2.21 S	16
				X	6	12 12 28 13	3.77 B	17
				X	7	3 3 9 11	2.79 B	19
				X	8	7 8 11 11	2.46 B	19
	825.1	Boring terminated at 16.00 ft						

GENERAL NOTES

Begin Drilling	02-01-2022	Complete Drilling	02-01-2022
Drilling Contractor	Wang Testing Services	Drill Rig	21D50A [84%]
Driller	KS&AP	Logger	A. Scifers
		Checked by	C. Marin
Drilling Method	2.25" ID HSA; Boring backfilled upon completion		

WATER LEVEL DATA

While Drilling		4.50 ft
At Completion of Drilling		Dry
Time After Drilling	NA	
Depth to Water		NA

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG SB-SGB-16

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
Project **Barrington Rd from Algonquin Rd to Central Rd**
Location **Cook County, IL**

Datum: NAVD 88
Elevation: 843.66 ft
North: 1977133.70 ft
East: 1036389.34 ft
Station: 91+93.74
Offset: 41.41 LT

[illegible]

GENERAL NOTES

Begin Drilling	02-01-2022	Complete Drilling	02-01-2022
Drilling Contractor	Wang Testing Services	Drill Rig	21D50A [84%]
Driller	KS&AP	Logger	A. Scifers
		Checked by	C. Marin
Drilling Method	2.25" ID HSA; Boring backfilled upon completion		

WATER LEVEL DATA

While Drilling		2.50 ft
At Completion of Drilling		11.00 ft
Time After Drilling		NA
Depth to Water		NA

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG SB-SGB-17

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
Project **Barrington Rd from Algonquin Rd to Central Rd**
Location **Cook County, IL**

Datum: NAVD 88
Elevation: 845.52 ft
North: 1977281.05 ft
East: 1036386.82 ft
Station: 93+41.11
Offset: 42.06 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	844.9	8-inch thick TOPSOIL				12											
		Medium stiff to hard, black and gray SILTY CLAY, trace gravel; moist			1	6	4.50	17									
		--FILL--				6	P										
		--RDR 2--				6											
						7											
	841.8	Medium dense, brown Gravelly SAND; saturated			2	11	0.74	14									
		--FILL--				9	B										
		--RDR 2--				11											
						13											
	838.5	Black SILTY CLAY; wet				23											
	838.0	--Buried TOPSOIL--				9											
		Medium stiff to hard, black to gray SILTY CLAY to SILTY CLAY LOAM, trace gravel; moist			3	5	NP	10									
		--RDR 2--				5											
						4											
						8	NP	13									
						2											
						3											
						3											
						3											
						4	0.57	27									
						3	B										
						4											
						4	1.56	20									
						6	B										
						2											
						4											
						9	2.62	16									
						12	B										
						16											
						19	4.92	17									
						23	B										
						24											
	829.5	Boring terminated at 16.00 ft															

GENERAL NOTES

Begin Drilling **02-01-2022** Complete Drilling **02-01-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **21D50A [84%]**
Driller **KS&AP** Logger **A. Scifers** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; Boring backfilled upon completion**

WATER LEVEL DATA

While Drilling **4.00 ft**
At Completion of Drilling **Dry**
Time After Drilling **NA**
Depth to Water **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG SB-SGB-18

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
Project **Barrington Rd from Algonquin Rd to Central Rd**
Location **Cook County, IL**

Datum: NAVD 88
Elevation: 849.17 ft
North: 1977427.46 ft
East: 1036385.48 ft
Station: 94+87.52
Offset: 41.53 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	848.4	9-inch thick, black SILTY CLAY				11											
		--TOPSOIL--				10											
	847.4	Hard, gray SILTY CLAY, little gravel; moist			1	6	4.50	18									
		--FILL--				7	P										
		--RDR 2--				6											
		--wet spoon--			2	8	0.82	19									
		Medium stiff to stiff, black and gray CLAY LOAM to SILTY CLAY, trace gravel; moist				9	B										
		--FILL--				6											
		--RDR 2--				5											
		--L _L (%)=44, P _L (%)=19--			3	7	1.50	20									
		--%Gravel=5.6--				6	P										
		--%Sand=16.8--				5											
		--%Silt=48.7--				7											
		--%Clay=28.9--			4	8	1.23	22									
	841.7	--A-7-6 (19)--				7	B										
		Stiff to hard, brown to gray SILTY CLAY to SILTY CLAY LOAM, trace gravel; moist				8											
		--RDR 2--			5	8	1.56	30									
						6	B										
						7											
					6	9	2.54	18									
						7	B										
						8											
						9											
					7	12	4.84	16									
						11	B										
						7											
					8	12	6.89	17									
						13	B										
						13											
	833.2	Boring terminated at 16.00 ft															

GENERAL NOTES

Begin Drilling **02-01-2022** Complete Drilling **02-01-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **21D50A [84%]**
Driller **KS&AP** Logger **A. Scifers** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; Boring backfilled upon completion**

WATER LEVEL DATA

While Drilling **2.00 ft**
At Completion of Drilling **Dry**
Time After Drilling **NA**
Depth to Water **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG SB-SGB-19

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
 Project **Barrington Rd from Algonquin Rd to Central Rd**
 Location **Cook County, IL**

Datum: NAVD 88
Elevation: 857.54 ft
North: 1977741.09 ft
East: 1036376.66 ft
Station: 98+00.72
Offset: 47.98 LT

[illegible]

GENERAL NOTES

Begin Drilling	02-01-2022	Complete Drilling	02-01-2022
Drilling Contractor	Wang Testing Services	Drill Rig	21D50A [84%]
Driller	KS&AP	Logger	A. Scifers
		Checked by	C. Marin
Drilling Method	2.25" ID HSA; Boring backfilled upon completion		

WATER LEVEL DATA

While Drilling		3.00 ft
At Completion of Drilling		Dry
Time After Drilling	NA	
Depth to Water		NA

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG SB-SGB-20

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
Project **Barrington Rd from Algonquin Rd to Central Rd**
Location **Cook County, IL**

Datum: NAVD 88
Elevation: 860.31 ft
North: 1978619.89 ft
East: 1036390.67 ft
Station: 106+79.50
Offset: 32.40 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	859.9	Very stiff, black and gray SILTY CLAY, trace gravel; moist --TOPSOIL--			1	4 7 11 7	3.77 B	33									
		Very stiff to hard, gray and black CLAY to SILTY CLAY, trace gravel; moist --FILL-- --RDR 2-- --L _c (%)=40, P _L (%)=17-- --%Gravel=5.5-- --%Sand=16.0-- --%Silt=48.1-- --%Clay=30.4-- --A-6 (17)--			2	7 8 7 13	2.62 B	22									
	854.6	Stiff to hard, brown to gray SILTY CLAY, trace gravel; moist --RDR 2--			3	12 9 8 7	4.10 B	21									
					4	9 8 7 9	1.97 B	23									
					5	10 9 9 9	2.79 B	21									
					6	7 8 10 11	4.67 B	17									
					7	17 22 17 15	6.56 B	18									
					8	15 17 16 15	4.26 B	15									
	844.3	Boring terminated at 16.00 ft															

GENERAL NOTES

Begin Drilling **01-28-2022** Complete Drilling **01-28-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **21D50A [84%]**
Driller **KS&AP** Logger **A. Scifers** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; Boring backfilled upon completion**

WATER LEVEL DATA

While Drilling **▼** **Dry**
At Completion of Drilling **▼** **Dry**
Time After Drilling **NA**
Depth to Water **▼** **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG SB-SGB-21

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
Project **Barrington Rd from Algonquin Rd to Central Rd**
Location **Cook County, IL**

Datum: NAVD 88
Elevation: 869.85 ft
North: 1979219.38 ft
East: 1036398.48 ft
Station: 112+78.97
Offset: 23.52 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	869.54	1-inch thick, black SILTY CLAY --TOPSOIL-- Very stiff to hard, black and gray to gray SILTY CLAY, trace gravel; moist			1	4 3 3 5	2.46 B	19									
		--RDR 2--			2	28 25 27 15	7.13 B	20									
	865.9	--wet spoon-- Medium stiff, gray SILTY LOAM to LOAM, little gravel; wet			3	6 6 6 7	0.50 P	19									
	864.4	--RDR 2-- Stiff to very stiff, gray SILTY CLAY to SILTY CLAY LOAM, trace gravel; moist			4	5 7 8 7	1.97 B	22									
		--RDR 2--			5	6 7 7 8	1.48 B	19									
			10		6	10 8 10 9	2.05 B	17									
					7	10 8 7 8	1.18 B	18									
			15		8	7 8 9 9	1.80 B	21									
	853.9	Boring terminated at 16.00 ft															
			20														

GENERAL NOTES

Begin Drilling **01-28-2022** Complete Drilling **01-28-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **21D50A [84%]**
Driller **KS&AP** Logger **A. Scifers** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; Boring backfilled upon completion**

WATER LEVEL DATA

While Drilling **4.00 ft**
At Completion of Drilling **Dry**
Time After Drilling **NA**
Depth to Water **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG TSB-01

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
Project **Barrington Rd from Algonquin Rd to Central Rd**
Location **Cook County, IL**

Datum: NAVD 88
Elevation: 862.40 ft
North: 1977863.51 ft
East: 1036484.99 ft
Station: 99+22.95
Offset: 60.56 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	861.7	9-inch thick, dark brown SANDY LOAM, trace gravel --TOPSOIL-- Very stiff to hard, brown and gray SILTY CLAY, trace to little gravel; damp --RDR 2--			1	6 6 8	3.94 B	19									
					2	4 5 5	10.25 B	18									
	856.4	--AUGER REFUSAL at 6 feet, unknown obstruction-- Boring terminated at 6.00 ft															
			10														
			15														
			20														

GENERAL NOTES

Begin Drilling **01-27-2022** Complete Drilling **01-27-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **21D50A [84%]**
Driller **KS&AP** Logger **A. Scifers** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; Boring backfilled upon completion**

WATER LEVEL DATA

While Drilling **▽** **Dry**
At Completion of Drilling **▼** **Dry**
Time After Drilling **NA**
Depth to Water **▼** **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG TSB-01-A1t

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
Project **Barrington Rd from Algonquin Rd to Central Rd**
Location **Cook County, IL**

Datum: NAVD 88
Elevation: 862.11 ft
North: 1977864.85 ft
East: 1036492.64 ft
Station: 99+24.27
Offset: 68.22 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	861.4	9-inch thick, black SILTY CLAY; damp --TOPSOIL-- Stiff to very stiff, brown to gray SILTY CLAY to SILTY CLAY LOAM, trace gravel; moist --RDR 2--			1	20 15 12	3.50 P	22						9	9 10 7	1.23 B	15
			5		2	7 6 5	2.50 P	20				25		10	7 20 10	1.06 B	17
					3	9 11 11	2.21 B	18						11	7 16 15	1.39 B	18
			10		4	7 9 12	3.44 B	17		834.1 833.2	Gray, fine SAND, trace gravel; moist to saturated --RDR 2-- Hard, gray SILTY CLAY, trace gravel; moist --RDR 2-- Boring terminated at 30.00 ft	30		12	4 9 10	4.10 B	16
					5	4 7 11	3.03 B	17									
			15		6	7 11 14	3.77 B	16				35					
					7	3 6 8	1.72 B	16									
			20		8	6 8 8	NR					40					

GENERAL NOTES

Begin Drilling **02-03-2022** Complete Drilling **02-03-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **21D50A [84%]**
Driller **KS&AP** Logger **A. Scifers** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; Boring backfilled upon completion**

WATER LEVEL DATA

While Drilling **28.50 ft**
At Completion of Drilling **Dry**
Time After Drilling **NA**
Depth to Water **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG TSB-02

WEI Job No.: 1064-01-01

Client **Ardmore Roderick**
Project **Barrington Rd from Algonquin Rd to Central Rd**
Location **Cook County, IL**

Datum: NAVD 88
Elevation: 864.48 ft
North: 1978034.71 ft
East: 1036373.88 ft
Station: 100+94.34
Offset: 50.24 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	864.24	864.24-inch thick, black SILTY CLAY --TOPSOIL-- Stiff to very stiff, gray SILTY CLAY to SILTY CLAY LOAM, trace to little gravel; damp --RDR 2 to 3--			1	5 11 11	2.00 P	12									
			5		2	5 4 6	1.80 B	15			--sand lenses; saturated-- --wet spoon--	25		9	4 5 11	3.12 B	20
					3	4 7 8	1.48 B	19						10	8 12 15	2.62 B	18
			10		4	3 4 5	1.07 B	12						11	7 7 13	3.77 B	18
					5	4 6 7	1.48 B	17		834.5		30		12	5 6 11	2.05 B	19
			15		6	4 8 13	1.64 B	17			Boring terminated at 30.00 ft						
		--RDR 3-- --some rig chatter, 15.0 to 16.0 feet-- --possible cobbles--			7	7 7 7	2.05 B	18									
			20		8	4 8 8	1.72 B	15				40					

GENERAL NOTES

Begin Drilling **01-28-2022** Complete Drilling **01-28-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **21D50A [84%]**
Driller **KS&AP** Logger **A. Scifers** Checked by **C. Marin**
Drilling Method **3.25" ID HSA; Boring backfilled upon completion**

WATER LEVEL DATA

While Drilling **21.00 ft**
At Completion of Drilling **20.00 ft**
Time After Drilling **NA**
Depth to Water **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

APPENDIX B



Illinois Department of Transportation

Summary Report on Pavement, Base and Subbase Design

State Job Number: D-91-312-20 Project: Barrington Road Route: FAP 362

Section: 2019-161-W City or County: Cook Date: 02/07/2023

ADT: _____ Year: _____ Design Period: _____ Class Highway: _____

Passenger Cars Per Day: _____ Trucks S.U. Per Day: _____ Trucks M.U. Per Day: _____

Pavement Structure: _____

Type Surface Course: _____ Thickness: _____

Type Base Course: _____ Thickness: _____

Type Subbase Material: _____ Thickness: _____

Sta. to Sta.	7+30 to 116+52	+ to +	+ to +	+ to +
*Sta. of Test	61+17.34			
*Drainage Class	Poor			
*Ave. Frost Penetration	45 to 60 in.			
Illinois Textural Classification	Silty Clay			
Classification and Group Index (AASHTO M 145)	A-7-6 (29)			
*Percent Silt (AASHTO T 88)	58.9			
*Illinois Bearing Ratio (%)				
Std. Dry Density (IL Mod. AASHTO T 99)				
Optimum Moisture (IL Mod AASHTO T 99)				

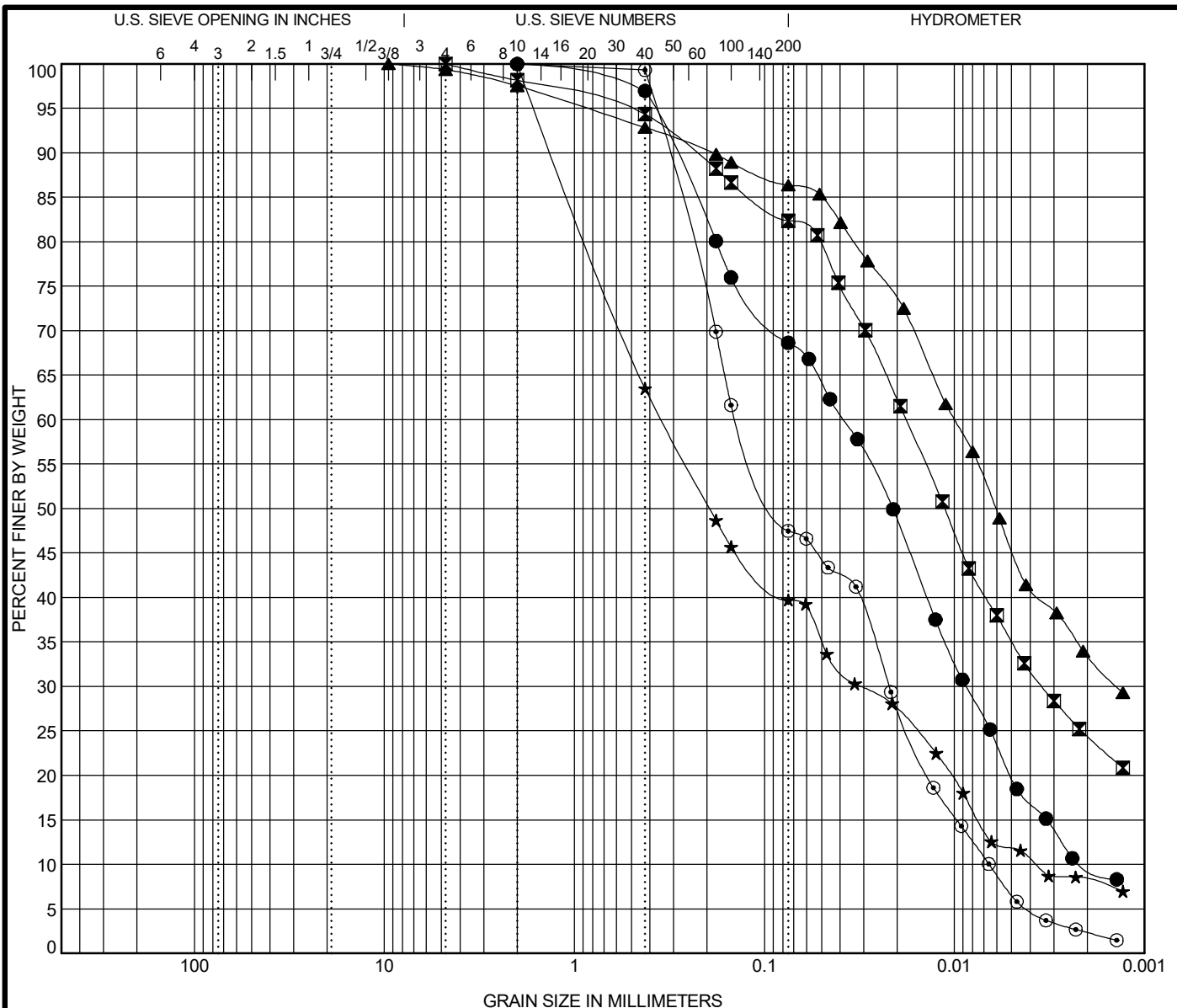
* Indicates worst condition within the above station limits.

Remarks: _____

SOIL TEST DATA**ROUTE**
Barrington Road**PROJECT**
1061-01-01/ KE225002**SECTION**
2019-161-W**COUNTY**
Cook

Lab. No.	NB-SGB-02 No.2	NB-SGB-06 No.2	SB-SGB-08 No.2	SB-SGB-10 No.2	SB-SGB-20 No.2
Station (ft)	52+88.27	68+17.34	49+86.75	54+48.77	106+79.50
Offset (ft)	32.50 RT	38.36 RT	33.51 LT	33.38 LT	32.40 LT
Depth (ft)	2.0	2.0	2.0	2.0	2.0
AASHTO M 145 Classification and Group Index	A-7-6 (25)	A-7-6 (29)	A-6 (19)	A-7-6 (10)	A-6 (17)
Illinois Textural Classification (Illinois Method)	Silty Clay	Silty Clay	Silty Clay	Loam	Silty Clay
Gradation--Passing 1" Sieve %					
--" 3/4" Sieve %					
--" 1/2" Sieve %				100.0	
--" No.4 Sieve %	99.4	100.0	99.4	92.0	98.0
--" No.10 Sieve %	96.8	99.4	97.8	85.3	94.5
--" No.40 Sieve %	91.7	97.2	94.4	71.4	87.9
--" No.100 Sieve %	85.7	93.9	89.4	57.1	81.9
--" No.200 Sieve %	82.4	91.6	85.7	52.3	78.6
Sand % (AASHTO T 88)	14.4	7.8	12.1	33.0	16.0
Silt % (AASHTO T 88)	50.6	58.9	51.6	37.8	48.1
Clay % (AASHTO T 88)	31.8	32.8	34.1	14.6	30.4
Liquid limit % (AASHTO T 89)	47	46	39	46	40
Plasticity index % (AASHTO T 90)	31	32	23	26	23
IBR % (Illinois Method)					
Standard Dry Density % (AASHTO T 99)					
Optimum Moisture % (AASHTO T 99)					
Subgrade Support Rating	FAIR	FAIR	FAIR	POOR	FAIR
In situ Moisture % (AASHTO T 99)	26	32	25	9	22

APPENDIX C



COBBLES	GRAVEL	SAND		SILT AND CLAY
		coarse	fine	

Specimen Identification			IDH Classification					LL	PL	PI	Cc	Cu
●	CUL-01#5	11.0 ft	Silty Loam					120	101	19	0.96	18.50
⊠	CUL-02#3	6.0 ft	Silty Clay Loam					59	29	30		
▲	DPB-01#3	6.0 ft	Silty Clay					44	20	24		
★	DPB-01-ST#2	6.0 ft	Sandy Loam					NP	NP	NP	0.76	92.80
⊙	DPB-02#5	11.0 ft	Sandy Loam					NP	NP	NP	0.54	21.04
Specimen Identification			D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay		
●	CUL-01#5	11.0 ft	2	0.038	0.009	0.002	0.0	31.5	58.7	9.9		
⊠	CUL-02#3	6.0 ft	4.75	0.018	0.003		1.8	15.8	57.9	24.4		
▲	DPB-01#3	6.0 ft	9.5	0.01	0.001		2.5	11.2	52.8	33.5		
★	DPB-01-ST#2	6.0 ft	2	0.347	0.031	0.004	0.0	60.3	31.5	8.2		
⊙	DPB-02#5	11.0 ft	2	0.138	0.022	0.007	0.0	52.6	45.1	2.3		



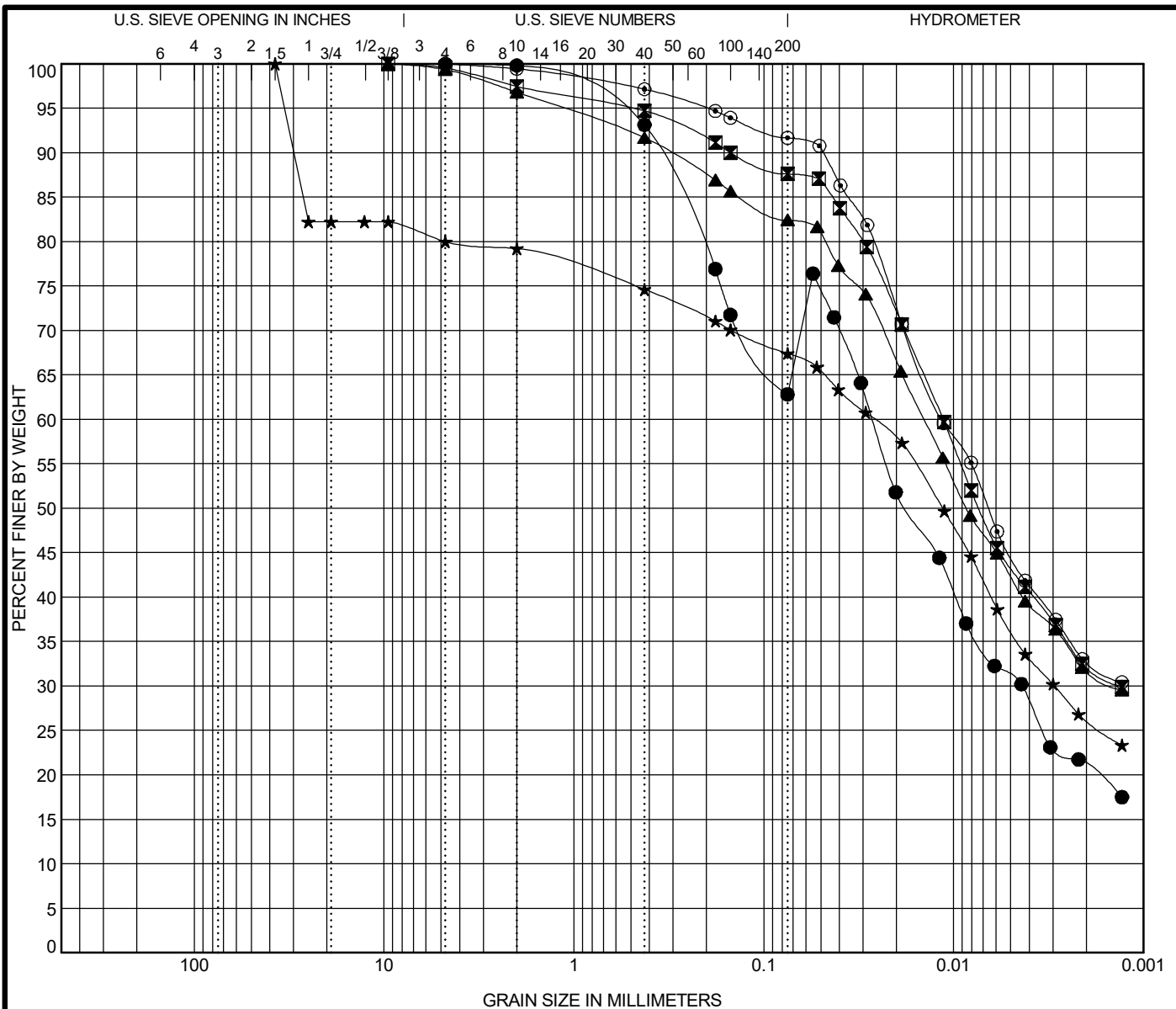
Terracon
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

GRAIN SIZE DISTRIBUTION

Project: Barrington Rd from Algonquin Rd to Central Rd

Location: Cook County, IL

Number: 1064-01-01



COBBLES	GRAVEL	SAND		SILT AND CLAY
		coarse	fine	

Specimen Identification			IDH Classification				LL	PL	PI	Cc	Cu
●	DPB-02-ST#2	6.0 ft	Clay Loam				NP	NP	NP		
☒	DPB-06#3	6.0 ft	Silty Clay				46	17	29		
▲	NB-SGB-02#2	2.0 ft	Silty Clay				47	16	31		
★	NB-SGB-04#3	4.0 ft	Gravelly Silty Clay				39	19	20		
◎	NB-SGB-06#2	2.0 ft	Silty Clay				46	15	31		
Specimen Identification			D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay	
●	DPB-02-ST#2	6.0 ft	4.75	0.054	0.004		0.2	36.4	42.4	21.0	
☒	DPB-06#3	6.0 ft	9.5	0.011	0.001		2.5	9.9	55.4	32.2	
▲	NB-SGB-02#2	2.0 ft	9.5	0.014	0.001		3.2	14.4	50.6	31.8	
★	NB-SGB-04#3	4.0 ft	37.5	0.026	0.003		20.8	11.9	41.2	26.2	
◎	NB-SGB-06#2	2.0 ft	4.75	0.012			0.6	7.8	58.9	32.8	



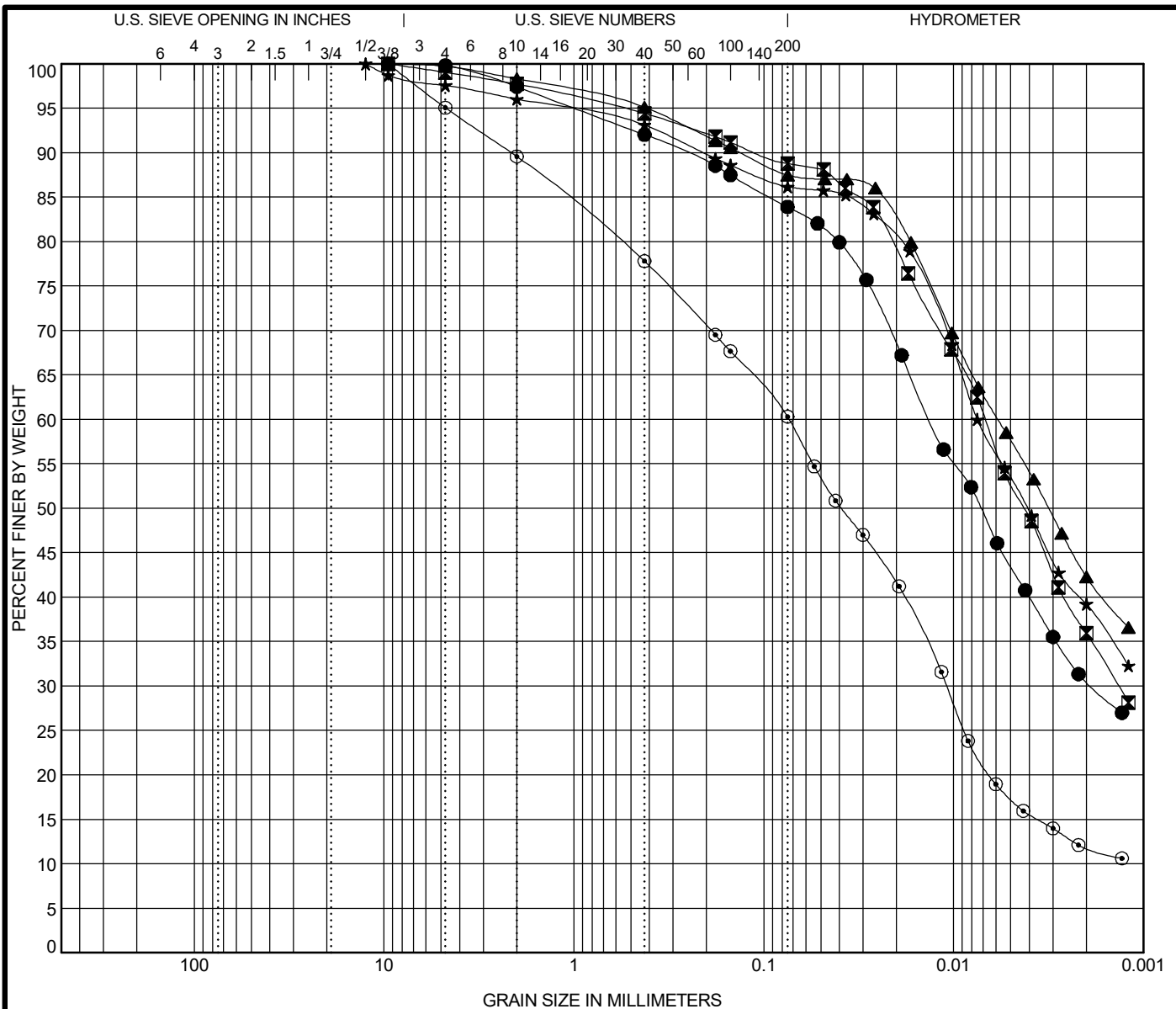
Terracon
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

GRAIN SIZE DISTRIBUTION

Project: Barrington Rd from Algonquin Rd to Central Rd

Location: Cook County, IL

Number: 1064-01-01



COBBLES	GRAVEL	SAND		SILT AND CLAY
		coarse	fine	

Specimen Identification			IDH Classification			LL	PL	PI	Cc	Cu
●	NB-SGB-09#5	8.0 ft	Silty Clay			36	17	19		
✕	PSE-01#14	38.5 ft	Silty Clay			32	16	16		
▲	PSE-03#4	8.5 ft	Clay			46	19	27		
★	PSE-05#3	6.0 ft	Clay			44	18	26		
◎	PSE-05#13	33.5 ft	Silty Loam			18	12	6		
Specimen Identification			D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	NB-SGB-09#5	8.0 ft	9.5	0.013	0.002		2.6	13.6	53.3	30.6
✕	PSE-01#14	38.5 ft	9.5	0.007	0.001		2.3	9.0	52.8	35.9
▲	PSE-03#4	8.5 ft	9.5	0.006			1.7	10.8	45.2	42.3
★	PSE-05#3	6.0 ft	12.5	0.008			4.0	9.9	47.0	39.2
◎	PSE-05#13	33.5 ft	9.5	0.074	0.011		10.4	29.5	48.3	11.8



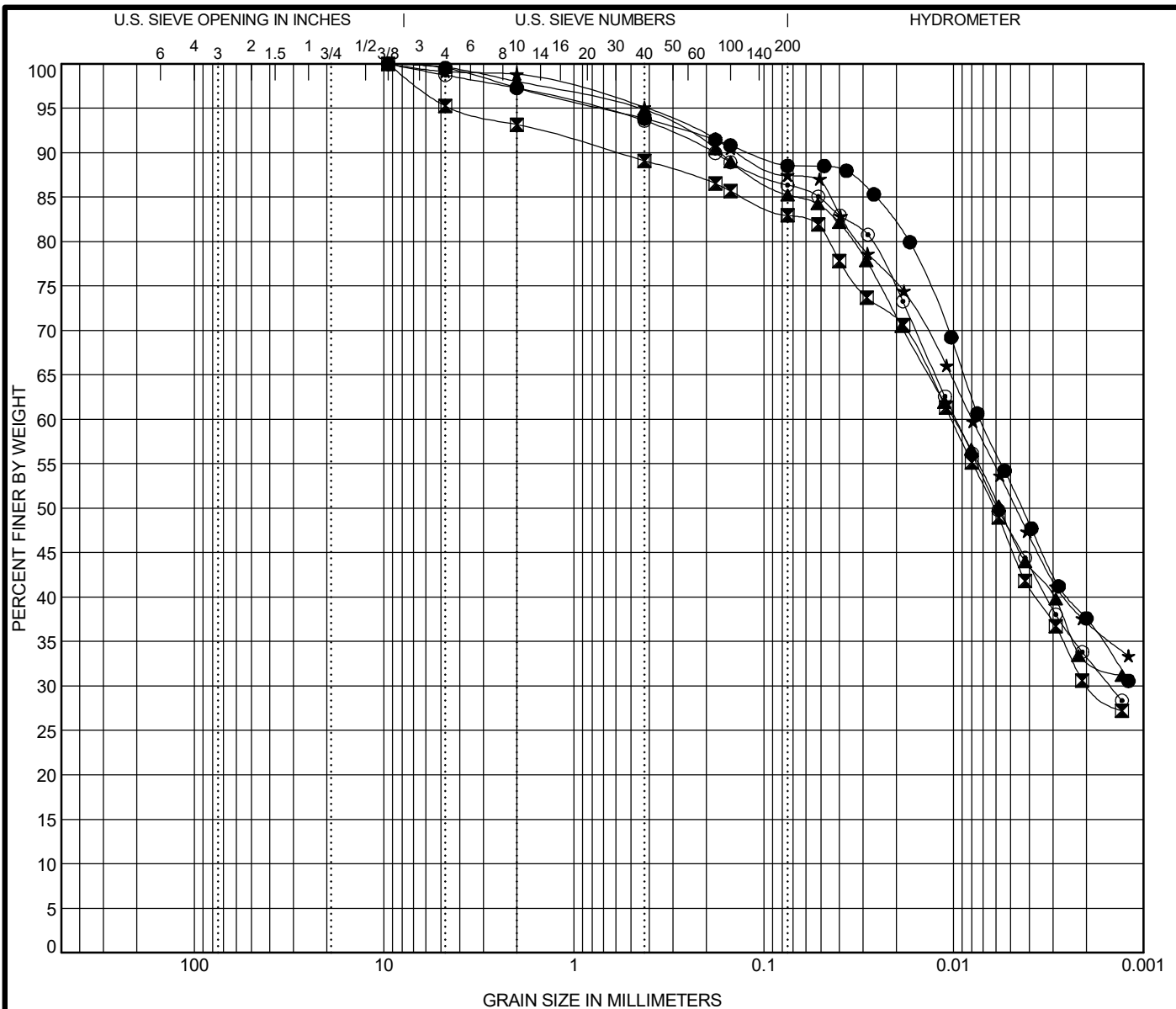
Terracon
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

GRAIN SIZE DISTRIBUTION

Project: Barrington Rd from Algonquin Rd to Central Rd

Location: Cook County, IL

Number: 1064-01-01



COBBLES	GRAVEL	SAND		SILT AND CLAY
		coarse	fine	

Specimen Identification			IDH Classification				LL	PL	PI	Cc	Cu
●	PSE-09#15	43.5 ft	Silty Clay				31	16	15		
☒	RWB-01#7	16.0 ft	Silty Clay				31	15	16		
▲	RWB-03#5	11.0 ft	Silty Clay				43	20	23		
★	RWB-03-ST#1	14.0 ft	Silty Clay				45	17	28		
◎	RWB-04#2	3.5 ft	Silty Clay				43	20	23		
Specimen Identification			D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay	
●	PSE-09#15	43.5 ft	9.5	0.007			2.7	8.8	50.9	37.6	
☒	RWB-01#7	16.0 ft	9.5	0.01	0.002		6.8	10.3	52.7	30.2	
▲	RWB-03#5	11.0 ft	9.5	0.01			2.0	12.8	52.2	33.0	
★	RWB-03-ST#1	14.0 ft	9.5	0.008			1.2	11.4	50.2	37.2	
◎	RWB-04#2	3.5 ft	9.5	0.01	0.002		2.7	11.0	53.0	33.3	



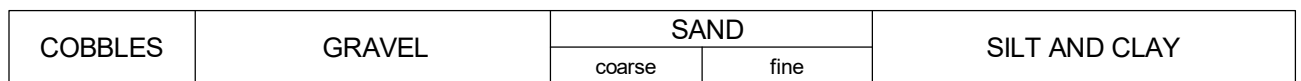
Terracon
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

GRAIN SIZE DISTRIBUTION

Project: Barrington Rd from Algonquin Rd to Central Rd

Location: Cook County, IL

Number: 1064-01-01

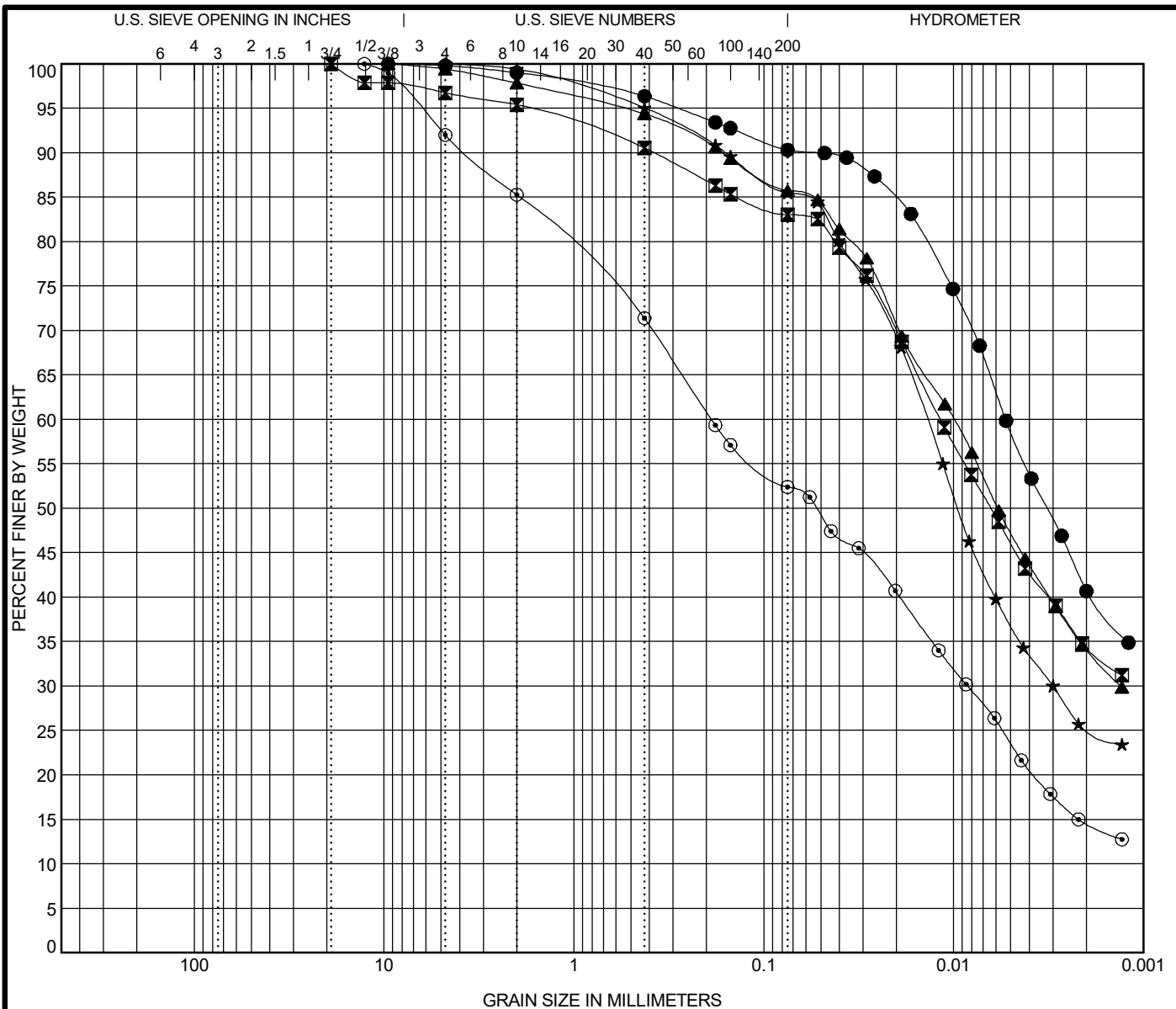


Specimen Identification			IDH Classification					LL	PL	PI	Cc	Cu
●	RWB-06#5	11.0 ft	Silty Clay					35	17	18		
☒	RWB-08#1	1.0 ft	Clay					33	16	17		
▲	RWB-08#7	16.0 ft	Silty Loam					18	13	5		
★	RWB-09#2	3.5 ft	Clay					37	17	20		
◎	SB-04#5	11.0 ft	Silty Clay					33	17	16		
Specimen Identification			D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay		
●	RWB-06#5	11.0 ft	9.5	0.008	0.001		2.2	9.5	53.0	35.4		
☒	RWB-08#1	1.0 ft	9.5	0.007			3.0	11.2	46.8	39.0		
▲	RWB-08#7	16.0 ft	12.5	0.069	0.01		10.4	28.6	48.9	12.0		
★	RWB-09#2	3.5 ft	19	0.007			5.3	12.8	41.5	40.4		
◎	SB-04#5	11.0 ft	9.5	0.007			1.2	10.3	50.8	37.7		



Terracon
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

Number: 1064-01-01



COBBLES	GRAVEL	SAND		SILT AND CLAY
		coarse	fine	

Specimen Identification			IDH Classification				LL	PL	PI	Cc	Cu
●	SB-08#3	6.0 ft	Silty Clay				42	18	24		
⊠	SB-SGB-05#2	2.0 ft	Silty Clay				49	17	32		
▲	SB-SGB-08#2	2.0 ft	Silty Clay				39	16	23		
★	SB-SGB-09#4	6.0 ft	Silty Clay Loam				32	16	16		
⊙	SB-SGB-10#2	2.0 ft	Loam				46	20	26		
Specimen Identification			D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay	
●	SB-08#3	6.0 ft	9.5	0.005			1.0	8.7	49.6	40.7	
⊠	SB-SGB-05#2	2.0 ft	19	0.012			4.6	12.4	48.6	34.4	
▲	SB-SGB-08#2	2.0 ft	9.5	0.01	0.001		2.2	12.1	51.6	34.1	
★	SB-SGB-09#4	6.0 ft	4.75	0.014	0.003		0.6	13.9	60.2	25.3	
⊙	SB-SGB-10#2	2.0 ft	12.7	0.188	0.008		14.7	33.0	37.8	14.6	



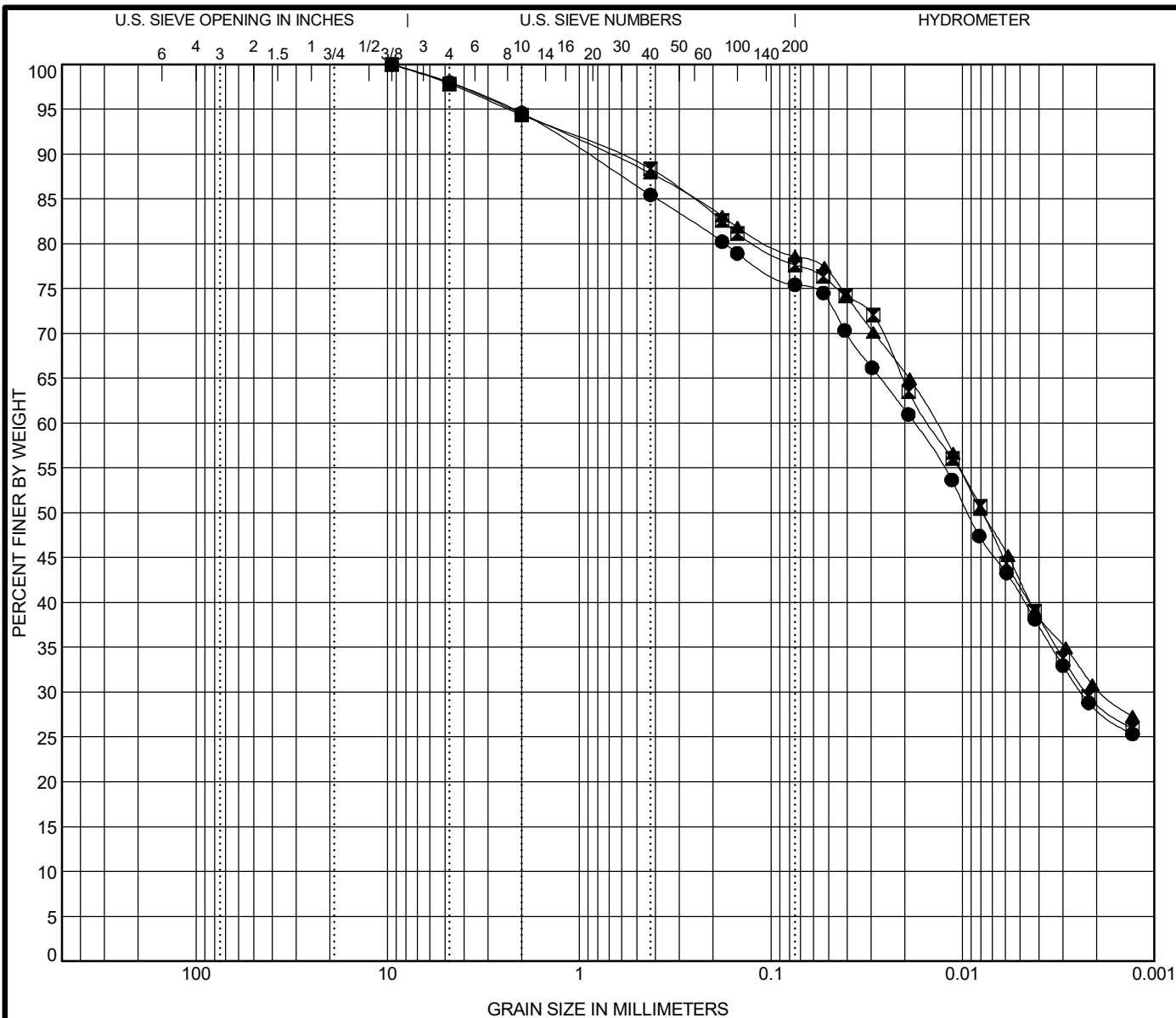
Terracon
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

GRAIN SIZE DISTRIBUTION

Project: Barrington Rd from Algonquin Rd to Central Rd

Location: Cook County, IL

Number: 1064-01-01



COBBLES	GRAVEL	SAND		SILT AND CLAY
		coarse	fine	

Specimen Identification			IDH Classification			LL	PL	PI	Cc	Cu
●	SB-SGB-15#3	4.0 ft	Clay Loam			33	15	18		
■	SB-SGB-18#3	4.0 ft	Silty Clay			44	19	25		
▲	SB-SGB-20#2	2.0 ft	Silty Clay			40	17	23		
Specimen Identification			D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	SB-SGB-15#3	4.0 ft	9.5	0.018	0.002		5.4	19.2	47.2	28.2
■	SB-SGB-18#3	4.0 ft	9.5	0.015	0.002		5.6	16.8	48.7	28.9
▲	SB-SGB-20#2	2.0 ft	9.5	0.014	0.002		5.5	16.0	48.1	30.4



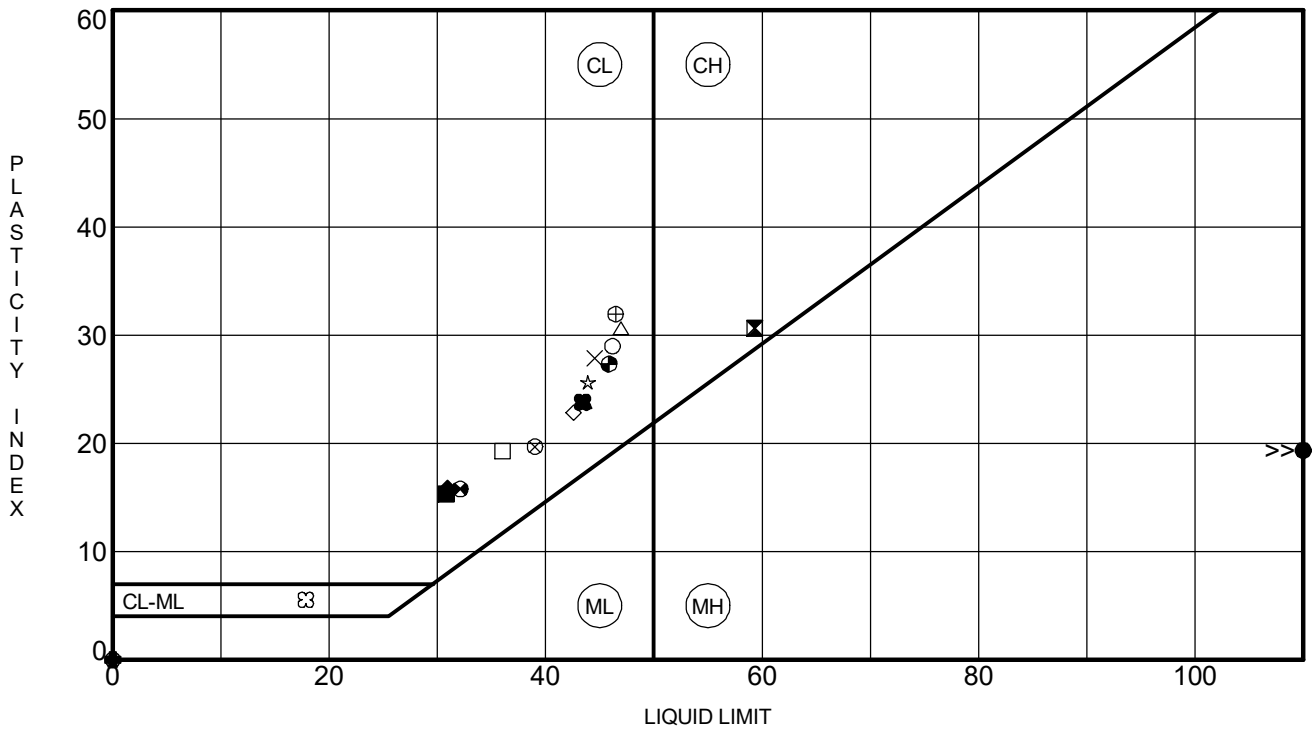
Terracon
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

GRAIN SIZE DISTRIBUTION

Project: Barrington Rd from Algonquin Rd to Central Rd

Location: Cook County, IL

Number: 1064-01-01



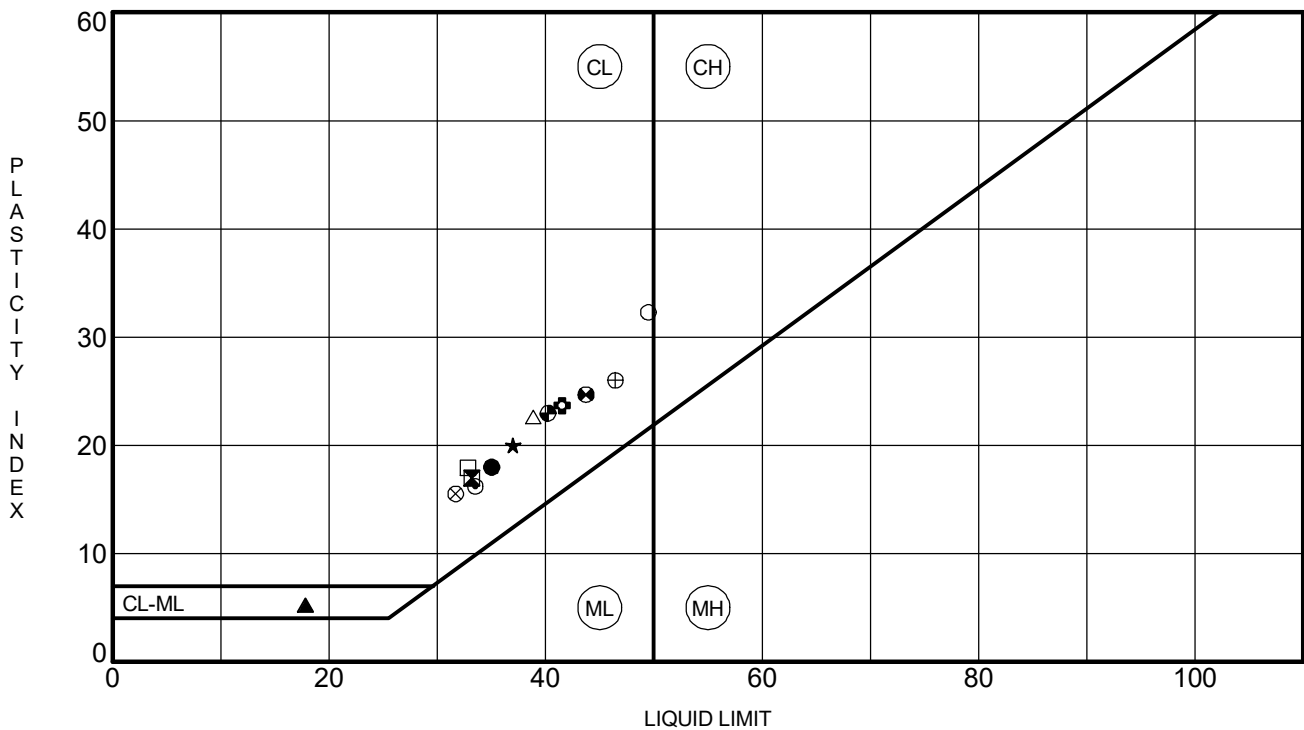
Specimen Identification	LL	PL	PI	Fines	IDH Classification
● CUL-01#5 11.0 ft	120	101	19	69	Silty Loam
⊠ CUL-02#3 6.0 ft	59	29	30	82	Silty Clay Loam
▲ DPB-01#3 6.0 ft	44	20	24	86	Silty Clay
★ DPB-01-ST#2 6.0 ft	NP	NP	NP	40	Sandy Loam
⊙ DPB-02#5 11.0 ft	NP	NP	NP	47	Sandy Loam
⊕ DPB-02-ST#2 6.0 ft	NP	NP	NP	63	Clay Loam
○ DPB-06#3 6.0 ft	46	17	29	88	Silty Clay
△ NB-SGB-02#2 2.0 ft	47	16	31	82	Silty Clay
⊗ NB-SGB-04#3 4.0 ft	39	19	20	67	Gravelly Silty Clay
⊕ NB-SGB-06#2 2.0 ft	46	15	31	92	Silty Clay
□ NB-SGB-09#5 8.0 ft	36	17	19	84	Silty Clay
⊕ PSE-01#14 38.5 ft	32	16	16	89	Silty Clay
⊕ PSE-03#4 8.5 ft	46	19	27	87	Clay
☆ PSE-05#3 6.0 ft	44	18	26	86	Clay
⊗ PSE-05#13 33.5 ft	18	12	6	60	Silty Loam
■ PSE-09#15 43.5 ft	31	16	15	89	Silty Clay
◆ RWB-01#7 16.0 ft	31	15	16	83	Silty Clay
◇ RWB-03#5 11.0 ft	43	20	23	85	Silty Clay
× RWB-03-ST#1 14.0 ft	45	17	28	87	Silty Clay
■ RWB-04#2 3.5 ft	43	20	23	86	Silty Clay



Terracon
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

ATTERBERG LIMITS' RESULTS

Project: Barrington Rd from Algonquin Rd to Central Rd
Location: Cook County, IL
Number: 1064-01-01



Specimen Identification	LL	PL	PI	Fines	IDH Classification
● RWB-06#5 11.0 ft	35	17	18	88	Silty Clay
⊠ RWB-08#1 1.0 ft	33	16	17	86	Clay
▲ RWB-08#7 16.0 ft	18	13	5	61	Silty Loam
★ RWB-09#2 3.5 ft	37	17	20	82	Clay
⊙ SB-04#5 11.0 ft	33	17	16	89	Silty Clay
⊕ SB-08#3 6.0 ft	42	18	24	90	Silty Clay
○ SB-SGB-05#2 2.0 ft	49	17	32	83	Silty Clay
△ SB-SGB-08#2 2.0 ft	39	16	23	86	Silty Clay
⊗ SB-SGB-09#4 6.0 ft	32	16	16	86	Silty Clay Loam
⊕ SB-SGB-10#2 2.0 ft	46	20	26	52	Loam
□ SB-SGB-15#3 4.0 ft	33	15	18	75	Clay Loam
⊗ SB-SGB-18#3 4.0 ft	44	19	25	78	Silty Clay
⊕ SB-SGB-20#2 2.0 ft	40	17	23	79	Silty Clay



Terracon
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

ATTERBERG LIMITS' RESULTS

Project: Barrington Rd from Algonquin Rd to Central Rd

Location: Cook County, IL

Number: 1064-01-01

ORGANIC CONTENT in SOILS by LOSS on IGNITION
ASTM D 2974, Method C

Client: Ardmore Roderick
Project: Barrington Road
WEI Job: 1064-01-01
Type/Condition: ST
Testing Furnace Temp °C.: 440

Analyst Name: L. Varzaru
Date Received: Various
Date Tested: 10/12/2022

Sample No./ Depth	DPB-03 ST#3 (11-13 ft.) Top	DPB-03 ST#2 (6-8 ft.) Top	RWB-03 ST#2 (18-20 ft.) Top		
wet soil + tare	96.65	79.25	76.62		
Dry Soil + Tare	67.16	48.65	50.98		
Tare Mass	42.24	42.63	41.69		
w (%)	118	508	276		
Dry Soil + Tare	67.16	48.65	50.98		
Ash+ Tare	63.98	44.98	46.91		
Tare Mass	42.24	42.63	41.69		
Ash Content (%)	87	39	56		
Organic Content (%)	12.8	61.0	43.8		

Prepared By: _____

Revised By: _____

ORGANIC CONTENT in SOILS by LOSS on IGNITION
ASTM D 2974, Method C

Client: Ardmore Roderick
Project: Barrington Road
WEI Job: 1064-01-01
Type/Condition: ST
Testing Furnace Temp °C.: 440

Analyst Name: L. Varzaru
Date Received: Various
Date Tested: 10/13/2022

Sample No./ Depth	DPB-02 ST#3 (11-13 ft.)	DPB-03 ST#1 (1-3 ft.)	DPB-02 ST#1 (1-3 ft.)		
wet soil + tare	87.59	89.95	94.82		
Dry Soil + Tare	50.97	62.22	56.57		
Tare Mass	43.73	42.66	42.11		
w (%)	506	142	265		
Dry Soil + Tare	50.97	62.22	56.57		
Ash+ Tare	46.89	55.81	49.57		
Tare Mass	43.73	42.66	42.11		
Ash Content (%)	44	67	52		
Organic Content (%)	56.4	32.8	48.4		

Prepared By: _____

Revised By: _____

MIDLAND STANDARD ENGINEERING TESTING, INC.
410 NOLEN DRIVE, SOUTH ELGIN, IL 60177 P(847) 844-1895 F(847) 844-3875

Standard Test Methods for Moisture, Ash, and Organic Matter of Peat and Other Organic Soils ASTM 2974

Project # <u>22251</u>	Date Received: <u>3/7/22</u>
Project Name: <u>Barrington Road</u>	Date Tested: <u>3/15/22</u>
	Tested by: <u>JDS</u>
Wei Job # <u>1064-01-01</u>	

		SAMPLE ID	CUL-01	CUL-02	RWB-03	DPB-02
METHOD D, 750°C	SPECIMEN #		SS#4	SS#1	SS#7	SS#2
METHOD C, 440°C	TEST DATE		3/15/22	3/15/22	3/15/22	3/15/22
	TEST TEMP		440°C	440°C	440°C	440°C
1. wt of crucible, no cover	1		28.77	28.23	26.16	29.11
2. wt. of crucible & unburnt sample, r	2		35.02	36.43	36.32	37.2
3. wt. of crucible & burned sample, n	3		32.85	32.99	34.6	35.36
4. wt. of dry sample at start	B		6.25	8.20	10.16	8.09
5. net wt. of ash	C		4.08	4.76	8.44	6.25
6. ash content, %	D		65.28	58.05	83.07	77.26
7. organic matter, %	OM,%		34.72	41.95	16.93	22.74

ONE-DIMENSIONAL CONSOLIDATION TEST

AASHTO T 216 / ASTM D 2435

Project: Barrington Road
Client: Ardmore Rodrick
Soil Sample ID: Boring DPB-02, ST#2, 6 to 8 feet
Sample Description: Black PEAT

Tested by: M. Snider
Prepared by: M. Snider
Test date: 4/11/2022
WEI: 1064-01-01

Initial sample height = 0.999 in
Initial sample mass = 73.22 g
Initial water content = 533.94%
Initial dry unit weight = 8.97 pcf
Initial void ratio = 12.906
Initial degree of saturation = 82.74%

Final sample mass = 53.23 g
Final dry sample mass = 11.55 g
Final water content = 360.87%
Final dry unit weight = 15.54 pcf
Final void ratio = 7.032
Final degree of saturation = 100.00%
Estimated specific gravity = 2.00

Ring diameter = 2.500 in
Ring mass = 109.43 g
Initial sample and ring mass = 182.65 g
Tare mass = 14.35 g
Final ring and sample mass = 162.71 g
Mass of wet sample and tare = 67.58 g
Mass of dry sample and tare = 25.90 g
Initial dial reading = 0.01000 in
Final dial reading = 0.43200 in
LL = n.a. %
PL = n.a. %
% Sand = n.a.
% Silt = n.a.
% Clay = n.a.

In-Situ Vertical Effective Stress = 300 psf

Compression and Swelling Indices

Compression index C_c = 7.774
Field corrected C_c = 17.268
Swelling index C_s = 0.454

Preconsolidation pressure, s_c

Casagrande Method = 1421 psf

Over-Consolidation Ratio (OCR) = 4.74

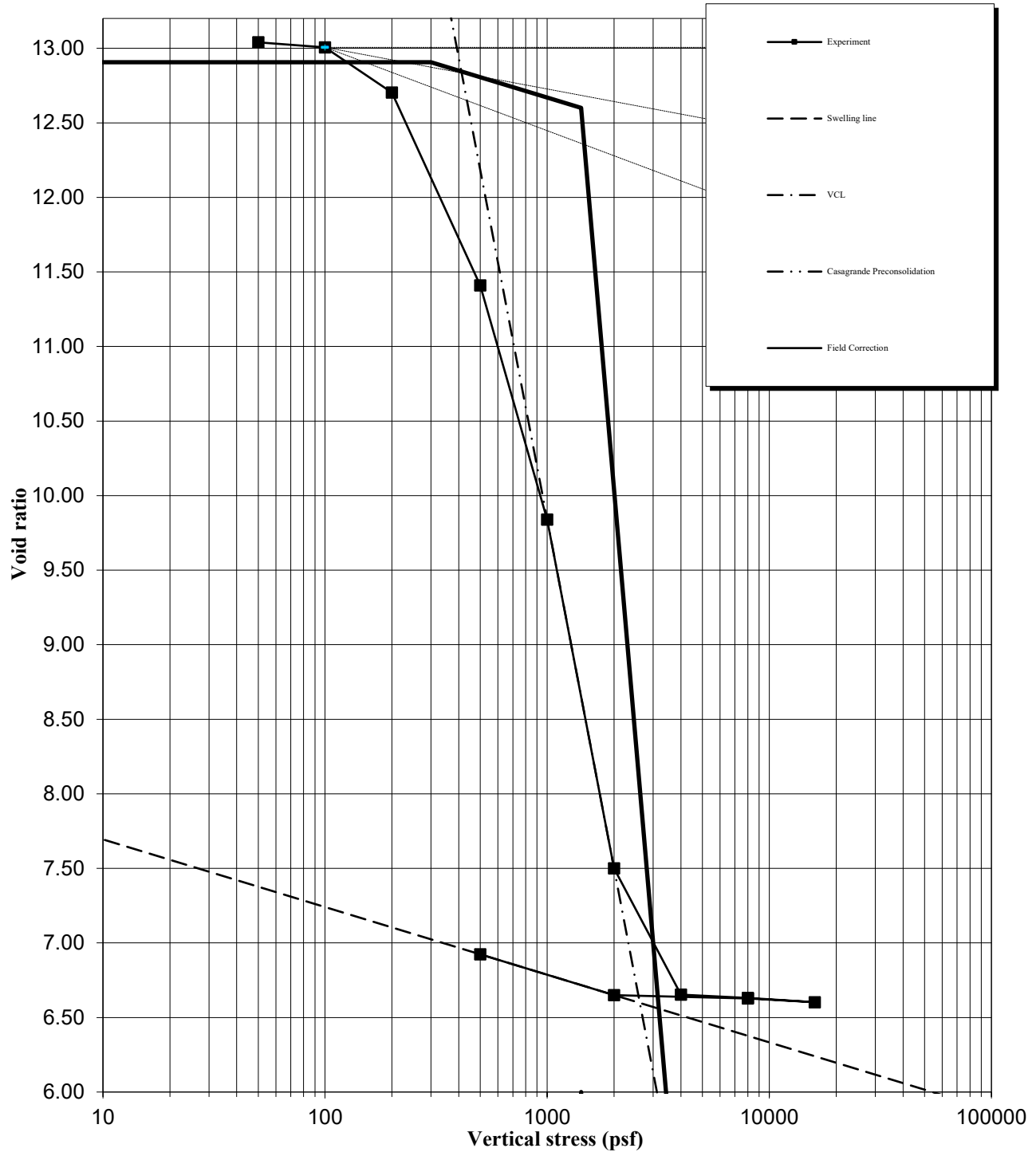
Load number	Vertical stress psf	Dial reading in	System deflection in	Vertical strain %	Void ratio	C_v ft ² /day	C_{ae} %	Elapsed time min
1	50.0	0.00032	0.00010	-0.96	13.040	N/A	N/A	480
2	100.0	0.00260	0.00023	-0.72	13.006	0.1110	0.06	720
3	200.0	0.02402	0.00058	1.46	12.703	0.1392	0.44	720
4	500.0	0.11661	0.00090	10.76	11.410	0.1789	1.49	720
5	1000.0	0.22896	0.00135	22.05	9.840	0.1403	2.11	720
6	2000.0	0.39650	0.00193	38.88	7.499	0.0898	3.21	720
7	4000.0	0.45674	0.00253	44.97	6.652	0.0853	0.05	1440
8	8000.0	0.45754	0.00324	45.12	6.631	0.1164	0.01	1440
9	16000.0	0.45872	0.00413	45.33	6.603	0.0041	0.01	1440
10	8000.0	0.45811	0.00295	45.15	6.627	N/A	N/A	480
11	2000.0	0.45746	0.00198	44.99	6.650	N/A	N/A	720
12	500.0	0.43858	0.00123	43.02	6.923	N/A	N/A	485

Prepared by: _____ Date: _____

Checked by: _____ Date: _____

CONSOLIDATION CURVE

Sample DPB-02, ST#2, 6 to 8 feet



ONE-DIMENSIONAL CONSOLIDATION TEST AASHTO T 216 / ASTM D 2435

Project: Barrington Road
Client: Ardmore Rodrick
Soil Sample ID: Boring DPB-01, ST#2, 6 to 8 feet
Sample Description: Black PEAT and Organic SILT

Tested by: M. Snider
Prepared by: M. Snider
Test date: 4/11/2022
WEI: 1064-01-01

Initial sample height = 0.998 in
 Initial sample mass = 92.29 g
 Initial water content = 244.49%
 Initial dry unit weight = 20.85 pcf
 Initial void ratio = 5.583
 Initial degree of saturation = 96.34%

 Final sample mass = 60.07 g
 Final dry sample mass = 26.79 g
 Final water content = 124.23%
 Final dry unit weight = 40.97 pcf
 Final void ratio = 2.351
 Final degree of saturation = 100.00%
 Estimated specific gravity = 2.20

Ring diameter = 2.499 in
 Ring mass = 109.79 g
 Initial sample and ring mass = 202.08 g
 Tare mass = 11.99 g
 Final ring and sample mass = 169.95 g
 Mass of wet sample and tare = 72.06 g
 Mass of dry sample and tare = 38.78 g
 Initial dial reading = 0.01000 in
 Final dial reading = 0.50000 in
 LL = n.a. %
 PL = n.a. %
 % Sand = n.a.
 % Silt = n.a.
 % Clay = n.a.

In-Situ Vertical Effective Stress = 400 psf

Compression and Swelling Indices

Compression index C_c = 4.070
 Field corrected C_c = 4.111
 Swelling index C_s = 0.667

Preconsolidation pressure, s_c

Casagrande Method = 1063 psf

Over-Consolidation Ratio (OCR) = 2.66

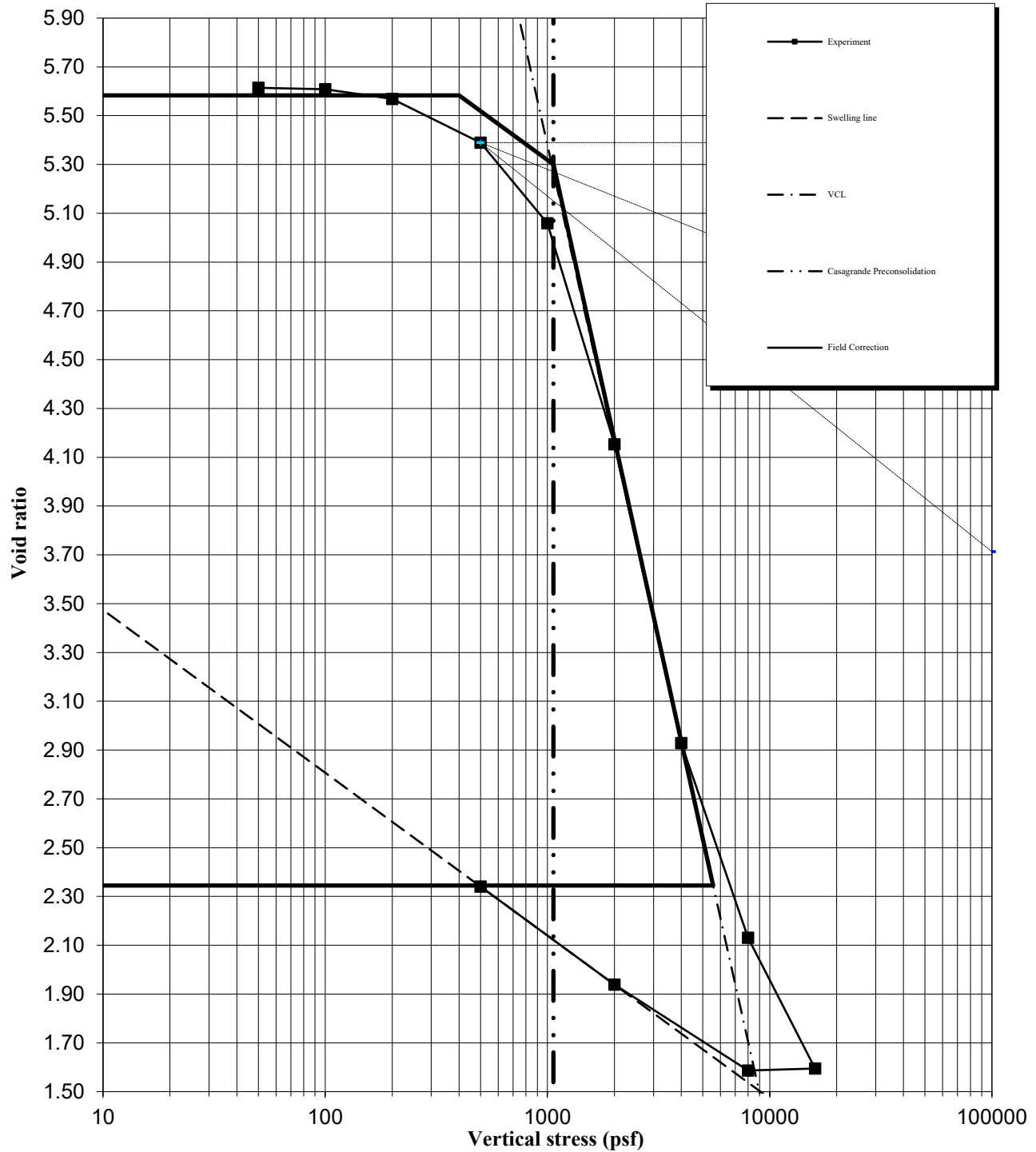
Load number	Vertical stress psf	Dial reading in	System deflection in	Vertical strain %	Void ratio	C_v ft ² /day	C_{ae} %	Elapsed time min
1	50.0	0.00519	0.00010	-0.47	5.614	N/A	N/A	480
2	100.0	0.00589	0.00023	-0.39	5.609	0.0559	0.02	720
3	200.0	0.01161	0.00058	0.22	5.569	0.0897	0.11	720
4	500.0	0.03845	0.00090	2.94	5.390	0.0686	0.45	720
5	1000.0	0.08804	0.00135	7.96	5.059	0.0192	2.36	480
6	2000.0	0.22480	0.00193	21.72	4.154	0.0091	7.99	720
7	4000.0	0.40994	0.00253	40.33	2.928	0.0046	13.15	1440
8	8000.0	0.53020	0.00324	52.45	2.130	0.0023	10.34	1440
9	16000.0	0.61046	0.00413	60.58	1.595	0.0022	6.74	1440
10	8000.0	0.61290	0.00295	60.71	1.587	N/A	N/A	480
11	2000.0	0.56050	0.00198	55.36	1.939	N/A	N/A	900
12	500.0	0.50035	0.00123	49.26	2.341	N/A	N/A	1440

Prepared by: _____ Date: _____

Checked by: _____ Date: _____

CONSOLIDATION CURVE

Sample DPB-01, ST#2, 6 to 8 feet



ONE-DIMENSIONAL CONSOLIDATION TEST AASHTO T 216 / ASTM D 2435

Project: Barrington Road
Client: Ardmore Rodrick
Soil Sample ID: Boring RWB-03, ST#1, 14 to 16 feet
Sample Description: Brown CLAY LOAM

Tested by: M. Snider
Prepared by: M. Snider
Test date: 4/11/2022
WEI: 1064-01-01

Initial sample height = 0.770 in
 Initial sample mass = 125.23 g
 Initial water content = 23.98%
 Initial dry unit weight = 101.34 pcf
 Initial void ratio = 0.663
 Initial degree of saturation = 97.72%

 Final sample mass = 121.32 g
 Final dry sample mass = 101.01 g
 Final water content = 20.11%
 Final dry unit weight = 114.37 pcf
 Final void ratio = 0.473
 Final degree of saturation = 100.00%
 Estimated specific gravity = 2.70

Ring diameter = 2.506 in
 Ring mass = 62.30 g
 Initial sample and ring mass = 187.53 g
 Tare mass = 11.64 g
 Final ring and sample mass = 183.81 g
 Mass of wet sample and tare = 132.96 g
 Mass of dry sample and tare = 112.65 g
 Initial dial reading = 0.01000 in
 Final dial reading = 0.09772 in
 LL = n.a. %
 PL = n.a. %
 % Sand = n.a.
 % Silt = n.a.
 % Clay = n.a.

In-Situ Vertical Effective Stress = 1400 psf

Compression and Swelling Indices

Compression index C_c = 0.180
 Field corrected C_c = 0.192
 Swelling index C_s = 0.049

Preconsolidation pressure, s_c

Casagrande Method = 1612 psf

Over-Consolidation Ratio (OCR) = 1.15

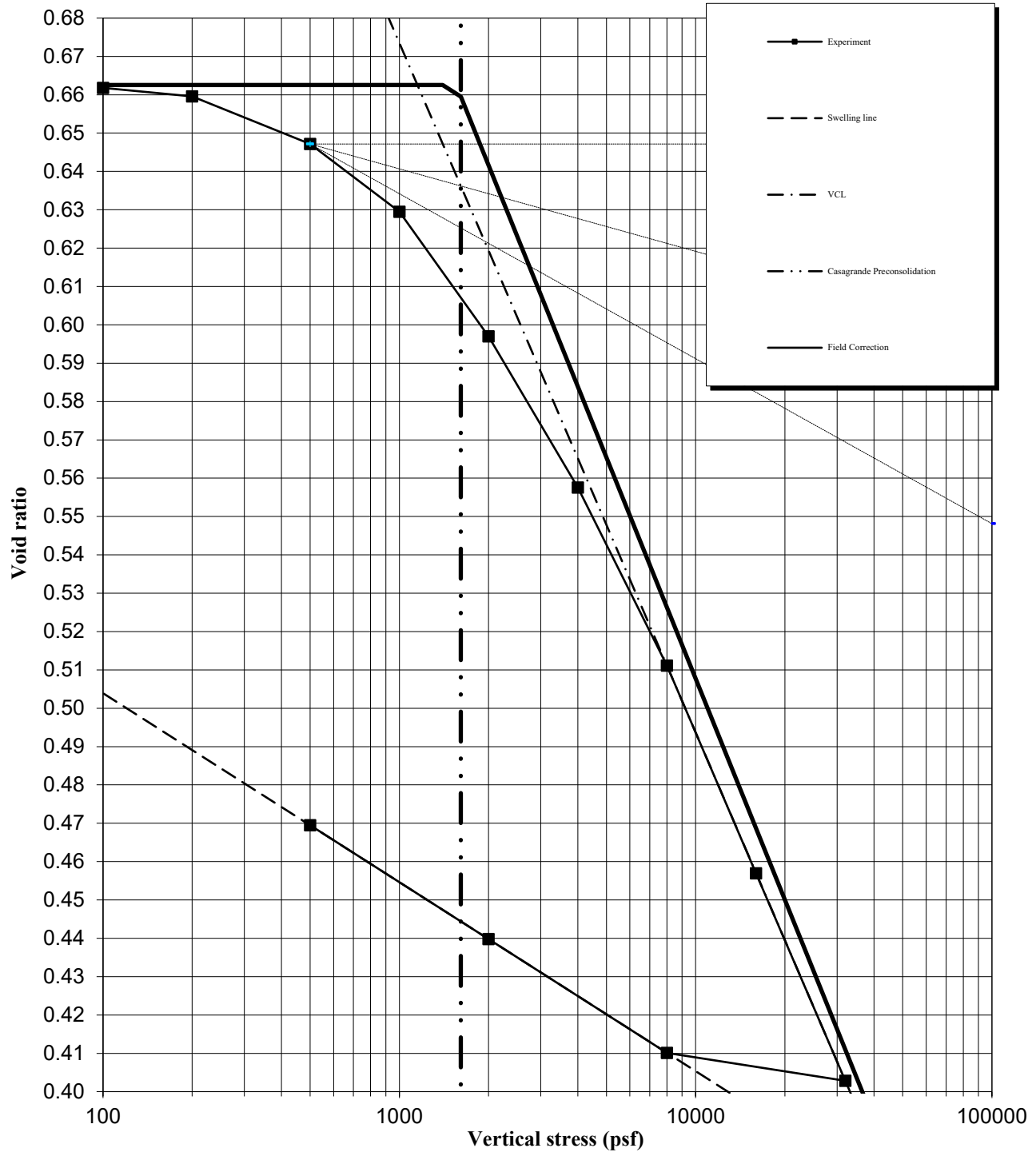
Load number	Vertical stress psf	Dial reading in	System deflection in	Vertical strain %	Void ratio	C_v ft ² /day	C_{ae} %	Elapsed time min
1	100.0	0.01024	0.00010	0.04	0.662	N/A	N/A	720
2	200.0	0.01114	0.00023	0.18	0.660	0.0861	0.04	720
3	500.0	0.01655	0.00058	0.93	0.647	0.0764	0.11	720
4	1000.0	0.02439	0.00090	1.99	0.630	0.0785	0.17	678
5	2000.0	0.03900	0.00135	3.94	0.597	0.0768	0.17	720
6	4000.0	0.05670	0.00193	6.32	0.558	0.0774	0.25	1440
7	8000.0	0.07759	0.00253	9.11	0.511	0.0719	0.28	1440
8	16000.0	0.10197	0.00324	12.36	0.457	0.0736	0.30	1440
9	32000.0	0.12615	0.00413	15.62	0.403	0.0831	0.33	720
10	8000.0	0.12395	0.00295	15.18	0.410	N/A	N/A	480
11	2000.0	0.11117	0.00198	13.40	0.440	N/A	N/A	720
12	500.0	0.09819	0.00123	11.61	0.469	N/A	N/A	480

Prepared by: _____ Date: _____

Checked by: _____ Date: _____

CONSOLIDATION CURVE

Sample RWB-03, ST#1, 14 to 16 feet



UNCONFINED COMPRESSIVE STRENGTH of COHESIVE SOIL (AASHTO T 208 / ASTM D 2166)

Project: Barrington Road
Client: Ardmore Roderick
WEI Job No.: 1064-01-01
Soil Sample ID: DPB-02 ST#1, (1-3 ft.)
Type/Condition: ST/Undisturbed
Liquid Limit (%): NA
Plastic Limit (%): NA

Analyst name: L. Varzaru
Date received: NA
Test date: 10/12/2022
Sample description: Black PEAT

Average initial height $h_0 = 5.92$ in
Average initial diameter $d_0 = 2.78$ in
Height to diameter ratio = 2.13
Mass of wet sample = 672.58 g
Mass of dry sample and tare = 356.92 g
Mass of tare = 151.52 g
Specific gravity = 2.70 (estimated)

Sand(%): NA
Silt(%): NA
Clay(%): NA
Initial water content $w = 227.45\%$ (specimen)
Initial unit weight $\gamma = 71.04$ pcf
Initial dry unit weight $\gamma_d = 21.70$ pcf
Initial void ratio $e_0 = 6.77$
Initial degree of saturation $S_r = 91\%$
Average Rate of Strain = 1%/min
Unconfined compressive strength $q_u = 0.21$ tsf
Shear Strength = 0.11 tsf

Displacement (in)	Force (lbs)	Strain (%)	Stress (tsf)
Δh	F	e	s
0.00	0.00	0.00	0.00
0.03	2.39	0.51	0.03
0.06	2.39	1.01	0.03
0.09	4.78	1.52	0.06
0.12	7.16	2.03	0.08
0.15	9.55	2.53	0.11
0.18	9.55	3.04	0.11
0.21	9.55	3.54	0.11
0.24	11.94	4.05	0.14
0.27	11.94	4.56	0.13
0.30	14.33	5.06	0.16
0.35	16.71	5.91	0.19
0.40	19.10	6.75	0.21
0.45	19.10	7.60	0.21
0.50	19.10	8.44	0.21
0.55	14.33	9.28	0.15
0.60	11.94	10.13	0.13
0.65	11.94	10.97	0.13
0.70	11.94	11.82	0.12
0.80	11.94	13.50	0.12
0.90	11.94	15.19	0.12
1.00	11.94	16.88	0.12



NOTES:

Prepared by: _____ Date: _____

Checked by: _____ Date: _____

UNCONFINED COMPRESSIVE STRENGTH of COHESIVE SOIL (AASHTO T 208 / ASTM D 2166)

Project: Barrington Road
Client: Ardmore Roderick
WEI Job No.: 1064-01-01
Soil Sample ID: DPB-02 ST#3, (11-13 ft.)
Type/Condition: ST/Undisturbed
Liquid Limit (%): NA
Plastic Limit (%): NA

Analyst name: L. Varzaru
Date received: NA
Test date: 10/12/2022
Sample description: Black/Gray PEAT

Average initial height h_0 = 6.09 in
Average initial diameter d_0 = 2.81 in
Height to diameter ratio = 2.17
Mass of wet sample = 644.62 g
Mass of dry sample and tare = 293.73 g
Mass of tare = 187.42 g
Specific gravity = 2.70 (estimated)

Sand(%): NA
Silt(%): NA
Clay(%): NA
Initial water content w = 506.36% (specimen)
Initial unit weight γ = 65.31 pcf
Initial dry unit weight γ_d = 10.77 pcf
Initial void ratio e_0 = 14.64
Initial degree of saturation S_r = 93%
Average Rate of Strain = 1%/min
Unconfined compressive strength q_u = 0.18 tsf
Shear Strength = 0.09 tsf

Displacement (in)	Force (lbs)	Strain (%)	Stress (tsf)
Δh	F	e	s
0.00	0.00	0.00	0.00
0.03	2.39	0.49	0.03
0.06	2.39	0.99	0.03
0.09	2.39	1.48	0.03
0.12	4.78	1.97	0.05
0.15	4.78	2.46	0.05
0.18	7.16	2.96	0.08
0.21	7.16	3.45	0.08
0.24	7.16	3.94	0.08
0.27	9.55	4.44	0.11
0.30	9.55	4.93	0.11
0.35	11.94	5.75	0.13
0.40	11.94	6.57	0.13
0.45	11.94	7.39	0.13
0.50	14.33	8.22	0.15
0.55	16.71	9.04	0.18
0.60	16.71	9.86	0.18
0.65	16.71	10.68	0.17
0.70	14.33	11.50	0.15
0.80	11.94	13.14	0.12
0.90	4.78	14.79	0.05
1.00	2.39	16.43	0.02



NOTES:

Prepared by: _____ Date: _____

Checked by: _____ Date: _____

UNCONFINED COMPRESSIVE STRENGTH of COHESIVE SOIL (AASHTO T 208 / ASTM D 2166)

Project: Barrington Road
Client: Ardmore Roderick
WEI Job No.: 1064-01-01
Soil Sample ID: DPB-03 ST#1, (1-3 ft.)
Type/Condition: ST/Undisturbed
Liquid Limit (%): NA
Plastic Limit (%): NA

Analyst name: L. Varzaru
Date received: NA
Test date: 10/12/2022
Sample description: Black/Gray PEAT

Average initial height $h_0 = 6.03$ in
Average initial diameter $d_0 = 2.78$ in
Height to diameter ratio = 2.17
Mass of wet sample = 737.47 g
Mass of dry sample and tare = 485.88 g
Mass of tare = 164.47 g
Specific gravity = 2.70 (estimated)

Sand(%): NA
Silt(%): NA
Clay(%): NA
Initial water content $w = 129.45\%$ (specimen)
Initial unit weight $\gamma = 76.49$ pcf
Initial dry unit weight $\gamma_d = 33.34$ pcf
Initial void ratio $e_0 = 4.05$
Initial degree of saturation $S_r = 86\%$
Average Rate of Strain = 1%/min
Unconfined compressive strength $q_u = 0.15$ tsf
Shear Strength = 0.08 tsf

Displacement (in)	Force (lbs)	Strain (%)	Stress (tsf)
Δh	F	e	s
0.00	0.00	0.00	0.00
0.03	2.39	0.50	0.03
0.06	2.39	0.99	0.03
0.09	4.78	1.49	0.06
0.12	4.78	1.99	0.06
0.15	7.16	2.49	0.08
0.18	7.16	2.98	0.08
0.21	9.55	3.48	0.11
0.24	9.55	3.98	0.11
0.27	9.55	4.47	0.11
0.30	9.55	4.97	0.11
0.35	9.55	5.80	0.11
0.40	9.55	6.63	0.11
0.45	11.94	7.46	0.13
0.50	11.94	8.29	0.13
0.55	11.94	9.11	0.13
0.60	14.33	9.94	0.15
0.65	14.33	10.77	0.15
0.70	11.94	11.60	0.12
0.80	9.55	13.26	0.10
0.90	7.16	14.91	0.07
1.00	7.16	16.57	0.07



NOTES:

Prepared by: _____ Date: _____

Checked by: _____ Date: _____

UNCONFINED COMPRESSIVE STRENGTH of COHESIVE SOIL (AASHTO T 208 / ASTM D 2166)

Project: Barrington Road
Client: Ardmore Roderick
WEI Job No.: 1064-01-01
Soil Sample ID: DPB-03 ST#2, (6-8 ft.)
Type/Condition: ST/Undisturbed
Liquid Limit (%): NA
Plastic Limit (%): NA

Analyst name: L. Varzaru
Date received: NA
Test date: 10/11/2022
Sample description: Brown/Gray PEAT

Average initial height $h_0 = 5.97$ in
Average initial diameter $d_0 = 2.77$ in
Height to diameter ratio = 2.16
Mass of wet sample = 602.62 g
Mass of dry sample and tare = 312.06 g
Mass of tare = 185.64 g
Specific gravity = 2.70 (estimated)

Sand(%): NA
Silt(%): NA
Clay(%): NA
Initial water content $w = 376.68\%$ (specimen)
Initial unit weight $\gamma = 64.01$ pcf
Initial dry unit weight $\gamma_d = 13.43$ pcf
Initial void ratio $e_0 = 11.55$
Initial degree of saturation $S_r = 88\%$
Average Rate of Strain = 1%/min
Unconfined compressive strength $q_u = 0.15$ tsf
Shear Strength = 0.07 tsf

Displacement (in)	Force (lbs)	Strain (%)	Stress (tsf)
Δh	F	e	s
0.00	0.00	0.00	0.00
0.03	2.39	0.50	0.03
0.06	2.39	1.01	0.03
0.09	2.39	1.51	0.03
0.12	2.39	2.01	0.03
0.15	2.39	2.51	0.03
0.18	4.78	3.02	0.06
0.21	4.78	3.52	0.06
0.24	4.78	4.02	0.05
0.27	7.16	4.52	0.08
0.30	7.16	5.03	0.08
0.35	9.55	5.87	0.11
0.40	9.55	6.70	0.11
0.45	9.55	7.54	0.11
0.50	9.55	8.38	0.10
0.55	9.55	9.22	0.10
0.60	11.94	10.06	0.13
0.65	11.94	10.89	0.13
0.70	11.94	11.73	0.13
0.80	11.94	13.41	0.12
0.90	14.33	15.08	0.15
1.00	14.33	16.76	0.14



NOTES:

Prepared by: _____ Date: _____

Checked by: _____ Date: _____

UNCONFINED COMPRESSIVE STRENGTH of COHESIVE SOIL (AASHTO T 208 / ASTM D 2166)

Project: Barrington Road
Client: Ardmore Roderick
WEI Job No.: 1064-01-01
Soil Sample ID: DPB-03 ST#3, (11-13 ft.)
Type/Condition: ST/Undisturbed
Liquid Limit (%): NA
Plastic Limit (%): NA

Analyst name: L. Varzaru
Date received: NA
Test date: 10/11/2022
Sample description: Gray SILTY CLAY

Average initial height $h_0 = 5.94$ in
Average initial diameter $d_0 = 2.85$ in
Height to diameter ratio = 2.08
Mass of wet sample = 1202.53 g
Mass of dry sample and tare = 1167.14 g
Mass of tare = 187.65 g
Specific gravity = 2.70 (estimated)

Sand(%): NA
Silt(%): NA
Clay(%): NA
Initial water content $w = 22.77\%$ (specimen)
Initial unit weight $\gamma = 121.15$ pcf
Initial dry unit weight $\gamma_d = 98.68$ pcf
Initial void ratio $e_0 = 0.71$
Initial degree of saturation $S_r = 87\%$
Average Rate of Strain = 1%/min
Unconfined compressive strength $q_u = 0.18$ tsf
Shear Strength = 0.09 tsf

Displacement (in)	Force (lbs)	Strain (%)	Stress (tsf)
Δh	F	e	s
0.00	0.00	0.00	0.00
0.03	2.39	0.51	0.03
0.06	2.39	1.01	0.03
0.09	2.39	1.52	0.03
0.12	4.78	2.02	0.05
0.15	4.78	2.53	0.05
0.18	7.16	3.03	0.08
0.21	7.16	3.54	0.08
0.24	7.16	4.04	0.08
0.27	7.16	4.55	0.08
0.30	9.55	5.05	0.10
0.35	9.55	5.90	0.10
0.40	9.55	6.74	0.10
0.45	9.55	7.58	0.10
0.50	11.94	8.42	0.12
0.55	11.94	9.27	0.12
0.60	14.33	10.11	0.15
0.65	14.33	10.95	0.14
0.70	14.33	11.79	0.14
0.80	14.33	13.48	0.14
0.90	19.10	15.16	0.18
1.00	19.10	16.85	0.18



NOTES:

Prepared by: _____ Date: _____

Checked by: _____ Date: _____

UNCONFINED COMPRESSIVE STRENGTH of COHESIVE SOIL (AASHTO T 208 / ASTM D 2166)

Project: Barrington Road
Client: Ardmore Roderick
WEI Job No.: 1064-01-01
Soil Sample ID: RWB-03 ST#2, (18-20 ft.)
Type/Condition: ST/Undisturbed
Liquid Limit (%): NA
Plastic Limit (%): NA

Analyst name: L. Varzaru
Date received: NA
Test date: 10/11/2022
Sample description: Gray SILTY CLAY

Average initial height $h_0 = 6.06$ in
Average initial diameter $d_0 = 2.78$ in
Height to diameter ratio = 2.18
Mass of wet sample = 988.65 g
Mass of dry sample and tare = 809.05 g
Mass of tare = 186.95 g
Specific gravity = 2.70 (estimated)

Sand(%): NA
Silt(%): NA
Clay(%): NA
Initial water content $w = 58.92\%$ (specimen)
Initial unit weight $\gamma = 102.59$ pcf
Initial dry unit weight $\gamma_d = 64.55$ pcf
Initial void ratio $e_0 = 1.61$
Initial degree of saturation $S_r = 99\%$
Average Rate of Strain = 1%/min
Unconfined compressive strength $q_u = 0.28$ tsf
Shear Strength = 0.14 tsf

Displacement (in)	Force (lbs)	Strain (%)	Stress (tsf)
Δh	F	e	s
0.00	0.00	0.00	0.00
0.03	2.39	0.49	0.03
0.06	4.78	0.99	0.06
0.09	7.16	1.48	0.08
0.12	9.55	1.98	0.11
0.15	9.55	2.47	0.11
0.18	11.94	2.97	0.14
0.21	14.33	3.46	0.16
0.24	16.71	3.96	0.19
0.27	16.71	4.45	0.19
0.30	19.10	4.95	0.22
0.35	19.10	5.77	0.21
0.40	21.49	6.60	0.24
0.45	21.49	7.42	0.24
0.50	23.88	8.25	0.26
0.55	23.88	9.07	0.26
0.60	23.88	9.90	0.26
0.65	23.88	10.72	0.25
0.70	26.26	11.55	0.28
0.80	26.26	13.20	0.27
0.90	26.26	14.85	0.27
1.00	26.26	16.50	0.26

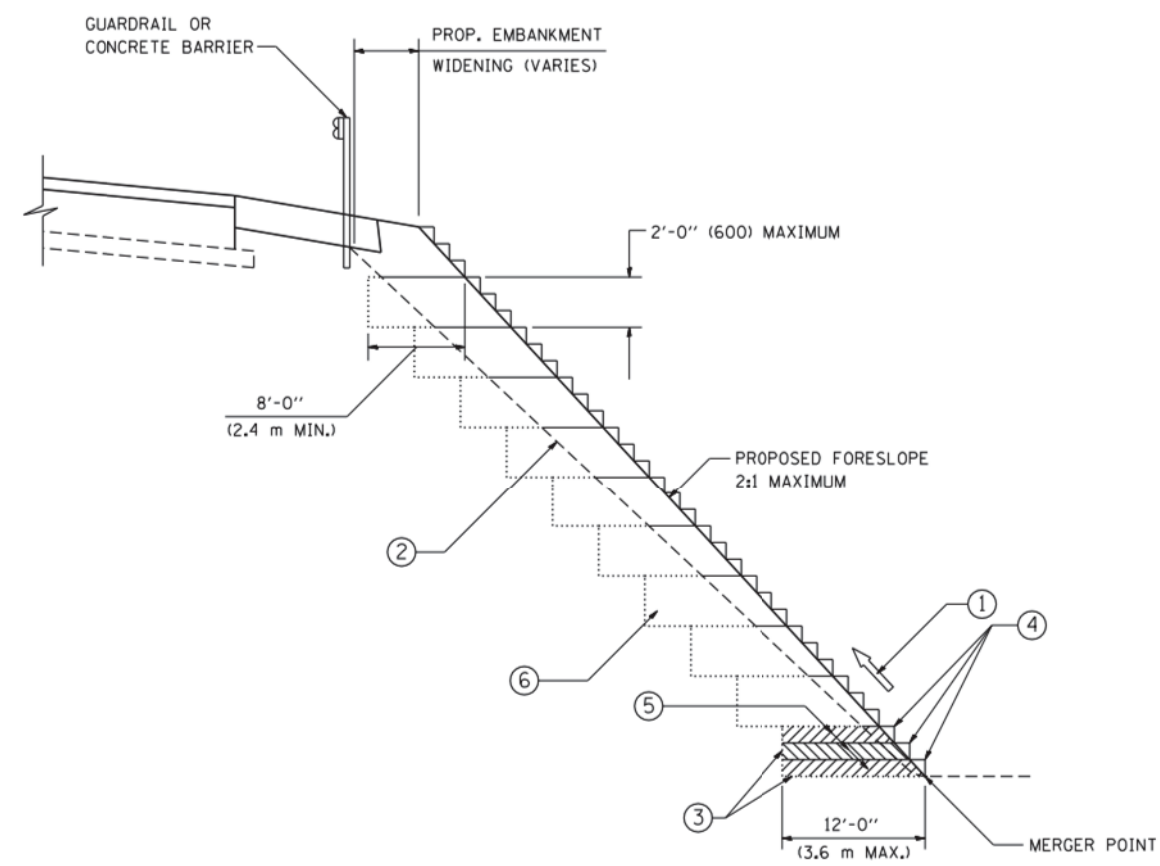


NOTES:

Prepared by: _____ Date: _____

Checked by: _____ Date: _____

APPENDIX D



TYPICAL BENCHING DETAIL
FOR EMBANKMENT

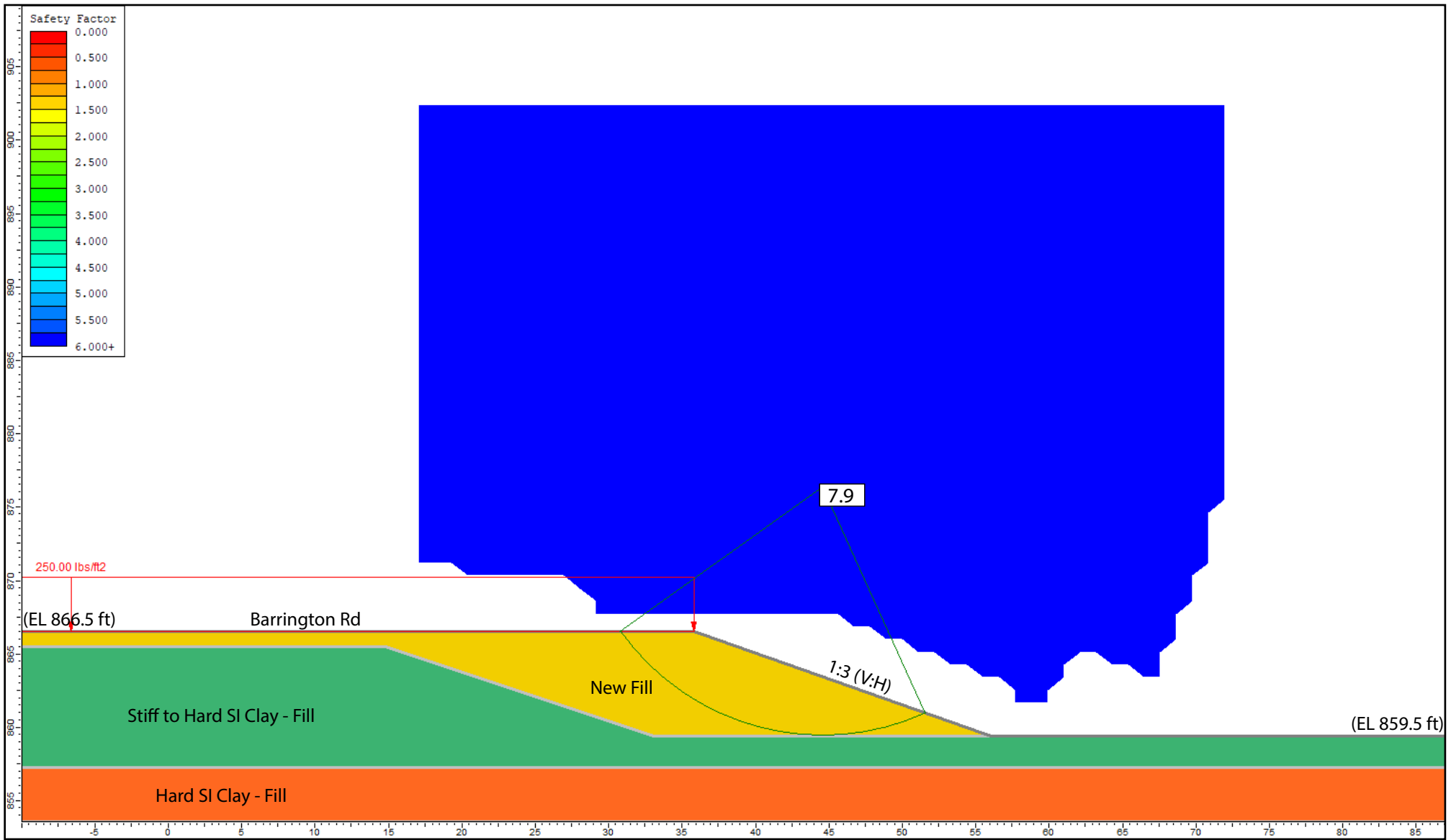
NOTES:

- 1. CONSTRUCT SUCCEEDING BENCH CUTS AND EMBANKMENT PLACEMENT AND COMPACTION FROM BOTTOM TO TOP IN STAIRSTEP FASHION.
- 2. EXISTING FORESLOPE PREPARED IN ACCORDANCE WITH ARTICLE 205.03 OF THE STANDARD SPECIFICATIONS.
- 3. BENCH CUT EXISTING SLOPE TYPICAL FOR EACH STEP.
- 4. TRIM TO FINAL SLOPE.
- 5. EQUAL 8-INCH (200) LIFTS OF EMBANKMENT COMPACTED IN ACCORDANCE WITH ARTICLE 205.05 OF THE STANDARD SPECIFICATIONS.
- 6. EXCAVATION OF BENCH CUTS WITHIN EXISTING EMBANKMENT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER CUBIC METER OR CUBIC YARD FOR "EARTH EXCAVATION". THIS PRICE WILL INCLUDE ALL LABOR AND MATERIAL, NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- 7. SLOPES SHALL BE BENCHED ACCORDING TO THIS DETAIL WHEN THE SLOPE IS STEEPER THAN 4:1 AND THE HEIGHT IS GREATER THAN 5' (1.5 m).

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS)
UNLESS OTHERWISE SHOWN.

FILE NAME = W:\diststd\22x34\bd51.dgn	USER NAME = gogliano	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BENCHING DETAIL FOR EMBANKMENT WIDENING			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 50.0000' / IN.	CHECKED - S.E.B.	REVISED -					326	105-N-2(15)	MCHENRY	473	380
	PLOT DATE = 1/4/2008	DATE - 06-16-04	REVISED -		SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.			BD-51 CONTRACT NO. 62B43				
								FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

APPENDIX E

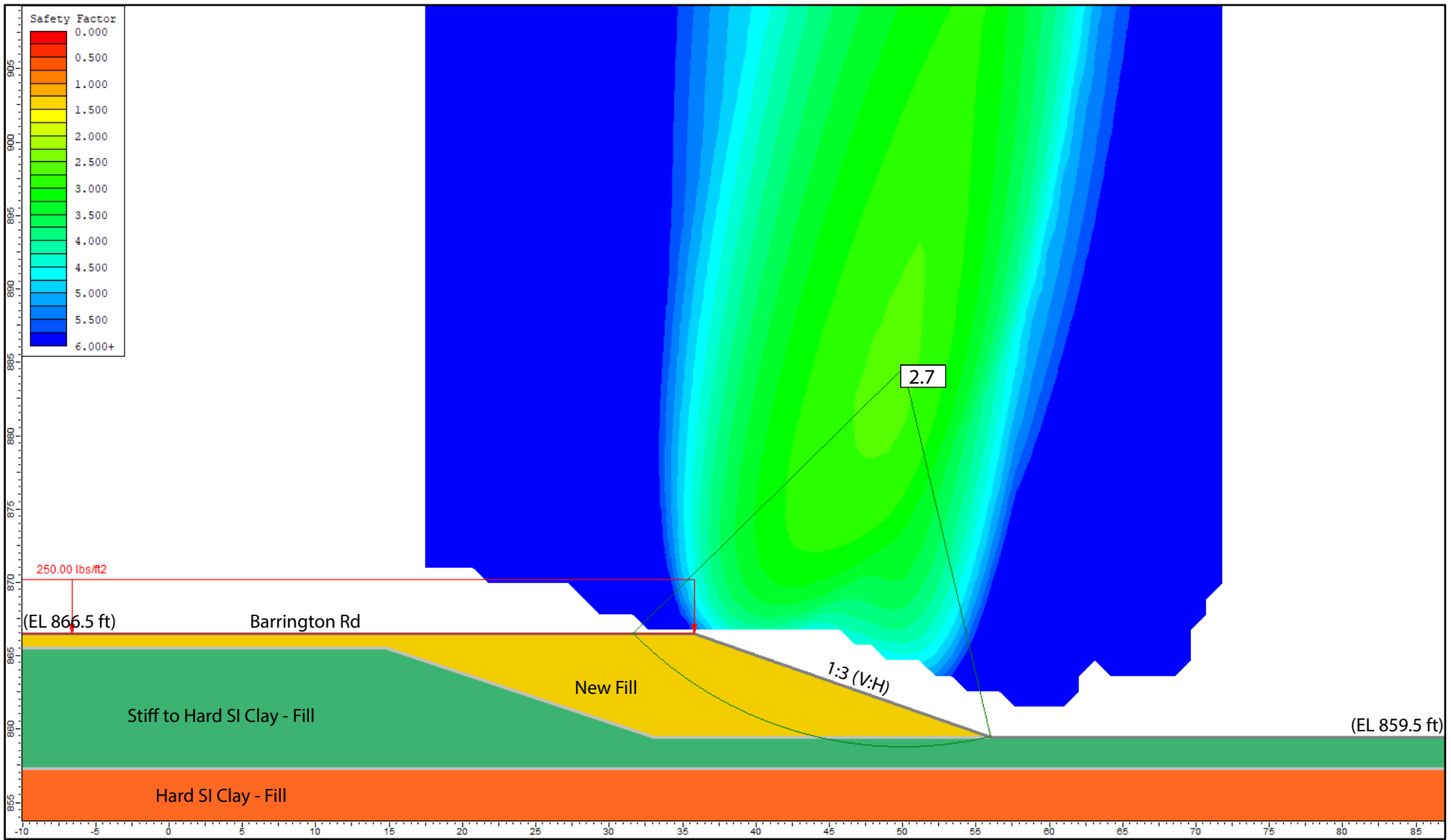


Undrained Analysis, Sta.72+00.00, Ref Boring: NB-SGB-07

Layer ID	Description	Total Unit Weight (pcf)	Undrained Cohesion (psf)	Undrained Friction Angle (degrees)
1	New Fill	125	1000	0
2	Stiff to Hard SI Clay - Fill	120	3400	0
3	Hard SI Clay - Fill	125	4500	0

GLOBAL STABILITY: BARRINGTON ROAD FROM ALGONQUIN ROAD TO CENTRAL ROAD; COOK COUNTY, ILLINOIS

SCALE: GRAPHICAL	APPENDIX E-1	DRAWN BY: D. You CHECKED BY: A. Kurnia
 Wang Engineering A Terracon Company		1145 N. Main Street Lombard, IL 60148 www.wangeng.com
FOR ARDMORE RODERICK		KE225002 1064-01-01



Drained Analysis, Sta.72+00.00, Ref Boring: NB-SGB-07

Layer ID	Description	Total Unit Weight (pcf)	Drained Cohesion (psf)	Drained Friction Angle (degrees)
1	New Fill	125	100	30
2	Stiff to Hard SI Clay - Fill	120	100	31
3	Hard SI Clay - Fill	125	100	33

GLOBAL STABILITY: BARRINGTON ROAD FROM ALGONQUIN ROAD TO CENTRAL ROAD; COOK COUNTY, ILLINOIS

SCALE: GRAPHICAL	APPENDIX E-2	DRAWN BY: D. You CHECKED BY: A. Kurnia
 A Terracon Company		1145 N. Main Street Lombard, IL 60148 www.wangeng.com
FOR ARDMORE RODERICK		KE225002 1064-01-01

APPENDIX F

APPENDIX F
BORING LOCATION PLANS
AND SOIL PROFILES

ROADWAY GEOTECHNICAL REPORT

BARRINGTON ROAD
FROM ALGONQUIN ROAD TO CENTRAL ROAD
PTB 194-001, D-91-312-20
COOK COUNTY, ILLINOIS

FOR
FOR ARDMORE RODERICK
1500 W CARROLL AVENUE, SUITE 300
CHICAGO, IL 60607

PREPARED BY
WANG ENGINEERING
1145 NORTH MAIN STREET
LOMBARD, IL 60148

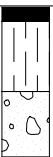
June 28, 2024
WANG PROJECT KE225002

LEGEND:



SB-SGB-01 Borehole Number
823.66 ft, Elevation
7+66.54; 69.75 LT Station; offset

Borehole Lithology



N--N-value, (blw/12 in)
Qu--UC Strength, (tsf)
MC--Moisture Content, (%)

- ▽ Water Level Reading at time of drilling.
- ▼ Water Level Reading 24-hr after drilling or at end of drilling

Lithology Graphics

- Topsoil
- IDH Sand, Sandy Loam
- IDH Clay
- Gravelly sand, sandy gravel
- IDH Loam
- IDH Clay Loam
- IDH Silt, Silty Loam
- Pavement
- IDH Silty Clay, Silty Clay Loam
- Crushed stone

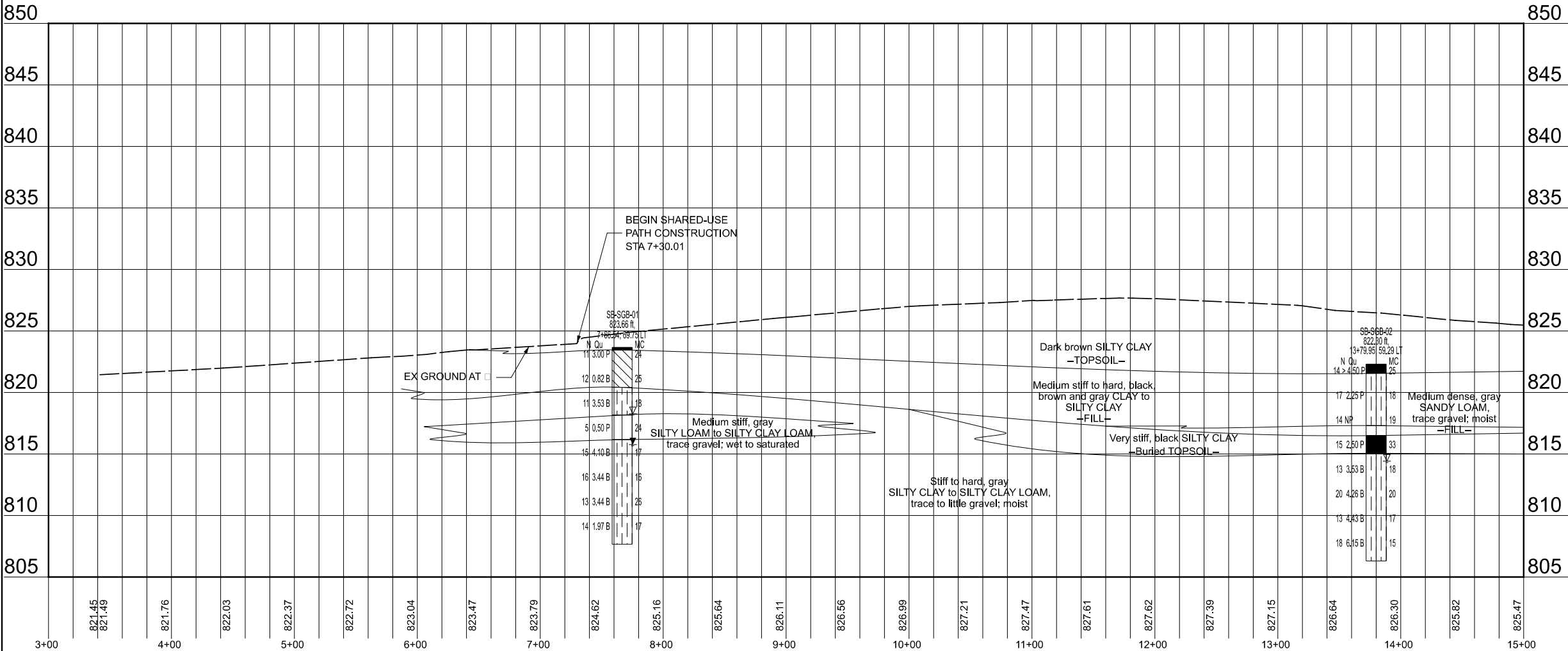
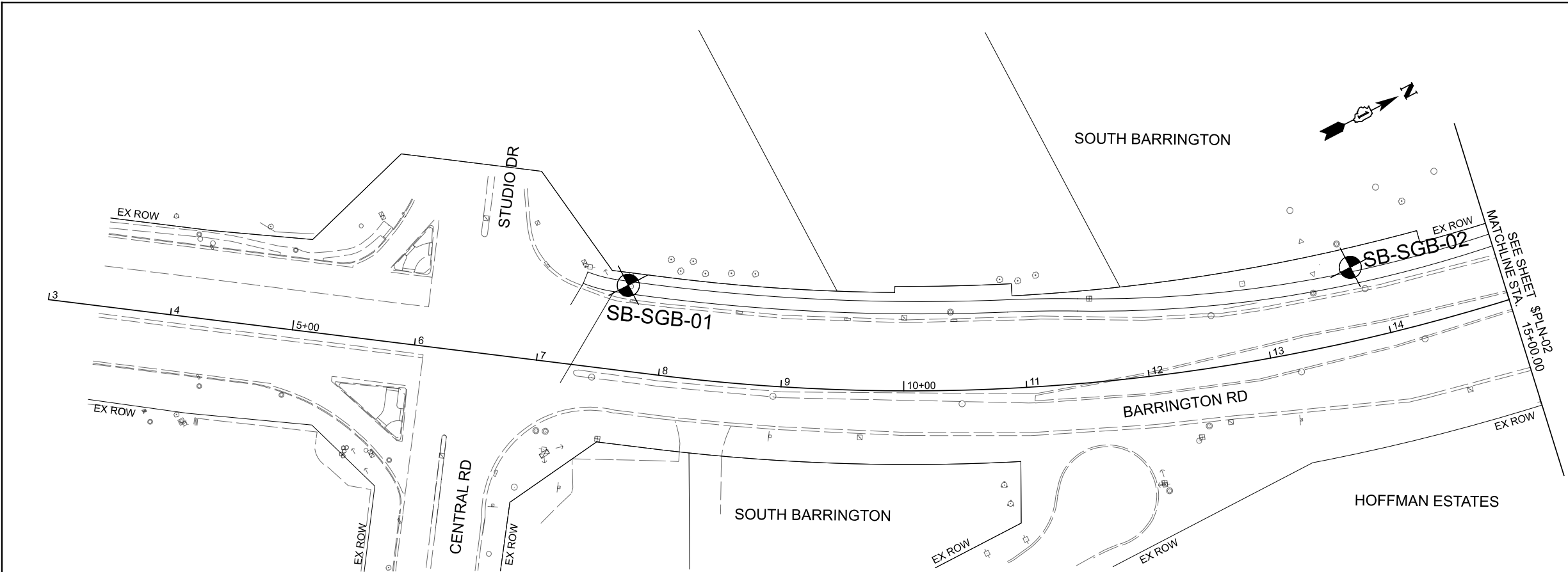


PLAN AND PROFILE LEGEND

- EX ROW
- PR ROW
- EX EASEMENT
- PR TEMPORARY EASEMENT
- EX PROPERTY LOT LINE
- PCC SIDEWALK, XX"
AGG BASE CSE TY B XX"

NOTES

1. FOR ADA DETAILS, SEE SHEETS \$ADA-XX AND \$ADA-XX



MODEL: \$MODELNAME\$
FILENAME: \$FILES\$



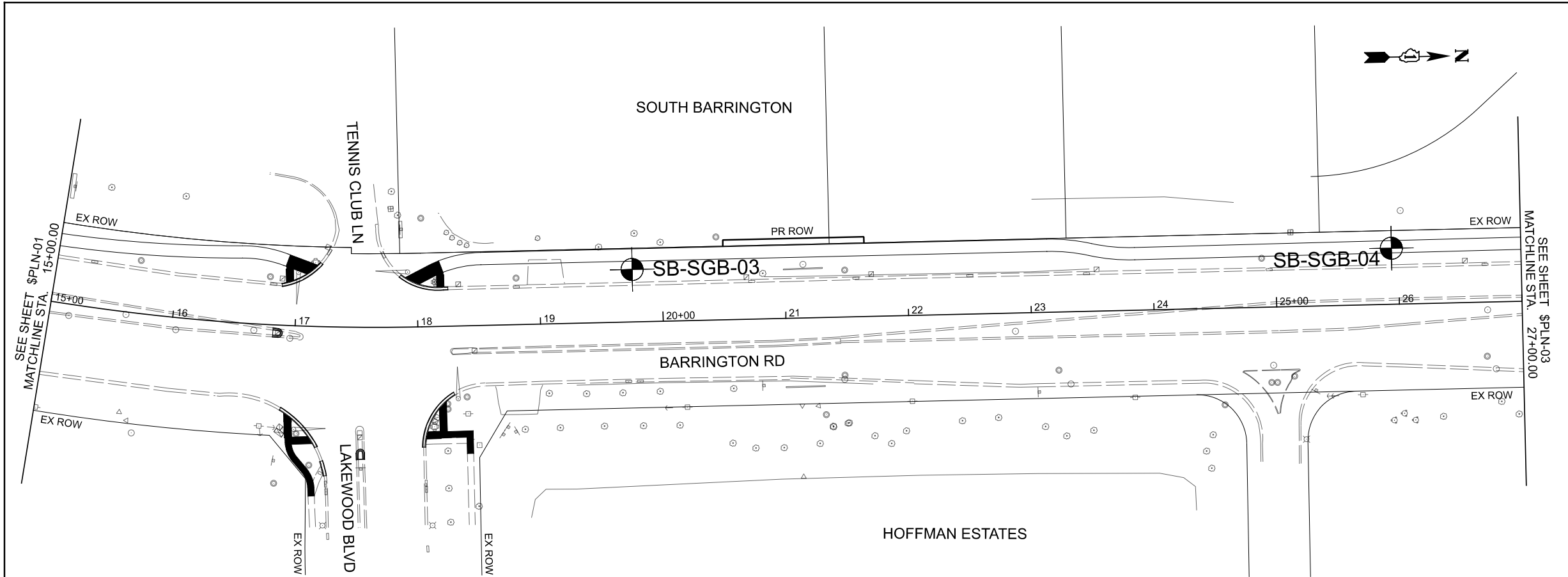
USER NAME = \$USERS\$	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = \$\$SCALE\$	CHECKED -	REVISED -
PLOT DATE = \$DATES\$	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BARRINGTON ROAD
PLAN AND PROFILE

SCALE: 1:50 SHEET \$PLN-01\$ OF \$PLN-SHEETS\$ STA. 03+00 TO STA. 15+00

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
362	2019-161-W	COOK	\$TOT	\$PLN-01
CONTRACT NO. 62K33				
ILLINOIS FED. AID PROJECT				

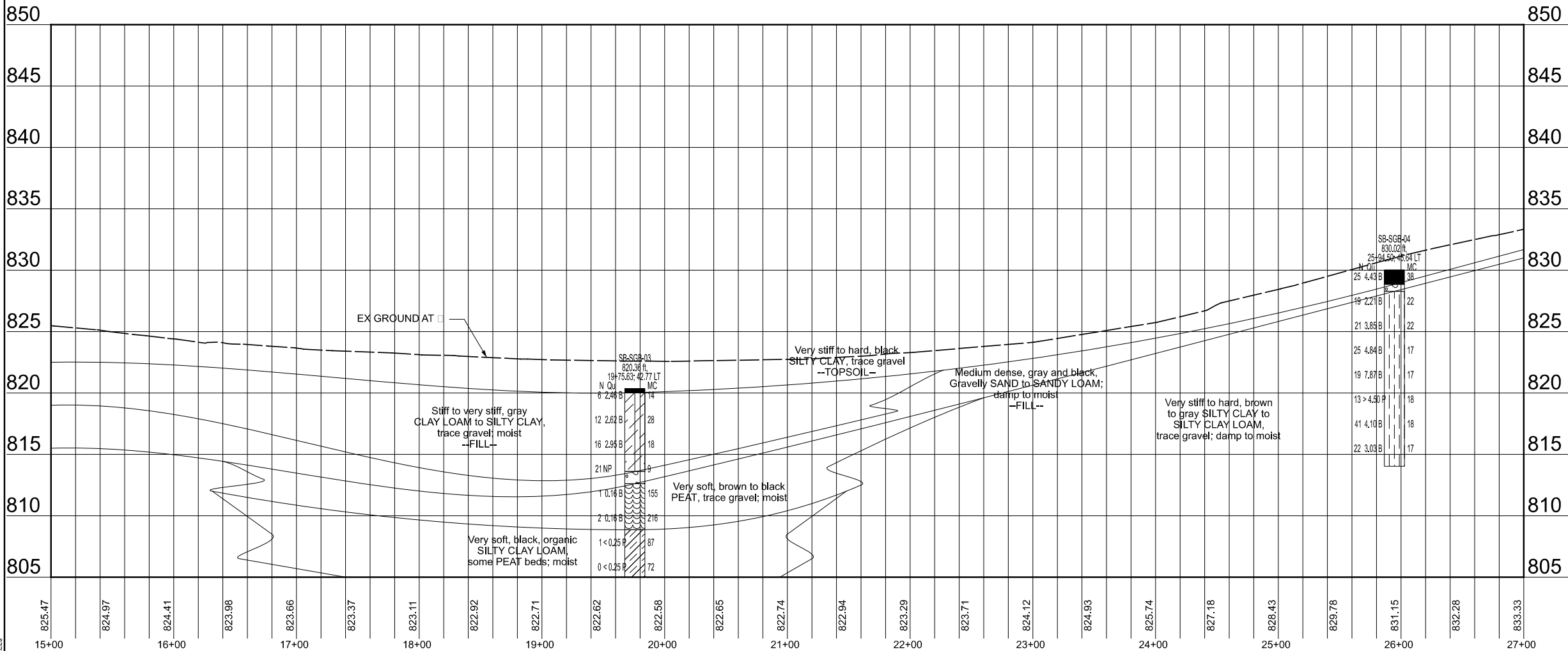


PLAN AND PROFILE LEGEND

- EX ROW
- PR ROW
- EX EASEMENT
- PR TEMPORARY EASEMENT
- EX PROPERTY LOT LINE
- PCC SIDEWALK, XX"
- AGG BASE CSE TY B XX"

NOTES

1. FOR ADA DETAILS, SEE SHEETS \$ADA-XX



MODEL: \$MODELNAME\$
FILE NAME: \$FILES\$



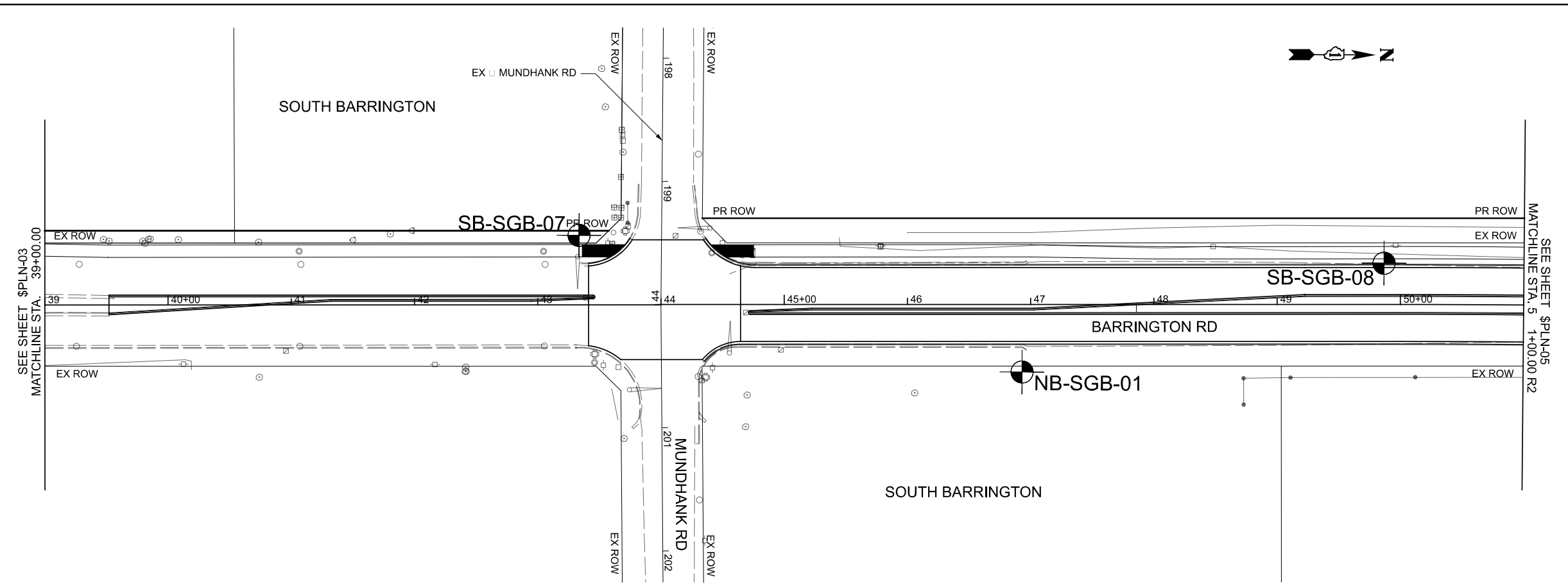
USER NAME = \$USERS\$	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = \$SCALES\$	CHECKED -	REVISED -
PLOT DATE = \$DATES\$	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BARRINGTON ROAD
PLAN AND PROFILE

SCALE: 1:50 SHEET \$PLN-02\$ OF \$PLN-03\$ SHEETS STA. 15+00 TO STA. 27+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
362	2019-161-W	COOK	\$TOT	\$PLN-02
CONTRACT NO. 62K33				
ILLINOIS FED. AID PROJECT				

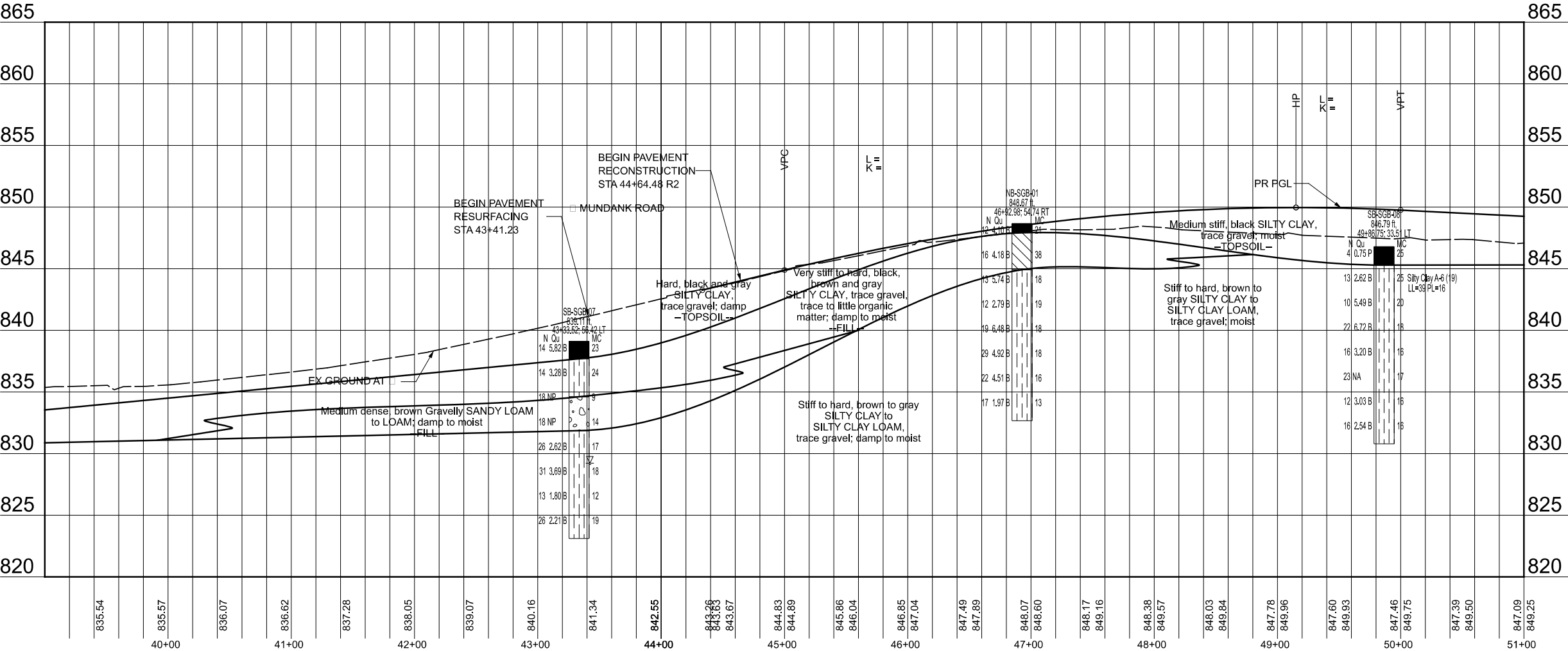


PLAN AND PROFILE LEGEND

- EX ROW
- PR ROW
- EX EASEMENT
- PR TEMPORARY EASEMENT
- EX PROPERTY LOT LINE
- PCC SIDEWALK, XX"
- AGG BASE CSE TY B XX"

NOTES

- FOR ADA DETAILS, SEE SHEETS \$ADA-XX AND \$ADA-XX



MODEL: \$MODELNAME\$
FILENAME: \$FILES\$

TranSystems

USER NAME = \$USERS\$	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED -	REVISED -
PLOT DATE = \$DATES\$	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

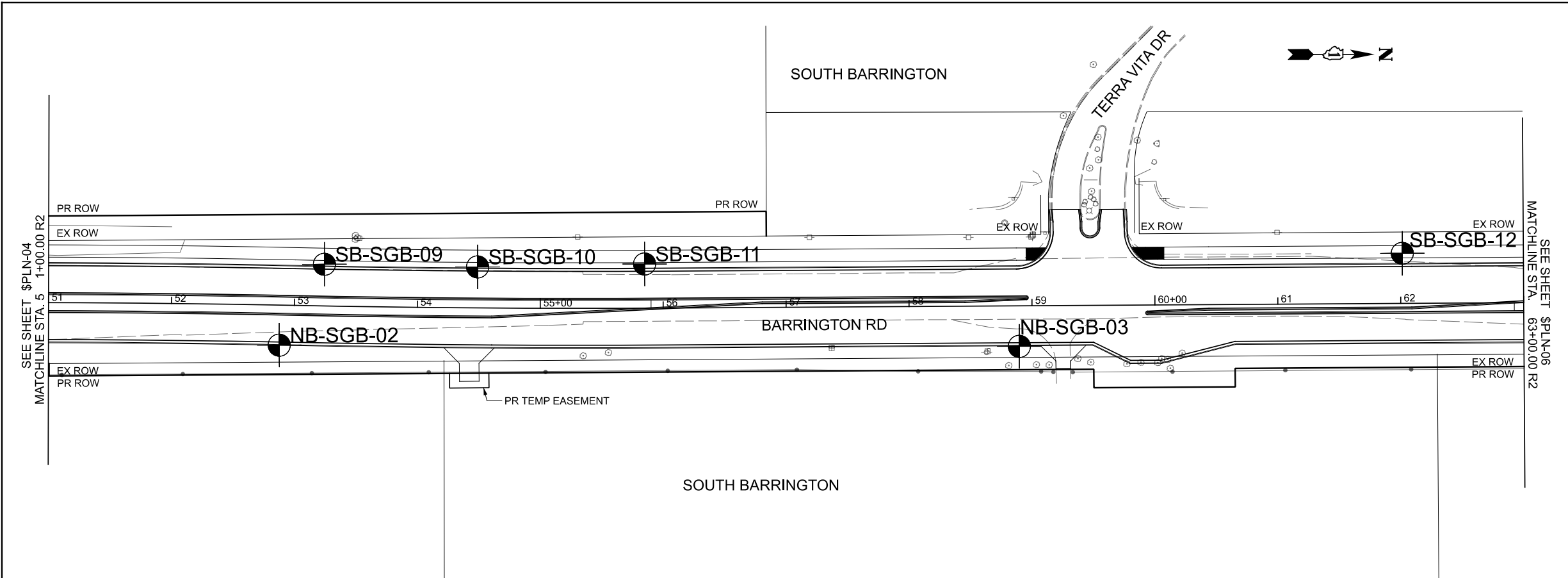
BARRINGTON ROAD
PLAN AND PROFILE

SCALE: 1:50

SHEET \$PLN-04\$ OF \$PLN-05\$

STA. 39+00 TO STA. 51+00

F.A.P. RTE. 362	SECTION 2019-161-W	COUNTY COOK	TOTAL SHEETS \$TOT\$	SHEET NO. \$PLN-04\$
			CONTRACT NO. 62K33	
ILLINOIS		FED. AID PROJECT		

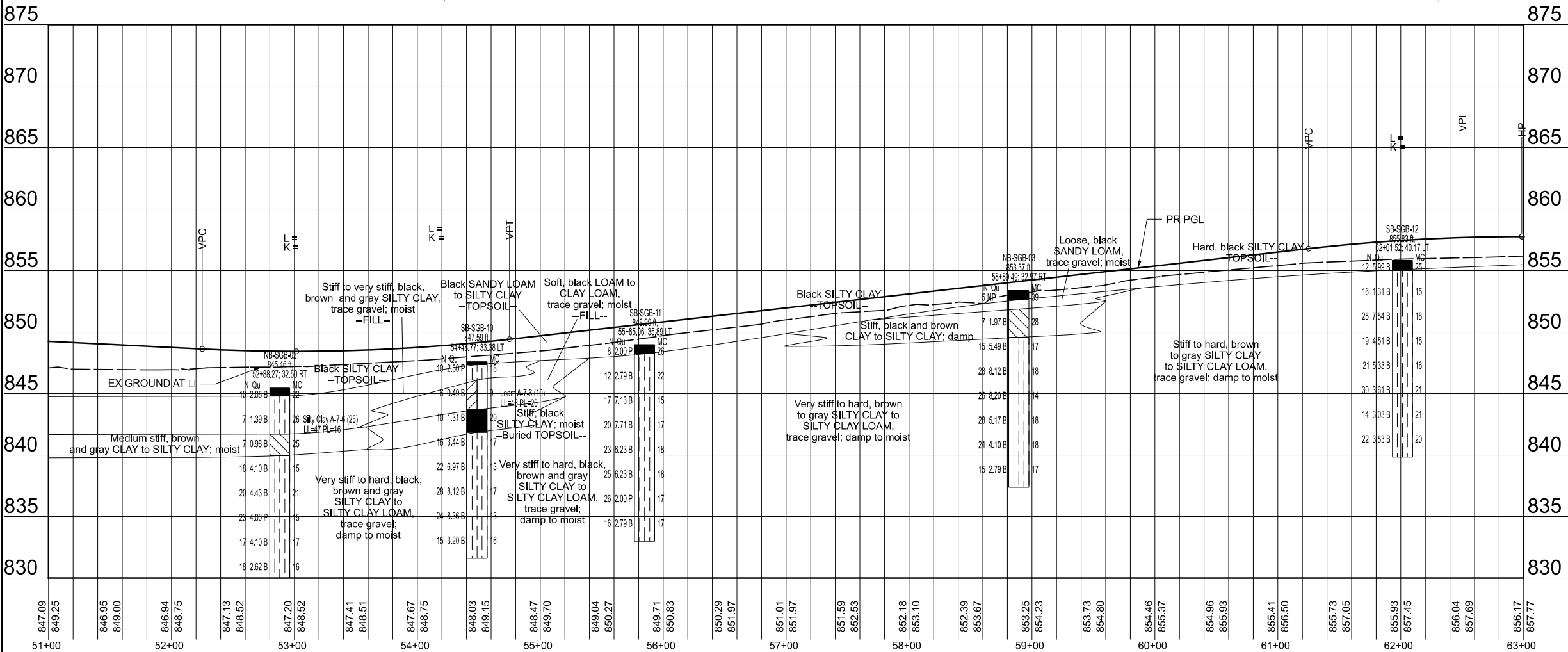


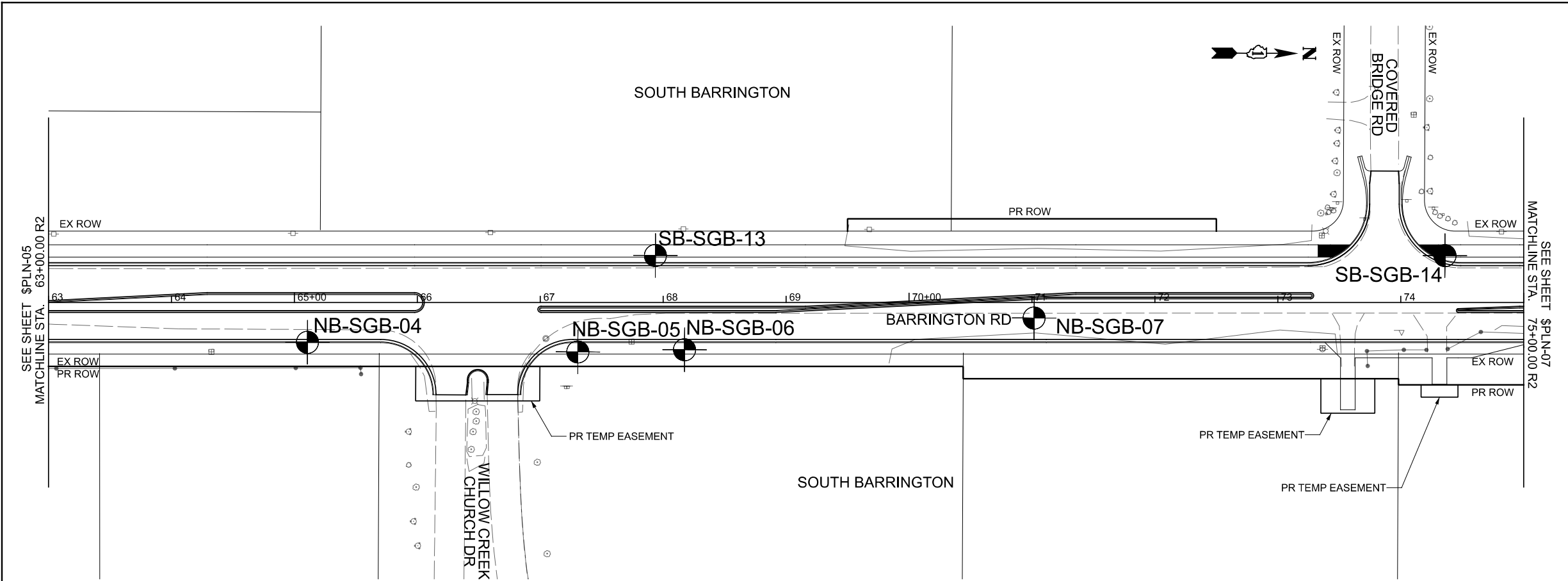
PLAN AND PROFILE LEGEND

- EX ROW
- PR ROW
- EX EASEMENT
- PR TEMPORARY EASEMENT
- EX PROPERTY LOT LINE
- PCC SIDEWALK, XX"
- AGG BASE CSE TY B XX"

NOTES

- FOR ADA DETAILS, SEE SHEETS \$ADA-XX AND \$ADA-XX



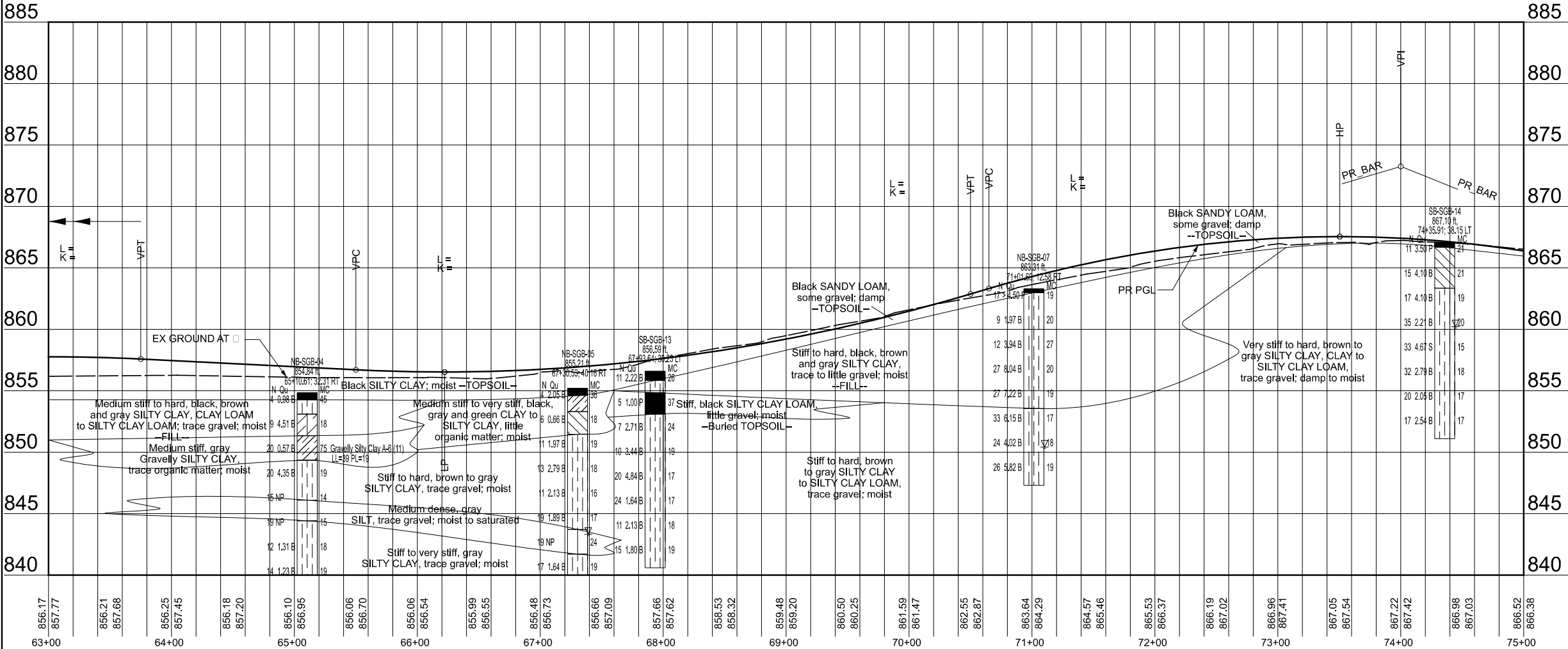


PLAN AND PROFILE LEGEND

- EX ROW
- PR ROW
- EX EASEMENT
- PR TEMPORARY EASEMENT
- EX PROPERTY LOT LINE
- PCC SIDEWALK, XX"
- AGG BASE CSE TY B XX"

NOTES

- FOR ADA DETAILS, SEE SHEETS \$ADA-XX AND \$ADA-XX



MODEL: SHOWNAMES
FILENAME: SHEETS



USER NAME = \$USERS	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = \$SCALES	CHECKED -	REVISED -
PLOT DATE = \$DATES	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BARRINGTON ROAD
PLAN AND PROFILE

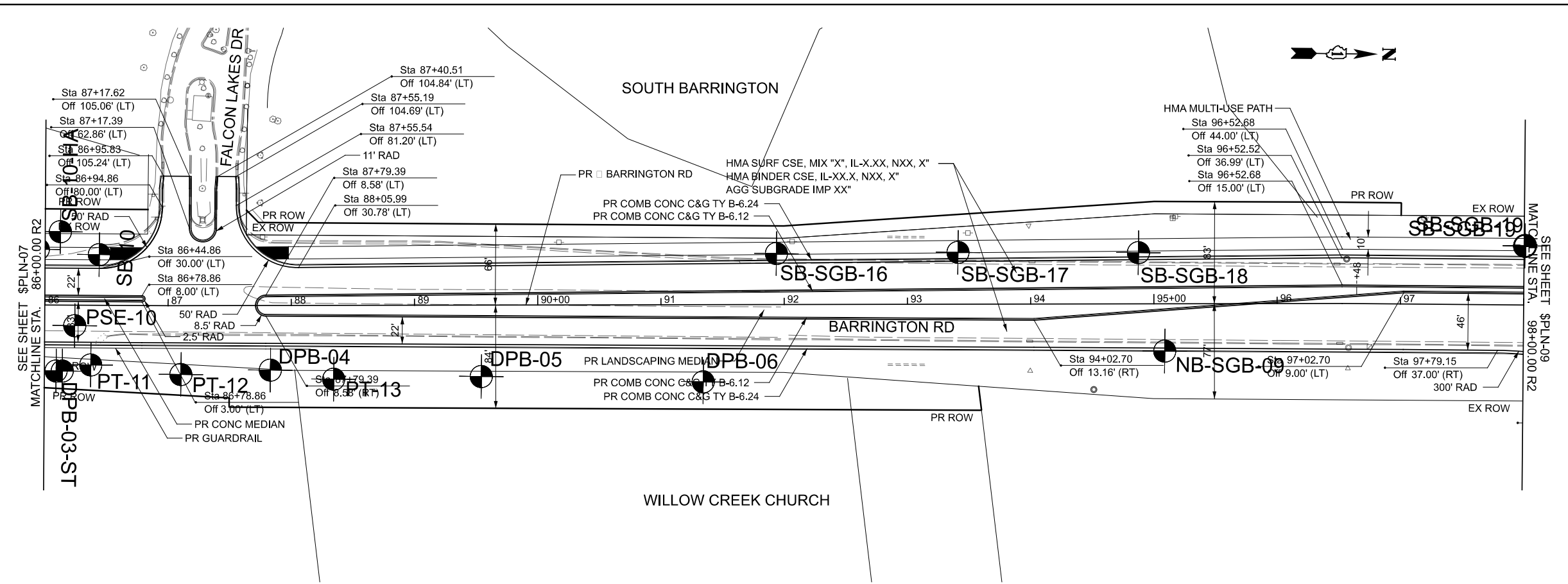
SCALE: 1:50 SHEET \$PLN-06 OF \$PLN-06 STAs. 63+00 TO STA. 75+00

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
362	2019-161-W	COOK	\$TOT	\$PLN-06
CONTRACT NO. 62K33				
ILLINOIS FED. AID PROJECT				



1. FOR ADA DETAILS, SEE SHEETS ~~SADA-XX~~ SADA-XX

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
362	2019-161-W	COOK	\$TOT	\$PLN-07
		CONTRACT NO. 62K33		

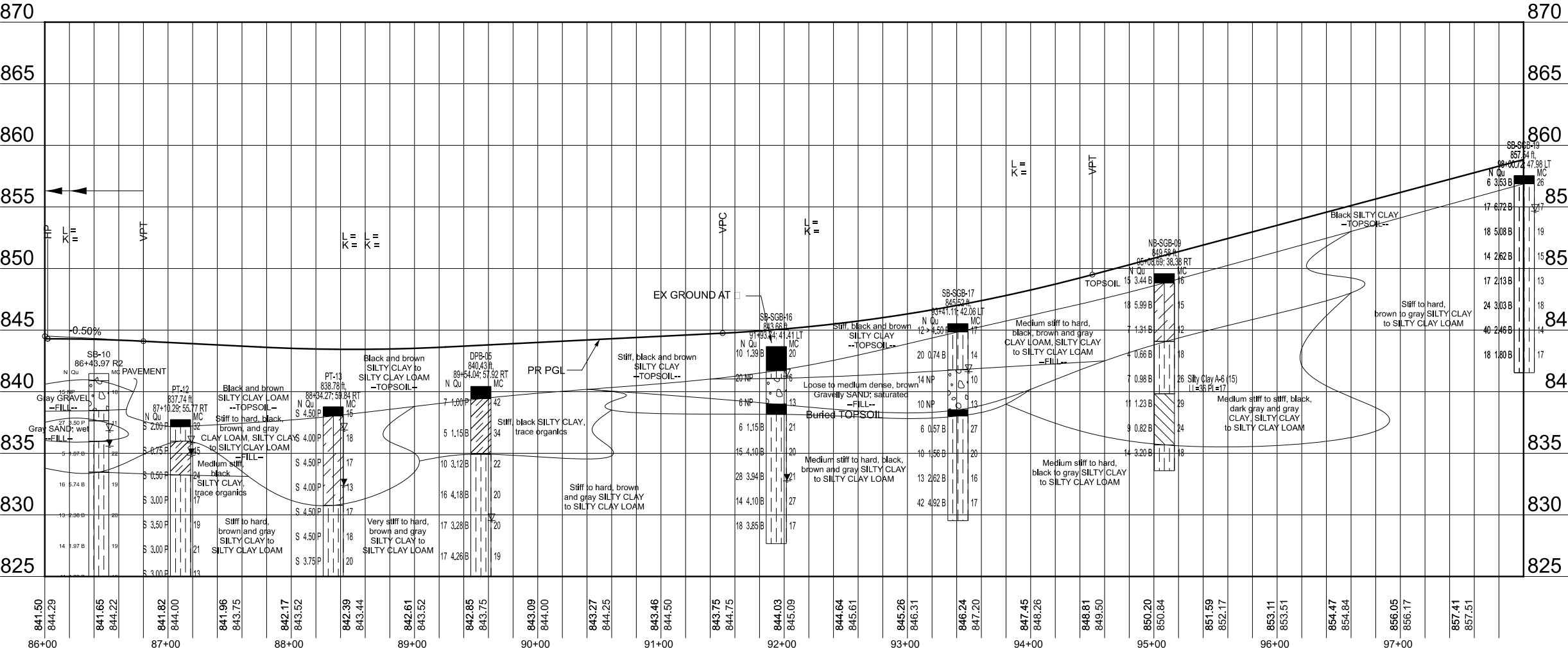


PLAN AND PROFILE LEGEND

- EX ROW
- PR ROW
- EX EASEMENT
- PR TEMPORARY EASEMENT
- EX PROPERTY LOT LINE
- PCC SIDEWALK, XX"
- AGG BASE CSE TY B XX"

NOTES

- FOR ADA DETAILS, SEE SHEETS \$ADA-XX-ADA-XX



USER NAME = \$USERS	DESIGNED -	REVISED -
PLOT SCALE = \$SCALES	DRAWN -	REVISED -
PLOT DATE = \$DATES	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BARRINGTON ROAD
PLAN AND PROFILE
SCALE: 1:50
SHEET \$PLN-08 OF \$PLN-08
STA. 86+00 TO STA. 98+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
362	2019-161-W	COOK	\$TOT	\$PLN-08
CONTRACT NO. 62K33				
ILLINOIS FED. AID PROJECT				

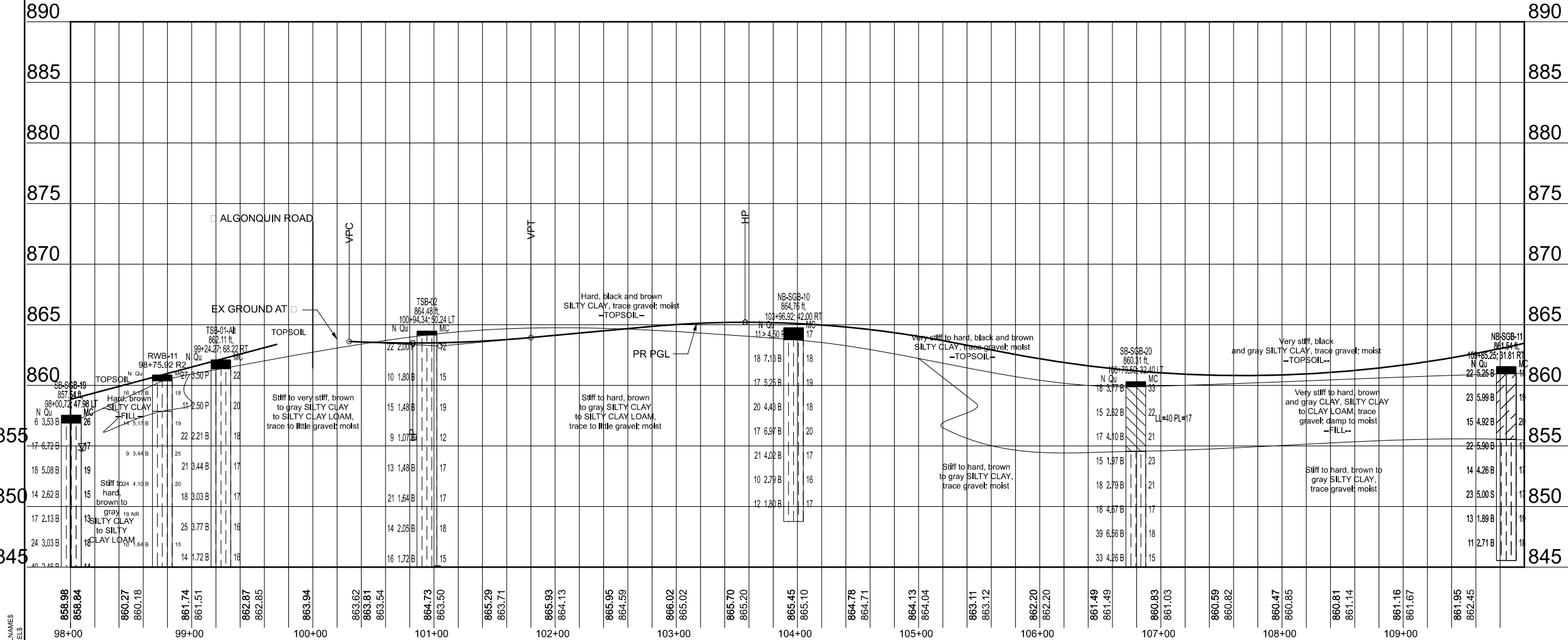
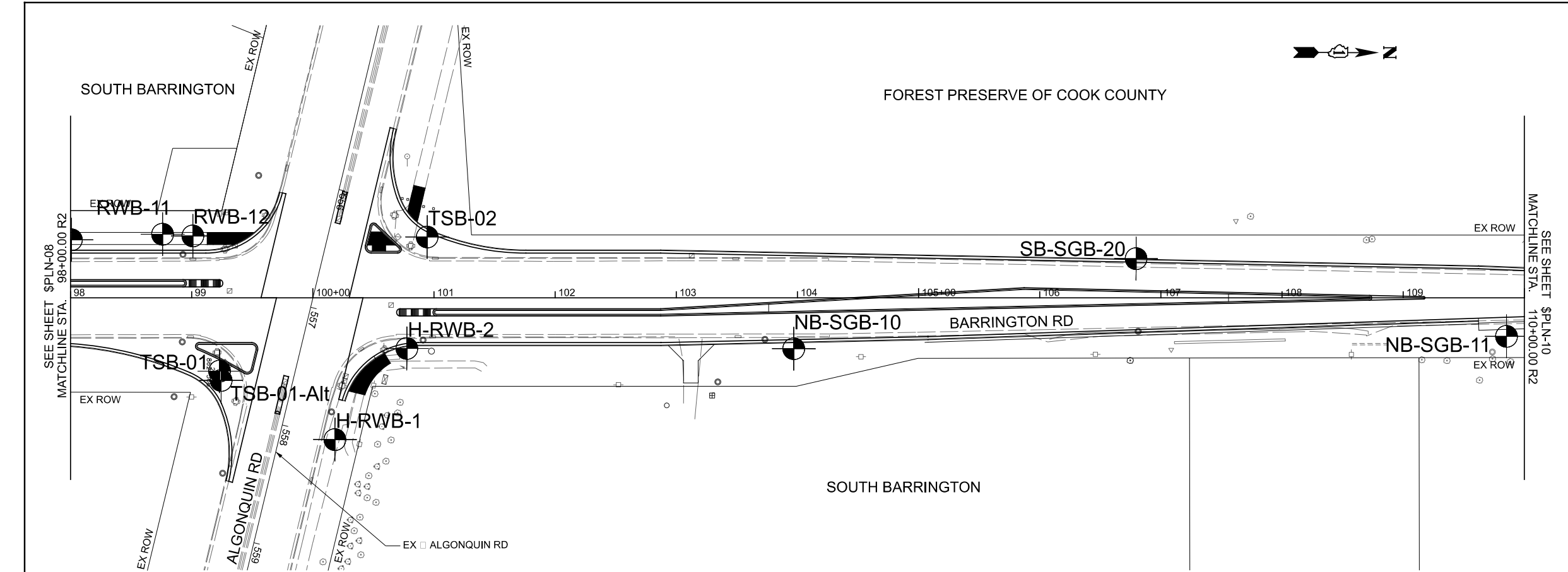


PLAN AND PROFILE LEGEND

- EX ROW
- PR ROW
- EX EASEMENT
- PR TEMPORARY EASEMENT
- EX PROPERTY LOT LINE
- PCC SIDEWALK, XX"
- AGG BASE CSE TY B XX"

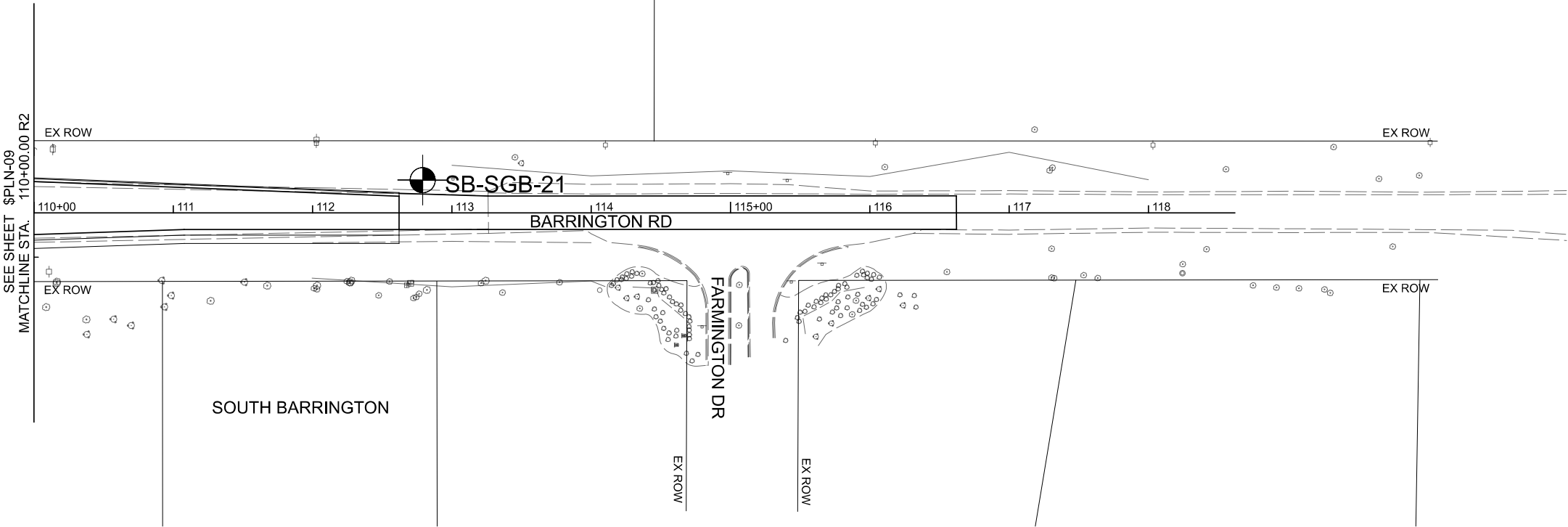
NOTES

1. FOR ADA DETAILS, SEE SHEETS SADA-XX AND SADA-XX





FOREST PRESERVE OF COOK COUNTY

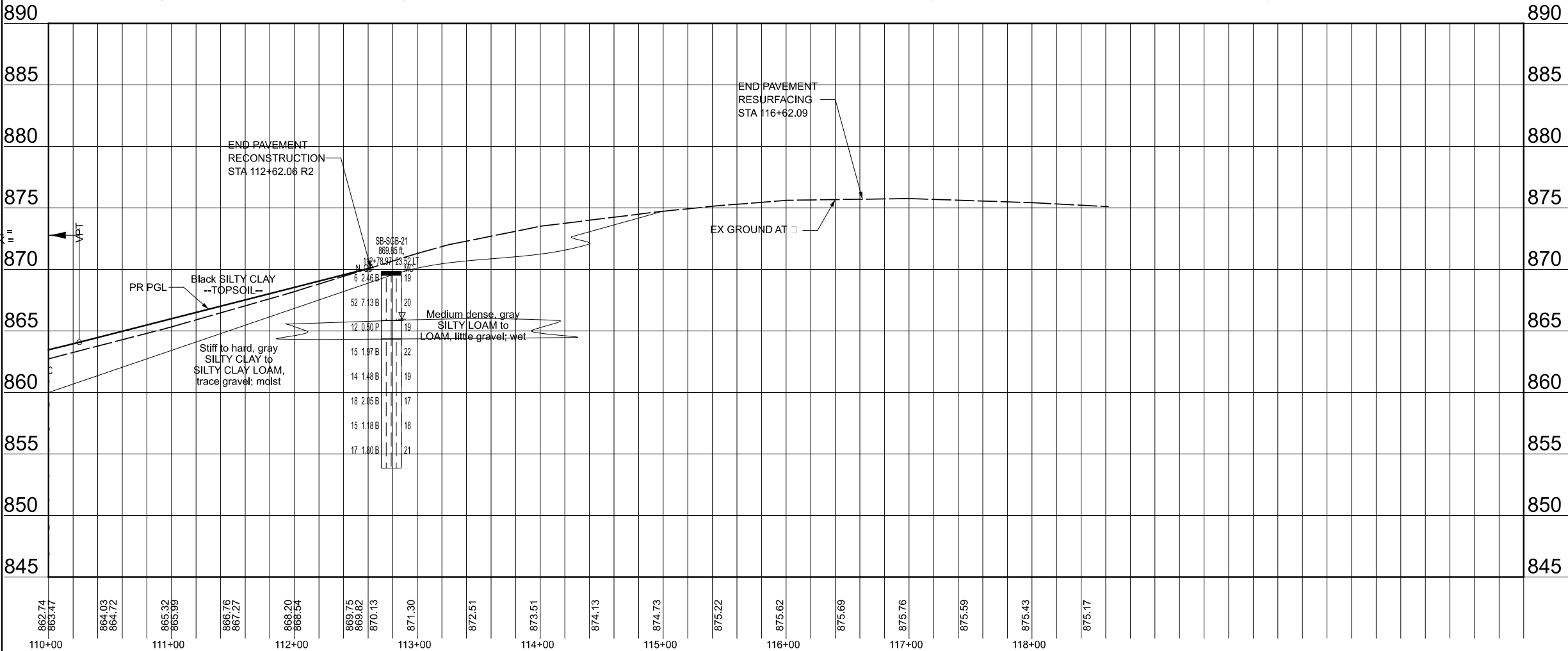


PLAN AND PROFILE LEGEND

- EX ROW
- PR ROW
- EX EASEMENT
- PR TEMPORARY EASEMENT
- EX PROPERTY LOT LINE
- PCC SIDEWALK, XX"
- AGG BASE CSE TY B XX"

NOTES

1. FOR ADA DETAILS, SEE SHEETS \$ADA-XX AND \$ADA-XX



MODEL: \$MODELNAME\$
FILENAME: \$FILES\$



USER NAME = \$USERS\$	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = \$SCALES\$	CHECKED -	REVISED -
PLOT DATE = \$DATES\$	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BARRINGTON ROAD
PLAN AND PROFILE

SCALE: 1:50 SHEET \$PLN-100F \$PLN-100F STA. 110+00 TO STA. 118+62

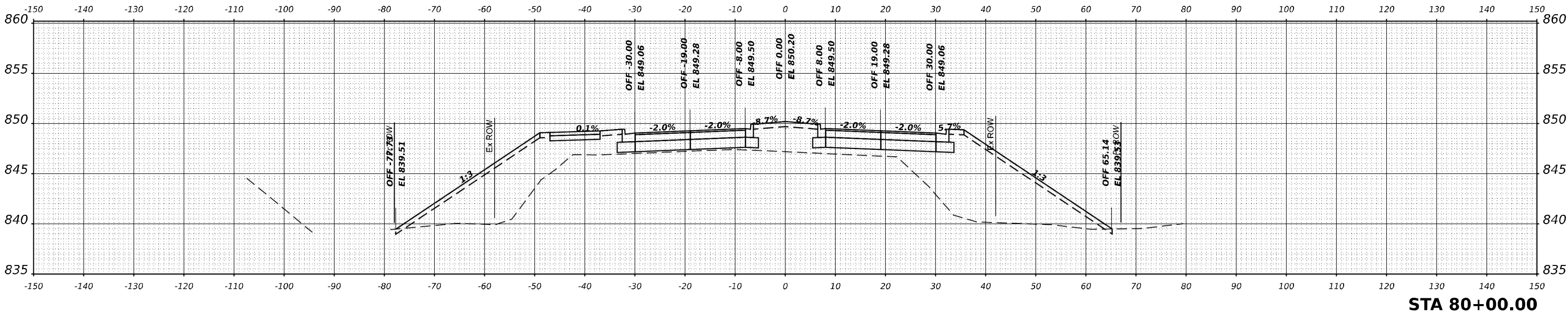
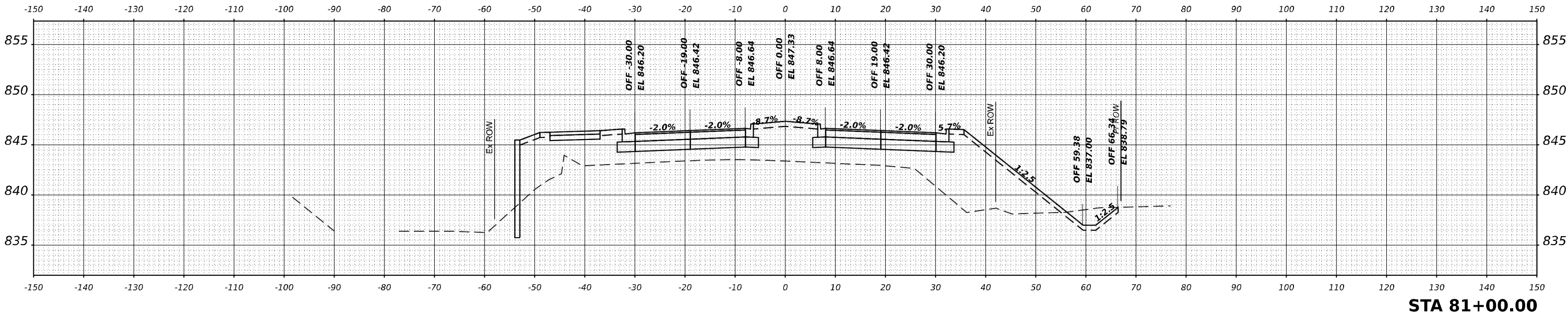
F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
362	2019-161-W	COOK	\$TOT	\$PLN-10
CONTRACT NO. 62K33				
ILLINOIS FED. AID PROJECT				

APPENDIX G

FINAL SURVEY	BY		DATE
	SURVEYED		
	PLOTTED		
	TEMPLATE		
NOTE BOOK NO.	AREAS		
	CHECKED		

ORIGINAL SURVEY	BY		DATE
	SURVEYED		
	PLOTTED		
	TEMPLATE		
NOTE BOOK NO.	AREAS		
	CHECKED		

MODEL SHEET LAYOUT
FILE NAME: 81E1E5



USER NAME	DESIGNED	REVISED
DRAWN	REVISED	
PLOT SCALE	CHECKED	REVISED
PLOT DATE	DATE	REVISED

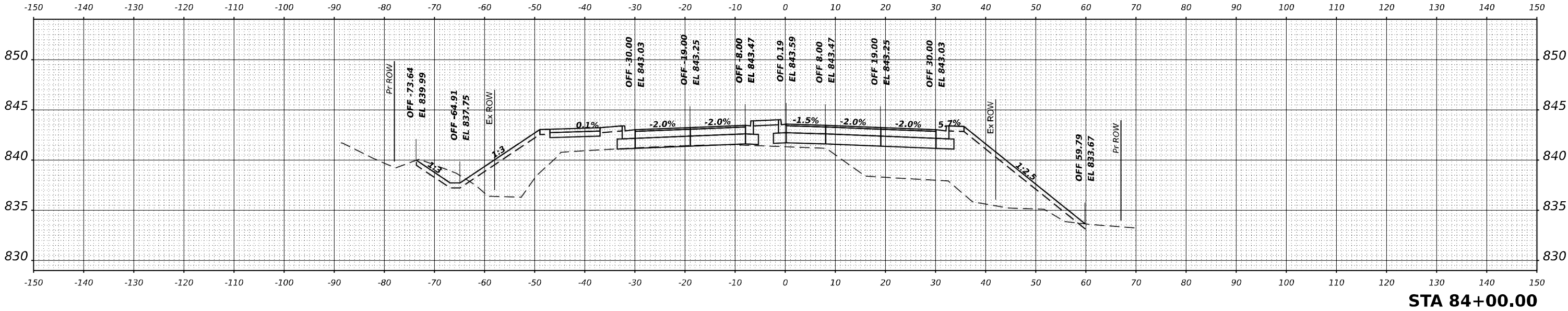
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHEET TITLE LINE 1
SHEET TITLE LINE 2

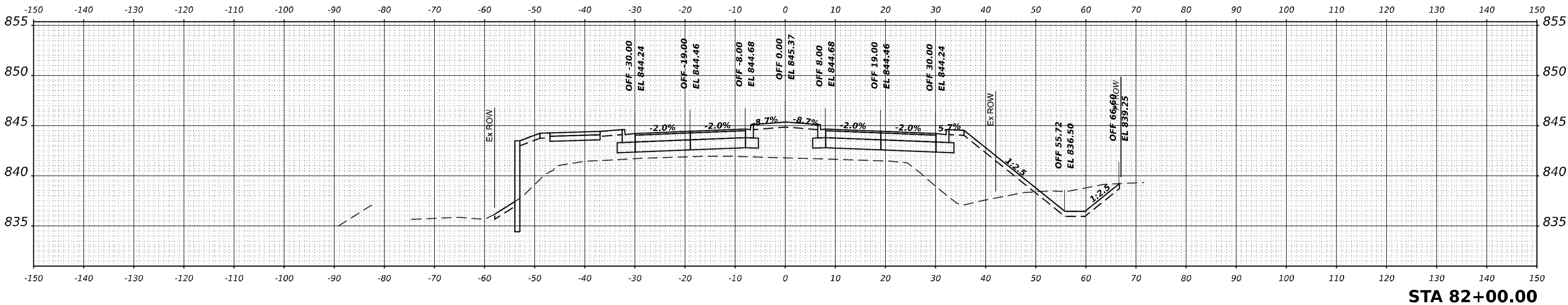
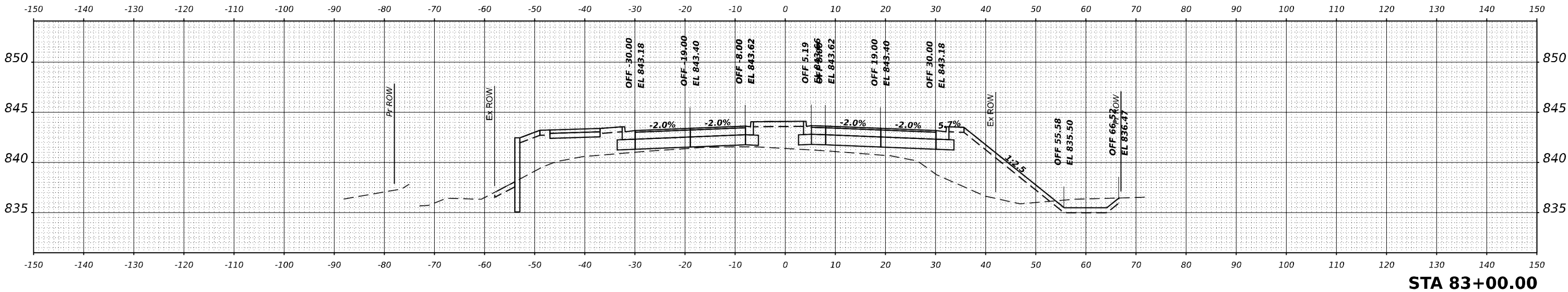
SCALE: SCALE SHEET 0 OF 1 SHEETS STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ROUTE	SECTION	COUNTY	1	1
CONTRACT NO.				
ILLINOIS FED. AID PROJECT				

FINAL SURVEY	SURVEYED PLOTTED TEMPLATE AREAS	BY	DATE
NOTE BOOK NO.	AREAS CHECKED		



ORIGINAL SURVEY	SURVEYED PLOTTED TEMPLATE AREAS	BY	DATE
NOTE BOOK NO.	AREAS CHECKED		



USER NAME	DESIGNED	REVISED
BY	DRAWN	REVISED
PLOT SCALE	CHECKED	REVISED
PLOT DATE	DATE	REVISED

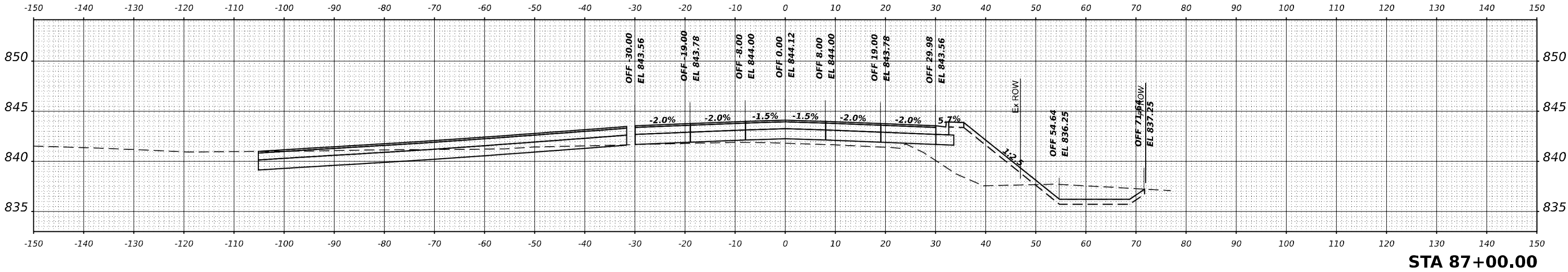
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHEETTITLELINE1
SHEETTITLELINE2

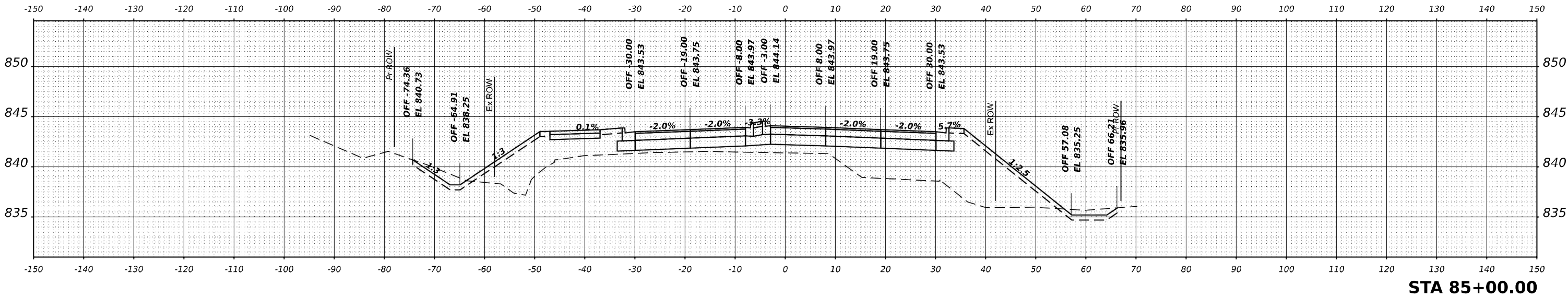
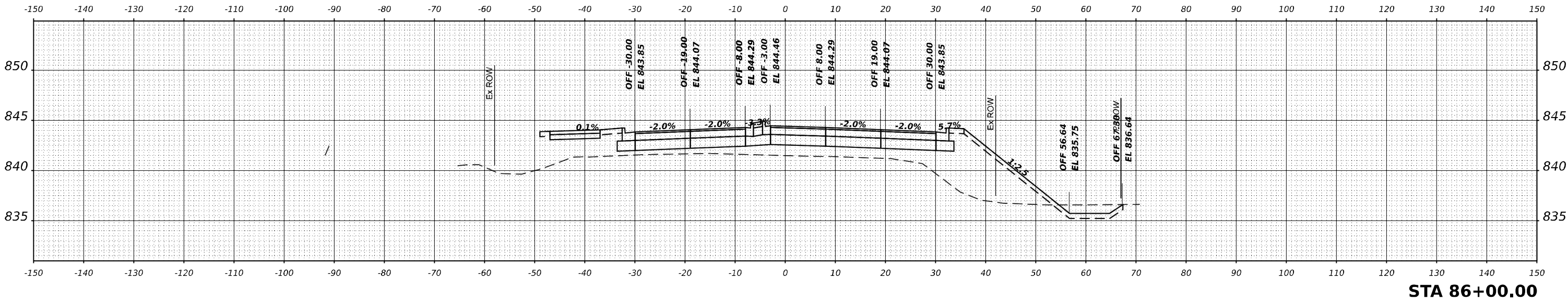
SCALE: SCALE SHEET 0 OF 1 SHEETS STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ROUTE	SECTION	COUNTY	1	1
CONTRACT NO.				
ILLINOIS FED. AID PROJECT				

FINAL SURVEY	BY	DATE	SURVEYED _____
			PLOTTED _____
			TEMPLATE _____
			AREAS _____
NO. _____	NOTE BOOK		AREAS CHECKED _____



ORIGINAL SURVEY	BY	DATE	SURVEYED	PLOTTED	TEMPLATE	AREAS	CHECKED
NO.	NOTE BOOK						



USER NAME	DESIGNED	REVISED
DRAWN	REVISED	
PLOT SCALE	CHECKED	REVISED
PLOT DATE	DATE	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHEETTITLELINE1
SHEETTITLELINE2

SCALE: SCALE SHEET 0 OF 1 SHEETS STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ROUTE	SECTION	COUNTY	1	1
		CONTRACT NO.		
		ILLINOIS	FED. AID PROJECT	