ROADWAY GEOTECHNICAL REPORT
INTERSTATE 80 IMPROVEMENTS
RIVER ROAD TO WEST OF HOUBOLT ROAD
STATION 305+50 TO STATION 410+00
CONTRACT 62R28 (ML-4)
WILL COUNTY, ILLINOIS

For

Stantec

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Submitted by

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Technical Report Documentation Page

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11. Abstract

The proposed improvements include the reconstruction and widening of I-80 between Station 305+50 and Station 410+00. The I-80 roadway will primarily be widened from two lanes and narrow shoulders to three lanes and wider shoulders in each direction. Most of the widening will occur over the existing grassy median. The widening along I-80 will require the placement of up to 7.0 feet of new fill or up to 7.0 feet cuts with side slopes of 1:4 (V:H) or gentler.

At the surface, the borings encountered 3 to 16 inches of silty clay loam to silty loam topsoil. The recommended topsoil thickness to be stripped is 9 inches. The existing shoulder pavements are made of either full-depth asphalt or asphalt over concrete with thicknesses of up to 26 inches, over aggregate base. The existing subgrade consists of stiff to hard silty clay to silty clay loam fill or medium dense to very dense silty loam, sandy gravel, and weathered bedrock. Some borings encountered perched groundwater between 1 and 12 feet bgs and within the shallower sandy gravel and weathered bedrock.

With a few exceptions, the subgrade will generally provide a stable working platform for the placement of fill and pavement construction. Subgrade treatment recommendations include the removal and replacement of up to 18 inches at several locations along the proposed roadway widening and reconstruction.

For a mechanistic pavement design, the pavement sections should be designed using an SSR of POOR. For an AASHTO pavement design, the pavement sections should be designed using an IBR of 2.

We estimate the embankment widening will have adequate factors of safety against slope instability and foundation soil settlement below the new fill will be 1 inch or less.

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TABLE OF CONTENTS

List of Tables

LIST OF FIGURES

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FOR
STANTEC

1.0 INTRODUCTION

This report presents the results of our subsurface investigation, laboratory testing, and geotechnical evaluations and recommendations in support of the roadway improvements proposed along Interstate 80 (I-80) from River Road to west of Houbolt Road in Will County, Illinois. A *Site Location Map* is presented as Exhibit 1. The proposed roadway improvements will be completed as part of Contract 62R28 (ML-4).

Based on the drawings and information provided by Stantec and dated September 29, 2022, Wang Engineering, Inc. (Wang) understands the proposed improvements include roadway widening and reconstruction along I-80 between River Road and Houbolt Road (Station 305+50 to Station 410+00). The widening of I-80 is planned over the existing interstate median along both directions and the outer shoulders.

The purpose of our investigation was to characterize the pavement, subgrade, and groundwater conditions; perform geotechnical engineering analyses; and provide geotechnical recommendations for the design and construction of the proposed roadway improvements. The Interstate 55 interchange and associated ramps is addressed in a separate Roadway Geotechnical Report.

2.0 GEOLOGICAL SETTING

The project area extends through west central Will County, Illinois. On the USGS *Channahon 7.5 Minute Series Quadrangle* maps, the project runs from west to east along the limit between N ½ of Section 28 and N ½ of Section 27, Tier 35 N, Range 9E of the Troy Township of the Third Principal Meridian.

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

2.1 Physiography

The project area is located within the northern part of the lowland Kankakee Plain physiographic subsection of the Till Plains Section (Leighton et al. 1948). This intermorainic area, once occupied by Glacial Lake Wauponsee, is characterized by flat to gently undulatory topography, with low morainic islands, glacial terraces, torrent bars, and sand dunes. The surface along the project alignment undulates within the intermorainal area between Minooka and Rockdale Moraines. Within the western limits of the project, the I-80 corridor passes over the DuPage River which is about a 200-foot-wide channel that flows south into the Des Plaines River. Within the eastern portion of the project the I-80 corridor passes over the 50-foot-wide Rock Run Creek which is also a tributary to the Des Plaines River. The surface elevation along the project alignment ranges from 554 feet to 612 feet.

2.2 Pedological Features

After the Wisconsin glaciation, several types of soils developed through weathering of glacigenic sediments. In Will County, the soil types were surveyed by the USDA (2022). A summary of the USDA soil types present within the project area, including their relevant geotechnical index properties and suitability as subgrade and road fill are shown in Exhibits 2-1 to 2-4. The soil information provided by USDA is meant to be used as a general reference in the absence of a site-specific investigation. In this instance, our findings regarding soil features affecting suitability for highway and street construction are not necessarily in agreement with the information presented in the exhibits.

2.3 Surficial Cover

The surficial cover is the result of Wisconsinan-age glacial activity. The glacigenic deposits were emplaced during pulsating advances and retreats of an ice-sheet lobe responsible for the formation of end moraines and associated low-relief till and lake plains (Hansel and Johnson 1996). Along the project area, the drift thickness varies from about 1 foot to 55 feet. Predominantly the drift is dominated by silty clay diamicton of the Yorkville Member of the Lemont Formation. In the project area, discontinuous patches of lacustrine deposits of the Equality Formation and alluvium of the Cahokia Formation resting over sand and gravel outwash of the Henry Formation may be encountered in sag areas or channels carved by meltwater into silty clayey diamicton of the Yorkville Member of the Lemont Formation (Hansel and Johnson 1996, Willman et al. 1971). Occasionally, beneath the Lemont Formation diamicton, sand and gravel outwash of the Henry Formation may be found filling bedrock valleys. Exhibit 3 illustrates the *Site and Regional Geology*.

The Equality Formation, less than 10 feet thick, consists of brown to gray, bedded fine sand, silt, and clay lacustrine deposits (Caron 2017). The Henry Formation consists of stratified sand and gravel outwash with thicknesses of about 5 to 40 feet (Caron 2017). The Yorkville Member of the Lemont Formation, up to 70-foot thick, consists of yellowish brown to gray silty clay to silty clay loam diamicton that contains lenses of gravel, sand, silt, and clay (Hansel and Johnson 1996, Caron 2017).

From a geotechnical viewpoint, the Yorkville Member is characterized by low to moderate plasticity, high strength, and low to moderate moisture content (Bauer et al. 1991).

2.4 Bedrock

In southwestern Will County, the Ordovician-age bedrock extends about 5 miles into the county and the surficial cover rests unconformably on top of the bedrock that dips east. The remaining portions of the county, the surficial cover rests unconformably on top of Silurian-age bedrock that dips east. The top of the bedrock lies at 1 to 55 feet below the ground surface (bgs). Within the project area, Ordovician shales of the Maquoketa Group are underlain by dolostones of the Galena Platteville Group (Kolata 2005). The shale bedrock is slightly to highly weathered and may be encountered on the western side of the project. The Silurian-age dolostone extends through majority of the central and eastern portion of the project area.

Structurally, the site is located on the eastern flank of the Wisconsin Arch. The northwest to southeast trending inactive Sandwich Fault Zone transverses the western portion of the project. The western

section is the upthrown block with Ordovician-age shale and dolostone bedrock and the eastern section is the downthrown block with Silurian-age dolostone bedrock.

2.5 Climatological Data

The subsurface investigation was performed from March to November of 2021 and January to November of 2022. To assess the possible effects of temperature and precipitation on water table data and soil moisture, the climatic conditions for the investigation period and three months prior to the start of the investigation are summarized graphically in Figures 1 and 2. The precipitation and temperature data for the investigation period are compared against thirty-year monthly data (1991 to 2020) in box-and-whiskers format to show deviations from "normal" climate conditions during the current investigation. Local climate data were obtained from the O'Hare Station (NCDC 2022).

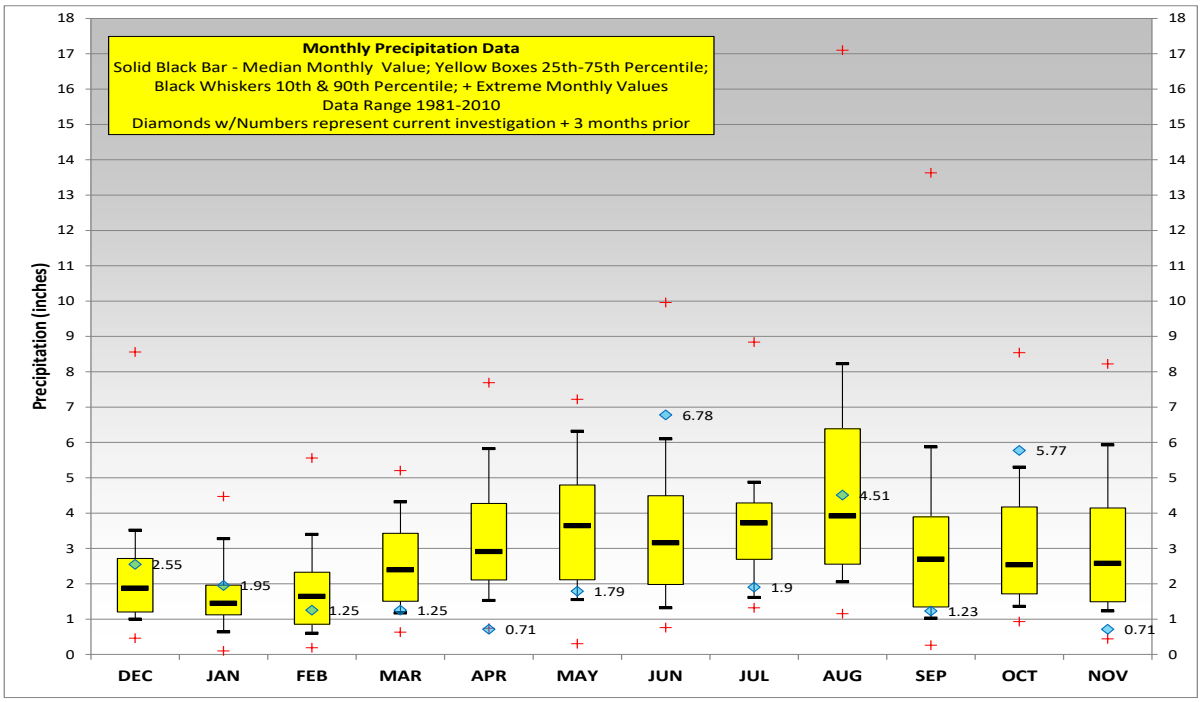

Figure 1: Monthly Precipitation Data for December 2020 to November 2021

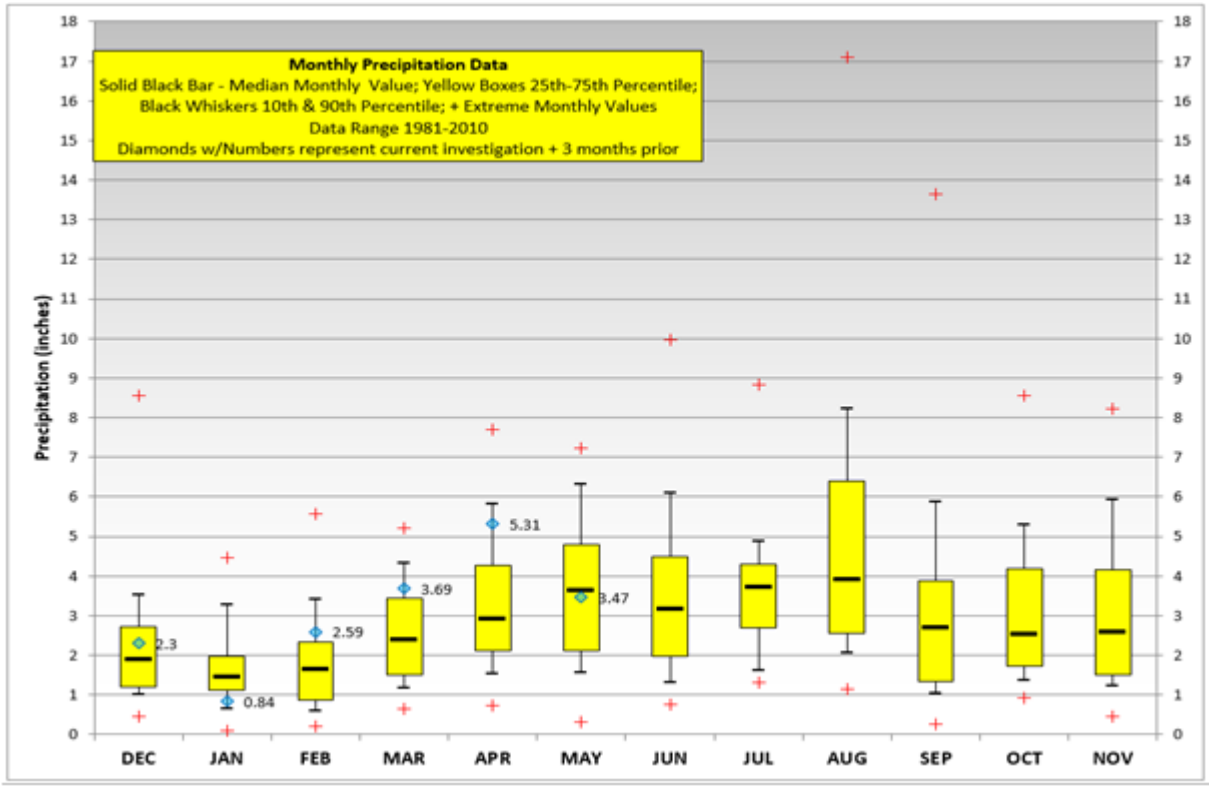

Figure 2: Monthly Precipitation Data for December 2021 to November 2022

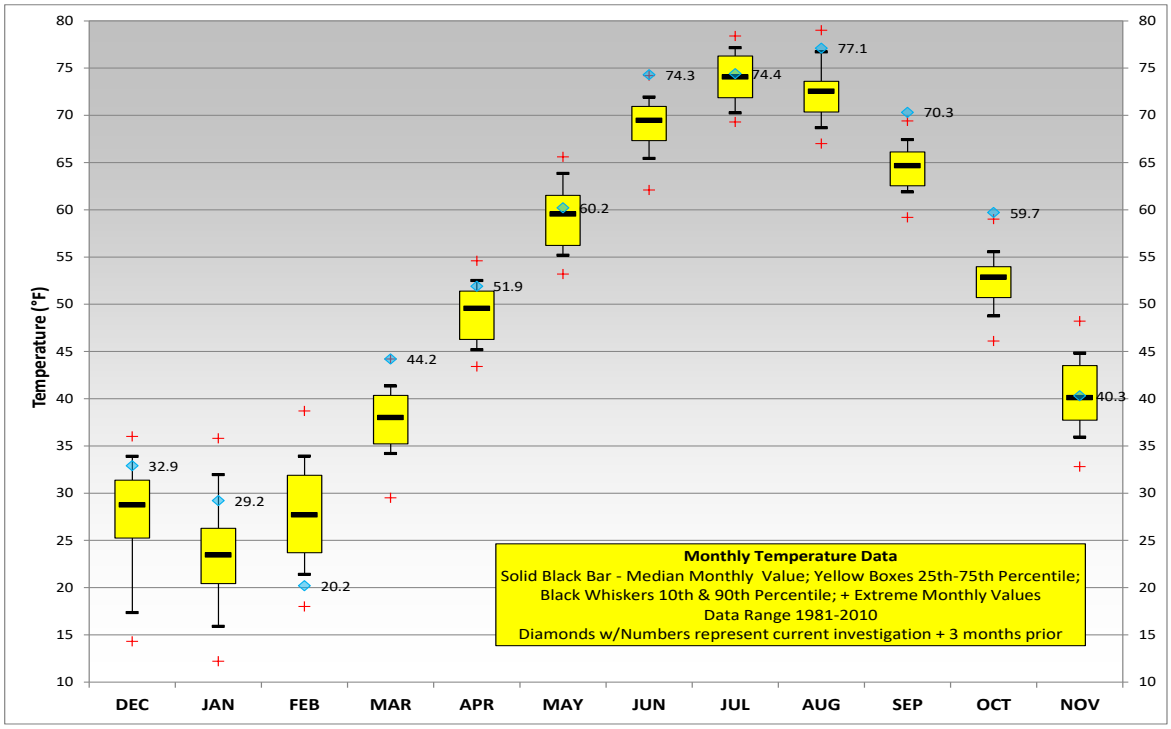

Figure 3: Monthly Temperature Data for December 2020 to November 2021

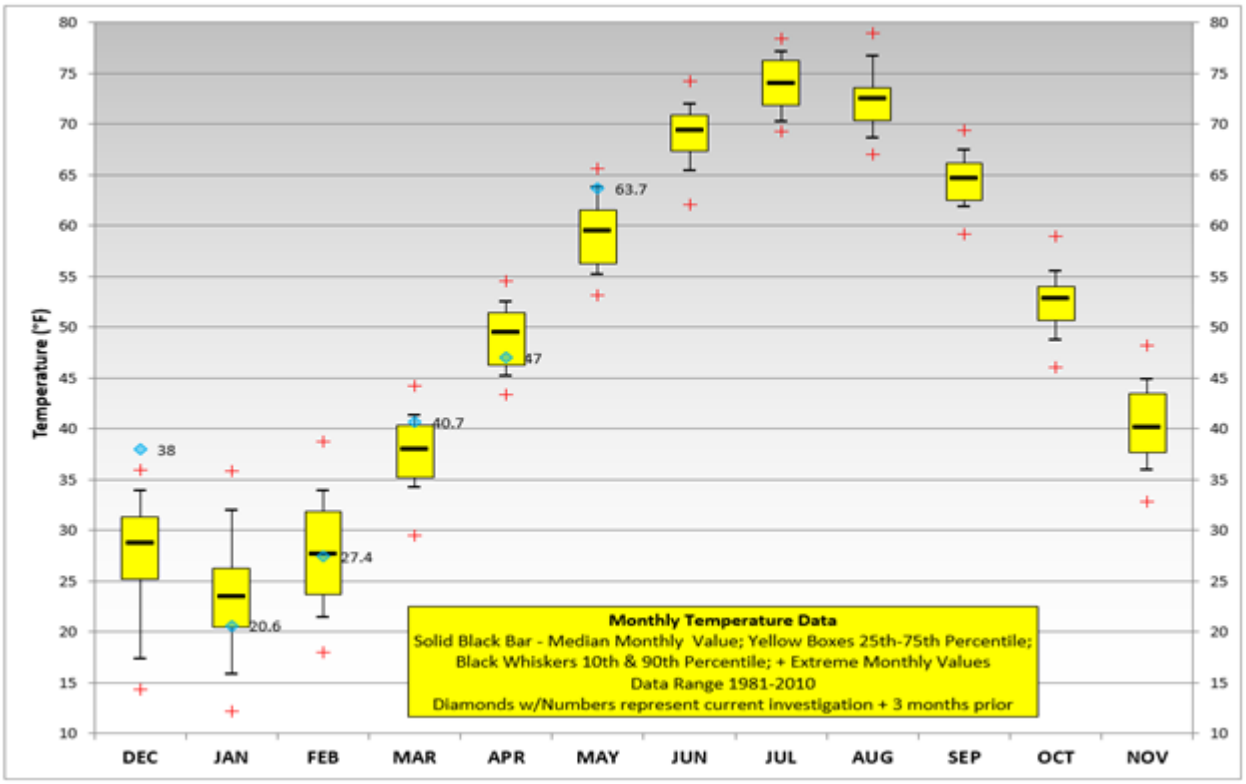

Figure 4: Monthly Temperature Data for December 2021 to November 2022

The deviations from the historical 30-year climate data show the investigation period was characterized in general by average precipitations and temperature with the exception of record high temperatures with average precipitation in March, June, September, October, and December 2021. Observations of perched water within the granular fill may have been influenced by these climate factors.

3.0 METHODS OF INVESTIGATION

The following sections outline the subsurface and laboratory investigations performed by Wang.

3.1 Field Investigation

The subsurface investigation consisted of subgrade borings (SGB) drilled along the I-80 eastbound (EB), westbound (WB), and centerline/median (CL). To supplement the subsurface data, we considered for our analysis nearby bridge and sign structure borings. The borings were drilled by Wang between March 2021 and November of 2022 from elevations of 553.9 to 611.7 feet and were

advanced to depths of 1.0 to 54.5 feet bgs. A summary of borings, ground surface elevations, and termination depths along the I-80 EB, WB, and CL is provided in Table 1.

Table 1: Subsurface Investigation Summary

Roadway Alignment	Alignment Limits (Station to Station)	Location	Reference Borings IDs	Ground Surface Elevations (feet)	Termination Depths (feet)
I-80	305+50.00 to 410+00.00	EB	EB-SGB-25 through EB-SGB-41, DpR-BSB-02, DpR-BSB-08, 80AA-BSB-01, 80/55-BSB-01, 80/55-BSB-03, RRC-BSB-01, RRC-BSB-05, OSB-04, OSB-06, OSB-07, OSB-15, FR-BSB-08, and FR-BSB-07	554.3 to 611.5	4.0 to 54.0
		CL	CL-SGB-24 through CL-SGB-38, 80AA-BSB-02, 80/55-BSB-04, 80/55-BSB-06, OSB-01, OSB-03, OSB-05, OSB-08, OSB-09, OSB-11, OSB-13, FR-BSB-04, and FR-BSB-07	554.2 to 611.7	1.0 to 54.5
		WB	WB-SGB-26 through WB-SGB-42, DpR-BSB-01, DpR-BSB-07, 80AA-BSB-03, 80AA-BSB-04, 80/55-BSB-07, 80/55-BSB-09, RRC-BSB-02, RRC-BSB-06, FR-BSB-03, and FR-BSB-04	553.9 to 610.7	2.5 to 54.0

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

A combination of ATV- and truck-mounted drilling rigs equipped with hollow stem augers was used to advance and maintain open boreholes. Soil sampling was performed according to AASHTO T206, *"Penetration Test and Split Barrel Sampling of Soils."* The soil was sampled continuously in the SGB borings. The BSB borings were sampled at 2.5-foot intervals to 30 feet, and at 5-foot intervals thereafter to boring termination depths. Soil samples collected from each sampling interval were placed in sealed jars and transported to the laboratory for further examination and laboratory testing.

Field boring logs, prepared and maintained by a Wang field engineer, included lithological descriptions, visual-manual soil classifications, results of Rimac and/or pocket penetrometer unconfined compressive strength tests, and results of Standard Penetration Tests (SPT) recorded as

blows per 6 inches of penetration. The N-values shown in the *Boring Location Plans and Profiles* (Appendix H) are the sum of the second and third set of blows per 6 inches of penetration.

Groundwater levels were measured while drilling and at the completion of each boring. For safety considerations each borehole was backfilled upon completion with soil cuttings and/or bentonite chips and the pavement surface was restored as close as possible to its original condition.

3.2 Laboratory Testing

The soil samples were tested in the laboratory for moisture content (AASHTO T265). Atterberg limits (AASHTO T89 and T90), particle size analysis (AASHTO T88), and organic content by loss on ignition (ASTM D2974, Method C) tests were performed on select samples. Field visual descriptions of the soil samples were verified in the laboratory and the soils were classified according to the IDH and AASHTO Soil Classification Systems. The laboratory test results are shown in the *Boring Logs* (Appendix A), in the *Laboratory Test Results* (Appendix B), in the *IDOT Forms* (Appendix C), and in the *Boring Location Plans and Profiles* (Appendix H).

4.0 INVESTIGATION RESULTS

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

4.1 Surface Characterization

The proposed roadway improvement will include widening within the median and outer shoulders along I-80. Most of the eastbound and westbound borings were drilled through pavement and all centerline borings were drilled through the grassy area within the existing ditch. Topsoil measurements were performed within the improvement right-of-way (ROW) to supplement the topsoil data obtained from borings. The topsoil thicknesses are summarized in Table 2.

Table 2: Summary of Topsoil Thickness Along I-80

Direction	Number of Measurements	Topsoil Thickness Range (inches)	Average Thickness (inches)
EB	10	3 to 12	6
CL	24	2 to 12	5
WB	16	5 to 16	10

Most of the borings were drilled through paved shoulders. The borings drilled through the existing shoulders show the pavement structures consist of either full-depth asphalt or asphalt over concrete. The pavement thickness ranges from 6 to 25 inches with an average of 15 inches. The aggregate base consists of crushed stone, sandy gravel, sand, or gravelly loam and its thickness ranges from 2 to 47 inches. The existing shoulder pavement thicknesses are summarized in Table 3.

Table 3: Summary of Existing Shoulder Pavement Thickness and Composition

Alignment/Direction		Total Number of Measurements (No)	Pavement Structure Thickness (inches)			Pavement Average Thickness (inches)
			Asphalt No[1]/Range	Concrete No[1]/Range	Total Pavement No[1]/Range	
I-80	EB	29	29/6-25	4/2-15	29/10-26	16
	WB	25	25/9-24	2/2-4	25/9-24	16

[1]No = number of measurements along the alignment

Additional pavement cores were obtained from the I-80 roadway pavements to supplement the pavement information along the proposed improvement. The cores obtained from the travel lanes show the pavement structure consists of asphalt over concrete except for WB-PC-19 which encountered asphalt overlying concrete followed by another layer of asphalt. The travel lanes pavement thickness ranges from 12 to 18 inches with an average of 15 inches. The aggregate base consists of sandy gravel or gravel. The roadway pavement structure thicknesses are summarized in Table 4 and the pavement composition for both shoulder and mainline is included in Appendix D.

Table 4: Summary of Existing Roadway Lane Pavement Thickness and Composition

Alignment/Direction		Total Number of Measurements (No)	Pavement Structure Thickness (inches)			Pavement Average Thickness (inches)
			Asphalt No[1]/Range	Concrete No[1]/Range	Total Pavement No[1]/Range	
I-80	EB	4	4/4-6	4/8-11	4/12-16	14
	WB	4	4/7-20	4/9-10	4/13-18	15

[1]No = number of measurements along the alignment

4.2 Subgrade Conditions

Beneath the surface, in descending order, the lithologic succession encountered includes: 1) man-made ground (fill); 2) stiff to hard silty clay to silty clay loam; and 3) very dense sandy gravel and weathered bedrock. The following section presents the subgrade conditions encountered within the top 6.0 to 10.0 feet along the roadway alignments by our subsurface investigation.

1) Man-made ground (fill)

Beneath the pavement structure or topsoil, the borings encountered up to 25.0 feet of primarily cohesive fill along I-80. The cohesive fill generally consists of medium stiff to hard, black, brown, and gray silty loam, clay loam to silty clay loam, and silty clay with unconfined compressive strength (Q_u) values of 0.5 to 10.2 tsf with an average of 3.0 tsf and moisture content values of 10 to 35% averaging 18%. Laboratory index testing shows liquid limit (L_L) values of 23 to 55% and plastic limit (P_L) values of 16 to 22%. The soil belongs primarily to the A-6 and A-7-6 groups in accordance with AASHTO. Construction debris was noticed within the top 6.0 feet of some of the borings drilled approximately between Stations 347+00and 467+00 (Borings CL-SGB-29, WB-SGB-32, WB-SGB-33, WB-SGB-35, 80/55-BSB-01, and 80AA-BSB-01 to 80AA-BSB-03). Borings CL-SGB-32, CL-SGB-35, CL-SGB-36, EB-SGB-25, EB-SGB-28, EB-SGB-36, EB-SGB-38, WB-SGB-28, WB-SGB-36, WB-SGB-37, and WB-SGB-39 to WB-SGB-41 did not encounter fill underneath the pavement structure or topsoil and instead encountered auger refusal or weathered bedrock directly underneath the topsoil/pavement and/or within a depth of less than 5.0 to 10.0 feet from the ground surface. Cobbles were noted within the fill at a depth of 6.0 feet in Boring CL-SGB-34.

About 1.0 to 4.0 feet of granular fill was encountered underneath the cohesive fill, pavement structure, and/or topsoil in about 13% of the borings. The granular fill consists of loose to dense, black, brown,

and gray silty loam, gravelly loam, and sandy gravel characterized by N values of 6 to 39 blows per foot and moisture contents of 4 to 16%. The granular fill was sampled directly underneath the pavement structure and/or at the surface in Borings EB-SGB-34 and EB-SGB-36 to EB-SGB-38.

An approximately 8- to 24-inch thick layer of black silty clay to silty clay loam buried topsoil was sampled underneath the pavement structure and/or fill in about 8 borings along I-80. This layer has moisture contents of 25 to 39% and likely indicates the boundary between fill and natural ground.

2) Stiff to hard silty clay to silty clay loam

Underneath the fill or buried topsoil, the borings generally encountered up to 6.0 feet of stiff to hard, brown and gray, silty clay to silty clay loam, discontinuously present along the alignment. This unit is characterized by Q_u values of 1.3 to 6.7 tsf, moisture contents of 14 to 26%, and L_L and P_L values of 31% and 17%, respectively. The AASHTO soil classification shows the soil belongs to the A-6 group. This layer was generally encountered to the boring termination depths of some of the shallower subgrade borings and was sampled within the structure borings up to a thickness of up to 15.0 feet. Within this unit, layers of sand and silt are discontinuously encountered. Layers are up to 6-foot thick, moist to saturated, with N-values of 3 blows per foot to 50 blows per 6 inches, and moisture content values of 5 to 29%. An approximately 18-inch thick layer of very soft silty clay with a Q_u value of 0.16 tsf and a moisture content of 15% was sampled within this unit in Boring EB-SGB-25.

3) Very dense sandy gravel and weathered bedrock

Below the topsoil/pavement or Unit 2, at elevations of 574 to 556 feet, the borings generally advanced through 3.0 to 4.0 feet of very dense, sandy gravel and weathered dolostone and/or shale bedrock. This soil unit has N-values of up to 100 blows per 3 inches and moisture content values of 2 to 10%.

The subsurface investigation revealed several areas along the alignment where auger or sampler refusal indicating possible top of bedrock was noted. Shallow top of bedrock was estimated within the top 10.0 feet bgs between Stations 321+00 to 327+00, Stations 370+00 to 380+00, and Stations 390+00 to 410+00.

4.3 Groundwater Conditions

Groundwater was recorded during and upon completion of drilling. The groundwater was encountered in 20% of the roadway borings, perched within granular lenses and within the sandy gravel and weathered bedrock. However, it should be noted that groundwater levels might change and

may vary with seasonal rainfall patterns and long-term climate fluctuations or may be influenced by local site conditions. A groundwater data summary is presented in Table 5.

Table 5: Summary of Groundwater Measurements

Alignment/Direction		Groundwater measurements No[1]./out of [2]	Groundwater while drilling (feet)		Groundwater after drilling (feet)	
			Depth min-max	Elevation min-max	Depth min-max	Elevation min-max
I-80	EB	3/17	1.5-7.0	552.8-565.9	2.5-8.5	563.4-564.4
	CL	5/15	2.5-8.5	563.0-593.4	5.0-12.0	566.5-593.4
	WB	2/17	2.0	604.9-608.7	5.0	605.7

[1]No = number of borings that encountered groundwater; [2] total number of borings drilled along the alignment

5.0 ANALYSIS AND RECOMMENDATIONS

According to the drawings provided by Stantec, Wang understands the I-80 mainline pavement will be reconstructed and widened from Station 305+50.00 to Station 410+00.00. The existing mainline pavement will be widened and reconstructed from two to three lanes in both directions and widening will occur over the existing interstate grassy median. The design and cross-section drawings indicate the proposed grade will be slightly changed; however, the widened portions of the roadway will be supported by either new embankment fill or will require cuts through the side slopes along the existing I-80 embankment. The widening will require cuts and fills of up to 7.5 and 7.0 feet, respectively. The new cuts and embankments along the proposed widening will have slopes of 1:4 (V: H) or gentler. New 4-foot wide drainage ditches will be created along the outer edges of the roadway. As per the *Typical Sections* (Appendix F) provided by Stantec, the proposed pavement design is:

I-80 Lanes

13″ continuously reinforced Portland cement concrete pavement (PCC);
4″ Stabilized subbase (SSB); and
12″ Aggregate Subgrade Improvement (ASI)

I-80 Shoulders

13″ Portland cement concrete shoulder (PCC);
4″ Stabilized subbase (SSB); and
12″ Aggregate Subgrade Improvement (ASI)

5.1 Site Preparation

For the proposed reconstruction, it is recommended that any topsoil and pavement be stripped within the limits of the proposed improvements. For estimating purposes, the topsoil thickness to be stripped is 9 inches, representing the 75 percentile of topsoil thickness. The existing pavement thicknesses, as uncovered by our investigation, are summarized in Section 4.1. As per IDOT District One, a shrinkage factor of 15% should be used to measure borrowed and furnished excavation quantities.

After stripping, the stability of the exposed subgrade should be observed for the presence of any unsuitable and/or unstable soils to determine if remedial treatment is necessary. The prepared subgrade should be proofrolled to check for rutting and subgrade deformation. Using either a static or dynamic cone penetrometer, any unstable and/or unsuitable soils revealed during proofrolling should be tested and evaluated according to the IDOT *Subgrade Stability Manual* (IDOT 2005).

5.2 Subgrade Treatment Recommendations

In general, the performance of the pavement will be affected by the geotechnical properties of the upper 4 to 6 feet of the soil profile (i.e. the subgrade). Based on the results of our investigation, the subgrade will generally consist of stiff to hard silty clay to silty clay loam fill or medium dense to very dense silty loam, sandy gravel, and weathered bedrock or dolostone. The proposed pavement structure will be supported generally on both existing fill and at some locations on the weathered bedrock.

Wang understands the pavement structure would be conforming to IDOT's Mechanistic Pavement Design (MPD), which requires a minimum of 12 inches improved subgrade below the design pavement structure to ensure stability during construction and long-term pavement performance (IDOT 2020). Thus, the top 12 inches of existing subgrade will be improved to facilitate the MPD, and additional subgrade improvement requirements may be identified beyond the 12 inches of improved cover (IDOT 2005). Between Stations 321+00 to 327+00, Stations 370+00 to 380+00, and Stations 390+00 to 410+00, the pavement will likely be installed either over weathered bedrock or freshly exposed bedrock. As per IDOT District One, *in areas where the bedrock is anticipated to encroach into the aggregate subgrade improvement thickness, so that the full 12 inch layer cannot be*

included below the pavement, we recommend that a minimum thickness of 3 inches of aggregate material should be maintained below the pavement section, consisting of ***SUBBASE GRANULAR MATERIAL, TYPE B (CU YD)****.*

The soil borings indicate the proposed subgrade generally consists of soils with Q_u values greater than 1.0 tsf, moisture contents of less than 25%, and L_L values below 50%. Overall, the subgrade soils will provide a stable working platform for the construction of the new pavement structure and the aggregate base barring specific areas along the project area where tests revealed Q_u values less than 1.0 tsf, low N-values, L_L values above 50%, and/or high MC values. In addition, a few borings encountered buried topsoil at or just below the proposed subgrade. These areas will require removal and replacement of the unsuitable material with compacted granular material. Prior to placing the granular material, a layer of geofabric material should be placed on top of the existing soils. The limits of the areas with unstable soil requiring additional subgrade improvement beyond the 12 inches required for MPD are summarized in Table 6.

Table 6: Summary of Subgrade Treatment Recommendations

Limits Station to Station	Treatment Width	Treatment Type	Treatment Depth[(1)] (inch)	Reference Boring, Subgrade Concerns
305+50 to 306+83	WB widening	Aggregate Subgrade Improvement and Geofabric	12	WB-SGB-26 (Buried topsoil)
311+00 to 312+85	WB widening	Aggregate Subgrade Improvement and Geofabric	12	WB-SGB-27 (Buried Topsoil)
338+36 to 339+57	WB pavement and widening width and median width	Aggregate Subgrade Improvement and Geofabric	18	FR-BSB-04 (MC=28%; Qu=0.98 tsf)
358+64 to 360+45	Median width	Disk and Dry	12	OSB-05 (MC=28%)
383+06 to 384+79	WB pavement and widening width and median width	Aggregate Subgrade Improvement and Geofabric	12	WB-SGB-38 (Qu=0.5 tsf)
399+08 to 401+09	Full Width of Improvement	Disk and Dry	6	EB-SGB-39 (MC=26%)

[(1)]The treatment depths are below 12 inches of aggregate improvement that is included in proposed pavement section.

As per IDOT District One, *in addition to the undercuts recommended in* Table 6, *we recommend that*

a plan quantity of Aggregate Subgrade Improvement (CU YD) equal to 25% of the planned full depth pavement area assuming a thickness of 12 inches should be added for estimating purposes. This material should be used to replace any unsuitable soils below the bottom of the improved subgrade layer that are encountered in the field during construction. The actual need for removal and replacement with Aggregate Subgrade Improvement should be determined in the field at the time of construction by the Geotechnical Engineer or soils inspector. 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. Any material not needed for undercut replacement at the time of construction should be deleted from the contract with no extra compensation to the contractor.

Based on the above recommendation, there will be a need for two separate Aggregate Subgrade Improvement line items in the Schedule of Quantities (SOQ) included in the design plans:

- *AGGREGATE SUBGRADE IMPROVEMENT 12" (SQ YD) – This will be used for the 12 inch aggregate subgrade improvement below new pavement sections and widening pavement sections.*
- *AGGREGATE SUBGRADE IMPROVEMENT (CU YD) – This will be used in locations where there are undercuts (below the 12 inch improved subgrade layer) where poor soils were removed.*

It should be noted that both above items refer to the IDOT Bureau of Design and Environment (BDE) Aggregate Subgrade Improvement Special Provision (April 1, 2022).

The actual need for removal and replacement of unstable and unsuitable soils, including the required width and depth of improvement shown in Table 6, should be determined in the field at the time of construction. The subgrade should be proofrolled and tested as outlined in Section 5.1.

As per IDOT District One, *we also recommend including a plan quantity of* ***geotechnical fabric for ground stabilization*** *(SQ YD) equal to at least 25% of the planned pavement area in addition to the areas in the Table 8. We recommend placing geotextile fabric at the base of undercut areas where low strength subgrade soils are encountered. The 12 inches of improved subgrade is not considered an undercut, and we do not recommend placing the fabric at the base of the proposed 12 inch improved subgrade layer unless it is determined to be necessary to achieve stability by the Geotechnical*

Engineer or soils inspector at the time of construction. Fabric should meet the requirements of Article 210, Fabric for Ground Stabilization, of the SSRBC. Any material not needed at time of construction should be deleted from the contract with no extra compensation to the contractor.

The frost depth for pavement design in northern Illinois could be expected to range from 45 to 60 inches (IDOT 2020). Within the frost susceptible depth, the samples tested in the laboratory generally measured silt and fine sand contents less than 65% and had plasticity indices greater than 12%. The borings encountered generally deep-seated groundwater except for 10 borings in which we measured the water table while drilling within the top 6.0 feet bgs. Therefore, Wang estimate the subgrade soils will exhibit low to medium frost susceptibility (IDOT 2020). Adequate drainage may suffice to alleviate any frost heave. Any highly moist soils, if not otherwise unsuitable or unstable, encountered within the exposed roadway subgrade should be disked, dried, and compacted before placing the new pavement structure.

5.3 Pavement Design Recommendations

For a Mechanistic Pavement Design (MPD), IDOT rates the subgrade using the Subgrade Support Rating (SSR). Laboratory testing on representative samples of the subgrade soil shows SSR ratings of POOR to FAIR (Exhibit 4). Considering the worst subgrade conditions, we recommend that an SSR of POOR be used for the purpose of pavement design. Pavement structure conforming to IDOT's MPD requires a minimum of 12 inches of improved subgrade below the design pavement structure to ensure stability during construction and long-term pavement performance (IDOT 2020).

For an AASHTO pavement design, the subgrade soil support is characterized using the Illinois Bearing Ratio (IBR). Based on soil tests and classifications (A-7), we recommend that the pavement be designed based on an IBR value of 2 (IDOT 2020).

5.4 Embankment and Cut Sections

Based on the cross sections drawings, the reconstruction will require both fill and cut sections. The proposed I-80 embankment widening will require the placement of up to 7.5 feet of new fill placed along the existing embankment slope and within the grassy median. Additionally, up to 7.0 feet of cuts into the existing embankment slopes are proposed to accommodate the widening. The embankment slopes will be graded at slopes of 1:4 to 1:6 (V:H). We have evaluated the potential long-term settlement and global slope stability of the cut and fill sections at critical sections along the proposed improvements using nearby soil borings.

5.4.1 Settlement

Wang performed settlement analysis along I-80 at selected critical sections where the highest new fill heights are proposed. Settlement estimates have been made based on correlations to measured index properties obtained from laboratory tests (Appendix B). In general, our evaluations, summarized in Table 7, show expected long-term settlements of one inch or less which are suitable for reconstruction of the roadway.

Table 7: Summary of Estimated Consolidation Settlements

Approximate Station	New Fill Height (feet)	Reference Boring(s)	Estimated Settlement (inches)
307+00	5.0	CL-SGB-24	0.2
353+00	6.0	WB-SGB-33 and OSB-15	0.3
378+00	5.5	CL-SGB-33 and OSB-08	0.2
382+00	7.5	EB-SGB-37	0.5

5.4.2 Global Stability

The proposed embankment and cut side slopes will be graded at slopes of 1:4 to 1:6 (V: H). The global stability at critical sections along I-80 was analyzed based on the soil information from the nearest borings. The analysis results indicate that the factors of safety (FOS) meet IDOT's minimum requirement of 1.5 for embankment and 1.7 for cuts. *Slide2* exhibits employing the Bishop Simplified method of analysis are shown in Appendix G.

5.5 Drainage Considerations

The proposed subgrade and pavement should have proper surface grading to prevent the pooling of water. The soils encountered beneath the proposed subgrade will exhibit poor to fair drainage characteristics. The fill material to be placed in support of the widening will likely be cohesive and will exhibit poor drainage characteristics. We recommend installing longitudinal pipe underdrains under the edge of new pavement in widening areas, and transverse pipe underdrains using a spacing of 300-foot, at the low points in the profile, and at the base of any undercuts. Any highly moist soils, if not otherwise unsuitable or unstable, encountered within the exposed roadway

subgrade should be disked or tilled, dried, and compacted before placing the new pavement structure.

6.0 CONSTRUCTION CONSIDERATIONS

6.1 Excavation, Dewatering, and Utilities

Excavations should be performed in accordance with local, state, and federal regulations. The potential effect of ground movements upon nearby utilities should be considered during construction. Excavations should be sloped at no steeper than 1:2 (V: H) for cohesive soils and 1:2.5 (V:H) for granular soils. Based on the cross sections, roadway cuts of up to 7.0 feet are proposed along the improvements. In some sections along I-80, between Stations 321+00 to 327+00, Stations 370+00 to 380+00, and Stations 390+00 to 410+00, the bedrock will be at depths of 2.0 to 6.0 feet bgs and will likely require bedrock excavation. Excavation for the roadway cut should be as per IDOT Section 202, *Earth and Rock Excavation* (IDOT 2022).

The excavations required for the cuts and undercuts generally will not require dewatering as the water table is seated deeper than the required excavation depths. However, the proposed cuts between Station 322+00 and 327+00 (Borings CL-SGB-26, EB-SGB-28, and OSB-01) will encounter groundwater within the granular subgrade which overlays the weathered bedrock and dewatering will be required at these locations. We do not anticipate the need for special dewatering systems. However, during and immediately following periods of heavy precipitation, the excavations may encounter perched groundwater within granular layers interbedded within cohesive layers. Therefore, the Contractor should ensure proper surface grading to prevent pooling of water and run-off into open excavations. Any water allowed to enter excavations should immediately be removed via sump pump.

6.2 Filling and Backfilling

Fill material used for replacement of any poor soils encountered during construction should be pre-approved by the Engineer. The fill material should be free of organic matter and debris and should be placed in lifts compacted in accordance with Section 205, *Embankment* (IDOT 2022). For new fill to be placed on existing slopes, we recommend benching the slopes according to IDOT embankment construction details.

The subgrade undercuts should be backfilled with material meeting the requirements of the IDOT Bureau of Design and Environment (BDE) Aggregate Subgrade Improvement Special Provision (April 1, 2022).

6.3 Reuse of Materials

Soil excavated from the existing subgrade may be reused as embankment fill if testing shows it conforms to the following criteria: a) L_L less than 50%; b) PI value of more than 12%; c) maximum dry density greater than 90 pcf according to AASHTO T99; and d) organic content less than 10%. The excavated soils should be removed, brought to within ±2% of the optimum moisture content and recompacted according to Section 205, *Embankment* (IDOT 2022).

6.4 Earthwork Operations

The required earthwork can be accomplished with conventional construction equipment. Moisture and traffic will cause deterioration of the exposed subgrade soils. Precautions should be taken by the Contractor to prevent water erosion of the exposed subgrade. A compacted subgrade will minimize water runoff erosion.

Earth moving operations should be scheduled to avoid excessive cold or wet weather (early spring, late fall or winter). Any soil allowed to freeze or soften due to the standing water should be removed. Wet weather can cause problems with subgrade compaction.

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

7.0 QUALIFICATIONS

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

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

Respectfully Submitted,

WANG ENGINEERING, INC.

Azza Hamad, PE
Senior Geotechnical Engineer

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

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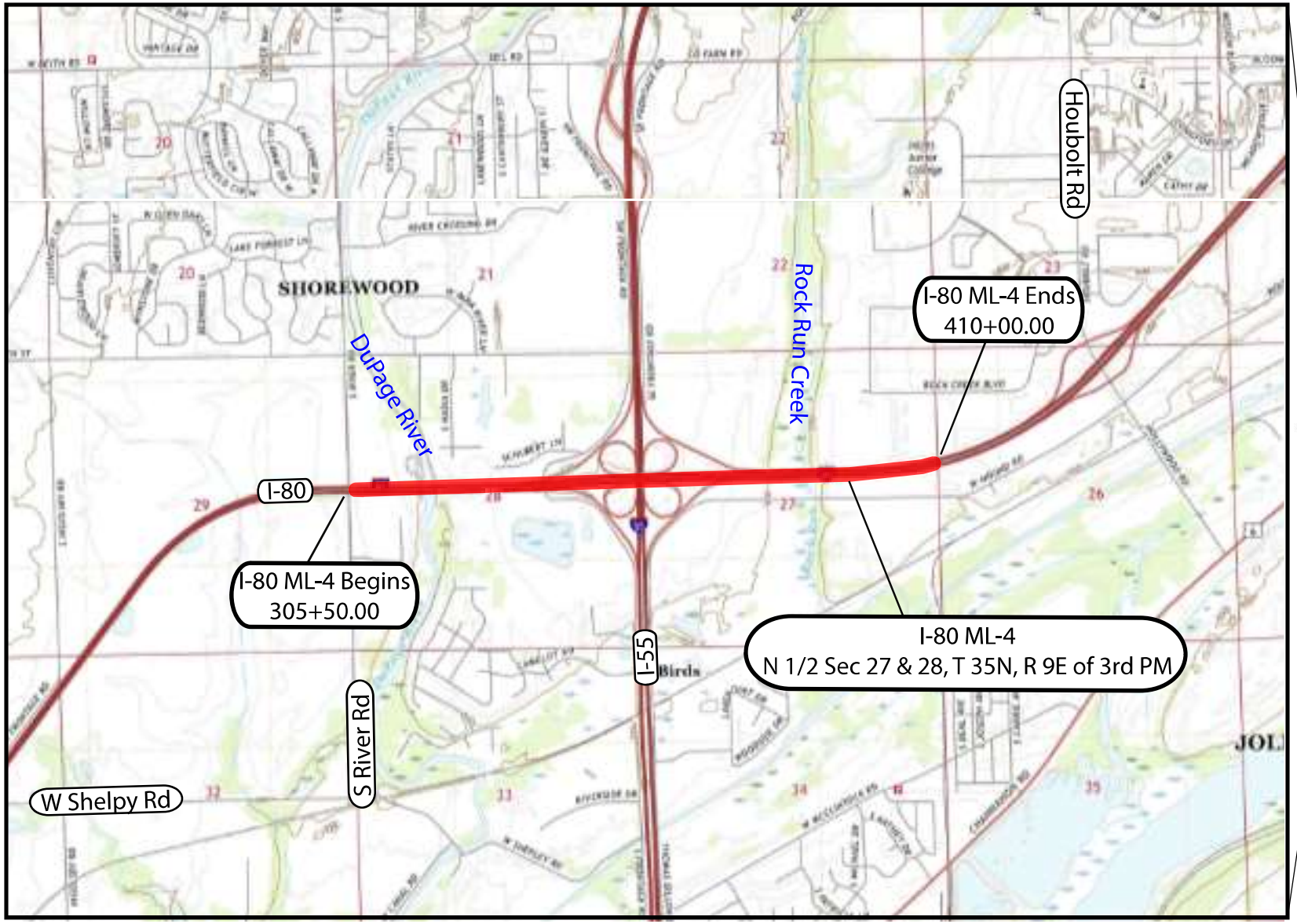
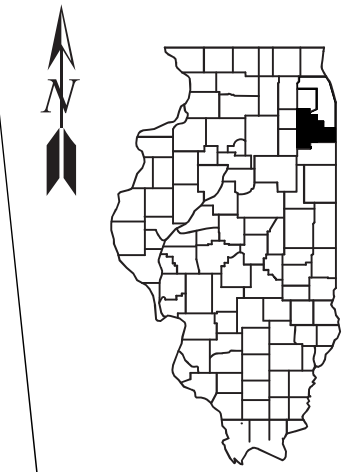
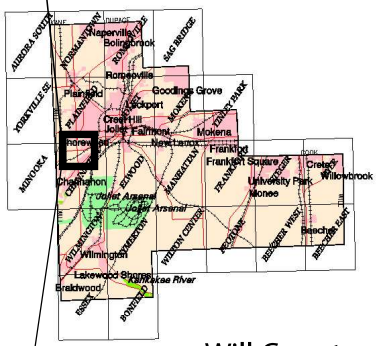
EXHIBITS







Will County

SITE LOCATION MAP: I-80 RECONSTRUCTION FROM RIVER RD TO HOUBOLT RD; ML-4, PTB 194/10, WILL COUNTY, ILLINOIS

SCALE: GRAPHICAL	EXHIBIT 1	DRAWN BY: J. Bensen CHECKED BY: A. Hamad

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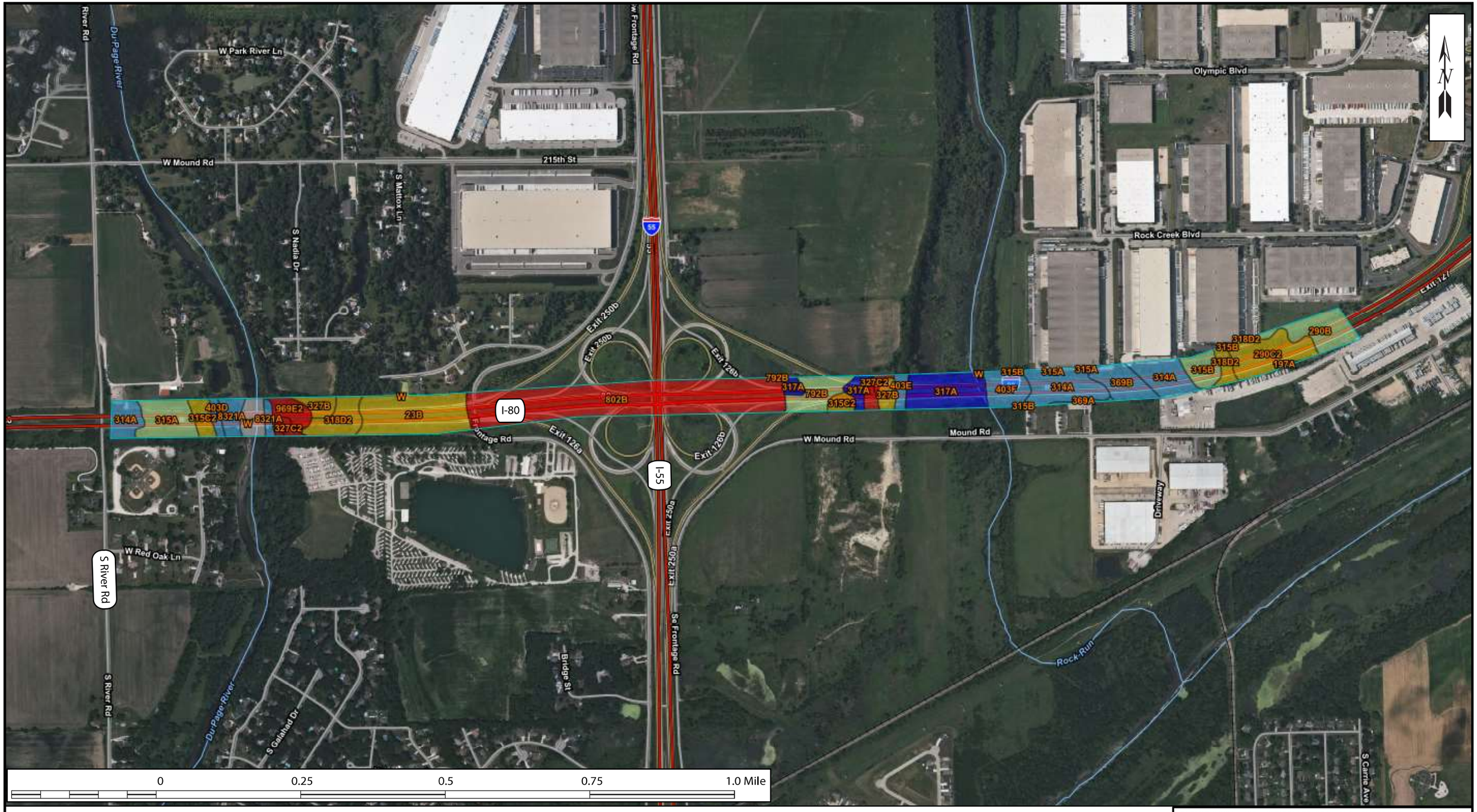

Organic Matter Soil Rating

- <= 0.82
- > 0.82 and <= 1.27
- > 1.27 and <= 1.50
- > 1.50 and <= 2.10
- > 2.10 and <= 3.82
- Not rated or not available

SITE PEDOLOGICAL MAP: I-80 RECONSTRUCTION FROM RIVER RD TO HOUBOLT RD; ML-4, PTB 194/10, WILL COUNTY, ILLINOIS

SCALE: GRAPHICAL	EXHIBIT 2-1	DRAWN BY: J. Bensen CHECKED BY: A. Hamad

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Map unit symbol and soil name	Depth	USDA texture	Classification	Pct Fragments		Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Organic matter	Liquid limit	Plasticity index	Erosion factors			Potential as a source of roadfill	Local Roads and Streets	Shallow Excavations
			AASHTO	>10 inches	3-10 inches									Kw	Kf	T	Rating class; and Limiting features	Rating class; and Limiting features	Rating class; and Limiting features
	In			*L-R-H*	*L-R-H*	*Pct*	*Pct*	*Pct*	*g/cc*	*micro m/sec*	*Pct*	*L-R-H*	*L-R-H*						
23B—Blount silt loam, Lake Michigan Lobe, 2 to 4 percent slopes																			
Blount, lake michigan lobe	0-6	Silt loam	A-6, A-7-6	0- 0- 0	0-1-3	5-12-20	53-66-77	18-22-27	1.25-1.35-1.45	4.23-9.17-14.11	2.0-2.5-3.0	31-37-43	11-14-18	0.37	0.37	3	Poor; Low strength, Wetness, Dusty	Very limited; Frost action, Low strength, Depth to saturated zone, Ponding, Shrink-swell	Very limited; Depth to saturated zone, Dusty, Unstable excavation walls, Ponding, Too clayey
	6-10	Silt loam	A-4, A-6	0- 0- 0	0-1-3	5-12-20	53-67-80	15-21-27	1.30-1.40-1.55	4.23-9.17-14.11	0.2-0.6-1.0	25-32-39	9-14-19	0.55	0.55				
	10-28	silty clay loam, silty clay, clay loam	A-7-6	0-1-1	0-1-3	5-15-25	27-43-60	35-42-48	1.40-1.50-1.55	0.42-2.33-4.23	0.2-0.6-1.0	44-51-58	25-30-35	0.32	0.32				
	28-34	silty clay loam, clay loam, silty clay	A-6, A-7-6	0-1-1	0-3-4	5-15-25	30-49-68	27-36-45	1.50-1.55-1.70	0.42-0.92-1.41	0.0-0.3-0.5	37-46-55	19-26-32	0.37	0.37				
	34-60	silty clay loam	A-6, A-7-6	0-1-1	0-2-4	5-15-20	40-55-68	27-30-40	1.60-1.75-1.90	0.42-0.92-1.41	0.0-0.3-0.5	35-39-49	18-21-28	0.43	0.43				
197A—Troxel silt loam, 0 to 2 percent slopes																			
Troxel	0-7	Silt loam	A-4, A-6	0- 0- 0	0- 0- 0	2-9-15	58-69-80	18-23-27	1.20-1.30-1.40	4.23-9.17-14.11	3.0-4.0-5.0	20-25-30	5-10-15	0.32	0.32	5	Poor; Low strength, Shrink-swell, Dusty	Very limited; Frost action, Low strength	Somewhat limited; Depth to saturated zone, Dusty, Unstable excavation walls
	7-32	Silt loam	A-4, A-6	0- 0- 0	0- 0- 0	2-9-15	58-67-80	18-24-27	1.30-1.40-1.50	4.23-9.17-14.11	1.0-2.0-3.0	20-25-35	5-13-20	0.43	0.43				
	32-62	Silty clay loam, silt loam	A-6, A-7-6	0- 0- 0	0- 0- 0	2-12-20	50-58-73	25-30-35	1.35-1.45-1.55	4.23-9.17-14.11	0.2-0.6-1.0	25-35-45	10-18-25	0.37	0.37				
	62-80	Stratified sandy loam to gravelly clay loam	A-2-4, A-2-6, A-4, A-6	0-0-1	0-3-4	15-40-60	5-35-70	15-25-35	1.0-1.52-1.65	4.23-9.17-14.11	0.1-0.3-0.5	20-30-35	5-13-20	0.20	0.32				
290B—Warsaw silt loam, 2 to 4 percent slopes																			
Warsaw	0-10	Silt loam	A-4, A-6, A-7-6	0- 0- 0	0- 0- 0	10-20-30	50-60-75	15-20-25	1.30-1.40-1.50	4.23-9.17-14.11	2.5-3.3-4.0	30-37-43	9-13-17	0.32	0.32	3	Fair; Dusty	Somewhat limited; Frost action, Low strength, Shrink-swell, Depth to saturated zone	Somewhat limited; Dusty, Unstable excavation walls
	10-24	Sandy clay loam, loam, clay loam, silty clay loam	A-6, A-7-6	0- 0- 0	0-1-3	10-35-60	8-36-70	20-29-32	1.35-1.48-1.60	4.23-9.17-14.11	0.5-1.3-2.0	32-42-47	13-20-23	0.28	0.28				
	24-34	Gravelly loam, gravelly sandy clay loam, gravelly clay loam, gravelly sandy loam	A-2-6, A-2-7, A-6, A-7-6	0-0-1	0-2-4	30-53-70	0-22-50	18-25-30	1.40-1.53-1.65	4.23-9.17-14.11	0.2-1.0-1.5	29-38-44	12-17-21	0.15	0.24				
	34-60	Stratified gravelly loamy sand to extremely gravelly coarse sand	A-1-a, A-1-b, A-3	0-1-1	1-2-3	80-85-98	0-10-18	2-5-8	1.50-1.60-1.70	141.14-423.42-705.00	0.0-0.3-0.5	0-17-21	NP-2-4	0.02	0.02				
290C2—Warsaw silt loam, 4 to 6 percent slopes, eroded																			
Warsaw	0-8	Silt loam	A-4, A-6	0- 0- 0	0- 0- 0	10-20-30	50-60-75	15-20-25	1.30-1.40-1.50	4.23-9.17-14.11	2.0-2.5-3.0	20-25-30	4-10-15	0.43	0.43	3	Fair; Dusty	Somewhat limited; Frost action, Shrink-swell	Somewhat limited; Dusty, Unstable excavation walls
	8-16	sandy silty clay, loam, clay loam, silty clay loam	A-4, A-6	0- 0- 0	0-1-3	10-18-60	8-53-70	20-29-32	1.35-1.48-1.60	4.23-9.17-14.11	0.5-1.3-2.0	20-30-40	8-14-20	0.37	0.37				
	16-27	Gravelly loam, gravelly sandy clay loam, gravelly clay loam, gravelly sandy loam	A-2-4, A-2-6, A-4, A-6	0-0-1	0-2-4	30-43-70	0-28-50	18-29-30	1.40-1.53-1.65	4.23-9.17-14.11	0.2-1.0-1.5	20-28-35	5-13-20	0.15	0.24				
	27-60	Stratified gravelly loamy sand to extremely gravelly coarse sand	A-1-a	0-1-1	1-2-3	80-85-98	0-10-18	2-5-8	1.50-1.60-1.70	141.14-423.42-705.00	0.0-0.3-0.5	0-8-15	NP	0.02	0.05				
314A—Joliet silt loam, 0 to 2 percent slopes																			
Joliet	0-15	Silt loam	A-4, A-6	0- 1- 1	0-3-5	10-20-30	50-58-72	18-22-27	1.15-1.25-1.35	4.23-9.17-14.11	4.0-4.5-5.0	25-33-40	7-14-20	0.37	0.37	1	Poor; Depth to bedrock, Low Strength, Dusty, Shrink-swell	Very limited; Depth to hard bedrock, Ponding, Depth to saturated zone, Frost action, Low strength	Very limited; Depth to hard bedrock, Depth to saturated zone, Ponding, Dusty, Unstable excavation walls
	15-19	Loam, clay loam, silty clay loam	A-6, A-7-6	0- 1- 1	0-3-4	15-18-50	15-52-60	23-30-33	1.35-1.45-1.55	4.23-9.17-14.11	0.5-1.3-2.0	30-40-50	20-28-35	0.43	0.43				
	19-60	Bedrock	-	-	-	-	-	-	-	0.42-2.33-4.23	-	-	-						
315A—Channahon silt loam, 0 to 2 percent slopes																			
Channahon	0-8	Silt loam	A-4, A-6	0-0-1	0-1-4	10-20-30	50-58-72	18-22-27	1.20-1.30-1.40	4.23-9.17-14.11	2.0-3.0-4.0	20-30-40	7-14-20	0.32	0.32	1	Poor; Depth to bedrock, Low Strength, Dusty, Shrink-swell	Very limited; Depth to hard bedrock, Frost action, Low strength, Shrink-swell	Very limited; Depth to hard bedrock, Dusty, Unstable excavation walls
	8-16	Loam, silt loam, silty clay loam, clay loam	A-6, A-7-6	0- 1- 1	0-3-10	15-22-50	15-52-60	25-26-35	1.35-1.47-1.60	4.23-9.17-14.11	0.0-0.7-1.5	30-38-45	15-20-25	0.43	0.43				
	16-60	Bedrock	-	-	-	-	-	-	-	0.42-2.33-4.23	-	-	-						
315B—Channahon silt loam, 2 to 4 percent slopes																			
Channahon	0-11	Silt loam	A-4, A-6	0-0-1	0-1-4	10-20-30	50-58-72	18-22-27	1.20-1.30-1.40	4.23-9.17-14.11	2.0-3.0-4.0	20-30-40	7-14-20	0.43	0.43	1	Poor; Depth to bedrock, Low Strength, Dusty, Shrink-swell	Very limited; Depth to hard bedrock, Frost action, Low strength, Shrink-swell	Very limited; Depth to hard bedrock, Dusty, Unstable excavation walls
	11-18	Loam, silt loam, silty clay loam, clay loam	A-6, A-7-6	0- 1- 1	0-3-10	15-18-50	15-52-60	25-30-35	1.35-1.47-1.60	4.23-9.17-14.11	0.0-0.7-1.5	30-38-45	15-20-25	0.43	0.43				
	18-60	Bedrock	-	-	-	-	-	-	-	0.42-2.33-4.23	-	-	-						

Source: USDA, Natural Resources Conservation Service; Web Soil Survey
Soil Survey Area: Will County, Illinois
Survey Area Data: Version 16, Aug 31, 2021

SITE PEDOLOGICAL MAP: I-80 RECONSTRUCTION FROM RIVER RD TO HOUBOLT RD; ML-4, PTB 194/10, WILL COUNTY, ILLINOIS

SCALE: GRAPHICAL | EXHIBIT 2-2 | DRAWN BY: J. Bensen, CHECKED BY: A. Hamad

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Map unit symbol and soil name	Depth	USDA texture	Classification	Pct Fragments		Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Organic matter	Liquid limit	Plasticity index	Erosion factors			Potential as a source of roadfill	Local Roads and Streets	Shallow Excavations
			AASHTO	>10 inches	3-10 inches									Kw	Kf	T	Rating class; and Limiting features	Rating class; and Limiting features	Rating class; and Limiting features
	In			*L-R-H*	*L-R-H*	*Pct*	*Pct*	*Pct*	*g/cc*	*micro m/sec*	*Pct*	*L-R-H*	*L-R-H*						
315C2—Channahon silt loam, 4 to 6 percent slopes, eroded																			
Channahon	0-6	Silt loam	A-4, A-6	0-0-1	0-1-4	10-20-30	50-58-72	18-22-27	1.20-1.30-1.40	4.23-9.17-14.11	2.0-3.0-4.0	20-30-40	7-14-20	0.43	0.43		Poor; Depth to bedrock, Low Strength, Dusty, Shrink-swell	Very limited; Depth to hard bedrock, Frost action, Low strength, Shrink-swell	Very limited; Depth to hard bedrock, Dusty, Unstable excavation walls
	6-13	Clay loam, silty clay loam, silt loam, loam	A-6, A-7-6	0- 1- 1	0-3-10	15-35-50	15-39-60	25-26-35	1.35-1.47-1.60	4.23-9.17-14.11	0.0-0.7-1.5	30-38-45	15-20-25	0.37	0.37	1			
	13-60	Bedrock	-	-	-	-	-	-	-	0.42-2.33-4.23	-	-	-						
317A—Millsdale silty clay loam, 0 to 2 percent slopes																			
Millsdale	0-18	Silty clay loam	A-6, A-7-6	0- 0- 0	0- 0- 0	5-10-20	45-60-68	27-30-35	1.30-1.40-1.50	4.23-9.17-14.11	4.0-5.5-7.0	30-40-50	12-19-25	0.32	0.32		Poor; Wetness, Depth to bedrock, Low Strength, Dusty, Shrink-swell	Very limited; Depth to saturated zone, Ponding, Shrink-swell, Frost action, Low strength	Very limited; Depth to hard bedrock, Dusty, Unstable excavation walls, Ponding, Depth to saturated zone
	18-36	Silty clay,silty clay loam, clay loam	A-7-6	0- 0- 0	0-3-4	5-14-35	30-47-60	35-39-45	1.40-1.53-1.65	1.41-2.82-4.23	0.2-1.3-2.5	40-50-60	20-28-35	0.32	0.32	2			
	36-60	Bedrock	-	-	-	-	-	-	-	0.42-2.33-4.23	-	-	-						
318D2—Lorenzo loam, 6 to 12 percent slopes, eroded																			
Lorenzo	0-5	Loam	A-4, A-6	0- 0- 0	0-3-5	25-32-40	33-45-50	18-23-27	1.25-1.33-1.40	4.23-9.17-14.11	2.0-2.5-3.0	25-33-40	10-15-20	0.28	0.28		Good	Somewhat limited; Frost action, Slope	Very limited; Slope, Dusty, Unstable excavation walls
	5-15	Loam, clay loam, gravelly sandy clay loam	A-2-4, A-6, A-7-6	0- 0- 0	1-2-8	30-42-75	5-28-50	20-30-35	1.60-1.65-1.70	14.11-28.23-42.34	0.0-0.5-1.0	30-38-45	10-18-25	0.20	0.20	2			
	15-60	Stratified gravelly loamy sand to extremely gravelly coarse sand	A-1-a, A-1-b	0- 0- 0	4-9-13	85-92-99	0-5-14	1-3-5	1.60-1.70-1.80	141.14-423.42-705.00	0.0-0.3-0.5	0-8-15	NP-3-5	0.02	0.02				
327B—Fox silt loam, 2 to 4 percent slopes																			
Fox	0-4	Silt loam	A-4, A-6	0- 0- 0	0- 0- 0	5-18-30	50-62-80	15-20-25	1.30-1.40-1.45	4.23-9.17-14.11	1.0-2.0-3.0	27-34-41	9-13-17	0.37	0.37		Fair; Dusty	Somewhat limited; Frost action, Low strength, Depth to saturated zone, Shrink-swell	Somewhat limited; Depth to saturated zone, Dusty, Unstable excavation walls
	4-7	Silt loam	A-4, A-6	0- 0- 0	0- 0- 0	5-18-30	50-63-80	15-19-25	1.35-1.45-1.55	4.23-9.17-14.11	0.2-0.6-1.0	25-30-37	9-12-17	0.49	0.49				
	7-13	silty clay loam, silt loam	A-6, A-7-6	0- 0- 0	0-1-1	5-18-30	50-50-77	18-32-35	1.50-1.57-1.65	4.23-9.17-14.11	0.2-0.3-0.5	29-42-46	12-23-25	0.37	0.37				
	13-28	Clay loam, sandy clay loam, gravelly loam	A-2-6, A-2-7, A-6, A-7-6	0-1-1	0-1-4	20-42-75	5-26-50	18-32-35	1.55-1.60-1.65	4.23-9.17-14.11	0.0-0.3-0.5	29-42-46	12-23-25	0.24	0.24	3			
	28-60	Stratified gravelly sand to extremely gravelly coarse sand	A-1-a, A-1-b, A-3	0-1-2	0-4-7	90-92-98	0-7-10	0-1-2	1.45-1.58-1.70	141.14-423.42-705.00	0.0-0.3-0.5	0-0-14	NP	0.02	0.02				
327C2—Fox silt loam, 4 to 6 percent slopes, eroded																			
Fox, eroded	0-4	Silt loam	A-4, A-6	0- 0- 0	0- 0- 0	5-18-30	50-62-80	15-20-25	1.30-1.40-1.50	4.23-9.17-14.11	1.0-1.5-2.0	27-33-39	9-13-17	0.43	0.43		Fair; Dusty	Somewhat limited; Frost action, Low strength, Depth to saturated zone, Shrink-swell	Somewhat limited; Depth to saturated zone, Dusty, Unstable excavation walls
	4-12	silty clay loam, silt loam	A-6, A-7-6	0- 0- 0	0-1-1	5-18-30	50-50-77	18-32-35	1.50-1.57-1.65	4.23-9.17-14.11	0.2-0.3-0.5	29-42-46	12-23-25	0.37	0.37				
	12-24	Clay loam, sandy clay loam, gravelly loam	A-2-6, A-2-7, A-6, A-7-6	0-1-1	0-1-4	20-42-75	5-26-50	18-32-35	1.55-1.60-1.65	4.23-9.17-14.11	0.0-0.3-0.5	29-42-46	12-23-25	0.24	0.24	3			
	24-60	Stratified gravelly sand to extremely gravelly coarse sand	A-1-a, A-1-b, A-3	0-1-2	0-4-7	90-92-98	0-7-10	0-1-2	1.45-1.58-1.70	141.14-423.42-705.00	0.0-0.3-0.5	0-0-14	NP	0.02	0.02				
369A—Waupecan silt loam, 0 to 2 percent slopes																			
Waupecan	0-14	Silt loam	A-4, A-6	0- 0- 0	0- 0- 0	5-10-15	68-69-80	15-21-27	1.15-1.25-1.35	4.23-9.17-14.11	3.0-4.0-5.0	20-28-35	8-12-15	0.32	0.32		Poor; Low strength, Dusty	Very limited; Frost action, Low strength, Shrink-swell	Somewhat limited; Dusty, Unstable excavation walls
	14-35	Silty clay loam, silt loam	A-6, A-7-6	0- 0- 0	0- 0- 0	5-10-15	50-60-70	25-30-35	1.30-1.40-1.50	4.23-9.17-14.11	0.5-0.8-1.0	35-40-45	15-20-25	0.43	0.43				
	35-49	Stratified gravelly loamy sand to sandy clay loam	A-2-4, A-4	0- 0- 0	0- 0- 0	35-55-75	5-28-50	10-18-25	1.55-1.65-1.75	4.23-23.29-42.34	0.2-0.3-0.5	0-10-20	NP-5-10	0.15	0.28	4			
	49-67	Stratified gravelly loamy sand to extremely gravelly coarse sand	A-1-a, A-1-b	0-2-3	4-15-23	85-92-99	0-3-15	0-5-10	1.60-1.70-1.80	141.14-423.42-705.00	0.0-0.3-0.5	0-7-14	NP	0.02	0.02				
369B—Waupecan silt loam, 2 to 4 percent slopes																			
Waupecan	0-11	Silt loam	A-4, A-6, A-7-6	0- 0- 0	0- 0- 0	5-10-15	68-69-80	15-21-27	1.15-1.25-1.35	4.23-9.17-14.11	3.0-4.0-5.0	31-39-47	9-14-18	037	0.37		Poor; Low strength, Dusty, Shrink-swell	Very limited; Frost action, Low strength, Shrink-swell, Depth to saturated zone	Somewhat limited; Dusty, Unstable excavation walls, Depth to saturated zone
	11-39	Silty clay loam, silt loam	A-6, A-7-6	0- 0- 0	0- 0- 0	5-10-15	50-60-70	25-30-35	1.30-1.40-1.50	4.23-9.17-14.11	0.5-0.8-1.0	36-42-47	17-21-25	0.43	0.43				
	39-45	Clay loam, sandy clay loam, gravelly loam, gravelly sandy loam	A-2-4, A-2-6, A-4, A-6	0- 0- 0	1-4-9	35-50-75	5-32-50	10-18-30	1.55-1.65-1.75	4.23-23.29-42.34	0.2-0.3-0.5	21-29-40	6-12-21	0.15	0.28	4			
	45-60	Stratified gravelly loamy sand to extremely gravelly coarse sand	A-1-a, A-1-b	0-2-3	4-12-36	80-92-99	0-3-20	0-5-10	1.60-1.70-1.80	141.14-423.42-705.00	0.0-0.3-0.5	0-17-23	NP-2-6	0.02	0.02				

Source: USDA, Natural Resources Conservation Service; Web Soil Survey
Soil Survey Area: Will County, Illinois
Survey Area Data: Version 16, Aug 31, 2021

SITE PEDOLOGICAL MAP: I-80 RECONSTRUCTION FROM RIVER RD TO HOUBOLT RD; ML-4, PTB 194/10, WILL COUNTY, ILLINOIS

SCALE: GRAPHICAL | EXHIBIT 2-3 | DRAWN BY: J. Bensen, CHECKED BY: A. Hamad

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1145 N. Main Street
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FOR STANTEC | 255-39-01

Map unit symbol and soil name	Depth	USDA texture	Classification	Pct Fragments		Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Organic matter	Liquid limit	Plasticity index	Erosion factors			Potential as a source of roadfill	Local Roads and Streets	Shallow Excavations
			AASHTO	>10 inches	3-10 inches									Kw	Kf	T	Rating class; and Limiting features	Rating class; and Limiting features	Rating class; and Limiting features
	In			*L-R-H*	*L-R-H*	*Pct*	*Pct*	*Pct*	*g/cc*	*micro m/sec*	*Pct*	*L-R-H*	*L-R-H*						
403D—Elizabeth silt loam, 6 to 12 percent slopes																			
Elizabeth	0-4	Silt loam	A-6, A-7-6	0-0-1	0-1-5	5-20-35	50-58-77	18-23-27	1.15-1.20-1.25	4.23-9.17-14.11	2.5-3.8-5.0	30-38-45	10-15-20	0.32	0.32	1	Poor; Depth to bedrock, Low strength, Dusty, Cobble content	Very limited; Depth to hard bedrock, Frost action, Low strength, Soluble bedrock, Slope	Very limited; Depth to hard bedrock, Dusty, Slope, Unstable excavation walls
	4-7	Cobbly silt loam, silt loam, loam, clay loam	A-6, A-7-6	0-1-4	0-5-31	5-23-40	30-53-77	18-24-35	1.25-1.35-1.45	4.23-9.17-14.11	1.0-2.0-3.0	30-38-45	10-15-20	0.37	0.37				
	7-12	Very cobbly silt loam, extremely cobbly loam, very cobbly loam, extremely cobbly clay loam	A-6	0-6-13	41-51-65	5-23-40	30-53-77	18-24-35	1.30-1.40-1.50	4.23-9.17-14.11	1.0-1.5-2.9	25-33-40	10-15-20	0.10	0.43				
	12-60	Bedrock	-	-	-	-	-	-	-	0.42-2.33-4.23	-	-	-						
403E—Elizabeth silt loam, 12 to 20 percent slopes																			
Elizabeth	0-5	Silt loam	A-6, A-7-6	0-0-1	0-1-5	5-20-32	50-58-77	18-23-27	1.15-1.20-1.25	4.23-9.17-14.11	2.5-3.8-5.0	30-38-45	10-15-20	037	0.37	1	Poor; Depth to bedrock, Low strength, Dusty, Cobble content	Very limited; Depth to hard bedrock, Frost action, Low strength, Soluble bedrock, Slope	Very limited; Depth to hard bedrock, Dusty, Slope, Unstable excavation walls
	5-13	Cobbly silt loam, silt loam, loam, clay loam	A-6, A-7-6	0-1-4	0-5-31	5-30-40	30-46-77	18-24-35	1.25-1.35-1.45	4.23-9.17-14.11	1.0-2.0-3.0	30-38-45	10-15-20	0.37	0.37				
	13-16	Very cobbly silt loam, extremely cobbly loam, very cobbly loam, extremely cobbly clay loam	A-6	0-6-13	41-51-65	5-35-40	30-41-77	18-24-35	1.30-1.40-1.50	4.23-9.17-14.11	1.0-1.5-2.0	25-33-40	10-15-20	0.10	0.37				
	16-60	Bedrock	-	-	-	-	-	-	-	0.42-2.33-4.23	-	-	-						
403F—Elizabeth silt loam, 20 to 30 percent slopes																			
Elizabeth	0-6	Silt loam	A-6, A-7-6	0-0-1	0-1-5	5-20-32	50-58-77	18-23-27	1.15-1.20-1.25	4.23-9.17-14.11	2.5-3.8-5.0	30-38-45	10-15-20	037	0.37	1	Poor; Depth to bedrock, Slope, Low strength, Dusty, Cobble content	Very limited; Depth to hard bedrock, Frost action, Low strength, Soluble bedrock, Slope	Very limited; Depth to hard bedrock, Dusty, Slope, Unstable excavation walls
	6-11	Cobbly silt loam, clay loam, loam, silt loam	A-6, A-7-6	0-3-4	0-21-31	5-23-40	30-53-77	18-24-35	1.25-1.35-1.45	4.23-9.17-14.11	1.0-2.0-3.0	30-38-45	10-15-20	0.20	0.43				
	11-14	Very cobbly loam, very cobbly loam, extremely cobbly clay loam, very cobbly silt loam	A-6	0-6-13	41-51-65	5-23-40	30-53-77	18-24-35	1.30-1.40-1.50	4.23-9.17-14.11	1.0-1.5-2.0	25-33-40	10-15-20	0.10	0.43				
	14-60	Bedrock	-	-	-	-	-	-	-	0.42-2.33-4.23	-	-	-						
792B—Bowes silt loam, 2 to 4 percent slopes																			
Bowes	0-8	Silt loam	A-4, A-6	0- 0- 0	0- 0- 0	0-6-10	63-72-82	18-22-27	1.30-1.40-1.50	4.23-9.17-14.11	2.0-3.0-4.0	25-30-35	5-13-20	0.32	0.32	4	Fair; Dusty, Shrink-swell	Very limited; Frost action, Low strength, Shrink-swell	Somewhat limited; Dusty, Unstable excavation walls
	8-12	Silt loam	A-4, A-6	0- 0- 0	0- 0- 0	0-6-10	65-74-85	15-20-25	1.35-1.45-1.55	4.23-9.17-14.11	0.5-1.0-1.5	20-25-30	5-10-15	0.49	0.49				
	12-37	silty clay loam, silt loam	A-6, A-7-6	0- 0- 0	0- 0- 0	0-6-10	55-63-75	25-31-35	1.30-1.40-1.50	4.23-9.17-14.11	0.2-0.6-1.0	35-40-45	15-20-25	0.43	0.43				
	37-43	Gravelly clay loam, gravelly sandy loam, very gravelly loamy sand	A-2-4, A-4, A-6	0-1-1	0-4-4	30-35-85	2-35-50	10-30-32	1.55-1.65-1.75	4.23-23.29-42.34	0.1-0.3-0.5	10-20-30	NP-8-15	0.10	0.24				
	43-70	Stratified extremely gravelly coarse sand to gravelly sandy loam	A-1-a, A-1-b	0-1-1	4-11-23	75-87-98	0-7-23	2-6-10	1.60-1.70-1.80	141.14-423.42-705.00	0.0-0.3-0.5	0-10-20	NP-2-3	0.02	0.10				
802B—Orthents, loamy, undulating																			
Orthents, loamy,	0-7	Loam	A-6, A-7-6	0- 0- 0	0-2-4	23-40-50	28-40-50	22-25-27	1.70-1.73-1.75	1.41-2.82-4.23	0.5-1.3-2.0	32-37-41	15-17-19	0.37	0.37	5	Poor; Low strength, Shrink-	Somewhat limited; Frost action, Low	Somewhat limited; Depth to saturated zone,
	7-60	Loam, silt loam, clay loam	A-6, A-7-6	0-1-1	0-2-4	20-38-50	25-35-58	22-28-30	1.70-1.75-1.80	1.41-2.82-4.23	0.2-0.6-1.0	33-39-43	15-19-21	0.32	0.32				
969E2—Casco-Rodman complex, 12 to 20 percent slopes, eroded																			
Casco, eroded	0-5	Loam	A-4, A-6	0- 0- 0	0-3-4	25-37-50	28-44-50	12-19-25	1.35-1.45-1.55	4.23-9.17-14.11	1.0-1.5-2.0	24-32-39	7-12-17	0.32	0.32	2	Fair; Slope, Dusty	Very limited; Slope, Frost action	Very limited; Slope, Unstable excavation walls, Dusty, Depth to saturated zone
	5-19	Gravelly clay loam, sandy clay loam, gravelly loam	A-2-6, A-2-7, A-6, A-7-6	0- 1- 1	0-1-4	20-40-60	10-32-50	18-28-35	1.55-1.60-1.65	4.23-9.17-14.11	0.2-0.6-1.0	29-40-47	12-20-25	0.17	0.28				
	19-60	Stratified sand to extremely gravelly coarse sand	A-1-a, A-1-b, A-2-4, A-3	0-1-2	0-9-21	87-92-98	0-6-13	0-2-5	1.45-1.57-1.70	141.14-423.42-705.00	0.0-0.3-0.5	0-0-19	NP-0-2	0.02	0.02				
Rodman, eroded	0-6	Gravelly loam	A-4, A-6	0- 0- 0	0-1-1	30-39-52	23-44-55	8-17-25	1.20-1.35-1.50	14.11-28.23-42.34	2.0-2.5-3.0	23-32-41	4-11-17	0.15	0.28	5	Fair; Slope	Very limited; Slope	Very limited; Slope, Unstable excavation walls, Dusty, Depth to saturated zone
	6-10	Gravelly loam, sandy loam, loam	A-1-b, A-2-4, A-2-6, A-4, A-6	0- 0- 0	0-1-2	40-50-80	0-35-55	5-15-25	1.10-1.30-1.50	14.11-28.23-42.34	0.0-1.0-2.0	16-28-39	2-9-17	0.17	0.32				
	10-60	Stratified very gravelly loamy sand to extremely gravelly coarse sand	A-1-a	0- 1- 1	1-2-3	85-92-98	0-4-15	0-5-10	1.60-1.65-1.70	141.14-423.42-705.00	0.0-1.5-2.9	0-18-24	NP-2-6	0.02	0.02				
8321A—Du Page silt loam, 0 to 2 percent slopes, occasionally flooded																			
Du page	0-30	Silt loam	A-6, A-7-6	0- 0- 0	0- 0- 0	5-18-30	50-60-77	18-23-27	1.35-1.45-1.55	4.23-9.17-14.11	3.0-4.0-5.0	30-38-45	11-16-21	0.32	0.32	5	Fair; Dusty	Very limited; Flooding, Frost action, Low strength	Somewhat limited; Flooding, Dusty, Unstable excavation walls, Depth to saturated zone
	30-35	Silt loam, sandy loam, loam, gravelly sandy clay loam	A-4, A-6, A-7-6	0- 0- 0	0- 0- 0	15-38-60	20-40-65	18-23-27	1.45-1.55-1.65	4.23-9.17-14.11	0.5-1.8-3.0	25-35-45	7-14-20	0.32	0.32				
	35-60	Stratified silt loam to gravelly sandy clay loam	A-4, A-6	0- 0- 0	0- 0- 0	15-40-65	11-45-75	6-15-24	1.50-1.60-1.70	4.23-9.17-14.11	0.2-0.6-1.0	15-28-40	5-13-20	0.43	0.43				

Source: USDA, Natural Resources Conservation Service; Web Soil Survey
Soil Survey Area: Will County, Illinois
Survey Area Data: Version 16, Aug 31, 2021

SITE PEDOLOGICAL MAP: I-80 RECONSTRUCTION FROM RIVER RD TO HOUBOLT RD; ML-4, PTB 194/10, WILL COUNTY, ILLINOIS

SCALE: GRAPHICAL | EXHIBIT 2-4 | DRAWN BY: J. Bensen, CHECKED BY: A. Hamad

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FOR STANTEC | 255-39-01

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APPENDIX A

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BORING LOG CL-SGB-24

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 571.51 ft
North: 1755228.93 ft
East: 1016592.54 ft
Station: 307+82.06
Offset: 11.7 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	571.0	6-inch thick, brown SILTY CLAY LOAM						
		--TOPSOIL--						
		Stiff to hard, muddled brown, black and gray SILTY CLAY LOAM to SILTY CLAY, trace gravel; damp to moist			1	3 4 4 4	3.25 P	15
		--FILL--						
		--organic content= 14.0%--				4		
		--L_L(%)=55, P_L(%)=22--			2	4 4 4	1.39 B	30
	568.0	--%Gravel=0.7--						
		--%Sand=15.4--						
		--%Silt=56.9--						
		--%Clay=27.0--				3		
		--A-7-6 (29)--			3	5	NP	29
	566.5	Very dense, brown SILTY LOAM, trace gravel; damp to moist	5			100/6"		
		--Weathered SHALE--						
		Very dense, gray SANDY GRAVEL, dolostone fragments; damp			4	100/5"	NP	3
		--RDR 4-5--						
	563.1							
		Brown LOAM, little gravel; saturated			5	24 100/6"	NP	3
	562.5	--Sampler REFUSAL--						
		Boring terminated at 9.00 ft	10					
			15					

GENERAL NOTES

Begin Drilling **08-03-2021** Complete Drilling **08-03-2021**
Drilling Contractor **Wang Testing Services** Drill Rig **21GeoT[92%]**
Driller **NC&AG** Logger **E. Yim** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **8.50 ft**
At Completion of Drilling ▼ **5.00 ft**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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BORING LOG CL-SGB-25

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 568.78 ft
North: 1755235.88 ft
East: 1017201.57 ft
Station: 313+91.13
Offset: 14.8 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	568.5	3-inch thick, brown SILTY CLAY LOAM						
		--TOPSOIL--						
		Very stiff to hard, brown SILTY CLAY, trace gravel; damp			1	3 6 3 3	2.00 P	15
		--FILL--						
		--RDR 2--			2	6 7 9 8	> 4.50 P	15
			5		3	4 7 9 9	6.31 B	16
	563.0	Medium dense, black SILTY LOAM, little gravel; damp						
		--FILL--			4	6 5 7 8	NP	15
	560.5	Very stiff, black SILTY CLAY LOAM; damp						
	559.8	--Buried TOPSOIL--			5	4 4 8 9	3.00 P	29
	559.3	Very stiff, gray SILTY CLAY; damp	10					
		Medium dense, brown SILTY LOAM, trace to little gravel; moist			6	13 12 10 9	1.50 P	20
		--Weathered SHALE--						
	556.8	Boring terminated at 12.00 ft	15					

GENERAL NOTES

Begin Drilling **08-03-2021** Complete Drilling **08-03-2021**
Drilling Contractor **Wang Testing Services** Drill Rig **21GeoT[92%]**
Driller **NC&AG** Logger **E. Yim** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

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

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BORING LOG CL-SGB-26

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 571.57 ft
North: 1755267.55 ft
East: 1018389.19 ft
Station: 325+79.10
Offset: 2.8 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	571.3	3-inch thick, brown, gravelly SILTY LOAM						
	570.8	--TOPSOIL--						
		Medium stiff (0.90B), brown and gray SILTY CLAY, trace gravel; damp			1	3 2 3 16	NP	9
		--FILL--						
		Loose to medium dense, gray SILTY LOAM, little to some gravel; damp to saturated			2	6 17 11 14	NP	8
		--RDR 2-3--						
			5		3	3 5 12	NP	9
	566.1					50/4"		
		Very dense, white and light gray, weathered DOLOSTONE			4	67 100/1"	NP	9
	563.3				5	100/3"	NP	6
		Boring terminated at 8.25 ft						
			10					
			15					

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)

GENERAL NOTES

Begin Drilling **08-03-2021** Complete Drilling **08-03-2021**
Drilling Contractor **Wang Testing Services** Drill Rig **21GeoT[92%]**
Driller **NC&AG** Logger **E. Yim** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **2.50 ft**
At Completion of Drilling ▼ **DRY**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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BORING LOG CL-SGB-27

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 588.26 ft
North: 1755276.47 ft
East: 1018985.80 ft
Station: 331+75.78
Offset: 3.8 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	588.0	3-inch thick, brown SILTY LOAM --TOPSOIL--						
		Stiff to very stiff, brown SILTY CLAY to SILTY CLAY LOAM , trace gravel; damp to moist --FILL-- --RDR 2--			1	1 3 3 3	2.30 S	16
					2	2 4 3 5	1.23 B	25
	584.5	Stiff, dark brown and gray SILTY CLAY LOAM; moist --Buried TOPSOIL--	5		3	1 3 3 4	1.80 B	27
	582.5	Brown LOAM, trace gravel; moist to wet			4	1 2 1 3	NP	18
	581.3	Very loose, brown SANDY LOAM, trace gravel; saturated						
	580.0	Loose, brown and gray SILTY LOAM, trace to little gravel; saturated --RDR 2--			5	3 4 4 5	NP	14
	578.8	Stiff, gray SILTY CLAY LOAM, trace gravel; damp --RDR 2--	10		6	2 2 4 6	1.72 B	15
	576.3	Boring terminated at 12.00 ft	15					

GENERAL NOTES

Begin Drilling **08-03-2021** Complete Drilling **08-03-2021**
Drilling Contractor **Wang Testing Services** Drill Rig **21GeoT[92%]**
Driller **NC&AG** Logger **E. Yim** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **7.00 ft**
At Completion of Drilling ▼ **12.00 ft**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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BORING LOG CL-SGB-28

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 608.83 ft
North: 1755353.46 ft
East: 1020189.37 ft
Station: 343+81.84
Offset: 11.1 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	608.5	4-inch thick, black SILTY CLAY LOAM --TOPSOIL--						
		Stiff to hard, dark brown, brown and gray SILTY CLAY to SILTY CLAY LOAM, trace gravel --FILL-- --RDR 2--			1	3 5 3 3	2.00 P	18
					2	3 4 4 15	1.72 B	19
			5		3	6 7 7 11	3.36 B	19
					4	3 6 6 8	5.82 B	19
					5	4 7 8 13	3.94 B	20
	598.8		10					
		Boring terminated at 10.00 ft						
			15					

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)

GENERAL NOTES

Begin Drilling **09-14-2021** Complete Drilling **09-14-2021**
Drilling Contractor **Wang Testing Services** Drill Rig **21GeoT[92%]**
Driller **J&K** Logger **F. Bozga** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

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

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BORING LOG CL-SGB-29

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 611.68 ft
North: 1755409.65 ft
East: 1020789.72 ft
Station: 349+85.24
Offset: 10.7 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	611.3	5-inch thick, black SILTY CLAY LOAM						
		--TOPSOIL--						
		Very stiff to hard, dark brown, brown and gray SILTY CLAY LOAM to SILTY CLAY, trace gravel			1	4 8 5 5	2.79 B	22
		--FILL--						
		--RDR 2--			2	3 5 6 11	5.00 B	18
		--trace brick fragments--						
			5		3	6 15 9 11	> 4.50 P	18
					4	4 9 10 15	6.40 B	16
					5	3 7 8 13	4.67 B	19
	601.7		10					
		Boring terminated at 10.00 ft						
			15					

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)

GENERAL NOTES

Begin Drilling **09-14-2021** Complete Drilling **09-14-2021**
Drilling Contractor **Wang Testing Services** Drill Rig **21GeoT[92%]**
Driller **J&K** Logger **F. Bozga** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

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

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BORING LOG CL-SGB-30

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 601.87 ft
North: 1755453.32 ft
East: 1021987.83 ft
Station: 361+84.55
Offset: 8.6 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	601.5	5-inch thick, black SILTY CLAY LOAM						
		--TOPSOIL--						
		Medium dense, brown Gravelly LOAM; damp			1	6 12 12 6	NP	7
	600.1	--FILL--						
		Stiff to very stiff, brown and gray SILTY CLAY LOAM, trace gravel; damp			2	4 6 4 5	2.30 B	13
		--FILL--						
		--RDR 2--	5		3	3 4 5 5	2.38 B	14
					4	3 4 5 10	1.31 B	17
	594.1	--wet spoon recovery--						
		Very stiff, brown, gray and black SILTY LOAM to SILTY CLAY LOAM, some gravel; wet			5	19 16 16 16	2.00 P	17
	591.9		10					
		Boring terminated at 10.00 ft						
			15					

GENERAL NOTES

Begin Drilling **08-20-2021** Complete Drilling **08-20-2021**
Drilling Contractor **Wang Testing Services** Drill Rig **20D25A [83%]**
Driller **RR&JD** Logger **F. Bozga** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

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

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BORING LOG CL-SGB-31

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 588.13 ft
North: 1755473.30 ft
East: 1022588.13 ft
Station: 367+85.18
Offset: 7.1 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	587.7	5-inch thick, black SILTY CLAY LOAM						
		--TOPSOIL--			1	2 3 3 3	1.23 B	17
	586.4	Stiff, brown SILTY CLAY LOAM, trace gravel; damp						
		--FILL--						
		Medium dense to dense, brown and gray SILTY LOAM, trace gravel; damp			2	2 5 7 29	NP	8
		--FILL--						
		--L_L(%)=28, P_L(%)=18--						
		--%Gravel=3.5--						
		--%Sand=7.6--						
		--%Silt=72.8--						
		--%Clay=16.1--						
		--A-4 (8)--	5		3	7 20 19 12	NP	16
	582.4	Black SILTY CLAY LOAM						
		--Buried TOPSOIL--						
	581.6	Very stiff, brown, gray and black SILTY CLAY; damp			4	4 7 10 14	2.95 B	26
		--RDR 2--						
					5	4 6 8 10	3.77 B	24
	578.1		10					
		Boring terminated at 10.00 ft						
			15					

GENERAL NOTES

Begin Drilling **08-20-2021** Complete Drilling **08-20-2021**
Drilling Contractor **Wang Testing Services** Drill Rig **20D25A [83%]**
Driller **RR&JD** Logger **F. Bozga** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

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

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BORING LOG CL-SGB-32

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 570.09 ft
North: 1755489.10 ft
East: 1023189.33 ft
Station: 373+86.58
Offset: 9.8 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	569.8	3-inch thick, black SILTY CLAY LOAM						
		--TOPSOIL--						
		Medium dense to very dense, brown SILTY LOAM; damp			1	5 10 18 30	NP	5
		--RDR 2--			2	17 50/4"	NP	5
	566.6							
		Very dense, brown and gray Weathered BEDROCK; damp			3	50/4"	NP	6
	565.1		5					
		--AUGER REFUSAL--						
		Boring terminated at 5.00 ft						
			10					
			15					

GENERAL NOTES

Begin Drilling **09-09-2021** Complete Drilling **09-09-2021**
Drilling Contractor **Wang Testing Services** Drill Rig **21GeoT[92%]**
Driller **N&K** Logger **F. Bozga** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

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

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BORING LOG CL-SGB-33

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 556.49 ft
North: 1755507.38 ft
East: 1023786.69 ft
Station: 379+84.22
Offset: 9.9 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	555.9	7-inch thick, black SILTY CLAY LOAM						
		--TOPSOIL--						
		Stiff, brown SILTY CLAY CLAY, trace gravel			1	2 2 4 9	1.72 B	11
		--FILL--						
		--RDR 2--						
	554.0							
		Dense, brown Gravelly LOAM; dry			2	4 22 17 10	NP	11
		--FILL--						
	552.7	--RDR 3--						
		Stiff, brown and gray SILTY CLAY LOAM, trace gravel						
		--FILL--	5		3	4 8 9 10	1.75 P	13
	551.0							
		Stiff, black SILTY CLAY LOAM						
		--Buried TOPSOIL--						
	549.5				4	2 4 4 7	1.31 B	21
		Stiff, brown and gray SILTY CLAY LOAM, trace gravel						
		--RDR 2--						
					5	3 3 6 7	1.48 B	15
	546.5		10					
		Boring terminated at 10.00 ft						
			15					

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)

GENERAL NOTES

Begin Drilling **09-08-2021** Complete Drilling **09-08-2021**
Drilling Contractor **Wang Testing Services** Drill Rig **21GeoT[92%]**
Driller **N&K** Logger **F. Bozga** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

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

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BORING LOG CL-SGB-34

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 554.20 ft
North: 1755524.74 ft
East: 1024381.62 ft
Station: 385+79.40
Offset: 10.9 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	553.7	6-inch thick, black SILTY CLAY LOAM						
		--TOPSOIL--						
		Very stiff to hard, dark brown, brown, gray and black CLAY LOAM to SILTY CLAY LOAM, trace to little gravel; damp			1	3 4 4 6	3.36 B	18
		--FILL--			2	4 7 11 21	> 4.50 P	12
			5		3	8 13 16 38	2.50 P	13
		--brown cobble fragments--			4	9 9 10 8	2.62 B	14
	546.4	Medium dense, brown and gray Gravelly LOAM; damp						
		--FILL--			5	4 14 11 7	NP	8
	544.2		10					
		Boring terminated at 10.00 ft						
			15					

GENERAL NOTES

Begin Drilling **09-08-2021** Complete Drilling **09-08-2021**
Drilling Contractor **Wang Testing Services** Drill Rig **21GeoT[92%]**
Driller **N&K** Logger **F. Bozga** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

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

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

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BORING LOG CL-SGB-35

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 557.45 ft
North: 1755558.03 ft
East: 1024972.04 ft
Station: 391+70.56
Offset: 4.2 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	557.2	3-inch thick, black SILTY CLAY LOAM; moist						
		--TOPSOIL--						
		Stiff, gray and black SILTY			1	1 3 40/3"	1.50 P	38
	556.0	CLAY LOAM, trace gravel; moist						
	555.2	Very dense, gray DOLOSTONE			2	40/3"	NP	2
		--Weathered BEDROCK--						
		--AUGER REFUSAL--						
		Boring terminated at 2.25 ft						
			5					
			10					
			15					

GENERAL NOTES

Begin Drilling **08-18-2021** Complete Drilling **08-18-2021**
Drilling Contractor **Wang Testing Services** Drill Rig **20D25A [83%]**
Driller **RR&JD** Logger **M. Rojo** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

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

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BORING LOG CL-SGB-36

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 562.52 ft
North: 1755560.11 ft
East: 1025594.67 ft
Station: 397+92.97
Offset: 12.9 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	562.2	4-inch thick, black SILTY CLAY LOAM						
		--TOPSOIL--						
	561.5	Very dense, white DOLOSTONE						
		--Weathered BEDROCK--						
		--AUGER REFUSAL--						
		Boring terminated at 1.00 ft						
				X	1	50/5"	0.50 P	35
			5					
			10					
			15					

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)

GENERAL NOTES

Begin Drilling **08-18-2021** Complete Drilling **08-18-2021**
Drilling Contractor **Wang Testing Services** Drill Rig **20D25A [83%]**
Driller **RR&JD** Logger **M. Rojo** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

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

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

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BORING LOG CL-SGB-37

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 568.89 ft
North: 1755619.57 ft
East: 1026180.80 ft
Station: 403+81.57
Offset: 0.4 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	568.5	5-inch thick, gray SILTY LOAM --TOPSOIL--						
	568.2	Brown Gravelly SAND --FILL--			1	4 7 3 4	2.00 P	23
	567.1	Very stiff, brown SILTY CLAY to SILTY CLAY LOAM, trace gravel; damp						
		Very stiff, gray and black SILTY CLAY to SILTY CLAY LOAM, trace gravel; damp --RDR 2--			2	2 4 5 5	3.44 B	21
	564.2	Brown and gray, weathered DOLOSTONE --Weathered BEDROCK--	5		3	2 4 7 37/4"	3.50 P	13
	562.9	--AUGER REFUSAL-- Boring terminated at 6.00 ft	10					
			15					

GENERAL NOTES

Begin Drilling **08-18-2021** Complete Drilling **08-18-2021**
Drilling Contractor **Wang Testing Services** Drill Rig **20D25A [83%]**
Driller **RR&JD** Logger **M. Rojo** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

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

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

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BORING LOG CL-SGB-38

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 574.89 ft
North: 1755728.06 ft
East: 1026772.85 ft
Station: 409+83.64
Offset: 1.8 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	574.4	6-inch thick, brown SILTY CLAY LOAM						
		--TOPSOIL--						
		Very stiff, brown to gray SILTY CLAY LOAM to CLAY LOAM, trace gravel; damp			1	4 6 7 5	3.00 P	35
		--FILL--						
		--RDR 2--						
		--L_L(%)=42, P_L(%)=18--				3		
		--%Gravel=3.4--			2	6 4 5	3.50 P	20
		--%Sand=21.2.--						
	571.1	--%Silt=51.7--						
		--%Clay=23.7--						
		--A-7-6 (17)--				2		
		Medium dense, black SILTY LOAM to SILTY CLAY LOAM; moist	5		3	3 8 11	NP	29
	569.1	Medium dense, gray and brown, SANDY LOAM, trace gravel; moist to wet				17		
		--RDR 2--			4	17 20 12	NP	16
	567.1	Very dense, gray DOLOSTONE; damp				19		
		--RDR 3--			5	50/4"	NP	14
	566.1	--AUGER REFUSAL--						
		Boring terminated at 8.10 ft	10					
			15					

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)

GENERAL NOTES

Begin Drilling **08-18-2021** Complete Drilling **08-18-2021**
Drilling Contractor **Wang Testing Services** Drill Rig **20D25A [83%]**
Driller **RR&JD** Logger **M. Rojo** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

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

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BORING LOG EB-SGB-26

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 570.43 ft
North: 1755181.74 ft
East: 1016841.96 ft
Station: 310+30.66
Offset: 63 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	569.6	10-inch thick ASPHALT --PAVEMENT--						
	568.9	8-inch thick, brown and gray SANDY GRAVEL; damp --AGGREGATE BASE--	0					
		Very stiff, brown and gray CLAY LOAM to SILTY CLAY LOAM, trace gravel; damp --FILL-- --RDR 2--			1	6 7 6 7	3.53 B	23
					2	3 6 6 7	2.13 B	13
	564.9		5					
		Medium stiff to very stiff, brown and gray SILTY CLAY to SILTY CLAY LOAM; damp to moist --RDR 2--			3	4 4 7 7	2.30 B	24
	563.7	Medium stiff, gray SILTY LOAM, little gravel; moist --RDR 2--			4	4 6 6 50/2"	0.66 B	12
	561.7	Very dense, brown and gray SANDY GRAVEL; damp			5	50/2"	NP	9
	560.4	Boring terminated at 10.00 ft	10					
			15					

GENERAL NOTES

Begin Drilling **08-01-2021** Complete Drilling **08-01-2021**
Drilling Contractor **Wang Testing Services** Drill Rig **20D50T [80%]**
Driller **R&R** Logger **M. Sadowski** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

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

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

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BORING LOG EB-SGB-27

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 567.42 ft
North: 1755189.73 ft
East: 1017438.01 ft
Station: 316+26.76
Offset: 64.9 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		18-inch thick ASPHALT --PAVEMENT--						
	565.9							
	565.4	6-inch thick, loose, brown and gray SANDY GRAVEL; moist --AGGREGATE BASE--			1	6 4 3	2.75 P	24
		Stiff to hard, brown and gray SILTY CLAY LOAM, trace to little gravel; damp --FILL-- --RDR 2-3--			2	6 8 7 8	1.89 B	20
			5		3	4 5 7 7	2.71 B	19
					4	4 5 6 6	4.38 B	19
			10		5	4 6 7 9	1.97 B	20
	556.4	Boring terminated at 11.00 ft						
			15					

GENERAL NOTES

Begin Drilling **08-01-2021** Complete Drilling **08-01-2021**
Drilling Contractor **Wang Testing Services** Drill Rig **20D50T [80%]**
Driller **R&R** Logger **M. Sadowski** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

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

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BORING LOG EB-SGB-28

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 565.91 ft
North: 1755197.58 ft
East: 1018036.02 ft
Station: 322+24.82
Offset: 67 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	564.9	12-inch thick ASPHALT --PAVEMENT--						
	564.7	3-inch thick, brown SANDY GRAVEL; damp --AGGREGATE BASE--			1	8 10 10 40/5"	NP	9
	562.9	Medium dense, brown SILTY LOAM; damp to moist						
		Very dense, gray, weathered SHALE; damp --RDR 3--			2	11 100/3"	NP	4
	561.7	Very dense, gray weathered DOLOSTONE; dry to damp --Weathered BEDROCK-- --RDR 3-4--	5		3	9 100/3"	NP	
	559.7				4	100/2"	NP	
		--AUGER REFUSAL-- Boring terminated at 6.20 ft	10					
			15					

GENERAL NOTES

Begin Drilling **08-02-2021** Complete Drilling **08-02-2021**
Drilling Contractor **Wang Testing Services** Drill Rig **17B57T [91%]**
Driller **NC&AG** Logger **E. Yim** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **3.00 ft**
At Completion of Drilling ▼ **2.50 ft**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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BORING LOG EB-SGB-29

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 578.38 ft
North: 1755210.15 ft
East: 1018638.96 ft
Station: 328+27.89
Offset: 64.4 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	577.1	15-inch thick ASPHALT --PAVEMENT--						
	576.6	6-inch thick, brown, silty SANDY GRAVEL; damp --AGGREGATE BASE--						
		Very stiff to hard, brown, black and gray CLAY LOAM to SILTY CLAY LOAM, trace gravel;			1	4 6 6 5	3.50 P	20
	574.9	damp --FILL--						
		Hard, brown and gray SILTY CLAY, trace gravel; damp --RDR 2--	5		2	4 3 5 7	4.00 P	18
	573.4							
		Medium dense, brown and gray SILTY LOAM, trace gravel; damp to moist --RDR 2--			3	6 6 8 9	NP	16
					4	4 5 9 8	NP	16
	569.1							
		Hard, brown SILTY CLAY LOAM to SILTY LOAM, trace gravel; damp --RDR 2--	10		5	4 7 10 18	5.17 B	16
	567.1							
		Boring terminated at 11.25 ft	15					

GENERAL NOTES

Begin Drilling **08-02-2021** Complete Drilling **08-02-2021**
Drilling Contractor **Wang Testing Services** Drill Rig **17B57T [91%]**
Driller **NC&AG** Logger **E. Yim** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

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

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BORING LOG EB-SGB-30

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 594.63 ft
North: 1755223.69 ft
East: 1019247.93 ft
Station: 334+35.82
Offset: 62.3 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	593.6	12-inch thick ASPHALT --PAVEMENT--						
	592.9	9-inch thick, medium dense, brown and gray SANDY GRAVEL; damp to moist --AGGREGATE BASE--			1	8 12 10 6	6.40 B	16
		Stiff to very stiff, gray and brown SILTY CLAY LOAM to CLAY LOAM, trace to little gravel; damp --FILL-- --RDR 2--			2	5 7 6 7	2.38 B	18
			5		3	6 7 6 5	3.28 B	12
					4	7 7 7 8	2.87 B	14
			10		5	6 5 5 6	1.56 B	16
	583.6	Boring terminated at 11.00 ft						
			15					

GENERAL NOTES

Begin Drilling **08-02-2021** Complete Drilling **08-02-2021**
Drilling Contractor **Wang Testing Services** Drill Rig **20D50T [80%]**
Driller **R&R** Logger **M. Sadowski** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

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

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BORING LOG EB-SGB-31

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 604.40 ft
North: 1755230.12 ft
East: 1019884.25 ft
Station: 340+65.88
Offset: 103.1 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	604.2	3-inch thick, black SILTY CLAY LOAM						
		--TOPSOIL--						
		Stiff, brown and gray CLAY LOAM to SILTY CLAY LOAM, trace gravel; damp			1	3 4 4 5	1.97 B	13
		--FILL--						
		--RDR 2--						
		--L_L(%)=33, P_L(%)=16--			2	2 2 2 4	1.48 B	16
		--%Gravel=9.6--						
		--%Sand=18.2--						
	600.7	--%Silt=49.0--						
		--%Clay=23.2--						
		--A-6 (10)--						
		Very stiff to hard, brown SILTY CLAY, trace gravel; damp	5		3	3 4 4 4	2.30 B	19
		--RDR 2--						
					4	3 4 5 7	2.38 B	21
					5	3 7 9 11	4.26 B	19
	594.4		10					
		Boring terminated at 10.00 ft						
			15					

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)

GENERAL NOTES

Begin Drilling **09-09-2021** Complete Drilling **09-09-2021**
Drilling Contractor **Wang Testing Services** Drill Rig **21GeoT[92%]**
Driller **N&K** Logger **F. Bozga** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

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

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BORING LOG EB-SGB-32

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 610.13 ft
North: 1755324.53 ft
East: 1020437.70 ft
Station: 346+26.01
Offset: 64.8 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	608.3	22-inch thick ASPHALT --PAVEMENT--						
	607.1	14-inch thick, very dense, brown SANDY GRAVEL; damp --AGGREGATE BASE--			1	50/5"	1.50 P	16
		Stiff to hard, brown to gray SILTY CLAY to SILTY CLAY LOAM, trace gravel; damp --FILL-- --RDR 2--	5		2	4 4 5 7	1.31 B	19
					3	5 10 13 16	9.10 B	19
	600.1		10		4	10 10 13 17	7.71 B	16
		Boring terminated at 10.00 ft	15					

GENERAL NOTES

Begin Drilling **08-02-2021** Complete Drilling **08-02-2021**
Drilling Contractor **Wang Testing Services** Drill Rig **20D50T [80%]**
Driller **R&R** Logger **M. Sadowski** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

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

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BORING LOG EB-SGB-33

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 610.94 ft
North: 1755367.84 ft
East: 1021034.42 ft
Station: 352+28.72
Offset: 64.7 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		16-inch thick ASPHALT --PAVEMENT--						
	609.6							
	609.1	6-inch thick, gray SANDY GRAVEL; damp --AGGREGATE BASE--						
		Very stiff, gray CLAY LOAM to SILTY CLAY LOAM, trace gravel; damp --FILL--			1	11 11 5 4	2.50 P	18
	606.4				2	6 3 4 5	NA	15
		Hard, gray SILTY CLAY, trace gravel; damp --RDR 2--	5					
	604.7				3	4 3 7 7	4.76 B	19
		Medium dense, gray SILTY LOAM, trace gravel; damp --RDR 2--						
	602.9				4	4 6 6 9	6.72 B	18
		Hard, gray SILTY CLAY; damp --RDR 2--	10		5	4 5 8 9	6.40 B	19
	599.4							
		Boring terminated at 11.50 ft	15					

GENERAL NOTES

Begin Drilling **08-02-2021** Complete Drilling **08-02-2021**
Drilling Contractor **Wang Testing Services** Drill Rig **17B57T [91%]**
Driller **NC&AG** Logger **E. Yim** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

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

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BORING LOG EB-SGB-34

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 597.07 ft
North: 1755404.88 ft
East: 1022227.45 ft
Station: 364+22.56
Offset: 64.4 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		21-inch thick ASPHALT --PAVEMENT--						
	595.3							
		Medium dense, gray SANDY GRAVEL; damp			1	18 12 12 15	NP	5
	593.6							
		Loose to medium dense, brown SILTY LOAM, trace to little gravel; damp --FILL-- --RDR 2--	5		2	6 9 8 7	NP	12
	591.3	3-inch thick, very stiff (2.50P), brown SILTY CLAY; damp						
		3-inch thick, very stiff (3.00P), black and gray SILTY CLAY; damp			3	2 3 4 3	NP	16
	589.6							
	588.1	3-inch thick, very stiff (2.75P), brown SILTY CLAY LOAM; damp	10		4	1 2 2 4	NP	15
	585.8				5	4 4 3 5	NP	16
		Very stiff to hard (3.50P to >4.50P), brown SILTY CLAY LOAM, trace gravel; damp						
	584.6	--FILL--						
		Medium dense, brown SILTY LOAM, trace gravel; damp --FILL-- --RDR 2--			6	6 7 10 16	NP	12
	583.1							
		Boring terminated at 14.00 ft	15					

GENERAL NOTES

Begin Drilling **08-05-2021** Complete Drilling **08-05-2021**
Drilling Contractor **Wang Testing Services** Drill Rig **17B57T [91%]**
Driller **NC&AG** Logger **E. Yim** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

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

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BORING LOG EB-SGB-35

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 581.38 ft
North: 1755422.46 ft
East: 1022821.27 ft
Station: 370+16.64
Offset: 65.1 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		14-inch thick ASPHALT --PAVEMENT--						
	580.2							
		Medium dense, gray SANDY GRAVEL; dry --AGGREGATE BASE--			1	19 10 9 16	NP	6
	578.6							
		Very stiff, brown, gray and black SILTY CLAY LOAM, trace gravel; damp --FILL--			2	11 12 10 9	2.71 B	15
			5					
					3	7 5 5 6	2.05 B	15
	574.1							
		Very dense, brown and gray SANDY GRAVEL; dry --Weathered BEDROCK--			4	10 22 50/5"	NP	10
	571.7				5	50/2"	NP	12
		Boring terminated at 9.70 ft	10					
			15					

GENERAL NOTES

Begin Drilling **09-09-2021** Complete Drilling **09-09-2021**
Drilling Contractor **Wang Testing Services** Drill Rig **21GeoT[92%]**
Driller **N&K** Logger **F. Bozga** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

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

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BORING LOG EB-SGB-36

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 563.71 ft
North: 1755429.82 ft
East: 1023422.43 ft
Station: 376+17.74
Offset: 76.2 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		15-inch thick ASPHALT --PAVEMENT--						
	562.5							
		Loose, brown and gray SANDY GRAVEL, some construction debris; damp --FILL--			1	9 3 3	NP	4
	561.0							
		Very dense, gray DOLOSTONE fragments; damp --Weathered BEDROCK--			2	50/5"	NP	2
	559.7							
		--AUGER REFUSAL-- Boring terminated at 4.00 ft	5					
			10					
			15					

GENERAL NOTES

Begin Drilling **08-05-2021** Complete Drilling **08-05-2021**
Drilling Contractor **Wang Testing Services** Drill Rig **20D50T [80%]**
Driller **R&R** Logger **M. Sadowski** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

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

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

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BORING LOG EB-SGB-37

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 554.30 ft
North: 1755454.65 ft
East: 1024024.10 ft
Station: 382+19.90
Offset: 70 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		16-inch thick ASPHALT --PAVEMENT--						
	553.0							
		10-inch thick, gray CRUSHED STONE --AGGREGATE BASE--				11 20 8 10		
	552.0				1		NP	9
		Medium dense, brown Gravelly LOAM; dry --FILL--						
	551.1							
		Medium dense, brown, gray and black SILTY LOAM, trace to little gravel; dry --FILL-- --RDR 3--	5		2	9 15 13 14	NP	11
					3	11 13 10 9	NP	5
					4	18 10 10 9	NP	10
			10		5	4 5 6 6	NP	8
	542.8							
		Boring terminated at 11.50 ft	15					

GENERAL NOTES

Begin Drilling **09-09-2021** Complete Drilling **09-09-2021**
Drilling Contractor **Wang Testing Services** Drill Rig **21GeoT[92%]**
Driller **N&K** Logger **F. Bozga** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **1.50 ft**
At Completion of Drilling ▼ **DRY**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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BORING LOG EB-SGB-38

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: Wang Srvy
Elevation: 562.57 ft
North: 1755489.42 ft
East: 1025227.14 ft
Station: 394+23.44
Offset: 72.2 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		Medium dense, dark brown SANDY GRAVEL; damp			1	5 6 7 7	NP	8
		--FILL--						
		--RDR 3--						
	561.1	Very dense, brown SILTY LOAM, some gravel; damp						
		--RDR 4--			2	10 10 50/5"	NP	6
	559.6	Very dense, gray DOLOSTONE fragments; dry						
		--Weathered BEDROCK--						
	557.6		5					
		--AUGER REFUSAL--						
		Boring terminated at 5.00 ft						
			10					
			15					

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)

GENERAL NOTES

Begin Drilling **09-09-2021** Complete Drilling **09-09-2021**
Drilling Contractor **Wang Testing Services** Drill Rig **21GeoT[92%]**
Driller **N&K** Logger **F. Bozga** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

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

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BORING LOG EB-SGB-39

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: Wang Srvy
Elevation: 568.61 ft
North: 1755510.59 ft
East: 1025829.00 ft
Station: 400+22.91
Offset: 73.8 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	568.0	7-inch thick, stiff, black SILTY CLAY LOAM --TOPSOIL-- Loose, brown Gravelly LOAM to Gravelly SANDY LOAM; moist --FILL-- --RDR 2--			1	1 2 3 4	1.23 B	26
					2	2 3 3 3	NP	10
	564.1	Very dense, brown SANDY GRAVEL; moist	5		3	6 50/5"	NP	5
	563.1	--Weathered BEDROCK-- --RDR 3-4-- --AUGER REFUSAL-- Boring terminated at 5.50 ft	10 15					

GENERAL NOTES

Begin Drilling **09-09-2021** Complete Drilling **09-09-2021**
Drilling Contractor **Wang Testing Services** Drill Rig **21GeoT[92%]**
Driller **N&K** Logger **F. Bozga** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

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

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BORING LOG EB-SGB-40

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 571.23 ft
North: 1755587.71 ft
East: 1026415.85 ft
Station: 406+07.85
Offset: 67.2 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	570.4	10-inch thick ASPHALT --PAVEMENT--				9 9 5 6		
		Medium dense, brown Gravelly LOAM --AGGREGATE BASE--			1		NP	7
	568.7	Very stiff, dark brown SILTY CLAY LOAM, trace to little gravel; damp --FILL-- --RDR 2--			2	9 4 5 7	2.95 B	22
		--L_L(%)=47, P_L(%)=17-- --%Gravel=5.8-- --%Sand=18.7-- --%Silt=49.1-- --%Clay=26.4-- --A-7-6 (22)--	5		3	5 9 9 12	2.46 B	23
					4	7 7 5 6	2.00 P	21
	562.7	Very stiff, black SILTY CLAY LOAM --Buried TOPSOIL--			5	3 4 5 6	1.50 P	25
	561.2	Boring terminated at 10.00 ft	10					
			15					

GENERAL NOTES

Begin Drilling **09-09-2021** Complete Drilling **09-09-2021**
Drilling Contractor **Wang Testing Services** Drill Rig **21GeoT[92%]**
Driller **N&K** Logger **F. Bozga** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

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

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BORING LOG EB-SGB-41

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 577.19 ft
North: 1755720.27 ft
East: 1027006.45 ft
Station: 412+06.37
Offset: 68.3 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		13-inch thick ASPHALT --PAVEMENT--						
	576.1							
		Stiff to very stiff, dark brown, brown and gray SILTY CLAY to SILTY CLAY LOAM, trace gravel --FILL-- --RDR 2--			1	3 4 5 7	2.21 B	23
					2	3 5 5 6	1.89 B	15
			5					
					3	6 10 9 11	1.75 P	21
	570.2							
		Dense, brown SANDY GRAVEL; dry --RDR 3--			4	7 18 17 19	NP	7
			10		5	8 22 21 19	NP	4
	565.7							
		Boring terminated at 11.50 ft						
			15					

GENERAL NOTES

Begin Drilling **09-09-2021** Complete Drilling **09-09-2021**
Drilling Contractor **Wang Testing Services** Drill Rig **21GeoT[92%]**
Driller **N&K** Logger **F. Bozga** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

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

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

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BORING LOG WB-SGB-26

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 572.55 ft
North: 1755293.66 ft
East: 1016392.36 ft
Station: 305+82.98
Offset: 56.3 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	571.3	15-inch thick ASPHALT --PAVEMENT--						
	570.5	10-inch thick, medium dense, brown SANDY GRAVEL; damp --AGGREGATE BASE--			1	14 5 6	2.75 P	25
	569.6	Very stiff, black SILTY CLAY; damp --Buried TOPSOIL--						
		Very stiff, gray and brown SILTY CLAY, trace gravel; damp --RDR 2--			2	5 10 8 6	3.20 B	21
			5		3	4 4 6 10	2.62 B	19
	565.7							
		Very dense, brown SILTY LOAM, some gravel; damp to moist --RDR 2-3--			4	4 6 50/6"	NP	10
	563.8							
		Hard, gray SILTY CLAY LOAM, trace gravel; damp	10		5	5 6 19 50/2"	5.66 B	15
	561.9	Boring terminated at 10.70 ft						
			15					

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)

GENERAL NOTES

Begin Drilling **08-04-2021** Complete Drilling **08-04-2021**
Drilling Contractor **Wang Testing Services** Drill Rig **20D50T [80%]**
Driller **R&R** Logger **M. Sadowski** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

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

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BORING LOG WB-SGB-27

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 569.81 ft
North: 1755302.40 ft
East: 1016987.33 ft
Station: 311+78.01
Offset: 55.2 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		13-inch thick ASPHALT --PAVEMENT--						
	568.7							
		Medium dense, gray and brown SANDY GRAVEL --AGGREGATE BASE--			1	7 8 13	NP	16
	567.1							
		Very stiff, black SILTY CLAY; damp						
	566.3	--Buried TOPSOIL--				5		
		Very stiff, brown and gray SILTY CLAY; damp			2	5 6 14	2.62 B	26
	565.6							
		Medium dense to very dense, brown SILTY LOAM, trace to some gravel; damp to moist --RDR 2-3--	5		3	16 18 11 10	NP	11
		--possible cobbles--			4	18 52/6"	NP	11
			10		5	17 26 35 20	NP	14
	558.8							
		Boring terminated at 11.00 ft	15					

GENERAL NOTES

Begin Drilling **08-04-2021** Complete Drilling **08-04-2021**
Drilling Contractor **Wang Testing Services** Drill Rig **20D50T [80%]**
Driller **R&R** Logger **M. Sadowski** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

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

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BORING LOG WB-SGB-28

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 567.70 ft
North: 1755329.43 ft
East: 1018199.64 ft
Station: 323+90.60
Offset: 62.2 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	566.4	16-inch thick ASPHALT --PAVEMENT--						
	566.2	2-inch thick, brown SANDY GRAVEL --AGGREGATE BASE--			1	4 50/6"	NP	8
	565.9	Stiff (1.50 P), gray and brown CLAY LOAM, little gravel; damp						
	565.2	Very dense, gray SILTY LOAM, little gravel; damp --Weathered BEDROCK-- --AUGER REFUSAL-- Boring terminated at 2.50 ft	5					
			10					
			15					

GENERAL NOTES

Begin Drilling **08-31-2021** Complete Drilling **08-31-2021**
Drilling Contractor **Wang Testing Services** Drill Rig **20CME55T[81%]**
Driller **R&R** Logger **M. Sadowski** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

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

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BORING LOG WB-SGB-29

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 582.95 ft
North: 1755348.32 ft
East: 1018795.77 ft
Station: 329+86.96
Offset: 71.2 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		17-inch thick ASPHALT --PAVEMENT--						
	581.5							
		Loose, gray and brown SANDY GRAVEL; damp --AGGREGATE BASE--			1	6 5 4	NP	8
	580.5							
		Stiff, brown and black SILTY CLAY, trace gravel; damp --FILL-- --RDR 2-3--			2	6 4 4 5	1.89 B	23
	578.5							
		Hard, brown and gray SILTY CLAY LOAM to SILTY LOAM, little gravel; damp --RDR 2-- --L_L(%)=31, P_L(%)=17-- --%Gravel=4.3-- --%Sand=17.3-- --%Silt=56.4-- --%Clay=22.0-- --A-6 (9)--	5		3	4 9 7 8	5.66 B	15
					4	5 6 6 10	4.43 B	15
			10		5	6 10 8 9	4.51 B	14
	572.0							
		Boring terminated at 11.00 ft	15					

GENERAL NOTES

Begin Drilling **08-31-2021** Complete Drilling **08-31-2021**
Drilling Contractor **Wang Testing Services** Drill Rig **20CME55T[81%]**
Driller **R&R** Logger **M. Sadowski** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

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

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BORING LOG WB-SGB-30

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: Wang Srvy
Elevation: 599.90 ft
North: 1755382.73 ft
East: 1019385.95 ft
Station: 335+81.09
Offset: 90.4 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	599.5	5-inch thick, black SILTY CLAY LOAM						
		--TOPSOIL--						
		Very stiff to hard, dark brown, brown and gray SILTY CLAY LOAM to SILTY CLAY, trace gravel			1	2 3 5 6	2.13 B	16
		--FILL--						
		--RDR 2--			2	4 6 6 8	2.95 B	16
			5		3	2 4 4 4	2.05 B	16
					4	5 5 6 10	> 4.50 P	16
					5	4 6 6 10	3.03 B	14
	589.9		10					
		Boring terminated at 10.00 ft						
			15					

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)

GENERAL NOTES

Begin Drilling **09-08-2021** Complete Drilling **09-08-2021**
Drilling Contractor **Wang Testing Services** Drill Rig **21GeoT[92%]**
Driller **N&K** Logger **F. Bozga** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

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

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BORING LOG WB-SGB-31

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 606.92 ft
North: 1755407.42 ft
East: 1020001.79 ft
Station: 342+00.64
Offset: 61.4 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		17-inch thick ASPHALT --PAVEMENT--						
	605.5							
	605.1	5-inch thick, loose, gray and brown SANDY GRAVEL; damp to saturated --AGGREGATE BASE--			1	4 4 4	3.25 P	15
		Very stiff, gray and brown SILTY CLAY, trace gravel; damp --FILL-- --RDR 2--			2	5 5 8 9	3.85 B	19
			5		3	4 7 9 10	3.50 P	15
					4	6 6 7 7	3.36 B	18
			10		5	4 5 9 11	2.46 B	18
	595.9	Boring terminated at 11.00 ft						
			15					

GENERAL NOTES

Begin Drilling **08-31-2021** Complete Drilling **08-31-2021**
Drilling Contractor **Wang Testing Services** Drill Rig **20CME55T[81%]**
Driller **R&R** Logger **M. Sadowski** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

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

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BORING LOG WB-SGB-32

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 610.69 ft
North: 1755464.06 ft
East: 1020516.55 ft
Station: 347+18.41
Offset: 66.1 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	609.2	18-inch thick, medium dense, gray and brown SANDY GRAVEL; damp --FILL--			1	5 7 7 8	NP	4
	608.8	Black ASPHALT fragments; wet --FILL--						
		--wet spoon-- Stiff to hard, brown and gray SILTY CLAY, trace gravel; damp --FILL--			2	3 4 7 6	5.33 B	19
		--wet spoon; possible sand lens--	5		3	4 4 4 5	2.38 B	19
					4	3 4 7 9	4.76 B	20
	600.7		10		5	7 8 10 11	1.23 B	18
		Boring terminated at 10.00 ft	15					

GENERAL NOTES

Begin Drilling **08-30-2021** Complete Drilling **08-30-2021**
Drilling Contractor **Wang Testing Services** Drill Rig **20CME55T[81%]**
Driller **R&R** Logger **M. Sadowski** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **2.00 ft**
At Completion of Drilling ▼ **5.00 ft**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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BORING LOG WB-SGB-33

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 610.62 ft
North: 1755518.76 ft
East: 1021184.00 ft
Station: 353+83.11
Offset: 81.5 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	610.2	5-inch thick, black SILTY CLAY LOAM; damp --TOPSOIL-- --trace brick fragments-- Stiff to very stiff, brown, gray and black SILTY CLAY LOAM to SILTY CLAY, trace to little gravel; damp --FILL-- --RDR 2-3--			1	2 2 4 6	2.25 P	21
					2	6 5 5 5	2.62 B	14
			5		3	1 2 4 4	1.31 B	21
					4	4 10 7 7	3.94 B	15
	600.6		10		5	5 5 7 8	2.95 B	18
		Boring terminated at 10.00 ft						
			15					

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)

GENERAL NOTES

Begin Drilling **08-31-2021** Complete Drilling **08-31-2021**
Drilling Contractor **Wang Testing Services** Drill Rig **20CME55T[81%]**
Driller **R&R** Logger **M. Sadowski** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

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

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

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BORING LOG WB-SGB-34

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 604.45 ft
North: 1755540.12 ft
East: 1021784.20 ft
Station: 359+83.68
Offset: 84.4 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	604.0	5-inch thick, black SILTY CLAY; damp						
		--TOPSOIL--						
		Medium stiff to very stiff, brown and gray CLAY LOAM to SILTY LOAM, trace to little gravel; damp			1	2 4 7 8	1.07 B	12
		--FILL-- --RDR 2--			2	6 9 9 9	1.07 S	10
		--L_L(%)=25, P_L(%)=18-- --%Gravel=5.6-- --%Sand=13.9-- --%Silt=68.6-- --%Clay=11.9-- --A-4 (4)--	5		3	7 5 5 4	0.90 S	12
					4	2 3 3 5	0.90 B	20
					5	4 10 7 7	2.25 P	17
	594.5		10					
		Boring terminated at 10.00 ft						
			15					

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)

GENERAL NOTES

Begin Drilling **08-31-2021** Complete Drilling **08-31-2021**
Drilling Contractor **Wang Testing Services** Drill Rig **20CME55T[81%]**
Driller **R&R** Logger **M. Sadowski** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

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

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

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BORING LOG WB-SGB-35

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 593.58 ft
North: 1755540.90 ft
East: 1022386.19 ft
Station: 365+85.41
Offset: 66.7 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	593.2	5-inch thick, black SILTY LOAM; damp						
		--TOPSOIL--			1	5 12 17 22	NP	4
	592.2	Medium dense, gray and brown SANDY GRAVEL; damp						
	591.8	--FILL--						
		Black ASPHALT grinds and fragments; damp				8 10 8 11		
		--FILL--			2		1.50 P	16
		Medium stiff to very stiff, gray and brown CLAY LOAM, little to some gravel; damp						
		--FILL--				5 5 5 6		
		--RDR 2-3--	5		3		2.50 P	11
					4	5 5 5 7	0.75 P	14
					5	3 6 5 5	1.75 P	18
	583.6		10					
		Boring terminated at 10.00 ft						
			15					

GENERAL NOTES

Begin Drilling **08-30-2021** Complete Drilling **08-30-2021**
Drilling Contractor **Wang Testing Services** Drill Rig **20CME55T[81%]**
Driller **R&R** Logger **M. Sadowski** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

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

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BORING LOG WB-SGB-36

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 576.44 ft
North: 1755553.88 ft
East: 1022984.53 ft
Station: 371+83.87
Offset: 61.2 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		16-inch thick ASPHALT --PAVEMENT--						
	575.0							
		Gray SANDY GRAVEL; damp to moist --AGGREGATE BASE--			1	9 14 11	NP	8
	573.9							
		Stiff, brown and gray SILTY CLAY LOAM, little gravel; damp --RDR 2-3--			2	8 6 6	1.50 P	14
	571.9							
		Very dense, weathered SHALE; dry --Weathered SHALE BEDROCK-- --RDR 2-3--	5		3	45 36 50/3"	NP	6
					4	50/2"	NP	5
	567.3				5	50/1"	NP	6
		Boring terminated at 9.10 ft	10					
			15					

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)

GENERAL NOTES

Begin Drilling **08-30-2021** Complete Drilling **08-30-2021**
Drilling Contractor **Wang Testing Services** Drill Rig **20CME55T[81%]**
Driller **R&R** Logger **M. Sadowski** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

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

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BORING LOG WB-SGB-37

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 559.93 ft
North: 1755572.45 ft
East: 1023596.97 ft
Station: 377+96.59
Offset: 60.9 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		24-inch thick ASPHALT --PAVEMENT--						
	557.9							
	557.4	6-inch thick, very dense, gray and brown SAND; dry			1	22	NP	3
	557.1	--AGGREGATE BASE--				26		
		Medium stiff (0.75 P), brown and gray CLAY LOAM, some gravel; damp				50/3"		
	555.9	Very dense, brown weathered DOLOSTONE; damp						
		--AUGER REFUSAL--	5					
		Boring terminated at 4.00 ft						
			10					
			15					

GENERAL NOTES

Begin Drilling **08-30-2021** Complete Drilling **08-30-2021**
Drilling Contractor **Wang Testing Services** Drill Rig **20CME55T[81%]**
Driller **R&R** Logger **M. Sadowski** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

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

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BORING LOG WB-SGB-38

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 553.93 ft
North: 1755592.18 ft
East: 1024191.86 ft
Station: 383+91.80
Offset: 62.4 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	552.7	15-inch thick ASPHALT --PAVEMENT--						
	552.2	6-inch thick, medium dense, gray and brown SANDY GRAVEL; damp to moist --AGGREGATE BASE--			1	7 13 11	0.50 P	12
		Medium stiff to very stiff, brown and gray SILTY LOAM, little to some gravel; damp to moist --FILL-- --RDR 2-3-- --L_L(%)=23, P_L(%)=17-- --%Gravel=6.6-- --%Sand=21.5-- --%Silt=63.2-- --%Clay=8.8-- --A-4 (2)--	5		2	2 3 4 5	1.50 P	13
					3	9 14 20 20	1.25 P	10
					4	6 11 12 12	2.00 P	14
			10		5	7 9 8 6	1.50 P	16
	542.9	Boring terminated at 11.00 ft						
			15					

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)

GENERAL NOTES

Begin Drilling **08-30-2021** Complete Drilling **08-30-2021**
Drilling Contractor **Wang Testing Services** Drill Rig **20CME55T[81%]**
Driller **R&R** Logger **M. Sadowski** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

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

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BORING LOG WB-SGB-39

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 556.57 ft
North: 1755608.86 ft
East: 1024796.99 ft
Station: 389+97.16
Offset: 60.4 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	555.3	15-inch thick ASPHALT --PAVEMENT--						
	553.6	Very dense, brown SANDY GRAVEL; dry --SUB-BASE--			1	10 39 50/5"	NP	6
	551.6	Very dense, brown Weathered SHALE	5		2	36 50/5"	NP	6
		Very dense, gray SHALE			3	16 42 50/5"	NP	7
					4	27 50/5"	NP	5
			10		5	22 50/5"	NP	8
	545.1	Boring terminated at 11.50 ft	15					

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)

GENERAL NOTES

Begin Drilling **09-09-2021** Complete Drilling **09-09-2021**
Drilling Contractor **Wang Testing Services** Drill Rig **21GeoT[92%]**
Driller **N&K** Logger **F. Bozga** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

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

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

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BORING LOG WB-SGB-40

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 560.78 ft
North: 1755630.00 ft
East: 1025387.83 ft
Station: 395+88.38
Offset: 63.4 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		14-inch thick ASPHALT --PAVEMENT--						
	559.6							
		Very dense, gray and brown Weathered ROCK; damp --RDR 2-3--			1	50/4"	NP	7
	558.3							
		--AUGER REFUSAL-- Boring terminated at 2.50 ft						
			5					
			10					
			15					

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)

GENERAL NOTES

Begin Drilling **08-30-2021** Complete Drilling **08-30-2021**
Drilling Contractor **Wang Testing Services** Drill Rig **20CME55T[81%]**
Driller **R&R** Logger **M. Sadowski** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

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

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

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BORING LOG WB-SGB-41

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 566.68 ft
North: 1755660.27 ft
East: 1025989.16 ft
Station: 401+94.86
Offset: 62 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		18-inch thick ASPHALT --PAVEMENT--						
	565.2							
	564.9	3-inch thick, brown and gray SANDY GRAVEL; damp --AGGREGATE BASE--						
		Stiff, brown and gray CLAY LOAM, little to some gravel; damp --RDR 2--			1	11 7 6	1.50 P	11
					2	4 5 7 6	1.25 P	16
	562.2	Soft, brown and gray SILTY CLAY, little gravel; damp to moist --RDR 2--	5		3	3 8 50/2"	0.41 B	21
	560.7	Very dense, brown, weathered Sandstone and Dolostone; dry --Weathered BEDROCK-- --RDR 2-3--			4	50/2"	NP	7
					5	50/3"	NP	6
	556.7	Boring terminated at 10.00 ft	10					
			15					

GENERAL NOTES

Begin Drilling **08-30-2021** Complete Drilling **08-30-2021**
Drilling Contractor **Wang Testing Services** Drill Rig **20CME55T[81%]**
Driller **R&R** Logger **M. Sadowski** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

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

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

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BORING LOG WB-SGB-42

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: Wang Srvy
Elevation: 570.87 ft
North: 1755770.08 ft
East: 1026566.53 ft
Station: 407+89.99
Offset: 84.1 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	570.0	10-inch thick, stiff, black SILTY CLAY LOAM						
		--TOPSOIL--			1	2 4 4 5	1.25 P	24
		Very stiff, dark brown SILTY CLAY LOAM, trace gravel; damp						
		--FILL--			2	5 6 6 9	2.05 B	27
	567.4	Medium stiff, brown and gray SILTY LOAM, trace gravel; damp						
		--RDR 2--	5		3	4 8 4 5	0.75 P	20
	565.6	Very dense, brown SANDY GRAVEL; damp						
		--Weathered BEDROCK--						
		--RDR 4--			4	9 23 50/5"	NP	8
					5	50/5"	NP	9
	560.9		10					
		Boring terminated at 10.00 ft						
			15					

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)

GENERAL NOTES

Begin Drilling **09-09-2021** Complete Drilling **09-09-2021**
Drilling Contractor **Wang Testing Services** Drill Rig **21GeoT[92%]**
Driller **N&K** Logger **F. Bozga** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

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

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BORING LOG 80/55-BSB-01

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 611.15 ft
North: 1755503.86 ft
East: 1021318.23 ft
Station: 355+16.8
Offset: 62.5 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		17-inch thick ASPHALT --PAVEMENT--						
	609.7							
	609.6	2-inch thick CONCRETE --PAVEMENT-- Loose to medium dense, gray Gravelly SAND; damp --AGGREGATE BASE--			1	29/5"	NP	6
		--white COBBLE fragments--	5		2	3 3 5	NP	8
	605.7							
		Very stiff to hard, gray to brown SILTY CLAY LOAM to CLAY LOAM, trace gravel, trace brick fragments; damp --FILL-- --RDR 2--			3	8 6 6	4.25 P	13
			10		4	7 8 6	3.36 B	19
		--trace brick fragments--			5	4 5 9	3.36 B	17
		--L_L(%)=34, P_L(%)=16-- --%Gravel=7.8-- --%Sand=15.6-- --%Silt=49.2--	15		6	4 4 6	2.21 B	18
		--%Clay=27.4-- --A-6 (12)--						
	595.7	Medium dense, gray SILT, trace gravel; damp --FILL-- --RDR 2--			7	7 9 7	3.61 S	15
	593.7	Stiff to very stiff, brown and gray CLAY LOAM to SILTY CLAY LOAM, trace gravel, trace brick fragments; damp --FILL-- --RDR 2--	20		8	3 4 6	1.15 B	16
		--trace brick fragments--			9	5 6 9	3.69 B	20
	588.2	Medium stiff to hard, gray to brown and gray CLAY to SILTY CLAY, ; damp to moist --RDR 2--	25		10	5 3 5	2.62 B	30
		--L_L(%)=52, P_L(%)=19-- --%Gravel=0.8-- --%Sand=5.0-- --%Silt=50.6-- --%Clay=43.6-- --A-7-6 (34)--			11	5 3 3	0.82 B	27
			30		12	6 9 11	4.51 B	22

GENERAL NOTES

Begin Drilling **01-18-2022** Complete Drilling **01-18-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **20D50T [80%]**
Driller **RH&MG** Logger **M. Rojo** Checked by **C. Marin**
Drilling Method **2.25" ID HSA to 10 ft; mud rotary thereafter; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **DRY**
At Completion of Drilling ▼ **mud in the borehole**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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

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BORING LOG 80/55-BSB-01

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 611.15 ft
North: 1755503.86 ft
East: 1021318.23 ft
Station: 355+16.8
Offset: 62.5 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	579.4							
		Dense, gray and white GRAVEL, cobble fragments; damp --RDR 3--			13	6 14 33	NP	
	574.2		35					
		Medium strong, light gray, poor rock mass quality, shaly DOLOSTONE, occasionally vuggy; few shale partings, bedded, slightly weathered rock and joints, closely spaced horizontal and vertical joints, with less than 0.05-inch opening, soft joint wall, slicken joint wall surface, soft infill strength and less than 0.2-inch infill thickness. -- Run 1: 37.0 to 42.0 feet-- --Recovery = 91%-- --RQD = 18%-- --drilling rate, 2.1 min/ft--			14	CORE		
			40					
			45			CORE		
		-- Run 2: 42.0 to 52.0 feet-- --Recovery = 96%-- --RQD = 66%-- --drilling rate, 2.2 min/ft--			15			
	559.2		50					
		Boring terminated at 52.00 ft						
			55					
			60					

GENERAL NOTES

Begin Drilling **01-18-2022** Complete Drilling **01-18-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **20D50T [80%]**
Driller **RH&MG** Logger **M. Rojo** Checked by **C. Marin**
Drilling Method **2.25" ID HSA to 10 ft; mud rotary thereafter; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **DRY**
At Completion of Drilling ▼ **mud in the borehole**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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BORING LOG 80/55-BSB-03

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 607.82 ft
North: 1755521.40 ft
East: 1021642.76 ft
Station: 358+41.7
Offset: 70.1 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	606.2	20-inch thick ASPHALT --PAVEMENT--						
	605.8	4-inch thick CONCRETE --PAVEMENT--						
	604.8	Gray fine SAND, trace gravel; damp --AGGREGATE BASE--			1	3 12 9	NP	7
		Stiff, brown and gray SILTY CLAY to SILTY CLAY LOAM, trace gravel; damp --FILL-- --RDR 2--	5		2	4 4 5	1.50 P	20
	600.8	Medium dense, brown Gravelly SILTY LOAM to LOAM; moist to wet --FILL-- --RDR 2--			3	5 38 13	1.72 B	17
			10		4	10 6 6	NP	11
		--cobble fragments--			5	10 8 4	NP	14
	594.8	Stiff to very stiff, black, brown, and gray CLAY LOAM to SILTY CLAY LOAM, trace to little gravel; damp --FILL-- --RDR 2--	15		6	6 3 5	3.25 P	22
	589.8	Brown and gray LOAM, trace gravel; damp --FILL--	20		7	4 4 6	3.00 P	25
					8	8 10 10	1.50 P	14
	586.2	Very stiff, black, gray and brown CLAY to SILTY CLAY; damp --RDR 2--			9	7 7 9	3.00 P	24
		--L_L(%)=46, P_L(%)=16-- --%Gravel=0.5-- --%Sand=18.4-- --%Silt=50.8-- --%Clay=30.2-- --A-7-6 (24)--	25		10	4 5 3	2.46 B	28
	582.3	Stiff, brown and gray SILTY CLAY LOAM to SILTY LOAM, trace gravel; damp --RDR 2--			11	6 3 5	1.50 P	17
			30		12	3 4 6	1.56 B	19

GENERAL NOTES

Begin Drilling **01-18-2022** Complete Drilling **01-18-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **20D50T [80%]**
Driller **RH&MG** Logger **M. Rojo** Checked by **C. Marin**
Drilling Method **2.25" ID HSA to 10 ft; mud rotary thereafter; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **DRY**
At Completion of Drilling ▼ **mud in the borehole**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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

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BORING LOG 80/55-BSB-03

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 607.82 ft
North: 1755521.40 ft
East: 1021642.76 ft
Station: 358+41.7
Offset: 70.1 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		--RDR 3-- --some rig chatter, 30.0 to 31.5 feet-- --possible gravel or cobbles--						
	576.3	Medium strong, light gray, very poor to poor rock mass quality, shaly DOLOSTONE, occasionally vuggy; few shale partings, bedded, slightly weathered rock and joints, closely spaced horizontal joints, with less than 0.05-inch opening, soft joint wall, slicken joint wall surface, soft infill strength and less than 0.2-inch infill thickness. -- Run 1: 31.5 to 36.5 feet-- --Recovery = 100%-- --RQD = 0%-- --drilling rate, 1.5 min/ft-- -- Run 2: 36.5 to 46.5 feet-- --Recovery = 95%-- --RQD = 39%-- --drilling rate, 2.1 min/ft-- --Q_u at 36.5 feet=7,804 psi --Q_u at 37.0 feet=9,193 psi	35	CORE	13			
			40	CORE	14			
			45					
	561.3	Boring terminated at 46.50 ft	50					
			55					
			60					

GENERAL NOTES

Begin Drilling **01-18-2022** Complete Drilling **01-18-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **20D50T [80%]**
Driller **RH&MG** Logger **M. Rojo** Checked by **C. Marin**
Drilling Method **2.25" ID HSA to 10 ft; mud rotary thereafter; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **DRY**
At Completion of Drilling ▼ **mud in the borehole**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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

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BORING LOG 80/55-BSB-04

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 609.21 ft
North: 1755434.41 ft
East: 1021342.10 ft
Station: 355+38.3
Offset: 8.0 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		12-inch thick, brown SILTY CLAY LOAM						
	608.2	--TOPSOIL--						
		Very stiff to hard, brown SILTY CLAY to SILTY CLAY LOAM, trace gravel; damp			1	3 5 8	5.33 B	20
		--FILL--						
		--RDR 2--			2	2 2 3	2.50 P	21
			5					
	603.7	Hard, brown and gray SILTY CLAY LOAM to SILTY LOAM, trace gravel; damp			3	5 6 6	4.50 P	16
		--FILL--						
		--RDR 2--						
		--L_L(%)=35, P_L(%)=15-			4	5 6 7	4.00 P	16
		--%Gravel=6.8--						
		--%Sand=13.4--						
		--%Silt=51.2--						
		--%Clay=28.6--	10					
		--A-6 (14)--						
	598.7	Stiff to hard, brow and gray SILTY CLAY to SILTY CLAY LOAM, trace gravel; damp			5	3 3 10	1.15 S	19
		--FILL--						
		--RDR 2--			6	6 7 6	2.25 P	16
			15					

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
					7	6 5 8	4.00 P	17
					8	3 4 7	1.48 S	20
			20					
	588.7	Hard, black and gray SILTY CLAY, trace organic matter			9	6 6 10	5.82 B	24
		--RDR 2--						
	586.2	Hard, brown and gray SILTY CLAY to SILTY CLAY LOAM, trace gravel; damp			10	5 8 12	4.92 S	20
		--RDR 2--	25					
					11	8 5 11	5.08 B	21
					12	7 7 19	4.84 B	21
			30					

GENERAL NOTES

Begin Drilling **01-13-2022** Complete Drilling **01-16-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **21GeoT[92%]**
Driller **JS&AP** Logger **M. Rojo** Checked by **C. Marin**
Drilling Method **2.25" ID HSA to 10 ft; mud rotary thereafter; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **DRY**
At Completion of Drilling ▼ **mud in the borehole**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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

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BORING LOG 80/55-BSB-04

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 609.21 ft
North: 1755434.41 ft
East: 1021342.10 ft
Station: 355+38.3
Offset: 8.0 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	577.5	Gray GRAVEL; damp --RDR 2-3--						
	575.5	Dense, gray SILT, trace gravel; damp --RDR 3-4--	35		13	16 12 22	NP	12
	573.2	--Weathered BEDROCK--						
	572.2	Strong, dark grayish gray, very poor to fair rock mass quality, shaly DOLOSTONE, occasionally vuggy; few shale partings, bedded, closely spaced, slightly weathered, horizontal joints, with <0.05 inch opening, slicken walls, and <0.2 inch thick clay infill. --RUN 1: 37.0 to 42.0 feet-- --Recovery: 88%-- --RQD: 23%--	40		14	CORE		
		--RUN 2: 42.0 to 52.0 feet-- --Recovery: 97%-- --RQD: 67%--	45			CORE		

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
			50		15			
	557.2	Boring terminated at 52.00 ft	55					
			60					

GENERAL NOTES

Begin Drilling **01-13-2022** Complete Drilling **01-16-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **21GeoT[92%]**
Driller **JS&AP** Logger **M. Rojo** Checked by **C. Marin**
Drilling Method **2.25" ID HSA to 10 ft; mud rotary thereafter; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **DRY**
At Completion of Drilling ▼ **mud in the borehole**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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BORING LOG 80/55-BSB-06

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 607.05 ft
North: 1755444.34 ft
East: 1021626.17 ft
Station: 358+22.8
Offset: 6.5 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	606.9	2-inch thick, dark brown SILTY CLAY --TOPSOIL-- Very stiff to hard, brown and gray CLAY LOAM to LOAM, trace gravel; damp --FILL-- --RDR 2--			1	11 5 8	2.50 P	19
			5		2	2 3 5	4.50 P	14
					3	10 10 9	> 4.50 P	11
			10		4	4 12 11	> 4.50 P	12
	596.6	Very stiff to hard, brown and gray SILTY CLAY LOAM to SILTY LOAM, trace gravel; damp --FILL-- --RDR 2-- --L_L(%)=36, P_L(%)=17-- --%Gravel=3.1-- --%Sand=9.5-- --%Silt=67.4-- --%Clay=19.9-- --A-6 (16)--			5	4 4 5	3.00 P	23
			15		6	5 6 14	3.00 P	21
			20		7	3 7 5	3.00 P	14
					8	7 8 12	4.25 P	19
	585.6	Hard, dark gray and black SILTY CLAY LOAM, trace organic matter; damp --Buried TOPSOIL-- --RDR 2--			9	7 8 9	4.00 P	21
	584.1	Very stiff to hard, brown SILTY CLAY to SILTY CLAY LOAM, trace gravel; damp --RDR 2-4--	25		10	7 8 12	NR	
					11	7 7 8	8.77 B	15
			30		12	5 16 14	3.00 P	16

GENERAL NOTES

Begin Drilling **01-16-2022** Complete Drilling **01-16-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **20D50T [80%]**
Driller **RH&MG** Logger **M. Rojo** Checked by **C. Marin**
Drilling Method **2.25" ID HSA to 10 ft; mud rotary thereafter; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **DRY**
At Completion of Drilling ▼ **mud in the borehole**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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BORING LOG 80/55-BSB-06

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 607.05 ft
North: 1755444.34 ft
East: 1021626.17 ft
Station: 358+22.8
Offset: 6.5 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	576.6							
		--rig chatter--						
	576.1	--weathered bedrock--						
		Strong, light grayish gray, very poor to poor quality, shaly DOLOSTONE, occasionally vuggy, few shale partings, bedded, closely spaced, slightly weathered, horizontal and vertical JOINTS, with <0.05 inch opening, slicken walls, and <0.2 inch thick clay infill.				CORE		
		--RUN 1: 31.0 to 37.0 feet--			13			
		--Recovery: 90%--						
		--RQD: 6%--	35					
		--RUN 2: 37.0 to 47.0 feet--				CORE		
		--Recovery: 93%--						
		--RQD: 43%--						
			40		14			
			45					

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	560.1	Boring terminated at 47.00 ft	50					
			55					
			60					

GENERAL NOTES

Begin Drilling **01-16-2022** Complete Drilling **01-16-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **20D50T [80%]**
Driller **RH&MG** Logger **M. Rojo** Checked by **C. Marin**
Drilling Method **2.25" ID HSA to 10 ft; mud rotary thereafter; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **DRY**
At Completion of Drilling ▼ **mud in the borehole**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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

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BORING LOG 80/55-BSB-07

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 610.38 ft
North: 1755366.35 ft
East: 1021320.22 ft
Station: 355+14.6
Offset: 75.0 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		21-inch thick ASPHALT --PAVEMENT--						
	608.6							
		10-inch thick CONCRETE --PAVEMENT--						
	607.8							
		Stiff to hard, brown, black and gray SILTY CLAY LOAM to CLAY LOAM, trace gravel; damp --FILL-- --RDR 2--			1	3 5 3 4	2.00 P	15
			5		2	3 6 9	3.77 B	21
			10		3	4 5 8	3.50 P	17
					4	4 5 7	2.75 P	15
			15		5	2 4 7	3.00 P	18
			20		6	5 5 9	2.75 P	14
					7	4 4 7	2.46 B	18
			25		8	5 10 9	3.03 B	15
	584.9	Hard, brown and gray SILTY CLAY, trace gravel; damp --RDR 2--			9	4 7 10	4.43 B	18
					10	8 12 16	5.17 B	19
			30		11	5 13 10	5.74 B	19

GENERAL NOTES

Begin Drilling **01-03-2022** Complete Drilling **01-03-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **17B57T [91%]**
Driller **N&K** Logger **F. Bozga** Checked by **C. Marin**
Drilling Method **3.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **35.50 ft**
At Completion of Drilling ▼ **NA**
Time After Drilling **180 hours**
Depth to Water ▼ **25.50 ft**

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

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BORING LOG 80/55-BSB-07

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 610.38 ft
North: 1755366.35 ft
East: 1021320.22 ft
Station: 355+14.6
Offset: 75.0 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	578.6	Very dense, gray Gravelly LOAM; damp						
		--RDR 2-4--						
		--L_L(%)=NP, P_L(%)=NP--						
		--%Gravel=43.0--						
		--%Sand=27.9--						
		--%Silt=27.0--						
		--%Clay=2.1--						
		--A-2-4 (0)--	35		12	12 28 30	NP	9
	573.9	--hard slow drilling--						
		Very dense SHALE FRAGMENTS			13	50/3"	NP	
	572.4	--auger refusal at 38 feet--						
		Medium strong, dark grayish gray, very poor to good quality, shaly DOLOSTONE, occasionally vuggy; few shale partings, bedded, interbedded mudstone, closely spaced, slightly weathered to fresh, horizontal JOINTS, with 0-0.2 inch opening, slicken to slightly rough walls, and 0 - 0.2 inch thick clay infill.	40			C O R E		
		--RUN 1: 38.0 to 48.0 feet--						
		--Recovery: 98%--						
		--RQD: 18%--			14			
		--Q_u at 44.0 feet=5,242 psi	45					
		--RUN 2: 48.0 to 53.0 feet--	50		15	C O R E		
		--Recovery: 100%--						
		--RQD: 87%--						
	557.4	Boring terminated at 53.00 ft	55					
			60					

GENERAL NOTES

Begin Drilling **01-03-2022** Complete Drilling **01-03-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **17B57T [91%]**
Driller **N&K** Logger **F. Bozga** Checked by **C. Marin**
Drilling Method **3.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **35.50 ft**
At Completion of Drilling ▼ **NA**
Time After Drilling **180 hours**
Depth to Water ▼ **25.50 ft**

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

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BORING LOG 80/55-BSB-09

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 607.17 ft
North: 1755379.63 ft
East: 1021648.43 ft
Station: 358+43.0
Offset: 71.8 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		16-inch thick ASPHALT --PAVEMENT--						
	605.8							
	605.7	2-inch thick CONCRETE --PAVEMENT--						
		Stiff to hard, brown and gray SILTY CLAY LOAM to CLAY LOAM, trace gravel; damp --FILL-- --RDR 2--			1	4 8 7	1.50 P	18
			5		2	3 2 4	> 4.50 P	11
					3	3 3 8	2.62 B	23
	599.2							
		Loose, brown SILTY LOAM, trace gravel; damp --FILL-- --RDR 2-- --L_L(%)=28, P_L(%)=15-- --%Gravel=5.3-- --%Sand=18.4-- --%Silt=64.3-- --%Clay=12.0-- --A-6 (8)--	10		4	5 4 5	NP	19
	596.7							
		Very stiff to hard, brown and gray SILTY CLAY LOAM to CLAY LOAM, trace to little gravel; damp --FILL-- --RDR 2-3--			5	3 3 3	2.50 P	14
			15		6	3 2 4	2.00 P	14
			20		7	4 3 5	4.50 P	16
		--rig chatter; possible cobbles--			8	10 7 8	> 4.50 P	13
					9	5 8 9	4.51 B	23
	584.2							
		Very stiff, brown and gray SILTY CLAY to SILTY CLAY LOAM, trace gravel; damp --RDR 2--	25		10	5 6 8	3.69 S	23
					11	3 5 5	3.50 P	17
	577.2		30		12	5 5 30	2.00 P	17

GENERAL NOTES

Begin Drilling **01-11-2022** Complete Drilling **01-11-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **17B57T [91%]**
Driller **JS&AP** Logger **M. Rojo** Checked by **C. Marin**
Drilling Method **3.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

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

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

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BORING LOG 80/55-BSB-09

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 607.17 ft
North: 1755379.63 ft
East: 1021648.43 ft
Station: 358+43.0
Offset: 71.8 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		--hard slow drilling at 30 feet--						
		--Weathered BEDROCK--						
	575.2							
		Strong, light grayish gray, poor to excellent quality, shaly DOLOSTONE, occasionally vuggy; few shale partings, bedded, closely spaced to massive, moderately to slightly weathered, horizontal and vertical JOINTS, with 0-0.2 inch opening, slicken walls, and <0.2 inch thick clay infill.				CORE		
		--RUN 1: 32.0 to 42.0 feet--	35					
		--Recovery: 91%--						
		--RQD: 32%--			13			
			40					
		--RUN 2: 42.0 to 47.0 feet--				CORE		
		--Recovery: 93%--						
		--RQD: 93%--			14			
			45					

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	560.2	Boring terminated at 47.00 ft	50					
			55					
			60					

GENERAL NOTES

Begin Drilling **01-11-2022** Complete Drilling **01-11-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **17B57T [91%]**
Driller **JS&AP** Logger **M. Rojo** Checked by **C. Marin**
Drilling Method **3.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

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

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

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BORING LOG 80AA-BSB-01

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 611.46 ft
North: 1755478.84 ft
East: 1020710.73 ft
Station: 349+12.14
Offset: 63.49 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		9-inch thick ASPHALT --PAVEMENT--						
	610.7							
		Dense, gray, black and brown Gravelly SAND, trace brick fragments; dry --FILL-- --RDR 2-3--			1	5 16 14	NP	7
	608.5							
		Very stiff to hard, black, brown and gray SILTY CLAY to SILTY CLAY LOAM, trace gravel; damp --FILL-- --RDR 2-3--	5		2	3 5 7	2.48 B	17
					3	3 3 11	4.76 B	19
			10		4	3 4 8	4.10 B	19
					5	3 4 6	2.12 B	19
	598.5							
		Very stiff, black, brown, and gray CLAY to SILTY CLAY, trace gravel; damp --FILL-- --RDR 2-- --L_L(%)=50, P_L(%)=15--	15		6	5 6 5	2.54 B	24
	596.0	--%Gravel=1.2-- --%Sand=15.0-- --%Silt=47.6-- --%Clay=36.2-- --A-7-6 (30)-- --rig chatter; possible cobbles--			7	3 5 9	2.95 B	20
		Very stiff to hard, black, brown, and gray CLAY LOAM to SILTY CLAY LOAM, trace gravel; damp --FILL--			8	5 7 12	> 10.25 B	17
	591.0		20					
		Very stiff to hard, brown and gray SILTY CLAY, trace gravel; damp --RDR 2--			9	5 6 8	3.28 B	29
			25		10	4 7 12	8.28 B	18
	586.0							
		Medium dense, brown and gray SILTY LOAM; dry --RDR 2--			11	3 6 6	NP	18
	583.5							
		Hard, brown and gray SILTY CLAY --RDR 2--	30		12	4 7 9	4.92 B	22

GENERAL NOTES

Begin Drilling **01-04-2022** Complete Drilling **01-04-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **20CME55T[81%]**
Driller **JS&AP** Logger **E. Greenwood** Checked by **C. Marin**
Drilling Method **3.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **31.75 ft**
At Completion of Drilling ▼ **mud in the borehole**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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

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BORING LOG 80AA-BSB-01

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 611.46 ft
North: 1755478.84 ft
East: 1020710.73 ft
Station: 349+12.14
Offset: 63.49 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	579.7	Medium dense, gray SILT; saturated --RDR 2-- --L_L(%)=NP, P_L(%)=NP-- --%Gravel=0.0-- --%Sand=1.3-- --%Silt=88.1-- --%Clay=10.7-- --A-4 (0)--	35		13	5 6 17	NP	23
	573.0	Strong, light grayish gray, very poor to fair quality, shaly DOLOSTONE, occasionally vuggy; few shale partings, bedded, very closely to closely spaced, moderately to slightly weathered, horizontal, oblique, and vertical joints, with 0.00 - > 0.2 inch opening, slicken to slightly rough walls, and no infill. --RUN 1: 38.5 to 43.5 feet-- --Recovery: 97%-- --RQD: 0%-- --RUN 2: 43.5 to 53.5 feet-- --Recovery: 92%-- --RQD: 55%-- --Q_u=10,600 psi	40 45		14	CORE COR		
	558.0	Boring terminated at 53.50 ft	50 55 60		15	E		

GENERAL NOTES

Begin Drilling **01-04-2022** Complete Drilling **01-04-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **20CME55T[81%]**
Driller **JS&AP** Logger **E. Greenwood** Checked by **C. Marin**
Drilling Method **3.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **31.75 ft**
At Completion of Drilling ▼ **mud in the borehole**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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

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BORING LOG 80AA-BSB-02

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 608.67 ft
North: 1755399.72 ft
East: 1020610.93 ft
Station: 348+06.01
Offset: 6.83 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		12-inch thick, brown SILTY CLAY						
	607.7	--TOPSOIL--						
		Stiff to hard, brown and gray SILTY CLAY, trace gravel and wood fragments; damp			1	7 2 4	1.39 B	12
		--FILL-- --RDR 2--						
			5		2	7 7 10	2.50 P	29
					3	5 7 11	5.33 B	18
	600.7							
		Very stiff to hard, brown and gray CLAY LOAM to SILTY CLAY LOAM, trace gravel; damp			4	5 14 14	4.10 S	18
		--FILL-- --RDR 2-3--	10					
					5	7 8 9	4.02 S	19
		--rig chatter; possible cobbles--						
					6	8 8 10	NR	
			15					
	590.7	Hard, gray and black SILTY CLAY, trace gravel and organic matter; damp			7	4 6 8	3.20 S	16
		--RDR 2--	20		8	6 9 10	4.50 P	20
	588.2	Hard, brown and gray SILTY CLAY to SILTY CLAY LOAM, trace gravel; damp			9	7 11 16	6.31 B	21
		--RDR 2--						
	585.7	Loose to medium dense, gray SANDY GRAVEL; damp to saturated			10	5 6 5	NP	
		--RDR 2-3--	25					
		--rig chatter; possible cobbles--			11	5 3 4	NP	16
	580.7	Very stiff, gray SILTY CLAY, trace gravel; moist						
	579.7	Medium dense, gray SILT, trace gravel; damp to moist			12	3 7 8	2.05 B	17
		--RDR 2-3--	30					

GENERAL NOTES

Begin Drilling **01-12-2022** Complete Drilling **01-12-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **21GeoT[92%]**
Driller **JS&AP** Logger **M. Rojo** Checked by **C. Marin**
Drilling Method **2.25" ID HSA to 10 ft; mud rotary thereafter; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **27.00 ft**
At Completion of Drilling ▼ **NA**
Time After Drilling **24 hours**
Depth to Water **0 ft (▽cave in 1.5 ft) ft**

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

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BORING LOG 80AA-BSB-02

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 608.67 ft
North: 1755399.72 ft
East: 1020610.93 ft
Station: 348+06.01
Offset: 6.83 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		--hard drilling; possible cobbles--						
		--hard drilling; possible cobbles--	35		13	9 12 12	NP	14
	572.2	--hard slow drilling at 35.5 feet; possible bedrock-- Strong, light grayish gray, poor to good quality, shaly DOLOSTONE, occasionally vuggy; few shale partings, bedded, closely spaced, slightly weathered, horizontal, oblique, and vertical JOINTS, with 0-0.2 inch opening, slicken walls, and 0 inch thick clay infill. --RUN 1: 36.5 to 46.5 feet-- --Recovery: 90%-- --RQD: 36%--	40		14	CORE		
			45					
		--RUN 2: 46.5 to 52.0 feet-- --Recovery: 100%-- --RQD: 66%--	50		15	CORE		
	556.7	Boring terminated at 52.00 ft	55					
			60					

GENERAL NOTES

Begin Drilling **01-12-2022** Complete Drilling **01-12-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **21GeoT[92%]**
Driller **JS&AP** Logger **M. Rojo** Checked by **C. Marin**
Drilling Method **2.25" ID HSA to 10 ft; mud rotary thereafter; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **27.00 ft**
At Completion of Drilling ▼ **NA**
Time After Drilling **24 hours**
Depth to Water **0 ft (▽cave in 1.5 ft) ft**

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

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BORING LOG 80AA-BSB-03

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 607.05 ft
North: 1755317.15 ft
East: 1020594.39 ft
Station: 347+81.98
Offset: 87.59 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		9.5-inch thick ASPHALT --PAVEMENT--						
	606.3							
		Very dense, brown SANDY GRAVEL, trace asphalt fragments; dry --FILL--			1	23 50 19	NP	2
	604.1							
		Very stiff to hard, black, brown and gray CLAY to SILTY CLAY LOAM, trace to little gravel; damp --FILL-- --RDR 2--			2	3 3 3	3.00 P	20
			5					
		--wet spoon recovery; possible saturated sand lens-- --L_L(%)=35, P_L(%)=14-- --%Gravel=3.5-- --%Sand=17.6-- --%Silt=47.5-- --%Clay=31.4-- --A-6 (15)--			3	2 3 5	3.44 B	16
			10		4	5 7 10	4.50 P	11
					5	4 5 8	3.10 B	18
			15		6	5 6 4	5.33 B	18
			20		7	6 9 10	5.00 B	14
					8	5 6 13	4.00 P	11
	586.6	Very stiff, black, brown and gray CLAY to SILTY CLAY, trace organic matter; damp --RDR 2--			9	3 4 7	2.57 B	30
	584.1	Hard, brown and gray SILTY CLAY to SILTY CLAY LOAM, trace gravel; damp --RDR 2--	25		10	6 6 9	4.51 B	20
					11	5 8 11	4.92 B	17
			30		12	7 8 12	5.33 B	20

GENERAL NOTES

Begin Drilling **01-05-2022** Complete Drilling **01-05-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **20CME55T[81%]**
Driller **JS&AP** Logger **E. Greenwood** Checked by **C. Marin**
Drilling Method **3.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **5.50 ft**
At Completion of Drilling ▼ **NA**
Time After Drilling **132 hours**
Depth to Water ▼ **2.00 ft**

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BORING LOG 80AA-BSB-03

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 607.05 ft
North: 1755317.15 ft
East: 1020594.39 ft
Station: 347+81.98
Offset: 87.59 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	575.3							
		Medium dense, gray SILTY LOAM, trace gravel; saturated --RDR 2--						
			35		13	4 5 7	NP	10
	569.1							
		Strong, light grayish gray, poor to fair quality, shaly DOLOSTONE, occasionally vuggy; few shale partings, bedded, occasionally with interbedded mudstone, closely spaced, slightly weathered, horizontal and oblique joints, with <0.05 inch opening, slicken to slightly rough walls, and no infill. --RUN 1: 38.0 to 48.0 feet-- --Recovery: 96%-- --RQD: 42%--				C O R E		
			40		14			
			45					

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		--Q_u=6,988 psi						
		--RUN 2: 48.0 to 53.0 feet-- --Recovery: 100%-- --RQD: 61%--				C O R E		
			50		15			
	554.1							
		Boring terminated at 53.00 ft						
			55					
			60					

GENERAL NOTES

Begin Drilling **01-05-2022** Complete Drilling **01-05-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **20CME55T[81%]**
Driller **JS&AP** Logger **E. Greenwood** Checked by **C. Marin**
Drilling Method **3.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **5.50 ft**
At Completion of Drilling ▼ **NA**
Time After Drilling **132 hours**
Depth to Water ▼ **2.00 ft**

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BORING LOG 80AA-BSB-04

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 610.72 ft
North: 1755345.82 ft
East: 1020723.07 ft
Station: 349+13.92
Offset: 69.69 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		12-inch thick ASPHALT --PAVEMENT--						
	609.7							
		Dense, brown SANDY GRAVEL; moist --AGGREGATE BASE-- --RDR 2--			1	12 22 26	NP	7
	607.7							
		Stiff to very stiff, brown and gray SILTY CLAY to SILTY CLAY LOAM, trace to few gravel; damp --FILL-- --RDR 2--			2	5 4 3	1.00 P	22
			5 ▽					
					3	3 5 9	3.69 B	17
					4	3 5 8	3.50 P	20
			10					
					5	5 8 11	NR	
					6	5 8 10	3.61 B	18
			15					

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
			20		7	6 7 11	3.00 P	21
					8	8 10 14	2.50 P	24
	587.7							
		Very stiff to hard, brown and gray SILTY CLAY, trace gravel --RDR 2--			9	5 5 7	1.50 P	28
			25		10	5 10 12	4.16 B	22
					11	3 6 11	3.20 B	21
			30		12	5 7 11	3.36 B	23

GENERAL NOTES

Begin Drilling **02-03-2022** Complete Drilling **02-03-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **17B57T [91%]**
Driller **N&K** Logger **F. Bozga** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **5.50 ft**
At Completion of Drilling ▼ **5.00 ft**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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BORING LOG 80AA-BSB-04

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 610.72 ft
North: 1755345.82 ft
East: 1020723.07 ft
Station: 349+13.92
Offset: 69.69 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
			35		13	7 11 16	2.75 P	22
	573.2	--AUGER REFUSAL-- Boring terminated at 37.50 ft	40 45					

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)

GENERAL NOTES

Begin Drilling **02-03-2022** Complete Drilling **02-03-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **17B57T [91%]**
Driller **N&K** Logger **F. Bozga** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **5.50 ft**
At Completion of Drilling ▼ **5.00 ft**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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

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BORING LOG DpR-BSB-01

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 567.33 ft
North: 1755313.68 ft
East: 1017504.81 ft
Station: 316+95.61
Offset: 57.9 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		12.5-inch thick ASPHALT --PAVEMENT--						
	566.3							
		Medium dense, brown SANDY GRAVEL; damp --AGGREGATE BASE--			1	6 8 3	NP	6
	564.3							
		Stiff to very stiff, gray SILTY CLAY to SILTY CLAY LOAM, trace to some gravel; damp --FILL-- --RDR 2--			2	7 4 3	2.50 P	18
			5					
		--L_L(%)=31, P_L(%)=15-- --%Gravel=16.3-- --%Sand=11.1-- --%Silt=49.1-- --%Clay=23.5-- --A-6 (9)--			3	3 3 3	1.89 B	21
	558.1							
		Brown SILTY LOAM, trace gravel; damp --FILL--	10		4	3 5 5	3.85 B	18
	556.8							
		Stiff to very stiff, brown and gray SILTY CLAY LOAM, trace gravel; damp --FILL--			5	3 4 7	1.89 B	16
			15		6	3 6 6	3.28 B	13

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	551.8							
		Medium dense, brown and gray SILTY LOAM, trace gravel; damp --FILL-- --L_L(%)=25, P_L(%)=14-- --%Gravel=4.3-- --%Sand=18.2-- --%Silt=59.0-- --%Clay=18.6-- --A-6 (6)--			7	4 7 7	NP	15
	548.1							
		Loose to very dense, brown Gravelly SANDY LOAM; saturated --RDR 2-3--	20		8	2 3 3	NR	
		--L_L(%)=NP, P_L(%)=NP-- --%Gravel=49.7-- --%Sand=32.3-- --%Silt=16.8-- --%Clay=1.2-- --A-1-b (0)--			9	4 4 7	NP	15
			25		10	6 7 7	NP	12
		--3-inch thick silty loam lens--			11	8 8 50/3"	NP	10
	540.1							
		Very dense, dark brownish gray Weathered SHALE --Weathered BEDROCK--			12		NP	9
	538.3							
		Medium strong, dark brownish gray, poor quality, MUDSTONE & DOLOSTONE; Closely	30			50/2" C O		

GENERAL NOTES

Begin Drilling **08-04-2021** Complete Drilling **08-04-2021**
Drilling Contractor **Wang Testing Services** Drill Rig **17B57T [91%]**
Driller **NC&AG** Logger **E. Yim** Checked by **C. Marin**
Drilling Method **2.25" ID HSA to 29 ft; mud rotary thereafter; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **21.00 ft**
At Completion of Drilling ▼ **23.00 ft**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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BORING LOG DpR-BSB-01

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 567.33 ft
North: 1755313.68 ft
East: 1017504.81 ft
Station: 316+95.61
Offset: 57.9 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		spaced, slightly weathered, horizontal and vertical joints, with 0 inch opening, slicken to slightly rough walls, and >0.2 inch thick clay infill.				R E		
		--RUN 1: 29.0 to 39.0 feet--						
		--Recovery: 100%--						
		--RQD: 29%--						
	533.3							
		Strong, light greenish gray, very poor quality, DOLOSTONE; Closely spaced, slightly weathered, horizontal, oblique, and vertical joints, with >0.2 inch opening, rough walls, and >0.2 inch thick sand and silt infill.			13			
			35					
		--RUN 2: 39.0 to 44.0 feet--				C O R E		
		--Recovery: 100%--						
		--RQD: 0%--	40					
					14			
	523.3							
		Boring terminated at 44.00 ft						
			45					

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)

GENERAL NOTES

Begin Drilling **08-04-2021** Complete Drilling **08-04-2021**
Drilling Contractor **Wang Testing Services** Drill Rig **17B57T [91%]**
Driller **NC&AG** Logger **E. Yim** Checked by **C. Marin**
Drilling Method **2.25" ID HSA to 29 ft; mud rotary thereafter; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **21.00 ft**
At Completion of Drilling ▼ **23.00 ft**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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

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BORING LOG DpR-BSB-02

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 567.08 ft
North: 1755187.36 ft
East: 1017508.96 ft
Station: 316+97.67
Offset: 68.4 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		18-inch thick ASPHALT --PAVEMENT--						
	565.6							
	565.1	Brown SANDY GRAVEL; damp --AGGREGATE BASE--						
		Medium dense, brown, gravelly SANDY LOAM; damp --FILL--			1	7 8 8	NP	10
	563.8							
		--wet spoon recovery-- Very stiff, brown and gray SILTY CLAY, little gravel; damp --FILL--			2	3 4 5	3.85 B	21
	562.3		5					
	561.6	Brown and gray SANDY GRAVEL; saturated --FILL--						
		Very stiff to hard, brown and gray SILTY CLAY to SILTY CLAY LOAM, trace to little gravel; damp --FILL-- --RDR 2--			3	2 3 6	4.18 B	15
					4	4 4 5	4.35 B	17
			10					
		--L_L(%)=38, P_L(%)=15-- --%Gravel=2.0-- --%Sand=13.2-- --%Silt=55.5-- --%Clay=29.3-- --A-6 (19)--			5	4 5 8	3.69 B	28
					6	3 4 8	2.79 B	14
			15					
		--gray, black and brown--			7	5 7 9	4.67 B	19
	549.1							
		Loose, gray SILTY LOAM; damp --RDR 2--			8	3 3 3	NP	32
			20					
	546.6							
		Medium stiff, gray SILTY CLAY LOAM; moist			9	2 3 5	0.90 B	28
	545.3							
		Loose to medium dense, gray and brown SANDY GRAVEL; saturated --RDR 2-3--			10	13 9 7	NP	13
			25					
		--rig chatter--						
	541.6							
		Dense, gray SILTY LOAM, trace gravel; damp to moist --RDR 3--			11	11 14 16	NP	14
	539.1							
		Very dense, greenish gray, highly weathered SHALE; damp --Weathered BEDROCK-- --RDR 2-3--			12	22 50/1"	NP	10
			30					

GENERAL NOTES

Begin Drilling **08-01-2021** Complete Drilling **08-01-2021**
Drilling Contractor **Wang Testing Services** Drill Rig **20D50T [80%]**
Driller **R&R** Logger **M. Sadowski** Checked by **C. Marin**
Drilling Method **2.25" ID HSA to 10 ft; mud rotary thereafter; boring flushed and left open for 24-hr WL reading; backfilled upon reading**

WATER LEVEL DATA

While Drilling ▽ **3.25 ft**
At Completion of Drilling ▼ **NA**
Time After Drilling **24 hours**
Depth to Water ▼ **11.00 ft**

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

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BORING LOG DpR-BSB-02

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 567.08 ft
North: 1755187.36 ft
East: 1017508.96 ft
Station: 316+97.67
Offset: 68.4 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	535.1							
		Strong, light brown and gray, poor quality, vuggy DOLOSTONE with occasional shale partings; Closely spaced, highly weathered, horizontal and oblique joints, with 0.05 - > 0.2 inch opening, rough walls, and <0.2 inch thick greenish gray clayey and silty infill.				CORE		
		--RUN 1: 32.0 to 41.0 feet--	35					
		--Recovery: 100%--						
		--RQD: 40%--			13			
			40					
		--RUN 2: 41.0 to 47.0 feet--				CORE		
		--Recovery: 100%--						
		--RQD: 25%--			14			
			45					
	520.1	Boring terminated at 47.00 ft	50					
			55					
			60					

GENERAL NOTES

Begin Drilling **08-01-2021** Complete Drilling **08-01-2021**
Drilling Contractor **Wang Testing Services** Drill Rig **20D50T [80%]**
Driller **R&R** Logger **M. Sadowski** Checked by **C. Marin**
Drilling Method **2.25" ID HSA to 10 ft; mud rotary thereafter; boring flushed and left open for 24-hr WL reading; backfilled upon reading**

WATER LEVEL DATA

While Drilling ▽ **3.25 ft**
At Completion of Drilling ▼ **NA**
Time After Drilling **24 hours**
Depth to Water ▼ **11.00 ft**

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

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BORING LOG DpR-BSB-07

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 565.84 ft
North: 1755319.46 ft
East: 1017855.32 ft
Station: 320+46.17
Offset: 57.9 LT

Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	13.5-inch thick ASPHALT --PAVEMENT--						
564.7							
564.4	Brown SANDY GRAVEL; damp --AGGREGATE BASE--						
	Loose, brown SILTY LOAM, trace gravel; damp --FILL--			1	5 4 4	NP	15
562.8							
	Very stiff, brown and black SILTY CLAY LOAM, trace gravel; damp						
561.8				2	11 6 50/4"	2.00 P	14
	Very stiff, brown Gravelly CLAY LOAM; moist to wet --RDR 4-- --L_L(%)=29, P_L(%)=15-- --%Gravel=17.9-- --%Sand=25.7-- --%Silt=38.6-- --%Clay=17.7-- --A-6 (5)-- --hard drilling from 5.0 feet--	5		3	50/5"	NP	4
560.8							
	Very dense, brown and gray, weathered SHALE; damp --Weathered BEDROCK-- --RDR 4--			4	50/4"	NP	5
		10		5	50/1.5"	NP	
552.8							
	Medium strong, dark gray, fair to good quality, dolomitic SHALE and MUDSTONE; massive, slightly weathered, horizontal and vertical joints, top 3 feet with brownish, slightly	15	CORE				

Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	weathered joints, with 0 inch opening, slicken to slightly rough walls, and no infill. --RUN 1: 13.0 to 23.0 feet-- --Recovery: 100%-- --RQD: 62%-- --Q_u at 14.0 feet= 7,947 psi --Q_u at 14.5 feet= 8,058 psi			6			
		20					
	--RUN 2: 23.0 to 28.0 feet-- --Recovery: 100%-- --RQD: 84%--		CORE				
		25		7			
537.8							
	Boring terminated at 28.00 ft	30					

GENERAL NOTES

Begin Drilling **08-04-2021** Complete Drilling **08-04-2021**
Drilling Contractor **Wang Testing Services** Drill Rig **17B57T [91%]**
Driller **NC&AG** Logger **E. Yim** Checked by **C. Marin**
Drilling Method **2.25" ID HSA to 13 ft: mud rotary thereafter; boring backfilled upon completion**

WATER LEVEL DATA

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

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BORING LOG DpR-BSB-08

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 565.87 ft
North: 1755198.67 ft
East: 1017874.15 ft
Station: 320+62.99
Offset: 63.2 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		15-inch thick ASPHALT --PAVEMENT--						
	564.6							
		Brown, silty SANDY GRAVEL; damp				4		
	563.9	--AGGREGATE BASE--						
		Very stiff, brown and gray SILTY CLAY LOAM to SILTY CLAY, trace to little gravel; damp			1	3 6	3.77 B	15
		--FILL--				8		
					2	4 8	2.25 P	16
			5					
	560.4							
		Gray SILTY LOAM, trace gravel; damp				4		
	559.1				3	2 3	NP	15
		--Qu: 1.00 P-- Medium stiff to stiff, brown and gray CLAY LOAM to SILTY LOAM, trace gravel; moist --RDR 2--				2		
		--L_L(%)=48, P_L(%)=17-- --%Gravel=13.2-- --%Sand=26.8-- --%Silt=43.6-- --%Clay=16.4-- --A-7-6 (30)--			4	2 3	0.82 B	21
			10					
	555.4							
		Stiff, dark gray SILTY LOAM; moist --RDR 2--				2		
					5	2 2	1.00 P	31
	552.9							
		Soft, brown and gray SILTY CLAY, some gravel; wet --RDR 2--				2		
					6	3 3	0.49 B	17
			15					

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	550.4	--rig chatter; moderate advancement--						
		Medium dense to very dense, gray, highly weathered SHALE --Weathered BEDROCK-- --RDR 3-4--			7	3 7 18	NP	12
					8	100/5"	NP	5
	545.9		20					
		--rig chatter; slow advancement-- Very dense, gray, moderately weathered SHALE --BEDROCK-- --RDR 4--			9	100/4"	NP	4
		--slow advancement--			10	100/5"	NP	4
			25					
					11	100/5.5"	NP	4
					12	100/4"	NP	3
			30					

GENERAL NOTES

Begin Drilling **08-02-2021** Complete Drilling **08-02-2021**
Drilling Contractor **Wang Testing Services** Drill Rig **17B57T [91%]**
Driller **NC&AG** Logger **E. Yim** Checked by **C. Marin**
Drilling Method **2.25" ID HSA to 31 ft; mud rotary thereafter; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **20.00 ft**
At Completion of Drilling ▼ **DRY**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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BORING LOG DpR-BSB-08

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 565.87 ft
North: 1755198.67 ft
East: 1017874.15 ft
Station: 320+62.99
Offset: 63.2 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		--rig chatter; slow advancement--						
		Medium strong, dark gray, fair to good quality, dolomitic SHALE and MUDSTONE; slightly weathered, horizontal joints, with 0 inch opening, slicken to slightly rough walls, and no infill.				CORE		
	532.4							
		Strong, light bluish gray, very poor quality, highly fractured, vuggy DOLOSTONE; Very closely to closely spaced, slightly weathered, horizontal, oblique, and vertical joints, with > 0.5 inch opening, slightly rough to rough walls, and >0.5 inch thick light greenish clayey and silty infill.	35		13		1	
		--RUN 1: 31.0 to 41.0 feet-- --Recovery: 69%-- --RQD: 8%--						
		--RUN 2: 41.0 to 45.0 feet-- --Recovery: 75%-- --RQD: 10%--	40		14	CORE		
			45					

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		--RUN 3: 45.0 to 48.0 feet-- --Recovery: 100%-- --RQD: 11%--			15	CORE		
	517.9							
		Boring terminated at 48.00 ft	50					
			55					
			60					

GENERAL NOTES

Begin Drilling **08-02-2021** Complete Drilling **08-02-2021**
Drilling Contractor **Wang Testing Services** Drill Rig **17B57T [91%]**
Driller **NC&AG** Logger **E. Yim** Checked by **C. Marin**
Drilling Method **2.25" ID HSA to 31 ft; mud rotary thereafter; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **20.00 ft**
At Completion of Drilling ▼ **DRY**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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BORING LOG FR-BSB-03

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 604.73 ft
North: 1755391.52 ft
East: 1019804.59 ft
Station: 340+02.8
Offset: 65.4 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		14-inch thick ASPHALT --PAVEMENT--						
	603.6							
		Medium dense, brown LOAM, little gravel; dry --FILL--			1	14 7 4	NP	5
	601.5							
		Very stiff to hard, brown and gray SILTY CLAY to SILTY CLAY LOAM, trace gravel; damp to moist --FILL-- --RDR 2--	5		2	5 4 6	4.35 B	19
					3	4 5 5	3.44 B	19
			10		4	8 4 4	6.31 B	17
	594.2							
		Very stiff to hard, brown and gray CLAY to SILTY CLAY, trace gravel; damp --FILL-- --RDR 2-- --L_L(%)=36, P_L(%)=15-- --%Gravel=3.7-- --%Sand=10.8-- --%Silt=45.8-- --%Clay=39.6-- --A-6 (17)--			5	3 4 6	3.28 B	23
			15		6	4 6 7	4.26 B	22

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	589.2							
		Hard, brown and gray SILTY CLAY, trace gravel; damp --FILL-- --RDR 2--			7	4 6 6	4.92 B	18
	585.7							
		Very stiff, black SILTY CLAY, trace organic matter; damp to moist --BURIED TOPSOIL--	20		8	4 8 5	2.71 B	29
	584.2							
		--1-inch thick sand seam; saturated--						
		Very stiff to hard, brown to gray SILTY CLAY, trace gravel; damp to moist --RDR 2--			9	3 6 6	2.87 B	23
			25		10	5 6 9	4.51 B	20
					11	6 10 13	6.72 B	19
		--L_L(%)=39, P_L(%)=17-- --%Gravel=0.8-- --%Sand=4.8-- --%Silt=50.8--	30		12	6 10 12	4.02 B	21

GENERAL NOTES

Begin Drilling **10-24-2022** Complete Drilling **10-24-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **20D50T [80%]**
Driller **RH&TC** Logger **D. Morken** Checked by **C. Marin**
Drilling Method **3.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **21.00 ft**
At Completion of Drilling ▼ **NA**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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BORING LOG FR-BSB-03

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 604.73 ft
North: 1755391.52 ft
East: 1019804.59 ft
Station: 340+02.8
Offset: 65.4 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		--%Clay=43.5--						
		--A-6 (21)--						
	573.0							
		Hard, gray SILTY CLAY LOAM to SILTY LOAM, trace gravel; damp						
		--RDR 2--						
					13	9 10 13	5.49 B	12
			35					
	568.0							
		Very dense, gray SANDY GRAVEL; moist to wet						
		--RDR 4--						
					14		NP	6
	565.7					50/1"		
		Strong, dark gray, fair rock mass quality, Shaly DOLOSTONE, horizontally bedded; closely spaced, fresh, horizontal joints, with 0-0.2 inch opening, rough walls, and 0 - 0.2 inch thick clay and shale infill.	40			C O R E		
		--RUN 1: 39.0 to 44.0 feet--			15			
		--Recovery: 98%--						
		--RQD: 67%--						
		--Q_u@39.5 feet=9,126 psi--						
		--RUN 2: 44.0 to 54.0 feet--				C		
		--Recovery: 93%--				O		
		--RQD: 67%--	45					

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
						R E		
					16			
			50					
	550.7							
		Boring terminated at 54.00 ft						
			55					
			60					

GENERAL NOTES

Begin Drilling **10-24-2022** Complete Drilling **10-24-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **20D50T [80%]**
Driller **RH&TC** Logger **D. Morken** Checked by **C. Marin**
Drilling Method **3.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **21.00 ft**
At Completion of Drilling ▼ **NA**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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BORING LOG FR-BSB-04

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 603.69 ft
North: 1755347.84 ft
East: 1019716.69 ft
Station: 339+10.9
Offset: 30.7 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		12-inch thick ASPHALT --PAVEMENT--						
	602.7	Medium dense, brown SANDY GRAVEL; dry --BASE COURSE--			1	6 6 5	NP	7
	600.7	Medium stiff to very stiff, brown to gray SILTY CLAY LOAM to CLAY LOAM, trace gravel; damp --FILL-- --RDR 2--	5		2	2 2 4	0.98 B	28
					3	2 4 5	1.72 S	12
			10		4	3 2 5	2.50 P	16
					5	4 5 9	1.64 S	13
			15		6	5 5 7	1.89 S	19
	588.2	Stiff, black SILTY CLAY, trace gravel; damp --BURIED TOPSOIL-- --RDR 2--			7	4 5 6	1.07 B	29
	584.4	Stiff to hard, brown to gray SILTY CLAY to SILTY CLAY LOAM, trace gravel; damp --RDR 2--	20		8	5 5 6	NR	
					9	8 13 15	7.63 B	19
			25		10	6 7 10	1.50 P	21
	578.2	Medium dense, brown, fine SAND; moist to wet --RDR 2--			11	7 8 10	NP	21
		--L_L(%)=NP, P_L(%)=NP-- --%Gravel=1.0-- --%Sand=92.3-- --%Silt=4.5--	30		12	6 9 16	NP	22

GENERAL NOTES

Begin Drilling **10-30-2022** Complete Drilling **10-30-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **20D50T [80%]**
Driller **RH&TC** Logger **N. Karahalios** Checked by **C. Marin**
Drilling Method **3.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **26.00 ft**
At Completion of Drilling ▼ **28 (before core)**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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BORING LOG FR-BSB-04

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 603.69 ft
North: 1755347.84 ft
East: 1019716.69 ft
Station: 339+10.9
Offset: 30.7 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		--%Clay=2.2--						
		--A-3 (0)--						
	571.9							
		Very stiff, gray SILTY CLAY LOAM, trace gravel; damp						
		--RDR 2-3--						
					13	5	2.21	15
						50/5"	B	
		--possible cobbles--	35					
	565.7							
		Strong, dark gray, fair to good rock mass quality, horizontaly bedded, Shaly DOLOSTONE; slightly weathered rock, slightly weathered to moderately weathered joints, closely spaced horizontal joints, with less than 0.05-inch opening, hard joint wall, slightly rough joint wall, hard infill strength, and less than 0.2-inch infill thickness.	40			C O R E		
		--Run 1: 38.0 to 44.5 feet--						
		--Recovery: 74%--						
		--RQD: 56%--						
		--drilling rate: 3.5 min/ft --						
		--Run 2: 44.5 to 54.5 feet--	45			C		

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		--Recovery: 99%--				O		
		--RQD: 89%--				R		
		--drilling rate: 2.6 min/ft --				E		
			50					
			55					
	547.2							
		Boring terminated at 54.50 ft						
			60					

GENERAL NOTES

Begin Drilling **10-30-2022** Complete Drilling **10-30-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **20D50T [80%]**
Driller **RH&TC** Logger **N. Karahalios** Checked by **C. Marin**
Drilling Method **3.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **26.00 ft**
At Completion of Drilling ▼ **28 (before core)**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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BORING LOG FR-BSB-07

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD88
Elevation: 605.00 ft
North: 1755294.63 ft
East: 1019819.27 ft
Station: 340+07.7
Offset: 32.4 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	604.5	6-inch thick ASPHALT --PAVEMENT--						
	603.9	8-inch thick CONCRETE --PAVEMENT--						
		Very stiff, brown and gray SILTY CLAY to SILTY CLAY LOAM, trace gravel; damp --FILL-- --RDR 2--			1	6 8 6	2.50 P	12
			5		2	4 3 5	2.87 B	19
					3	3 5 5	3.03 B	18
			10		4	4 6 9	2.54 B	18
					5	4 6 7	3.20 B	20
			15		6	3 5 8	3.28 B	19
	587.0	Very stiff (3.00P), black SILTY CLAY, trace gravel; damp to moist			7	7 7 8	2.21 B	18
	586.1	--BURIED TOPSOIL--			8	4 8 10	6.64 B	22
		Hard, brown SILTY CLAY, trace gravel; damp to moist --RDR 2--	20		9	4 6 8	3.53 B	21
			25		10	5 8 12	7.38 S	19
					11	6 8 15	5.74 B	20
			30		12	5 8 11	5.17 B	19

GENERAL NOTES

Begin Drilling **10-27-2022** Complete Drilling **10-27-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **20D50T [80%]**
Driller **RH&TC** Logger **D. Morken** Checked by **C. Marin**
Drilling Method **3.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **31.00 ft**
At Completion of Drilling ▼ **NA**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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

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BORING LOG FR-BSB-07

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD88
Elevation: 605.00 ft
North: 1755294.63 ft
East: 1019819.27 ft
Station: 340+07.7
Offset: 32.4 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	574.0	Possible SAND; wet --sand heaving in augers--						
	573.0	Stiff, gray CLAY LOAM, trace gravel; wet --RDR 2--						
			35		13	3 5 8	1.97 B	17
	567.0	Strong, dark grayish gray, poor to good quality, horizontaly bedded, Shaly DOLOSTONE; closely spaced, fresh to slightly weathered, horizontal and oblique joints, with <0.05 inch opening, rough walls, and <0.2 inch thick clay infill. --RUN 1: 38.0 to 44.0 feet-- --Recovery: 100%-- --RQD: 41%-- --Q_u@40.0 feet=8,816 psi--	40		14	C O R E		
		--RUN 2: 44.0 to 54.0 feet-- --Recovery: 95%-- --RQD: 81%--	45			C O		
	551.0	Boring terminated at 54.00 ft	50		15	R E		
			55					
			60					

GENERAL NOTES

Begin Drilling **10-27-2022** Complete Drilling **10-27-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **20D50T [80%]**
Driller **RH&TC** Logger **D. Morken** Checked by **C. Marin**
Drilling Method **3.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **31.00 ft**
At Completion of Drilling ▼ **NA**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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

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BORING LOG FR-BSB-08

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 605.29 ft
North: 1755237.20 ft
East: 1019711.46 ft
Station: 340+01.9
Offset: 89.6 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		15-inch thick CONCRETE --PAVEMENT--						
	604.0							
		Medium dense, brown SANDY GRAVEL; dry --FILL--			1	8 9 6	NP	3
	602.0							
		Medium stiff to very stiff, brown and gray SILTY CLAY to SILTY CLAY LOAM, trace gravel; damp to moist --FILL-- --RDR 2--	5		2	3 4 7	> 4.50 P	19
					3	4 4 4	1.07 B	18
			10		4	3 3 6	2.05 B	21
		--L_L(%)=32, P_L(%)=16-- --%Gravel=3.4-- --%Sand=13.6-- --%Silt=48.5-- --%Clay=34.4-- --A-6 (12)--			5	2 2 3	0.82 B	23
			15		6	3 2 3	2.46 B	18

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	589.8							
		Stiff, black and greenish gray SILTY CLAY, trace gravel; damp to moist --BURIED TOPSOIL--			7	6 7 7	1.31 B	16
	587.3							
		Very stiff, black and greenish gray CLAY to SILTY CLAY, trace gravel; damp to moist --RDR 2--	20		8	4 6 8	2.71 B	26
	584.8							
		Hard, brown to gray SILTY CLAY, trace gravel; damp to moist --RDR 2--			9	8 12 15	7.63 B	19
			25		10	7 12 15	10.25 B	18
					11	6 10 13	6.97 B	20
	576.6							
		Medium dense, brown to yellowish brown, fine to medium SAND, trace gravel; wet to saturated	30		12	5 6 9	NP	19

GENERAL NOTES

Begin Drilling **10-26-2022** Complete Drilling **10-26-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **20D50T [80%]**
Driller **RH&TC** Logger **D. Morken** Checked by **C. Marin**
Drilling Method **3.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **30.00 ft**
At Completion of Drilling ▼ **NA**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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BORING LOG FR-BSB-08

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 605.29 ft
North: 1755237.20 ft
East: 1019711.46 ft
Station: 340+01.9
Offset: 89.6 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		--RDR 2--						
	573.5							
		Hard, gray SILTY CLAY LOAM to CLAY LOAM, trace gravel, few silt seams; moist --RDR 2--			13	7 15 37	> 4.50 P	25
	570.6							
		Very dense, gray, gravelly LOAM; wet --WEATHERED BEDROCK-- --heaving sand in augers--	35					
	567.3							
		Very weak, dark gray, very poor quality, highly weathered Shaly DOLOSTONE; very closely spaced, slightly weathered, horizontal joints, with <0.05 inch opening, rough walls, and <0.2 inch thick clay infill. --RUN 1: 38.0 to 39.5 feet-- --Recovery: 94%-- --RQD: 0%--			14	CORE CORE		
	565.8		40					
		Strong, gray, fair rock mass quality, horizontaly bedded Shaly DOLOSTONE; closely spaced, fresh to slightly weathered, horizontal and oblique joints, with 0-0.2 inch opening, rough walls, and <0.2 inch thick clay infill. --RUN 2: 39.5 to 44.5 feet-- --Recovery: 95%-- --RQD: 57%-- --Q_u@=12,298 psi--			15			
			45			C		

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		--RUN 3: 44.5 to 54.5 feet-- --Recovery: 98%-- --RQD: 61%--	50		16	CORE		
	550.8							
		Boring terminated at 54.50 ft	55					
			60					

GENERAL NOTES

Begin Drilling **10-26-2022** Complete Drilling **10-26-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **20D50T [80%]**
Driller **RH&TC** Logger **D. Morken** Checked by **C. Marin**
Drilling Method **3.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **30.00 ft**
At Completion of Drilling ▼ **NA**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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BORING LOG OSB-01

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 571.07 ft
North: 1755243.20 ft
East: 1018367.03 ft
Station: 325+56.5
Offset: 26.9 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	570.6	6-inch thick, brown SILTY CLAY LOAM --TOPSOIL--						
		Stiff to hard, brown to gray SILTY CLAY LOAM to SILTY LOAM, trace gravel; damp --RDR 2--			1	7 10 11	> 4.50 P	12
			5		2	4 4 21	1.64 S	12
	565.6	Gray GRAVEL: wet						
	565.0	Very dense, gray SILTY LOAM, trace gravel; moist to wet --RDR 3--			3	17 23 30	NP	10
	563.1	Very dense, gray DOLOSTONE fragments --Weathered BEDROCK--			4	50/5"	NP	7
			10		5	50/3"	NP	8
	558.1	Strong to very strong, light gray, poor to fair quality, DOLOSTONE; closely spaced, moderately weathered, horizontal, oblique, and vertical joints, with 0.05 - 0.2 inch				CORE		
			15					

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		opening, slightly rough walls, and <0.2 inch thick clay infill. --RUN 1: 13.0 to 17.0 feet-- --Recovery: 84%-- --RQD: 39%--			6			
		--RUN 2: 17.0 to 23.0 feet-- --Recovery: 93%-- --RQD: 51%--				CORE		
			20		7			
	548.1	Boring terminated at 23.00 ft						
			25					
			30					

GENERAL NOTES

Begin Drilling **11-03-2022** Complete Drilling **11-03-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **20D50T [80%]**
Driller **RH&TC** Logger **N. Karahalios** Checked by **C. Marin**
Drilling Method **3.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **6.00 ft**
At Completion of Drilling ▼ **9.00 ft**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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BORING LOG OSB-03

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 599.56 ft
North: 1755294.11 ft
East: 1019570.36 ft
Station: 337+60.2
Offset: 10.1 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	599.1	5-inch thick, dark brown SILTY CLAY LOAM --TOPSOIL--						
		Stiff to very stiff, brown SILTY CLAY to SILTY CLAY LOAM, trace gravel; damp --FILL-- --RDR 2--			1	6 4 6	3.00 P	25
	596.6	Medium dense to dense, gray SILTY LOAM, trace gravel; damp --FILL-- --RDR 2--			2	6 9 23	NP	12
			5		3	7 12 12	NP	14
			10		4	6 10 14	NP	15
	587.8	Very stiff to hard, gray SILTY CLAY, trace gravel; damp --RDR 2--			5	5 7 9	NR	
			15		6	6 5 6	2.46 B	19
			20		7	9 12 19	7.79 B	18
					8	5 11 15	7.79 B	20
	579.1	Medium dense, brown, fine SAND, trace gravel; saturated --RDR 2--			9	6 10 16	NP	20
	576.6	Stiff, gray SILTY CLAY, trace gravel; damp --RDR 2-3--	25		10	4 7 8	1.48 B	16
	574.1	Dense to very dense, gray SILTY LOAM, trace gravel; damp --RDR 2--			11	11 18 17	NP	16
			30		12	17 33 28	NP	8

GENERAL NOTES

Begin Drilling **11-03-2022** Complete Drilling **11-03-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **20D50T [80%]**
Driller **RH&TC** Logger **N. Karahalios** Checked by **C. Marin**
Drilling Method **3.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **21.00 ft**
At Completion of Drilling ▼ **DRY**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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BORING LOG OSB-03

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 599.56 ft
North: 1755294.11 ft
East: 1019570.36 ft
Station: 337+60.2
Offset: 10.1 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	566.6							
		Strong, dark gray, poor to good quality, DOLOSTONE; very closely to closely spaced, slightly to moderately weathered, horizontal joints, with <0.05 inch opening, rough walls, and <0.2 inch thick clay infill.				CORE		
		--RUN 1: 33.0 to 39.5 feet--	35					
		--Recovery: 94%--			13			
		--RQD: 48%--						
		--RUN 2: 39.5 to 43.5 feet--						
		--Recovery: 93%--	40			CORE		
		--RQD: 77%--			14			
	556.1							
		Boring terminated at 43.50 ft	45					

GENERAL NOTES

Begin Drilling **11-03-2022** Complete Drilling **11-03-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **20D50T [80%]**
Driller **RH&TC** Logger **N. Karahalios** Checked by **C. Marin**
Drilling Method **3.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **21.00 ft**
At Completion of Drilling ▼ **DRY**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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BORING LOG OSB-04

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 601.80 ft
North: 1755232.08 ft
East: 1019559.05 ft
Station: 337+44.8
Offset: 70.8 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		25-inch thick ASPHALT --PAVEMENT--						
	599.7	Very stiff to hard, brown CLAY LOAM to SILTY CLAY LOAM, trace gravel; damp --FILL-- --RDR 2-3--			1	4 4 3	NA	7
			5		2	4 5 7	5.17 B	20
					3	3 7 8	3.28 B	17
	593.1	Medium dense, brown GRAVEL, some silty clay loam; damp --FILL-- --RDR 3--	10		4	6 6 8	NP	10
	591.3	Hard, brown CLAY LOAM to SILTY CLAY LOAM, trace gravel; damp --FILL-- --RDR 2-3--			5	4 11 13	> 4.50 P	17
			15		6	5 8 10	4.35 B	14
	585.3	Very stiff to hard, brown SILTY CLAY, trace gravel; damp --RDR 2--			7	4 5 9	2.46 B	24
			20		8	9 15 26	10.17 B	18
	581.3	Brown SILT; damp						
	580.7	Hard, brown and gray CLAY to SILTY CLAY, trace gravel; damp --RDR 3--			9	8 14 18	9.18 B	20
	578.8	Hard, gray SILTY CLAY LOAM, trace gravel; moist --RDR 3--	25		10	5 3 6	1.15 B	14
					11	4 5 6	1.23 B	14
			30		12	8 12 16	> 4.50 P	15

GENERAL NOTES

Begin Drilling **11-09-2022** Complete Drilling **11-09-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **20D50T [80%]**
Driller **RH&TC** Logger **N. Karahalios** Checked by **C. Marin**
Drilling Method **3.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

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

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BORING LOG OSB-04

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 601.80 ft
North: 1755232.08 ft
East: 1019559.05 ft
Station: 337+44.8
Offset: 70.8 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	570.1	Very dense, gray SILT to SILTY LOAM, trace gravel; wet --RDR 2--			13	11 50/3"	NP	20
	565.8	Strong, light gray, fair quality, DOLOSTONE; closely spaced, moderately weathered, horizontal, oblique, and vertical joints, with <0.05 inch opening, slightly rough walls, and >0.2 inch thick clay infill. --RUN 1: 36.0 to 46.0 feet-- --Recovery: 99%-- --RQD: 53%--			14	CORE		
	555.8	Boring terminated at 46.00 ft						

GENERAL NOTES

Begin Drilling **11-09-2022** Complete Drilling **11-09-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **20D50T [80%]**
Driller **RH&TC** Logger **N. Karahalios** Checked by **C. Marin**
Drilling Method **3.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

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

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BORING LOG OSB-05

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 605.58 ft
North: 1755443.97 ft
East: 1021708.12 ft
Station: 359+05.4
Offset: 9.8 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	605.0	7-inch thick, dark brown SILTY CLAY LOAM --TOPSOIL--						
		Stiff to hard, brown SILTY CLAY LOAM to CLAY LOAM, trace gravel; damp --FILL-- --RDR 2--			1	5 3 6	3.12 B	28
			5		2	3 6 6	2.30 B	14
					3	6 14 17	2.46 B	17
			10		4	8 9 15	3.00 P	15
					5	4 10 12	2.13 S	13
			15		6	2 7 11	3.85 B	12
	585.1	Hard, black SILTY CLAY, trace gravel; damp --Buried TOPSOIL-- --RDR 2--	20		7	6 6 7	4.50 P	23
					8	14 6 7	1.00 P	16
					9	7 9 12	4.43 B	30
	582.6	Stiff to harf, brown and gray SILTY CLAY, trace gravel; damp --RDR 2-3--	25		10	6 9 11	4.67 B	23
					11	4 5 8	1.39 B	21
			30		12	3 50/4"	1.39 B	19

GENERAL NOTES

Begin Drilling **11-06-2022** Complete Drilling **11-06-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **20D50T [80%]**
Driller **RH&TC** Logger **N. Karahalios** Checked by **C. Marin**
Drilling Method **3.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **21.00 ft**
At Completion of Drilling ▼ **32.00 ft**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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BORING LOG OSB-05

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 605.58 ft
North: 1755443.97 ft
East: 1021708.12 ft
Station: 359+05.4
Offset: 9.8 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	575.1							
		--Weathered BEDROCK-- --hard slow drilling-- --rig chatter--						
	572.6							
		Strong, dark gray, poor quality, DOLOSTONE; closely spaced, moderately weathered, horizontal, oblique, and vertical joints, with <0.05 inch opening, slightly rough walls, and >0.2 inch thick clay infill. --RUN 1: 33.0 to 43.0 feet-- --Recovery: 99%-- --RQD: 27%--	35		13	CORE		
	562.6		40					
		Boring terminated at 43.00 ft	45					

GENERAL NOTES

Begin Drilling **11-06-2022** Complete Drilling **11-06-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **20D50T [80%]**
Driller **RH&TC** Logger **N. Karahalios** Checked by **C. Marin**
Drilling Method **3.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **21.00 ft**
At Completion of Drilling ▼ **32.00 ft**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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

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BORING LOG OSB-06

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 606.30 ft
North: 1755380.93 ft
East: 1021708.20 ft
Station: 359+02.8
Offset: 72.4 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		23-inch thick ASPHALT --PAVEMENT--						
	604.4							
		Medium stiff to hard, brown SILTY CLAY LOAM to CLAY LOAM, trace gravel; damp --FILL-- --RDR 2--			1	9 14 9	> 4.50 P	13
			5		2	6 7 8	3.50 P	15
					3	4 5 8	2.46 S	20
			10		4	4 9 10	3.12 S	22
					5	5 6 6	0.98 S	29
			15		6	7 11 12	3.44 S	14
			20		7	10 8 5	2.00 P	10
					8	7 6 6	2.13 B	11
	585.8	--wet spoon recovery-- --wet sand lenses--						
		Soft to very stiff, brown and gray SILTY CLAY to SILTY CLAY LOAM, trace gravel; damp --RDR 3--			9	2 2 7	1.89 B	21
			25		10	6 9 11	2.87 S	26
	580.0	--Qu: 0.25P--						
		Medium dense, brown SILT; wet --RDR 2--			11	6 8 8	NP	16
	578.3							
		Stiff, brown SILTY CLAY, trace gravel; moist --RDR 3--			12	4 6 50/4"	1.64 B	19
	576.5		30					

GENERAL NOTES

Begin Drilling **11-09-2022** Complete Drilling **11-09-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **20D50T [80%]**
Driller **RH&TC** Logger **N. Karahalios** Checked by **C. Marin**
Drilling Method **3.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **21.00 ft**
At Completion of Drilling ▼ **DRY**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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

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BORING LOG OSB-06

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 606.30 ft
North: 1755380.93 ft
East: 1021708.20 ft
Station: 359+02.8
Offset: 72.4 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		--Weathered BEDROCK--						
		--RDR 3--						
	575.3							
		Strong, light gray, very poor quality, DOLOSTONE; closely spaced, moderately weathered, horizontal, oblique, and vertical joints, with <0.05 inch opening, slightly rough walls, and >0.2 inch thick clay infill.				C O R E		
		--RUN 1: 31.0 to 41.0 feet--						
		--Recovery: 96%--						
		--RQD: 12%--						
			35					
					13			
			40					
	565.3							
		Boring terminated at 41.00 ft						
			45					

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)

GENERAL NOTES

Begin Drilling **11-09-2022** Complete Drilling **11-09-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **20D50T [80%]**
Driller **RH&TC** Logger **N. Karahalios** Checked by **C. Marin**
Drilling Method **3.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **21.00 ft**
At Completion of Drilling ▼ **DRY**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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

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BORING LOG OSB-07

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 556.33 ft
North: 1755595.16 ft
East: 1023813.00 ft
Station: 380+13.2
Offset: 77.0 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		19.5-inch thick ASPHALT --PAVEMENT--						
	554.7							
		Stiff to very stiff, brown SILTY CLAY LOAM to CLAY LOAM, trace to little gravel; damp --FILL-- --RDR 2-3--			1	8 18 13	3.00 P	4
			5		2	5 6 10	2.46 B	31
					3	4 5 8	2.00 P	33
	547.1					3		
		Medium dense to dense, brown SILTY LOAM, trace gravel; damp --FILL-- --RDR 2--	10		4	8 8	NR	
					5	6 20 10	NP	12
	543.3							
		Stiff, black and brown CLAY LOAM to CLAY, trace to some gravel; damp --FILL-- --RDR 2-3--	15		6	3 4 6	1.61 B	26

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		--trace organic matter--						
	539.9				7	50/4"	1.50 P	37
		Hard, gray Gravelly SANDY LOAM; damp --Weathered BEDROCK-- --RDR 4--						
	537.3				8	50/4"	> 4.50 P	4
		Strong, light gray, very poor quality, DOLOSTONE; closely spaced, highly weathered, horizontal, oblique, and vertical joints, with <0.05 inch opening, slightly rough walls, and 0 - >0.2 inch thick clay infill. --RUN 1: 19.0 to 24.0 feet-- --Recovery: 87%-- --RQD: 16%--	20		9	CORE		
		--RUN 2: 24.0 to 29.0 feet-- --Recovery: 91%-- --RQD: 10%--	25		10	CORE		
	527.3							
		Boring terminated at 29.00 ft	30					

GENERAL NOTES

Begin Drilling **11-08-2022** Complete Drilling **11-08-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **20D50T [80%]**
Driller **RH&TC** Logger **N. Karahalios** Checked by **C. Marin**
Drilling Method **3.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

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

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BORING LOG OSB-08

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 556.29 ft
North: 1755494.82 ft
East: 1023807.76 ft
Station: 380+04.7
Offset: 23.4 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	555.9	5-inch thick, dark brown SILTY CLAY LOAM --TOPSOIL--						
		Stiff to hard, brown SILTY LOAM to CLAY LOAM, trace to little gravel; damp --FILL-- --RDR 2--			1	8 12 8	> 4.50 P	11
			5		2	9 8 13	2.50 P	12
					3	7 12 14	3.00 P	11
			10		4	7 14 13	3.50 P	13
					5	6 15 14	1.00 P	10
	543.3	Stiff, black CLAY LOAM, trace gravel; damp --Buried TOPSOIL-- --RDR 2--	15		6	2 3 6	1.39 S	26
	539.8	Very stiff, brown SILTY CLAY LOAM to SILTY LOAM, little to some gravel and rock fragments; damp to moist --Weathered BEDROCK-- --RDR 4--			7	4 5 8	1.23 S	36
			20		8	12 50/3"	2.00 P	20
	535.3	Strong, light gray, very poor quality, DOLOSTONE; Closely spaced, moderately weathered, horizontal, oblique, and vertical JOINTS, with <0.05 inch opening, slightly rough walls, and >0.2 inch thick clay infill. --RUN 1: 21.0 to 25.0 feet-- --Recovery: 72%-- --RQD: 0%--			9	C O R E		
			25					
		--RUN 2: 25.0 to 31.0 feet-- --Recovery: 61%-- --RQD: 21%--			10	C O R E		
			30					

GENERAL NOTES

Begin Drilling **11-06-2022** Complete Drilling **11-06-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **20D50T [80%]**
Driller **RH&TC** Logger **N. Karahalios** Checked by **C. Marin**
Drilling Method **3.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **13.00 ft**
At Completion of Drilling ▼ **16.00 ft**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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BORING LOG OSB-08

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 556.29 ft
North: 1755494.82 ft
East: 1023807.76 ft
Station: 380+04.7
Offset: 23.4 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	525.3	Boring terminated at 31.00 ft	35					
			40					
			45					

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)

GENERAL NOTES

Begin Drilling **11-06-2022** Complete Drilling **11-06-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **20D50T [80%]**
Driller **RH&TC** Logger **N. Karahalios** Checked by **C. Marin**
Drilling Method **3.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **13.00 ft**
At Completion of Drilling ▼ **16.00 ft**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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BORING LOG OSB-09

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 554.72 ft
North: 1755501.96 ft
East: 1024366.95 ft
Station: 385+65.2
Offset: 32.5 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		12-inch thick ASPHALT --PAVEMENT--						
	553.6							
		Medium dense, brown Gravelly LOAM to SANDY LOAM; dry --RDR 2--			1	4 4 8	NP	4
			5		2	8 8 11	NP	6
	549.2							
		Stiff to very stiff, brown SILTY CLAY LOAM, trace gravel; damp --FILL-- --RDR 2-3--			3	13 12 20	1.50 P	16
			10		4	8 14 17	2.00 P	24
					5	7 10 5	1.00 P	12
	541.7							
		Stiff, black SILTY CLAY to SILTY CLAY LOAM, trace gravel; damp --Buried TOPSOIL-- --RDR 2--			6	3 3 4	1.50 P	25
			15					

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	538.3							
		Dense SANDY GRAVEL; damp --RDR 2--			7	3 4 27	NP	13
	536.7							
		Hard, gray Gravelly LOAM; damp --Weathered BEDROCK-- --RDR 3--			8	50/6"	NP	5
			20					
	533.7							
		Strong, light gray and brown, very poor quality vuggy DOLOSTONE toweek, dark gray and greenish gray Shaly DOLOSTONE; very closely to closely spaced, highly weathered, horizontal, oblique, and vertical joints, with 0.05-0.2 inch opening, slightly rough walls, and <0.2 inch thick clay infill. --RUN 1: 21 to 22.0 feet-- --Recovery: 92%-- --RQD: 0%-- --RUN 2: 22 to 24.0 feet-- --Recovery: 64%-- --RQD: 0%-- --RUN 3: 24 to 25.0 feet-- --Recovery: 92%-- --RQD: 0%-- --@25 ft Shaly DOLOSTONE-- --RUN 4: 25 to 30.0 feet-- --Recovery: 63%-- --RQD: 25%--			1 2 3 4	CORE CORE		
			25					
	524.7		30					
		Boring terminated at 30.00 ft						

GENERAL NOTES

Begin Drilling **11-10-2022** Complete Drilling **11-10-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **20D50T [80%]**
Driller **RH&TC** Logger **N. Karahalios** Checked by **C. Marin**
Drilling Method **3.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

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

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BORING LOG OSB-11

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 569.16 ft
North: 1755652.72 ft
East: 1026272.87 ft
Station: 404+77.6
Offset: 19.8 LT

Elevation (ft)	Depth (ft)	SOIL AND ROCK DESCRIPTION	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
568.7	0	6-inch thick, dark brown, SILTY CLAY LOAM --TOPSOIL-- Very stiff to hard, brown CLAY LOAM, trace gravel; damp --FILL-- --RDR 2--		1	5 5 13	> 4.50 P	18
				2	14 9 14	2.21 S	11
563.7	5	Very stiff, brown SILTY CLAY to SILTY CLAY LOAM, trace gravel; damp --RDR 2-3--		3	2 5 7	2.54 B	28
	10			4	3 6 7	3.94 B	23
556.2				5	3 4 9	2.00 P	15
		Very dense, gray Gravelly LOAM; damp --Weathered BEDROCK-- --RDR 3--		6	50/2"	NP	5
554.2	15						

Elevation (ft)	Depth (ft)	SOIL AND ROCK DESCRIPTION	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	20	Strong, light gray, very poor quality, DOLOSTONE; Very closely spaced, moderately weathered, horizontal, oblique, and vertical joints, with <0.05 inch opening, slightly rough walls, and >0.2 inch thick clay infill. --RUN 1: 15.0 to 25.0 feet-- --Recovery: 99%-- --RQD: 7%--		7	C O R E		
544.2	25	Boring terminated at 25.00 ft					
	30						

GENERAL NOTES

Begin Drilling **11-07-2022** Complete Drilling **11-07-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **20D50T [80%]**
Driller **RH&TC** Logger **N. Karahalios** Checked by **C. Marin**
Drilling Method **3.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **13.50 ft**
At Completion of Drilling ▼ **DRY**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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BORING LOG OSB-13

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 571.74 ft
North: 1755692.22 ft
East: 1026496.13 ft
Station: 407+05.1
Offset: 21.3 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	571.3	5-inch thick, brown SILTY CLAY LOAM --TOPSOIL--						
		Stiff to very stiff, brown to dark brown CLAY LOAM to SILTY CLAY LOAM, trace gravel; damp --FILL-- --RDR 2--			1	5 6 10	2.62 B	15
			5		2	6 7 8	3.77 B	14
					3	5 6 9	1.97 B	24
			10		4	3 6 10	3.85 B	30
		--rig chatter--						
	561.2	Medium dense to dense, brown LOAM to SANDY LOAM, little to some gravel; damp to saturated --RDR 3--			5	9 10 19	4.00 P	12
					6	12 24 28	1.00 P	10
			15					

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	556.2	Very stiff to hard, gray SILTY LOAM to SILTY CLAY LOAM, trace gravel; damp --RDR 2-3--			7	12 20 24	5.33 S	12
			20		8	10 19 27	3.36 S	14
					9	14 25 48	5.66 S	15
			25		10	21 34 50/4"	4.35 S	15
					11	20 27 50/5"	6.48 S	17
			30		12	20 50 50/4"	4.67 S	14

GENERAL NOTES

Begin Drilling **11-07-2022** Complete Drilling **11-07-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **20D50T [80%]**
Driller **RH&TC** Logger **N. Karahalios** Checked by **C. Marin**
Drilling Method **3.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **13.00 ft**
At Completion of Drilling ▼ **16.00 ft**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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BORING LOG OSB-13

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 571.74 ft
North: 1755692.22 ft
East: 1026496.13 ft
Station: 407+05.1
Offset: 21.3 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		--possible cobbles--			13	35 50/3"	4.26 S	16
	535.0		35					
		Very dense, gray Gravelly SANDY LOAM; damp --RDR 2-3--			14	50/4"	NP	9
	530.0		40					
		Hard, gray SILTY CLAY LOAM to SILTY LOAM, trace gravel; wet --possible cobbles-- --RDR 2--			15	50/6"	4.67 S	19
	527.7	Boring terminated at 44.00 ft	45					

GENERAL NOTES

Begin Drilling **11-07-2022** Complete Drilling **11-07-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **20D50T [80%]**
Driller **RH&TC** Logger **N. Karahalios** Checked by **C. Marin**
Drilling Method **3.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **13.00 ft**
At Completion of Drilling ▼ **16.00 ft**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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

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BORING LOG OSB-15

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 610.80 ft
North: 1755521.20 ft
East: 1021230.90 ft
Station: 354+31.8
Offset: 83.3 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	610.3	6-inch thick, dark brown SILTY CLAY LOAM --TOPSOIL--						
		Stiff to hard, brown SILTY CLAY LOAM to CLAY LOAM, trace gravel; damp --FILL-- --RDR 2-3--			1	4 7 7	5.66 S	13
			5		2	3 5 4	2.87 B	16
					3	3 4 5	3.12 B	18
			10		4	3 8 8	3.85 S	21
					5	3 2 4	1.39 S	20
			15		6	3 6 8	2.95 B	19
			20		7	6 8 11	3.03 B	19
					8	6 8 9	4.43 S	15
					9	6 9 10	3.12 B	24
			25		10	3 8 17	7.30 S	17
	585.3	Hard, brown SILTY CLAY, trace gravel; dmap --RDR 3--			11	11 17 21	> 10.25 B	19
			30		12	8 11 16	9.18 B	20

GENERAL NOTES

Begin Drilling **11-08-2022** Complete Drilling **11-08-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **20D50T [80%]**
Driller **RH&TC** Logger **N. Karahalios** Checked by **C. Marin**
Drilling Method **3.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **34.00 ft**
At Completion of Drilling ▼ **35.00 ft**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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BORING LOG OSB-15

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 610.80 ft
North: 1755521.20 ft
East: 1021230.90 ft
Station: 354+31.8
Offset: 83.3 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	579.1	Stiff, gray SILTY CLAY LOAM to SILTY LOAM, trace gravel; damp						
					13	8 17 23	1.39 S	16
	573.8	Strong, dark gray, poor quality, DOLOSTONE; closely spaced, moderately weathered, horizontal joints, with <0.05 inch opening, slicken walls, and >0.2 inch thick clay infill. --RUN 1: 37.0 to 47.0 feet-- --Recovery: 100%-- --RQD: 31%--				C O R E		
					14			
	563.8	Boring terminated at 47.00 ft						

35 40 45 50 55 60

GENERAL NOTES

Begin Drilling **11-08-2022** Complete Drilling **11-08-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **20D50T [80%]**
Driller **RH&TC** Logger **N. Karahalios** Checked by **C. Marin**
Drilling Method **3.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **34.00 ft**
At Completion of Drilling ▼ **35.00 ft**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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

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BORING LOG RRC-BSB-01

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 554.86 ft
North: 1755592.99 ft
East: 1024452.16 ft
Station: 386+52.00
Offset: 55.2 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		14-inch thick ASPHALT --PAVEMENT--						
	553.7							
		Brown SANDY GRAVEL; damp --AGGREGATE BASE--						
	552.9							
		Stiff, brown and gray SILTY CLAY LOAM, some gravel; damp --FILL-- --RDR 2-3--			1	6 6 9	1.25 P	11
	551.6							
		Medium dense to dense, brown and gray Gravelly SILTY LOAM to LOAM; damp to moist --FILL-- --RDR 2-3--	5		2	7 9 11	NP	9
		--L_L(%)=24, P_L(%)=15-- --%Gravel=30.0-- --%Sand=25.7-- --%Silt=35.1-- --%Clay=9.1-- --A-4 (1)--			3	6 16 25	NP	9
			10		4	7 17 24	NP	8
					5	5 14 13	NP	7
			15		6	6 17 18	NP	8
	539.4	Soft, gray and brown SILTY CLAY LOAM, some gravel; damp --RDR 3--			7	27 50/3"	0.25 P	13
	536.9	Very dense, gray Weathered BEDROCK --RDR 3-4--			8	50/2"	NP	1
	534.9	Strong, light bluish gray, very poor quality, shaly and vuggy DOLOSTONE; closely spaced, highly to moderately weathered, horizontal, oblique, and vertical joints, with <0.05 inch opening, slightly rough walls, and <0.2 inch thick clay and silty infill. --RUN 1: 20.0 to 22.0 feet-- --Recovery: 100%-- --RQD: 0%-- --RUN 2: 22.0 to 30.0 feet-- --Recovery: 58%-- --RQD: 0%--	20		9	C O R E		
			25		10	C O R E		
			30					

GENERAL NOTES

Begin Drilling **08-15-2021** Complete Drilling **08-16-2021**
Drilling Contractor **Wang Testing Services** Drill Rig **20D50T [80%]**
Driller **R&A** Logger **M. Sadowski** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **DRY**
At Completion of Drilling ▼ **DRY**
Time After Drilling **24 hours**
Depth to Water ▼ **19.00 ft**

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

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BORING LOG RRC-BSB-01

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 554.86 ft
North: 1755592.99 ft
East: 1024452.16 ft
Station: 386+52.00
Offset: 55.2 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		--RUN 3: 30.0 to 37.0 feet--				C		
		--Recovery: 99%--				O		
		--RQD: 10%--				R		
						E		
					11			
			35					
		--RUN 4: 37.0 to 42.0 feet--				C		
		--Recovery: 55%--				O		
		--RQD: 15%--				R		
						E		
					12			
			40					
		--RUN 5: 42.0 to 46.0 feet--				C		
		--Recovery: 100%--				O		
		--RQD: 17%--				R		
						E		
					13			
			45					

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	508.9	Boring terminated at 46.00 ft						
			50					
			55					
			60					

GENERAL NOTES

Begin Drilling **08-15-2021** Complete Drilling **08-16-2021**
Drilling Contractor **Wang Testing Services** Drill Rig **20D50T [80%]**
Driller **R&A** Logger **M. Sadowski** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **DRY**
At Completion of Drilling ▼ **DRY**
Time After Drilling **24 hours**
Depth to Water ▼ **19.00 ft**

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

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BORING LOG RRC-BSB-02

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 554.93 ft
North: 1755473.76 ft
East: 1024456.87 ft
Station: 386+53.04
Offset: 64.2 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		15-inch thick ASPHALT --PAVEMENT--						
	553.7							
	553.2	Brown and gray SANDY GRAVEL; damp --AGGREGATE BASE--						
		Medium dense, brown and gray Gravelly SILTY LOAM to LOAM; damp --FILL-- --RDR 2-3--			1	3 6 11	NP	13
			5		2	5 7 14	NP	9
		--L_L(%)=22, P_L(%)=15-- --%Gravel=29.1-- --%Sand=26.0-- --%Silt=37.4-- --%Clay=7.4-- --A-4 (0)--			3	4 6 17	NP	11
	546.9							
		Medium dense, brown Gravelly SANDY LOAM; damp --RDR 3--			4	8 10 10	NP	8
	544.4		10					
		Very stiff, brown to gray Gravelly CLAY LOAM --RDR 2-3--			5	7 15 18	3.25 P	8
	541.9							
		Medium dense, brown and gray Gravelly LOAM; damp --Weathered BEDROCK-- --RDR 2--			6	6 7 13	NP	20
			15					

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	539.4							
		Medium dense, gray, SILTY LOAM, some gravel; damp --Weathered BEDROCK-- --RDR 2-3--			7	7 9 15	NP	21
					8	50/2"	NP	
	534.9		20					
		Very strong, light bluish gray, very poor quality, vuggy DOLOSTONE, occasional shale partings; moderately to highly weathered, horizontal, oblique, and vertical joints, with 0.05 - 0.2 inch opening, slightly rough walls, and <0.2 inch thick clay and silty greenish infill. --RUN 1: 20.0 to 27.0 feet-- --Recovery: 18%-- --RQD: 0%-- --poor water return top 4 feet; bottom 3 feet no water return--			9	CORE		
			25					
		--RUN 2: 27.0 to 34.0 feet-- --Recovery: 31%-- --RQD: 0%--				CORE		
			30					

GENERAL NOTES

Begin Drilling **08-09-2021** Complete Drilling **08-09-2021**
Drilling Contractor **Wang Testing Services** Drill Rig **20D50T [80%]**
Driller **R&A** Logger **M. Sadowski** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **16.00 ft**
At Completion of Drilling ▼ **DRY**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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

WANGENGINC 2553901.GPJ WANGENG.GDT 11/29/22

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BORING LOG RRC-BSB-02

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 554.93 ft
North: 1755473.76 ft
East: 1024456.87 ft
Station: 386+53.04
Offset: 64.2 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		--no water return after 31 feet--			1			
		--RUN 3: 34.0 to 38.0 feet-- --Recovery: 79%-- --RQD: 0%--	35		2	CORE		
		Medium strong, light bluish gray, poor quality, shaly and vuggy DOLOSTONE --RUN 4: 38.0 to 40.5 feet-- --Recovery: 97%-- --RQD: 0%--	40		3	CORE		
		Strong, light gray to dark brownish and gray, very poor quality, shaly and vuggy DOLOSTONE; closely spaced, moderately weathered, horizontal and oblique joints, with 0.05 - > 0.2 inch opening, slightly rough walls, and <0.2 inch thick silt infill. --RUN 5: 40.5 to 44.0 feet-- --Recovery: 50%-- --RQD: 0%--			4	CORE		
	510.9	Boring terminated at 44.00 ft	45					

GENERAL NOTES

Begin Drilling **08-09-2021** Complete Drilling **08-09-2021**
Drilling Contractor **Wang Testing Services** Drill Rig **20D50T [80%]**
Driller **R&A** Logger **M. Sadowski** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **16.00 ft**
At Completion of Drilling ▼ **DRY**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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

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BORING LOG RRC-BSB-05

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 555.73 ft
North: 1755598.94 ft
East: 1024593.29 ft
Station: 387+93.26
Offset: 56.8 LT

Elevation (ft)	Depth (ft)	SOIL AND ROCK DESCRIPTION	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		20-inch thick ASPHALT --PAVEMENT--					
554.1		Medium dense, brown and gray SANDY GRAVEL; damp --AGGREGATE BASE--					
553.0		Medium dense to very dense, brown and gray SILTY LOAM, little to some gravel; damp --FILL-- --RDR 2--		1	7 8 6	NP	12
				2	19 32 21	NP	9
	5			3	25 44 50/2"	NP	9
				4	50/6"	NP	7
	10			5	50/5"	NP	4
545.2		Very dense, gray SANDY GRAVEL; dry --RDR 2-3--					
542.7		Very dense, gray SILTY LOAM, some gravel; dry --Highly weathered BEDROCK-- --RDR 2-3--		6	50/6"	NP	3
	15						

Elevation (ft)	Depth (ft)	SOIL AND ROCK DESCRIPTION	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
				7	50/5"	NP	4
				8	50/2"	NP	5
535.7	20	Strong, light bluish gray, very poor quality, vuggy DOLOSTONE, few shale partings; closely spaced, highly to moderately weathered, horizontal, oblique, and vertical joints, with <0.05 inch opening, slightly rough walls, and <0.2 inch thick greenish clay and silty infill. --RUN 1: 20.0 to 27.5 feet-- --Recovery: 98%-- --RQD: 17%--		9	CORE		
	25	--RUN 2: 27.5 to 35.0 feet-- --Recovery: 98%-- --RQD: 14%--			CORE		
	30						

GENERAL NOTES

Begin Drilling **08-15-2021** Complete Drilling **08-15-2021**
Drilling Contractor **Wang Testing Services** Drill Rig **20D50T [80%]**
Driller **R&A** Logger **M. Sadowski** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **DRY**
At Completion of Drilling ▼ **18.00 ft**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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BORING LOG RRC-BSB-05

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 555.73 ft
North: 1755598.94 ft
East: 1024593.29 ft
Station: 387+93.26
Offset: 56.8 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
					10			
	520.7		35					
		Boring terminated at 35.00 ft						
			40					
			45					

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)

GENERAL NOTES

Begin Drilling **08-15-2021** Complete Drilling **08-15-2021**
Drilling Contractor **Wang Testing Services** Drill Rig **20D50T [80%]**
Driller **R&A** Logger **M. Sadowski** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **DRY**
At Completion of Drilling ▼ **18.00 ft**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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BORING LOG RRC-BSB-06

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 555.68 ft
North: 1755480.43 ft
East: 1024594.60 ft
Station: 387+90.91
Offset: 61.7 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		14-inch thick ASPHALT --PAVEMENT--						
	554.5							
		Medium dense, brown and gray Gravelly SILTY LOAM to CLAY LOAM; damp --FILL-- --RDR 2-3--			1	8 7 8	NP	15
		--L_L(%)=25, P_L(%)=16-- --%Gravel=23.7-- --%Sand=22.3-- --%Silt=42.8-- --%Clay=11.2-- --A4 (2)--	5		2	7 6 11	NP	15
					3	3 4 17	NP	13
	546.7							
		Very stiff, black SILTY CLAY; damp --Buried TOPSOIL--	10		4	7 7 7	2.50 P	30
	545.2							
		Very stiff, brown and gray CLAY to SILTY CLAY, trace wood fragments; damp --RDR 2--			5	3 3 6	3.12 B	17
	542.7							
		Hard, brown and light gray SILTY CLAY LOAM; damp --RDR 2-- --L_L(%)=33, P_L(%)=16-- --%Gravel=0.1-- --%Sand=5.0--	15		6	6 11 12	4.18 S	18

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		--%Silt=69.6-- --%Clay=25.2-- --A-6 (16)--			7	3 9 16	4.50 P	17
	537.7							
		Very dense, gray GRAVEL; damp to wet --Weathered BEDROCK-- --RDR 2-3--	20		8	50/4"	NP	7
	534.7							
		--poor recovery of rock core possibly due to gummy shale in core sample-- Strong, light bluish gray, very poor quality, vuggy DOLOSTONE, SHALE and MUDSTONE interbedded; closely spaced, moderately weathered, horizontal, oblique, and vertical joints, with 0.05 - 0.2 inch opening, slightly rough walls, and >0.2 inch thick, greenish clay and silty infill. --RUN 1: 21.0 to 29.0 feet-- --Recovery: 63%-- --RQD: 4%--	25		9	C O R E		
		--RUN 2: 29.0 to 36.0 feet-- --Recovery: 95%-- --RQD: 4%--	30			C O		

GENERAL NOTES

Begin Drilling **08-05-2021** Complete Drilling **08-05-2021**
Drilling Contractor **Wang Testing Services** Drill Rig **20D50T [80%]**
Driller **R&R** Logger **M. Sadowski** Checked by **C. Marin**
Drilling Method **2.25" ID HSA to 10 ft; mud rotary thereafter; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **18.50 ft**
At Completion of Drilling ▼ **mud in the borehole**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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

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BORING LOG RRC-BSB-06

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 555.68 ft
North: 1755480.43 ft
East: 1024594.60 ft
Station: 387+90.91
Offset: 61.7 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
					10	R E		
			35					
	519.7	Boring terminated at 36.00 ft						
			40					
			45					

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)

GENERAL NOTES

Begin Drilling **08-05-2021** Complete Drilling **08-05-2021**
Drilling Contractor **Wang Testing Services** Drill Rig **20D50T [80%]**
Driller **R&R** Logger **M. Sadowski** Checked by **C. Marin**
Drilling Method **2.25" ID HSA to 10 ft; mud rotary thereafter; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **18.50 ft**
At Completion of Drilling ▼ **mud in the borehole**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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

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A Terracon Company

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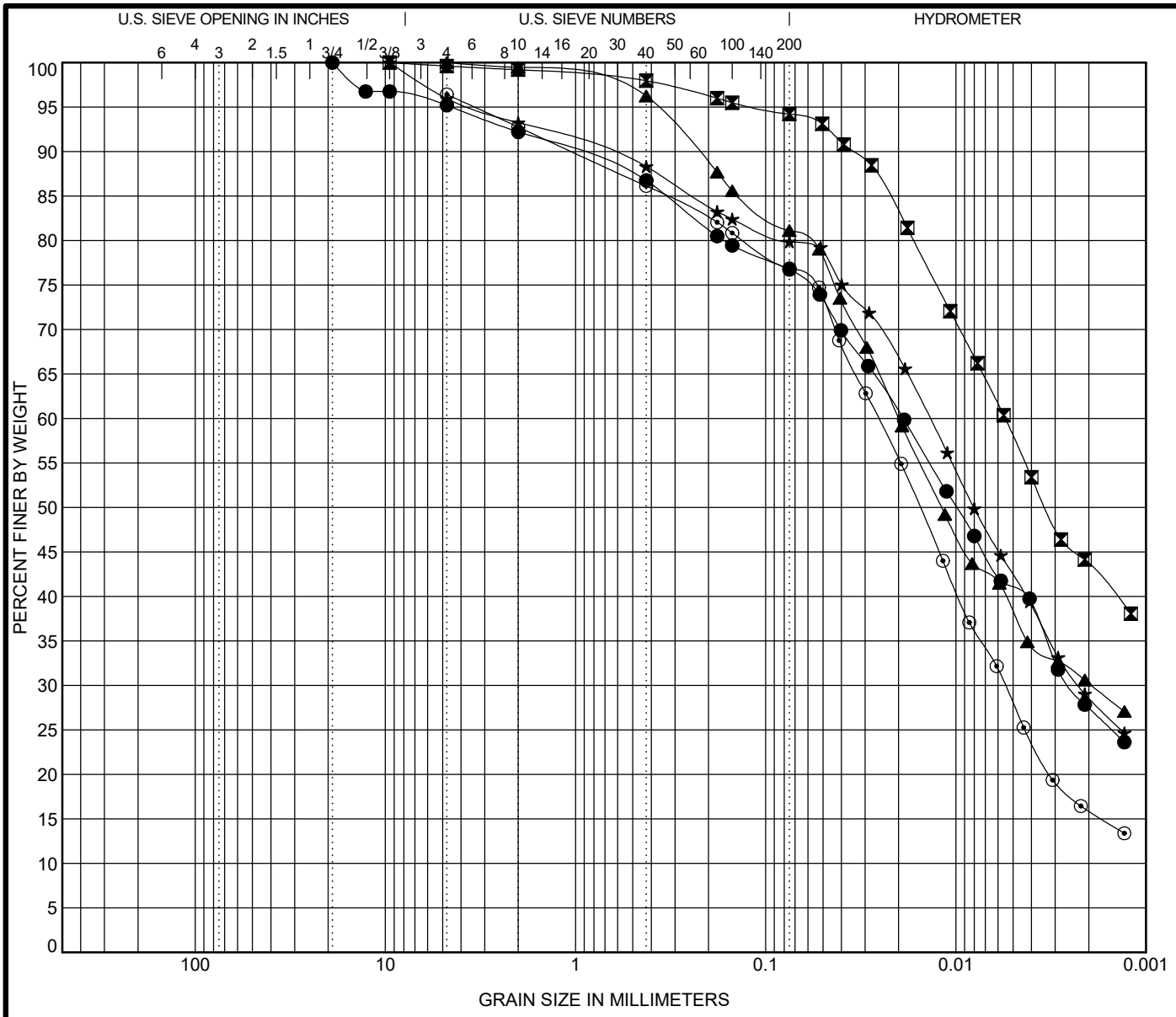
APPENDIX B



COBBLES	GRAVEL	SAND		SILT AND CLAY
		coarse	fine	

Specimen Identification		IDH Classification	LL	PL	PI	Cc	Cu
●	80/55-BSB-01#6 13.5 ft	**Silty Clay Loam**	**34**	**16**	**18**		
⊠	80/55-BSB-01#11 26.0 ft	**Silty Clay**	**52**	**19**	**33**		
▲	80/55-BSB-03#10 23.5 ft	**Silty Clay**	**46**	**16**	**30**		
★	80/55-BSB-04#4 8.5 ft	**Silty Clay**	**35**	**15**	**20**		
⊙	80/55-BSB-05#4 8.5 ft	**Silty Loam**	**25**	**15**	**10**		

Specimen Identification		D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	80/55-BSB-01#6 13.5 ft	**19**	**0.019**	**0.003**		**7.8**	**15.6**	**49.2**	**27.4**
⊠	80/55-BSB-01#11 26.0 ft	**9.5**	**0.006**			**0.8**	**5.0**	**50.6**	**43.6**
▲	80/55-BSB-03#10 23.5 ft	**4.75**	**0.02**	**0.002**		**0.5**	**18.4**	**50.8**	**30.2**
★	80/55-BSB-04#4 8.5 ft	**9.5**	**0.014**	**0.002**		**6.8**	**13.4**	**51.2**	**28.6**
⊙	80/55-BSB-05#4 8.5 ft	**4.75**	**0.026**	**0.006**		**7.2**	**16.0**	**60.9**	**15.9**

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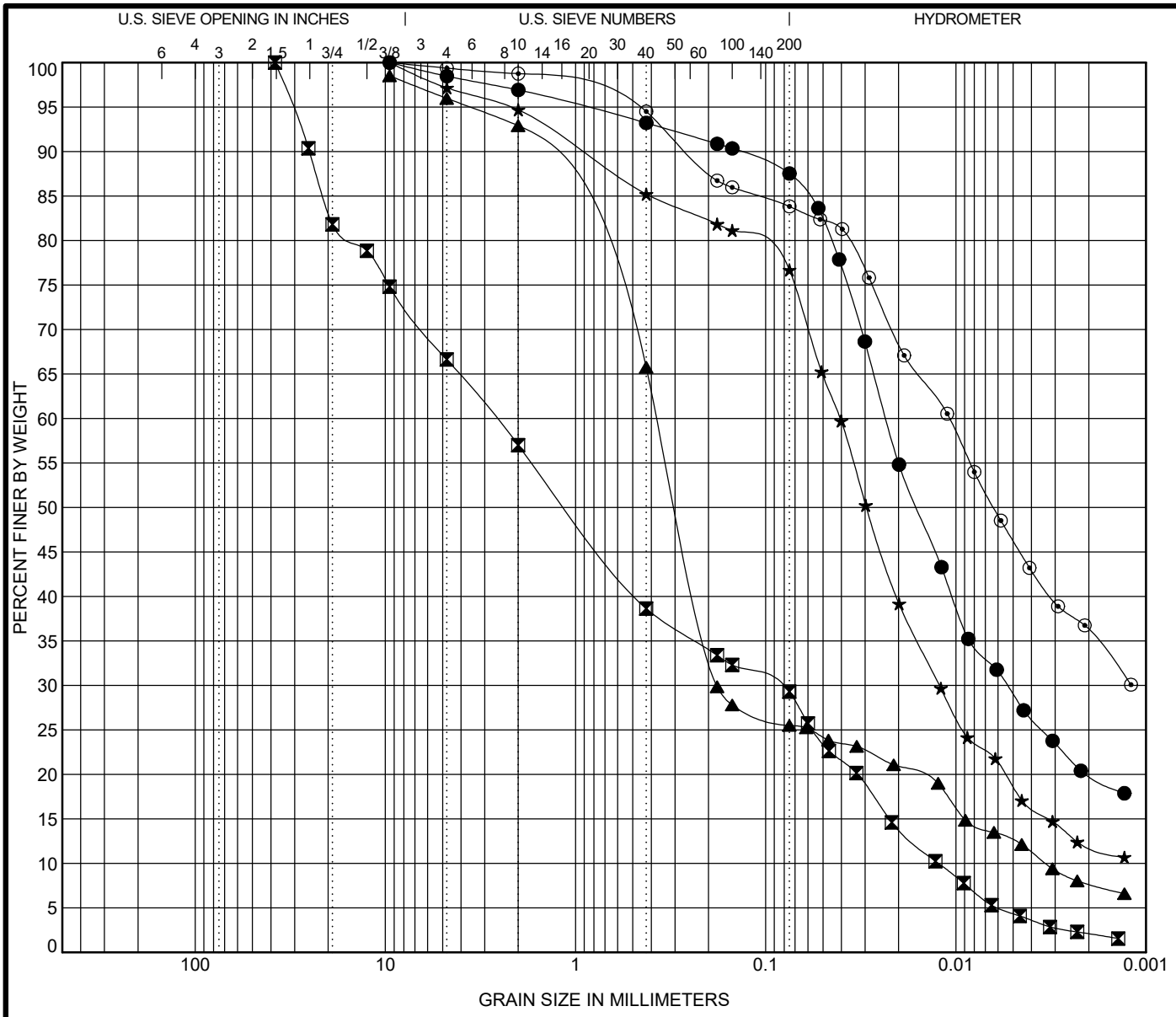
GRAIN SIZE DISTRIBUTION

Project: I-80 Reconstruction, Ridge Road to Houbolt Road

Location: Will County, Illinois

Number: 255-39-01



COBBLES	GRAVEL	SAND		SILT AND CLAY
		coarse	fine	

Specimen Identification		IDH Classification	LL	PL	PI	Cc	Cu
● 80/55-BSB-06#5	11.0 ft	**Silty Clay Loam**	**36**	**17**	**19**		
⊠ 80/55-BSB-07#12	33.5 ft	**Gravelly Loam**	**NP**	**NP**	**NP**	**0.24**	**211.78**
▲ 80/55-BSB-08#4	8.5 ft	**Sandy Loam**	**16**	**9**	**7**	**26.16**	**109.93**
★ 80/55-BSB-09#4	8.5 ft	**Silty Loam**	**28**	**15**	**13**		
⊙ 80AA-BSB-01#6	13.5 ft	**Clay**	**50**	**15**	**35**		

Specimen Identification		D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
● 80/55-BSB-06#5	11.0 ft	**9.5**	**0.023**	**0.005**		**3.1**	**9.5**	**67.4**	**19.9**
⊠ 80/55-BSB-07#12	33.5 ft	**38.1**	**2.617**	**0.088**	**0.012**	**43.0**	**27.9**	**27.0**	**2.1**
▲ 80/55-BSB-08#4	8.5 ft	**9.5**	**0.37**	**0.181**	**0.003**	**7.1**	**67.4**	**17.8**	**7.7**
★ 80/55-BSB-09#4	8.5 ft	**9.5**	**0.041**	**0.012**		**5.3**	**18.4**	**64.3**	**12.0**
⊙ 80AA-BSB-01#6	13.5 ft	**9.5**	**0.011**			**1.2**	**15.0**	**47.6**	**36.2**

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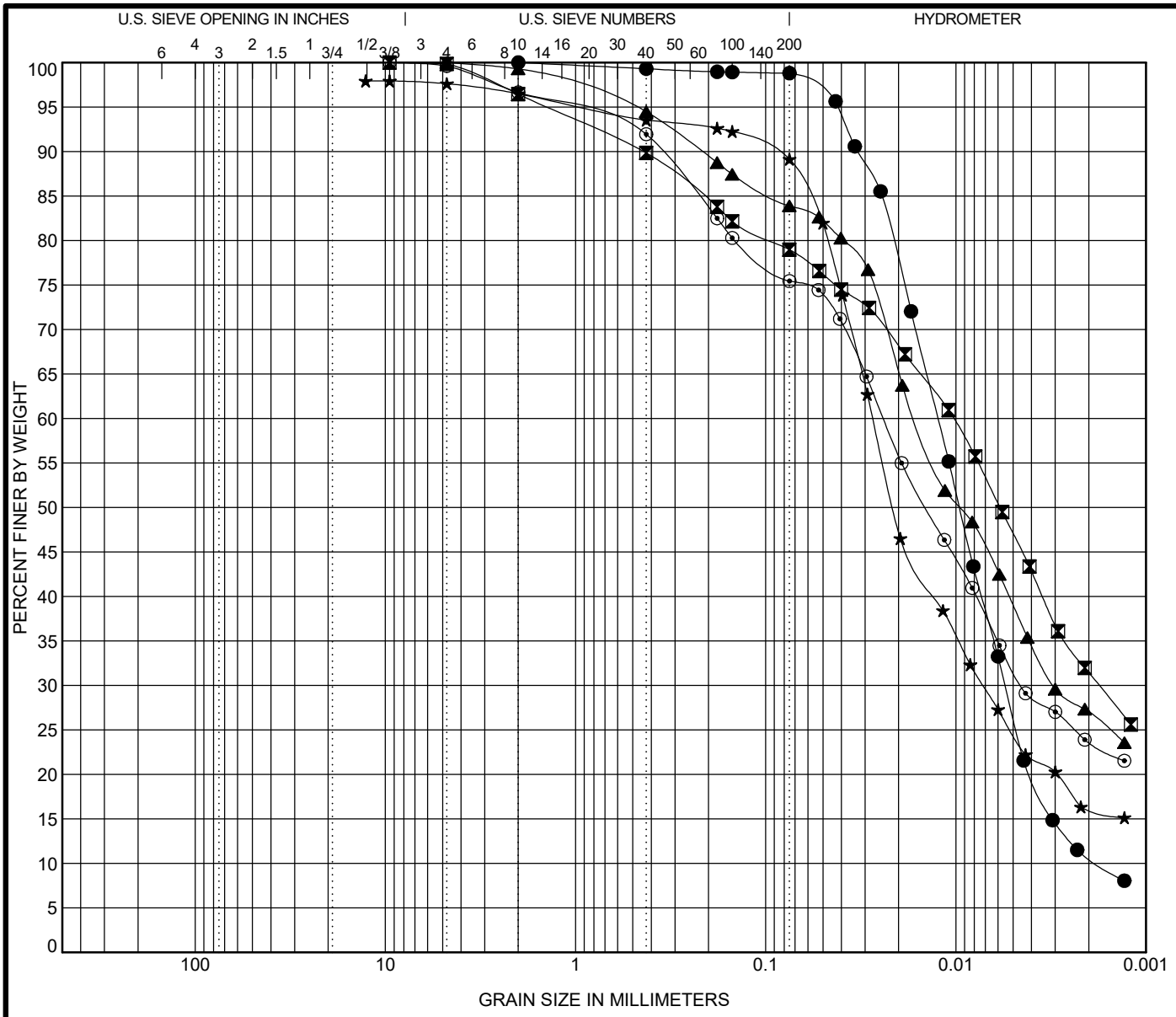
GRAIN SIZE DISTRIBUTION

Project: I-80 Reconstruction, Ridge Road to Houbolt Road

Location: Will County, Illinois

Number: 255-39-01

WEI GRAIN SIZE IDH 2553901.GPJ US LAB.GDT 11/25/22



COBBLES	GRAVEL	SAND		SILT AND CLAY
		coarse	fine	

Specimen Identification			IDH Classification	LL	PL	PI	Cc	Cu
●	80AA-BSB-01#13	33.5 ft	**Silt**	**NP**	**NP**	**NP**	**1.36**	**6.93**
⊠	80AA-BSB-03#3	6.0 ft	**Clay**	**35**	**14**	**21**		
▲	CL-SGB-24#2	2.0 ft	**Silty Clay Loam**	**55**	**22**	**33**		
★	CL-SGB-31#2	2.0 ft	**Silty Loam**	**28**	**18**	**10**		
⊙	CL-SGB-38#2	2.0 ft	**Silty Clay Loam**	**42**	**18**	**24**		

Specimen Identification			D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	80AA-BSB-01#13	33.5 ft	**2**	**0.012**	**0.006**	**0.002**	**0.0**	**1.3**	**88.1**	**10.7**
⊠	80AA-BSB-03#3	6.0 ft	**9.5**	**0.01**	**0.002**		**3.5**	**17.6**	**47.5**	**31.4**
▲	CL-SGB-24#2	2.0 ft	**4.75**	**0.016**	**0.003**		**0.7**	**15.4**	**56.9**	**27.0**
★	CL-SGB-31#2	2.0 ft	**12.7**	**0.027**	**0.007**		**3.5**	**7.6**	**72.8**	**16.1**
⊙	CL-SGB-38#2	2.0 ft	**9.5**	**0.024**	**0.005**		**3.4**	**21.2**	**51.7**	**23.7**

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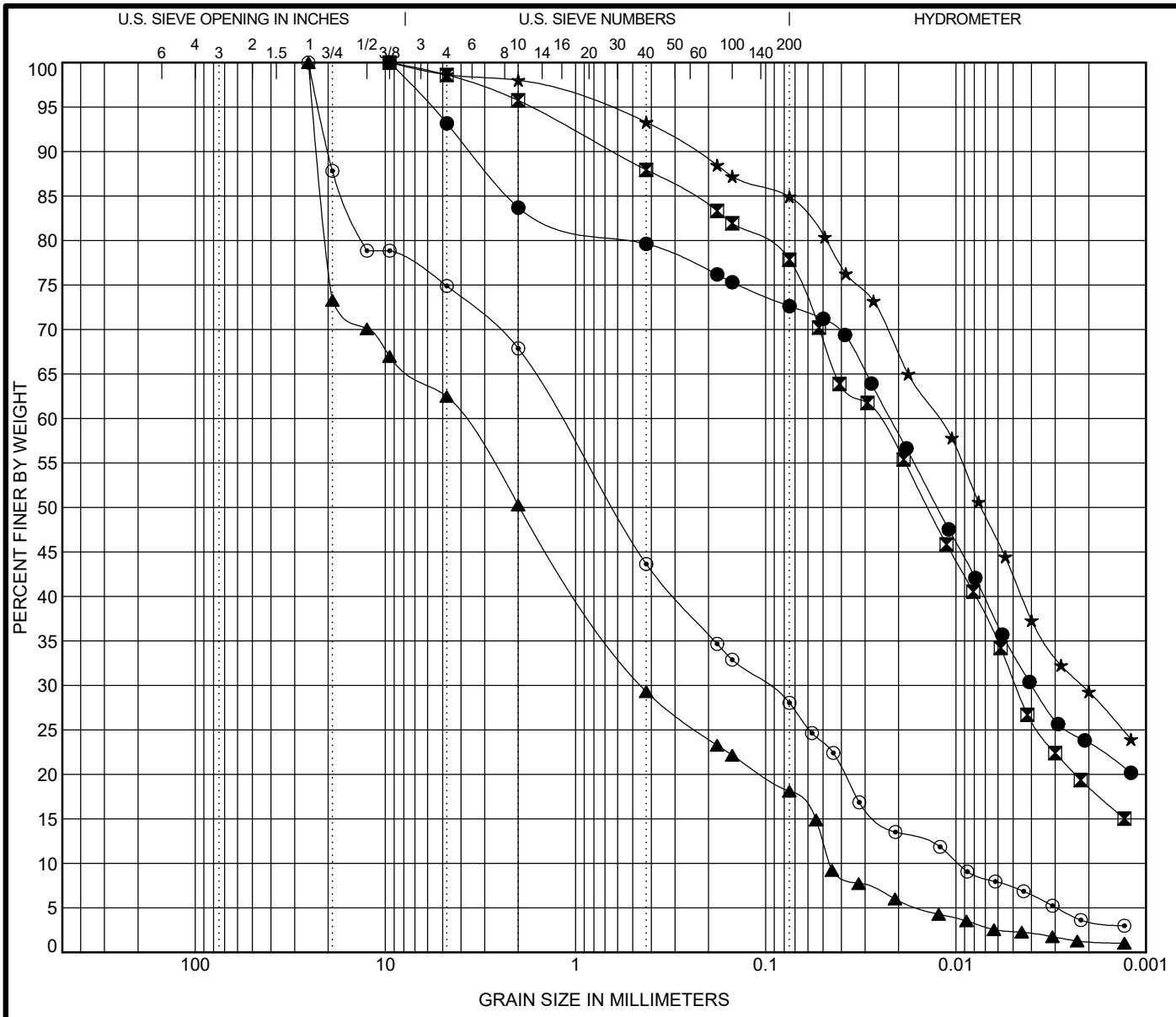
GRAIN SIZE DISTRIBUTION

Project: I-80 Reconstruction, Ridge Road to Houbolt Road

Location: Will County, Illinois

Number: 255-39-01



COBBLES	GRAVEL	SAND		SILT AND CLAY
		coarse	fine	

Specimen Identification			IDH Classification	LL	PL	PI	Cc	Cu
●	DpR-BSB-01#3	6.0 ft	**Gravelly Silty Clay Loam**	**31**	**15**	**16**		
⊠	DpR-BSB-01#7	16.0 ft	**Silty Loam**	**25**	**14**	**11**		
▲	DpR-BSB-01#10	23.5 ft	**Gravelly Sandy Loam**	**NP**	**NP**	**NP**	**1.09**	**86.50**
★	DpR-BSB-02#5	11.0 ft	**Silty Clay Loam**	**38**	**15**	**23**		
⊙	DpR-BSB-04#3	23.5 ft	**Gravelly Sandy Loam**	**NP**	**NP**	**NP**	**0.84**	**124.46**

Specimen Identification			D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	DpR-BSB-01#3	6.0 ft	**9.5**	**0.022**	**0.004**		**16.3**	**11.1**	**49.1**	**23.5**
⊠	DpR-BSB-01#7	16.0 ft	**9.5**	**0.026**	**0.005**		**4.3**	**18.2**	**59.0**	**18.6**
▲	DpR-BSB-01#10	23.5 ft	**25.4**	**3.988**	**0.447**	**0.046**	**49.7**	**32.3**	**16.8**	**1.2**
★	DpR-BSB-02#5	11.0 ft	**9.5**	**0.012**	**0.002**		**2.0**	**13.2**	**55.5**	**29.3**
⊙	DpR-BSB-04#3	23.5 ft	**25.4**	**1.209**	**0.099**	**0.01**	**32.1**	**40.0**	**24.4**	**3.5**

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GRAIN SIZE DISTRIBUTION

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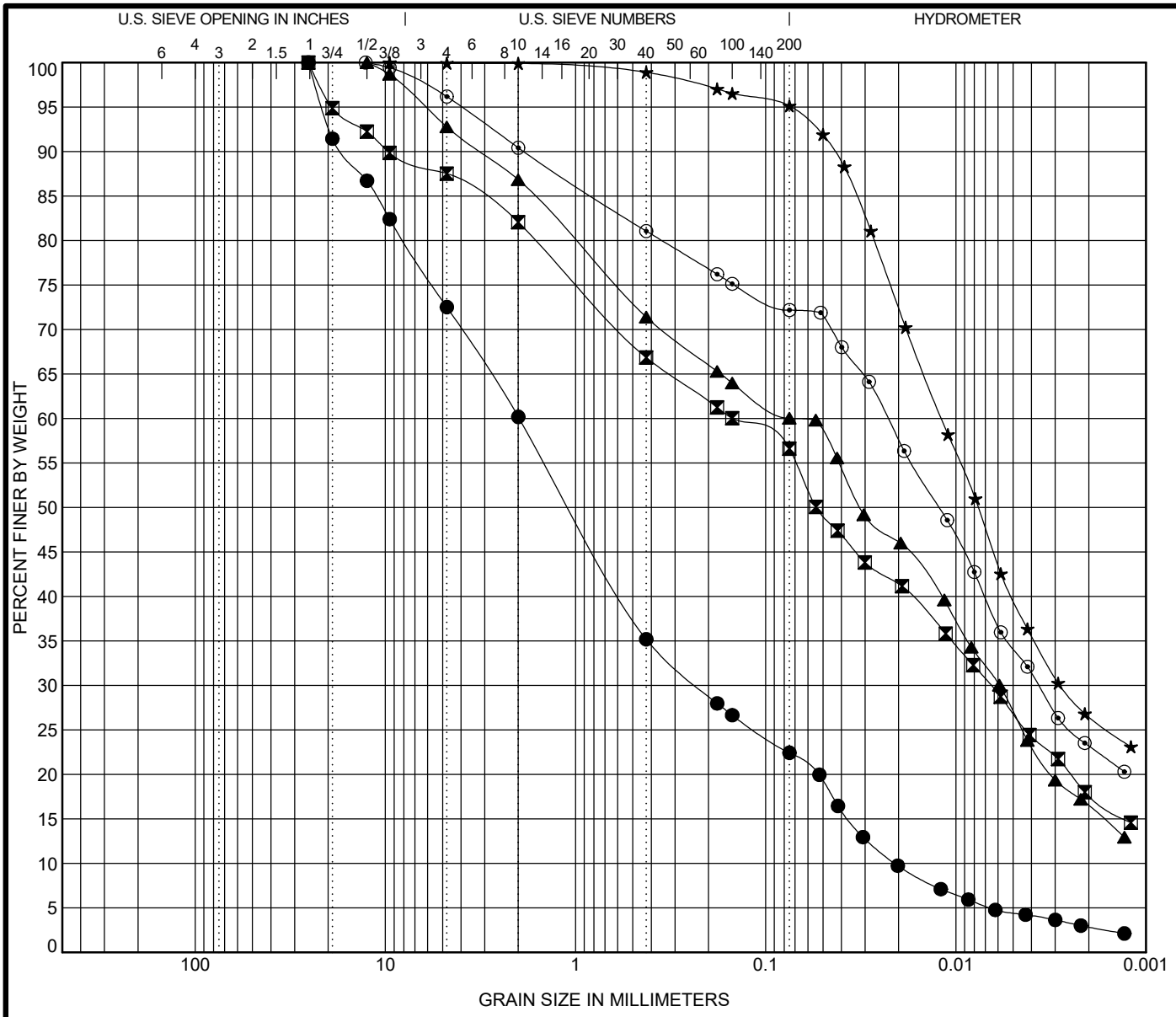
Location: Will County, Illinois

Number: 255-39-01



COBBLES	GRAVEL	SAND		SILT AND CLAY
		coarse	fine	

Specimen Identification		IDH Classification	LL	PL	PI	Cc	Cu
● DpR-BSB-05#1	22.5 ft	**Gravelly Sandy Loam**	**NP**	**NP**	**NP**	**1.27**	**94.53**
⊠ DpR-BSB-07#2	3.5 ft	**Gravelly Clay Loam**	**29**	**15**	**14**		
▲ DpR-BSB-08#4	8.5 ft	**Silty Loam**	**48**	**17**	**31**		
★ EB-SGB-25#1	1.0 ft	**Silty Clay Loam**	**59**	**28**	**31**		
⊙ EB-SGB-31#2	2.0 ft	**Silty Clay Loam**	**33**	**16**	**17**		

Specimen Identification		D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
● DpR-BSB-05#1	22.5 ft	**25.4**	**1.978**	**0.229**	**0.021**	**39.8**	**37.8**	**19.5**	**2.8**
⊠ DpR-BSB-07#2	3.5 ft	**25.4**	**0.149**	**0.007**		**17.9**	**25.7**	**38.6**	**17.7**
▲ DpR-BSB-08#4	8.5 ft	**12.5**	**0.072**	**0.006**		**13.2**	**26.8**	**43.6**	**16.4**
★ EB-SGB-25#1	1.0 ft	**9.5**	**0.012**	**0.003**		**0.1**	**4.9**	**68.5**	**26.5**
⊙ EB-SGB-31#2	2.0 ft	**12.7**	**0.023**	**0.004**		**9.6**	**18.2**	**49.0**	**23.2**

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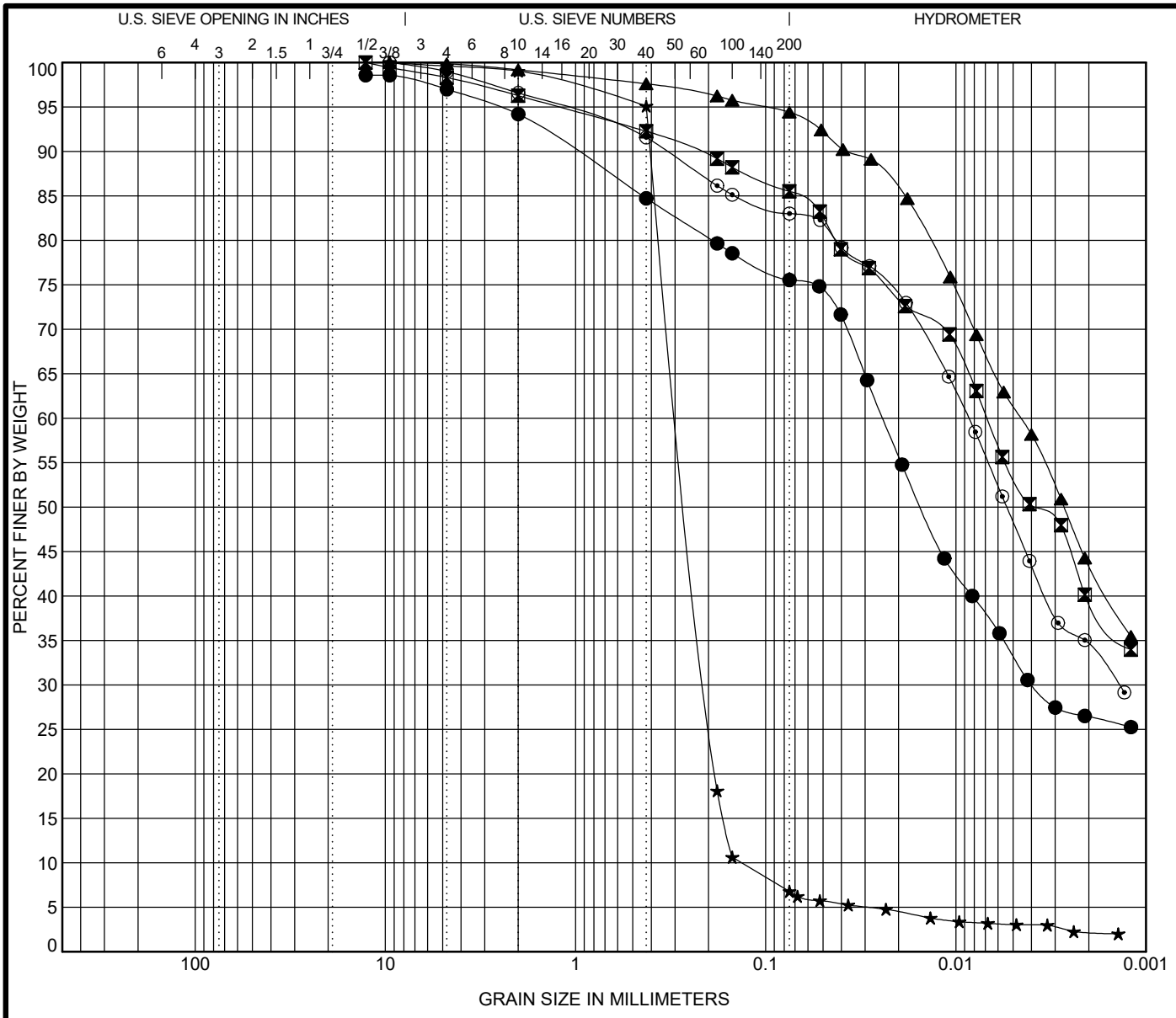

COBBLES	GRAVEL	SAND		SILT AND CLAY
		coarse	fine	

	Specimen Identification		IDH Classification	LL	PL	PI	Cc	Cu
●	EB-SGB-40#3	4.0 ft	**Silty Clay Loam**	**47**	**17**	**30**		
⊠	FR-BSB-03#5	11.0 ft	**Clay**	**36**	**15**	**21**		
▲	FR-BSB-03#12	28.5 ft	**Silty Clay**	**39**	**17**	**22**		
★	FR-BSB-04#12	28.5 ft	**Sand**	**NP**	**NP**	**NP**	**1.10**	**2.15**
⊙	FR-BSB-08#5	11.0 ft	**Silty Clay**	**32**	**16**	**16**		

	Specimen Identification		D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	EB-SGB-40#3	4.0 ft	**12.7**	**0.024**	**0.004**		**5.8**	**18.7**	**49.1**	**26.4**
⊠	FR-BSB-03#5	11.0 ft	**12.7**	**0.007**			**3.7**	**10.8**	**45.8**	**39.6**
▲	FR-BSB-03#12	28.5 ft	**9.5**	**0.005**			**0.8**	**4.8**	**50.8**	**43.5**
★	FR-BSB-04#12	28.5 ft	**9.5**	**0.287**	**0.206**	**0.134**	**1.0**	**92.3**	**4.5**	**2.2**
⊙	FR-BSB-08#5	11.0 ft	**9.5**	**0.009**	**0.001**		**3.4**	**13.6**	**48.5**	**34.4**

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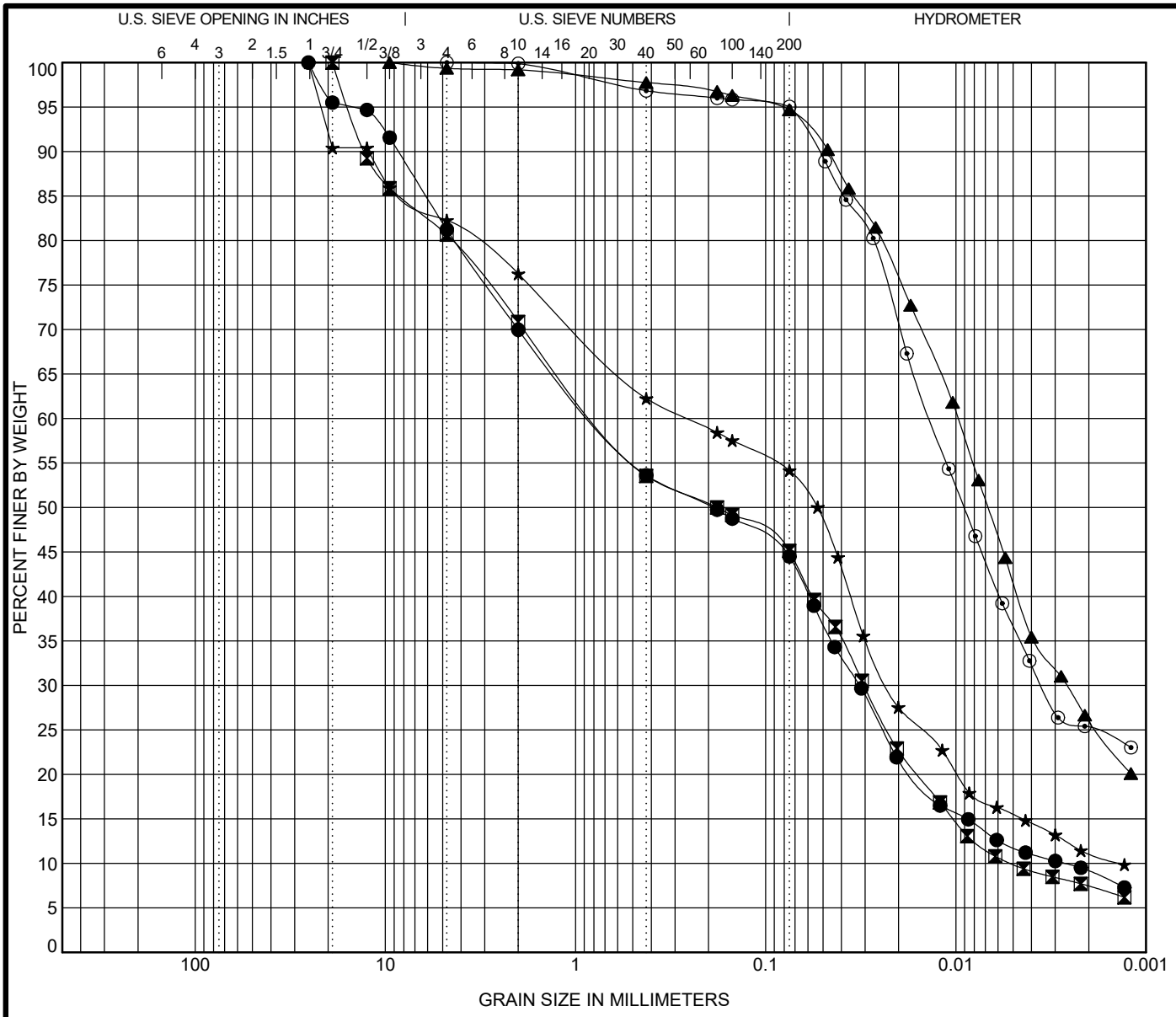

COBBLES	GRAVEL	SAND		SILT AND CLAY
		coarse	fine	

Specimen Identification			IDH Classification	LL	PL	PI	Cc	Cu
●	RRC-BSB-01#3	6.0 ft	**Gravelly Silty Loam**	**24**	**15**	**9**	**0.49**	**289.60**
⊠	RRC-BSB-02#3	6.0 ft	**Gravelly Silty Loam**	**22**	**15**	**7**	**0.24**	**148.17**
▲	RRC-BSB-03#1	16.0 ft	**Silty Clay Loam**	**69**	**32**	**37**		
★	RRC-BSB-06#2	3.5 ft	**Gravelly Silty Loam**	**25**	**16**	**9**	**1.50**	**187.98**
⊙	RRC-BSB-06#6	13.5 ft	**Silty Clay Loam**	**33**	**16**	**17**		

Specimen Identification			D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	RRC-BSB-01#3	6.0 ft	**25.4**	**0.778**	**0.032**	**0.003**	**30.0**	**25.7**	**35.1**	**9.1**
⊠	RRC-BSB-02#3	6.0 ft	**19**	**0.757**	**0.03**	**0.005**	**29.1**	**26.0**	**37.4**	**7.4**
▲	RRC-BSB-03#1	16.0 ft	**9.5**	**0.01**	**0.003**		**0.8**	**4.6**	**68.5**	**26.1**
★	RRC-BSB-06#2	3.5 ft	**25.4**	**0.256**	**0.023**	**0.001**	**23.7**	**22.3**	**42.8**	**11.2**
⊙	RRC-BSB-06#6	13.5 ft	**4.75**	**0.014**	**0.004**		**0.1**	**5.0**	**69.6**	**25.2**

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GRAIN SIZE DISTRIBUTION

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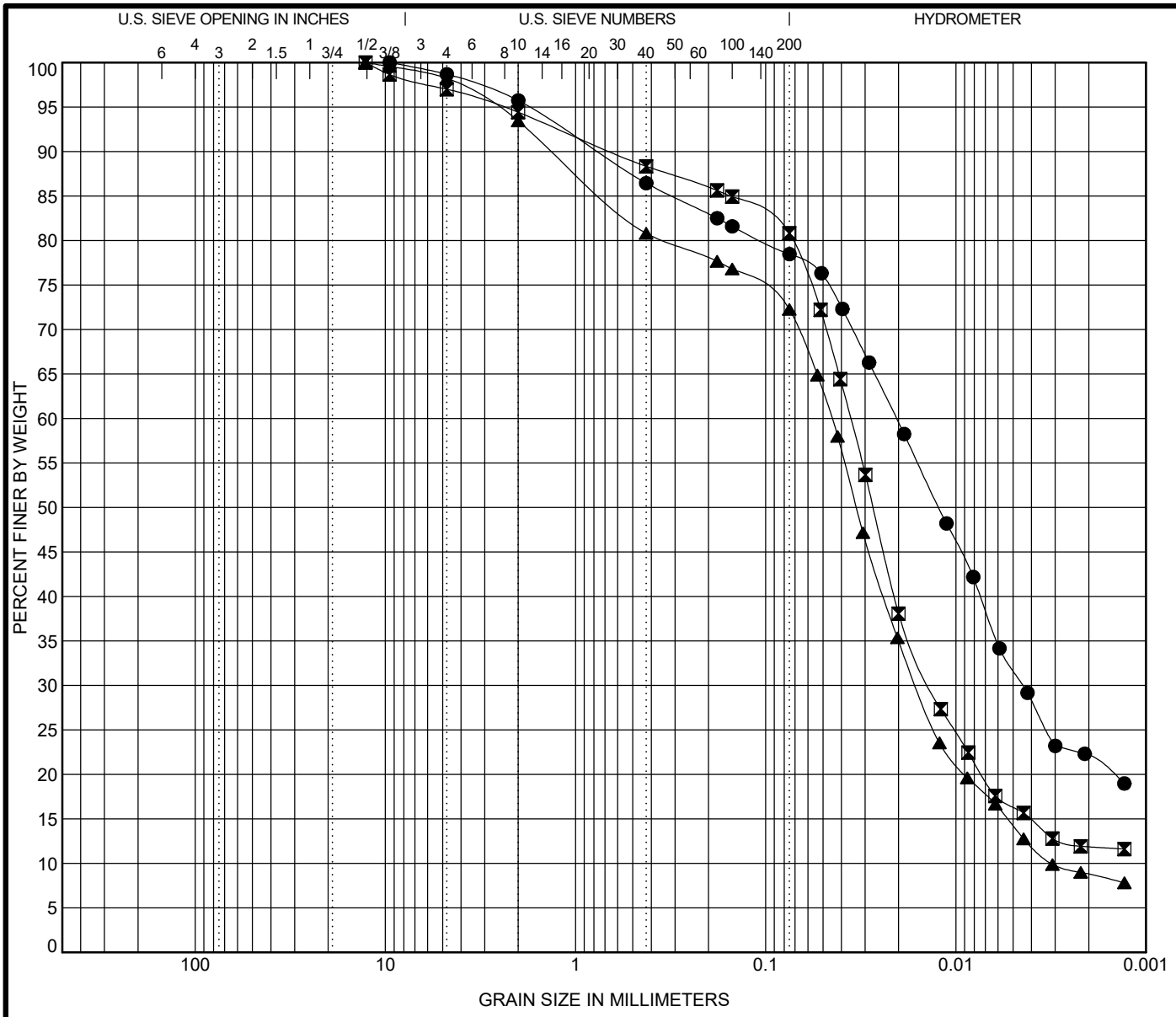
Location: Will County, Illinois

Number: 255-39-01



COBBLES	GRAVEL	SAND		SILT AND CLAY
		coarse	fine	

	Specimen Identification		IDH Classification	LL	PL	PI	Cc	Cu
●	WB-SGB-29#3	5.0 ft	**Silty Clay Loam**	**31**	**17**	**14**		
⊠	WB-SGB-34#3	4.0 ft	**Silty Loam**	**25**	**18**	**7**		
▲	WB-SGB-38#2	3.0 ft	**Silty Loam**	**23**	**17**	**6**	**1.84**	**14.25**

	Specimen Identification		D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	WB-SGB-29#3	5.0 ft	**9.5**	**0.021**	**0.004**		**4.3**	**17.3**	**56.4**	**22.0**
⊠	WB-SGB-34#3	4.0 ft	**12.7**	**0.036**	**0.014**		**5.6**	**13.9**	**68.6**	**11.9**
▲	WB-SGB-38#2	3.0 ft	**12.7**	**0.045**	**0.016**	**0.003**	**6.6**	**21.5**	**63.2**	**8.8**

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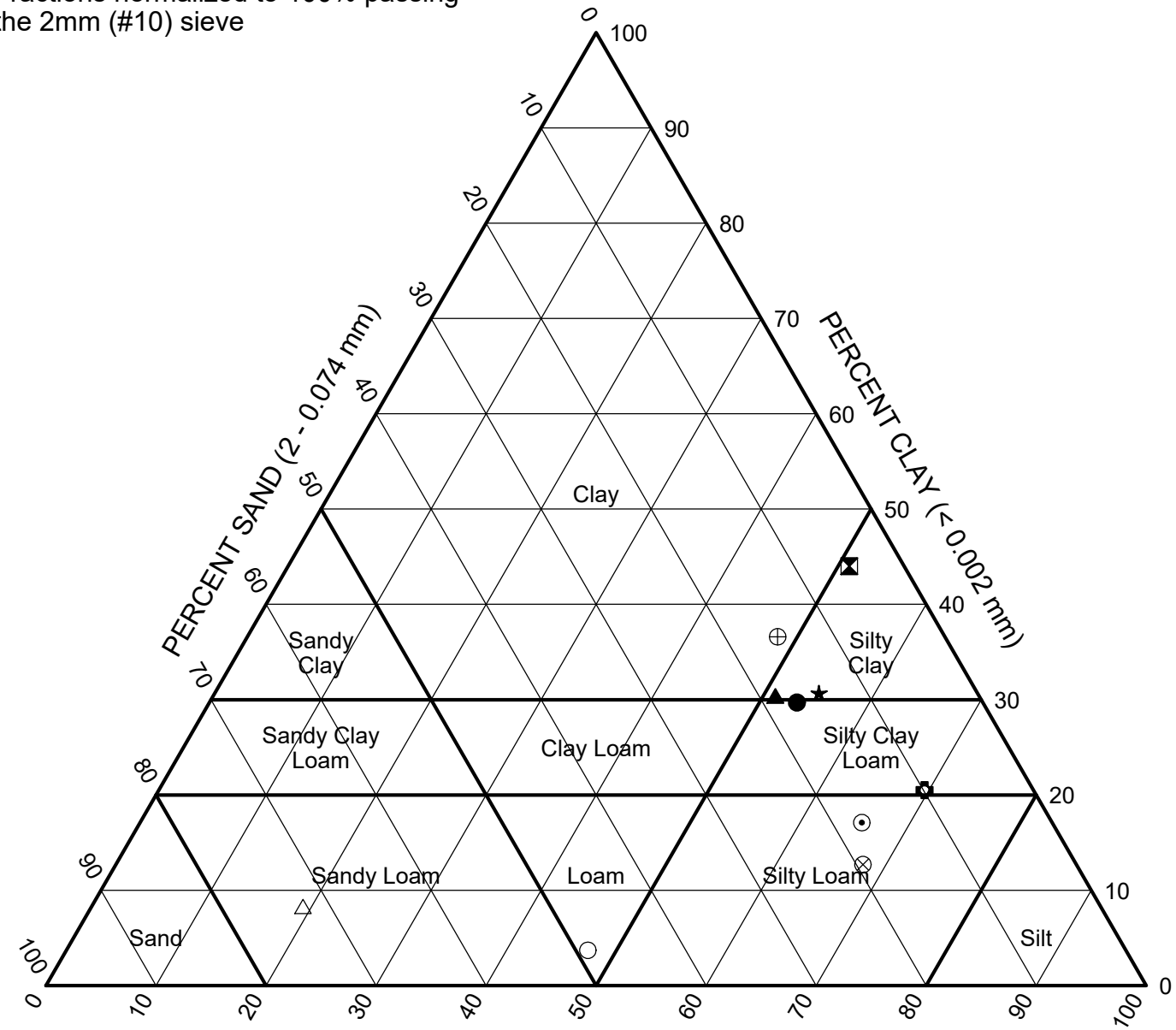
GRAIN SIZE DISTRIBUTION

Project: I-80 Reconstruction, Ridge Road to Houbolt Road

Location: Will County, Illinois

Number: 255-39-01

Fractions normalized to 100% passing the 2mm (#10) sieve



	Sample	Depth (ft)	Sand (%)	Silt (%)	Clay (%)	Classification		
						IL DOT	AASHTO	ASTM
●	80/55-BSB-01#6	13.5	**16.9**	**53.4**	**29.7**	**Silty Clay Loam**	**A-6 (12)**	**CL**
▣	80/55-BSB-01#11	26.0	**5.0**	**51.0**	**44.0**	**Silty Clay**	**A-7-6 (34)**	**CH**
▲	80/55-BSB-03#10	23.5	**18.5**	**51.1**	**30.4**	**Silty Clay**	**A-7-6 (24)**	**CL**
★	80/55-BSB-04#4	8.5	**14.4**	**54.9**	**30.7**	**Silty Clay**	**A-6 (14)**	**CL**
⊙	80/55-BSB-05#4	8.5	**17.2**	**65.6**	**17.1**	**Silty Loam**	**A-4 (5)**	**CL**
✿	80/55-BSB-06#5	11.0	**9.8**	**69.6**	**20.5**	**Silty Clay Loam**	**A-6 (16)**	**CL**
⊛	80/55-BSB-07#12	33.5	**48.9**	**47.4**	**3.7**	**Gravelly Loam**	**A-2-4 (0)**	**SM**
△	80/55-BSB-08#4	8.5	**72.6**	**19.2**	**8.3**	**Sandy Loam**	**A-2-4 (0)**	**SC-SM**
⊗	80/55-BSB-09#4	8.5	**19.4**	**67.9**	**12.7**	**Silty Loam**	**A-6 (8)**	**CL**
⊕	80AA-BSB-01#6	13.5	**15.2**	**48.2**	**36.6**	**Clay**	**A-7-6 (30)**	**CH**

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IDH Textural Classification Chart

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Location: Will County, Illinois

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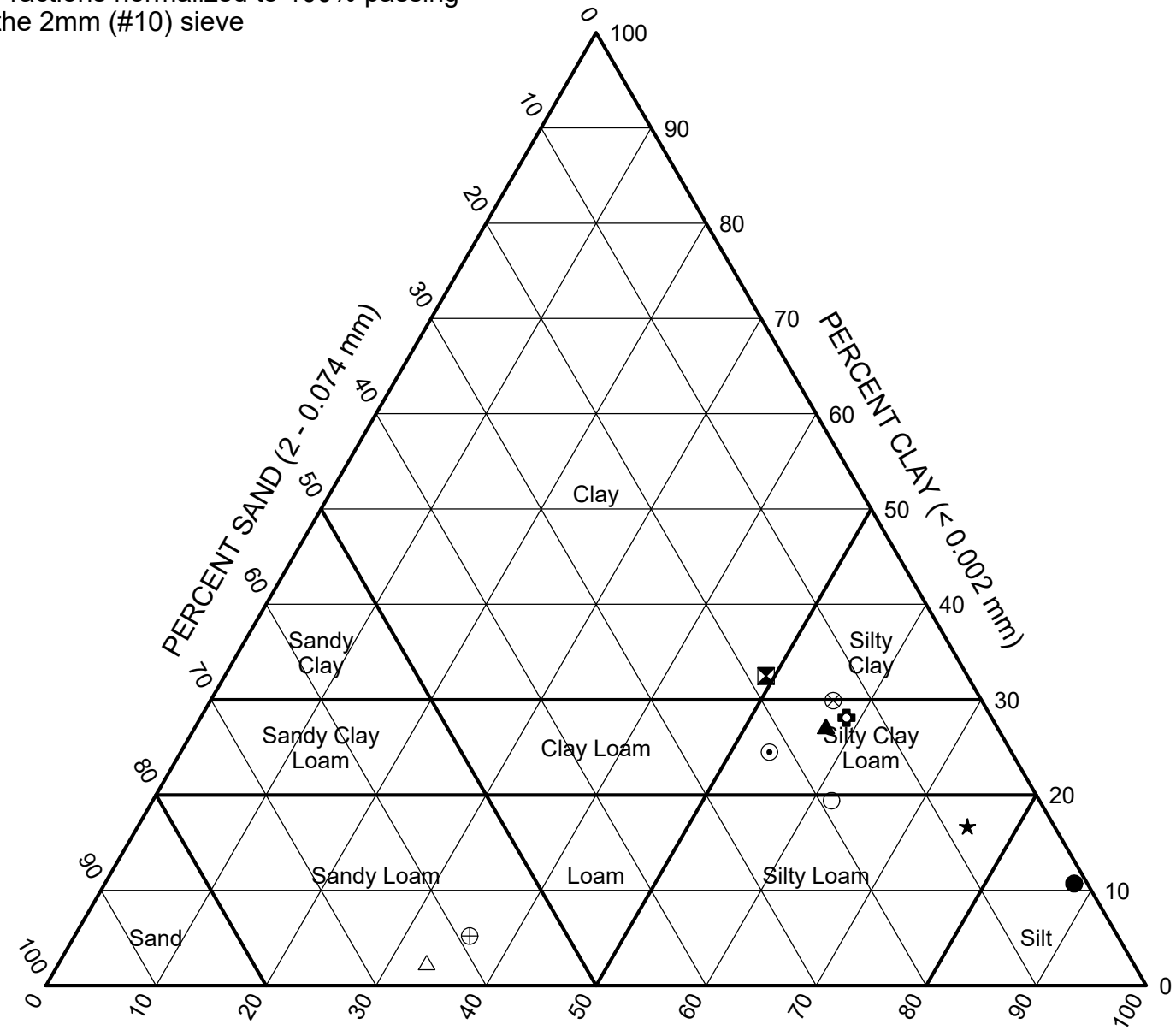
Fractions normalized to 100% passing the 2mm (#10) sieve



Sample	Depth (ft)	Sand (%)	Silt (%)	Clay (%)	Classification		
					IL DOT	AASHTO	ASTM
●DAA-BSB-01#13	33.5	1.3	88.1	10.7	Silt	A-4 (0)	ML
⊠DAA-BSB-03#3	6.0	18.2	49.2	32.5	Clay	A-6 (15)	CL
▲CL-SGB-24#2	2.0	15.5	57.3	27.2	Silty Clay Loam	A-7-6 (29)	CH
★CL-SGB-31#2	2.0	7.9	75.4	16.7	Silty Loam	A-4 (8)	CL
⊙CL-SGB-38#2	2.0	21.9	53.5	24.5	Silty Clay Loam	A-7-6 (17)	CL
✿DpR-BSB-01#3	6.0	13.3	58.7	28.1	Gravelly Silty Clay Loam	A-6 (9)	CL
○DpR-BSB-01#7	16.0	19.0	61.7	19.4	Silty Loam	A-6 (6)	CL
△DpR-BSB-01#10	23.5	64.2	33.4	2.4	Gravelly Sandy Loam	A-1-b (0)	SM
⊗DpR-BSB-02#5	11.0	13.5	56.6	29.9	Silty Clay Loam	A-6 (19)	CL
⊕DpR-BSB-04#3	23.5	58.9	35.9	5.2	Gravelly Sandy Loam	A-2-4 (0)	SM

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IDH Textural Classification Chart

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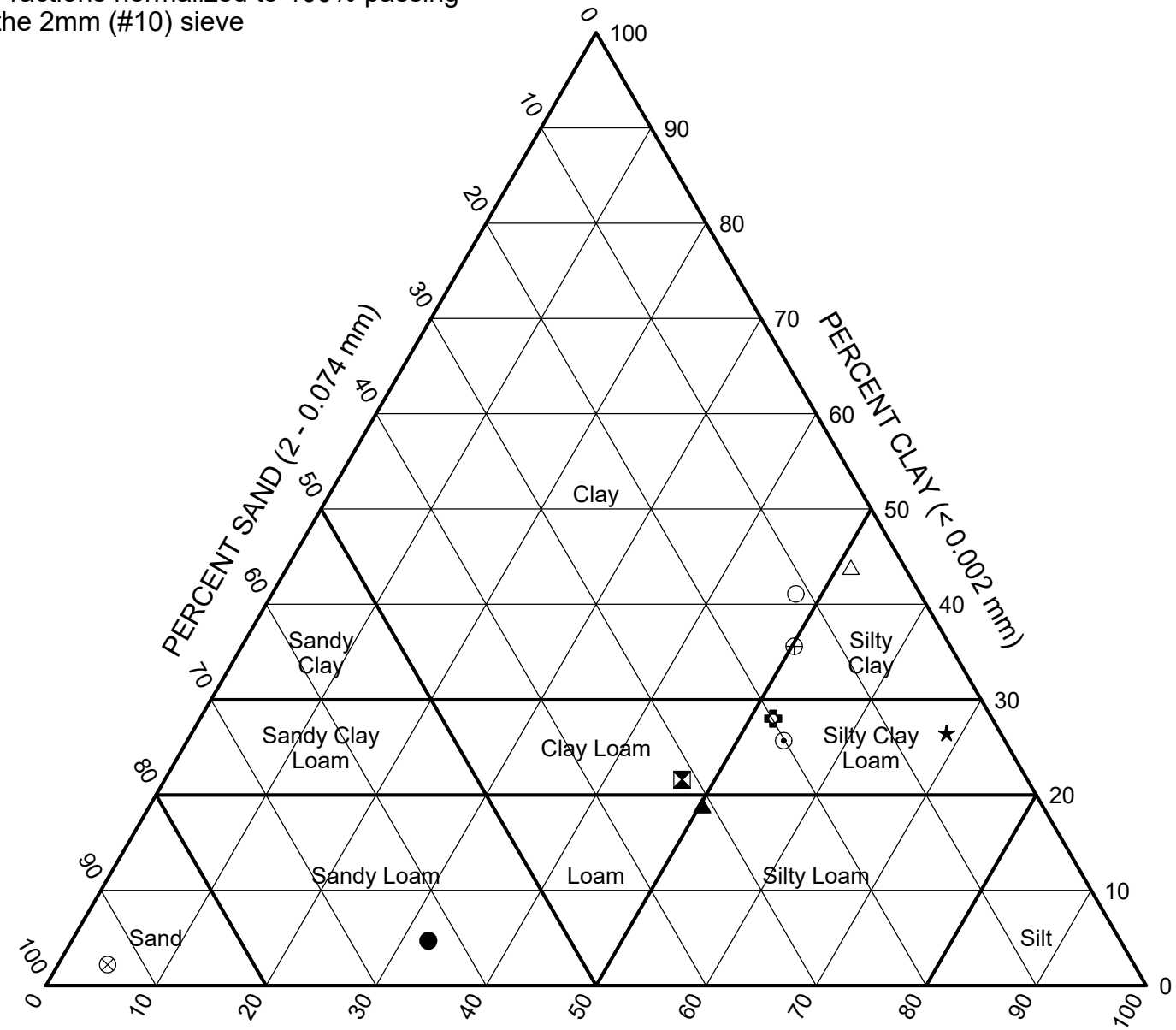

	Sample	Depth (ft)	Sand (%)	Silt (%)	Clay (%)	Classification		
						IL DOT	AASHTO	ASTM
●	DpR-BSB-05#1	22.5	62.8	32.4	4.7	Gravelly Sandy Loam	A-1-b (0)	SM
⊠	DpR-BSB-07#2	3.5	31.3	47.0	21.6	Gravelly Clay Loam	A-6 (5)	CL
▲	DpR-BSB-08#4	8.5	30.9	50.2	18.9	Silty Loam	A-7-6 (15)	CL
★	EB-SGB-25#1	1.0	4.9	68.6	26.5	Silty Clay Loam	A-7-6 (35)	CH
⊙	EB-SGB-31#2	2.0	20.1	54.2	25.7	Silty Clay Loam	A-6 (10)	CL
✿	EB-SGB-40#3	4.0	19.9	52.1	28.0	Silty Clay Loam	A-7-6 (22)	CL
○	FR-BSB-03#5	11.0	11.2	47.6	41.1	Clay	A-6 (17)	CL
△	FR-BSB-03#12	28.5	4.8	51.2	43.9	Silty Clay	A-6 (21)	CL
⊗	FR-BSB-04#12	28.5	93.2	4.5	2.2	Sand	A-3 (0)	SP-SM
⊕	FR-BSB-08#5	11.0	14.1	50.2	35.6	Silty Clay	A-6 (12)	CL

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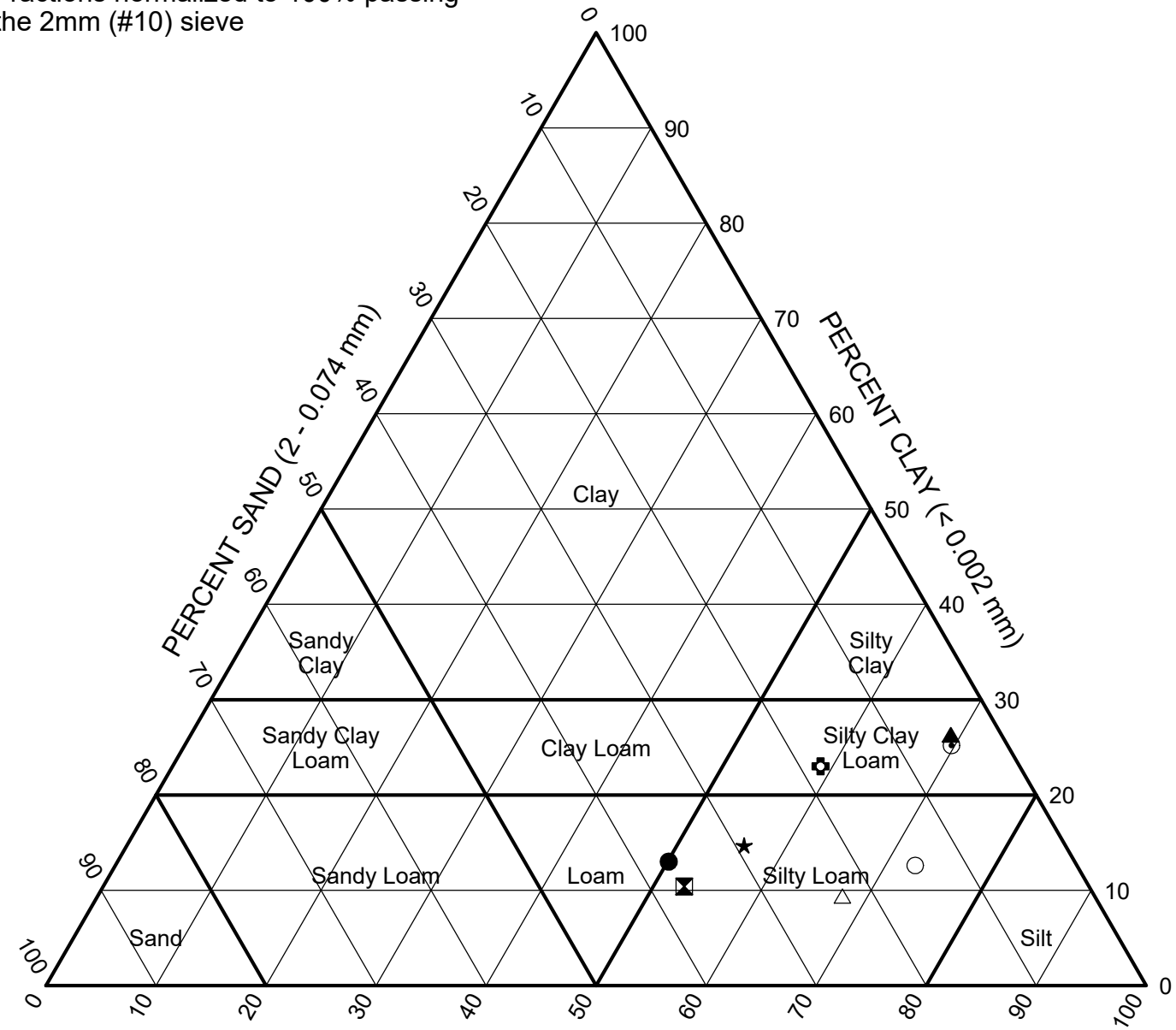

	Sample	Depth (ft)	Sand (%)	Silt (%)	Clay (%)	Classification		
						IL DOT	AASHTO	ASTM
●	RRC-BSB-01#3	6.0	36.7	50.1	13.0	Gravelly Silty Loam	A-4 (1)	SC
⊠	RRC-BSB-02#3	6.0	36.7	52.8	10.4	Gravelly Silty Loam	A-4 (0)	SC-SM
▲	RRC-BSB-03#1	16.0	4.6	69.1	26.3	Silty Clay Loam	A-7-5 (42)	CH
★	RRC-BSB-06#2	3.5	29.2	56.1	14.7	Gravelly Silty Loam	A-4 (2)	CL
⊙	RRC-BSB-06#6	13.5	5.0	69.7	25.2	Silty Clay Loam	A-6 (16)	CL
✿	WB-SGB-29#3	5.0	18.1	58.9	23.0	Silty Clay Loam	A-6 (9)	CL
○	WB-SGB-34#3	4.0	14.7	72.7	12.6	Silty Loam	A-4 (4)	CL-ML
△	WB-SGB-38#2	3.0	23.0	67.7	9.4	Silty Loam	A-4 (2)	CL-ML

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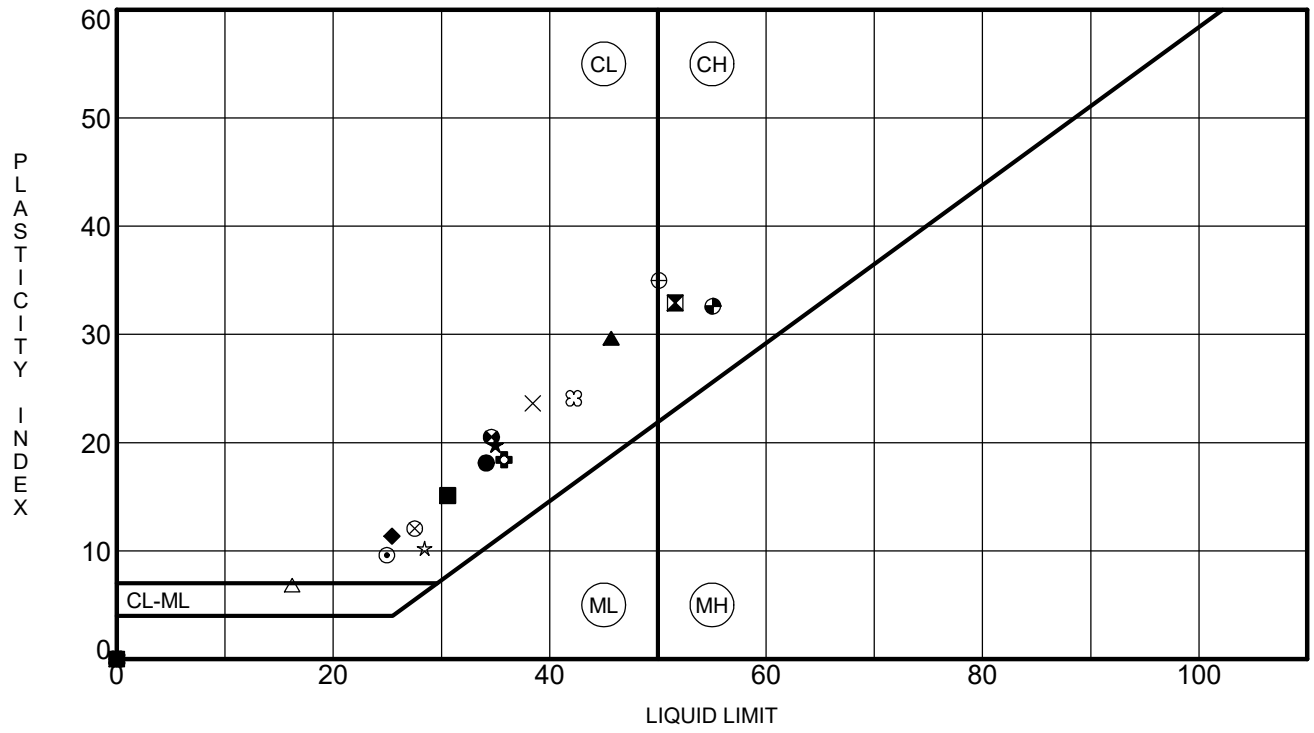

	Specimen Identification		LL	PL	PI	Fines	IDH Classification
●	80/55-BSB-01#6	13.5 ft	34	16	18	77	Silty Clay Loam
⊠	80/55-BSB-01#11	26.0 ft	52	19	33	94	Silty Clay
▲	80/55-BSB-03#10	23.5 ft	46	16	30	81	Silty Clay
★	80/55-BSB-04#4	8.5 ft	35	15	20	80	Silty Clay
⊙	80/55-BSB-05#4	8.5 ft	25	15	10	77	Silty Loam
✿	80/55-BSB-06#5	11.0 ft	36	17	19	88	Silty Clay Loam
○	80/55-BSB-07#12	33.5 ft	NP	NP	NP	29	Gravelly Loam
△	80/55-BSB-08#4	8.5 ft	16	9	7	25	Sandy Loam
⊗	80/55-BSB-09#4	8.5 ft	28	15	13	77	Silty Loam
⊕	80AA-BSB-01#6	13.5 ft	50	15	35	84	Clay
□	80AA-BSB-01#13	33.5 ft	NP	NP	NP	99	Silt
⊛	80AA-BSB-03#3	6.0 ft	35	14	21	79	Clay
◕	CL-SGB-24#2	2.0 ft	55	22	33	84	Silty Clay Loam
☆	CL-SGB-31#2	2.0 ft	28	18	10	89	Silty Loam
⊠	CL-SGB-38#2	2.0 ft	42	18	24	75	Silty Clay Loam
■	DpR-BSB-01#3	6.0 ft	31	15	16	73	Gravelly Silty Clay Loam
◆	DpR-BSB-01#7	16.0 ft	25	14	11	78	Silty Loam
◇	DpR-BSB-01#10	23.5 ft	NP	NP	NP	18	Gravelly Sandy Loam
×	DpR-BSB-02#5	11.0 ft	38	15	23	85	Silty Clay Loam
⊠	DpR-BSB-04#3	23.5 ft	NP	NP	NP	28	Gravelly Sandy Loam

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ATTERBERG LIMITS' RESULTS

Project: I-80 Reconstruction, Ridge Road to Houbolt Road

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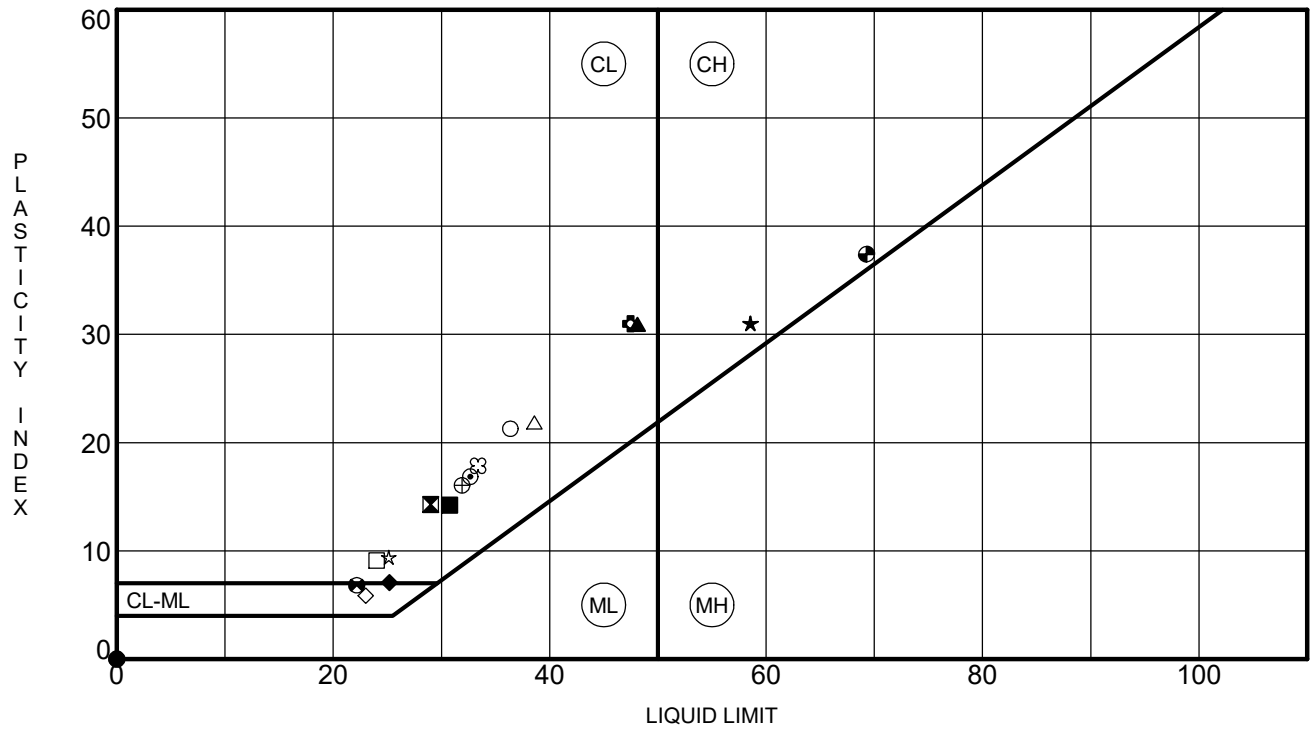

Specimen Identification			LL	PL	PI	Fines	IDH Classification
●	DpR-BSB-05#1	22.5 ft	NP	NP	NP	22	Gravelly Sandy Loam
⊠	DpR-BSB-07#2	3.5 ft	29	15	14	57	Gravelly Clay Loam
▲	DpR-BSB-08#4	8.5 ft	48	17	31	60	Silty Loam
★	EB-SGB-25#1	1.0 ft	59	28	31	95	Silty Clay Loam
⊙	EB-SGB-31#2	2.0 ft	33	16	17	72	Silty Clay Loam
✿	EB-SGB-40#3	4.0 ft	47	17	30	76	Silty Clay Loam
○	FR-BSB-03#5	11.0 ft	36	15	21	86	Clay
△	FR-BSB-03#12	28.5 ft	39	17	22	94	Silty Clay
⊗	FR-BSB-04#12	28.5 ft	NP	NP	NP	7	Sand
⊕	FR-BSB-08#5	11.0 ft	32	16	16	83	Silty Clay
□	RRC-BSB-01#3	6.0 ft	24	15	9	44	Gravelly Silty Loam
⊛	RRC-BSB-02#3	6.0 ft	22	15	7	45	Gravelly Silty Loam
◕	RRC-BSB-03#1	16.0 ft	69	32	37	95	Silty Clay Loam
☆	RRC-BSB-06#2	3.5 ft	25	16	9	54	Gravelly Silty Loam
⊠	RRC-BSB-06#6	13.5 ft	33	16	17	95	Silty Clay Loam
■	WB-SGB-29#3	5.0 ft	31	17	14	78	Silty Clay Loam
◆	WB-SGB-34#3	4.0 ft	25	18	7	81	Silty Loam
◇	WB-SGB-38#2	3.0 ft	23	17	6	72	Silty Loam

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ATTERBERG LIMITS' RESULTS

Project: I-80 Reconstruction, Ridge Road to Houbolt Road

Location: Will County, Illinois

Number: 255-39-01

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APPENDIX C

Illinois Department of Transportation

Summary Report on Pavement, Base and Subbase Design

State Job Number: D-91-206-19 Project: I-80 Reconstruction Route: I-80

Section: _____ City or County: Will Date: 11/30/2022

ADT: _____ Year: _____ Design Period: _____ Class Highway: _____

Passenger Cars Per Day: _____ Trucks S.U. Per Day: _____ Trucks M.U. Per Day: _____

Pavement Structure: _____

Type Surface Course: _____ Thickness: _____

Type Base Course: _____ Thickness: _____

Type Subbase Material: _____ Thickness: _____

Sta. to Sta.	305+50 to 410+00	+ to +	+ to +	+ to +
*Sta. of Test	307+82.06			
*Drainage Class	Poor			
*Ave. Frost Penetration	45 to 60 in.			
Illinois Textural Classification	Silty Clay Loam			
Classification and Group Index (AASHTO M 145)	A-7-6 (29)			
*Percent Silt (AASHTO T 88)	56.9			
*Illinois Bearing Ratio (%)				
Std. Dry Density (IL Mod. AASHTO T 99)				
Optimum Moisture (IL Mod AASHTO T 99)				

* Indicates worst condition within the above station limits.

Remarks: _____

SOIL TEST DATA

PROJECT
255-39-01/KE225039

ROUTE
I-80 Reconstruction From River Road to West of Houbolt Road

SECTION
I-80 (Sta. 305+50.00 to Sta. 410+00.00)

COUNTY
Will County

Lab. No.	CL-SGB-24 No. 2	80/55-BSB-04 No. 4	CL-SGB-31 No. 2	CL-SGB-38 No.2	EB-SGB-25 No.1
Station ft)	307+82.06	355+38.30	367+85.18	409+83.64	304+79.55
Offset (ft)	11.7 RT	8.0 RT	7.1 RT	1.8 RT	65.0 RT
Depth (ft)	2.0	8.5	2	2	1
AASHTO M 145 Classification and Group Index	A-7-6 (29)	A-6 (14)	A-4 (8)	A-7-6 (17)	A-7-6 (35)
Illinois Textural Classification (Illinois Method)	Silty Clay Loam	Silty Clay	Silty Loam	Silty Clay Loam	Silty Clay Loam
Gradation--Passing 1" Sieve %					
--"-- 3/4" Sieve %			100.0		
--"-- 1/2" Sieve %		100.0	97.9	100.0	100.0
--"-- No.4 Sieve %	100.0	96.0	97.6	99.6	99.9
--"-- No.10 Sieve %	99.3	93.2	96.5	96.6	99.9
--"-- No.40 Sieve %	94.5	88.3	93.5	91.9	98.9
--"-- No.100 Sieve %	87.4	82.4	92.3	80.3	96.5
--"-- No.200 Sieve %	83.8	79.8	88.9	75.4	95.0
Sand % (AASHTO T 88)	15.4	13.4	7.6	21.2	4.9
Silt % (AASHTO T 88)	56.9	51.2	72.8	51.7	68.5
Clay % (AASHTO T 88)	27.0	28.6	16.1	23.7	26.5
Liquid limit % (AASHTO T 89)	55.0	35.0	28.0	42.0	59.0
Plasticity index % (AASHTO T 90)	33.0	20.0	10.0	24.0	31.0
IBR % (Illinois Method)					
Standard Dry Density % (AASHTO T 99)					
Optimum Moisture % (AASHTO T 99)					
Subgrade Support Rating	POOR	POOR	POOR	POOR	POOR
Insitu Moisture % (AASHTO T 99)	30	16	8	20	39

SOIL TEST DATA

PROJECT
255-39-01/KE225039

ROUTE
I-80 Reconstruction From River Road to West of Houbolt Road

SECTION
I-80 (Sta. 305+50.00 to Sta. 410+00.00)

COUNTY
Will County

Lab. No.	DpR-BSB-08 No.4	EB-SGB-31 No.2	RRC-BSB-01 No.3	EB-SGB-40 No.3	DpR-BSB-01 No.3
Station ft)	320+62.99	340+65.88	386+52.00	406+07.85	316+95.61
Offset (ft)	63.2 RT	103.1 RT	55.2 LT	67.2 RT	57.9 LT
Depth (ft)	8.5	2	6	4	6
AASHTO M 145 Classification and Group Index	A-7-6 (15)	A-6 (10)	A-4 (1)	A-7-6 (22)	A-6 (9)
Illinois Textural Classification (Illinois Method)	Silty Loam	Silty Clay Loam	Gravelly Silty Loam	Silty Clay Loam	Gravelly Silty Clay Loam
Gradation--Passing 1" Sieve %			99.8		
--"-- 3/4" Sieve %			95.5		
--"-- 1/2" Sieve %	100.0	100.0	94.7	98.6	
--"-- No.4 Sieve %	92.8	96.2	81.2	97.0	93.2
--"-- No.10 Sieve %	86.8	90.4	70.0	94.2	83.7
--"-- No.40 Sieve %	71.4	81.1	53.6	84.7	79.6
--"-- No.100 Sieve %	64.0	75.1	48.7	78.5	75.3
--"-- No.200 Sieve %	60.0	72.2	44.2	75.5	72.6
Sand % (AASHTO T 88)	26.8	18.2	25.7	18.7	11.1
Silt % (AASHTO T 88)	43.6	49.0	35.1	49.1	49.1
Clay % (AASHTO T 88)	16.4	23.2	9.1	26.4	23.5
Liquid limit % (AASHTO T 89)	48.0	33.0	24.0	47.0	31.0
Plasticity index % (AASHTO T 90)	31.0	17.0	9.0	31.0	15.0
IBR % (Illinois Method)					
Standard Dry Density % (AASHTO T 99)					
Optimum Moisture % (AASHTO T 99)					
Subgrade Support Rating	POOR	POOR	POOR	POOR	POOR
Insitu Moisture % (AASHTO T 99)	21	16	9	23	21

SOIL TEST DATA

PROJECT
255-39-01/KE225039

ROUTE
I-80 Reconstruction From River Road to West of Houbolt Road

SECTION
I-80 (Sta. 305+50.00 to Sta. 410+00.00)

COUNTY
Will County

Lab. No.	DpR-BSB-07 No.2	WB-SGB-29 No.3	80AA-BSB-03 No.3	80/55-BSB-05 No.4	80/55-BSB-08 No.4
Station ft)	320+46.17	329+86.96	347+81.98	356+86.9	356+89.7
Offset (ft)	57.9 LT	71.2 LT	87.59 RT	1.5 RT	101.6 RT
Depth (ft)	3.5	5	6	8.5	8.5
AASHTO M 145 Classification and Group Index	A-6 (5)	A-6 (9)	A-6 (15)	A-4 (5)	A-2-4 (0)
Illinois Textural Classification (Illinois Method)	Gravelly Clay Loam	Silty Clay Loam	Clay	Silty Loam	Sandy Loam
Gradation--Passing 1" Sieve %	99.7				
--"-- 3/4" Sieve %	94.9				
--"-- 1/2" Sieve %	92.3				
--"-- No.4 Sieve %	87.5	98.7	99.8	96.4	96.0
--"-- No.10 Sieve %	82.1	95.7	96.5	92.8	92.9
--"-- No.40 Sieve %	66.8	86.4	89.8	86.1	65.8
--"-- No.100 Sieve %	60.0	81.6	82.2	80.8	27.8
--"-- No.200 Sieve %	56.3	78.4	78.9	76.8	25.5
Sand % (AASHTO T 88)	25.7	17.3	17.6	16.0	67.4
Silt % (AASHTO T 88)	38.6	56.4	47.5	60.9	17.8
Clay % (AASHTO T 88)	17.7	22.0	31.4	15.9	7.7
Liquid limit % (AASHTO T 89)	29.0	31.0	35.0	25.0	16.0
Plasticity index % (AASHTO T 90)	14.0	14.0	21.0	10.0	7.0
IBR % (Illinois Method)					
Standard Dry Density % (AASHTO T 99)					
Optimum Moisture % (AASHTO T 99)					
Subgrade Support Rating	POOR	POOR	FAIR	POOR	GRANULAR
Insitu Moisture % (AASHTO T 99)	14	15	16	16	21

SOIL TEST DATA

PROJECT
255-39-01/KE225039

ROUTE
I-80 Reconstruction From River Road to West of Houbolt Road

SECTION
I-80 (Sta. 305+50.00 to Sta. 410+00.00)

COUNTY
Will County

Lab. No.	80/55-BSB-09 No.4	WB-SGB-34 No.3	WB-SGB-38 No.2	RRC-BSB-02 No.3	RRC-BSB-06 No.2
Station ft)	358+43.0	359+83.68	383+91.80	386+53.04	387+90.91
Offset (ft)	71.8 RT	84.4 LT	62.4 LT	64.2 RT	61.7 RT
Depth (ft)	8.5	4	3	6	3.5
AASHTO M 145 Classification and Group Index	A-6 (8)	A-4 (4)	A-4 (2)	A-4 (0)	A-4 (2)
Illinois Textural Classification (Illinois Method)	Silty Loam	Silty Loam	Silty Loam	Gravelly Silty Loam	Gravelly Silty Loam
Gradation--Passing 1" Sieve %					99.5
--"-- 3/4" Sieve %				100.0	90.4
--"-- 1/2" Sieve %		100.0	100.0	89.7	90.4
--"-- No.4 Sieve %	97.2	97.0	98.2	80.7	82.3
--"-- No.10 Sieve %	94.7	94.4	93.4	70.9	76.3
--"-- No.40 Sieve %	85.2	88.3	80.8	53.5	62.3
--"-- No.100 Sieve %	81.1	84.9	76.8	49.1	57.5
--"-- No.200 Sieve %	76.3	80.5	72.0	44.9	54.0
Sand % (AASHTO T 88)	18.4	13.9	21.5	26.0	22.3
Silt % (AASHTO T 88)	64.3	68.6	63.2	37.4	42.8
Clay % (AASHTO T 88)	12.0	11.9	8.8	7.4	11.2
Liquid limit % (AASHTO T 89)	28.0	25.0	23.0	22.0	25.0
Plasticity index % (AASHTO T 90)	12.0	7.0	6.0	7.0	9.0
IBR % (Illinois Method)					
Standard Dry Density % (AASHTO T 99)					
Optimum Moisture % (AASHTO T 99)					
Subgrade Support Rating	POOR	POOR	POOR	POOR	POOR
Insitu Moisture % (AASHTO T 99)	19	12	13	11	15

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APPENDIX D

Wang Engineering

Pavement Composition - Shoulder
I-80 Mainline (Contract ML-4)
Station 305+50 to Station 410+00

	Station	Offset	Asphalt (in)	Concrete (in)	Basecourse Type / Thickness (in)	Topsoil Type	Topsoil Thickness (in)	Distance from Edge of Pavement (ft)
EB-SGB-25	304+79.55	65.0 RT	12	-	Sandy Gravel/6	-	-	-
EB-SGB-26	310+30.66	63 RT	10	-	Sandy Gravel / 8	Silty Clay Loam	6	15
EB-PC-16	311+15.50	64.89 RT	10	-	Sandy Gravel	-	-	25
EB-SGB-27	316+26.76	64.9 RT	18	-	Sandy Gravel / 6	Silty Clay Loam	12	-
DpR-BSB-02	316+97.67	68.4 RT	18	-	Sandy Gravel/6	-	-	-
DpR-BSB-08	320+62.99	63.2 RT	15	-	Sandy Gravel/8	-	-	3
EB-SGB-28	322+24.82	67 RT	12	-	Sandy Gravel / 3	Silty Loam	9	3
EB-SGB-29	328+27.89	64.4 RT	15	-	Silty Sandy Gravel / 6	Silty Loam	9	35
EB-SGB-30	334+35.82	62.3 RT	12	-	Sandy Gravel / 9	Silty Clay Loam	5	-
OSB-04	337+44.8	70.8 RT	25	-	Silty Clay Loam Fill	-	-	-
FR-BSB-08	340+0.1.9	89.6 RT	-	15	Sandy Gravel Fill	-		
EB-PC-17	337+78.52	29.08 RT	14	-	Sandy Gravel	-	-	10
FR-BSB-07	340+07.7	32.4 RT	6	8	-	-		
EB-SGB-31	340+65.88	103.1 RT	-	-	-	Silty Clay Loam	3	5
EB-SGB-32	346+26.01	64.8 RT	22	-	Sandy Gravel / 14	-	-	-
80AA-BSB-03	347+81.98	87.59 RT	9.5	-	Sandy Gravel Fill	-	-	-
80AA-BSB-04	349+13.92	69.69 RT	12	-	Sandy Gravel/24	-	-	-
EB-SGB-33	352+28.72	64.7 RT	16	10	Sandy Gravel / 6	Silty Loam	3	2
80/55-BSB-07	355+14.6	75.0 RT	21	2	-	-	-	-
80/55-BSB-09	358+43.0	71.8 RT	16	-	-	-	-	-
OSB-06	359+02.8	72.4 RT	23	-	Clay Loam Fill	-	-	-
EB-SGB-34	364+22.56	64.4 RT	21	-	Sandy Gravel / 21	Silty Clay Loam	3	12
EB-PC-20	364+44.98	63.33 RT	20.5	-	Sandy Gravel	-	-	-
EB-SGB-35	370+16.64	65.1 RT	14	-	Sandy Gravel / 19	-	-	-
EB-SGB-36	376+17.74	76.2 RT	15	-	Sandy Gravel / 18	Silty Loam	5	30
EB-SGB-37	382+19.90	70 RT	16	-	Crushed Stone / 10	-	-	-
RRC-BSB-02	386+53.04	64.2 RT	15	-	Sandy Gravel/6	-	-	-
RRC-BSB-06	387+90.91	61.7 RT	14	-	Fill	-	-	-
EB-PC-22	391+05.08	29.27 RT	10	-	Gravel	-	-	-
EB-SGB-38	394+23.44	72.2 RT	-	-	Sandy Gravel / 18	-	-	-
EB-SGB-39	400+22.91	73.8 RT	-	-	-	Silty Clay Loam	7	31
EB-SGB-40	406+07.85	67.2 RT	10	-	Gravelly Loam / 20	-	-	-
EB-SGB-41	412+06.37	68.3 RT	13	-	Silty Clay	-	-	-
CL-SGB-24	307+82.06	11.7 RT	-	-	-	Silty Clay Loam	6	-
CL-SGB-25	313+91.13	14.8 RT	-	-	-	Silty Clay Loam	3	12
CL-SGB-26	325+79.10	2.8 RT	-	-	-	Gravelly Silty Loam	3	25
OSB-01	325+56.5	26.9 RT	-	-	-	Silty Clay Loam	6	
CL-SGB-27	331+75.78	3.8 RT	-	-	-	Silty Loam	3	21
OSB-03	337+60.2	10.1 RT	-	-	-	Silty Clay Loam	5	-
CL-SGB-28	343+81.84	11.1 RT	-	-	-	Silty Clay Loam	4	-
80AA-BSB-02	348+06.01	6.83 RT	-	-	-	Silty Clay	12	-

Wang Engineering

Pavement Composition - Shoulder
I-80 Mainline (Contract ML-4)
Station 305+50 to Station 410+00

	Station	Offset	Asphalt (in)	Concrete (in)	Basecourse Type / Thickness (in)	Topsoil Type	Topsoil Thickness (in)	Distance from Edge of Pavement (ft)
CL-SGB-29	349+85.24	10.7 RT	-	-	-	Silty Clay Loam	5	-
80/55-BSB-04	355+38.3	8.0 RT	-	-	-	Silty Clay Loam	12	-
80/55-BSB-06	358+22.8	6.5 RT	-	-	-	Silty Clay	2	-
OSB-05	359+05.4	9.8 RT	-	-	-	Silty Clay Loam	7	-
CL-SGB-30	361+84.55	8.6 RT	-	-	-	Silty Clay Loam	5	21
CL-SGB-31	367+85.18	7.1 RT	-	-	-	Silty Clay Loam	5	22
CL-SGB-32	373+86.58	9.8 RT	-	-	-	Silty Clay Loam	3	17
CL-SGB-33	379+84.22	9.9 RT	-	-	-	Silty Clay Loam	7	17
OSB-08	380+04.7	23.4 RT	-	-	-	Silty Clay Loam	5	-
OSB-09	385+65.2	32.5 RT	12	-	Gravelly Loam to Sandy Loam	-	-	-
CL-SGB-34	385+79.40	10.9 RT	-	-	-	Silty Clay Loam	6	17
CL-SGB-35	391+70.56	4.2 LT	-	-	-	Silty Clay Loam	3	-
CL-SGB-36	397+92.97	12.9 RT	-	-	-	Silty Clay Loam	4	-
CL-SGB-37	403+81.57	0.4 RT	-	-	-	Silty Loam	5	-
OSB-11	404+77.6	19.8 LT	-	-	-	Silty Clay Loam	6	-
OSB-13	407+05.1	21.3 LT	-	-	-	Silty Clay Loam	5	-
CL-SGB-38	409+83.64	1.8 RT	-	-	-	Silty Clay Loam	6	-
WB-SGB-26	305+82.98	56.3 LT	15	-	Sandy Gravel / 10	Silty Clay	12	25
WB-PC-14	311+06.52	59.38 LT	11	-	Sandy Gravel	-	-	-
WB-SGB-27	311+78.01	55.2 LT	13	-	Sandy Gravel / 20	Silty Clay	10	25
DpR-BSB-01	316+95.61	57.9 LT	12.5	-	Sandy Gravel/24	-	-	-
DpR-BSB-07	320+46.17	57.9 LT	13.5	-	Sandy Gravel/4	-	-	-
WB-SGB-28	323+90.60	62.2 LT	16	-	Sandy Gravel / 2	Silty Clay Loam	8	7
WB-SGB-29	329+86.96	71.2 LT	17	-	Sandy Gravel / 13	Silty Clay Loam	10	5
WB-SGB-30	335+81.09	90.4 LT		-	-	Silty Clay Loam	5	6
FR-BSB-03	340+02.8	65.4 LT	14	-	Loam Fill	-		
FR-BSB-04	339+10.9	30.7 LT	12	-	Sandy Gravel/24	-		
WB-PC-16	337+52.56	27.32 LT	13	-	Sandy Gravel	Silty Clay	11	10
WB-SGB-31	342+00.64	61.4 LT	17	-	Sandy Gravel / 5	Silty Clay	9	15
WB-SGB-32	347+18.41	66.1 LT	-	-	Sandy Gravel / 18	-	-	-
80AA-BSB-01	349+12.14	63.49 LT	9	-	Gravelly Sand Fill	Silty Clay Loam	5	3
WB-SGB-33	353+83.11	81.5 LT	-	-	-	-	-	-
OSB-15	354+31.8	83.3 LT	-	-	-	Silty Clay Loam	6	-
80/55-BSB-01	355+16.8	62.5 LT	17	2	Gravelly Sand/47	-	-	-
80/55-BSB-03	358+41.7	70.1 LT	20	4	Sand/12	Silty Clay	-	-
WB-SGB-34	359+83.68	84.4 LT	-	-	-			
WB-PC-18	364+07.72	58.49 LT	23.5	-	-	Silty Clay	6	35 (bottom of ditch)
WB-SGB-35	365+85.41	66.7 LT	-	-	Sandy Gravel / 11	Silty Clay	5	35 (bottom of ditch)
WB-SGB-36	371+83.87	61.2 LT	16	-	Sand / 6	Silty Clay	12	45
WB-SGB-37	377+96.59	60.9 LT	24	-	Sandy Gravel / 6	Silty Clay	14	30
OSB-07	380+13.2	77.0 LT	19.5	-	Clay Loam Fill	-	-	-

Pavement Composition - Shoulder
I-80 Mainline (Contract ML-4)
Station 305+50 to Station 410+00

	Station	Offset	Asphalt (in)	Concrete (in)	Basecourse Type / Thickness (in)	Topsoil Type	Topsoil Thickness (in)	Distance from Edge of Pavement (ft)
WB-SGB-38	383+91.80	62.4 LT	15	-	Sandy Gravel/10	-	-	-
RRC-BSB-01	386+52.00	55.2 LT	14	-	Sandy Gravel/13	-	-	-
RRC-BSB-05	387+93.26	56.8 LT	20	-	Sandy Gravel / 21	-	-	-
WB-SGB-39	389+97.16	60.4 LT	15	-				
WB-PC-20	390+53.47	25.59 LT	17		Sandy Gravel	-	-	-
WB-SGB-40	395+88.38	63.4 LT	14		-	Silty Clay Loam	16	20
WB-SGB-41	401+94.86	62 LT	18		Sandy Gravel / 3	Silty Clay Loam	15	15
WB-SGB-42	407+89.99	84.1 LT	-		-	Silty Clay Loam	10	4

Appendix D-2

Pavement Composition - Mainline
I-80 Mainline (Contract ML-4)
Station 305+50 to Station 410+00

	Station	Offset	Asphalt (in)	Concrete (in)	Asphalt (in)	Total Thickness (in)	Basecourse Type
EB-PC-15	311+12.52	56.21 RT	4	10	-	14	Sandy Gravel
EB-PC-18	337+87.92	36.38 RT	5.5	10	-	15.5	Sand Gravel
EB-PC-19	364+43.72	53.63 RT	4.75	10.75	-	15.5	Sandy Gravel
EB-PC-21	391+01.88	36.12 RT	4	8	-	12	Gravel
WB-PC-13	311+13.32	51.74 LT	4	9	-	13	Sandy Gravel
WB-PC-15	337+52.39	31.55 LT	4	9	-	13	Sandy Gravel
WB-PC-17	364+06.19	50.96 LT	7.25	10.25	-	17..5	Sandy Gravel
WB-PC-19	390+52.10	30.94 LT	4.5	8.5	3	16	Sandy Gravel

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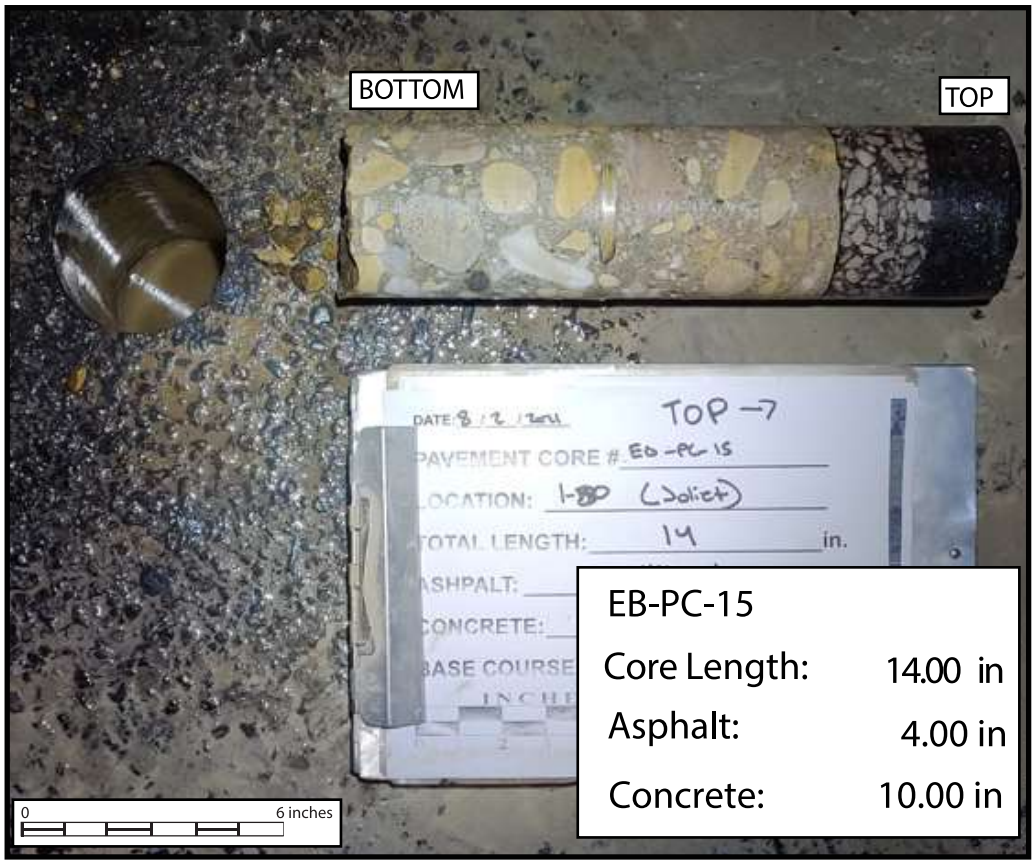
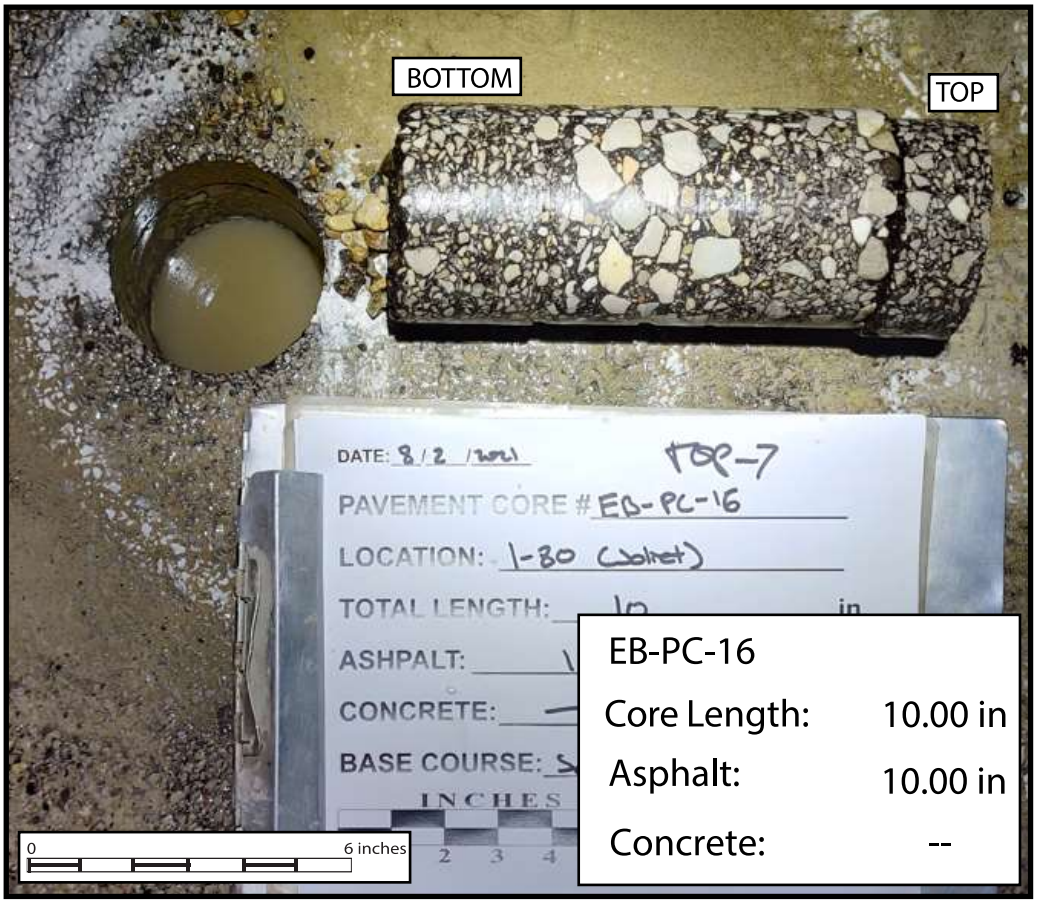
APPENDIX E



EB-PC-15	
Core Length:	14.00 in
Asphalt:	4.00 in
Concrete:	10.00 in



EB-PC-16	
Core Length:	10.00 in
Asphalt:	10.00 in
Concrete:	--

PAVEMENT CORES: I-80 RECONSTRUCTION FROM RIVER RD TO HOUBOLT RD; ML-4, PTB 194/10, WILL COUNTY, ILLINOIS

SCALE: GRAPHICAL	APPENDIX E-1	DRAWN BY: J. Bensen CHECKED BY: A. Hamad

Wang Engineering
A Terracon Company
1145 N. Main Street
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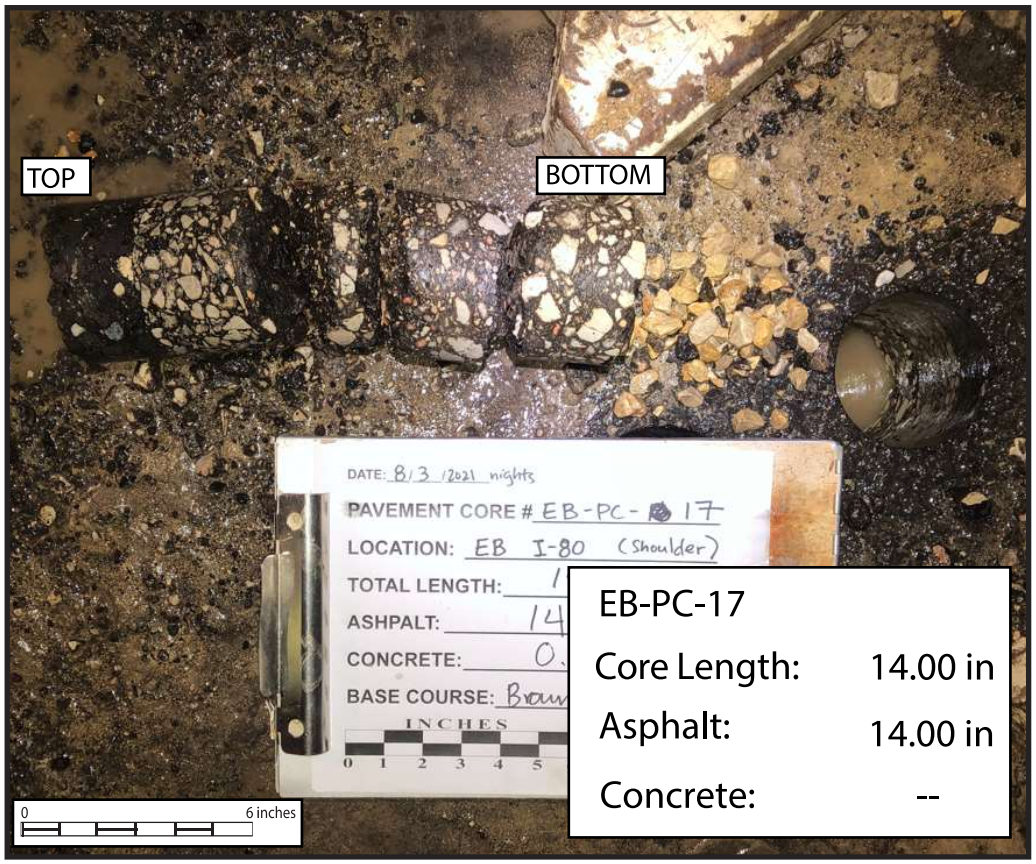
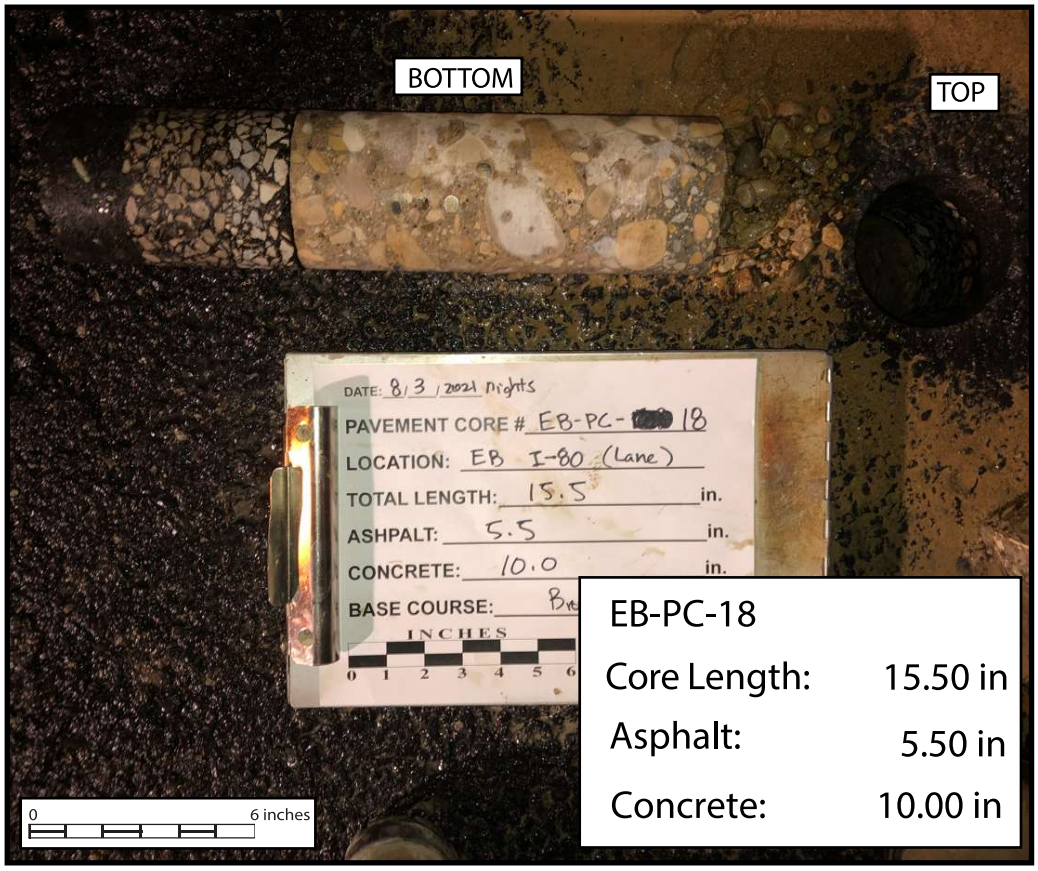
www.wangeng.com

FOR STANTEC	2553901 KE225039



EB-PC-17	
Core Length:	14.00 in
Asphalt:	14.00 in
Concrete:	--



EB-PC-18	
Core Length:	15.50 in
Asphalt:	5.50 in
Concrete:	10.00 in

PAVEMENT CORES: I-80 RECONSTRUCTION FROM RIVER RD TO HOUBOLT RD; ML-4, PTB 194/10, WILL COUNTY, ILLINOIS

SCALE: GRAPHICAL	APPENDIX E-2	DRAWN BY: J. Bensen CHECKED BY: A. Hamad

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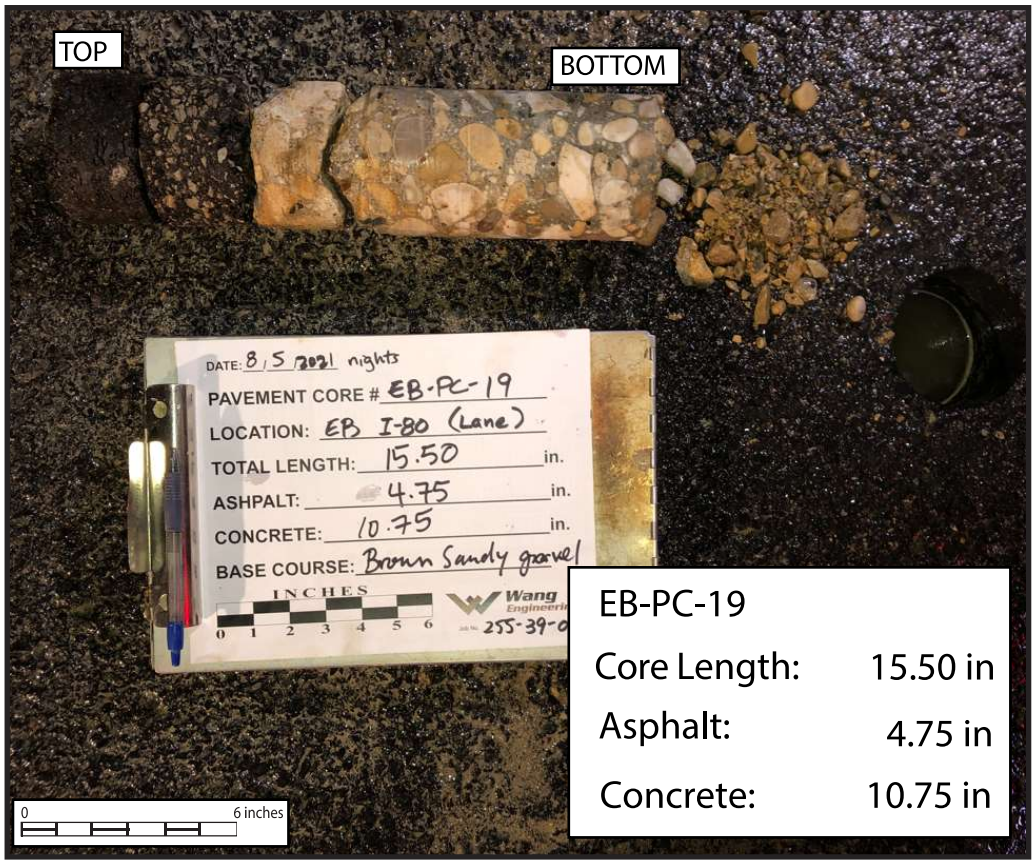
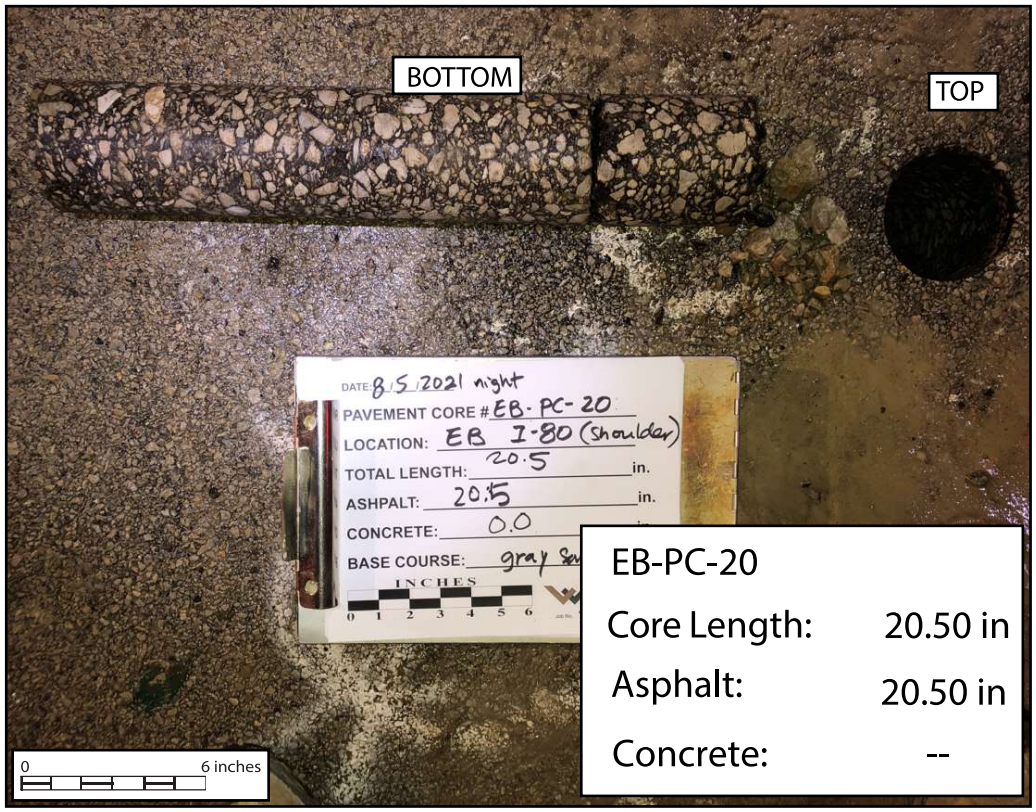


EB-PC-19	
Core Length:	15.50 in
Asphalt:	4.75 in
Concrete:	10.75 in



EB-PC-20	
Core Length:	20.50 in
Asphalt:	20.50 in
Concrete:	--

PAVEMENT CORES: I-80 RECONSTRUCTION FROM RIVER RD TO HOUBOLT RD; ML-4, PTB 194/10, WILL COUNTY, ILLINOIS

SCALE: GRAPHICAL	APPENDIX E-3	DRAWN BY: J. Bensen CHECKED BY: A. Hamad

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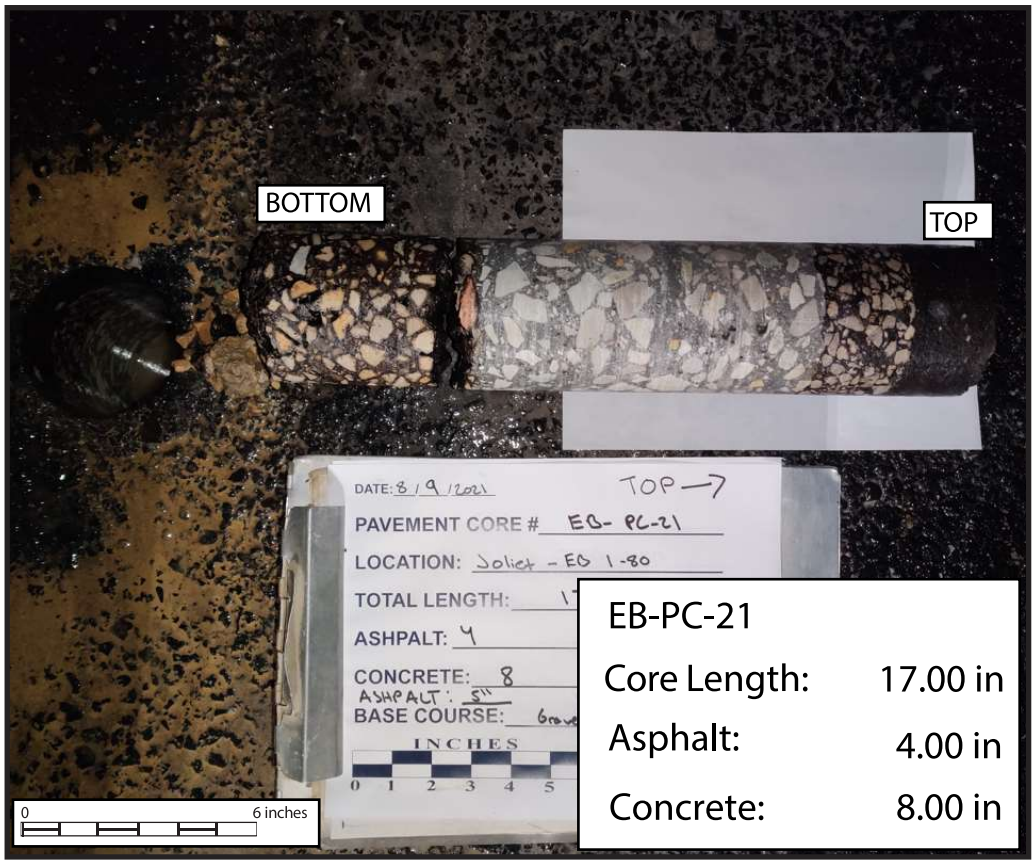
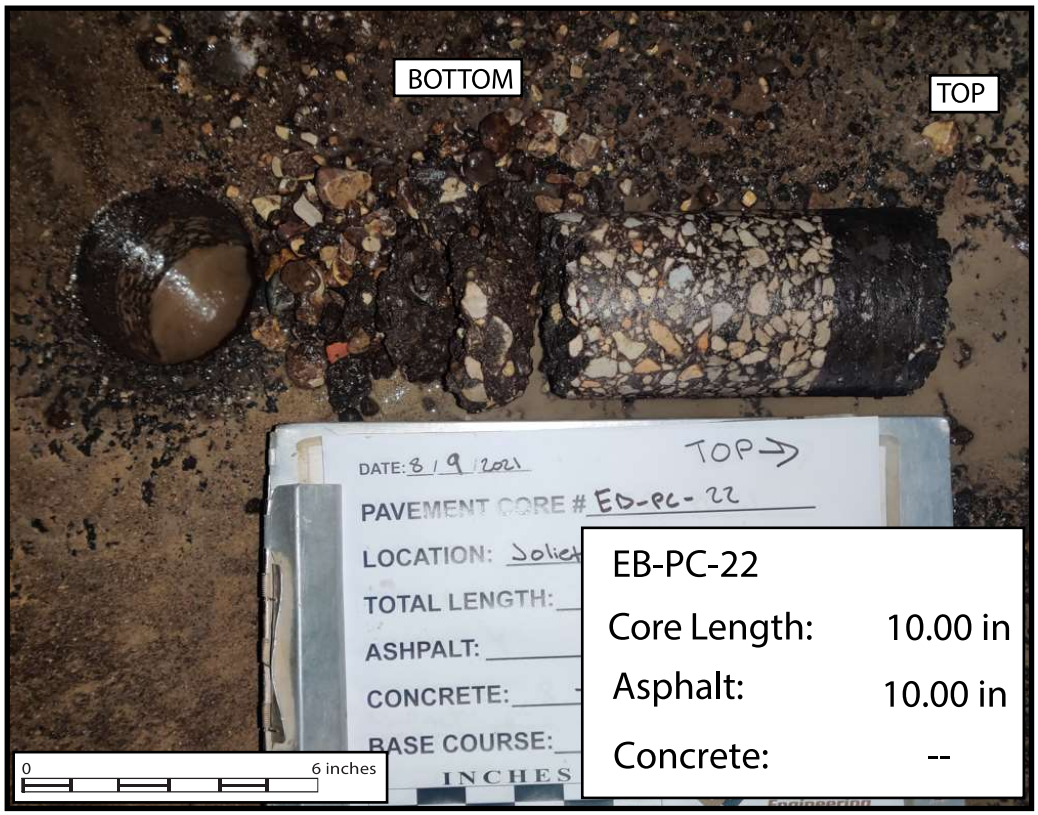


EB-PC-21	
Core Length:	17.00 in
Asphalt:	4.00 in
Concrete:	8.00 in



EB-PC-22	
Core Length:	10.00 in
Asphalt:	10.00 in
Concrete:	--

PAVEMENT CORES: I-80 RECONSTRUCTION FROM RIVER RD TO HOUBOLT RD; ML-4, PTB 194/10, WILL COUNTY, ILLINOIS

SCALE: GRAPHICAL	APPENDIX E-4	DRAWN BY: J. Bensen CHECKED BY: A. Hamad

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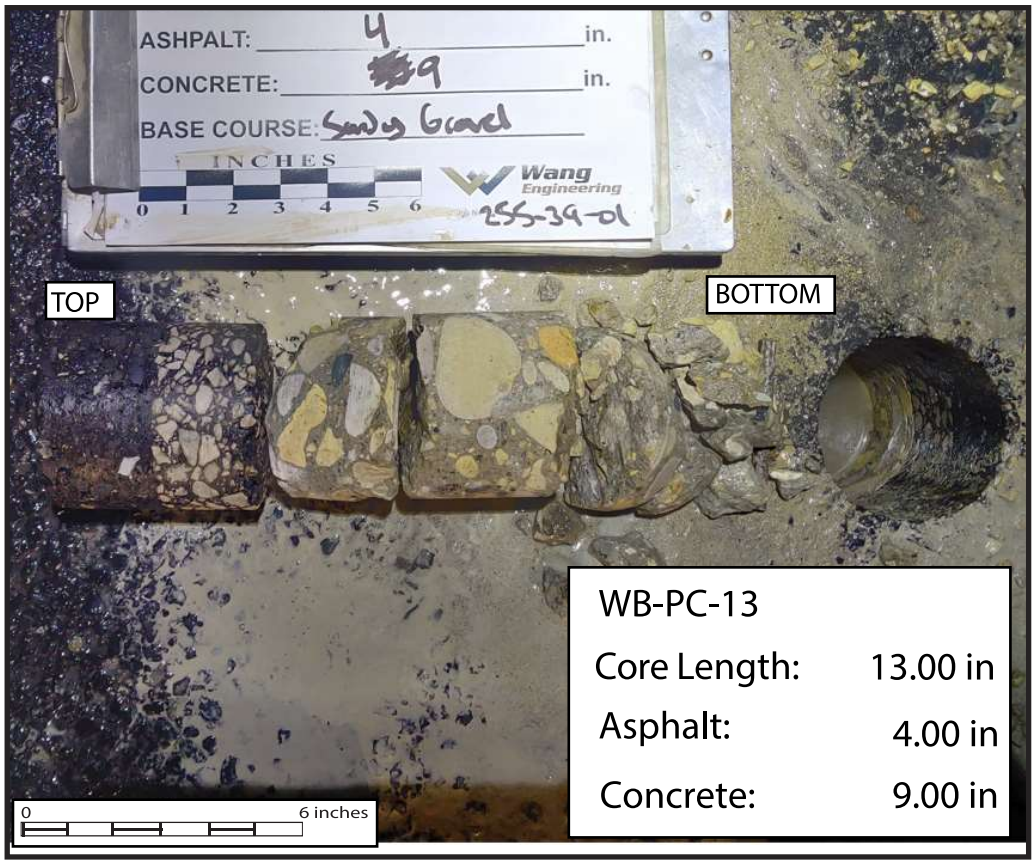
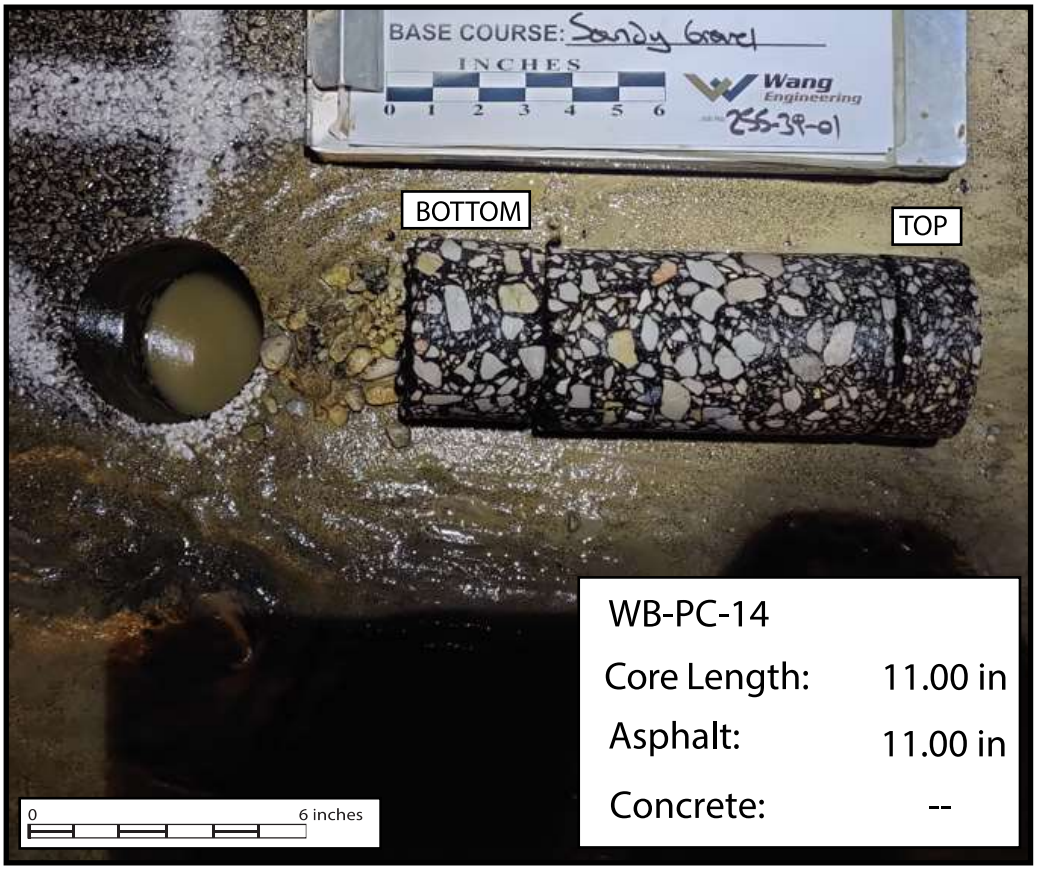


WB-PC-13	
Core Length:	13.00 in
Asphalt:	4.00 in
Concrete:	9.00 in



WB-PC-14	
Core Length:	11.00 in
Asphalt:	11.00 in
Concrete:	--

PAVEMENT CORES: I-80 RECONSTRUCTION FROM RIVER RD TO HOUBOLT RD; ML-4, PTB 194/10, WILL COUNTY, ILLINOIS

SCALE: GRAPHICAL	APPENDIX E-5	DRAWN BY: J. Bensen CHECKED BY: A. Hamad

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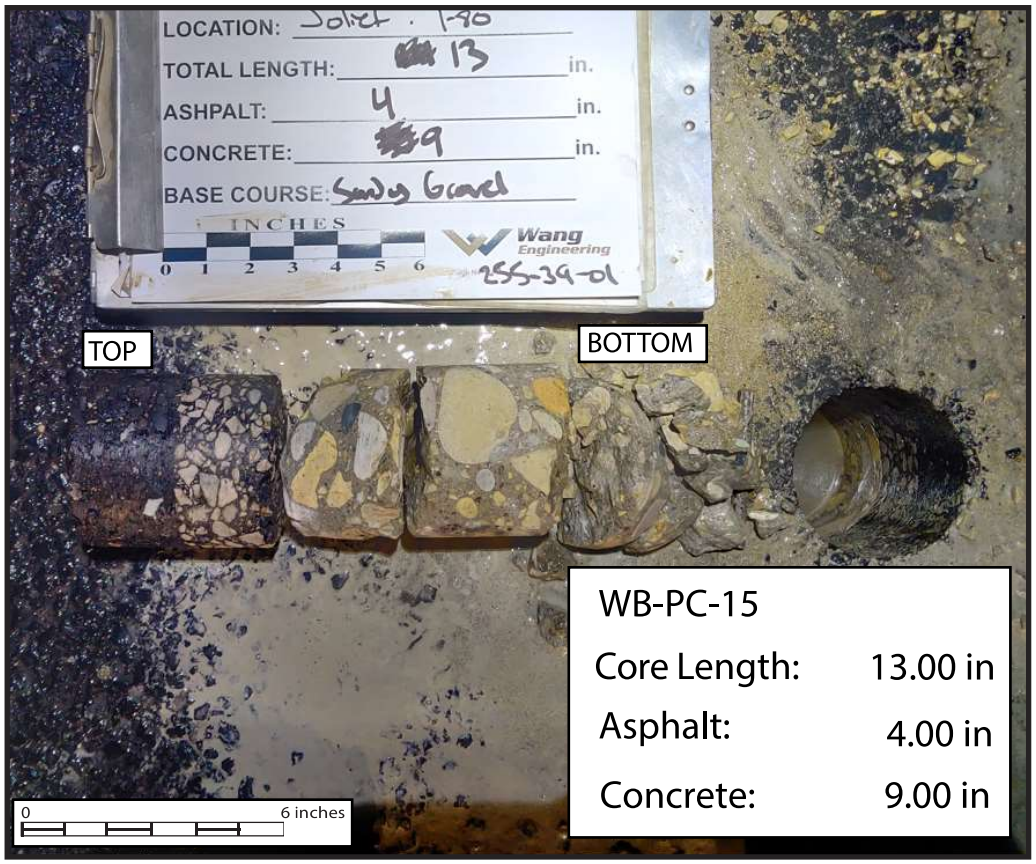

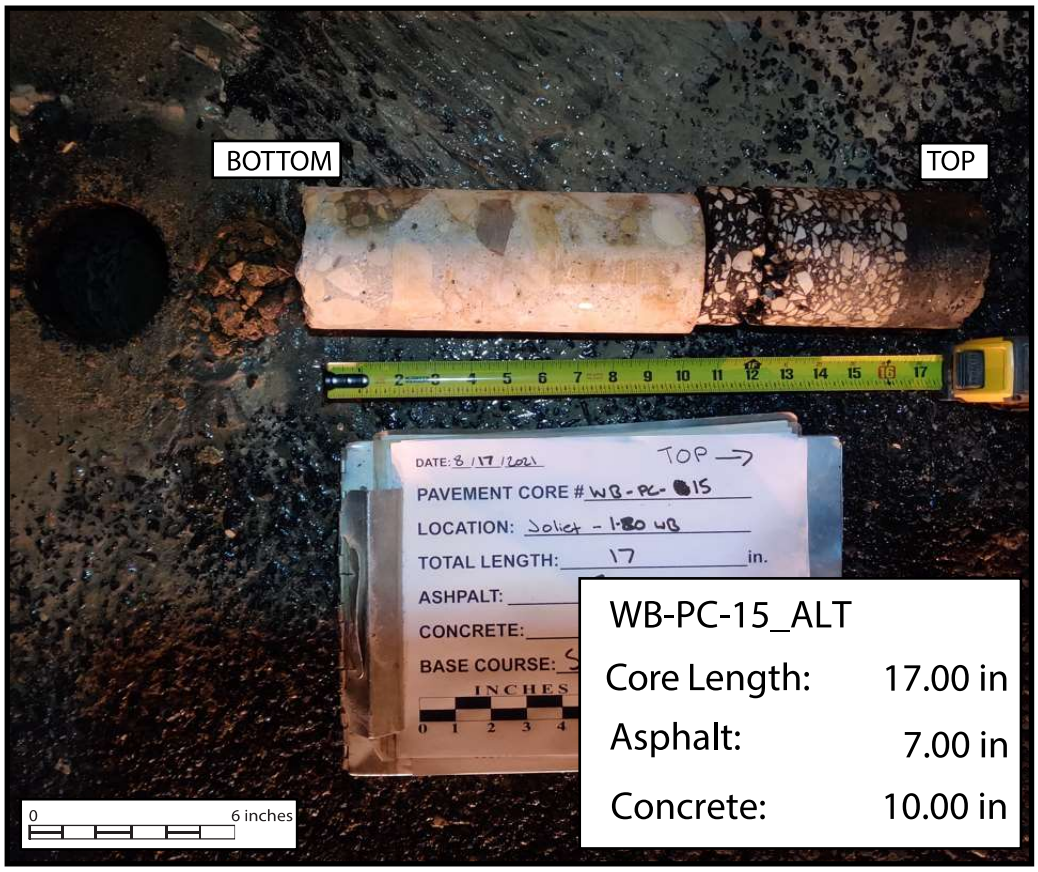

PAVEMENT CORES: I-80 RECONSTRUCTION FROM RIVER RD TO HOUBOLT RD; ML-4, PTB 194/10, WILL COUNTY, ILLINOIS

SCALE: GRAPHICAL	APPENDIX E-6	DRAWN BY: J. Bensen CHECKED BY: A. Hamad

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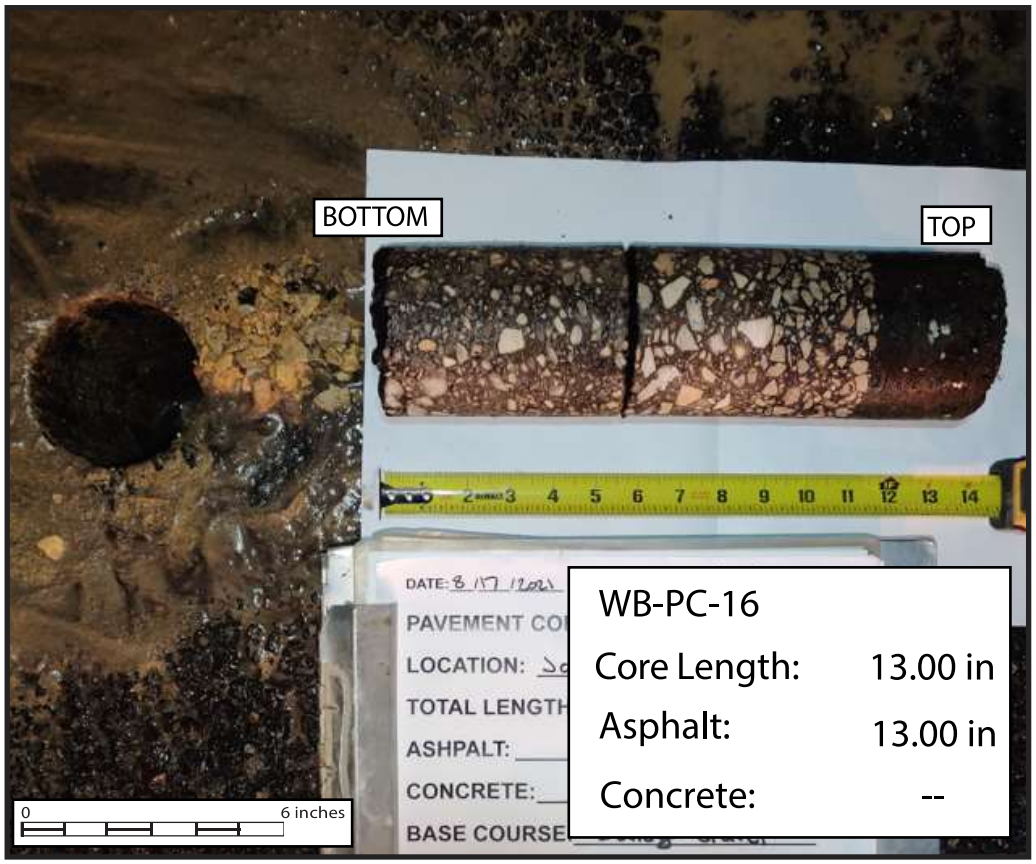

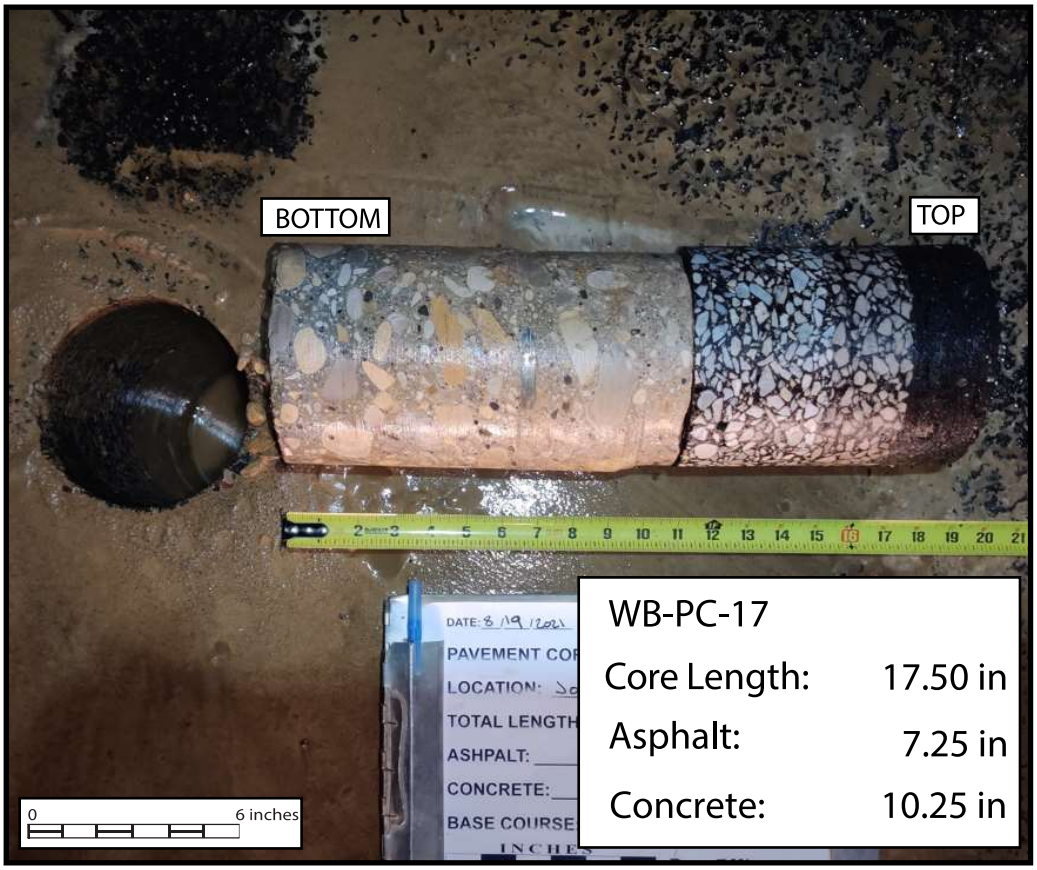

PAVEMENT CORES: I-80 RECONSTRUCTION FROM RIVER RD TO HOUBOLT RD; ML-4, PTB 194/10, WILL COUNTY, ILLINOIS

SCALE: GRAPHICAL	APPENDIX E-7	DRAWN BY: J. Bensen CHECKED BY: A. Hamad

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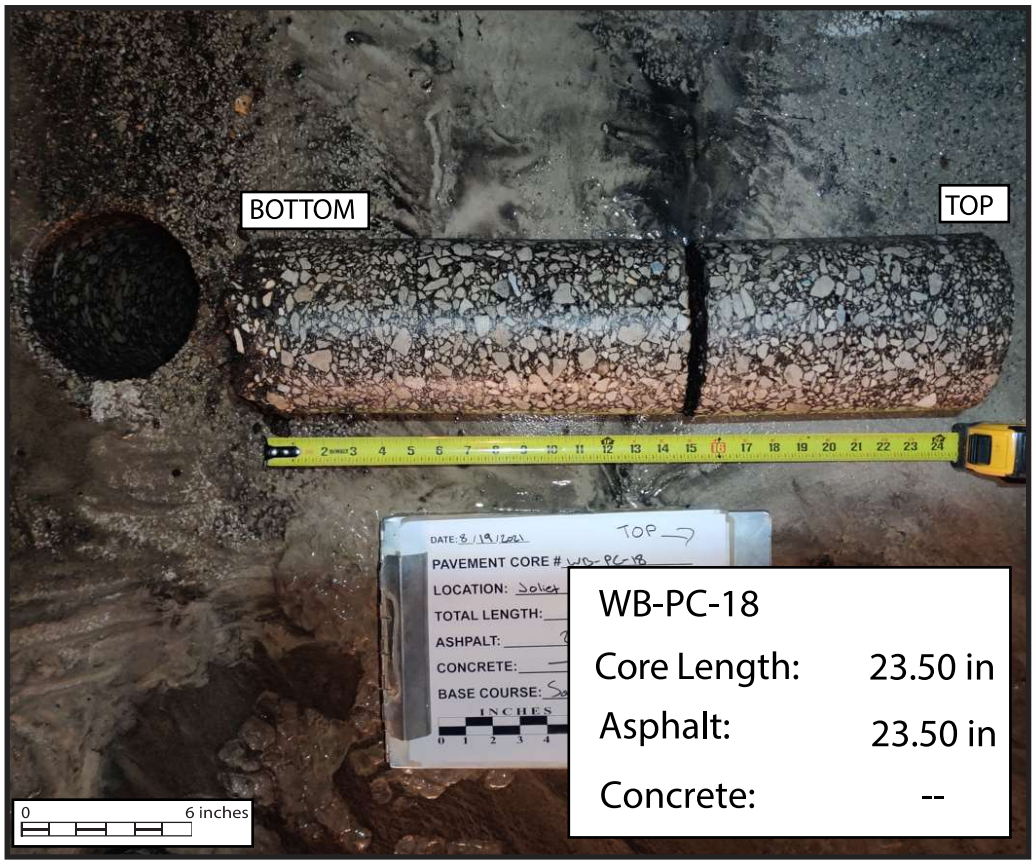
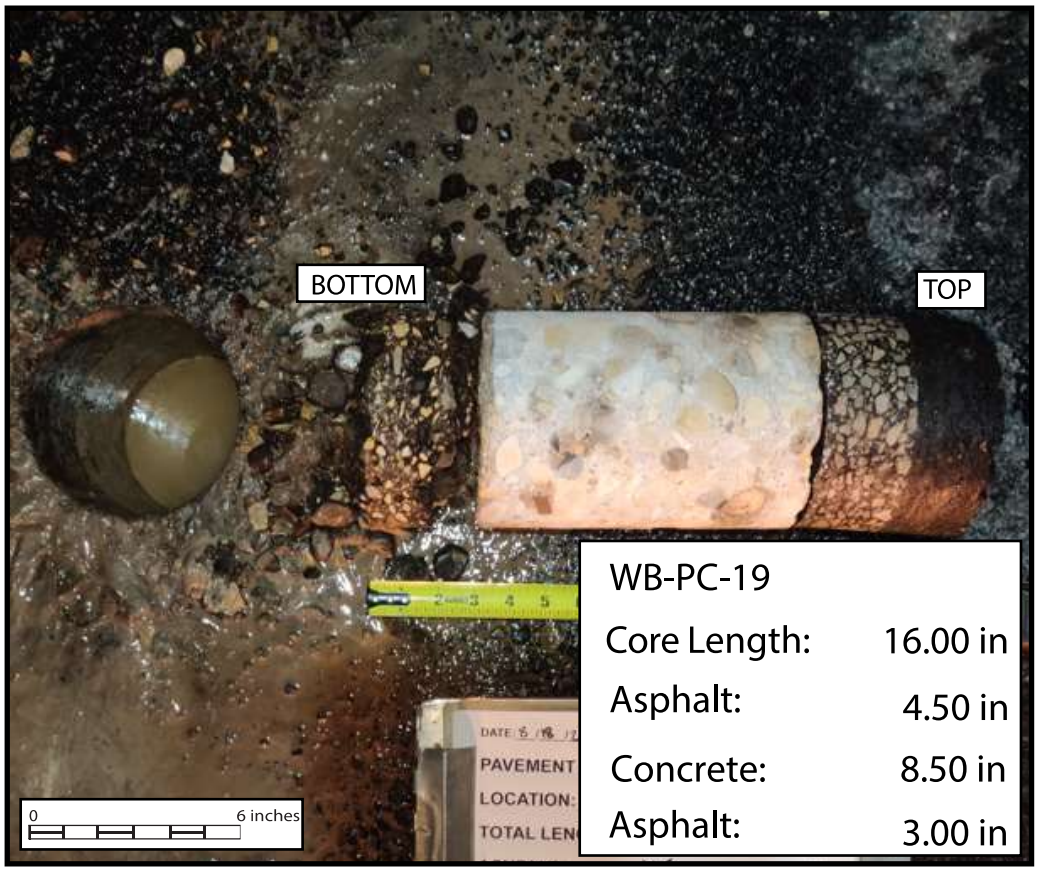


WB-PC-18	
Core Length:	23.50 in
Asphalt:	23.50 in
Concrete:	--



WB-PC-19	
Core Length:	16.00 in
Asphalt:	4.50 in
Concrete:	8.50 in
Asphalt:	3.00 in

PAVEMENT CORES: I-80 RECONSTRUCTION FROM RIVER RD TO HOUBOLT RD; ML-4, PTB 194/10, WILL COUNTY, ILLINOIS

SCALE: GRAPHICAL | APPENDIX E-8 | DRAWN BY: J. Bensen, CHECKED BY: A. Hamad

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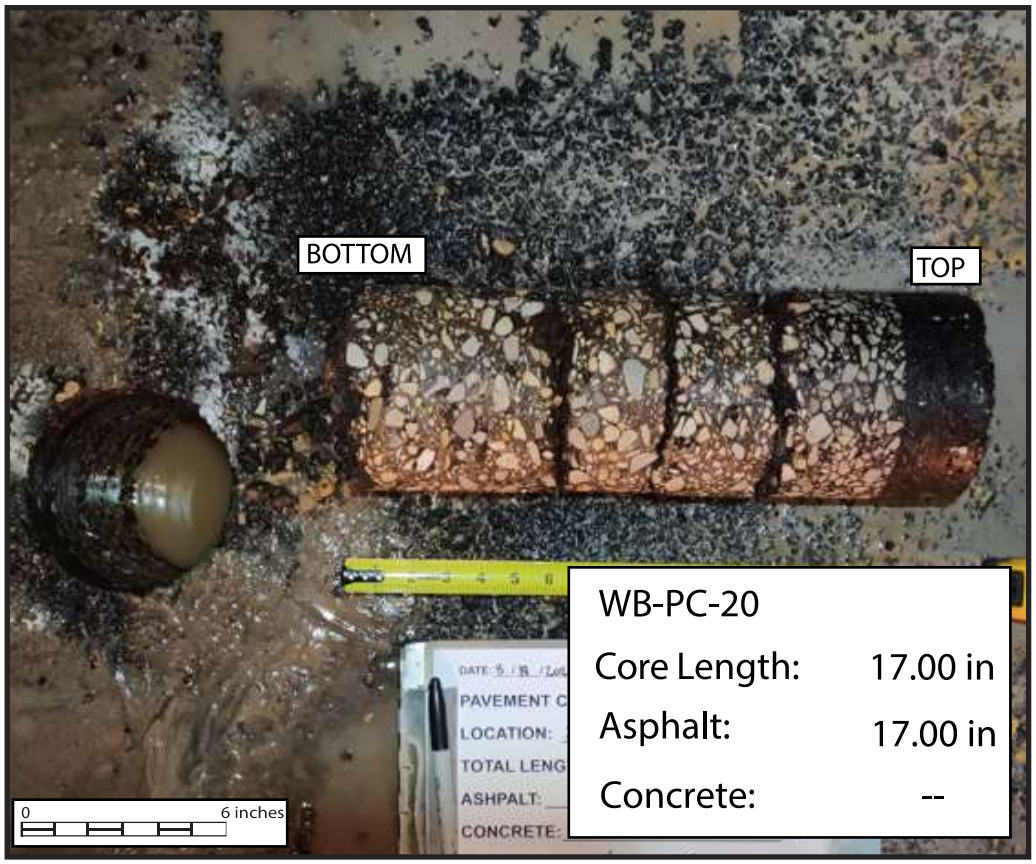

PAVEMENT CORES: I-80 RECONSTRUCTION FROM RIVER RD TO HOUBOLT RD; ML-4, PTB 194/10, WILL COUNTY, ILLINOIS

SCALE: GRAPHICAL	APPENDIX E-9	DRAWN BY: J. Bensen CHECKED BY: A. Hamad

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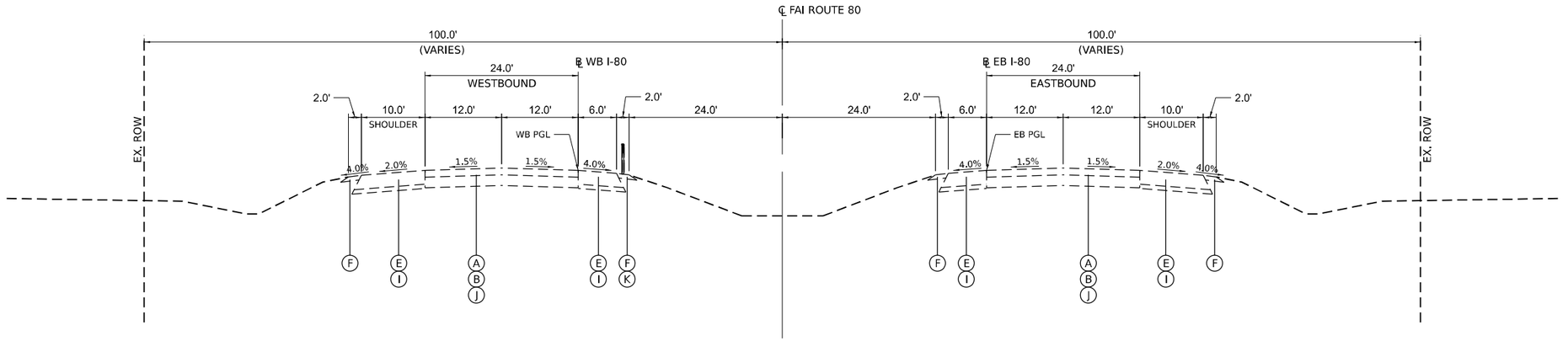
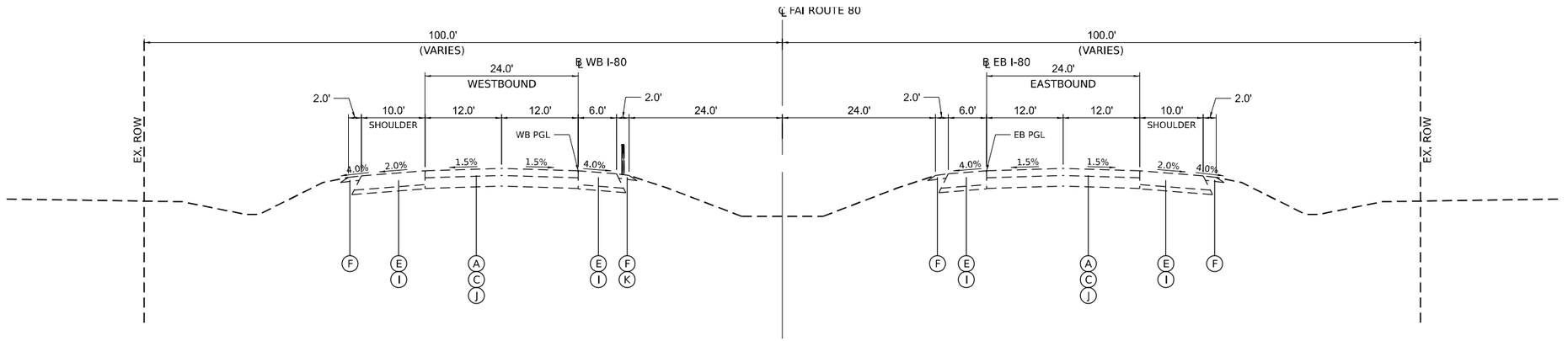
APPENDIX F



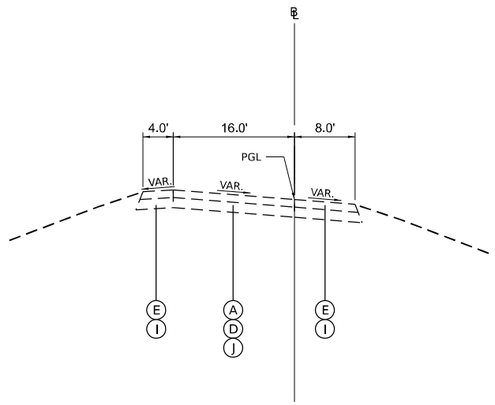
EXISTING ROADWAY TYPICAL SECTION

STA. 305+50.00 TO STA. 386+00.00



EXISTING ROADWAY TYPICAL SECTION

STA. 386+00.00 TO STA. 410+00.00



EXISTING LOOP RAMP TYPICAL SECTION

LEGEND

EXISTING TYPICAL SECTION

- (A) EXISTING HMA OVERLAY, 5" & VARIES
- (B) EXISTING PCC PAVEMENT, 10" & VARIES
- (C) EXISTING PCC PAVEMENT, 8" & VARIES
- (D) EXISTING PCC RAMP PAVEMENT, 10" & VARIES
- (E) EXISTING HMA SHOULDER, FULL DEPTH, 13" & VARIES
- (F) EXISTING AGGREGATE SHOULDER, 4" & VARIES
- (G) EXISTING CONCRETE BARRIER WALL
- (H) CONCRETE BARRIER REMOVAL
- (I) PAVED SHOULDER REMOVAL
- (J) PAVEMENT REMOVAL
- (K) HIGH TENSION CABLE MEDIAN BARRIER
- (L) TOPSOIL EXCAVATION AND PLACEMENT (DEPTH VARIES, REFER TO CROSS SECTIONS)
- (M) EXISTING STEEL PLATE BEAM GUARDRAIL
- (N) EXISTING AGGREGATE SUBGRADE, 12" & VARIES
- (O) EXISTING HMA PAVEMENT, FULL DEPTH, 14" & VARIES
- (P) EXISTING HMA OVERLAY, 7" & VARIES

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FILE NAME: pw://transystems-pw.bentley.com:transystcorp-pw1-hosted/Documents/Projects_2018/CH4014011800220/01-Stantec/CAD/MI_04_62R28/04-Sheets/02-Roadway/D16R28-sht-typical-001.dgn

Stantec

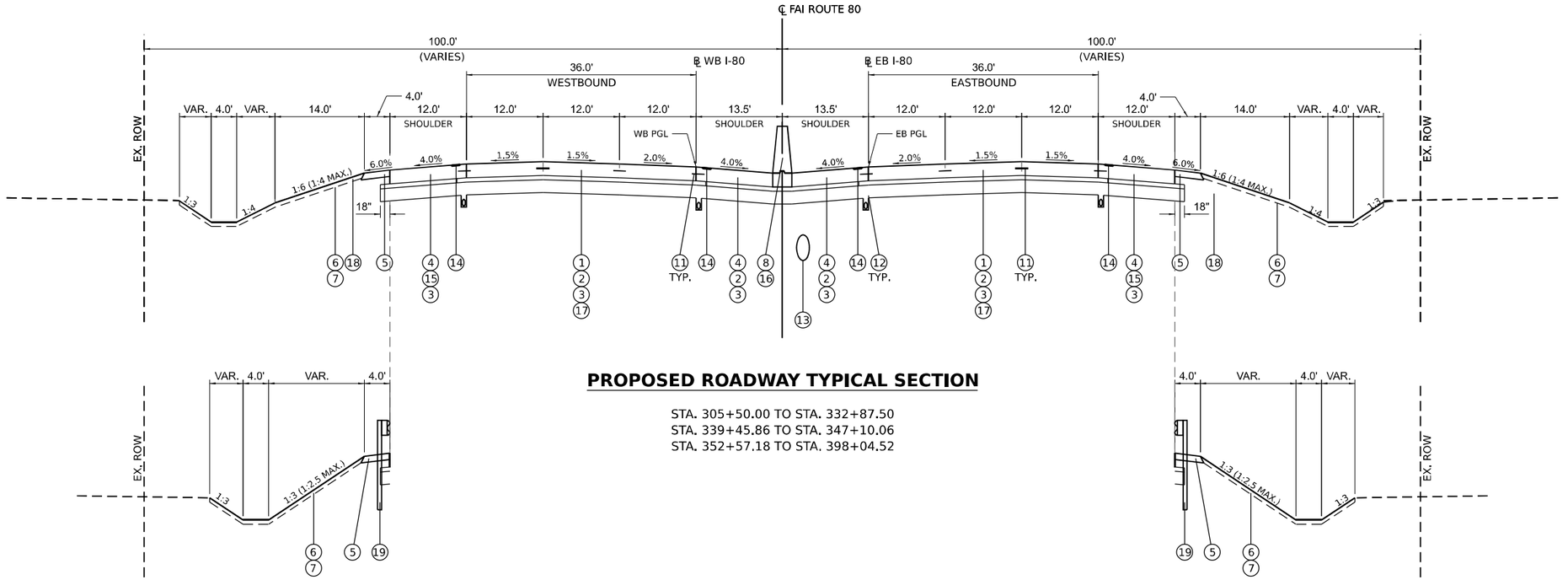
USER NAME = dbook	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 9/29/2022	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

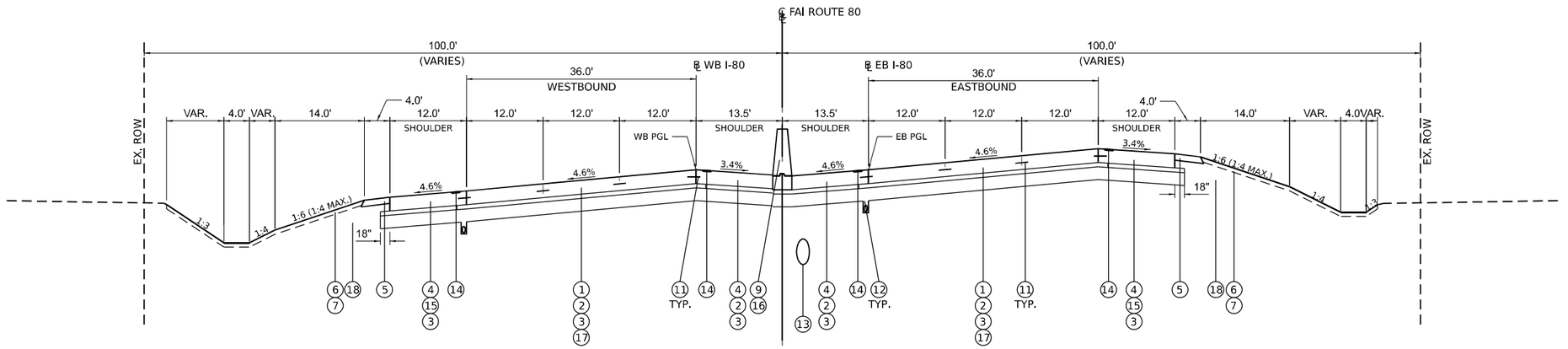
SCALE: | SHEET 1 OF 6 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	$SEC	WILL	6	1
		CONTRACT NO. 62R28		
	ILLINOIS FED. AID PROJECT			



PROPOSED ROADWAY TYPICAL SECTION

STA. 305+50.00 TO STA. 332+87.50
STA. 339+45.86 TO STA. 347+10.06
STA. 352+57.18 TO STA. 398+04.52



PROPOSED ROADWAY TYPICAL SECTION

STA. 332+87.50 TO STA. 339+45.86
STA. 398+04.52 TO STA. 410+00.00

LEGEND

PROPOSED TYPICAL SECTION

1. CONTINOUSLY REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT 13"
2. STABILIZED SUBBASE - HOT-MIX ASPHALT, 4"
3. AGGREGATE SUBGRADE IMPROVEMENT 12"
4. PORTLAND CEMENT CONCRETE SHOULDERS 13"
5. AGGREGATE SHOULDERS, TYPE B 6"
6. SEEDING (SEE PLANS FOR CLASS)
7. TOPSOIL EXCAVATION AND PLACEMENT
8. CONCRETE BARRIER, DOUBLE FACE, 44 INCH HEIGHT
9. CONCRETE BARRIER, VARIABLE CROSS SECTION, 44 INCH HEIGHT
10. CORRUGATED MEDIAN
11. TIE BARS (#6 AT 36" CTS.) (SEE NOTE 1)
12. PIPE UNDERDRAINS, TYPE 1, 6" (SEE DRAINAGE PLANS FOR LOCATION)
13. PROPOSED STORM SEWER (SEE DRAINAGE PLANS FOR LOCATION)
14. SHOULDER RUMBLE STRIPS, 16 INCH
15. SUBBASE GRANULAR MATERIAL, TYPE C
16. CONCRETE BARRIER BASE
17. PAVEMENT REINFORCEMENT
18. EARTH EXCAVATION
19. STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS
20. PORTLAND CEMENT CONCRETE PAVEMENT 10 3/4" (JOINTED)
21. PORTLAND CEMENT CONCRETE SHOULDERS 10 3/4"
22. HOT-MIX ASHPALT PAVEMENT (FULL-DEPTH), 8"
23. HOT-MIX ASPHALT SHOULDERS, 8"
24. COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12
25. PROPOSED RETAINNING WALL (SEE STRUCTURAL PLANS)

NOTE 1. NO. 6 TIE BARS BETWEEN LANES ARE INCLUDED IN THE CONTRACT UNIT FOR CONTINUOUSLY REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT 13".

NO. 6 TIE BARS BETWEEN MAINLINE PAVEMENT AND PCC SHOULDER ARE INCLUDED IN THE CONTRACT UNIT PRICE FOR PORTLAND CEMENT CONCRETE

Stantec

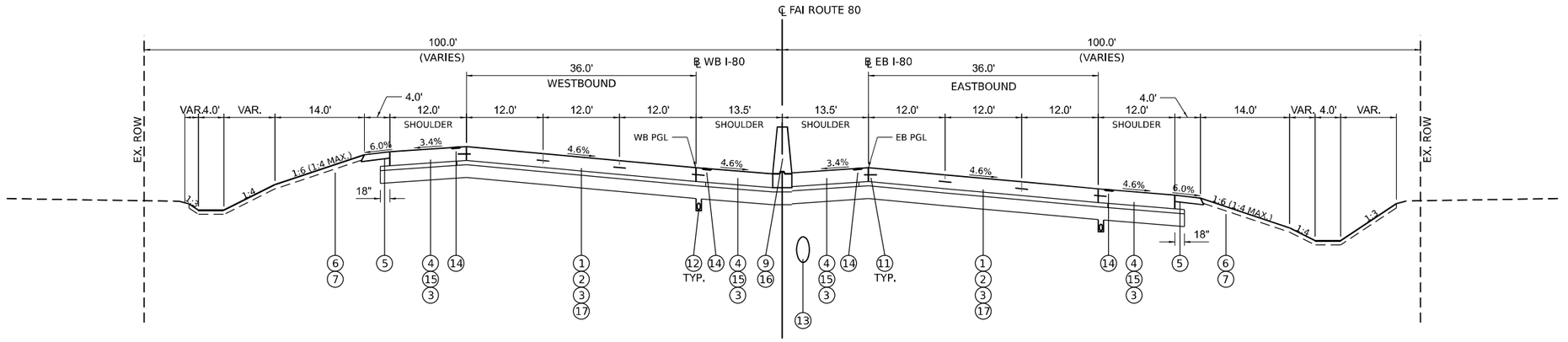
USER NAME = dbook	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 9/29/2022	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

SCALE: | SHEET 2 OF 6 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	$SEC	WILL	6	2
		CONTRACT NO. 62R28		
		ILLINOIS	FED. AID PROJECT	



PROPOSED ROADWAY TYPICAL SECTION

STA. 347+10.06 TO STA. 352+57.18

LEGEND

PROPOSED TYPICAL SECTION

1. CONTINOUSLY REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT 13"
2. STABILIZED SUBBASE - HOT-MIX ASPHALT, 4"
3. AGGREGATE SUBGRADE IMPROVEMENT 12"
4. PORTLAND CEMENT CONCRETE SHOULDERS 13"
5. AGGREGATE SHOULDERS, TYPE B 6"
6. SEEDING (SEE PLANS FOR CLASS)
7. TOPSOIL EXCAVATION AND PLACEMENT
8. CONCRETE BARRIER, DOUBLE FACE, 44 INCH HEIGHT
9. CONCRETE BARRIER, VARIABLE CROSS SECTION, 44 INCH HEIGHT
10. CORRUGATED MEDIAN
11. TIE BARS (#6 AT 36" CTS.) (SEE NOTE 1)
12. PIPE UNDERDRAINS, TYPE 1, 6" (SEE DRAINAGE PLANS FOR LOCATION)
13. PROPOSED STORM SEWER (SEE DRAINAGE PLANS FOR LOCATION)
14. SHOULDER RUMBLE STRIPS, 16 INCH
15. SUBBASE GRANULAR MATERIAL, TYPE C
16. CONCRETE BARRIER BASE
17. PAVEMENT REINFORCEMENT
18. EARTH EXCAVATION
19. STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS
20. PORTLAND CEMENT CONCRETE PAVEMENT 10 3/4" (JOINTED)
21. PORTLAND CEMENT CONCRETE SHOULDERS 10 3/4"
22. HOT-MIX ASHPALT PAVEMENT (FULL-DEPTH), 8"
23. HOT-MIX ASPHALT SHOULDERS, 8"
24. COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12
25. PROPOSED RETAINNING WALL (SEE STRUCTURAL PLANS)

NOTE 1. NO. 6 TIE BARS BETWEEN LANES ARE INCLUDED IN THE CONTRACT UNIT FOR CONTINUOUSLY REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT 13".

NO. 6 TIE BARS BETWEEN MAINLINE PAVEMENT AND PCC SHOULDER ARE INCLUDED IN THE CONTRACT UNIT PRICE FOR PORTLAND CEMENT CONCRETE

Stantec

USER NAME = dbook	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 9/29/2022	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

SCALE: | SHEET 3 OF 6 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	$SEC	WILL	6	3
		CONTRACT NO. 62R28		
	ILLINOIS	FED. AID PROJECT		

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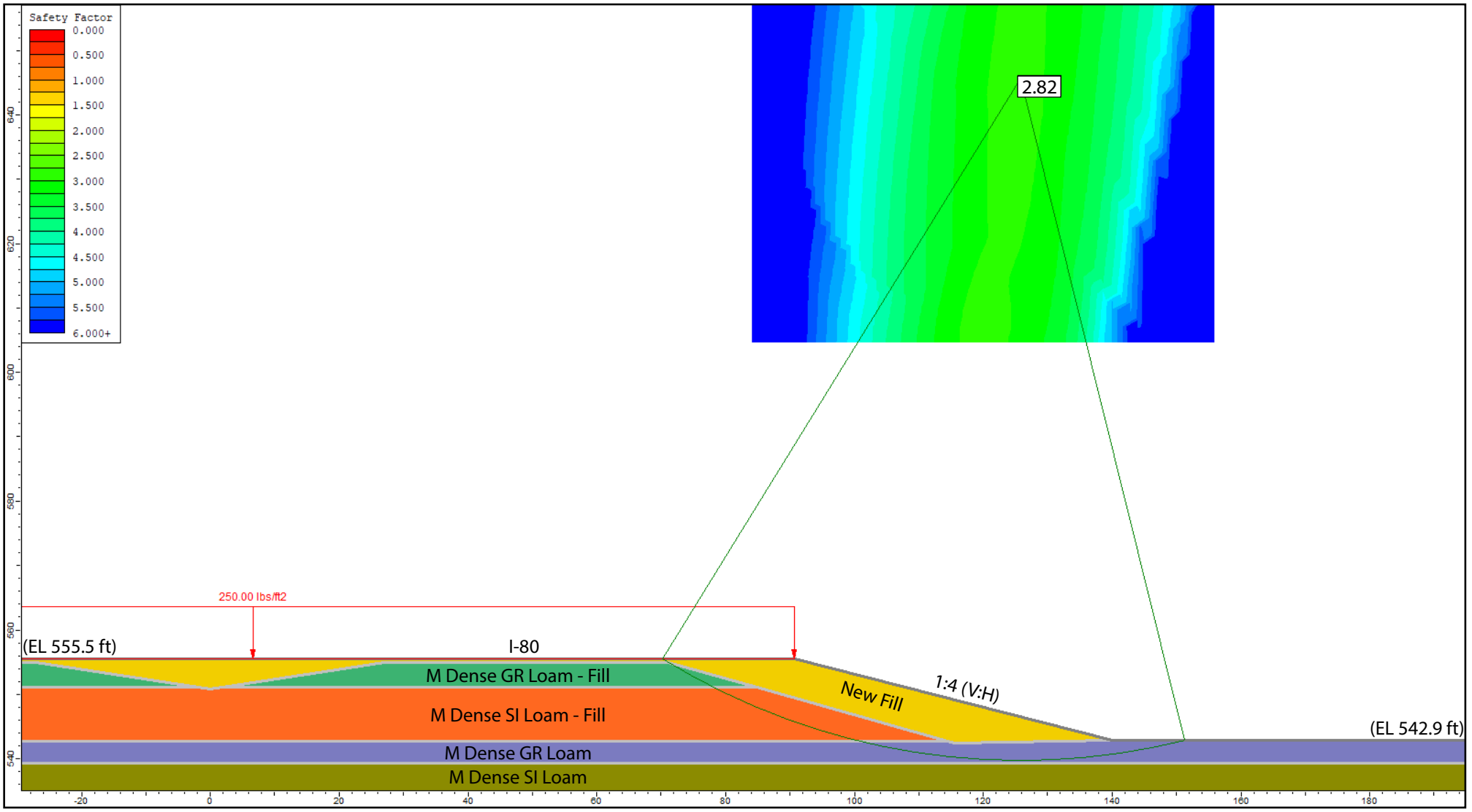
APPENDIX G



Undrained Analysis, Sta.382+00.00, Ref Boring: EB-SGB-37 & RRC-BSB-02

Layer ID	Description	Total Unit Weight (pcf)	Undrained Cohesion (psf)	Undrained Friction Angle (degrees)
1	New Fill	125	1000	0
2	M Dense GR Loam - Fill	115	0	29
3	M Dense SI Loam - Fill	120	0	30
4	M Dense GR Loam	115	0	29
5	M Dense SI Loam	120	0	30

GLOBAL STABILITY: I-80 RECONSTRUCTION FROM RIVER RD TO HOUBOLT RD; ML-4, PTB 194/10, WILL COUNTY, ILLINOIS

SCALE: GRAPHICAL | APPENDIX G-1 | DRAWN BY: D. You | CHECKED BY: A. Hamad

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Lombard, IL 60148
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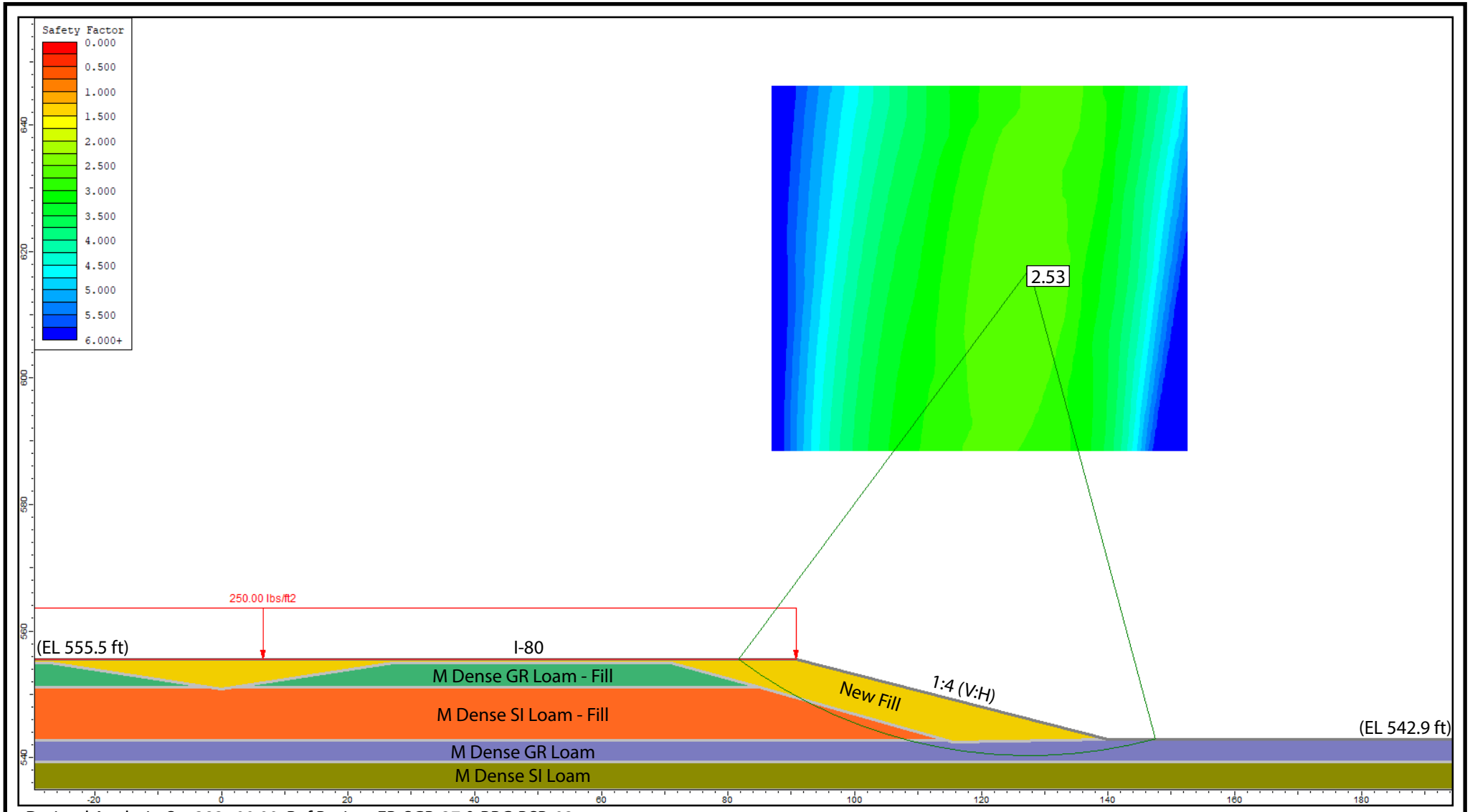
FOR STANTEC | 2553901 KE225039



Drained Analysis, Sta.382+00.00, Ref Boring: EB-SGB-37 & RRC-BSB-02

Layer ID	Description	Total Unit Weight (pcf)	Drained Cohesion (psf)	Drained Friction Angle (degrees)
1	New Fill	125	100	30
2	M Dense GR Loam - Fill	115	0	29
3	M Dense SI Loam - Fill	120	0	30
4	M Dense GR Loam	115	0	29
5	M Dense SI Loam	120	0	30

GLOBAL STABILITY: I-80 RECONSTRUCTION FROM RIVER RD TO HOUBOLT RD; ML-4, PTB 194/10, WILL COUNTY, ILLINOIS

SCALE: GRAPHICAL | APPENDIX G-2 | DRAWN BY: D. You | CHECKED BY: A. Hamad

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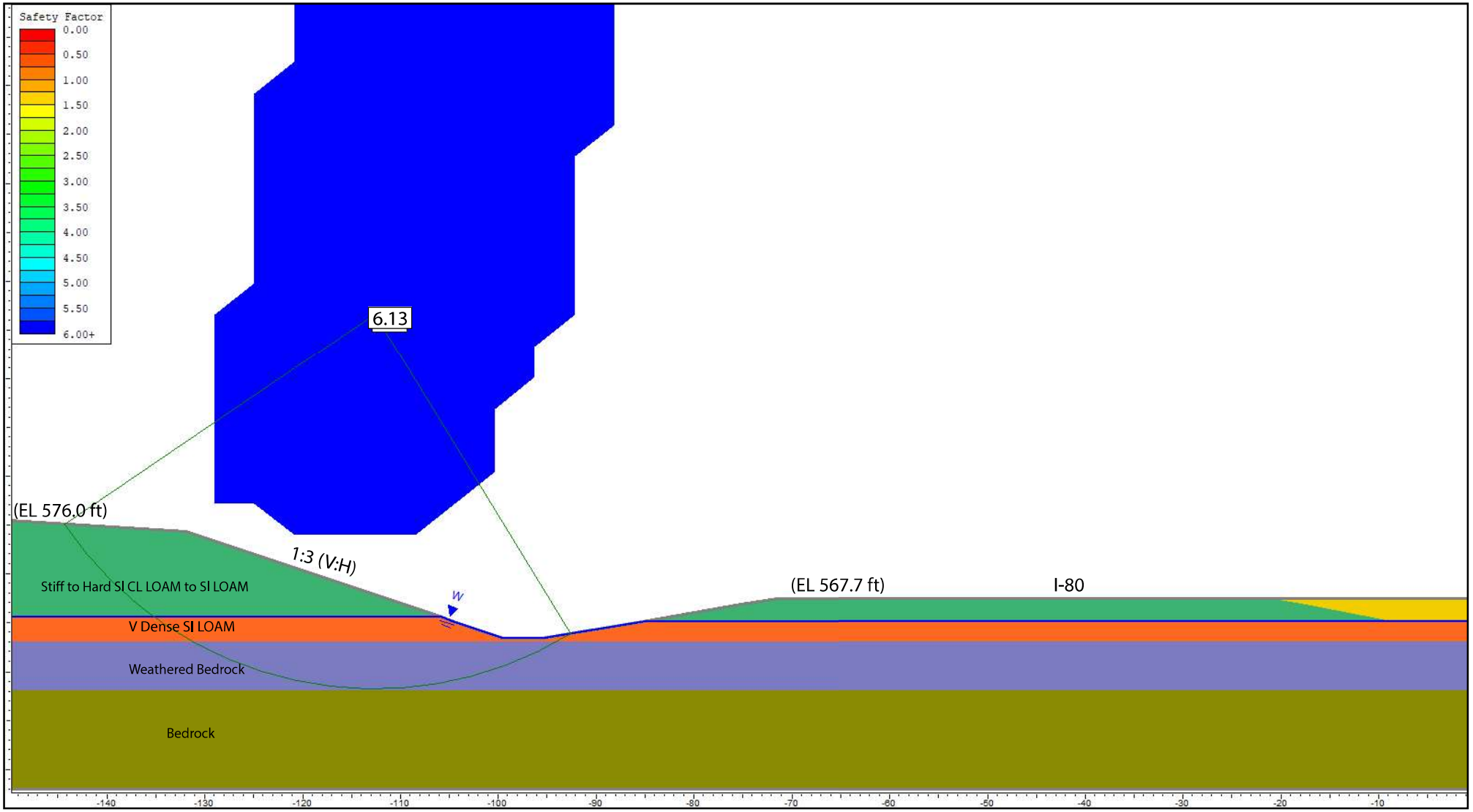
FOR STANTEC | 2553901 KE225039



Undrained Analysis, Sta.324+00.00, Ref Boring: WB-SGB-28 & OSB-01

Layer ID	Description	Total Unit Weight (pcf)	Undrained Cohesion (psf)	Undrained Friction Angle (degrees)
1	Stiff to Hard SI CL LOAM to SI LOAM	120	2500	0
2	V Dense SI LOAM	120	0	34
3	V Dense Weathered Bedrock	120	0	36

GLOBAL STABILITY: I-80 RECONSTRUCTION FROM RIVER RD TO HOUBOLT RD; ML-4, PTB 194/10, WILL COUNTY, ILLINOIS

SCALE: GRAPHICAL | APPENDIX G-3 | DRAWN BY: A. Hamad, CHECKED BY: C. Farez

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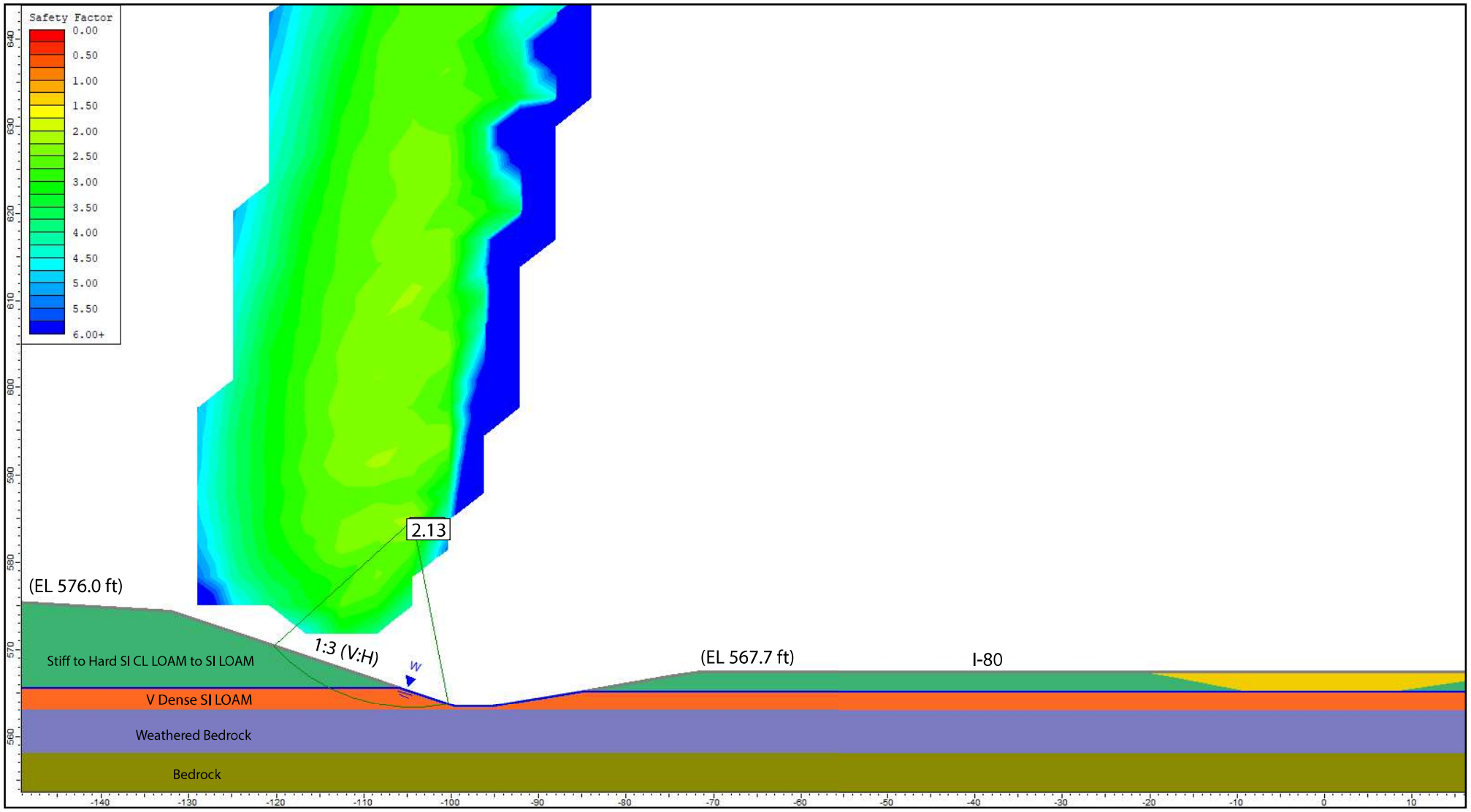

Drained Analysis, Sta.324+00.00, Ref Boring: WB-SGB-28 & OSB-01

Layer ID	Description	Total Unit Weight (pcf)	Drained Cohesion (psf)	Drained Friction Angle (degrees)
1	Stiff to Hard SI CL LOAM to SI LOAM	120	100	30
2	V Dense SI LOAM	120	0	34
3	V Dense Weathered Bedrock	120	0	36

GLOBAL STABILITY: I-80 RECONSTRUCTION FROM RIVER RD TO HOUBOLT RD; ML-4, PTB 194/10, WILL COUNTY, ILLINOIS

SCALE: GRAPHICAL | APPENDIX G-4 | DRAWN BY: A. Hamad, CHECKED BY: C. Farez

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FOR STANTEC | 2553901 KE225039

Wang Engineering
A Terracon Company

1145 North Main Street
Lombard, Illinois 60148
Phone (630) 953-9928
www.wangeng.com

APPENDIX H

APPENDIX H

BORING LOCATION PLANS AND SOIL PROFILES

ROADWAY GEOTECHNICAL REPORT

I-80 RECONSTRUCTION
FROM RIVER RD TO HOUBOLT RD
ML-4, PTB 194/10,
WILL COUNTY, ILLINOIS

FOR
STANTEC
224 S MICHIGAN AVENUE, SUITE 1400
CHICAGO, IL 60604

Prepared by
WANG ENGINEERING
1145 NORTH MAIN STREET
LOMBARD, IL 60148

November 02,2022
WANG PROJECT 255-39-01/KE225039

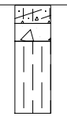
LEGEND:

Roadway Boring

Pavement Core

SGB-01 — Borehole Number
461.97 ft, — Elevation
92+54.28, 68.73 LT — Station, offset

Borehole Lithology



N--N-value, (blw/12 in)
Qu--UC Strength, (tsf)
MC--Moisture Content, (%)

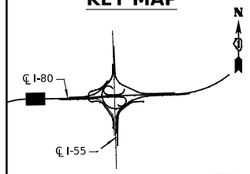
Water Level Reading at time of drilling.

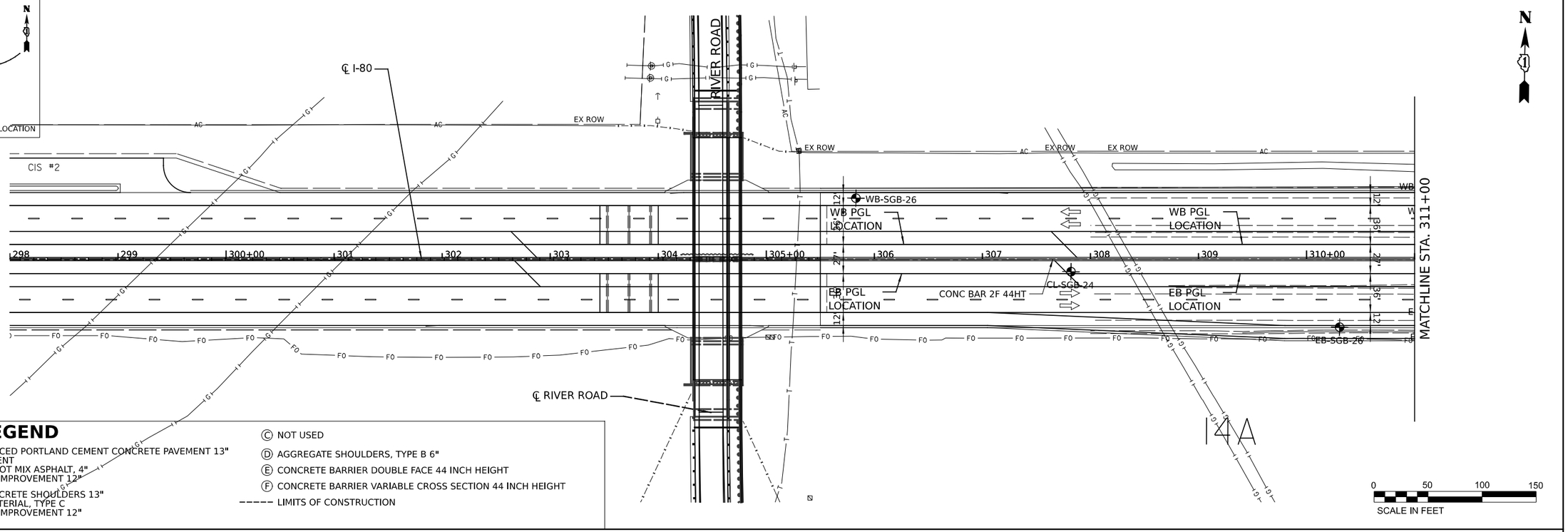
Water Level Reading 24-hr after drilling or at end of drilling

Lithology Graphics

- Pavement
- Concrete
- Crushed stone
- Topsoil
- Clay
- Silty Clay, Silty Clay Loam
- Clay Loam
- Silt, Silty Loam
- Loam
- Sand, Sandy Loam
- Gravelly sand, sandy gravel
- Weathered bedrock
- Shale
- Dolomite or Dolomitic Limestone
- Weathered bedrock

KEY MAP





ROADWAY LEGEND

Ⓐ CONTINUOUSLY REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT 13"
PAVEMENT REINFORCEMENT
STABILIZED SUBBASE - HOT MIX ASPHALT, 4"
AGGREGATE SUBGRADE IMPROVEMENT 12"

Ⓑ PORTLAND CEMENT CONCRETE SHOULDERS 13"
SUBBASE GRANULAR MATERIAL, TYPE C
AGGREGATE SUBGRADE IMPROVEMENT 12"

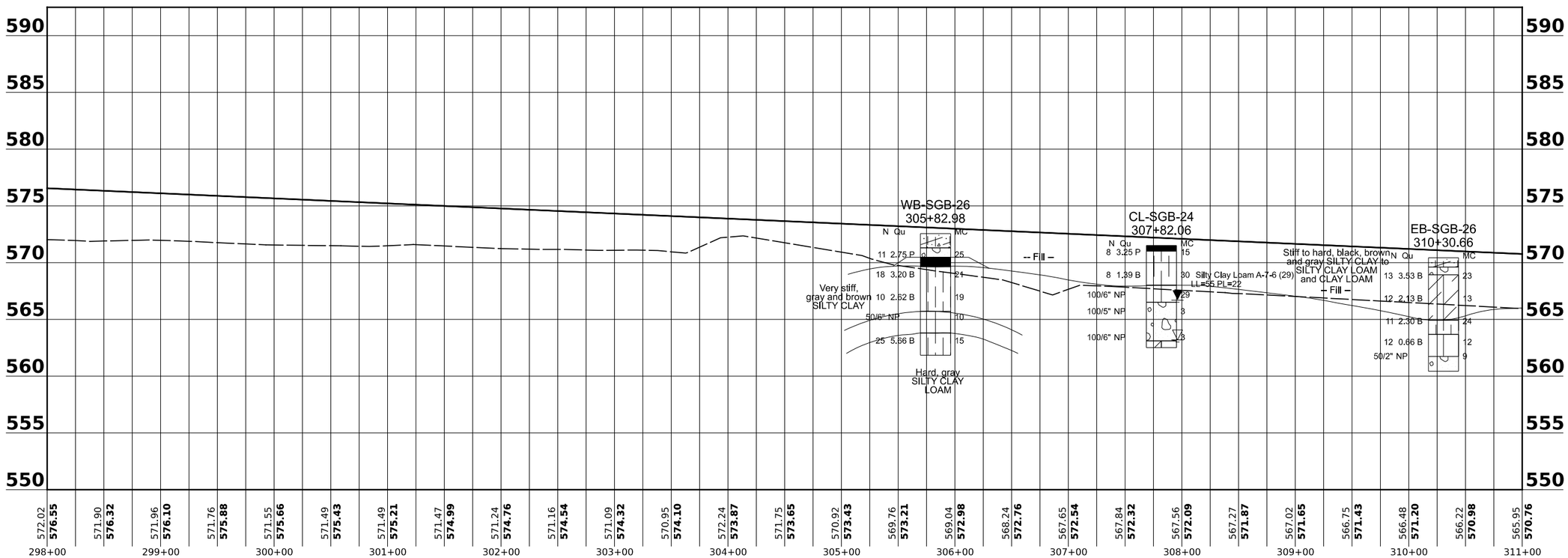
Ⓒ NOT USED

Ⓓ AGGREGATE SHOULDERS, TYPE B 6"

Ⓔ CONCRETE BARRIER DOUBLE FACE 44 INCH HEIGHT

Ⓕ CONCRETE BARRIER VARIABLE CROSS SECTION 44 INCH HEIGHT

----- LIMITS OF CONSTRUCTION



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	DRAWN -	REVISED -	
PLOT SCALE = $SCALE$	CHECKED -	REVISED -	
PLOT DATE = $DATE$	DATE -	REVISED -	

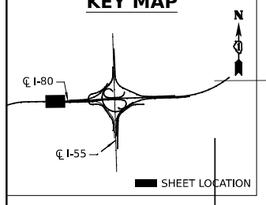
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

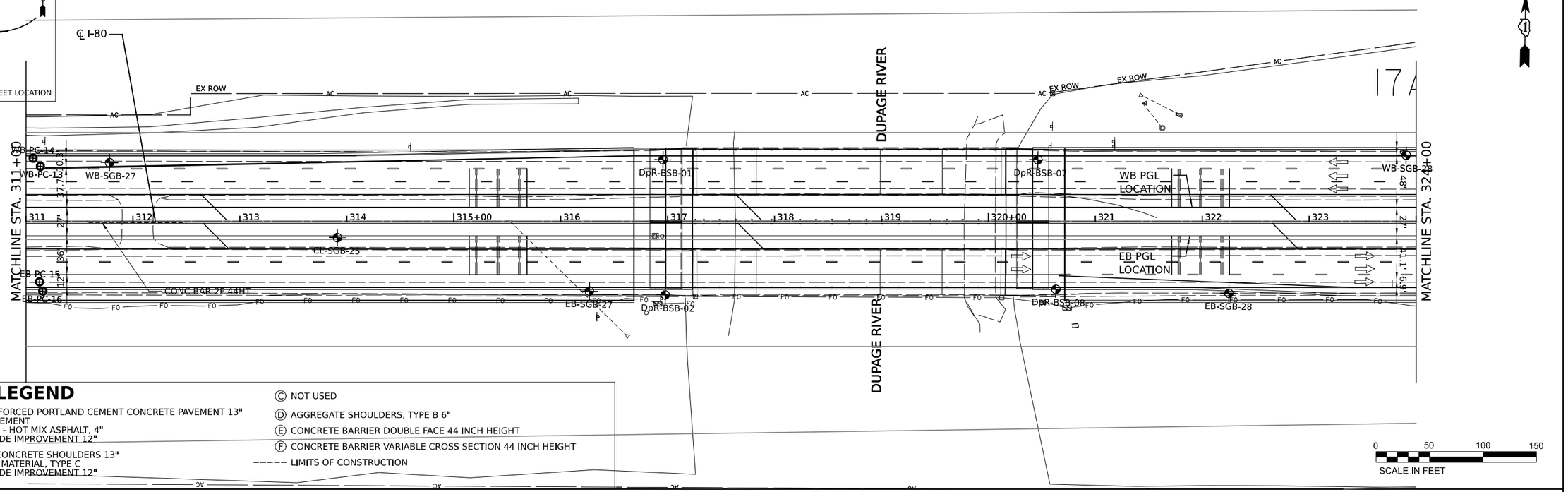
ROADWAY PLAN AND PROFILE

SCALE: | SHEET 1 OF 9 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
$RTE	$SEC	$CNTY	$TOT	$PNP01
		CONTRACT NO. $CONTRACT		
	ILLINOIS FED. AID PROJECT			

KEY MAP





ROADWAY LEGEND

Ⓐ CONTINUOUSLY REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT 13"
PAVEMENT REINFORCEMENT
STABILIZED SUBBASE - HOT MIX ASPHALT, 4"
AGGREGATE SUBGRADE IMPROVEMENT 12"

Ⓑ PORTLAND CEMENT CONCRETE SHOULDERS 13"
SUBBASE GRANULAR MATERIAL, TYPE C
AGGREGATE SUBGRADE IMPROVEMENT 12"

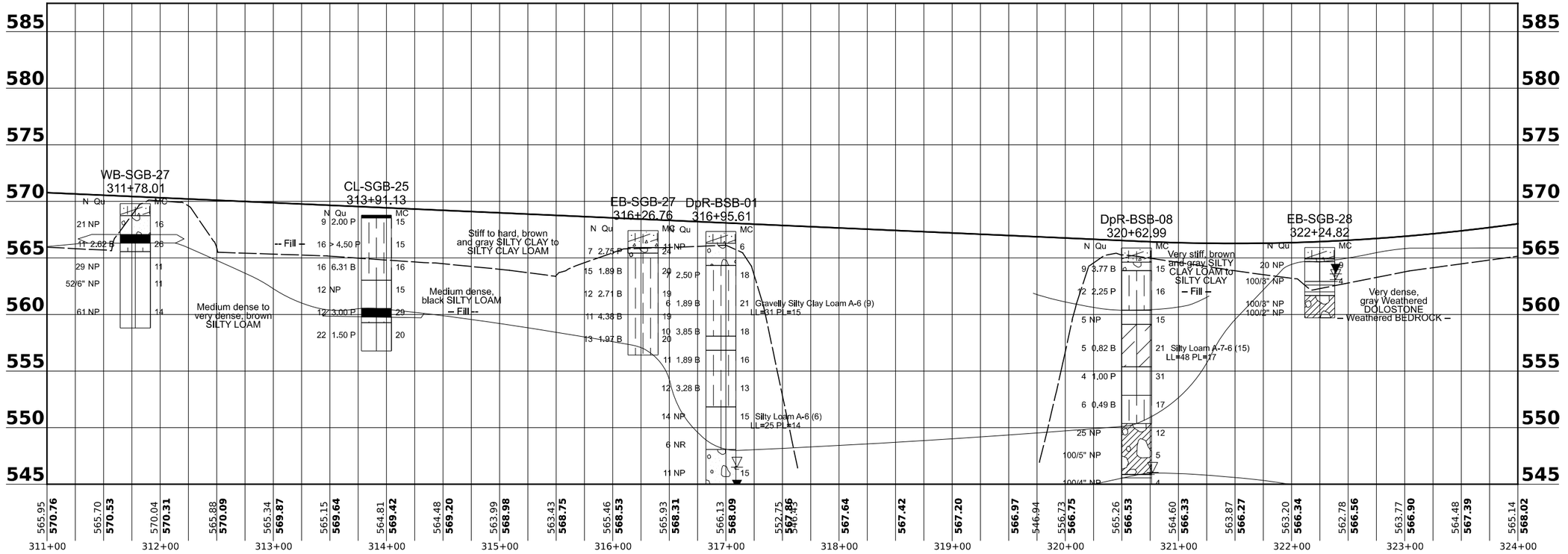
Ⓒ NOT USED

Ⓓ AGGREGATE SHOULDERS, TYPE B 6"

Ⓔ CONCRETE BARRIER DOUBLE FACE 44 INCH HEIGHT

Ⓕ CONCRETE BARRIER VARIABLE CROSS SECTION 44 INCH HEIGHT

----- LIMITS OF CONSTRUCTION



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PLOT SCALE = $SCALE$	CHECKED -	REVISED -
PLOT DATE = $DATE$	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROADWAY PLAN AND PROFILE

SCALE:

SHEET 2 OF 9 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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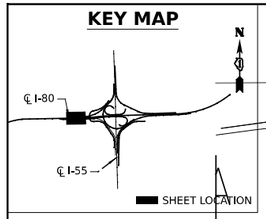
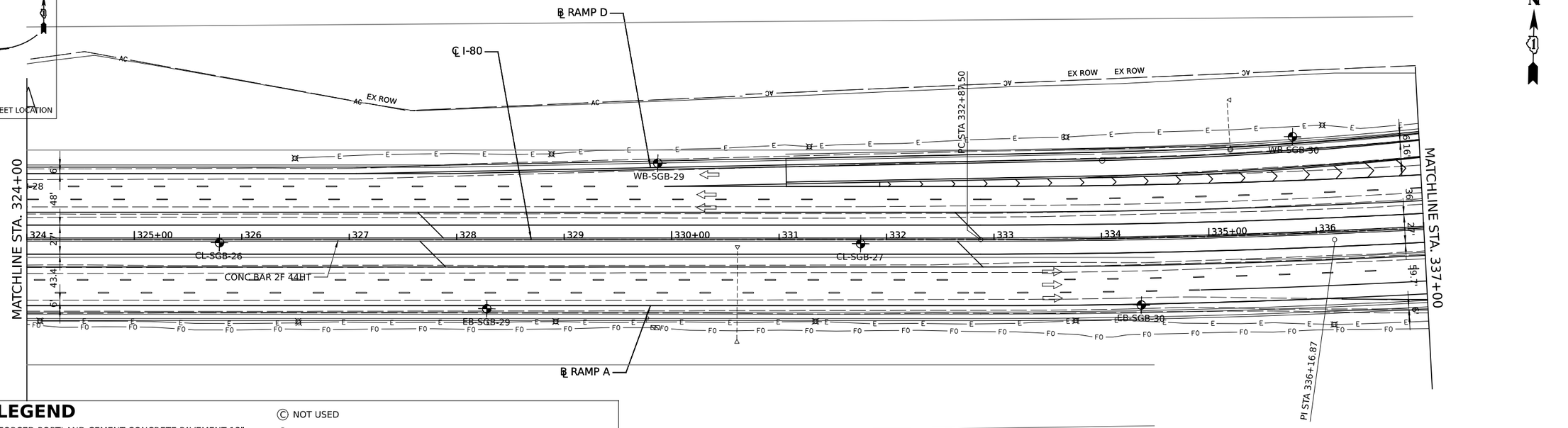
			CONTRACT NO. $CONTRACT	
		ILLINOIS	FED. AID PROJECT	

KEY MAP





ROADWAY LEGEND

Ⓐ CONTINUOUSLY REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT 13"
PAVEMENT REINFORCEMENT
STABILIZED SUBBASE - HOT MIX ASPHALT, 4"
AGGREGATE SUBGRADE IMPROVEMENT 12"

Ⓑ PORTLAND CEMENT CONCRETE SHOULDERS 13"
SUBBASE GRANULAR MATERIAL, TYPE C
AGGREGATE SUBGRADE IMPROVEMENT 12"

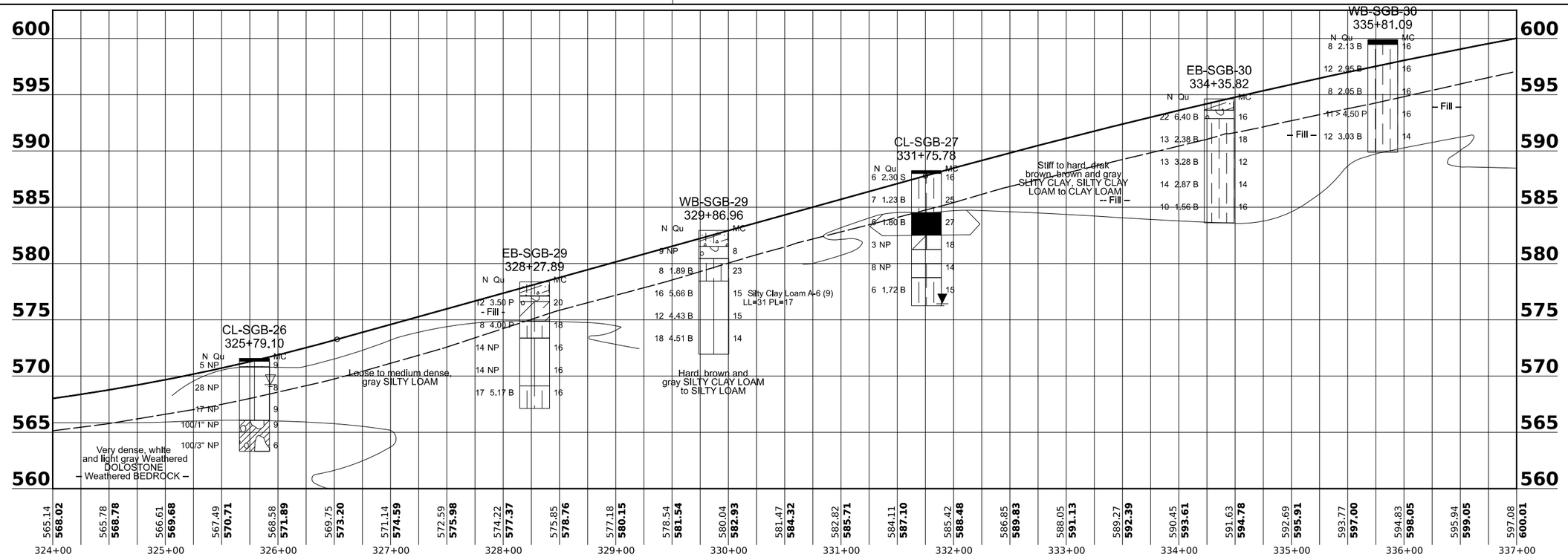
Ⓒ NOT USED

Ⓓ AGGREGATE SHOULDERS, TYPE B 6"

Ⓔ CONCRETE BARRIER DOUBLE FACE 44 INCH HEIGHT

Ⓕ CONCRETE BARRIER VARIABLE CROSS SECTION 44 INCH HEIGHT

----- LIMITS OF CONSTRUCTION



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PLOT SCALE = $SCALE$	CHECKED -	REVISED -	
PLOT DATE = $DATE$	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

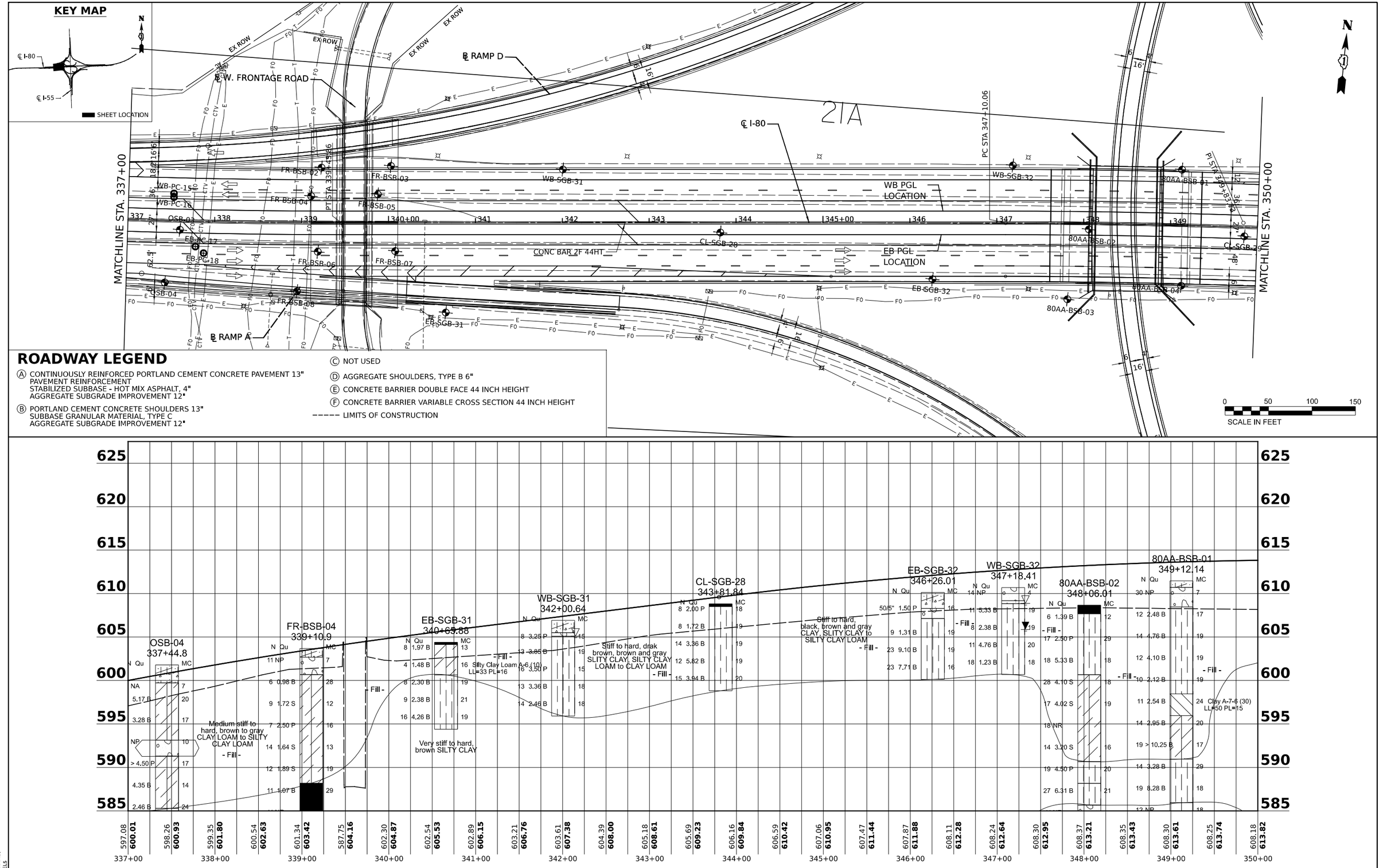
ROADWAY PLAN AND PROFILE

SCALE: | SHEET 3 OF 9 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
$RTE	$SEC	$CNTY	$TOT	$PNP03

CONTRACT NO. $CONTRACT

ILLINOIS | FED. AID PROJECT



ROADWAY LEGEND

Ⓐ CONTINUOUSLY REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT 13"
PAVEMENT REINFORCEMENT
STABILIZED SUBBASE - HOT MIX ASPHALT, 4"
AGGREGATE SUBGRADE IMPROVEMENT 12"

Ⓑ PORTLAND CEMENT CONCRETE SHOULDERS 13"
SUBBASE GRANULAR MATERIAL, TYPE C
AGGREGATE SUBGRADE IMPROVEMENT 12"

Ⓒ NOT USED

Ⓓ AGGREGATE SHOULDERS, TYPE B 6"

Ⓔ CONCRETE BARRIER DOUBLE FACE 44 INCH HEIGHT

Ⓕ CONCRETE BARRIER VARIABLE CROSS SECTION 44 INCH HEIGHT

----- LIMITS OF CONSTRUCTION

MODEL: $MODELNAME$
FILE NAME: $FILE$

Stantec

USER NAME = $USER$	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = $SCALE$	CHECKED -	REVISED -	
PLOT DATE = $DATE$	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROADWAY PLAN AND PROFILE

SCALE: | SHEET 4 OF 9 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
$RTE	$SEC	$CNTY	$TOT	$PNP04
		CONTRACT NO. $CONTRACT		
	ILLINOIS	FED. AID PROJECT		

KEY MAP

SHEET LOCATION

℄ RAMP DD

℄ I-80

℄ I-55

℄ RAMP CC

℄ RAMP BB

℄ RAMP BB

PT STA 352+57.18

MATCHLINE STA. 350+00

MATCHLINE STA. 363+00

WB PGL LOCATION

EB PGL LOCATION

WB-SGB-33

OSB-15

80/55-BSB-01

CONC BAR 2F 44HT

EB-SGB-33

80/55-BSB-04

80/55-BSB-07

80/55-BSB-03

WB-SGB-34

80/55-BSB-06

OSB-05

CL-SGB-30

80/55-BSB-09

OSB-08

1056

1055+00

1054

1053

1052

350+00 351 352 353 354 355+00 356 357 358 359 360+00 361 362

N

0 50 100 150

SCALE IN FEET

ROADWAY LEGEND

Ⓐ CONTINUOUSLY REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT 13"
PAVEMENT REINFORCEMENT
STABILIZED SUBBASE - HOT MIX ASPHALT, 4"
AGGREGATE SUBGRADE IMPROVEMENT 12*

Ⓑ PORTLAND CEMENT CONCRETE SHOULDERS 13"
SUBBASE GRANULAR MATERIAL, TYPE C
AGGREGATE SUBGRADE IMPROVEMENT 12*

Ⓒ NOT USED

Ⓓ AGGREGATE SHOULDERS, TYPE B 6"

Ⓔ CONCRETE BARRIER DOUBLE FACE 44 INCH HEIGHT

Ⓕ CONCRETE BARRIER VARIABLE CROSS SECTION 44 INCH HEIGHT

----- LIMITS OF CONSTRUCTION

EB-SGB-33
352+28.72

Stiff to very stiff, blakc, brown and gray CLAY LOAM, SILTY CLAY to SILTY CLAY LOAM
- Fill -
Hard, gray CLAY to SILTY CLAY

WB-SGB-33
353+83.11
- Fill -

80/55-BSB-01
355+16.8
- Fill -
Silty Clay Loam A-6 (12) LL=34 PL=16

80/55-BSB-03
358+41.7
- Fill -

WB-SGB-34
359+83.68
- Fill -
Medium stiff to very stiff, brown and gray CLAY LOAM, SILTY CLAY to SILTY CLAY LOAM
- Fill -

CL-SGB-30
361+84.55
- Fill -
Silty Loam A-4 (4) LL=25 PL=18
Very stiff, black, brown and gray SILTY LOAM to SILTY CLAY LOAM

625 620 615 610 605 600 595 590 585

608.18 613.82 | 608.06 613.87 | 607.91 613.86 | 607.78 613.82 | 607.65 613.72 | 607.40 613.59 | 607.08 613.40 | 607.29 613.18 | 607.80 612.91 | 607.71 612.59 | 609.65 612.23 | 607.75 611.83 | 586.74 611.38 | 588.10 610.88 | 588.73 610.35 | 587.81 609.76 | 604.73 609.13 | 606.53 608.46 | 605.49 607.75 | 604.44 606.98 | 603.41 606.18 | 601.98 605.33 | 600.61 604.43 | 599.45 603.49 | 598.41 602.51 | 597.42 601.48 | 596.37 600.40

350+00 351+00 352+00 353+00 354+00 355+00 356+00 357+00 358+00 359+00 360+00 361+00 362+00 363+00

MODEL: $MODELNAME$
FILE NAME: $FILE1$

Stantec

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PLOT SCALE = $SCALE$	CHECKED -	REVISED -
PLOT DATE = $DATE$	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROADWAY PLAN AND PROFILE

SCALE:

SHEET 5 OF 9 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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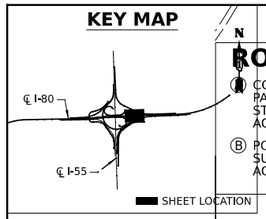
		CONTRACT NO. $CONTRACT		
	ILLINOIS	FED. AID PROJECT		

KEY MAP



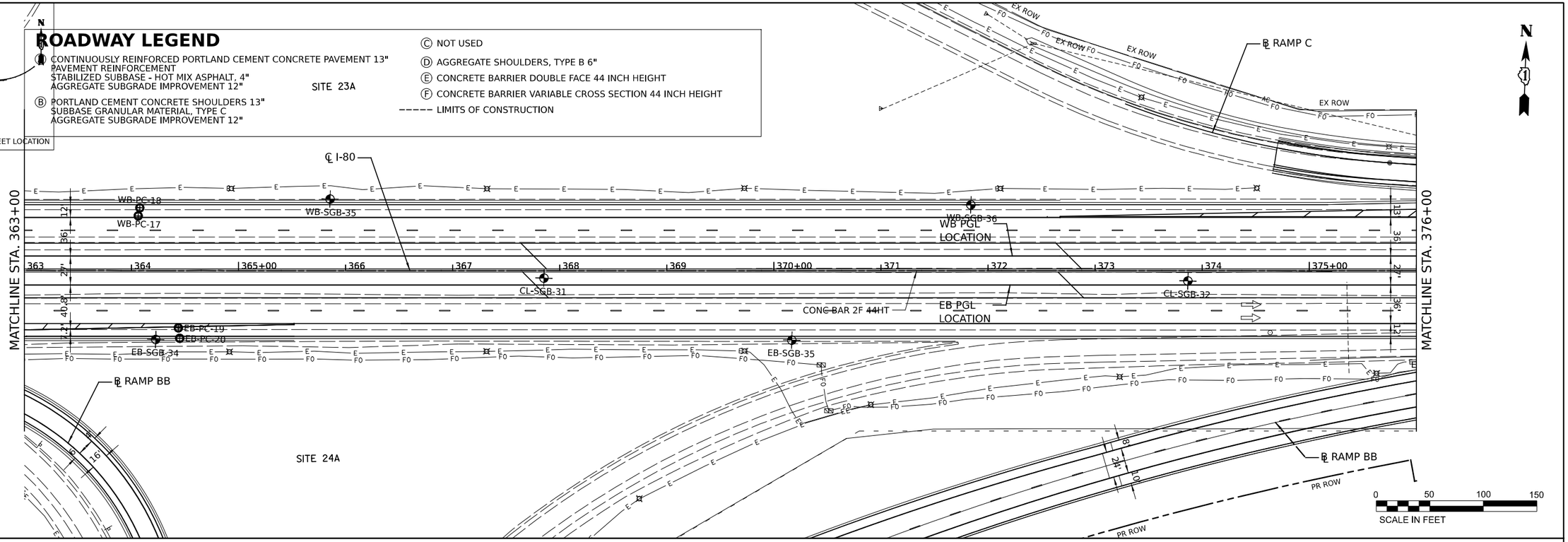
ROADWAY LEGEND

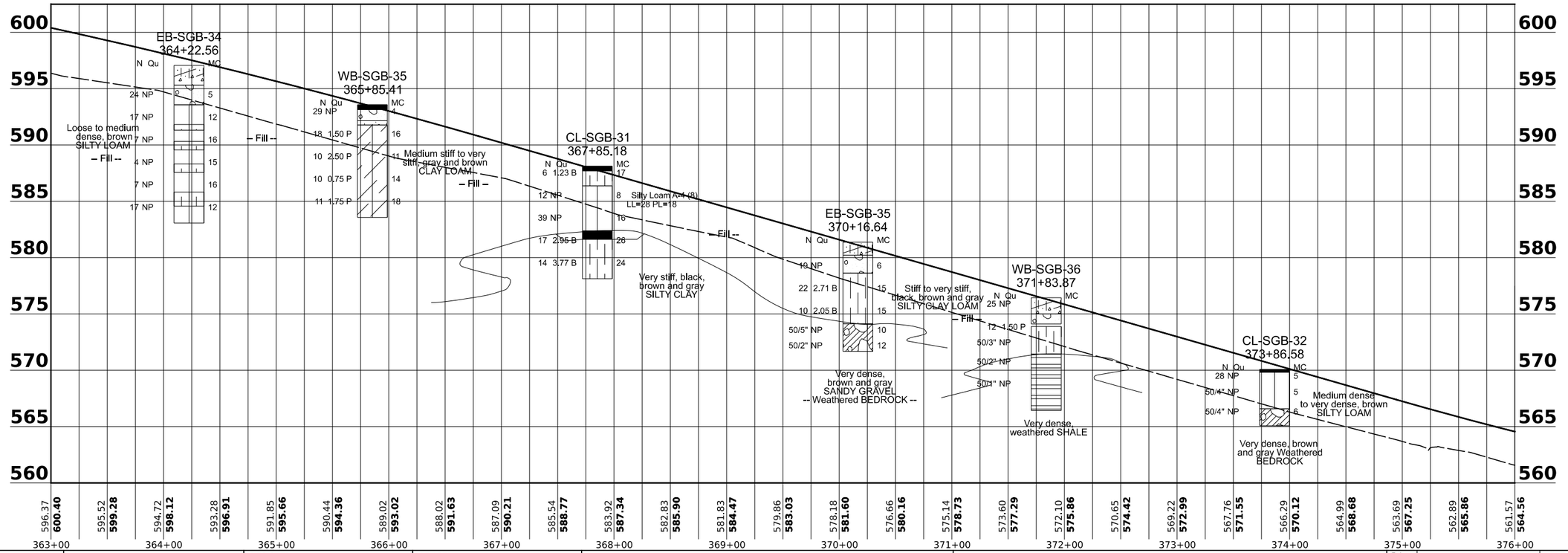
Ⓐ CONTINUOUSLY REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT 13"
PAVEMENT REINFORCEMENT
STABILIZED SUBBASE - HOT MIX ASPHALT, 4"
AGGREGATE SUBGRADE IMPROVEMENT 12"

Ⓑ PORTLAND CEMENT CONCRETE SHOULDERS 13"
SUBBASE GRANULAR MATERIAL, TYPE C
AGGREGATE SUBGRADE IMPROVEMENT 12"

SITE 23A

Ⓒ NOT USED
Ⓓ AGGREGATE SHOULDERS, TYPE B 6"
Ⓔ CONCRETE BARRIER DOUBLE FACE 44 INCH HEIGHT
Ⓕ CONCRETE BARRIER VARIABLE CROSS SECTION 44 INCH HEIGHT
----- LIMITS OF CONSTRUCTION





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	DRAWN -	REVISED -
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PLOT DATE = $DATE$	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROADWAY PLAN AND PROFILE

SCALE: | SHEET 6 OF 9 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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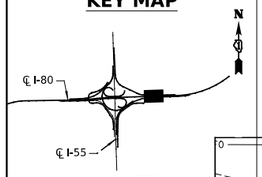
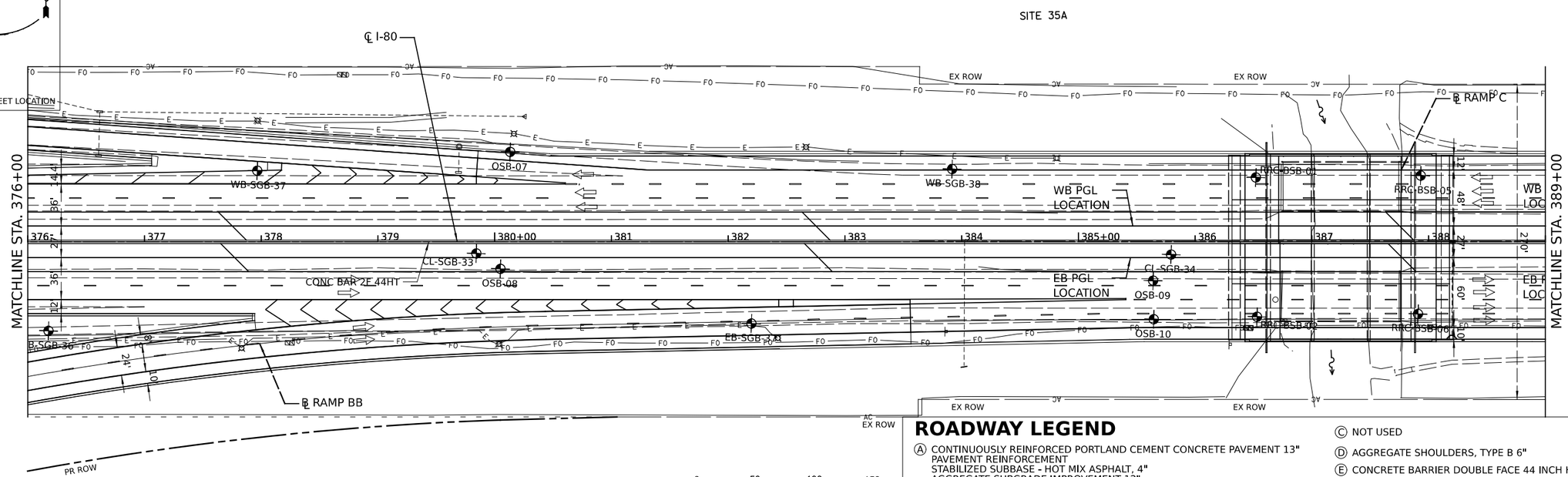
CONTRACT NO. $CONTRACT

ILLINOIS | FED. AID PROJECT

KEY MAP



SITE 35A



ROADWAY LEGEND

Ⓐ CONTINUOUSLY REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT 13"
PAVEMENT REINFORCEMENT
STABILIZED SUBBASE - HOT MIX ASPHALT, 4"
AGGREGATE SUBGRADE IMPROVEMENT 12"

Ⓑ PORTLAND CEMENT CONCRETE SHOULDERS 13"
SUBBASE GRANULAR MATERIAL, TYPE C
AGGREGATE SUBGRADE IMPROVEMENT 12"

Ⓒ NOT USED

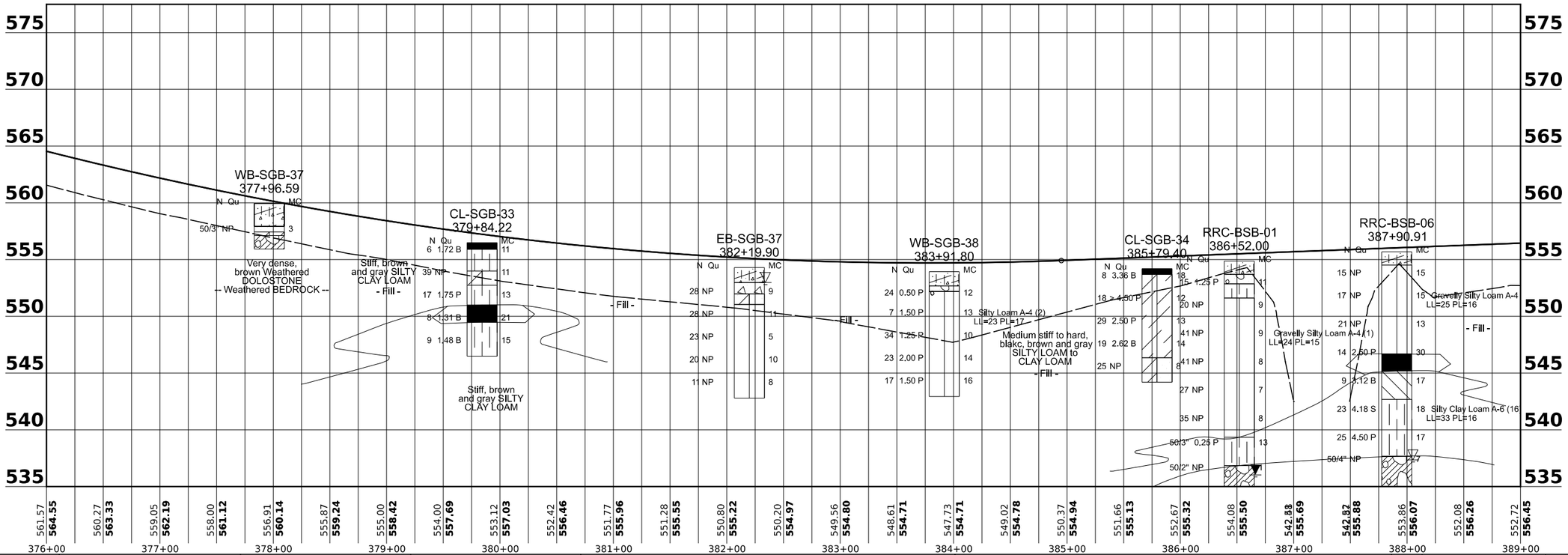
Ⓓ AGGREGATE SHOULDERS, TYPE B 6"

Ⓔ CONCRETE BARRIER DOUBLE FACE 44 INCH HEIGHT

Ⓕ CONCRETE BARRIER VARIABLE CROSS SECTION 44 INCH HEIGHT

----- LIMITS OF CONSTRUCTION

SITE 35A



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PLOT SCALE = $SCALE$	CHECKED -	REVISED -
PLOT DATE = $DATE$	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROADWAY PLAN AND PROFILE

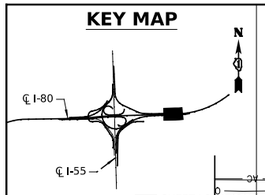
SCALE: | SHEET 7 OF 9 SHEETS | STA. | TO STA.

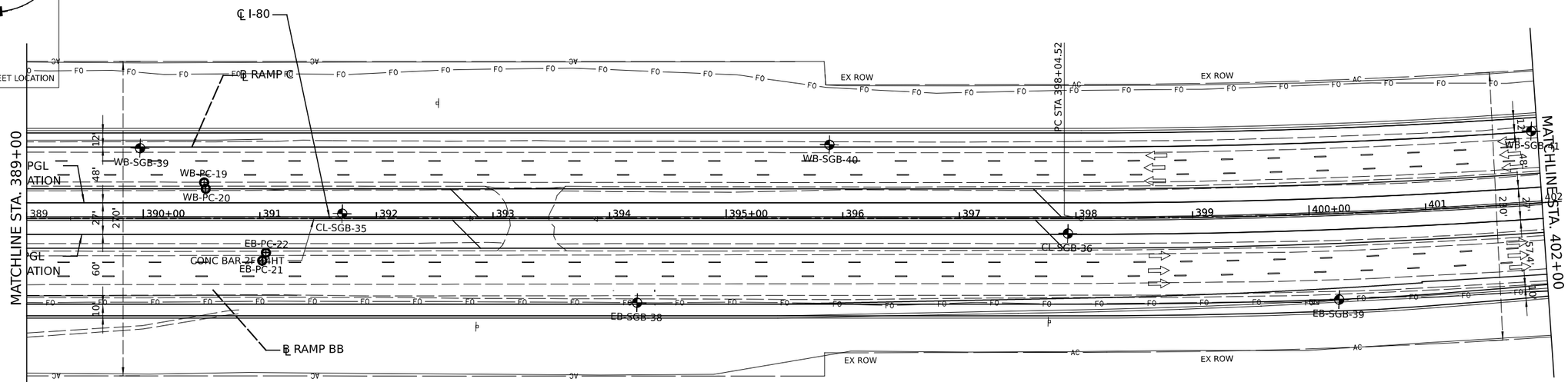
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
$RTE	$SEC	$CNTY	$TOT	$PNP07

CONTRACT NO. $CONTRACT

ILLINOIS | FED. AID PROJECT

KEY MAP





ROADWAY LEGEND

Ⓐ CONTINUOUSLY REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT 13"
PAVEMENT REINFORCEMENT
STABILIZED SUBBASE - HOT MIX ASPHALT, 4"
AGGREGATE SUBGRADE IMPROVEMENT 12"

Ⓑ PORTLAND CEMENT CONCRETE SHOULDERS 13"
SUBBASE GRANULAR MATERIAL, TYPE C
AGGREGATE SUBGRADE IMPROVEMENT 12"

Ⓒ NOT USED

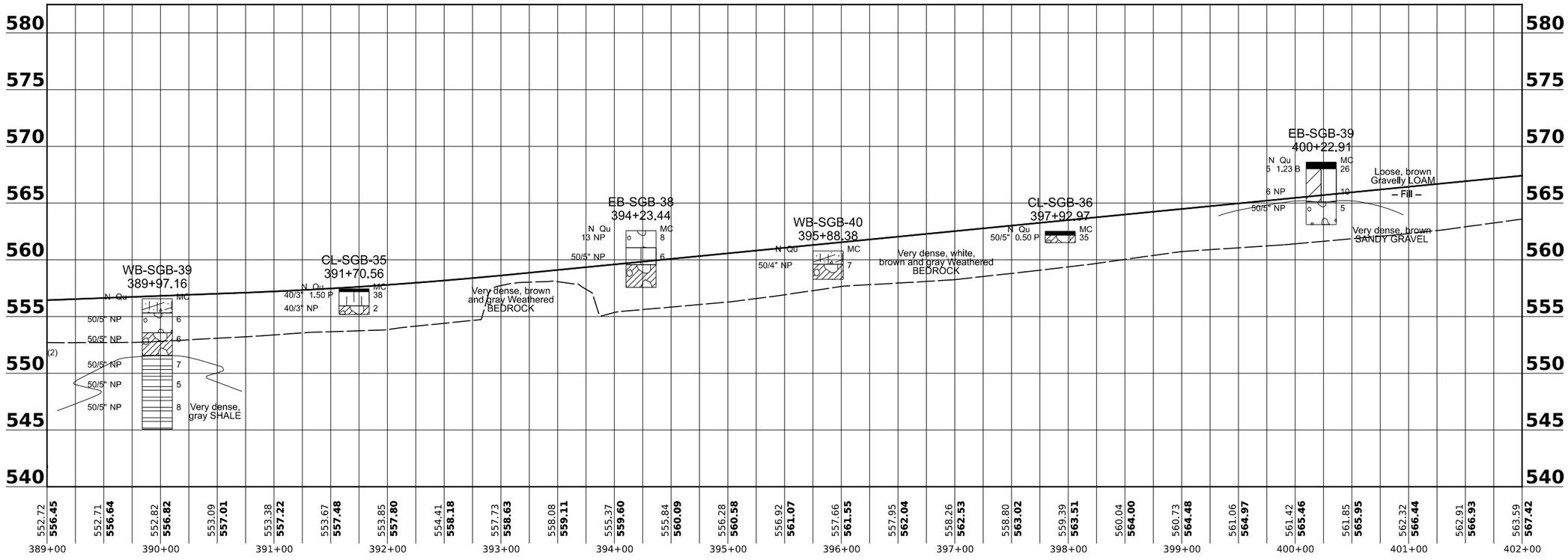
Ⓓ AGGREGATE SHOULDERS, TYPE B 6"

Ⓔ CONCRETE BARRIER DOUBLE FACE 44 INCH HEIGHT

Ⓕ CONCRETE BARRIER VARIABLE CROSS SECTION 44 INCH HEIGHT

----- LIMITS OF CONSTRUCTION

0 50 100 150
SCALE IN FEET



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Stantec

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	DRAWN -	REVISED -	
PLOT SCALE = $SCALE$	CHECKED -	REVISED -	
PLOT DATE = $DATE$	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROADWAY PLAN AND PROFILE

SCALE: | SHEET 8 OF 9 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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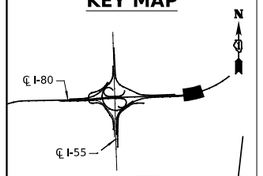
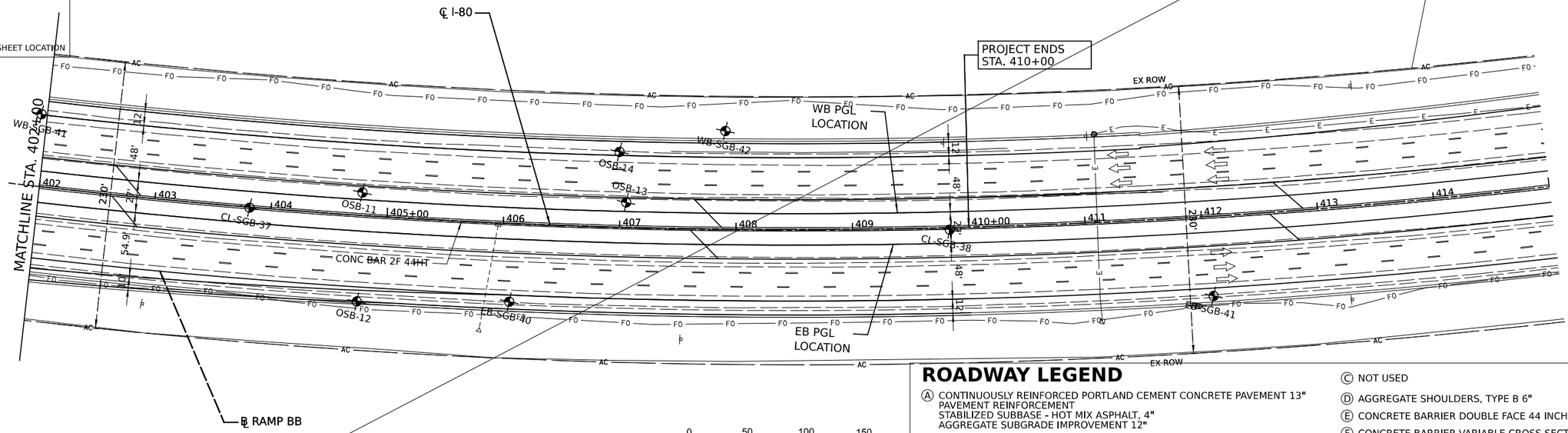
		CONTRACT NO. $CONTRACT		
	ILLINOIS	FED. AID PROJECT		

KEY MAP





ROADWAY LEGEND

Ⓐ CONTINUOUSLY REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT 13"
PAVEMENT REINFORCEMENT
STABILIZED SUBBASE - HOT MIX ASPHALT, 4"
AGGREGATE SUBGRADE IMPROVEMENT 12"

Ⓑ PORTLAND CEMENT CONCRETE SHOULDERS 13"
SUBBASE GRANULAR MATERIAL, TYPE C
AGGREGATE SUBGRADE IMPROVEMENT 12"

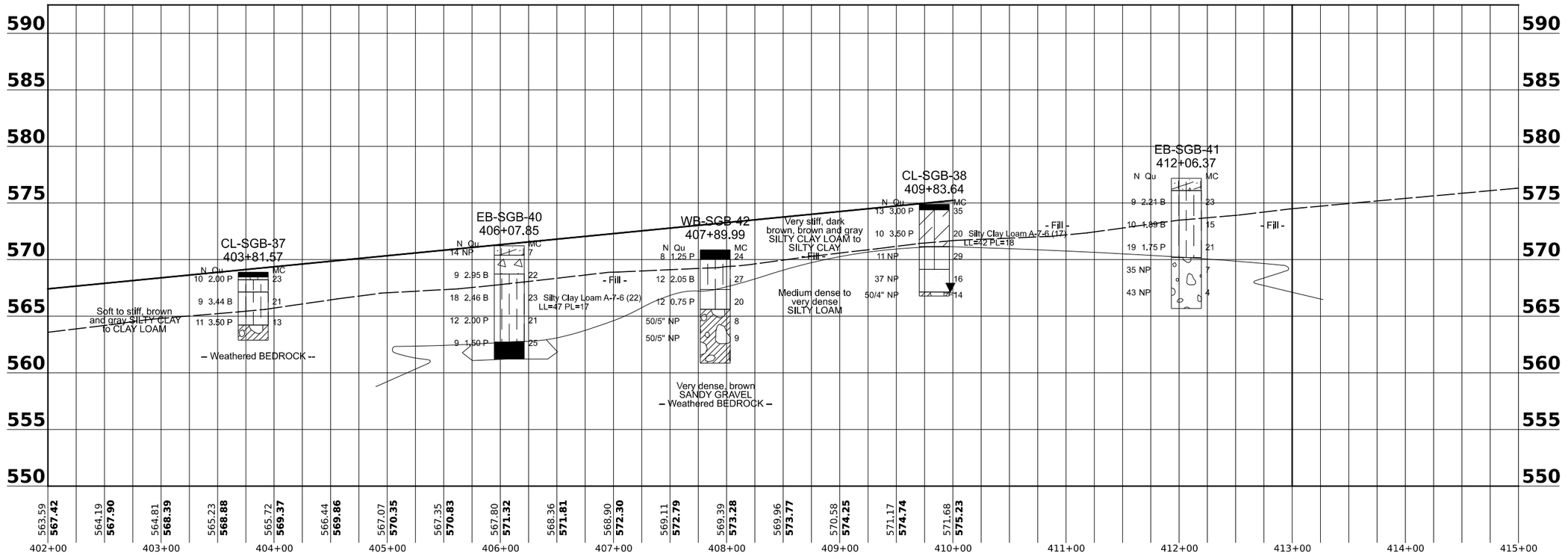
Ⓒ NOT USED

Ⓓ AGGREGATE SHOULDERS, TYPE B 6"

Ⓔ CONCRETE BARRIER DOUBLE FACE 44 INCH HEIGHT

Ⓕ CONCRETE BARRIER VARIABLE CROSS SECTION 44 INCH HEIGHT

----- LIMITS OF CONSTRUCTION



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Stantec

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	DRAWN -	REVISED -
PLOT SCALE = $SCALE$	CHECKED -	REVISED -
PLOT DATE = $DATE$	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROADWAY PLAN AND PROFILE

SCALE: | SHEET 9 OF 9 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
$RTE	$SEC	$CNTY	$TOT	$PNP09
		CONTRACT NO. $CONTRACT		
	ILLINOIS	FED. AID PROJECT		