

Pontiac Tr.



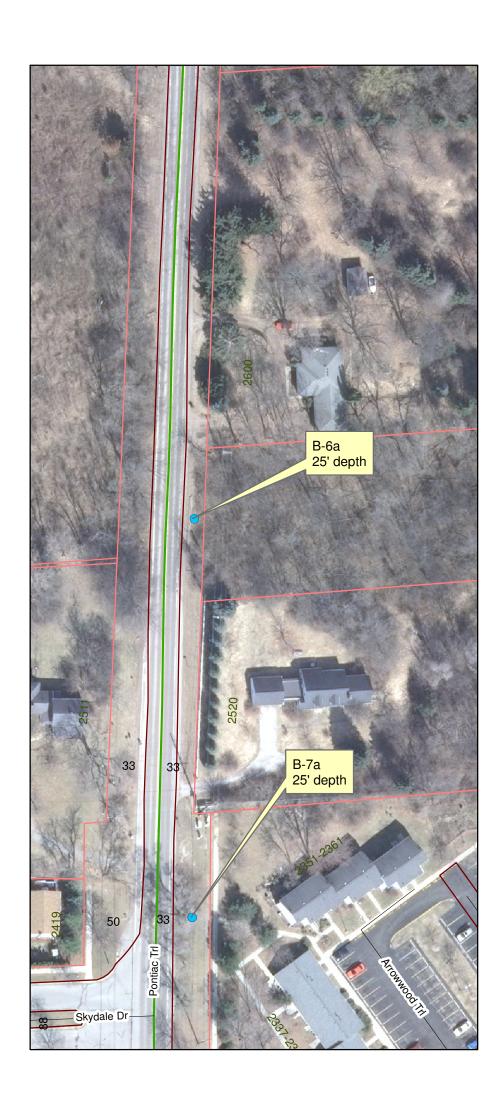


Pontiac Tr.





Pontiac Tr.



	Associa	CTI and Associates Inc		BOR	ING	NUMI	BEF	R: P	ontiac Trail B-1 PAGE 1 OF 1			
			ECT		Misce	llaneous Geol	technica	al Servi	ces			
		/				Ann Arbor,						
			GROUND ELEVATION N/A									
						G None						
				ER DRI		-						
			COLLAPSE DEPTH 15' 6"									
o DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION		SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf) UNC. STRENGTH (psf)	NATURAL MOISTURE CONTENT (%)	▲ SPT N VALUE ▲ 20 40 60 80 PL MC LL 20 40 60 80 □ FINES CONTENT (%) □ 20 40 60 80			
	XXXX	─ 5 inches ASPHALT PAVEMENT	\square									
		13 inches of dark brown moist silty fine to medium SAND with gravel - (FILL) Brown moist fine to medium SAND with some silt and trace of gravel - (FILL)		SS 1	89	10-15-15 (30)			<u></u>			
		Dark brown moist sandy CLAY with silt and trace of gravel - (FIL	L)	SS 2	17	6-8-9 (17)	-					
 _ 10		Rubbelized ASPHALT with occasional clay seams and pieces of slag - (FILL) Brown moist medium dense clayey fine SAND with trace of grave and occasional clay seams - (SC) Brown moist dense fine to medium SAND with some silt, trace or gravel and occasional cobbles - (SP-SM)	j é el	SS 3 SS 4	100	24-22-13 (35) 8-13-14 (27)	-					
 _ <u>15</u> 			2	SS 5	44	9-25-22 (47)						
 _ <u>20</u> 		Brown moist dense to very dense fine SAND with silt, some grav and occasional cobbles - (SM)	el ,	SS 6	56	12-17-22 (39)	-					
Ļ .				SS 7	100	38-47-22						
25				∕ 7	100	(69)						
		Bottom of borehole at 25.0 feet. Boring performed 2' east of west edge of road, 61' north of address 3185 driveway										

		CTI and Associates Inc		BOR	ING	NUM	BEF	R: P	ontia			3-2 OF 1
					Miscel	laneous Geot	echnics	al Servir	200			
		-							663			
			PROJECT LOCATION Ann Arbor, Michigan									
		v										
		ETHOD _2-1/4 inch HSA		RING DR								
		G. Geerlings CHECKED BY T. Marsik		TER DRI								
NOTE	S _Bo	ring backfilled with auger cuttings.	COLLAPSE DEPTH									
o DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION		SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf) UNC. STRENGTH (psf)	NATURAL MOISTURE CONTENT (%)	20 PL 20	40	60 L 60 FENT	80 .L 1 80
Γ	$\left[\frac{7}{7}\frac{1}{12},\frac{1}{7}\right]$	12 inches of dark brown moist sandy TOPSOIL with traces \neg gravel	of					[Γ	-		
		Brown moist medium dense clayey fine to medium SAND v and some gravel - (SC)	vith silt	SS 1	100	7-7-7 (14)			A			
 5		Brown moist hard sandy CLAY with silt, trace of gravel and frequent silt partings - (CL)		SS 2	100	7-9-8 (17)	4.5+	7				
		Brown moist medium dense silty fine to coarse SAND with gravel and occasional cobbles - (SM)	some	SS 3	78	8-6-7 (13)	4.5+	9	•			
 <u>10</u> 				SS 4	78	9-6-7 (13)						
 _ <u>15</u> 				SS 5	78	4-5-6 (11)						
		Brown moist medium dense silty, clayey fine SAND with tra gravel - (SC-SM)	ace of			10 11 10						
 				SS 6	100	10-11-12 (23)						
		Brown moist medium dense silty fine SAND with traces of \underline{g} and clay - (SM)	gravel			10 10 11					· · · · · · · · · · · · · · · · · · ·	
25					100	12-10-11 (21)			<u> </u>			
	1 1 1 1	Bottom of borehole at 25.0 feet.		<u> </u>		. ,						
		Boring performed 20' west of west edge of road, 40' north o of Dhu Varren Road	of center									

	CTI and Associates Inc	BORING NUMBER: Pontiac Trail B-3 PAGE 1 OF 1									
CTI and Associ				Miscel	laneous Geo	echnic	al Servi	265			
	-				Ann Arbor,						
	IETHOD _2-1/4 inch HSA	DURING DRILLING _13'									
LOGGED B	G. Geerlings CHECKED BY T. Marsik	AFTER DRILLING None									
	ring backfilled with auger cuttings and patched.	COLLAPSE DEPTH 16'6"									
o DEPTH (ft) GRAPHIC LOG	MATERIAL DESCRIPTION		SAMPLE TYPE NUMBER RECOVERY % (RQD) BLOW COUNTS				NATURAL MOISTURE CONTENT (%)	▲ SPT N VALUE ▲ 20 40 60 80 PL MC LL 20 40 60 80 □ FINES CONTENT (%) □ 20 40 60 80			
	6 inches of ASPHALT PAVEMENT 18 inches of brown moist fine to medium SAND with some and clay - (FILL) Brown moist medium dense gravelly fine to coarse SAND w some clay and occasional clay lenses - (SP-SC)	-	SS 1	100	16-11-7 (18)						
5	Brown moist hard CLAY with silt, traces of gravel and sand	and	SS 2	83	4-3-3 (6) 2-3-5						
	occasional silt partings - (CL)		∧ 3 √ ss	94	(8) 5-12-21	4.5+	13 21				
	Brown moist dense fine SAND with some silt, trace of grave occasional cobbles - (SP-SM)	el and	4		(33)			•			
 15	Brown wet dense sandy SILT - (ML)		SS 5	100	12-14-18 (32)						
	Light brown moist dense to medium dense fine SAND with silt - (SP-SM)	some	√ ss		11-14-21						
20				100	(35)						
				100	8-12-13 (25)						
25 2444	Bottom of borehole at 25.0 feet. Boring performed 10' west of east curb, 20' south of Knights Circle	sbridge	/ \ /	<u> </u>	(23)	<u> </u>	<u> </u>	<u> : : : :</u>			

		CTI and Associates Inc			BOR	ING	NUMI	BEF	R: P	ontiac Trail B-4 PAGE 1 OF 1			
		y of Ann Arbor		EC		Miscol	laneous Geol	tochnic	al Sonvi	COS			
		y of Ann Arbor UMBER 3122040060-2											
			PROJECT LOCATION _ Ann Arbor, Michigan GROUND ELEVATION _N/A										
		ETHOD 2-1/4 inch HSA	_ GROUND WATER LEVELS: DURING DRILLING None										
		G. Geerlings CHECKED BY _T. Marsik											
		ring backfilled with auger cuttings.	_ AFTER DRILLING <u>None</u> COLLAPSE DEPTH None										
		······································											
o DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION			SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf) UNC. STRENGTH (psf)	NATURAL MOISTURE CONTENT (%)	▲ SPT N VALUE ▲ 20 40 60 80 PL MC LL 20 40 60 80 □ FINES CONTENT (%) □ 20 40 60 80			
		2 inches of dark brown TOPSOIL	/	\square									
		Brown moist medium dense silty, sandy GRAVEL - (GM)			ss s	94	8-9-12 (21)						
		Brown moist hard CLAY with silt, traces of gravel and sand frequent silt partings - (CL)	d and		SS 2	100	11-15-17 (32)	4.5+	7				
						100	11-18-22 (40)	4.5+	9				
					∑ ss	100	13-21-33	4.5+					
 					4		(54)	-	8	•			
		Light brown moist dense to medium dense fine SAND with silt - (SP-SM)	i some		SS 5	100	12-22-22 (44)	4.5+					
<u>20</u> 					SS 6	100	10-9-18 (27)	-					
25						100	12-17-17 (34)						
		Bottom of borehole at 25.0 feet.			/ / -		(0.1)			· · · ·			
		Boring performed 15' west of west edge of road, 260' north driveway to address 2735 Pontiac Trail	n of										

CTI and	Associ	CTI and Associates Inc		BOR	ING	NUM	BEF	R: P	ontiac Trail B-5 PAGE 1 OF 1		
CLIE	NT _Ci	ty of Ann Arbor	PROJEC	T NAME	Miscel	laneous Geo	technica	al Servio	ces		
PROJ	IECT N	UMBER 3122040060-2	PROJEC	T LOCAT		Ann Arbor,	Michi	gan			
DATE	STAR	TED 11/29/12 COMPLETED 11/29/12	GROUND ELEVATION N/A								
DRILI	LING C	ONTRACTOR Stearns Drilling	GROUND WATER LEVELS:								
DRILI		IETHOD _4-1/4 inch Hollow Stem Auger	DU	IRING DR	RILLING	G <u>13' 6"</u>					
LOGO	GED BY	G. Geerlings CHECKED BY T. Marsik	AF	TER DRI	LLING	13'					
NOTE	S _ Bo	ring backfilled with auger cuttings.	AFTER DRILLING _13' COLLAPSE DEPTH _14'								
							sf)	щ	▲ SPT N VALUE ▲		
o DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION		SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf) UNC. STRENGTH (psf)	NATURAL MOISTURE CONTENT (%)	20 40 60 80 PL MC LL 20 40 60 80 □ FINES CONTENT (%) □ 20 40 60 80		
		 6 inches of brown moist silty fine to medium SAND with gra (FILL) 	avel - 🖯	-							
		Brown moist fine to medium SAND with some gravel and s (FILL)	ilt -	SS 1	89	6-7-3 (10)	0.75	17	•		
		Brown moist CLAY with silt, traces of gravel and sand and occasional silt seams - (FILL)	· .	∬ ss	83	3-5-5	-				
		Brown moist silty fine SAND with trace of gravel and occas clay lenses - (FILL)		2		(10)	-				
		Brown moist loose fine to medium SAND with some silt, tra gravel and occasional organic clay seams - (SP-SM/Poss. Loss-on-Ignition (organic content) = 3.5%	FILL)	SS 3	83	2-5-4 (9)	-	28	•		
 10		Brown moist stiff CLAY with silt, traces of gravel and sand occasional silt seams - (CL)	and	SS 4	100	2-3-4 (7)	1.25	21			
				<u> </u>							
 _ 15	-	Brown wet very loose to medium dense fine to medium SA some silt and occasional clay lenses - (SP-SM)	ND with	SS 5	78	1-0-0 (0)					
20				SS 6	100	7-9-7 (16)	-				
		Gray wet loose clayey fine to medium SAND with trace of g	gravel				_				
25		and occasional clay seams - (SC)		SS 7	83	2-2-2 (4)					
	1711	Bottom of borehole at 25.0 feet.		<u>r 1</u>		. ,		!			
		Boring performed 4' east of east edge of road, 2 feet north address 2672 driveway	of								

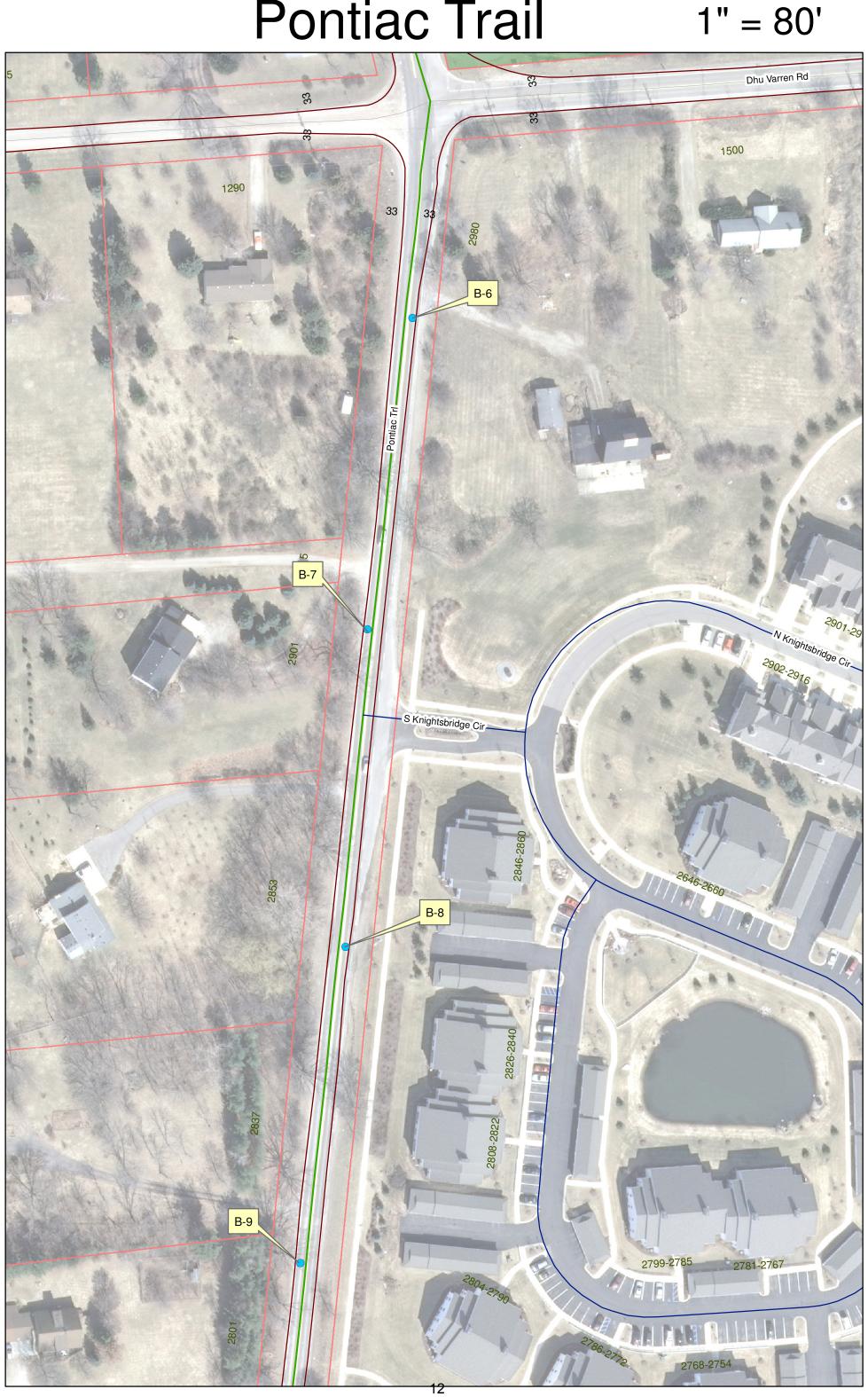
CTI and	Associa	CTI and Associates Inc		BOR	ING	NUM	BEF	R: P	ontiac Trail B-6 PAGE 1 OF 1		
CLIEN	T Cit	y of Ann Arbor	PROJEC	T NAME	Miscel	laneous Geo	technica	al Servi	ces		
PROJ	ECT N	UMBER 3122040060-2				Ann Arbor,					
DATE	STAR	TED 11/29/12 COMPLETED 11/29/12	GROUN	D ELEVA	TION	N/A					
		ONTRACTOR Stearns Drilling									
		ETHOD _4-1/4 inch Hollow Stem Auger		JRING DF	RILLING	G None					
		G. Geerlings CHECKED BY T. Marsik	AFTER DRILLING None								
		ring backfilled with auger cuttings.	COLLAPSE DEPTH 17'								
_							6				
o DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION		SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf) UNC. STRENGTH (psf)	NATURAL MOISTURE CONTENT (%)	▲ SPT N VALUE ▲ 20 40 60 80 PL MC LL 20 40 60 80 □ FINES CONTENT (%) □ 20 40 60 80		
0		6 inches of brown moist silty fine to medium SAND with g	ravel	_					20 40 60 80		
		(FILL) Brown moist loose fine to coarse SAND with some gravel (SP-SM)	and silt -	ss 1	78	6-5-4 (9)	-		•		
		Brown moist loose fine to coarse SAND with some gravel - (SP-SC)	and clay	SS 2	56	3-4-4 (8)	-		•		
		Brown moist loose fine SAND with some silt and trace of (SP-SM)	gravel -	SS 3	89	3-4-5 (9)	-		•		
 _ <u>10</u> 				SS 4	78	3-3-4 (7)	-				
 _ <u>15</u>		Brown moist medium dense fine to medium SAND with si some gravel - (SM)	lt and	SS 5	89	4-8-9 (17)	-				
 _ <u>20</u>		Brown moist medium dense fine to medium SAND with so gravel, trace of silt and occasional cobbles - (SP)	ome	SS 6	67	6-7-10 (17)					
 25				SS 7	56	9-11-9 (20)	-				
	<u>,</u>	Bottom of borehole at 25.0 feet.		<u>v V</u>	1	. /	!				
		Boring performed 1' east of east edge of road, 65' south o address 2600 driveway	f								

		CTI and Associates Inc		BOR	ING	NUM	BEF	R: P	ontiac Trail B-7 PAGE 1 OF 1		
CTI and A											
		y of Ann Arbor	PROJECT NAME Miscellaneous Geotechnical Services								
		UMBER 3122040060-2	PROJECT LOCATION Ann Arbor, Michigan								
		TED 11/29/12 COMPLETED 11/29/12									
		ONTRACTOR Stearns Drilling	GROUNE								
DRILLI	NG M	ETHOD 4-1/4 inch Hollow Stem Auger		IRING DF							
LOGGE	ED BY	G. Geerlings CHECKED BY T. Marsik	AFTER DRILLING None								
NOTES	Bo	ing backfilled with auger cuttings and patched.	COLLAPSE DEPTH _ 21' 6"								
o DEPTH (ff)	GRAPHIC LOG	MATERIAL DESCRIPTION		SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf) UNC. STRENGTH (psf)	NATURAL MOISTURE CONTENT (%)	▲ SPT N VALUE ▲ 20 40 60 80 PL MC LL 20 40 60 80 □ FINES CONTENT (%) □ 20 40 60 80		
×	$\times\!\!\times\!\!\times$	6 inches of ASPHALT PAVEMENT		-							
		6 inches of dark brown moist silty fine to medium SAND w gravel - (FILL) 12 inches of gray moist fine to coarse SAND and GRAVEI Brown moist medium dense silty fine sand with traces of g	(FILL)	SS 1	89	6-9-7 (16)	-				
		and clay and occasional clay seams - (SM)		SS 2	94	4-5-7 (12)	-		· · · · · · · · · · · · · · · · · · ·		
		Brown moist loose silty fine SAND - (SM)		SS 3	100	3-5-5 (10)	-				
 <u>10</u> 				SS 4	89	4-5-5 (10)	_				
		Brown moist to very moist loose sandy SILT - (ML)		∬ ss	94	4-4-4		25	•		
<u>15</u>		Light brown moist loose fine to medium SAND with some trace of silt and occasional silt lenses - (SP)	gravel,	5		(8)	-				
 20 		Brown moist medium dense to loose fine to medium SANI some gravel and silt - (SP-SM)	D with	SS 6	44	3-5-6 (11)	-				
		Bottom of borehole at 25.0 feet.		SS 7	67	5-4-5 (9)	_				
		Bottom of borenole at 25.0 feet. Boring performed 11' west of east edge of road, 61' south address 2520 driveway	of								

Pontiac Trail



Pontiac Trail



Pontiac Trail 1" = 80'





Client: City of Ann Arbor Type of Rig: Truck Location: Ann Arbor, Michigan Drilling Method: Solid Stem Augers Drilled By: I. Mickle Ground Surface Elevation: Started: 12/21/2011 Completed: 12/21/2011 Completed: 12/21/2011	-
Drilling Method: Solid Stem Augers Drilled By: I. Mickle Ground Surface Elevation: Started: 12/21/2011	
Ground Surface Elevation: Started: 12/21/2011	
Completed: 12/21/2011	
Depth (ft) Sample N Strata Change Soil Classification w d q	
2.5 - 12 3 Medium Compact Moist Brown Gravelly Well Graded Sand With Some Clay-FILL	
LS 6 9/4" 5 Medium Compact Moist Brown Clayey SAND With Trace Of 5.8 112 Gravel & Clay Layers	
- Bottom of Borehole at 5'	
7.5-	
10.0-	
12.5-	
15.0-	
17.5-	
	-
"N" - Standard Penetration Resistance w - H2O, % of dry weight Water Encountered: None	_
SS - 2").D. Split Spoon Sample d - Bulk Density, pdf LS - Sectional Liner Sample qu - Unconfined Compression, psf	
ST - Shelby Tube Sample DP - Direct Push At Completion: None AS - Auger Sample Boring No. PT1 Pontiac Trail	



	Boring No.: PT2 Pontiac Trail Client: City of Ann Arbor			Job No.: 51989	Project: Miscellaneous Geote One	echnical S	ervices, Bu	Indle
	of Rig: True				Location: Ann Arbor, Michiga	'n		
Drilling	g Method:	Solid Ster	n Augers		Drilled By: I. Mickle			
Groun	d Surface	Elevation	:		Started: 12/21/2011			
					Completed: 12/21/2011			
Depth (ft)	Sample Type	N	Strata Change	Soil Classifie	cation	w	d	qu
			.38	ASPHALT (4 1/2")				
-	LS	10 13			/	5.5	93	
2.5		10		Medium Compact Moist Brown Gra With Some Clayey Seams-FILL	velly Well Graded Sand			
-	LS	4 9/5"				5.7	97	
5.0-		0,0	5					
-				Bottom of Borehole at 5'				
7.5-								
-								
- 10.0 -								
-								
-							· ,	
12.5-								
-								
15.0-								
-								
- 17.5								
-								
20.0								
20.0								
-								
22.5-								
-								
"NP 04				· · · · · ·				
SS - 2").[LS - Secti	dard Penetrati D. Split Spoon ional Liner Sat	Sample nole	d - Bulk I	% of dry weight Density, pof Infined Compression, psf	Water Enco			
LS - Sectional Liner Sample qu - Unconfir ST - Shelby Tube Sample DP - Direct F AS - Auger Sample		ct Push	At Completion: None					
					Boring No.	PT2 Pont	iac Trail	



Boring No.: PT3 Pontiac Trail Client: City of Ann Arbor				Job No.: 51989	Project: Miscellaneous Geote One	chnical Se	ervices, Bu	Indle			
	of Rig: True				Location: Ann Arbor, Michiga	n					
	Method:		n Augers		Drilled By: 1. Mickle						
	d Surface				Started: 12/21/2011						
					Completed: 12/21/2011						
							[
Depth (ft)	Sample Type	N	Strata Change	Soil Classif	cation	w	d	qu			
-			.27	ASPHALT (3 1/4")							
-	LS	15 11				7.1	99				
2.5-		11	3	Medium Compact Moist Brown Gr With Some Clay-FILL	avelly Well Graded Sand						
-	LS	4 5	4	Medium Compact Moist Brown Fir	e SAND	15.5	103				
5.0-		6	5	Firm Moist Brown CLAY With Som	/						
-				•							
7.5-				Bottom of Borehole at 5'							
-											
10.0-											
-											
12.5-											
-											
15.0											
-											
17.5-											
-											
20.0-											
-											
22.5-											
-											
SS - 2").I	dard Penetrati D. Split Spoon	Sample		% of dry weight Density, pcf	Water Enco	untered:	None				
			qu - Unco	nfined Compression, psf	At Completi	on: None					
AS - Auger sample Boring No. PT3 Pontiac Trai							iac Trail				



Boring No.: PT4 Pontiac Trail Client: City of Ann Arbor				Job No.: 51989	Project: Miscellaneous Geotechnical Services. Bundle One							
Туре о	of Rig: True	:k			Location: Ann Arbor, Michiga	n						
Drilling	g Method:	Solid Sten	n Augers		Drilled By: I. Mickle							
Ground	d Surface	Elevation:			Started: 12/21/2011							
					Completed: 12/21/2011							
Depth (ft)	Sample Type	N	Strata Change	Soil Classific	ation	w	d	qu				
-			.54	ASPHALT (6 1/2")								
-	LS	6 7	1.5		/	16.3	125	3300				
2.5-		5	3	Adium Compact Moist Brown Clay	vey Medium To Fine SAND							
- - 5.0	LS	6 7 7	5	Firm Moist Brown CLAY With Some	Silt & Trace Of Gravel	5.6	104					
-				Medium Compact MOist Brown Med	lium SAND							
7.5-				Bottom of Borehole at 5'								
-												
- 10.0												
-												
12.5												
-												
- 15.0 -												
-												
17.5												
]												
- 20.0							ĺ					
-		:										
22.5												
"N" - Stand	dard Penetratio	on Resistance	W + H2O	% of dry weight								
SS - 2").[LS - Secti	 Split Spoon Inder Sar 	Sample nple	d - Bulk D qu - Unco	Density, pcf nfined Compression, psf	Water Enco							
	ST - Shelby Tube Sample AS - Auger Sample		DP - Direc	a Fush		At Completion: None Boring No. PT4 Pontiac Trail						



Boring No.: PT5 Pontiac Trail Client: City of Ann Arbor			rail	Job No.: 51989	Project: Miscellaneous Geo One	echnical S	ervices, Bu	ndle		
Client:	City of An	n Arbor								
Туре о	of Rig: True	ck			Location: Ann Arbor, Michig	an				
	g Method:				Drilled By: I. Mickle					
Groun	d Surface	Elevation:	1		Started: 12/21/2011					
	7				Completed: 12/21/2011					
Depth (ft)	Sample Type	N	Strata Change	Soil Classifi	cation	w	d	qu		
	LS	3	.29	ASPHALT (3 1/2")		14.3	124	1400		
2.5-		4 5	3	Loose Moist Brown Well Graded S — Clay-FILL	and With Some Gravel &	_				
5.0-	LS	6 8 9	5	Medium Compact Moist Brown Fin Trace Of Gravel	e To Medium SAND With	5.2	101			
-				Bottom of Borehole at 5'						
7.5										
- - 10.0										
-										
12.5										
- 15.0 -										
- - 17.5										
20.0										
22.5-										
-										
"N" - Stoo	dard Ponotrati	on Rocistor								
"N" - Standard Penetration Resistance w - H2O, % of dry t SS - 2").D. Split Spoon Sample d - Bulk Density, p LS - Sectional Liner Sample qu - Unconfined Co				Density, pcf Infined Compression, psf		ountered:				
ST - Shelby Tube Sample DP - Direct F AS - Auger Sample		ct Push		tion: None						
					Boring No	. PT5 Pont	iac Trail			

.



Boring No.: PT6 Pontiac Trail			rail	Job No.: 51989	Project: Miscellaneous Geote One	chnical Se	ervices, Bu	ndle
Client: City of Ann Arbor								
	f Rig: True				Location: Ann Arbor, Michiga	'n		
		Solid Sten			Drilled By: 1. Mickle			
Ground	d Surface	Elevation:	:		Started: 12/7/2011			
	r	<u> </u>	l		Completed: 12/7/2011			
Depth (ft)	Sample Type	N	Strata Change	Soil Classi	ication	w	d	qu
-			.60	ASPHALT (7 1/4")				
	LS	9 9			/	6.5	106	
2.5-		6	3	Medium Compact Moist Brown W Gravel & Clay-FILL	ell Graded Sand With Some			
5.0-	LS	5 7 9	5	Medium Compact Moist Brown Me Gravel	edium SAND With Trace Of	4.6	112	
1				Bottom of Borehole at 5'				
- 7.5								
-								
10.0-								
-								
-								
12.5								
-								
15.0-								
-								
17.5-								
20.0-								
22.5-								
								ľ
-								
N - Stand	dard Penetrati	on Resistance		% of dry weight	Water Enco	untered:	None	
LS - Secti ST - Shell	 Split Spoon ional Liner Sar by Tube Samp 	mple	d - Bulk [Density, pcf Infined Compression, psf	At Completi			
AS - Auge	er Sample			Boring No.		ac Trail		



Boring No.: PT7 Pontiac Trail			rail	Job No.: 51989	Project: Miscellaneous Geotechnical Services, Bundle One			ndle
Client: City of Ann Arbor Type of Rig: Truck					Lengthens Are Arbert Michigan			
	g Method:		Augoro		Location: Ann Arbor, Michiga	ก		
	d Surface		-		Drilled By: I. Mickle			
Groun	u Sunace	cievation:			Started: 12/7/2011			
	1	<u> </u>	1		Completed: 12/7/2011			
Depth (ft)	Sample Type	N	Strata Change	Soil Classific	ation	w	d	qu
-			.58	ASPHALT (7")				
-	LS	9 9				7.6	122	
2.5-		9		Medium Compact Moist Brown Wel Gravel & Clay-FILL	I Graded Sand With Some			
-	LS	5	4	· · · ·	ç	3.9	125	
- 5.0-		6 6	5	Medium Compact Moist Brown Fine		3.8	125	
-				Gravel	SAND WITH Hace Of			
-				Bottom of Borehole at 5'				
7.5-								
-								
- 10.0-								
-								
12.5								
15.0-								
-								
-								
17.5								
-								
20.0-					¢			
-								
22.5								
SS - 2").	dard Penetrati D. Split Spoor Ional Liner Sa	Sample	d - Bulk I	% of dry weight Density, pcf onfined Compression, psf	Water Enco			
ST - She AS - Aug	lby Tube Sam	ble	DP - Dire	ct Push	At Complet	ion: None	:	r
					Boring No.	PT7 Pont	iac Trail	



Boring No.: PT8 Pontiac Trail Client: City of Ann Arbor	Job No.: 51989	Project: Miscellaneous Geotechnical Services, Bundle One				
Type of Rig: Truck		Location: Ann Arbor, Michiga	ก			
Drilling Method: Solid Stem Augers		Drilled By: I. Mickle				
Ground Surface Elevation:		Started: 12/7/2011				
		Completed: 12/7/2011				
Depth Sample N Strata (ft) Type N Change	Soil Classi	fication	w	d	qu	
54	ASPHALT (6 1/2")					
- LS 9 - 10			7.4	124		
2.5-6	Medium Compact Moist Brown Cl Gravel & Pebbles	ayey SAND With Some				
LS 6			10.5	130		
5.0 12 ⁵						
	Bottom of Borehole at 5'					
7.5-						
10.0				ľ		
12.5						
15.0						
17.5-						
20.0						
20.0						
22.5-						
LS - Sectional Liner Sample gu - Unco	% of dry weight Denslty, paf infined Compression, psf	Water Encountered: None				
ST - Shelby Tube Sample DP - Dire	erinprocesion, por	At Completion: None Boring No. PT8 Pontiac Trail			1	



Boring No.: PT9 Pontiac Trail		rail	Job No.: 51989 Project: Miscellaneous Geotechnical Services, Bun One				ndle	
Client: City of Ann Arbor								
Type of Rig: Truck					Location: Ann Arbor, Michiga	มา		
Drilling	g Method:	Solid Sten	n Augers		Drilled By: I. Mickle			
Groun	d Surface	Elevation:	:		Started: 12/7/2011			
					Completed: 12/7/2011			
Depth (ft)	Sample Type	N	Strata Change	Soil Classifi	cation	w	d	qu
-			.56	ASPHALT (6 3/4")		1		
-	LS	4 4		(ASPRALI (0 3/4)		12.5	109	
2.5		2/2"	3.4	Loose Moist Brown Clayey SAND With Some Gravel				
5.0				On Possible Utility At 2.2'. Moved Possible Utility At 3.4' Bottom of Borehole at 3.4'	3.5' North & Redrilled,			
7.5-								
-								
- 10.0								
-								
12.5-								
-								
15.0-								
17.5								
1					•			
20.0-								
-								
22.5-								
-								
"N" - Stan	dard Penetrati	ion Resistance	w - H2O,	% of dry weight	Water Enco	L		
LS - Sect	D. Split Spoor ional Liner Sa Iby Tube Sam	mple	d - Bulk I qu - Unco DP - Dire	Density, pcf onfined Compression, psf ct Push	At Complet			
ST - Shelby Tube Sample DP - Dire AS - Auger Sample		- 4 🗸		Boring No. PT9 Pontiac Trail				



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Boring No.: PT10 Pontiac Trail 51989			Trail	Job No.:	Project: Miscellaneous Geote One	chnical S	ervices, Bu	ndle
Client:	City of An	n Arbor						
Type of Rig: Truck Location: Ann Arbor, Michigan				n				
Drilling	g Method:	Solid Sten	n Augers		Drilled By: I. Mickle			
Ground	d Surface	Elevation:			Started: 12/7/2011			
				,	Completed: 12/7/2011	r	1	
Depth (ft)	Sampie Type	N	Strata Change	Soil Classifi	cation	w	d	qu
-			.56		/			
-	LS	7 5	2		/	4.9	128	
2.5		4	3	Medium Compact Moist Brown Cla	yey Medium To Fine SAND			
-	LS	7 8	-	Loose Moist Brown Clayey SAND V	Nith Trace Of Gravel	11.1	130	5600
5.0-		9	5	Stiff Moist Brown CLAY With Some				
1								
7.5-				Bottom of Borehole at 5'				
-								
10.0								
-								
12.5-					.*			
15.0-							-	
-								
17.5-								
-								
20.0-								
20.0								
-								
22.5-								
-								
	dard Penetration D. Split Spoon			% of dry weight Density, pdf		untered:	None	
LS - Sectl	onal Liner Sar by Tube Samp	nple	qu - Buik I qu - Unco DP - Dire	infined Compression, psf	At Completi	on: None		
					Boring No.	PT10 Por	ntiac Trail	



Boring No.: PT11 Pontiac Trail 51989			Frail	Job No.:	Project: Miscellaneous Geotechnical Services, Bundle One			
Client: City of Ann Arbor								
Туре о	f Rig: True	ĸ			Location: Ann Arbor, Michiga	n		
Drilling	g Method:	Solid Sten	n Augers		Drilled By: I. Mickle			
Ground	d Surface	Elevation:			Started: 12/7/2011			
					Completed: 12/7/2011			
Depth (ft)	Sample Type	N	Strata Change	Soil Classific	ation	w	d	qu
-		40	.35	ASPHALT (4 1/4")				
2.5-	LS	10 7	2.5			4.3	120	
2.5-		7	3.6	Medium Compact Moist Dark Brown SAND With Trace Of Gravel	n Clayey Medium To Fine			
-	LS	4/1"	0.0	Medium Compact Moist Brown Clay	vey SILT & Sand			
5.0				Bottom of Borehole at 5'				
-								
7.5								
-								
- 10.0-								
-								
- 12.5								
12.0***								
-								
15.0-								
-								
17.5-						ĺ		
20.0-								
-								
22.5-								
-								- - - -
"N" - Star	dard Penetratio	n Resistance		0/ of downsish				
SS - 2").[LS - Secti	D. Split Spoon Ional Liner Sar by Tube Samp	Sample nple	d - Bulk (qu - Unco	% of dry weight Density, pcf Infined Compression, psf	Water Enco			
AS - Auge	er Sample	12	DP - Direc	G FUSH	At Completi Boring No.			
					Boring No.	11170	nac itali	



Boring No.: PT12 Pontiac Trail 51989			Frail	Job No.:	Project: Miscellaneous Geotechnical Services, Bundle One				
Client: City of Ann Arbor									
Туре о	f Rig: Truc	:k			Location: Ann Arbor, Michiga	n			
Drilling	g Method:	Solid Sten	n Augers		Drilled By: I. Mickle				
Ground	d Surface	Elevation:			Started: 12/7/2011				
	F	I			Completed: 12/7/2011				
Depth (ft)	Sample Type	N	Strata Change	Soil Classifi	cation	w	d	qu	
-			.63 1.3	ASPHALT (7 1/2")					
-	LS	6 6	1.5		///	10.1	123		
2.5-		5	3	Moist Brown Gravelly Well Graded	Sand With Some Clay-FILL				
-	LS	2		Medium Compact Moist Brown Cla	yey SILT & Sand	15.8	115	1400	
- 5.0		3 3	5	Plastic Moist Variegated CLAY Wil	h Come Cittle Tranco Of				
-				Sand					
-				Bottom of Borehole at 5'					
7.5									
-									
10.0-									
-									
12.5-									
12.5-									
-									
15.0-									
1 L I									
 17.5—									
17.0									
					i				
20.0-									
-									
22.5-									
-									
"N" - Stan	dard Penetrat	ion Resistance	⊾ ≥ w-H2O	% of dry weight	Water Enco	untered	None		
SS - 2"). LS - Sect	D. Split Spoor tional Liner Sa	n Sample mple	d - Bulk I gu - Unco	Density, pcf onfined Compression, psf	At Complet				
ST - Shelby Tube Sample DP - Dire AS - Auger Sample			UP - Ulfe	GL FUSA	Boring No.				



Testing Engineers & Consultants, Inc.

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Boring No.: PT13 Pontiac Trail Job No.: Project: Miscellaneous Geotechnical Services, Bundle 51989 One Client: City of Ann Arbor Location: Ann Arbor, Michigan Type of Rig: Truck Drilled By: I. Mickle Drilling Method: Solid Stem Augers Started: 12/7/2011 Ground Surface Elevation: Completed: 12/7/2011 Depth Sample Strata Ν Soil Classification d (ft) Туре Change w qu :48 :83 ASPHALT (5 3/4") LS 10 10.6 103 9 2.5 11 Moist Brown Gravelly Well Graded Sand With Some Clay-FILL LS Medium Compact Moist Brown Fine SAND 4 3.6 105 6 5 5.0 6 Bottom of Borehole at 5' 7.5 10.0 12.5 15.0 17.5 20.0 22.5 "N" - Standard Penetration Resistance w - H2O, % of dry weight Water Encountered: None SS -2*).D. Split Spoon Sample LS - Sectional Liner Sample ST - Shelby Tube Sample AS - Auger Sample d - Bulk Density, pcf qu - Unconfined Compression, psf DP - Direct Push At Completion: None

Boring No. PT13 Pontiac Trail



Boring No.: PT14 Pontiac Trail 51989			Trail	Job No.:	Project: Miscellaneous Geotechnical Services, Bundle One				
Client:	City of An	n Arbor							
Туре о	of Rig: True	c k			Location: Ann Arbor, Michiga	n			
Drilling	g Method:	Solid Sten	n Augers		Drilled By: I. Mickle				
Groun	d Surface	Elevation:	:		Started: 12/7/2011				
			r		Completed: 12/7/2011				
Depth (ft)	Sample Type	N	Strata Change	Soil Classific	ation	w	d	qu	
-			.38 .83	ASPHALT (4 1/2")	/=				
-	LS	12 12			/	3.3	106		
2.5		11	3	Moist Brown Gravelly Well Graded S	Sand With Some Clay-FILL				
- 	LS	5 5 4	5	Medium Compact Moist Brown Fine	SAND With Trace Of	6.7	107		
-				Loose Moist Brown Fine SAND With	n Silt Layers				
7.5-				Bottom of Borehole at 5'					
10.0		-							
12.5-									
-									
15.0									
-									
17.5 - -									
20.0-									
20.0									
22.5-									
~ - ~									
]			
SS - 2"). LS - Sect	dard Penetrati D. Split Spoon Ional Liner Sa	Sample mple	w - H2O, d - Bulk [gu - Unco	% of dry weight Density, pcf pnfined Compression, psf	Water Enco				
ST - Shel AS - Auge	by Tube Samp	ble	DP - Direc	ct Push	At Completi				
					Boring No.	PT14 Por	ntiac Trail		