
ROADWAY GEOTECHNICAL REPORT
I-80 Phase II: Chicago Street to US 30
I-80 Mainline Roadway
Contract Number: 62R29, PTB 194-009
IDOT Job No. D-91-205-19
Will County, Illinois

Prepared for:

EXP US Services Inc.
205 North Michigan Avenue
Suite 3600
Chicago, IL 60601

Prepared by:

Geo Services, Inc.
805 Amherst Court
Suite 204
Naperville, Illinois 60565
(630) 305-9186



JOB NO. 20012
September 7th, 2022
Revised: November 22nd, 2022
March 22, 2023



September 7th, 2022
Revised: November 22nd, 2022
Revised: March 22, 2023

EXP US Services Inc.
205 North Michigan Avenue, Suite 3600
Chicago, Illinois 60601-5924

Attn: Mr. Thomas Hough, P.E.,
Email: Thomas.Hough@exp.com

Job No. 20012

Re: Roadway Geotechnical Report I-80
Contract No.: 62R29
Approximate Stationing: 780+25 to 924+90
IDOT Job Number P-91-185-09 / PTB 194-09
Will County, Illinois

Dear Mr. Hough:

The following report presents the geotechnical analysis and recommendations for the reconstruction and widening of Interstate Highway 80 from Chicago Street to US-30. A total of one hundred and fourteen (114) soil borings, seventy-nine (79) noise wall borings (for roadway analysis) and fourteen (14) pavement core borings are included with this Roadway Geotechnical Report (RGR); performed by Geo Services Inc. (GEO) in 2021.

If there are any questions regarding the information submitted herein, please do not hesitate to contact us.

Very truly yours,

GEO SERVICES, Inc.

Nawras Alhadab
Project Manager

Andrew J. Ptak, P.E.
Principal Engineer

enc.



exp/103 11/30/22

TABLE OF CONTENTS

SECTION 01: INTRODUCTION.....	1
SECTION 02: PROJECT DESCRIPTION.....	1
SECTION 03: Geology and Pedology	1
SECTION 04: CLIMATIC CONDITIONS.....	2
SECTION 05: SUBSURFACE INVESTIGATION PROCEDURES	3
SECTION 06: LAB TESTING PROGRAM.....	3
SECTION 07: SOIL CONDITIONS	4
SECTION 08: BURIED TOPSOIL CONDITIONS	5
SECTION 09: GROUND WATER CONDITIONS.....	6
SECTION 10: ANALYSIS	6
10.1 Drainage Conditions Analysis	6
SECTION 11: ROADWAY RECOMMENDATIONS.....	6
11.1 Roadway Recommendations	6
11.2 Topsoil Recommendations.....	7
11.3 Subgrade Rating and Borrow Fill Recommendations.....	7
11.4 Drainage Recommendations.....	9
SECTION 12: GENERAL QUALIFICATIONS	9

- APPENDIX A: General Notes
- APPENDIX B: Site Map
- APPENDIX C: Plan and Profiles
- APPENDIX D: Soil Boring / Core Logs
- APPENDIX E: Lab Data
- APPENDIX F: BBS 2640 and SSR Triangle
- APPENDIX G: USDA NRCS Soil Resource Report:

SECTION 01: INTRODUCTION

This report presents the results of the geotechnical investigation for the roadway reconstruction and widening project on Interstate Highway 80 (I-80) in Will County, IL. A total of one hundred and fourteen (114) soil borings and fourteen (14) pavement cores are included with this Roadway Geotechnical Report (RGR); performed by Geo Services Inc. (GEO) in 2021. Plan and profile drawings provided by EXP for the proposed roadway alignments have been considered in developing the recommendations in this report.

Boring locations were selected by GEO and were reviewed and approved by EXP. Boring locations were laid out in the field by GEO personnel at the proposed locations. Elevations were taken using a survey grade GPS and can be seen on the boring logs.

This report includes descriptions of soil and groundwater conditions encountered and recommendations pertaining to the design and construction of the roadway as well as, a site location map, boring location diagram and boring logs.

SECTION 02: PROJECT DESCRIPTION

This report refers to the I-80 improvements and widening from Chicago Street to US-30. General information can be found in Appendix A, site map can be found in Appendix B, corresponding plan and profile drawings can be found in Appendix C, soil boring and core logs can be found in Appendix D, lab data can be found in Appendix E, and a copy of BBS 2640 and the SSR Triangle can be found in Appendix F.

SECTION 03: Geology and Pedology

According to the 1971 ISGS Circular #460: Summary of the Geology of the Chicago Area/ISGS Geologic Materials to a Depth of 20' - Will County, the surficial soils immediately adjacent to where Hickory Creek crosses the project corridor are categorized as Cahokia Alluvium deposits and the surficial soils on each side of this area are noted to generally belong to the Mackinaw Member of the Henry Formation. It is further noted that Silurian Dolomite is present within 20.0' at the different location of the project corridor. Cahokia Alluvium soils generally consist of recent flood plain deposits of silt, sand and gravel which can be organic. Henry Formation deposits generally consist of sand and gravel deposited in valley trains which are typically well sorted and evenly bedded.

The Wetland Inventory database reviewed on-line at the US Fish & Wildlife Service website indicates that the only documented wetland that the project corridor crosses is Hickory Creek which is identified as a 36 acre, excavated, Riverine System-Lower Perennial Subsystem-Unconsolidated Bottom Class wetland that is located in a permanently flooded water regime. It is also noted that the Michigan Beach pond area located adjacent to the northeast corner of the project corridor is a 13.6 acre, excavated

Palustrine System-Unconsolidated Bottom Class wetland that is located in an Intermittently Exposed water regime.

The USDA Natural Resources Conservation Service Soil Survey database indicates that surficial soils in the vicinity of the project corridor are generally associated with various silt loams and loam materials. None of these soils are overly organic and potential frost action ranges from moderate to high.

According to readily available ISGS sources, there are no documented coal mining operations in near vicinity to the project site and seismic activity is noted to be very low.

The available geologic information indicates that the subgrade soils within the limits of the project corridor should generally consist of loams and silt loams with relatively shallow bedrock.

Appendix (G) of this report contains a Soil Resource Report from the USDA Natural Resource Conservation Services containing soil maps with soil types for the project site. The report included in Appendix I provide general information for the soils encountered in the upper 5 to 6 feet including soil units and drainage conditions for the project site. This information will be needed if a NPDES storm water permit is required for construction activities.

SECTION 04: CLIMATIC CONDITIONS

The climate within the area of this project site falls within the temperate humid, continental range and is characterized by cold conditions in the winter and warm conditions in the summer. The winter average daily temperature is 32° F and the average daily minimum temperature is 18° F. The summer average temperature is 64° F and the summer average daily maximum temperature is 84° F. The total annual precipitation for this area is 30.9" with approximately 60% falling between April and October.

Local Climatological Data, as measured at O’Hare International Airport (ORD), for the three (3) month period prior to and during drilling, including average precipitation, average temperature and snowfall are summarized below:

Table 1 – Climate Conditions

MONTH	ppt (in)		Temp (°F)		Average Snow (in)
	Total	Mean	Average Min Temp.	Average Max Temp	
Dec	2.32	2.39	30	46	3.9
Jan	1.52	1.56	13	29	4.3
Feb	1.73	1.79	20	35	3.6
March	3.43	3.54	32	49	3.5

borings performed 11-2021 to 03-2022

SECTION 05: SUBSURFACE INVESTIGATION PROCEDURES

The borings were performed between November 2021 and March 2022 (see boring logs for specific dates), with a truck-mounted drilling rig equipped with a CME automatic hammer, and were advanced by means of hollow stem augers to depths ranging from 10 to 30 feet. Representative soil samples were obtained employing split spoon sampling procedures in accordance with AASHTO Method T-206. Samples obtained in the field were returned to our laboratory for further examination and testing.

Split spoon sampling involves driving a 2.0-inch outside diameter split barrel sampler into the soil with a 140pound weight falling freely through a distance of 30 inches. Blow counts are recorded at 6" intervals and the blow counts are shown on the boring logs. The number of blows required to advance the sampler the last 12 inches is termed the Standard Penetration Resistance (N). The N value is an indication of the relative density of the soil. Samples obtained in the field were returned to our laboratory for further examination and testing.

SECTION 06: LAB TESTING PROGRAM

The test procedures were performed in accordance with test procedures discussed in the IDOT Geotechnical Manual. All split-spoon samples obtained from the drilling operation were visually classified in the field. Cohesive samples were tested for unconfined compressive strength using an IDOT modified RIMAC test device and/or calibrated penetrometer in the field.

The soil testing program included performing water content, density and either unconfined compression and/or calibrated penetrometer tests on the cohesive samples recovered. These tests were performed upon representative portions of the samples obtained in the field. The results of the above testing, along with a visual classification of the material based upon both the Illinois textural classification and the AASHTO Soil Classification System, are indicated on the boring logs.

In addition to the regular lab testing program, Atterberg Limits (AASHTO T-89/90), Organic Content (AASHTO T267) and Particle Size Analysis (AASHTO T-88) or Grain Size Analysis (AASHTO T-311) tests were performed on select samples from the borings. The tests were performed upon representative portions of the samples obtained in the field. Graphs for the particle size or grain size can be found in Appendix E, and on the following Table 2 is a summary of the test data.

Table 2 - Lab Testing Data Summary

Boring No.	Location (Station)	Sample Depth (ft)	Material Description	Organic Content	LL	PI	P200
SGB-002	782+59	3.5-5.0	Sand (A-3)	-	-	-	8.5%

Boring No.	Location (Station)	Sample Depth (ft)	Material Description	Organic Content	LL	PI	P200
SGB-009	793+00	1.0-2.5	Silty Loam (A-6)	-	27	11	75.2%
SGB-010	794+53	3.5-5.0	Silty Clay Loam (A-6)	-	38	16	91.6%
SGB-011	797+50	3.5-5.0	Clay (A-6)	-	36	17	88.1%
SGB-016	808+04	3.5-5.0	Silty Loam (A-6)	-	36	17	79.6%
SGB-018	811+02	8.5-10.0	Sandy Loam (A-6)	-	29	11	49.1%
SGB-019	812+50	1.0-2.5	Silty Clay Loam (A-6)	-	31	15	79.6%
SGB-025	824+51	1.0-2.5	Silty Loam (A-4)	-	26	10	71.0%
SGB-026	826+03	3.5-5.0	Silty Loam (A-6)	-	31	13	87.9%
SGB-035	841+01	3.5-5.0	Silty Clay Loam (A-6)	-	26	11	74.6%
SGB-036	842+56	6.0-7.5	Clay Loam (A-6)	-	40	19	65.7%
SGB-045	855+99	3.5-5.0	Silty Loam (A-4)	-	22	8	75.5%
SGB-046	857+54	8.5-10.0	Silty Clay (A-6)	-	39	17	94.5%
SGB-055	870+96	3.5-5.0	Silty Clay (A-6)	-	40	18	93.8%
SGB-056	872+53	6.0-7.5	Silty Loam (A-4)	-	21	5	60.7%
SGB-063	883+03	1.0-2.5	Silty Clay Loam (A-6)	-	30	14	89.5%
SGB-066	887+52	6.0-7.5	Loam (A-4)	-	27	10	53.4%
SGB-073	898+00	1.0-2.5	Silt (A-6)	-	39	17	89%
SGB-075	901+02	6.0-7.5	Silty Clay (A-6)	-	33	14	87.5%
SGB-076	902+54	3.5-5.0	Silty Clay (A-7)	-	44	21	91.1%
SGB-081	910+00	3.5-5.0	Silty Loam (A-6)	-	37	13	82.8%
SGB-083	916+00	3.5-5.0	Silty Loam (A-6)	4.9%	38	15	87.3%
SGB-085	924+99	3.5-5.0	Clay Loam (A-6)	-	36	18	73.7%
SGB-086	827+80	6.0-7.5	Loam (A-6)	-	34	14	60.9%
SGB-111	61+92	3.5-5.0	Sandy Loam (A-2-4)	-	-	-	28.2%

SECTION 07: SOIL CONDITIONS

For specific boring information, reference can be made to the individual soil boring / core logs in Appendix D. Below is a summary of soil conditions found on those logs.

The I-80 pavement cores which were performed in the roadway between Chicago Street and US Route 30 (C-01 to C-14) generally encountered 8 to 15 inches of asphalt at ground surface overlying 12 to 30 inches of crushed stone. Asphalt depths varied greatly at some points along the road with the thinnest section (C-04) consisting of 8 inches of

asphalt over 10 inches of gravel. Some sections such as C-12 and C-13 consisted of a layer of asphalt overlying a 7 to 12 inch layer of concrete supported by an 18 inch layer of crushed stone base. Underlying the pavement and/or material at the ground surface, borings along I-80 generally encountered 2 to 10 feet of stiff to hard clay loam/silty clay subgrade soils. The sub-soils generally can be categorized as stiff to very stiff cohesive soils.

From approximate stations 730+00 to 805+00 shallow bedrock was encountered at depths ranging from 4 to 33 feet below existing grade. This may affect the western portion of the roadway in some cases.

SECTION 08: BURIED TOPSOIL CONDITIONS

Areas with buried topsoil were encountered in various locations along the alignment. The approximate intervals where buried topsoil layers were noted in the borings are shown in the following table:

Table 3 – Buried Topsoil Soil Conditions

Boring	Station	Depth (feet)	Elevation (feet)	Moisture Content (%)	Material Description
SGB-034	839+51	5.5-8.0	638.74-636.24	28	Topsoil
SGB-062	881+55	8.0-10.0	648.65-646.65	25	Topsoil
SGB-074	899+52	3.0-5.5	649.42-646.92	26	Topsoil
SGB-083	916+00	2.5-5.0	643.5-641.0	31	Organic Silty Clay
SGB-092	404+00	3.0-5.5	638.4-635.9	24	Topsoil
SGB-110	50+79	8.0-10.0	649.15-647.15	28	Topsoil
NWB-065	916+95	3.0-5.5	636.97-634.47	37	Organic Silty Clay

The actual soil conditions may vary from boring to boring and the conditions at the specific boring locations are noted on the boring logs. Variations in soil conditions between boring locations should be expected during construction.

SECTION 09: GROUND WATER CONDITIONS

Groundwater (when encountered) was generally observed at approximate depths ranging from 5.5 to 8 feet below the ground surface. Some borings were dry to a depth of 10 feet prior to termination of boring, however average water table height can be estimated by the presence of a color shift from brown to gray. We estimate the long-term water table depth to be between 5 and 9 feet on average from the surface. Fluctuations in the amount of water accumulated and in the hydrostatic water table can be anticipated depending on variations in precipitation and surface runoff.

SECTION 10: ANALYSIS

10.1 Drainage Conditions Analysis

The stratification lines shown on the boring logs represent the approximate boundary between soil types, and the actual transition may be gradual. Soils consisted of predominately stiff to hard silty clay, silty loam, or clay loam within the top 10 feet of the borings. Moisture contents for the clay soils were typically in the mid-teens to mid-twenties. Due to the silty clay/silty loam rated as A-4, A-6, or A-7 soil depending on location, greater than 0.5% grade slope, and anticipated shallow sloped ditches, we rate drainage conditions as "Poor".

SECTION 11: ROADWAY RECOMMENDATIONS

11.1 Roadway Recommendations

Based on the boring logs, the subgrade soils beneath the existing roadway, consisting of clay loam/silty clay soils, are considered suitable for support of the proposed roadway with exception of the area outlined on the following Table 4.

Recommended Remedial Treatments

Table 4- Recommended Undercuts I-80 EB

Station (Boring, Sample Depth)	Cut or Fill	Subgrade Description (water content. Ft below proposed grade)	Unconfined Compressive Strength (tsf)	Approx. Subgrade Elevation (feet)	Elevation of Suitable Soil	Reason of Remedial Treatment	Remedial Treatment, Depth (inches)	Remedial Treatment ¹
57+64 to 67+00 (SGB-108, 1-2.5) (Briggs St. North of I-80)	Fill	Silty Clay-dark brown-stiff (Fill) (25%)	0.3	Vary	24-inches below the bottom of the aggregate subgrade layer	Low strength at subgrade elevation	24	Remove 24 inches of silty clay and replace with approved structural (granular) fill

The actual need for the recommended treatment should be determined in the field at the time of construction based on guidelines presented in the Illinois Department of Transportation Geotechnical Manual under the direction of a licensed geotechnical engineer. Evaluation of soils in the field should be performed based on the guidelines presented in the IDOT Subgrade Stability Manual. If poor soil conditions (very soft, organic or peat soils) are encountered at the time construction, differing than those encountered in this report, the Geotechnical Engineer should be consulted. Heavy equipment traffic directly on the undercut subgrade should be minimized. All potentially unstable soils should be tested with a cone penetrometer and treated in accordance with Article 301.04 of the SSRBC and the undercut guidelines in the IDOT Subgrade Stability Manual.

It is recommended that the unsuitable soils be removed and replaced with suitable fill material (undercuts), all undercut should be measured from the bottom of the 12-inch aggregate-based course layer below the proposed pavement. After removal of the unsuitable soil, a non-woven geo fabric in accordance with Article 210, Fabric for Ground Stabilization, of the SSRBC should be placed to stabilize the subgrade soil at low strength subgrade area before placement of the structural fill. Selection of fill material and placement should conform to the IDOT District 1 Special Provision Section 303: Aggregate Subgrade Improvement

For excavations extending into the higher approach roadway embankments and wherever deeper undercuts (≥ 4 feet below design bearing elevations) are necessary, a temporary soil retention system to be designed by the Contractor (or as directed by the Engineer, as specified in IDOT GBSP 44) will likely also be required to support the embankment during excavation and wall construction.

11.2 Topsoil Recommendations

In addition to the above undercuts, it should be expected that approximately 0 to 36 inches of topsoil to be present at the surface in the areas where the widening is proposed that will require topsoil stripping. It is expected that greater topsoil thicknesses and/or higher moisture soils will also be encountered in the ditch areas. For quantity estimation, we recommend topsoil stripping to an average depth of 10 inches be included in the construction plans.

11.3 Subgrade Rating and Borrow Fill Recommendations

The majority of the subgrade consists of silty clay/clay loam cohesive soils. The roadway should be designed with a Subgrade Support Rating (SSR) of Poor to Fair. We recommend that the pavement design be performed utilizing a Poor rating, with an Illinois Bearing Ratio (IBR) of 2.0. Also, we recommend a shrinkage factor of 15% for cohesive or granular soils.

Prior to placing any borrow fill at the site, it is recommended that the exposed surface at or near grade be proofrolled with the heaviest available equipment to determine if there are any localized deposits of soft or unsuitable materials. During the proofrolling procedure, the exposed surface is rolled with the heaviest piece of construction equipment available at the site, such as a heavily loaded tandem axle dump truck having a gross weight of not less than 25 tons. Any such deposits, as observed by deflection of the subgrade under the wheels of the proofrolling equipment, should be removed and replaced with an approved fill free of organic matter and debris. The silt and silty clay loam soils are sensitive to moisture changes and some softening/disturbance of the exposed soils should be expected following periods of precipitation. If any remediation is required at the time of construction, it may include undercutting and placement of a stabilization stone such as IDOT gradation CA-1 or PGEs materials or approved fill material.

In addition, borrow and excavation material should be in accordance with Section 8.4 of the IDOT Geotechnical Manual. In particular, soils should be tested and conform to the required testing and permissible limits as defined in the following table (taken from Table 8.4-1 in the IDOT Geotechnical Manual). Materials that do not meet the permissible limits should be confined to the embankment core with at least 24-inches of cover material which meets the testing requirements in the following Table 5.

Table 5 – Requirements of Borrow Soils for Top 24-in Subgrade

Required Test	AASHTO Method	Permissible Limit
SDD (at OMC)	T-99 (Method C)	90 pcf min ¹
Organic Content	T-194	10% max
Percent Silt and Fine Sand	T-88	65% max ²
PI	T-90	12% min
LL	T-89	50% max
Shear Strength © at 95% SDD	T-208 or T-234	1,000 psf min ³
SO ₃ ⁴	ASTM C-618	5% max

- Notes: 1. As Per Standard Specification.
 2. Frost Susceptibility Criteria.
 3. For Engineered Embankments which are greater than 15ft in height or greater.
 4. Only for CCB.

Fill materials placed at the site should consist of an inorganic approved material, compacted to a minimum 95% of AASHTO T-99 (ASTM D-698), Standard Proctor method. Moisture levels for fill material should be maintained within a maximum +/- 3% of the optimal moisture content or as directed by the engineer.

Construction of the proposed roadway improvements should be performed in accordance with the current Illinois Department of Transportation (IDOT) "Standard Specifications for Road and Bridge Construction. In particular, refer to Section 202, "Earth and Rock Excavation", Section 205, "Embankment" and Section 301, "Subgrade Preparation".

11.4 Drainage Recommendations

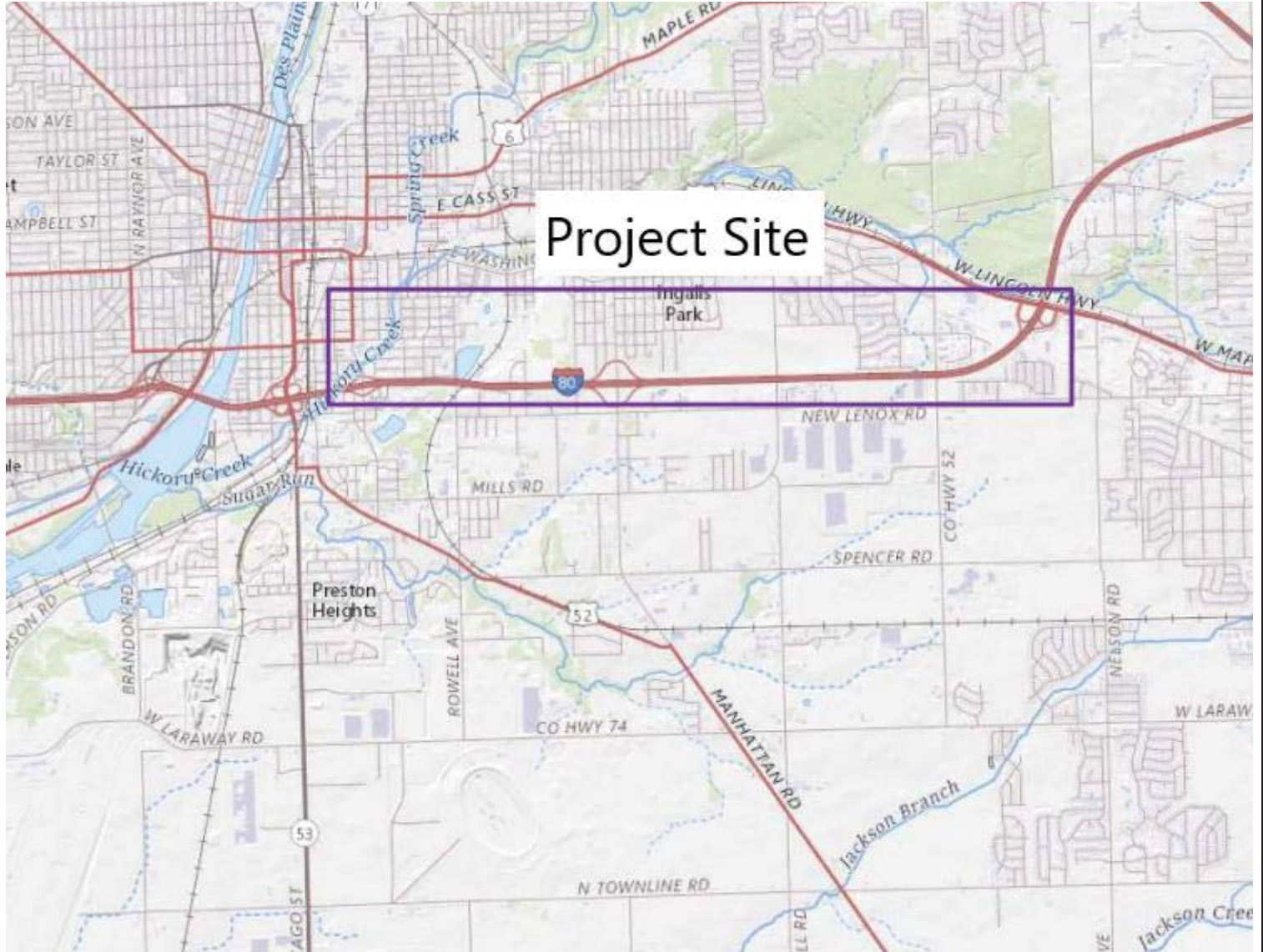
As noted in Appendix F, the majority of the roadway is considered to have a drainage class of "Poor". However, underdrains are required at low areas in the profiles to properly drain the 12-inch aggregate subgrade. Transverse underdrains should be installed at the low points of the alignments, and then continued at an interval of 500' between low points, except at high points. The drains should be 4-inch diameter, placed at a depth of 30 inches and installed in accordance with IDOT Standard Specifications Section 601.


SECTION 12: GENERAL QUALIFICATIONS

The analysis and recommendations presented in this report are based upon the data obtained from the soil borings performed at the indicated locations and from any other information discussed in this report. This report does not reflect any variations that may occur between borings or across the site. In addition, the soil samples cannot be relied on to accurately reflect the strata variations that usually exist between sampling locations. The nature and extent of such variations may not become evident until construction. If variations appear evident, it will be necessary to reevaluate the recommendations of the report. In addition, it is recommended that Geo Services Inc. be retained to perform construction observation and thereby provide a complete professional geotechnical engineering service through the observational method.

This report has been prepared for the exclusive use of our client for specific application to the project discussed and has been prepared in accordance with generally accepted geotechnical engineering practices. No other warranties, either expressed or implied, are intended or made. In the event that any changes in the nature, design or location of the project as outlined in this report are planned, the conclusions and recommendations contained in this report shall not be considered valid unless the changes are reviewed and the conclusions of this report modified or verified in writing by the geotechnical engineer. Also note that Geo Services Inc. is not responsible for any claims, damages, or liability associated with any other party's interpretation of this report's subsurface data or reuse of the report's subsurface data or engineering analyses without the express written authorization of Geo Services Inc.

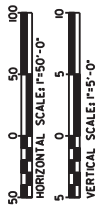
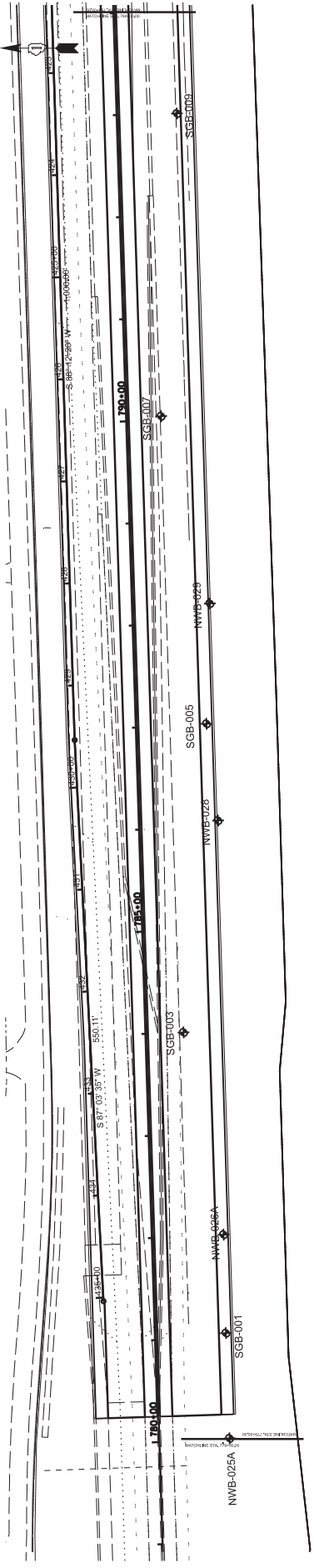
APPENDIX B
SITE MAP



SITE MAP	 <p>Geo Services, Inc. Geotechnical, Environmental & Civil Engineering 805 Amherst Court, Suite 204 Naperville, Illinois 60565 (630) 355-2838</p>	DRAWN BY	SP
IL 60/83 RGR,		APPROVED BY	AT
Interstate-80,		DATE	September 7, 2022
Joliet, IL 60433		GSI JOB No.	20012
		SCALE	NTS

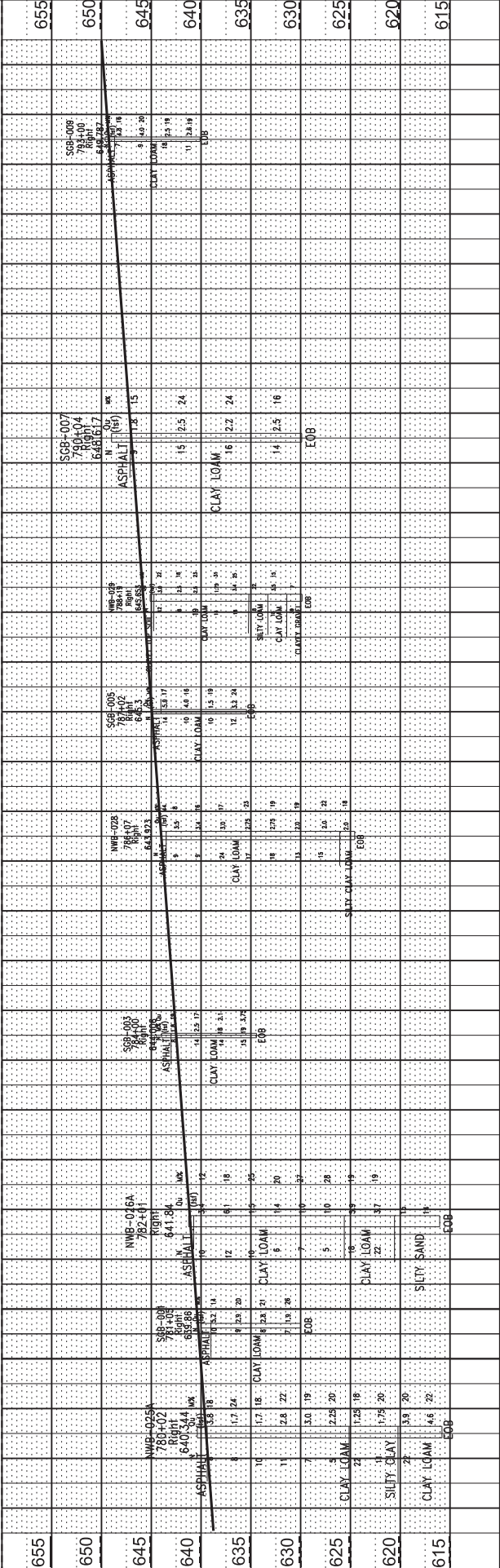
APPENDIX C
PLAN & PROFILE

N



NO.	DATE	BY	DESCRIPTION

NO.	DATE	BY	DESCRIPTION



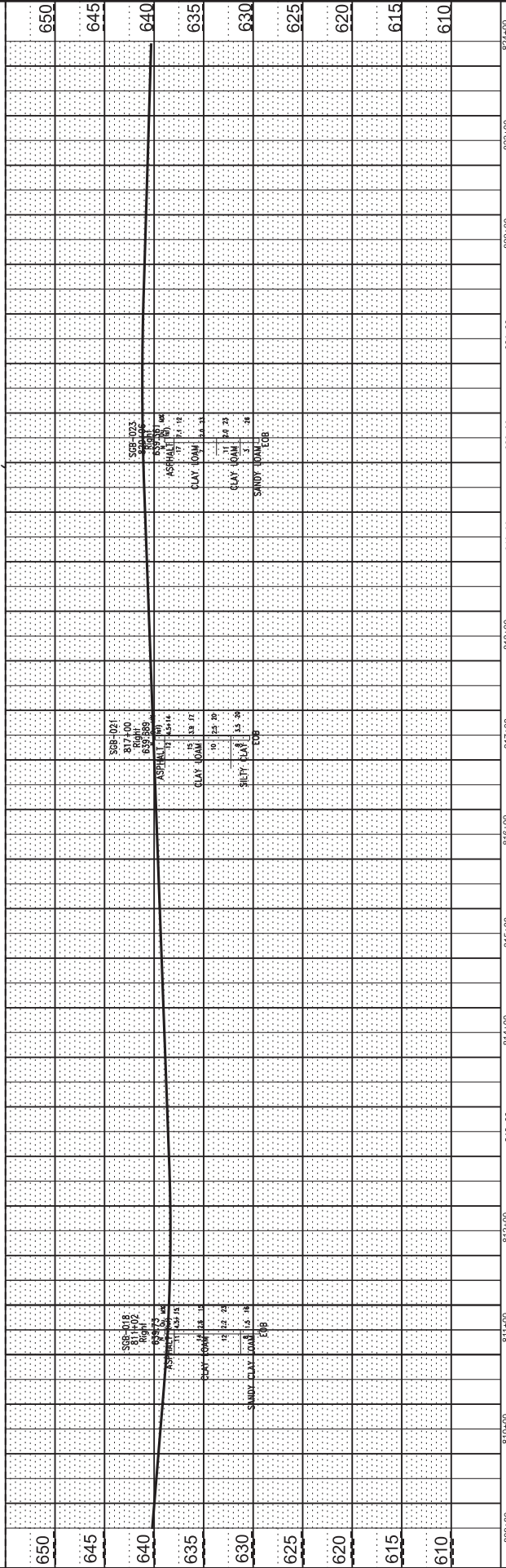
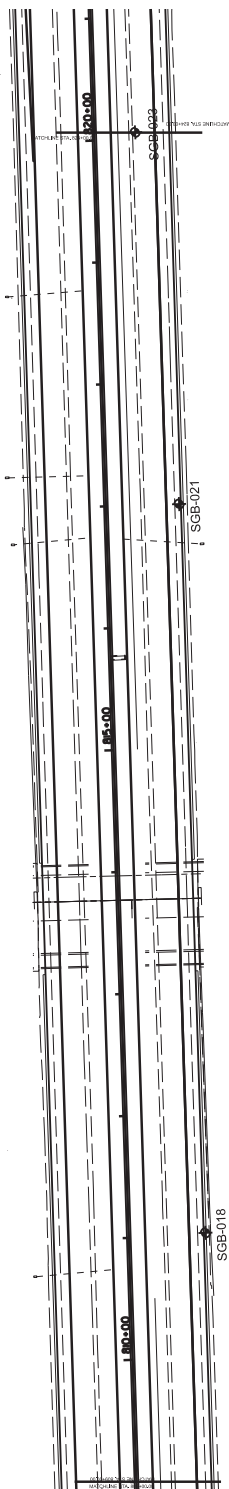
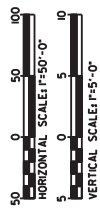
778+00	780+00	782+00	784+00	786+00	788+00	790+00	792+00	794+00
DESIGNED	DESIGNED	DESIGNED	DESIGNED	DESIGNED	DESIGNED	DESIGNED	DESIGNED	DESIGNED
CHECKED	CHECKED	CHECKED	CHECKED	CHECKED	CHECKED	CHECKED	CHECKED	CHECKED
DRAWN	DRAWN	DRAWN	DRAWN	DRAWN	DRAWN	DRAWN	DRAWN	DRAWN
SCALE	SCALE	SCALE	SCALE	SCALE	SCALE	SCALE	SCALE	SCALE
DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

1-88 FROM RIDGE ROAD TO US ROUTE 30
PREFERRED LONG-TERM IMPROVEMENT PLAN
PLAN AND PROFILE

SHEET 2 OF 23
STA. 778+00 TO STA. 794+00
SECTION COUNTY CONTRACT NO.
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

Geo Services, Inc.
USER NAME: MUSEM
PLOT SCALE: ESCALER
PLOT DATE: AJP



PLAN	DATE
DATE	BY
PLOTTED	
REVISIONS	
AMOUNT CHECKED	
NOT BOOK	
NO.	MOD FILE NAME

PROFILE	DATE
DATE	BY
PLOTTED	
REVISIONS	
AMOUNT CHECKED	
NOT BOOK	
NO.	STRUCTURE NOTTING CHG

FILE NAME	809+00	815+00	821+00	825+00
USER NAME	USER1	USER1	USER1	USER1
NOT SCALE	AS SHOWN	AS SHOWN	AS SHOWN	AS SHOWN
NOT DATE	AS SHOWN	AS SHOWN	AS SHOWN	AS SHOWN
DESIGNED	813+00	815+00	817+00	819+00
CHECKED	813+00	815+00	817+00	819+00
DRAWN	813+00	815+00	817+00	819+00
CHECKED	813+00	815+00	817+00	819+00
DATE	813+00	815+00	817+00	819+00
BY	813+00	815+00	817+00	819+00
SECTION	821+00	823+00	825+00	
COUNTY	821+00	823+00	825+00	
SHEETS	821+00	823+00	825+00	
NO.	821+00	823+00	825+00	
CONTRACT NO.	821+00	823+00	825+00	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Geo Services, Inc.

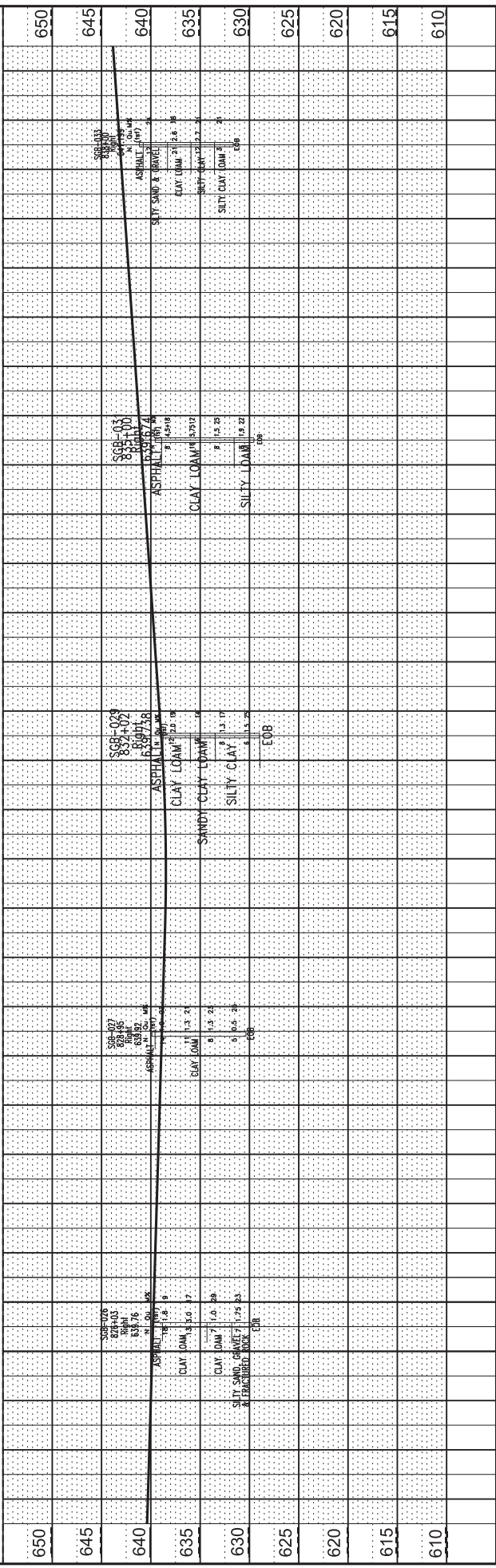
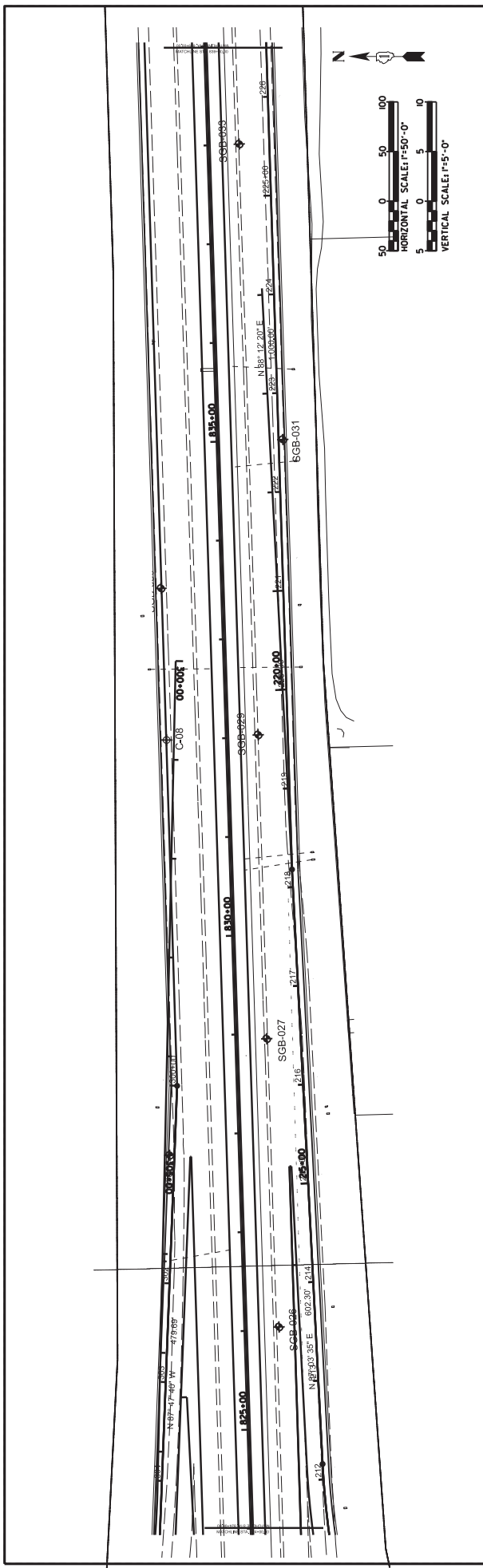
1-88 FROM RIDGE ROAD TO US ROUTE 38
PREFERRED LONG-TERM IMPROVEMENT PLAN
PLAN AND PROFILE

SCALE: 1"=50'

SHEET 4 OF 23

STA. 809+00 TO 814+00

FED. ROAD DIST. NO. ILLINOIS FED. ROAD DISTRICT



DATE	BY	REVISION
		DESIGNED
		CHECKED
		DRAWN
		CHECKED

PLAN
 DATE: _____ BY: _____
 REVISION: _____
 NOTE BOOK: _____
 PLANS CHECKED: _____
 CADD FILE NAME: _____

PROFILE
 DATE: _____ BY: _____
 REVISION: _____
 NOTE BOOK: _____
 PLANS CHECKED: _____
 CADD FILE NAME: _____

STATION	SECTION	COUNTY	CONTRACT NO.
824+00		839+00	839+00
825+00		837+00	839+00
826+00		836+00	839+00
827+00		835+00	839+00
828+00		834+00	839+00
829+00		833+00	839+00
830+00		832+00	839+00
831+00		831+00	839+00
832+00		830+00	839+00
833+00		829+00	839+00
834+00		828+00	839+00
835+00		827+00	839+00
836+00		826+00	839+00
837+00		825+00	839+00
838+00		824+00	839+00
839+00		823+00	839+00
840+00		822+00	839+00
841+00		821+00	839+00
842+00		820+00	839+00
843+00		819+00	839+00
844+00		818+00	839+00
845+00		817+00	839+00
846+00		816+00	839+00
847+00		815+00	839+00
848+00		814+00	839+00
849+00		813+00	839+00
850+00		812+00	839+00
851+00		811+00	839+00
852+00		810+00	839+00
853+00		809+00	839+00
854+00		808+00	839+00
855+00		807+00	839+00
856+00		806+00	839+00
857+00		805+00	839+00
858+00		804+00	839+00
859+00		803+00	839+00
860+00		802+00	839+00
861+00		801+00	839+00
862+00		800+00	839+00
863+00		799+00	839+00
864+00		798+00	839+00
865+00		797+00	839+00
866+00		796+00	839+00
867+00		795+00	839+00
868+00		794+00	839+00
869+00		793+00	839+00
870+00		792+00	839+00
871+00		791+00	839+00
872+00		790+00	839+00
873+00		789+00	839+00
874+00		788+00	839+00
875+00		787+00	839+00
876+00		786+00	839+00
877+00		785+00	839+00
878+00		784+00	839+00
879+00		783+00	839+00
880+00		782+00	839+00
881+00		781+00	839+00
882+00		780+00	839+00
883+00		779+00	839+00
884+00		778+00	839+00
885+00		777+00	839+00
886+00		776+00	839+00
887+00		775+00	839+00
888+00		774+00	839+00
889+00		773+00	839+00
890+00		772+00	839+00
891+00		771+00	839+00
892+00		770+00	839+00
893+00		769+00	839+00
894+00		768+00	839+00
895+00		767+00	839+00
896+00		766+00	839+00
897+00		765+00	839+00
898+00		764+00	839+00
899+00		763+00	839+00
900+00		762+00	839+00
901+00		761+00	839+00
902+00		760+00	839+00
903+00		759+00	839+00
904+00		758+00	839+00
905+00		757+00	839+00
906+00		756+00	839+00
907+00		755+00	839+00
908+00		754+00	839+00
909+00		753+00	839+00
910+00		752+00	839+00
911+00		751+00	839+00
912+00		750+00	839+00
913+00		749+00	839+00
914+00		748+00	839+00
915+00		747+00	839+00
916+00		746+00	839+00
917+00		745+00	839+00
918+00		744+00	839+00
919+00		743+00	839+00
920+00		742+00	839+00
921+00		741+00	839+00
922+00		740+00	839+00
923+00		739+00	839+00
924+00		738+00	839+00
925+00		737+00	839+00
926+00		736+00	839+00
927+00		735+00	839+00
928+00		734+00	839+00
929+00		733+00	839+00
930+00		732+00	839+00
931+00		731+00	839+00
932+00		730+00	839+00
933+00		729+00	839+00
934+00		728+00	839+00
935+00		727+00	839+00
936+00		726+00	839+00
937+00		725+00	839+00
938+00		724+00	839+00
939+00		723+00	839+00
940+00		722+00	839+00
941+00		721+00	839+00
942+00		720+00	839+00
943+00		719+00	839+00
944+00		718+00	839+00
945+00		717+00	839+00
946+00		716+00	839+00
947+00		715+00	839+00
948+00		714+00	839+00
949+00		713+00	839+00
950+00		712+00	839+00
951+00		711+00	839+00
952+00		710+00	839+00
953+00		709+00	839+00
954+00		708+00	839+00
955+00		707+00	839+00
956+00		706+00	839+00
957+00		705+00	839+00
958+00		704+00	839+00
959+00		703+00	839+00
960+00		702+00	839+00
961+00		701+00	839+00
962+00		700+00	839+00
963+00		699+00	839+00
964+00		698+00	839+00
965+00		697+00	839+00
966+00		696+00	839+00
967+00		695+00	839+00
968+00		694+00	839+00
969+00		693+00	839+00
970+00		692+00	839+00
971+00		691+00	839+00
972+00		690+00	839+00
973+00		689+00	839+00
974+00		688+00	839+00
975+00		687+00	839+00
976+00		686+00	839+00
977+00		685+00	839+00
978+00		684+00	839+00
979+00		683+00	839+00
980+00		682+00	839+00
981+00		681+00	839+00
982+00		680+00	839+00
983+00		679+00	839+00
984+00		678+00	839+00
985+00		677+00	839+00
986+00		676+00	839+00
987+00		675+00	839+00
988+00		674+00	839+00
989+00		673+00	839+00
990+00		672+00	839+00
991+00		671+00	839+00
992+00		670+00	839+00
993+00		669+00	839+00
994+00		668+00	839+00
995+00		667+00	839+00
996+00		666+00	839+00
997+00		665+00	839+00
998+00		664+00	839+00
999+00		663+00	839+00
1000+00		662+00	839+00

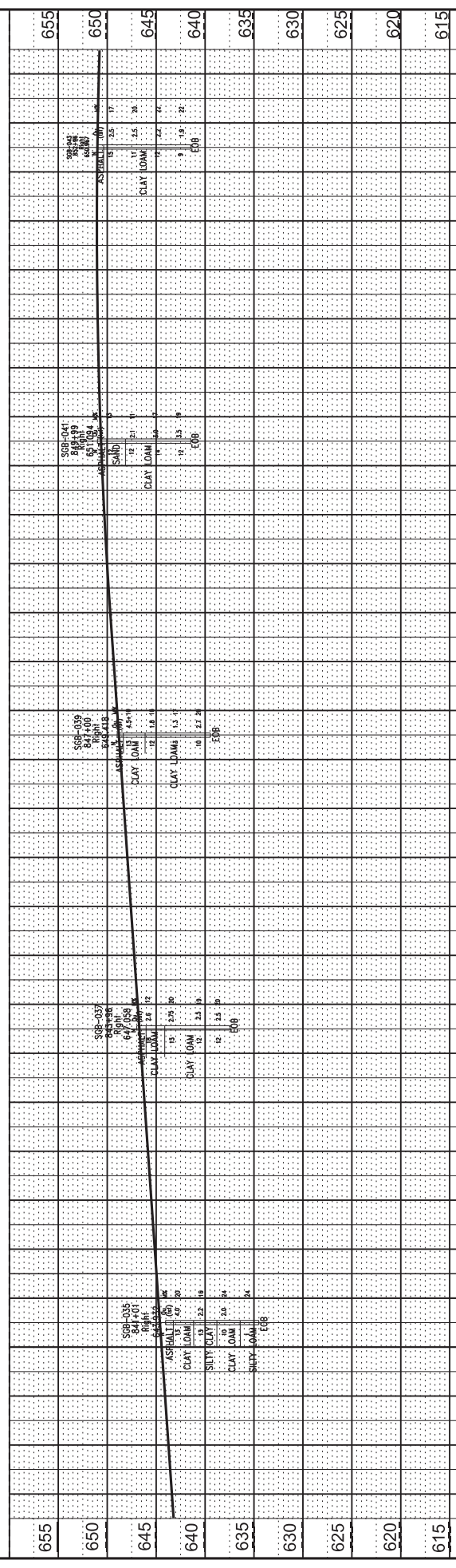
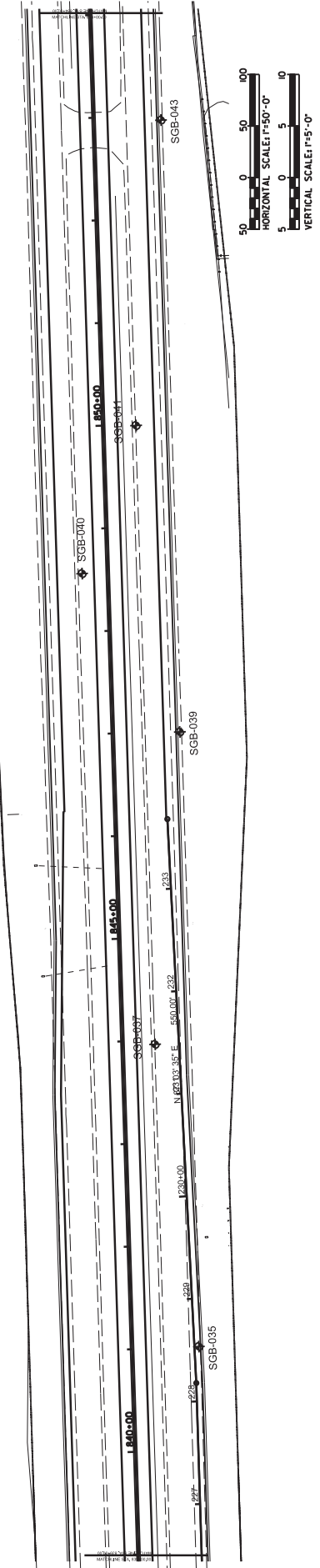
USER NAME: huser
 DATE SCALE: 1"=50'
 DATE DATE: 08/23
 DATE DATE: 08/23

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 1-88 FROM RIDGE ROAD TO US ROUTE 38
 PREFERRED LONG-TERM IMPROVEMENT PLAN
 PLAN AND PROFILE
 STA 824+00 TO STA 839+00
 SHEET 5 OF 23
 SCALE: 1"=50'
 CONTRACT NO. 839-00
 COUNTY 839-00
 SECTION 839-00
 TOTAL SHEETS 23
 SHEET NO. 5
 ILLINOIS FEDERAL PROJECT

Geo Services, Inc.
 11111 N. W. 11th St.
 Miami, FL 33157
 Phone: (305) 551-1111
 Fax: (305) 551-1112
 Email: info@geoservices.com



NO.	DATE
1	BT
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	



839+00	840+00	841+00	842+00	843+00	844+00	845+00	846+00	847+00	848+00	849+00	850+00	851+00	852+00	853+00	854+00
655	650	645	640	635	630	625	620	615							

FILE NAME: *Geo Services, Inc.*
 USER NAME: *USER*
 PLOT SCALE: *SCALE*
 PLOT DATE: *DATE*

DESIGNED:
 CHECKED:
 DRAWN: *GS*
 CHECKED: *AJP*

REVISED:
 REVISED:
 REVISED:

SCALE:
 OF 23 SHEETS

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

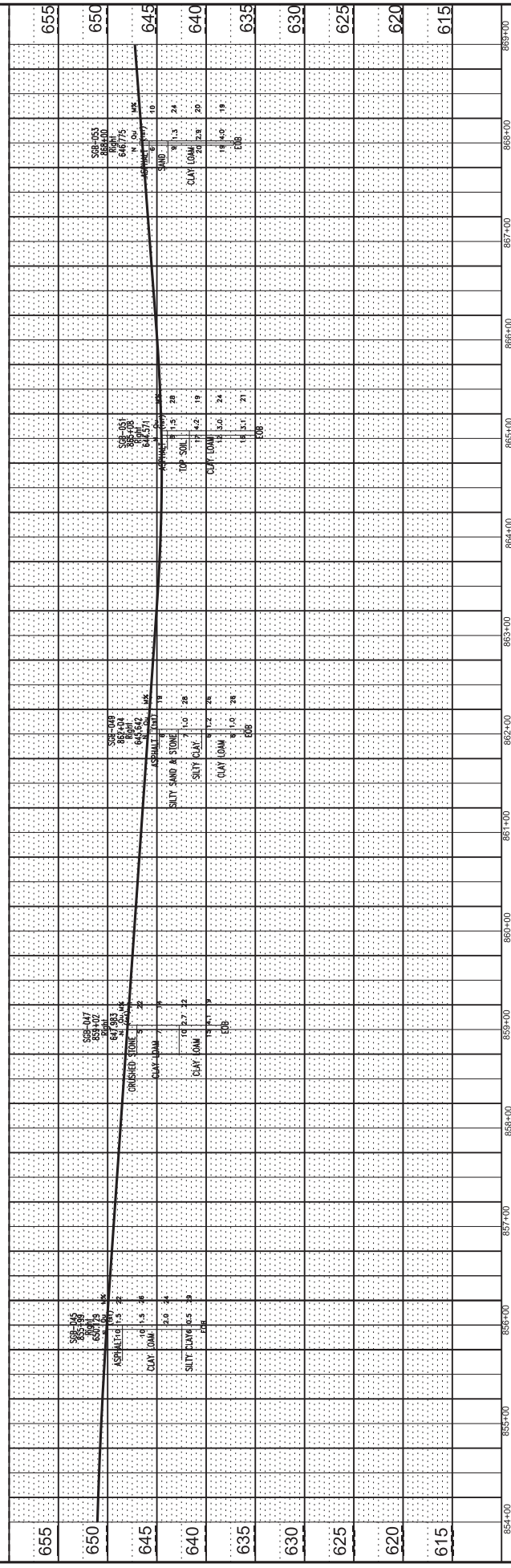
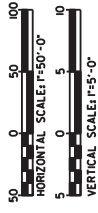
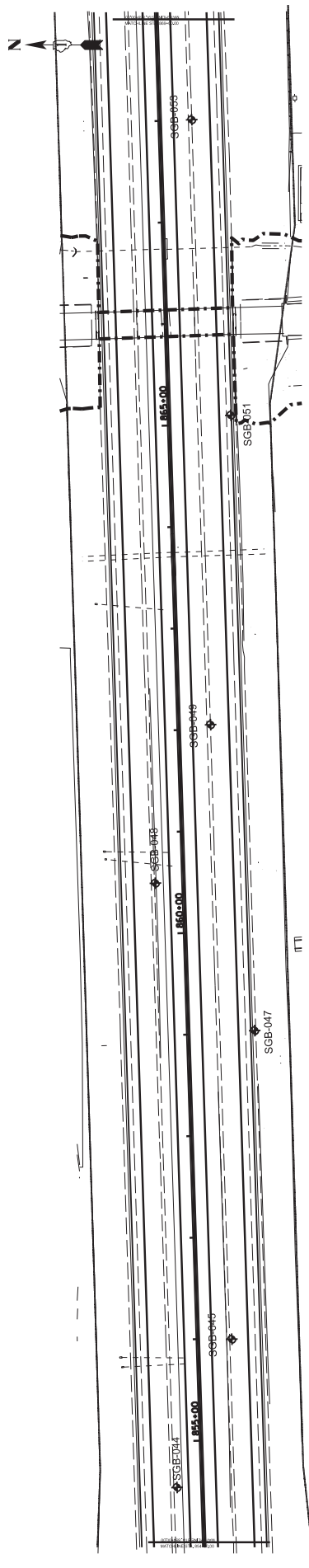
F-60 FROM RIDGE ROAD TO US ROUTE 36
 PREFERRED PLAN
 PLAN AND PROFILE

FED. ROAD DIST. NO. *ILLINOIS*
 COUNTY: *ILLINOIS*
 SECTION: *ILLINOIS*
 TOTAL SHEET NO.: *ILLINOIS*
 SHEET NO.: *ILLINOIS*
 CONTRACT NO.: *ILLINOIS*

NO. DATE

NO. DATE

PLAN
 DATE: 07
 SURVEYOR: [blank]
 CHECKED BY: [blank]
 DRAWN BY: [blank]
 SCALE: [blank]
 PROJECT NO.: [blank]



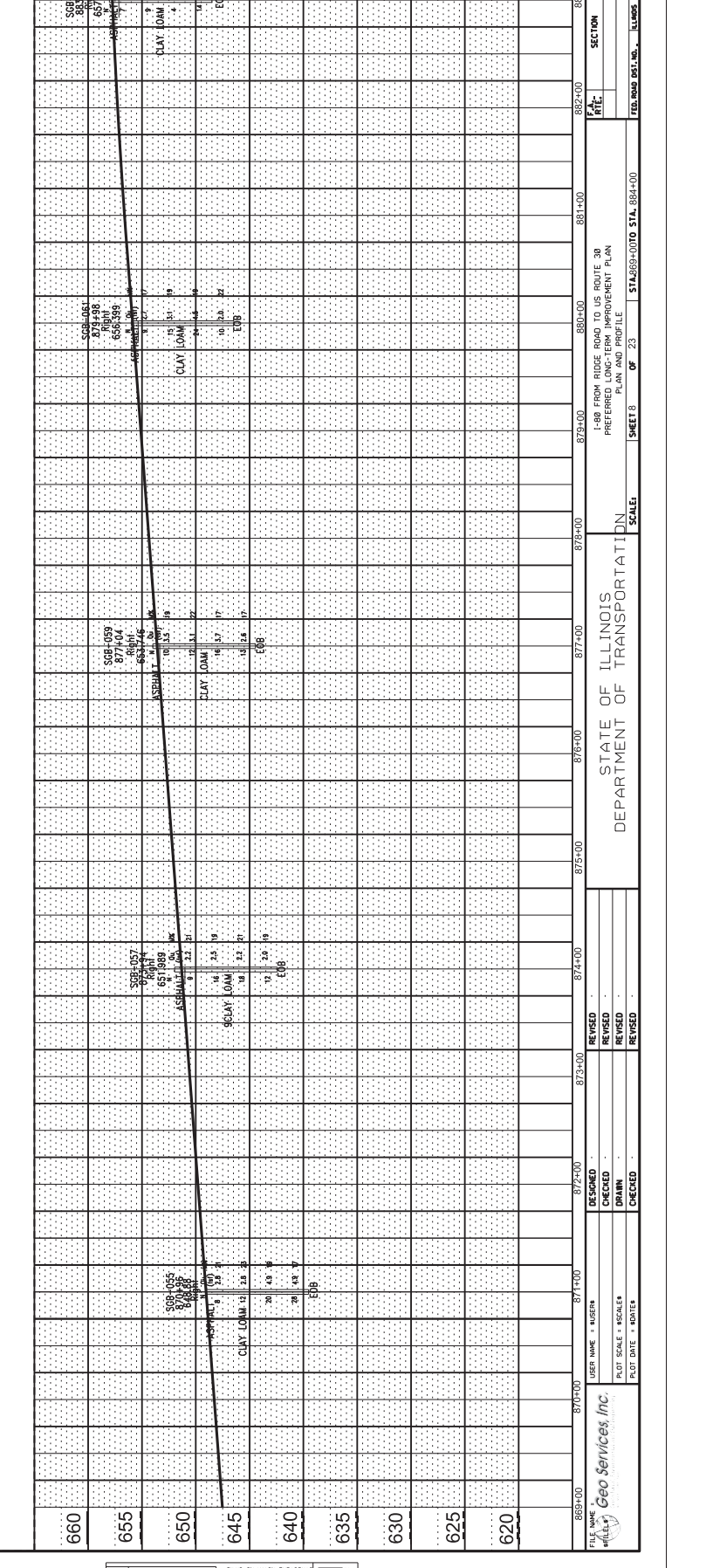
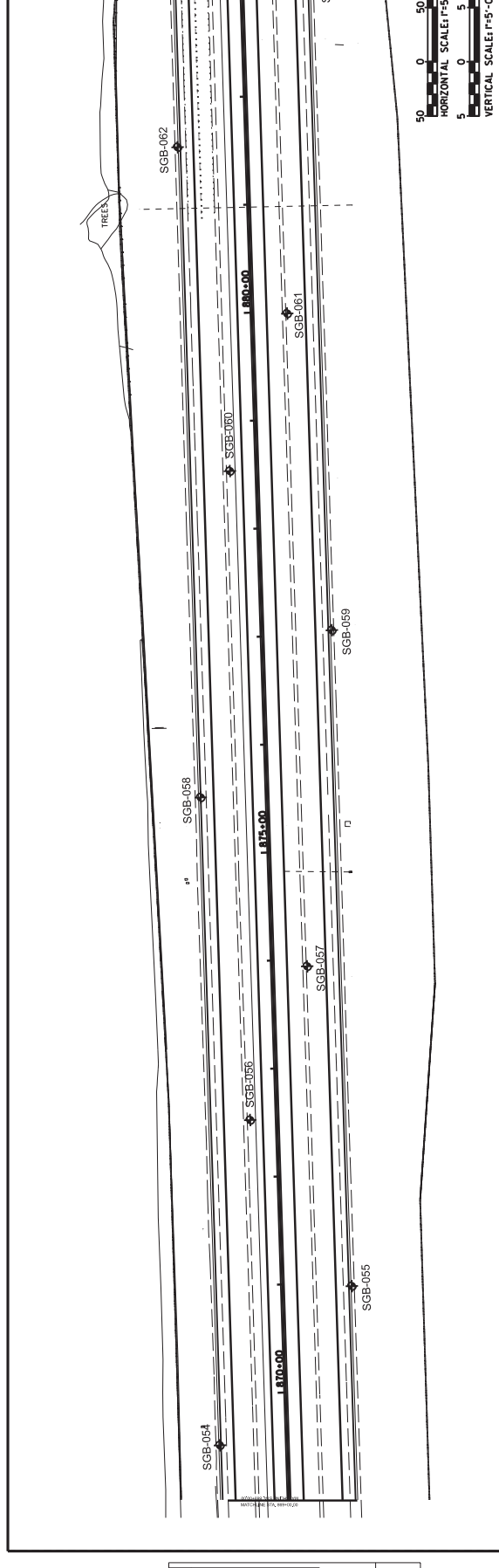
PROFILE
 DATE: 07
 SURVEYOR: [blank]
 CHECKED BY: [blank]
 DRAWN BY: [blank]
 SCALE: [blank]
 PROJECT NO.: [blank]

FILE NAME	855+00	857+00	859+00	861+00	863+00	865+00	867+00	869+00	871+00	873+00	875+00	877+00	879+00	881+00	883+00
DESIGNED	REVISION	REVISION	REVISION	REVISION	REVISION	REVISION	REVISION	REVISION	REVISION	REVISION	REVISION	REVISION	REVISION	REVISION	REVISION
DRAWN	CHECKED	CHECKED	CHECKED	CHECKED	CHECKED	CHECKED	CHECKED	CHECKED	CHECKED	CHECKED	CHECKED	CHECKED	CHECKED	CHECKED	CHECKED
USER NAME	855+00	857+00	859+00	861+00	863+00	865+00	867+00	869+00	871+00	873+00	875+00	877+00	879+00	881+00	883+00
PLAT SCALE	855+00	857+00	859+00	861+00	863+00	865+00	867+00	869+00	871+00	873+00	875+00	877+00	879+00	881+00	883+00
PLAT DATE	855+00	857+00	859+00	861+00	863+00	865+00	867+00	869+00	871+00	873+00	875+00	877+00	879+00	881+00	883+00
DATE	855+00	857+00	859+00	861+00	863+00	865+00	867+00	869+00	871+00	873+00	875+00	877+00	879+00	881+00	883+00

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 PROJECT: I-580 FROM RIDGE ROAD TO US ROUTE 30
 SHEET 7 OF 23
 STA. 854+00 TO STA. 889+00



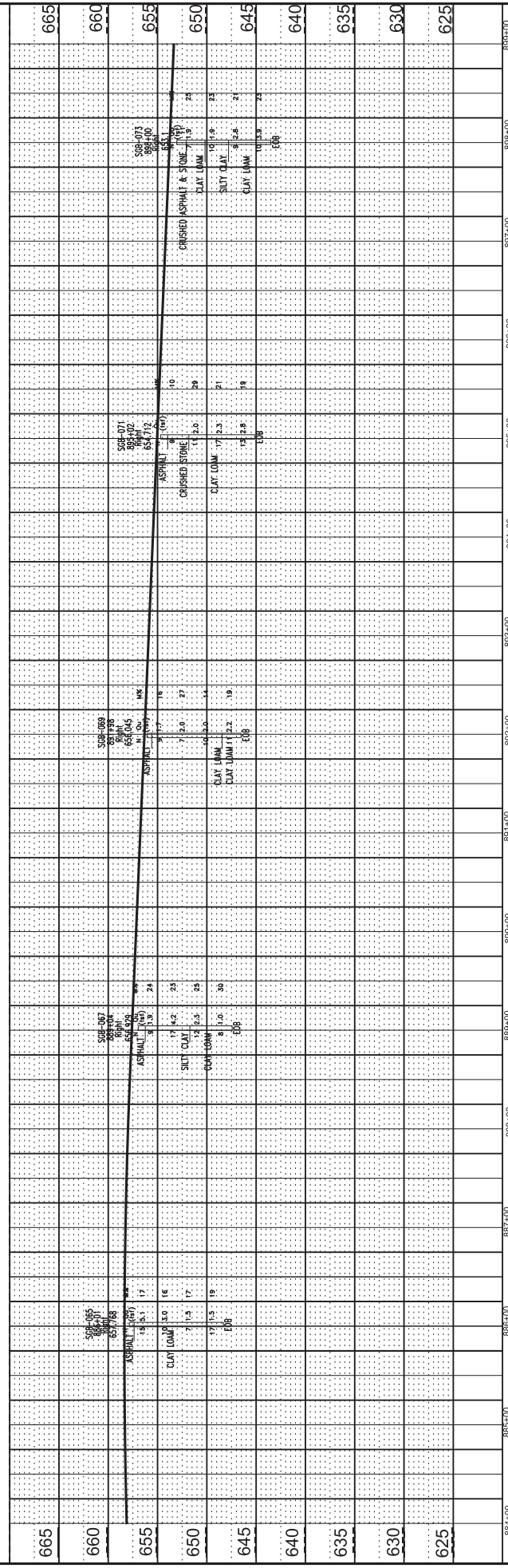
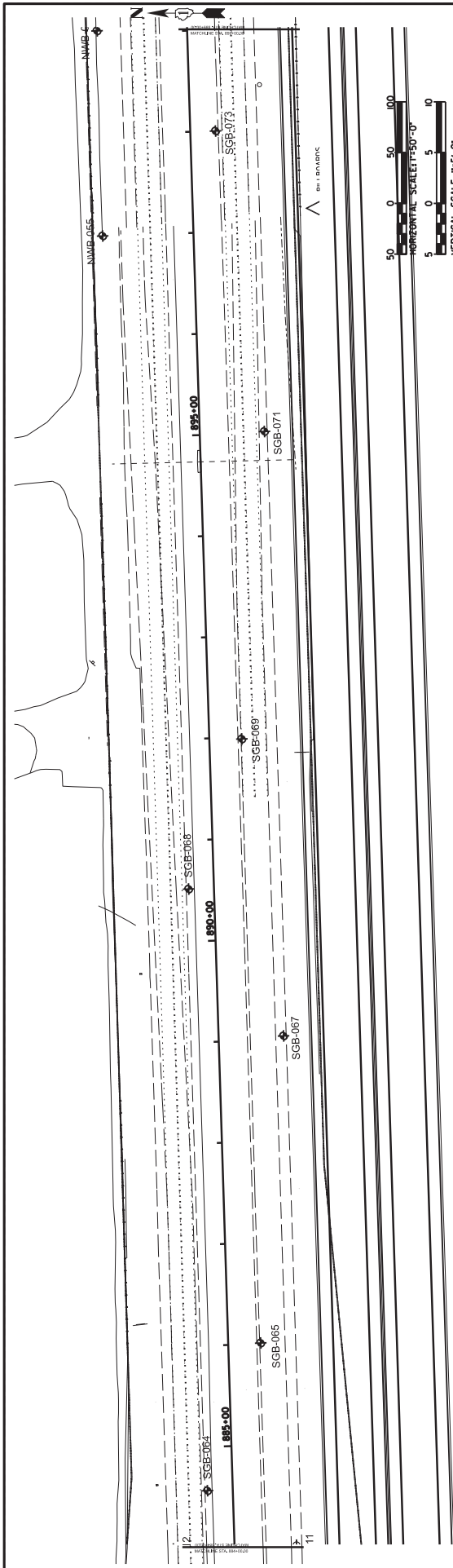
TOTAL SHEET NO. 23
 COUNTY SHEETS NO. 7
 CONTRACT NO. [blank]



NO.	DATE	REVISION
1	08/15/10	ISSUED FOR BIDDING
2	08/15/10	REVISED PER COMMENTS
3	08/15/10	REVISED PER COMMENTS
4	08/15/10	REVISED PER COMMENTS
5	08/15/10	REVISED PER COMMENTS
6	08/15/10	REVISED PER COMMENTS
7	08/15/10	REVISED PER COMMENTS
8	08/15/10	REVISED PER COMMENTS
9	08/15/10	REVISED PER COMMENTS
10	08/15/10	REVISED PER COMMENTS

NO.	DATE	REVISION
1	08/15/10	ISSUED FOR BIDDING
2	08/15/10	REVISED PER COMMENTS
3	08/15/10	REVISED PER COMMENTS
4	08/15/10	REVISED PER COMMENTS
5	08/15/10	REVISED PER COMMENTS
6	08/15/10	REVISED PER COMMENTS
7	08/15/10	REVISED PER COMMENTS
8	08/15/10	REVISED PER COMMENTS
9	08/15/10	REVISED PER COMMENTS
10	08/15/10	REVISED PER COMMENTS

FILE NAME	870+00	870+00	871+00	872+00	873+00	874+00	875+00	876+00	877+00	878+00	879+00	880+00	881+00	882+00	883+00	884+00
DESIGNED																
CHECKED																
DRAWN																
PLT SCALE - BESLES																
PLT DATE - BENTE																
USER NAME - MUSER																
SCALE																
SECTION																
COUNTY																
PROJECT NO.																
CONTRACT NO.																
STATE OF ILLINOIS	DEPARTMENT OF TRANSPORTATION															
FILE NAME	I-88 FROM RIDGE ROAD TO US ROUTE 30															
PROJECT NO.	PREFERRED LONG-TERM IMPROVEMENT PLAN															
CONTRACT NO.	STA 869+00 TO STA. 884+00															
SHEET 8	OF 23															
SCALE	1"=40'-0"															



STATION	SECTION	CONTRACT NO.
1884+00		
1885+00		
1886+00		
1887+00		
1888+00		
1889+00		
1890+00		
1891+00		
1892+00		
1893+00		
1894+00		
1895+00		
1896+00		
1897+00		
1898+00		
1899+00		

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 I-88 FROM RIDGE ROAD TO US ROUTE 38
 PREFERRED LONG-TERM IMPROVEMENT PLAN
 PLAN AND PROFILE
 SHEET 8 OF 23
 STA. 1884+00 TO STA. 1899+00
 ILLINOIS FED. AID PROJECT

USER NAME: J. BUSEY
 PLOT SCALE: 1"=80'
 PLOT DATE: 11/11/11

DESIGNED: []
 CHECKED: []
 DRAWN: []
 REVISIONS: []

FILE NAME: I-88-08-11-11.dwg
 PLOT DATE: 11/11/11

SHEET NO.: 8
 TOTAL SHEETS: 23

CONTRACT NO.: ILLINOIS FED. AID PROJECT

PROJECT NO.: I-88 FROM RIDGE ROAD TO US ROUTE 38

DRAWING NO.: I-88 FROM RIDGE ROAD TO US ROUTE 38

DATE: 11/11/11

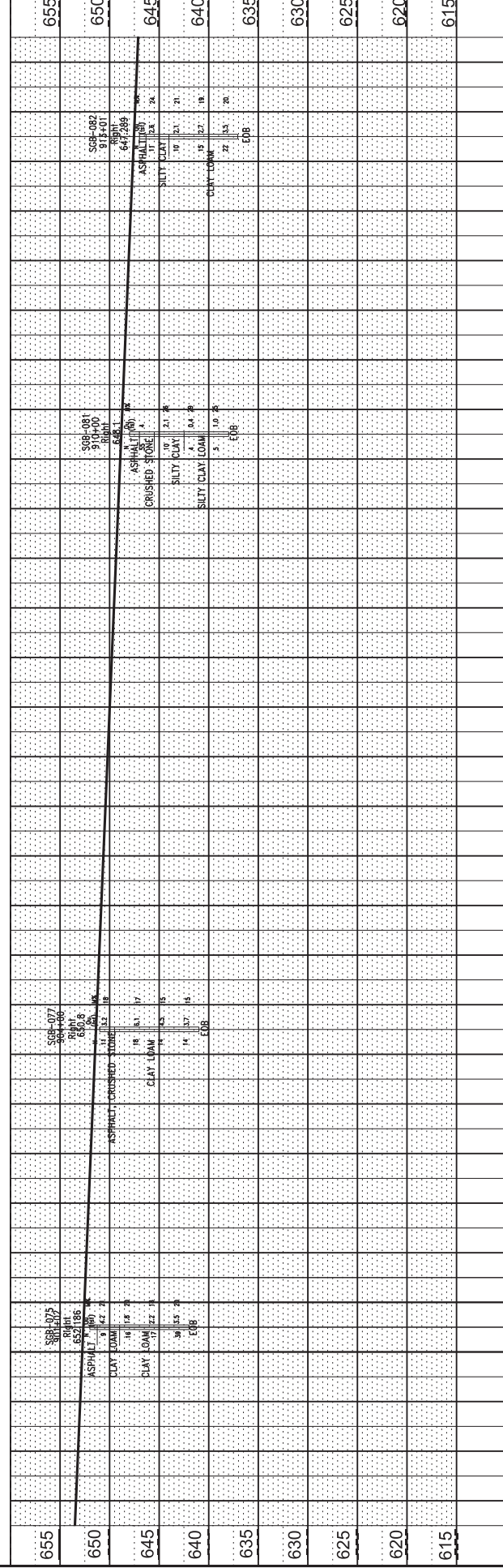
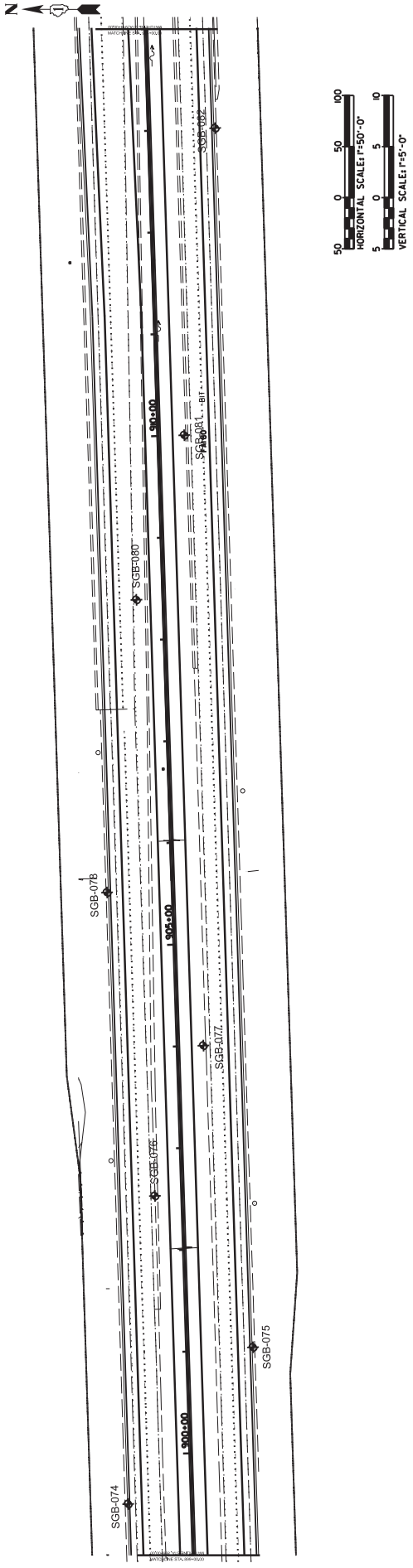
BY: []

CHECKED: []

DATE: 11/11/11

NO.	DATE	BY	REVISION

NO.	DATE	BY	REVISION



899+00	900+00	901+00	902+00	903+00	904+00	905+00	906+00	907+00	908+00	909+00	910+00	911+00	912+00	913+00	914+00

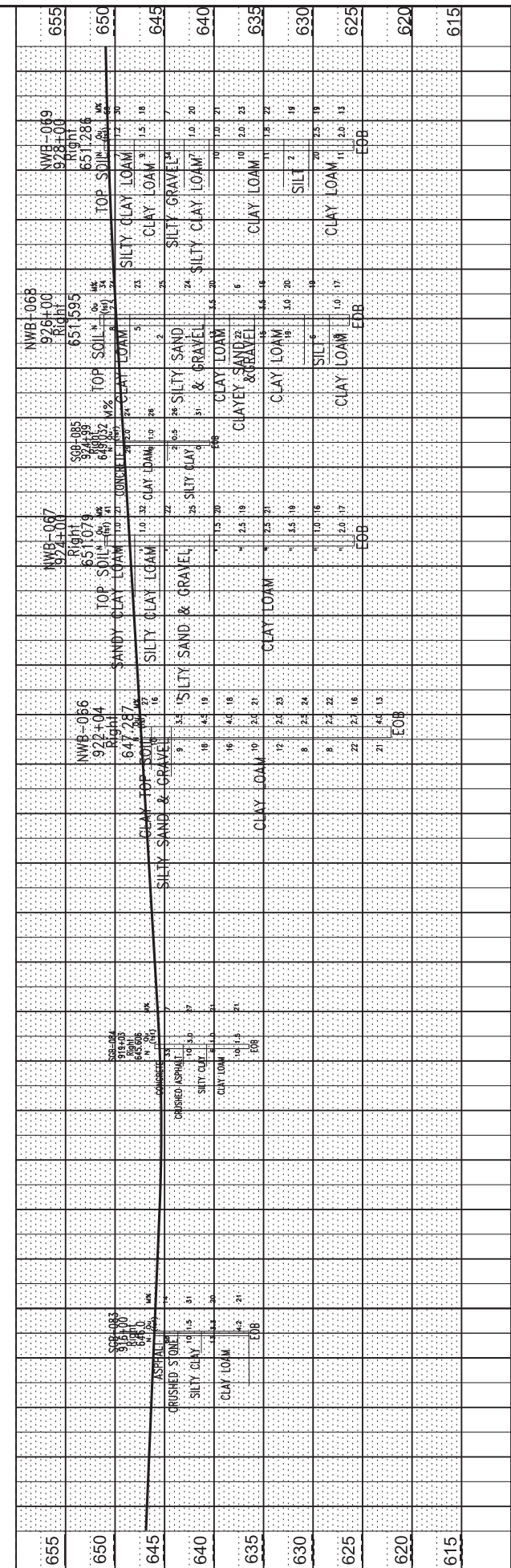
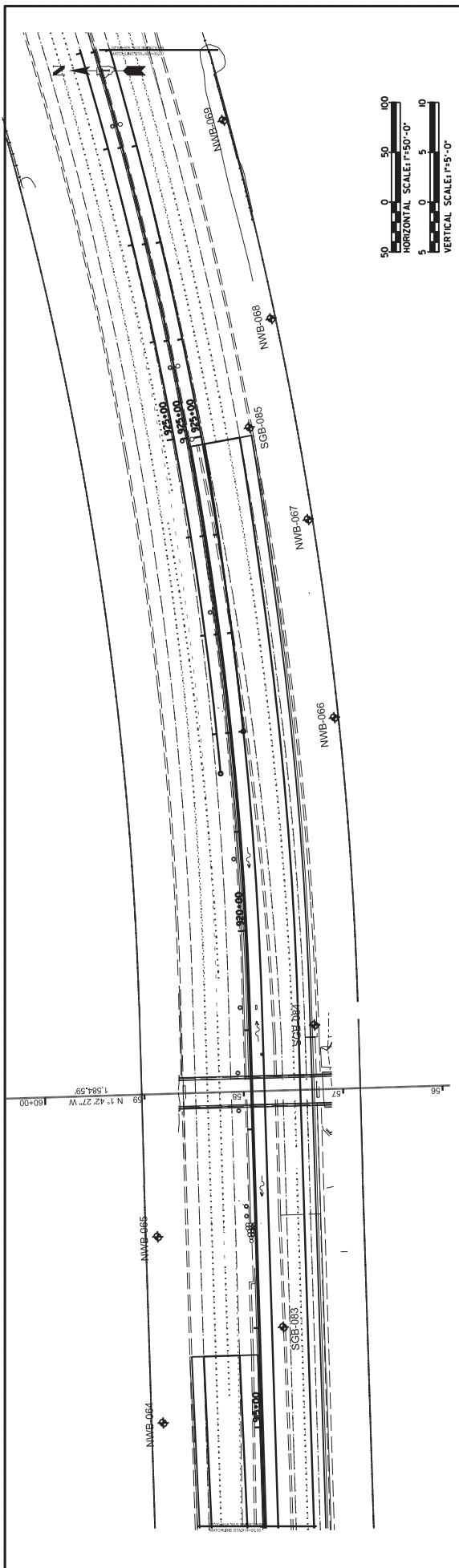
FILE NAME : **Geo services, Inc.**
 USER NAME : **AUSEN**
 PLOT SCALE : **ASCALE**
 PLOT DATE : **DATE**

DESIGNED	REVISION
CHECKED	REVISION
DRAWN	REVISION
CHECKED	REVISION

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

FROM ROUTE 39
 INTERCHANGE PLAN
 PLAN AND PROFILE
 SHEET 10 OF 23
 STA. 899+00 TO STA. 914+00

SECTION	CONTRACT NO.	TOTAL SHEET NO.



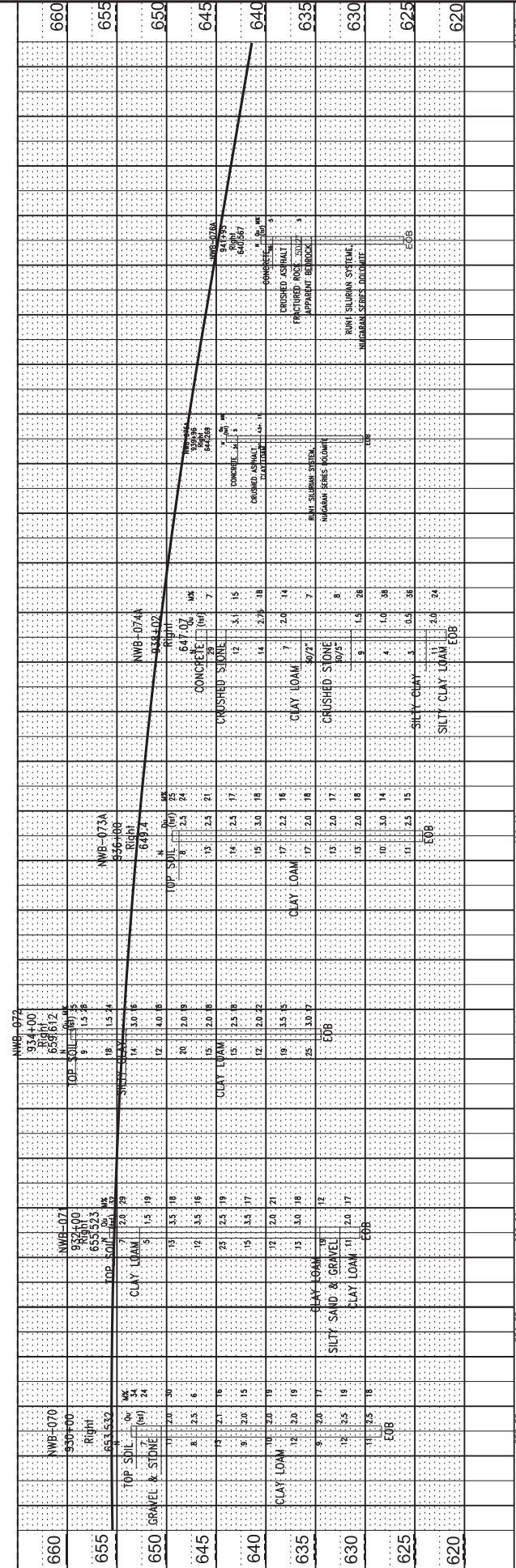
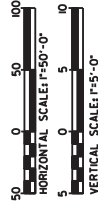
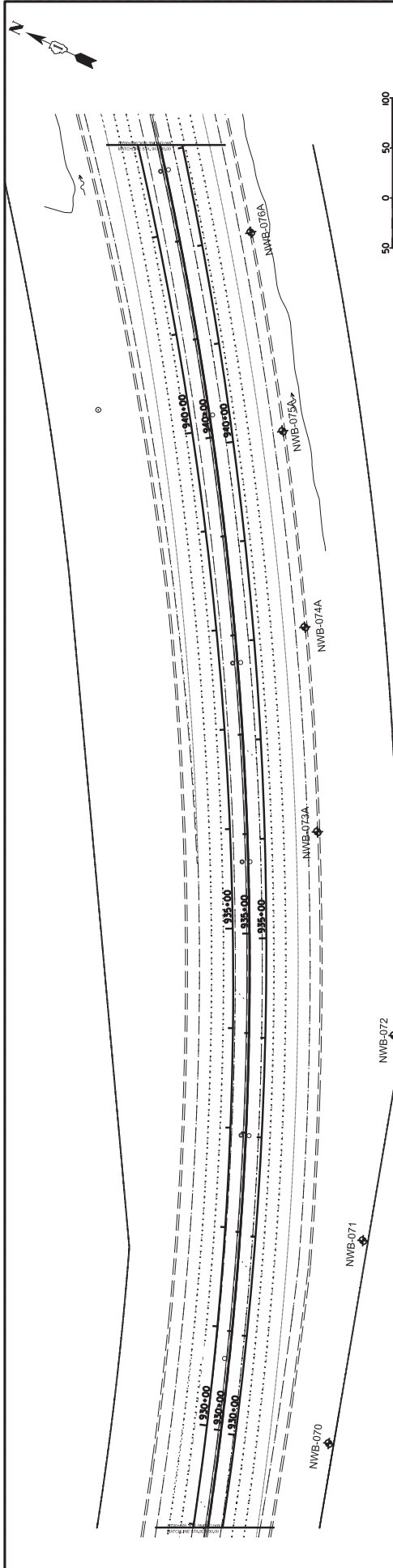
DATE	BY	REVISION
		DESIGNED
		CHECKED
		DRAWN
		CHECKED

DATE	BY	REVISION
		REVISED
		REVISED
		REVISED
		REVISED

PROJECT NO.	914-00	915-00	916-00	917-00	918-00	919-00	920-00	921-00	922-00	923-00	924-00	925-00	926-00	927-00	928-00	929-00	930-00
SECTION																	
COUNTY	ILLINOIS																
CONTRACT NO.	1-88 FROM RIDGE ROAD TO US ROUTE 38 PREFERRED LONG-TERM IMPROVEMENT PLAN PLAN AND PROFILE																
SCALE	SHEET 11 OF 23																
PROJECT NAME	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION																
DESIGNER	Geo Services, Inc.																
USER NAME	USER NAME																
POST DATE	POST DATE																
POST DATE	POST DATE																

PLAN
 DATE: 8/27/00
 DRAWN BY: [Name]
 CHECKED BY: [Name]
 NOTE BOOK: [Number]
 PLOT FILE NAME: [Name]

PROFILE
 DATE: 8/27/00
 DRAWN BY: [Name]
 CHECKED BY: [Name]
 NOTE BOOK: [Number]
 PLOT FILE NAME: [Name]



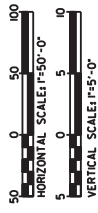
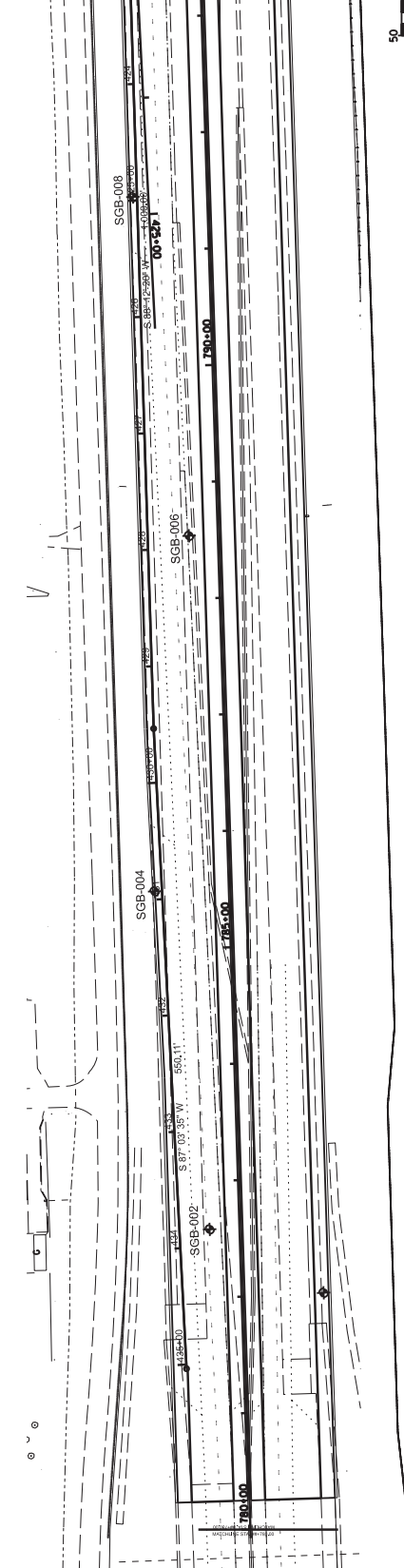
STATION	DESCRIPTION	THICKNESS (ft)	UNIT WEIGHT (pcf)	PERCENTAGE (%)	REMARKS
660	CONCRETE SLAB	8	145	100	
655	CRUSHED ASPHALT	2	120	100	
650	FRACTURED ROCK	4	160	100	
645	CONCRETE SLAB	8	145	100	
640	CRUSHED ASPHALT	2	120	100	
635	FRACTURED ROCK	4	160	100	
630	CONCRETE SLAB	8	145	100	
625	CRUSHED ASPHALT	2	120	100	
620	FRACTURED ROCK	4	160	100	

FILE NAME: **Geo Services, Inc.**
 USER NAME: **USER**
 PLOT SCALE: **AS IS**
 PLOT DATE: **DATE**

REVISIONS:
 1. **REVISION**
 2. **REVISION**
 3. **REVISION**

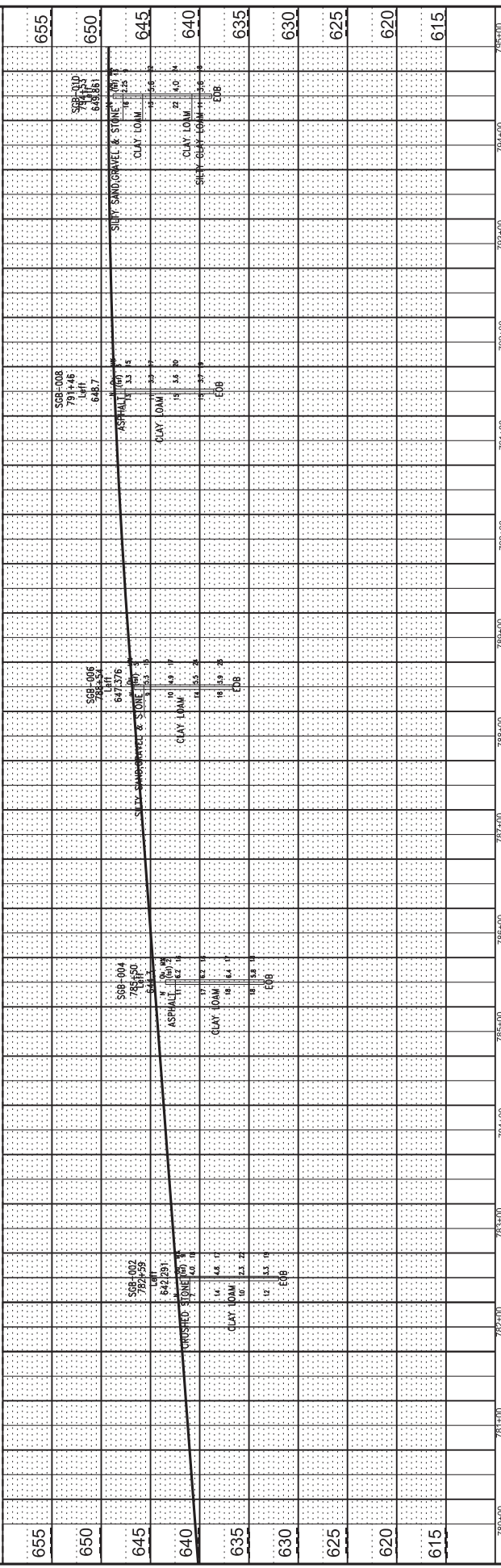
PROJECT: **STATE ROUTE 38**
 SHEET: **12** OF **23**
 SCALE: **1" = 40'**

TOTAL SHEETS: **23**
 COUNTY: **ILLINOIS**
 CONTRACT NO.: **11A222-1070 STA. 943+00**



NO.	DATE	BY	REVISION

NO.	DATE	BY	REVISION



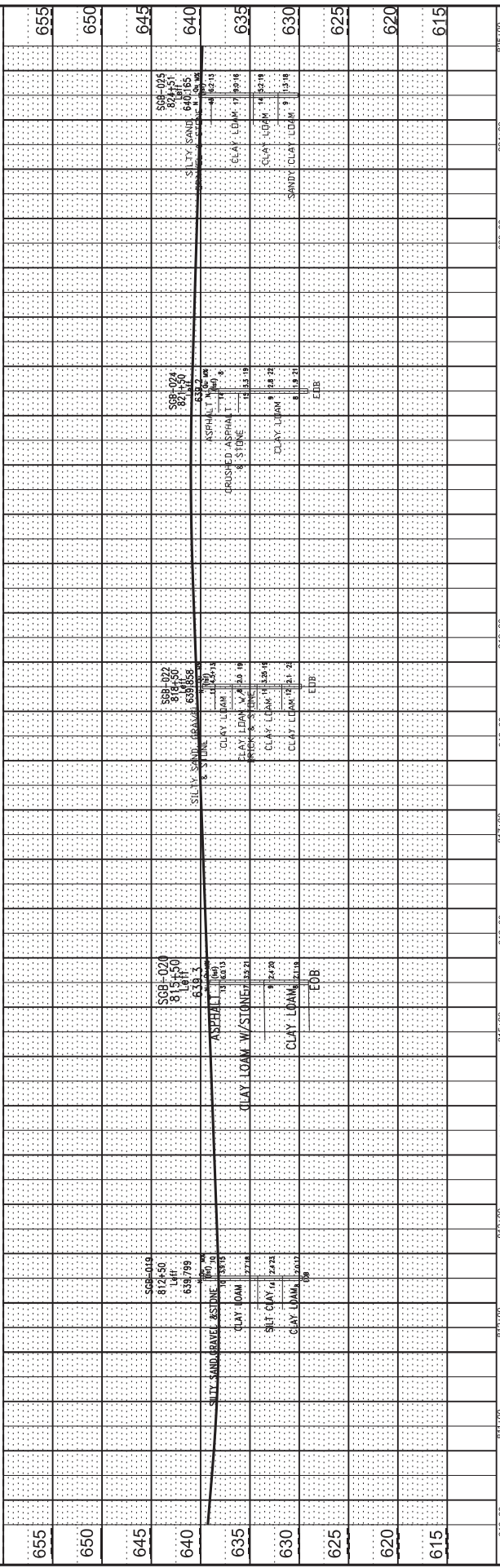
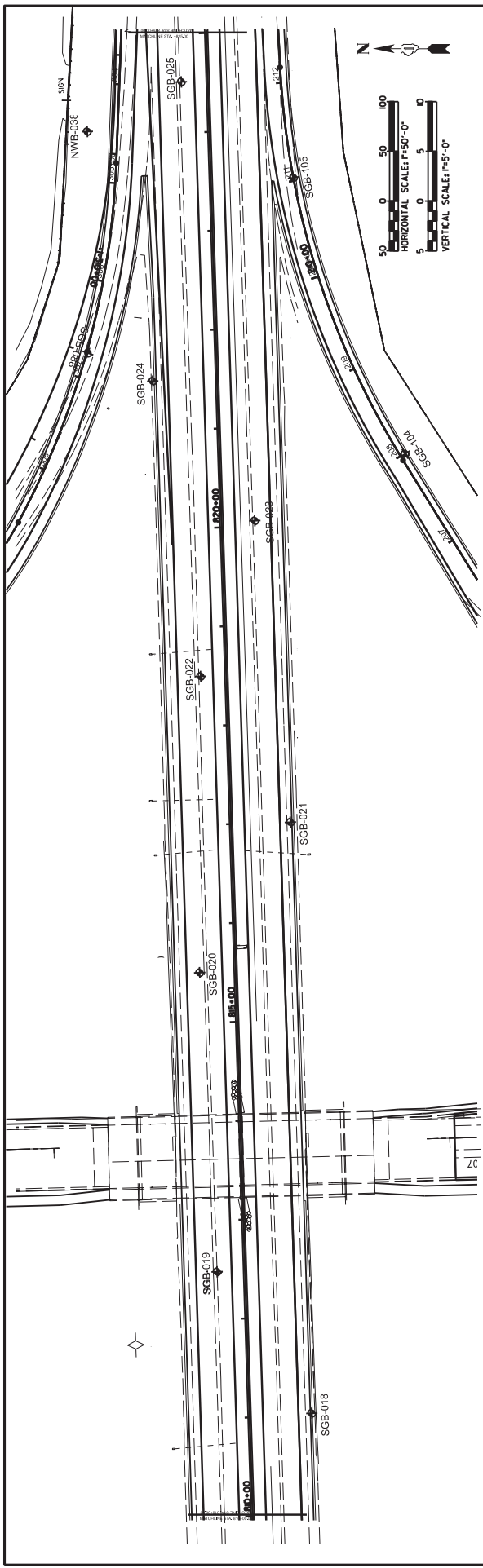
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Geo Services, Inc.

1.48 FROM RISE ROAD TO US ROUTE 38
PREFERRED LONG-TERM IMPROVEMENT PLAN
PLAN AND PROFILE

SHEET 14 OF 23 STA./80+00 TO STA. 795+00

SCALE:



FILE NAME	USER NAME	DESKTOP	810+00	811+00	812+00	813+00	814+00	815+00	816+00	817+00	818+00	819+00	820+00	821+00	822+00	823+00	824+00	825+00
PROJECT NO.	1-88 FROM RIDGE ROAD TO US ROUTE 38																	
DATE	11/15/00																	
BY																		
SCALE	1"=20'																	
SECTION	SECTION																	
CONTRACT NO.	111111																	
SHEET NO.	23																	
PROJECT	111111																	

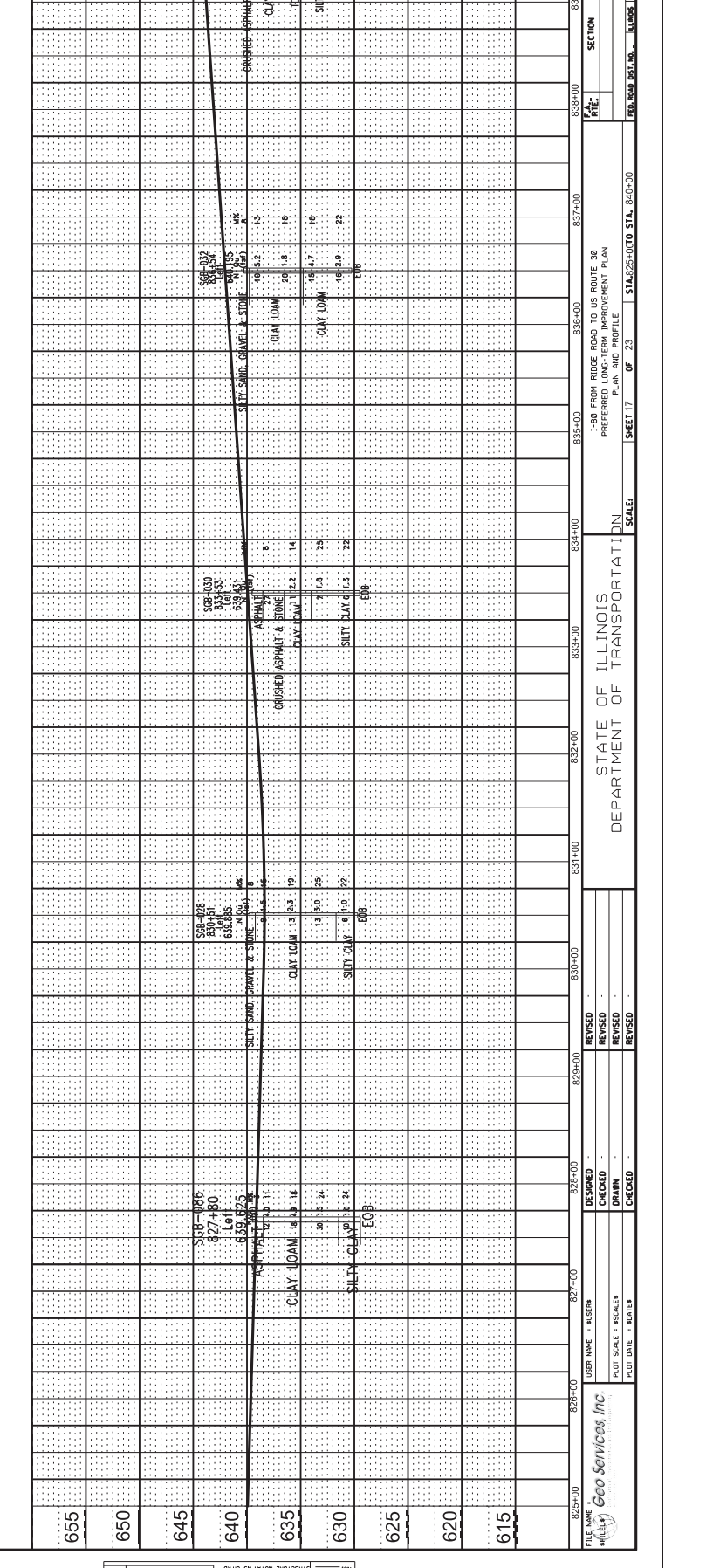
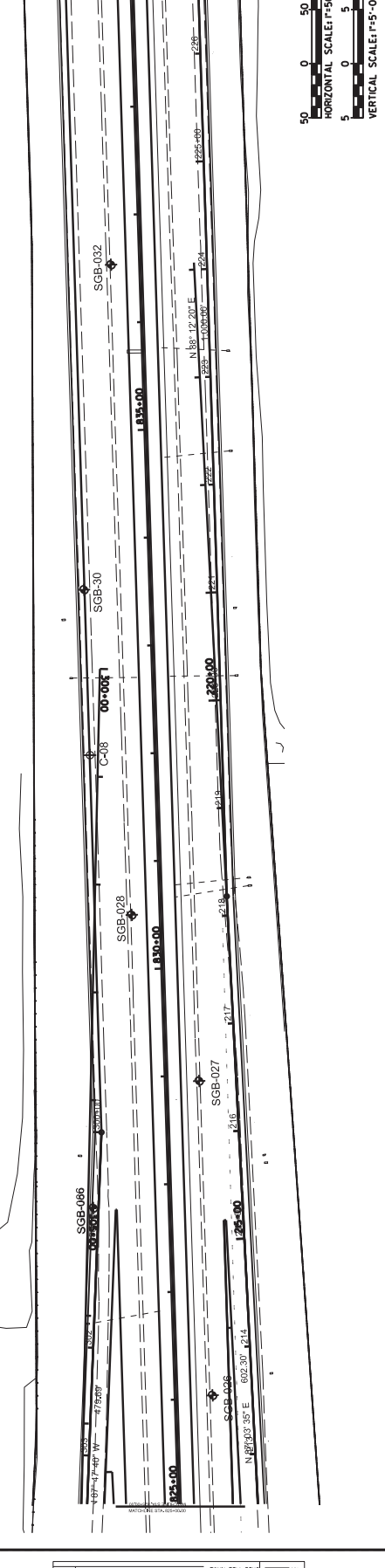
NO.	REVISION	DATE
1	ISSUED FOR PERMIT	11/15/00
2	ISSUED FOR BIDDING	11/15/00
3	ISSUED FOR CONSTRUCTION	11/15/00

NO.	REVISION	DATE
1	ISSUED FOR PERMIT	11/15/00
2	ISSUED FOR BIDDING	11/15/00
3	ISSUED FOR CONSTRUCTION	11/15/00

Geo Services, Inc.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

1-88 FROM RIDGE ROAD TO US ROUTE 38
PREFERRED LONG-TERM IMPROVEMENT PLAN
PLAN AND PROFILE



NO.	DATE	BY	REVISION
1			AS SHOWN
2			REVISIONS
3			REVISIONS
4			REVISIONS
5			REVISIONS

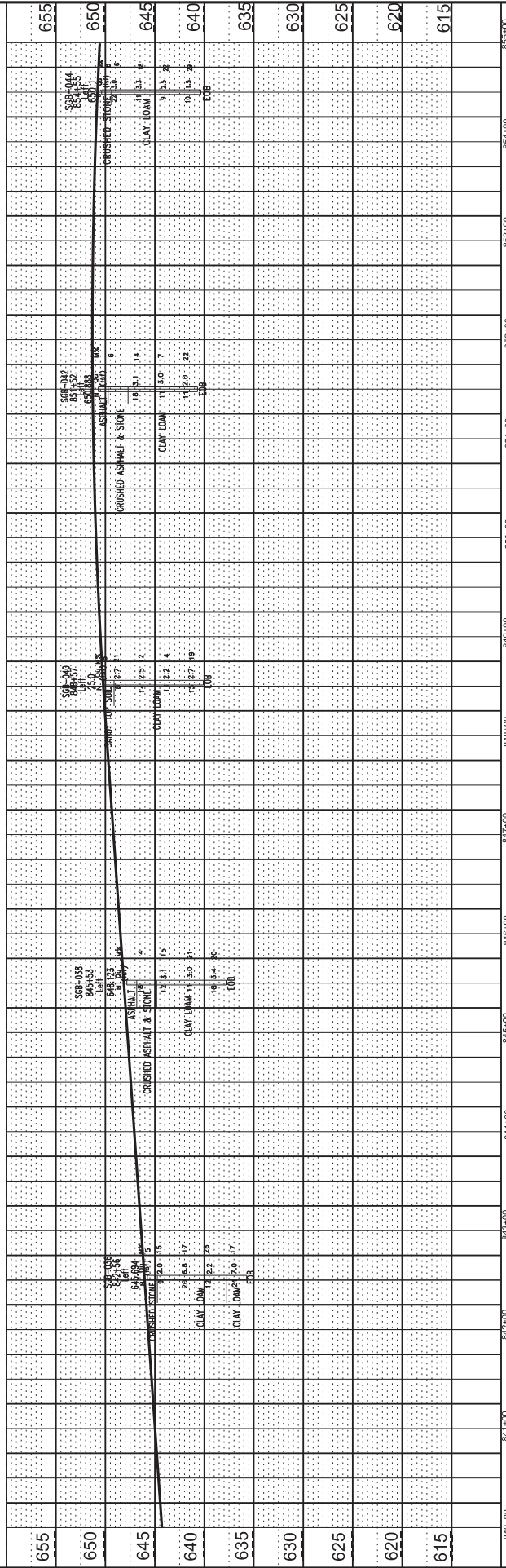
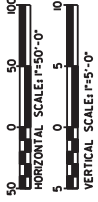
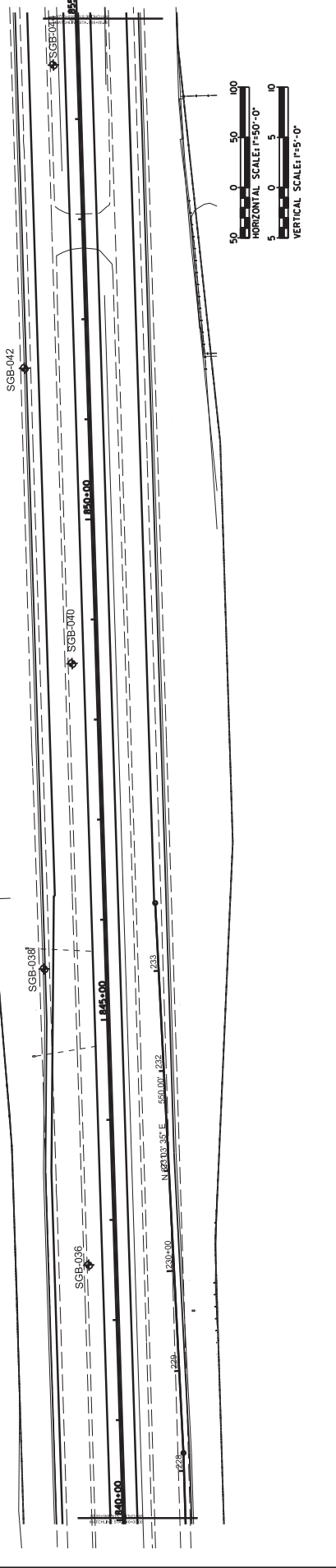
NO.	DATE	BY	REVISION
1			AS SHOWN
2			REVISIONS
3			REVISIONS
4			REVISIONS
5			REVISIONS

FILE NAME	825+00	826+00	827+00	828+00	829+00	830+00	831+00	832+00	833+00	834+00	835+00	836+00	837+00	838+00	839+00	840+00
USER NAME	AUGER															
PROJECT	I-80 FROM RIDGE ROAD TO US ROUTE 30															
SCALE	PLAN AND PROFILE															
DATE	07/23															
PROJECT NO.	STA. 825+00 TO STA. 840+00															
SHEET NO.	17															
TOTAL SHEETS	23															
CONTRACT NO.	ILLINOIS TOLLWAY PROJECT															

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALE

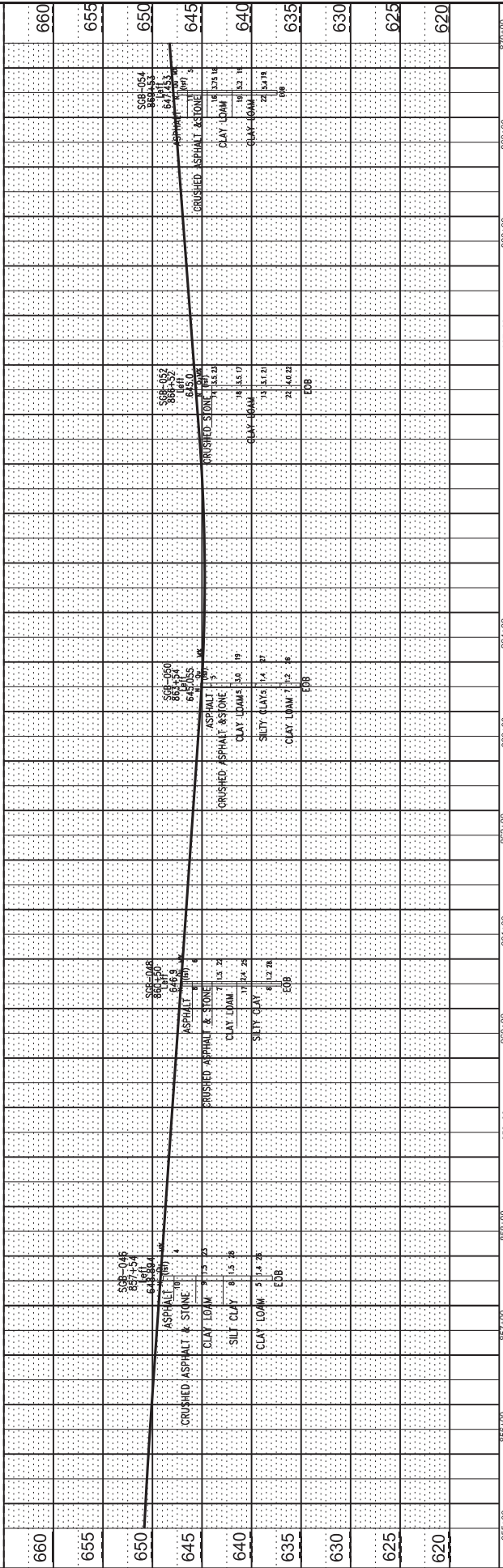
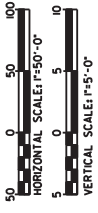
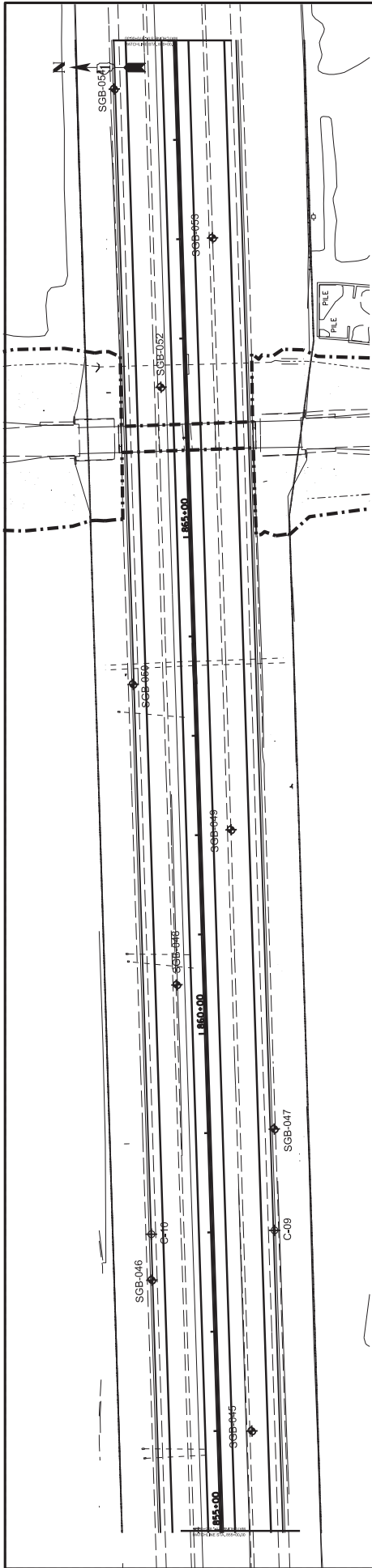
Geo Services, Inc.



PLN	DATE	BY	REV

PROF	DATE	BY	REV

840+00	841+00	842+00	843+00	844+00	845+00	846+00	847+00	848+00	850+00	851+00	852+00	853+00	854+00	855+00
USER NAME : USER FILE NAME : PLANT SCALE : 1/4" = 1'-0" PROF SCALE : 1" = 10'-0" DATE : 11/11/11														
REVISIONS NO. DATE BY DESCRIPTION 1 11/11/11 USER 2 11/11/11 USER 3 11/11/11 USER 4 11/11/11 USER														
PROJECT: STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION CONTRACT NO.: 11-101-1-0000 SHEET NO.: 23 TOTAL SHEETS: 23 SCALE: AS SHOWN														

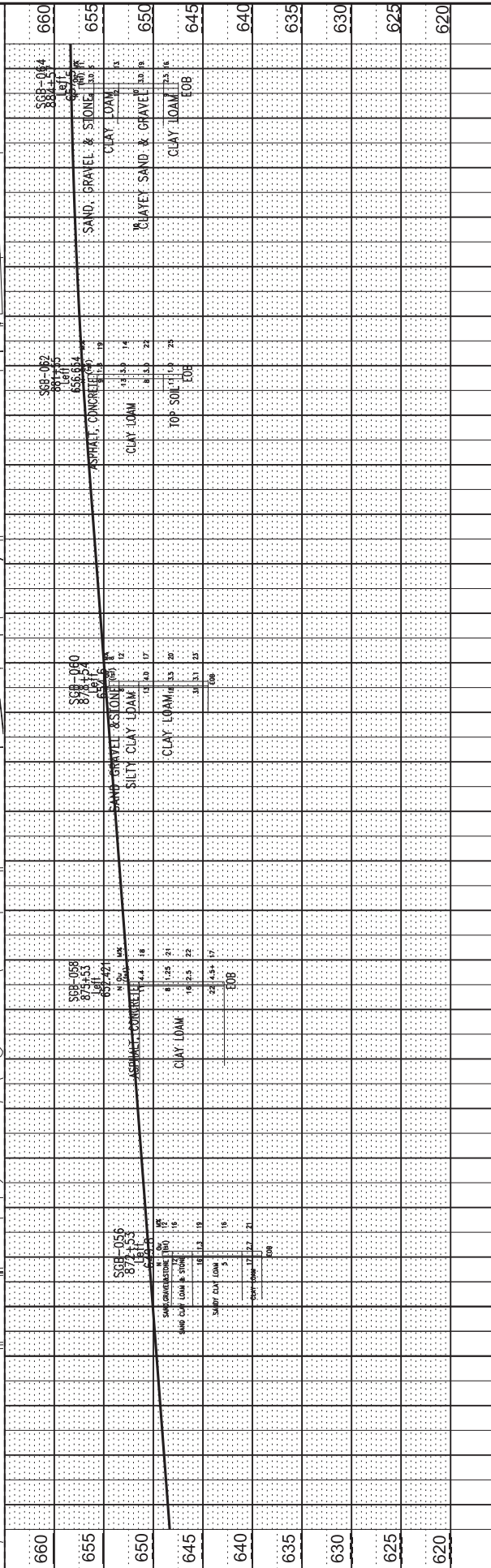
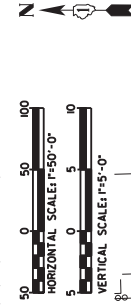
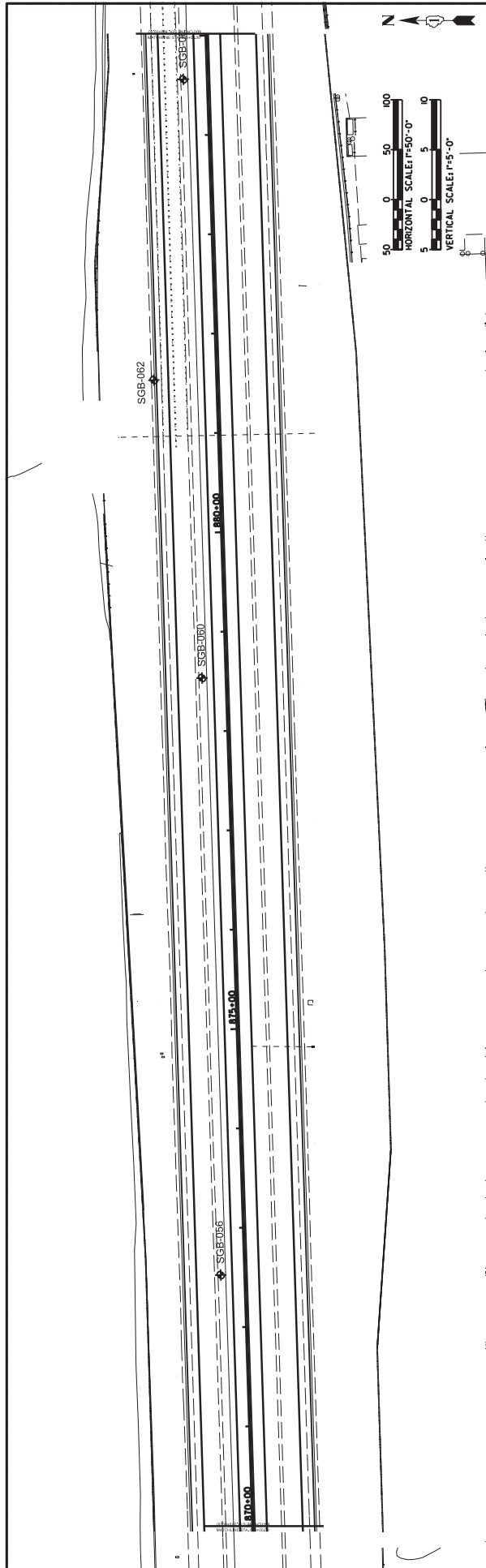


NO.	REVISION	DATE
1	ISSUED FOR PERMITS	08/15/19
2	REVISED	08/15/19
3	REVISED	08/15/19
4	REVISED	08/15/19
5	REVISED	08/15/19
6	REVISED	08/15/19
7	REVISED	08/15/19
8	REVISED	08/15/19
9	REVISED	08/15/19
10	REVISED	08/15/19

NO.	REVISION	DATE
1	ISSUED FOR PERMITS	08/15/19
2	REVISED	08/15/19
3	REVISED	08/15/19
4	REVISED	08/15/19
5	REVISED	08/15/19
6	REVISED	08/15/19
7	REVISED	08/15/19
8	REVISED	08/15/19
9	REVISED	08/15/19
10	REVISED	08/15/19

855+00	857+00	859+00	861+00	862+00	863+00	864+00	865+00	866+00	867+00	868+00	870+00
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION											
PROJECT: I-55 RAMP FROM RIDGE ROAD TO US ROUTE 390 PREFERRED UNIT: METRIC PLAN AND PROFILE											
SHEET 19 OF 23 STA 255+00 TO STA. 870+00											
SCALE:											
FILE NAME: USER:											
PLOT SCALE: *SCALE*											
PLOT DATE: *DATE*											
DESIGNED: CHECKED:											
DRAWN: CHECKED:											
REVISIONS:											
TOTAL SHEET NO. COUNTY SHEETS NO.											
CONTRACT NO.											

Geo Services, Inc.
 1111 N. W. 10th St., Suite 100
 Ft. Lauderdale, FL 33304
 Phone: (954) 571-1111
 Fax: (954) 571-1112
 Email: info@geoservices.com



STATION	SECTION	COUNTY	TOTAL SHEET NO.
870+00	883+00		885+00
871+00	884+00		886+00
872+00	885+00		887+00
873+00	886+00		888+00
874+00	887+00		889+00
875+00	888+00		890+00
876+00	889+00		891+00
877+00	890+00		892+00
878+00	891+00		893+00
879+00	892+00		894+00
880+00	893+00		895+00

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

FILE NAME: USER: 870+00
 CHECKED: 873+00
 DRAWN: 872+00
 PLOT SCALE: 1" = 50'
 PLOT DATE: 8/1/23

SCALE: SHEET 20 OF 23

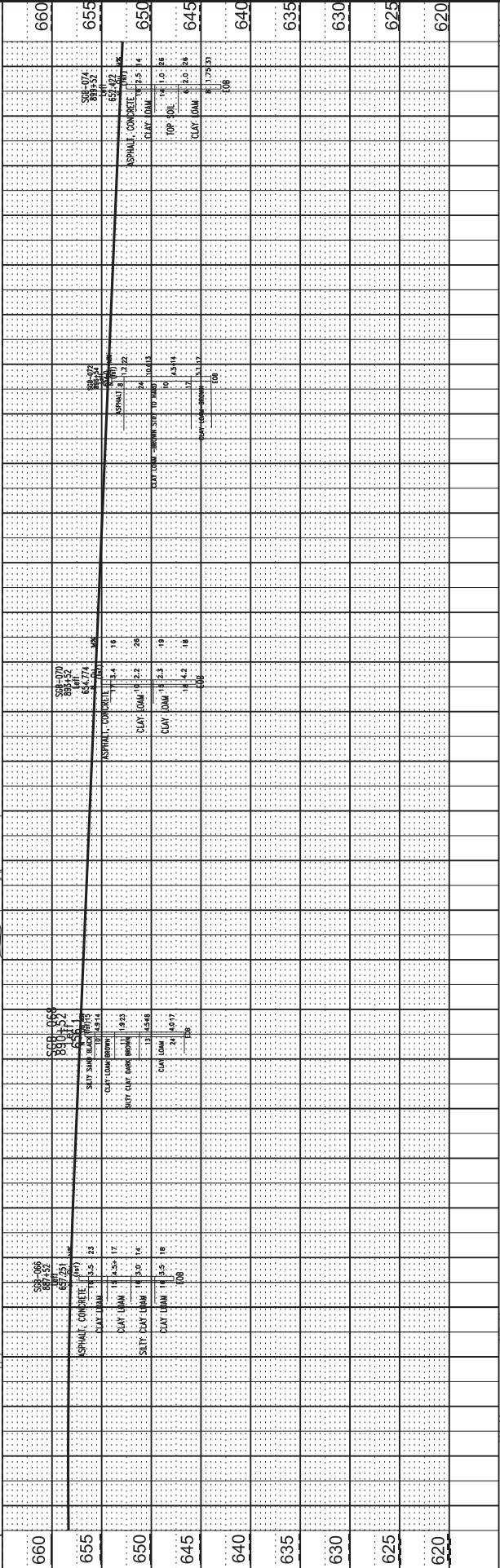
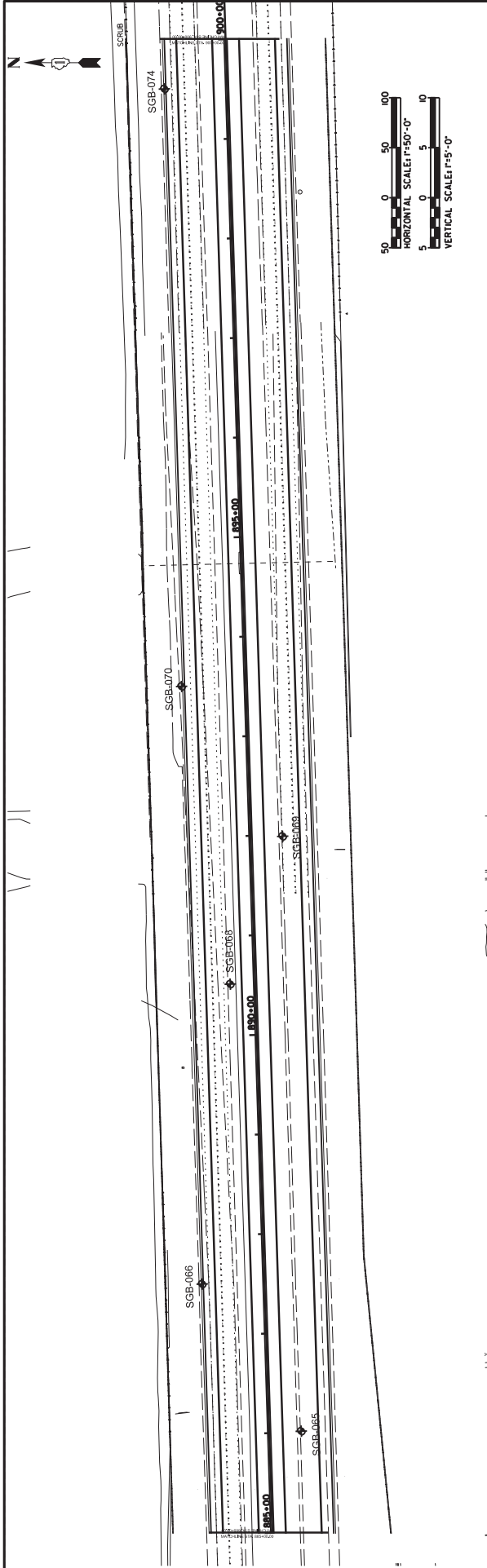
FROM REFERENCE TO ROUTE 30
 PREPARED LONG-TERM IMPROVEMENT PLAN
 PLAN AND PROFILE STA. 870+00 TO STA. 895+00

CONTRACT NO. ILLINOIS FIELD PROJECT

DATE	BY	REVISION

NO.	REVISION	DATE

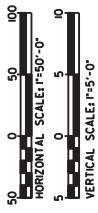




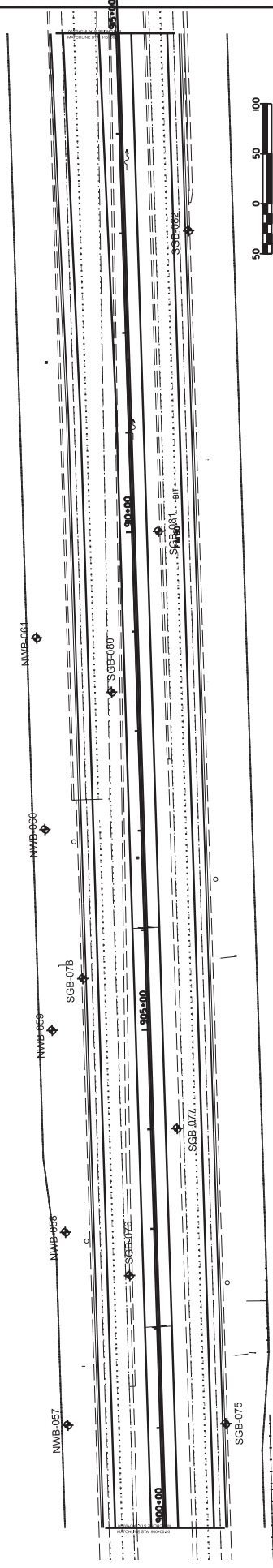
DATE	BY	REVISION

DATE	BY	REVISION

FILE NAME: Geo Services, Inc.	USER NAME: MURKIN	DESIGNED: <input checked="" type="checkbox"/>	REVISED: <input type="checkbox"/>	885+00	888+00	889+00	890+00	891+00	892+00	893+00	894+00	895+00	896+00	897+00	898+00	899+00	900+00
NOTE BOOK: <input type="checkbox"/>	PLANT CHECKED: <input type="checkbox"/>	CHECKED: <input type="checkbox"/>	REVISED: <input type="checkbox"/>	885+00	888+00	889+00	890+00	891+00	892+00	893+00	894+00	895+00	896+00	897+00	898+00	899+00	900+00
PLANT CHECKED: <input type="checkbox"/>	PLANT CHECKED: <input type="checkbox"/>	CHECKED: <input type="checkbox"/>	REVISED: <input type="checkbox"/>	885+00	888+00	889+00	890+00	891+00	892+00	893+00	894+00	895+00	896+00	897+00	898+00	899+00	900+00
PLANT CHECKED: <input type="checkbox"/>	PLANT CHECKED: <input type="checkbox"/>	CHECKED: <input type="checkbox"/>	REVISED: <input type="checkbox"/>	885+00	888+00	889+00	890+00	891+00	892+00	893+00	894+00	895+00	896+00	897+00	898+00	899+00	900+00
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION																	
1-800 FROM RIDGE ROAD TO US ROUTE 98 PREFERRED LONG-TERM IMPROVEMENT PLAN SCALE: SHEET 21 OF 23 STA. 885+00 TO STA. 900+00																	
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT CONTRACT NO.																	



DATE: _____
 BY: _____
 PLAN: _____
 SOUGHT TO: _____
 CHECKED: _____
 DESIGNED: _____
 DRAWN: _____
 DATE: _____



STATION	SOIL TYPE	DEPTH (ft)	SOIL TYPE	DEPTH (ft)	SOIL TYPE	DEPTH (ft)	SOIL TYPE	DEPTH (ft)	SOIL TYPE	DEPTH (ft)	SOIL TYPE	DEPTH (ft)
900+00												
901+00	CLAY LOAM	1.2	SILT CLAY	1.5	CLAY LOAM	1.8	SILT CLAY	2.1	CLAY LOAM	2.4	SILT CLAY	2.7
902+00	CLAY LOAM	1.5	SILT CLAY	1.8	CLAY LOAM	2.1	SILT CLAY	2.4	CLAY LOAM	2.7	SILT CLAY	3.0
903+00	CLAY LOAM	1.8	SILT CLAY	2.1	CLAY LOAM	2.4	SILT CLAY	2.7	CLAY LOAM	3.0	SILT CLAY	3.3
904+00	CLAY LOAM	2.1	SILT CLAY	2.4	CLAY LOAM	2.7	SILT CLAY	3.0	CLAY LOAM	3.3	SILT CLAY	3.6
905+00	CLAY LOAM	2.4	SILT CLAY	2.7	CLAY LOAM	3.0	SILT CLAY	3.3	CLAY LOAM	3.6	SILT CLAY	3.9
906+00	CLAY LOAM	2.7	SILT CLAY	3.0	CLAY LOAM	3.3	SILT CLAY	3.6	CLAY LOAM	3.9	SILT CLAY	4.2
907+00	CLAY LOAM	3.0	SILT CLAY	3.3	CLAY LOAM	3.6	SILT CLAY	3.9	CLAY LOAM	4.2	SILT CLAY	4.5
908+00	CLAY LOAM	3.3	SILT CLAY	3.6	CLAY LOAM	3.9	SILT CLAY	4.2	CLAY LOAM	4.5	SILT CLAY	4.8
909+00	CLAY LOAM	3.6	SILT CLAY	3.9	CLAY LOAM	4.2	SILT CLAY	4.5	CLAY LOAM	4.8	SILT CLAY	5.1
910+00	CLAY LOAM	3.9	SILT CLAY	4.2	CLAY LOAM	4.5	SILT CLAY	4.8	CLAY LOAM	5.1	SILT CLAY	5.4
911+00	CLAY LOAM	4.2	SILT CLAY	4.5	CLAY LOAM	4.8	SILT CLAY	5.1	CLAY LOAM	5.4	SILT CLAY	5.7
912+00	CLAY LOAM	4.5	SILT CLAY	4.8	CLAY LOAM	5.1	SILT CLAY	5.4	CLAY LOAM	5.7	SILT CLAY	6.0
913+00	CLAY LOAM	4.8	SILT CLAY	5.1	CLAY LOAM	5.4	SILT CLAY	5.7	CLAY LOAM	6.0	SILT CLAY	6.3
914+00	CLAY LOAM	5.1	SILT CLAY	5.4	CLAY LOAM	5.7	SILT CLAY	6.0	CLAY LOAM	6.3	SILT CLAY	6.6
915+00	CLAY LOAM	5.4	SILT CLAY	5.7	CLAY LOAM	6.0	SILT CLAY	6.3	CLAY LOAM	6.6	SILT CLAY	6.9

FILE NAME: Geo Services Inc	USER NAME: RUSIN	DESIGNED: _____	REVISION: _____
PROJECT: STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PLOT SCALE: SCALE	CHECKED: _____	REVISION: _____
SHEET: 23	OF: 23	DRAWN: _____	REVISION: _____
DATE: 9/15/00	DATE: 9/15/00	CHECKED: _____	REVISION: _____

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

PROJECT: **STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**

SHEET: **23** OF **23**

DATE: **9/15/00**

SECTION: **SECTION**

COUNTY: **COUNTY**

TOTAL SHEETS: **23**

CONTRACT NO.: **CONTRACT NO.**

FED. ROAD DIST. NO.: **ELIHOOS FED. RD. PROJECT**

NOTE BOOK: **NOTE BOOK**

STRUCTURE NOTES: **STRUCTURE NOTES**

DATE: _____

BY: _____

PLAN: _____

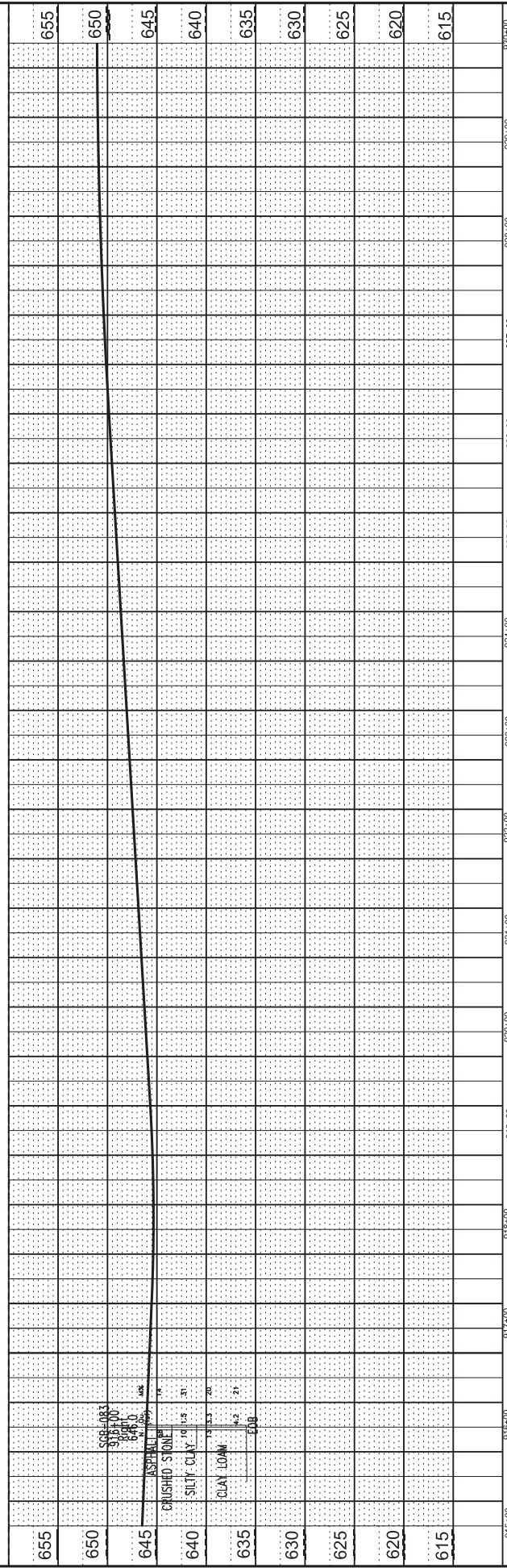
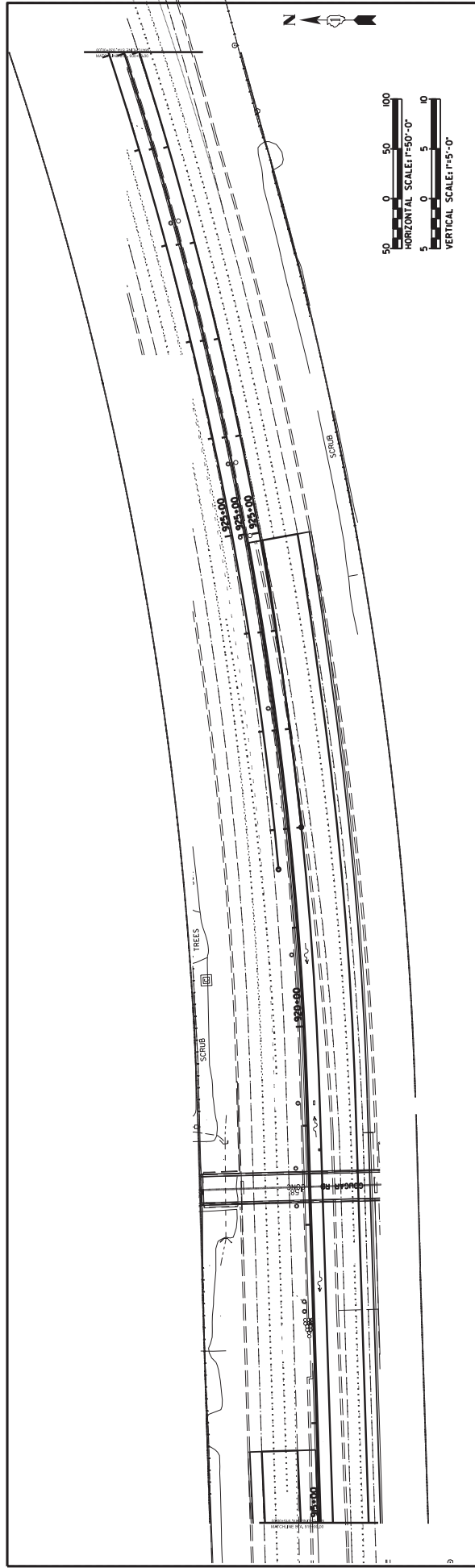
SOUGHT TO: _____

CHECKED: _____

DESIGNED: _____

DRAWN: _____

DATE: _____



915+00	916+00	917+00	918+00	919+00	920+00	921+00	922+00	923+00	924+00	925+00	926+00	927+00	928+00	929+00	930+00
655	650	645	640	635	630	625	620	615							

PLAN
 NO. _____
 DATE _____
 DRAWN BY _____
 CHECKED BY _____
 APPROVED BY _____
 TITLE _____

PROFILE
 NO. _____
 DATE _____
 DRAWN BY _____
 CHECKED BY _____
 APPROVED BY _____
 TITLE _____

FILE NAME : 918-083
 USER NAME : AUBURN
 PLOT SCALE : 1"=50'
 PLOT DATE : 10/21/00

DESIGNED :
 CHECKED :
 DRAWN :
 CHECKED :

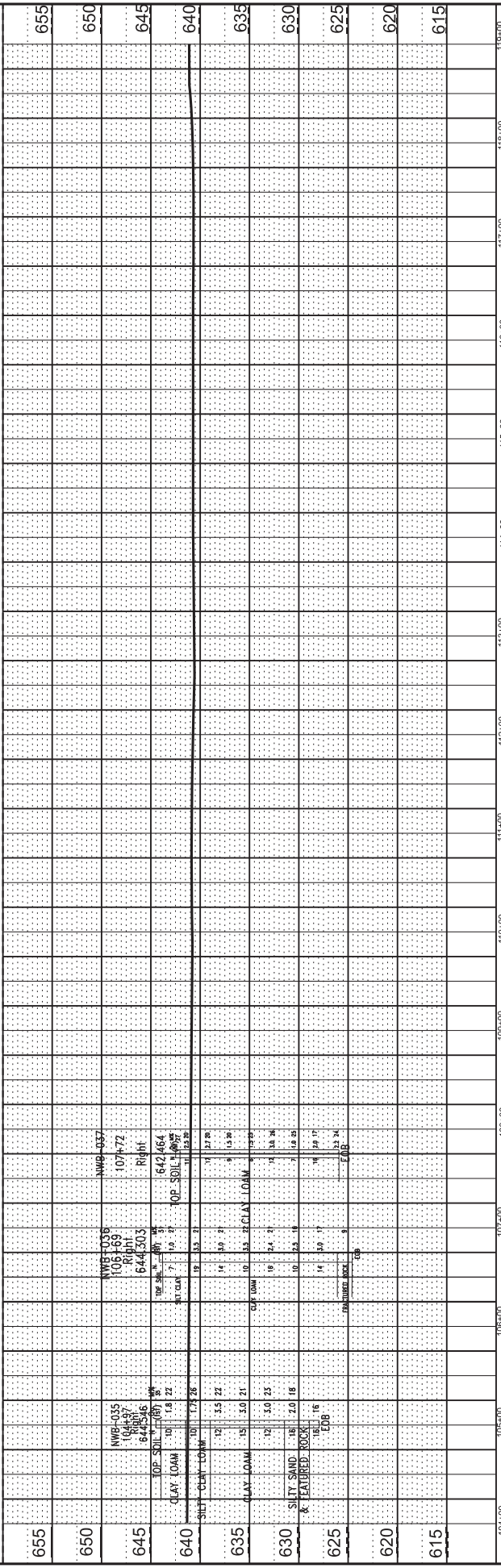
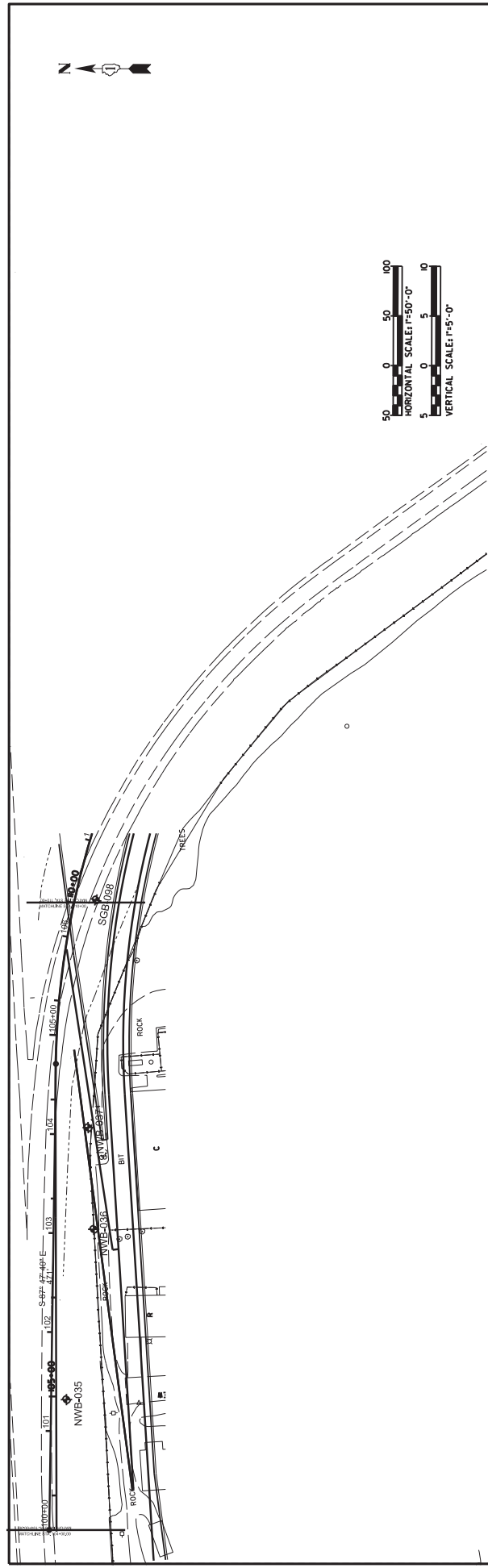
REVISED :
 REVISED :
 REVISED :
 REVISED :

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SCALE: _____
 SHEET 23 OF 23
 STA. 915+00 TO STA. 930+00

FEDERAL DIST. NO. _____
 COUNTY _____
 SECTION _____
 TOTAL SHEET NO. _____
 CONTRACT NO. _____





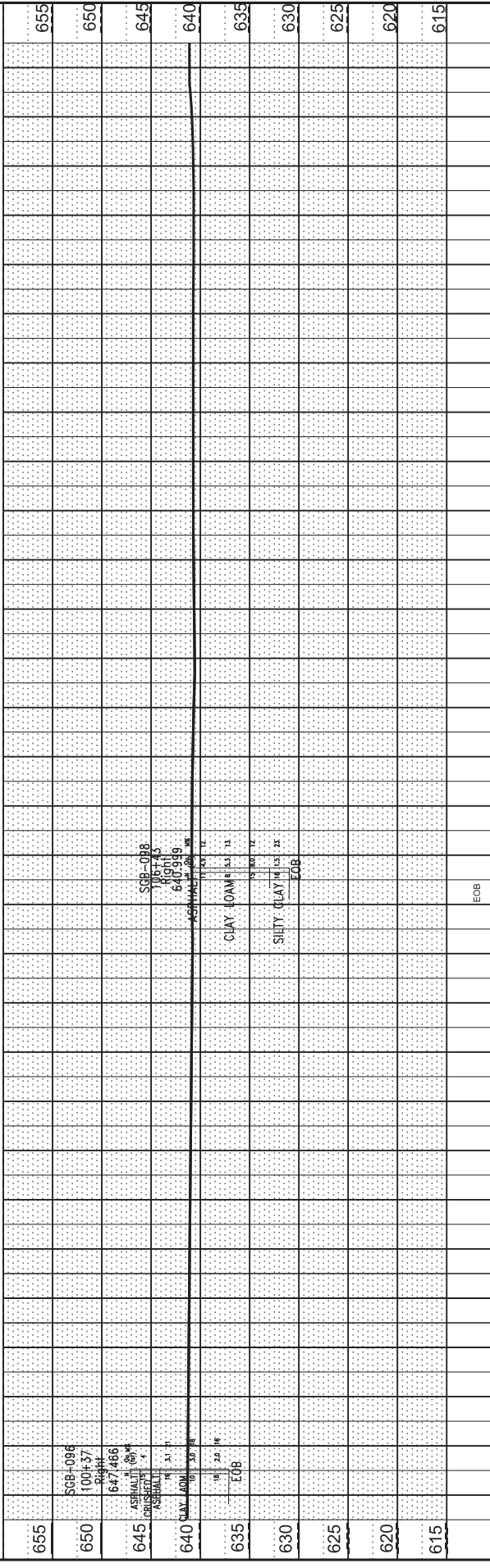
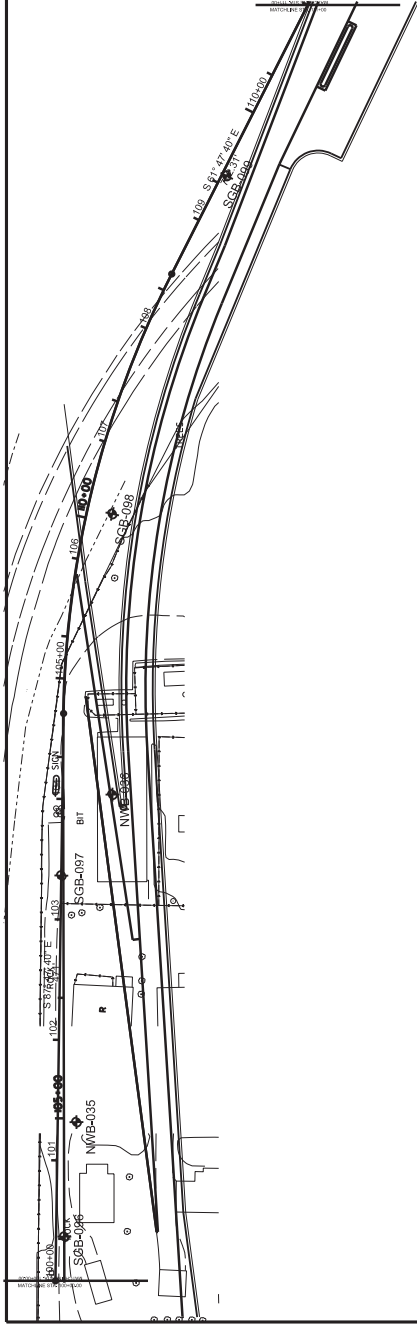
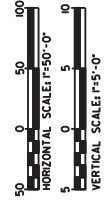
STATION	ELEVATION	SOIL TYPE	REVISIONS
104+00	615	CLAY LOAM	DESIGNED
105+00	620	CLAY LOAM	CHECKED
106+00	625	SILT CLAY LOAM	DRAWN
107+00	630	CLAY LOAM	CHECKED
108+00	635	SILT SAND & FEATURED ROCK	DESIGNED
109+00	640	SILT CLAY LOAM	CHECKED
110+00	645	CLAY LOAM	DRAWN
111+00	650	SILT CLAY LOAM	CHECKED
112+00	655	SILT CLAY LOAM	DESIGNED
113+00	655	SILT CLAY LOAM	CHECKED
114+00	655	SILT CLAY LOAM	DRAWN
115+00	655	SILT CLAY LOAM	CHECKED
116+00	655	SILT CLAY LOAM	DESIGNED
117+00	655	SILT CLAY LOAM	CHECKED
118+00	655	SILT CLAY LOAM	DRAWN
119+00	655	SILT CLAY LOAM	CHECKED

NO.	DATE	BY

NO.	DATE	BY

FILE NAME: **Geo Services, Inc.**
 USER NAME: **BUSBY**
 PLOT SCALE - HORIZONTAL: **1"=50'-0"**
 PLOT SCALE - VERTICAL: **1"=5'-0"**
 PLOT DATE: **8/15/2018**

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 PROJECT: **102 S 47th E**
 SHEET: **24** OF **28**
 STA. 104+00 TO STA. 119+00
 TOTAL SHEETS: **28**
 COUNTY: **LA SALLE**
 CONTRACT NO.: **11A-04-0010 STA. 110+00**



STATION	ELEVATION	SECTION	CONTRACT NO.	TOTAL SHEETS
100+00	615			
101+00	620			
102+00	625			
103+00	630			
104+00	635			
105+00	640			
106+00	645			
107+00	650			
108+00	655			

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

1-80 FROM RIDGE ROAD TO US ROUTE 30
PREFERRED PLAN AND PROFILE
SHEET 24 OF 28

SCALE: #1"=20'
#1"=20'

CONTRACT NO. #115-00
TOTAL SHEETS 24
SHEET NO. 24



USER NAME: BOBKA
PLOT DATE: BOBKA

CHECKED: BOBKA
DRAWN: BOBKA

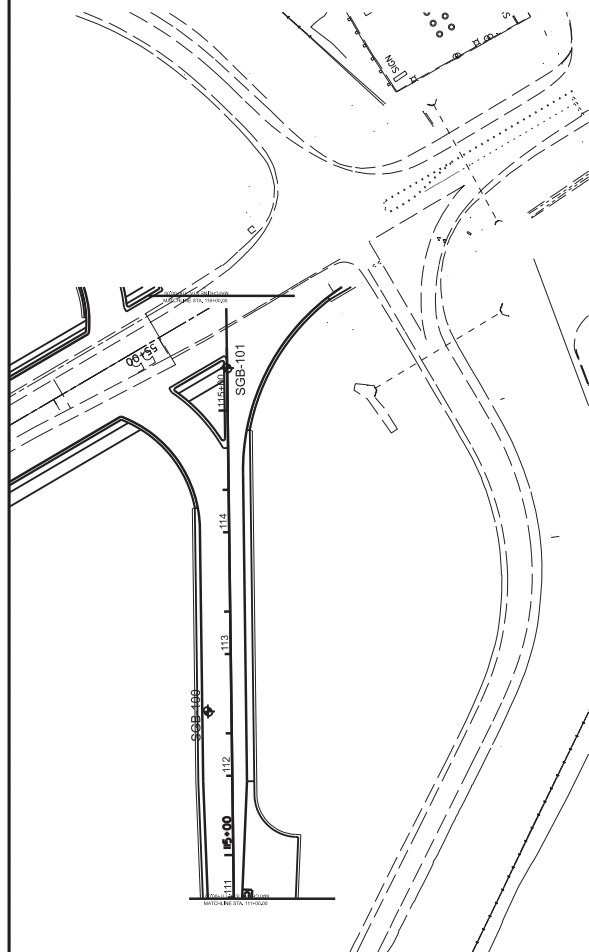
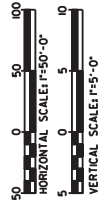
REVISIONS:
REVISION: BOBKA
REVISION: BOBKA
REVISION: BOBKA

PLAN

DATE	BY

PROFILE

DATE	BY



STATION	655	650	645	640	635	630	625	620	615
111+00									
112+00									
113+00									
114+00									
115+00									
116+00									
117+00									
118+00									
119+00									
120+00									
121+00									
122+00									
123+00									
124+00									
125+00									
126+00									

PLAN
 DRAWN BY _____
 CHECKED BY _____
 DATE _____
 NO. _____
 NOTE BOOK _____
 ROAD FILE NAME _____

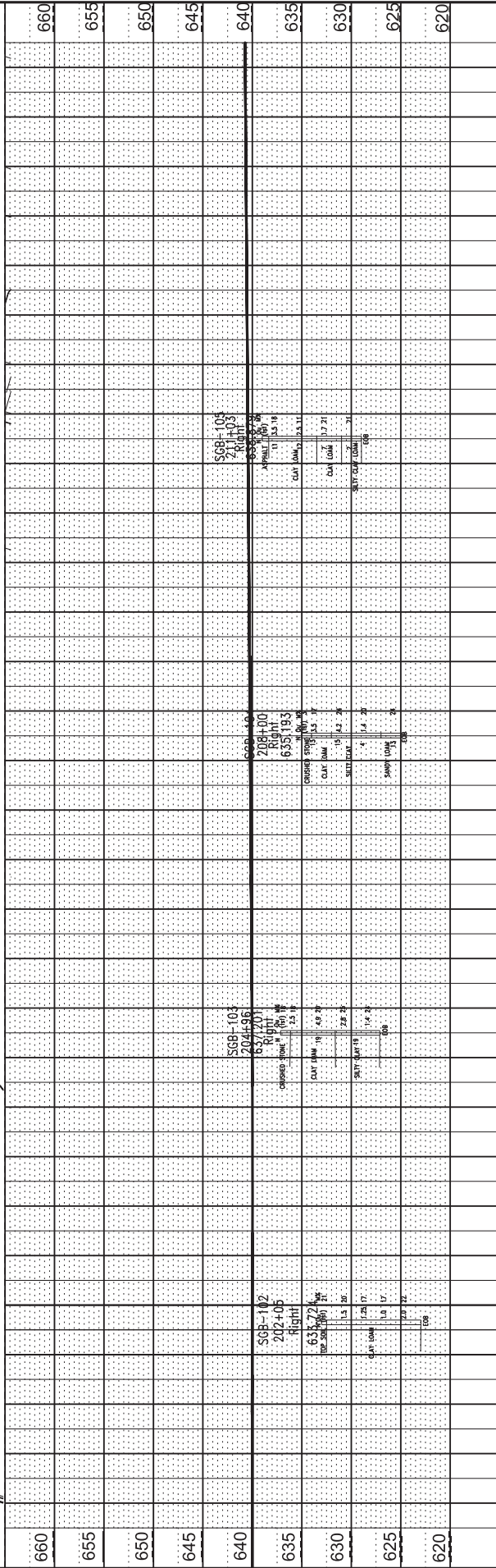
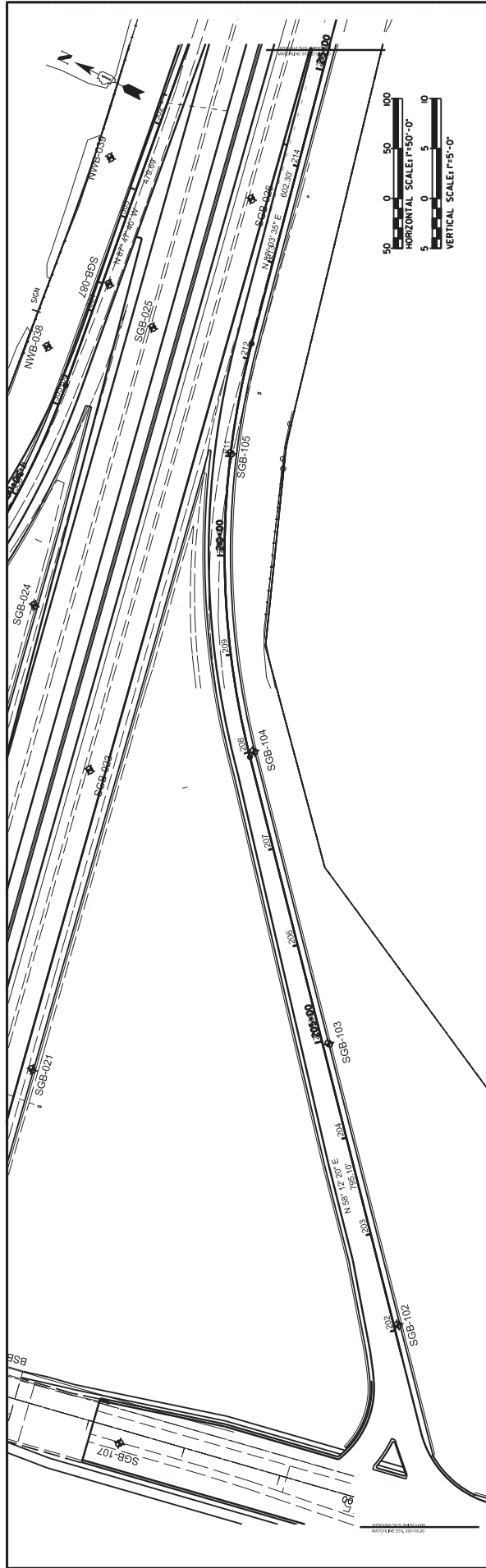
PROFILE
 DRAWN BY _____
 CHECKED BY _____
 DATE _____
 NO. _____
 NOTE BOOK _____
 STRUCTURE NOTATIONS CHRD _____

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

FILE NAME: *Geo Services, Inc.*
 USER NAME: *MURKIN*
 PLOT SCALE: *1"=20'*
 PLOT DATE: *10/01/11*

1-80 FROM RIDGE ROAD TO US ROUTE 30
 PREFERRED LONG-TERM IMPROVEMENT PLAN
 PLAN AND PROFILE

SCALE: *1"=25'* OF *1"=40'* SHEET 25 OF 25
 SECTION: *125+00* COUNTY: *ILLINOIS* TOTAL SHEET: *25*
 FILE: *125+00* COUNTY: *ILLINOIS* SHEET: *125+00* COUNTY: *ILLINOIS* TOTAL SHEET: *25*
 CONTRACT NO. *125*



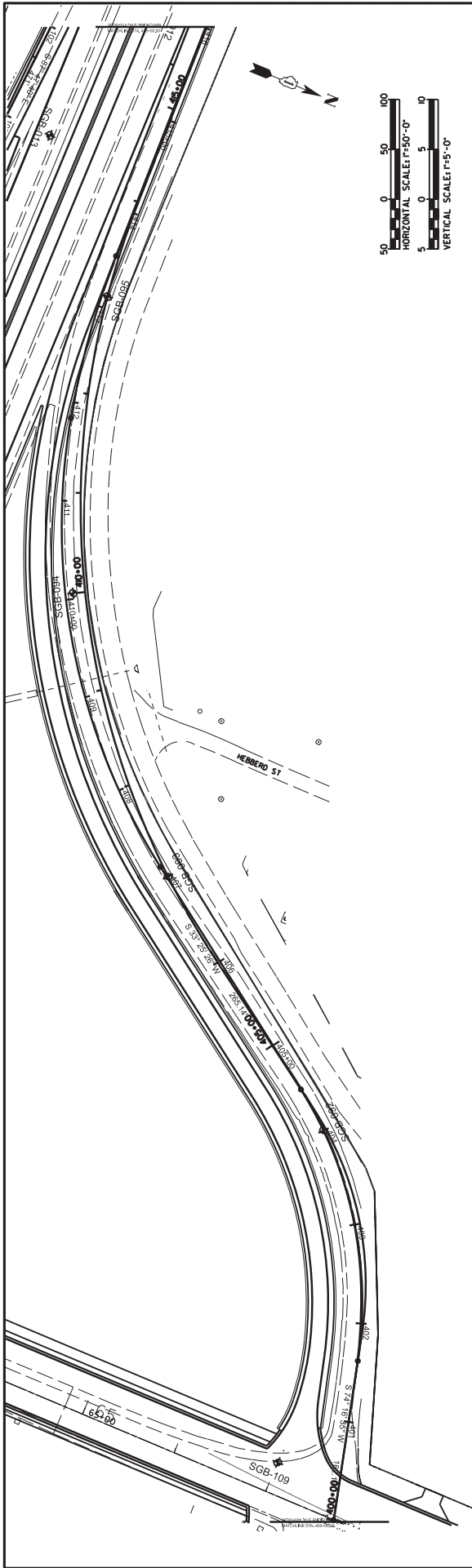
FILE NAME	USER NAME	DATE	REVISION	SECTION	COUNTY	SHEET NO.
1-88 FROM RIDGE ROAD TO US ROUTE 38	WISNER	2014-00	DESIGNED	214+00	ILLINOIS	215+00
PREFERRED LONG-TERM IMPROVEMENT PLAN	ESKLER	2014-00	CHECKED	213+00	ILLINOIS	214+00
PLAN AND PROFILE	ESKLER	2014-00	DRAWN	212+00	ILLINOIS	213+00
	ESKLER	2014-00	REVISION	211+00	ILLINOIS	212+00
	ESKLER	2014-00	REVISION	210+00	ILLINOIS	211+00
	ESKLER	2014-00	REVISION	209+00	ILLINOIS	210+00
	ESKLER	2014-00	REVISION	208+00	ILLINOIS	209+00
	ESKLER	2014-00	REVISION	207+00	ILLINOIS	208+00
	ESKLER	2014-00	REVISION	206+00	ILLINOIS	207+00
	ESKLER	2014-00	REVISION	205+00	ILLINOIS	206+00
	ESKLER	2014-00	REVISION	204+00	ILLINOIS	205+00
	ESKLER	2014-00	REVISION	203+00	ILLINOIS	204+00
	ESKLER	2014-00	REVISION	202+00	ILLINOIS	203+00
	ESKLER	2014-00	REVISION	201+00	ILLINOIS	202+00
	ESKLER	2014-00	REVISION	200+00	ILLINOIS	201+00

PLAN
 CHECKED BY: []
 DRAWN BY: []
 DATE: []

PROFILE
 CHECKED BY: []
 DRAWN BY: []
 DATE: []

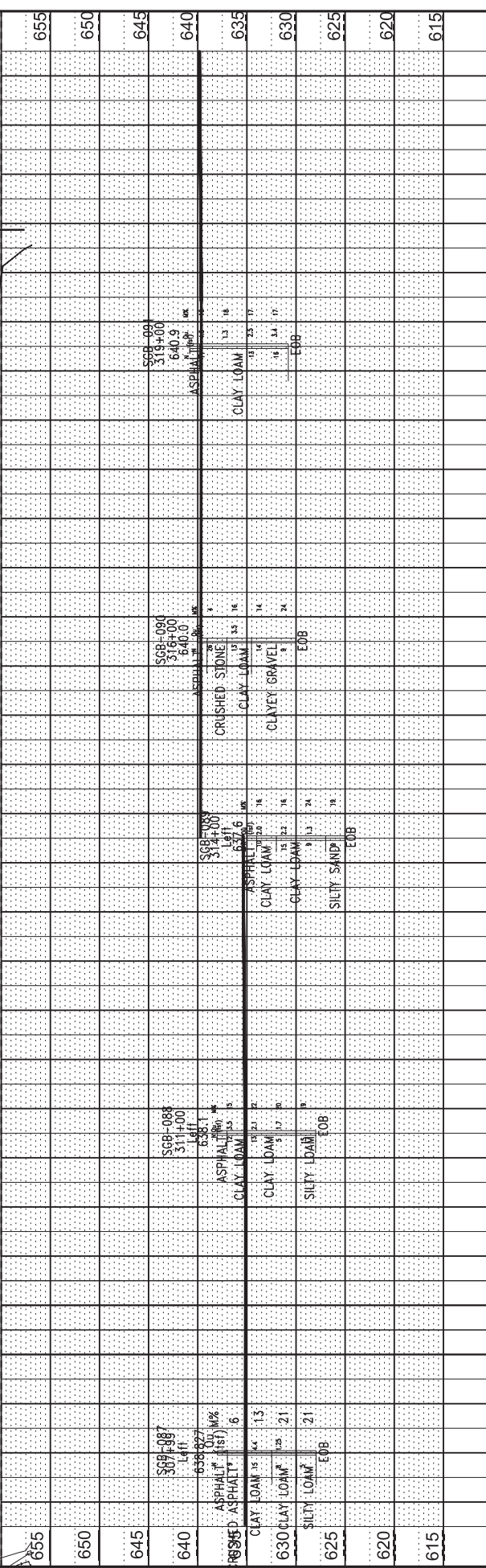
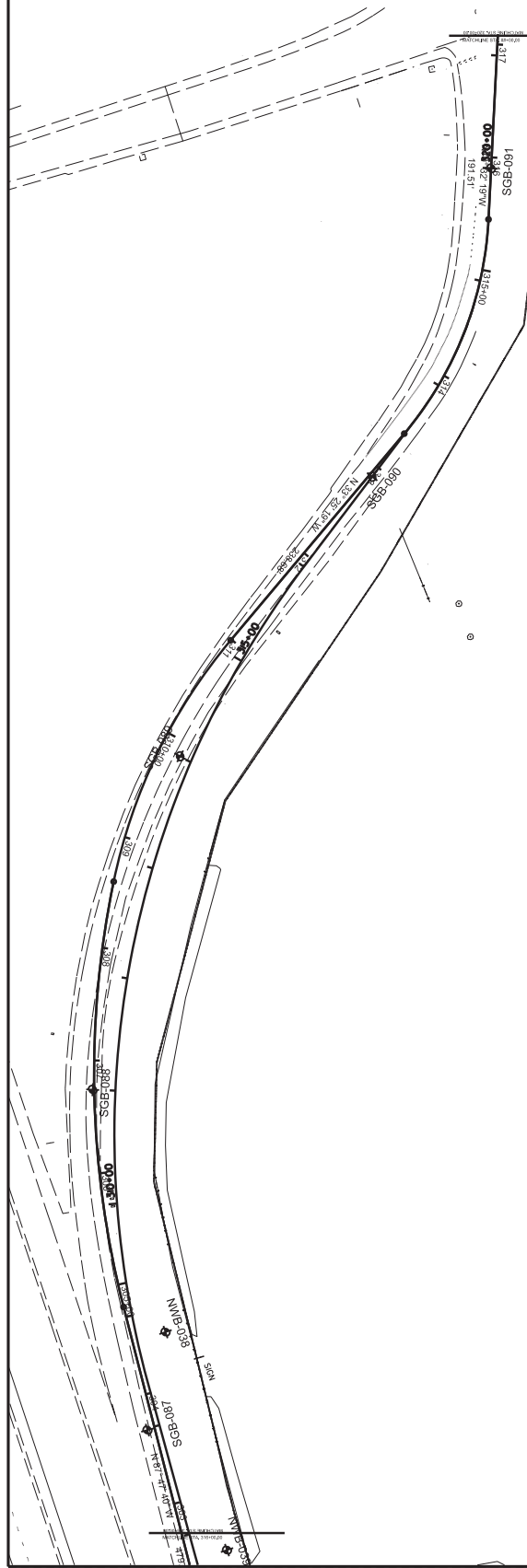
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 SCALE: #1"=100'
 SHEET 26 OF 26
 \$14,200,000 STA. 215+00
 1-88 FROM RIDGE ROAD TO US ROUTE 38
 PREFERRED LONG-TERM IMPROVEMENT PLAN
 PLAN AND PROFILE

GEO SERVICES, INC.
 USER NAME: WISNER
 PLOT SCALE: ESKLER
 PLOT DATE: ESKLER



Station	660	655	650	645	640	635	630	625	620
400+00									
401+00									
402+00									
403+00									
404+00				SCR-087 404+00 645.0 ASPHALT Left	SCR-093 407+00 642.0 ASPHALT Left	SCR-094 410+00 645.0 ASPHALT Left	SCR-095 413+00 643.0 ASPHALT Left		
405+00				CLAY GRAVEL & STONE	CRUSHED ASPHALT & STONE				
406+00									
407+00									
408+00									
409+00									
410+00									
411+00									
412+00									
413+00									
414+00									
415+00									

FILE NAME #123456789	USER NAME J. M. SMITH	DESIGNED CHECKED DRAIN CHECKED	REVISIONS REVISION REVISION REVISION	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	COUNTY #1-00	SECTION #1-00	SHEET #1-00	SHEET #1-00	CONTRACT NO. #1-00
1-88 FROM RIDGE ROAD TO US ROUTE 38 PREFERRED LONG-TERM IMPROVEMENT PLAN PLAN AND PROFILE			SCALE: #1-00	SCALE: #1-00	SHEET 127+00 OF	1780.000 051.00 ILLINOIS LTD. PROJECT			
PLAN DATE: _____ BY: _____ CHECKED: _____ DRAWN: _____ PLOTTED: _____ PRINTED: _____ NOTE BOOK: _____					PROFILE DATE: _____ BY: _____ CHECKED: _____ DRAWN: _____ PLOTTED: _____ PRINTED: _____ NOTE BOOK: _____				



DATE	BY	REVISION

DATE	BY	REVISION

FILE NO.	307+00	308+500	310+00	312+00	313+00	314+00	315+00	316+00	317+00	318+00	319+00	320+00	321+00	322+00
DESIGNED														
CHECKED														
APPROVED														

USER NAME = ADMIN
 DATE = 1/15/2014
 TIME = 10:10:00 AM

Geo Services, Inc.

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

1-88 FROM RIDGE ROAD TO US ROUTE 30
 PREFERRED LONG-TERM IMPROVEMENT PLAN
 PLAN AND PROFILE
 SHEET 28-00 OF 28-00 | STA. 307+00 TO STA. 322+00

SCALE: #1"=100'
 COUNTY #00
 TOTAL SHEETS 28
 SHEET NO. 28
 CONTRACT NO. #00

APPENDIX D

SOIL BORING/CORE LOGS



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
 805 Amherst Court, Suite 204
 Naperville, Illinois 60565
 (630) 355-2838

FAI Route 80 from
 Chicago Street to US

SOIL BORING LOG

Date 3/1/22

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY DJ
 SECTION 15 LOCATION SW 1/4, SEC. 15, TWP. T35N, RNG. R30E, 3rd PM,
Northing 1765493.879, Easting 1055868.984
 COUNTY Will DRILLING METHOD Hollow Stem Auger/Rotary HAMMER TYPE CME Automatic

STRUCT. NO. <u>-</u>	D E P T H	B L O W S	U C S	M O I S T	Surface Water Elev. <u>n/a</u> ft
Station <u>-</u>					Stream Bed Elev. <u>n/a</u> ft
BORING NO. <u>NWB-002</u>	(ft)	(/6")	(tsf)	(%)	Groundwater Elev.: First Encounter <u>Dry</u> ft
Station <u>112+14</u>					Upon Completion <u>n/a</u> ft
Offset <u>31 ft Left</u>					After <u>-</u> Hrs. <u>-</u> ft
Ground Surface Elev. <u>541.64</u> ft					

Soil Description	Depth (ft)	Blow Count (/6")	UCS (tsf)	Moisture (%)	
SANDY TOPSOIL-black	540.64			32	
CLAY LOAM-brown spotted black-stiff (Fill)		50/1"	1.25 P	18	
	538.64				
CRUSHED STONE-very dense		50/3"		2	
	-5				
		5			
		50/2"		25	
		21			
	-10	50/1"		12	
		18			
		50/2"		10	
		50/3"			
	-15			7	
	525.64				
Auger Refusal @ -16.0'. Possible Bedrock. End Of Boring. Boring backfilled with cuttings.		50/1"		7	
	-20				

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)
 BBS, form 137 (Rev. 8-99)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204
Naperville, Illinois 60565
(630) 355-2838
FAI Route 80 from
Chicago Street to US
Route 30

SOIL BORING LOG

Page 1 of 1

Date 2/21/22

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY DJ

SECTION 15 LOCATION SE 1/4, SEC. 15, TWP. T35N, RNG. R30E, 3rd PM,

Northing 1765425.304, Easting 1056771.242

COUNTY Will DRILLING METHOD Hollow Stem Auger/Rotary HAMMER TYPE CME Automatic

STRUCT. NO. -
Station -

BORING NO. NWB-005
Station 103+26
Offset 26.5 ft Left
Ground Surface Elev. 565.72 ft

D
E
P
T
H

B
L
O
W
S

U
C
S

M
O
I
S
T

(ft) (1/6") (tsf) (%)

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft
Groundwater Elev.:
First Encounter Dry ft
Upon Completion n/a ft
After - Hrs. - ft

TOPSOIL-black				33
564.22	3			
SILTY CLAY-dark brown spotted black-stiff (Fill)	4 3	1.75 P	19	
561.22	2 2		27	
FRACTURED ROCK-very dense	-5	50/4"		
559.72				
Borehole continued with rock coring.				
-10				
-15				
-20				

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204
Naperville, Illinois 60565
(630) 355-2838

SOIL BORING LOG

ROUTE Chicago Street to US Route 30 DESCRIPTION I-80 Phase II LOGGED BY DJ
SECTION 15 LOCATION SE 1/4, SEC. 15, TWP. T35N, RNG. R30E, 3rd PM, Northing 1057583.5, Easting 1765457
COUNTY Will DRILLING METHOD Hollow Stem Auger/Rotary HAMMER TYPE CME Automatic

STRUCT. NO. <u>-</u>	DEPTH	UCS	MOIST	Surface Water Elev. <u>n/a</u> ft
Station <u>-</u>				Stream Bed Elev. <u>n/a</u> ft
BORING NO. <u>NWB-009</u>		Qu		Groundwater Elev.: <u>-</u> ft
Station <u>751+00</u>				First Encounter <u>Dry</u> ft
Offset <u>97.7 ft Left</u>				Upon Completion <u>n/a</u> ft
Ground Surface Elev. <u>577.90</u> ft				After <u>-</u> Hrs. <u>-</u> ft

DESCRIPTION	DEPTH (ft)	UCS (tsf)	MOIST (%)	Notes
TOPSOIL with Stone-black-very loose (Fill)	0		9	
	3			
	2		25	
	1			
574.90				
GRAVEL & STONE-brown-very loose (Fill)	4			
	6		8	
	7			
572.40				
SILTY CLAY LOAM-brown-very stiff (Fill)	4			
570.90	50/4"	2.75	13	
Drillers Observation: Weathered/Fractured Rock	569.90	P		
Borehole continued with rock coring.				
	-10			
	-15			
	-20			

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) BBS, form 137 (Rev. 8-99)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204
Naperville, Illinois 60565
(630) 355-2838
FAI Route 80 from
Chicago Street to US
Route 30

SOIL BORING LOG

Page 1 of 1

Date _____

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY _____

SECTION 15 LOCATION SE 1/4, SEC. 15, TWP. T35N, RNG. R30E, 3rd PM,

Northing 1765500.579, Easting 1057988.341

COUNTY Will DRILLING METHOD Hollow Stem Auger/Rotary HAMMER TYPE CME Automatic

STRUCT. NO. -
Station -

BORING NO. NWB-011
Station 755+03
Offset 129.8 ft Left
Ground Surface Elev. 568.21 ft

D
E
P
T
H

(ft)

B
L
O
W
S

(/6")

U
C
S

Qu
(tsf)

M
O
I
S
T

(%)

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft
Groundwater Elev.:
First Encounter Dry ft
Upon Completion n/a ft
After - Hrs. - ft

ASPHALT/GRAVEL	567.21
SILTY CLAY with gravel-brown-grey-stiff(CL)	564.71
SANDY CLAY LOAM-brown, grey-Hard	-5
CLAYEY SAND & GRAVEL -brown, grey-Hard	562.21
CRUSHED STONE with sand -grey	559.71
LIMESTONE with sand -gray	557.21
	553.21 -15

End Of Boring @ -15.0'. Boring backfilled with cuttings.

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
 805 Amherst Court, Suite 204
 Naperville, Illinois 60565
 (630) 355-2838
 FAI Route 80 from
 Chicago Street to US
 Route 30

SOIL BORING LOG

Date 3/4/22

ROUTE DESCRIPTION I-80 Phase II LOGGED BY TC

SECTION 15 LOCATION SW 1/4, SEC. 15, TWP. T35N, RNG. R30E, 3rd PM,

 Northing 1764691.5, Easting 1055609.2

COUNTY Will DRILLING METHOD Hollow Stem Auger/Rotary HAMMER TYPE CME Automatic

STRUCT. NO. <u> - </u>	D E P T H	B L O W S	U C S Qu	M O I S T	Surface Water Elev. <u> n/a </u> ft
Station <u> - </u>					Stream Bed Elev. <u> n/a </u> ft
BORING NO. <u> NWB-012 </u>					Groundwater Elev.:
Station <u> 53+16 </u>					First Encounter <u> Dry </u> ft
Offset <u> 42 ft Right </u>					Upon Completion <u> n/a </u> ft
Ground Surface Elev. <u> 556.00 </u> ft	(ft)	(/6")	(tsf)	(%)	After <u> - </u> Hrs. <u> - </u> ft

10.0" ASPHALT	555.17			
CRUSHED STONE-medium dense		8		
		8	4	
		5		
	553.00			
Drillers Observation: Apparent Bedrock				
	551.50			
Borehole continued with rock coring.	-5			
	-10			
	-15			
	-20			

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
 805 Amherst Court, Suite 204
 Naperville, Illinois 60565
 (630) 355-2838
 FAI Route 80 from
 Chicago Street to US
 Route 30

SOIL BORING LOG

ROUTE Route 30 **DESCRIPTION** I-80 Phase II **LOGGED BY** TC

SECTION 15 **LOCATION** SW 1/4, SEC. 15, TWP. T35N, RNG. R30E, 3rd PM,

Northing 1764890.1, Easting 1055651.9

COUNTY Will **DRILLING METHOD** Hollow Stem Auger/Rotary **HAMMER TYPE** CME Automatic

STRUCT. NO. <u>-</u>	D	B	U	M	Surface Water Elev. <u>n/a</u> ft
Station <u>-</u>	E	L	C	O	Stream Bed Elev. <u>n/a</u> ft
	P	O	S	I	
BORING NO. <u>NWB-013</u>	T	W	Qu	S	Groundwater Elev.:
Station <u>11+00</u>	H	S		T	First Encounter <u>Dry</u> ft
Offset <u>2 ft Right</u>					Upon Completion <u>n/a</u> ft
Ground Surface Elev. <u>549.00</u> ft	(ft)	(/6")	(tsf)	(%)	After <u>-</u> Hrs. <u>-</u> ft

10.0" ASPHALT					
548.17					
CLAY LOAM-brown-very stiff (Fill)		21		18	
		3			
		5			
545.50					
Drillers Observation: Fractured/Weathered Rock		50/0"		NR	
544.00	-5				
Drillers Observation: Apparent Bedrock					
543.00					
Borehole continued with rock coring.					
	-10				
	-15				
	-20				

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
 805 Amherst Court, Suite 204
 Naperville, Illinois 60565
 (630) 355-2838
 FAI Route 80 from
 Chicago Street to US
 Route 30

SOIL BORING LOG

Date 3/8/22

ROUTE Route 30 **DESCRIPTION** I-80 Phase II **LOGGED BY** TC

SECTION 15 **LOCATION** SW 1/4, SEC. 15, TWP. T35N, RNG. R30E, 3rd PM,

Northing 1764993.7, Easting 1055822.9

COUNTY Will **DRILLING METHOD** Hollow Stem Auger/Rotary **HAMMER TYPE** CME Automatic

STRUCT. NO. <u>-</u>	D E P T H B L O W S U C S M O I S T U R E Qu (ft) (/6") (tsf) (%)	Surface Water Elev. <u>n/a</u> ft
Station <u>-</u>		Stream Bed Elev. <u>n/a</u> ft
BORING NO. <u>NWB-014</u>		Groundwater Elev.:
Station <u>12+99</u>		First Encounter <u>547.7</u> ft ▼
Offset <u>11.7 ft Left</u>		Upon Completion <u>n/a</u> ft
Ground Surface Elev. <u>553.70</u> ft		After <u>-</u> Hrs. <u>-</u> ft

14.0" ASPHALT	552.53			
CRUSHED ASPHALT-very dense		50/5"		3
	550.70			
CRUSHED STONE-medium dense		12		8
		17		8
		-5		
		▼		
		5		
546.70		50/0"		2
Borehole continued with rock coring.				
	-10			
	-15			
	-20			

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
 805 Amherst Court, Suite 204
 Naperville, Illinois 60565
 (630) 355-2838
 FAI Route 80 from
 Chicago Street to US
 Route 30

SOIL BORING LOG

Page 1 of 1

Date 3/8/22

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY TC

SECTION 15 LOCATION SE 1/4, SEC. 15, TWP. T35N, RNG. R30E, 3rd PM,

Northing 1765109.6, Easting 1055986.5

COUNTY Will DRILLING METHOD Hollow Stem Auger/Rotary HAMMER TYPE CME Automatic

STRUCT. NO. -
 Station -

BORING NO. NWB-015
 Station 15+00
 Offset 11.2 ft Right
 Ground Surface Elev. 555.70 ft

D E P T H S	B L O W S	U C S Qu	M O I S T U R E
(ft)	(/6")	(tsf)	(%)

Surface Water Elev. n/a ft
 Stream Bed Elev. n/a ft
 Groundwater Elev.:
 First Encounter Dry ft
 Upon Completion n/a ft
 After - Hrs. - ft

16.0" ASPHALT			
554.37	35		
CRUSHED ASPHALT-very dense	50/4"		3
552.70			
Drillers Observation: Apparent Bedrock	50/0"		NR
551.70			
Borehole continued with rock coring.			
-5			
-10			
-15			
-20			

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204
Naperville, Illinois 60565
(630) 355-2838
FAI Route 80 from
Chicago Street to US
Route 30

SOIL BORING LOG

Page 1 of 1

Date 3/15/22

ROUTE DESCRIPTION I-80 Phase II LOGGED BY TC

SECTION 15 LOCATION SE 1/4, SEC. 15, TWP. T35N, RNG. R30E, 3rd PM,

 Northing 1765208 , Easting 1056158.5

COUNTY Will DRILLING METHOD Hollow Stem Auger/Rotary HAMMER TYPE CME Automatic

STRUCT. NO. -
Station -

D
E
P
T
H

B
L
O
W
S

U
C
S

Qu

M
O
I
S
T

(ft)

(/6")

(tsf)

(%)

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft

BORING NO. NWB-016
Station 17+00
Offset 2.1 ft Left
Ground Surface Elev. 558.60 ft

Groundwater Elev.:
First Encounter Dry ft
Upon Completion n/a ft
After - Hrs. - ft

11.0" ASPHALT	557.68			
CRUSHED STONE-medium dense		16		4
		16		
	555.60	12		
Drillers Observation: Apparent Bedrock	554.60	50/1"		
Borehole continued with rock coring.	-5			
	-10			
	-15			
	-20			

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204
Naperville, Illinois 60565
(630) 355-2838

FAI Route 80 from
Chicago Street to US

SOIL BORING LOG

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY TC

SECTION 15 LOCATION SE 1/4, SEC. 15, TWP. T35N, RNG. R30E, 3rd PM, Northing 1765240.1, Easting 1056356.1

COUNTY Will DRILLING METHOD Hollow Stem Auger/Rotary HAMMER TYPE CME Automatic

STRUCT. NO. _____ Station _____	D E P T H	B L O W S	U C S Qu	M O I S T T	Surface Water Elev. _____ n/a ft Stream Bed Elev. _____ n/a ft Groundwater Elev.: First Encounter _____ Dry ft Upon Completion _____ n/a ft After _____ Hrs. _____ - ft
BORING NO. <u>NWB-017</u> Station <u>19+00</u> Offset <u>4.5 ft Left</u> Ground Surface Elev. <u>560.80</u> ft	(ft)	(/6")	(tsf)	(%)	

11.0" ASPHALT					
559.88					
CRUSHED ASPHALT-medium dense		25			
		12		4	
		9			
557.80					
Drillers Observation: Apparent Bedrock					
557.30					
Borehole continued with rock coring.					
	-5				
	-10				
	-15				
	-20				

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
 805 Amherst Court, Suite 204
 Naperville, Illinois 60565
 (630) 355-2838

FAI Route 80 from
 Chicago Street to US
 Route 30

SOIL BORING LOG

Date 3/24/22

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY MB

SECTION 14 LOCATION SW 1/4, SEC. 14, TWP. T35N, RNG. R10E, 3rd PM,

Northing 1765217.686, Easting 1059094.5

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. <u>-</u>	D	B	U	M	Surface Water Elev. <u>n/a</u> ft	D	B	U	M
Station <u>-</u>	E	L	C	O	Stream Bed Elev. <u>n/a</u> ft	E	L	C	O
BORING NO. <u>NWB-018A</u>	P	O	S	I	Groundwater Elev.:	T	W	S	S
Station <u>766+22</u>	T	S	Qu	T	First Encounter <u>619.636</u> ft▼	H	S	Qu	T
Offset <u>60.7 ft Right</u>	H	S			Upon Completion <u>n/a</u> ft	(ft)	(/6")	(tsf)	(%)
Ground Surface Elev. <u>624.64</u> ft	(ft)	(/6")	(tsf)	(%)	After <u>-</u> Hrs. <u>-</u> ft				

10.0" ASPHALT	623.80				CLAY LOAM-brown, gray & black-stiff to very stiff (Fill) (continued)				
CRUSHED STONE-loose		6		5			12	2.10	21
		6					10	B	
		3					12		
	621.64								
CLAY LOAM-brown, gray & black-stiff to very stiff (Fill)		3					6		
		4	1.20	23			8	2.20	22
		3	B			599.64	10	B	
	▼-5				End Of Boring @ -25.0'. Boring backfilled with cuttings.				
		3							
		10	3.75	23					
		10	P						
		4							
		4	1.50	26					
	-10	7	P						
		3							
		2	1.30	22					
		2	B						
		3							
		9	3.80	24					
	-15	9	B						
		3							
		6	2.00	19					
		7	P						
		4							
		6	1.50	19					
	-20	9	P						

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
 805 Amherst Court, Suite 204
 Naperville, Illinois 60565
 (630) 355-2838

FAI Route 80 from
 Chicago Street to US

SOIL BORING LOG

Date 3/24/22

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY MB

SECTION 14 LOCATION SW 1/4, SEC. 14, TWP. T35N, RNG. R10E, 3rd PM,

Northing 1765188.349, Easting 1059276.34

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. -
 Station -

BORING NO. NWB-019A
 Station 768+06
 Offset 63.9 ft Right
 Ground Surface Elev. 628.55 ft

DEPTH TH S (ft)	BLOW S (/6")	UCS Qu (tsf)	MOIST T (%)	Surface Water Elev. <u>n/a</u> ft	Stream Bed Elev. <u>n/a</u> ft	GROUNDWATER ELEV. First Encounter <u>Dry</u> ft	Upon Completion <u>n/a</u> ft	After <u>-</u> Hrs. <u>-</u> ft	DEPTH TH S (ft)	BLOW S (/6")	UCS Qu (tsf)	MOIST T (%)
-----------------------	--------------------	--------------------	-------------------	-----------------------------------	--------------------------------	--	-------------------------------	---------------------------------	-----------------------	--------------------	--------------------	-------------------

12.0" ASPHALT									608.05			
	627.55											
CLAY LOAM-brown-very dense (Possible Fill)	12									7		
	8	3.50	18							4		9
	4	P								6		
	6									6		
	7	3.50	17							6		9
	-5	6	B						603.55	-25	7	
	6											
	8	3.30	16									
	8	B										
	7											
	9	3.40	16									
	-10	13	B							-30		
becoming gray @ -10.5'	6											
	9	2.90	15									
	11	B										
	5											
	9	2.20	15									
	-15	8	B							-35		
	7											
	4	3.00	15									
	9	P										
	6											
	11	2.50	17									
	-20	13	P							-40		

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204
Naperville, Illinois 60565
(630) 355-2838

FAI Route 80 from
Chicago Street to US

SOIL BORING LOG

Page 1 of 1

Date 4/4/22

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY RT

SECTION 14 LOCATION SW 1/4, SEC. 14, TWP. T35N, RNG. R10E, 3rd PM, Northing, Easting

COUNTY Will DRILLING METHOD Hand Auger HAMMER TYPE Manual

STRUCT. NO. -
 Station -

BORING NO. NWB-020
 Station
 Offset ft Right
 Ground Surface Elev. 0.00 ft

DEPTH (ft)	BLOW COUNT (blows/6")	UCS (tsf)	MOISTURE (%)
------------	-----------------------	-----------	--------------

Surface Water Elev. n/a ft
 Stream Bed Elev. n/a ft

Groundwater Elev.:
 First Encounter Dry ft
 Upon Completion Dry ft
 After - Hrs. - ft

6.0"	TOPSOIL-black	-0.50	AS	35
	CLAY LOAM-brown-hard		AS	
			4.00 P	19
			AS	
			3.50 P	20
			AS	
		-5	3.50 P	21
			AS	
			4.50 P	20
		-8.00		
	Auger Refusal @ -8.0'. End Of Boring.			
		-10		
		-15		
		-20		

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, form 137 (Rev. 8-99)

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
 805 Amherst Court, Suite 204
 Naperville, Illinois 60565
 (630) 355-2838

FAI Route 80 from
 Chicago Street to US
 Route 30

SOIL BORING LOG

Date 3/25/22

ROUTE DESCRIPTION I-80 Phase II LOGGED BY MB

SECTION 14 LOCATION SW 1/4, SEC. 14, TWP. T35N, RNG. R10E, 3rd PM,

Northing 1765165.183, Easting 1059474.248

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. -
 Station -

BORING NO. NWB-020A
 Station 770+03
 Offset 63.7 ft Right
 Ground Surface Elev. 631.64 ft

DEPTH TH S (ft)	BLOW S (/6")	UCS Qu (tsf)	MOIST S (%)	Surface Water Elev.	ft	DEPTH TH S (ft)	BLOW S (/6")	UCS Qu (tsf)	MOIST S (%)
				Stream Bed Elev.	ft				
				n/a	ft				
				n/a	ft				
				Groundwater Elev.:					
				First Encounter	Dry	ft			
				Upon Completion	n/a	ft			
				After - Hrs.	-	ft			
6.0" ASPHALT	631.14				611.14				
CLAY LOAM-brown & gray-stiff to hard				SANDY LOAM-brown-medium dense			12		
	4						8		16
	9	4.50	12				12		
	9	P			608.64				
				SAND-brown-medium dense			5		
	2						4		7
	3	1.20	19				6		
	-5	2	B		606.64	-25			
				End Of Boring @ -25.0'. Boring backfilled with cuttings.					
	5								
	8	2.50	19						
	9	B							
	4								
	7	1.80	18						
	-10	5	B			-30			
	4								
	6	2.20	21						
	8	B							
	5								
	8	2.80	18						
	-15	11	B			-35			
	5								
	8	3.00	16						
	9	P							
	4								
	5	2.50	17						
	-20	10	P			-40			

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
 805 Amherst Court, Suite 204
 Naperville, Illinois 60565
 (630) 355-2838

FAI Route 80 from
 Chicago Street to US
 Route 30

SOIL BORING LOG

Date 3/28/22

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY MB

SECTION 14 LOCATION SW 1/4, SEC. 14, TWP. T35N, RNG. R10E, 3rd PM,

Northing 1765148.842, Easting 1059666.081

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. -
 Station -

BORING NO. NWB-021A
 Station 771+93
 Offset 63.9 ft Right
 Ground Surface Elev. 633.85 ft

D
E
P
T
H

 B
L
O
W
S

 U
C
S

 M
O
I
S
T

 (ft) (/6") (tsf) (%)

Surface Water Elev. n/a ft
 Stream Bed Elev. n/a ft
 Groundwater Elev.:
 First Encounter Dry ft
 Upon Completion n/a ft
 After - Hrs. - ft

D
E
P
T
H

 B
L
O
W
S

 U
C
S

 M
O
I
S
T

 (ft) (/6") (tsf) (%)

Soil Description	Depth (ft)	Blow Count (/6")	UCS (tsf)	Moisture (%)	Soil Description	Depth (ft)	Blow Count (/6")	UCS (tsf)	Moisture (%)
12.0" ASPHALT	632.85				CLAY LOAM-brown-very stiff to hard (continued)				
		9				3			
		8	5.90	16		5	2.50	17	
		8	B			6	B		
		5				6			
		4	2.70	19		10	3.10	18	
	-5	7	B			7	B		
					608.85	-25			
		6			End Of Boring @ -25.0'. Boring backfilled with cuttings.				
		5	3.00	22					
		5	B						
		4							
		4	3.10	22					
	-10	6	B			-30			
		2							
		4	3.60	24					
		4	B						
		6							
		9	5.30	17					
	-15	9	B			-35			
		4							
		8	2.75	18					
		10	P						
		4							
		7	4.90	20					
	-20	8	B			-40			

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
 805 Amherst Court, Suite 204
 Naperville, Illinois 60565
 (630) 355-2838

FAI Route 80 from
 Chicago Street to US
 Route 30

SOIL BORING LOG

Date 3/28/22

ROUTE _____ DESCRIPTION I-80 Phase II LOGGED BY MB

SECTION 14 LOCATION SW 1/4, SEC. 14, TWP. T35N, RNG. R10E, 3rd PM,

Northing 1765136.923, Easting 1059878.746

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. -
 Station -

BORING NO. NWB-022A
 Station 774+04
 Offset 65.4 ft Right
 Ground Surface Elev. 635.57 ft

D E P T H S H	B L O W S	U C S Qu	M O I S T	Surface Water Elev. n/a ft	D E P T H	B L O W S	U C S Qu	M O I S T
(ft)	(/6")	(tsf)	(%)	Stream Bed Elev. n/a ft	(ft)	(/6")	(tsf)	(%)

12.0" ASPHALT				615.07				
634.57				SANDY LOAM-dark brown-loose	▼			
CLAY LOAM-brown, gray & spotted black-very stiff to hard (Fill)	4					2		
	4	4.20	18			3		23
	5	B				2		
				612.57				
	3			CLAY LOAM-brown-very stiff				
	3	3.30	20			5		
	4	B				7	2.70	21
	-5			610.57	-25	9	B	
				End Of Boring @ -25.0'. Boring backfilled with cuttings.				
	4							
	6	3.50	24					
	9	B						
627.57								
CLAY LOAM-brown-very stiff	6							
	7	3.70	18					
	9	B						
	-10							
	4							
	6	3.70	18					
	9	B						
	5							
	7	4.80	19					
	8	B						
	-15							
	4							
	5	2.30	20					
	5	B						
	5							
	4	3.00	20					
	5	B						
	-20							

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204
Naperville, Illinois 60565
(630) 355-2838

FAI Route 80 from
Chicago Street to US
Route 30

SOIL BORING LOG

ROUTE DESCRIPTION I-80 Phase II LOGGED BY TC

SECTION 14 LOCATION SW 1/4, SEC. 14, TWP. T35N, RNG. R10E, 3rd PM,

Northing 1765123.92, **Easting** 1060089.567

COUNTY Will DRILLING METHOD Hand Auger HAMMER TYPE CME Automatic

STRUCT. NO. -
Station -

BORING NO. NWB-023
Station
Offset ft
Ground Surface Elev. 636.23 ft

**D
E
P
T
H** (ft)
**B
L
O
W
S** (/6")
**U
C
S** (tsf)
**M
O
I
S
T** (%)

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft
Groundwater Elev.:
First Encounter 630.227 ft▼
Upon Completion ft
After - Hrs. - ft

8.0" TOPSOIL-black	635.56	HA		
CLAY LOAM-brown-medium stiff to hard		HA		24
			0.75 P	27
		HA		
			1.00 P	25
		HA		
		-5	1.00 P	23
	▼	HA		
			4.50 P	19
		HA		
			3.50 P	18
	626.23	-10		

Auger Refusal @ -10.0'. End Of Boring.

-15

-20

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
 805 Amherst Court, Suite 204
 Naperville, Illinois 60565
 (630) 355-2838
 FAI Route 80 from
 Chicago Street to US
 Route 30

SOIL BORING LOG

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY TC

SECTION 14 LOCATION SW 1/4, SEC. 14, TWP. T35N, RNG. R10E, 3rd PM,

Northing 1765131.191, Easting 1060080.639

COUNTY Will DRILLING METHOD Hand Auger HAMMER TYPE CME Automatic

STRUCT. NO. <u>-</u>	D	B	U	M	Surface Water Elev. <u>n/a</u> ft	D	B	U	M
Station <u>-</u>	E	L	C	O	Stream Bed Elev. <u>n/a</u> ft	E	L	C	O
BORING NO. <u>NWB-023A</u>	P	O	S	I	Groundwater Elev.:	T	W	S	S
Station <u>776+03</u>	H	S	Qu	T	First Encounter <u>Dry</u> ft	H	S	Qu	T
Offset <u>68.5 ft Right</u>	(ft)	(/6")	(tsf)	(%)	Upon Completion <u>n/a</u> ft	(ft)	(/6")	(tsf)	(%)
Ground Surface Elev. <u>637.13</u> ft					After <u>-</u> Hrs. <u>-</u> ft				

12.0" ASPHALT					CLAY LOAM-brown & gray-very stiff to hard (continued)				
636.13							5		
CLAY LOAM with STONE-brown-hard (Fill)		22					6	2.75	17
		8	4.00	14			10	P	
634.13		8	P						
CLAY LOAM-brown & gray-very stiff to hard		4					7		
		6	5.40	17			10	4.60	21
		8	B			612.13	12	B	
	-5				End Of Boring @ -25.0'. Boring backfilled with cuttings.				
		3							
		5	2.00	24					
		6	P						
		4							
		4	1.20	25					
	-10	4	B						
		4							
		8	3.75	23					
		9	P						
		7							
		12	5.60	17					
	-15	12	B						
		7							
		8	3.20	17					
		13	B						
		4							
		5	2.00	18					
	-20	9	P						

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204
Naperville, Illinois 60565
(630) 355-2838

FAI Route 80 from
Chicago Street to US

SOIL BORING LOG

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY TC

SECTION 14 LOCATION SW 1/4, SEC. 14, TWP. T35N, RNG. R10E, 3rd PM,

Northing 1765127.549, Easting 1060293.859

COUNTY Will DRILLING METHOD Hand Auger HAMMER TYPE CME Automatic

STRUCT. NO. -
Station -

BORING NO. NWB-024
Station _____
Offset ft
Ground Surface Elev. 637.40 ft

D
E
P
T
H
(ft)

B
L
O
W
S
(/6")

U
C
S
Qu
(tsf)

M
O
I
S
T
(%)

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft
Groundwater Elev.:
First Encounter Dry ft
Upon Completion Dry ft
After - Hrs. - ft

TOPSOIL-black	HA		
636.40			28
CLAY LOAM-brown-stiff to hard	HA		
		1.50	25
	HA	P	
		1.75	26
		P	
	HA		
-5		3.25	16
		P	
	HA		
		4.50	16
		P	
629.40			
Auger Refusal @ -8.0'. End Of Boring.			
-10			
-15			
-20			

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
 805 Amherst Court, Suite 204
 Naperville, Illinois 60565
 (630) 355-2838

FAI Route 80 from
 Chicago Street to US
 Route 30

SOIL BORING LOG

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY TC

SECTION 14 LOCATION SW 1/4, SEC. 14, TWP. T35N, RNG. R10E, 3rd PM,

Northing 1060278.846, Easting 176135.13

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. Station	DEPTH H	BLOW S	UCS Qu	MOIST T	Surface Water Elev. _____ n/a ft	Stream Bed Elev. _____ n/a ft	DEPTH H	BLOW S	UCS Qu	MOIST T
BORING NO. <u>NWB-024A</u> Station <u>778+00</u> Offset <u>68.7 ft Right</u> Ground Surface Elev. <u>638.69</u> ft	(ft)	(/6")	(tsf)	(%)			(ft)	(/6")	(tsf)	(%)

11.0" ASPHALT	637.78					CLAY LOAM-brown-stiff to very stiff (continued)				
CLAY LOAM with STONE-brown & black-very stiff (Fill)		35					6			
		11	2.50	14			8	2.30	24	
		8	P				9	B		
635.69										
CLAY LOAM-brown-stiff to very stiff (Fill)		4					6			
		3	1.90	22			9	2.10	25	
		-5	7	B			9	B		
					613.69	End Of Boring @ -25.0'. Boring backfilled with cuttings.	-25			
		3								
		4	2.20	19						
		5	B							
		3								
		3	1.50	20						
		-10	5	P			-30			
		3								
		3	1.90	22						
625.69		5	B							
SITLY CLAY-dark brown & gray-very stiff		3								
		5	2.00	27						
		7	P				-35			
623.19										
CLAY LOAM-brown-stiff to very stiff		5								
		7	2.20	20						
		8	B							
		4								
		8	1.50	18						
		8	P				-40			

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
 805 Amherst Court, Suite 204
 Naperville, Illinois 60565
 (630) 355-2838
 FAI Route 80 from
 Chicago Street to US
 Route 30

SOIL BORING LOG

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY MB

SECTION 14 LOCATION SW 1/4, SEC. 14, TWP. T35N, RNG. R10E, 3rd PM,

Northing 1765141.253, Easting 1060480.479

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. <u>-</u>	D	B	U	M	Surface Water Elev. <u>n/a</u> ft	D	B	U	M
Station <u>-</u>	E	L	C	O	Stream Bed Elev. <u>n/a</u> ft	E	L	C	O
BORING NO. <u>NWB-025A</u>	P	O	S	I	Groundwater Elev.:	T	W	S	S
Station <u>780+02</u>	H	S	Qu	T	First Encounter <u>Dry</u> ft	H	S	Qu	T
Offset <u>68.8 ft Right</u>	(ft)	(/6")	(tsf)	(%)	Upon Completion <u>Dry</u> ft	(ft)	(/6")	(tsf)	(%)
Ground Surface Elev. <u>640.34</u> ft					After <u>-</u> Hrs. <u>-</u> ft				

Soil Description	Depth (ft)	Blow Count (/6")	UCS (tsf)	Moisture (%)	Soil Description	Depth (ft)	Blow Count (/6")	UCS (tsf)	Moisture (%)	
ASPHALT	639.34					619.84				
CLAY LOAM-brown & gray-very stiff to stiff (Apparent Fill)	4				CLAY LOAM-gray-very stiff to hard	6				
	4	3.80	18	9		3.90	20			
	4	B		13		B				
	2			5						
	3	1.70	24	25		4.60	22			
	-5	5	B	615.34		-25	50/2"	B		
	4			End Of Boring @ -25.0'. Boring backfilled with cuttings.						
	5	1.70	18							
	5	B								
	3									
4	2.80	22								
-10	7	B			-30					
2										
3	3.00	19								
4	B									
2										
2	2.25	20								
-15	3	P			-35					
624.84										
SILTY CLAY LOAM-brown & gray-stiff	7									
	12	1.25	18							
	10	P								
	2									
	4	1.75	20							
-20	7	P			-40					

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
 805 Amherst Court, Suite 204
 Naperville, Illinois 60565
 (630) 355-2838
 FAI Route 80 from
 Chicago Street to US
 Route 30

SOIL BORING LOG

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY MB

SECTION 14 LOCATION SW 1/4, SEC. 14, TWP. T35N, RNG. R10E, 3rd PM,

Northing 1765147.173, Easting 1060679.935

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. -
 Station -

BORING NO. NWB-026A
 Station 782+01
 Offset 69.2 ft Right
 Ground Surface Elev. 641.84 ft

DEPTH TH S (ft)	BLOW S (/6")	UCS Qu (tsf)	MOIST T (%)	Surface Water Elev.	ft	DEPTH TH S (ft)	BLOW S (/6")	UCS Qu (tsf)	MOIST T (%)		
				Stream Bed Elev.	ft						
				n/a	ft						
				n/a	ft						
				Groundwater Elev.:							
				First Encounter	<u>625.84</u>	ft▼					
				Upon Completion		ft					
				After - Hrs.	-	ft					
6.0" ASPHALT				641.34		621.34					
CLAY LOAM-brown & gray spotted black-stiff to hard (Fill)	3						25				
	6	3.40	12				50/2"		15		
	4	B									
	6						50/2"				
	6	6.10	18						14		
	-5	6	B			616.84	-25				
				End Of Boring @ -25.0'. Boring backfilled with cuttings.							
	2										
	5	1.50	25								
	5	B									
	2										
	3	1.40	20								
	-10	3	B				-30				
	2										
	4	1.00	27								
	3	P									
	3										
	3	1.00	28								
	-15	2	P				-35				
				626.34							
CLAY LOAM-brown-very stiff to hard	5										
	7	5.90	19								
	11	B									
	7										
	10	3.70	19								
	-20	12	B				-40				

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204
Naperville, Illinois 60565
(630) 355-2838
FAI Route 80 from
Chicago Street to US
Route 30

SOIL BORING LOG

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY TC

SECTION 14 LOCATION SW 1/4, SEC. 14, TWP. T35N, RNG. R10E, 3rd PM,

Northing 1765125.06, Easting 1060880.564

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. -
Station -

BORING NO. NWB-027
Station 784+01
Offset 76.5 ft Right
Ground Surface Elev. 643.17 ft

DEPTH TH (ft)	BLOW S (/6")	UCS Qu (tsf)	MOIST T (%)
---------------------	--------------------	--------------------	-------------------

Surface Water Elev.	<u>n/a</u>	ft
Stream Bed Elev.	<u>n/a</u>	ft
Groundwater Elev.:		
First Encounter	<u>Dry</u>	ft
Upon Completion	<u>Dry</u>	ft
After <u>-</u> Hrs.	<u>-</u>	ft

DEPTH TH (ft)	BLOW S (/6")	UCS Qu (tsf)	MOIST T (%)
---------------------	--------------------	--------------------	-------------------

6.0" CLAYEY TOPSOIL-brown & black	642.67			45	backfilled with cuttings.			
CLAY LOAM-brown & gray-very stiff		4						
		5	3.00	18				
		5	P					
		5						
		8	3.10	16				
		-5	11	B			-25	
		6						
		7	2.00	16				
		10	P					
		8						
becoming gray @ -8.0'		10	3.50	22				
	-10	12	B			-30		
	5							
	6	2.75	18					
	6	P						
	5							
	2	2.00	17					
	-15	9	P			-35		
	6							
	10	3.10	20					
	12	B						
	625.17							
SILTY LOAM-brown-very dense	624.17	50/1"		12				
Auger Refusal @ -19.0'. Possible Bedrock. End Of Boring.	-20					-40		

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204
Naperville, Illinois 60565
(630) 355-2838
FAI Route 80 from
Chicago Street to US
Route 30

SOIL BORING LOG

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY TC

SECTION 14 LOCATION SW 1/4, SEC. 14, TWP. T35N, RNG. R10E, 3rd PM,

Northing 1765152.567, Easting 1061085.365

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. -
Station -

BORING NO. NWB-028
Station 786+07
Offset 76.5 ft Right
Ground Surface Elev. 643.92 ft

D E P T H (ft)	B L O W S (/6")	U C S Qu (tsf)	M O I S T (%)
-------------------------------	--------------------------------	----------------------------	------------------------------

Surface Water Elev.	<u>n/a</u>	ft
Stream Bed Elev.	<u>n/a</u>	ft
Groundwater Elev.:		
First Encounter	<u>632.923</u>	ft▼
Upon Completion		ft
After - Hrs.	<u>-</u>	ft

D E P T H (ft)	B L O W S (/6")	U C S Qu (tsf)	M O I S T (%)
-------------------------------	--------------------------------	----------------------------	------------------------------

6.0" TOPSOIL-black	643.42						Bedrock. End Of Boring. Boring backfilled with cuttings.
CLAY LOAM-brown & gray-very stiff		3			44		
		4	3.50	18			
		5	P				
		7					
		4	3.40	16			
		-5	5	B		-25	
		6					
		12	3.00	17			
		12	P				
becoming gray @ -8.0'		6					
		6	2.75	23			
		-10	11	P		-30	
		▼					
		8					
		8	2.75	19			
		10	P				
		4					
		6	2.00	19			
		-15	7	P		-35	
		4					
		6	2.00	22			
		9	P				
	625.92						
SILTY CLAY LOAM-brown & gray-very stiff		50/4"					
	624.42		2.00	18			
Auger Refusal @ -19.5'. Possible		-20	P			-40	

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
 805 Amherst Court, Suite 204
 Naperville, Illinois 60565
 (630) 355-2838

FAI Route 80 from
 Chicago Street to US
 Route 30

SOIL BORING LOG

Date 2/15/22

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY TC

SECTION 14 LOCATION SE 1/4, SEC. 14, TWP. T35N, RNG. R10E, 3rd PM,

Northing 1765160.651, Easting 1061297.814

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. -
 Station -

BORING NO. NWB-029
 Station 788+19
 Offset 75.1 ft Right
 Ground Surface Elev. 645.65 ft

D E P T H (ft)	B L O W S (/6")	U C S Qu (tsf)	M O I S T (%)	Surface Water Elev. <u>n/a</u> ft	Stream Bed Elev. <u>n/a</u> ft	D E P T H (ft)	B L O W S (/6")	U C S Qu (tsf)	M O I S T (%)
-------------------------------	--------------------------------	----------------------------	------------------------------	-----------------------------------	--------------------------------	-------------------------------	--------------------------------	----------------------------	------------------------------

6.0" CLAYEY TOPSOIL-brown & black	645.15									Auger Refusal @ -20.0'. Possible Bedrock. End Of Boring. Boring backfilled with cuttings.
			33							
CLAY LOAM-brown & gray-stiff to very stiff		4								
		4	3.00	22						
		8	P							
		3								
		3	2.50	18						
	-5	5	P			-25				
		4								
		7	2.50	23						
		12	B							
		4								
		7	1.75	31						
	-10	7	P			-30				
		4								
		8	3.40	25						
		10	B							
	632.65									
SILTY LOAM-brown-loose		3								
		3		22						
		5								
	-15					-35				
	630.15									
CLAY LOAM-gray-very stiff		7								
		9	3.50	15						
		9	P							
	627.65									
CLAYEY GRAVEL-brown-dense		5								
		12		7						
	625.65	-20	27			-40				

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
 805 Amherst Court, Suite 204
 Naperville, Illinois 60565
 (630) 355-2838
 FAI Route 80 from
 Chicago Street to US
 Route 30

SOIL BORING LOG

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY TC

SECTION 13 LOCATION SW 1/4, SEC. 13, TWP. T35N, RNG. R10E, 3rd PM,

Northing 1765122.567, Easting 1061483.393

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. -
 Station -

BORING NO. NWB-030
 Station 790+03
 Offset 118.9 ft Right
 Ground Surface Elev. 653.25 ft

D E P T H (ft)	B L O W S (/6")	U C S Qu (tsf)	M O I S T (%)
-------------------------------	--------------------------------	----------------------------	------------------------------

Surface Water Elev.	<u>n/a</u>	ft
Stream Bed Elev.	<u>n/a</u>	ft
Groundwater Elev.:		
First Encounter	<u>Dry</u>	ft
Upon Completion	<u>Dry</u>	ft
After <u>-</u> Hrs.	<u>-</u>	ft

D E P T H (ft)	B L O W S (/6")	U C S Qu (tsf)	M O I S T (%)
-------------------------------	--------------------------------	----------------------------	------------------------------

6.0" TOPSOIL-black	652.75				backfilled with cuttings.			
CLAY LOAM with Stone-brown-very stiff (Fill)			28					
		4						
		5	2.20	14				
	6	B						
	650.25							
CLAY LOAM-brown & gray-very stiff to hard		4						
		5	2.60	17				
		7	B					
	-5							-25
		5						
		5	4.40	25				
		7	B					
		5						
		7	4.20	25				
	-10	9	B					-30
		5						
		6	3.50	15				
		9	P					
	640.25							
SILTY CLAY LOAM-brown-very stiff		6						
		6	2.50	16				
		6	P					
	-15							-35
	637.75							
CLAY LOAM-brown-very stiff		5						
		7	3.40	17				
		11	B					
	634.25		50/1"	NR				
Auger Refusal @ -19.0'. Possible Bedrock. End Of Boring. Boring	-20							-40

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
 805 Amherst Court, Suite 204
 Naperville, Illinois 60565
 (630) 355-2838

FAI Route 80 from
 Chicago Street to US
 Route 30

SOIL BORING LOG

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY TC

SECTION 14 LOCATION SE 1/4, SEC. 14, TWP. T35N, RNG. R10E, 3rd PM,
Northing 1765181.4, Easting 1061697.3

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. <u>-</u>	D	B	U	M	Surface Water Elev. <u>n/a</u> ft	D	B	U	M
Station <u>-</u>	E	L	C	O	Stream Bed Elev. <u>n/a</u> ft	E	L	C	O
BORING NO. <u>NWB-031</u>	P	O	S	I	Groundwater Elev.:	T	W	S	S
Station <u>792+19</u>	T	S	Qu	T	First Encounter <u>Dry</u> ft	H	S	Qu	T
Offset <u>66.8 ft Right</u>	H	S			Upon Completion <u>Dry</u> ft				
Ground Surface Elev. <u>649.30</u> ft	(ft)	(/6")	(tsf)	(%)	After <u>-</u> Hrs. <u>-</u> ft	(ft)	(/6")	(tsf)	(%)

6.0" CLAYEY TOPSOIL-dark brown & black	648.80				628.80				
				38					
SILTY CLAY-brown-hard		3							
		5	4.00	22					
		6	P						
	646.30								
CLAY LOAM-brown-very stiff		5							
		5	2.20	17					
		-5	7	B					-25
becoming gray @ -5.5'		5							
		8	2.70	19					
		8	B						
		4							
		5	3.00	19					
		-10	8	P					-30
		4							
		5	2.20	22					
		8	B						
		5							
		8	3.00	16					
		-15	12	P					-35
		4							
		5	3.50	14					
		8	P						
	631.30								
FRACTURED ROCK-brown-very dense		15							
		23		6					
		-20	50/2"						-40

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
 805 Amherst Court, Suite 204
 Naperville, Illinois 60565
 (630) 355-2838
 FAI Route 80 from
 Chicago Street to US
 Route 30

SOIL BORING LOG

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY TC

SECTION 14 LOCATION SE 1/4, SEC. 14, TWP. T35N, RNG. R10E, 3rd PM, Northing 1765189, Easting 1061924.2

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. <u>-</u>	D E P T H S	B L O W S	U C S Qu	M O I S T T	Surface Water Elev. <u>n/a</u> ft
Station <u>-</u>					Stream Bed Elev. <u>n/a</u> ft
BORING NO. <u>NWB-032</u>					Groundwater Elev.: <u>-</u> ft
Station <u>794+46</u>					First Encounter <u>Dry</u> ft
Offset <u>66.3 ft Right</u>					Upon Completion <u>Dry</u> ft
Ground Surface Elev. <u>649.50</u> ft					After <u>-</u> Hrs. <u>-</u> ft

Soil Description	Depth (ft)	Blow Count (/6")	UCS (tsf)	Moisture (%)	
6.0" TOPSOIL-black	649.00				
CLAY LOAM-brown & gray-very stiff		5		55	
		5	3.00	18	
		6	P		
		5			
		5	2.20	21	
		-5	5	B	
		5			
		8	3.00	21	
		11	P		
	becoming gray @ -8.0'		4		
	4	2.00	20		
	-10	4	P		
639.00					
SILTY CLAY-gray-medium stiff		2			
		3	0.50	15	
		3	P		
636.50					
CLAY LOAM-gray-very stiff		3			
		5	2.50	16	
		-15	7	B	
		5			
		15	2.50	16	
	50/1"	P			
631.00					
Auger Refusal @ -18.5'. Possible Bedrock. End Of Boring. Boring backfilled with cuttings.		50/1"		NR	
	-20				

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
 805 Amherst Court, Suite 204
 Naperville, Illinois 60565
 (630) 355-2838
 FAI Route 80 from
 Chicago Street to US
 Route 30

SOIL BORING LOG

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY TC

SECTION 14 LOCATION SE 1/4, SEC. 14, TWP. T35N, RNG. R10E, 3rd PM,

Northing 1765172.834, Easting 1062082.047

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. -
 Station -

BORING NO. NWB-033
 Station 100+69
 Offset 34.3 ft Right
 Ground Surface Elev. 647.14 ft

DEPTH (ft)	BLOW COUNT (/6")	UCS (tsf)	MOISTURE (%)
---------------	------------------------	--------------	-----------------

Surface Water Elev. n/a ft
 Stream Bed Elev. n/a ft
 Groundwater Elev.:
 First Encounter Dry ft
 Upon Completion Dry ft
 After - Hrs. - ft

CLAY LOAM with Stone-brown (Fill)	646.14			14	
ORGANIC SILTY CLAY-black-medium dense	644.14	5 9 10			50
SILTY CLAY-dark brown & gray-very stiff (Fill)	641.64	7 28 -5 13	2.70 B	25	
CLAY LOAM-gray-very stiff (Fill)	639.14	5 10 4			NR
SILTY CLAY LOAM-brown & gray-stiff to very stiff (Fill)	631.64	6 5 -10 7 8 13	2.20 B	20	
FRACTURED ROCK-brown-very dense	630.64	50/1"			
Auger Refusal @ -16.5'. Possible Bedrock. End Of Boring. Boring backfilled with cuttings.				5	
	-20				

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
 805 Amherst Court, Suite 204
 Naperville, Illinois 60565
 (630) 355-2838
 FAI Route 80 from
 Chicago Street to US
 Route 30

SOIL BORING LOG

Date 2/15/22

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY TC
 SECTION 14 LOCATION SE 1/4, SEC. 14, TWP. T35N, RNG. R10E, 3rd PM,
Northing 1765181.517, Easting 1062269.559
 COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. _____ Station _____	-	D E P T H	B L O W S	U C S Qu	M O I S T	Surface Water Elev. _____	n/a	ft	
						Stream Bed Elev. _____	n/a	ft	
BORING NO. _____ Station _____ Offset _____	NWB-034 102+56 21.6 ft Right	(ft)	(/6")	(tsf)	(%)	Groundwater Elev.:			
Ground Surface Elev. _____	646.05					ft	First Encounter _____	Dry	ft
							Upon Completion _____	Dry	ft
							After _____ Hrs.	-	ft

6.0" TOPSOIL-black	645.55							
CLAY LOAM-brown-very stiff to hard		4			26			
		5	4.00		23			
		7	B					
		3						
		4	3.00		17			
becoming gray @ -3.0'		-5	P					
		6						
		6	3.00		17			
		6	P					
		4						
		5	2.20		21			
		-10	B					
	635.55							
SILTY CLAY LOAM-brown & gray-very stiff to hard		5						
		6			15			
		7						
		6						
		6	4.50		17			
		-15	P					
	630.05							
Auger Refusal @ -16.0'. Possible Bedrock. End Of Boring. Boring backfilled with cuttings.			50/1"		NR			
		-20						

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
 805 Amherst Court, Suite 204
 Naperville, Illinois 60565
 (630) 355-2838

FAI Route 80 from
 Chicago Street to US

SOIL BORING LOG

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY DJ

SECTION 14 LOCATION SE 1/4, SEC. 14, TWP. T35N, RNG. R10E, 3rd PM,

Northing 1765155.812, Easting 1062682

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. -
 Station -

BORING NO. NWB-036
 Station 106+69
 Offset 38.3 ft Right
 Ground Surface Elev. 644.30 ft

DEPTH T H S (ft)	BLOW C S (/6")	UCS Qu (tsf)	MOIST S T (%)
------------------------	----------------------	--------------------	---------------------

Surface Water Elev.	<u>n/a</u>	ft
Stream Bed Elev.	<u>n/a</u>	ft
Groundwater Elev.:		
First Encounter	<u>Dry</u>	ft
Upon Completion	<u>Dry</u>	ft
After <u>-</u> Hrs.	<u>-</u>	ft

DEPTH T H S (ft)	BLOW C S (/6")	UCS Qu (tsf)	MOIST S T (%)
------------------------	----------------------	--------------------	---------------------

4.0" TOPSOIL-black	643.97				Bedrock. End Of Boring. Boring backfilled with cuttings.
SILTY CLAY-dark brown-stiff			31		
		3			
		3	1.00	27	
		4	P		
	641.30				
CLAY LOAM-brown-stiff to very stiff		5			
		8	3.50	21	
		-5	11	P	
		5			
		6	3.00	21	
		8	P		
		3			
		3	3.50	22	
		-10	7	P	
		5			
		7	2.40	21	
		9	B		
becoming gray @ -13.0'		3			
		4	2.50	16	
		-15	6	P	
		4			
		6	3.00	17	
		8	P		
	626.30				
FRACTURED ROCK-very dense			50/1"		
	624.80			9	
Auger Refusal @ -19.5'. Possible		-20			

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
 805 Amherst Court, Suite 204
 Naperville, Illinois 60565
 (630) 355-2838

FAI Route 80 from
 Chicago Street to US
 Route 30

SOIL BORING LOG

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY DJ

SECTION 14 LOCATION SE 1/4, SEC. 14, TWP. T35N, RNG. R10E, 3rd PM,

Northing 1765157.331, Easting 1062784.69

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. -
 Station -

BORING NO. NWB-037
 Station 107+72
 Offset 32.9 ft Right
 Ground Surface Elev. 642.46 ft

D E P T H (ft)	B L O W S (/6")	U C S Qu (tsf)	M O I S T (%)
-------------------------------	--------------------------------	----------------------------	------------------------------

Surface Water Elev.	<u>n/a</u>	ft
Stream Bed Elev.	<u>n/a</u>	ft
Groundwater Elev.:		
First Encounter	<u>Dry</u>	ft
Upon Completion	<u>Dry</u>	ft
After <u>-</u> Hrs.	<u>-</u>	ft

D E P T H (ft)	B L O W S (/6")	U C S Qu (tsf)	M O I S T (%)
-------------------------------	--------------------------------	----------------------------	------------------------------

6.0" TOPSOIL-black	641.96				backfilled with cuttings.			
CLAY LOAM-brown-stiff to very stiff			27					
		3						
		4	2.50	20				
		7	P					
		5						
		8	2.70	20				
	-5	9	B			-25		
		4						
		4	1.50	20				
		5	P					
		3						
		3	1.50	25				
	-10	5	P			-30		
		5						
		5	3.00	26				
		7	P					
		5						
		3	1.00	25				
	-15	4	P			-35		
		4						
		6	2.00	17				
		10	P					
		6						
	623.46	6						
Auger Refusal @ -19.0'. Possible Bedrock. End Of Boring. Boring	-20	50/3"	2.20	24		-40		
			B					

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
 805 Amherst Court, Suite 204
 Naperville, Illinois 60565
 (630) 355-2838
 FAI Route 80 from
 Chicago Street to US
 Route 30

SOIL BORING LOG

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY DJ

SECTION 13 LOCATION SW 1/4, SEC. 13, TWP. T35N, RNG. R30E, 3rd PM,

Northing 1765471.035, Easting 1064874.901

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. <u>-</u>	D	B	U	M	Surface Water Elev. <u>n/a</u> ft	D	B	U	M
Station <u>-</u>	E	L	C	O	Stream Bed Elev. <u>n/a</u> ft	E	L	C	O
BORING NO. <u>NWB-038</u>	P	O	S	I	Groundwater Elev.: <u>-</u> ft	T	W	S	S
Station <u>824+04</u>	H	S	Qu	T	First Encounter <u>627.757</u> ft	H	S	Qu	T
Offset <u>123.2 ft Left</u>	(ft)	(/6")	(tsf)	(%)	Upon Completion <u>-</u> ft	(ft)	(/6")	(tsf)	(%)
Ground Surface Elev. <u>634.76</u> ft					After <u>-</u> Hrs. <u>-</u> ft				

12.0" TOPSOIL-black	633.76			37	614.26				
SILTY CLAY-brown & gray-stiff		3				3			
		4	1.20	25		4	1.50	21	
		6	B			5	P		
631.76					611.76				
LOAM-brown & gray-very loose to loose		1				4			
		2		23		6			17
		-5	2		609.76	-25	5		
becoming gray @ -5.5'		4							
		3		27					
		3							
626.76									
SILTY CLAY-gray-stiff		3							
		3	1.25	24					
		3	P						
-10									
624.26									
SILTY SAND with Gravel-gray-loose		2							
		3		28					
		2							
		4							
		3		22					
		3							
-15									
		3							
		3		15					
		4							
616.76									
SILT-gray-loose		3							
		4		24					
		3							
-20									

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204
Naperville, Illinois 60565
(630) 355-2838

FAI Route 80 from
Chicago Street to US
Route 30

SOIL BORING LOG

Date 2/15/22

ROUTE _____ DESCRIPTION I-80 Phase II LOGGED BY DJ

SECTION 13 LOCATION SW 1/4, SEC. 13, TWP. T35N, RNG. R30E, 3rd PM,

Northing 1765426.658, Easting 1065074.12

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. _____	D	B	U	M	Surface Water Elev. _____ n/a ft	D	B	U	M
Station _____	E	L	C	O	Stream Bed Elev. _____ n/a ft	E	L	C	O
BORING NO. NWB-039	P	O	S	I	Groundwater Elev.:	T	W	S	S
Station 826+04	H	S	Qu	T	First Encounter _____ 630.909 ft▼	H	S	Qu	T
Offset 114 ft Left	(ft)	(/6")	(tsf)	(%)	Upon Completion _____ ft	(ft)	(/6")	(tsf)	(%)
Ground Surface Elev. 639.41 ft	(ft)	(/6")	(tsf)	(%)	After _____ Hrs. _____ ft	(ft)	(/6")	(tsf)	(%)

12.0" TOPSOIL-black	638.41			29	618.91				
CLAY LOAM-brown & gray-stiff		3			SAND-brown-medium dense		5		
		3	1.10	21			10		25
		3	B				10		
SANDY CLAY LOAM-brown & gray-medium stiff	636.41						6		
		1					3		17
		2	0.50	23	614.41	-25	10		
		-5	P						
SANDY LOAM-brown-loose	633.91				End Of Boring @ -25.0'. Boring backfilled with cuttings.				
		3							
		2		26					
		3							
		▼							
		3							
		2		24					
		-10	33						
SILTY SAND with Gravel-brown-very loose to loose	628.91								
		2							
		2		25					
		2							
		1							
		2		20					
		-15	2						
SAND-brown-loose	623.91								
		2							
		3		33					
		2							
CLAY LOAM-gray-stiff	621.41								
		3							
		3	1.50	17					
		-20	P						

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
 805 Amherst Court, Suite 204
 Naperville, Illinois 60565
 (630) 355-2838
 FAI Route 80 from
 Chicago Street to US
 Route 30

SOIL BORING LOG

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY DJ

SECTION 13 LOCATION SE 1/4, SEC. 13, TWP. T35N, RNG. R10E, 3rd PM,

Northing 1765469.864, Easting 1065272.768

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. <u>-</u>	D	B	U	M	Surface Water Elev. <u>n/a</u> ft	D	B	U	M
Station <u>-</u>	E	L	C	O	Stream Bed Elev. <u>n/a</u> ft	E	L	C	O
BORING NO. <u>NWB-040</u>	P	W	S	I	Groundwater Elev.:	T	S	Q	S
Station <u>828+02</u>	H	S	Qu	T	First Encounter <u>627.459</u> ft▼	H	S	Qu	T
Offset <u>109.5 ft Left</u>	(ft)	(/6")	(tsf)	(%)	Upon Completion _____ ft	(ft)	(/6")	(tsf)	(%)
Ground Surface Elev. <u>634.46</u> ft					After <u>-</u> Hrs. _____ ft				

12.0" TOPSOIL-black					613.96				
633.46				43	SAND-gray-medium dense				
SILTY CLAY-brown & gray-stiff		3				4			
		3	1.75	23		7			16
		3	P			11			
631.46									
SANDY LOAM-brown & gray-very loose		1				3			
		2		18		7			22
		-5	2		609.46	-25	9		
628.96					End Of Boring @ -25.0'. Boring backfilled with cuttings.				
SILTY CLAY-gray-medium stiff		3							
		2	0.80	27					
		3	B						
626.46									
CLAY LOAM-gray-stiff to very stiff		3							
		4	1.30	25					
		-10	B			-30			
		3							
		4	2.50	24					
		7	P						
621.46									
SAND-gray-loose		2							
		3		23					
		-15	5			-35			
618.96									
CLAY LOAM-gray-very stiff		3							
		5	2.10	20					
		11	B						
		4							
		5	3.25	27					
		-20	P			-40			

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
 805 Amherst Court, Suite 204
 Naperville, Illinois 60565
 (630) 355-2838

FAI Route 80 from
 Chicago Street to US

SOIL BORING LOG

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY DJ

SECTION 13 LOCATION SW 1/4, SEC. 13, TWP. T35N, RNG. R10E, 3rd PM,

Northing 1765464.134, Easting 1065474.058

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. <u>-</u>	D	B	U	M	Surface Water Elev. <u>n/a</u> ft	D	B	U	M
Station <u>-</u>	E	L	C	O	Stream Bed Elev. <u>n/a</u> ft	E	L	C	O
BORING NO. <u>NWB-041</u>	P	O	S	I	Groundwater Elev.:	T	W	S	S
Station <u>830+03</u>	T	S	Qu	T	First Encounter <u>624.607</u> ft▼	H	S	Qu	T
Offset <u>98 ft Left</u>	H	S			Upon Completion _____ ft	(ft)	(/6")	(tsf)	(%)
Ground Surface Elev. <u>633.61</u> ft	(ft)	(/6")	(tsf)	(%)	After <u>-</u> Hrs. _____ ft				

Soil Description	Depth (ft)	Blow Count (SPT)	UCS (tsf)	Moisture (%)	Soil Description	Depth (ft)	Blow Count (SPT)	UCS (tsf)	Moisture (%)
12.0" TOPSOIL-black	632.61			35	SAND-gray-medium dense (continued)				
CLAY LOAM-brown & gray-stiff		2				5			
		3	1.00	27		6			
		3	P			7			
		2				4			
		2	1.00	29		5			
	-5	2	B			6			
						608.61			
		4				-25			
		5	1.30	23					
		6	B						
625.61									
SAND-brown- loose		3							
	▼	3		23					
	-10	3			-30				
623.11									
CLAY-gray-very stiff		4							
		5	2.40	20					
		10	B						
		3							
		4	2.50	20					
	-15	6	P		-35				
		3							
		5	2.00	28					
		6	P						
615.61									
SAND-gray-medium dense		4							
		7		17					
	-20	10			-40				

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
 805 Amherst Court, Suite 204
 Naperville, Illinois 60565
 (630) 355-2838
 FAI Route 80 from
 Chicago Street to US
 Route 30

SOIL BORING LOG

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY DJ

SECTION 13 LOCATION SW 1/4, SEC. 13, TWP. T35N, RNG. R10E, 3rd PM,

Northing 1765472.738, Easting 1065675.383

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. <u>-</u>	D	B	U	M	Surface Water Elev. <u>n/a</u> ft	D	B	U	M
Station <u>-</u>	E	L	C	O	Stream Bed Elev. <u>n/a</u> ft	E	L	C	O
BORING NO. <u>NWB-042</u>	P	O	S	I	Groundwater Elev.: <u>-</u>	T	W	S	S
Station <u>832+04</u>	T	S	Qu	T	First Encounter <u>626.343</u> ft▼	H	S	Qu	T
Offset <u>99.8 ft Left</u>	H	S			Upon Completion <u>-</u> ft				
Ground Surface Elev. <u>633.84</u> ft	(ft)	(/6")	(tsf)	(%)	After <u>-</u> Hrs. <u>-</u> ft	(ft)	(/6")	(tsf)	(%)

12.0" TOPSOIL-black					613.34				
632.84				6	SAND-gray-medium dense				
CLAY LOAM-brown & gray-stiff to very stiff		3				4			
		4	1.50	24		5			25
		6	P			6			
					610.84				
					CLAY-gray-stiff				
		3				3			
		5	2.70	23		4	1.00		26
	-5	6	B		608.84	6	P		
					End Of Boring @ -25.0'. Boring backfilled with cuttings.				
		3							
		3	2.20	24					
625.84		5	B						
CLAYEY SAND-brown-loose to medium dense									
		3							
		3		26					
	-10	3							-30
		4							
		5		22					
		6							
620.84									
SILTY SAND-brown-loose to medium dense									
		2							
		3		27					
	-15	4							-35
		3							
		4		22					
		5							
		3							
		5		26					
	-20	6							-40

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
 805 Amherst Court, Suite 204
 Naperville, Illinois 60565
 (630) 355-2838
 FAI Route 80 from
 Chicago Street to US
 Route 30

SOIL BORING LOG

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY DJ

SECTION 13 LOCATION SW 1/4, SEC. 13, TWP. T35N, RNG. R10E, 3rd PM,

Northing 1765469.851, Easting 1065873.35

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. <u>-</u>	D	B	U	M	Surface Water Elev. <u>n/a</u> ft	D	B	U	M
Station <u>-</u>	E	L	C	O	Stream Bed Elev. <u>n/a</u> ft	E	L	C	O
BORING NO. <u>NWB-043</u>	P	O	S	I	Groundwater Elev.:	T	W	S	S
Station <u>834+02</u>	H	S	Qu	T	First Encounter <u>627.361</u> ft	H	S	Qu	T
Offset <u>90.7 ft Left</u>					Upon Completion <u> </u> ft				
Ground Surface Elev. <u>633.86</u> ft	(ft)	(/6")	(tsf)	(%)	After <u>-</u> Hrs. <u>-</u> ft	(ft)	(/6")	(tsf)	(%)

12.0" TOPSOIL-black	632.86			44	613.36				
SILTY CLAY-brown & gray-stiff		3			CLAYEY SAND & GRAVEL-brown-medium dense		9		16
		2	1.25	27			11		
		3	P				10		
SAND with Gravel-gray-loose					610.86				
		2				3			
		3	1.50	26		4		21	
		-5	3	P		5			
		628.36				608.86	-25		
SILTY SAND & gravel-brown-very loose		1		28	End Of Boring @ -25.0'. Boring backfilled with cuttings.				
SANDY LOAM-brown-very loose to loose		1							
		1							
		1							
		2							
		2		30					
SILTY SAND with GRAVEL-brown-loose		2							
		2							
		-10							
		3							
		5		23					
SAND-brown & gray-dense		4							
		3							
		4							
		3		24					
		6							
SAND-brown & gray-dense		3							
		4		16					
		-15	5						
SAND-brown & gray-dense		3							
		3		24					
		6							
		615.86							
SAND-brown & gray-dense		12							
		14		28					
		-20	16						

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
 805 Amherst Court, Suite 204
 Naperville, Illinois 60565
 (630) 355-2838

FAI Route 80 from
 Chicago Street to US
 Route 30

SOIL BORING LOG

Date 2/14/22

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY DJ

SECTION 13 LOCATION SW 1/4, SEC. 13, TWP. T35N, RNG. R10E, 3rd PM,

Northing 1765451.294, Easting 1066075.183

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. <u>-</u>	D	B	U	M	Surface Water Elev. <u>n/a</u> ft	D	B	U	M
Station <u>-</u>	E	L	C	O	Stream Bed Elev. <u>n/a</u> ft	E	L	C	O
BORING NO. <u>NWB-044</u>	P	O	S	I	Groundwater Elev.:	T	W	S	S
Station <u>836+03</u>	H	S	Qu	T	First Encounter <u>633.108</u> ft▼	H	S	Qu	T
Offset <u>65.9 ft Left</u>	(ft)	(/6")	(tsf)	(%)	Upon Completion _____ ft	(ft)	(/6")	(tsf)	(%)
Ground Surface Elev. <u>639.61</u> ft					After <u>-</u> Hrs. _____ ft				

12.0" TOPSOIL-black	638.61			71	619.11				
					CLAY LOAM-gray-stiff to very stiff				
SILTY CLAY-dark brown, gray & black-stiff		2					3		
		4	1.20	28			5	1.75	14
		5	B				5	P	
		2					3		
		3	1.75	23			4	2.00	13
		-5	4	P		614.61	-25	6	P
634.11					End Of Boring @ -25.0'. Boring backfilled with cuttings.				
SILTY CLAY LOAM-brown & gray-very loose		1							
		1		25					
		1							
631.61									
SANDY CLAY LOAM-gray-loose		1							
		3		25					
		3							
-10							-30		
629.11									
CLAY LOAM-gray-very stiff		3							
		6	2.70	21					
		7	B						
		3							
		6	2.20	22					
		9	B						
-15							-35		
		3							
		5	2.75	24					
		7	P						
621.61									
SILTY LOAM-gray-medium dense		2							
		4		21					
		6							
-20							-40		

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
 805 Amherst Court, Suite 204
 Naperville, Illinois 60565
 (630) 355-2838

FAI Route 80 from
 Chicago Street to US

SOIL BORING LOG

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY DJ

SECTION 13 LOCATION SW 1/4, SEC. 13, TWP. T35N, RNG. R10E, 3rd PM,

Northing 1765480.818, Easting 1066275.651

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. -
 Station -

BORING NO. NWB-045
 Station 838+05
 Offset 89.1 ft Left
 Ground Surface Elev. 635.14 ft

DEPTH TH (ft)	BLOW S (/6")	UCS Qu (tsf)	MOIST S (%)	Surface Water Elev. <u>n/a</u> ft	Stream Bed Elev. <u>n/a</u> ft	DEPTH TH (ft)	BLOW S (/6")	UCS Qu (tsf)	MOIST S (%)
---------------------	--------------------	--------------------	-------------------	-----------------------------------	--------------------------------	---------------------	--------------------	--------------------	-------------------

12.0" TOPSOIL-black						614.64			
634.14			72						
SILTY CLAY-brown & gray-medium stiff to stiff	3						4		
	3	0.50	24				5		18
	4	P					9		
						612.14			
	2						4		
	2	1.00	26				5	1.50	14
	-5	3	P			610.14	-25	6	P
629.64									
SANDY LOAM-brown-loose to medium dense	2								
	4		21						
	6								
	4								
	5		17						
	-10	6					-30		
624.64									
CLAY LOAM-gray-stiff to very stiff	3								
	4	2.50	20						
	6	P							
	3								
	5	1.80	19						
	-15	7	B				-35		
619.64									
SILT-gray-loose to medium dense	5								
	7		19						
	4								
	2								
	2		1						
	-20	4					-40		

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204
Naperville, Illinois 60565
(630) 355-2838

FAI Route 80 from
Chicago Street to US
Route 30

SOIL BORING LOG

ROUTE _____ DESCRIPTION I-80 Phase II LOGGED BY DJ

SECTION 13 LOCATION SE 1/4, SEC. 13, TWP. T35N, RNG. R10E, 3rd PM,

Northing 1765353.593, Easting 1068132.123

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO.	-	D	B	U	M	Surface Water Elev.	n/a	ft	D	B	U	M
Station	-	E	L	C	O	Stream Bed Elev.	n/a	ft	E	L	C	O
BORING NO.	NWB-046	P	O	S	I	Groundwater Elev.:			T	W	S	S
Station	856+50	H	S	Qu	T	First Encounter	623.334	ft	H	S	Qu	T
Offset	99 ft Right					Upon Completion		ft				
Ground Surface Elev.	646.83	ft	(ft)	(/6")	(tsf)	(%)	After	-	Hrs.			

6.0" TOPSOIL-black	646.33						CLAY LOAM-brown & gray-stiff to very stiff (continued)					
CLAY LOAM-brown & gray-stiff to very stiff			3						4			
			3	1.00	24				5	2.50	21	
			3	B					7	P		
							623.83					
			3				SILTY CLAY-gray-very stiff		4			
			3	1.50	23				6	2.50	20	
			-5	5	P				12	P		
							621.83	-25				
			4				End Of Boring @ -25.0'. Boring backfilled with cuttings.					
			5	2.00	21							
			8	B								
			5									
			7	3.10	19							
			-10	13	B				-30			
becoming gray @ -10.5'												
			4									
			5	3.00	20							
			7	P								
			6									
			6	2.75	19							
			-15	7	P				-35			
			3									
			4	2.50	21							
			6	P								
			3									
			4	2.75	21							
			-20	6	P				-40			

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
 805 Amherst Court, Suite 204
 Naperville, Illinois 60565
 (630) 355-2838

FAI Route 80 from
 Chicago Street to US
 Route 30

SOIL BORING LOG

Date 2/23/22

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY DJ

SECTION 13 LOCATION SE 1/4, SEC. 13, TWP. T35N, RNG. R10E, 3rd PM,

Northing 1765362.44, Easting 1068329.028

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. -
 Station -

BORING NO. NWB-047
 Station 585+53
 Offset 93.5 ft Right
 Ground Surface Elev. 645.35 ft

D E P T H S T H	B L O W S	U C S Qu	M O I S T	Surface Water Elev. <u>n/a</u> ft	Stream Bed Elev. <u>n/a</u> ft	D E P T H	B L O W S	U C S Qu	M O I S T
(ft)	(/6")	(tsf)	(%)			(ft)	(/6")	(tsf)	(%)

TOPSOIL-black			39						
	4						6		
	5	2.50	35				6	2.00	22
	6	P					7	P	
642.35					622.35				
CLAY LOAM-brown & gray-very stiff	5						5		
	5	3.00	25				5		20
	-5	6	P		620.35	-25	6		
	8								
	10	2.25	24						
	12	P							
becoming gray @ -8.0'									
	5								
	5	2.50	19						
	-10	6	P			-30			
	4								
	4	2.50	20						
	5	P							
	6								
	4	2.25	20						
	-15	6	P			-35			
	4								
	5	2.50	28						
	7	P							
	5								
	5	3.25	21						
	-20	6	P			-40			

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
 805 Amherst Court, Suite 204
 Naperville, Illinois 60565
 (630) 355-2838

FAI Route 80 from
 Chicago Street to US
 Route 30

SOIL BORING LOG

Date 2/23/22

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY DJ

SECTION 13 LOCATION SE 1/4, SEC. 13, TWP. T35N, RNG. R10E, 3rd PM,

Northing 1765364.937, Easting 1068534.336

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. -
 Station -

BORING NO. NWB-048
 Station 860+59
 Offset 97.5 ft Right
 Ground Surface Elev. 644.94 ft

DEPTH TH (ft)	BLOW S (/6")	UCS Qu (tsf)	MOIST T (%)	Surface Water Elev.	n/a	ft	DEPTH TH (ft)	BLOW S (/6")	UCS Qu (tsf)	MOIST T (%)
				Stream Bed Elev.	n/a	ft				
				Groundwater Elev.:						
				First Encounter	621.435	ft				
				Upon Completion		ft				
				After	-	ft				
6.0"				644.44						
			91							
	3							5		
	3	1.00	31					6	2.00	21
	6	P						11	P	
				641.94			621.94			
	3							9		
	4	2.20	23					6		19
	-5	6	B				619.94	-25	6	
	4									
	5	1.90	22							
	8	B								
	5									
	6	2.50	21							
	-10	9	B							
	5									
	7	3.00	19							
	9	P								
	4									
	5	3.00	18							
	-15	7	P							
	4									
	5	2.25	22							
	7	P								
	3									
	3	1.50	22							
	-20	5	P							

6.0" TOPSOIL-black
 SILTY CLAY-dark brown & gray-stiff

CLAY LOAM-brown & gray-stiff to very stiff (continued)

CLAY LOAM-brown & gray-stiff to very stiff

SILT-gray-medium dense

becoming gray @ -10.5'

End Of Boring @ -25.0'. Boring backfilled with cuttings.

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
 805 Amherst Court, Suite 204
 Naperville, Illinois 60565
 (630) 355-2838

FAI Route 80 from
 Chicago Street to US
 Route 30

SOIL BORING LOG

Date 2/23/22

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY DJ

SECTION 13 LOCATION SE 1/4, SEC. 13, TWP. T35N, RNG. R10E, 3rd PM,

Northing 1765370.729, Easting 1068721.275

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. -
 Station -

BORING NO. NWB-049
 Station 862+46
 Offset 97.5 ft Right
 Ground Surface Elev. 644.84 ft

DEPTH TH (ft)	BLOW S (/6")	UCS Qu (tsf)	MOIST T (%)	Surface Water Elev.	n/a	ft	DEPTH TH (ft)	BLOW S (/6")	UCS Qu (tsf)	MOIST T (%)
				Stream Bed Elev.	n/a	ft				
				Groundwater Elev.:						
				First Encounter	636.341	ft				
				Upon Completion		ft				
				After	-	ft				
6.0"				6.0" TOPSOIL-black	644.34					
			32	CLAY LOAM-brown & gray-very stiff				4		
	5							7	3.00	22
	6	2.00	23					15	P	
	6	P								
					621.84					
				SILTY LOAM-gray-medium dense				6		
	5							5		17
	5	2.00	26					5		
	-5	7	P		619.84	-25				
				End Of Boring @ -25.0'. Boring backfilled with cuttings.						
	5									
	8	2.00	20							
	8	P								
	5									
	5	2.20	20							
	-10	8	B							
				becoming gray @ -10.5'						
	6									
	9	2.20	17							
	13	B								
	6									
	7	3.00	23							
	-15	7	P							
	4									
	5	2.50	23							
	6	P								
	4									
	4	2.00	23							
	-20	6	P							

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204
Naperville, Illinois 60565
(630) 355-2838

FAI Route 80 from
Chicago Street to US
Route 30

SOIL BORING LOG

Date 2/23/22

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY DJ

SECTION 13 LOCATION SE 1/4, SEC. 13, TWP. T35N, RNG. R10E, 3rd PM,

Northing 1765378.085, Easting 1068930.99

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. -
Station -

BORING NO. NWB-050
Station 864+55
Offset 96.7 ft Right
Ground Surface Elev. 643.66 ft

D E P T H (ft)	B L O W S (/6")	U C S Qu (tsf)	M O I S T (%)	Surface Water Elev. <u>n/a</u> ft	Stream Bed Elev. <u>n/a</u> ft	D E P T H (ft)	B L O W S (/6")	U C S Qu (tsf)	M O I S T (%)
-------------------------------	--------------------------------	----------------------------	------------------------------	-----------------------------------	--------------------------------	-------------------------------	--------------------------------	----------------------------	------------------------------

5.0" TOPSOIL-black	643.24								
CLAY LOAM-brown & gray-stiff (Fill)		3					5		
		4	1.50	29			7	2.50	23
		4	P				7	P	
					620.66				
		3					4		
		3	1.50	35			3		25
		-5	5	P			3		
	638.16								
CLAY LOAM-brown-stiff to very stiff		4							
		4	1.25	24					
		7	P						
		4							
		7	3.00	22					
	-10	12	P						
		5							
		8	3.00	23					
		9	P						
		4							
		5	3.00	25					
	-15	7	P						
becoming gray @ -15.5'		5							
		5	2.50	22					
		6	P						
		4							
		6	2.00	22					
	-20	8	P						

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
 805 Amherst Court, Suite 204
 Naperville, Illinois 60565
 (630) 355-2838

FAI Route 80 from
 Chicago Street to US

SOIL BORING LOG

Date 2/20/22

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY DJ

SECTION 18 LOCATION SW 1/4, SEC. 18, TWP. T35N, RNG. R11E, 3rd PM,

Northing 1765637.174, Easting 1071368.147

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. -
 Station -

BORING NO. NWB-051
 Station 889+99
 Offset 85.9 ft Left
 Ground Surface Elev. 654.02 ft

D
E
P
T
H

 B
L
O
W
S

 U
C
S

 M
O
I
S
T

 (ft) (/6") (tsf) (%)

Surface Water Elev. n/a ft
 Stream Bed Elev. n/a ft
 Groundwater Elev.:
 First Encounter Dry ft
 Upon Completion Dry ft
 After - Hrs. - ft

D
E
P
T
H

 B
L
O
W
S

 U
C
S

 M
O
I
S
T

 (ft) (/6") (tsf) (%)

TOPSOIL-black	653.02			52	CLAY LOAM-gray-very stiff (continued)				
CLAY LOAM-brown-stiff to very stiff		3					4		
		4	1.80	21			5	2.50	19
		6	B				8	P	
		3					4		
		5	1.50	19			6	2.50	18
		6	P				7	P	
		-5				629.02	-25		
End Of Boring @ -25.0'. Boring backfilled with cuttings.		3							
		4	2.50	22					
		6	P						
		4							
		6	3.50	20					
		8	P						
	-10								
	643.52								
SILT-gray-medium dense		2							
		4		21					
		6							
	641.02								
CLAY LOAM-gray-very stiff		3							
		5	3.00	18					
		8	P						
		-15							
		3							
		5	2.50	19					
		7	P						
		2							
		4	2.50	19					
		6	P						
	-20								

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
 805 Amherst Court, Suite 204
 Naperville, Illinois 60565
 (630) 355-2838
 FAI Route 80 from
 Chicago Street to US
 Route 30

SOIL BORING LOG

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY DJ

SECTION 18 LOCATION SW 1/4, SEC. 18, TWP. T35N, RNG. R11E, 3rd PM,

Northing 1765645.679, Easting 1071573.275

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. <u>-</u>	D	B	U	M	Surface Water Elev. <u>n/a</u> ft	D	B	U	M
Station <u>-</u>	E	L	C	O	Stream Bed Elev. <u>n/a</u> ft	E	L	C	O
BORING NO. <u>NWB-052</u>	P	O	S	I	Groundwater Elev.:	T	W	S	S
Station <u>891+05</u>	H	S	Qu	T	First Encounter <u>645.344</u> ft▼	H	S	Qu	T
Offset <u>88 ft Left</u>	(ft)	(/6")	(tsf)	(%)	Upon Completion _____ ft	(ft)	(/6")	(tsf)	(%)
Ground Surface Elev. <u>652.34</u> ft					After <u>-</u> Hrs. _____ ft				

DEPTH (ft)	SOIL DESCRIPTION	BLOWS (/6")	UCS (tsf)	MOIST (%)	DEPTH (ft)	BLOWS (/6")	UCS (tsf)	MOIST (%)
651.34	TOPSOIL-black			35				
	CLAY LOAM-brown-stiff to very stiff	3				4		
		4	2.00	26		7	3.50	18
		5	P			6	P	
		4				4		
		5	3.50	19		6	3.50	18
		-5	6	P	627.34	-25	7	P
		5						
		4	1.00	19				
		4	P					
		3						
		4	2.50	23				
		-10	6	P		-30		
	becoming gray @ -10.5'							
		4						
		6	2.50	21				
		8	P					
		4						
		6	3.00	21				
		-15	9	P		-35		
		4						
		6	3.50	20				
		10	P					
		4						
		6	3.50	19				
		-20	8	P		-40		

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
 805 Amherst Court, Suite 204
 Naperville, Illinois 60565
 (630) 355-2838

FAI Route 80 from
 Chicago Street to US

SOIL BORING LOG

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY DJ

SECTION 18 LOCATION SE 1/4, SEC. 18, TWP. T35N, RNG. R11E, 3rd PM,

Northing 1765649.616, Easting 1071772.238

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. -
 Station -

BORING NO. NWB-053
 Station 893+04
 Offset 85.7 ft Left
 Ground Surface Elev. 650.77 ft

D E P T H (ft)	B L O W S (/6")	U C S Qu (tsf)	M O I S T (%)	Surface Water Elev. <u>n/a</u> ft	D E P T H (ft)	B L O W S (/6")	U C S Qu (tsf)	M O I S T (%)
				Stream Bed Elev. <u>n/a</u> ft				
				Groundwater Elev.:				
				First Encounter <u>Dry</u> ft				
				Upon Completion <u>Dry</u> ft				
				After <u>-</u> Hrs. <u>-</u> ft				

TOPSOIL-black			60						CLAY LOAM-brown-stiff to very stiff (continued)
	649.77								
CLAY LOAM-brown-stiff to very stiff		4				3			
		4	1.50	20		5	2.50	19	
		4	P			7	P		
		4				3			
		7	2.40	19		4	1.75	19	
		-5	7	B		6	P		625.77 -25
									End Of Boring @ -25.0'. Boring backfilled with cuttings.
		3							
		5	1.20	19					
		7	B						
		4							
		6	2.50	20					
	-10	8	P						-30
becoming gray @ -10.5'		3							
		5	3.00	22					
		8	P						
		2							
		4	2.00	22					
	-15	6	P						-35
		3							
		4	2.50	18					
		6	P						
		4							
		4	2.00	14					
	-20	6	P						-40

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
 805 Amherst Court, Suite 204
 Naperville, Illinois 60565
 (630) 355-2838
 FAI Route 80 from
 Chicago Street to US
 Route 30

SOIL BORING LOG

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY DJ

SECTION 18 LOCATION SE 1/4, SEC. 18, TWP. T35N, RNG. R11E, 3rd PM,
Northing 1765657.34, Easting 1071967.827

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. <u>-</u>	D	B	U	M	Surface Water Elev. <u>n/a</u> ft	D	B	U	M
Station <u>-</u>	E	L	C	O	Stream Bed Elev. <u>n/a</u> ft	E	L	C	O
BORING NO. <u>NWB-054</u>	P	O	S	I	Groundwater Elev.:	T	W	S	S
Station <u>895+00</u>	T	S	Qu	T	First Encounter <u>Dry</u> ft	H	S	Qu	T
Offset <u>87.3 ft Left</u>	H	S			Upon Completion <u>Dry</u> ft				
Ground Surface Elev. <u>649.62</u> ft	(ft)	(/6")	(tsf)	(%)	After <u>-</u> Hrs. <u>-</u> ft	(ft)	(/6")	(tsf)	(%)

Soil Description	Depth (ft)	Penetration (6")	UCS (tsf)	Moisture (%)	Soil Description	Depth (ft)	Penetration (6")	UCS (tsf)	Moisture (%)
TOPSOIL-black	648.62			55	CLAY LOAM-brown-stiff to very stiff (continued)	3			
		4				5	2.50		18
		5	2.00	30		6	P		
		6	P						
		3				3			
		4	1.75	25		4	2.50		18
		-5	6	P		7	P		
					624.62	-25			
		4			End Of Boring @ -25.0'. Boring backfilled with cuttings.				
		6	1.80	20					
		8	B						
		3							
becoming gray @ -8.0'		4	2.75	17					
		-10	5	P		-30			
		3							
		4	3.00	20					
		6	P						
		3							
		4	2.50	20					
		-15	5	P		-35			
		3							
		5	1.80	19					
		7	B						
		4							
		6	2.50	19					
		-20	7	P		-40			

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
 805 Amherst Court, Suite 204
 Naperville, Illinois 60565
 (630) 355-2838
 FAI Route 80 from
 Chicago Street to US
 Route 30

SOIL BORING LOG

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY DJ

SECTION 18 LOCATION SE 1/4, SEC. 18, TWP. T35N, RNG. R11E,

Northing 1765666.196, Easting 1072167.916

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. <u>-</u>	D	B	U	M	Surface Water Elev. <u>n/a</u> ft	D	B	U	M
Station <u>-</u>	E	L	C	O	Stream Bed Elev. <u>n/a</u> ft	E	L	C	O
BORING NO. <u>NWB-055</u>	P	O	S	I	Groundwater Elev.:	T	W	S	S
Station <u>897+00</u>	H	S	Qu	T	First Encounter <u>628.05</u> ft▼	H	S	Qu	T
Offset <u>89.9 ft Left</u>	(ft)	(/6")	(tsf)	(%)	Upon Completion _____ ft	(ft)	(/6")	(tsf)	(%)
Ground Surface Elev. <u>649.05</u> ft					After <u>-</u> Hrs. _____ ft				

TOPSOIL-black	648.05			27	628.55				
CLAY LOAM-brown & gray-stiff to very stiff		2			SILT-gray-medium dense	▼		3	
		2	1.00	22				4	21
		3	P					6	
					626.05				
		5			SILTY CLAY LOAM-gray-stiff			4	
		7	3.10	14				6	1.50
		-5	10	B				7	P
					624.05	-25			
		5			End Of Boring @ -25.0'. Boring backfilled with cuttings.				
		6	1.80	22					
		7	B						
		11							
		8	1.50	17					
		-10	6	P					
	638.05								
COBBLES & BOULDERS-very dense		50/5"		2					
	636.55								
CLAY LOAM-gray-very stiff									
		3							
		5	2.25	19					
		-15	6	P					-35
		3							
		5	2.25	22					
		7	P						
		3							
		4	2.75	21					
		-20	7	P					-40

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
 805 Amherst Court, Suite 204
 Naperville, Illinois 60565
 (630) 355-2838

FAI Route 80 from
 Chicago Street to US

SOIL BORING LOG

Date 2/9/22

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY DJ

SECTION 18 LOCATION SE 1/4, SEC. 18, TWP. T35N, RNG. R11E, 3rd PM,

Northing 1765671.745, Easting 1072370.697

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. -
 Station -

BORING NO. NWB-056
 Station 899+03
 Offset 86.1 ft Left
 Ground Surface Elev. 649.34 ft

D E P T H (ft)	B L O W S (/6")	U C S Qu (tsf)	M O I S T (%)
-------------------------------	--------------------------------	----------------------------	------------------------------

Surface Water Elev.	<u>n/a</u>	ft
Stream Bed Elev.	<u>n/a</u>	ft
Groundwater Elev.:		
First Encounter	<u>Dry</u>	ft
Upon Completion	<u>Dry</u>	ft
After <u>-</u> Hrs.	<u>-</u>	ft

D E P T H (ft)	B L O W S (/6")	U C S Qu (tsf)	M O I S T (%)
-------------------------------	--------------------------------	----------------------------	------------------------------

TOPSOIL-black	648.34			43	CLAY LOAM-brown-very stiff (continued)			
SILTY CLAY-dark brown & gray-stiff		2				3		
		3	1.40	29		5	3.10	17
		4	B			6	B	
	646.34							
CLAY LOAM-brown-very stiff		3				3		
		4	3.50	16		5	2.20	18
		-5	6	B		8	B	
					624.34	-25		
		4			End Of Boring @ -25.0'. Boring backfilled with cuttings.			
		5	2.50	18				
		7	P					
		5						
		6	2.20	18				
	-10	9	B			-30		
becoming gray @ -10.5'		5						
		6	2.50	17				
		7	P					
		5						
		6	3.10	16				
	-15	8	B			-35		
		3						
		4	2.50	22				
		6	P					
		3						
		5	2.25	20				
	-20	7	P			-40		

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
 805 Amherst Court, Suite 204
 Naperville, Illinois 60565
 (630) 355-2838
 FAI Route 80 from
 Chicago Street to US
 Route 30

SOIL BORING LOG

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY DJ

SECTION 18 LOCATION SE 1/4, SEC. 18, TWP. T35N, RNG. R11E, 3rd PM,

Northing 1765682.871, Easting 1072573.396

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. <u>-</u>	D	B	U	M	Surface Water Elev. <u>n/a</u> ft	D	B	U	M
Station <u>-</u>	E	L	C	O	Stream Bed Elev. <u>n/a</u> ft	E	L	C	O
BORING NO. <u>NWB-057</u>	P	O	S	I	Groundwater Elev.:	T	W	S	S
Station <u>901+06</u>	H	S	Qu	T	First Encounter <u>Dry</u> ft	H	S	Qu	T
Offset <u>93.8 ft Left</u>	(ft)	(/6")	(tsf)	(%)	Upon Completion <u>Dry</u> ft	(ft)	(/6")	(tsf)	(%)
Ground Surface Elev. <u>649.44</u> ft					After <u>-</u> Hrs. <u>-</u> ft				

Soil Description	Depth (ft)	Blow Count (/6")	UCS (tsf)	Moisture (%)	Soil Description	Depth (ft)	Blow Count (/6")	UCS (tsf)	Moisture (%)
TOPSOIL-black	648.44			33	CLAY LOAM-brown & gray-stiff to very stiff (continued)				
SILTY CLAY-black-stiff (Fill)		3				4			
		3	1.20	28		5	2.00	14	
		5	B			6	P		
	646.44								
CLAY LOAM-brown & gray-stiff (Fill)		3				3			
		3	1.20	18		4	1.30	18	
	-5	4	B			6	B		
	643.94					624.44	-25		
SILTY CLAY-dark brown & gray-medium stiff		2				End Of Boring @ -25.0'. Boring backfilled with cuttings.			
		2	0.50	35					
		3	P						
	641.44								
CLAY LOAM-brown & gray-stiff to very stiff		2							
		3	2.60	19					
	-10	4	B						
becoming gray @ -10.5'		3							
		5	2.10	19					
		7	B						
		3							
		4	3.75	21					
	-15	7	P						
		3							
		5	1.75	22					
		5	P						
		3							
		3	1.50	13					
	-20	5	P						

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
 805 Amherst Court, Suite 204
 Naperville, Illinois 60565
 (630) 355-2838
 FAI Route 80 from
 Chicago Street to US
 Route 30

SOIL BORING LOG

Date 2/9/22

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY DJ

SECTION 18 LOCATION SE 1/4, SEC. 18, TWP. T35N, RNG. R11E, 3rd PM,

Northing 1765685.279, Easting 1072767.109

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. -
 Station -

BORING NO. NWB-058
 Station 902+99
 Offset 90.2 ft Left
 Ground Surface Elev. 649.45 ft

D E P T H (ft)	B L O W S (/6")	U C S (tsf)	M O I S T (%)	Surface Water Elev. n/a ft	D E P T H (ft)	B L O W S (/6")	U C S (tsf)	M O I S T (%)
				Stream Bed Elev. n/a ft				
				Groundwater Elev.:				
				First Encounter <u>649.452</u> ft				
				Upon Completion _____ ft				
				After _____ Hrs. _____ ft				

TOPSOIL-black				628.95				
648.45			65					
CLAY LOAM-brown-very stiff	3					50/2"		18
	6	3.10	18					
	9	B						
				626.45				
	4					3		
	7	3.10	17			5	2.00	18
	-5	10	B	624.45	-25	6	P	
	3							
	7	2.70	19					
	10	B						
becoming gray @ -8.0	4							
	7	2.70	19					
	-10	9	B		-30			
	3							
	4	2.50	22					
	6	P						
	2							
	4	2.50	22					
	-15	6	P		-35			
	5							
	6	3.00	18					
	10	P						
	3							
	5	2.00	12					
	-20	6	P		-40			

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
 805 Amherst Court, Suite 204
 Naperville, Illinois 60565
 (630) 355-2838
 FAI Route 80 from
 Chicago Street to US
 Route 30

SOIL BORING LOG

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY DJ

SECTION 18 LOCATION SE 1/4, SEC. 18, TWP. T35N, RNG. R11E, 3rd PM,

Northing 1765698.661, Easting 1072969.909

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. <u>-</u>	D	B	U	M	Surface Water Elev. <u>n/a</u> ft	D	B	U	M
Station <u>-</u>	E	L	C	O	Stream Bed Elev. <u>n/a</u> ft	E	L	C	O
BORING NO. <u>NWB-059</u>	P	O	S	I	Groundwater Elev.: <u>-</u>	T	W	S	S
Station <u>905+02</u>	H	S	Qu	T	First Encounter <u>643.32</u> ft▼	H	S	Qu	T
Offset <u>97.2 ft Left</u>	(ft)	(/6")	(tsf)	(%)	Upon Completion <u>-</u> ft	(ft)	(/6")	(tsf)	(%)
Ground Surface Elev. <u>650.32</u> ft					After <u>-</u> Hrs. <u>-</u> ft				

DEPTH (ft)	SOIL DESCRIPTION	UCS (tsf)	MOIST (%)	DEPTH (ft)	SOIL DESCRIPTION	UCS (tsf)	MOIST (%)
0	TOPSOIL-black		84	0	CLAY LOAM-brown & gray-stiff to very stiff (continued)		
3				3			
3	CLAY LOAM-brown & gray-stiff to very stiff	3.40	17	5		2.75	21
5		B		8		P	
2				4			
4		1.50	22	5		2.00	23
-5		P		7		P	
				625.32		-25	
4				End Of Boring @ -25.0'. Boring backfilled with cuttings.			
6		3.10	21				
7		B					
4	becoming gray @ -8.0						
6		2.20	19				
-10		B				-30	
3							
6		2.25	21				
8		P					
3							
4		2.25	20				
-15		P				-35	
3							
4		2.00	22				
5		P					
4							
4		2.00	22				
-20		P				-40	

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
 805 Amherst Court, Suite 204
 Naperville, Illinois 60565
 (630) 355-2838

FAI Route 80 from
 Chicago Street to US
 Route 30

SOIL BORING LOG

Date 2/8/22

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY DJ

SECTION 18 LOCATION SE 1/4, SEC. 18, TWP. T35N, RNG. R11E, 3rd PM,

Northing 1765705.786, Easting 1073171.598

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. -
 Station -

BORING NO. NWB-060
 Station 907+04
 Offset 98 ft Left
 Ground Surface Elev. 649.86 ft

DEPTH TH (ft)	BLOW S (/6")	UCS Qu (tsf)	MOIST T (%)	Surface Water Elev. <u>n/a</u> ft	Stream Bed Elev. <u>n/a</u> ft	GROUNDWATER ELEV. First Encounter <u>637.862</u> ft▼ Upon Completion _____ ft After <u>-</u> Hrs. _____ ft	DEPTH TH (ft)	BLOW S (/6")	UCS Qu (tsf)	MOIST T (%)
---------------------	--------------------	--------------------	-------------------	-----------------------------------	--------------------------------	---	---------------------	--------------------	--------------------	-------------------

CLAYEY SAND & GRAVEL-dark brown 648.86			21			629.36				
	4							3		
CLAY LOAM-brown & gray-very stiff	4	2.50	18				5	2.00	14	
	5	P					5	P		
						626.86				
	4							4		
	6	3.50	18				6	3.40	17	
	-5	7	B			624.86	-25	9	B	
	4									
	5	3.50	16							
	6	B								
	3									
	4	3.25	18							
	-10	5	P				-30			
becoming gray @ -10.5										
	4									
	4	2.75	19							
	5	P								
	4									
	4	2.00	22							
	-15	5	P				-35			
	2									
	4	2.00	22							
	5	B								
	3									
	4	2.50	22							
	-20	6	P				-40			

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
 805 Amherst Court, Suite 204
 Naperville, Illinois 60565
 (630) 355-2838
 FAI Route 80 from
 Chicago Street to US
 Route 30

SOIL BORING LOG

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY DJ

SECTION 18 LOCATION SE 1/4, SEC. 18, TWP. T35N, RNG. R11E, 3rd PM,

Northing 1765714.187, Easting 1073363.838

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. -
 Station -

BORING NO. NWB-061
 Station 908+97
 Offset 100.4 ft Left
 Ground Surface Elev. 648.63 ft

D E P T H S H	B L O W S	U C S Qu	M O I S T	Surface Water Elev. <u>n/a</u> ft	Stream Bed Elev. <u>n/a</u> ft	D E P T H	B L O W S	U C S Qu	M O I S T
(ft)	(/6")	(tsf)	(%)			(ft)	(/6")	(tsf)	(%)

CLAYEY TOPSOIL-dark brown & black	647.63		23			CLAY LOAM-brown & gray-stiff to very stiff (continued)			
	3						5		
CLAY LOAM-brown & gray-stiff to very stiff	5	2.50	17				6	1.80	17
	5	B					7	B	
	3						4		
	4	2.50	18				5	2.00	20
	-5	4	B		623.63		6	P	
						End Of Boring @ -25.0'. Boring backfilled with cuttings.			
	3								
	5	2.70	20						
	8	B							
	4								
	8	3.40	19						
	-10	12	B				-30		
becoming gray @ -10.5									
	4								
	7	2.50	22						
	8	B							
	3								
	4	1.50	23						
	-15	5	P				-35		
	4								
	5	1.80	18						
	50/1"	B							
	3								
	5	1.75	17						
	-20	7	P				-40		

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
 805 Amherst Court, Suite 204
 Naperville, Illinois 60565
 (630) 355-2838

FAI Route 80 from
 Chicago Street to US
 Route 30

SOIL BORING LOG

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY DJ

SECTION 18 LOCATION SE 1/4, SEC. 18, TWP. T35N, RNG. R11E, 3rd PM,

Northing 1765719.404, Easting 1073566.818

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. -
 Station -

BORING NO. NWB-062
 Station 911+00
 Offset 99.2 ft Left
 Ground Surface Elev. 643.93 ft

D E P T H S (ft)	B L O W S (/6")	U C S Qu (tsf)	M O I S T (%)
------------------------------------	--------------------------------	----------------------------	------------------------------

Surface Water Elev.	<u>n/a</u>	ft
Stream Bed Elev.	<u>n/a</u>	ft
Groundwater Elev.:		
First Encounter	<u>633.925</u>	ft▼
Upon Completion		ft
After <u>-</u> Hrs.	<u>-</u>	ft

D E P T H S (ft)	B L O W S (/6")	U C S Qu (tsf)	M O I S T (%)
------------------------------------	--------------------------------	----------------------------	------------------------------

TOPSOIL-black	642.93			31	CLAY LOAM-brown-stiff to very stiff (continued)			
CLAY LOAM-dark brown & gray spotted black-stiff (Fill)		3				3		
		4	1.50	31		5	2.20	18
		4	P			8	B	
		3				4		
		16	1.00	18		6	2.10	18
		-5	6	P		7	B	
	638.43				618.93	-25		
CLAY LOAM-brown-stiff to very stiff		2			End Of Boring @ -25.0'. Boring backfilled with cuttings.			
		3	1.00	20				
		4	P					
		3						
		5	3.75	20				
		▼-10	7	P		-30		
becoming gray @ -10.5		4						
		6	2.20	16				
		7	B					
		3						
		3	1.80	16				
	-15	6	B			-35		
		3						
		5	2.50	17				
		7	B					
		3						
		6	2.20	18				
	-20	9	B			-40		

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
 805 Amherst Court, Suite 204
 Naperville, Illinois 60565
 (630) 355-2838

FAI Route 80 from
 Chicago Street to US

SOIL BORING LOG

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY DJ

SECTION 18 LOCATION SE 1/4, SEC. 18, TWP. T35N, RNG. R11E, 3rd PM,

Northing 1765727.676, Easting 1073774.496

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. -
 Station -

BORING NO. NWB-063
 Station 913+07
 Offset 101 ft Left
 Ground Surface Elev. 642.69 ft

D E P T H S	B L O W S	U C S Qu	M O I S T
(ft)	(/6")	(tsf)	(%)

Surface Water Elev.	<u>n/a</u>	ft
Stream Bed Elev.	<u>n/a</u>	ft
Groundwater Elev.:		
First Encounter	<u>631.692</u>	ft▼
Upon Completion		ft
After <u>-</u> Hrs.	<u>-</u>	ft

D E P T H S	B L O W S	U C S Qu	M O I S T
(ft)	(/6")	(tsf)	(%)

TOPSOIL-black	641.69			37	CLAY LOAM-brown-very stiff to hard (continued)			
		3				4		
SILTY CLAY-dark brown & gray-stiff		3	1.80	30		4	2.00	19
		4	B			5	B	
	639.69							
CLAY LOAM-brown-very stiff to hard		3				4		
		3	2.10	17		5	2.00	14
		-5	B			7	P	
					617.69	-25		
		3			End Of Boring @ -25.0'. Boring backfilled with cuttings.			
		4	2.00	18				
		5	P					
		3						
		5	5.70	18				
	-10	12	B			-30		
becoming gray @ -10.5		▼						
		4						
		5	4.20	19				
		7	B					
		3						
		5	3.00	21				
	-15	6	B			-35		
		2						
		4	2.80	19				
		5	B					
		3						
		3	2.20	14				
	-20	3	B			-40		

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
 805 Amherst Court, Suite 204
 Naperville, Illinois 60565
 (630) 355-2838
 FAI Route 80 from
 Chicago Street to US
 Route 30

SOIL BORING LOG

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY DJ

SECTION 18 LOCATION SE 1/4, SEC. 18, TWP. T35N, RNG. R11E, 3rd PM,

Northing 1765731.808, Easting 1073974.385

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. -
 Station -

BORING NO. NWB-064
 Station 915+07
 Offset 98.9 ft Left
 Ground Surface Elev. 641.30 ft

D
E
P
T
H

 B
L
O
W
S

 U
C
S

 M
O
I
S
T

 (ft) (/6") (tsf) (%)

Surface Water Elev. n/a ft
 Stream Bed Elev. n/a ft
 Groundwater Elev.:
 First Encounter 630.296 ft▼
 Upon Completion ft
 After - Hrs. - ft

D
E
P
T
H

 B
L
O
W
S

 U
C
S

 M
O
I
S
T

 (ft) (/6") (tsf) (%)

TOPSOIL-black	640.30				31	CLAY LOAM-brown & gray-very stiff to hard (continued)			
SILTY CLAY-black-stiff		3					3		
		4	1.20	29			5	2.80	18
		5	B				7	B	
		2					3		
		2	1.60	28			5	2.50	21
	-5	2	B			616.30	-25	5	B
635.80						End Of Boring @ -25.0'. Boring backfilled with cuttings.			
CLAY LOAM-brown & gray-very stiff to hard		1							
		2	2.60	24					
		3	B						
		3							
		6	6.40	22					
		-10	8	B				-30	
		3							
		6	5.30	22					
		7	B						
		3							
becoming gray @ -13.0		4	3.70	20					
	-15	7	B				-35		
	2								
	3	3.40	14						
	4	B							
	3								
	3	3.60	13						
	-20	4	B				-40		

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
 805 Amherst Court, Suite 204
 Naperville, Illinois 60565
 (630) 355-2838
 FAI Route 80 from
 Chicago Street to US
 Route 30

SOIL BORING LOG

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY DJ

SECTION 18 LOCATION SE 1/4, SEC. 18, TWP. T35N, RNG. R11E, 3rd PM,

Northing 1765737.367, Easting 1074161.745

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. <u>-</u>	D	B	U	M	Surface Water Elev. <u>n/a</u> ft	D	B	U	M
Station <u>-</u>	E	L	C	O	Stream Bed Elev. <u>n/a</u> ft	E	L	C	O
BORING NO. <u>NWB-065</u>	P	O	S	I	Groundwater Elev.:	T	W	S	S
Station <u>916+95</u>	T	S	Qu	T	First Encounter <u>626.469</u> ft▼	H	S	Qu	T
Offset <u>98.6 ft Left</u>	H	S			Upon Completion _____ ft	(ft)	(/6")	(tsf)	(%)
Ground Surface Elev. <u>639.97</u> ft	(ft)	(/6")	(tsf)	(%)	After <u>-</u> Hrs. _____ ft				

Soil Description	Depth (ft)	Blow Count (N)	UCS (tsf)	Moisture (%)	Soil Description	Depth (ft)	Blow Count (N)	UCS (tsf)	Moisture (%)	
TOPSOIL-black	638.97			31	CLAY LOAM-brown & gray-stiff to hard (continued)					
CLAY LOAM with Stone-brown-very stiff (Fill)		2				3				
		3	2.90	17		2	1.10	20		
	6	B				4	B			
	636.97									
ORGANIC SILTY CLAY-black-medium stiff		3				2				
		4	0.70	37		3	1.10	20		
	-5	7	B			4	B			
	634.47					614.97	-25			
CLAY LOAM-brown & gray-stiff to hard		2				End Of Boring @ -25.0'. Boring backfilled with cuttings.				
		2	1.90	23						
		4	B							
		3								
		4	4.00	18						
	-10	6	B							
		3								
		6	3.90	22						
		9	B							
		3								
becoming gray @ -13.0	4									
	6	3.60	20							
-15	8	B								
	4									
	6	3.50	18							
	9	B								
	3									
	4	4.40	18							
-20	6	B								

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
 805 Amherst Court, Suite 204
 Naperville, Illinois 60565
 (630) 355-2838

FAI Route 80 from
 Chicago Street to US

SOIL BORING LOG

Date 2/24/22

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY TC

SECTION 17 LOCATION SW 1/4, SEC. 17, TWP. T35N, RNG. R11E, 3rd PM,

Northing 1765562.819, Easting 1074689.564

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. -
 Station -

BORING NO. NWB-066
 Station 922+04
 Offset 105.9 ft Right
 Ground Surface Elev. 647.29 ft

D E P T H (ft)	B L O W S (/6")	U C S Qu (tsf)	M O I S T (%)
-------------------------------	--------------------------------	----------------------------	------------------------------

Surface Water Elev.	<u>n/a</u>	ft
Stream Bed Elev.	<u>n/a</u>	ft
Groundwater Elev.:		
First Encounter	<u>Dry</u>	ft
Upon Completion	<u>Dry</u>	ft
After <u>-</u> Hrs.	<u>-</u>	ft

D E P T H (ft)	B L O W S (/6")	U C S Qu (tsf)	M O I S T (%)
-------------------------------	--------------------------------	----------------------------	------------------------------

CLAYEY TOPSOIL dark brown & black 646.29			27	CLAY LOAM-brown-very stiff to hard (continued)			
	3				6		
SILTY SAND & GRAVEL-brown-medium dense (Fill) 644.29	4		16		9	2.70	16
	6				13	B	
CLAY LOAM-brown-very stiff to hard	3				5		
	4	3.50	17		8	4.00	13
	-5	5	P		13	P	
				622.29	-25		
	6			End Of Boring @ -25.0'. Boring backfilled with cuttings.			
	9	4.50	19				
	9	P					
	6						
	7	4.00	18				
	-10	9	P		-30		
becoming gray @ -10.5							
	4						
	5	2.00	21				
	5	P					
	4						
	6	2.00	23				
	-15	6	P		-35		
	2						
	4	2.50	24				
	4	P					
	3						
	3	2.20	22				
	-20	5	B		-40		

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
 805 Amherst Court, Suite 204
 Naperville, Illinois 60565
 (630) 355-2838
 FAI Route 80 from
 Chicago Street to US
 Route 30

SOIL BORING LOG

Page 1 of 1

Date 2/24/22

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY TC

SECTION 17 LOCATION SW 1/4, SEC. 17, TWP. T35N, RNG. R11E, 3rd PM,

Northing 1765584.393, Easting 1074880.87

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. <u>-</u>	D	B	U	M	Surface Water Elev. <u>n/a</u> ft	D	B	U	M
Station <u>-</u>	E	L	C	O	Stream Bed Elev. <u>n/a</u> ft	E	L	C	O
BORING NO. <u>NWB-067</u>	P	O	S	I	Groundwater Elev.:	T	W	S	S
Station <u>924+00</u>	H	S	Qu	T	First Encounter <u>Dry</u> ft	H	S	Qu	T
Offset <u>105.5 ft Right</u>	(ft)	(/6")	(tsf)	(%)	Upon Completion <u>Dry</u> ft	(ft)	(/6")	(tsf)	(%)
Ground Surface Elev. <u>651.08</u> ft					After <u>-</u> Hrs. <u>-</u> ft				

Soil Description	Depth (ft)	Bulge (6")	UCS (tsf)	Moist (%)	Soil Description	Depth (ft)	Bulge (6")	UCS (tsf)	Moist (%)
3.0" TOPSOIL-black	650.83				CLAY LOAM-gray-stiff to very stiff (continued)				
SANDY CLAY LOAM-dark brown-stiff (Fill)	3			4					
	3	1.00	21	5					
	3	P		6					
648.08									
SILTY CLAY LOAM-dark brown & gray-stiff (Fill)	3			4					
	1	1.00	32	5					
	-5	P		6					
645.58				626.08 -25					
SILTY SAND & GRAVEL-brown-very loose to loose	1					End Of Boring @ -25.0'. Boring backfilled with cuttings.			
	2		22						
	1								
	2								
	2		25						
	-10			-30					
640.58									
CLAY LOAM-gray-stiff to very stiff	3								
	4	1.50	20						
	5	P							
	4								
	6	2.50	19						
	-15	P		-35					
	7								
	7	2.50	21						
	9	P							
	5								
	5	3.50	19						
	-20	P		-40					

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
 805 Amherst Court, Suite 204
 Naperville, Illinois 60565
 (630) 355-2838

FAI Route 80 from
 Chicago Street to US
 Route 30

SOIL BORING LOG

ROUTE DESCRIPTION I-80 Phase II LOGGED BY TC

SECTION 17 LOCATION SW 1/4, SEC. 17, TWP. T35N, RNG. R11E, 3rd PM,

Northing 1765621.413, Easting 1075085.689

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. -
 Station -

BORING NO. NWB-068
 Station 926+00
 Offset 105.5 ft Right
 Ground Surface Elev. 651.60 ft

D E P T H H	B L O W S	U C S Qu	M O I S T	Surface Water Elev.	D E P T H H	B L O W S	U C S Qu	M O I S T
				n/a ft				
(ft)	(/6")	(tsf)	(%)		(ft)	(/6")	(tsf)	(%)
651.18				631.10				
			34					
	4					3		
	4	2.50	24			3		19
	4	P				3		
648.60				628.60				
	2					3		
	3		23			4	1.00	17
	-5	2		626.60	-25	4	P	
	2							
	1		25					
	1							
	0							
	0		24					
	-10	1						
641.10								
	4							
	5	3.50	20					
	8	P						
638.60								
	5							
	11		6					
	-15	11						
636.10								
	4							
	6	3.50	16					
	9	P						
	5							
	7	3.00	20					
	-20	12	P					

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
 805 Amherst Court, Suite 204
 Naperville, Illinois 60565
 (630) 355-2838
 FAI Route 80 from
 Chicago Street to US
 Route 30

SOIL BORING LOG

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY TC

SECTION 17 LOCATION SW 1/4, SEC. 17, TWP. T35N, RNG. R11E, 3rd PM,

Northing 1765670.783, Easting 1075287.966

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. <u>-</u>	D	B	U	M	Surface Water Elev. <u>n/a</u> ft	D	B	U	M
Station <u>-</u>	E	L	C	O	Stream Bed Elev. <u>n/a</u> ft	E	L	C	O
BORING NO. <u>NWB-069</u>	P	O	S	I	Groundwater Elev.:	T	W	S	S
Station <u>928+00</u>	T	H	Qu	T	First Encounter <u>Dry</u> ft	H	S	Qu	T
Offset <u>108.6 ft Right</u>	H	S			Upon Completion <u>Dry</u> ft				
Ground Surface Elev. <u>651.29</u> ft	(ft)	(/6")	(tsf)	(%)	After <u>-</u> Hrs. <u>-</u> ft	(ft)	(/6")	(tsf)	(%)

Soil Description	Depth (ft)	Blow Count (/6")	UCS (tsf)	Moisture (%)	Soil Description	Depth (ft)	Blow Count (/6")	UCS (tsf)	Moisture (%)
6.0" TOPSOIL-black	650.79					630.79			
SILTY CLAY LOAM-dark brown, gray & black-stiff		3		59	CLAY LOAM-gray-very stiff		6		
		3	1.20	30			8	2.50	19
		4	B				12	P	
	648.29								
CLAY LOAM-brown & gray-stiff		4					4		
		4	1.50	18			5	2.00	13
		-5	P			626.29	-25	6	P
	645.79				End Of Boring @ -25.0'. Boring backfilled with cuttings.				
SILTY GRAVEL-brown-dense		3							
		5		7					
		29							
	643.29								
SILTY CLAY LOAM-gray-stiff		3							
		3	1.00	20					
		4	P						
	-10								
	640.79								
CLAY LOAM-gray-stiff		2							
		5	1.00	21					
		5	P						
		4							
		4	2.00	23					
		-15	P						
		3							
		4	1.80	22					
		7	B						
	633.29								
SILT-gray-very loose		1							
		1		19					
		1							
	-20								

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
 805 Amherst Court, Suite 204
 Naperville, Illinois 60565
 (630) 355-2838

FAI Route 80 from
 Chicago Street to US
 Route 30

SOIL BORING LOG

Date 2/28/22

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY TC

SECTION 17 LOCATION SW 1/4, SEC. 17, TWP. T35N, RNG. R11E, 3rd PM,

Northing 1765727.109, Easting 1075485.234

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. -
 Station -

BORING NO. NWB-070
 Station 930+00
 Offset 108.6 ft Right
 Ground Surface Elev. 653.53 ft

D E P T H
B L O W S
U C S
M O I S T
 (ft) (/6") (tsf) (%)

Surface Water Elev. n/a ft
 Stream Bed Elev. n/a ft
 Groundwater Elev.:
 First Encounter 635.032 ft▼
 Upon Completion 635.532 ft▼
 After - Hrs. - ft

D E P T H
B L O W S
U C S
M O I S T
 (ft) (/6") (tsf) (%)

6.0" TOPSOIL-black	653.03				CLAY LOAM-brown-very stiff (continued)				
GRAVEL & STONE-brown & black-loose (Fill)		4		34			3		
		3		24			5	2.50	19
		4					7	P	
	650.53								
CLAY LOAM-brown-very stiff		4					3		
		5	2.00	30			5	2.50	18
		-5	6	P		628.53	-25	6	P
					End Of Boring @ -25.0'. Boring backfilled with cuttings.				
		3							
		3	2.50	6					
		5	P						
		5							
		6	2.10	16					
		-10	7	B			-30		
becoming gray @ -8.0'									
		3							
		3	2.00	15					
		6	P						
		3							
		4	2.00	19					
		-15	6	P			-35		
		4							
		5	2.00	19					
		7	P						
		3							
		4	2.00	17					
		-20	5	P			-40		

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204
Naperville, Illinois 60565
(630) 355-2838

FAI Route 80 from
Chicago Street to US
Route 30

SOIL BORING LOG

Page 1 of 1

Date 2/28/22

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY TC

SECTION 17 LOCATION SW 1/4, SEC. 17, TWP. T35N, RNG. R11E, 3rd PM,

Northing 1765780.838, Easting 1075683.535

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. -
Station -

BORING NO. NWB-071
Station 932+00
Offset 123.2 ft Right
Ground Surface Elev. 655.52 ft

D E P T H (ft)	B L O W S (/6")	U C S Qu (tsf)	M O I S T (%)	Surface Water Elev. <u>n/a</u> ft	Stream Bed Elev. <u>n/a</u> ft	D E P T H (ft)	B L O W S (/6")	U C S Qu (tsf)	M O I S T (%)
-------------------------------	--------------------------------	----------------------------	------------------------------	-----------------------------------	--------------------------------	-------------------------------	--------------------------------	----------------------------	------------------------------

6.0" TOPSOIL-black	655.02								
CLAY LOAM-dark brown & gray spotted-very stiff (Fill)		3			634.52		4		
		3	2.00	29			6		12
		4	P				13		
	652.52				632.52				
CLAY LOAM-brown & gray-stiff to very stiff		2					6		
		2	1.50	19			6	2.00	17
		-5	3	P		630.52	-25	5	P
		4							
		4	3.50	18					
		9	P						
		4							
		5	3.50	16					
	-10	7	P				-30		
becoming gray @ -10.5'									
		5							
		9	2.50	19					
		14	P						
		4							
		5	3.50	17					
	-15	10	P				-35		
		3							
		4	2.00	21					
		8	P						
		3							
		6	3.00	18					
	-20	7	P				-40		

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
 805 Amherst Court, Suite 204
 Naperville, Illinois 60565
 (630) 355-2838

FAI Route 80 from
 Chicago Street to US
 Route 30

SOIL BORING LOG

Date 2/28/22

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY TC

SECTION 17 LOCATION SW 1/4, SEC. 17, TWP. T35N, RNG. R11E, 3rd PM,

Northing 1765838.698, Easting 1075883.259

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. -
 Station -

BORING NO. NWB-072
 Station 934+00
 Offset 145.4 ft Right
 Ground Surface Elev. 659.61 ft

D
E
P
T
H

 B
L
O
W
S

 U
C
S

 M
O
I
S
T

 (ft) (/6") (tsf) (%)

Surface Water Elev. n/a ft
 Stream Bed Elev. n/a ft
 Groundwater Elev.:
 First Encounter 651.112 ft▼
 Upon Completion _____ ft
 After - Hrs. _____ ft

D
E
P
T
H

 B
L
O
W
S

 U
C
S

 M
O
I
S
T

 (ft) (/6") (tsf) (%)

6.0" TOPSOIL-black	659.11				CLAY LOAM-brown-very stiff to hard (continued)				
SILTY CLAY-dark brown-stiff				35					
		3					8		
		4	1.50	28			9	3.50	15
		5	P				10	P	
		7					9		
		10	1.50	24			11	3.00	17
		-5	8	P		634.61	-25	14	P
	654.11				End Of Boring @ -25.0'. Boring backfilled with cuttings.				
CLAY LOAM-brown-very stiff to hard		4							
		7	3.00	16					
		7	P						
		4							
		5	4.00	18					
		-10	7	P			-30		
		5							
		7	2.00	19					
		13	B						
becoming gray @ -13.0'		5							
		6	2.00	18					
		-15	9	P			-35		
		8							
		7	2.50	18					
		8	P						
		4							
		6	2.00	22					
		-20	6	P			-40		

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
 805 Amherst Court, Suite 204
 Naperville, Illinois 60565
 (630) 355-2838
 FAI Route 80 from
 Chicago Street to US
 Route 30

SOIL BORING LOG

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY TC

SECTION 17 LOCATION SW 1/4, SEC. 17, TWP. T35N, RNG. R11E, 3rd PM,

Northing 1765995.4, Easting 1076036.1

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. -
 Station -

BORING NO. NWB-073A
 Station 936+00
 Offset 70.2 ft Right
 Ground Surface Elev. 649.40 ft

D E P T H (ft)	B L O W S (/6")	U C S Qu (tsf)	M O I S T (%)	Surface Water Elev. <u>n/a</u> ft	Stream Bed Elev. <u>n/a</u> ft	D E P T H (ft)	B L O W S (/6")	U C S Qu (tsf)	M O I S T (%)
-------------------------------	--------------------------------	----------------------------	------------------------------	-----------------------------------	--------------------------------	-------------------------------	--------------------------------	----------------------------	------------------------------

8.0" TOPSOIL-black	648.73								
CLAY LOAM-brown-very stiff			25						
		3					3		
		3	2.50	24			4	3.00	14
		5	P				6	P	
		5					3		
		6	2.50	21			5	2.50	15
		-5	7	P		624.40	-25	6	P
					End Of Boring @ -25.0'. Boring backfilled with cuttings.				
		4							
		6	2.50	17					
		8	P						
		5							
		6	3.00	18					
		-10	9	P			-30		
		5							
		7	2.20	16					
		10	B						
becoming gray @ -13.0'		5							
		5	2.00	18					
		-15	12	B			-35		
		4							
		4	2.00	17					
		9	P						
		5							
		5	2.00	18					
		-20	8	P			-40		

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
 805 Amherst Court, Suite 204
 Naperville, Illinois 60565
 (630) 355-2838
 FAI Route 80 from
 Chicago Street to US
 Route 30

SOIL BORING LOG

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY TC

SECTION 17 LOCATION SW 1/4, SEC. 17, TWP. T35N, RNG. R11E, 3rd PM,

Northing 1766093.455, Easting 1076217.16

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. -
 Station -

BORING NO. NWB-074A
 Station 938+02
 Offset 70.2 ft Right
 Ground Surface Elev. 647.07 ft

D
E
P
T
H

 B
L
O
W
S

 U
C
S

 M
O
I
S
T

 (ft) (/6") (tsf) (%)

Surface Water Elev. n/a ft
 Stream Bed Elev. n/a ft
 Groundwater Elev.:
 First Encounter Dry ft
 Upon Completion Dry ft
 After - Hrs. - ft

D
E
P
T
H

 B
L
O
W
S

 U
C
S

 M
O
I
S
T

 (ft) (/6") (tsf) (%)

13.0" CONCRETE					SILTY CLAY-dark gray to gray-medium stiff to stiff (continued)				
645.99									
CRUSHED STONE-dense	21			7		2			
	25					1	0.50		36
	4					2	P		
644.07						624.07			
CLAY LOAM-brown-very stiff (Fill)					SILTY CLAY LOAM-gray-very stiff				
	6					5			
	6	3.10		15		5	2.00		24
	-5	6	B			622.07	-25	6	P
becoming gray @ -5.5'					End Of Boring @ -25.0'. Boring backfilled with cuttings.				
	4								
	7	2.75		18					
	7	P							
	3								
	3	2.00		14					
	-10	4	P						
636.57									
CRUSHED STONE-brown & gray-very dense	14			7					
	26								
	50/2"								
	17			8					
	50/5"								
	-15								
631.57									
SILTY CLAY-dark gray to gray-medium stiff to stiff	3								
	4	1.50		26					
	5	P							
	3								
	2	1.00		38					
	-20	2	P						

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204
Naperville, Illinois 60565
(630) 355-2838

FAI Route 80 from
Chicago Street to US

SOIL BORING LOG

Page 1 of 1

Date 3/14/22

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY TC

SECTION 17 LOCATION SW 1/4, SEC. 17, TWP. T35N, RNG. R11E, 3rd PM,

Northing 1766256.3, Easting 1076598.9

COUNTY Will DRILLING METHOD Hand Auger HAMMER TYPE CME Automatic

STRUCT. NO. -
Station -

BORING NO. NWB-076
Station 942+00
Offset 141.1 ft Right
Ground Surface Elev. 655.70 ft

D
E
P
T
H

(ft)

B
L
O
W
S

(/6")

U
C
S

Qu
(tsf)

M
O
I
S
T

(%)

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft
Groundwater Elev.:
First Encounter Dry ft
Upon Completion ft
After - Hrs. - ft

12.0" TOPSOIL-black	654.70	HA		38
CLAY LOAM-brown & gray spotted black-very stiff (Fill)	653.70	HA	3.00	16
SILTY SAND & GRAVEL-brown (Fill)	651.70	HA	P	9
CLAY LOAM-brown spotted black-stiff (Fill)	649.70	HA	1.00 P	6
CLAY LOAM-brown-hard	645.70	HA	4.50 P	20
Auger Refusal @ -10.0'. End Of Boring.	-10	HA	4.50 P	17
	-15			
	-20			

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
 805 Amherst Court, Suite 204
 Naperville, Illinois 60565
 (630) 355-2838

FAI Route 80 from
 Chicago Street to US

SOIL BORING LOG

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY TC

SECTION 17 LOCATION SW 1/4, SEC. 17, TWP. T35N, RNG. R11E, 3rd PM,

Northing 1766309.787, Easting 1076553.735

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. -
 Station -

BORING NO. NWB-076A
 Station 941+95
 Offset 71.3 ft Right
 Ground Surface Elev. 640.57 ft

D E P T H	B L O W S	U C S Qu	M O I S T T
(ft)	(/6")	(tsf)	(%)

Surface Water Elev. n/a ft
 Stream Bed Elev. n/a ft

Groundwater Elev.:
 First Encounter Dry ft
 Upon Completion Dry ft
 After - Hrs. - ft

14.0" CONCRETE	639.40				
CRUSHED ASPHALT & STONE-dense	637.57	36			
		23		5	
		23			
FRACTURED ROCK-brown-very dense	636.57	21			
		35		5	
Drillers Observation: Apparent Bedrock	635.57	-5	50/2"		
Borehole continued with rock coring.					
		-10			
		-15			
		-20			

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
 805 Amherst Court, Suite 204
 Naperville, Illinois 60565
 (630) 355-2838

FAI Route 80 from
 Chicago Street to US
 Route 30

SOIL BORING LOG

Page 1 of 1

Date 3/14/22

ROUTE DESCRIPTION I-80 Phase II LOGGED BY TC

SECTION 17 LOCATION SW 1/4, SEC. 17, TWP. T35N, RNG. R11E, 3rd PM,

Northing 1766383.2, Easting 1076762.9

COUNTY Will DRILLING METHOD Hand Auger HAMMER TYPE CME Automatic

STRUCT. NO. -
 Station -

BORING NO. NWB-077
 Station 944+00
 Offset 141.1 ft Right
 Ground Surface Elev. 651.90 ft

DEPTH H (ft)	B L O W S (/6")	U C S Qu (tsf)	M O I S T (%)
--------------------	--------------------------------	----------------------------	------------------------------

Surface Water Elev.	<u>n/a</u>	ft
Stream Bed Elev.	<u>n/a</u>	ft
Groundwater Elev.:		
First Encounter	<u>Dry</u>	ft
Upon Completion	<u> </u>	ft
After <u>-</u> Hrs.	<u>-</u>	ft

8.0" TOPSOIL-black 651.23

HA			
----	--	--	--

40

CLAY LOAM-brown-stiff to very stiff

HA			
----	--	--	--

1.75	19
------	----

HA			
----	--	--	--

P	
---	--

--	--	--	--

2.50	17
------	----

--	--	--	--

P	
---	--

HA			
----	--	--	--

--	--

-5			
----	--	--	--

2.50	22
------	----

--	--	--	--

P	
---	--

HA			
----	--	--	--

--	--

--	--	--	--

1.75	14
------	----

--	--	--	--

P	
---	--

643.40

Auger Refusal @ -8.5'. End Of Boring.

--	--	--	--

--	--

-10			
-----	--	--	--

--	--

--	--	--	--

--	--

--	--	--	--

--	--

--	--	--	--

--	--

--	--	--	--

--	--

--	--	--	--

--	--

--	--	--	--

--	--

--	--	--	--

--	--

-15			
-----	--	--	--

--	--

--	--	--	--

--	--

--	--	--	--

--	--

--	--	--	--

--	--

--	--	--	--

--	--

--	--	--	--

--	--

-20			
-----	--	--	--

--	--

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204
Naperville, Illinois 60565
(630) 355-2838

FAI Route 80 from
Chicago Street to US
Route 30

SOIL BORING LOG

Page 1 of 1

Date 3/14/22

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY TC

SECTION 17 LOCATION SE 1/4, SEC. 17, TWP. T35N, RNG. R11E, 3rd PM,

Northing 1766518.382, Easting 1076919.99

COUNTY Will DRILLING METHOD Hand Auger HAMMER TYPE CME Automatic

STRUCT. NO. -
Station -

BORING NO. NWB-078
Station 946+00
Offset 139 ft Right
Ground Surface Elev. 656.20 ft

D
E
P
T
H
(ft)

B
L
O
W
S
(/6")

U
C
S
Qu
(tsf)

M
O
I
S
T
(%)

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft
Groundwater Elev.:
First Encounter Dry ft
Upon Completion ft
After - Hrs. - ft

6.0" TOPSOIL-black	655.70	HA		31
CLAY LOAM-brown-stiff to hard		HA		
			2.00	19
			P	
		HA		
			2.50	19
			P	
		HA		
	-5		4.50	20
			P	
		HA		
			1.50	13
			P	
		HA		
			3.00	14
			P	
	646.20	-10		

Auger Refusal @ -10.0'. End Of Boring.

-15

-20

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
 805 Amherst Court, Suite 204
 Naperville, Illinois 60565
 (630) 355-2838
 FAI Route 80 from
 Chicago Street to US
 Route 30

SOIL BORING LOG

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY TC

SECTION 17 LOCATION SE 1/4, SEC. 17, TWP. T35N, RNG. R11E, 3rd PM,

Nothing 1766647.529, Easting 1076965.806

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. -
 Station -

BORING NO. NWB-079A
 Station 947+18
 Offset 75.3 ft Right
 Ground Surface Elev. 633.33 ft

D E P T H H S H	B L O W S H S	U C S Qu	M O I S T T
(ft)	(/6")	(tsf)	(%)

Surface Water Elev. n/a ft
 Stream Bed Elev. n/a ft
 Groundwater Elev.:
 First Encounter Dry ft
 Upon Completion Dry ft
 After - Hrs. - ft

15.0" CONCRETE

632.08

CRUSHED STONE-dense

14

16

17

6

629.33

10

Borehole continued with rock
 coring.

50/2"

-5

-10

-15

-20

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204
Naperville, Illinois 60565
(630) 355-2838
FAI Route 80 from
Chicago Street to US
Route 30

SOIL BORING LOG

Page 1 of 1

Date 11/20/21

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY LP

SECTION 14 LOCATION SW 1/4, SEC. 14, TWP. T35N, RNG. R10E, 3rd PM,

Northing 1765244.978, Easting 1060734.351

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. -
Station -

BORING NO. SGB-002
Station 782+59
Offset 26.9 ft Left
Ground Surface Elev. 642.29 ft

D
E
P
T
H

B
L
O
W
S

U
C
S

M
O
I
S
T

(ft) (/6") (tsf) (%)

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft
Groundwater Elev.:
First Encounter Dry ft
Upon Completion Dry ft
After - Hrs. - ft

12.0" CRUSHED STONE				
	641.29			9
CLAY LOAM-brown & gray spotted black-very stiff to hard (Fill)		3		
		3	4.00	18
		4	B	
		5		
		7	4.80	17
		-5	7	B
		5		
		4	2.30	22
		6	B	
		5		
		5	3.30	19
	632.29	-10	7	B

End Of Boring @ -10.0'. Boring
backfilled with cuttings.

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
 805 Amherst Court, Suite 204
 Naperville, Illinois 60565
 (630) 355-2838
 FAI Route 80 from
 Chicago Street to US
 Route 30

SOIL BORING LOG

Page 1 of 1

Date 3/14/22

ROUTE DESCRIPTION I-80 Phase II LOGGED BY MB

SECTION 14 LOCATION SW 1/4, SEC. 14, TWP. T35N, RNG. R10E, 3rd PM,

Northing 1765186.395, Easting 1060877.921

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. -
 Station -

D
E
P
T
H

 B
L
O
W
S

 U
C
S

 M
O
I
S
T

 (ft) (1/6") (tsf) (%)

Surface Water Elev. n/a ft
 Stream Bed Elev. n/a ft
 Groundwater Elev.:
 First Encounter Dry ft
 Upon Completion Dry ft
 After - Hrs. - ft

BORING NO. SGB-003
 Station 784+00
 Offset 36.2 ft Right
 Ground Surface Elev. 644.01 ft

ASPHALT					
	643.01				
CLAY LOAM-brown-stiff to very stiff		3			
		3 5	1.80 B	19	
		4			
		6 8	2.50 P	17	
		-5			
		5			
		6 8	2.10 B	18	
		4			
		6 9	3.75 P	19	
	634.01	-10			
End Of Boring @ -10.0'. Boring backfilled with cuttings.					
		-15			
		-20			

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
 805 Amherst Court, Suite 204
 Naperville, Illinois 60565
 (630) 355-2838
 FAI Route 80 from
 Chicago Street to US
 Route 30

SOIL BORING LOG

Page 1 of 1

Date 3/17/22

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY MB

SECTION 14 LOCATION SW 1/4, SEC. 14, TWP. T35N, RNG. R10E, 3rd PM,

 Northing 1765163.903, Easting 1061180.073

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. -
 Station -

BORING NO. SGB-005
 Station 787+02
 Offset 68.1 ft Right
 Ground Surface Elev. 645.30 ft

DEPTH TWS H	UCS Qu	MOIST T
(ft)	(tsf)	(%)

Surface Water Elev. n/a ft
 Stream Bed Elev. n/a ft
 Groundwater Elev.:
 First Encounter 634.3 ft▼
 Upon Completion ft
 After - Hrs. - ft

DEPTH (ft)	SOIL DESCRIPTION	UCS (tsf)	MOISTURE (%)	REMARKS
644.30	ASPHALT			
5	CLAY LOAM-brown & gray-stiff to hard	5.90	17	
7		B		
4				
4		4.00	16	
6		B		
3				
4		1.50	19	
6		B		
3				
6		3.20	24	
6		B		
635.30	End Of Boring @ -10.0'. Boring backfilled with cuttings.			
-15				
-20				

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204
Naperville, Illinois 60565
(630) 355-2838

FAI Route 80 from
Chicago Street to US
Route 30

SOIL BORING LOG

ROUTE _____ DESCRIPTION I-80 Phase II LOGGED BY LP

SECTION 14 LOCATION SE 1/4, SEC. 14, TWP. T35N, RNG. R10E, 3rd PM,

Nothing 1765262.677, Easting 1061329.645

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. _____
Station _____

BORING NO. SGB-006
Station 788+54
Offset 25.9 ft Left
Ground Surface Elev. 647.38 ft

**D
E
P
T
H**
**B
L
O
W
S**
**U
C
S**
**M
O
I
S
T**
Qu
(ft)
(/6")
(tsf)
(%)

Surface Water Elev. _____ n/a ft
Stream Bed Elev. _____ n/a ft
Groundwater Elev.:
First Encounter _____ Dry ft
Upon Completion _____ Dry ft
After - Hrs. _____ - ft

SILTY SAND, GRAVEL & STONE

646.38 _____ 5

CLAY LOAM-brown-very stiff to hard

5 _____

4 5.30 15

5 B

6 _____

5 4.90 17

-5 5 B

5 _____

5 5.50 24

9 B

6 _____

9 3.90 23

9 B

637.38 -10

End Of Boring @ -10.0'. Boring
backfilled with cuttings.

-15

-20

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
 805 Amherst Court, Suite 204
 Naperville, Illinois 60565
 (630) 355-2838
 FAI Route 80 from
 Chicago Street to US
 Route 30

SOIL BORING LOG

ROUTE Route 30 **DESCRIPTION** I-80 Phase II **LOGGED BY** LP

SECTION 14 **LOCATION** SE 1/4, SEC. 14, TWP. T35N, RNG. R10E, 3rd PM,

Northing 1765281.748, Easting 1061927.992

COUNTY Will **DRILLING METHOD** Hollow Stem Auger **HAMMER TYPE** CME Automatic

STRUCT. NO. <u>-</u> Station <u>-</u>	D E P T H B L O W S U C S M O I S T U R E Qu (ft) (/6") (tsf) (%)	Surface Water Elev. <u>n/a</u> ft	
		Stream Bed Elev. <u>n/a</u> ft	
BORING NO. <u>SGB-010</u> Station <u>794+53</u> Offset <u>26.3 ft Left</u> Ground Surface Elev. <u>649.86</u> ft		Groundwater Elev.: First Encounter <u>Dry</u> ft Upon Completion <u>Dry</u> ft After <u>-</u> Hrs. <u>-</u> ft	

SILTY SAND, GRAVEL & STONE 648.86					13
CLAY LOAM w/ Stone-brown-very stiff (Fill) 646.86	4				
	5 11	2.25 P			9
SILTY CLAY LOAM (A6)-brown-hard 641.86	5				
	5 8 -5	5.60 B			22
	5 9 13	4.00 B			24
SILTY CLAY LOAM-gray-very stiff 639.86	5 6	3.60 B			18
	-10				
End Of Boring @ -10.0'. Boring backfilled with cuttings. -15 -20					

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204
Naperville, Illinois 60565
(630) 355-2838

FAI Route 80 from
Chicago Street to US
Route 30

SOIL BORING LOG

Date 11/20/21

ROUTE Description I-80 Phase II LOGGED BY LP
SECTION 14 LOCATION SE 1/4, SEC. 14, TWP. T35N, RNG. R10E, 3rd PM,
COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

Table with columns for STRUCT. NO., BORING NO., Station, Offset, Ground Surface Elev., D E P T H (ft), B L O W S (/6"), U C S (tsf), M O I S T (%), Surface Water Elev., Stream Bed Elev., Groundwater Elev., First Encounter, Upon Completion, After Hrs.

Main data table with columns for Soil Description, Depth (ft), Blow Count (/6"), UCS (tsf), Moisture (%), and Elevation (ft). Includes entries for SILTY SAND, GRAVEL & STONE and CLAY LOAM w/ Stone-brown-very stiff.

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204
Naperville, Illinois 60565
(630) 355-2838

FAI Route 80 from
Chicago Street to US

SOIL BORING LOG

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY MB

SECTION 14 LOCATION SE 1/4, SEC. 14, TWP. T35N, RNG. R10E, 3rd PM,
Northing 1765264.178, Easting 1063280.587

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. -
Station -

BORING NO. SGB-016
Station 808+04
Offset 33.7 ft Right
Ground Surface Elev. 640.84 ft

D E P T H	B L O W S	U C S Qu	M O I S T
-----------------------	-----------------------	-----------------------	-----------------------

Surface Water Elev.	<u>n/a</u>	ft
Stream Bed Elev.	<u>n/a</u>	ft
Groundwater Elev.:		
First Encounter	<u>Dry</u>	ft
Upon Completion	<u>Dry</u>	ft
After <u>-</u> Hrs.	<u>-</u>	ft

Soil Description	Depth (ft)	Blows (/6")	UCS (tsf)	MOS (%)
ASPHALT	639.84			
SILTY LOAM-brown & gray spotted black-stiff to very stiff (Fill)	3			
	5	2.70	15	
	7	B		
	1			
	3	1.00	25	
CLAY LOAM-brown & gray-very stiff	4	P		
	635.34			
	3			
SILTY CLAY LOAM-brown-very loose	5	2.70	24	
	6	B		
End Of Boring @ -10.0'. Boring backfilled with cuttings.	632.84			
	1			
	2		24	
	630.84	-10		
	2			
	-15			
	-20			

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
 805 Amherst Court, Suite 204
 Naperville, Illinois 60565
 (630) 355-2838
 FAI Route 80 from
 Chicago Street to US
 Route 30

SOIL BORING LOG

Date 11/19/21

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY LP

SECTION 13 LOCATION SW 1/4, SEC. 13, TWP. T35N, RNG. R10E, 3rd PM,

Northing 1765338.835, Easting 1063724.891

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. -
 Station -

BORING NO. SGB-019
 Station 812+50
 Offset 26.6 ft Left
 Ground Surface Elev. 639.80 ft

D
E
P
T
H

 B
L
O
W
S

 U
C
S

 M
O
I
S
T

 (ft) (/6") (tsf) (%)

Surface Water Elev. n/a ft
 Stream Bed Elev. n/a ft
 Groundwater Elev.:
 First Encounter Dry ft
 Upon Completion Dry ft
 After - Hrs. - ft

Soil Description	Depth (ft)	Blow Count (/6")	UCS (tsf)	Moisture (%)
SILTY SAND, GRAVEL & STONE	638.30	3		10
SILTY CLAY LOAM (A-6)-dark brown & gray spotted black-very stiff (Fill)	637.00	7	3.90 B	15
	634.30	3	2.70 B	18
SILTY CLAY-dark brown & gray-very stiff	633.00	7	2.40 B	23
	631.80	7		
CLAY LOAM-brown & gray-very stiff	630.00	4	2.00 B	17
	629.80	4		
End Of Boring @ -10.0'. Boring backfilled with cuttings.	-10.0			
	-15			
	-20			

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
 805 Amherst Court, Suite 204
 Naperville, Illinois 60565
 (630) 355-2838
 FAI Route 80 from
 Chicago Street to US
 Route 30

SOIL BORING LOG

ROUTE Route 30 **DESCRIPTION** I-80 Phase II **LOGGED BY** DJ

SECTION 13 **LOCATION** SW 1/4, SEC. 13, TWP. T35N, RNG. R10E, 3rd PM,

Northing 1755383.9, Easting 1064023

COUNTY Will **DRILLING METHOD** Hollow Stem Auger **HAMMER TYPE** CME Automatic

STRUCT. NO. <u>-</u>	DEPTHS	UCS	MOIST	Surface Water Elev. <u>n/a</u> ft
Station <u>-</u>	(ft)	(tsf)	(%)	Stream Bed Elev. <u>n/a</u> ft
BORING NO. <u>SGB-020</u>				Groundwater Elev.:
Station <u>815+50</u>				First Encounter <u>Dry</u> ft
Offset <u>62.7 ft Left</u>				Upon Completion <u>Dry</u> ft
Ground Surface Elev. <u>639.30</u> ft				After <u>-</u> Hrs. <u>-</u> ft

Soil Description	Elev. (ft)	Depth (ft)	UCS (tsf)	MOIST (%)
ASPHALT	638.30			2
CLAY LOAM w/ Stone-brown & gray-very stiff to hard (Fill)		11		
		5	6.00	13
		8	B	
		3		
		7	3.50	21
	-5	10	P	
	633.80			
CLAY LOAM-brown & gray-very stiff		3		
		5	2.40	20
		4	B	
		2		
	4	2.10	19	
	629.30	-10	4	B
End Of Boring @ -10.0'. Boring backfilled with cuttings.				
		-15		
		-20		

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204
Naperville, Illinois 60565
(630) 355-2838
FAI Route 80 from
Chicago Street to US
Route 30

SOIL BORING LOG

Page 1 of 1

Date 11/19/21

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY LP

SECTION 13 LOCATION SW 1/4, SEC. 13, TWP. T35N, RNG. R10E, 3rd PM,

Northing 1765356.499, Easting 1064324.215

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. _____	-	D E P T H	B L O W S	U C S	M O I S T	Surface Water Elev. _____ n/a ft
Station _____	-					Stream Bed Elev. _____ n/a ft
BORING NO. _____	SGB-022					Groundwater Elev.: _____
Station _____	818+50					First Encounter _____ Dry ft
Offset _____	25.9 ft Left	Upon Completion _____ Dry ft				After _____ Hrs. _____ - ft
Ground Surface Elev. _____	639.86	ft	(ft)	(/6")	(tsf)	(%)

Description	Elev. (ft)	Blows (/6")	UCS (tsf)	Moist (%)
SILTY SAND, GRAVEL & STONE	638.61			11
CLAY LOAM-brown & gray-hard (Fill)	636.86	4	5 6	4.50 P 13
CLAY LOAM with Brick & Stone-dark brown & gray-very stiff (Fill)	634.36	5	4 4	2.00 P 19
CLAY LOAM-brown & gray spotted black-very stiff (Fill)	631.86	4	6 5	3.25 P 19
CLAY LOAM-brown & gray-very stiff	629.86	5	6 6	2.10 B 23
End Of Boring @ -10.0'. Boring backfilled with cuttings.	-10			
	-15			
	-20			

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
 805 Amherst Court, Suite 204
 Naperville, Illinois 60565
 (630) 355-2838
 FAI Route 80 from
 Chicago Street to US
 Route 30

SOIL BORING LOG

Date 11/18/21

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY DJ

SECTION 13 LOCATION SW 1/4, SEC. 13, TWP. T35N, RNG. R10E, 3rd PM,

Northing 1765404.9, Easting 1064622.7

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. -
 Station -

BORING NO. SGB-024
 Station 821+50
 Offset 65 ft Left
 Ground Surface Elev. 639.20 ft

D E P T H H	B L O W S	U C S Qu	M O I S T
(ft)	(/6")	(tsf)	(%)

Surface Water Elev. n/a ft
 Stream Bed Elev. n/a ft
 Groundwater Elev.:
 First Encounter Dry ft
 Upon Completion Dry ft
 After - Hrs. - ft

ASPHALT				
	638.20			3
CRUSHED ASPHALT & STONE-medium dense		16		
		7		8
		7		
	636.20			
CLAY LOAM-brown & gray-stiff to very stiff		3		
		7	3.30	19
		8	B	
	-5			
		2		
		4	2.80	22
		5	B	
		3		
		4	1.90	21
	629.20 -10	4	B	

End Of Boring @ -10.0'. Boring
backfilled with cuttings.

-15

-20

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
 805 Amherst Court, Suite 204
 Naperville, Illinois 60565
 (630) 355-2838

FAI Route 80 from
 Chicago Street to US

SOIL BORING LOG

Page 1 of 1

Date 11/19/21

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY LP

SECTION 13 LOCATION SW 1/4, SEC. 13, TWP. T35N, RNG. R10E, 3rd PM,

Nothing 1765376.085, Easting 1064925.115

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. <u>-</u>	D E P T H	B L O W S	U C S Qu	M O I S T	Surface Water Elev. <u>n/a</u> ft
Station <u>-</u>					Stream Bed Elev. <u>n/a</u> ft
BORING NO. <u>SGB-025</u>	(ft)	(/6")	(tsf)	(%)	Groundwater Elev.:
Station <u>824+51</u>					First Encounter <u>Dry</u> ft
Offset <u>26.7 ft Left</u>					Upon Completion <u>Dry</u> ft
Ground Surface Elev. <u>640.17</u> ft					After <u>-</u> Hrs. <u>-</u> ft

SILTY SAND, GRAVEL & STONE	638.92				10
		7			
SILTY LOAM (A-6)-brown & gray-hard (Fill)		16 27	6.20 B	13	
		6			
		7 -5	9.00 B	16	
	634.67				
CLAY LOAM-dark brown & gray-hard		4			
		5 9	5.20 B	19	
	632.17				
SANDY CLAY LOAM-brown & gray-stiff		3			
		3 6	1.30 B	18	
	630.17	-10			
End Of Boring @ -10.0'. Boring backfilled with cuttings.					
		-15			
		-20			

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
 805 Amherst Court, Suite 204
 Naperville, Illinois 60565
 (630) 355-2838
 FAI Route 80 from
 Chicago Street to US
 Route 30

SOIL BORING LOG

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY MB

SECTION 13 LOCATION SW 1/4, SEC. 13, TWP. T35N, RNG. R10E, 3rd PM,

Northing 1765332.745, Easting 1065370.026

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. -
 Station -

BORING NO. SGB-027
 Station 828+95
 Offset 30.6 ft Right
 Ground Surface Elev. 639.92 ft

DEPTH (ft)	BLOW COUNTS (/6")	UCS (tsf)	MOISTURE (%)
2			
5	1.00	22	
9	P		
4			
5	1.30	21	
-5	6	B	
3			
4	1.30	23	
4	B		
1			
2	0.50	25	
3	P		

Surface Water Elev. n/a ft
 Stream Bed Elev. n/a ft
 Groundwater Elev.:
 First Encounter 631.42 ft▼
 Upon Completion Dry ft
 After - Hrs. - ft

4.0" ASPHALT 639.59

CLAY LOAM-brown & gray
 spotted black-medium stiff to stiff
 (Fill)

2			
5	1.00	22	
9	P		
4			
5	1.30	21	
-5	6	B	
3			
4	1.30	23	
4	B		
1			
2	0.50	25	
3	P		

629.92 -10

End Of Boring @ -10.0'. Boring
 backfilled with cuttings.

-15			
-20			

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204
Naperville, Illinois 60565
(630) 355-2838
FAI Route 80 from
Chicago Street to US
Route 30

SOIL BORING LOG

Date 3/14/22

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY MB

SECTION 13 LOCATION SW 1/4, SEC. 13, TWP. T35N, RNG. R10E, 3rd PM,

Northing 1765341.37, Easting 1065677.467

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. - Station -

BORING NO. SGB-029 Station 832+02 Offset 31.6 ft Right Ground Surface Elev. 639.74 ft

Table with columns: DEPTH (ft), BLOW COUNT (Blows/6" (tsf)), UCS (%)

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft
Groundwater Elev.:
First Encounter 636.238 ft
Upon Completion Dry ft
After - Hrs. - ft

3.0" ASPHALT 639.49
CLAY LOAM-dark brown spotted
black-very stiff (Fill)
636.74

Table with columns: DEPTH (ft), BLOW COUNT (Blows/6" (tsf)), UCS (%)

SANDY CLAY LOAM-brown-medium dense (Fill)
634.24

Table with columns: DEPTH (ft), BLOW COUNT (Blows/6" (tsf)), UCS (%)

SILTY CLAY-brown & gray-stiff
629.74 -10

Table with columns: DEPTH (ft), BLOW COUNT (Blows/6" (tsf)), UCS (%)

End Of Boring @ -10.0'. Boring backfilled with cuttings.

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



SOIL BORING LOG

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY DJ

SECTION 13 LOCATION SW 1/4, SEC. 13, TWP. T35N, RNG. R10E, 3rd PM,

Northing 1765439.609, **Easting** 1065825.647

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. <u> - </u>	DEPTH STH	BLOWS S	UCS Qu	MOIST T	Surface Water Elev. <u> n/a </u> ft
Station <u> - </u>					Stream Bed Elev. <u> n/a </u> ft
BORING NO. <u> SGB-030 </u>	(ft) (1/6")	(tsf)	(%)	Groundwater Elev.:	
Station <u> 833+53 </u>				First Encounter <u> Dry </u> ft	
Offset <u> 62 ft Left </u>				Upon Completion <u> Dry </u> ft	
Ground Surface Elev. <u> 639.43 </u> ft				After <u> - </u> Hrs. <u> - </u> ft	

ASPHALT						
638.43						
CRUSHED ASPHALT & STONE-medium dense	9			8		
	7			20		
636.43						
CLAY LOAM-brown & gray-very stiff (Fill)	3					
	4	2.20	14			
	7	B				
633.93						
SILTY CLAY-brown & gray-stiff	2					
	3	1.80	25			
	4	B				
	2					
	3	1.30	22			
629.43	3	B				
End Of Boring @ -10.0'. Boring backfilled with cuttings.						
	-15					
	-20					

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

**The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)**



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
 805 Amherst Court, Suite 204
 Naperville, Illinois 60565
 (630) 355-2838
 FAI Route 80 from
 Chicago Street to US
 Route 30

SOIL BORING LOG

Date 11/15/21

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY DJ
 SECTION 13 LOCATION SW 1/4, SEC. 13, TWP. T35N, RNG. R10E, 3rd PM,
Northing 1765459.159, Easting 1066423.24
 COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. <u>-</u>	D	B	U	M	Surface Water Elev. <u>n/a</u> ft
Station <u>-</u>	E	L	C	O	Stream Bed Elev. <u>n/a</u> ft
	P	O	S	I	
BORING NO. <u>SGB-034</u>	T	W	Qu	S	Groundwater Elev.:
Station <u>839+51</u>	H	S		T	First Encounter <u>Dry</u> ft
Offset <u>62.8 ft Left</u>					Upon Completion <u>Dry</u> ft
Ground Surface Elev. <u>642.24</u> ft	(ft)	(/6")	(tsf)	(%)	After <u>-</u> Hrs. <u>-</u> ft

Soil Description	Depth (ft)	Penetration (blows/6")	UCS (tsf)	Moisture (%)	Notes
ASPHALT	641.24				
CRUSHED ASPHALT & STONE-medium dense	639.24	12 5 7		5	
CLAY LOAM-brown & gray-hard (Fill)	636.74	4 9 9 -5	4.25 B	14	
TOPSOIL-black	634.24	4 7 11	3.30 B	28	
SILTY CLAY-brown & gray-stiff	632.24	3 3 4 -10	1.70 B	25	
End Of Boring @ -10.0'. Boring backfilled with cuttings.	-20				

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)
 BBS, form 137 (Rev. 8-99)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
 805 Amherst Court, Suite 204
 Naperville, Illinois 60565
 (630) 355-2838
 FAI Route 80 from
 Chicago Street to US
 Route 30

SOIL BORING LOG

Date 12/3/21

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY MM
 SECTION 13 LOCATION SW 1/4, SEC. 13, TWP. T35N, RNG. R10E, 3rd PM,
Northing 1765335.98, Easting 1066576.376
 COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. _____ Station _____	D E P T H	B L O W S	U C S Qu	M O I S T	Surface Water Elev. _____ n/a ft
BORING NO. <u>SGB-035</u> Station <u>841+01</u> Offset <u>65.1 ft Right</u> Ground Surface Elev. <u>643.93</u> ft					Stream Bed Elev. _____ n/a ft
					Groundwater Elev.: First Encounter _____ Dry ft
					Upon Completion _____ Dry ft After <u>-</u> Hrs. _____ - ft

10.0" ASPHALT 643.10						
CLAY LOAM-brown-hard 640.93	10					
	6 7	4.00 B	20			
SILTY CLAY LOAM (A-6)-brown-very stiff 638.43	5					
	5 8 -5	2.20 B	16			
CLAY LOAM-brown-very stiff 635.93	3					
	5 5	2.00 P	24			
SILTY LOAM-dark brown-very loose 633.93	1 0 1					
			24			
End Of Boring @ -10.0'. Boring backfilled with cuttings.						
	-15					
	-20					

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
 805 Amherst Court, Suite 204
 Naperville, Illinois 60565
 (630) 355-2838
 FAI Route 80 from
 Chicago Street to US
 Route 30

SOIL BORING LOG

Page 1 of 1

Date 12/3/21

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY MM

SECTION 13 LOCATION SW 1/4, SEC. 13, TWP. T35N, RNG. R10E, 3rd PM,

Northing 1765354.526, Easting 1067175.015

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. <u>-</u> Station <u>-</u>	D E P T H	B L O W S	U C S Qu	M O I S T	Surface Water Elev. <u>n/a</u> ft Stream Bed Elev. <u>n/a</u> ft
BORING NO. <u>SGB-039</u> Station <u>847+00</u> Offset <u>65.3 ft Right</u> Ground Surface Elev. <u>649.42</u> ft	(ft)	(/6")	(tsf)	(%)	Groundwater Elev.: First Encounter <u>Dry</u> ft Upon Completion <u>Dry</u> ft After <u>-</u> Hrs. <u>-</u> ft

8.0" ASPHALT 648.75 CLAY LOAM-brown-hard (Fill) 646.42 CLAY LOAM-brown-stiff to very stiff becoming gray @ -5.5' 639.42 -10 End Of Boring @ -10.0'. Boring backfilled with cuttings. -15 -20	(ft)	(/6")	(tsf)	(%)	
		8			
		8 5	4.50 P	10	
		5			
		5 7	1.80 B	16	
		5 8	1.30 B	17	
		4			
		6 4	2.70 B	20	

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
 805 Amherst Court, Suite 204
 Naperville, Illinois 60565
 (630) 355-2838
 FAI Route 80 from
 Chicago Street to US
 Route 30

SOIL BORING LOG

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY LP
 SECTION 13 LOCATION SE 1/4, SEC. 13, TWP. T35N, RNG. R10E, 3rd PM,
Northing 1765391.96, Easting 1068376.779
 COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. - DEPTH (ft) _____ UCS (tsf) _____ MOIST (%) _____
 Station - SURFACE WATER Elev. n/a ft
 _____ STREAM BED Elev. n/a ft
 BORING NO. SGB-047 GROUNDWATER Elev.:
 Station 859+02 First Encounter Dry ft
 Offset 65.5 ft Right Upon Completion Dry ft
 Ground Surface Elev. 647.98 ft After - Hrs. - ft

DEPTH (ft)	DIAMETER (in)	UCS (tsf)	MOIST (%)
646.98			11
646.00	3		
645.00	2		22
644.00	3		
643.00	4		
642.00	3		14
641.00	4		
640.00	-5		
642.48			
641.00	5		
640.00	4	2.70	22
639.00	6	B	
638.00	5		
637.00	6	4.10	19
637.98	9	B	
-10			
-15			
-20			

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
 805 Amherst Court, Suite 204
 Naperville, Illinois 60565
 (630) 355-2838
 FAI Route 80 from
 Chicago Street to US
 Route 30

SOIL BORING LOG

Date 11/13/21

ROUTE Route 30 **DESCRIPTION** I-80 Phase II **LOGGED BY** LP

SECTION 13 **LOCATION** SE 1/4, SEC. 13, TWP. T35N, RNG. R10E, 3rd PM,
Northing 1765489.8, Easting 1068521.9

COUNTY Will **DRILLING METHOD** Hollow Stem Auger **HAMMER TYPE** CME Automatic

STRUCT. NO. <u>-</u> Station <u>-</u>	D	E	P	T	H	B	L	O	W	S	U	C	S	M	O	I	S	T	Surface Water Elev. <u>n/a</u> ft	
																				Stream Bed Elev. <u>n/a</u> ft
BORING NO. <u>SGB-048</u> Station <u>860+50</u> Offset <u>27.7 ft Left</u> Ground Surface Elev. <u>646.90</u> ft	(ft)	(/6")			(tsf)						(%)									Groundwater Elev.:
																				First Encounter <u>Dry</u> ft
																				Upon Completion <u>Dry</u> ft
																				After <u>-</u> Hrs. <u>-</u> ft

12.0" ASPHALT 645.90																					
CRUSHED ASPHALT & STONE-loose 643.90																					
CLAY LOAM-brown-stiff (Fill) 641.40																					
SILTY CLAY-dark brown & gray spotted black-stiff to very stiff 636.90																					
becoming gray @ -8.0'																					
End Of Boring @ -10.0'. Boring backfilled with cuttings. -15																					

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
 805 Amherst Court, Suite 204
 Naperville, Illinois 60565
 (630) 355-2838
 FAI Route 80 from
 Chicago Street to US
 Route 30

SOIL BORING LOG

Date 11/15/21

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY DJ

SECTION 13 LOCATION SE 1/4, SEC. 13, TWP. T35N, RNG. R10E, 3rd PM,

Northing 1765533.894, Easting 1068824.337

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. <u>-</u>	D	B	U	M	Surface Water Elev. <u>n/a</u> ft	D	B	U	M
Station <u>-</u>	E	L	C	O	Stream Bed Elev. <u>n/a</u> ft	E	L	C	O
BORING NO. <u>SGB-050</u>	P	O	S	I	Groundwater Elev.:	T	W	S	S
Station <u>863+54</u>	T	S	Qu	T	First Encounter <u>Dry</u> ft	H	S	Qu	T
Offset <u>62.3 ft Left</u>	H	S			Upon Completion <u>Dry</u> ft				
Ground Surface Elev. <u>645.06</u> ft	(ft)	(/6")	(tsf)	(%)	After <u>-</u> Hrs. <u>-</u> ft	(ft)	(/6")	(tsf)	(%)

Soil Description	Depth (ft)	Blow Count (/6")	UCS (tsf)	Moisture (%)	Groundwater Elev. (ft)	Depth (ft)	Blow Count (/6")	UCS (tsf)	Moisture (%)
ASPHALT	644.06								
CRUSHED ASPHALT & STONE-very dense	50/6"		5						
CLAY LOAM-brown & gray-very stiff (Fill)	3	5	3.00	19					
	-5	7	P		-25				
SILTY CLAY-dark gray-stiff	3	5	1.40	27					
	5	5	B						
CLAY LOAM-brown & gray-stiff	2	3	1.20	26					
	3	4	B		-30				
End Of Boring @ -10.0'. Boring backfilled with cuttings.									
	-15				-35				
	-20				-40				

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204
Naperville, Illinois 60565
(630) 355-2838

FAI Route 80 from
Chicago Street to US
Route 30

SOIL BORING LOG

Date 11/15/21

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY DJ

SECTION 13 LOCATION SE 1/4, SEC. 13, TWP. T35N, RNG. R10E, 3rd PM,

Nothing 1765533.894, Easting 1068824.337

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. -
Station -

BORING NO. SGB-050
Station 863+54
Offset 62.3 ft Left
Ground Surface Elev. 645.06 ft

D
E
P
T
H

B
L
O
W
S

U
C
S

M
O
I
S
T

Qu

(ft) (/6") (tsf) (%)

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft
Groundwater Elev.:
First Encounter Dry ft
Upon Completion Dry ft
After - Hrs. - ft

End Of Boring @ -10.0'. Boring
backfilled with cuttings.

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204
Naperville, Illinois 60565
(630) 355-2838
FAI Route 80 from
Chicago Street to US
Route 30

SOIL BORING LOG

Page 1 of 1

Date 12/3/21

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY LP

SECTION 13 LOCATION SE 1/4, SEC. 13, TWP. T35N, RNG. R10E, 3rd PM,

Northing 1765415.461, Easting 1068982.64

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. -
Station -

BORING NO. SGB-051
Station 865+08
Offset 61 ft Right
Ground Surface Elev. 644.57 ft

**D
E
P
T
H**
**B
L
O
W
S**
**U
C
S**
**M
O
I
S
T**
Qu
(ft) **(/6")** **(tsf)** **(%)**

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft
Groundwater Elev.:
First Encounter Dry ft
Upon Completion Dry ft
After - Hrs. - ft

8.0" ASPHALT	643.91				
TOPSOIL-black		3			
		3	1.50	28	
		5	P		
	641.57				
CLAY LOAM-brown-very stiff to hard		4			
		8	4.20	19	
		-5	9	B	
		3			
		6	3.00	24	
		6	P		
		4			
		7	3.10	21	
	634.57	-10	9	B	

End Of Boring @ -10.0'. Boring backfilled with cuttings.

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
 805 Amherst Court, Suite 204
 Naperville, Illinois 60565
 (630) 355-2838

FBI Route 80 from
 Chicago Street to US

SOIL BORING LOG

Date 11/13/21ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY LPSECTION 18 LOCATION SW 1/4, SEC. 18, TWP. T35N, RNG. R11E, 3rd PM,Northing 1765505.9, Easting 1069123.4COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. -
 Station -

D
E
P
T
H

B
L
O
W
S

U
C
S

Qu

M
O
I
S
T

(ft) (/6") (tsf) (%)

Surface Water Elev. n/a ft
 Stream Bed Elev. n/a ft

BORING NO. SGB-052
 Station 866+52
 Offset 25 ft Left
 Ground Surface Elev. 645.00 ft

Groundwater Elev.:
 First Encounter Dry ft
 Upon Completion Dry ft
 After - Hrs. - ft

CRUSHED STONE			
	644.00		7
CLAY LOAM-brown-very stiff to hard		4	
		6	3.50
		8	P
		7	
		8	3.50
		10	B
		-5	
		4	
		7	3.10
		6	B
		7	
		10	4.00
		12	B
	635.00	-10	

End Of Boring @ -10.0'. Boring backfilled with cuttings.

-15
-20

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
 805 Amherst Court, Suite 204
 Naperville, Illinois 60565
 (630) 355-2838
 FAI Route 80 from
 Chicago Street to US
 Route 30

SOIL BORING LOG

ROUTE DESCRIPTION I-80 Phase II LOGGED BY LP

SECTION 18 LOCATION SW 1/4, SEC. 18, TWP. T35N, RNG. R10E, 3rd PM,

Northing 1765430.612, **Easting** 1069570.772

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. -
 Station -

BORING NO. SGB-055
 Station 870+96
 Offset 64.3 ft Right
 Ground Surface Elev. 648.88 ft

D E P T H (ft)	B L O W S (/6")	U C S Qu (tsf)	M O I S T (%)
-------------------------------	--------------------------------	--------------------------------	----------------------------------

Surface Water Elev. n/a ft
 Stream Bed Elev. n/a ft
 Groundwater Elev.:
 First Encounter Dry ft
 Upon Completion Dry ft
 After - Hrs. - ft

4.0" ASPHALT	648.85			
SILTY LOAM (A-6)-brown-very stiff to hard				
		6		
		3	2.80	21
		5	B	
		3		
		6	2.80	23
		-5	6	B
		4		
		10	4.90	19
		10	B	
becoming gray @ -8.0'		9		
		12	4.90	17
	638.88	-10	16	B

End Of Boring @ -10.0'. Boring backfilled with cuttings.

-15

-20

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
 805 Amherst Court, Suite 204
 Naperville, Illinois 60565
 (630) 355-2838
 FAI Route 80 from
 Chicago Street to US
 Route 30

SOIL BORING LOG

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY LP
 SECTION 18 LOCATION SW 1/4, SEC. 18, TWP. T35N, RNG. R11E, 3rd PM,
 COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic
 Northing 1765449.167, Easting 1070177.862

STRUCT. NO. <u>-</u>	-	D	B	U	M	Surface Water Elev.	<u>n/a</u>	ft
Station <u>-</u>	-	E	L	C	O	Stream Bed Elev.	<u>n/a</u>	ft
BORING NO. <u>SGB-059</u>		P	O	S	I	Groundwater Elev.:		
Station <u>877+04</u>		T	W		S	First Encounter	<u>Dry</u>	ft
Offset <u>64.7 ft Right</u>		H	S	Qu	T	Upon Completion	<u>Dry</u>	ft
Ground Surface Elev. <u>653.75</u>	ft	(ft)	(/6")	(tsf)	(%)	After <u>-</u> Hrs.	<u>-</u>	ft

8.0" ASPHALT	653.08							
CLAY LOAM-brown-very stiff			13					
			4	3.50	19			
			6	B				
			2					
			5	3.10	22			
			-5	7	B			
			5					
			7	3.70	17			
			9	B				
	becoming gray @ -8.0'		6					
		6	2.60	17				
643.75	-10	7	B					
End Of Boring @ -10.0'. Boring backfilled with cuttings.								
		-15						
		-20						

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
 805 Amherst Court, Suite 204
 Naperville, Illinois 60565
 (630) 355-2838
 FAI Route 80 from
 Chicago Street to US
 Route 30

SOIL BORING LOG

Page 1 of 1

Date 11/12/21

ROUTE DESCRIPTION I-80 Phase II LOGGED BY LP

SECTION 18 LOCATION SW 1/4, SEC. 18, TWP. T35N, RNG. R11E, 3rd PM,
 Northing 1765543.6, Easting 1070325.2

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. <u> </u> -	D E P T H H	B L O W S	U C S	M O I S T	Surface Water Elev. <u> </u> n/a ft
Station <u> </u> -					Stream Bed Elev. <u> </u> n/a ft
BORING NO. <u> </u> SGB-060					Groundwater Elev.:
Station <u> </u> 878+54			Qu		First Encounter <u> </u> Dry ft
Offset <u> </u> 25 ft Left					Upon Completion <u> </u> Dry ft
Ground Surface Elev. <u> </u> 654.60 ft			(tsf)	(%)	After <u> </u> Hrs. <u> </u> - ft

		(ft)	(/6")	(tsf)	(%)
SAND, GRAVEL & STONE-dark gray 653.60	—				8
SILTY CLAY LOAM-brown-loose (Fill) 651.60	—				3
	—				2
CLAY LOAM-brown-very stiff to hard 644.60	—				6
	—				4
becoming gray @ -8.0'	—			4.00	17
	—	-5		B	
End Of Boring @ -10.0'. Boring backfilled with cuttings. -20	—				
	—			3.50	20
	—	-10		P	
	—				
	—			3.10	23
	—	-10		B	

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)
 BBS, form 137 (Rev. 8-99)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204
Naperville, Illinois 60565
(630) 355-2838

FAI Route 80 from
Chicago Street to US
Route 30

SOIL BORING LOG

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY MM

SECTION 18 LOCATION SW 1/4, SEC. 18, TWP. T35N, RNG. R11E, 3rd PM,

Nothing 1765490.463, Easting 1070470.973

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. -
Station -

BORING NO. SGB-061
Station 879+98
Offset 32.6 ft Right
Ground Surface Elev. 656.40 ft

D
E
P
T
H

B
L
O
W
S

U
C
S

M
O
I
S
T

(ft) (/6") (tsf) (%)

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft
Groundwater Elev.:
First Encounter Dry ft
Upon Completion Dry ft
After - Hrs. - ft

8.0" ASPHALT	655.73			
CLAY LOAM-brown & gray-very stiff to hard		5		
		5	2.70	17
		4	B	
		4		
		8	3.10	19
		-5	7	B
		6		
		10	4.50	19
		14	P	
		4		
		5	2.00	22
	646.40	-10	5	P

End Of Boring @ -10.0'. Boring backfilled with cuttings.

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204
Naperville, Illinois 60565
(630) 355-2838
FAI Route 80 from
Chicago Street to US
Route 30

SOIL BORING LOG

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY MM
SECTION 18 LOCATION SW 1/4, SEC. 18, TWP. T35N, RNG. R11E, 3rd PM,
Northing 1765592.038, Easting 1070624.903
COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. Station BORING NO. Station Offset Ground Surface Elev. D E P T H S U C S Qu M O I S T Surface Water Elev. Stream Bed Elev. Groundwater Elev.: First Encounter Upon Completion After Hrs.

Table with columns for elevation, depth, soil type, UCS, SPT, and moisture content. Includes entries for ASPHALT/CONCRETE, CLAY LOAM, and TOPSOIL.

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204
Naperville, Illinois 60565
(630) 355-2838

FAI Route 80 from
Chicago Street to US

SOIL BORING LOG

Date 12/9/21

ROUTE Route 30 **DESCRIPTION** I-80 Phase II **LOGGED BY** LP

SECTION 18 **LOCATION** SW 1/4, SEC. 18, TWP. T35N, RNG. R11E, 3rd PM,

Northing 1765468.369, Easting 1070781.413

COUNTY Will **DRILLING METHOD** Hollow Stem Auger **HAMMER TYPE** CME Automatic

STRUCT. NO. -
Station -

BORING NO. SGB-063
Station 883+08
Offset 64.4 ft Right
Ground Surface Elev. 657.76 ft

D E P T H (ft)	B L O W S (/6")	U C S Qu (tsf)	M O I S T (%)

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft
Groundwater Elev.:
First Encounter Dry ft
Upon Completion Dry ft
After - Hrs. - ft

11.0" ASPHALT				
656.84				
SILTY CLAY LOAM (A-6)-brown-medium stiff to very stiff	3			
	3	1.90	20	
	4	B		
	3			
	4	3.10	23	
	-5	5	B	
	2			
	2	0.90	20	
	2	B		
becoming gray @ -8.0'	3			
	6	3.30	17	
647.76	-10	8	B	
End Of Boring @ -10.0'. Boring backfilled with cuttings.				
	-15			
	-20			

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
 805 Amherst Court, Suite 204
 Naperville, Illinois 60565
 (630) 355-2838
 FAI Route 80 from
 Chicago Street to US
 Route 30

SOIL BORING LOG

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY LP

SECTION 18 LOCATION SW 1/4, SEC. 18, TWP. T35N, RNG. R11E, 3rd PM,
Northing 1765562.4, Easting 1070927.5

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. -
 Station -

BORING NO. SGB-064
 Station 884+57
 Offset 25 ft Left
 Ground Surface Elev. 657.50 ft

D E P T H	B L O W S	U C S Qu	M O I S T %
-----------------------	-----------------------	-----------------------	----------------------------

Surface Water Elev. n/a ft
 Stream Bed Elev. n/a ft
 Groundwater Elev.:
 First Encounter Dry ft
 Upon Completion Dry ft
 After - Hrs. - ft

SAND, GRAVEL & STONE-dark gray	656.50						11
CLAY LOAM-brown-very stiff (Fill)	654.50	1					
		4		3.00			5
		5		B			
CLAYEY SAND & GRAVEL-brown-medium dense (Fill)	652.00	8					
		6					13
		-5	6				
CLAY LOAM-brown-very stiff	647.50	4					
		5		3.00			19
		5		P			
becoming gray @ -8.0'	647.50	2					
2		5	2.50			16	
End Of Boring @ -10.0'. Boring backfilled with cuttings.		4		P			
	-15						
	-20						

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
 805 Amherst Court, Suite 204
 Naperville, Illinois 60565
 (630) 355-2838
 FAI Route 80 from
 Chicago Street to US
 Route 30

SOIL BORING LOG

Page 1 of 1

Date 3/17/22

ROUTE DESCRIPTION I-80 Phase II LOGGED BY MM

SECTION 18 LOCATION SW 1/4, SEC. 18, TWP. T35N, RNG. R11E, 3rd PM,

Northing 1765509.796, Easting 1071073.509

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. -
 Station -

BORING NO. SGB-065
 Station 886+01
 Offset 32.2 ft Right
 Ground Surface Elev. 657.77 ft

DEPTH TWS (ft)	UCS Qu (tsf)	MOIST T (%)
----------------------	--------------------	-------------------

Surface Water Elev. n/a ft
 Stream Bed Elev. n/a ft
 Groundwater Elev.:
 First Encounter 649.268 ft▼
 Upon Completion ft
 After - Hrs. - ft

6.0" ASPHALT	657.27			
CLAY LOAM-brown-stiff to hard				
		10		
		11	5.10	17
		4	B	
		3		
		6	3.00	16
		-5	P	
		3		
		4	1.50	17
		3	P	
		▼		
		4		
		7	1.50	19
		10	P	
	647.77	-10		

End Of Boring @ -10.0'. Boring backfilled with cuttings.

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, form 137 (Rev. 8-99)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204
Naperville, Illinois 60565
(630) 355-2838

FAI Route 80 from
Chicago Street to US
Route 30

SOIL BORING LOG

Page 1 of 1

Date 11/12/21

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY LP

SECTION 18 LOCATION SW 1/4, SEC. 18, TWP. T35N, RNG. R11E, 3rd PM,

Northing 1765581.1, Easting 1071522.3

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. -
Station -

BORING NO. SGB-068
Station 890+52
Offset 25 ft Left
Ground Surface Elev. 656.10 ft

D
E
P
T
H

(ft)

B
L
O
W
S

(/6")

U
C
S

Qu
(tsf)

M
O
I
S
T

(%)

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft
Groundwater Elev.:
First Encounter Dry ft
Upon Completion Dry ft
After - Hrs. - ft

SILTY SAND-black	655.10			15	
CLAY LOAM-brown-hard (Fill)	653.10	4			
		5	4.90	14	
SILTY CLAY-dark brown to black-stiff	650.60	5	1.90	23	
		6	B		
CLAY LOAM-brown-hard	646.10	3			
		6	4.50	18	
		7	P		
End Of Boring @ -10.0'. Boring backfilled with cuttings.	-10	8			
		11	4.00	17	
	-20	13	B		

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
 805 Amherst Court, Suite 204
 Naperville, Illinois 60565
 (630) 355-2838

SOIL BORING LOG

ROUTE Chicago Street to US Route 30 DESCRIPTION I-80 Phase II LOGGED BY MM

SECTION 18 LOCATION SW 1/4, SEC. 18, TWP. T35N, RNG. R11E, 3rd PM,

Northing 1765528.468, Easting 1071670.692

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. -
 Station -

BORING NO. SGB-069
 Station 891+98
 Offset 32.2 ft Right
 Ground Surface Elev. 656.05 ft

D E P T H S	B L O W S	U C S Qu	M O I S T
(ft)	(/6")	(tsf)	(%)

Surface Water Elev. n/a ft
 Stream Bed Elev. n/a ft
 Groundwater Elev.:
 First Encounter Dry ft
 Upon Completion Dry ft
 After - Hrs. - ft

6.0" ASPHALT	655.55			
CLAY LOAM-brown-stiff to very stiff (Fill)		3		
		5	1.70	16
		4	B	
		2		
648.05		3	2.00	27
		4	P	
		-5		
646.05		6		
		6	2.00	14
		4	P	
End Of Boring @ -10.0'. Boring backfilled with cuttings.		5		
		4	2.20	19
	646.05 -10	7	B	
				-15
				-20

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204
Naperville, Illinois 60565
(630) 355-2838
FAI Route 80 from
Chicago Street to US
Route 30

SOIL BORING LOG

Page 1 of 1

Date 12/22/21

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY LP

SECTION 18 LOCATION SW 1/4, SEC. 18, TWP. T35N, RNG. R11E, 3rd PM,

Northing 1765506.132, Easting 1071974.638

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. -
Station -

BORING NO. SGB-071
Station 895+02
Offset 64.1 ft Right
Ground Surface Elev. 654.71 ft

D
E
P
T
H

B
L
O
W
S

U
C
S

Q
u

M
O
I
S
T

(ft)
(/6")

(tsf)

(%)

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft
Groundwater Elev.:
First Encounter Dry ft
Upon Completion Dry ft
After - Hrs. - ft

9.0" ASPHALT 653.96

CRUSHED STONE-loose

	4		
	5		10
	4		

651.71

CLAY LOAM-brown & gray
spotted black-very stiff (Fill)

	3		
	6	2.00	29
	5	P	

6

8

9

4

6

7

644.71

-10

B

End Of Boring @ -10.0'. Boring
backfilled with cuttings.

-

-

-

-

-

-

-

-

-

-

-

-

-

-

-

-

-

-

-

-

-

-

-

-

-20

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
 805 Amherst Court, Suite 204
 Naperville, Illinois 60565
 (630) 355-2838

SOIL BORING LOG

Page 1 of 1

Date 12/22/21

FAI Route 80 from
 Chicago Street to US

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY GT

SECTION 18 LOCATION SW 1/4, SEC. 18, TWP. T35N, RNG. R11E, 3rd PM,

Northing 1765554.5, Easting 1072271.7

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. -
 Station -

BORING NO. SGB-073
 Station 898+00
 Offset 25 ft Right
 Ground Surface Elev. 653.10 ft

D E P T H (ft)
B L O W S (/6")
U C S (tsf)
M O I S T (%)

Surface Water Elev. n/a ft
 Stream Bed Elev. n/a ft
 Groundwater Elev.:
 First Encounter Dry ft
 Upon Completion Dry ft
 After - Hrs. - ft

CRUSHED ASPHALT & STONE 652.10				11
SILT (A-6)-dark brown, gray & black-stiff (Fill) 650.10	4			
	2 5	1.90 B	25	
SILTY CLAY-dark brown & gray-stiff 647.60	3			
	5 -5	1.90 B	23	
	5			
CLAY LOAM-brown & gray-very stiff 643.10	3			
	4 5	2.80 B	21	
	2 4 6			
End Of Boring @ -10.0'. Boring backfilled with cuttings. -15				
-20				

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
 805 Amherst Court, Suite 204
 Naperville, Illinois 60565
 (630) 355-2838

FAI Route 80 from
 Chicago Street to US

SOIL BORING LOG

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY LP

SECTION 18 LOCATION SE 1/4, SEC. 18, TWP. T35N, RNG. R11E, 3rd PM,

Northing 1765573.3, Easting 1072871.4

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. -
 Station -

BORING NO. SGB-077
 Station 904+00
 Offset 25 ft Right
 Ground Surface Elev. 650.80 ft

DEPTH TWS H	UCS Qu	MOIST T
(ft)	(/6")	(tsf)
		(%)

Surface Water Elev. n/a ft
 Stream Bed Elev. n/a ft
 Groundwater Elev.:
 First Encounter Dry ft
 Upon Completion Dry ft
 After - Hrs. - ft

12.0" ASPHALT, 6.0" CRUSHED
 STONE

649.30

15

CLAY LOAM-brown & gray-very
 stiff to hard

5

3.20

18

6

B

3

8

6.10

17

10

B

becoming gray @ -5.5'

3

7

4.50

15

7

P

4

5

3.70

15

640.80

-10

9

B

End Of Boring @ -10.0'. Boring
 backfilled with cuttings.

-15

-20

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204
Naperville, Illinois 60565
(630) 355-2838

FAI Route 80 from
Chicago Street to US

SOIL BORING LOG

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY MM

SECTION 18 LOCATION SE 1/4, SEC. 18, TWP. T35N, RNG. R11E, 3rd PM,

Northing 1765667.844, Easting 1073021.831

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. -
Station -

BORING NO. SGB-078
Station 905+53
Offset 64.8 ft Left
Ground Surface Elev. 650.01 ft

D E P T H (ft)	B L O W S (/6")	U C S Qu (tsf)	M O I S T (%)
-------------------------------	--------------------------------	--------------------------------	------------------------------

Surface Water Elev.	<u>n/a</u>	ft
Stream Bed Elev.	<u>n/a</u>	ft
Groundwater Elev.:		
First Encounter	<u>Dry</u>	ft
Upon Completion	<u>Dry</u>	ft
After <u>-</u> Hrs.	<u>-</u>	ft

6.0" ASPHALT, 6.0" CONCRETE			
649.01			
CLAY LOAM-brown-stiff to very stiff	3		
	4	3.50	18
	6	P	
	5		
	7	2.00	17
	9	P	
	-5		
	5		
	3	1.50	16
	7	P	
	4		
	6	3.50	19
640.01	-10	6	P

End Of Boring @ -10.0'. Boring backfilled with cuttings.

-15

-20

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



SOIL BORING LOG

ROUTE _____ DESCRIPTION I-80 Phase II LOGGED BY _____

SECTION _____ LOCATION SEC. , TWP. , RNG. ,
Northing , Easting

COUNTY Will DRILLING METHOD _____ HAMMER TYPE CME Automatic

STRUCT. NO. _____	-	D E P T H	B L O W S	U C S Qu	M O I S T	Surface Water Elev. _____ ft
Station _____	-	(ft)	(/6")	(tsf)	(%)	Stream Bed Elev. _____ ft
BORING NO. _____	<u>SGB-079</u>					Groundwater Elev.: _____
Station _____						First Encounter _____ ft
Offset _____	ft					Upon Completion _____ ft
Ground Surface Elev. _____	ft					After <u>-</u> Hrs. _____ ft

8.0" ASPHALT	-	-	-	-	-	-			
							CLAY LOAM-brown & gray-very stiff	4	
CLAY-gray-medium stiff	-	-	-	-	-	5		2.90	15
						7	B		
						4			
						5	2.20	21	
End Of Boring @ -10.0'. Boring backfilled with cuttings.	-	-	-	-	-	-5	6	B	
						2			
						3	0.50	19	
						3	B		
End Of Boring @ -10.0'. Boring backfilled with cuttings.	-	-	-	-	-	3	3	0.80	19
						3	B		
						-10			
						-15			
End Of Boring @ -10.0'. Boring backfilled with cuttings.	-	-	-	-	-	-20			

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204
Naperville, Illinois 60565
(630) 355-2838
FAI Route 80 from
Chicago Street to US
Route 30

SOIL BORING LOG

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY LP

SECTION 18 LOCATION SE 1/4, SEC. 18, TWP. T35N, RNG. R11E, 3rd PM,
Northing 1765592.1, Easting 1073471.1

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. <u>-</u>	D E P T H S	B L O W S	U C S Qu	M O I S T %	Surface Water Elev. <u>n/a</u> ft
Station <u>-</u>					Stream Bed Elev. <u>n/a</u> ft
BORING NO. <u>SGB-081</u>					Groundwater Elev.: <u>641.1</u> ft▼
Station <u>910+00</u>					First Encounter <u>641.1</u> ft▼
Offset <u>25 ft Right</u>					Upon Completion <u> </u> ft
Ground Surface Elev. <u>648.10</u> ft					After <u>-</u> Hrs. <u>-</u> ft

Depth (ft)	Soil Description	B L O W S (/6")	U C S (tsf)	M O I S T (%)	Remarks
647.10	12.0" ASPHALT				
645.60	18.0" CRUSHED STONE-dense	25 35 20		4	
642.60	SILTY LOAM (A-6)-dark gray to black-very stiff	2 4 -5	2.10 B	26	
	SILTY CLAY LOAM-brown & gray-soft to stiff	2 2 2	0.40 B	29	
638.10	End Of Boring @ -10.0'. Boring backfilled with cuttings.	2 3	1.00 P	25	
-15					
-20					

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204
Naperville, Illinois 60565
(630) 355-2838
FAI Route 80 from
Chicago Street to US
Route 30

SOIL BORING LOG

Page 1 of 1

Date 12/22/21

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY LP

SECTION 18 LOCATION SE 1/4, SEC. 18, TWP. T35N, RNG. R11E, 3rd PM,

Northing 1765610.9, Easting 1074070.8

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. -
Station -

BORING NO. SGB-083
Station 916+00
Offset 25 ft Right
Ground Surface Elev. 646.00 ft

DEPTH TWS H	UCS Qu	M O I S T %
(ft)	(tsf)	(%)
(/6")		

Surface Water Elev.	<u>n/a</u>	ft
Stream Bed Elev.	<u>n/a</u>	ft
Groundwater Elev.:		
First Encounter	<u>Dry</u>	ft
Upon Completion	<u>Dry</u>	ft
After <u>-</u> Hrs.	<u>-</u>	ft

12.0" ASPHALT	645.00				
18.0" CRUSHED STONE-dense	643.50	18 33 35		14	
SILTY LOAM (A-6)-dark gray to black-stiff	641.00	3 4 6	1.50 B	31	
CLAY LOAM-brown & gray-very stiff to hard	636.00	5 6 7 9	3.30 B	20	
	636.00	50/5" -10	4.20 B	21	
End Of Boring @ -10.0'. Boring backfilled with cuttings.					
					-15
					-20

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, form 137 (Rev. 8-99)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
 805 Amherst Court, Suite 204
 Naperville, Illinois 60565
 (630) 355-2838

FAI Route 80 from
 Chicago Street to US
 Route 30

SOIL BORING LOG

ROUTE DESCRIPTION I-80 Phase II LOGGED BY LP

SECTION 18 LOCATION SW 1/4, SEC. 18, TWP. T35N, RNG. R11E, 3rd PM,

Northing 1765645.202, Easting 1074976.393

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. -
 Station -

BORING NO. SGB-085
 Station 924+99
 Offset 62.8 ft Right
 Ground Surface Elev. 649.03 ft

D E P T H (ft) (ft) (/6")
 B L O W S (tsf)
 U C S
 M O I S T (%)

Surface Water Elev. n/a ft
 Stream Bed Elev. n/a ft
 Groundwater Elev.:
 First Encounter Dry ft
 Upon Completion Dry ft
 After Hrs. - ft

12.0" CONCRETE					
648.03					
CLAY LOAM (A-6)-dark brown & gray potted black-stiff to very stiff (Fill)	24				
	22 7	2.00 P	24		
	4				
	4 -5	1.00 P	26		
	643.53				
SILTY CLAY LOAM-brown & gray-very loose (Fill)	1				
	1 1	0.50 P	26		
	0				
	0 639.03 -10		31		
End Of Boring @ -10.0'. Boring backfilled with cuttings.					
	-20				

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
 805 Amherst Court, Suite 204
 Naperville, Illinois 60565
 (630) 355-2838

FBI Route 80 from
 Chicago Street to US

SOIL BORING LOG

Date 11/18/21

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY DJ
 SECTION 13 LOCATION SE 1/4, SEC. 13, TWP. T35N, RNG. R10E, 3rd PM,
Northing 1765428.936, Easting 1065256.22
 COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. <u>-</u>	D E P T H S H T W S H S Qu T	B L O W S	U C S	M O I S T	Surface Water Elev. <u>n/a</u> ft
Station <u>-</u>					Stream Bed Elev. <u>n/a</u> ft
BORING NO. <u>SGB-086</u>					Groundwater Elev.:
Station <u>827+80</u>					First Encounter <u>Dry</u> ft
Offset <u>71.1 ft Left</u>		Upon Completion <u>Dry</u> ft			After <u>-</u> Hrs. <u>-</u> ft
Ground Surface Elev. <u>639.63</u> ft	(ft)	(/6")	(tsf)	(%)	

Soil Description	Depth (ft)	Blow Count (/6")	UCS (tsf)	MIST (%)
ASPHALT	638.63			3
LOAM (A-6)-dark brown to brown-stiff to hard (Fill)	5		4.00	11
	8		P	
	4			
	9		4.90	18
	-5		B	
	4			
	22		1.50	24
	8		P	
	631.63			
SILTY CLAY-brown & gray-stiff	4			
	5		1.00	24
	629.63	-10	P	
End Of Boring @ -10.0'. Boring backfilled with cuttings.				
	-15			
	-20			

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)
 BBS, form 137 (Rev. 8-99)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204
Naperville, Illinois 60565
(630) 355-2838

FAI Route 80 from
Chicago Street to US
Route 30

SOIL BORING LOG

Page 1 of 1

Date 11/16/21

ROUTE _____ DESCRIPTION I-80 Phase II LOGGED BY MM

SECTION 13 LOCATION SW 1/4, SEC. 13, TWP. T35N, RNG. R30E, 3rd PM,

Northing 1765430.981, Easting 1064953.509

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. _____	-	D E P T H B L O W S U C S Q u (ft) (/6") (tsf) (%)				Surface Water Elev. _____	n/a	ft
Station _____	-					Stream Bed Elev. _____	n/a	ft
BORING NO. _____	SGB-087					Groundwater Elev.:		
Station _____	307+99					First Encounter _____	Dry	ft
Offset _____	11.4 ft Left	Upon Completion _____	Dry	ft				
Ground Surface Elev. _____	638.83	ft				After _____	-	Hrs.

Soil Description	Elev. (ft)	Depth (ft)	UCS (tsf)	MOIST (%)
ASPHALT	637.83			
CRUSHED ASPHALT & STONE-medium dense	635.83	14		6
CLAY LOAM-brown & gray-hard (Fill)	633.33	3		
		6		
		7	4.40	13
CLAY LOAM-brown & gray-stiff	630.83	-5	8	B
		2		
		4	1.25	21
SILTY LOAM-brown & gray-loose	628.83	4		
		2		21
		3		
End Of Boring @ -10.0'. Boring backfilled with cuttings.				
		-15		
		-20		

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, form 137 (Rev. 8-99)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204
Naperville, Illinois 60565
(630) 355-2838

FAI Route 80 from
Chicago Street to US
Route 30

SOIL BORING LOG

ROUTE _____ DESCRIPTION I-80 Phase II LOGGED BY MM

SECTION 13 LOCATION SW 1/4, SEC. 13, TWP. T35N, RNG. R30E, 3rd PM,

Northing 1765861.9, Easting 1064201.6

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. _____	D E P T H	B L O W S	U C S Qu	M O I S T	Surface Water Elev. _____	n/a	ft
Station _____					Stream Bed Elev. _____	n/a	ft
BORING NO. <u>SGB-090</u>	ft (ft)	(/6")	(tsf)	(%)	Groundwater Elev.:		
Station <u>316</u>					First Encounter _____	<u>633</u>	ft ▼
Offset <u>0 ft</u>					Upon Completion _____		ft
Ground Surface Elev. <u>640.00</u>					After <u>-</u> Hrs. _____	<u>-</u>	ft

ASPHALT						
639.00						
CRUSHED STONE-medium dense		10			4	
637.00		16				
CLAY LOAM-brown & gray-very stiff		10				
634.50		2				
CLAYEY GRAVEL with Sand-brown-loose to medium dense		7	3.50	16		
630.00		-5	6	B		
End Of Boring @ -10.0'. Boring backfilled with cuttings.		12				
-10		9		14		
		5				
		2				
		4		24		
-20		5				

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
 805 Amherst Court, Suite 204
 Naperville, Illinois 60565
 (630) 355-2838
 FAI Route 80 from
 Chicago Street to US
 Route 30

SOIL BORING LOG

ROUTE Route 30 **DESCRIPTION** I-80 Phase II **LOGGED BY** MM

SECTION 13 **LOCATION** SW 1/4, SEC. 13, TWP. T35N, RNG. R30E, 3rd PM,

Northing 1766040.5, **Easting** 1063970.1

COUNTY Will **DRILLING METHOD** Hollow Stem Auger **HAMMER TYPE** CME Automatic

STRUCT. NO. -
Station -

BORING NO. SGB-091
Station 319+00
Offset 0 ft
Ground Surface Elev. 640.90 ft

D E P T H	B L O W S	U C S Qu	M O I S T	Surface Water Elev.	Stream Bed Elev.	Groundwater Elev.:	First Encounter	Upon Completion	After
(ft)	(/6")	(tsf)	(%)	ft	ft		ft	ft	ft
				n/a	n/a		Dry	Dry	-

Soil Description	Depth (ft)	Blow Count	UCS (tsf)	Mist (%)
ASPHALT				
639.90				
CLAY LOAM-brown-very stiff to hard	9			
	5	4.00	16	
	6	B		
	2			
	2	1.30	18	
	-5	4	B	
	6			
	6	2.50	17	
	7	P		
	4			
	7	3.40	17	
630.90	-10	9	B	

End Of Boring @ -10.0'. Boring backfilled with cuttings.

-15

-20

Surface Water Elev. <u>n/a</u> ft	
Stream Bed Elev. <u>n/a</u> ft	
Groundwater Elev.:	
First Encounter <u>Dry</u> ft	
Upon Completion <u>Dry</u> ft	
After <u>-</u> Hrs. <u>-</u> ft	

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)
 BBS, form 137 (Rev. 8-99)



SOIL BORING LOG

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY MM

SECTION 14 LOCATION SE 1/4, SEC. 14, TWP. T35N, RNG. R30E, 3rd PM,

Northing 1765660.1, Easting 1063310.8

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. <u>-</u>	D	B	U	M	Surface Water Elev. <u>n/a</u> ft
Station <u>-</u>	E	L	C	O	Stream Bed Elev. <u>n/a</u> ft
BORING NO. <u>SGB-093</u>	P	O	S	I	Groundwater Elev.: <u>-</u>
Station <u>407+00</u>	T	W	Q	S	First Encounter <u>641</u> ft▼
Offset <u>0 ft</u>	H	S	T	T	Upon Completion <u>-</u> ft
Ground Surface Elev. <u>642.00</u> ft	(ft)	(/6")	(tsf)	(%)	After <u>-</u> Hrs. <u>-</u> ft

ASPHALT					
641.00▼					
CLAYEY GRAVEL & STONE-brown-very loose (Fill)	4				
	1			10	
	2				
639.00					
CLAY LOAM-brown-very stiff	3				
	5	3.00		18	
	7	P			
	-5				
	3				
	7	3.20		23	
	10	B			
	3				
	8	3.00		25	
632.00	-10	11	P		
End Of Boring @ -10.0'. Boring backfilled with cuttings.					
	-15				
	-20				

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
 805 Amherst Court, Suite 204
 Naperville, Illinois 60565
 (630) 355-2838
 FAI Route 80 from
 Chicago Street to US
 Route 30

SOIL BORING LOG

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY DJ

SECTION 14 LOCATION SE 1/4, SEC. 14, TWP. T35N, RNG. R10E, 3rd PM,
Northing 1764917.93, Easting 1063576.885

COUNTY Will DRILLING METHOD Hand Auger HAMMER TYPE Manual

STRUCT. NO. <u>-</u>	D E P T H H	B L O W S	U C S Qu	M O I S T	Surface Water Elev. <u>n/a</u> ft
Station <u>-</u>					Stream Bed Elev. <u>n/a</u> ft
BORING NO. <u>SGB-100</u>	ft (ft)	(6")	(tsf)	(%)	Groundwater Elev.:
Station <u>112+53</u>					First Encounter <u>628.35</u> ft▼
Offset <u>19.3 ft Left</u>					Upon Completion <u>628.35</u> ft▼
Ground Surface Elev. <u>634.35</u> ft					After <u>-</u> Hrs. <u>-</u> ft

CLAY LOAM-brown & gray-very stiff	HA	3.50 P	13	
630.35	HA	2.75 P	16	
SILTY SAND with GRAVEL-brown	HA		18	
628.35▼	HA	1.50 P	27	
CLAY-brown & gray-stiff				
626.35				
Auger Refusal @ -8.0'. End Of Boring.				
-10				
-15				
-20				

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
 805 Amherst Court, Suite 204
 Naperville, Illinois 60565
 (630) 355-2838
 FAI Route 80 from
 Chicago Street to US
 Route 30

SOIL BORING LOG

Date 12/16/21

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY DJ

SECTION 14 LOCATION SW 1/4, SEC. 14, TWP. T35N, RNG. R10E, 3rd PM,

Northing 1764837.423, Easting 1064042.879

COUNTY Will DRILLING METHOD Hand Auger HAMMER TYPE Manual

STRUCT. NO. -
 Station -

BORING NO. SGB-102
 Station 202+05
 Offset 4.1 ft Right
 Ground Surface Elev. 633.72 ft

DEPTH (ft) BLOWS (/6") UCS (tsf) MOISTURE (%)
 SPT Qu

Surface Water Elev. n/a ft
 Stream Bed Elev. n/a ft
 Groundwater Elev.:
 First Encounter 623.724 ft▼
 Upon Completion Dry ft
 After - Hrs. - ft

6.0" TOPSOIL-black	633.22	HA			
CLAY LOAM-brown & gray-stiff to very stiff					21
		HA			
			1.50 P		20
		HA			
		-5	1.25 P		17
			HA		
			1.00 P		17
becoming gray @ -8.0'		HA			
		2.00 P		22	
	623.72▼-10				
End Of Boring @ -10.0'.					
	-15				
	-20				

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
 805 Amherst Court, Suite 204
 Naperville, Illinois 60565
 (630) 355-2838
 FAI Route 80 from
 Chicago Street to US
 Route 30

SOIL BORING LOG

Page 1 of 1

Date 11/18/21

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY DJ

SECTION 13 LOCATION SE 1/4, SEC. 13, TWP. T35N, RNG. R10E, 3rd PM,

Northing 1764468.7, Easting 1063892

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. -
 Station -

BORING NO. SGB-106
 Station 51+63
 Offset 18.7 ft Right
 Ground Surface Elev. 639.50 ft

D E P T H	B L O W S	U C S Qu	M O I S T
(ft)	(/6")	(tsf)	(%)

Surface Water Elev. n/a ft
 Stream Bed Elev. n/a ft
 Groundwater Elev.:
 First Encounter Dry ft
 Upon Completion Dry ft
 After - Hrs. - ft

CRUSHED STONE	638.50			3	
SILTY CLAY-black-very stiff (Fill) Chemical Odor	636.50	5			
		7	3.40	20	
CLAY LOAM-dark brown-stiff to very stiff (Fill)	634.00	8	B		
		4			
		6	2.50	23	
CLAY LOAM-brown & gray-stiff	629.50	-5	7	P	
		2			
		3	1.75	25	
		4	P		
End Of Boring @ -10.0'. Boring backfilled with cuttings.	-10	1			
		2	1.40	25	
		3	B		
	-15				
	-20				

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204
Naperville, Illinois 60565
(630) 355-2838
FAI Route 80 from
Chicago Street to US
Route 30

SOIL BORING LOG

Page 1 of 1

Date 11/24/21

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY MM

SECTION 13 LOCATION SW 1/4, SEC. 13, TWP. T35N, RNG. R10E, 3rd PM,

Northing 1765068.5, Easting 1063744.7

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. -
Station -

BORING NO. SGB-107
Station 57+64
Offset 13.6 ft Left
Ground Surface Elev. 656.30 ft

**D
E
P
T
H** (ft)
**B
L
O
W
S** (/6")
**U
C
S** (tsf)
**M
O
I
S
T** (%)

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft
Groundwater Elev.:
First Encounter Dry ft
Upon Completion Dry ft
After - Hrs. - ft

CRUSHED STONE-medium dense	655.30			3
CLAY LOAM-brown-very stiff (Fill)		4		
		12 20	2.60 B	20
	653.30			
SAND & GRAVEL-brown-loose to dense (Fill)		10		
		15 -5		5
		13 7 2		3
		10		
		18 -10		5
	646.30	37		
End Of Boring @ -10.0'. Boring backfilled with cuttings.				
		-15		
		-20		

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
 805 Amherst Court, Suite 204
 Naperville, Illinois 60565
 (630) 355-2838

FAI Route 80 from
 Chicago Street to US
 Route 30

SOIL BORING LOG

ROUTE DESCRIPTION I-80 Phase II LOGGED BY MM

SECTION 18 LOCATION SE 1/4, SEC. 18, TWP. T35N, RNG. R11E, 3rd PM,

 Northing 1766342.5, Easting 1074270.5

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. -
 Station -

BORING NO. SGB-112
 Station 64+93
 Offset 16.8 ft Left
 Ground Surface Elev. 646.40 ft

D E P T H	B L O W S	U C S Qu	M O I S T
(ft)	(/6")	(tsf)	(%)

Surface Water Elev. n/a ft
 Stream Bed Elev. n/a ft
 Groundwater Elev.:
 First Encounter Dry ft
 Upon Completion Dry ft
 After - Hrs. - ft

CRUSHED STONE-medium dense				3
	8			
	12			5
	5			
643.40				
CLAY LOAM-brown-very stiff	2			
	3	2.50		19
	-5	5	P	
becoming gray @ -5.5'				
	4			
	6	2.25		18
	6		P	
	3			
	5	2.75		19
636.40	-10	7	P	

End Of Boring @ -10.0'. Boring
 backfilled with cuttings.

-15

-20

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



Geo Services, Inc.

Geotechnical, Environmental & Civil Engineering
 805 Amherst Court, Suite 204
 Naperville, Illinois 60565
 (630) 355-2838
 FAI Route 80 from
 Chicago Street to US
 Route 30

SOIL BORING LOG

Date 11/24/21

ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY MM
 SECTION 18 LOCATION SE 1/4, SEC. 18, TWP. T35N, RNG. R11E, 3rd PM,
Northing 1765231.1, Easting 1074304
 COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. - Station - DEPTH (ft) (ft) (6" SPTS Qu (tsf) MOIST (%))
 BORING NO. SGB-113 Station 53+81 Offset 16.5 ft Left Ground Surface Elev. 661.70 ft
 Surface Water Elev. n/a ft
 Stream Bed Elev. n/a ft
 Groundwater Elev.:
 First Encounter Dry ft
 Upon Completion Dry ft
 After - Hrs. - ft

DEPTH (ft)	(6" SPTS)	Qu (tsf)	MOIST (%)	DESCRIPTION	ELEVATION (ft)	DEPTH (ft)
				12.0" ASPHALT	660.70	
				CRUSHED STONE-medium dense	658.70	
				CLAY LOAM-brown-very stiff to hard	651.70	
				End Of Boring @ -10.0'. Boring backfilled with cuttings.		

SOIL BORING 20012_LOG.GPJ IL_DOT.GDT 11/22/22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

PAVEMENT CORE SUMMARY

Project: I-80 Phase 2 GSI Job No.: 20012
 Location: FAI Route 80 from Chicago Street to US Route 30 Date: 8/6/2021
 County: Will Cored By: TZ
 Client: EXP Checked By: AJP

CORE NO.	THICKNESS (in.)	MATERIAL DESCRIPTION
C-01	2.75 1.75 13.5 18.0+	Station: 715+04 Offset: 53.3' Left Total Thickness: 18.0"
		ASPHALT-well consolidated, fine to medium course aggregate. ASPHALT-well consolidated, fine to medium course aggregate. CONCRETE-well consolidated, 1" dia rebar @ 10" below. SUBGRADE-CLAY LOAM-brown & gray
C-02	9.25 5.5 14.75+	Station: 750+75 Offset: 55.5' Left Total Thickness: 14.75"
		ASPHALT-poorly consolidated @ base, fine to medium course aggregate. ASPHALT-poorly consolidated @ base, fine to medium course aggregate. SUBGRADE-CLAY LOAM-brown & black
C-03	3.25 1.75 1.75 5.25 12.0+	Station: 779+97 Offset: 57.0' Right Total Thickness: 12.0"
		ASPHALT-well consolidated, fine to medium course aggregate. ASPHALT-well consolidated, fine to medium course aggregate. ASPHALT-very poorly consolidated, fine to medium course aggregate. ASPHALT-very poorly consolidated @ base, fine to medium course aggregate. SUBBASE-SAND & GRAVEL
C-04	5.75 2.25 10.0 18.0+	Station: 780+00 Offset: 48.1' Left Total Thickness: 8.0"
		ASPHALT-well consolidated, fine to medium course aggregate. ASPHALT-well consolidated, fine to medium course aggregate. SUBBASE-SAND & GRAVEL SUBGRADE-CLAY LOAM-brown & gray
C-05	1.5 3.5 3.0 2.0 7.0 17.0 34.0+	Station: 806+00 Offset: 61.7' Right Total Thickness: 17.0"
		ASPHALT-well consolidated, fine to medium course aggregate. ASPHALT-well consolidated, medium course aggregate. ASPHALT-poorly consolidated, fine to medium course aggregate, poorly bonding @ base. ASPHALT-well consolidated, medium course aggregate. ASPHALT-poorly consolidated @ base, medium course aggregate. SUBBASE-CRUSHED STONE SUBGRADE-SANDY CLAY-brown
C-06	6.5 9.5 3.0 19.0+	Station: 806+00 Offset: 61.5' Left Total Thickness: 16.0"
		ASPHALT-well consolidated, fine to medium course aggregate. ASPHALT-well consolidated, fine to medium course aggregate. SUBBASE-SAND & GRAVEL SUBGRADE-CLAY LOAM-brown & gray
C-07	2.0 3.0 4.0 7.0 2.0 10.0 28.0+	Station: 832+00 Offset: 61.1' Right Total Thickness: 18.0"
		ASPHALT-well consolidated, fine to medium course aggregate. ASPHALT-well consolidated, medium course aggregate. ASPHALT-poorly consolidated, fine to medium course aggregate, poorly bonding @ base. ASPHALT-poorly consolidated, medium course aggregate, poorly bonding @ top & bottom. ASPHALT-poorly consolidated, medium course aggregate or bonding and deteriorated @ base. SUBGRADE-CLAY-black SUBGRADE-CLAY-brown & gray
C-08	5.25 1.5 8.0 3.0 17.75+	Station: 832+00 Offset: 61.2' Left Total Thickness: 14.75"
		ASPHALT-well consolidated, fine to medium course aggregate. ASPHALT-well consolidated, fine to medium course aggregate. ASPHALT-well consolidated, fine to medium course aggregate. SUBBASE-SAND & GRAVEL SUBGRADE-CLAY LOAM-brown & gray

PAVEMENT CORE SUMMARY

Project: I-80 Phase 2 GSI Job No.: 20012
 Location: FAI Route 80 from Chicago Street to US Route 30 Date: 8/6/2021
 County: Will Cored By: TZ
 Client: EXP Checked By: AJP

CORE NO.	THICKNESS (in.)	MATERIAL DESCRIPTION
C-09		Station: 858+00 Offset: 62.5' Right Total Thickness: 17.0"
	2.0	ASPHALT-well consolidated, fine to medium course aggregate.
	2.0	ASPHALT-well consolidated, medium course aggregate.
	2.0	ASPHALT-well consolidated, medium course aggregate.
	3.0	ASPHALT-well consolidated, fine to medium course aggregate.
	8.0	ASPHALT-well consolidated, medium course aggregate.
	4.5	SUBBASE-Crushed Stone
	21.5+	SUBGRADE-CLAY-brown & gray
C-10		Station: 858+00 Offset: 61.3' Left Total Thickness: 17.0"
	9.25	ASPHALT-well consolidated, fine to medium course aggregate.
	7.75	ASPHALT-well consolidated, fine to medium course aggregate.
	11.0	SUBGRADE-CLAY LOAM with Gravel-black
	28.0+	SUBGRADE-CLAY LOAM-brown & gray
C-11		Station: 884+00 Offset: 61.3' Right Total Thickness: 16.0"
	1.5	ASPHALT-well consolidated, fine to medium course aggregate.
	3.5	ASPHALT-well consolidated, medium course aggregate.
	2.5	ASPHALT-well consolidated, fine to medium course aggregate.
	8.5	CONCRETE-well consolidated
	3.5	SUBBASE-Crushed Stone
	19.5+	SUBGRADE-SANDY CLAY-brown
C-12		Station: 884+00 Offset: 60.6' Left Total Thickness: 14.0"
	2.0	ASPHALT-well consolidated, fine to medium course aggregate.
	2.5	ASPHALT-well consolidated, medium course aggregate.
	2.5	ASPHALT-well consolidated, fine to medium course aggregate.
	7.0	CONCRETE-well consolidated
	3.0	SUBBASE-Sand & Gravel-brown
	17.0+	SUBGRADE-CLAY-brown & gray
C-13		Station: 910+00 Offset: 61.1' Right Total Thickness: 15.0"
	2.0	ASPHALT-well consolidated, fine to medium course aggregate.
	3.0	ASPHALT-well consolidated, medium course aggregate.
	2.50	ASPHALT-well consolidated, fine to medium course aggregate, poorly bonding @ base.
	7.50	CONCRETE-well consolidated
	2.0	SUBBASE-Crushed Stone
	17.0+	SUBGRADE-CLAY with GRAVEL-gray
C-14		Station: 910+00 Offset: 60.8' Left Total Thickness: 13.0"
	1.50	ASPHALT-well consolidated, fine to medium course aggregate.
	2.50	ASPHALT-well consolidated, medium course aggregate.
	2.0	ASPHALT-well consolidated, fine to medium course aggregate, poorly bonding @ base.
	7.0	CONCRETE-well consolidated
	20.0+	SUBGRADE-CLAY-brown & gray

PAVEMENT CORE PHOTO LOG

Project: I-80 Phase 2 GSI Job No.: 20012
Location: FAI Route 80 from Chicago Street to US Route 30 Date: 8/6/2021
County: Will Cored By: TZ
Client: EXP Checked By: AJP



Core No.: C-01 Core Location: Station: 715+04 Offset: 53.3' Left



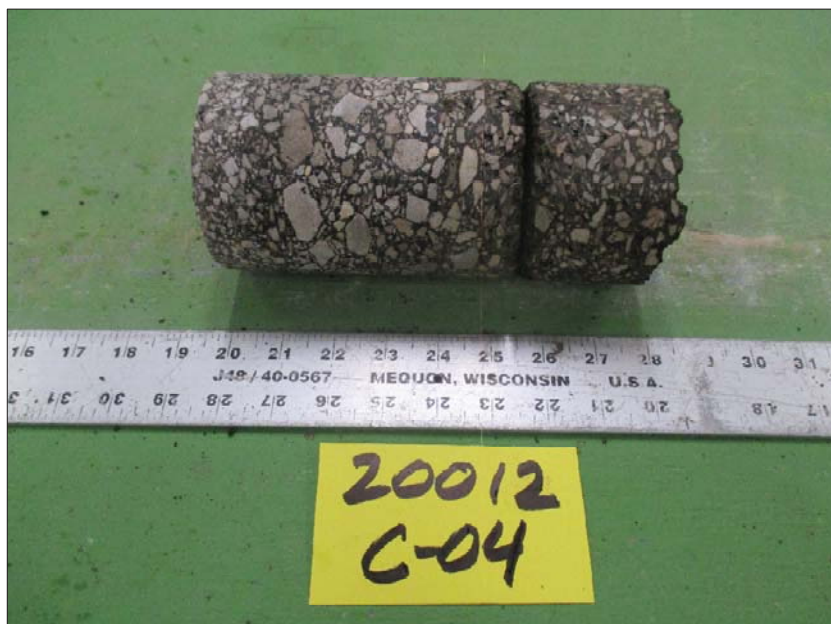
Core No.: C-02 Core Location: Station: 750+75 Offset: 55.5' Left

PAVEMENT CORE PHOTO LOG

Project: I-80 Phase 2 GSI Job No.: 20012
Location: FAI Route 80 from Chicago Street to US Route 30 Date: 8/6/2021
County: Will Cored By: TZ
Client: EXP Checked By: AJP



Core No.: C-03 Core Location: Station: 779+97 Offset: 57.0' Right



Core No.: C-04 Core Location: Station: 780+00 Offset: 48.1' Left

PAVEMENT CORE PHOTO LOG

Project: I-80 Phase 2 GSI Job No.: 20012
Location: FAI Route 80 from Chicago Street to US Route 30 Date: 8/6/2021
County: Will Cored By: TZ
Client: EXP Checked By: AJP



Core No.: C-05 Core Location: Station: 806+00 Offset: 61.7' Right



Core No.: C-06 Core Location: Station: 806+00 Offset: 61.5' Left

PAVEMENT CORE PHOTO LOG

Project: I-80 Phase 2 GSI Job No.: 20012
Location: FAI Route 80 from Chicago Street to US Route 30 Date: 8/6/2021
County: Will Cored By: TZ
Client: EXP Checked By: AJP



Core No.: C-07 Core Location: Station: 832+00 Offset: 61.1' Right



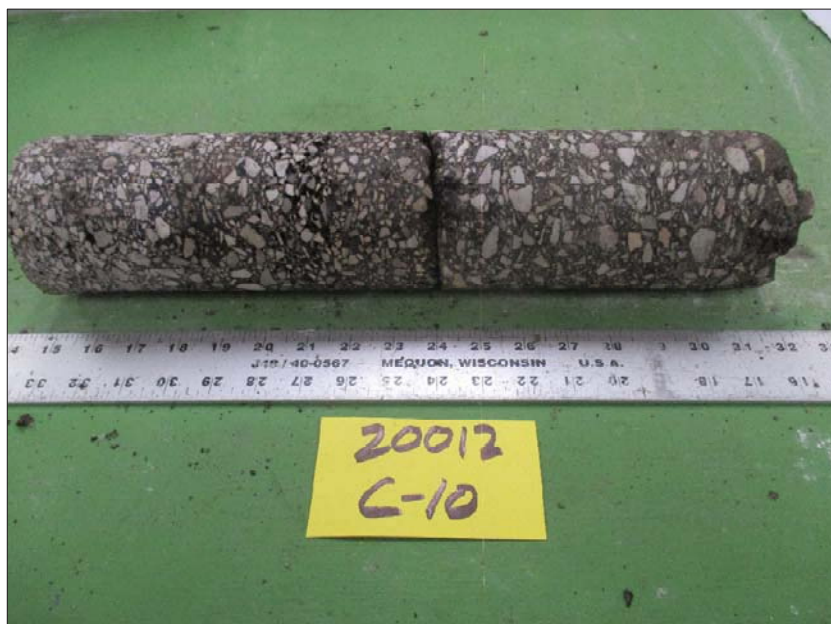
Core No.: C-08 Core Location: Station: 832+00 Offset: 61.2' Left

PAVEMENT CORE PHOTO LOG

Project: I-80 Phase 2 GSI Job No.: 20012
Location: FAI Route 80 from Chicago Street to US Route 30 Date: 8/6/2021
County: Will Cored By: TZ
Client: EXP Checked By: AJP



Core No.: C-09 Core Location: Station: 858+00 Offset: 62.5' Right



Core No.: C-10 Core Location: Station: 858+00 Offset: 61.3' Left

PAVEMENT CORE PHOTO LOG

Project: I-80 Phase 2 GSI Job No.: 20012
Location: FAI Route 80 from Chicago Street to US Route 30 Date: 8/6/2021
County: Will Cored By: TZ
Client: EXP Checked By: AJP



Core No.: C-11 Core Location: Station: 884+00 Offset: 61.3' Right



Core No.: C-12 Core Location: Station: 884+00 Offset: 60.6' Left

PAVEMENT CORE PHOTO LOG

Project: I-80 Phase 2 GSI Job No.: 20012
Location: FAI Route 80 from Chicago Street to US Route 30 Date: 8/6/2021
County: Will Cored By: TZ
Client: EXP Checked By: AJP



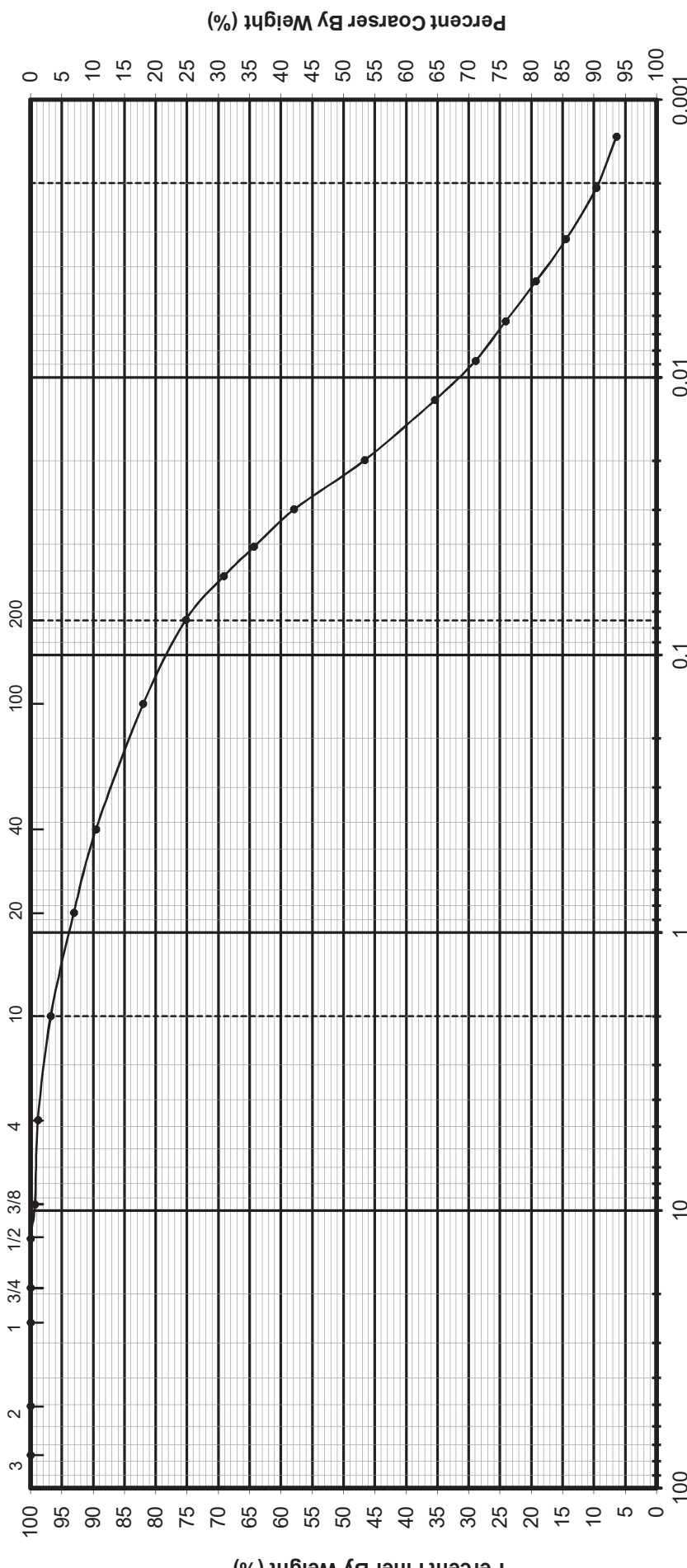
Core No.: C-13 Core Location: Station: 910+00 Offset: 61.1' Right



Core No.: C-14 Core Location: Station: 910+00 Offset: 60.8' Left


APPENDIX E

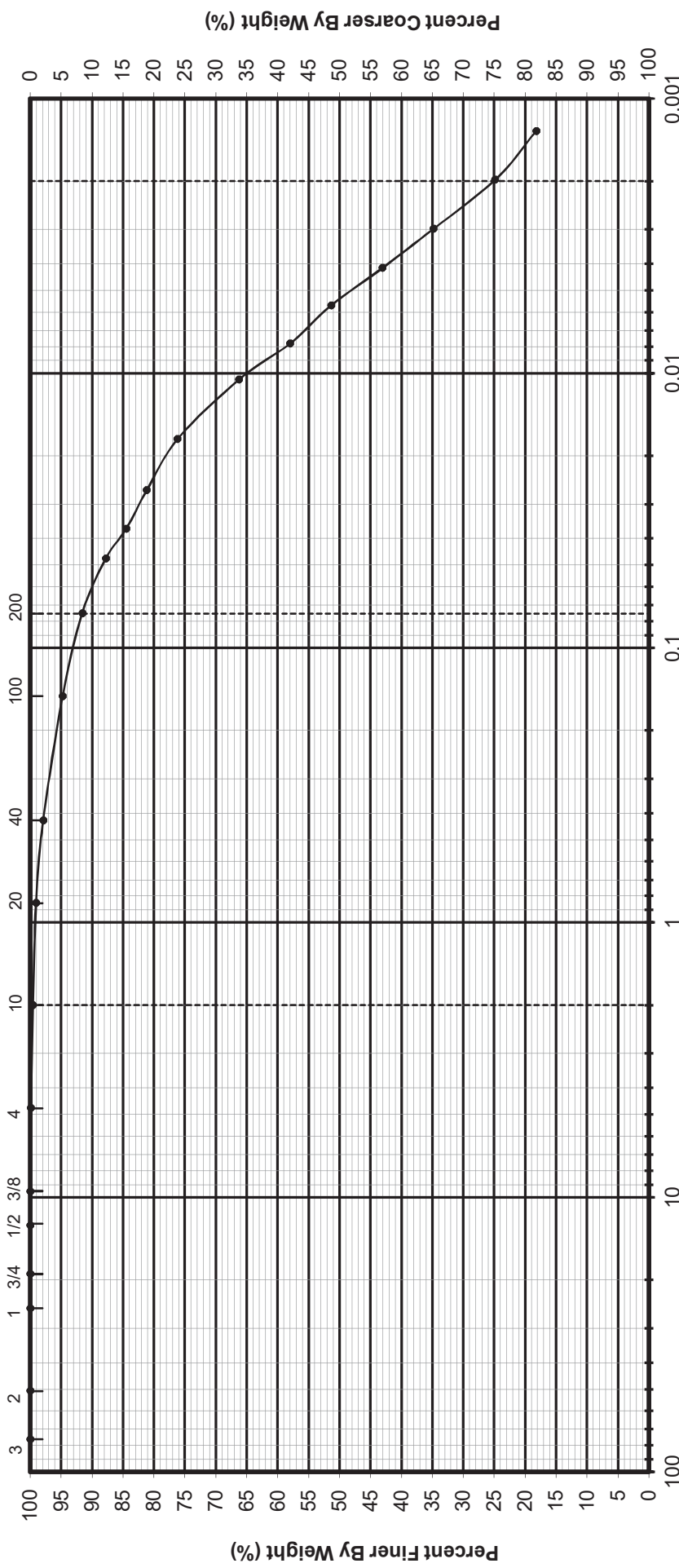
LAB DATA



Grain Size in Millimeters

GRAVEL	SAND		SILT	CLAY
	COARSE	FINE		

Boring No.	SGB-009	PARTICLE SIZE ANALYSIS-AASHTO T88		
Sample No.	2	Interstate Highway 80 (I-80) Roadway Reconstruction and Widening I-80 Will County, Illinois		
Depth	1.0'-2.5'	 Geo Services, Inc. <small>Geotechnical, Environmental and Civil Engineering An AISE - DBE Firm</small>		
Liquid Limit	27	1235 E. Davis St., Arlington Heights, IL 60005 Phone 847-253-3845 • Fax 847-253-0482		
Plasticity Limit	16	<p>CLASSIFICATION</p> <p>SILTY LOAM A-6 brown</p>		
Plasticity Index	11	Group Index	6	
Test By	MT	% Gravel	3.2	
Date	4/21/22	% Sand	21.5	
Reviewed By	RS	% Silt	65.6	
Job No	20012	% Clay	9.6	



Grain Size in Millimeters

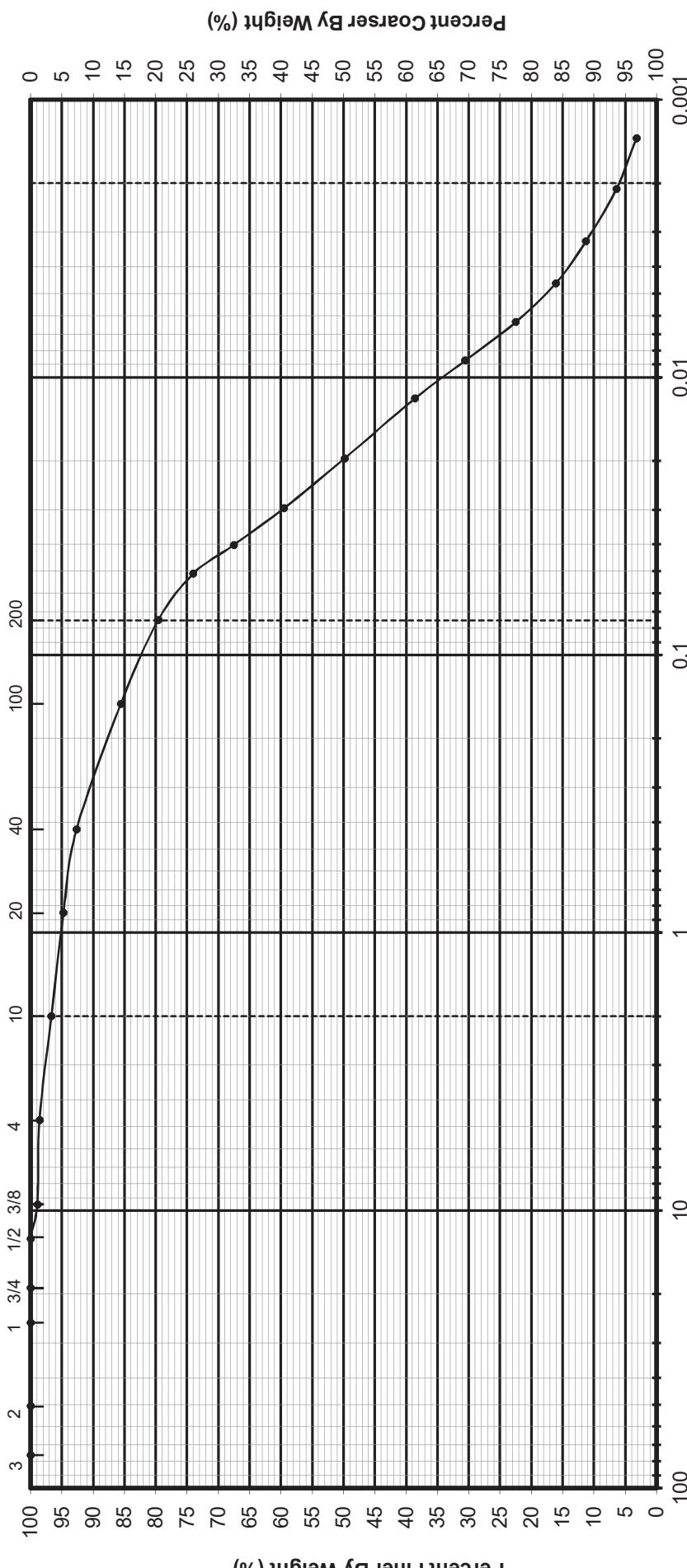
GRAVEL	COARSE	SAND	SILT	CLAY
		FINE		

Boring No.	SGB-010	CLASSIFICATION	PARTICLE SIZE ANALYSIS-AASHTO T88
Sample No.	3		
Depth	3.5'-5.0'	SILTY CLAY LOAM	
Liquid Limit	38	A-6	
Plasticity Limit	22	brown/gray	
Plasticity Index	16	Group Index	15
Test By	MT	% Gravel	0.4
Date	4/21/22	% Sand	8.0
Reviewed By	RS	% Silt	66.8
Job No	20012	% Clay	24.8

Interstate Highway 80 (I-80)
 Roadway Reconstruction and Widening I-80
 Will County, Illinois


Geo Services, Inc.
 Geotechnical, Environmental and Civil Engineering
 An AISE-DBE Firm

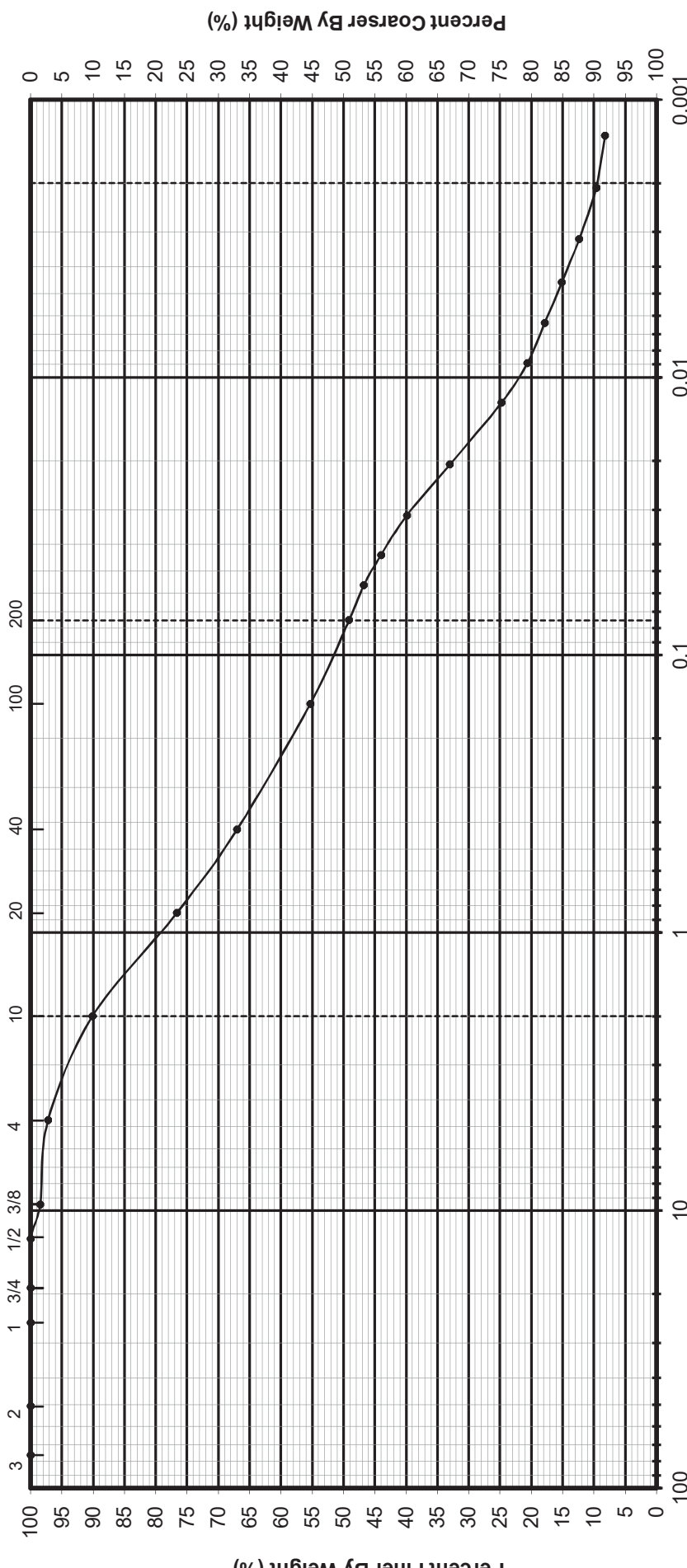
1235 E. Davis St., Arlington Heights, IL 60005
 Phone 847-253-3845 • Fax 847-253-0482




Grain Size in Millimeters

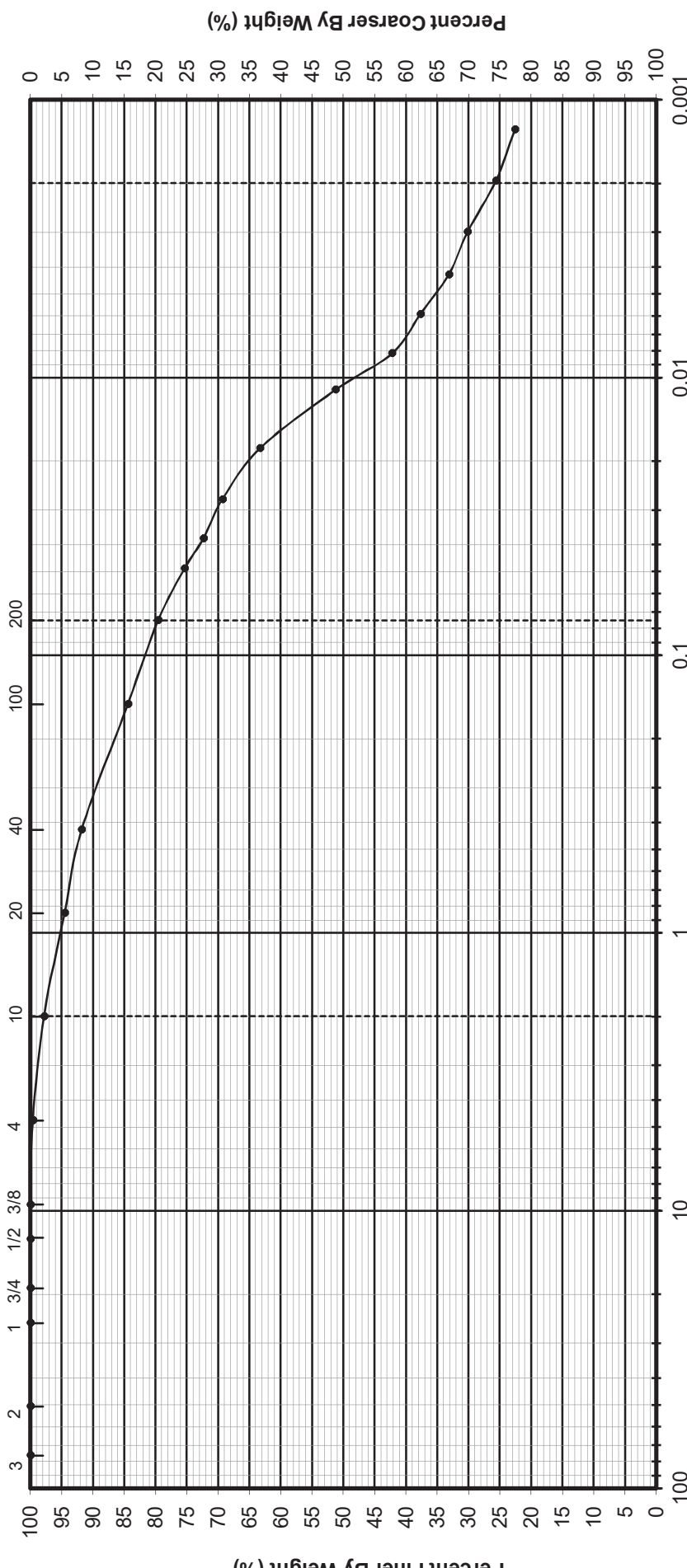
GRAVEL	SAND		SILT	CLAY
	COARSE	FINE		

Boring No.	SGB-016	CLASSIFICATION	PARTICLE SIZE ANALYSIS-AASHTO T88
Sample No.	3		
Depth	3.5'-5.0'	SILTY LOAM A-6 brown/gray Group Index 13 % Gravel 3.3 % Sand 17.1 % Silt 73.2 % Clay 6.4	Roadway Reconstruction and Widening I-80 Will County, Illinois  Geo Services, Inc. Geotechnical, Environmental and Civil Engineering An AISE - DBE Firm 1235 E. Davis St., Arlington Heights, IL 60005 Phone 847-253-3845 • Fax 847-253-0482
Liquid Limit	36		
Plastic Limit	19		
Plasticity Index	17		
Test By	MT		
Date	4/21/22		
Reviewed By	RS		
Job No	20012		



GRAVEL	COARSE	SAND	FINE	SILT	CLAY

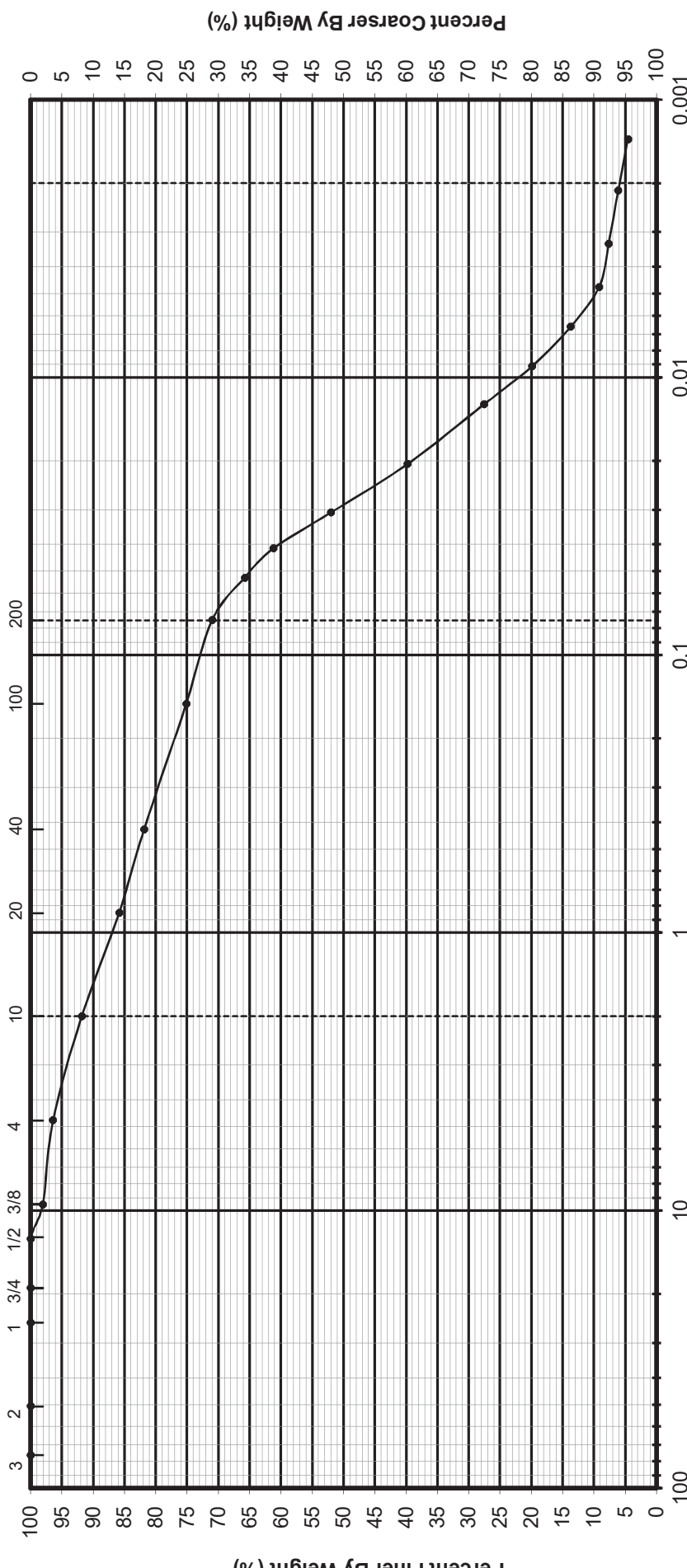
Boring No.	SGB-018	CLASSIFICATION	PARTICLE SIZE ANALYSIS-AASHTO T88
Sample No.	5	SANDY LOAM	Interstate Highway 80 (I-80)
Depth	8.5'-10.0'	A-6	Roadway Reconstruction and Widening I-80
Liquid Limit	29	brown	Will County, Illinois
Plastic Limit	18		 Geo Services, Inc. Geotechnical, Environmental and Civil Engineering An AISE - DBE Firm
Plasticity Index	11		1235 E. Davis St., Arlington Heights, IL 60005
Test By	MT		Phone 847-253-3845 • Fax 847-253-0482
Date	2/4/22		
Reviewed By	RS		
Job No	20012		




Grain Size in Millimeters

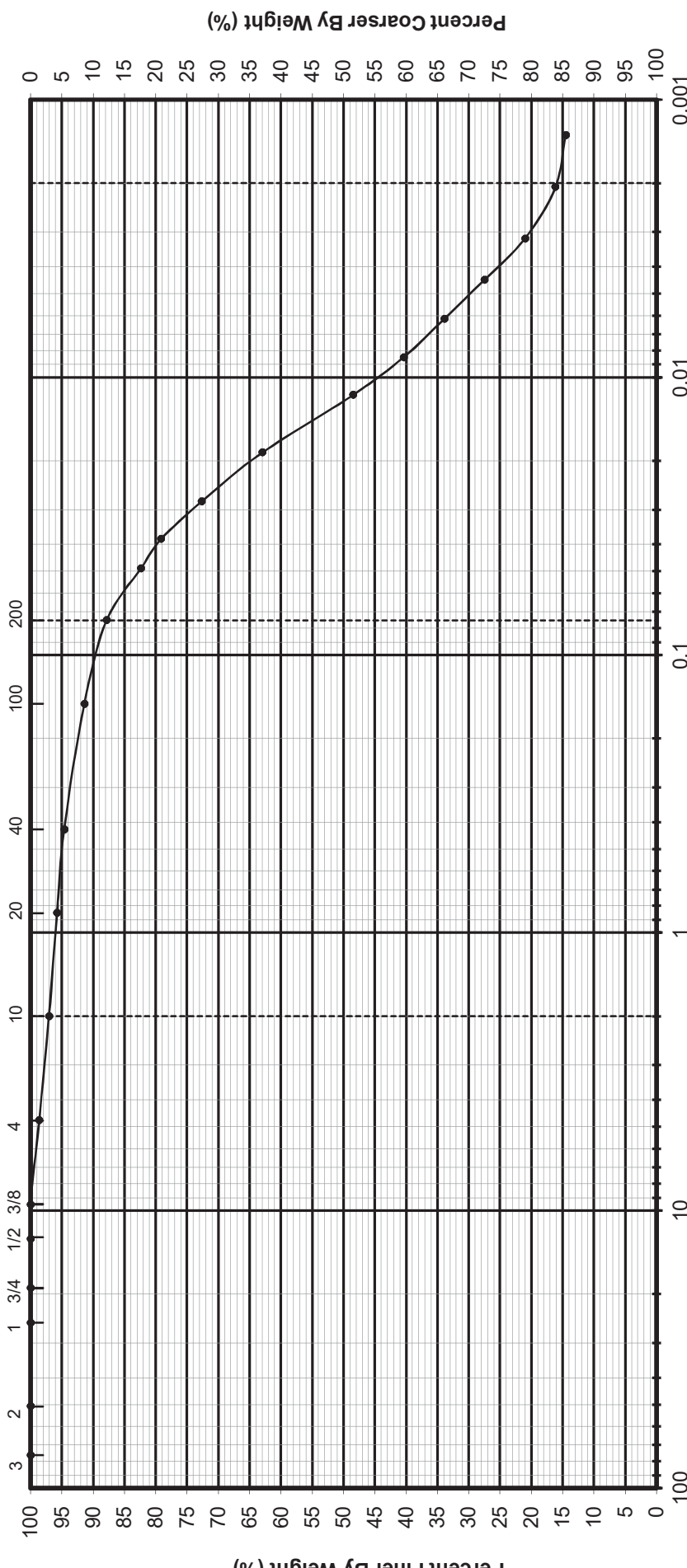
GRAVEL	COARSE	SAND	SILT	CLAY
		FINE		

Boring No.	SGB-019	CLASSIFICATION	PARTICLE SIZE ANALYSIS-AASHTO T88
Sample No.	2	SILTY CLAY LOAM	Interstate Highway 80 (I-80)
Depth	1.0'-2.5'	A-6	Roadway Reconstruction and Widening I-80
Liquid Limit	31	brown/gray	Will County, Illinois
Plastic Limit	16	Group Index 10	Geo Services, Inc.
Plasticity Index	15	% Gravel 2.2	Geotechnical, Environmental and Civil Engineering
Test By	MT	% Sand 18.2	An AISE - DBE Firm
Date	2/4/22	% Silt 54.0	1235 E. Davis St., Arlington Heights, IL 60005
Reviewed By	RS	% Clay 25.6	Phone 847-253-3845 • Fax 847-253-0482
Job No	20012		




Grain Size in Millimeters

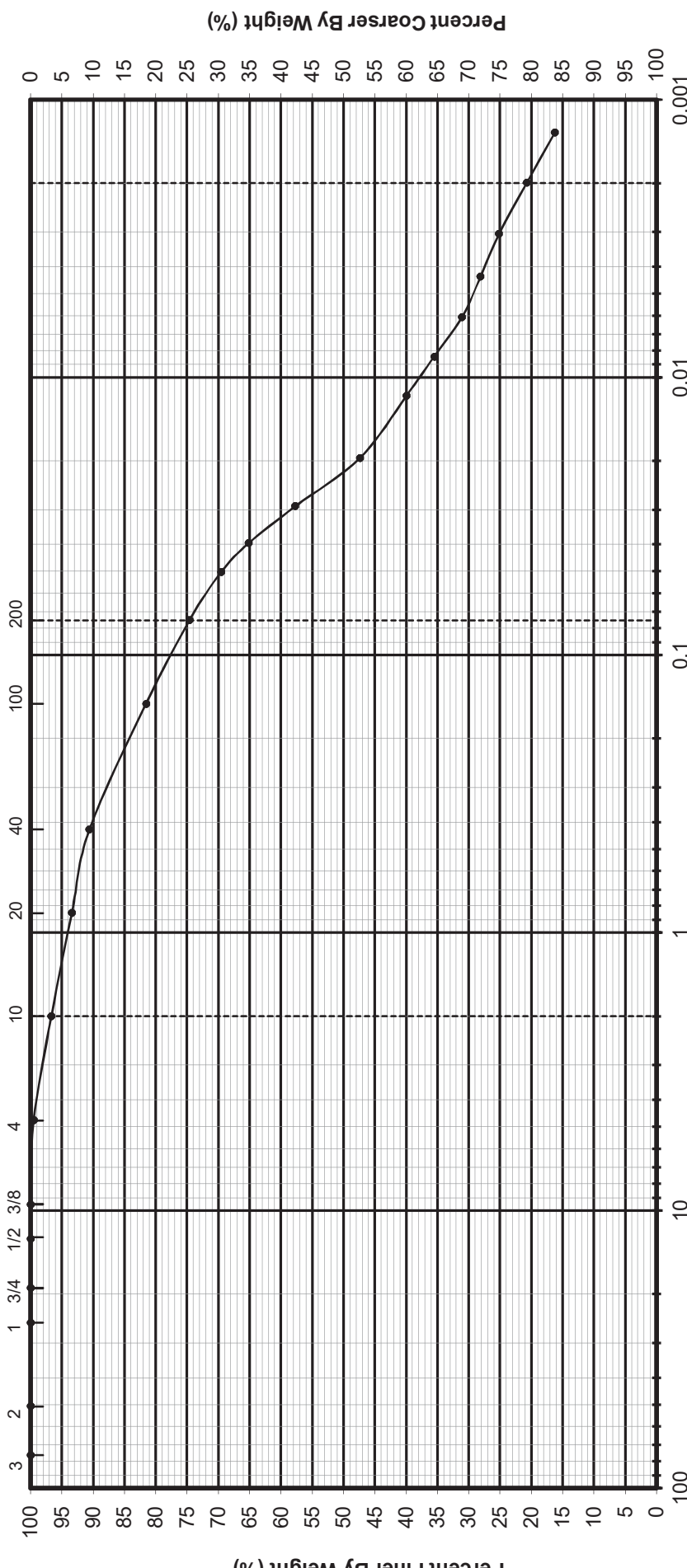
Boring No.	SGB-025	CLASSIFICATION	PARTICLE SIZE ANALYSIS-AASHTO T88
Sample No.	2		
Depth	1.0'-2.5'	SILTY LOAM	Interstate Highway 80 (I-80)
Liquid Limit	26	A-4	Roadway Reconstruction and Widening I-80
Plastic Limit	16	brown/gray	Will County, Illinois
Plasticity Index	10	Group Index	 Geo Services, Inc. Geotechnical, Environmental and Civil Engineering An AISE - DBE Firm
Test By	MT	% Gravel	1235 E. Davis St., Arlington Heights, IL 60005
Date	4/21/22	% Sand	Phone 847-253-3845 • Fax 847-253-0482
Reviewed By	RS	% Silt	
Job No	20012	% Clay	



Grain Size in Millimeters

GRAVEL	SAND		SILT	CLAY
	COARSE	FINE		

Boring No.	SGB-026	CLASSIFICATION	PARTICLE SIZE ANALYSIS-AASHTO T88
Sample No.	3		
Depth	3.5'-5.0'	SILTY LOAM A-6 brown/gray Group Index 10 % Gravel 2.9 % Sand 9.2 % Silt 71.7 % Clay 16.1	Interstate Highway 80 (I-80) Roadway Reconstruction and Widening I-80 Will County, Illinois  Geo Services, Inc. Geotechnical, Environmental and Civil Engineering An AISE - DBE Firm 1235 E. Davis St., Arlington Heights, IL 60005 Phone 847-253-3845 • Fax 847-253-0482
Liquid Limit	31		
Plastic Limit	18		
Plasticity Index	13		
Test By	MT		
Date	4/21/22		
Reviewed By	RS		
Job No	20012		



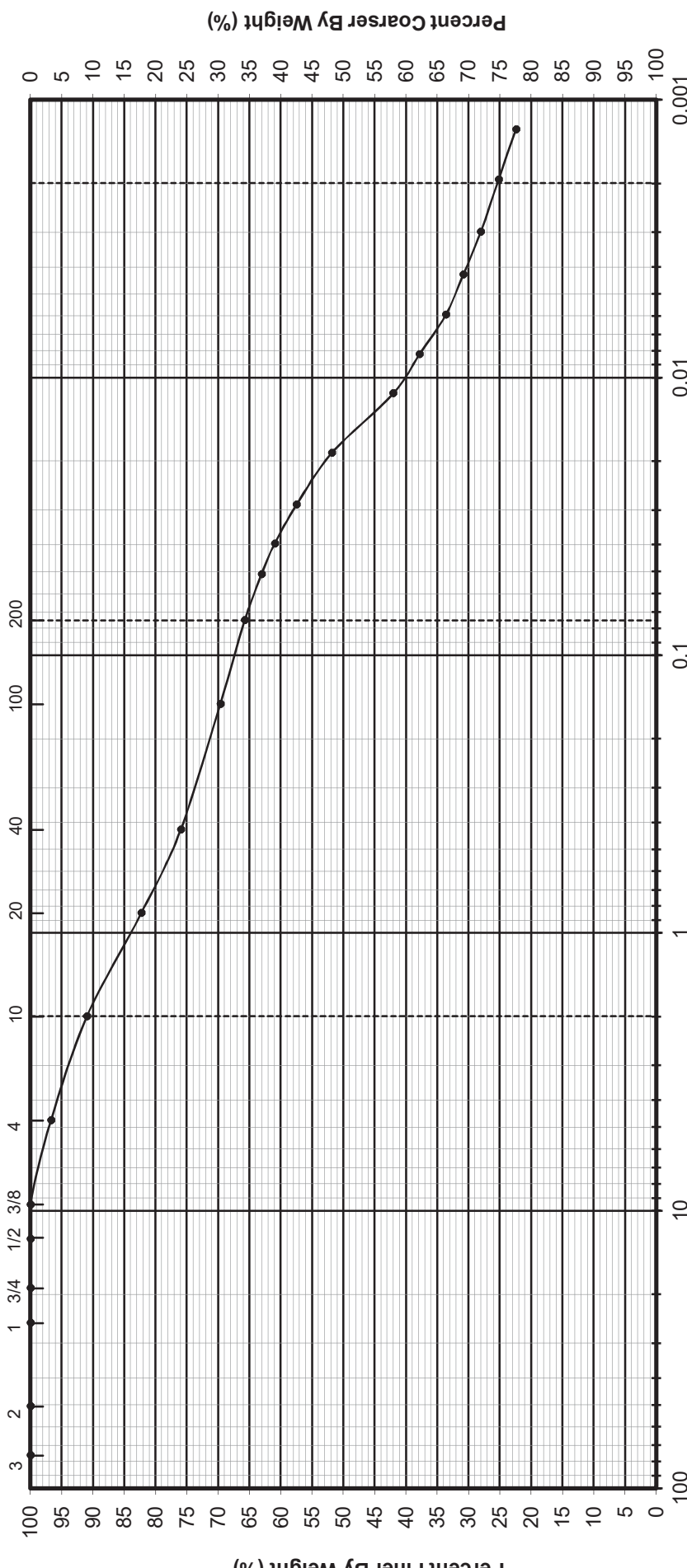
Grain Size in Millimeters

Boring No.	SGB-035	CLASSIFICATION	PARTICLE SIZE ANALYSIS-AASHTO T88
Sample No.	3		
Depth	3.5'-5.0'	SILTY CLAY LOAM	
Liquid Limit	26	A-6	
Plasticity Limit	15	brown	
Plasticity Index	11	Group Index	6
Test By	MT	% Gravel	3.3
Date	2/4/22	% Sand	22.1
Reviewed By	RS	% Silt	53.9
Job No	20012	% Clay	20.7

Interstate Highway 80 (I-80)
 Roadway Reconstruction and Widening I-80
 Will County, Illinois


Geo Services, Inc.
 Geotechnical, Environmental and Civil Engineering
 An ABE - DBE Firm

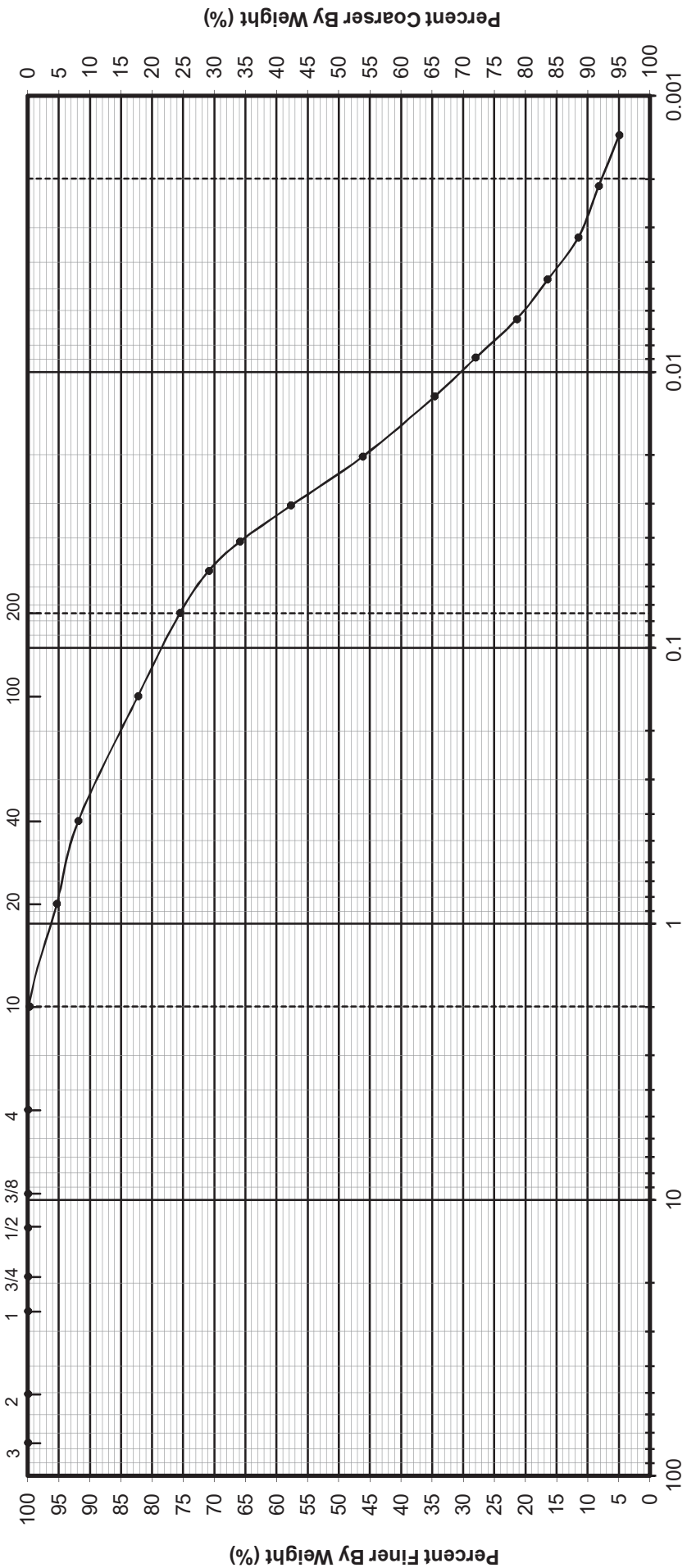
1235 E. Davis St., Arlington Heights, IL 60005
 Phone 847-253-3845 • Fax 847-253-0482



Grain Size in Millimeters


GRAVEL	SAND		SILT	CLAY
	COARSE	FINE		

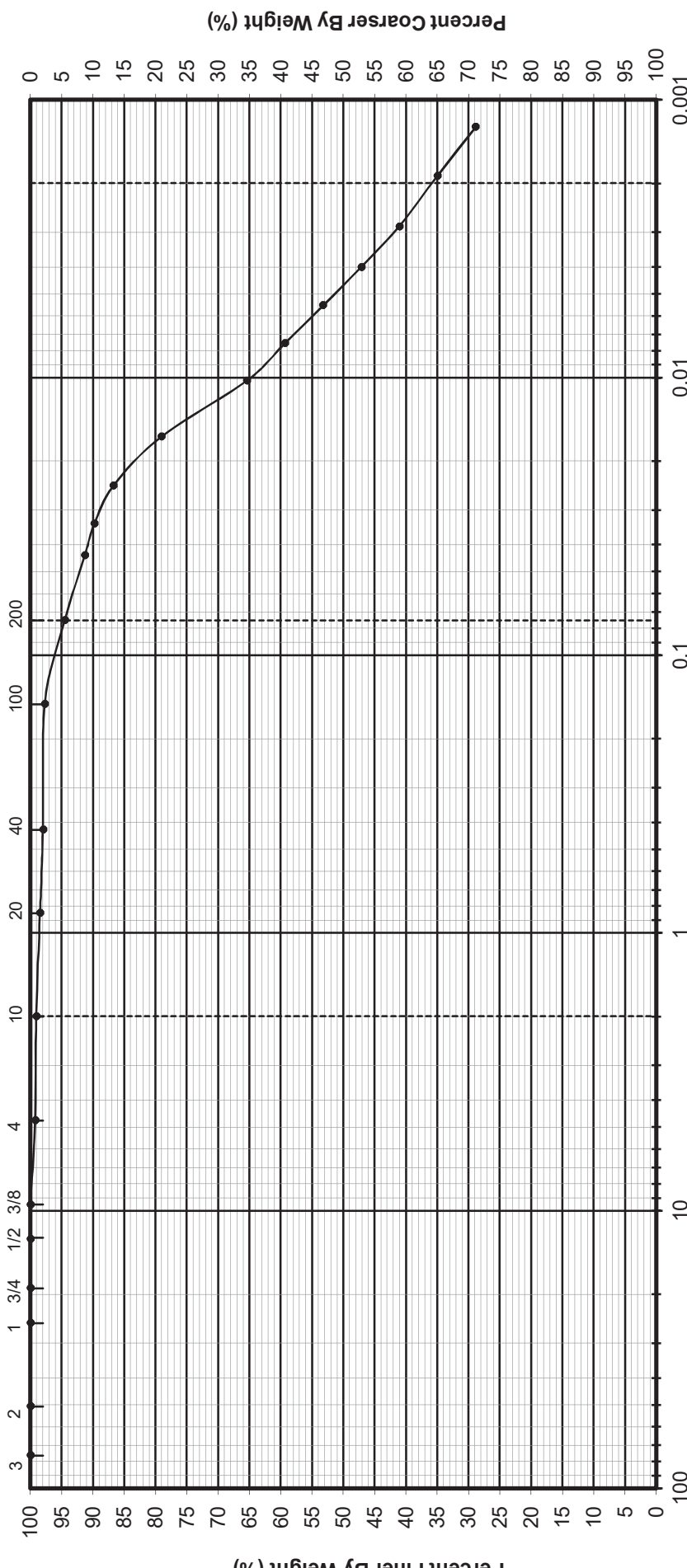
Boring No.	SGB-036	CLASSIFICATION	PARTICLE SIZE ANALYSIS-AASHTO T88
Sample No.	4	CLAY LOAM	Interstate Highway 80 (I-80)
Depth	6.0'-7.5'	A-6	Roadway Reconstruction and Widening I-80
Liquid Limit	40	brown	Will County, Illinois
Plastic Limit	21		 Geo Services, Inc. Geotechnical, Environmental and Civil Engineering An ABE - DBE Firm
Plasticity Index	19	Group Index 11	1235 E. Davis St., Arlington Heights, IL 60005
Test By	MT	% Gravel 9.0	Phone 847-253-3845 • Fax 847-253-0482
Date	2/4/22	% Sand 25.2	
Reviewed By	RS	% Silt 40.5	
Job No	20012	% Clay 25.2	



Grain Size in Millimeters

GRAVEL	SAND		SILT	CLAY
	COARSE	FINE		

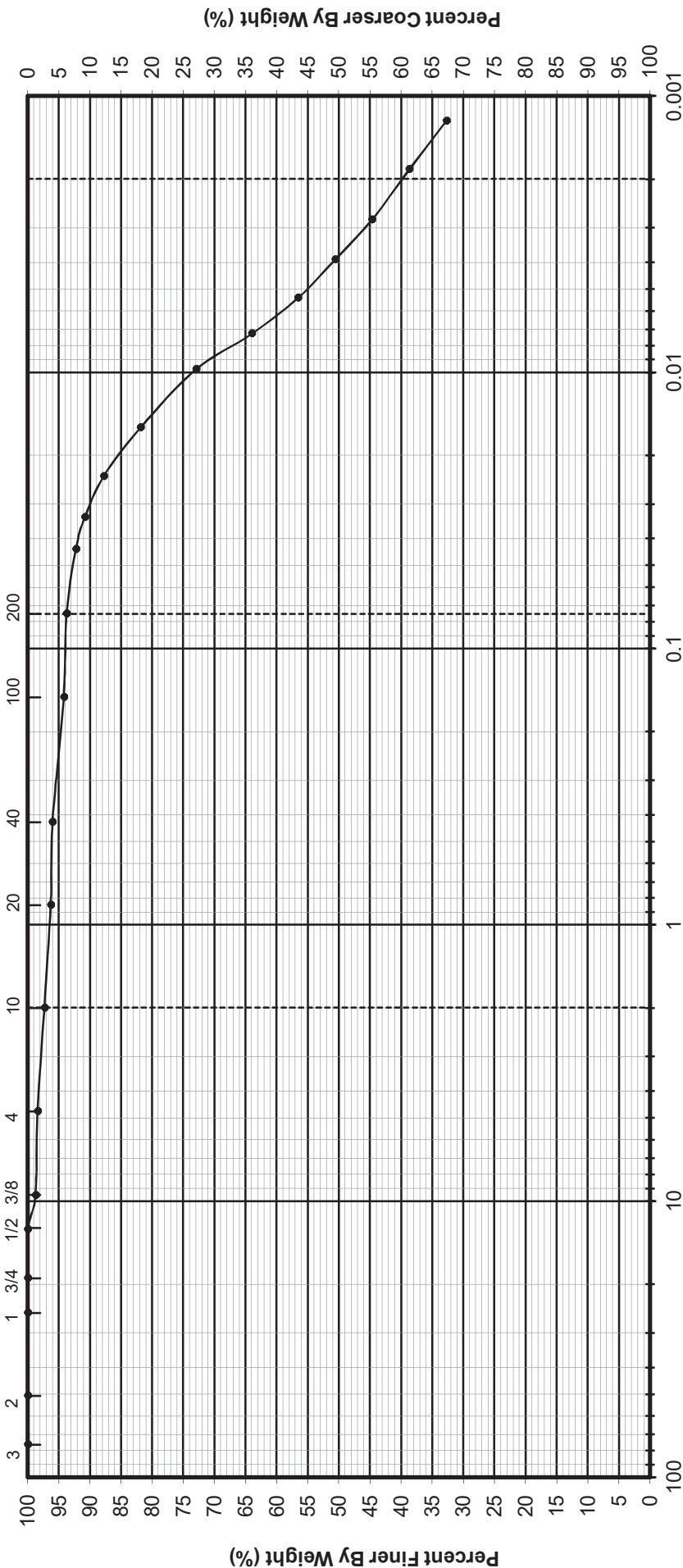
Boring No.	SGB-045	CLASSIFICATION		PARTICLE SIZE ANALYSIS-AASHTO T88	
Sample No.	3	SILTY LOAM		Interstate Highway 80 (I-80)	
Depth	3.5'-5.0'	A-4		Roadway Reconstruction and Widening I-80	
Liquid Limit	22	gray		Will County, Illinois	
Plastic Limit	14	Group Index 3		 Geo Services, Inc. <small>Geotechnical, Environmental and Civil Engineering An ABE - DBE Firm</small>	
Plasticity Index	8	% Gravel 0.2		1235 E. Davis St., Arlington Heights, IL 60005	
Test By	MT	% Sand 24.2		Phone 847-253-3845 • Fax 847-253-0482	
Date	4/21/22	% Silt 67.3			
Reviewed By	RS	% Clay 8.2			
Job No	20012				



Grain Size in Millimeters

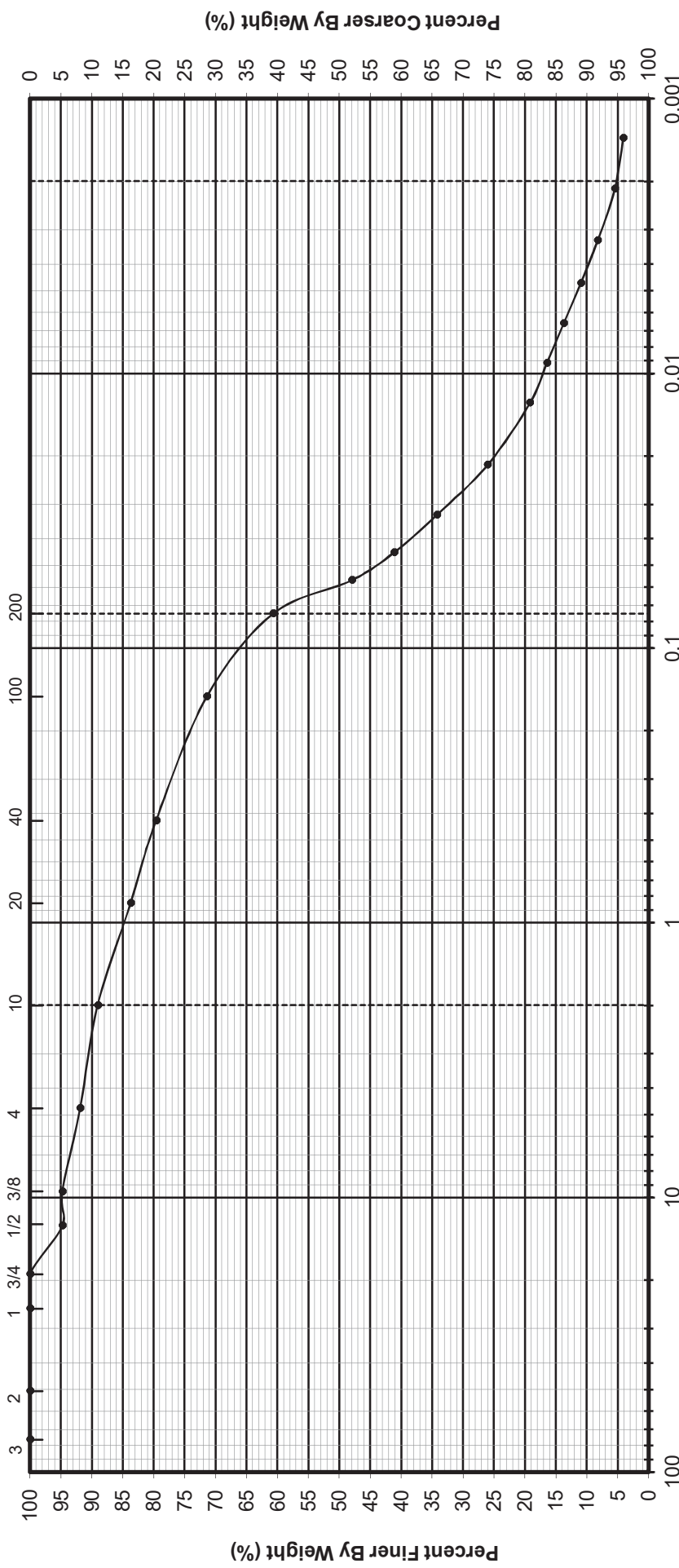
GRAVEL	COARSE	SAND	SILT	CLAY
		FINE		

Boring No.	SGB-046	CLASSIFICATION	PARTICLE SIZE ANALYSIS-AASHTO T88
Sample No.	5	SILTY CLAY	Interstate Highway 80 (I-80)
Depth	8.5'-10.0'	A-6	Roadway Reconstruction and Widening I-80
Liquid Limit	39	brown/gray	Will County, Illinois
Plastic Limit	22	Group Index	Geo Services, Inc.
Plasticity Index	17	% Gravel	Geotechnical, Environmental and Civil Engineering
Test By	MT	% Sand	An AISE - DBE Firm
Date	2/4/22	% Silt	1235 E. Davis St., Arlington Heights, IL 60005
Reviewed By	RS	% Clay	Phone 847-253-3845 • Fax 847-253-0482
Job No	20012		



GRAVEL	SAND		SILT	CLAY
	COARSE	FINE		

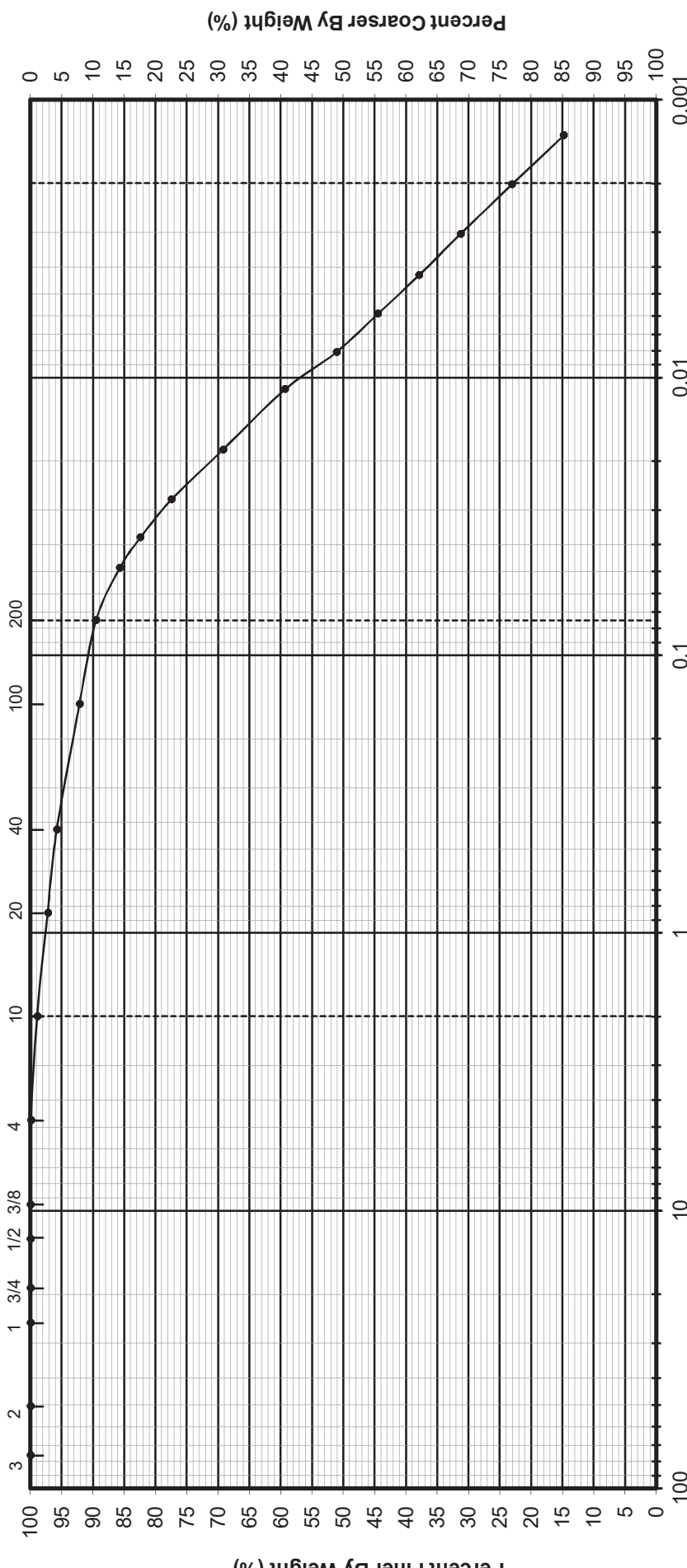
Boring No.	SGB-055	CLASSIFICATION	PARTICLE SIZE ANALYSIS-AASHTO T88
Sample No.	3		
Depth	3.5'-5.0'		
Liquid Limit	40	SILTY CLAY A-6 brown/gray Group Index 18 % Gravel 2.7 % Sand 3.6 % Silt 55.1 % Clay 38.7	Interstate Highway 80 (I-80) Roadway Reconstruction and Widening I-80 Will County, Illinois Geo Services, Inc. Geotechnical, Environmental and Civil Engineering An AISE-DBE Firm 1235 E. Davis St., Arlington Heights, IL 60005 Phone 847-253-3845 • Fax 847-253-0482
Plasticity Limit	22		
Plasticity Index	18		
Test By	MT		
Date	2/4/22		
Reviewed By	RS		
Job No	20012		



Grain Size in Millimeters

GRAVEL	COARSE	SAND	SILT	CLAY
		FINE		

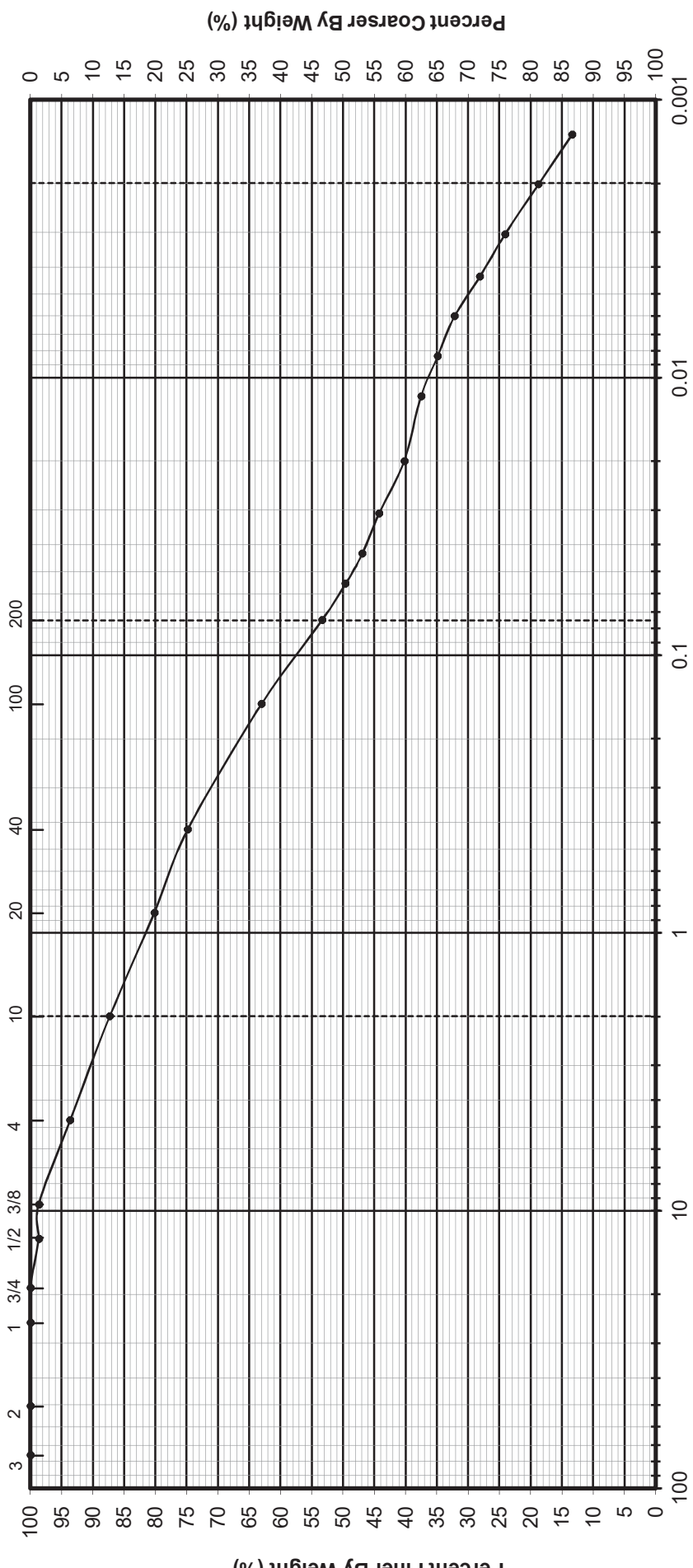
Boring No.	SGB-056	CLASSIFICATION	PARTICLE SIZE ANALYSIS-AASHTO T88
Sample No.	4	SILTY LOAM	Interstate Highway 80 (I-80)
Depth	6.0'-7.5'	A-4	Roadway Reconstruction and Widening I-80
Liquid Limit	21	brown	Will County, Illinois
Plastic Limit	16	Group Index 0	Geo Services, Inc. Geotechnical, Environmental and Civil Engineering An ABE - DBE Firm
Plasticity Index	5	% Gravel 10.9	1235 E. Davis St., Arlington Heights, IL 60005
Test By	MT	% Sand 28.4	Phone 847-253-3845 • Fax 847-253-0482
Date	2/4/22	% Silt 55.2	
Reviewed By	RS	% Clay 5.5	
Job No	20012		



Grain Size in Millimeters


GRAVEL	SAND		SILT	CLAY
	COARSE	FINE		

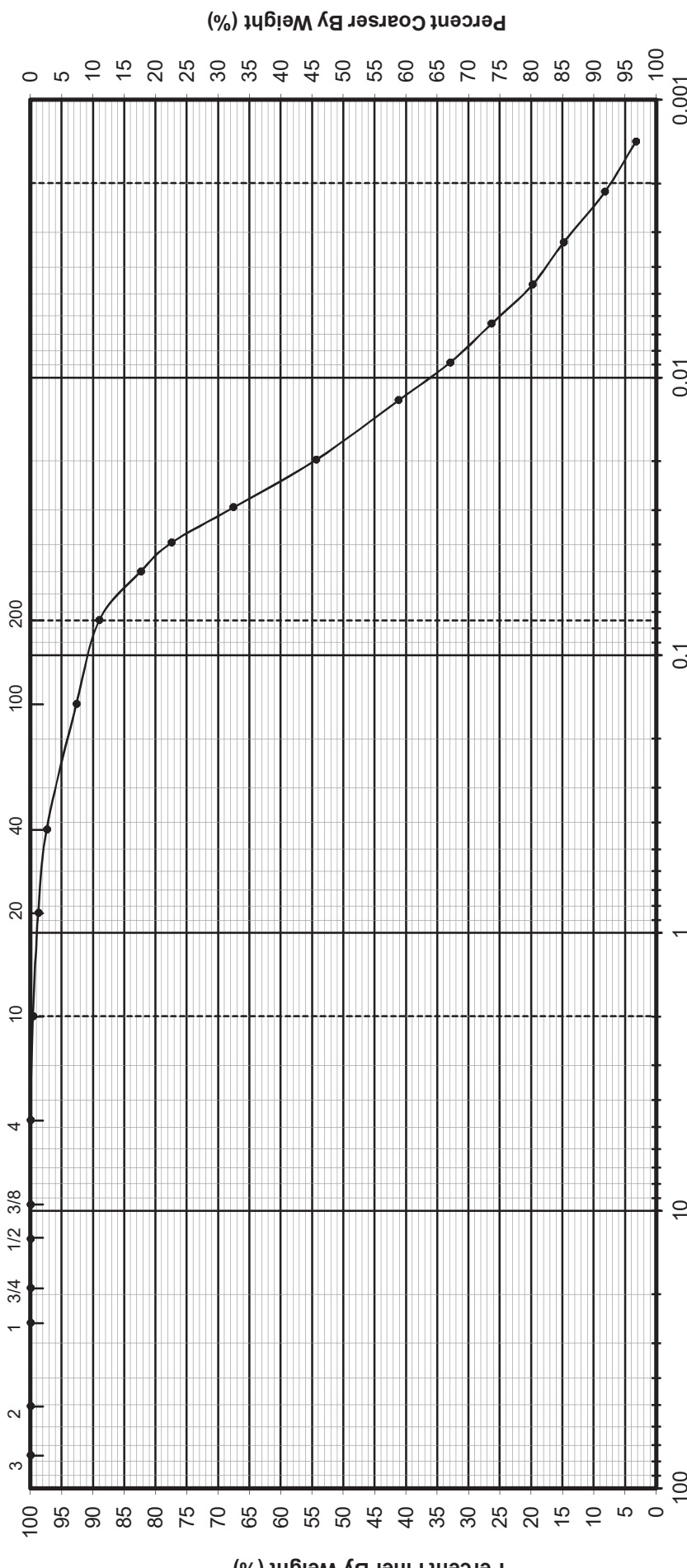
Boring No.	SGB-063	CLASSIFICATION	PARTICLE SIZE ANALYSIS-AASHTO T88
Sample No.	2	SILTY CLAY LOAM	Interstate Highway 80 (I-80)
Depth	1.0'-2.5'	A-6	Roadway Reconstruction and Widening I-80
Liquid Limit	30	brown/gray	Will County, Illinois
Plastic Limit	20	Group Index 11	Geo Services, Inc.
Plasticity Index	14	% Gravel 1.1	Geotechnical, Environmental and Civil Engineering
Test By	MT	% Sand 9.4	An AISE - DBE Firm
Date	4/21/22	% Silt 66.4	1235 E. Davis St., Arlington Heights, IL 60005
Reviewed By	RS	% Clay 23.1	Phone 847-253-3845 • Fax 847-253-0482
Job No	20012		



Grain Size in Millimeters


GRAVEL	SAND		SILT	CLAY
	COARSE	FINE		

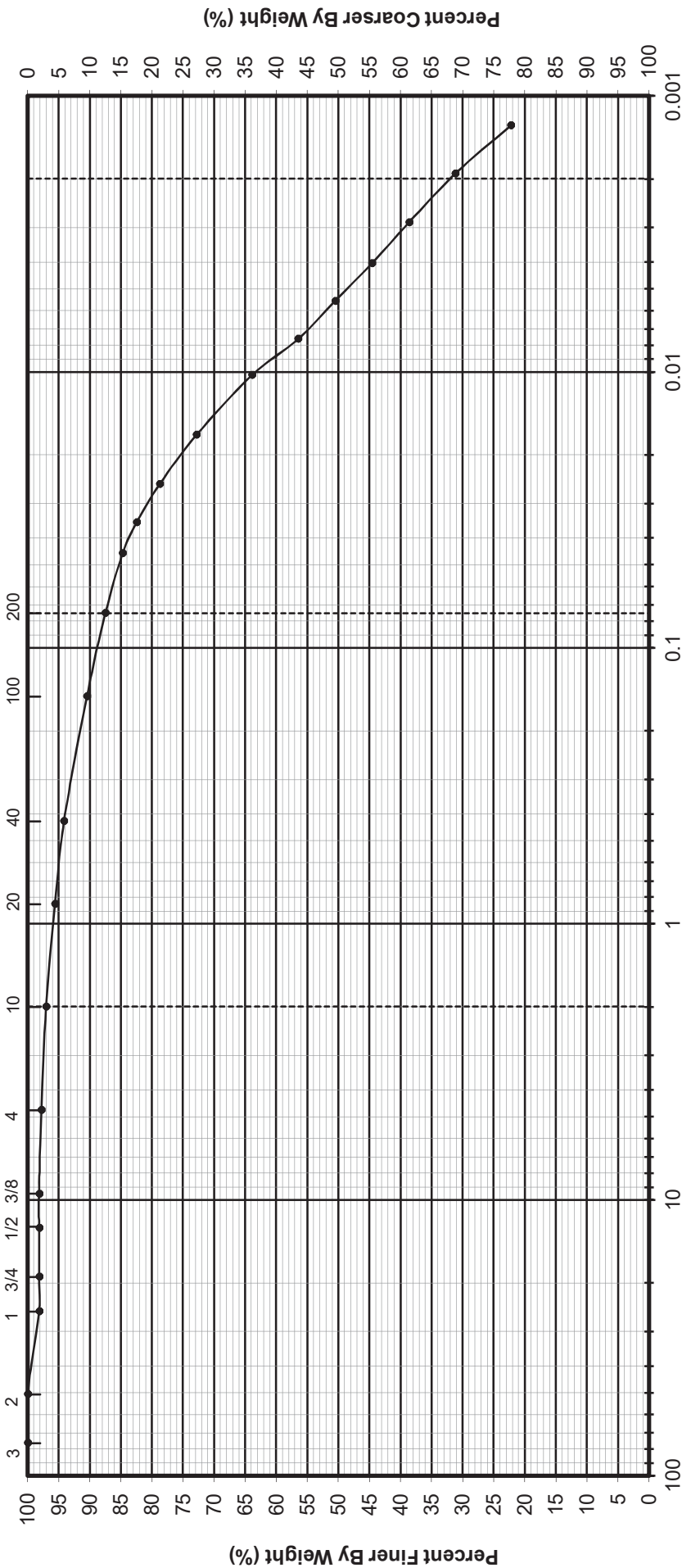
Boring No.	SGB-066	CLASSIFICATION	PARTICLE SIZE ANALYSIS-AASHTO T88
Sample No.	4		
Depth	6.0'-7.5'	LOAM	Interstate Highway 80 (I-80) Roadway Reconstruction and Widening I-80 Will County, Illinois  Geo Services, Inc. <small>Geotechnical, Environmental and Civil Engineering An AISE - DBE Firm</small> 1235 E. Davis St., Arlington Heights, IL 60005 Phone 847-253-3845 • Fax 847-253-0482
Liquid Limit	27	A-4	
Plastic Limit	17	brown/gray	
Plasticity Index	10	Group Index 2	
Test By	MT	% Gravel 12.7	
Date	2/4/22	% Sand 33.9	
Reviewed By	RS	% Silt 34.6	
Job No	20012	% Clay 18.8	




Grain Size in Millimeters

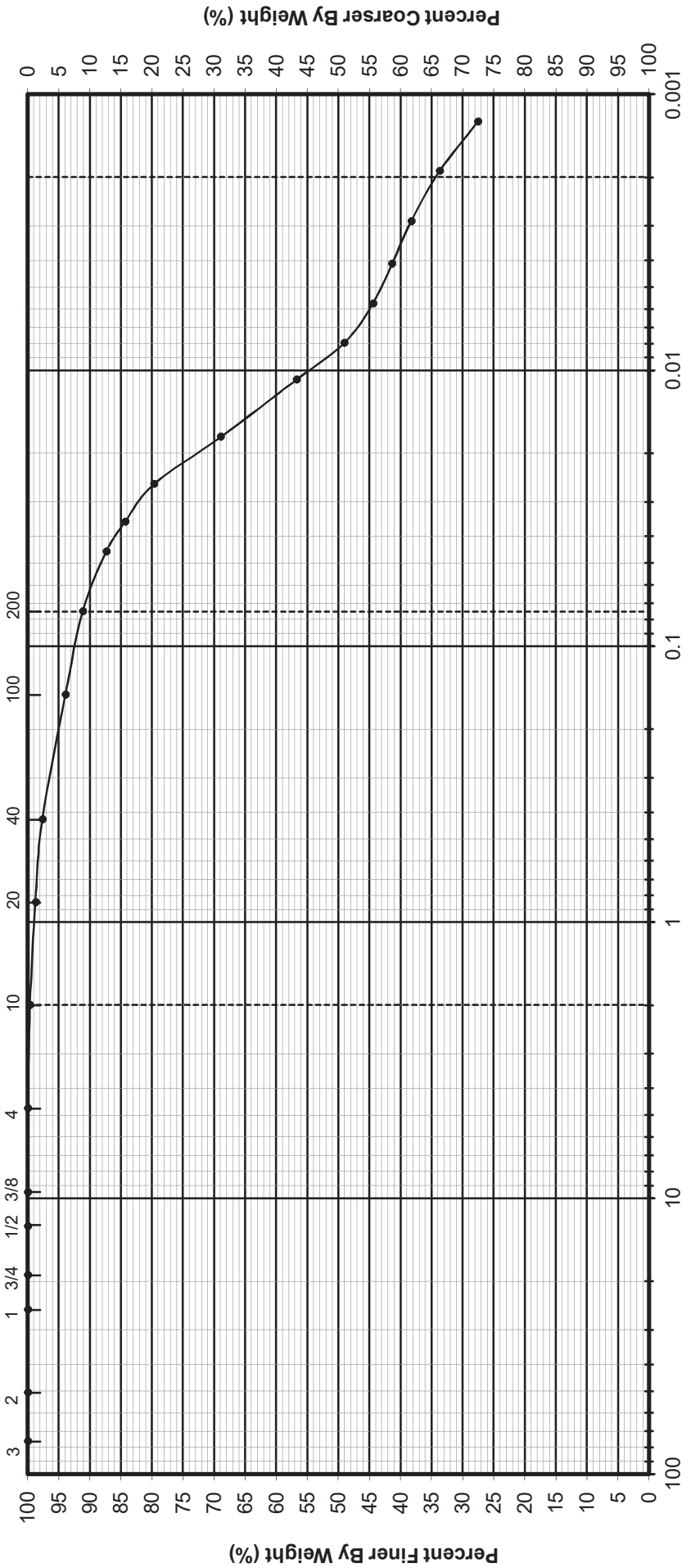
GRAVEL	COARSE	SAND	SILT	CLAY
		COARSE	FINE	

Boring No.	SGB-073	CLASSIFICATION	PARTICLE SIZE ANALYSIS-AASHTO T88
Sample No.	2		
Depth	1.0'-2.5'	SILT A-6 brown/black Group Index 16 % Gravel 0.5 % Sand 10.5 % Silt 80.8 % Clay 8.2	Interstate Highway 80 (I-80) Roadway Reconstruction and Widening I-80 Will County, Illinois  Geo Services, Inc. Geotechnical, Environmental and Civil Engineering An AISE - DBE Firm 1235 E. Davis St., Arlington Heights, IL 60005 Phone 847-253-3845 • Fax 847-253-0482
Liquid Limit	39		
Plastic Limit	22		
Plasticity Index	17		
Test By	MT		
Date	4/21/22		
Reviewed By	RS		
Job No	20012		




Grain Size in Millimeters

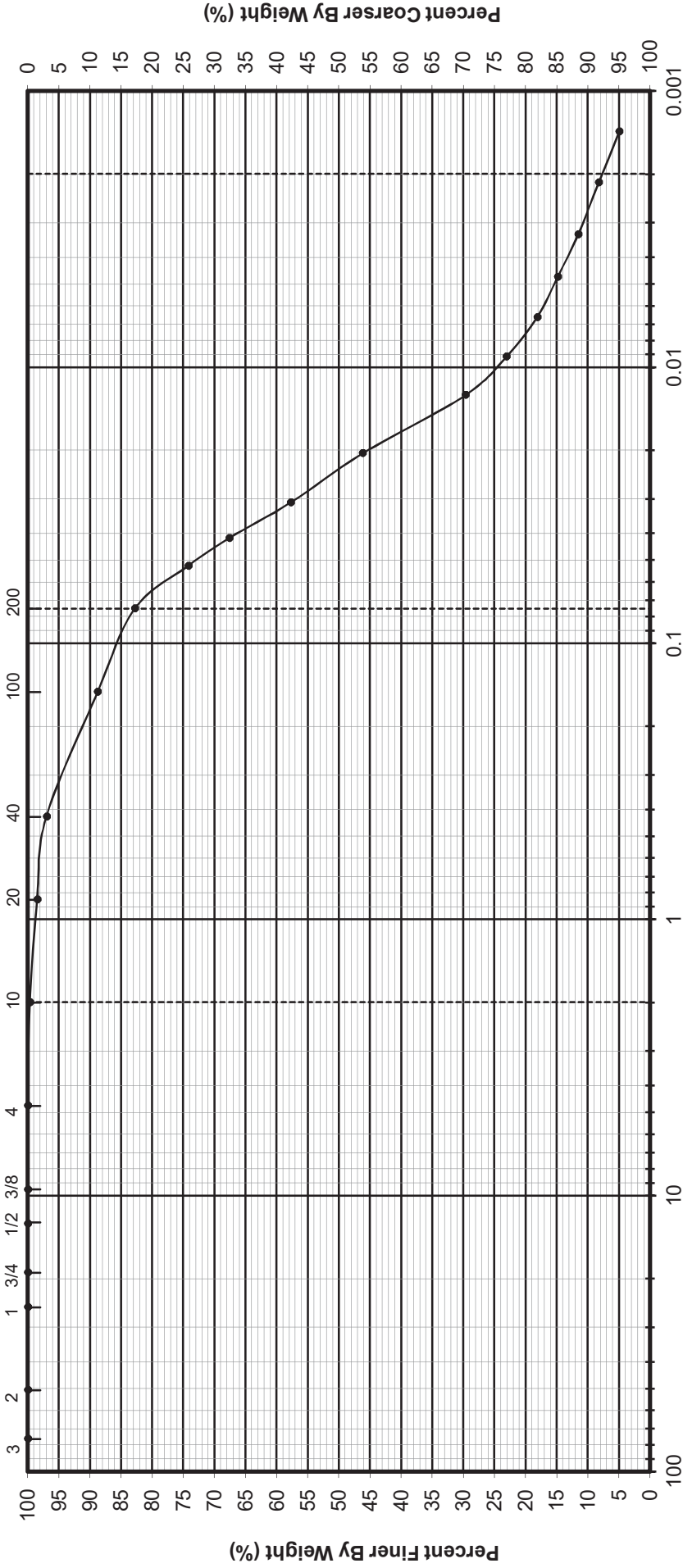
Boring No.		SGB-075		PARTICLE SIZE ANALYSIS-AASHTO T88	
Sample No.	4			Interstate Highway 80 (I-80) Roadway Reconstruction and Widening I-80 Will County, Illinois	
Depth	6.0'-7.5'			 Geo Services, Inc. <small>Geotechnical, Environmental and Civil Engineering An AISE - DBE Firm</small>	
Liquid Limit	33			1235 E. Davis St., Arlington Heights, IL 60005	
Plastic Limit	19			Phone 847-253-3845 • Fax 847-253-0482	
Plasticity Index	14				
Test By	MT				
Date	2/4/22				
Reviewed By	RS				
Job No	20012				
		CLASSIFICATION			
		SILTY CLAY			
		A-6			
		brown			
Group Index	11				
% Gravel	3.0				
% Sand	9.5				
% Silt	56.3				
% Clay	31.2				



Grain Size in Millimeters


GRAVEL	COARSE	SAND	SILT	CLAY
		FINE		

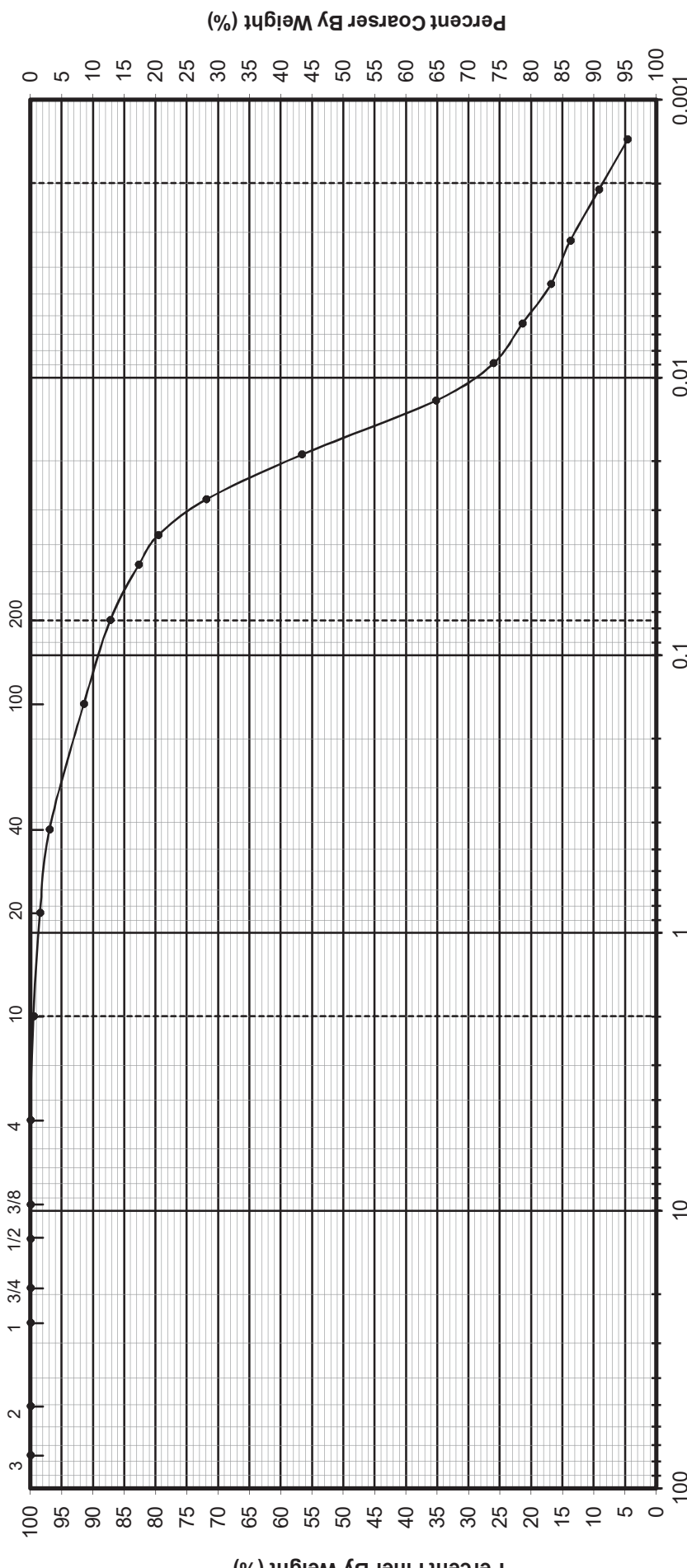
Boring No.	SGB-076	CLASSIFICATION	PARTICLE SIZE ANALYSIS-AASHTO T88
Sample No.	3	SILTY CLAY	Interstate Highway 80 (I-80)
Depth	3.5'-5.0'	A-7	Roadway Reconstruction and Widening I-80
Liquid Limit	44	gray	Will County, Illinois
Plastic Limit	23	Group Index 21	 Geo Services, Inc. Geotechnical, Environmental and Civil Engineering An AISE - DBE Firm
Plasticity Index	21	% Gravel 0.4	1235 E. Davis St., Arlington Heights, IL 60005
Test By	MT	% Sand 8.5	Phone 847-253-3845 • Fax 847-253-0482
Date	2/4/22	% Silt 57.4	
Reviewed By	RS	% Clay 33.7	
Job No	20012		



Grain Size in Millimeters

GRAVEL	SAND		SILT	CLAY
	COARSE	FINE		

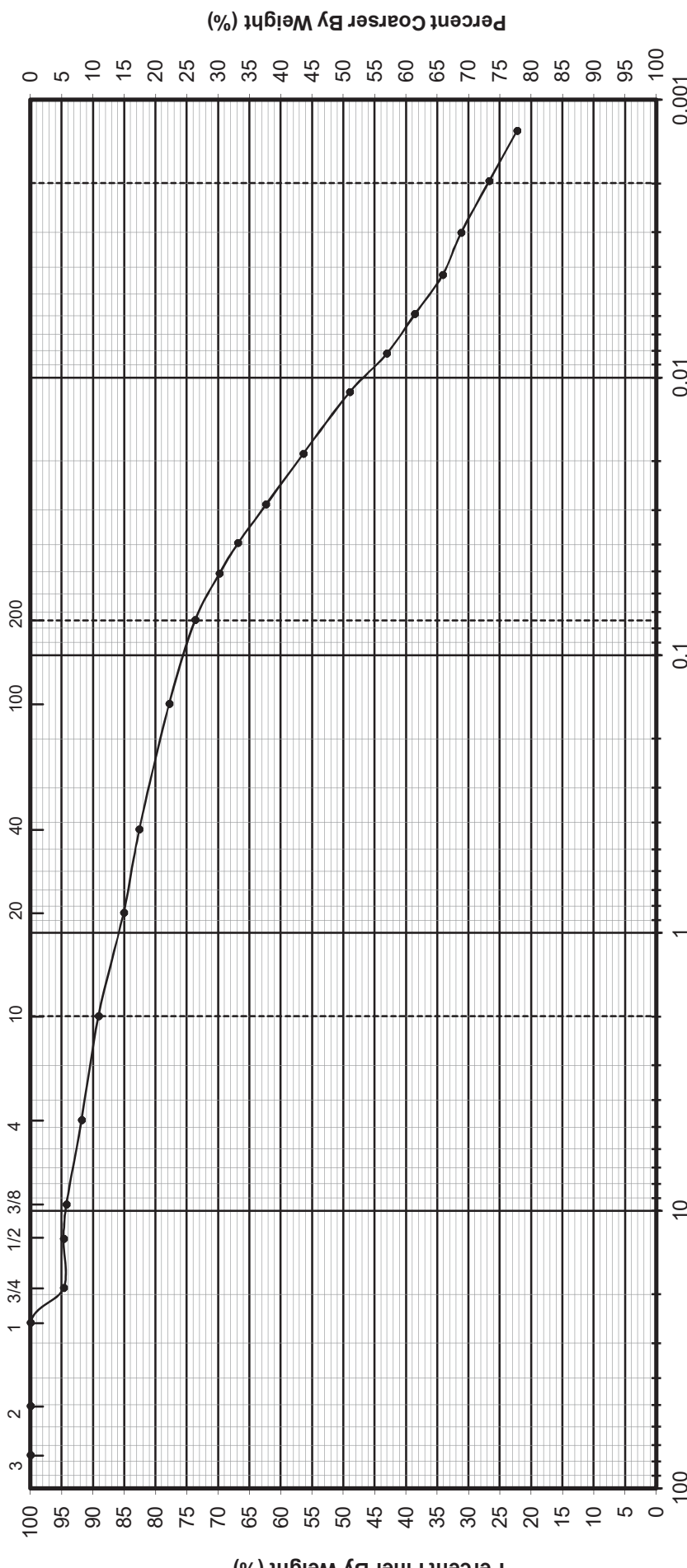
Boring No.	SGB-081	CLASSIFICATION	PARTICLE SIZE ANALYSIS-AASHTO T88
Sample No.	3	SILTY LOAM	Interstate Highway 80 (I-80) Roadway Reconstruction and Widening I-80 Will County, Illinois
Depth	3.5'-5.0'	A-6	 Geo Services, Inc. Geotechnical, Environmental and Civil Engineering An ABE - DBE Firm 1235 E. Davis St., Arlington Heights, IL 60005 Phone 847-253-3845 • Fax 847-253-0482
Liquid Limit	37	black	
Plastic Limit	24	Group Index 11	
Plasticity Index	13	% Gravel 0.4	
Test By	MT	% Sand 16.8	
Date	4/21/22	% Silt 74.6	
Reviewed By	RS	% Clay 8.2	
Job No	20012		



Grain Size in Millimeters

GRAVEL	COARSE	SAND	SILT	CLAY
		FINE		

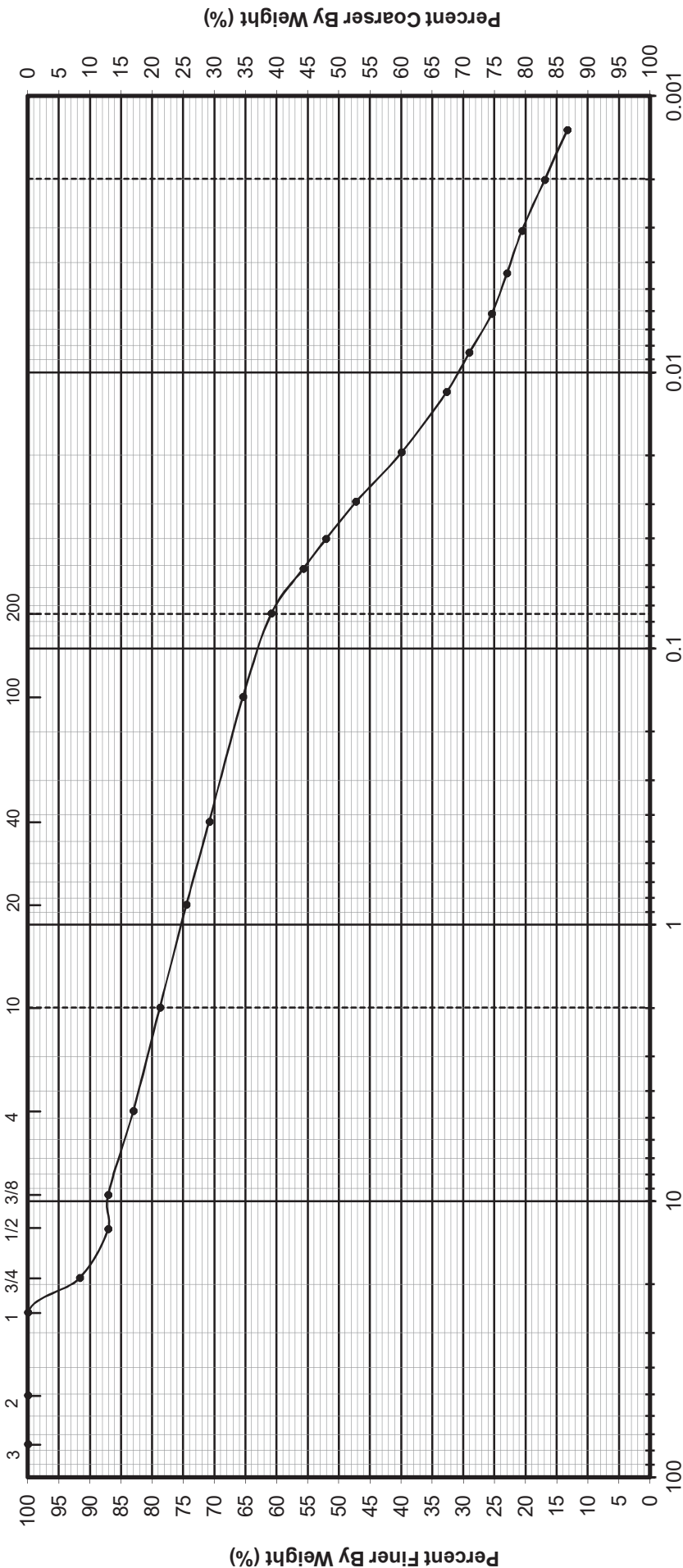
Boring No.	SGB-083	CLASSIFICATION	PARTICLE SIZE ANALYSIS-AASHTO T88
Sample No.	3	SILTY LOAM	Interstate Highway 80 (I-80)
Depth	3.5'-5.0'	A-6	Roadway Reconstruction and Widening I-80
Liquid Limit	38	black	Will County, Illinois
Plastic Limit	23	Group Index 13	Geo Services, Inc. Geotechnical, Environmental and Civil Engineering An ABE - DBE Firm
Plasticity Index	15	% Gravel 0.5	1235 E. Davis St., Arlington Heights, IL 60005
Test By	MT	% Sand 12.2	Phone 847-253-3845 • Fax 847-253-0482
Date	2/4/22	% Silt 78.1	
Reviewed By	RS	% Clay 9.2	
Job No	20012		



Grain Size in Millimeters

GRAVEL	SAND		SILT	CLAY
	COARSE	FINE		

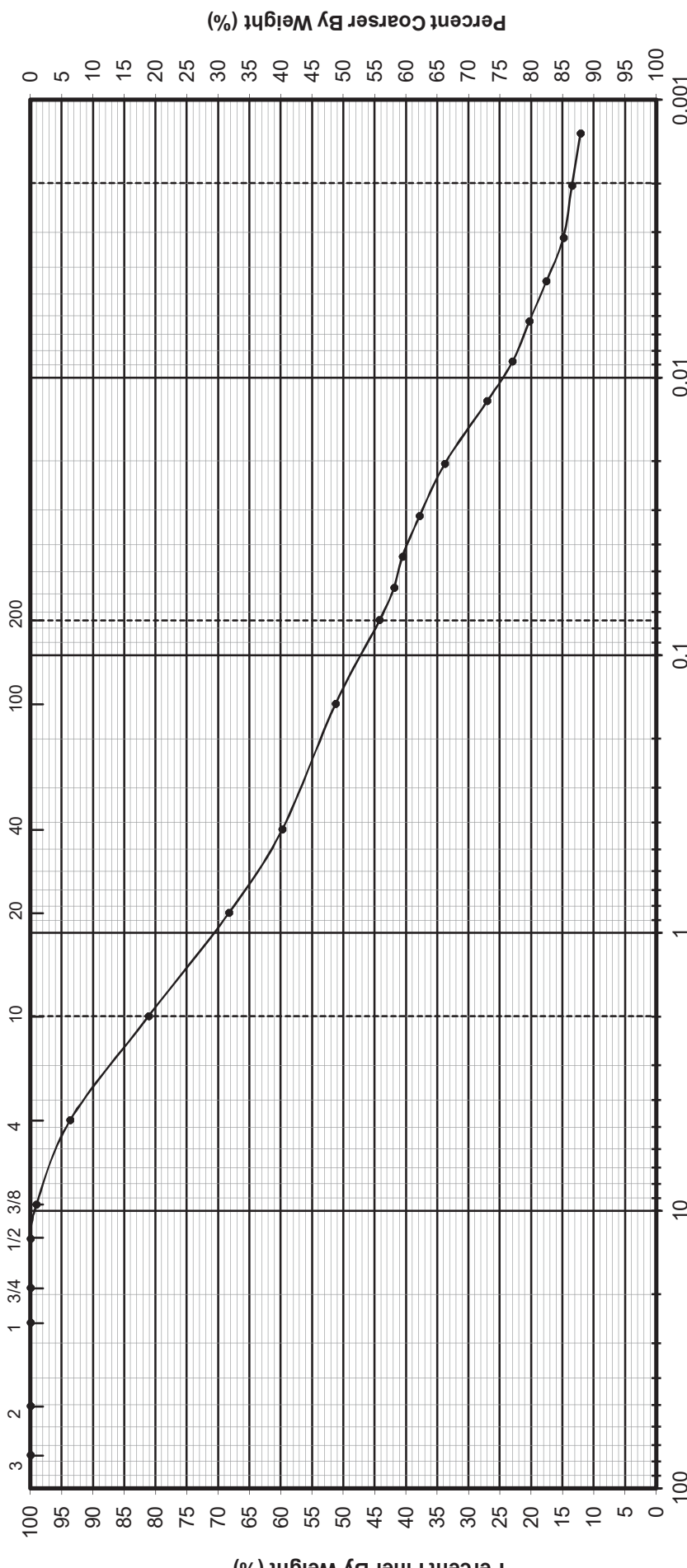
Boring No.	SGB-085	CLASSIFICATION	PARTICLE SIZE ANALYSIS-AASHTO T88
Sample No.	3	CLAY LOAM	Interstate Highway 80 (I-80)
Depth	3.5'-5.0'	A-6	Roadway Reconstruction and Widening I-80
Liquid Limit	36	brown/gray	Will County, Illinois
Plastic Limit	18	Group Index	Geo Services, Inc.
Plasticity Index	18	% Gravel	Geotechnical, Environmental and Civil Engineering
Test By	MT	% Sand	An AISE - DBE Firm
Date	4/21/22	% Silt	1235 E. Davis St., Arlington Heights, IL 60005
Reviewed By	RS	% Clay	Phone 847-253-3845 • Fax 847-253-0482
Job No	20012		



Grain Size in Millimeters


GRAVEL	SAND		SILT	CLAY
	COARSE	FINE		

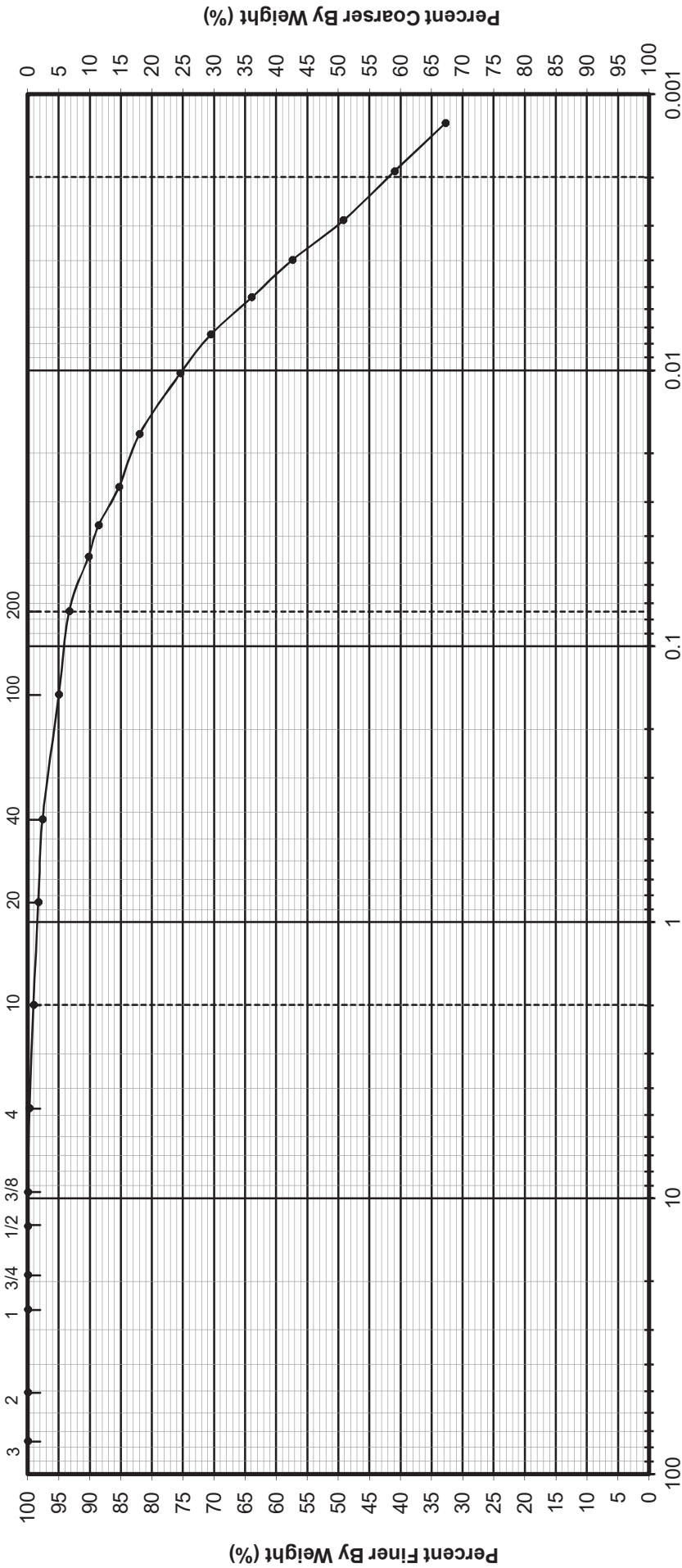
Boring No.	SGB-086	CLASSIFICATION	PARTICLE SIZE ANALYSIS-AASHTO T88
Sample No.	4	LOAM	Interstate Highway 80 (I-80)
Depth	6.0'-7.5'	A-6	Roadway Reconstruction and Widening I-80
Liquid Limit	34	brown	Will County, Illinois
Plastic Limit	20	Group Index 6	Geo Services, Inc. Geotechnical, Environmental and Civil Engineering An ABE - DBE Firm
Plasticity Index	14	% Gravel 21.2	1235 E. Davis St., Arlington Heights, IL 60005
Test By	MT	% Sand 17.9	Phone 847-253-3845 • Fax 847-253-0482
Date	2/4/22	% Silt 43.9	
Reviewed By	RS	% Clay 17.0	
Job No	20012		



Grain Size in Millimeters


GRAVEL	SAND		SILT	CLAY
	COARSE	FINE		

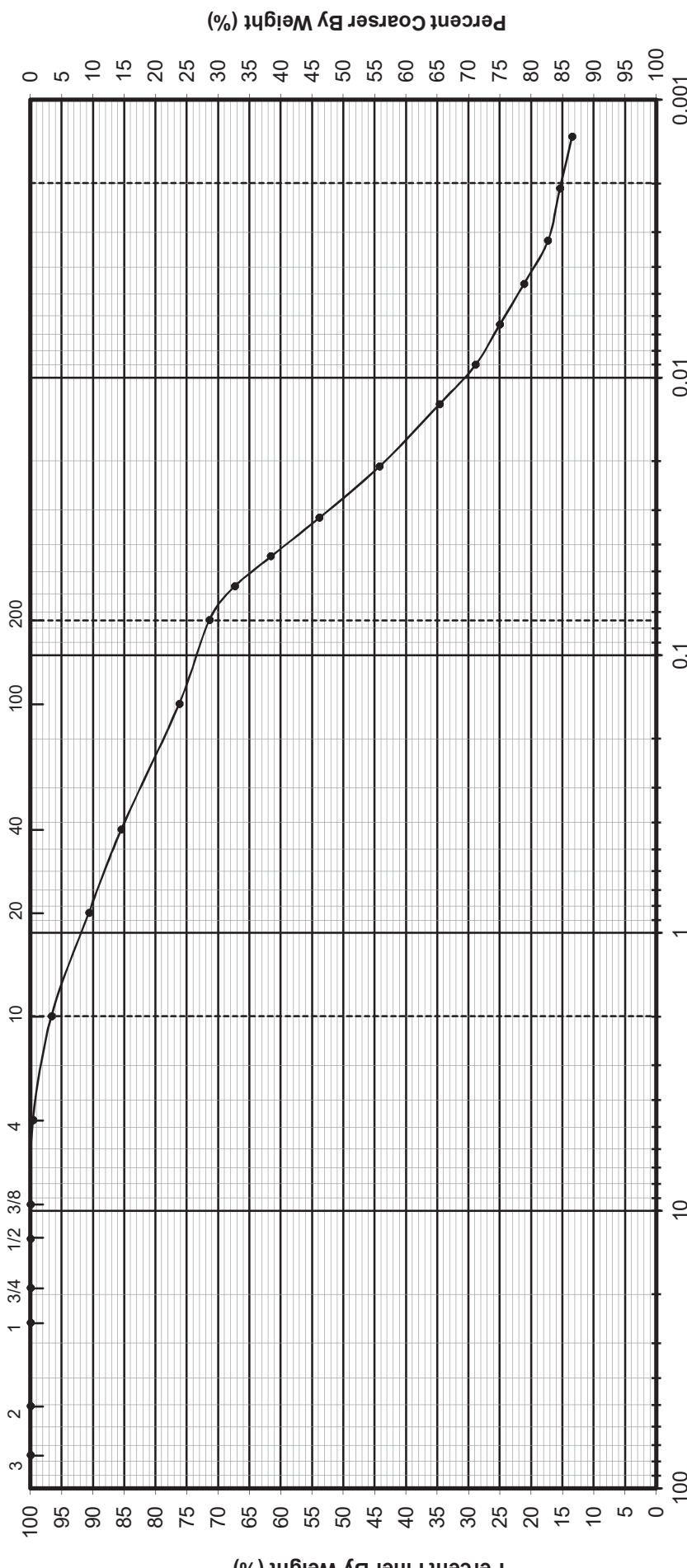
Boring No.	NWB-08	CLASSIFICATION	PARTICLE SIZE ANALYSIS-AASHTO T88
Sample No.	5		
Depth	8.5'-10.0'	SANDY LOAM A-4 brown/gray Group Index 0 % Gravel 18.9 % Sand 36.9 % Silt 30.7 % Clay 13.5	Interstate Highway 80 (I-80) Roadway Reconstruction and Widening I-80 Will County, Illinois  Geo Services, Inc. Geotechnical, Environmental and Civil Engineering An ABE - DBE Firm 1235 E. Davis St., Arlington Heights, IL 60005 Phone 847-253-3845 • Fax 847-253-0482
Liquid Limit	18		
Plastic Limit	15		
Plasticity Index	3		
Test By	MT		
Date	4/21/22		
Reviewed By	RS		
Job No	20012		




Grain Size in Millimeters

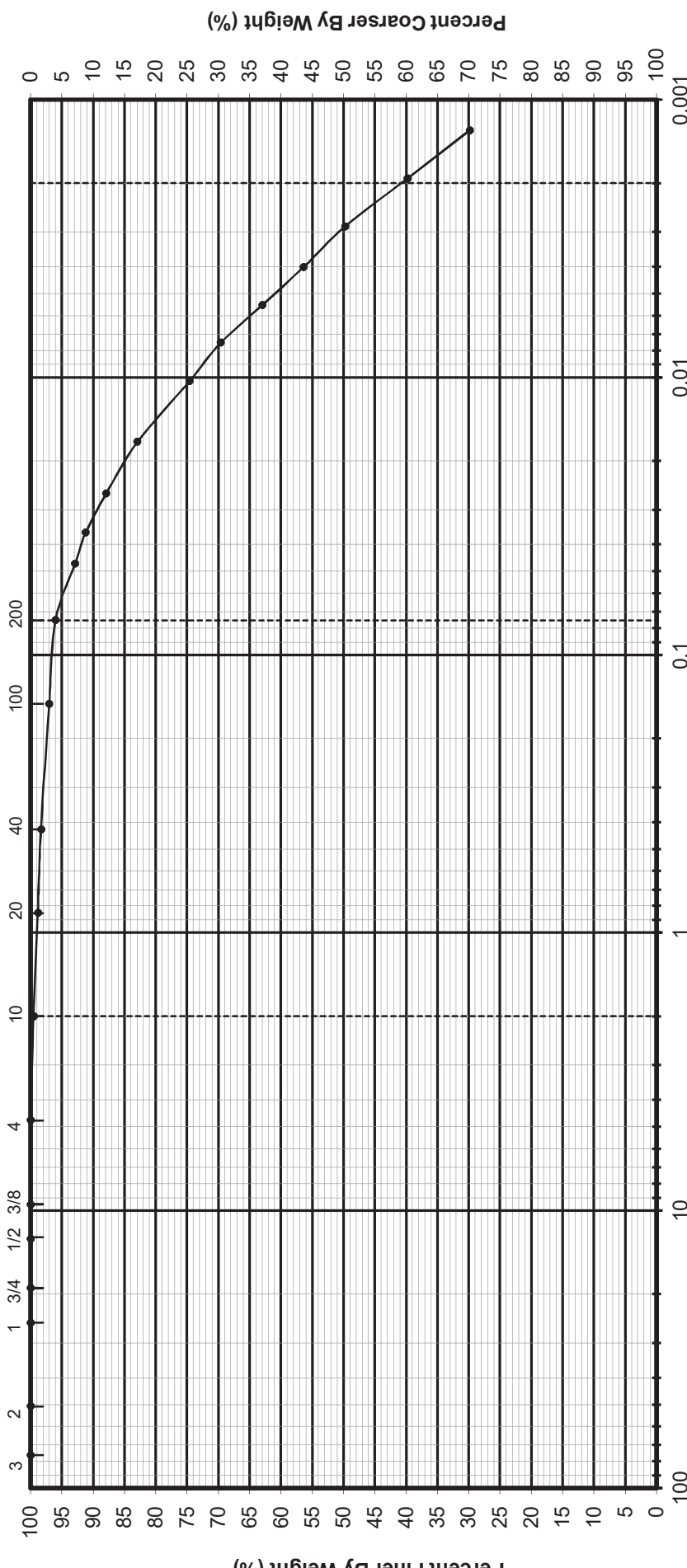
GRAVEL	COARSE	SAND	FINE	SILT	CLAY


Boring No.		NWB-18A		PARTICLE SIZE ANALYSIS-AASHTO T88		
Sample No.	3	CLASSIFICATION				Interstate Highway 80 (I-80) Roadway Reconstruction and Widening I-80 Will County, Illinois  Geo Services, Inc. <small>Geotechnical, Environmental and Civil Engineering An AISE - DBE Firm</small> 1235 E. Davis St., Arlington Heights, IL 60005 Phone 847-253-3845 • Fax 847-253-0482
Depth	3.5'-5.0'	SILTY CLAY				
Liquid Limit	36	A-6				
Plastic Limit	20	brown/gray				
Plasticity Index	16	Group Index	15	% Gravel	0.9	
Test By	MT	% Sand	5.7	% Silt	52.3	
Date	4/21/22	% Clay	41.0			
Reviewed By	RS					
Job No	20012					

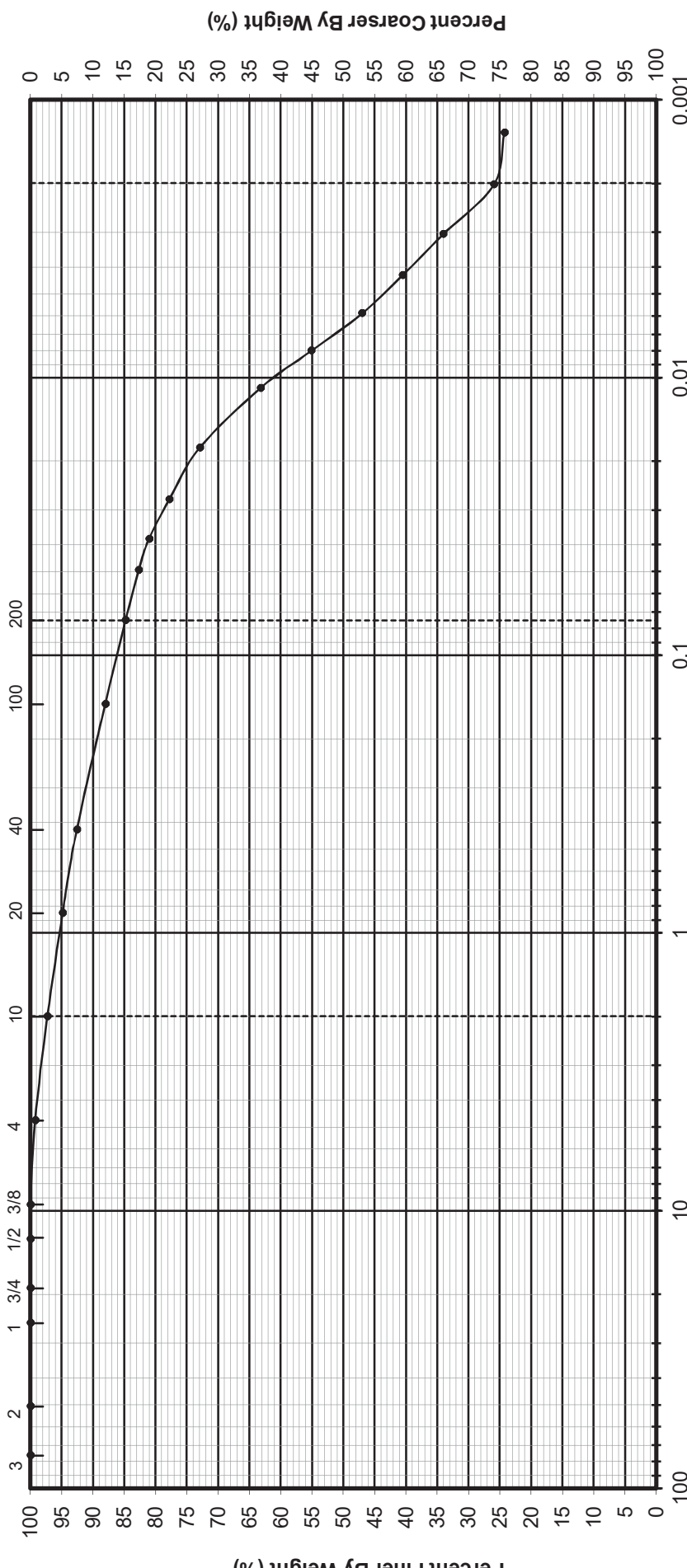


Grain Size in Millimeters


Boring No.		NWB-25A		PARTICLE SIZE ANALYSIS-AASHTO T88	
Sample No.	1	<p>CLASSIFICATION</p> <p>SILTY LOAM A-7 brown/black</p> <p>Group Index 9</p> <p>% Gravel 3.4</p> <p>% Sand 25.2</p> <p>% Silt 56.0</p> <p>% Clay 15.4</p>			
Depth	0-2.0	<p>Interstate Highway 80 (I-80) Roadway Reconstruction and Widening I-80 Will County, Illinois</p>			
Liquid Limit	47	 <p>Geo Services, Inc. Geotechnical, Environmental and Civil Engineering An AISE - DBE Firm</p>			
Plasticity Limit	36	<p>1235 E. Davis St., Arlington Heights, IL 60005 Phone 847-253-3845 • Fax 847-253-0482</p>			
Plasticity Index	11				
Test By	MT				
Date	4/21/22				
Reviewed By	RS				
Job No	20012				

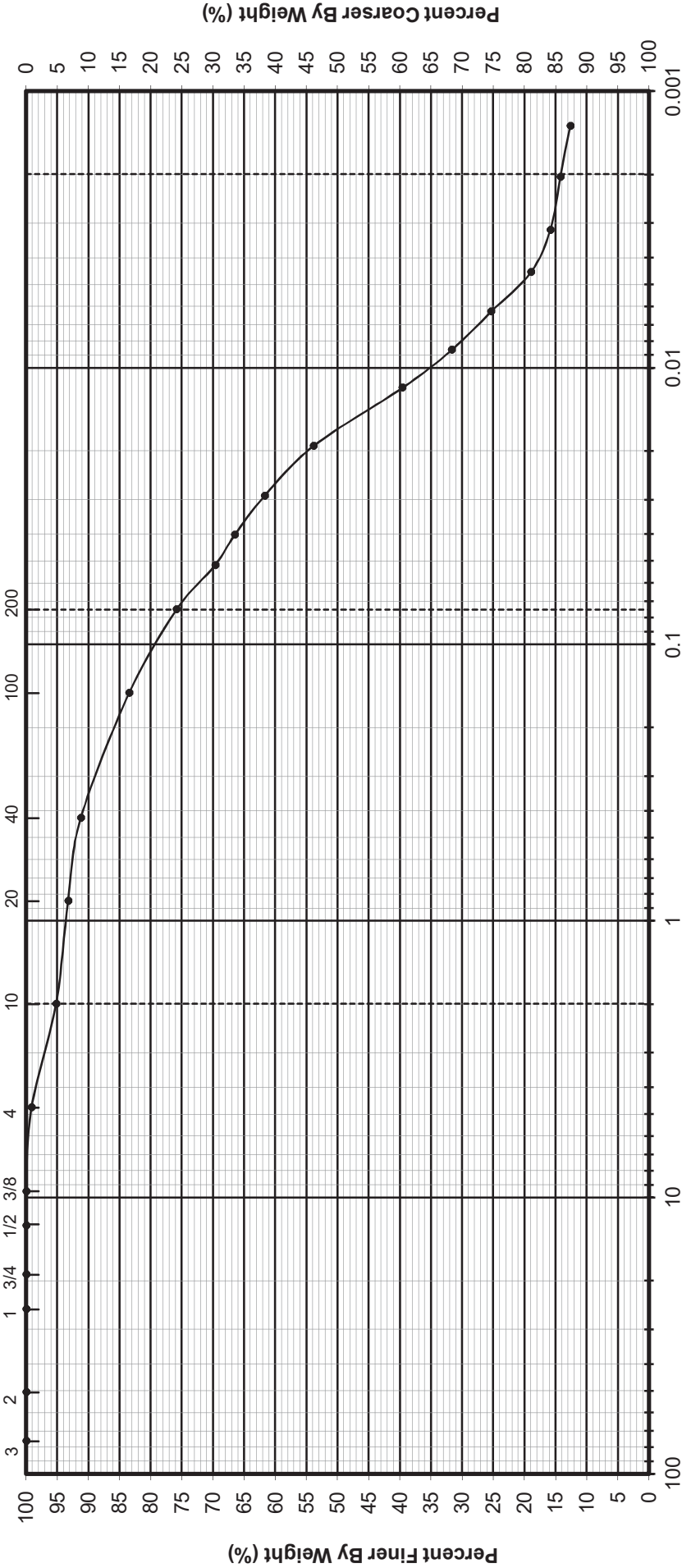


Boring No.	NWB-45	CLASSIFICATION	PARTICLE SIZE ANALYSIS-AASHTO T88
Sample No.	1		
Depth	1.0'-2.5'	SILTY CLAY A-6 gray Group Index 12 % Gravel 0.5 % Sand 3.5 % Silt 56.2 % Clay 39.8	Interstate Highway 80 (I-80) Roadway Reconstruction and Widening I-80 Will County, Illinois  Geo Services, Inc. Geotechnical, Environmental and Civil Engineering An AISE - DBE Firm 1235 E. Davis St., Arlington Heights, IL 60005 Phone 847-253-3845 • Fax 847-253-0482
Liquid Limit	30		
Plastic Limit	17		
Plasticity Index	13		
Test By	MT		
Date	4/21/22		
Reviewed By	RS		
Job No	20012		




Grain Size in Millimeters

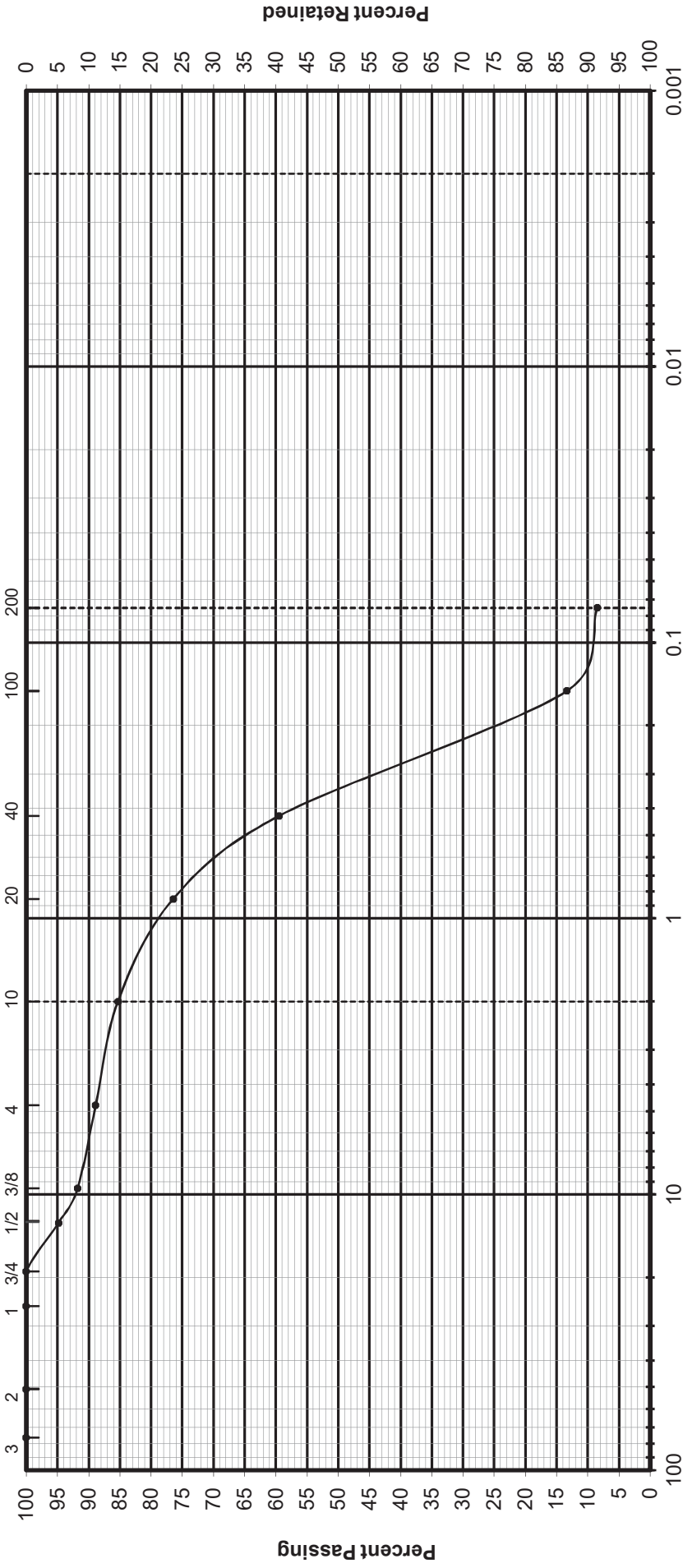
Boring No.	NWB-65	CLASSIFICATION		PARTICLE SIZE ANALYSIS-AASHTO T88
Sample No.	2	SILTY CLAY LOAM		Interstate Highway 80 (I-80) Roadway Reconstruction and Widening I-80 Will County, Illinois  Geo Services, Inc. Geotechnical, Environmental and Civil Engineering An AISE - DBE Firm 1235 E. Davis St., Arlington Heights, IL 60005 Phone 847-253-3845 • Fax 847-253-0482
Depth	1.0'-2.5'	A-6		
Liquid Limit	28	brown/gray		
Plastic Limit	17	Group Index 8		
Plasticity Index	11	% Gravel 2.7		
Test By	MT	% Sand 12.5		
Date	4/21/22	% Silt 58.8		
Reviewed By	RS	% Clay 25.9		
Job No	20012			



Grain Size in Millimeters


GRAVEL	SAND	SILT	CLAY
	COARSE	FINE	

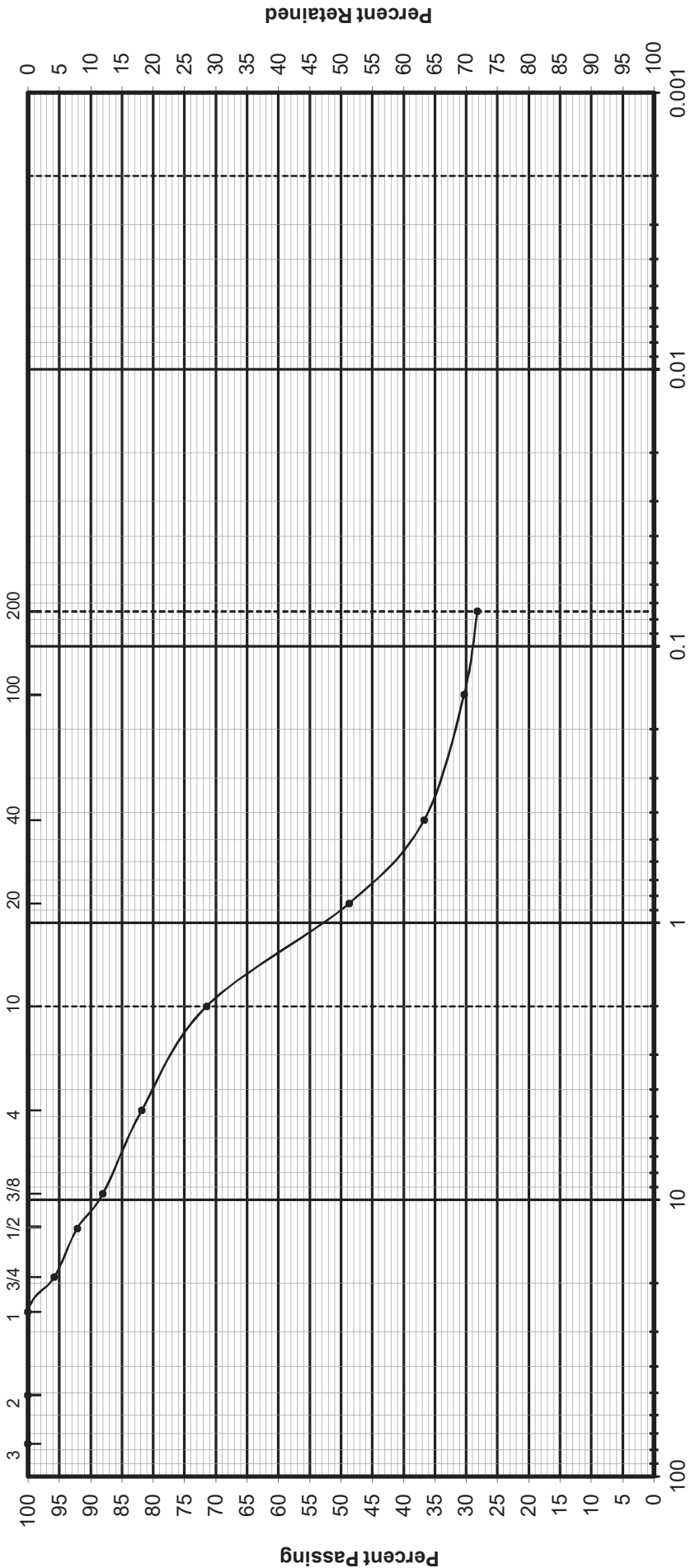
Boring No.		NW-75A		CLASSIFICATION		PARTICLE SIZE ANALYSIS-AASHTO T88	
Sample No.		3		SILTY LOAM A-6 brown/gray Group Index 14 % Gravel 4.8 % Sand 19.3 % Silt 61.6 % Clay 14.3		Interstate Highway 80 (I-80) Roadway Reconstruction and Widening I-80 Will County, Illinois  Geo Services, Inc. Geotechnical, Environmental and Civil Engineering An ABE - DBE Firm 1235 E. Davis St., Arlington Heights, IL 60005 Phone 847-253-3845 • Fax 847-253-0482	
Depth		3.5'-5.0'					
Liquid Limit		40					
Plasticity Limit		21					
Plasticity Index		19					
Test By		MT					
Date		4/21/22					
Reviewed By		RS					
Job No		20012					



Grain Size in Millimeters

GRAVEL	SAND COARSE FINE	SILT	CLAY
--------	--------------------------	------	------

Boring No.	SGB-002	GRAIN-SIZE ANALYSIS-AASHTO T 311	
Sample No.	3	CLASSIFICATION SAND A-3 dark brown Group Index 0 % Gravel 14.7 % Sand 76.8 % Silt / Clay 8.5	
Depth	3.5'-5.0'		
Liquid Limit	-		
Plastic Limit	-		
Plasticity Index	NP		
Test By	MT		
Date	2/8/22		
Reviewed By	RS		
Job No	20012		
Interstate Highway 80 (I-80) Roadway Reconstruction and Widening I-80 Will County, Illinois  Geo Services, Inc. Geotechnical, Environmental and Civil Engineering AN MBE - DBE Firm 1235 E. Davis St., Arlington Heights, IL 60005 Phone 847-253-3845 • Fax 847-253-0482			



Grain Size in Millimeters



Boring No.	SGB-111	GRAIN-SIZE ANALYSIS-AASHTO T 311	
Sample No.	3	CLASSIFICATION SANDY LOAM A-2-4 brown Group Index 0 % Gravel 28.5 % Sand 43.2 % Silt / Clay 28.2	
Depth	3.5'-5.0'		
Liquid Limit	-		
Plastic Limit	-		
Plasticity Index	NP		
Test By	MT		
Date	2/8/22		
Reviewed By	RS		
Job No	20012		
Interstate Highway 80 (I-80) Roadway Reconstruction and Widening I-80 Will County, Illinois			



1235 East Davis Street, Suite 101
 Arlington Heights, IL 60005
 (847) 253-3845

Liquid Limit, Plastic Limit, and Plasticity Index of Soils
 AASHTO T89/T90

Project Name I-80 Phase II: Proposed Briggs St Bridge Job No 20012

Location Will County, Illinois Date 2/9/22

Client EXP

Boring No.	SGB-011	SGB-018	SGB-019	SGB-035	SGB-036	SGB-046	SGB-055	SGB-056
Sample No.	3	5	2	3	4	5	3	4
Depth	3.5'-5.0'	8.5'-10.0'	1.0'-2.5'	3.5'-5.0'	8.5'-10.0'	3.5'-5.0'	6.0'-7.5'	6.0'-7.5'
LIQUID LIMIT (LL)	36	29	31	26	40	39	40	21
PLASTIC LIMIT (PL)	19	18	16	15	21	22	22	16
PLASTICITY INDEX (PI)	17	11	15	11	19	17	18	5

Tested by MT/VH



1235 East Davis Street, Suite 101
 Arlington Heights, IL 60005
 (847) 253-3845

Liquid Limit, Plastic Limit, and Plasticity Index of Soils
 AASHTO T89/T90

Project Name I-80 Phase II: Proposed Briggs St Bridge Job No 20012

Location Will County, Illinois Date 2/9/22

Client EXP

Boring No.	SGB-066	SGB-075	SGB-076	SGB-083	SGB-086
Sample No.	4	3	3	3	4
Depth	3.5'-5.0'	3.5'-5.0'	3.5'-5.0'	6.0'-7.5'	6.0'-7.5'
LIQUID LIMIT (LL)	27	33	44	38	34
PLASTIC LIMIT (PL)	17	19	23	23	20
PLASTICITY INDEX (PI)	10	14	21	15	14

Tested by MT/VH



1235 East Davis Street, Suite 101
 Arlington Heights, IL 60005
 (847) 253-3845

Liquid Limit, Plastic Limit, and Plasticity Index of Soils
 AASHTO T89/T90

Project Name I-80 Phase II: Proposed Briggs St Bridge Job No 20012

Location Will County, Illinois Date 5/6/22

Client EXP

Boring No.	SGB-009	SGB-010	SGB-016	SGB-025	SGB-026	SGB-033	SGB-045	SGB-063
Sample No.	2	3	3	2	3	2	3	2
Depth	1.0'-2.5'	3.5'-5.0'	3.5'-5.0'	1.0'-2.5'	3.5'-5.0'	1.0'-2.5'	3.5'-5.0'	1.0'-2.5'
LIQUID LIMIT (LL)	27	38	36	26	31	16	22	34
PLASTIC LIMIT (PL)	16	22	19	16	18	14	14	20
PLASTICITY INDEX (PI)	11	16	17	10	13	2	8	14

Tested by MT



1235 East Davis Street, Suite 101
 Arlington Heights, IL 60005
 (847) 253-3845

Liquid Limit, Plastic Limit, and Plasticity Index of Soils
 AASHTO T89/T90

Project Name I-80 Phase II: Proposed Briggs St Bridge Job No 20012

Location Will County, Illinois Date 5/6/22

Client EXP

Boring No.	SGB-073	SGB-081	SGB-085		
Sample No.	2	3	3		
Depth	1.0'-2.5'	3.5'-5.0'	3.5'-5.0'		
LIQUID LIMIT (LL)	39	37	36		
PLASTIC LIMIT (PL)	22	24	18		
PLASTICITY INDEX (PI)	17	13	18		

Tested by MT/VH



1235 East Davis Street
 Arlington Heights, IL 60005
 Phone (847) 253-3845
 Fax (847) 253-0482

**DETERMINATION of ORGANIC CONTENT in SOILS by LOSS on IGNITION
 AASHTO T267**

Project Name I-80 Phase II: Proposed Briggs St Bridge **Date** 02/01/22
Location Will County, IL **Job No** 20012

Boring No. SGB-083 **Sample No.** 3 **Depth** 3.5'-5.0'

Sample Description ORGANIC SILTY CLAY-black **Testing Furnace Temp °C.:** 440

Moisture Content	Wet Soil+Tare (g)	Dry Soil+Tare (g)	Tare Mass (g)	w (%)
Oven-Dry Method	87.83	79.7	51.48	28.8

Ash Content	Dry Soil+Tare (g)	Ash+Tare (g)	Tare Mass (g)	Ash content (%)
Loss on Ignition	79.7	78.33	51.48	95.1

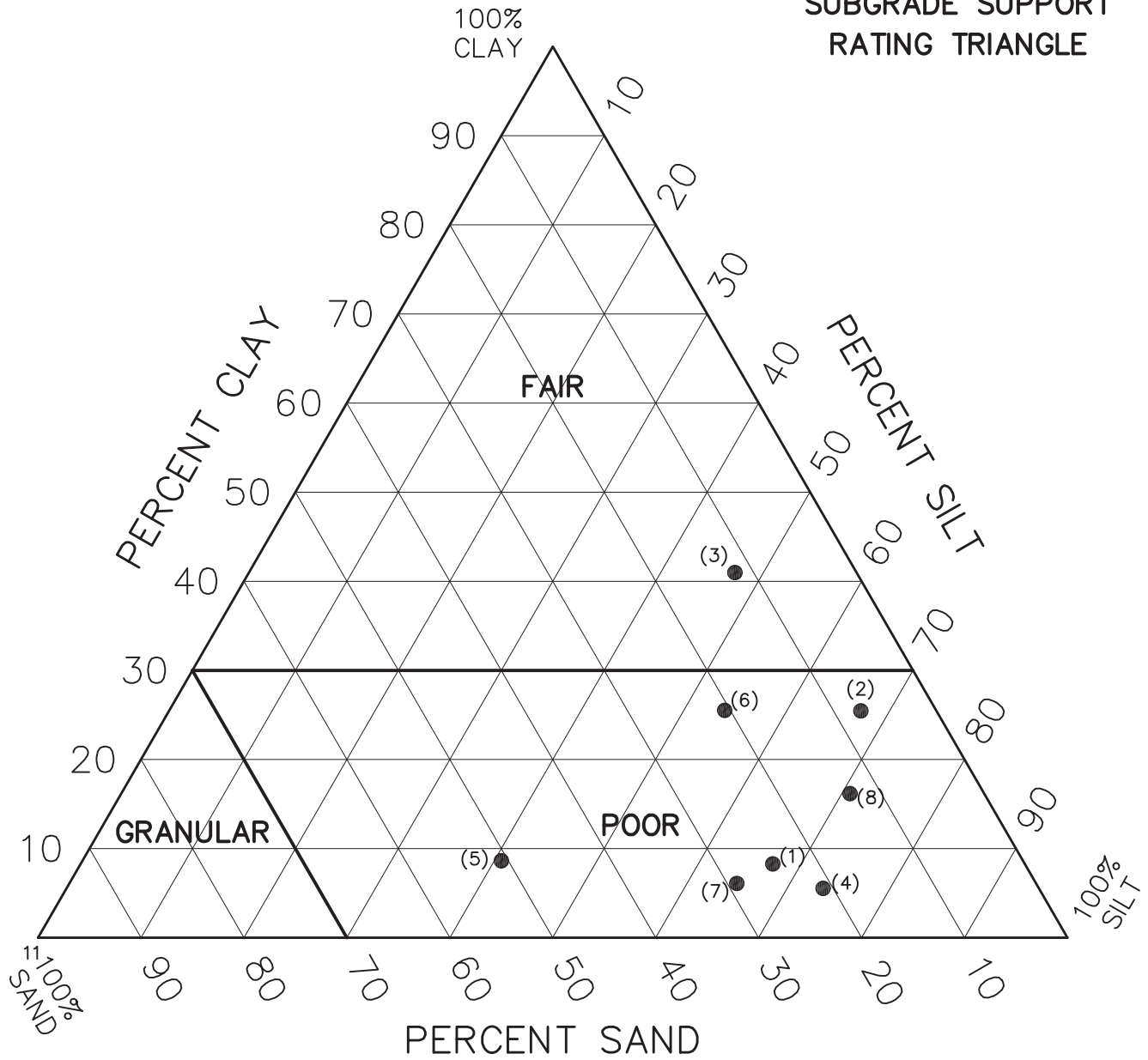
Organic Content (%) = 4.9

Notes: _____

Test By MT

APPENDIX F
BBS 2460 & SSR

SUBGRADE SUPPORT RATING TRIANGLE



NOTES:

1. If granular soils are encountered, the soils report should note alternatives to the 12 inch improved subgrade policy
2. Soil Separate Sizes:
 Sand: 2.0 mm to 0.074 mm
 Silt: 0.074 mm to 0.002 mm
 Clay: Below 0.002 mm

LAB SAMPLES:

- 1 ● SGB-009 (-1.0' to -2.5')
- 2 ● SGB-010 (-3.5' to -5.0')
- 3 ● SGB-011 (-3.5' to -5.0')
- 4 ● SGB-016 (-3.5' to -5.0')
- 5 ● SGB-018 (-8.5 to -10.0')
- 6 ● SGB-019 (-1.0' to -2.5')
- 7 ● SGB-025 (-1.0' to -2.5')
- 8 ● SGB-026 (-3.5' to -5.0')

SUBGRADE SUPPORT RATING (SSR)

Roadway Geotechnical Report (RGR)
 Roadway Improvements at IL 58 at
 Niles Center Road and US 41
 Work Order 19, PTB 187-06,
 Contract 62633, Section 2003-065N
 Skokie, Cook County, IL.


Geo Services, Inc.
 Geotechnical, Environmental & Civil Engineering
 805 Amherst Court, Suite 204
 Naperville, Illinois 60565
 (630) 355-2838

DRAWN BY

MT

APPROVED BY

RR

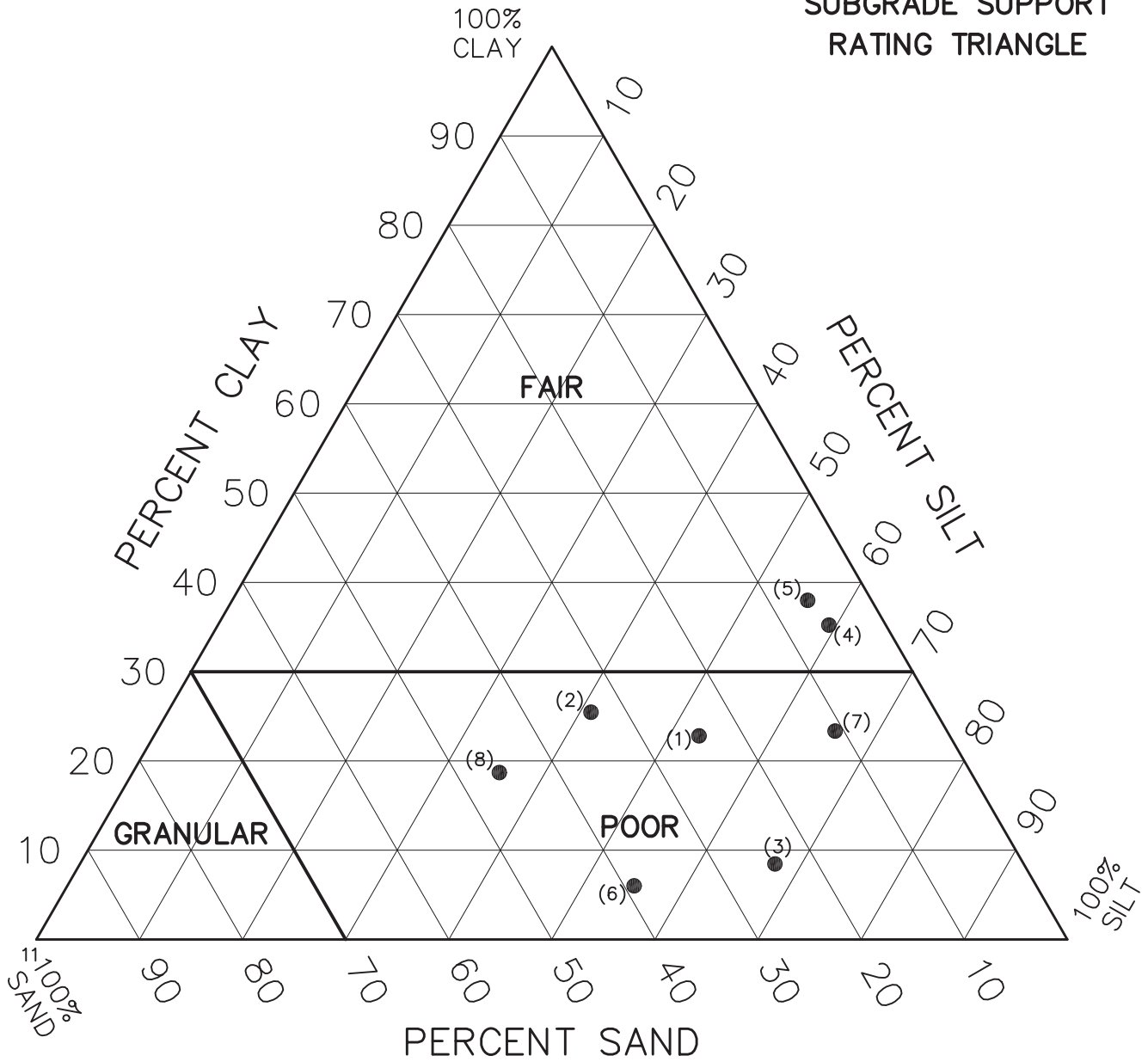
DATE

7/19/2019

JOB NO.

18042-B

SUBGRADE SUPPORT RATING TRIANGLE



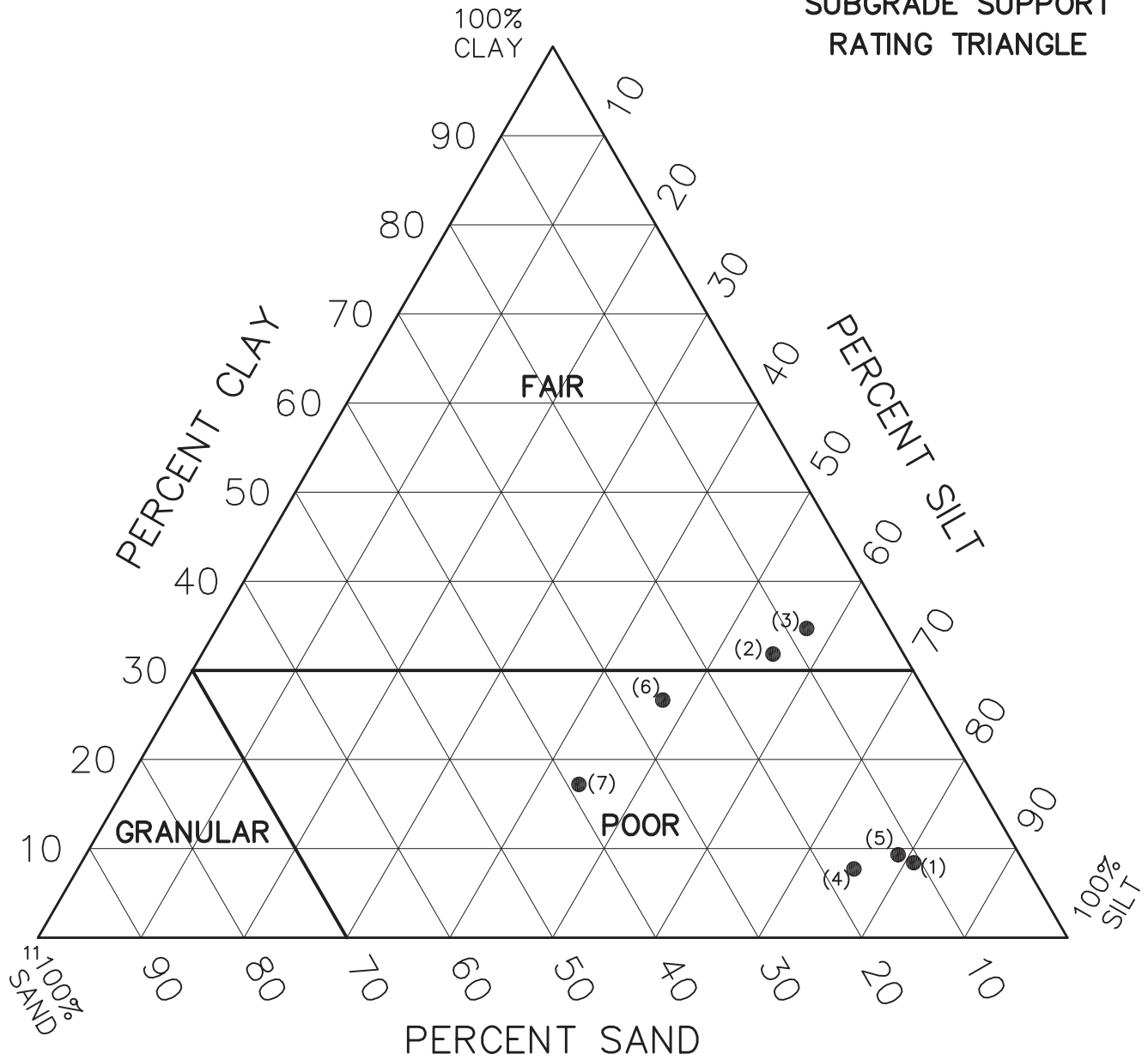
NOTES:

1. If granular soils are encountered, the soils report should note alternatives to the 12 inch improved subgrade policy
2. Soil Separate Sizes:
 Sand: 2.0 mm to 0.074 mm
 Silt: 0.074 mm to 0.002 mm
 Clay: Below 0.002 mm

- LAB SAMPLES:**
- 1 ● SGB-035 (-3.5' to -5.0')
 - 2 ● SGB-036 (-6.0' to -7.5')
 - 3 ● SGB-045 (-3.5' to -5.0')
 - 4 ● SGB-046 (-8.5' to -10.0')
 - 5 ● SGB-055 (-3.5' to -5.0')
 - 6 ● SGB-056 (-6.0' to -7.5')
 - 7 ● SGB-063 (-1.0' to -2.5')
 - 8 ● SGB-066 (-6.0' to -7.5')

SUBGRADE SUPPORT RATING (SSR)	 Geo Services, Inc. Geotechnical, Environmental & Civil Engineering 805 Amherst Court, Suite 204 Naperville, Illinois 60565 (630) 355-2838	DRAWN BY	MT
Roadway Geotechnical Report (RGR) Roadway Improvements at IL 58 at Niles Center Road and US 41 Work Order 19, PTB 187-06, Contract 62633, Section 2003-065N Skokie, Cook County, IL.		APPROVED BY	RR
		DATE	7/19/2019
		JOB NO.	18042-B

SUBGRADE SUPPORT RATING TRIANGLE



NOTES:

1. If granular soils are encountered, the soils report should note alternatives to the 12 inch improved subgrade policy
2. Soil Separate Sizes:
 Sand: 2.0 mm to 0.074 mm
 Silt: 0.074 mm to 0.002 mm
 Clay: Below 0.002 mm

LAB SAMPLES:

- 1 ● SGB-073 (-1.0' to -2.5')
- 2 ● SGB-075 (-6.0' to -7.5')
- 3 ● SGB-076 (-3.5' to -5.0')
- 4 ● SGB-081 (-3.5' to -5.0')
- 5 ● SGB-083 (-3.5' to -5.0')
- 6 ● SGB-085 (-3.5' to -5.0')
- 7 ● SGB-086 (-6.0' to -7.5')

SUBGRADE SUPPORT RATING (SSR)

Roadway Geotechnical Report (RGR)
 Roadway Improvements at IL 58 at
 Niles Center Road and US 41
 Work Order 19, PTB 187-06,
 Contract 62633, Section 2003-065N
 Skokie, Cook County, IL.


Geo Services, Inc.
 Geotechnical, Environmental & Civil Engineering
 805 Amherst Court, Suite 204
 Naperville, Illinois 60565
 (630) 355-2838

DRAWN BY

MT

APPROVED BY

RR

DATE

7/19/2019

JOB NO.

18042-B

Route I-80
 Section ---
 County Will
 Location Chicago Street to Rt. 30

Boring No./Sample No.	SGB-009 S-2	SGB-010 S-3	SGB-016 S-3	SGB-018 S-5
Station	793+00	794+53	808+04	811+02
Offset	57.9 ft Right	26.3 ft Left	33.7 ft Right	62.9 ft Right
Depth	1.0'-2.5'	3.5'-5.0'	3.5'-5.0'	8.5'-10.0'
AASHTO Classification	A-6	A-6	A-6	A-6
Illinois Textural Classification	SILTY LOAM	SILTY CLAY LOAM	SILTY LOAM	SANDY LOAM
Gradation Passing – 1"	100%	100%	100%	100%
¾"	100%	100%	100%	100%
½"	100%	100%	100%	100%
No. 4	98.8%	99.8%	98.6%	97.2%
No. 10	96.8%	99.5%	96.7%	90.1%
No. 40	89.5%	97.8%	92.6%	67.0%
No. 100	81.9%	94.7%	85.6%	55.3%
No. 200	75.2%	91.6%	79.6%	49.1%
Gravel (AASHTO T-88)	3.2%	0.4%	3.3%	9.9%
Sand (AASHTO T-88)	21.5%	8.0%	17.1%	41.0%
Silt (AASHTO T-88)	65.6%	66.8%	73.2%	39.5%
Clay (AASHTO T-88)	9.6%	24.8%	6.4%	9.6%
Liquid Limit (AASHTO T-89)	27	38	36	29
Plasticity Index (AASHTO T-90)	11	16	17	11
Std. Dry Density pcf (AASHTO T-99)	-	-	-	-
Optimum Moisture (AASHTO T-99)	-	-	-	-
Subgrade Support Rating	POOR	POOR	POOR	POOR
Organic Content	-	-	-	-
Insitu Moisture	16%	22%	25%	16%

Route I-80
 Section ---
 County Will
 Location Chicago Street to Rt. 30

Boring No./Sample No.	SGB-019 S-2	SGB-025 S-2	SGB-026 S-3	SGB-035 S-3
Station	812+50	824+51	826+03	841+01
Offset	26.6 ft Left	26.7 ft Left	33.9 ft Right	65.1 ft Right
Depth	1.0'-2.5'	1.0'-2.5'	3.5'-5.0'	3.5'-5.0'
AASHTO Classification	A-6	A-4	A-6	A-6
Illinois Textural Classification	SILTY CLAY LOAM	SILTY LOAM	SILTY LOAM	SILTY CLAY LOAM
Gradation Passing – 1"	100%	100%	100%	100%
¾"	100%	100%	100%	100%
½"	100%	100%	100%	100%
No. 4	99.6%	96.4%	98.6%	99.5%
No. 10	97.8%	91.8%	97.1%	96.6%
No. 40	91.8%	81.8%	94.6%	90.6%
No. 100	84.4%	75.1%	91.4%	81.6%
No. 200	79.6%	71.0%	87.85%	74.6%
Gravel (AASHTO T-88)	2.2%	8.2%	2.9%	3.3%
Sand (AASHTO T-88)	18.2%	20.8%	9.2%	22.1%
Silt (AASHTO T-88)	54.0%	64.9%	71.7%	53.9%
Clay (AASHTO T-88)	25.6%	6.1%	16.1%	20.7%
Liquid Limit (AASHTO T-89)	31	26	31	26
Plasticity Index (AASHTO T-90)	15	10	13	11
Std. Dry Density pcf (AASHTO T-99)	-	-	-	-
Optimum Moisture (AASHTO T-99)	-	-	-	-
Subgrade Support Rating	POOR	POOR	POOR	POOR
Organic Content	-	-	-	-
In situ Moisture	15%	13%	17%	16%

Route I-80
 Section ---
 County Will
 Location Chicago Street to Rt. 30

Boring No./Sample No.	SGB-036 S-4	SGB-045 S-3	SGB-046 S-5	SGB-055 S-3
Station	842+56	855+99	857+54	870+96
Offset	27.2 ft Left	33.5 ft Right	62.2 ft Left	64.3 ft Right
Depth	6.0'-7.5'	3.5'-5.0'	8.5'-10.0'	3.5'-5.0'
AASHTO Classification	A-6	A-4	A-6	A-6
Illinois Textural Classification	CLAY LOAM	SILTY LOAM	SILTY CLAY	SILTY CLAY
Gradation Passing – 1"	100%	100%	100%	100%
¾"	100%	100%	100%	100%
½"	100%	100%	100%	100%
No. 4	96.7%	100%	99.2%	98.4%
No. 10	90.9%	99.8%	99.0%	97.3%
No. 40	75.9%	91.8%	97.9%	95.9%
No. 100	69.6%	82.3%	97.7%	94.2%
No. 200	65.7%	75.5%	94.9%	94.7%
Gravel (AASHTO T-88)	9.0%	0.2%	0.9%	2.7%
Sand (AASHTO T-88)	25.2%	24.2%	4.6%	3.6%
Silt (AASHTO T-88)	40.5%	67.3%	59.5%	55.1%
Clay (AASHTO T-88)	25.2%	8.2%	35.0%	38.7%
Liquid Limit (AASHTO T-89)	40	22	39	40
Plasticity Index (AASHTO T-90)	19	8	17	18
Std. Dry Density pcf (AASHTO T-99)	-	-	-	-
Optimum Moisture (AASHTO T-99)	-	-	-	-
Subgrade Support Rating	POOR	POOR	FAIR	FAIR
Organic Content	-	-	-	-
Insitu Moisture	26%	26%	26%	23%

Route I-80
 Section ---
 County Will
 Location Chicago Street to Rt. 30

Boring No./Sample No.	SGB-056 S-4	SGB-063 S-2	SGB-066 S-4	SGB-073 S-2
Station	872+53	883+08	887+52	898+00
Offset	25.0 ft Left	64.4 ft Right	62.6 ft Left	25 ft Right
Depth	6.0'-7.5'	1.0'-2.5'	6.0'-7.5'	1.0'-2.5'
AASHTO Classification	A-4	A-6	A-4	A-6
Illinois Textural Classification	SILTY LOAM	SILTY CLAY LOAM	LOAM	SILT
Gradation Passing – 1"	100%	100%	100%	100%
¾"	100%	100%	100%	100%
½"	94.7%	100%	98.7%	100%
No. 4	91.9%	99.9%	93.6%	100%
No. 10	89.1%	98.9%	87.3%	99.5%
No. 40	79.6%	95.7%	74.8%	97.5%
No. 100	71.4%	92.1%	63.0%	92.6%
No. 200	60.7%	89.5%	53.4%	89.0%
Gravel (AASHTO T-88)	10.9%	1.1%	12.7%	0.5%
Sand (AASHTO T-88)	28.4%	9.4%	33.9%	10.5%
Silt (AASHTO T-88)	55.2%	66.4%	34.6%	80.8%
Clay (AASHTO T-88)	5.5%	23.1%	18.8%	8.2%
Liquid Limit (AASHTO T-89)	21	30	27	39
Plasticity Index (AASHTO T-90)	5	14	10	17
Std. Dry Density pcf (AASHTO T-99)	-	-	-	-
Optimum Moisture (AASHTO T-99)	-	-	-	-
Subgrade Support Rating	POOR	POOR	POOR	POOR
Organic Content	-	-	-	-
Insitu Moisture	16%	20%	14%	25%

Route I-80
 Section ---
 County Will
 Location Chicago Street to Rt. 30

Boring No./Sample No.	SGB-075 S-4	SGB-076 S-3	SGB-081 S-3	SGB-083 S-3
Station	901+02	902+54	910+00	916+00
Offset	65.4 ft Right	27.2 ft Left	25 ft Right	25 ft Right
Depth	6.0'-7.5'	3.5'-5.0'	3.5'-5.0'	3.5'-5.0'
AASHTO Classification	A-6	A-7	A-6	A-6
Illinois Textural Classification	SILTY CLAY	SILTY CLAY	SILTY LOAM	SILTY LOAM
Gradation Passing – 1"	98.2%	100%	100%	100%
¾"	98.2%	100%	100%	100%
½"	98.2%	100%	100%	100%
No. 4	97.7%	100%	100%	100%
No. 10	97.0%	99.6%	99.6%	99.5%
No. 40	94.1%	97.6%	96.9%	96.9%
No. 100	90.4%	94.9%	88.7%	91.4%
No. 200	87.5%	91.1%	82.8%	87.2%
Gravel (AASHTO T-88)	3.0%	0.4%	0.4%	0.5%
Sand (AASHTO T-88)	9.5%	8.5%	16.8%	12.2%
Silt (AASHTO T-88)	56.3%	57.4%	74.6%	78.1%
Clay (AASHTO T-88)	31.2%	33.7%	8.2%	9.2%
Liquid Limit (AASHTO T-89)	33	44	37	38
Plasticity Index (AASHTO T-90)	14	21	13	15
Std. Dry Density pcf (AASHTO T-99)	-	-	-	-
Optimum Moisture (AASHTO T-99)	-	-	-	-
Subgrade Support Rating	FAIR	FAIR	POOR	POOR
Organic Content	-	-	-	4.9%
Insitu Moisture	18%	27%	26%	31%

Route I-80
 Section ---
 County Will
 Location Chicago Street to Rt. 30

Boring No./Sample No.	SGB-085 S-3	SGB-086 S-4		
Station	924+99	827+80		
Offset	62.8 ft Right	71.1 ft Left		
Depth	3.5'-5.0'	6.0'-7.5'		
AASHTO Classification	A-6	A-6		
Illinois Textural Classification	CLAY LOAM	LOAM		
Gradation Passing – 1"	100%	100%		
¾"	94.679%	91.7%		
½"	94.679%	87.0%		
No. 4	91.8%	83.0%		
No. 10	89.1%	78.8%		
No. 40	82.6%	70.8%		
No. 100	77.8%	65.4%		
No. 200	73.7%	60.8%		
Gravel (AASHTO T-88)	10.9%	21.2%		
Sand (AASHTO T-88)	15.4%	17.9%		
Silt (AASHTO T-88)	46.9%	43.9%		
Clay (AASHTO T-88)	26.7%	17.0%		
Liquid Limit (AASHTO T-89)	36	34		
Plasticity Index (AASHTO T-90)	18	14		
Std. Dry Density pcf (AASHTO T-99)	-	-		
Optimum Moisture (AASHTO T-99)	-	-		
Subgrade Support Rating	POOR	POOR		
Organic Content	-	-		
Insitu Moisture	26%	24%		

APPENDIX G
NCRS SOILS REPORT



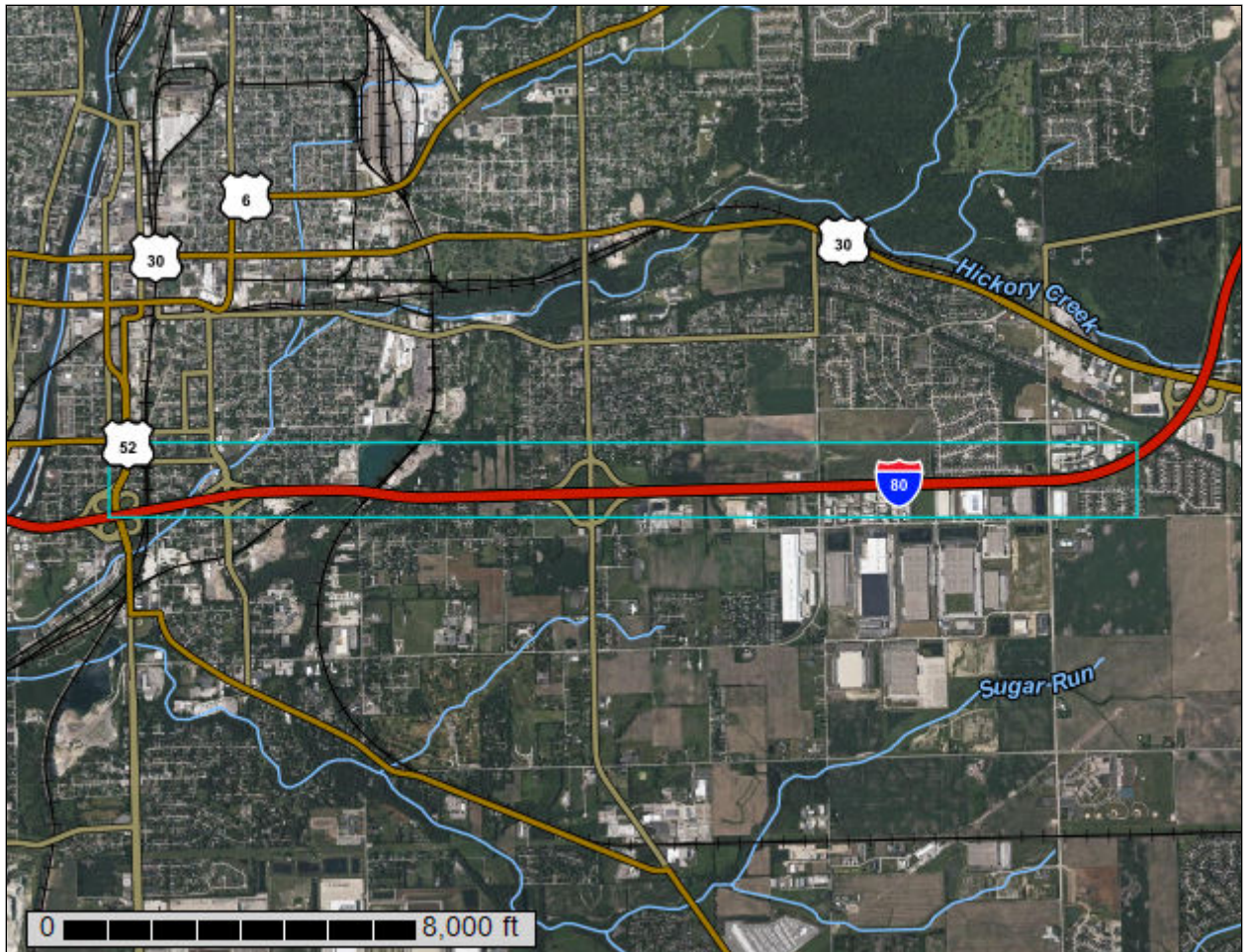
United States
Department of
Agriculture

NRCS

Natural
Resources
Conservation
Service

A product of the National
Cooperative Soil Survey,
a joint effort of the United
States Department of
Agriculture and other
Federal agencies, State
agencies including the
Agricultural Experiment
Stations, and local
participants

Custom Soil Resource Report for **Will County, Illinois**



Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<https://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

Contents

Preface	2
How Soil Surveys Are Made	5
Soil Map	8
Soil Map.....	9
Legend.....	10
Map Unit Legend.....	11
Map Unit Descriptions.....	12
Will County, Illinois.....	14
146A—Elliott silt loam, 0 to 2 percent slopes.....	14
146B—Elliott silt loam, 2 to 4 percent slopes.....	15
146B2—Elliott silty clay loam, 2 to 4 percent slopes, eroded.....	17
223C2—Varna silt loam, 4 to 6 percent slopes, eroded.....	18
223D2—Varna silt loam, 6 to 12 percent slopes, eroded.....	20
232A—Ashkum silty clay loam, 0 to 2 percent slopes.....	21
290B—Warsaw silt loam, 2 to 4 percent slopes.....	23
290C2—Warsaw silt loam, 4 to 6 percent slopes, eroded.....	24
293A—Andres silt loam, 0 to 2 percent slopes.....	25
294B—Symerton silt loam, 2 to 5 percent slopes.....	27
294C2—Symerton silt loam, 5 to 10 percent slopes, eroded.....	29
298B—Beecher silt loam, 2 to 4 percent slopes.....	30
316A—Romeo silt loam, 0 to 2 percent slopes.....	32
318A—Lorenzo loam, 0 to 2 percent slopes.....	33
318B—Lorenzo loam, 2 to 4 percent slopes.....	34
318C2—Lorenzo loam, 4 to 6 percent slopes, eroded.....	35
530E2—Ozaukee silt loam, 12 to 20 percent slopes, eroded.....	37
531C2—Markham silt loam, 4 to 6 percent slopes, eroded.....	38
541C2—Graymont silt loam, 5 to 10 percent slopes, eroded.....	40
802B—Orthents, loamy, 1 to 6 percent slopes.....	41
8451A—Lawson silt loam, heavy till plain, 0 to 2 percent slopes, occasionally flooded.....	43
W—Water.....	45
References	46

How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

Custom Soil Resource Report

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

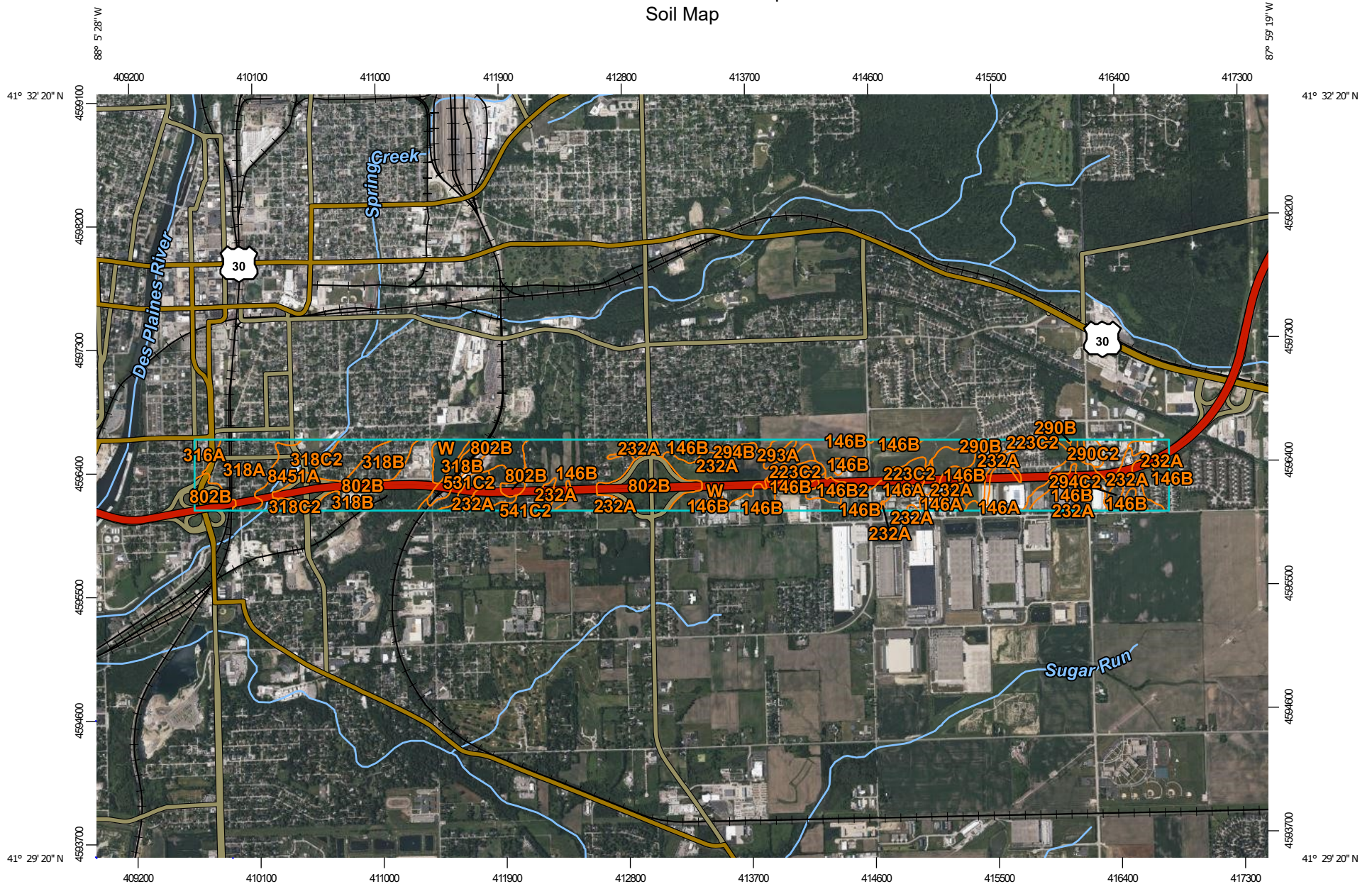
Custom Soil Resource Report

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

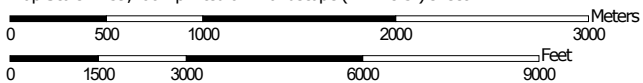
Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report Soil Map



Map Scale: 1:39,200 if printed on A landscape (11" x 8.5") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines


 Soil Map Unit Points

Special Point Features






-  Blowout
-  Borrow Pit
-  Clay Spot
-  Closed Depression
-  Gravel Pit
-  Gravelly Spot
-  Landfill
-  Lava Flow
-  Marsh or swamp
-  Mine or Quarry
-  Miscellaneous Water
-  Perennial Water
-  Rock Outcrop
-  Saline Spot
-  Sandy Spot
-  Severely Eroded Spot
-  Sinkhole
-  Slide or Slip
-  Sodic Spot

-  Spoil Area
-  Stony Spot
-  Very Stony Spot
-  Wet Spot
-  Other
-  Special Line Features


Water Features

 Streams and Canals

Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:12,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL:
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Will County, Illinois
 Survey Area Data: Version 17, Aug 31, 2022

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jul 4, 2020—Jul 6, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
146A	Elliott silt loam, 0 to 2 percent slopes	16.1	1.8%
146B	Elliott silt loam, 2 to 4 percent slopes	268.2	29.3%
146B2	Elliott silty clay loam, 2 to 4 percent slopes, eroded	9.4	1.0%
223C2	Varna silt loam, 4 to 6 percent slopes, eroded	75.0	8.2%
223D2	Varna silt loam, 6 to 12 percent slopes, eroded	6.0	0.7%
232A	Ashkum silty clay loam, 0 to 2 percent slopes	171.9	18.8%
290B	Warsaw silt loam, 2 to 4 percent slopes	2.4	0.3%
290C2	Warsaw silt loam, 4 to 6 percent slopes, eroded	5.8	0.6%
293A	Andres silt loam, 0 to 2 percent slopes	3.7	0.4%
294B	Symerton silt loam, 2 to 5 percent slopes	1.6	0.2%
294C2	Symerton silt loam, 5 to 10 percent slopes, eroded	3.1	0.3%
298B	Beecher silt loam, 2 to 4 percent slopes	15.6	1.7%
316A	Romeo silt loam, 0 to 2 percent slopes	8.7	0.9%
318A	Lorenzo loam, 0 to 2 percent slopes	49.2	5.4%
318B	Lorenzo loam, 2 to 4 percent slopes	41.8	4.6%
318C2	Lorenzo loam, 4 to 6 percent slopes, eroded	26.6	2.9%
530E2	Ozaukee silt loam, 12 to 20 percent slopes, eroded	22.8	2.5%
531C2	Markham silt loam, 4 to 6 percent slopes, eroded	9.4	1.0%
541C2	Graymont silt loam, 5 to 10 percent slopes, eroded	0.0	0.0%
802B	Orthents, loamy, 1 to 6 percent slopes	131.6	14.4%
8451A	Lawson silt loam, heavy till plain, 0 to 2 percent slopes, occasionally flooded	30.9	3.4%
W	Water	13.6	1.5%

Custom Soil Resource Report

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Totals for Area of Interest		914.4	100.0%

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Custom Soil Resource Report

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Will County, Illinois

146A—Elliott silt loam, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: 2sss0
Elevation: 570 to 930 feet
Mean annual precipitation: 33 to 42 inches
Mean annual air temperature: 46 to 54 degrees F
Frost-free period: 150 to 200 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Elliott and similar soils: 94 percent
Minor components: 6 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Elliott

Setting

Landform: Ground moraines, till plains
Landform position (two-dimensional): Footslope, summit
Landform position (three-dimensional): Interfluve
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Thin mantle of loess or other silty material over silty clay loam till

Typical profile

Ap - 0 to 6 inches: silt loam
A - 6 to 11 inches: silty clay loam
Bt1 - 11 to 16 inches: silty clay
2Bt2 - 16 to 41 inches: silty clay loam
2Cd - 41 to 60 inches: silty clay loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: 29 to 45 inches to densic material
Drainage class: Somewhat poorly drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 12 to 24 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 35 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Moderate (about 6.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2s
Hydrologic Soil Group: C/D
Ecological site: R110XY007IL - Moist Glacial Drift Upland Prairie
Forage suitability group: Mod AWC, high water table (G095BY004WI), High AWC, high water table (G095BY007WI)

Custom Soil Resource Report

Other vegetative classification: Mod AWC, high water table (G095BY004WI), High AWC, high water table (G095BY007WI)
Hydric soil rating: No

Minor Components

Ashkum, drained

Percent of map unit: 4 percent
Landform: Till plains, ground moraines
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Base slope
Down-slope shape: Linear
Across-slope shape: Concave
Ecological site: R110XY024IL - Poned Depressional Sedge Meadow
Hydric soil rating: Yes

Urban land

Percent of map unit: 1 percent
Landform: Ground moraines
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Interfluve
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Orthents, clayey

Percent of map unit: 1 percent
Landform: Till plains, ground moraines
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Interfluve
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: F095XB010WI - Loamy and Clayey Upland
Hydric soil rating: No

146B—Elliott silt loam, 2 to 4 percent slopes

Map Unit Setting

National map unit symbol: 2sss1
Elevation: 570 to 930 feet
Mean annual precipitation: 33 to 42 inches
Mean annual air temperature: 46 to 54 degrees F
Frost-free period: 150 to 200 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Elliott and similar soils: 94 percent
Minor components: 6 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Elliott

Setting

Landform: Ground moraines, till plains

Landform position (two-dimensional): Backslope, summit

Landform position (three-dimensional): Interfluve

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Thin mantle of loess or other silty material over silty clay loam till

Typical profile

Ap - 0 to 9 inches: silt loam

A - 9 to 13 inches: silty clay loam

2Bt1 - 13 to 17 inches: silty clay

2Bt2 - 17 to 35 inches: silty clay loam

2Cd - 35 to 60 inches: silty clay loam

Properties and qualities

Slope: 2 to 4 percent

Depth to restrictive feature: 25 to 39 inches to densic material

Drainage class: Somewhat poorly drained

Runoff class: High

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)

Depth to water table: About 12 to 24 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 35 percent

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Available water supply, 0 to 60 inches: Low (about 5.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 2e

Hydrologic Soil Group: C/D

Ecological site: R110XY007IL - Moist Glacial Drift Upland Prairie

Hydric soil rating: No

Minor Components

Ashkum, drained

Percent of map unit: 4 percent

Landform: Till plains, ground moraines

Landform position (two-dimensional): Toeslope

Landform position (three-dimensional): Base slope

Down-slope shape: Linear

Across-slope shape: Concave

Ecological site: R110XY024IL - Ponded Depressional Sedge Meadow

Hydric soil rating: Yes

Urban land

Percent of map unit: 1 percent

Landform: Ground moraines

Landform position (two-dimensional): Summit

Landform position (three-dimensional): Interfluve

Down-slope shape: Linear

Custom Soil Resource Report

Across-slope shape: Linear

Hydric soil rating: No

Orthents, clayey

Percent of map unit: 1 percent

Landform: Till plains, ground moraines

Landform position (two-dimensional): Summit

Landform position (three-dimensional): Interfluve

Down-slope shape: Linear

Across-slope shape: Linear

Ecological site: F095XB010WI - Loamy and Clayey Upland

Hydric soil rating: No

146B2—Elliott silty clay loam, 2 to 4 percent slopes, eroded

Map Unit Setting

National map unit symbol: 2sss2

Elevation: 570 to 930 feet

Mean annual precipitation: 33 to 42 inches

Mean annual air temperature: 46 to 54 degrees F

Frost-free period: 150 to 200 days

Farmland classification: All areas are prime farmland

Map Unit Composition

Elliott, eroded, and similar soils: 95 percent

Minor components: 5 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Elliott, Eroded

Setting

Landform: Ground moraines, till plains

Landform position (two-dimensional): Backslope, summit

Landform position (three-dimensional): Interfluve

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Thin mantle of loess or other silty material over silty clay loam till

Typical profile

Ap - 0 to 8 inches: silty clay loam

2Bt1 - 8 to 14 inches: silty clay loam

2Bt2 - 14 to 31 inches: silty clay loam

2Cd - 31 to 60 inches: silty clay loam

Properties and qualities

Slope: 2 to 4 percent

Depth to restrictive feature: 24 to 38 inches to densic material

Drainage class: Somewhat poorly drained

Runoff class: High

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)

Custom Soil Resource Report

Depth to water table: About 12 to 24 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 35 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 4.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: C/D
Ecological site: R110XY007IL - Moist Glacial Drift Upland Prairie, R111XD012IN -
Till Ridge Prairie
Hydric soil rating: No

Minor Components

Ashkum, drained

Percent of map unit: 5 percent
Landform: Till plains, ground moraines
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Base slope
Down-slope shape: Linear
Across-slope shape: Concave
Ecological site: R110XY024IL - Ponded Depressional Sedge Meadow
Hydric soil rating: Yes

223C2—Varna silt loam, 4 to 6 percent slopes, eroded

Map Unit Setting

National map unit symbol: 2yrqw
Elevation: 520 to 950 feet
Mean annual precipitation: 34 to 42 inches
Mean annual air temperature: 46 to 54 degrees F
Frost-free period: 140 to 185 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Varna, eroded, and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Varna, Eroded

Setting

Landform: End moraines, ground moraines
Landform position (two-dimensional): Backslope, shoulder
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex

Custom Soil Resource Report

Parent material: Loess over silty clay loam or clay loam till

Typical profile

Ap - 0 to 9 inches: silt loam
2Bt1 - 9 to 30 inches: silty clay loam
2Bt2 - 30 to 48 inches: silty clay loam
2Cd - 48 to 60 inches: silty clay loam

Properties and qualities

Slope: 4 to 6 percent
Depth to restrictive feature: 24 to 55 inches to densic material
Drainage class: Moderately well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 24 to 42 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 30 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Moderate (about 7.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: C
Ecological site: R110XY007IL - Moist Glacial Drift Upland Prairie, R108XA006IL - Loess Upland Prairie
Hydric soil rating: No

Minor Components

Ashkum, drained

Percent of map unit: 6 percent
Landform: End moraines, ground moraines
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Base slope
Down-slope shape: Linear
Across-slope shape: Concave
Ecological site: R110XY024IL - Poned Depressional Sedge Meadow
Hydric soil rating: Yes

Orthents, clayey

Percent of map unit: 2 percent
Landform: Ground moraines
Landform position (two-dimensional): Summit, backslope
Landform position (three-dimensional): Interfluvium
Down-slope shape: Convex
Across-slope shape: Convex
Ecological site: F095XB010WI - Loamy and Clayey Upland
Hydric soil rating: No

Urban land

Percent of map unit: 2 percent
Landform: Ground moraines
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Interfluvium

Custom Soil Resource Report

Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

223D2—Varna silt loam, 6 to 12 percent slopes, eroded

Map Unit Setting

National map unit symbol: 2yrqx
Elevation: 510 to 950 feet
Mean annual precipitation: 34 to 42 inches
Mean annual air temperature: 45 to 54 degrees F
Frost-free period: 140 to 185 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Varna, eroded, and similar soils: 92 percent
Minor components: 8 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Varna, Eroded

Setting

Landform: End moraines, ground moraines
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Loess over silty clay loam or clay loam till

Typical profile

Ap - 0 to 9 inches: silt loam
2Bt1 - 9 to 30 inches: silty clay loam
2Bt2 - 30 to 48 inches: silty clay loam
2Cd - 48 to 60 inches: silty clay loam

Properties and qualities

Slope: 6 to 12 percent
Depth to restrictive feature: 24 to 55 inches to densic material
Drainage class: Moderately well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 24 to 42 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 30 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Moderate (about 7.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Custom Soil Resource Report

Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: C
Ecological site: R110XY007IL - Moist Glacial Drift Upland Prairie
Forage suitability group: Mod AWC, adequately drained (G095BY005WI)
Other vegetative classification: Mod AWC, adequately drained (G095BY005WI)
Hydric soil rating: No

Minor Components

Ashkum, drained

Percent of map unit: 8 percent
Landform: End moraines, ground moraines
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Base slope
Down-slope shape: Linear
Across-slope shape: Concave
Ecological site: R110XY024IL - Poned Depressional Sedge Meadow
Hydric soil rating: Yes

232A—Ashkum silty clay loam, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: 2ssrw
Elevation: 520 to 930 feet
Mean annual precipitation: 33 to 41 inches
Mean annual air temperature: 46 to 54 degrees F
Frost-free period: 160 to 190 days
Farmland classification: Prime farmland if drained

Map Unit Composition

Ashkum, drained, and similar soils: 92 percent
Minor components: 8 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Ashkum, Drained

Setting

Landform: End moraines, ground moraines
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Concave
Parent material: Clayey colluvium over till

Typical profile

Ap - 0 to 12 inches: silty clay loam
Bg1 - 12 to 29 inches: silty clay
2Bg2 - 29 to 54 inches: silty clay loam
2Cg - 54 to 60 inches: silty clay loam

Custom Soil Resource Report

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.60 in/hr)
Depth to water table: About 0 to 12 inches
Frequency of flooding: None
Frequency of ponding: Frequent
Calcium carbonate, maximum content: 25 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Moderate (about 8.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2w
Hydrologic Soil Group: C/D
Ecological site: R110XY024IL - Poned Depressional Sedge Meadow
Hydric soil rating: Yes

Minor Components

Peotone, drained

Percent of map unit: 5 percent
Landform: Depressions on ground moraines
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Dip
Down-slope shape: Concave
Across-slope shape: Concave
Ecological site: R110XY024IL - Poned Depressional Sedge Meadow
Hydric soil rating: Yes

Orthents, clayey

Percent of map unit: 2 percent
Landform: Ground moraines, lake plains
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Interfluve
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: F095XB010WI - Loamy and Clayey Upland
Hydric soil rating: No

Urban land

Percent of map unit: 1 percent
Landform: Ground moraines
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Interfluve
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

290B—Warsaw silt loam, 2 to 4 percent slopes

Map Unit Setting

National map unit symbol: 8szq
Elevation: 510 to 980 feet
Mean annual precipitation: 28 to 40 inches
Mean annual air temperature: 45 to 54 degrees F
Frost-free period: 140 to 180 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Warsaw and similar soils: 92 percent
Minor components: 8 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Warsaw

Setting

Landform: Outwash plains, stream terraces
Landform position (two-dimensional): Backslope, summit
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Thin mantle of loess or other silty material and in the underlying loamy glaciofluvial deposits over sandy and gravelly glaciofluvial deposits

Typical profile

H1 - 0 to 10 inches: silt loam
H2 - 10 to 24 inches: clay loam
H3 - 24 to 34 inches: gravelly sandy clay loam
H4 - 34 to 60 inches: stratified gravelly loamy sand to extremely gravelly coarse sand

Properties and qualities

Slope: 2 to 4 percent
Depth to restrictive feature: 24 to 40 inches to strongly contrasting textural stratification
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 30 percent
Available water supply, 0 to 60 inches: Low (about 5.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2e

Custom Soil Resource Report

Hydrologic Soil Group: B

Ecological site: R110XY006IL - Dry Glacial Drift Upland Prairie

Hydric soil rating: No

Minor Components

Kane

Percent of map unit: 6 percent

Landform: Outwash plains, stream terraces

Landform position (two-dimensional): Footslope, summit

Landform position (three-dimensional): Rise

Down-slope shape: Linear

Across-slope shape: Linear

Ecological site: R110XY007IL - Moist Glacial Drift Upland Prairie

Hydric soil rating: No

Urban land

Percent of map unit: 2 percent

Down-slope shape: Linear

Across-slope shape: Linear

Hydric soil rating: No

290C2—Warsaw silt loam, 4 to 6 percent slopes, eroded

Map Unit Setting

National map unit symbol: nrsl

Elevation: 510 to 930 feet

Mean annual precipitation: 28 to 40 inches

Mean annual air temperature: 45 to 52 degrees F

Frost-free period: 140 to 180 days

Farmland classification: All areas are prime farmland

Map Unit Composition

Warsaw and similar soils: 92 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Warsaw

Setting

Landform: Outwash plains, stream terraces

Landform position (two-dimensional): Shoulder, backslope

Landform position (three-dimensional): Interfluvium

Down-slope shape: Convex

Across-slope shape: Linear

Parent material: Thin mantle of loess or other silty material and in the underlying loamy glaciofluvial deposits over sandy and gravelly glaciofluvial deposits

Typical profile

H1 - 0 to 8 inches: silt loam

H2 - 8 to 16 inches: silty clay loam

H3 - 16 to 27 inches: gravelly clay loam

Custom Soil Resource Report

H4 - 27 to 60 inches: stratified gravelly loamy sand to extremely gravelly coarse sand

Properties and qualities

Slope: 4 to 6 percent

Depth to restrictive feature: 24 to 40 inches to strongly contrasting textural stratification

Drainage class: Well drained

Runoff class: Medium

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 2.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 30 percent

Available water supply, 0 to 60 inches: Low (about 4.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 2e

Hydrologic Soil Group: B

Ecological site: R110XY006IL - Dry Glacial Drift Upland Prairie

Hydric soil rating: No

Minor Components

Will

Percent of map unit:

Landform: Stream terraces, outwash plains

Landform position (two-dimensional): Toeslope

Landform position (three-dimensional): Talf

Down-slope shape: Linear

Across-slope shape: Linear

Ecological site: R110XY008IL - Wet Glacial Drift Upland Prairie

Hydric soil rating: Yes

293A—Andres silt loam, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: 2t6zx

Elevation: 540 to 860 feet

Mean annual precipitation: 34 to 40 inches

Mean annual air temperature: 46 to 54 degrees F

Frost-free period: 155 to 190 days

Farmland classification: All areas are prime farmland

Map Unit Composition

Andres and similar soils: 91 percent

Minor components: 9 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Andres

Setting

Landform: Till-floored lake plains, ground moraines

Landform position (two-dimensional): Footslope, summit

Landform position (three-dimensional): Interfluve

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Thin mantle of loess over loamy outwash over till and/or lacustrine deposits

Typical profile

Ap - 0 to 11 inches: silt loam

Bt1 - 11 to 36 inches: clay loam

2Bt2 - 36 to 50 inches: silty clay loam

2C - 50 to 60 inches: silty clay loam

Properties and qualities

Slope: 0 to 2 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Somewhat poorly drained

Runoff class: Low

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)

Depth to water table: About 12 to 24 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 30 percent

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Available water supply, 0 to 60 inches: Moderate (about 8.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 1

Hydrologic Soil Group: C/D

Ecological site: R110XY007IL - Moist Glacial Drift Upland Prairie

Hydric soil rating: No

Minor Components

Ashkum, drained

Percent of map unit: 3 percent

Landform: Ground moraines

Landform position (two-dimensional): Toeslope

Landform position (three-dimensional): Base slope

Down-slope shape: Linear

Across-slope shape: Concave

Ecological site: R110XY024IL - Ponded Depressional Sedge Meadow

Hydric soil rating: Yes

Elliott

Percent of map unit: 3 percent

Landform: Ground moraines

Landform position (two-dimensional): Footslope, summit

Landform position (three-dimensional): Interfluve

Down-slope shape: Linear

Custom Soil Resource Report

Across-slope shape: Linear

Ecological site: R110XY007IL - Moist Glacial Drift Upland Prairie

Hydric soil rating: No

Reddick, drained

Percent of map unit: 3 percent

Landform: Till-floored lake plains, ground moraines

Landform position (two-dimensional): Toeslope

Landform position (three-dimensional): Base slope

Down-slope shape: Linear

Across-slope shape: Concave

Ecological site: R110XY024IL - Poned Depressional Sedge Meadow

Hydric soil rating: Yes

294B—Symerton silt loam, 2 to 5 percent slopes

Map Unit Setting

National map unit symbol: 2ytdr

Elevation: 510 to 900 feet

Mean annual precipitation: 35 to 40 inches

Mean annual air temperature: 48 to 52 degrees F

Frost-free period: 159 to 174 days

Farmland classification: All areas are prime farmland

Map Unit Composition

Symerton and similar soils: 91 percent

Minor components: 9 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Symerton

Setting

Landform: Lake plains, ground moraines

Landform position (two-dimensional): Summit, backslope

Landform position (three-dimensional): Interfluve

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Thin mantle of loess over loamy outwash over till and/or lacustrine deposits

Typical profile

Ap - 0 to 15 inches: silt loam

Bt1 - 15 to 19 inches: silty clay loam

2Bt2 - 19 to 35 inches: clay loam

3BCk - 35 to 39 inches: silty clay loam

3C - 39 to 79 inches: silty clay loam

Properties and qualities

Slope: 2 to 5 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Moderately well drained

Custom Soil Resource Report

Runoff class: Low

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)

Depth to water table: About 24 to 42 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 30 percent

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Available water supply, 0 to 60 inches: Moderate (about 7.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 2e

Hydrologic Soil Group: C

Ecological site: R110XY007IL - Moist Glacial Drift Upland Prairie

Hydric soil rating: No

Minor Components

Ashkum

Percent of map unit: 3 percent

Landform: Ground moraines

Landform position (two-dimensional): Toeslope

Landform position (three-dimensional): Base slope

Down-slope shape: Linear

Across-slope shape: Concave

Ecological site: R110XY024IL - Poned Depressional Sedge Meadow

Hydric soil rating: Yes

Reddick

Percent of map unit: 3 percent

Landform: Ground moraines, till-floored lake plains

Landform position (two-dimensional): Toeslope

Landform position (three-dimensional): Base slope

Down-slope shape: Linear

Across-slope shape: Concave

Ecological site: R110XY024IL - Poned Depressional Sedge Meadow

Hydric soil rating: Yes

Varna

Percent of map unit: 2 percent

Landform: End moraines, ground moraines

Landform position (two-dimensional): Backslope, summit

Landform position (three-dimensional): Interfluve

Down-slope shape: Convex

Across-slope shape: Convex

Ecological site: R110XY007IL - Moist Glacial Drift Upland Prairie

Hydric soil rating: No

Urban land

Percent of map unit: 1 percent

Down-slope shape: Linear

Across-slope shape: Linear

Hydric soil rating: No

294C2—Symerton silt loam, 5 to 10 percent slopes, eroded

Map Unit Setting

National map unit symbol: 2ytds

Elevation: 530 to 890 feet

Mean annual precipitation: 34 to 39 inches

Mean annual air temperature: 48 to 52 degrees F

Frost-free period: 158 to 171 days

Farmland classification: Farmland of statewide importance

Map Unit Composition

Symerton, eroded, and similar soils: 92 percent

Minor components: 8 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Symerton, Eroded

Setting

Landform: Lake plains, ground moraines

Landform position (two-dimensional): Shoulder, backslope

Landform position (three-dimensional): Interfluve

Down-slope shape: Convex

Across-slope shape: Linear

Parent material: Thin mantle of loess over loamy outwash over till and/or lacustrine deposits

Typical profile

Ap - 0 to 8 inches: silt loam

2Bt - 8 to 31 inches: clay loam

3BCK - 31 to 40 inches: silty clay loam

3C - 40 to 79 inches: silty clay loam

Properties and qualities

Slope: 5 to 10 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Moderately well drained

Runoff class: Medium

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)

Depth to water table: About 24 to 42 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 30 percent

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Available water supply, 0 to 60 inches: Moderate (about 7.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3e

Hydrologic Soil Group: C

Custom Soil Resource Report

Ecological site: R110XY007IL - Moist Glacial Drift Upland Prairie
Hydric soil rating: No

Minor Components

Ashkum

Percent of map unit: 6 percent
Landform: Ground moraines
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Base slope
Down-slope shape: Linear
Across-slope shape: Concave
Ecological site: R110XY024IL - Poned Depressional Sedge Meadow
Hydric soil rating: Yes

Andres

Percent of map unit: 1 percent
Landform: Till-floored lake plains, ground moraines
Landform position (two-dimensional): Summit, backslope
Landform position (three-dimensional): Interfluve
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R110XY007IL - Moist Glacial Drift Upland Prairie
Hydric soil rating: No

Reddick

Percent of map unit: 1 percent
Landform: Ground moraines, till-floored lake plains
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Base slope
Down-slope shape: Linear
Across-slope shape: Concave
Ecological site: R110XY024IL - Poned Depressional Sedge Meadow
Hydric soil rating: Yes

298B—Beecher silt loam, 2 to 4 percent slopes

Map Unit Setting

National map unit symbol: 2ytq1
Elevation: 520 to 960 feet
Mean annual precipitation: 34 to 41 inches
Mean annual air temperature: 46 to 52 degrees F
Frost-free period: 160 to 180 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Beecher and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Beecher

Setting

Landform: End moraines, ground moraines
Landform position (two-dimensional): Footslope, backslope
Landform position (three-dimensional): Side slope, base slope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Loess over silty clay loam or clay loam till

Typical profile

Ap - 0 to 13 inches: silt loam
2Bt1 - 13 to 21 inches: silty clay loam
2Bt2 - 21 to 37 inches: silty clay loam
2Cd - 37 to 60 inches: silty clay loam

Properties and qualities

Slope: 2 to 4 percent
Depth to restrictive feature: 24 to 45 inches to densic material
Drainage class: Somewhat poorly drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 6 to 24 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 35 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 5.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: D
Ecological site: F095XB005WI - Moist Loamy or Clayey Lowland
Hydric soil rating: No

Minor Components

Ashkum, drained

Percent of map unit: 6 percent
Landform: Ground moraines, end moraines
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Base slope
Down-slope shape: Linear
Across-slope shape: Concave
Ecological site: F095XB004WI - Wet Loamy or Clayey Lowland
Hydric soil rating: Yes

Urban land

Percent of map unit: 2 percent
Landform: Ground moraines
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Interfluvium
Down-slope shape: Linear
Across-slope shape: Linear

Custom Soil Resource Report

Hydric soil rating: No

Orthents, clayey

Percent of map unit: 2 percent

Landform: Ground moraines

Landform position (two-dimensional): Summit, backslope

Landform position (three-dimensional): Interfluve

Down-slope shape: Convex

Across-slope shape: Convex

Ecological site: F095XB010WI - Loamy and Clayey Upland

Hydric soil rating: No

316A—Romeo silt loam, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: 8t0d

Elevation: 510 to 930 feet

Mean annual precipitation: 28 to 40 inches

Mean annual air temperature: 45 to 52 degrees F

Frost-free period: 140 to 180 days

Farmland classification: Not prime farmland

Map Unit Composition

Romeo and similar soils: 94 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Romeo

Setting

Landform: Stream terraces

Landform position (two-dimensional): Toeslope

Parent material: Drift over dolostone

Typical profile

H1 - 0 to 8 inches: silt loam

R2 - 8 to 60 inches: bedrock

Properties and qualities

Slope: 0 to 2 percent

Depth to restrictive feature: 2 to 10 inches to lithic bedrock

Drainage class: Poorly drained

Runoff class: Negligible

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.60 in/hr)

Depth to water table: About 0 to 6 inches

Frequency of flooding: None

Frequency of ponding: Frequent

Calcium carbonate, maximum content: 20 percent

Available water supply, 0 to 60 inches: Very low (about 1.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6s
Hydrologic Soil Group: C/D
Ecological site: R110XY002IL - Wet Limestone Prairie
Hydric soil rating: Yes

Minor Components

Millsdale

Percent of map unit:
Landform: Stream terraces, flood plains
Landform position (two-dimensional): Toeslope
Ecological site: R110XY002IL - Wet Limestone Prairie
Hydric soil rating: Yes

318A—Lorenzo loam, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: 8t0g
Elevation: 510 to 930 feet
Mean annual precipitation: 28 to 40 inches
Mean annual air temperature: 45 to 52 degrees F
Frost-free period: 140 to 180 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Lorenzo and similar soils: 90 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Lorenzo

Setting

Landform: Outwash plains, stream terraces
Landform position (two-dimensional): Summit
Parent material: Loamy glaciofluvial deposits over sandy and gravelly glaciofluvial deposits

Typical profile

H1 - 0 to 12 inches: loam
H2 - 12 to 21 inches: clay loam
H3 - 21 to 60 inches: stratified gravelly loamy sand to extremely gravelly coarse sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: 12 to 24 inches to strongly contrasting textural stratification
Drainage class: Well drained
Runoff class: Low

Custom Soil Resource Report

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high
(0.60 to 2.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 40 percent

Available water supply, 0 to 60 inches: Low (about 3.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3s

Hydrologic Soil Group: B

Ecological site: R110XY006IL - Dry Glacial Drift Upland Prairie

Hydric soil rating: No

Minor Components

Will

Percent of map unit:

Landform: Stream terraces, outwash plains

Landform position (two-dimensional): Toeslope

Ecological site: R110XY024IL - Ponded Depressional Sedge Meadow

Hydric soil rating: Yes

318B—Lorenzo loam, 2 to 4 percent slopes

Map Unit Setting

National map unit symbol: 8t0h

Elevation: 510 to 930 feet

Mean annual precipitation: 28 to 40 inches

Mean annual air temperature: 45 to 52 degrees F

Frost-free period: 140 to 180 days

Farmland classification: Farmland of statewide importance

Map Unit Composition

Lorenzo and similar soils: 90 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Lorenzo

Setting

Landform: Outwash plains, stream terraces

Landform position (two-dimensional): Backslope, summit

Landform position (three-dimensional): Interfluve

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Loamy outwash over calcareous sand and gravel

Typical profile

H1 - 0 to 9 inches: loam

H2 - 9 to 18 inches: clay loam

Custom Soil Resource Report

H3 - 18 to 60 inches: stratified gravelly loamy sand to extremely gravelly coarse sand

Properties and qualities

Slope: 2 to 4 percent

Depth to restrictive feature: 12 to 24 inches to strongly contrasting textural stratification

Drainage class: Well drained

Runoff class: Low

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 2.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 40 percent

Available water supply, 0 to 60 inches: Low (about 3.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3s

Hydrologic Soil Group: B

Ecological site: R110XY006IL - Dry Glacial Drift Upland Prairie

Hydric soil rating: No

Minor Components

Will

Percent of map unit:

Landform: Stream terraces, outwash plains

Landform position (two-dimensional): Toeslope

Landform position (three-dimensional): Talf

Down-slope shape: Linear

Across-slope shape: Linear

Ecological site: R110XY008IL - Wet Glacial Drift Upland Prairie

Hydric soil rating: Yes

318C2—Lorenzo loam, 4 to 6 percent slopes, eroded

Map Unit Setting

National map unit symbol: nrtj

Elevation: 510 to 980 feet

Mean annual precipitation: 28 to 40 inches

Mean annual air temperature: 45 to 54 degrees F

Frost-free period: 140 to 180 days

Farmland classification: Farmland of statewide importance

Map Unit Composition

Lorenzo, eroded, and similar soils: 92 percent

Minor components: 8 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Lorenzo, Eroded

Setting

Landform: Outwash plains, stream terraces
Landform position (two-dimensional): Shoulder, backslope
Landform position (three-dimensional): Interfluve, tread
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Loamy outwash over calcareous sand and gravel

Typical profile

H1 - 0 to 7 inches: loam
H2 - 7 to 16 inches: clay loam
H3 - 16 to 60 inches: stratified gravelly loamy sand to extremely gravelly coarse sand

Properties and qualities

Slope: 4 to 6 percent
Depth to restrictive feature: 12 to 24 inches to strongly contrasting textural stratification
Drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 40 percent
Available water supply, 0 to 60 inches: Very low (about 2.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: B
Ecological site: R110XY006IL - Dry Glacial Drift Upland Prairie
Hydric soil rating: No

Minor Components

Kane

Percent of map unit: 6 percent
Landform: Outwash plains, stream terraces
Landform position (two-dimensional): Footslope, summit
Landform position (three-dimensional): Rise
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R110XY007IL - Moist Glacial Drift Upland Prairie
Hydric soil rating: No

Urban land

Percent of map unit: 2 percent
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

530E2—Ozaukee silt loam, 12 to 20 percent slopes, eroded

Map Unit Setting

National map unit symbol: 2sn0n
Elevation: 520 to 890 feet
Mean annual precipitation: 31 to 42 inches
Mean annual air temperature: 46 to 53 degrees F
Frost-free period: 135 to 195 days
Farmland classification: Not prime farmland

Map Unit Composition

Ozaukee, eroded, and similar soils: 93 percent
Minor components: 7 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Ozaukee, Eroded

Setting

Landform: Ground moraines, end moraines
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Loess over wisconsinan age silty and clayey till

Typical profile

Ap - 0 to 6 inches: silt loam
Bt1 - 6 to 11 inches: silty clay loam
2Bt2 - 11 to 27 inches: silty clay
2BCt - 27 to 32 inches: silty clay loam
2Cd - 32 to 60 inches: silty clay loam

Properties and qualities

Slope: 12 to 20 percent
Depth to restrictive feature: 22 to 39 inches to densic material
Drainage class: Moderately well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 24 to 42 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 35 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 4.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: C

Custom Soil Resource Report

Ecological site: F110XY011IL - Dry Glacial Drift Upland Forest
Forage suitability group: Mod AWC, adequately drained with limitations (G095BY006WI)
Other vegetative classification: Trees/Timber (Woody Vegetation), Mod AWC, adequately drained with limitations (G095BY006WI)
Hydric soil rating: No

Minor Components

Blount, lake michigan lobe

Percent of map unit: 3 percent
Landform: Ground moraines, end moraines
Landform position (two-dimensional): Summit, footslope
Landform position (three-dimensional): Interfluve
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: F110XY012IL - Moist Glacial Drift Upland Forest
Hydric soil rating: No

Ozaukee, severely eroded

Percent of map unit: 2 percent
Landform: Ground moraines, end moraines
Landform position (two-dimensional): Shoulder, backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Linear
Ecological site: F110XY012IL - Moist Glacial Drift Upland Forest
Hydric soil rating: No

Urban land

Percent of map unit: 2 percent
Landform: Ground moraines
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Interfluve
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

531C2—Markham silt loam, 4 to 6 percent slopes, eroded

Map Unit Setting

National map unit symbol: 2ytps
Elevation: 620 to 920 feet
Mean annual precipitation: 34 to 41 inches
Mean annual air temperature: 46 to 52 degrees F
Frost-free period: 160 to 180 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Markham, eroded, and similar soils: 90 percent

Custom Soil Resource Report

Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Markham, Eroded

Setting

Landform: End moraines, ground moraines
Landform position (two-dimensional): Backslope, shoulder
Landform position (three-dimensional): Interfluve, side slope
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Loess over silty clay loam till

Typical profile

Ap - 0 to 8 inches: silt loam
2Bt1 - 8 to 21 inches: silty clay loam
2Bt2 - 21 to 32 inches: silty clay loam
2Cd - 32 to 60 inches: silty clay loam

Properties and qualities

Slope: 4 to 6 percent
Depth to restrictive feature: 20 to 55 inches to densic material
Drainage class: Moderately well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 24 to 42 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 30 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 4.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: C
Ecological site: R110XY010IL - Moist Glacial Drift Upland Savanna
Hydric soil rating: No

Minor Components

Ashkum, drained

Percent of map unit: 6 percent
Landform: End moraines, ground moraines
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Base slope
Down-slope shape: Linear
Across-slope shape: Concave
Ecological site: R110XY024IL - Ponded Depressional Sedge Meadow
Hydric soil rating: Yes

Urban land

Percent of map unit: 2 percent
Landform: Ground moraines
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Interfluve

Custom Soil Resource Report

Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Orthents, clayey

Percent of map unit: 2 percent
Landform: Ground moraines
Landform position (two-dimensional): Summit, backslope
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Convex
Ecological site: F095XB010WI - Loamy and Clayey Upland
Hydric soil rating: No

541C2—Graymont silt loam, 5 to 10 percent slopes, eroded

Map Unit Setting

National map unit symbol: 2t6zv
Elevation: 540 to 880 feet
Mean annual precipitation: 34 to 42 inches
Mean annual air temperature: 46 to 54 degrees F
Frost-free period: 155 to 190 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Graymont, eroded, and similar soils: 97 percent
Minor components: 3 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Graymont, Eroded

Setting

Landform: Till plains, ground moraines
Landform position (two-dimensional): Shoulder, backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Loess over till

Typical profile

Ap - 0 to 8 inches: silt loam
Bt1 - 8 to 30 inches: silty clay loam
2Bt2 - 30 to 38 inches: silty clay loam
2C - 38 to 60 inches: silty clay loam

Properties and qualities

Slope: 5 to 10 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Runoff class: Medium

Custom Soil Resource Report

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)

Depth to water table: About 24 to 42 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 30 percent

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Available water supply, 0 to 60 inches: High (about 9.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3e

Hydrologic Soil Group: C

Ecological site: R110XY010IL - Moist Glacial Drift Upland Savanna, R108XA006IL - Loess Upland Prairie

Hydric soil rating: No

Minor Components

Elpaso, drained

Percent of map unit: 3 percent

Landform: Till plains, ground moraines

Landform position (two-dimensional): Toeslope

Landform position (three-dimensional): Base slope

Down-slope shape: Linear

Across-slope shape: Concave

Ecological site: R110XY024IL - Ponded Depressional Sedge Meadow, R108XA007IL - Wet Loess Upland Prairie, R108XA008IL - Ponded Loess Sedge Meadow

Hydric soil rating: Yes

802B—Orthents, loamy, 1 to 6 percent slopes

Map Unit Setting

National map unit symbol: 2ytf6

Elevation: 510 to 930 feet

Mean annual precipitation: 34 to 40 inches

Mean annual air temperature: 48 to 52 degrees F

Frost-free period: 158 to 175 days

Farmland classification: Not prime farmland

Map Unit Composition

Orthents, loamy, and similar soils: 90 percent

Minor components: 10 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Orthents, Loamy

Setting

Landform: Outwash plains

Custom Soil Resource Report

Landform position (two-dimensional): Summit
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Loamy human-transported material

Typical profile

^A - 0 to 6 inches: loam
^C - 6 to 79 inches: clay loam

Properties and qualities

Slope: 1 to 6 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.60 in/hr)
Depth to water table: About 42 to 60 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 20 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Moderate (about 6.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2s
Hydrologic Soil Group: C
Ecological site: R110XY024IL - Ponded Depressional Sedge Meadow
Hydric soil rating: No

Minor Components

Orthents, clayey, undulating

Percent of map unit: 3 percent
Landform: Outwash plains
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R110XY024IL - Ponded Depressional Sedge Meadow
Hydric soil rating: No

Urban land

Percent of map unit: 2 percent
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Orthents, loamy-skeletal, undulating

Percent of map unit: 2 percent
Landform: Outwash plains
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R110XY024IL - Ponded Depressional Sedge Meadow

Custom Soil Resource Report

Hydric soil rating: No

Houghton, drained

Percent of map unit: 1 percent

Landform: Depressions on lake plains, depressions on outwash plains

Landform position (two-dimensional): Toeslope

Landform position (three-dimensional): Dip

Down-slope shape: Concave

Across-slope shape: Concave

Ecological site: R110XY024IL - Poned Depressional Sedge Meadow

Hydric soil rating: Yes

Drummer, drained

Percent of map unit: 1 percent

Landform: Swales on till plains, swales on outwash plains, stream terraces on till plains, stream terraces on outwash plains

Landform position (two-dimensional): Toeslope

Landform position (three-dimensional): Base slope, talf

Down-slope shape: Linear

Across-slope shape: Concave, linear

Ecological site: R110XY024IL - Poned Depressional Sedge Meadow,

R108XA013IL - Wet Outwash Prairie, R111XD020IN - Wet Outwash Mollisol

Hydric soil rating: Yes

Pella

Percent of map unit: 1 percent

Landform: Lake plains, ground moraines, outwash plains

Landform position (two-dimensional): Toeslope

Landform position (three-dimensional): Talf

Down-slope shape: Linear

Across-slope shape: Linear

Ecological site: R110XY008IL - Wet Glacial Drift Upland Prairie

Hydric soil rating: Yes

8451A—Lawson silt loam, heavy till plain, 0 to 2 percent slopes, occasionally flooded

Map Unit Setting

National map unit symbol: 2ww9h

Elevation: 430 to 770 feet

Mean annual precipitation: 36 to 39 inches

Mean annual air temperature: 50 to 52 degrees F

Frost-free period: 164 to 174 days

Farmland classification: All areas are prime farmland

Map Unit Composition

Lawson, heavy till plain, occasionally flooded, and similar soils: 95 percent

Minor components: 5 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Lawson, Heavy Till Plain, Occasionally Flooded

Setting

Landform: Flood plains
Landform position (three-dimensional): Rise
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Silty alluvium

Typical profile

Ap - 0 to 14 inches: silt loam
A - 14 to 33 inches: silt loam
Cg - 33 to 79 inches: silt loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat poorly drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 2.00 in/hr)
Depth to water table: About 12 to 24 inches
Frequency of flooding: OccasionalNone
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 11.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2w
Hydrologic Soil Group: B/D
Ecological site: F110XY028IL - Silty-Loamy Floodplain Forest, F108XA019IL - Silty Floodplain Forest
Hydric soil rating: No

Minor Components

Sawmill, heavy till plain, occasionally flooded

Percent of map unit: 5 percent
Landform: Flood plains
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R110XY027IL - Poned Floodplain Marsh, R108XA018IL - Poned Floodplain Marsh
Hydric soil rating: Yes

W—Water

Map Unit Composition

Water: 100 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Water

Setting

Landform: Rivers, oxbows, lakes, drainageways, perennial streams, channels


Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 8w
















MAP LEGEND

Area of Interest (AOI)







 Area of Interest (AOI)










Soils

Soil Rating Polygons
















-  .02
-  .05
-  .10
-  .15
-  .17
-  .20
-  .24
-  .28
-  .32
-  .37
-  .43
-  .49
-  .55
-  .64
-  Not rated or not available

Soil Rating Lines








-  .02
-  .05
-  .10
-  .15
-  .17
-  .20

-  .24
-  .28
-  .32
-  .37
-  .43
-  .49
-  .55
-  .64
-  Not rated or not available

Soil Rating Points

-  .02
-  .05
-  .10
-  .15
-  .17
-  .20
-  .24
-  .28
-  .32
-  .37
-  .43
-  .49
-  .55
-  .64
-  Not rated or not available

Water Features

-  Streams and Canals
- Transportation**
-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads
- Background**
-  Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:12,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL:
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Will County, Illinois
 Survey Area Data: Version 17, Aug 31, 2022

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jul 4, 2020—Jul 6, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

K Factor, Whole Soil

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
23B	Blount silt loam, Lake Michigan Lobe, 2 to 4 percent slopes	.37	8.5	0.5%
146A	Elliott silt loam, 0 to 2 percent slopes	.32	86.0	5.5%
146B	Elliott silt loam, 2 to 4 percent slopes	.32	570.7	36.3%
146B2	Elliott silty clay loam, 2 to 4 percent slopes, eroded	.28	9.4	0.6%
223C2	Varna silt loam, 4 to 6 percent slopes, eroded	.37	91.4	5.8%
223D2	Varna silt loam, 6 to 12 percent slopes, eroded	.37	6.0	0.4%
232A	Ashkum silty clay loam, 0 to 2 percent slopes	.20	308.8	19.6%
290B	Warsaw silt loam, 2 to 4 percent slopes	.32	3.1	0.2%
290C2	Warsaw silt loam, 4 to 6 percent slopes, eroded	.43	6.2	0.4%
293A	Andres silt loam, 0 to 2 percent slopes	.28	3.7	0.2%
294B	Symerton silt loam, 2 to 5 percent slopes	.24	1.6	0.1%
294C2	Symerton silt loam, 5 to 10 percent slopes, eroded	.28	4.7	0.3%
298B	Beecher silt loam, 2 to 4 percent slopes	.37	15.6	1.0%
315A	Channahon silt loam, 0 to 2 percent slopes	.32	2.0	0.1%
315C2	Channahon silt loam, 4 to 6 percent slopes, eroded	.43	1.2	0.1%
316A	Romeo silt loam, 0 to 2 percent slopes	.32	6.5	0.4%
318A	Lorenzo loam, 0 to 2 percent slopes	.28	27.1	1.7%
318B	Lorenzo loam, 2 to 4 percent slopes	.32	60.2	3.8%

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
318C2	Lorenzo loam, 4 to 6 percent slopes, eroded	.28	46.1	2.9%
330A	Peotone silty clay loam, 0 to 2 percent slopes	.24	0.5	0.0%
530E2	Ozaukee silt loam, 12 to 20 percent slopes, eroded	.43	51.7	3.3%
531C2	Markham silt loam, 4 to 6 percent slopes, eroded	.37	19.4	1.2%
541C2	Graymont silt loam, 5 to 10 percent slopes, eroded	.37	11.9	0.8%
802B	Orthents, loamy, 1 to 6 percent slopes	.37	166.8	10.6%
8451A	Lawson silt loam, heavy till plain, 0 to 2 percent slopes, occasionally flooded	.37	36.9	2.3%
W	Water		25.9	1.6%
Totals for Area of Interest			1,572.9	100.0%

Description

Erosion factor K indicates the susceptibility of a soil to sheet and rill erosion by water. Factor K is one of six factors used in the Universal Soil Loss Equation (USLE) and the Revised Universal Soil Loss Equation (RUSLE) to predict the average annual rate of soil loss by sheet and rill erosion in tons per acre per year. The estimates are based primarily on percentage of silt, sand, and organic matter and on soil structure and saturated hydraulic conductivity (Ksat). Values of K range from 0.02 to 0.69. Other factors being equal, the higher the value, the more susceptible the soil is to sheet and rill erosion by water.

"Erosion factor Kw (whole soil)" indicates the erodibility of the whole soil. The estimates are modified by the presence of rock fragments.

Factor K does not apply to organic horizons and is not reported for those layers.

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

Layer Options (Horizon Aggregation Method): Surface Layer (Not applicable)

References

- American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.
- American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.
- Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.
- Federal Register. July 13, 1994. Changes in hydric soils of the United States.
- Federal Register. September 18, 2002. Hydric soils of the United States.
- Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.
- National Research Council. 1995. Wetlands: Characteristics and boundaries.
- Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_054262
- Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service, U.S. Department of Agriculture Handbook 436. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053577
- Soil Survey Staff. 2010. Keys to soil taxonomy. 11th edition. U.S. Department of Agriculture, Natural Resources Conservation Service. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053580
- Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.
- United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.
- United States Department of Agriculture, Natural Resources Conservation Service. National forestry manual. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/home/?cid=nrcs142p2_053374
- United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. <http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/landuse/rangepasture/?cid=stelprdb1043084>

Custom Soil Resource Report

United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2_054242

United States Department of Agriculture, Natural Resources Conservation Service. 2006. Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053624

United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210. http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_052290.pdf