

TEST BORING LOCATION DIAGRAM

Not to Scale

Project Name: 2020 Muskegon Streets – Michigan Ave and Franklin Street
Location: City of Muskegon, Muskegon County, Michigan
Project Numbers: 2019.19861987 Date: November 20, 2020

Note: The background image is an aerial photograph of the site.



Project Name MCRC Franklin St.

 Project Number 2019.1986

 Date 10/30/2019 5:47

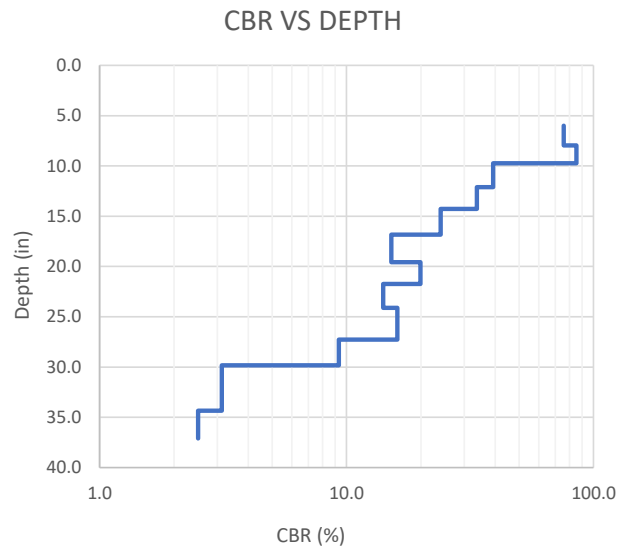
Client _____

 Boring Type Hand Auger

 Location See BLD

 Boring ID B-103
 DCP Starting Depth (in) 6

# of Blows	Cumulative Penetration (mm)	Hammer Type	Soil Type	CBR %
0	330	1	GP	
15	380	1	GP	75.8
15	425	1	GP	85.3
10	485	1	GP	39.3
8	540	1	GP	33.7
7	605	1	GP	24.1
5	675	1	GP	15.2
5	730	1	GP	19.9
4	790	1	SM	14.1
3	830	1	SM	16.0
3	870	1	SM	16.0
3	935	1	SM	9.3
2	1050	1	SP	3.1
1	1120	1	SP	2.5



From (in)	To (in)	Thickness (in)	Description	Classification
0	1	1	ASPHALT WEARING - Intact/Voids	
1	1.75	0.75	ASPHALT LEVELING - Intact/Voids	
1.75	6	4.25	ASPHALT LEVELING - Intact/Voids	
6	22	16	AGGREGATE BASE - GRAVEL with silty sand, brown	GP
22	34	12	Fine-to-Medium SILTY SAND, brown	SM
34	40	6	Fine-to-Medium SAND with organics, with wood, brown/black	SP
40	70	30	Fine-to-Coarse SILTY SAND, occasional gravel, brown	SM
			End of Test Hole at 70"	

Groundwater encountered at 66"

Project Name Michigan Avenue

 Project Number 2019.1987

 Date 11/20/2020 15:02

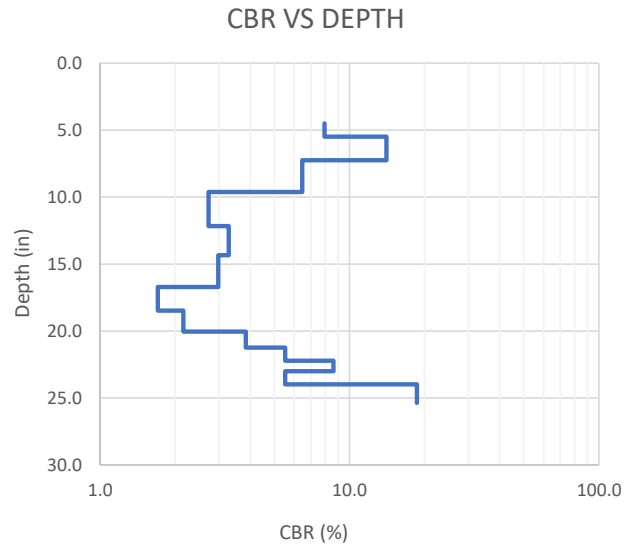
Client _____

 Boring Type Hand Aug

 Location See BLD

 Boring ID B-1
 DCP Starting Depth (in) 4.5

# of Blows	Cumulative Penetration (mm)	Hammer Type	Soil Type	CBR %
0	475	1	GP	
1	500	1	GP	7.9
1	515	1	GP	14.1
2	545	1	GP	14.1
2	605	1	GP	6.5
1	670	1	GP	2.7
1	725	1	SP	3.3
1	785	1	SP	3.0
1	830	1	CL	1.7
1	870	1	CL	2.2
1	900	1	CL	3.8
1	925	1	CL	5.5
1	945	1	CL	8.6
1	970	1	CL	5.5
3	1005	1	CL	18.6



From (in)	To (in)	Thickness (in)	Description	Classification
0	1	1	ASPHALT WEARING - Cracked/Voids	
1	2.5	1.5	ASPHALT LEVELING - Cracked/Voids	
2.5	4.25	1.75	ASPHALT BASE - Cracked/Voids	
4.25	13	8.75	AGGREGATE BASE - Crushed Limestone, grey/brown	GP
13	17	4	Fine-to-Medium SAND, brown	SP
17	41	24	LEAN CLAY, brown/grey	CL
41	58.5	17.5	SILT, brown/grey	MS
			End of Test Hole at 58.5"	

No groundwater encountered.

Project Name MCRC Michigan Ave.

 Project Number 2019.1987

 Date 10/30/2019 5:52

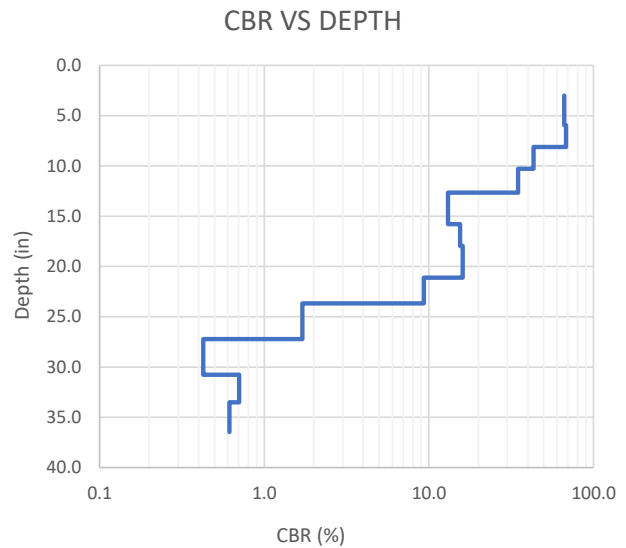
Client _____

 Boring Type Hand Auger

 Location See BLD

 Boring ID B-104
 DCP Starting Depth (in) 3

# of Blows	Cumulative Penetration (mm)	Hammer Type	Soil Type	CBR %
0	255	1	GP	
20	330	1	GP	66.4
15	385	1	GP	68.1
10	440	1	SM	43.3
9	500	1	SM	34.9
5	580	1	SM	13.1
4	635	1	SM	15.5
3	675	1	SM	16.0
3	715	1	SM	16.0
3	780	1	SM	9.3
2	870	1	CL	1.7
1	960	1	CL	0.4
1	1030	1	CL	0.7
1	1105	1	CL	0.6



From (in)	To (in)	Thickness (in)	Description	Classification
0	1	1	ASPHALT WEARING - Intact/Voids	
1	3	2	ASPHALT LEVELING - Intact/Voids	
3	9.75	6.75	AGGREGATE BASE, CRUSHED LIMESTONE with silty sand, grey	GP
9.75	24	14.25	Fine-to-Coarse SILTY SAND, occasional gravel, trace clay, brown	SM
24	46	22	LEAN CLAY with silty sand, brown	CL
46	50	4	Fine-to-Medium SILTY SAND, occasional clay and gravel, brown	SM
50	85	35	Fine-to-Medium SILTY SAND, orange/brown	SM
			End of Test Hole at 85"	

Groundwater encountered at 65"

Project Name MCRC Michigan Ave.

 Project Number 2019.1987

 Date 10/30/2019 5:53

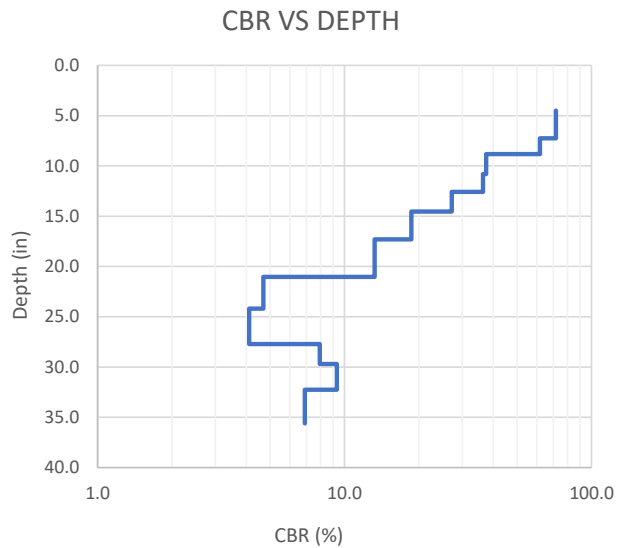
Client _____

 Boring Type Hand Auger

 Location See BLD

 Boring ID B-105
 DCP Starting Depth (in) 4.5

# of Blows	Cumulative Penetration (mm)	Hammer Type	Soil Type	CBR %
0	300	1	GP	
20	370	1	GP	71.8
10	410	1	GP	61.8
8	460	1	GP	37.5
7	505	1	GP	36.3
6	555	1	GP	27.2
6	625	1	GP	18.6
6	720	1	SM	13.2
2	800	1	SM	4.7
2	890	1	SM	4.1
2	940	1	SM	7.9
3	1005	1	SM	9.3
3	1090	1	SM	6.9



From (in)	To (in)	Thickness (in)	Description	Classification
0	1.75	1.75	ASPHALT WEARING - Intact/Voids	
1.75	4.5	2.75	ASPHALT LEVELING - Intact/Voids	
4.5	10.25	5.75	AGGREGATE BASE - CRUSHED LIMESTONE with silty sand, grey	GP
10.25	20.5	10.25	GRAVEL, occasional crushed limestone, silty sand, brown	GP
20.5	36	15.5	Fine-to-Coarse SILTY SAND, occasional clay and gravel, brown	SM
36	113	77	Fine-to-Medium SILTY SAND, trace organics, brown	SM
			End of Test Hole at 113"	

No groundwater encountered.