SC-1

Testing Service Corporation

STRUCTURE BORING LOG

Page 1 of 2
Date Started 5/8/07
Date Completed 5/8/07

ROUTE FAU 5077 DESCRIPTION Morgan Street Bridge, Rockford
SECT. 99-00493-00-BR STRUCT. NO. 101-6132 DRILLED BY TSC/L-68,462
COUNTY Winnebago LOCATION East of West Pier S. 26NW 1/4 , TWP. 44N , RNG. 1E

Boring No. SC-1
Station 48+72
Offset 6.00ft LT
Surface Elev. 727.60 ft

Surface Water Elev. 33.7'
Groundwater Elev.:
when drilling Wash Drill
at Completion Wash Drill
after Hrs.

DEPTH	BLOWS	Qu tsf	W %
727.10 6.75" PC Bridge Deck			
Air below bridge deck. Casing installed in streambed.			
694.40 Water in River			
690.60 Diedrich D-120 Truck Rig (#315) CME Automatic Hammer Rotary Wash Drill			
689.10 Dense brown and black SAND and GRAVEL with Cobbles and Boulders, saturated A-1-a	10 25 20		23.6
	10 10 7		13.1
Med. dense gray and black Gravel with Sand, trace concrete and cinders, saturated A-1-a	9 8 10		9.7
684.60 Med. dense gray Gravel with Sand, saturated A-1-a	6 6 9		9.5
682.10 LL/ PL/ PI = 41/15/26	9 10 12	B 4.1 15%	20.5
Hard gray CLAY, occasional silt seams, moist A-7-6 (27)	11 14 16	B 5.3 15%	23.5
677.60			

SPT. (N) = Sum of last two blow values in sample. (Qu) B=Bulge S=Shear P=Penetration Test
Stations, Depths, Offset, and Elevations are in Feet

SB-1

Testing Service Corporation

STRUCTURE BORING LOG

Page 1 of 3
Date Started 5/14/07
Date Completed 5/17/07

ROUTE FAU 5077 DESCRIPTION Morgan Street Bridge, Rockford
SECT. 99-00493-00-BR STRUCT. NO. 101-6132 DRILLED BY TSC/L-68,462
COUNTY Winnebago LOCATION West Abutment (center) S. 26NW 1/4 , TWP. 44N , RNG. 1E

Boring No. SB-1
Station 46+83
Offset 0.00ft RT
Surface Elev. 721.90 ft

Surface Water Elev.
Groundwater Elev.:
when drilling 693.9
at Completion Wash Drill
after Hrs.

DEPTH	BLOWS	Qu tsf	W %
721.29 7.25" PC Bridge Deck			
Air below bridge deck. Casing extended into soil below.			
Diedrich D-120 Truck Rig (#315) CME Automatic Hammer Rotary Wash Drill			
701.60 FILL - Black SANDY LOAM with some cinders, moist A-2-4	3 3 3		12.2
699.90 FILL - Brn & blk SAND & GRAVEL, occasional Cobbles, tr. organic, moist A-1-a	4 4 12		8.6

DEPTH	BLOWS	Qu tsf	W %
FILL - Black & brown SAND & GRAVEL, occasional Cobbles, trace organic, moist A-1-a	7 7 5		10.7
693.90 Black CLAY LOAM, trace organic, very moist A-6 (10)	6 4 5	P 0.25	36.0
LL/ PL/ PI = 36/16/22 691.40 Loose brown and gray SAND and GRAVEL, saturated A-1	4 3 3		12.5
688.90	9 9 8		8.1
Med. dense brown and gray SAND and GRAVEL, occasional Cobbles, saturated A-1-a	18 16 13		8.8
681.40	10 5 6		9.5
Med. dense brown fine to medium SAND, trace silt, saturated A-3	14 12 15		17.4
678.90 Med. dense brown silty SAND, saturated A-1-b	9 11 12		16.8
676.40 Med. dense brown and gray SAND and GRAVEL, saturated A-1-a	9 9 11		13.1
673.90 Dense brown fine to medium SAND, little gravel, saturated A-1-b	10 14 20		15.9
671.90			

SPT. (N) = Sum of last two blow values in sample. (Qu) B=Bulge S=Shear P=Penetration Test
Stations, Depths, Offset, and Elevations are in Feet

SB-1

Testing Service Corporation

STRUCTURE BORING LOG

Page 3 of 3
Date Started 5/16/07
Date Completed 5/17/07

STRUCTURE NO. 101-6132
ROUTE FAU 5077
SECTION 99-00493-00-BR
COUNTY Winnebago

Boring No. SB-1
Station 46+83
Offset 0.00ft RT
Elevation 621.90 ft

DEPTH	BLOWS	Qu tsf	W %
Stiff to very stiff gray CLAY and CLAY LOAM, trace gravel, moist A-6 (Qp = 3.0 tsf)	4 6 8	B 1.7 15%	23.8
614.90 Med. dense gray fine to medium SAND, trace gravel, saturated A-1-b	11 11 12		15.7
611.90 Dense brown and gray clayey SAND and GRAVEL, occasional Cobbles, saturated A-1-a	23 24 23		11.2
603.90 Very dense brown silty SAND and GRAVEL with cobbles, wet A-1-a	100/2"		12.3
599.90 Very dense yellow-brown SILTY LOAM with gravel & cobbles, moist A-4/A-6	100/2"	P 4.5	12.6
596.90			

DEPTH	BLOWS	Qu tsf	W %
Elevation 596.90 ft			
Diedrich D-120 Truck Rig (#315) CME Automatic Hammer Rotary Wash Drill			
End of Boring at 125'			

SPT. (N) = Sum of last two blow values in sample. (Qu) B=Bulge S=Shear P=Penetration Test
Stations, Depths, Offset, and Elevations are in Feet

SB-2

Testing Service Corporation

STRUCTURE BORING LOG

Page 2 of 3
Date Started 5/10/07
Date Completed 5/11/07

STRUCTURE NO. 101-6132
ROUTE FAU 5077
SECTION 99-00493-00-BR
COUNTY Winnebago

Boring No. SB-2
Station 47+22
Offset 25.00ft LT
Elevation 672.90 ft

DEPTH	BLOWS	Qu tsf	W %
Med. dense to dense brownish-gray fine to medium SAND, trace gravel, saturated A-3	12 13 16		18.5
645.90 Very stiff gray CLAY, trace gravel, moist A-6	12 15 16		20.7
643.90 Med. dense gray fine to medium SAND, trace silt, saturated A-1-b	7 5 6		17.7
640.90 Med. dense gray fine to medium SAND, trace gravel, saturated A-3	10 11 11		19.6
630.90 Very stiff gray CLAY, trace gravel, moist A-6	10 13 15		19.7
625.90 Stiff gray CLAY LOAM, moist A-6	5 7 9	B 1.7 15%	13.3
622.90			

DEPTH	BLOWS	Qu tsf	W %
Elevation 647.90 ft			
Stiff gray CLAY LOAM, moist A-6			
640.90 Very stiff gray CLAY, trace gravel, moist A-6	5 7 9	B 2.2 15%	13.7
Stiff to very stiff gray CLAY, trace to little gravel, moist A-6	8 8 13	B 1.9 15%	14.1
(disturbed sample, pound on large gravel)	9 12 15	P 0.25	25.2
Very stiff gray CLAY, trace gravel, moist A-6 (Qp = 3.5 tsf)	11 14	B 2.5 15%	16.3
625.90 Stiff to very stiff gray CLAY, little gravel, moist A-6 (Qp = 3.5 tsf)	10 15 20	B 1.4 15%	18.9
622.90			

SPT. (N) = Sum of last two blow values in sample. (Qu) B=Bulge S=Shear P=Penetration Test
Stations, Depths, Offset, and Elevations are in Feet

SC-1

Testing Service Corporation

STRUCTURE BORING LOG

Page 2 of 2
Date Started 5/8/07
Date Completed 5/8/07

STRUCTURE NO. 101-6132
ROUTE FAU 5077
SECTION 99-00493-00-BR
COUNTY Winnebago

Boring No. SC-1
Station 48+72
Offset 6.00ft LT
Elevation 677.60 ft

DEPTH	BLOWS	Qu tsf	W %
Hard to very stiff gray CLAY, trace gravel, moist A-6	9 11 20	B 6.5 15%	19.2
673.10 Dense brown fine to medium SAND, saturated A-1-b	5 10 15	B 3.6 15%	23.3 22.7
670.60 Dense to very dense gray SAND and GRAVEL, occasional Cobbles, saturated A-1-a	13 16 21		14.3 9.0
667.10 Dense gray SAND, some gravel, saturated A-1-b	20 28 33		9.3
664.60 Dense gray SAND and GRAVEL, occasional Cobbles, saturated A-1-a	15 17 17		9.0
662.10 Med. dense gray fine to medium SAND, occasional silt seams, trace to little gravel, saturated A-1-b	15 17 16		6.3
657.60 End of Boring at 70'	12 12 12		11.8
Diedrich D-120 Truck Rig (#315) CME Automatic Hammer Rotary Wash Drill	7 7 7		16.9

SPT. (N) = Sum of last two blow values in sample. (Qu) B=Bulge S=Shear P=Penetration Test
Stations, Depths, Offset, and Elevations are in Feet

SB-1

Testing Service Corporation

STRUCTURE BORING LOG

Page 2 of 3
Date Started 5/16/07
Date Completed 5/17/07

STRUCTURE NO. 101-6132
ROUTE FAU 5077
SECTION 99-00493-00-BR
COUNTY Winnebago

Boring No. SB-1
Station 46+83
Offset 0.00ft RT
Elevation 671.90 ft

DEPTH	BLOWS	Qu tsf	W %
Med. dense brown fine to medium SAND, trace gravel, saturated A-1-b	8 10 13		23.0
668.90 Med. dense gray fine to medium SAND, trace gravel, saturated A-1-b	7 10 11		18.4
664.90 Very stiff gray CLAY LOAM, little gravel, moist A-4/A-6	3 4 6	B 2.1 15%	11.4
659.90 Stiff gray CLAY LOAM, trace to little gravel, moist A-4/A-6	5 6 6	B 1.3 15%	14.1
	6 6 9	B 1.7 15%	20.6
646.90	3 5 9	B 1.3 15%	12.1

DEPTH	BLOWS	Qu tsf	W %
Elevation 646.60 ft			
Stiff to very stiff gray CLAY LOAM, little gravel, moist A-6	5 6 12		20.4
(disturbed sample - pound on large gravel)			
639.90 Very stiff gray CLAY LOAM, trace gravel, moist A-6	5 6 8	B 2.0 15%	13.7
634.90 Very stiff gray CLAY and CLAY LOAM, occasional sand seams, trace gravel, moist A-6	5 8 10	B 2.0 15%	14.9
629.90 Very stiff gray CLAY, trace gravel, moist A-6	8 11 16	B 3.5 15%	22.4
624.90 Stiff to very stiff gray CLAY LOAM, trace gravel, moist A-6 (Qp = 3.0 tsf)	9 7 11	B 1.7 15%	13.5
621.90			

SPT. (N) = Sum of last two blow values in sample. (Qu) B=Bulge S=Shear P=Penetration Test
Stations, Depths, Offset, and Elevations are in Feet

SB-2

Testing Service Corporation

STRUCTURE BORING LOG

Page 1 of 3
Date Started 5/10/07
Date Completed 5/11/07

ROUTE FAU 5077 DESCRIPTION Morgan Street Bridge, Rockford
SECT. 99-00493-00-BR STRUCT. NO. 101-6132 DRILLED BY TSC/L-68,482
COUNTY Winnebago LOCATION North End West Abutment S. 26NW 1/4 , TWP. 44N , RNG. 1E

Boring No. SB-2
Station 47+22
Offset 25.00ft LT
Surface Elev. 722.90 ft

Surface Water Elev.
Groundwater Elev.:
when drilling 694.4
at Completion Wash Drill
after Hrs.

DEPTH	BLOWS	Qu tsf	W %
722.20 8" PC Bridge Deck			
Air below bridge deck, Casing extended into soil below.			
Diedrich D-120 Truck Rig (#315) CME Automatic Hammer Rotary Wash Drill			
701.40 FILL - Brn SAND, lt gravel, tr cinders, damp	4 4 5		6.8
700.40 FILL - Blk & gr cl Sand, Cinders & Gravel, very moist	4 5 4		27.9
699.40 FILL - Brn fine SAND, damp	3 3 4		7.1
697.90			

DEPTH	BLOWS	Qu tsf	W %
FILL - Brown SAND and GRAVEL, occasional Cobbles, trace glass, damp A-1	3 4 3		6.4
694.40 FILL - Grey SAND and GRAVEL, occasional Cobbles, trace organic, saturated A-1	3 3 5		13.7
692.40 FILL - Brown SANDY LOAM, trace organic, trace cinders, very moist A-2-4	3 3 2	P	<0.25 23.3
689.90 Med. dense brown and gray SAND and GRAVEL, saturated A-1-a	5 10 12		8.9
684.90 Very stiff reddish-gray CLAY, moist A-6/A-7-6	5 8 7		9.8
682.40 Hard gray CLAY, trace gravel, moist A-6/A-7-6	6 9 11	B 3.3 15%	24.6
677.40 Very stiff brown CLAY, moist A-6/A-7-6	5 11 13	B 4.2 15%	22.7
674.90 Dense brown fine to medium SAND, trace gravel, saturated A-3	6 11 15	B 5.1 15%	21.9
672.50	5 10 15	B 2.7 15%	25.3
	12 16 22		18.3

SPT. (N) = Sum of last two blow values in sample. (Qu) B=Bulge S=Shear P=Penetration Test
Stations, Depths, Offset, and Elevations are in Feet

SB-2

Testing Service Corporation

STRUCTURE BORING LOG

Page 3 of 3
Date Started 5/10/07
Date Completed 5/11/07

STRUCTURE NO. 101-6132
ROUTE FAU 5077
SECTION 99-00493-00-BR
COUNTY Winnebago

Boring No. SB-2
Station 47+22
Offset 25.00ft LT
Elevation 622.90 ft

DEPTH	BLOWS	Qu tsf	W %
Very stiff gray CLAY, trace gravel, moist A-6	7 8 14	B 2.1 15%	15.6
615.90 Stiff gray SILTY LOAM, very moist A-4/A-6	3 4 8	B 1.2 15%	24.0
612.90 End of Boring at 110'			
Diedrich D-120 Truck Rig (#315) CME Automatic Hammer Rotary Wash Drill			

SPT. (N) = Sum of last two blow values in sample. (Qu) B=Bulge S=Shear P=Penetration Test
Stations, Depths, Offset, and Elevations are in Feet

L:\ROCKFORD\99260862\Design\CADD\Sheets\S_77_Boring Logs 1.dgn

CMT ©Copyright CMT, Inc.
CRAWFORD, MURPHY & TILLY, INC.
CONSULTING ENGINEERS
License No. 184-000613

HNTB

DESIGNED	PA, JDJ, BPD, CJW	REVISED	-
DRAWN	GLD	REVISED	-
CHECKED	RJK	REVISED	-
DATE	02/04/2011	REVISED	-

CITY OF ROCKFORD
MORGAN STREET BRIDGE

BORING LOGS - I
STRUCTURE NO. 101-6108

SCALE: | SHEET NO. 77 OF 79 SHEETS | STA. 47+00.74 TO STA. 52+63.50

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
5077	99-00493-00-BR	WINNEBAGO	253	203
		CONTRACT NO. 85529		
FED. ROAD DIST. NO. 2	ILLINOIS	FED. AID PROJECT BRM-5099(65)		