

TECHNICAL MEMORANDUM

TO: Mr. David Skaleski, P.E. WSP

FROM: Dawn Edgell, P.E.

- DATE: August 31, 2021
- RE: PTB 198-003
 Contract No. D-91-204-19
 I-80 at Center Street and Chicago Street
 Roadway Geotechnical Report Preliminary Underdrain Recommendations

This Technical Memorandum provides a summary of the field investigation and the Subgrade Stability Borings (SSB) completed along the proposed alignment of I-80, and provides geotechnical recommendations for the pavement underdrains and embankment construction of I-80 interchange ramps at Center Street and Chicago Street.

1.0 Project Information

As part of the I-80 realignment and reconstruction of the interchanges with Center Street and Chicago Street, new embankments will be constructed for the I-80 mainline as well as the new alignment of each roadway. For the new embankments and roadways, subgrade (SGB) and slope stability (SSB) borings have been completed at various locations within the project corridor. It is anticipated that for the mainline realignment west of the Des Plaines River, that new embankments of up to 20 to 25 feet will be required above the existing grade. This will include the ramps towards the Des Plaines River Bridge and the Center Street interchange. For the Chicago Street interchange, and ramps east of the Des Plaines River, some embankments will be constructed as part of the retaining walls and new interchange. These embankments are anticipated to be less than 15 feet maximum fill heights.

2.0 Site Investigation Summary

A total of forty-two (42) borings have been completed on the existing IDOT right of way along the mainline and for new ramp construction at the new interchanges. Additional borings will be completed as necessary for the new ramp construction at a future date. Roadway Geotechnical Report - Preliminary I-80 at Center Street and Chicago Street Page 2 of 3

2.1 Subsurface Conditions

Generally, the subsurface conditions along the corridor consisted of a mixture of sandy loam, silty clay loam and silty clay soils. Some existing fill material was noted in areas along the mainline alignment and near existing interchanges that consisted of silty clay materials. For the western section of the alignment, near Center Street, bedrock was encountered in most of the borings at depths ranging from 3 to 15 feet below existing grade. The borings that were completed east of the Des Plaines River typically extended to depths of 20 feet and bedrock was not encountered within that depth.

Groundwater was not encountered in most of the borings while drilling. Groundwater was encountered in SSB-42 while drilling, at a depth of about 13.5 feet (el. 533.5 feet), within a confined granular layer, but not after drilling was completed. Based on the proximity of the Des Plaines River, the long term groundwater level is likely near that elevation or along the bedrock interface.

3.0 Geotechnical Analysis and Recommendations

3.1 Drainage Characteristics

The drainage characteristics of the site were evaluated per the IDOT Geotechnical Manual (2020), Section 6.3.4.1, based on the subgrade soil type and moisture condition, depth of water table, project topography, the anticipated profile grade line, and depth and grade of drainage ditch along the roadways. Based on the proposed profile, the mainline embankment and ramp embankments will predominantly be supported on subgrade soils consisting of newly compacted fill materials. These soils are anticipated to consist of silty clay or silty clay loam materials, with more than 40% of fine material, similar to the near surface materials encountered in the borings, in accordance with IDOT Standard Specifications for Road and Bridge Construction (SSRBC) 2022.

Based on the preliminary plans and existing conditions, GSG anticipates that the proposed drainage will consist of an enclosed drainage system with curb and gutter and shallow ditches with slopes greater than 0.5%. GSG utilized Table 6.3.4.1-1, Drainage Classification in the IDOT Geotechnical Manual, to assign the drainage classes for the site. The drainage class should be taken as <u>Poor to Fair</u>.



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The drainage classification of <u>Poor to Fair</u> should be used for the project design. The overall groundwater depth is assumed deeper than the anticipated frost depth of 45 to 60 inches for the northern Illinois region, and near the bedrock interface, below the proposed new pavement elevations. However, pavement systems could become saturated following periods of precipitation. The proposed subgrade and pavement should have proper surface grading to prevent water from accumulating and ponding. GSG recommends installing lateral and longitudinal underdrain systems as recommended in Section 6.3.4.2 and 6.3.4.3 of the IDOT Geotechnical Manual to maintain the subgrade from deteriorating. These underdrains should be installed at undercut areas and low points in the roadway profile, and along the edge of pavement throughout the roadway improvement.

The installation of new pavement underdrains with the new pavement structure will improve the overall site drainage and the subgrade soils. The new underdrains should be a minimum of 6-inches in diameter, with adequate slope requirements to provide drainage to outlet pipes along the roadway corridor.

4.0 Construction Recommendations

All work performed for the proposed project should conform to the requirements in the IDOT Standard Specifications for Road and Bridge Construction (SSRBC) 2022. Particular attention should be paid to Section 202, "Earth and Rock Excavation", Section 205, "Embankment" and Section 301, "Subgrade Preparation" of the IDOT SSRBC.

Attachments: Draft Subgrade Stability Boring Logs



Illinois Depart	me tior	nt		SC	DIL BORIN	G LOG	Page <u>1</u> of <u>1</u>
Division of Highways GSG ROUTEI-80 D							Date 7/1/22
SECTIONI-80 over Des Plaines Rive				Latitu	ide, Longitude		
COUNTY Will DRILLIN	IG ME	THOD			HSA	_ HAMMER TYPE _	AUTO
STRUCT. NO Station	P	L O	U C S	M O I	Surface Water Elev. Stream Bed Elev.	<u>N/A</u> ft <u>N/A</u> ft	
BORING NO. SSB-01 Station	Н	S	Qu	S T	Groundwater Elev.: First Encounter Upon Completion After Hrs.	Dry ft N/A ft	
Ground Surface Elev ft 8 inches of Asphalt 4 inches of Aggregate Subbase	(π) 	(/6")	(tsf)	(%)	After Hrs	<u> </u>	
Dense Light Brown, Moist SANDY LOAM, with gravel (SM)		9 17 16		7			
Auger refusal at 5.5 feet End of Boring		-		7		Τ	

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ROUTE	I-80 DE	SCR	IPTION	I	Emba	nkment - Mainline - Sta	22+00 EB	LOGO	GED BY	AJ
SECTION	-80 over Des Plaines River	- 1	0041	ION	SEC	TWP RNG				
			-00/		Latitu	de , Longitude				
COUNTY	Will DRILLIN	G ME	THOD			HSA	HAMMER	TYPE	AUTO	
STRUCT. NO.		D	B	U	M	Surface Water Elev.	N/A	ft		
Station		E	L	C S	0	Stream Bed Elev.	N/A	ft		
		T	w	3	I S					
Station	SSB-03	Н.	S	Qu	Ť	Groundwater Elev.: First Encounter	Dny	#		
Offset						Upon Completion	N/A	ft		
Ground Surfa	ace Elev ft	(ft)	(/6")	(tsf)	(%)	Upon Completion After Hrs.	N/A	ft		
8 inches of As										
	gregate Subbase		-							
Very Dense			9							
Light Brown, D)ry		27		4					
SANDY LOAN	I, with gravel (SM)		29							
Auger refusal a End of Boring	at 3 feet	_	-							
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			-							
		-5								
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ROUTE	I-80	DE	SCR	PTION	I	Emba	ankment - Mainline - Sta	a 22+00 EB	LOG	GED BY	AJ
SECTION	I-80 over Des Plaines R	liver	L	OCAT	ION	, SEC.	, TWP. , RNG. ,				
						Latitu	ide, Longitude				
COUNTY _	Will DRIL	LINC	6 ME	THOD			HSA	HAMMER		AUTO	
				_							
STRUCT. N	0	-	D E	B	U C	M O	Surface Water Elev.	<u>N/A</u>	ft		
Station _		-	P	ō	S	I	Stream Bed Elev.	N/A	π		
BORING NO	D SSB-04		T	w		S	Groundwater Elev.:				
Station		-	н	S	Qu	Т	First Encounter	Dry	ft		
Offset							Upon Completion	N/Á	ft		
	urface Elev	ft	(ft)	(/6")	(tsf)	(%)	First Encounter Upon Completion After Hrs.	N/A	ft		
8 inches of	Asphalt										
	Aggregate Subbase										
Very Dense Light Browr	Moist			50/5"		-	-				
SANDY LO	AM, with gravel (SM)					5					
Auger refus	al at 1 foot 5 inches						-				
End of Bori	ng										
			-5								
								_			
								_			
								_			
			-10								
			-15								
			_								
			_								
			-20								

Illinois Department of Transportation SOIL BORING LOG Division of Highways GSG Embankment - Mainline - Sta 23+50 EB (overpass) to 35+00 LOGGED BY AJ DESCRIPTION I-80 ROUTE SECTION ____I-80 over Des Plaines River ____ LOCATION _, SEC. 16, TWP. 35 N, RNG. 10 E, _____ Latitude , Longitude HAMMER TYPE _____ AUTO COUNTY Will DRILLING METHOD HSA D В U Μ STRUCT. NO. Surface Water Elev. N/A ft Е L С 0 Stream Bed Elev. N/A ft Station Ρ S ο L BORING NO. SSB-06 Т W S Groundwater Elev.: н S Qu Т Station _____ First Encounter Dry ft Upon Completion Offset <u>N/A</u> ft (ft) (/6") (%) (tsf) Ground Surface Elev. 599.42 ft After Hrs. N/A ft

12 inches of Topsoil 598.42 Hard 5 Brown, Moist 7 4.0 18 SILTY CLAY (CL/ML) 10 Ρ 4 10 4.6 18 Silt seam at 4 feet 594.92 Medium Dense 16 В Brown, Wet SANDY LOAM, with gravel (SM) 593.42 Auger refusal at 6 feet End of Boring <u>-10</u> -20

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

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Embankment - Mainline - Sta 23+50 EB

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Date	6/30/22
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ROUTE I-80	DE	SCR	PTION	I		(overpass) to 35+0	0	LOGGED BY	AJ
SECTIONI-80 over Des Plaines R	River	ı	ΟCΔΤ	ION	SEC	16 TWP 35 N RNG 1	10 F		
		_ •			Latitu	de , Longitude	ю <u>с</u> ,		
COUNTY Will DRIL	LINC	S ME	THOD				HAMMER 1	TYPEAU	то
STRUCT. NO.	_	D	В	U	М	Surface Water Elev.	N/A	ft	
Station	_	E	L	C	0	Stream Bed Elev.	N/A	ft	
		P T	0	S					
BORING NO. SSB-08	_	H	W S	Qu	S T	Groundwater Elev.:		~	
Station	_			QU	'	First Encounter	Dry N/A	.π. #	
Offset Ground Surface Elev	ft	(ft)	(/6")	(tsf)	(%)	Upon Completion After Hrs.	N/A	ft	
12 inches of Topsoil		. ,	. ,	. ,					
Hard			6						
Brown, Moist			12	4.5	13				
SILTY CLAY LOAM, with sand			11	Р					
(CL/ML)									
			10						
Auger refusal at 4 feet			50/3"		13				
End of Boring		-5							
							_		
							_		
							_		
		_					_		
		-10							
		-15							
		-20							
		-20							

ROUTE 1-80 DESCRIPTION LINGUNERATING TO REAS 10.500 CD LOGGED BY USED TO CD LOGGED BY LOGGED BY USED TO CD LOGGED BY			Date			ER	- 22+50	DRIN	kmont l	Embo					ways	ision of Higl G	D G	
COUNTY Will DRILLING METHOD HAMMER TYPE AUTO	JEB		EDBY	LOGG			00	<u>s) to 35+(</u>	(overp			PHOP	SCR	DE		1-80		DUIE
COUNTY Will DRILLING METHOD HSA HAMMER TYPE AUTO							10 E,	<u>N, RNG.</u>	<u>6, TWP.</u>	, SEC.			L	s River	es Plaine) over D	I <u> -</u> 8	CTION
STRUCT. NO	1	JTC	AU	E	TYPE	MER	HAM		HSA	Latitu		THOD	G ME	RILLING	D	Will		DUNTY
Station It of the interval of the inte					ft ft	N/A N/A		iter Elev. ed Elev.	Surface Stream	0 1	С	L O	E P					
2 inches of Topsoil suger refusal at 1 foot ind of Boring					_ ft _ ft _ ft	Dry N/A N/A		er Elev.: ounter opletion Hrs.	Groundv First Er Upon C After	Т		S						tation
DRAFT									/									
														585.65		1 foot	usal at pring	ger rei d of B
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P) Illinois of Tran	sportati	ne ion	nt		SC	DIL BORIN	G LOG	Page 1 of Date 6/29/	
ROUTE		DE	SCR	IPTIO	۱	Emba	nkment - Mainline - Sta (overpass) to 35+0	a 23+50 EB 0	LOGGED BY JE	3
SECTION	I-80 over Des	Plaines River	I				16, TWP. 35 N, RNG. 1	0 E,		
	Will	DRILLING	G ME	THOD			ide , Longitude HSA		E <u>AUTO</u>	
BORING NC	0 0SSB-^	1	D E P T H	L O W	U C S Qu	M O I S T	Surface Water Elev. Stream Bed Elev. Groundwater Elev.: First Encounter Upon Completion After Hrs.			
Ground Su	urface Elev	586.08 ft	(ft)	(/6")	(tsf)	(%)	After Hrs.	<u>N/A</u> ft		
Brown, Mois	st to Very Moist	585.58		1						
(CL/ML)	Y, trace gravel			7	0.6 B	20				
					D					
		581.58		3 13	1.0	31				
Very Dense Brown, Wet GRAVEL, w End of Borir	rith sand (GPS)	581.08	-5	50/2"	В	ļ	١F	Т		
				-						
				-						
				-						
			-15	-						
			_							
			_							
			-20							

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ROUTEI-80	DESCRI	PTION	1	Emba	nkment - Mainline - Sta (overpass) to 35+0	a 23+50 EB	Date <u>6/29/22</u>
SECTION Vill	es River L	OCAT	ION _	<u>, SEC.</u> Latitu	<u>16, TWP. 35 N, RNG. 7</u> de , Longitude	10 E,	
STRUCT. NO Station BORING NOSSB-12 Station Offset Ground Surface Elev587.3 6 inches of Topsoil	9 ft (ft)	B L O W S (/6")	U C S Qu (tsf)	M O I S T (%)	Surface Water Elev. Stream Bed Elev. Groundwater Elev.: First Encounter Upon Completion After Hrs.	<u> </u>	
Soft to Very Stiff Brown, Moist SILTY CLAY, trace gravel (CL/ML)		3 6 9	3.1 B	16			
Very Dense Brown, Wet GRAVEL, with sand (GPS) Gray, Dry		1 2 2 3 3 27 50/5"	0.4 B 0.6 B	16 19	١F	Т	
WEATHERED LIMESTONE Auger refusal at 9 feet End of Boring				4			

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of Transportat	ion	SOIL BORIN	G LOG	Date 6/29/22
ROUTE I-80 DE	SCRIPTION	Embankment - Mainline - St (overpass) to 35+0	a 23+50 EB)0 LO O	
SECTION I-80 over Des Plaines River	LOCATION	, SEC. 16, TWP. 35 N, RNG.		
COUNTY Will DRILLING			HAMMER TYPE	AUTO
STRUCT. NO. Station BORING NO. SSB-13 Station Offset	D B U E L C P O S T W H S Qu	Upon Completion	Dry ft N/A ft	
Ground Surface Elev. 579.96 ft 6 inches of Topsoil 579.46 Stiff Brown, Moist SILTY CLAY, trace gravel (CL/ML)		(%) After Hrs. 12 12	<u>N/A</u> ft	
Brown, Wet WEATHERED LIMESTONE Auger refusal at 7.5 feet End of Boring			T	

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ROUTE I-80	DE	SCRI	PTION	۱	Emba	nkment - Mainline - Sta (overpass) to 35+00	23+50 EB 0	LOGGED BY	AJ
SECTION I-80 over Des Plaine	s River	_ L							
COUNTY Will DI	RILLING	6 ME	THOD			de , Longitude HSA	_ HAMMER TY	PEAUTO	
STRUCT. NO Station		D E P	B L O	U C S	M O I	Surface Water Elev Stream Bed Elev	<u>N/A</u> f <u>N/A</u> f		
BORING NO. SSB-14 Station Offset Ground Surface Elev. 580.01		T H (ft)	W S (/6")	Qu (tsf)	S T (%)	Groundwater Elev.: First Encounter Upon Completion After Hrs.	Dryf N/Af N/Af		
8 inches of Asphalt 4 inches of Aggregate Subbase	579.35 579.01								
Brown, Moist FILL: SILTY CLAY, trace sand and gravel			4 5 5	2.9 B	15				
			1	2.1	23				
Brown and Black, Moist FILL: SILTY CLAY, trace sand and gravel	574.01		2 2 3 5	В 2.1 В	20	λF	Т		
Dark Brown and Brown, Moist to Very Moist FILL: SILTY CLAY, with sand and gravel	571.51	-10	4 8 8		11				
Cobbles at 8.5 feet Auger refusal at 11 feet End of Boring	569.01		50/0.5		27				
		-15	-						

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Embankment - Mainline - Sta 23+50 EB

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ROUTE I-80 DESCR		IPTION			Embankment - Ram	рВ	LOGGED	BY JEB		
OFOTION		- Disimon Diver		0047		050				
SECTION	I-80 over Des	s Plaines River	I		ION _		<u>16, TWP. 35 N, RNG. 1</u> de , Longitude	10 E,		
COUNTY	\\/ill			тиоп					VDE	
	VVIII			THOD			115A			AUTO
			D	в	U	м			6	
STRUCT. N	IO		E	L	C	0	Surface Water Elev.	<u> </u>	ft	
Station _			P	Ō	S	1	Stream Bed Elev.	N/A	ft	
	• • • • •		T	w	3	S				
	O. SSB		н.	S	Qu	T	Groundwater Elev.:	_		
Station _				U	QU	•	First Encounter	Dry	π	
Offset		500 07 #	(ft)	(/6'')	(tsf)	(%)	Upon Completion After Hrs.	<u> </u>	π	
Ground S	urface Elev.	596.87 π	(14)	(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	(131)	(/0)	Aπer Hrs	N/A	π	
6 inches of	Topsoil	596.37]						
Hard										
Brown, Ver	y Moist			11						
SILTYCLA	Y, trace gravel			13	4.2	27				
				13	В					
		593.37		1						
Medium De	ense	090.07		6						
Brown, Moi				5		12				
GRAVEL, V	with sand (GPS))	_	15						
			-5							
				-						
			_	47						
				17						
		589.87		50/1		21				
	sal at 7 feet									
End of Bori	ing									
]						
				1						
			-10	1						
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				-						
			-20							

SOIL BORING LOG

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ROUTE I-80	DES	SCRI	PTION	I		Embankment - Ramp	bВ	LOGGED	BY JEB
SECTIONI-80 over Des Plaines I	River	_ L	OCAT	ION _		<u>16, TWP. 35 N, RNG. 1</u> de , Longitude	10 E,		
COUNTY Will DRI	LLING	ME	THOD						AUTO
STRUCT. NO Station	_	D E P	B L O	U C S	M O I	Surface Water Elev. Stream Bed Elev.	N/A N/A	ft ft	
BORING NO. SSB-18 Station Offset	_	T H (ft)	W S (/6")	Qu (tef)	S T (%)	Groundwater Elev.: First Encounter Upon Completion After Hrs.	Dry N/A	ft ft	
Ground Surface Elev.598.276 inches of Topsoil5	_ ft 97.77		(10)	(tsf)	(70)	After Hrs	N/A	_π	
Hard	91.11								
Brown, Moist to Very Moist SILTY CLAY, trace gravel			3 6	4.2	30				
		_	10	В					
		_	50/2"						
5 Very Dense	93.77		50/2		6				
Brown, Moist GRAVEL, with sand (GPS) Auger refusal at 5 feet End of Boring		-10							

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

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ROUTE	I-80		DES	CRI	PTION	l		Embankment - Ram	рВ	LOGGE	DBY	JEB
SECTION _	I-80 over D	<u>es Plaines R</u>	River	_ L	OCAT	ION _		16, TWP. 35 N, RNG.	10 E,			
							Latitu	de, Longitude				
COUNTY _	Will	DRIL	LING	ME.	THOD			HSA	_ HAMMER	ГҮРЕ	AUTO	
			Г	_	_							
STRUCT. N	0		_	D	В	U	М	Surface Water Elev.	N/A	ft		
Station _			_	Е	L	C	0	Stream Bed Elev.	N/A	ft		
				P	0	S						
) SS			T	W	•	S T	Groundwater Elev.:				
Station _			_	н	S	Qu	1	First Encounter	Dry	ft		
Offset			-	/#+\	(/6")	(tof)	(%)	Upon Completion After Hrs.	<u>N/A</u>	ft		
Ground St	urface Elev. $_$	599.77	_ ft	(ft)	(/0)	(tsf)	(70)	After Hrs.	N/A	_ ft		
6 inches of	Topsoil	59	9.27									
Stiff to Very	Sum											
Brown, Mois	st V trans a marine		_		8							
SILIYCLA	Y, trace grave				14	4.0	8					
			_		12	В						
			_									
					3							
			-	_	4	2.9	23					
				-5	9	В						
									_			
			<u>)3.52</u> -		9							
Very Dense Brown, Wet		55	93.27		50/1"	1.5	20		_			
GRAVEL W	ہ vith sand (GP	S)	/ -		,	P						
	al at 6.5 feet								_			
End of Bori	ng		-									
	-			_								
			-									
				-10								
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ROUTE I-80	_ DES	SCRI	PTION	I		Embankment - Ramp	В		BY AJ
SECTIONI-80 over Des Plaines	River	_ L	OCAT		<u>, SEC.</u>	<u>16, TWP. 35 N, RNG. 1</u>	0 E,		
COUNTY Will DR	ILLING	ME	THOD		Lautu	de , Longitude HSA	HAMMER TY	′PE	AUTO
STRUCT. NO Station	_	D E P	B L O	U C S	M O I	Surface Water Elev Stream Bed Elev	<u>N/A</u> f <u>N/A</u> f	t t	
BORING NO. SSB-20 Station Offset	_	T H	W S	Qu	S T	Groundwater Elev.: First Encounter _ Upon Completion _ After Hrs	Dry N/A	t t	
Ground Surface Elev. 600.67 12 inches of Topsoil	ft	(ft)	(/6")	(tsf)	(%)	After Hrs	<u> </u>	t	
Stiff to Very Stiff	599.67		4						
Dark Brown and Gray, Moist SILTY CLAY (CL/ML)	-		4 8	3.5 P	24				
	-		3						
_		-5	6 9	1.3 P	13				
Medium Dense Light Brown, Moist SANDY LOAM, with gravel (SM)	<u>594.17</u>		4 15 13	2.8 P	13	λF	Т		
Medium Stiff Brown, Moist SILTY CLAY, with sand (CL/ML)	<u>591.47 -</u> 589.67	-10	4 21 24	0.8 P	23				
Auger refusal at 11 feet End of Boring									
		-15							
	-								
		-20							

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ROUTE	I-80	DE					Embankment - Ramp	LOGGED BY KA			
	I-80 over Des Plaine	es River	_ I				<u>16, TWP. 35 N, RNG. 1</u> de , Longitude	10 E,			
COUNTY _	Will D	RILLING	6 ME	THOD			HSA	HAMMER	TYPE	AUTC)
Station _	0		D E P	B L O	U C S	M O I	Surface Water Elev. Stream Bed Elev.	N/A N/A	_ ft _ ft		
Station Offset	D. <u>SSB-40</u> <u>14+62.0491'</u> 18.89ft LT		T H	W S	Qu	S T	Groundwater Elev.: First Encounter Upon Completion After Hrs.	Dry N/A	_ ft _ ft		
	urface Elev. <u>554.82</u>	<u>2</u> ft	(ft)	(/6")	(tsf)	(%)	After Hrs.	N/A	_ ft		
12 inches o Stiff to Very		553.82		4							
	Y, trace gravel			12 16	3.5 P	27					
				3 5	2.5	16					
	- Г		-5	7	P			Т			
	. L			3 5	2.5 P	20					
				3		10					
		544.82	-10	5 7	1.0 B	16					
Stiff Gray, Moist SILTY CLA				3							
		541.82		4 15	1.0 B	15					
Medium De Gray, Moist		041.02		4							
SILŤ (ML) Cobbles at	13.5 feet		-15	9 12		16					
Stiff to Very Gray, Moist SILTY CLA		538.82		4 8 15	1.0	22					
Cobbles at	16.5 feet			-	В						
		534.82	-20	9 11 16	3.5 P	14					

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ROUTE I-80	DE	SCR	PTION			Embankment - Ramp B	В	LC	DGGI	ED BY	J	EB
SECTIONI-80 over Des Plain	as Rivar		0041		SEC	16 TWP 35 N RNG 10	F					
		_ '	-0041			de , Longitude	L,					
COUNTY Will [ORILLING	S ME	THOD				HAMMER 1	TYPE .		AL	ЛО	
STRUCT. NO		D	в	U	м	Surface Water Elev.	N/A	ft	D	в	U	м
Station		Е	L	С	0	Surface Water Elev Stream Bed Elev	N/A	ft	E	L	С	0
		P	0	S					P	0	S	
BORING NO. SSB-42		T H	W S	Qu	S T	Groundwater Elev.:		e T	T H	W S	Qu	S T
Station			5	Qu	•	First Encounter	<u>533.5</u>	. ft ⊻		3	Qu	
Offset Ground Surface Elev546.9	8 f t	(ft)	(/6'')	(tsf)	(%)	Upon Completion After Hrs	<u>Ν/Α</u> Ν/Δ	_ IL 	(ft)	(/6'')	(tsf)	(%)
			()	(/	((GC)	IN/77	. "	(7	(-)	()	()
6 inches of Topsoil Brown, Moist	546.48					Brick fragments at 19 fe	et					
FILL: SILTY CLAY, trace gravel	<u>545.98</u>		3			End of Boring						
Stiff to Very Stiff			2	1.9	19							
Brown, Moist			3	B								
SILTY CLAY, trace gravel			-									
			1									
			2									
			3	2.3	19							
		-5	4	В					-25			
		Ť										
Cobbles at 6 feet			1									
			4		17							
			5									
		_					_					
			1									
			1									
			2	1.5	18							
		-10	3	P					-30			
	535.98											
Soft			1									
Brown and Gray, Moist SILTY CLAY, trace gravel			1	0.4	22							
(CL/ML)			2	В								
()			-									
	533.48	T										
Medium Dense to Dense Gray, Wet			1									
CLAYEY GRAVEL, trace sand			1		17							
(GC)		-15	1						-35			
			-									
Von Stiff	530.98		F									
Very Stiff Gray and Dark Gray, Moist			5		44							
SILTY CLAY, trace gravel			8 10	2.5	14							
(CL/ML)		_	10	В								
	_		-									
Medium Dense to Dense	528.48		22									
Gray and Dark Gray, Moist			22		10							
CLAYEY GRAVEL, with sand			10									
,	526.98	-20	10						-40			

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ROUTE	I-80	DE	SCR	PTION			Embankment - Ramp	BB	LOGG	LOGGED BY J		
SECTION	I-80 over Des	Plaines River	L		ION	, SEC.	16, TWP. 35 N, RNG .	10 E,				
						Latitu	de , Longitude					
COUNTY	Will		6 ME	THOD			HSA	_ HAMMER TYPI		AL	ΙΤΟ	
STRUCT N	10		D	в	U	м	Surface Water Flev	N/A ft	D	в	U	м
Station			Е	L	С	ο	Surface Water Elev. Stream Bed Elev.	N/A ft	E	L	С	ο
			P	0	S				P	0	S	I
	O . <u>SSB-</u>		T H	W S	Qu	S T	Groundwater Elev.:		T H	W S	Qu	S T
Offset							First Encounter	Dryft N/Aff	1			•
Ground S	urface Elev	<u>546.46</u> ft	(ft)	(/6")	(tsf)	(%)	Upon Completion After Hrs.	<u> </u>	(ft)	(/6'')	(tsf)	(%)
6 inches of	Topsoil ist	545.96					GRAVEL, with sand ((GPS)				
Brown, Mo	ist	545.46					End of Boring]		
Medium St	Y CLAY, trace gr	avel	_	3	<u> </u>				_	-		
Brown, Moi	ist			4	1.7	18				-		
SILTY CLA	Y, trace gravel		_	4	В				_	-		
(CL/ML)												
			_	2								
				2	3.3	21	-		-25			
			-5	5	В				-25]		
										-		
			-	1						-		
				4	4.2	19				1		
				10	B					1		
									_	-		
										1		
				2]		
				4	2.7	20				-		
			-10	6	В				-30	-		
									_	-		
				3						-		
				6	0.6	24						
				7	В					İ		
			_									
				9 9		18				-		
			45	9		10				-		
			-15						35	-		
				2					_			
				3	2.7	21				-		
				4	В					-		
										-		
		527.46		3								
Dense		527.40	·	14	1.9	18						
Brown, We	t	526.46	-20	16	В				-40	1		

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Division of Highways GSG ROUTE I-80 DESCRIPTION Embankment - Ramp BB LOGGED BY EH SECTION __ I-80 over Des Plaines River __ LOCATION _, SEC. 16, TWP. 35 N, RNG. 10 E, Latitude , Longitude HAMMER TYPE _____ AUTO COUNTY _____Will DRILLING METHOD _ HSA D В U Μ Surface Water Elev. _____ Stream Bed Elev. STRUCT. NO. _____ N/A ft Е С L 0 Stream Bed Elev. N/A ft Station Ρ S ο L BORING NO. SSB-47 т W S Groundwater Elev.: н S Qu т Station _____ First Encounter Dry ft Upon Completion Offset N/A ft (ft) (/6") (%) (tsf) Ground Surface Elev. 544.65 ft After Hrs. N/A ft 1 inch of Topsoil /544.57 Hard Brown and Gray, Moist 4 SILTY CLAY, trace gravel 6 20 4.0 (CL/ML) 7 Ρ 541.15 7 Very Stiff to Hard Gray, Moist 17 14 SILTY CLAY LOAM, with gravel 12 (ML/CL) 8 10 4.5 13 12 3 9 11 13 -10 6 9 14 3.5 15 Р 5 13 6 7 -15 528.65 Medium Dense 8 Light Brown and Gray, Dry to 12 13 Moist 8 SAND, with gravel (SPG) 10 10 4 14 524.65 -20

End of Boring

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Date 5/24/22 _____ DESCRIPTION ____ Embankment - Ramp C (Chicago Street) LOGGED BY KA ROUTE I-80 SECTION ____I-80 over Des Plaines River ____ LOCATION _, SEC. 16, TWP. 35 N, RNG. 10 E, _____ Latitude , Longitude HAMMER TYPE AUTO COUNTY _____Will DRILLING METHOD _ HSA D В U Μ Surface Water Elev. _____ STRUCT. NO. N/A ft Е L С 0 Stream Bed Elev. N/A ft Station Ρ S ο L BORING NO. SSB-48 т W S Groundwater Elev.: н S Qu т
 Station
 3+99.3396

 Offset
 0.32ft LT
 First Encounter Dry ft Upon Completion <u>N/A</u> ft (ft) (/6") (%) (tsf) Ground Surface Elev. 537.93 ft After Hrs. N/A ft 2 inches of Topsoil /537.77 Very Stiff Brown and Dark Brown, Moist 5 SILTY CLAY LOAM, trace sand 6 3.1 16 (ML/CL) 9 В 535.43 Medium Dense to Dense Light Brown, Dry to Moist SAND, with gravel (SPG) 17 16 6 11 Cobbles at 6 feet 1 15 7 3 6 5 7 -10 9 Cobbles at 11 feet 12 5 14 Cobbles at 13.5 feet 12 14 5 21 6 14 6 18 13 16 9 14 517.93 -20

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ROUTE 1-80	DE	SCRI	PTION	I	Embar	nkment - Ramp C (Chio	ago Street)	LOGGED	BY	KA
			0047		050					
SECTION I-80 over Des PI	aines River	_ L	LOCA I	ION _	<u>, SEC.</u> Latitu	<u>16, TWP. 35 N, RNG. 1</u> de , Longitude	10 E,			
COUNTY Will		MF	THOD				HAMMER -	TYPE	AUTO	
STRUCT. NO.		D	в	U	м	Surface Water Elev.	N/A	ft		
Station		Е	L	С	0	Stream Bed Elev.	N/A	ft		
		Ρ	0	S	I	-		-		
BORING NO. SSB-49	1	T	W	•	S	Groundwater Elev.:				
Station 5+4.8154	4	н	S	Qu	T	First Encounter	Dry	ft		
Offset 0.73ft LT		(ft)	(/6'')	(tsf)	(%)	Upon Completion	<u> </u>	_ft		
Ground Surface Elev. 54			(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	(131)	(70)	After Hrs.	N/A	_ π		
2 inches of Topsoil										
Very Stiff Brown and Black, Moist										
SILTY CLAY, with gravel (CL/	ML)		4							
			6	2.0 P	14					
Stiff	541.52		0							
Brown, Moist										
SILTY CLAY (CL/ML)			1							
			2	1.5	21					
		5	4	В	<u>-</u> ·					
		-0								
							_			
Cobbles at 6 feet			2				_			
			10	1.5	16		_			
	536.52		27	Р			_			
Medium Dense		_					_			
Brown and Black, Moist	ما									
GRAVEL, trace sand, clay and wooden fragments (GP)	a		11							
			9		12					
	534.02	-10	4							
Dense Brown and Black Maint										
Brown and Black, Moist SAND, with gravel (SPG)			10							
Cobbles at 11 feet			10 8	<u> </u>						
			28		11					
Dense to Very Dense	531.52		20	<u> </u>						
Light Brown, Dry										
SAND, with gravel (SPG)			15							
Cobbles at 13.5 feet			26		5					
		45	20							
		-15								
			19							
			13		5					
			25							
			13							
			17		4					
	524.02	-20	30							

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ROUTE 1-80	DE	SCR	PTION	۱	Emba	nkment - Ramp C (Chio	cago Street)	LOGGE	D BY	KA
			0047		050					
SECTIONI-80 over Des Pla	aines River	L			<u>, SEC.</u> Latitu	ide, Longitude	10 E,			
COUNTY Will		S MF	тнор					TYPE	ΔΗΤΟ	ר ר
	DIVICENC	, wie								<i>.</i>
STRUCT. NO.		D	в	υ	м	Surface Water Flow	NI/A			
Station		E	L	Ċ	0	Surface Water Elev. Stream Bed Elev.	Ν/Α	_ IL 		
		Р	0	S	1			_ n.		
BORING NO. SSB-50		Т	W		S	Groundwater Elev.:				
Station 6+1.5870		H	S	Qu	Т	First Encounter	Dry	ft		
Station 6+1.5870 Offset 3.03ft RT						Upon Completion				
Ground Surface Elev. 539	9.06 ft	(ft)	(/6")	(tsf)	(%)	After Hrs.	N/A	ft		
2 inches of Topsoil	/538.89	-								
Soft to Hard										
Brown and Gray, Moist			3							
SILTY CLAY, trace gravel			8	2.5	16					
(CL/ML)			7	Р						
			3							
			9	6.3	17					
_		-5	5	В						
			2							
			3	2.5	16					
			5	P						
	531.06	_					_			
Soft (check) to Hard			1							
Brown, Moist			1							
SILTY CLAY, trace gravel			1	1.5	23					
(CL/ML)		-10	3	P						
			1							
Cobbles at 11 feet			6							
			9	0.3	25					
			9	P						
	526.06									
Loose			1							
Brown, Moist			4							
SILT, trace gravel (ML) Cobbles at 13.5 feet			4		11					
Cobbles at 15.5 leet		-15	4							
	523.06		1							
Loose			3							
Black, Very Moist			2		40					
SILT, trace gravel (ML) Cobbles at 16 feet	521.56	_	5							
Medium Dense										
Black and Light Brown, Moist]							
SAND, with gravel (SPG)			4							
			10		9					
	519.06	-20	12							

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ROUTE	I-80	DE	SCR	IPTION		Emba	nkment - Ramp C (Chio	ago Street)	LOGGED BY	KA
SECTION _	I-80 over Des Plain	nes River	_ [16, TWP. 35 N, RNG. 1	10 E,		
COUNTY	Will			тиор		Latitu	de , Longitude			
COUNTY_	VVIII	DRILLING		INOD			HSA			10
OTDUOT N	•		D	в	U	М		N1/A		
STRUCT. N	0		E	L	c	0	Surface Water Elev.	<u> </u>	_π	
Station _			P	ō	S	Ĩ	Stream Bed Elev.	IN/A	_ n	
). SSB-51		т	W		S	Groundwater Elev.:			
Station	6+99.3412		н	S	Qu	Т	First Encounter	Drv	ft	
Offset	1.54ft RT						Upon Completion	N/A	ft	
	urface Elev. 546.1		(ft)	(/6")	(tsf)	(%)	Upon Completion After Hrs.	N/A	ft	
	Topsoil		-							
Stiff				1						
Brown, Mois				3						
SILTY CLA	Y LOAM (ML/CL)			4		16				
				5						
				-						
				1						
				2	1.0	17				
	_		-5	3	Р					
								_		
				1				_		
				1	1.0	16		_		
		538.61		1	В			_		
Stiff								_		
Brown, Mois										
SILTY CLAY	r (CL/IVIL)			1						
				2	1.0	23				
			-10	3	В					
Cobbles at	11 feet			2						
				4	1.3	25				
		533.61		16	В					
	edium Dense			-						
Gray and Bi	ack, Moist to Wet gravel (SPG)									
Cobbles at	13.5 feet			13						
-			_	9		8				
			-15	12						
				-						
D · 1 <i>C</i>										
Brick fragm	ents at 16 feet			1		4-				
				2 2		17				
Madium		528.61		<u> </u>						
Medium De Black, Wet	nse			-						
	e gravel (SP)									
Cobbles at	18.5 feet			4		35				
				12		30				
		526.11	-20	12		1				

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_____ DESCRIPTION ____ Embankment - Ramp C (Chicago Street) LOGGED BY ____DM ROUTE I-80 SECTION ____I-80 over Des Plaines River ____ LOCATION _, SEC. 16, TWP. 35 N, RNG. 10 E, _____ Latitude , Longitude HAMMER TYPE AUTO COUNTY _____ Will ____ DRILLING METHOD _ HSA В U Μ D Surface Water Elev. _____ STRUCT. NO. N/A ft Е L С 0 Station _____ Stream Bed Elev. N/A ft Ρ S ο L BORING NO. SSB-52 Т W S Groundwater Elev.: н S Qu т
 Station
 7+97.0377

 Offset
 1.02ft RT
 First Encounter Dry ft Upon Completion <u>N/A</u> ft (ft) (/6") (%) (tsf) Ground Surface Elev. 544.00 ft After Hrs. N/A ft 4 inches of Asphalt _543.66 Stiff to Hard Brown. Moist 1 SILTY CLAY, trace sand and 3 5.4 16 gravel (CL/ML) 5 В 3 4 4.0 19 5 В 1 2 1.5 22 3 В 2 5 4.5 20 7 Р -10 3 5 21 4.4 8 В 3 9 3.0 18 529.50 15 Р Medium Dense to Dense -15 Brown, Moist SAND, with gravel (SPG) 8 8 9 7 8 24 9 13 524.00 -20

End of Boring

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ROUTE	I-80		DESC	RIPTIO	N	Emba	ankment - Ramp A (Ce	nter Street)	LOGO	GED BY	JEB
SECTION	I-80 over De	es Plaines F	River	LOCA	ΓΙΟΝ	SEC.	16, TWP. 35 N, RNG.	10 F.			
						Latitu	de, Longitude				
COUNTY _	Will	DRIL	LING M	ETHOD)		HSA	_ HAMMER 1		AUTO	
STRUCT. NO	D			L	U C S	M O	Surface Water Elev. Stream Bed Elev.	N/A N/A	ft ft		
	0.01			-	3	I S	One un división Elever				
	. <u></u> SSI				Qu	T	Groundwater Elev.:	Dry	ft		
Offset			-				First Encounter Upon Completion After Hrs.	N/A	ft		
Ground Su	rface Elev	596.07	_ft (f	:) (/6")	(tsf)	(%)	After Hrs.	N/A	ft		
6 inches of 1	Topsoil	59	95.57								
Stiff											
Brown, Mois				3							
	′, trace grave			4	1.7	17					
				5	В						
				3							
				4	1.7	16					
				-5 9	В						
								_			
		59	90.07					_			
Auger refuse								_			
End of Borin	g							_			
				_							
				_							
				10							
				_							
				_							
				_							
				_							
				15							
				_							
				_							
				_							
				_							
				_							
				_							
				_							
				_							
			-3	20							

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ROUTE I-80	DE	SCR	PTION	I	Emba	ankment - Ramp A (Ce	nter Street)	LOGO	JED BY _	JEB
SECTION I-80 over Des Plain	es River		0001		SEC	16 TWD 35 N DNC -	10 E			
		_ '	-0041			de , Longitude	10 L,			
	DRILLING	S ME	THOD				HAMMER	TYPE	AUT	С
STRUCT. NO.		D	В	U	M	Surface Water Elev.	N/A	ft		
Station		Е	L	С	0	Stream Bed Elev.	N/A	ft		
		P	0	S						
BORING NO. SSB-57		T H	W S	Qu	S T	Groundwater Elev.:				
Station			3	Qu	1	First Encounter	Dry	_ft		
Offset Ground Surface Elev588.9	1 f t	(ft)	(/6")	(tsf)	(%)	Upon Completion After Hrs.	<u> </u>	_ π #		
8 inches of Asphalt	<u> </u>	()	(-)	(,	(,		N/A	_ 11		
	588.24		-							
Medium Stiff			4							
Brown, Moist SILTY CLAY, with sand and			8	0.8	16					
gravel (CL/ML)			12	0.0 B	10					
······································										
	E0E 11									
Auger refusal at 3.5 feet	585.41		50/1"							
End of Boring					11					
		_5								
]							
					Γ					
			-							
			-							
		-10	-							
			-							
			-							
			-							
			-							
			-							
		-15	-							
		-13								
			1							
]							
		_								
		-20								

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ROUTE	I-80	DES	SCRI	PTION	I	Emba	nkment - Ramp A (Cei	nter Street)	LOG	GED BY _	JEB
SECTION	1.80 over Dec P	lainas Pivor		0047		SEC	16, TWP. 35 N, RNG.	10 ⊑			
SECTION	1-00 Over Des F	laines rivei	_ "				de , Longitude	10 L,			
COUNTY	Will	DRILLING	ME	THOD			HSA	HAMMER ⁻	TYPE	AUT	С
-		_									
STRUCT. N	IO		D	В	U	М	Surface Water Elev.	N/A	ft		
Station _			Е	L	C	0	Stream Bed Elev.	N/A	ft		
			P T	0	S	I S					
BORING N	O. SSB-58	3	H	W S	Qu	T	Groundwater Elev.:	5			
Station _			••		u u	·	First Encounter	Dry N/A	_π		
Ground S	urface Elev. 58	38.36 ft	(ft)	(/6")	(tsf)	(%)	Upon Completion After Hrs.	N/A	ft		
8 inches of								,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
	•	587.69									
Medium St Brown, Moi				12							
	Y, trace gravel			8	0.8	19					
(CL/ML)	•			6	В						
		585.36									
Auger refus	sal at 3 feet										
End of Bori	ng										
			-5								
			-								
			-10								
			_								
			45								
			-15								
]							1
			_								
			-20								

SOIL BORING LOG

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ROUTE	I-80	DE	SCR	PTION	I		Embankment - Ramp	D D	LOGG	ED BY	AJ
SECTION	l-80 over Des Plaine	s River	_ L				16, TWP. 35 N, RNG. 1	0 E,			
							de, Longitude				
COUNTY	Will D	RILLING	6 ME	THOD			HSA	HAMMER 1	YPE	AUTO	
STRUCT. NO.			D	B	U	M	Surface Water Elev.	N/A	ft		
Station			E		C	0	Stream Bed Elev.	N/A	ft		
			Р	0	S	I					
	SSB-59		Т	W		S	Groundwater Elev.:				
Station			н	S	Qu	Т	First Encounter	Dry	ft		
Offset			(64)	((0))	4-5	(0/)	First Encounter Upon Completion After Hrs.	N/A	ft		
	ace Elev605.68	5 ft	(π)	(/6*)	(tsf)	(%)	After Hrs	N/A	ft		
12 inches Top	soil										
		604.68									
Hard				4							
Brown, Moist				6	4.5	21					
	_OAM, trace sand			7	P						
(CL/ML)					-						
		602.18									
Hard		602.18		4							
Brown and Gr	av. Moist			13	4.5	16					
SILTY CLAY,	trace sand and		_	14	-т.5 Р	10					
gravel (CL/ML	.)		-5	T							
			_								
			-	0							
				6	10						
			_	10	4.2	23					
				17	В						
				5							
				8	4.6	22					
			-10	15	В						
		594.43		7							
Dense Brown Moist				17	4.5	15					
Brown, Moist	It and gravel (SPG)			21	Р						
		592.18									
Very Dense		591.68		50/6"							
Brown, Moist		591.08		00/0		NR					
	/I, trace gravel (SM)										
Auger refusal	at 14 feet		-15								
End of Boring											
			-20								

SOIL BORING LOG

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ROUTE I-80	DE					Embankment - Ramp	LOGGED BY AJ		
SECTIONI-80 over Des Plaine	s River	_ L	-OCAT		<u>, SEC.</u> Latitu	<u>16, TWP. 35 N, RNG. 1</u> de , Longitude	0 E,		
COUNTY Will D	RILLING	6 ME	THOD				HAMMER TY	'PE AU	TO
STRUCT. NO Station		D E P	B L O	U C S	M O I	Surface Water Elev Stream Bed Elev	<u>N/A</u> f <u>N/A</u> f	ft ft	
BORING NO. SSB-60 Station Offset Ground Surface Elev. 606.30		T H (ff)	W S (/6")	Qu (tsf)	S T (%)	Upon Completion	Dry f N/A f	ft	
12 inches of Topsoil	<u> </u>	(14)	(, , ,	((0))	(70)	After Hrs	<u> </u>		
Hard	605.30		6						
Brown, Moist SILTY CLAY, trace sand (CL/ML)			7 8	6.0 B	15				
Hard	602.80		6						
Brown, Moist SILTY CLAY LOAM (CL/ML)		-5	13 16	4.5 P	16		_		
Hard to Very Hard Brown, Moist SILTY CLAY, trace sand and gravel (CL/ML)	600.30		6 17 17	5.6 B	18		L		
			5 10 13	8.3 B	21				
			4 8 15	4.5 P	20				
Auger refusal at 13.5 feet	592.80		50/2"						
End of Boring		-15			NR				

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ROUTE	I-80	DE	SCRI	PTION	I		Embankment - Ram	p D	LOGGED BY AJ		
SECTION	I-80 over Des Plaine	es River	_ L				<u>16, TWP. 35 N, RNG. 1</u> de , Longitude	10 E,			
	Will D	RILLING	6 ME	THOD					TYPE	AUTC)
STRUCT. N Station	0		D E P	0	U C S	M O I	Surface Water Elev. Stream Bed Elev.	N/A N/A	_ ft _ ft		
Station _ Offset	D. SSB-62		T H	S	Qu (tef)	S T	Groundwater Elev.: First Encounter Upon Completion After Hrs.	Dry N/A	_ ft _ ft		
Ground So 12 inches o	urface Elev. <u>596.24</u> f Topsoil	ft	(11)	(/0)	(tsf)	(%)	After Hrs	N/A	_ ft		
Very Dense Brown, Mois	;	<u>595.24</u> 593.74		7 50/1"		11					
Auger refus End of Bori	al at 13.5 feet ng	333.74									
							١F	Т			
			 10 								
			15 	· · ·							

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ROUTE I-80 DE	SCR	IPTION	۱	Embankment - Ramp		D	LOGGED BY AJ		
SECTION I-80 over Des Plaines River	I			, SEC.	16, TWP. 35 N, RNG. 1	0 E,			
COUNTY Will DRILLING	6 ME	THOD			de , Longitude HSA	HAMMER	TYPE	AUTO	
STRUCT. NO Station	D E P	B L O	U C S	M O I	Surface Water Elev Stream Bed Elev	N/A N/A	_ ft _ ft		
BORING NO. SSB-63 Station	T H (ft)	W S	Qu (tsf)	S T	Groundwater Elev.: First Encounter Upon Completion After Hrs.	Dry N/A	_ ft _ ft		
Ground Surface Elev. 596.16 ft 12 inches of Topsoil	(11)	(/0)	((3))	(/0)	After Hrs	N/A	_π		
595.16 Very Dense Brown, Moist SANDY LOAM, with gravel (SM) 593.66 Gray		6 50/4"		15					
WEATHERED LIMESTONE Auger refusal at 2.5 feet End of Boring		-							
D					λF	Τ			
		-							
		-							
		-							
	-20	1							

SOIL BORING LOG

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ROUTE	I-80	DES	SCRI	PTION			Embankment - Ramp	p D	D LOGGED BY I		DD
SECTION	I-80 over Des Plain	es River	_ L			<u>, SEC.</u>	<u>16, TWP. 35 N, RNG. 1</u> de , Longitude	10 E,			
COUNTY	Will	DRILLING	ME	THOD			HSA	HAMMER T	YPE	AUTO	
Station _	10		D E P	B L O	U C S	M O I	Surface Water Elev. Stream Bed Elev.	N/A N/A	ft ft		
Station _ Offset	O . <u>SSB-64</u>		T H	W S	Qu	S T	Groundwater Elev.: First Encounter Upon Completion	Dry N/A	ft ft		
	Surface Elev. 600.8	8 ft	(ft)	(/6")	(tsf)	(%)	Upon Completion After Hrs.	N/A	ft		
12 inches of Dark Brown FILL: SAN		599.88		7		3					
				3							
	/ery Dense	<u>596.88</u> <u>596.38</u>		8 19 22		20		÷			
	n, Moist DAM, with gravel (SM) sal at 7 feet	593.88		22 50/1"		8		L.			
			-10								
			-15								
			-20								

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ROUTE I-80 DESCRI			PTION	I		Embankment - Ramp	D D	LOGGE	ED BY	DD	
	I-80 over Des Plain	es River	_ L	OCAT		<u>, SEC.</u>	<u>16, TWP. 35 N, RNG. 1</u>	0 E,			
COUNTY	Will C	DRILLING	ME	THOD			de , Longitude HSA	_ HAMMER [·]		AUTO)
STRUCT. NO. Station			D E P	B L O	U C S	M O I	Surface Water Elev Stream Bed Elev	N/A N/A	_ft _ft		
Station Offset			T H	W S (/6")	Qu (tof)	S T	Groundwater Elev.: First Encounter Upon Completion After Hrs.	Dry N/A	_ ft _ ft		
	face Elev. 602.6	/ft	(ft)	(/0)	(tsf)	(%)	After Hrs	N/A	_ ft		
12 inches of A Dark Brown, V	·	601.67		6							
FILL: SAND	wei	000.07	_	4	3.0	20					
Very Stiff Gray, Moist SILTY CLAY		600.67		5	P	20					
				5							
				6	4.0	20					
	— Г	596.67	-5	10	В			Т			
Very Dense Light Brown, I SAND, with gr	ravel (SPG)	595.67		50/4"		3					
Auger refusal	at / teet							_			
			-10								
			-15								
			-20								
End of Poring											

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ROUTE I-80	DESCR	DESCRIPTION		Embankment - Ramp D			LOGGED BY DD
SECTIONI-80 over De	s Plaines River	LOCAT	ION _	<u>, SEC.</u> Latitu	16, TWP. 35 N, RNG. [^] de , Longitude	10 E,	
COUNTY Will		ETHOD				_ HAMMER TYPE	AUTO
STRUCT. NO Station	E	L O	U C S	M O I	Surface Water Elev. Stream Bed Elev.	<u> </u>	
BORING NOSSB Station Offset Ground Surface Elev	H	S	Qu (tsf)	S T (%)	Groundwater Elev.: First Encounter Upon Completion After Hrs.	N/A ft	
14 inches of Asphalt	<u></u>	,,	()	(/0)		<u> </u>	
Dark Brown, Moist FILL: SAND, trace gravel Stiff to Very Stiff Brown, Moist		5 6 6	2.0 P	15			
SILTY CLAY, trace gravel (CL/ML)		3	1.0	21			
Light Brown, Very Moist SILT (ML) Stiff to Hard Brown, Moist SILTY CLAY, trace gravel (CL/ML)		5 6 5 7 11	P 4.2 B	20	١F	Т	
Auger refusal at 8 feet		5					