

GEOTECHNICAL ENGINEERING REPORT

INTERSTATE HIGHWAY 43
MILWAUKEE COUNTY LINE TO STATE HIGHWAY 60
OZAUKEE COUNTY, WISCONSIN
PROJECT ID: 1229-04-01

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INTERSTATE HIGHWAY 43
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EXECUTIVE SUMMARY

- Select materials in subgrade are recommended to be incorporated into the project.
- EBS will be needed for widening at the following locations.
 - SB - STA 1440+00 to STA 1448+00 LT
 - SB – STA 1457+00 to STA 1459+00 LT
 - NB – STA 1456+00 to STA 1462+00 RT
 - SB – STA 1473+00 to STA 1477+00 LT
 - NB – STA 1472+00 to STA 1476+00 RT
 - NB – STA 1473+00 to STA 1486+00 RT
 - SB – STA 1585+00 to STA 1605+50 LT
 - NB – STA 1587+00 to STA 1601+00 Median
 - NB – STA 1588+00 to STA 1596+00 RT
 - NB – STA 1636+50 to STA 1637+50 Median
 - SB – STA 1658+50 to STA 1667+50 LT
 - SB – STA 1597+50 to STA 1700+00 LT
 - NB – STA 1746+50 to STA 1748+75 RT
- Actual volumes of EBS will be a function of the EBS backfill option chosen. EBS areas listed should be considered full width for the lengths provided.
- It is recommended that 4000 lineal feet of undistributed EBS be added, in addition to the areas listed above, for the unstable soils that are expected to be encountered within the pavement widening areas.
- Select materials/EBS backfill areas can consist of the following:
 1. 16 inches of breaker run/select crushed material
 2. 20 inches of pit run sand and gravel
 3. 24 inches of Grade 1 granular Backfill
 4. 30 inches of Grade 2 granular Backfill
- Expansion factors are provided on Page 23 of this report.

- Soils removed as EBS are recommended to be wasted offsite and not reused as fill.
- Marsh excavation is not expected to be needed on this project. However, areas of deeper topsoil will be encountered and should be removed prior to placement of new embankment materials.
- An average topsoil depth of 12 inches should be used for estimating topsoil removal quantities.
- The following soil parameters are recommended to be used for pavement design

Design Group Index: 12

Frost Index: F-3

Soil Support Value: 4.7*

Modulus of Subgrade Reaction: 375* pounds per cubic inch

*Based on Select Materials used in subgrade

INTRODUCTION

A Geotechnical Engineering Analysis has been performed for the proposed project to provide design parameters. Pavement design parameters were provided in accordance with WisDOT *Geotechnical Bulletin No. 1*. Recommendations regarding construction issues are also addressed in this report. We should be contacted if the scope of the project changes to see if revisions to the recommendations contained herein are needed.

SITE AND PROJECT DESCRIPTION

It is understood that the proposed project is to consist of the reconstruction of Interstate Highway (I) 43 from the Milwaukee County Line to State Highway 60 in Ozaukee County, Wisconsin. Presently I-43 consists of a 4 lane divided highway with urban and rural cross sections. According to the project plans, dated February 2013, the travel lanes are 12 feet wide. Paved shoulders adjacent to the lanes vary from 0 to 10 feet wide. The pavement section consists of hot mix asphalt (HMA) over Portland Cement Concrete (PCC) over a crushed aggregate base course. The existing pavement is generally in fair condition. It is understood that the roadway portion of the project will generally consist of expanding the highway to 6 lanes and reconstructing/reconfiguring the interchanges, and their associated ramps and side roads, which lie within the project limits.

SUBSURFACE EXPLORATION

A total of 311 test borings were drilled between July 2014 and January of 2015 as part of the exploration and analysis. The test borings were drilled with conventional truck mounted drilling equipment. An all terrain drill rig was used to drill test borings that were off of the existing roadway in difficult to reach locations. Soil samples were collected from each test boring and were returned to the Wisconsin Department of Transportation (WisDOT) Southeast Region Soils Unit laboratory for classification purposes. The test borings were generally drilled to depths of 5 to 25 feet below the existing ground surface.

A boring location plan is also included in Appendix A. The test boring logs are included in Appendix B.

Subsoil Conditions

The United States Department of Agriculture, Soil Conservation Service, *Soil Survey of Ozaukee County, Wisconsin*, dated September 1970 was reviewed. The United States Geologic Survey *Topographic Map* of the region was also reviewed.

According to the *Soil Survey* the predominant soil types present at the project location generally consist of Kewaunee and Manawa soils. It is apparent that grading activities have taken place in the vicinity of the roadway and the actual soil types present may be greatly different than those listed in the *Soil Survey*.

The ***Kewaunee soils*** are well drained or moderately well drained soils that consist of a thin layer of silt loam over a clay loam subsoil that is underlain by calcareous silty clay till. These soils are on glacial ground moraines east of the Milwaukee River in the northern part of Milwaukee County. They occupy areas of irregular shape on convex side slopes.

In a typical profile, the surface layer is silt loam and is about 8 inches thick. The subsurface layer is silt loam that is about 2 inches thick. The subsoil is about 14 inches thick. The upper part of the subsoil is clay. The lower part is silty clay. The substratum is silty clay glacial till that is strongly calcareous.

The Kewaunee soils are slowly permeable and have high available water capacity. In some places ground water is less than 5 feet below the surface in wet periods. The Kewaunee soils are considered an unsuitable source of sand and gravel. They have moderate to very severe limitations for roadway construction and as a subgrade material.

The ***Manawa soils*** consist of somewhat poorly drained, silty soils that have a silty clay subsoil over calcareous silty clay glacial till. These soils occupy the concave side slopes of drainage ways and slight depressions. They lie east of the Milwaukee River in the northern part of Milwaukee County.

In a typical profile, the surface layer is silt loam about 9 inches thick. The subsurface layer is mottled silty clay loam about 3 inches thick. The subsoil is about 18 inches thick. The upper part of the subsoil is mottled silty clay. The lower part is strongly calcareous, mottled silty clay. The substratum is strongly calcareous, mottled silty clay glacial till containing a few pebbles and a few segregations of soft lime.

The Manawa soils are slowly permeable and have high available water capacity. Ground water is less than 3 feet below the surface in wet periods. Manawa soils are considered an unsuitable source for sand and gravel. They have severe to very severe limitations for roadway construction and as a subgrade material.

According to the *Soil Survey* Casco Loam, Fabius Loam, Fox Loam, Lorenzo Loam, Mussey Loam, Muskego Muck and Sisson Loam soils are also present along the proposed project but to a lesser extent, generally <1% of the total project area.

Test Borings

The following paragraphs are a brief description of the soil conditions encountered in the test borings. A more detailed description of the soil conditions can be found on the test boring logs found in Appendix B.

The test borings have been separated into the following sections: B-XX indicate borings performed within the existing IH-43 pavement and shoulders, SR-XX indicate borings performed along the side road alignments and MP-XX indicate borings performed within the delineated wetlands along the corridor.

The following test borings were drilled in the existing pavement or shoulders along I-43. The pavement thickness at the test boring locations is shown in the following table:

Pavement Thickness ¹						
Test Boring No.	Location	STA	Offset	HMA (inches)	PCC (inches)	Base Course (inches)
B29	I-43 NB	1319+00	40' Rt	4	9	4
B30	I-43 SB	1329+00	40' Lt	3.5	6.5	6
B31	I-43 NB	1339+00	40' Rt	4	8	5
B32	I-43 SB	1340+00	40' Lt	3.5	8	6

B33	I-43 NB	1342+00	40' Rt	3.5	7.5	5
B34	I-43 SB	1345+00	40' Lt	6.5	0	9
B35	I-43 SB	1349+00	40' Lt	7	0	8
B36	I-43 SB	1350+00	40' Lt	7	0	5
B37	I-43 NB	1390+00	40' Rt	4.5	8	5.5
B40	I-43 SB	1400+00	25' Lt	5	10	0
B41	I-43 NB	1420+00	25' Rt	5.5	8.5	0
B43	I-43 NB	1450+00	10' Lt	4.5	9	0
B46	I-43 SB	1460+00	15' Lt	0	0	1
B47	I-43 NB	1490+00	15' Rt	3.5	10.5	0
B50	I-43 SB	1500+00	15' Lt	4	9.5	0
B51	I-43 NB	1530+00	15' Rt	4.5	10	0
B54	I-43 SB	1540+00	20' Lt	5	10	0
B55	I-43 NB	1570+00	15' Rt	5.5	9.5	0
B58	I-43 SB	1580+00	15' Lt	4.5	9.5	0
B59	I-43 NB	1610+00	15' Rt	4.5	9	0
B62	I-43 SB	1620+00	20' Lt	4	9.5	0
B63	I-43 NB	1650+00	15' Rt	4	9	0
B66	I-43 SB	1660+00	20' Lt	4	9	0
B67	I-43 NB	1690+00	51' Rt	4	9	0
B70	I-43 SB	1700+00	15' Lt	4	9	0
B71	I-43 NB	1730+00	15' Rt	3.5	10	0
B74	I-43 SB	1740+00	20' Lt	4	9.5	4.5
B75	I-43 NB	1770+00	15' Rt	4.5	10	0
B78	I-43 SB	1770+00	15' Lt	4	9	0
1 – Pavement thickness was determined in the field during drilling.						

The following test borings were drilled in unpaved areas along IH-43. The topsoil thickness at the test boring locations is shown in the following table:

Topsoil Thickness ¹				
Test Boring No.	Location	STA	Offset	Topsoil (inches)
B38	I-43 SB	1370+00	0	2
B39	I-43 NB	1380+00	0	4
B42	I-43 SB	1410+11	20' Lt	12
B44	I-43 SB	1430+00	0	4
B45	I-43 NB	1440+00	0	6
B48	I-43 SB	1470+00	0	3
B49	I-43 NB	1480+00	0	6
B52	I-43 SB	1510+00	0	2

B53	I-43 NB	1520	+00	0	3
B56	I-43 SB	1550	+00	0	3
B57	I-43 NB	1560	+00	0	2
B60	I-43 SB	1590	+00	0	2
B61	I-43 NB	1600	+00	5' Lt	2
B64	I-43 SB	1630	+00	0	3
B65	I-43 NB	1640	+00	5' Lt	2
B68	I-43 SB	1670	+00	0	3
B69	I-43 NB	1680	+00	5' Lt	2
B72	I-43 SB	1710	+00	0	3
B73	I-43 NB	1720	+00	10' Lt	2
B76	I-43 SB	1750	+00	6' Rt	2
B77	I-43 NB	1760	+00	10' Lt	3

1 – Topsoil thickness determined at the time of drilling by observation of open boreholes.

Fill and possible soils were encountered in Test Boring Nos. B-38, 40, 43, 49, 50, 55, 58, 64, 65, 66, 67, 68, 69, 70, 71, 75 and 78 to depths of approximately 2.5 to 5 feet below grade. The fill and possible fill at locations B-38, 41 and 47 extended to approximately 5 to 10 feet below existing ground surface, the maximum depths explored at these locations.

The fill and possible fill soils generally consisted of silty clay, medium to coarse sand, clayey silt, sand and crushed concrete. The underlying apparent natural soils, where encountered, generally consisted of silty clay, medium to coarse sand, fine sandy clay, silty clay to clayey silt, clayey silt, silty fine sand and fine sandy silt soils to depths of at least 10 feet below grade, the maximum explored.

Side Roads and Ramps

The following test borings were drilled along intersecting roads and associated entrance and exit ramps. The pavement and topsoil thickness at the test boring locations are shown in the following tables:

Mequon Rd.

Pavement Thickness¹						
Test Boring No.	Location	STA	Offset	HMA (inches)	PCC (inches)	Base Course (inches)
SR66	Mequon Rd	24+00	35' Lt	3	6	6
SR67	Mequon Rd	26+50	9' Rt	4	7.5	6
SR70	Mequon Rd	40+00	10' Lt	5.5 + 4	0	3

1 – Pavement thickness was determined in the field during drilling.

Topsoil Thickness ¹				
Test Boring No.	Location	STA	Offset	Topsoil (inches)
SR65	Mequon EB	23+00	35' Rt	12.5
SR68	Mequon WB	30+00	40' Lt	12
SR69	Mequon EB	39+00	15' Rt	16
SR71	Ramp A	1419+00	0	12
SR72	Ramp A	1425+00	0	9
SR73	Ramp B	1405+00	0	4
SR74	Ramp B	1416+00	0	10
SR75	Ramp C	1415+00	0	24
SR76	Ramp C	1416+50	50' Lt	15
SR77	Ramp D	1420+00	0	8

1 – Topsoil thickness determined at the time of drilling by observation of open boreholes.

Fill and possible fill was encountered in Test Boring Nos. SR-66, 68, 70, 72, 73, 75 and 76 to depths of approximately 3 to 9 feet below existing grade. The fill and possible fill generally consisted of silty clay with varying amounts of sand and gravel. Test boring SR-70 indicated silty sand and gravel to a depth of 7 feet underlain by approximately 1-foot of buried topsoil. The underlying apparent natural soils in the test borings generally consisted of silty clay, silty clay to clayey silt, silty sand, clayey silt, medium to coarse silty sand and sandy clay to a depth of at least 20 feet below grade, the maximum depth explored.

Highland Drive

Pavement Thickness ¹						
Test Boring No.	Location	STA	Offset	HMA (inches)	PCC (inches)	Base Course (inches)
SR79	Highland Rd	17+03	5' Rt	0	0	4
SR81	Highland Rd	27+00	10' Rt	0	0	10

1 – Pavement thickness was determined in the field during drilling.

Topsoil Thickness ¹				
Test Boring No.	Location	STA	Offset	Topsoil (inches)
SR78	Highland WB	11+50	20' Lt	10
SR80	Highland WB	25+00	12' Lt	12
SR83	Ramp A	1530+00	0	18
SR84	Ramp A	1536+00	0	6
SR85	Ramp B	1510+00	6.5' Rt	7
SR87	Ramp B	1523+33	0	5.5
SR88	Ramp C	1514+00	15' Rt	11
SR90	Ramp D	1526+00	35' Rt	18
1 – Topsoil thickness determined at the time of drilling by observation of open boreholes.				

Fill and possible fill was encountered in Test Boring Nos. SR- 79, 81 and 90 to depths of approximately 3 to 13 feet below grade. The fill generally consisted of silty clay and sand and gravel. The underlying apparent natural soils generally consisted of silty clay to a depth of at least 30 feet below grade, the maximum depth explored.

CTH C

Pavement Thickness ¹						
Test Boring No.	Location	STA	Offset	HMA (inches)	PCC (inches)	Base Course (inches)
SR92	CTH C	250+00	10' Rt	6	0	12
SR94	CTH C	265+00	20' Rt	0	0	12
SR95	CTH C	265+00	38' Lt	0	0	12
SR96	CTH C	270+00	15' Lt	10	0	2
SR103	CTH C Ramp B	2272+79	0	7	0	12
1 – Pavement thickness was determined in the field during drilling.						

Topsoil Thickness ¹				
Test Boring No.	Location	STA	Offset	Topsoil (inches)
SR93	CTH C	255+00	6' Lt	11
SR97	Ramp A	1634+07	0	7
SR98	Ramp A	1645+00	0	5

SR99	Ramp B	1622	+00	0	4.5
SR100	Ramp B	1632	+50	0	6
SR101	Ramp C	1621	+00	12' Rt	11
SR102	Ramp C	1632	+50	0	6
SR104	Ramp D	1637	+00	0	9
1 – Topsoil thickness determined at the time of drilling by observation of open boreholes.					

Fill and possible fill was encountered in Test Boring Nos. SR-92, 93, 95, 96, 97, 98 and 104 to depths of approximately 4 to 11 feet below grade. The fill generally consisted of silty clay, silty sand and gravel and sand and gravel. Boring SR-93 indicated approximately 3-feet of sand and gravel fill and 12 inches of asphalt pavement which was underlain by silty clay with sand and gravel fill to a depth of about 8 feet. Additionally a zone of buried topsoil was encountered within the boring below the aforementioned fill soils. Buried topsoil was also encountered in borings SR-97 and 98 at depths of about 12 feet and 7 feet, respectively, below existing ground surface. Borings SR-92 and 95 were terminated at plan depths of 6 feet and 5 feet, respectively, below existing ground surface and did not extend through the fill or possible fill soils. The underlying apparent natural soils in the remainder of the test borings generally consisted of silty clay to a depth of at least 25 feet below grade, the maximum depth explored.

Lakefield Road

Pavement Thickness ¹						
Test Boring No.	Location	STA	Offset	HMA (inches)	PCC (inches)	Base Course (inches)
SR105	Lakefield	41+90	0	10	0	8
SR106	Lakefield	47+00	10' Lt	4	0	12
1 – Pavement thickness was determined in the field during drilling.						

Fill was encountered in Test Boring Nos. SR- 105 and 106 to depths of 6 feet below grade, the plan depths of the borings. The fill generally consisted of silty clay, sand gravel and silty sand.

Falls Road

Pavement Thickness ¹						
Test Boring No.	Location	STA	Offset	HMA (inches)	PCC (inches)	Base Course (inches)
SR107	Falls Rd	35+00	7' Rt	0	0	12

SR108	Falls Rd	44+00	10' Lt	6	0	12
1 – Pavement thickness was determined in the field during drilling.						

Fill was encountered in Test Boring Nos. SR- 107 to a depth of approximately 6 feet below grade. The fill generally consisted of silty clay. The underlying apparent natural soils in the test borings generally consisted of silty clay to a depth of at least 10 feet below grade, the maximum depth explored.

STH 60

Topsoil Thickness ¹				
Test Boring No.	Location	STA	Offset	Topsoil (inches)
SR109	Ramp B	1769+00	0	6
SR110	Ramp B	1773+00	0	6
SR111	Ramp C	1770+00	0	6
1 – Topsoil thickness determined at the time of drilling by observation of open boreholes.				

Possible fill was encountered in Test Boring No. SR-110 to a depth of approximately 5 feet below the existing grade. The possible fill generally consisted of silty clay with varying amounts of sand, gravel and organics. The boring was terminated at the plan depths of 5 feet below existing ground surface and did not extend through possible fill soils. The underlying apparent natural soils in the remainder of the test borings generally consisted of silty clay or salty sand and gravel and clayey silt to depths of at least 10 feet below grade, the maximum depth explored.

Marsh Probes

The following marsh probes were performed within the identified wetlands along the proposed IH-43 project corridor roadway expansion. The purpose of the Marsh probes was to identify potential marsh excavation and/or zones of deeper topsoil.

Marsh Probes ¹				
Test Boring No.	Location	STA	Offset	Topsoil (inches)
MP16	I-43 NB	1391+00	75' RT	6
MP18	I-43 SB	1392+75	63' Lt	0
MP19	I-43 NB	1693+00	100' RT	13
MP21	I-43 NB	1395+00	80' RT	6
MP22	I-43 SB	1395+00	90' LT	24

MP23	I-43 NB	1397	+00	100' RT	12
MP25	I-43 NB	1398	+00	80' RT	24
MP26	I-43 SB	1399	+00	95' LT	12
MP27	I-43 NB	1434	+85	70' RT	10
MP28	I-43 SB	1440	+00	70' LT	24
MP29	I-43 SB	1442	+00	87' LT	12
MP30	I-43 SB	1444	+00	70' LT	24
MP31	I-43 SB	1446	+00	78' LT	24
MP32	I-43 SB	1448	+00	70' LT	12
MP33	I-43 SB	1453	+00	70' LT	12
MP35	I-43 NB	1457	+00	70' RT	36
MP36	I-43 SB	1457	+00	70' LT	12
MP37	I-43 NB	1459	+00	90' RT	36
MP38	I-43 SB	1459	+00	70' LT	12
MP39	I-43 NB	1461	+00	70' RT	12
MP40	I-43 SB	1461	+00	70' LT	24
MP41	I-43 NB	1472	+00	70' RT	14
MP42	I-43 SB	1473	+00	87' LT	12
MP43	I-43 NB	1474	+00	110' RT	14
MP44	I-43 SB	1475	+00	70' LT	12
MP45	I-43 NB	1476	+00	70' RT	12
MP46	I-43 SB	1477	+00	91' LT	12
MP47	I-43 NB	1478	+50	70' RT	12
MP48	I-43 SB	1479	+00	70' LT	12
MP49	I-43 NB	1481	+00	100' RT	14.5
MP50	I-43 SB	1481	+00	100' LT	12
MP51	I-43 SB	1482	+00	70' LT	12
MP52	I-43 NB	1483	+00	70' RT	12
MP53	I-43 NB	1485	+00	100' RT	36
MP54	I-43 NB	1485	+75	70' RT	36
MP55	I-43 NB	1571	+50	60' RT	8
MP56	I-43 NB	1572	+50	25' LT	12
MP57	I-43 NB	1573	+00	105' RT	14
MP58	I-43 NB	1573	+50	25' LT	12
MP59	I-43 NB	1575	+00	75' RT	12
MP60	I-43 SB	1583	+00	95' LT	12
MP61	I-43 NB	1585	+00	25' LT	12
MP62	I-43 NB	1585	+00	59' Rt	12
MP63	I-43 SB	1585	+00	48' LT	0
MP64	I-43 NB	1586	+50	70' RT	12
MP65	I-43 NB	1587	+00	25' LT	12

MP66	I-43 SB	1587	+00	53' LT	0
MP67	I-43 NB	1588	+00	57' Rt	12
MP68	I-43 NB	1589	+00	25' LT	12
MP69	I-43 SB	1589	+00	48' LT	0
MP70	I-43 NB	1591	+00	25' LT	12
MP71	I-43 SB	1591	+00	100' LT	12
MP72	I-43 NB	1592	+00	75' RT	12
MP73	I-43 NB	1593	+00	25' LT	12
MP74	I-43 SB	1593	+00	48' LT	0
MP75	I-43 NB	1595	+00	25' LT	12
MP76	I-43 SB	1595	+00	50' LT	0
MP77	I-43 NB	1596	+00	60' RT	12
MP78	I-43 NB	1597	+00	25' LT	12
MP79	I-43 SB	1597	+00	50' LT	0
MP80	I-43 SB	1599	+00	90' LT	12
MP81	I-43 NB	1600	+00	80' RT	12
MP82	I-43 NB	1601	+00	25' LT	12
MP83	I-43 SB	1601	+00	51' LT	36
MP84	I-43 NB	1603	+00	25' LT	12
MP85	I-43 SB	1603	+00	60' LT	12
MP86	I-43 NB	1603	+50	85' RT	12
MP87	I-43 NB	1605	+00	25' LT	12
MP88	I-43 SB	1605	+00	80' LT	12
MP89	I-43 SB	1607	+00	60' LT	12
MP90	I-43 SB	1608	+50	52' LT	12
MP91	I-43 NB	1625	+75	60' RT	12
MP92	I-43 SB	1629	+00	75' LT	36
MP93	I-43 NB	1629	+70	75' RT	12
MP94	I-43 NB	1630	+15	150' RT	12
MP95	I-43 SB	1631	+25	75' LT	12
MP96	I-43 NB	1632	+00	175' RT	18
MP97	I-43 NB	1632	+40	65' RT	12
MP98	I-43 NB	1634	+00	175' RT	12
MP99	I-43 NB	1634	+00	75' RT	12
MP100	I-43 SB	1634	+50	75' LT	36
MP101	I-43 NB	1635	+00	25' LT	12
MP102	I-43 NB	1635	+75	125' RT	12
MP103	I-43 NB	1636	+00	75' RT	36
MP104	I-43 SB	1636	+25	75' LT	12
MP105	I-43 NB	1637	+00	25' LT	12
MP106	I-43 SB	1637	+00	75' LT	12

MP107	I-43 NB	1637	+75	75' RT	12
MP108	I-43 NB	1639	+00	33' LT	12
MP110	I-43 NB	1640	+50	25' LT	12
MP111	I-43 NB	1653	+00	65' RT	12
MP112	I-43 SB	1653	+00	65' LT	12
MP113	I-43 NB	1655	+00	65' RT	12
MP114	I-43 NB	1657	+00	85' RT	14
MP115	I-43 SB	1657	+00	65' LT	48
MP116	I-43 NB	1659	+00	65' RT	12
MP118	I-43 SB	1660	+00	73' LT	54
MP119	I-43 NB	1662	+50	65' RT	12
MP120	I-43 SB	1663	+00	70' LT	54
MP121	I-43 NB	1664	+00	85' RT	12
MP122	I-43 NB	1666	+00	65' RT	36
MP123	I-43 SB	1666	+00	65' LT	36
MP124	I-43 NB	1668	+50	65' RT	36
MP125	I-43 SB	1669	+00	77' LT	12
MP126	I-43 NB	1670	+00	80' RT	36
MP127	I-43 NB	1672	+00	65' RT	18
MP128	I-43 SB	1672	+00	80' LT	36
MP129	I-43 SB	1686	+60	100' LT	12
MP130	I-43 SB	1689	+00	121' LT	36
MP131	I-43 SB	1690	+50	100' LT	12
MP132	I-43 SB	1696	+00	85' LT	12
MP133	I-43 SB	1698	+00	95' LT	36
MP134	I-43 SB	1699	+75	75' LT	36
MP135	I-43 NB	1715	+00	75' RT	12
MP136	I-43 NB	1715	+50	100' RT	36
MP137	I-43 NB	1716	+75	75' RT	12
MP138	I-43 SB	1718	+75	100' LT	36
MP139	I-43 SB	1720	+00	108' LT	36
MP140	I-43 SB	1721	+25	100' LT	12
MP141	I-43 NB	1734	+25	75' RT	12
MP142	I-43 NB	1735	+75	75' RT	36
MP143	I-43 SB	1736	+00	65' LT	12
MP144	I-43 NB	1737	+00	75' RT	12
MP145	I-43 SB	1737	+00	65' LT	12
MP146	I-43 NB	1747	+00	100' RT	36
MP147	I-43 SB	1747	+00	65' LT	12
MP148	I-43 NB	1748	+00	75' RT	36
MP149	I-43 SB	1748	+00	65' LT	36

MP150	I-43 NB	1776	+00	75' RT	20
MP151	I-43 SB	1778	+50	75' RT	60
MP158	Port	344	+00	130' RT	36
MP159	Port	344	+75	152' RT	12
Mequon Rd					
MP160	Ramp B	1403	+45	40' RT	11
MP161	Ramp B	1405	+00	40' RT	12
MP162	Ramp B	1407	+00	15' RT	12
MP163	Ramp B	1409	+00	10' RT	12
MP164	Ramp B	1411	+00	20' RT	12
MP165	Ramp B	1413	+00	60' RT	3
MP166	Ramp B	1414	+00	65' RT	3
MP167	Mequon	38	+43	34' RT	0
MP168	Mequon	39	+00	29' RT	0
MP169	Ramp D	1425	+50	53' LT	24
MP170	Ramp D	1426	+30	30' LT	24
MP171	Ramp D	1427	+00	30' LT	24
Highland Rd					
MP172	Ramp A	1525	+50	15' RT	12
MP173	Ramp A	1527	+00	30' RT	12
MP174	Ramp A	1527	+00	25' LT	12
MP175	Ramp A	1528	+40	25' RT	30
MP176	Ramp A	1529	+50	35' LT	12
MP177	Ramp A	1530	+40	5' LT	32
MP178	Ramp A	1531	+50	0	9
MP179	Ramp A	1532	+65	15' RT	12
MP180	Ramp A	1542	+00	35' RT	15
MP181	Ramp A	1543	+00	50' RT	12
MP182	Ramp A	1544	+25	30' RT	12
MP183	Ramp B	1508	+50	50' RT	16
MP184	Ramp B	1510	+00	40' RT	12
MP185	Ramp B	1511	+00	25' RT	12
MP186	Ramp B	1512	+00	0	12
MP189	Ramp B	1519	+00	25' LT	36
MP193	Ramp C	1515	+20	17' RT	12
MP194	Ramp C	1516	+00	47' LT	12
MP196	Ramp C	1519	+50	35' RT	12
MP199	Ramp C	1523	+50	26' RT	12
MP200	Ramp D	1527	+00	0	36
MP201	Ramp D	1529	+00	0	12
MP202	Ramp D	1531	+00	0	12

MP203	Ramp D	1533	+00	0	12
MP204	Ramp D	1542	+00	20' LT	12
MP205	Ramp D	1543	+00	38' LT	12
MP206	Ramp D	1544	+00	35' LT	36
MP207	Ramp D	1544	+46	25' LT	12
CTH C					
MP208	Ramp A	1634	+00	100' RT	12
MP209	Ramp A	1637	+60	25' RT	12
MP210	Ramp A	1640	+00	0	12
MP211	Ramp A	1642	+00	0	17
MP212	Ramp A	1643	+00	20' RT	36
MP213	Ramp B	1611	+50	35' RT	12
MP214	Ramp B	1624	+00	15' LT	12
MP215	Ramp B	1626	+00	0	12
MP216	Ramp B	1628	+00	25' RT	15
MP217	Ramp B	1630	+00	60' RT	15
MP219	Ramp C	1625	+00	30' LT	12
MP221	Ramp C	1627	+00	50' LT	12
MP222	Ramp C	1628	+00	0	12
MP223	Ramp C	1629	+00	25' LT	36
MP224	Ramp D	1634	+00	0	12
MP225	Ramp D	1641	+00	0	36
MP226	Ramp D	1643	+00	19' LT	36
MP227	Ramp D	1645	+75	25' LT	12
STH 60					
MP228	Ramp B	1761	+00	25' RT	12
MP229	Ramp B	1762	+50	25' RT	12
MP230	Ramp B	1768	+25	35' RT	36
MP231	Ramp B	1770	+00	20' RT	36
MP232	Ramp B	1772	+00	25' RT	36
MP233	Ramp B	1774	+00	35' RT	36
MP234	Ramp B	1776	+00	43' RT	36
MP235	Ramp B	1778	+00	53' RT	60
MP236	Ramp C	1762	+00	25' LT	12
MP237	Ramp C	1763	+00	51' Lt	36
MP238	Ramp C	1765	+00	12' LT	12
MP239	Ramp C	1767	+00	0	14
MP240	Ramp C	1769	+00	8' RT	16
MP241	Ramp C	1769	+75	8' RT	16

1 – Material thickness determined at the time of drilling by observation of open boreholes.

Although areas of deeper topsoil were encountered within a number of the marsh probes significant depths of highly organic marsh type soils were not encountered within the marsh probes. Soft, somewhat saturated upper zone soils, below the surficial topsoil, were encountered in test boring Nos. MP- 29, 31, 35, 36, 37, 38, 39, 41, 42, 45, 46, 50, 52, 53, 54, 55, 56, 62, 63, 65, 67, 68, 71, 72, 75, 77, 78, 79, 82, 83, 88, 93, 94, 95, 99, 102, 105, 107, 116, 120, 134, 143, 146, 148, 162, 163, 169, 170, 171, 176, 182, 183, 199, 200, 201, 210, 214, 216, 219, 221, 223, 229, 230, 231, 232, 233, 234, 236 and 237.

Additionally, fill and possible fill soils were encountered in test boring Nos. MP-16, 21, 63. 64, 66, 69, 74, 76, 79, 91, 92, 129, 167, 168, 180, 181, 238 and 241 to depths of 3 to 8 feet below grade. The underlying apparent natural soils the test borings generally consisted of silty clay to a depth of at least 15 feet below grade, the maximum depth explored.

Groundwater Conditions

Depth of Water Encountered During Drilling ¹					
Test Boring No.	Location	STA	Offset	During Drilling (feet)	
B65	I-43 NB	1640	+00	5' Lt	4.5
B67	I-43 NB	1660	+00	15' Rt	8.9
B68	I-43 SB	1670	+00	0	8.9
MP36	I-43 SB	1457	+00	70' LT	8.8
MP50	I-43 SB	1481	+00	100' LT	0.25
MP53	I-43 NB	1485	+00	100' RT	At Surface
MP57	I-43 NB	1573	+00	105' RT	6.3
MP66	I-43 SB	1587	+00	53' LT	7.6
MP88	I-43 SB	1605	+00	80' LT	0.5
MP91	I-43 NB	1625	+75	60' RT	9.6
MP99	I-43 NB	1634	+00	75' RT	1
MP103	I-43 NB	1636	+00	75' RT	3.0
MP107	I-43 NB	1637	+75	75' RT	3.0
MP108	I-43 NB	1639	+00	33' LT	5.2
MP112	I-43 SB	1653	+00	65' LT	6.4
MP115	I-43 SB	1657	+00	65' LT	7.4
MP118	I-43 SB	1660	+00	73' LT	7.0
MP120	I-43 SB	1663	+00	70' LT	8.0
MP122	I-43 NB	1666	+00	65' RT	7.8
MP123	I-43 SB	1666	+00	65' LT	7.7
MP125	I-43 SB	1669	+00	77' LT	6.7

MP128	I-43 SB	1672	+00	80' LT	6.9
MP130	I-43 SB	1689	+00	121' LT	1.5
MP143	I-43 SB	1736	+00	65' LT	3.7
MP150	I-43 NB	1776	+00	75' RT	4.9
MP161	Ramp B	1405	+00	40' RT	1.0
MP170	Ramp D	1426	+30	30' LT	7.6
MP171	Ramp D	1427	+00	30' LT	7.2
MP176	Ramp A	1529	+50	35' LT	8.2
MP178	Ramp A	1531	+50	0	15.7
MP211	Ramp A	1642	+00	0	6.4
MP217	Ramp B	1630	+00	60' RT	8.9
MP222	Ramp C	1628	+00	0	3.0
MP223	Ramp C	1629	+00	25' LT	7.5
MP225	Ramp D	1641	+00	0	8.1
MP231	Ramp B	1770	+00	20' RT	7.4
MP233	Ramp B	1774	+00	35' RT	7.5
MP234	Ramp B	1776	+00	43' RT	3.9
MP235	Ramp B	1778	+00	53' RT	5.4
MP241	Ramp C	1769	+75	8' RT	6.8
1 – Depth to water determined in the field during drilling.					

Water was not encountered during drilling in any test borings not listed above. In general the groundwater depth is estimated at greater than 5 feet below the natural grade where these soil types exist. However, perched water is typically encountered in granular soils or topsoil that is underlain by cohesive soils and in existing fill soils.

According to the *Soil Survey* some of the soil types encountered within the project limits are associated with shallow groundwater. The following table presents the locations where shallow groundwater relative to the natural ground surface exists.

Location of Soils with Associated Shallow Groundwater ¹				
STA 1414	+87 to STA 1418	+40		
STA 1438	+00 to STA 1448	+00		
STA 1455	+29 to STA 1464	+77		
STA 1470	+88 to STA 1475	+06		
STA 1477	+47 to STA 1483	+78		
STA 1485	+77 to STA 1486	+66		
STA 1488	+01 to STA 1491	+39		
STA 1494	+19 to STA 1496	+20		

STA 1504	-22 to STA 1510	+01
STA 1530	-74 to STA 1532	+97
STA 1570	-81 to STA 1574	+51
STA 1585	-50 to STA 1599	+54
STA 1623	-40 to STA 1632	+80
STA 1633	-24 to STA 1646	+62
STA 1653	-71 to STA 1697	+30
STA 1695	-96 to STA 2018	+20
STA 1735	-55 to STA 1737	+00
STA 1746	-49 to STA 1748	+38
STA 1760	-75 to STA 1765	+04
1 –Manawa soils.		

The estimated groundwater table depth is considered a preliminary estimate and is based on the regional geology and site features. A more accurate estimate of the groundwater table would require the installation of groundwater observation wells along with observing the wells over an extended period of time.

CONCLUSIONS AND RECOMMENDATIONS

The conclusions and recommendations presented in this report are based on the subsoil conditions encountered during the subsurface exploration and the information provided on the submitted project plans. The Southeast Region Soils Unit should be provided with revised plans as soon as possible to determine if alterations to the recommendations contained herein are needed.

Select Materials in Subgrades

According to Chapter 11-5-15 of the (WisDOT) Facilities Development Manual (FDM) the proposed project is located within the standard inclusion area for select materials in subgrades. The FDM requires that projects located in the standard inclusion area have select materials incorporated into the subgrade.

The subsoil conditions encountered in the test borings ranged from somewhat uniform apparent natural clays to variable fill and possible fill soils. The onsite soils are considered to be moisture and disturbance sensitive and will likely become unstable when exposed to construction traffic when at an elevated moisture content.

Due to the presence of silty clay soils and somewhat varied subgrade soils within the existing embankment areas it is recommended to use select materials beneath the proposed pavement sections. Additionally within the new alignments and widened corridor portions of the project EBS can be expected due to varied fill possible fill and

unstable upper apparent natural soils. Shallow ground water and perched water can be encountered during construction therefore, select materials would be necessary to build a stable platform prior to placement of additional embankment materials.

Several options for select materials are considered suitable for this project.

1. Breaker Run Stone/Select Crushed Material: A 16-inch thick layer of breaker run or select crushed material. The breaker run layer would be placed beneath the planned pavement and base course. The breaker run layer is recommended to extend laterally to the outside edge of pavement or 2 feet behind back of curb where applicable.

Breaker run generally consists of large stone, which is likely to contain a large amount of void space. Water will likely become trapped in the void space. Trapped water in the breaker run can cause softening of the underlying subgrade soils and allow for the breaker run containing large void space to settle into the soft soils resulting in an increase in pavement distress. Water trapped in the void space of the breaker run has the potential to freeze during the winter and heave the pavement structure supported above, resulting in increased pavement distress.

It is recommended that the layer of breaker run be drained to prevent the accumulation of water. Water within the breaker run layer is recommended to be removed through relief trenches that outfall to the outside ditches. Relief trenches should be spaced every 250 feet and at low points. In urban sections the breaker run can be drained by installing sections of draitile at low points in the profile and discharging them to suitable drainage structures.

2. Pit Run Sand and Gravel: Select materials can consist of placing 20 inches of pit run sand and gravel beneath the pavement and base course. The lateral extent for placement of pit run sand and gravel is the same as that for breaker run.

Similar to breaker run, pit run generally consists of large stone, which is likely to contain a large amount of void space that may trap water. The same provisions used to drain breaker run should be used for pit run.

3. Grade 1 or Grade 2 Granular Backfill: Select materials can consist of placing a 24-inch thick layer of Grade 1 Granular Backfill or a 30-inch thick layer of Grade 2 Granular Backfill beneath the planned pavement and base course. The granular backfill layer will need to extend laterally to outside edge of

pavement or 2 feet behind back of curb where applicable. It is not considered necessary to drain the layer of Granular Backfill.

Select materials are not required to be placed on an unyielding subgrade. The use of select materials should reduce the amount of additional EBS that would be required for the project, since the select material layer will bridge/stabilize poorer support soils which would otherwise need to be removed.

It should be noted that some EBS and subgrade stabilization will be needed on this project in addition to the Select Materials layer due to the presence of poor soils. Recommendations regarding EBS and subgrade stabilization are addressed further in this report.

If during construction it is determined that the in-place granular soils are stable, then the Select Materials layer could be eliminated for stretches of the project. Decisions to remove the Select Materials layer should be made by the Project Engineer at the time of grading after a consultation with the Regional Geotechnical Engineer.

Stabilization/Excavation Below Subgrade

It is understood the project will include widening IH-43. The subsoil conditions encountered in some of the test borings within the widened portion of the project were highly variable. Some of the onsite soils are considered to be moisture and disturbance sensitive and may become unstable when exposed to construction traffic when at an elevated moisture content. It is expected that subgrade soils that become unstable will require EBS. The following table lists approximate areas where unstable soils will be encountered in the widening portions of the project. EBS in the following areas is expected to be performed between the existing roadway 1:1 and the toe of the new embankment slopes.

Anticipated EBS in Widening Areas				
Highway	Direction	Station		
IH 43	SB	STA 1440	+00 to STA 1448	+00 LT
	SB	STA 1457	+00 to STA 1459	+00 LT
	NB	STA 1456	+00 to STA 1462	-00 RT
	SB	STA 1473	+00 to STA 1477	+00 LT
	NB	STA 1472	+00 to STA 1476	-00 RT
	NB	STA 1483	+00 to STA 1486	-00 RT
	SB	STA 1585	+00 to STA 1605	+50 LT
	NB	STA 1587	+00 to STA 1601	+00 Median
	NB	STA 1588	+00 to STA 1596	+00 RT
	NB	STA 1636	+50 to STA 1637	+50 Median

	SB	STA 1658	-50 to STA 1667	+50 LT
	SB	STA 1597	-50 to STA 1700	+00 LT
	NB	STA 1746	-50 to STA 1748	+75 RT

If the granular backfill option is chosen careful EBS operations will be needed to avoid undermining of the mainline pavement of IH 43.

The total volume of undistributed EBS needed will be a function of the backfill option chosen, which will determine the thickness of EBS needed. Additional EBS is expected to be needed as well on this project. It is recommended to add an additional 4000 lineal feet of undistributed EBS to the project, which is to include both inside and outside shoulders in both directions. Whatever option is chosen for the above EBS areas should be used in the undistributed EBS areas as well.

Decisions regarding the need and location for EBS should be made by the Project Engineer at the time of grading after a consultation with the Regional Geotechnical Engineer.

Marsh Excavation

According to the Soil Survey Muskego and Palms soils are present along the project. Muskego and Palms soils are highly organic soils and extremely problematic. However, these soils were not encountered in any of the test borings. Therefore, marsh excavation is not expected to be needed on this project.

Site Stripping/Topsoil Removal

Remove vegetation, including heavy sod, from the roadway foundation. It is recommended to remove all surficial topsoil from underneath new embankment fill. Topsoil thicknesses encountered in the test borings are given in the Topsoil Thickness table in the Subsoil Conditions section of this report. Approximately 6 to 60 inches of topsoil was encountered at the ground surface in the test borings that were drilled outside of the existing roadway. An average topsoil depth of 12 inches is recommended to be used in determining removal quantities.

Pavement Removal

Pavement thicknesses are provided under the Subsoil Conditions section of this report. Section 205.3.2 requires that all pavement be removed to a depth of 2 feet below the finished grade line. Removed pavement could be disposed of offsite or salvaged per Section 490 of the Standard Specifications and reused as fill elsewhere on the project.

Removed pavement could also be used as a subgrade stabilization material provided it is processed to a size similar to that of Breaker Run per Section 311.

Groundwater Concerns

A shallow groundwater table relative to the natural ground surface is estimated to exist in the locations indicated in the Groundwater Conditions section of this report. In most of those locations the proposed construction will likely be higher than the estimated groundwater elevation.

Water is recommended to be removed from subgrade surfaces prior to fill placement. Water can be removed through conventional methods such as with temporary drainage ditches or through the use of conventional pumps placed in shallow excavated sumps.

Excavation below the water table is recommended to be kept to a minimum where shallow water is encountered. Dewatering below the water table is likely to be difficult and not economically feasible. Therefore, where it is not practical to dewater beneath the water table, it is recommended that a layer of granular material be placed to at least one foot above the standing water to provide a stable, dry base to place fill from.

Fill Placement/Compaction

Embankment fill is recommended to be constructed in accordance with Section 207 of the Standard Specifications. Standard compaction per Section 207.3.6.2 is considered suitable for this project.

Specialized compaction equipment such as rollers, are still required to be used under the standard compaction specification. The engineer can waive the requirement to use specialized compaction equipment if in the engineer's opinion hauling equipment is achieving satisfactory compaction. However, it is not recommended to waive this requirement.

Fill is recommended to be placed in loose lifts not exceeding 8 inches per the Standard Specifications except as noted in the Stabilization/Excavation Below Subgrade section of this report.

Do not continue placing and compacting fill if the moisture content of the fill soils is high enough to cause excessive rutting and subgrade instability. Careful control of the moisture content of fill soils will be needed. It may be necessary to spread fill soils in thin lifts allowing them to dry to an adequate moisture content that will allow for construction of stable fill embankments. Drying of fill soils can be expedited by

scarifying the soils. It may be necessary to scarify unstable, wet soils several times a day for several days.

Reuse of Onsite Soils

In general the non-organic onsite soils are considered suitable for reuse as fill for the project. However, soils removed as EBS are recommended to be wasted offsite.

Some of the collected soil samples were at an elevated moisture content. Therefore, some drying of onsite soils should be expected prior to their reuse as fill. It may be necessary to scarify and dry the onsite soils prior to their reuse as fill on the project. It may be necessary to scarify onsite soils several times a day for several days in a row to allow enough time for them dry to within a reasonable moisture content to be used as fill.

Earthwork Summary Table

The Earthwork Summary Table in the Miscellaneous Quantities section of the project plans must be in accordance with WisDOT's latest requirements.

EBS will be needed on this project in isolated areas of highly unstable soils. The material removed from EBS areas is recommended to be wasted offsite. Any EBS areas are recommended to be backfilled with Breaker Run, Pit Run or Granular Backfill. The expand the fill factor for the various EBS backfill options is listed in the following table.

Expanded the Fill EBS Factor	
Backfill Type	Expansion Factor
Breaker Run	1.0
Pit Run Sand and Gravel	1.1
Grade 1 or 2 Granular Backfill	1.2

Since the EBS soil is recommended to be wasted and not reused as fill a Reduced EBS in Fill factor is not needed and not provided.

It is sometimes preferred to pay for items such as Breaker Run, Pit Run Sand and Gravel and Granular Backfill by the ton rather than by the cubic yard. Therefore, if desired, multiply the estimated volumes in cubic yards by a factor of 1.75 to determine the quantity of material needed in tons.

An expand the fill factor needs to be applied to all common excavation material that can be reused as fill. The following table lists the Expand the Fill factor that should be used.

Expanded Fill Factor	
Material Type	Expansion Factor
Common Excavation	1.2

Subgrade Protection/Drainage

Water should not be allowed to accumulate on the exposed subgrade during construction. Standing water along with the accumulation of soft soils is recommended to be removed as quickly as possible from the exposed subgrade surface.

During construction, maintain roadway, ditches, and channels in a well-drained condition at all times by keeping the excavation areas and embankments sloped to the approximate section of the ultimate earth grade. It may be necessary to construct temporary drainage channels to prevent the accumulation of water on the proposed subgrade.

Maintain and protect any drainage structures such as drintile. Repair damaged drintile as soon as possible. If necessary relocate drintile to prevent water discharge directly onto the exposed subgrade surface.

The exposed subgrade is recommended to be sealed and graded for proper drainage with a smooth drum roller at the end of each workday or when the threat of inclement weather is imminent.

Heavy, rubber tired construction equipment is recommended to be restricted from the exposed subgrade soils immediately after heavy rainfalls. Exposure of heavy construction equipment to the wet subgrade soils will further deteriorate the subgrade, requiring further EBS. The subgrade soils should be given an adequate amount of time to dry prior the subgrade being subjected to heavy construction equipment. Drying could be expedited by scarifying wet subgrade soils.

Final Grade Preparation

The final roadway foundation grade is recommended to be prepared in accordance with Section 211 of the Standard Specifications. It is recommended that the finished subgrade be scarified to a depth of approximately 12 inches. All material greater than 6 inches in size is recommended to be removed from the finished subgrade. It is difficult to adequately compact soil that contains material larger than 6 inches. Material greater than 6 inches in size also has the potential to heave towards the subgrade surface during freezing weather causing distress to the overlying pavement. Recompact the scarified subgrade in accordance with standard compaction requirements.

PAVEMENT DESIGN PARAMETERS

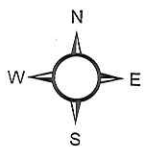
The following soil parameters were previously provided and are recommended to be used in design of the pavement structure. The parameters provided are in accordance with the WisDOT Pedological approach to Pavement Design outlined in the WisDOT *Geotechnical Bulletin No. 1*.

Pavement Design Parameters			
Design Group Index	Frost Index	Soil Support Value	Modulus of Subgrade Reaction (pounds per cubic inch)
12	F-3	4.7*	475*
*Based on Select Materials in Subgrade			

AASHTOWare	
Depth to Bedrock (if < 20')	-
AASHTO Soil Classification	A-6
Resilient Modulus	12,286
Max Dry Density	115
Specific Gravity	2.65
Optimum Moisture Content	15
Grain Size Distribution:	
#4	97
#10	95
#40	90
#200	76
Atterberg Limits:	
LL	32
PL	18
PI	14

Appendix A

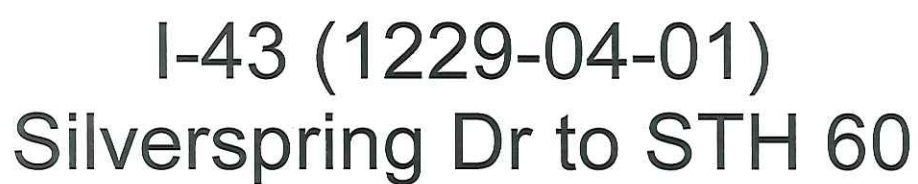
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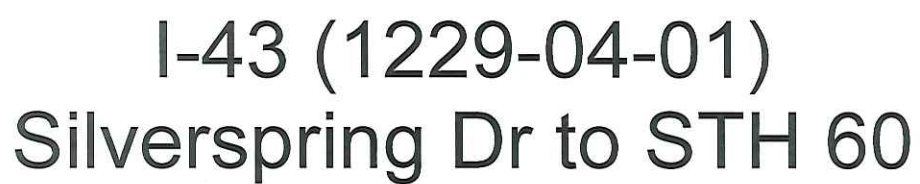


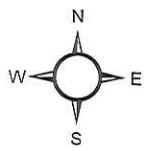
I-43 (1229-04-01)

Silverspring Dr to STH 60



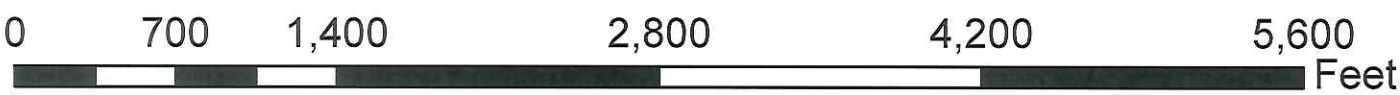
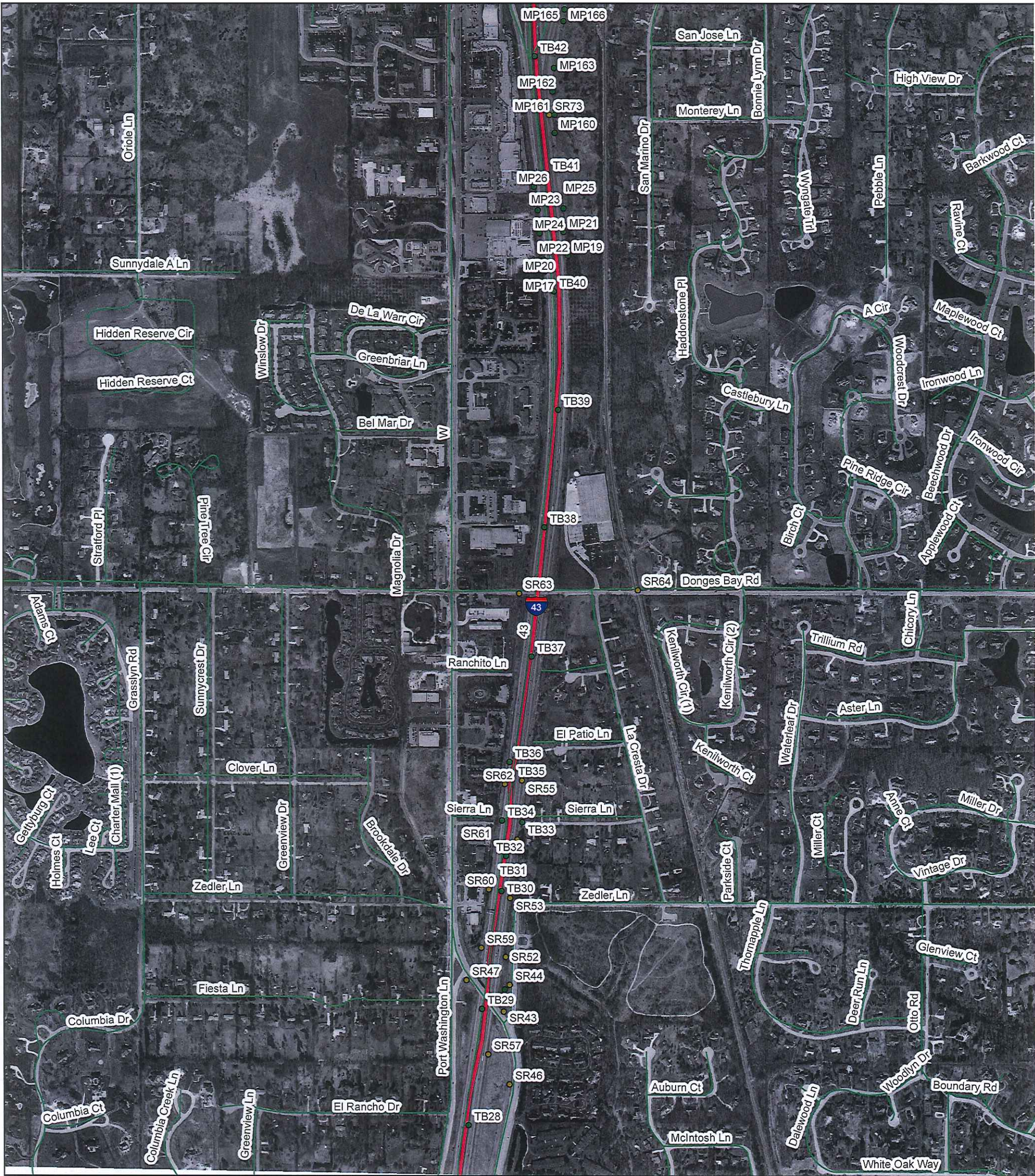


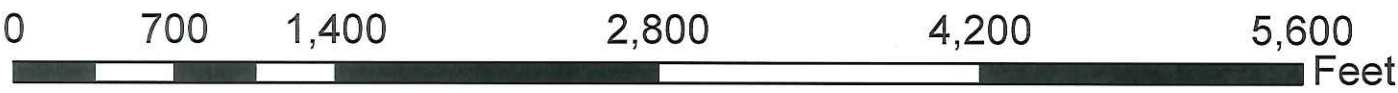
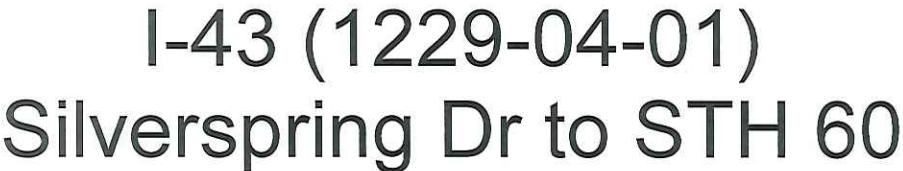




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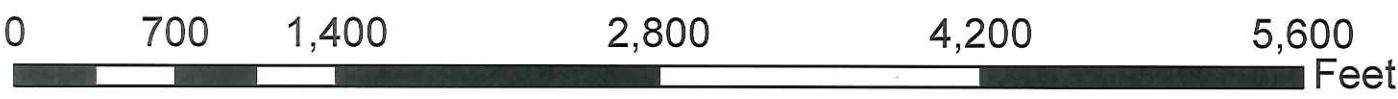
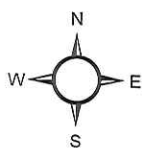
Silverspring Dr to STH 60





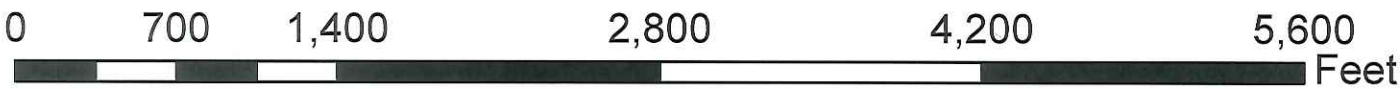
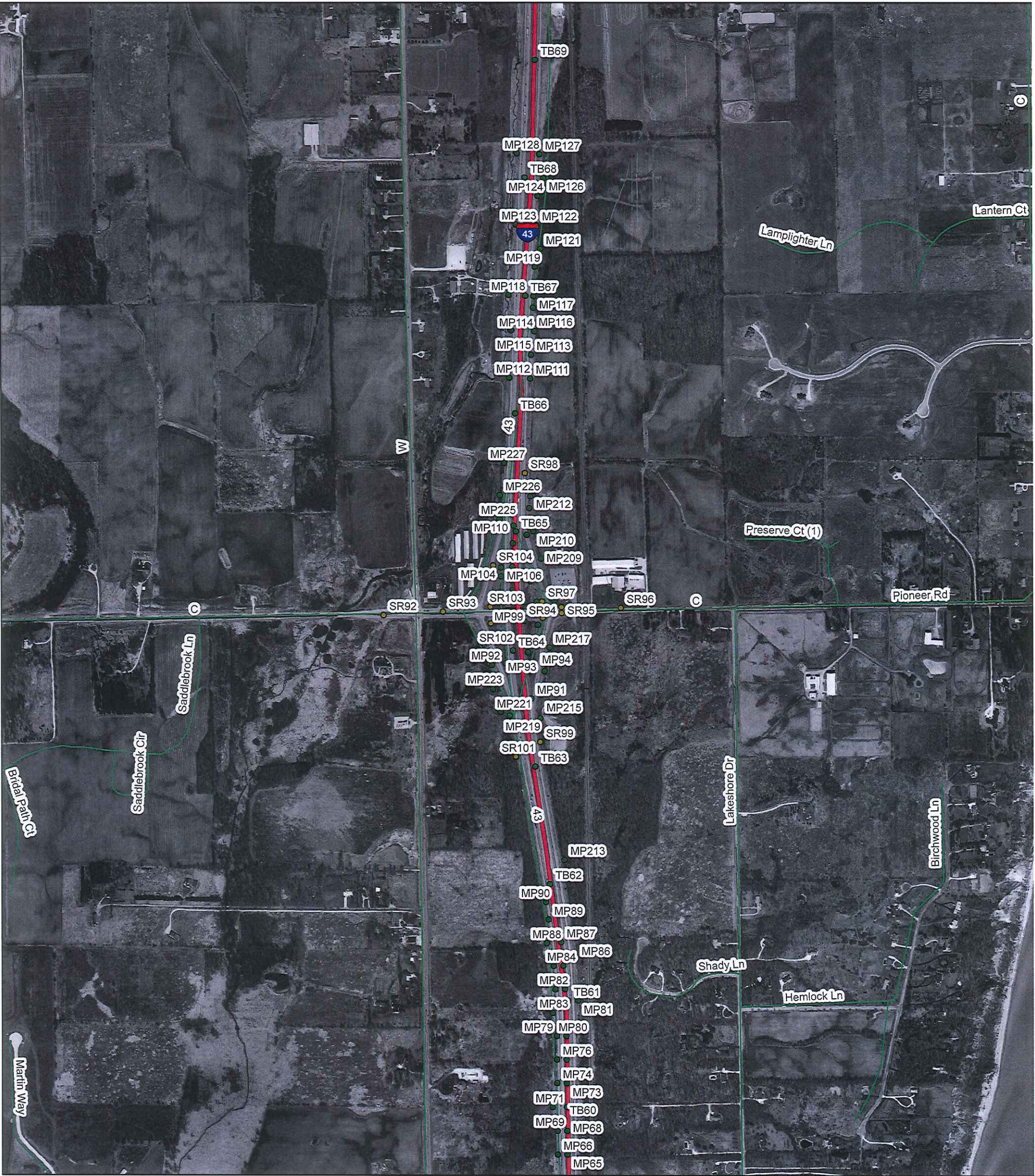
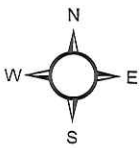
I-43 (1229-04-01)

Silverspring Dr to STH 60



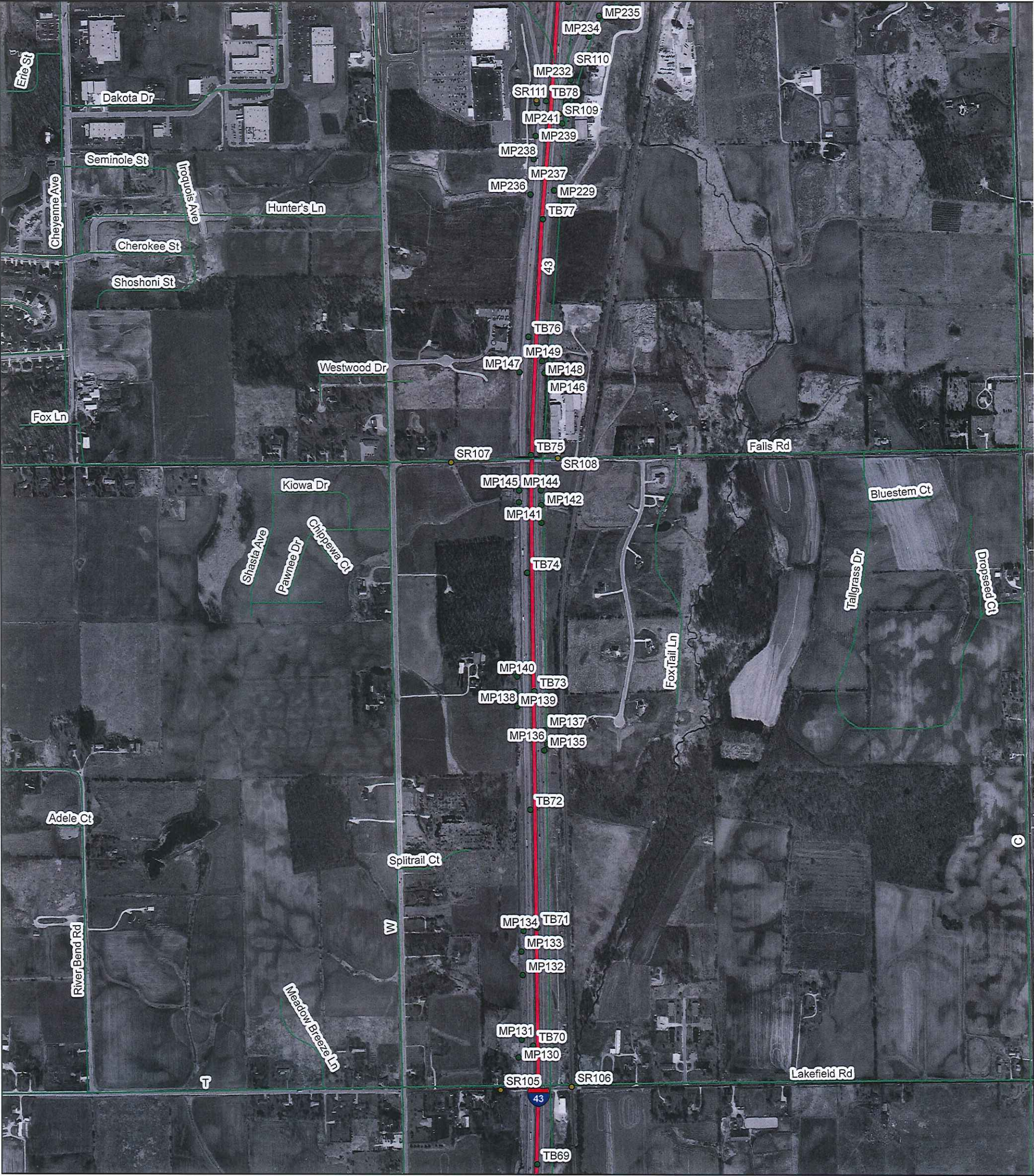
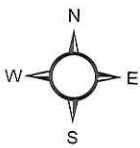
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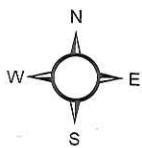
Silverspring Dr to STH 60



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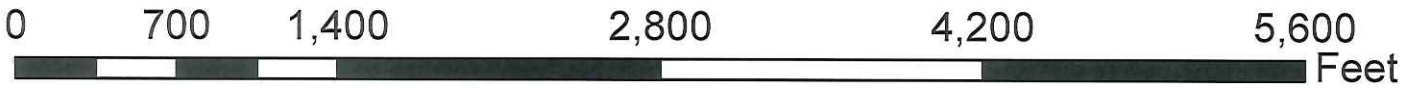
Silverspring Dr to STH 60






I-43 (1229-04-01)





Silverspring Dr to STH 60



Appendix B





Test Boring Logs

 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704	WISDOT PROJECT ID: 1229-04-01		BORING ID: B29				
	WISDOT STRUCTURE ID:		PAGE NO: 1 of 1				
WISDOT PROJECT NAME: I-43		CONSULTANT:	CONSULTANT PROJECT NO:	LATITUDE:	LONGITUDE:		
ROADWAY NAME:		DRILLING CONTRACTOR: RVT	DRILLING CONTRACTOR PROJECT NO:	NORTHING: 356320.674	EASTING: 602136.965		
DATE STARTED: 9/04/14		CREW CHIEF: MD	DRILL RIG:	COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 9/04/14		LOGGED BY: RVT	HOLE SIZE: 4 in	HORIZONTAL DATUM:		VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski	HAMMER TYPE:	STREAMBED ELEVATION: NA			
STATION 1319+03NB	OFFSET 40' Rt	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
AUGER BC	4	M 4				4" HMA						HSA	
				0.3									
					9" PCC								
	1			1.1									
				1.4		4" BASE COURSE	GW						
	2					SILTY CLAY, brown, moist, very stiff		2.5					
	3												
	4												
	5												
					6								
				7									
				8									
				8.5									
						SILTY CLAY, grayish brown, moist, very stiff		3.0					
				9			CL						
				10									


End of Boring at 10.0 ft.


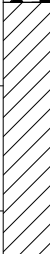



WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded





J:\COUNTIES\OZAUKEE\1229-04-01-143-SILVERSPRING DR TO 5TH 60\GINT\1229-04-01 OZAUKEE CO.GPJ 143 8/21/15

 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704	WISDOT PROJECT ID: 1229-04-01				BORING ID: B30		
	WISDOT STRUCTURE ID:				PAGE NO: 1 of 1		
WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:	LONGITUDE:
ROADWAY NAME:		DRILLING CONTRACTOR: RVT		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 357313.512	EASTING: 602260.782
DATE STARTED: 7/28/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS	
DATE COMPLETED: 7/28/14		LOGGED BY: RVT		HOLE SIZE: 4 in		HORIZONTAL DATUM: VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA	
STATION 1329+00SB OFFSET 40' Lt		TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
AUGER BC	6	M	7	1		0.3 3.5" HMA	GW						HSA
						0.8 6.5" PCC							
SS 1	15	M	11	2		1.3 6" BASE COURSE	CL	4.5					
						SILTY CLAY, dark gray/brown, moist, little sand & gravel, hard							
SS 2	11	M	19	4		Very stiff		3.75					
SS 3	24	M	18	9									
				10				4.0					






End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA














	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704		WISDOT PROJECT ID: 1229-04-01				BORING ID: B31																																																																																																																																			
		WISDOT STRUCTURE ID:				PAGE NO: 1 of 1																																																																																																																																			
WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:																																																																																																																																	
ROADWAY NAME:		DRILLING CONTRACTOR: RVT		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 358298.599		EASTING: 602432.832																																																																																																																																	
DATE STARTED: 9/04/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS																																																																																																																																			
DATE COMPLETED: 9/04/14		LOGGED BY: RVT		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:																																																																																																																																	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA																																																																																																																																			
STATION 1339+00NB		OFFSET 40' Rt		TOWNSHIP:		RANGE:		SECTION:																																																																																																																																	
				1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:																																																																																																																																	
<table><thead><tr><th>SAMPLE TYPE NUMBER</th><th>RECOVERY (in) (RQD)</th><th>Moisture</th><th>BLOW COUNTS (N VALUE)</th><th>Depth (ft)</th><th>Graphic</th><th>Soil / Rock Description and Geological Origin for Each Major Unit / Comments</th><th>USCS / AASHTO</th><th>Strength Qp (tsf)</th><th>Liquid Limit (%)</th><th>Plasticity Index (%)</th><th>Boulders</th><th>Drilling Method</th><th>Notes</th></tr></thead><tbody><tr><td rowspan="4">AUGER BC</td><td rowspan="4">5</td><td rowspan="4">M 4</td><td rowspan="4"></td><td></td><td></td><td>4" HMA</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>0.3</td><td></td><td>8" PCC</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>1.0</td><td></td><td>5" BASE COURSE</td><td>GW</td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>1.4</td><td></td><td>SILTY CLAY, brown, moist, hard</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td>2</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td>3</td><td></td><td></td><td></td><td>4.5</td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td>4</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td>5</td><td></td><td></td><td></td><td>4.5</td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td>6</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></tbody></table>										SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes	AUGER BC	5	M 4				4" HMA								0.3		8" PCC								1.0		5" BASE COURSE	GW							1.4		SILTY CLAY, brown, moist, hard												2														3				4.5										4														5				4.5										6									
SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes																																																																																																																												
AUGER BC	5	M 4				4" HMA																																																																																																																																			
				0.3		8" PCC																																																																																																																																			
				1.0		5" BASE COURSE	GW																																																																																																																																		
				1.4		SILTY CLAY, brown, moist, hard																																																																																																																																			
				2																																																																																																																																					
				3				4.5																																																																																																																																	
				4																																																																																																																																					
				5				4.5																																																																																																																																	
				6																																																																																																																																					
End of Boring at 6.0 ft.																																																																																																																																									
WATER LEVEL & CAVE-IN OBSERVATION DATA																																																																																																																																									
	WATER ENCOUNTERED DURING DRILLING: NE				CAVE - IN DEPTH AT COMPLETION: NMR			WET <input type="checkbox"/> DRY <input type="checkbox"/>																																																																																																																																	
	WATER LEVEL AT COMPLETION: NMR				CAVE - IN DEPTH AFTER 0 HOURS: NMR			WET <input type="checkbox"/> DRY <input type="checkbox"/>																																																																																																																																	
NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected. 2) NE = Not Encountered; NMR = No Measurement Recorded																																																																																																																																									

J:\COUNTIES\OZAUKEE\1229-04-01-143-SILVERSPRING DR TO 5TH 60\GINT\1229-04-01 OZAUKEE CO.GPJ 143 8/21/15

 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704				WISDOT PROJECT ID: 1229-04-01				BORING ID: B32											
				WISDOT STRUCTURE ID:				PAGE NO: 1 of 1											
WISDOT PROJECT NAME: I-43				CONSULTANT:				CONSULTANT PROJECT NO:				LATITUDE:		LONGITUDE:					
ROADWAY NAME:				DRILLING CONTRACTOR: RVT				DRILLING CONTRACTOR PROJECT NO:				NORTHING: 358407.51		EASTING: 602375.181					
DATE STARTED: 7/28/14				CREW CHIEF: MD				DRILL RIG:				COORDINATE SYSTEM: WCCS							
DATE COMPLETED: 7/28/14				LOGGED BY: RVT				HOLE SIZE: 4 in				HORIZONTAL DATUM:		VERTICAL DATUM:					
COUNTY: Ozaukee				LOG QC BY: C. Wierzchowski				HAMMER TYPE:				STREAMBED ELEVATION: NA							
STATION 1340+00SB		OFFSET 40' Lt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:					
SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments					USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes		
				1		3.5" HMA											HSA		
						8" PCC													
AUGER 6	M			1.5		6" BASE COURSE					GW								
						SILTY CLAY, brown & gray mottled, moist, trace sand & gravel, hard													
SS 1	11	M 23	4-4-4-4 (8)	2		Very stiff					CL	4.5							
SS 2	16	M 19	3-5-4-5 (9)	4								2.5							
				5															
				5.5															
End of Boring at 5.5 ft.																			
WATER LEVEL & CAVE-IN OBSERVATION DATA																			
	WATER ENCOUNTERED DURING DRILLING: NE						CAVE - IN DEPTH AT COMPLETION: NMR					WET <input type="checkbox"/>			DRY <input type="checkbox"/>				
	WATER LEVEL AT COMPLETION: NMR						CAVE - IN DEPTH AFTER 0 HOURS: NMR					WET <input type="checkbox"/>			DRY <input type="checkbox"/>				
NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected. 2) NE = Not Encountered; NMR = No Measurement Recorded																			

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WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID:

1229-04-01

BORING ID:

B33

WISDOT STRUCTURE ID:

PAGE NO:

1 of 1

WISDOT PROJECT NAME:

I-43

CONSULTANT:

CONSULTANT PROJECT NO:

LATITUDE:

LONGITUDE:

ROADWAY NAME:

DRILLING CONTRACTOR:

RVT

DRILLING CONTRACTOR PROJECT NO:

NORTHING: 358595.783

EASTING: 602473.847

DATE STARTED:

9/04/14

CREW CHIEF:

MD

DRILL RIG:

COORDINATE SYSTEM:

WCCS

DATE COMPLETED:

9/04/14

LOGGED BY:

RVT

HOLE SIZE:

4 in

HORIZONTAL DATUM:

VERTICAL DATUM:

COUNTY:

Ozaukee

LOG QC BY:

C. Wierzchowski

HAMMER TYPE:

STREAMBED ELEVATION:

NA

STATION

1342+00NB

OFFSET

40' Rt

TOWNSHIP:

RANGE:

SECTION:

1/4 SECTION:

1/4 1/4 SECTION:

SURFACE ELEVATION:

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				0.3		3.5" HMA							
				0.9		7.5" PCC							
AUGER BC	5	M 6		1		5" BASE COURSE	GW						
				1.3		SILTY CLAY, brown, moist, trace sand, stiff							
SS 1	8	M 17	2-3-4-4 (7)	2				2.0					
				3									
SS 2	15	M 19	3-4-5-5 (9)	4		Very stiff		2.5					
				5									
				6			CL						
				7									
				8									
SS 3	8	M 19	4-5-6-7 (11)	9		(A-6)		2.2	30	16			
				10									

End of Boring at 10.0 ft.


WATER LEVEL & CAVE-IN OBSERVATION DATA

WATER ENCOUNTERED DURING DRILLING: NE	CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
WATER LEVEL AT COMPLETION: NMR	CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.

2) NE = Not Encountered; NMR = No Measurement Recorded





J:\COUNTIES\OZAUKEE\1229-04-01-1-143-SILVERSPRING DR TO 5TH 60\GINT\1229-04-01 OZAUKEE CO.GPJ 143 8/21/15

 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704	WISDOT PROJECT ID: 1229-04-01				BORING ID: B34		
	WISDOT STRUCTURE ID:				PAGE NO: 1 of 1		
WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:	LONGITUDE:
ROADWAY NAME:		DRILLING CONTRACTOR: RVT		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 358902.815	EASTING: 602443.539
DATE STARTED: 7/28/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS	
DATE COMPLETED: 7/28/14		LOGGED BY: RVT		HOLE SIZE: 4 in		HORIZONTAL DATUM: VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA	
STATION 1345+00SB OFFSET 40' Lt		TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION: SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				0.5		6.5" HMA							
				1		9" BASE COURSE	GW						
				1.3		SILTY CLAY, brown to gray/brown, moist, trace sand & gravel, very stiff							
SS 1	14	M 13	3-5-2-7 (7)	2				3.0					
		16		3		Hard							
SS 2	12	M	5-5-4-8 (9)	4				4.5					
				5			CL						
				6									
				7									
				8									
SS 3	22	M 17	3-5-4-5 (9)	9		Very stiff		2.25					
				10									

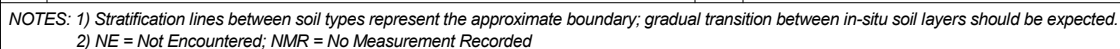
End of Boring at 10.0 ft.


WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: 8ft.		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

J:\COUNTIES\OZAUKEE\1229-04-01-1-143-SILVERSPRING DR TO 5TH 60\GINT\1229-04-01 OZAUKEE CO.GPJ 143 8/21/15







 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704	WISDOT PROJECT ID: 1229-04-01		BORING ID: B36				
	WISDOT STRUCTURE ID:		PAGE NO: 1 of 1				
WISDOT PROJECT NAME: I-43		CONSULTANT:	CONSULTANT PROJECT NO:	LATITUDE:	LONGITUDE:		
ROADWAY NAME:		DRILLING CONTRACTOR: RVT	DRILLING CONTRACTOR PROJECT NO:	NORTHING: 359398.12	EASTING: 602511.897		
DATE STARTED: 7/28/14		CREW CHIEF: MD	DRILL RIG:	COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 7/28/14		LOGGED BY: RVT	HOLE SIZE: 4 in	HORIZONTAL DATUM:	VERTICAL DATUM:		
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski	HAMMER TYPE:	STREAMBED ELEVATION: NA			
STATION 1350+00SB	OFFSET 40' Lt	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
						7" HMA							
				0.6									
				1.0		5" BASE COURSE	GW						
				1		SILTY CLAY, brown, moist, trace sand & gravel, very stiff							
SS 1	15	M 18	1-4-2-5 (6)	2				3.25					
				3		Hard							
SS 2	21	M 17	6-9-6-11 (15)	4				4.5					
				5			CL						
				6									
				7									
				8		Very stiff							
SS 3	24	M 20	4-6-5-7 (11)	9				3.75					
				10									


End of Boring at 10.0 ft.


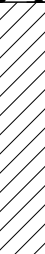
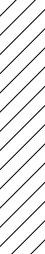
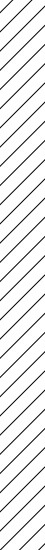
WATER LEVEL & CAVE-IN OBSERVATION DATA





	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

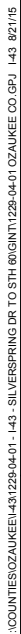
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



 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704		WISDOT PROJECT ID: 1229-04-01		BORING ID: B37	
		WISDOT STRUCTURE ID:		PAGE NO: 1 of 1	
WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:	
ROADWAY NAME:		DRILLING CONTRACTOR: RVT		DRILLING CONTRACTOR PROJECT NO:	
DATE STARTED: 9/04/14		CREW CHIEF: MD		DRILL RIG:	
DATE COMPLETED: 9/04/14		LOGGED BY: RVT		HOLE SIZE: 4 in	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:	
STATION 1359+00NB		OFFSET 40' Rt		SURFACE ELEVATION: NA	
		TOWNSHIP:		RANGE:	
		SECTION:		1/4 SECTION:	
				1/4 1/4 SECTION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
AUGER BC	6	M 5		1		4.5" HMA							HSA
						8" PCC							
SS 1	14	M 17	3-4-5-5 (9)	2		5.5" BASE COURSE	GW						
						SILTY CLAY, brown/grayish brown, moist, trace sand, very stiff							
SS 2	15	M 17	3-4-5-6 (9)	4		Hard		4.0					
SS 3	18	M 20	3-3-4-5 (7)	9		Very stiff	CL	4.5					
				10		End of Boring at 10.0 ft.							

WATER LEVEL & CAVE-IN OBSERVATION DATA			
	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR
NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected. 2) NE = Not Encountered; NMR = No Measurement Recorded			

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 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704				WISDOT PROJECT ID: 1229-04-01				BORING ID: B39																							
				WISDOT STRUCTURE ID:				PAGE NO: 1 of 1																							
WISDOT PROJECT NAME: I-43				CONSULTANT:				CONSULTANT PROJECT NO:				LATITUDE:		LONGITUDE:																	
ROADWAY NAME:				DRILLING CONTRACTOR: AET				DRILLING CONTRACTOR PROJECT NO:				NORTHING: 362366.709		EASTING: 602950.54																	
DATE STARTED: 11/11/14				CREW CHIEF: MD				DRILL RIG:				COORDINATE SYSTEM: WCCS																			
DATE COMPLETED: 11/11/14				LOGGED BY: AET				HOLE SIZE: 4 in				HORIZONTAL DATUM:		VERTICAL DATUM:																	
COUNTY: Ozaukee				LOG QC BY: C. Wierzchowski				HAMMER TYPE:				STREAMBED ELEVATION: NA																			
STATION 2020+00NB		OFFSET 0		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:																	
SAMPLE TYPE NUMBER		RECOVERY (in) (RQD)		Moisture		BLOW COUNTS (N VALUE)		Depth (ft)		Graphic		Soil / Rock Description and Geological Origin for Each Major Unit / Comments				USCS / AASHTO		Strength Qp (tsf)		Liquid Limit (%)		Plasticity Index (%)		Boulders		Drilling Method		Notes			
								0.3				4" TOPSOIL												HSA							
								1																							
SS 1		12		M 21		2-3-4-6 (7)		2										2.5													
								3																							
SS 2		24		M 18		5-8-10-13 (18)		4										3.75													
								5																							
								6																							
								7																							
								8																							
SS 3		24		M 13		6-9-16-16 (25)		9										2.0													
								10				10.0																			
End of Boring at 10.0 ft.																															
WATER LEVEL & CAVE-IN OBSERVATION DATA																															
		WATER ENCOUNTERED DURING DRILLING: NE														CAVE - IN DEPTH AT COMPLETION: 9.9ft.												WET <input type="checkbox"/>		DRY <input type="checkbox"/>	
		WATER LEVEL AT COMPLETION: NMR														CAVE - IN DEPTH AFTER 0 HOURS: NMR												WET <input type="checkbox"/>		DRY <input type="checkbox"/>	
NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected. 2) NE = Not Encountered; NMR = No Measurement Recorded																															

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WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID:

1229-04-01

BORING ID:


B40

WISDOT STRUCTURE ID:

PAGE NO:

1 of 1





WISDOT PROJECT NAME: I-43		CONSULTANT: AET		CONSULTANT PROJECT NO:		LATITUDE: 363369.829		LONGITUDE: 602900.241	
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 363369.829		EASTING: 602900.241	
DATE STARTED: 11/14/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 11/14/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA			
STATION 2030+00SB	OFFSET 25' Lt	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:		

 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704	WISDOT PROJECT ID: 1229-04-01		BORING ID: B41		
	WISDOT STRUCTURE ID:		PAGE NO: 1 of 1		
WISDOT PROJECT NAME: I-43		CONSULTANT:	CONSULTANT PROJECT NO:	LATITUDE:	LONGITUDE:
ROADWAY NAME:		DRILLING CONTRACTOR: AET	DRILLING CONTRACTOR PROJECT NO:	NORTHING: 364365.6	EASTING: 602905.005
DATE STARTED: 11/11/14		CREW CHIEF: MD	DRILL RIG:	COORDINATE SYSTEM: WCCS	
DATE COMPLETED: 11/11/14		LOGGED BY: AET	HOLE SIZE: 4 in	HORIZONTAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski	HAMMER TYPE:	STREAMBED ELEVATION: NA	
STATION 2040+00NB	OFFSET 25' Rt	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
						5.5" HMA							
				0.5		8.5" PCC							
				1									
				1.2									
SS 1	14	M 4	9-11-6-5 (17)	2		MEDIUM TO COARSE SAND, brown, moist, trace gravel, FILL, medium dense, slight petro odor	SP						
				3									
				3.0									
						SILTY CLAY, dark brown, moist, trace sand, POSSIBLE FILL, very stiff							
SS 2	12	M 17	5-7-11-11 (18)	4			CL	3.5					
				5									
				5.0									

End of Boring at 5.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: 4.8ft.	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

BORING ID: B42

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 365375.799		EASTING: 602764.667							
DATE STARTED: 1/22/15		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 1/20/15		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 2050+11SB		OFFSET 20' Lt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		12" TOPSOIL						HSA	
SS 1	12	M 19	3-4-3-5 (7)	2		SILTY CLAY, gray/brown mottled, moist, trace fine roots, stiff		1.75					
SS 2	24	M 29	3-2-2-3 (4)	4		Medium		0.75					
				5			CL						
				6									
				7									
SS 3	14	M 19	2-4-3-6 (7)	9		No roots, very stiff		2.75					
				10									







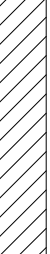










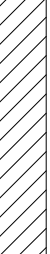










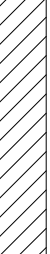





End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA


	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704				WISDOT PROJECT ID: 1229-04-01				BORING ID: B43																																																																																																																																																																																																																																																																									
				WISDOT STRUCTURE ID:				PAGE NO: 1 of 1																																																																																																																																																																																																																																																																									
WISDOT PROJECT NAME: I-43				CONSULTANT:				CONSULTANT PROJECT NO:				LATITUDE:		LONGITUDE:																																																																																																																																																																																																																																																																			
ROADWAY NAME:				DRILLING CONTRACTOR: AET				DRILLING CONTRACTOR PROJECT NO:				NORTHING: 366361.142		EASTING: 602814.433																																																																																																																																																																																																																																																																			
DATE STARTED: 11/11/14				CREW CHIEF: MD				DRILL RIG:				COORDINATE SYSTEM: WCCS																																																																																																																																																																																																																																																																					
DATE COMPLETED: 11/11/14				LOGGED BY: AET				HOLE SIZE: 4 in				HORIZONTAL DATUM:		VERTICAL DATUM:																																																																																																																																																																																																																																																																			
COUNTY: Ozaukee				LOG QC BY: C. Wierzchowski				HAMMER TYPE:				STREAMBED ELEVATION: NA																																																																																																																																																																																																																																																																					
STATION 2060+00NB		OFFSET 10' Lt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:																																																																																																																																																																																																																																																																			
<table><thead><tr><th>SAMPLE TYPE NUMBER</th><th>RECOVERY (in) (RQD)</th><th>Moisture</th><th>BLOW COUNTS (N VALUE)</th><th>Depth (ft)</th><th>Graphic</th><th>Soil / Rock Description and Geological Origin for Each Major Unit / Comments</th><th>USCS / AASHTO</th><th>Strength Qp (tsf)</th><th>Liquid Limit (%)</th><th>Plasticity Index (%)</th><th>Boulders</th><th>Drilling Method</th><th>Notes</th></tr></thead><tbody><tr><td></td><td></td><td></td><td></td><td></td><td></td><td>4.5" HMA</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td>9" PCC</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td>1</td><td></td><td>CLAYEY SILT, brown, moist, trace sand, POSSIBLE FILL, stiff</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>SS 1</td><td>6</td><td>M 33</td><td>8-3-3-5 (6)</td><td>2</td><td></td><td></td><td>CL-ML</td><td>1.75</td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td>3</td><td></td><td>Very stiff</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>SS 2</td><td>14</td><td>M 19</td><td>4-4-6-8 (10)</td><td>4</td><td></td><td>SILTY CLAY, brown mottled, moist, trace sand, very stiff</td><td></td><td>2.25</td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td>5</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td>6</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td>7</td><td></td><td></td><td>CL</td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td>8</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>SS 3</td><td>16</td><td>M 25</td><td>3-3-5-8 (8)</td><td>9</td><td></td><td></td><td></td><td>3.25</td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td>10</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td colspan="14">End of Boring at 10.0 ft.</td><td colspan="2"></td></tr><tr><td colspan="16">WATER LEVEL & CAVE-IN OBSERVATION DATA</td></tr><tr><td></td><td colspan="5">WATER ENCOUNTERED DURING DRILLING: NE</td><td></td><td colspan="5">CAVE - IN DEPTH AT COMPLETION: 9.9ft.</td><td colspan="2">WET <input type="checkbox"/> DRY <input type="checkbox"/></td></tr><tr><td></td><td colspan="5">WATER LEVEL AT COMPLETION: NMR</td><td></td><td colspan="5">CAVE - IN DEPTH AFTER 0 HOURS: NMR</td><td colspan="2">WET <input type="checkbox"/> DRY <input type="checkbox"/></td></tr><tr><td colspan="16">NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected. 2) NE = Not Encountered; NMR = No Measurement Recorded</td></tr></tbody></table>																SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes							4.5" HMA														9" PCC												1		CLAYEY SILT, brown, moist, trace sand, POSSIBLE FILL, stiff								SS 1	6	M 33	8-3-3-5 (6)	2			CL-ML	1.75										3		Very stiff								SS 2	14	M 19	4-4-6-8 (10)	4		SILTY CLAY, brown mottled, moist, trace sand, very stiff		2.25										5														6														7			CL											8										SS 3	16	M 25	3-3-5-8 (8)	9				3.25										10										End of Boring at 10.0 ft.																WATER LEVEL & CAVE-IN OBSERVATION DATA																	WATER ENCOUNTERED DURING DRILLING: NE						CAVE - IN DEPTH AT COMPLETION: 9.9ft.					WET <input type="checkbox"/> DRY <input type="checkbox"/>			WATER LEVEL AT COMPLETION: NMR						CAVE - IN DEPTH AFTER 0 HOURS: NMR					WET <input type="checkbox"/> DRY <input type="checkbox"/>		NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected. 2) NE = Not Encountered; NMR = No Measurement Recorded															
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



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 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704	WISDOT PROJECT ID: 1229-04-01		BORING ID: B44				
	WISDOT STRUCTURE ID:		PAGE NO: 1 of 1				
WISDOT PROJECT NAME: I-43		CONSULTANT:	CONSULTANT PROJECT NO:	LATITUDE:	LONGITUDE:		
ROADWAY NAME:		DRILLING CONTRACTOR: AET	DRILLING CONTRACTOR PROJECT NO:	NORTHING: 367361.865	EASTING: 602870.376		
DATE STARTED: 11/14/14		CREW CHIEF: MD	DRILL RIG:	COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 11/14/14		LOGGED BY: AET	HOLE SIZE: 4 in	HORIZONTAL DATUM:		VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski	HAMMER TYPE:	STREAMBED ELEVATION: NA			
STATION 2070+00SB	OFFSET 9' Lt	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:


SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
						4" TOPSOIL							
				0.3		SILTY CLAY, brown, moist, very stiff							
SS 1	18	M 23	2-5-9-7 (14)	2				3.0	38	21			
SS 2	18	M 20	3-5-7-7 (12)	4			CL	2.5					
				5									
				6									
				7									
				8									
				8.0		FINE SANDY CLAY, light brown, moist, trace silt, stiff							
SS 3	24	M 16	3-5-7-8 (12)	9			SC	2.0					
				10									
				10.0									

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>





NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704	WISDOT PROJECT ID: 1229-04-01		BORING ID: B45				
	WISDOT STRUCTURE ID:		PAGE NO: 1 of 1				
WISDOT PROJECT NAME: I-43		CONSULTANT:	CONSULTANT PROJECT NO:	LATITUDE:	LONGITUDE:		
ROADWAY NAME:		DRILLING CONTRACTOR: AET	DRILLING CONTRACTOR PROJECT NO:	NORTHING: 368348.254	EASTING: 603037.396		
DATE STARTED: 11/11/14		CREW CHIEF: MD	DRILL RIG:	COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 11/11/14		LOGGED BY: AET	HOLE SIZE: 4 in	HORIZONTAL DATUM:	VERTICAL DATUM:		
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski	HAMMER TYPE:	STREAMBED ELEVATION: NA			
STATION 2080+00NB	OFFSET 0	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
						6" TOPSOIL							
				0.5		SILTY CLAY, brown, moist, trace gravel, stiff							
SS 1	14	M 18	3-4-5-5 (9)	2				1.5					
				3		Hard							
SS 2	16	M 14	5-8-8-8 (16)	4			CL	4.5					
				5									
				6									
				7									
				8									
				8.0		SILTY CLAY TO CLAYEY SILT, light brown mottled, moist, trace fine sand, stiff							
SS 3	18	M 17	3-5-4-7 (9)	9			CL-ML	1.75	26	14			
				10									
				10.0									






End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA













	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: 9.7ft.	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704				WISDOT PROJECT ID: 1229-04-01				BORING ID: B46										
				WISDOT STRUCTURE ID:				PAGE NO: 1 of 1										
WISDOT PROJECT NAME: I-43				CONSULTANT:				CONSULTANT PROJECT NO:				LATITUDE:		LONGITUDE:				
ROADWAY NAME:				DRILLING CONTRACTOR: AET				DRILLING CONTRACTOR PROJECT NO:				NORTHING: 369346.1		EASTING: 603115.94				
DATE STARTED: 11/14/14				CREW CHIEF: MD				DRILL RIG:				COORDINATE SYSTEM: WCCS						
DATE COMPLETED: 11/14/14				LOGGED BY: AET				HOLE SIZE: 4 in				HORIZONTAL DATUM:		VERTICAL DATUM:				
COUNTY: Ozaukee				LOG QC BY: C. Wierzchowski				HAMMER TYPE:				STREAMBED ELEVATION: NA						
STATION 2090+00SB		OFFSET 21' Lt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:				
SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments					USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes	
				0.1		0.1 1" SHOULDER GRAVEL					GW-GM							
						SILTY CLAY, brown, moist, trace sand, very stiff												
				1														
SS 1	6	M 17	9-4-5-8 (9)	2								3.75						
				3		Hard												
SS 2	16	M 18	5-9-15-15 (24)	4								4.5						
				5							CL							
				6														
				7														
				8														
SS 3	24	M 19	5-9-10-13 (19)	9		Gray/brown, very stiff						3.0						
				10		10.0												
End of Boring at 10.0 ft.																		
WATER LEVEL & CAVE-IN OBSERVATION DATA																		
	WATER ENCOUNTERED DURING DRILLING: NE						CAVE - IN DEPTH AT COMPLETION: NMR					WET <input type="checkbox"/>			DRY <input type="checkbox"/>			
	WATER LEVEL AT COMPLETION: NMR						CAVE - IN DEPTH AFTER 0 HOURS: NMR					WET <input type="checkbox"/>			DRY <input type="checkbox"/>			
NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected. 2) NE = Not Encountered; NMR = No Measurement Recorded																		

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 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704				WISDOT PROJECT ID: 1229-04-01				BORING ID: B47											
				WISDOT STRUCTURE ID:				PAGE NO: 1 of 1											
WISDOT PROJECT NAME: I-43				CONSULTANT:				CONSULTANT PROJECT NO:				LATITUDE:		LONGITUDE:					
ROADWAY NAME:				DRILLING CONTRACTOR: AET				DRILLING CONTRACTOR PROJECT NO:				NORTHING: 370337.523		EASTING: 603239.345					
DATE STARTED: 11/11/14				CREW CHIEF: MD				DRILL RIG:				COORDINATE SYSTEM: WCCS							
DATE COMPLETED: 11/11/14				LOGGED BY: AET				HOLE SIZE: 4 in				HORIZONTAL DATUM:		VERTICAL DATUM:					
COUNTY: Ozaukee				LOG QC BY: C. Wierzchowski				HAMMER TYPE:				STREAMBED ELEVATION: NA							
STATION 2100+00NB		OFFSET 15' Rt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:					
SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments						USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes	
				0.3		3.5" HMA													
						10.5" PCC													
				1															
				1.2		SILTY CLAY, brown, moist, trace sand & gravel, FILL, very stiff													
SS 1	12	M 21	9-4-7-8 (11)	2									3.75						
				3															
						Hard													
SS 2	14	M 22	5-7-8-11 (15)	4									4.5						
				5															
				6								CL							
				7															
				8															
SS 3	16	M 16	6-7-9-10 (16)	9									4.5						
				10		10.0													
End of Boring at 10.0 ft.																			
WATER LEVEL & CAVE-IN OBSERVATION DATA																			
	WATER ENCOUNTERED DURING DRILLING: NE						CAVE - IN DEPTH AT COMPLETION: 9.8ft.					WET <input type="checkbox"/>			DRY <input type="checkbox"/>				
	WATER LEVEL AT COMPLETION: NMR						CAVE - IN DEPTH AFTER 0 HOURS: NMR					WET <input type="checkbox"/>			DRY <input type="checkbox"/>				
NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected. 2) NE = Not Encountered; NMR = No Measurement Recorded																			

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WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID:

1229-04-01

BORING ID:


B48

WISDOT STRUCTURE ID:

PAGE NO:

1 of 1





WISDOT PROJECT NAME: I-43		CONSULTANT: AET		CONSULTANT PROJECT NO:		LATITUDE: 371338.014		LONGITUDE: 603185.08	
ROADWAY NAME: 11/14/14		DRILLING CONTRACTOR: MD		DRILLING CONTRACTOR PROJECT NO:		NORTHING: WCCS		EASTING:	
DATE STARTED: 11/14/14		CREW CHIEF: AET		DRILL RIG: 4 in		COORDINATE SYSTEM:			
DATE COMPLETED: 11/14/14		LOGGED BY: AET		HOLE SIZE:		HORIZONTAL DATUM:		VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION:		NA	
STATION 2110+00SB	OFFSET 0	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:		

 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704	WISDOT PROJECT ID: 1229-04-01		BORING ID: B49				
	WISDOT STRUCTURE ID:		PAGE NO: 1 of 1				
WISDOT PROJECT NAME: I-43		CONSULTANT:	CONSULTANT PROJECT NO:	LATITUDE:	LONGITUDE:		
ROADWAY NAME:		DRILLING CONTRACTOR: AET	DRILLING CONTRACTOR PROJECT NO:	NORTHING: 372337.708	EASTING: 603237.326		
DATE STARTED: 11/11/14		CREW CHIEF: MD	DRILL RIG:	COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 11/11/14		LOGGED BY: AET	HOLE SIZE: 4 in	HORIZONTAL DATUM:		VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski	HAMMER TYPE:	STREAMBED ELEVATION: NA			
STATION 2120+00NB	OFFSET 0	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
						6" TOPSOIL							
				0.5		SILTY CLAY, brown/dark brown, moist, trace gravel, FILL, very stiff							
SS 1	6	M 19	3-3-5-5 (8)	1									
				2			CL	2.75					
				3									
SS 2	14	M 22	2-3-4-6 (7)	4				2.25					
				5		5.0 SILTY CLAY, light brown mottled, moist, trace sand, very stiff to hard							
				6									
				7			CL						
				8									
SS 3	20	M 18	4-9-15-16 (24)	9				4.5					
				10		10.0							

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded



WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID:

1229-04-01

BORING ID:

B50

WISDOT STRUCTURE ID:

PAGE NO:

1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:	
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 373338.069		EASTING: 603182.573	
DATE STARTED: 11/14/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 11/14/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA			
STATION 2130+00SB	OFFSET 15' Lt	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:		

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
						4" HMA							
				0.3		9.5" PCC							
				1									
				1.1		SILTY CLAY, brown/dark brown, moist, trace sand & gravel, POSSIBLE FILL, hard							
SS 1	12	M 17	13-5-7-8 (12)	2			CL	4.5					
				3									
				3.0		SILTY CLAY, brown mottled, moist, trace sand, very stiff							
SS 2	12	M 20	4-7-8-11 (15)	4				3.5					
				5									
				6			CL						
				7									
				8		Hard							
SS 3	18	M 17	5-11-17-19 (28)	9				4.5					
				10									
				10.0									






End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA


WATER ENCOUNTERED DURING DRILLING: NE	CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
WATER LEVEL AT COMPLETION: NMR	CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704				WISDOT PROJECT ID: 1229-04-01				BORING ID: B51										
				WISDOT STRUCTURE ID:				PAGE NO: 1 of 1										
WISDOT PROJECT NAME: I-43				CONSULTANT:				CONSULTANT PROJECT NO:				LATITUDE:		LONGITUDE:				
ROADWAY NAME:				DRILLING CONTRACTOR: AET				DRILLING CONTRACTOR PROJECT NO:				NORTHING: 374337.664		EASTING: 603263.565				
DATE STARTED: 11/11/14				CREW CHIEF: MD				DRILL RIG:				COORDINATE SYSTEM: WCCS						
DATE COMPLETED: 11/11/14				LOGGED BY: AET				HOLE SIZE: 4 in				HORIZONTAL DATUM:		VERTICAL DATUM:				
COUNTY: Ozaukee				LOG QC BY: C. Wierzchowski				HAMMER TYPE:				STREAMBED ELEVATION: NA						
STATION 2140+00NB		OFFSET 15' Rt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:				
SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments					USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes	
						4.5" HMA												
				0.4		10" PCC												
				1														
				1.2														
SS 1	12	M 21	8-3-4-8 (7)	2		SILTY CLAY, brown/light brown mottled, moist, trace sand & gravel, very stiff						4.0						
				3		With sand												
SS 2	18	M 14	5-6-9-12 (15)	4								2.75						
				5														
				6							CL							
				7														
				8														
				9														
SS 3	18	M 16	7-13-17-26 (30)	9								4.5						
				10														
End of Boring at 10.0 ft.																		
WATER LEVEL & CAVE-IN OBSERVATION DATA																		
	WATER ENCOUNTERED DURING DRILLING: NE					CAVE - IN DEPTH AT COMPLETION: NMR								WET <input type="checkbox"/> DRY <input type="checkbox"/>				
	WATER LEVEL AT COMPLETION: NMR					CAVE - IN DEPTH AFTER 0 HOURS: NMR								WET <input type="checkbox"/> DRY <input type="checkbox"/>				
NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected. 2) NE = Not Encountered; NMR = No Measurement Recorded																		





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 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704	WISDOT PROJECT ID: 1229-04-01		BORING ID: B52				
	WISDOT STRUCTURE ID:		PAGE NO: 1 of 1				
WISDOT PROJECT NAME: I-43		CONSULTANT:	CONSULTANT PROJECT NO:	LATITUDE:	LONGITUDE:		
ROADWAY NAME:		DRILLING CONTRACTOR: AET	DRILLING CONTRACTOR PROJECT NO:	NORTHING: 375337.96	EASTING: 603203.164		
DATE STARTED: 11/14/14		CREW CHIEF: MD	DRILL RIG:	COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 11/14/14		LOGGED BY: AET	HOLE SIZE: 4 in	HORIZONTAL DATUM:	VERTICAL DATUM:		
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski	HAMMER TYPE:	STREAMBED ELEVATION: NA			
STATION 150+00SB	OFFSET 0	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
						0.2 2" TOPSOIL SILTY CLAY, brown mottled, moist, trace sand, very stiff						HSA	
SS 1	12	M 17	4-4-7-7 (11)	2				3.25					
SS 2	16	M 17	5-12-13-15 (25)	4		Hard		4.5					
				5			CL						
				6									
				7									
SS 3	18	M 16	5-9-10-14 (19)	9				4.5					
				10		10.0							







End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA


	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704		WISDOT PROJECT ID: 1229-04-01				BORING ID: B53								
		WISDOT STRUCTURE ID:				PAGE NO: 1 of 1								
WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:						
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 376337.673		EASTING: 603249.763						
DATE STARTED: 11/11/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS								
DATE COMPLETED: 11/11/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:						
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA								
STATION 2160+00NB		OFFSET 0		TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:						
SURFACE ELEVATION:														
SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments		USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
						3" TOPSOIL							HSA	
				0.3		SILTY CLAY, brown mottled, moist, trace sand & gravel, very stiff								
SS 1	14	M 19	3-5-5-8 (10)	1										
				2					2.75					
				3		Stiff		CL						
SS 2	1	M 16	3-5-6-5 (11)	4					1.25					
				5										
End of Boring at 5.0 ft.														
WATER LEVEL & CAVE-IN OBSERVATION DATA														
	WATER ENCOUNTERED DURING DRILLING: NE					CAVE - IN DEPTH AT COMPLETION: NMR				WET <input type="checkbox"/> DRY <input type="checkbox"/>				
	WATER LEVEL AT COMPLETION: NMR					CAVE - IN DEPTH AFTER 0 HOURS: NMR				WET <input type="checkbox"/> DRY <input type="checkbox"/>				
NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected. 2) NE = Not Encountered; NMR = No Measurement Recorded														





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 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704	WISDOT PROJECT ID: 1229-04-01		BORING ID: B54				
	WISDOT STRUCTURE ID:		PAGE NO: 1 of 1				
WISDOT PROJECT NAME: I-43		CONSULTANT:	CONSULTANT PROJECT NO:	LATITUDE:	LONGITUDE:		
ROADWAY NAME:		DRILLING CONTRACTOR: AET	DRILLING CONTRACTOR PROJECT NO:	NORTHING: 377337.971	EASTING: 603184.362		
DATE STARTED: 11/14/14		CREW CHIEF: MD	DRILL RIG:	COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 11/14/14		LOGGED BY: AET	HOLE SIZE: 4 in	HORIZONTAL DATUM:		VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski	HAMMER TYPE:	STREAMBED ELEVATION: NA			
STATION 2170+00SB	OFFSET 20' Lt	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
						5" HMA							
				0.4		10" PCC							
				1									
				1.3									
SS 1	12	M 14	15-5-9-7 (14)	2		SILTY CLAY, brown/light brown mottled, moist, trace sand & gravel, hard		4.5					
				3									
SS 2	14	M 15	6-12-14-15 (26)	4				4.5					
				5									
				6			CL						
				7									
				8									
SS 3	16	M 16	5-14-20-24 (34)	9				4.5	35	20			
				10									
				10.0									


End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded





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 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704	WISDOT PROJECT ID: 1229-04-01		BORING ID: B55		
	WISDOT STRUCTURE ID:		PAGE NO: 1 of 1		
WISDOT PROJECT NAME: I-43		CONSULTANT:	CONSULTANT PROJECT NO:	LATITUDE:	LONGITUDE:
ROADWAY NAME:		DRILLING CONTRACTOR: AET	DRILLING CONTRACTOR PROJECT NO:	NORTHING: 378337.663	EASTING: 603265.961
DATE STARTED: 11/11/14		CREW CHIEF: MD	DRILL RIG:	COORDINATE SYSTEM: WCCS	
DATE COMPLETED: 11/11/14		LOGGED BY: AET	HOLE SIZE: 4 in	HORIZONTAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski	HAMMER TYPE:	STREAMBED ELEVATION: NA	
STATION 2180+00NB	OFFSET 15' Rt	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
						5.5" HMA							
				0.5		9.5" PCC							
				1									
				1.3									
SS 1	16	M 15	19-18-5-6 (23)	2		SAND, brown/dark brown, moist, trace silt, some gravel & concrete fragments, FILL, medium dense	SW	0					
				3									
SS 2	14	M 19	3-5-6-9 (11)	4		SILTY CLAY, gray/brown, moist, trace sand & gravel, very stiff		3.5					
				5									
				6									
				7									
				8									
SS 3	24	M 18	7-12-16-13 (28)	9				2.5					
				10									
				10.0									

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: 9.8ft.	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded



WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

BORING ID: B56

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 379337.959		EASTING: 603205.561							
DATE STARTED: 11/14/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 11/14/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 2190+00SB		OFFSET 0		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
						0.3 3" TOPSOIL						HSA	
						SILTY CLAY, brown, moist, trace sand, hard							
SS 1	14	M 15	6-7-12-17 (19)	2				4.5					
SS 2	18	M 15	11-20-27-33 (47)	4				4.5					
				5			CL						
				6									
				7									
				8									
SS 3	18	M 18	7-13-17-18 (30)	9		Gray/brown, stiff		2.0					
				10									


End of Boring at 10.0 ft.


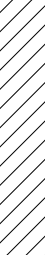


WATER LEVEL & CAVE-IN OBSERVATION DATA

<input type="checkbox"/>	WATER ENCOUNTERED DURING DRILLING: NE	<input type="checkbox"/>	CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
<input type="checkbox"/>	WATER LEVEL AT COMPLETION: NMR	<input type="checkbox"/>	CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded





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 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704	WISDOT PROJECT ID: 1229-04-01		BORING ID: B57				
	WISDOT STRUCTURE ID:		PAGE NO: 1 of 1				
WISDOT PROJECT NAME: I-43		CONSULTANT:	CONSULTANT PROJECT NO:	LATITUDE:	LONGITUDE:		
ROADWAY NAME:		DRILLING CONTRACTOR: AET	DRILLING CONTRACTOR PROJECT NO:	NORTHING: 380337.672	EASTING: 603252.218		
DATE STARTED: 11/11/14		CREW CHIEF: MD	DRILL RIG:	COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 11/11/14		LOGGED BY: AET	HOLE SIZE: 4 in	HORIZONTAL DATUM:	VERTICAL DATUM:		
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski	HAMMER TYPE:	STREAMBED ELEVATION: NA			
STATION 2200+00NB	OFFSET 0	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:


SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				0.2		0.2 2" TOPSOIL						HSA	
SS 1	12	M 18	2-4-4-5 (8)	2		SILTY CLAY, gray/brown mottled, moist, trace sand & gravel, very stiff		2.5					
SS 2	16	M 19	2-5-5-6 (10)	4		Stiff	CL	2.0					
				5									
				6									
				7									
				8		8.0 SILTY FINE SAND, gray, moist, trace gravel, medium dense							
SS 3	18	M 13	4-7-11-12 (18)	9			SM						
				10		10.0							

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: 9.9ft.	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>





NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704	WISDOT PROJECT ID: 1229-04-01		BORING ID: B58		
	WISDOT STRUCTURE ID:		PAGE NO: 1 of 1		
WISDOT PROJECT NAME: I-43		CONSULTANT:	CONSULTANT PROJECT NO:	LATITUDE:	LONGITUDE:
ROADWAY NAME:		DRILLING CONTRACTOR: AET	DRILLING CONTRACTOR PROJECT NO:	NORTHING: 381337.971	EASTING: 603192.057
DATE STARTED: 11/14/14		CREW CHIEF: MD	DRILL RIG:	COORDINATE SYSTEM: WCCS	
DATE COMPLETED: 11/14/14		LOGGED BY: AET	HOLE SIZE: 4 in	HORIZONTAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski	HAMMER TYPE:	STREAMBED ELEVATION: NA	
STATION 2210+00SB	OFFSET 15' Lt	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:
				SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
						4.5" HMA							
				0.4		9.5" PCC							
				1									
SS 1	14	M 19	13-6-6-7 (12)	2		SILTY CLAY, brown, moist, with sand, trace gravel, POSSIBLE FILL, hard	CL	4.25					
				2.5		SILTY CLAY, gray/brown mottled, moist, trace sand, very stiff							
SS 2	14	M 25	4-6-6-7 (12)	4				3.25					
				5									
				6									
				7									
				8		Gray, hard							
SS 3	24	M 17	10-14-19-23 (33)	9									
				10									

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

J:\COUNTIES\OZAUKEE\1229-04-01-1-43-SILVERSPRING DR TO 5TH 60\GINT\1229-04-01 OZAUKEE CO.GPJ 143 8/21/15



WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID:

1229-04-01

BORING ID:

B59

WISDOT STRUCTURE ID:

PAGE NO:

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WISDOT PROJECT NAME: I-43		CONSULTANT:	CONSULTANT PROJECT NO:	LATITUDE:	LONGITUDE:
ROADWAY NAME:		DRILLING CONTRACTOR: AET	DRILLING CONTRACTOR PROJECT NO:	NORTHING: 382337.659	EASTING: 603268.894
DATE STARTED: 11/12/14		CREW CHIEF: MD	DRILL RIG:	COORDINATE SYSTEM: WCCS	
DATE COMPLETED: 11/12/14		LOGGED BY: AET	HOLE SIZE: 4 in	HORIZONTAL DATUM:	VERTICAL DATUM:
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski	HAMMER TYPE:	STREAMBED ELEVATION: NA	
STATION 2220+00NB	OFFSET 15' Rt	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:
					SURFACE ELEVATION:

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				0.4		4.5" HMA							
						9" PCC							
				1		1.1							
						SILTY CLAY, brown, moist, trace sand & gravel, hard							
SS 1	12	M 16	13-8-5-8 (13)	2				4.5					
				3		Very stiff							
SS 2	12	M 18	6-12-6-14 (18)	4				4.0					
				5									
				6									
				7									
				8			CL						
SS 3	18	M 20	7-8-7-11 (15)	9				4.0					
				10									
				11									
				12									
				13									
SS 4	24	M 19	6-10-9-13 (19)	14				3.5					
				15		15.0							

End of Boring at 15.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

<input type="checkbox"/>	WATER ENCOUNTERED DURING DRILLING: NE	<input type="checkbox"/>	CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
<input type="checkbox"/>	WATER LEVEL AT COMPLETION: NMR	<input type="checkbox"/>	CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

J:\COUNTIES\OZAUKEE\1229-04-01 - I-43 - SILVERSPRING DR TO 5TH 60\GINT\1229-04-01 OZAUKEE CO.GPJ 143 8/21/15



WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

BORING ID: B60

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 383337.958		EASTING: 603208.733							
DATE STARTED: 11/13/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 11/13/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 2230+00SB		OFFSET 0		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				0.2		0.2 2" TOPSOIL						HSA	
SS 1	12	M 18	2-4-6-5 (10)	2		SILTY CLAY, brown mottled, moist, trace sand & gravel, very stiff		3.0					
SS 2	12	M 23	4-7-8-8 (15)	4				3.5					
				5			CL						
				6									
				7									
				8									
SS 3	16	M 18	3-9-12-15 (21)	9				4.0					
				10									

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded



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WISDOT PROJECT ID: 1229-04-01

BORING ID: B61

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 384337.446		EASTING: 603245.757							
DATE STARTED: 11/12/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 11/12/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 2240+00NB		OFFSET 5' Lt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
						0.2 2" TOPSOIL							
						SILTY CLAY, gray/brown, moist, little sand, trace gravel, stiff							
SS 1	12	M 18	2-4-4-5 (8)	2				2.0					
SS 2	12	M 19	3-4-6-8 (10)	4			CL	1.75					
				5									
				6									
				7									
				8		8.0							
						FINE SANDY SILT, gray, moist, trace clay & gravel, very stiff							
SS 3	12	M 15	3-5-6-9 (11)	9			SM	2.75					
				10		10.0							

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

WATER ENCOUNTERED DURING DRILLING: NE	CAVE - IN DEPTH AT COMPLETION: 9.9ft.	WET <input type="checkbox"/> DRY <input type="checkbox"/>
WATER LEVEL AT COMPLETION: NMR	CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

J:\COUNTIES\OZAUKEE\1229-04-01-1-143-SILVERSPRING DR TO 5TH 60GINT\1229-04-01 OZAUKEE CO GPR 143 8/21/15



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3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

BORING ID: B62

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 385329.052		EASTING: 603085.422							
DATE STARTED: 11/13/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 11/13/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 2250+00SB		OFFSET 20' Lt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
						4" HMA							
						9.5" PCC							
				1									
				1.1		SILTY CLAY, light brown/brown mottled, moist, trace sand, hard							
SS 1	12	M 15	10-6-8-11 (14)	2				4.5					
				3									
SS 2	16	M 17	7-9-18-22 (27)	4				4.5					
				5									
				6			CL						
				7									
				8									
				8		Gray/brown, very stiff							
SS 3	18	M 17	7-11-12-14 (23)	9				2.75					
				10									
				10.0									


End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

<input type="checkbox"/>	WATER ENCOUNTERED DURING DRILLING: NE	<input type="checkbox"/>	CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/>
<input type="checkbox"/>	WATER LEVEL AT COMPLETION: NMR	<input type="checkbox"/>	CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/>
				DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded





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 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704	WISDOT PROJECT ID: 1229-04-01				BORING ID: B63		
	WISDOT STRUCTURE ID:				PAGE NO: 1 of 1		
WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:	LONGITUDE:
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 386321.672	EASTING: 603007.586
DATE STARTED: 11/12/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS	
DATE COMPLETED: 11/12/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM: VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA	
STATION 2260+00NB	OFFSET 15' Rt	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION: SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
						0.3 4" HMA							
						9" PCC							
				1		1.1							
						SILTY CLAY, brown/gray brown, moist, trace sand, hard							
SS 1	4	M 17	9-8-3-8 (11)	2				4.5					
SS 2	14	M 16	6-15-12-18 (27)	4				4.5					
				5									
				6									
				7									
				8		Very stiff	CL						
SS 3	20	M 19	7-15-14-16 (29)	9				3.5					
				10									
				11									
				12									
				13		Gray/brown							
SS 4	20	M 19	7-9-7-11 (16)	14				3.25					
				15		15.0							

End of Boring at 15.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: 14.8ft.	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID:

1229-04-01

BORING ID:

B64

WISDOT STRUCTURE ID:

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WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:	
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 387310.265		EASTING: 602813.354	
DATE STARTED: 11/13/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 11/13/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA			
STATION 2270+00SB	OFFSET 0	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:		

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				0.3		3" TOPSOIL						HSA	
SS 1	14	M 19	3-5-4-5 (9)	2		SILTY CLAY, brown, moist, trace sand, POSSIBLE FILL, very stiff to hard	CL	2.75					
SS 2	14	M 18	5-7-10-14 (17)	4		SILTY CLAY, gray/brown mottled, moist, trace sand & gravel, hard to very stiff	CL	4.5					
				5									
				6									
				7									
SS 3	6	M 18	5-8-13-15 (21)	9				3.75					
				10									

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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WISDOT PROJECT ID:

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B65

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WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:	
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 388309.46		EASTING: 602843.197	
DATE STARTED: 11/12/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 11/12/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA			
STATION 2280+00NB	OFFSET 5' Lt	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:		

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				0.2		0.2 2" TOPSOIL							
SS 1	12	M 15	3-5-6-8 (11)	1		SILTY CLAY, brown/dark brown, moist, trace gravel, POSSIBLE FILL, very stiff	CL	4.0					
SS 2	12	M 17	4-7-10-11 (17)	2									
				3		3.0							
				4		SILTY CLAY, brown mottled, moist, trace sand & gravel, very stiff		2.75					
				5			CL						
				6									
				7									
				8		8.0							
				9		MEDIUM TO COARSE SAND, brown, wet, medium dense	SP						
SS 3	14	W-M 13 17	6-6-5-7 (11)	9		9.0		2.75					
				10		SILTY CLAY, brown, moist, trace sand, very stiff	CL						
				10.0		10.0							

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: 4.5ft.		CAVE - IN DEPTH AT COMPLETION: 4.5ft.	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID:

1229-04-01

BORING ID:

B66

WISDOT STRUCTURE ID:

PAGE NO:

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WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:			LATITUDE:		LONGITUDE:	
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:			NORTHING: 389309.202		EASTING: 602833.47	
DATE STARTED: 11/13/14		CREW CHIEF: MD		DRILL RIG:			COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 11/13/14		LOGGED BY: AET		HOLE SIZE: 4 in			HORIZONTAL DATUM:		VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski			HAMMER TYPE:			STREAMBED ELEVATION: NA		
STATION 2290+00SB	OFFSET 20' Lt	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:			

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				0.3		4" HMA							
						9" PCC							
				1.1									
SS 1	6	M 24	9-5-7-8 (12)	2		SILTY CLAY, brown, moist, with sand, trace gravel, POSSIBLE FILL, hard	CL	4.5					
SS 2	14	M 15	5-12-9-14 (21)	4				4.5					
				5.0		SILTY CLAY, gray/brown mottled, moist, trace sand, hard							
SS 3	20	M 16	9-17-12-21 (29)	9				4.5	36	22			
				10			CL						
				11									
				12									
				13		Very stiff							
SS 4	20	M 17	6-10-9-13 (19)	14				3.75					
				15.0									

End of Boring at 15.0 ft.






WATER LEVEL & CAVE-IN OBSERVATION DATA

<input type="checkbox"/>	WATER ENCOUNTERED DURING DRILLING: NE	<input type="checkbox"/>	CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
<input type="checkbox"/>	WATER LEVEL AT COMPLETION: NMR	<input type="checkbox"/>	CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>


NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.

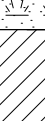
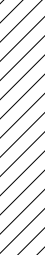
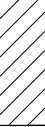






2) NE = Not Encountered; NMR = No Measurement Recorded

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 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704		WISDOT PROJECT ID: 1229-04-01				BORING ID: B67																																																																																																																																																																																																																																																															
		WISDOT STRUCTURE ID:				PAGE NO: 1 of 1																																																																																																																																																																																																																																																															
WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:																																																																																																																																																																																																																																																													
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 390305.804		EASTING: 602965.768																																																																																																																																																																																																																																																													
DATE STARTED: 11/12/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS																																																																																																																																																																																																																																																															
DATE COMPLETED: 11/12/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:																																																																																																																																																																																																																																																													
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA																																																																																																																																																																																																																																																															
STATION 2300+00NB		OFFSET 15' Rt		TOWNSHIP:		RANGE:		SECTION:																																																																																																																																																																																																																																																													
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<table><thead><tr><th>SAMPLE TYPE NUMBER</th><th>RECOVERY (in) (RQD)</th><th>Moisture</th><th>BLOW COUNTS (N VALUE)</th><th>Depth (ft)</th><th>Graphic</th><th>Soil / Rock Description and Geological Origin for Each Major Unit / Comments</th><th>USCS / AASHTO</th><th>Strength Qp (tsf)</th><th>Liquid Limit (%)</th><th>Plasticity Index (%)</th><th>Boulders</th><th>Drilling Method</th><th>Notes</th></tr></thead><tbody><tr><td></td><td></td><td></td><td></td><td></td><td></td><td>4" HMA</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td>0.3</td><td></td><td>9" PCC</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td>1</td><td></td><td>1.1</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td>1</td><td></td><td>SILTY CLAY, brown, moist, trace sand & gravel, POSSIBLE FILL, medium</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>SS 1</td><td>3</td><td>M 14</td><td>6-3-8-9 (11)</td><td>2</td><td></td><td></td><td>CL</td><td>0.75</td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td>3</td><td></td><td>Hard</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>SS 2</td><td>12</td><td>M 19</td><td>5-9-10-12 (19)</td><td>4</td><td></td><td>4.0</td><td></td><td>4.25</td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td>4</td><td></td><td>SILTY CLAY, brown mottled, moist, trace gravel, hard</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td>5</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td>6</td><td></td><td></td><td>CL</td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td>7</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td>8</td><td></td><td>8.0</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td>8</td><td></td><td>FINE SANDY SILT, gray, moist, medium</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>SS 3</td><td>14</td><td>M 17</td><td>5-6-3-3 (9)</td><td>9</td><td></td><td></td><td>SM</td><td>1.0</td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td>9</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td>10</td><td></td><td>10.0</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td>10</td><td></td><td>End of Boring at 10.0 ft.</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></tbody></table>										SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes							4" HMA												0.3		9" PCC												1		1.1												1		SILTY CLAY, brown, moist, trace sand & gravel, POSSIBLE FILL, medium								SS 1	3	M 14	6-3-8-9 (11)	2			CL	0.75										3		Hard								SS 2	12	M 19	5-9-10-12 (19)	4		4.0		4.25										4		SILTY CLAY, brown mottled, moist, trace gravel, hard												5														6			CL											7														8		8.0												8		FINE SANDY SILT, gray, moist, medium								SS 3	14	M 17	5-6-3-3 (9)	9			SM	1.0										9														10		10.0												10		End of Boring at 10.0 ft.							
SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes																																																																																																																																																																																																																																																								
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J:\COUNTIES\OZAUKEE\1229-04-01-143-SILVERSPRING DR TO 5TH 60GINT\1229-04-01 OZAUKEE CO GRP - 143 8/21/15

 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704	WISDOT PROJECT ID: 1229-04-01		BORING ID: B68				
	WISDOT STRUCTURE ID:		PAGE NO: 1 of 1				
WISDOT PROJECT NAME: I-43		CONSULTANT:	CONSULTANT PROJECT NO:	LATITUDE:	LONGITUDE:		
ROADWAY NAME:		DRILLING CONTRACTOR: AET	DRILLING CONTRACTOR PROJECT NO:	NORTHING: 391305.542	EASTING: 602956.041		
DATE STARTED: 11/13/14		CREW CHIEF: MD	DRILL RIG:	COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 11/13/14		LOGGED BY: AET	HOLE SIZE: 4 in	HORIZONTAL DATUM:	VERTICAL DATUM:		
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski	HAMMER TYPE:	STREAMBED ELEVATION: NA			
STATION 2310+00SB	OFFSET 0	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				0.3		3" TOPSOIL						HSA	
SS 1	12	M 19	4-5-4-4 (9)	2		SILTY CLAY, brown, moist, trace sand & gravel, POSSIBLE FILL, very stiff	CL	2.5					
SS 2	16	M 20 12	4-7-14-14 (21)	4		SAND, brown, moist to wet, medium dense		4.0					
				5									
				6									
				7			SW						
				8									
SS 3	6	M 21	12-15-12-8 (27)	9				0					Fines = 12%
				10									

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: 8.9ft.		CAVE - IN DEPTH AT COMPLETION: 9.4ft.	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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WISDOT PROJECT ID:

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B69

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WISDOT PROJECT NAME: I-43		CONSULTANT: AET		CONSULTANT PROJECT NO:		LATITUDE:	LONGITUDE:
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 392304.19	EASTING: 603047.608
DATE STARTED: 11/12/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS	
DATE COMPLETED: 11/12/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:	VERTICAL DATUM:
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA	
STATION 2320+00NB	OFFSET 5' Lt	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				0.2		0.2 2" TOPSOIL						HSA	
SS 1	6	M 18	2-4-6-5 (10)	2		SILTY CLAY, brown, moist, trace sand & gravel, POSSIBLE FILL, very stiff	CL	3.25					
SS 2	14	M 18	5-6-10-9 (16)	4		SILTY CLAY, brown/light brown mottled, trace gravel, stiff		1.5					
				5			CL						
				6									
				7									
				8		Very stiff							
SS 3	14	M 18	5-8-10-15 (18)	9				3.5					
				10									

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:	
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 393303.949		EASTING: 603012.883	
DATE STARTED: 11/13/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 11/13/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA			
STATION 2330+00SB	OFFSET 15' Lt	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:		

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				0.3		4" HMA							
						9" PCC							
				1.1									
SS 1	6	M 14	11-4-5-9 (9)	2		SILTY CLAY, brown, moist, trace sand & gravel, FILL, hard	CL	4.25					
				3.0									
SS 2	8	M 14	7-13-11-20 (24)	4		SILTY CLAY, brown mottled, moist, trace gravel, hard		4.5					
				5									
				6									
				7									
				8		Very stiff	CL						
SS 3	14	M 22	4-6-6-8 (12)	9				4.0					
				10									
				11									
				12									
				13.0									
				13		CLAYEY SILT, brown mottled, moist, trace fine sand, stiff							
SS 4	14	M 22	4-6-5-10 (11)	14			CL-ML	1.75					
				15.0									
				15		End of Boring at 15.0 ft.							

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: 14.9ft.	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.

2) NE = Not Encountered; NMR = No Measurement Recorded

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WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:	
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 394303.717		EASTING: 603085.424	
DATE STARTED: 11/12/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 11/12/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA			
STATION 2340+00NB	OFFSET 15' Rt	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:		

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				0.3		3.5" HMA							
						10" PCC							
				1									
				1.1		FILL 10.5" CRUSHED CONCRETE							
SS 1	12	M 16	13-20-7-10 (27)	2		SILTY CLAY, brown, moist, trace sand & gravel, hard		4.5					
				3									
SS 2	16	M 16	8-13-19-20 (32)	4				4.5					
				5									
				6			CL						
				7									
				8									
SS 3	22	M 18	9-11-16-19 (27)	9				4.25					
				10									
				10.0									

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

WATER ENCOUNTERED DURING DRILLING: NE	CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
WATER LEVEL AT COMPLETION: NMR	CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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WISDOT PROJECT NAME: I-43		CONSULTANT: AET	CONSULTANT PROJECT NO:		LATITUDE:	LONGITUDE:
ROADWAY NAME:		DRILLING CONTRACTOR: AET	DRILLING CONTRACTOR PROJECT NO:		NORTHING: 395303.493	EASTING: 603020.858
DATE STARTED: 11/13/14		CREW CHIEF: MD	DRILL RIG:		COORDINATE SYSTEM: WCCS	
DATE COMPLETED: 11/13/14		LOGGED BY: AET	HOLE SIZE: 4 in		HORIZONTAL DATUM:	VERTICAL DATUM:
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski	HAMMER TYPE:		STREAMBED ELEVATION: NA	
STATION 2350+00SB	OFFSET 0	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:
SURFACE ELEVATION:						

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				0.3		0.3 3" TOPSOIL							
						SILTY CLAY, gray, moist, trace sand, very stiff							
SS 1	8	M 18	2-3-3-5 (6)	1									
				2				3.0					
SS 2	18	M 21	3-6-7-8 (13)	3									
				4				2.25					
				5			CL						
				6									
				7									
				8									
SS 3	24	M 23	4-7-8-11 (15)	9				2.25					
				10									

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 396303.615		EASTING: 603053.292							
DATE STARTED: 11/12/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 11/12/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 2360+00NB		OFFSET 10' Lt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				0.2		2" TOPSOIL							
				1									
SS 1	16	M 20	3-5-7-11 (12)	2				4.5					
				3		Very stiff							
SS 2	22	M 21	3-7-11-12 (18)	4				2.75					
				5			CL						
				6									
				7									
				8									
SS 3	24	M 20	4-6-8-10 (14)	9				2.5					
				10		10.0							


End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

<input type="checkbox"/>	WATER ENCOUNTERED DURING DRILLING: NE	<input type="checkbox"/>	CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
<input type="checkbox"/>	WATER LEVEL AT COMPLETION: NMR	<input type="checkbox"/>	CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded





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 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704	WISDOT PROJECT ID: 1229-04-01		BORING ID: B74				
	WISDOT STRUCTURE ID:		PAGE NO: 1 of 1				
WISDOT PROJECT NAME: I-43		CONSULTANT:	CONSULTANT PROJECT NO:	LATITUDE:	LONGITUDE:		
ROADWAY NAME:		DRILLING CONTRACTOR: AET	DRILLING CONTRACTOR PROJECT NO:	NORTHING: 397303.409	EASTING: 602993.726		
DATE STARTED: 11/13/14		CREW CHIEF: MD	DRILL RIG:	COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 11/13/14		LOGGED BY: AET	HOLE SIZE: 4 in	HORIZONTAL DATUM:		VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski	HAMMER TYPE:	STREAMBED ELEVATION: NA			
STATION 2370+00SB	OFFSET 20' Lt	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
						4" HMA							
				0.3		9.5" PCC							
				1		1.1							
				1.5		4.5" BASE COURSE	GW-GM						
SS 1	12	M 20	6-4-3-3 (7)	2		SILTY CLAY, brown, moist, trace sand, very stiff		2.5					
SS 2	16	M 21	3-5-7-9 (12)	4			CL	3.25					
				5									
				6									
				7									
				8		8.0							
				8		SILTY CLAY TO CLAYEY SILT, gray, moist, trace gravel, stiff							
SS 3	24	M 19	3-4-5-8 (9)	9			CL-ML	2.0					
				10		10.0							






End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704		WISDOT PROJECT ID: 1229-04-01				BORING ID: B75								
		WISDOT STRUCTURE ID:				PAGE NO: 1 of 1								
WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:						
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 398303.692		EASTING: 603071.159						
DATE STARTED: 11/12/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS								
DATE COMPLETED: 11/12/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:						
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA								
STATION 2380+00NB		OFFSET 15' Rt		TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:					
SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments		USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
						4.5" HMA								
				0.4		10" PCC								
				1										
				1.2		SILTY CLAY, brown, moist, little sand, POSSIBLE FILL, stiff								
SS 1	3	M 23	7-6-7-6 (13)	2				CL						
				3		SILTY CLAY, gray/brown, moist, trace sand, very stiff								
SS 2	12	M 20	3-4-5-8 (9)	4				CL	2.75					
				5		End of Boring at 5.0 ft.								
WATER LEVEL & CAVE-IN OBSERVATION DATA														
	WATER ENCOUNTERED DURING DRILLING: NE					CAVE - IN DEPTH AT COMPLETION: NMR				WET <input type="checkbox"/> DRY <input type="checkbox"/>				
	WATER LEVEL AT COMPLETION: NMR					CAVE - IN DEPTH AFTER 0 HOURS: NMR				WET <input type="checkbox"/> DRY <input type="checkbox"/>				
NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected. 2) NE = Not Encountered; NMR = No Measurement Recorded														

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WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

BORING ID: B76

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 399302.099		EASTING: 603050.803							
DATE STARTED: 11/13/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 11/13/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 2390+00SB		OFFSET 6' Rt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				0.2		2" TOPSOIL							
				1									
SS 1	14	M 14	3-7-9-10 (16)	2				4.5					
				3		Very stiff							
SS 2	18	M 21	3-6-8-10 (14)	4				2.5					
				5			CL						
				6									
				7									
				8									
SS 3	24	M 20	3-5-9-14 (14)	9		Gray, trace gravel, hard		4.25					
				10									

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

<input type="checkbox"/>	WATER ENCOUNTERED DURING DRILLING: NE	<input type="checkbox"/>	CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
<input type="checkbox"/>	WATER LEVEL AT COMPLETION: NMR	<input type="checkbox"/>	CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

BORING ID: B77

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 400300.088		EASTING: 603164.218							
DATE STARTED: 11/12/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 11/12/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 2400+00NB		OFFSET 10' Lt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				0.3		3" TOPSOIL							
						SILTY CLAY, brown, moist, trace sand, very stiff							
SS 1	14	M 21	5-7-8-10 (15)	2				3.5					
SS 2	16	M 22	4-7-10-11 (17)	4				3.5	38	23			
				5			CL						
				6									
				7									
SS 3	24	M 20	4-7-9-13 (16)	9		Gray		3.5					
				10									






End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

<input type="checkbox"/>	WATER ENCOUNTERED DURING DRILLING: NE	<input type="checkbox"/>	CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
<input type="checkbox"/>	WATER LEVEL AT COMPLETION: NMR	<input type="checkbox"/>	CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704				WISDOT PROJECT ID: 1229-04-01				BORING ID: B78										
				WISDOT STRUCTURE ID:				PAGE NO: 1 of 1										
WISDOT PROJECT NAME: I-43				CONSULTANT:				CONSULTANT PROJECT NO:				LATITUDE:		LONGITUDE:				
ROADWAY NAME:				DRILLING CONTRACTOR: AET				DRILLING CONTRACTOR PROJECT NO:				NORTHING: 401300.858		EASTING: 603196.764				
DATE STARTED: 11/13/14				CREW CHIEF: MD				DRILL RIG:				COORDINATE SYSTEM: WCCS						
DATE COMPLETED: 11/13/14				LOGGED BY: AET				HOLE SIZE: 4 in				HORIZONTAL DATUM:		VERTICAL DATUM:				
COUNTY: Ozaukee				LOG QC BY: C. Wierzchowski				HAMMER TYPE:				STREAMBED ELEVATION: NA						
STATION 2410+00SB		OFFSET 15' Lt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:				
SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments					USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes	
						4" HMA												
						9" PCC												
				1		1.1												
						SILTY CLAY, brown, moist, trace sand & gravel, POSSIBLE FILL, hard												
SS 1	6	M 14	11-10-8-13 (18)	2							CL	4.5						
				3		3.0												
						SILTY CLAY, brown mottled, moist, trace sand, very stiff												
SS 2	8	M 24	5-8-10-12 (18)	4								4.0						
				5														
				6							CL							
				7														
				8		Trace gravel												
SS 3	16	M 21	7-10-10-14 (20)	9								3.25						
				10		10.0												
End of Boring at 10.0 ft.																		
WATER LEVEL & CAVE-IN OBSERVATION DATA																		
	WATER ENCOUNTERED DURING DRILLING: NE					CAVE - IN DEPTH AT COMPLETION: NMR				WET <input type="checkbox"/>				DRY <input type="checkbox"/>				
	WATER LEVEL AT COMPLETION: NMR					CAVE - IN DEPTH AFTER 0 HOURS: NMR				WET <input type="checkbox"/>				DRY <input type="checkbox"/>				
NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected. 2) NE = Not Encountered; NMR = No Measurement Recorded																		

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WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

BORING ID: SR43

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT: Giles		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: Giles		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 357280.99		EASTING: 602443.107							
DATE STARTED: 11/18/14		CREW CHIEF: Chip		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 11/18/14		LOGGED BY: GILES		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 343+25PortNB		OFFSET 60' Rt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		12" TOPSOIL						HSA	
SS 1	18	M 16	4-6-6-6 (12)	2		SILTY CLAY, brown, moist, trace sand, very stiff	CL	3.0					
SS 2	12	M 16	4-3-3-4 (6)	4				3.75					
				5		End of Boring at 5.0 ft.							

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

BORING ID: SR44

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT: Giles		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: Giles		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 357505.184		EASTING: 602494.703							
DATE STARTED: 11/18/14		CREW CHIEF: Chip		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 11/18/14		LOGGED BY: GILES		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 344+80PortNB		OFFSET 230' Rt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
						10" TOPSOIL						HSA	
				0.8		SILTY CLAY, brown mottled, moist, trace sand, very stiff							
SS 1	24	M 22	3-4-5-5 (9)	1									
				2				4.0					
				3		Moist, trace fine gravel, stiff	CL						
SS 2	12	M 18	5-5-6-7 (11)	4				1.5					
				5		End of Boring at 5.0 ft.							

WATER LEVEL & CAVE-IN OBSERVATION DATA

<input type="checkbox"/>	WATER ENCOUNTERED DURING DRILLING: NE	<input type="checkbox"/>	CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/>
<input type="checkbox"/>	WATER LEVEL AT COMPLETION: NMR	<input type="checkbox"/>	CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID:

1229-04-01

BORING ID:

SR46

WISDOT STRUCTURE ID:

PAGE NO:

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WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:	
ROADWAY NAME:		DRILLING CONTRACTOR: Giles		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 356663.398		EASTING: 602485.786	
DATE STARTED: 11/18/14		CREW CHIEF: Chip		DRILL RIG:		COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 11/18/14		LOGGED BY: GILES		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA			
STATION 337+00PortSB	OFFSET 15' Lt	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:		

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
						11" TOPSOIL						HSA	
				0.9									
SS 1	24	M 19	3-3-5-5 (8)	1		SILTY CLAY, brown mottled, moist, trace sand & gravel, very stiff		3.0					
SS 2	24	M 18	5-6-8-10 (14)	4			CL	3.0					
				5									
				6									
				7									
				8									
SS 3	24	M 20	6-7-10-10 (17)	9		A-6(4)		2.5	36	21			
				10									
				10.0									

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID:

1229-04-01

BORING ID:

SR47

WISDOT STRUCTURE ID:

PAGE NO:

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WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:	
ROADWAY NAME:		DRILLING CONTRACTOR: Giles		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 357546.166		EASTING: 602130.925	
DATE STARTED: 11/18/14		CREW CHIEF: Chip		DRILL RIG:		COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 11/18/14		LOGGED BY: GILES		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA			
STATION 347+00PortSB	OFFSET 10' Lt	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:		

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
						10" TOPSOIL						HSA	
				0.8		SILTY CLAY, brown, moist, with gravel, POSSIBLE FILL, hard							
SS 1	18	M 14	3-4-5-5 (9)	1				4.5					
				3			CL						
SS 2	18	M 14	5-5-8-8 (13)	4				4.5					
				5									


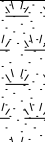



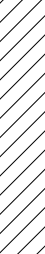





End of Boring at 5.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA


WATER ENCOUNTERED DURING DRILLING: NE	CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
WATER LEVEL AT COMPLETION: NMR	CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704				WISDOT PROJECT ID: 1229-04-01				BORING ID: SR52											
				WISDOT STRUCTURE ID:				PAGE NO: 1 of 1											
WISDOT PROJECT NAME: I-43				CONSULTANT:				CONSULTANT PROJECT NO:				LATITUDE:		LONGITUDE:					
ROADWAY NAME:				DRILLING CONTRACTOR: Giles				DRILLING CONTRACTOR PROJECT NO:				NORTHING: 357740.287		EASTING: 602463.38					
DATE STARTED: 11/20/14				CREW CHIEF: Chip				DRILL RIG:				COORDINATE SYSTEM: WCCS							
DATE COMPLETED: 11/20/14				LOGGED BY: GILES				HOLE SIZE: 4 in				HORIZONTAL DATUM:		VERTICAL DATUM:					
COUNTY: Ozaukee				LOG QC BY: C. Wierzchowski				HAMMER TYPE:				STREAMBED ELEVATION: NA							
STATION 1333+50		COUNTyA		OFFSET 15' Lt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:			
SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments						USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes	
						8" TOPSOIL												HSA	
				0.7		SILTY CLAY, dark brown, moist, trace sand & gravel, FILL, hard													
SS 1	12	M 20	4-8-9-9 (17)	1								CL	4.5						
				3		SILTY CLAY, brown mottled, moist, trace sand, very stiff													
SS 2	24	M 17	4-5-9-10 (14)	4								CL	3.5						
				5		End of Boring at 5.0 ft.													
WATER LEVEL & CAVE-IN OBSERVATION DATA																			
	WATER ENCOUNTERED DURING DRILLING: NE					CAVE - IN DEPTH AT COMPLETION: NMR				WET <input type="checkbox"/>				DRY <input type="checkbox"/>					
	WATER LEVEL AT COMPLETION: NMR					CAVE - IN DEPTH AFTER 0 HOURS: NMR				WET <input type="checkbox"/>				DRY <input type="checkbox"/>					
NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected. 2) NE = Not Encountered; NMR = No Measurement Recorded																			





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 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704	WISDOT PROJECT ID: 1229-04-01		BORING ID: SR53				
	WISDOT STRUCTURE ID:		PAGE NO: 1 of 1				
WISDOT PROJECT NAME: I-43		CONSULTANT:	CONSULTANT PROJECT NO:	LATITUDE:	LONGITUDE:		
ROADWAY NAME:		DRILLING CONTRACTOR: Giles	DRILLING CONTRACTOR PROJECT NO:	NORTHING: 358288.432	EASTING: 602524.301		
DATE STARTED: 11/20/14		CREW CHIEF: Chip	DRILL RIG:	COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 11/20/14		LOGGED BY: GILES	HOLE SIZE: 4 in	HORIZONTAL DATUM:	VERTICAL DATUM:		
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski	HAMMER TYPE:	STREAMBED ELEVATION: NA			
STATION 1339+02CountyA	OFFSET 17' Rt	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
						10" TOPSOIL							
				0.8									
SS 1	18	M 14	3-4-10-11 (14)	1		SILTY CLAY, dark brown, moist, trace sand & gravel, FILL, hard	CL	4.5					
				2									
				3.0									
SS 2	24	M 15	10-16-23-23 (39)	3		SILTY CLAY, brown mottled, moist, trace sand, hard		4.5					
				4									
				5									
SS 3	24	M 17	7-9-11-13 (20)	5			CL	4.5					
				6									
				7									
				8.0									
SS 4	24	M 13	7-11-15-17 (26)	8		CLAYEY SILT, brown, moist, trace fine sand & gravel, very stiff		3.5	19	7			
				9									
				10			CL-ML						
				11									
				12									
				13.0									
SS 5	24	M 22	3-4-6-6 (10)	13		SILTY CLAY, gray, moist, trace gravel, very stiff A-6(4)		2.25	35	21			
				14									
				15									
				16			CL						
				17									
				18									
SS 6	24	M 21	3-4-6-9 (10)	18				2.75					
				19									
				20.0									
				20									



























End of Boring at 20.0 ft.


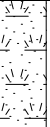






WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>





























NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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
































 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704				WISDOT PROJECT ID: 1229-04-01				BORING ID: SR54																					
				WISDOT STRUCTURE ID:				PAGE NO: 1 of 1																					
WISDOT PROJECT NAME: I-43				CONSULTANT:				CONSULTANT PROJECT NO:				LATITUDE:		LONGITUDE:															
ROADWAY NAME:				DRILLING CONTRACTOR: Giles				DRILLING CONTRACTOR PROJECT NO:				NORTHING: 358738.726		EASTING: 602585.832															
DATE STARTED: 11/20/14				CREW CHIEF: Chip				DRILL RIG:				COORDINATE SYSTEM: WCCS																	
DATE COMPLETED: 11/20/14				LOGGED BY: GILES				HOLE SIZE: 4 in				HORIZONTAL DATUM:		VERTICAL DATUM:															
COUNTY: Ozaukee				LOG QC BY: C. Wierzchowski				HAMMER TYPE:				STREAMBED ELEVATION: NA																	
STATION 1343+54		COUNTY A		OFFSET 20' Rt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:													
SAMPLE TYPE NUMBER		RECOVERY (in) (RQD)		Moisture		BLOW COUNTS (N VALUE)		Depth (ft)		Graphic		Soil / Rock Description and Geological Origin for Each Major Unit / Comments				USCS / AASHTO		Strength Qp (tsf)		Liquid Limit (%)		Plasticity Index (%)		Boulders		Drilling Method		Notes	
SS 1		12		M 8		5-2-3-5 (5)		1				SAND, brown/light brown, moist, FILL				SW										HSA			
SS 2		6		M 19				2				50/5"				SW													
								3				4"-6" concrete fill																	
SS 3		24		M 15		9-13-18-20 (31)		4				SILTY CLAY, brown, moist, with sand & gravel, hard				CL		4.5											
SS 4		24		M 15		5-7-9-11 (16)		5				Very stiff				CL		3.5											
								6				FINE TO MEDIUM SAND, gray, moist, trace gravel, medium dense				SP													
SS 5		24		M 11		6-7-5-10 (12)		7								SP													
								8																					
SS 6		24		M 19		3-6-8-11 (14)		9				SILTY CLAY, gray/brown, moist, trace gravel, very stiff				CL													
								10																					
								11																					
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 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704				WISDOT PROJECT ID: 1229-04-01				BORING ID: SR55											
				WISDOT STRUCTURE ID:				PAGE NO: 1 of 1											
WISDOT PROJECT NAME: I-43				CONSULTANT:				CONSULTANT PROJECT NO:				LATITUDE:		LONGITUDE:					
ROADWAY NAME:				DRILLING CONTRACTOR: Giles				DRILLING CONTRACTOR PROJECT NO:				NORTHING: 359232.451		EASTING: 602615.474					
DATE STARTED: 11/20/14				CREW CHIEF: Chip				DRILL RIG:				COORDINATE SYSTEM: WCCS							
DATE COMPLETED: 11/20/14				LOGGED BY: GILES				HOLE SIZE: 4 in				HORIZONTAL DATUM:		VERTICAL DATUM:					
COUNTY: Ozaukee				LOG QC BY: C. Wierzchowski				HAMMER TYPE:				STREAMBED ELEVATION: NA							
STATION 1348+50		COUNTyA		OFFSET 0		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:			
SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments						USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes	
						7" TOPSOIL												HSA	
						0.6													
						SILTY CLAY, brown mottled, moist, trace gravel, very stiff													
				1															
SS 1	18	M 19	3-4-5-5 (9)	2								CL	3.5						
				3															
SS 2	24	M 19	6-8-12-14 (20)	4		A-6(4)							3.5	37	22				
				5		5.0													
End of Boring at 5.0 ft.																			
WATER LEVEL & CAVE-IN OBSERVATION DATA																			
	WATER ENCOUNTERED DURING DRILLING: NE						CAVE - IN DEPTH AT COMPLETION: NMR					WET <input type="checkbox"/>			DRY <input type="checkbox"/>				
	WATER LEVEL AT COMPLETION: NMR						CAVE - IN DEPTH AFTER 0 HOURS: NMR					WET <input type="checkbox"/>			DRY <input type="checkbox"/>				
NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected. 2) NE = Not Encountered; NMR = No Measurement Recorded																			

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 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704				WISDOT PROJECT ID: 1229-04-01				BORING ID: SR56																																																																																																																									
				WISDOT STRUCTURE ID:				PAGE NO: 1 of 1																																																																																																																									
WISDOT PROJECT NAME: I-43				CONSULTANT:				CONSULTANT PROJECT NO:				LATITUDE:		LONGITUDE:																																																																																																																			
ROADWAY NAME:				DRILLING CONTRACTOR: Giles				DRILLING CONTRACTOR PROJECT NO:				NORTHING: 356421.865		EASTING: 602249.117																																																																																																																			
DATE STARTED: 11/18/14				CREW CHIEF: Chip				DRILL RIG:				COORDINATE SYSTEM: WCCS																																																																																																																					
DATE COMPLETED: 11/18/14				LOGGED BY: GILES				HOLE SIZE: 4 in				HORIZONTAL DATUM:		VERTICAL DATUM:																																																																																																																			
COUNTY: Ozaukee				LOG QC BY: C. Wierzchowski				HAMMER TYPE:				STREAMBED ELEVATION: NA																																																																																																																					
STATION 1320+00CountyB		OFFSET 0		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:																																																																																																																			
<table><thead><tr><th>SAMPLE TYPE NUMBER</th><th>RECOVERY (in) (RQD)</th><th>Moisture</th><th>BLOW COUNTS (N VALUE)</th><th>Depth (ft)</th><th>Graphic</th><th>Soil / Rock Description and Geological Origin for Each Major Unit / Comments</th><th>USCS / AASHTO</th><th>Strength Qp (tsf)</th><th>Liquid Limit (%)</th><th>Plasticity Index (%)</th><th>Boulders</th><th>Drilling Method</th><th>Notes</th></tr></thead><tbody><tr><td></td><td></td><td></td><td></td><td></td><td></td><td>12" TOPSOIL</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>SS 1</td><td>18</td><td>M 14</td><td>4-6-7-8 (13)</td><td>1</td><td></td><td>SILTY CLAY, brown, moist, trace sand & gravel, hard</td><td></td><td>4.5</td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>SS 2</td><td>24</td><td>M 16</td><td>8-9-16-17 (25)</td><td>4</td><td></td><td></td><td></td><td>4.5</td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>SS 3</td><td>24</td><td>M 17</td><td>9-13-15-18 (28)</td><td>7</td><td></td><td>A-6(4)</td><td></td><td>4.5</td><td>36</td><td>21</td><td></td><td></td><td></td></tr><tr><td>SS 4</td><td>24</td><td>M 20</td><td>6-6-10-11 (16)</td><td>9</td><td></td><td>Very stiff</td><td>CL</td><td>3.5</td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>SS 5</td><td>24</td><td>M 14</td><td>4-4-4-5 (8)</td><td>14</td><td></td><td>Gray, very stiff</td><td></td><td>2.25</td><td></td><td></td><td></td><td></td><td></td></tr><tr><td colspan="16">End of Boring at 15.0 ft.</td></tr></tbody></table>																SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes							12" TOPSOIL								SS 1	18	M 14	4-6-7-8 (13)	1		SILTY CLAY, brown, moist, trace sand & gravel, hard		4.5						SS 2	24	M 16	8-9-16-17 (25)	4				4.5						SS 3	24	M 17	9-13-15-18 (28)	7		A-6(4)		4.5	36	21				SS 4	24	M 20	6-6-10-11 (16)	9		Very stiff	CL	3.5						SS 5	24	M 14	4-4-4-5 (8)	14		Gray, very stiff		2.25						End of Boring at 15.0 ft.															
SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes																																																																																																																				
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SS 1	18	M 14	4-6-7-8 (13)	1		SILTY CLAY, brown, moist, trace sand & gravel, hard		4.5																																																																																																																									
SS 2	24	M 16	8-9-16-17 (25)	4				4.5																																																																																																																									
SS 3	24	M 17	9-13-15-18 (28)	7		A-6(4)		4.5	36	21																																																																																																																							
SS 4	24	M 20	6-6-10-11 (16)	9		Very stiff	CL	3.5																																																																																																																									
SS 5	24	M 14	4-4-4-5 (8)	14		Gray, very stiff		2.25																																																																																																																									
End of Boring at 15.0 ft.																																																																																																																																	
WATER LEVEL & CAVE-IN OBSERVATION DATA																																																																																																																																	
<table><tr><td></td><td colspan="4">WATER ENCOUNTERED DURING DRILLING: NE</td><td></td><td colspan="4">CAVE - IN DEPTH AT COMPLETION: NMR</td><td colspan="4">WET <input type="checkbox"/> DRY <input type="checkbox"/></td></tr><tr><td></td><td colspan="4">WATER LEVEL AT COMPLETION: NMR</td><td></td><td colspan="4">CAVE - IN DEPTH AFTER 0 HOURS: NMR</td><td colspan="4">WET <input type="checkbox"/> DRY <input type="checkbox"/></td></tr></table>																	WATER ENCOUNTERED DURING DRILLING: NE					CAVE - IN DEPTH AT COMPLETION: NMR				WET <input type="checkbox"/> DRY <input type="checkbox"/>					WATER LEVEL AT COMPLETION: NMR					CAVE - IN DEPTH AFTER 0 HOURS: NMR				WET <input type="checkbox"/> DRY <input type="checkbox"/>																																																																																									
	WATER ENCOUNTERED DURING DRILLING: NE					CAVE - IN DEPTH AT COMPLETION: NMR				WET <input type="checkbox"/> DRY <input type="checkbox"/>																																																																																																																							
	WATER LEVEL AT COMPLETION: NMR					CAVE - IN DEPTH AFTER 0 HOURS: NMR				WET <input type="checkbox"/> DRY <input type="checkbox"/>																																																																																																																							
NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected. 2) NE = Not Encountered; NMR = No Measurement Recorded																																																																																																																																	

J:\COUNTIES\OZAUKEE\1431229-04-01 - I-43 - SILVERSPRING DR TO 5TH 60\GINT\1229-04-01 OZAUKEE CO.GPJ 143 8/21/15

 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704				WISDOT PROJECT ID: 1229-04-01				BORING ID: SR57																					
				WISDOT STRUCTURE ID:				PAGE NO: 1 of 1																					
WISDOT PROJECT NAME: I-43				CONSULTANT:				CONSULTANT PROJECT NO:				LATITUDE:		LONGITUDE:															
ROADWAY NAME:				DRILLING CONTRACTOR: Giles				DRILLING CONTRACTOR PROJECT NO:				NORTHING: 356915.748		EASTING: 602327.087															
DATE STARTED: 11/18/14				CREW CHIEF: Chip				DRILL RIG:				COORDINATE SYSTEM: WCCS																	
DATE COMPLETED: 11/18/14				LOGGED BY: GILES				HOLE SIZE: 4 in				HORIZONTAL DATUM:		VERTICAL DATUM:															
COUNTY: Ozaukee				LOG QC BY: C. Wierzchowski				HAMMER TYPE:				STREAMBED ELEVATION: NA																	
STATION 1325+00		COUNTY B		OFFSET 20' Rt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:													
SAMPLE TYPE NUMBER		RECOVERY (in) (RQD)		Moisture		BLOW COUNTS (N VALUE)		Depth (ft)		Graphic		Soil / Rock Description and Geological Origin for Each Major Unit / Comments				USCS / AASHTO		Strength Qp (tsf)		Liquid Limit (%)		Plasticity Index (%)		Boulders		Drilling Method		Notes	
								1				12" TOPSOIL												HSA					
		SS 1		24		M 14		6-6-8-10 (14)		2				SILTY CLAY, brown mottled, moist, trace gravel, hard				CL		4.5									
		SS 2		24		M 15		12-15-18-21 (33)		3																			
		SS 3		24		M 18		6-8-12-15 (20)		4																			
		SS 4		24		M 19		6-8-10-10 (18)		5				Very stiff				CL		3.75									
		SS 5		24		M 20		5-5-6-6 (11)		6																			
		SS 6		24		M 22		3-4-4-5 (8)		7																			
		SS 7		24		M 21		4-4-6-6 (10)		8				Hard				CL		4.5									
		SS 8		24		M 23		5-5-6-6 (11)		9																			
		SS 9		24		M 24		6-8-10-10 (18)		10																			
		SS 10		24		M 25		7-7-10-10 (22)		11				SILTY CLAY, gray, moist, trace gravel, stiff				CL		2.0		35		21					
		SS 11		24		M 26		8-8-12-15 (20)		12																			
		SS 12		24		M 27		9-9-12-15 (20)		13																			
		SS 13		24		M 28		10-10-15-15 (24)		14				A-6(4)				CL		1.5		35		21					
		SS 14		24		M 29		11-11-15-15 (24)		15																			
		SS 15		24		M 30		12-12-15-15 (24)		16																			
		SS 16		24		M 31		13-13-15-15 (24)		17				A-6(4)				CL		2.0									
		SS 17		24		M 32		14-14-15-15 (24)		18																			
		SS 18		24		M 33		15-15-15-15 (24)		19																			
		SS 19		24		M 34		16-16-15-15 (24)		20				End of Boring at 20.0 ft.															
		SS 20		24		M 35		17-17-15-15 (24)		21																			
		SS 21		24		M 36		18-18-15-15 (24)		22																			
WATER LEVEL & CAVE-IN OBSERVATION DATA																													
		WATER ENCOUNTERED DURING DRILLING: NE												CAVE - IN DEPTH AT COMPLETION: NMR										WET <input type="checkbox"/>					
		WATER LEVEL AT COMPLETION: NMR												CAVE - IN DEPTH AFTER 0 HOURS: NMR										WET <input type="checkbox"/>					
NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected. 2) NE = Not Encountered; NMR = No Measurement Recorded																													

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WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

BORING ID: SR59

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT: Giles		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: Giles		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 357817.165		EASTING: 602267.447							
DATE STARTED: 11/20/14		CREW CHIEF: Chip		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 11/20/14		LOGGED BY: GILES		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 1334+00CountyD		OFFSET 9' Rt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		12" TOPSOIL						HSA	
SS 1	18	W 25	3-3-3-4 (6)	2		SILTY CLAY, gray/brown mottled, moist, trace gravel, very stiff		3.75					
SS 2	12	M 18	3-5-6-8 (11)	4		SILTY CLAY, gray/brown, moist, trace fine gravel, very stiff		2.75					
				5			CL						
				6									
				7									
SS 3	24	M 23	4-5-8-8 (13)	9		SILTY CLAY, gray, moist, trace fine gravel, stiff		1.5	36	22			
				10		A-6(4)							

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

BORING ID: SR60

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: Giles		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 358309.23		EASTING: 602337.389							
DATE STARTED: 11/20/14		CREW CHIEF: Chip		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 11/20/14		LOGGED BY: GILES		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 1338+97CountyD		OFFSET 11' Rt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		12" TOPSOIL						HSA	
SS 1	24	M 20	3-4-6-7 (10)	2		SILTY CLAY, brown, moist, trace gravel, very stiff		3.25					
SS 2	24	M 21	3-5-5-7 (10)	4				2.5					
		20		6			CL						
				8		Gray							
SS 3	24	M	5-7-9-11 (16)	9				3.0					
				10									

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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Madison, WI 53704

WISDOT PROJECT ID:

1229-04-01

BORING ID:

SR61

WISDOT STRUCTURE ID:

PAGE NO:

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WISDOT PROJECT NAME: I-43		CONSULTANT: Giles		CONSULTANT PROJECT NO:		LATITUDE: 358708.598		LONGITUDE: 602390.362	
ROADWAY NAME:		DRILLING CONTRACTOR: Chip		DRILLING CONTRACTOR PROJECT NO:		NORTHING: WCCS		EASTING:	
DATE STARTED: 11/20/14		CREW CHIEF:		DRILL RIG:		COORDINATE SYSTEM:			
DATE COMPLETED: 11/20/14		LOGGED BY: GILES		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION:		NA	
STATION 1343+00CountyD	OFFSET 7' Rt	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:		

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		12" TOPSOIL						HSA	
				1.0		Root material							
				1.5		SILTY CLAY, brown mottled, moist, trace gravel, hard							
SS 1	12	M 19	0-1-4-4 (5)	2				4.5					
				3		Very stiff							
SS 2	12	M 20	4-5-7-7 (12)	4				3.0					
				5									
				6			CL						
				7									
				8		Gray							
SS 3	24	M 19	7-8-10-10 (18)	9		A-6(4)		3.0	35	20			
				10									

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID:

1229-04-01

BORING ID:

SR62

WISDOT STRUCTURE ID:

PAGE NO:

1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT: Giles		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:	
ROADWAY NAME:		DRILLING CONTRACTOR: Chip		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 359202.014		EASTING: 602470.534	
DATE STARTED: 11/20/14		CREW CHIEF: GILES		DRILL RIG:		COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 11/20/14		LOGGED BY:		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA			
STATION 1348+00CountyD	OFFSET 0	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:		

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
						10" TOPSOIL						HSA	
				0.8									
SS 1	12	M 21	0-3-4-5 (7)	1		SANDY CLAY, brown, moist, trace gravel, with roots, stiff	SC	1.5					
				3.0									
SS 2	18	M 18	5-8-8-9 (16)	4		SILTY CLAY, brown, moist, trace gravel, hard		4.5					
				5									
				6			CL						
				7									
				8									
				8		Gray, very stiff							
SS 3	24	M 21	4-6-8-6 (14)	9				2.25					
				10									
				10.0									

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

WATER ENCOUNTERED DURING DRILLING: NE	CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
WATER LEVEL AT COMPLETION: NMR	CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID:

1229-04-01

BORING ID:

SR63

WISDOT STRUCTURE ID:

PAGE NO:

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WISDOT PROJECT NAME:

I-43

CONSULTANT:

CONSULTANT PROJECT NO:

LATITUDE:

LONGITUDE:

ROADWAY NAME:

DRILLING CONTRACTOR:

Giles

DRILLING CONTRACTOR PROJECT NO:

NORTHING:

360819.253

EASTING:

602602.434

DATE STARTED:

11/18/14

CREW CHIEF:

Chip

DRILL RIG:

COORDINATE SYSTEM:

WCCS

DATE COMPLETED:

11/18/14

LOGGED BY:

GILES

HOLE SIZE:

4 in

HORIZONTAL DATUM:

VERTICAL DATUM:

COUNTY:

Ozaukee

LOG QC BY:

C. Wierzchowski

HAMMER TYPE:

STREAMBED ELEVATION:

NA

STATION

54+96Donges

OFFSET

11' Rt

TOWNSHIP:

RANGE:

SECTION:

1/4 SECTION:

1/4 1/4 SECTION:

SURFACE ELEVATION:

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
AUGER 1	12	M 5				4" HMA							
						0.3							
						12" BASE COURSE							
				1			GW						
						1.3							
						SILTY CLAY, brown, moist, stiff							
SS 2	24	M 14	5-3-7-8 (10)	2			CL	1					
				3									
						3.5							
						SILTY SAND, brown, moist, medium dense							
SS 3	24	M	6-7-7-7 (14)	4		A-2-4	SM						Fines = 13%
				5									
				6		6.0							

End of Boring at 6.0 ft.






WATER LEVEL & CAVE-IN OBSERVATION DATA

▽	WATER ENCOUNTERED DURING DRILLING:	NE	☒	CAVE - IN DEPTH AT COMPLETION:	NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
▽	WATER LEVEL AT COMPLETION:	NMR	☒	CAVE - IN DEPTH AFTER 0 HOURS:	NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.

2) NE = Not Encountered; NMR = No Measurement Recorded

J:\COUNTIES\OZAUKEE\1229-04-01-143-SILVERSPRING DR TO 5TH 60GINT\1229-04-01 OZAUKEE CO GPRJ - 143 8/21/15

 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704				WISDOT PROJECT ID: 1229-04-01				BORING ID: SR64																					
				WISDOT STRUCTURE ID:				PAGE NO: 1 of 1																					
WISDOT PROJECT NAME: I-43				CONSULTANT:				CONSULTANT PROJECT NO:				LATITUDE:		LONGITUDE:															
ROADWAY NAME:				DRILLING CONTRACTOR: Giles				DRILLING CONTRACTOR PROJECT NO:				NORTHING: 360837.039		EASTING: 603606.615															
DATE STARTED: 12/02/14				CREW CHIEF: Chip				DRILL RIG:				COORDINATE SYSTEM: WCCS																	
DATE COMPLETED: 12/02/14				LOGGED BY: GILES				HOLE SIZE: 4 in				HORIZONTAL DATUM:		VERTICAL DATUM:															
COUNTY: Ozaukee				LOG QC BY: C. Wierzchowski				HAMMER TYPE:				STREAMBED ELEVATION: NA																	
STATION 64+00Donges		OFFSET 15' Lt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:															
SAMPLE TYPE NUMBER		RECOVERY (in) (RQD)		Moisture		BLOW COUNTS (N VALUE)		Depth (ft)		Graphic		Soil / Rock Description and Geological Origin for Each Major Unit / Comments				USCS / AASHTO		Strength Qp (tsf)		Liquid Limit (%)		Plasticity Index (%)		Boulders		Drilling Method		Notes	
												12" HMA														HSA			
1		2		5				1		1.0		SILTY CLAY, dark brown, moist, with sand & gravel, FILL, very stiff				CL		2.5											
2		12		M 24		6-3-6-6 (9)		2																					
3								3		3.0		SILTY CLAY, brown mottled, moist, trace gravel, hard																	
4		18		M 18		4-4-5-7 (9)		4								CL		4.5											
5								5		5.0		End of Boring at 5.0 ft.																	
WATER LEVEL & CAVE-IN OBSERVATION DATA																													
		WATER ENCOUNTERED DURING DRILLING: NE														CAVE - IN DEPTH AT COMPLETION: NMR												WET <input type="checkbox"/>	
		WATER LEVEL AT COMPLETION: NMR														CAVE - IN DEPTH AFTER 0 HOURS: NMR												WET <input type="checkbox"/>	
NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected. 2) NE = Not Encountered; NMR = No Measurement Recorded																													

J:\COUNTIES\OZAUKEE\1229-04-01-143-SILVERSPRING DR TO 5TH 60\GINT\1229-04-01 OZAUKEE CO.GPJ 143 8/21/15



WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID:

1229-04-01

BORING ID:

SR65

WISDOT STRUCTURE ID:

PAGE NO:

1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:	
ROADWAY NAME:		DRILLING CONTRACTOR: Giles		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 366074.773		EASTING: 601594.679	
DATE STARTED: 11/21/14		CREW CHIEF: Chip		DRILL RIG:		COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 11/21/14		LOGGED BY: GILES		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA			
STATION 23+00	MEQUON E	OFFSET 35' Rt	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		12.5" TOPSOIL						HSA	
SS 1	18	M 16	4-6-8-12 (14)	2		SILTY CLAY, brown/dark brown mottled, moist, trace sand & gravel, FILL, hard	CL	4.5					
SS 2	24	M 20	9-12-17-21 (29)	4		Very stiff	CL	3.5					
				5		SILTY CLAY, brown mottled, moist, trace gravel, very stiff							
				6									
				7									
SS 3	24	M 21	5-8-8-10 (16)	9		A-6(8)	CL	3.5	40	24			
				10									









End of Boring at 10.0 ft.

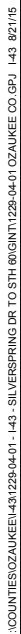
WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

J:\COUNTIES\OZAUKEE\1229-04-01-1-43-SILVERSPRING DR TO 5TH 60\GINT\1229-04-01 OZAUKEE CO.GPJ 143 8/21/15

 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704				WISDOT PROJECT ID: 1229-04-01				BORING ID: SR66																							
				WISDOT STRUCTURE ID:				PAGE NO: 1 of 1																							
WISDOT PROJECT NAME: I-43				CONSULTANT:				CONSULTANT PROJECT NO:				LATITUDE:		LONGITUDE:																	
ROADWAY NAME:				DRILLING CONTRACTOR: Giles				DRILLING CONTRACTOR PROJECT NO:				NORTHING: 366191.994		EASTING: 601697.34																	
DATE STARTED: 12/02/14				CREW CHIEF: Chip				DRILL RIG:				COORDINATE SYSTEM: WCCS																			
DATE COMPLETED: 12/02/14				LOGGED BY: GILES				HOLE SIZE: 4 in				HORIZONTAL DATUM:		VERTICAL DATUM:																	
COUNTY: Ozaukee				LOG QC BY: C. Wierzchowski				HAMMER TYPE:				STREAMBED ELEVATION: NA																			
STATION 24+00.00		OFFSET MequonW 35' Lt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:																	
SAMPLE TYPE NUMBER		RECOVERY (in) (RQD)		Moisture		BLOW COUNTS (N VALUE)		Depth (ft)		Graphic		Soil / Rock Description and Geological Origin for Each Major Unit / Comments				USCS / AASHTO		Strength Qp (tsf)		Liquid Limit (%)		Plasticity Index (%)		Boulders		Drilling Method		Notes			
AUGER BC		6		7				1				0.3 3" HMA																			
												6" PCC																			
												0.8 6" BASE COURSE																			
												1.3 SILTY CLAY, brown, moist, trace sand & gravel, POSSIBLE FILL, hard				GW															
		SS 1		18		M 18		2-4-6-8 (10)		2						CL		4.5													
										3																					
										4																					
		SS 2		24		M 14		6-10-14-14 (24)		5																					
										6																					
										7																					
										8																					
		SS 3		24		M 18		5-7-11-13 (18)		9								4.5													
										10																					





WI Dept. of Transportation
3502 Kinsman Blvd.
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WISDOT PROJECT ID: 1229-04-01

BORING ID: SR68

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT: Giles		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: Giles		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 366195.201		EASTING: 602298.07							
DATE STARTED: 11/19/14		CREW CHIEF: Chip		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 11/19/14		LOGGED BY: GILES		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 30+00MequonW		OFFSET 40' Lt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
						12" TOPSOIL						HSA	
SS 1	12	M 14	10-4-5-5 (9)	1		SILTY CLAY, dark brown, moist, with sand & gravel, trace foundry slag, FILL, medium	CL						
SS 2	18	M 17	2-3-5-7 (8)	2		SILTY CLAY, brown, moist, trace sand & gravel, very stiff	CL	3.5					
				3									
				4									
				5									
				6									
				7									
SS 3	24	M 18	5-7-7-9 (14)	8		Hard		4.5					
				9									
				10									

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

WATER ENCOUNTERED DURING DRILLING: NE	CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
WATER LEVEL AT COMPLETION: NMR	CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID:

1229-04-01

BORING ID:

SR69

WISDOT STRUCTURE ID:

PAGE NO:

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WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:	
ROADWAY NAME:		DRILLING CONTRACTOR: Giles		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 366085.953		EASTING: 603196.577	
DATE STARTED: 11/19/14		CREW CHIEF: Chip		DRILL RIG:		COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 11/19/14		LOGGED BY: GILES		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA			
STATION 39+00.00	OFFSET MequonE 15' Rt	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:		

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		16" TOPSOIL							
SS 1	18	21 M	2-3-4-4 (7)	2		1.3 SILTY CLAY, brown mottled, moist, trace sand & gravel, very stiff		3.5					
SS 2	24	17 M	4-6-10-10 (16)	4		Hard		4.5					
				5			CL						
				6									
				7									
				8									
SS 3	24	19 M	9-9-10-11 (19)	9		Gray, very stiff		3.5					
				10									







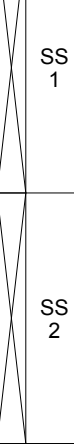














End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

J:\COUNTIES\OZAUKEE\1229-04-01-143-SILVERSPRING DR TO 5TH 60\GINT\1229-04-01 OZAUKEE CO.GPJ 143 8/21/15

 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704				WISDOT PROJECT ID: 1229-04-01				BORING ID: SR70																							
				WISDOT STRUCTURE ID:				PAGE NO: 1 of 1																							
WISDOT PROJECT NAME: I-43				CONSULTANT:				CONSULTANT PROJECT NO:				LATITUDE:		LONGITUDE:																	
ROADWAY NAME:				DRILLING CONTRACTOR: Giles				DRILLING CONTRACTOR PROJECT NO:				NORTHING: 366142.568		EASTING: 603297.58																	
DATE STARTED: 12/02/14				CREW CHIEF: Chip				DRILL RIG:				COORDINATE SYSTEM: WCCS																			
DATE COMPLETED: 12/02/14				LOGGED BY: GILES				HOLE SIZE: 4 in				HORIZONTAL DATUM:		VERTICAL DATUM:																	
COUNTY: Ozaukee				LOG QC BY: C. Wierzchowski				HAMMER TYPE:				STREAMBED ELEVATION: NA																			
STATION 40+00.00		MEQUON W		OFFSET 10' Lt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:															
SAMPLE TYPE NUMBER		RECOVERY (in) (RQD)		Moisture		BLOW COUNTS (N VALUE)		Depth (ft)		Graphic		Soil / Rock Description and Geological Origin for Each Major Unit / Comments				USCS / AASHTO		Strength Qp (tsf)		Liquid Limit (%)		Plasticity Index (%)		Boulders		Drilling Method		Notes			
 AUGER BC		3		3				0.5				5.5" HMA														HSA					
								0.7				3" BASE COURSE				GW															
								1.0				4" HMA																			
SS 1		18		M 6		14-17-9-11 (26)		1				SILTY SAND & GRAVEL, brown, moist, FILL, medium dense																			
								2				Loose				GM															
								3																							
								4																							
SS 2		18		M 11		5-3-4-4 (7)		5																							
								6																							
								7																							
								8																							
								9																							
								10																							
								10.0																							
								End of Boring at 10.0 ft.																							
WATER LEVEL & CAVE-IN OBSERVATION DATA																															
		WATER ENCOUNTERED DURING DRILLING: NE														CAVE - IN DEPTH AT COMPLETION: NMR												WET <input type="checkbox"/>		DRY <input type="checkbox"/>	
		WATER LEVEL AT COMPLETION: NMR														CAVE - IN DEPTH AFTER 0 HOURS: NMR												WET <input type="checkbox"/>		DRY <input type="checkbox"/>	
NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected. 2) NE = Not Encountered; NMR = No Measurement Recorded																															

J:\COUNTIES\OZAUKEE\1229-04-01-1-143-SILVERSPRING DR TO 5TH 60GINT\1229-04-01 OZAUKEE CO GPRJ -143 8/21/15



WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID:

1229-04-01

BORING ID:

SR71

WISDOT STRUCTURE ID:

PAGE NO:

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WISDOT PROJECT NAME: I-43		CONSULTANT: Giles		CONSULTANT PROJECT NO:		LATITUDE:	LONGITUDE:
ROADWAY NAME:		DRILLING CONTRACTOR: Giles		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 366279.279	EASTING: 602981.189
DATE STARTED: 11/18/14		CREW CHIEF: Chip		DRILL RIG:		COORDINATE SYSTEM: WCCS	
DATE COMPLETED: 11/18/14		LOGGED BY: GILES		HOLE SIZE: 4 in		HORIZONTAL DATUM:	VERTICAL DATUM:
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA	
STATION 2059+00	OFFSET MeguonA	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		14" TOPSOIL						HSA	
SS 1	18	M 17	2-2-4-5 (6)	2		SANDY CLAY, brown, moist, trace silt & gravel, hard	SC	4.5					
SS 2	24	M 17	3-3-5-7 (8)	4		SILTY CLAY, brown mottled, moist, trace gravel, hard		4.5					
				5			CL						
				6									
				7									
SS 3	24	M 17	7-10-12-12 (22)	9		Gray, very stiff A-6(8)			36	22			
				10									


End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

WATER ENCOUNTERED DURING DRILLING: NE	CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
WATER LEVEL AT COMPLETION: NMR	CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded





J:\COUNTIES\OZAUKEE\1229-04-01 - I-43 - SILVERSPRING DR TO 5TH 60\GINT\1229-04-01 OZAUKEE CO.GPJ 143 8/21/15

 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704	WISDOT PROJECT ID: 1229-04-01		BORING ID: SR72	
	WISDOT STRUCTURE ID:		PAGE NO: 1 of 1	
WISDOT PROJECT NAME: I-43		CONSULTANT: Giles	CONSULTANT PROJECT NO:	
ROADWAY NAME:		DRILLING CONTRACTOR: Giles	DRILLING CONTRACTOR PROJECT NO:	
DATE STARTED: 11/19/14		CREW CHIEF: Chip	DRILL RIG:	
DATE COMPLETED: 11/19/14		LOGGED BY: GILES	HOLE SIZE: 4 in	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski	HAMMER TYPE:	
STATION 2065+00		OFFSET 0	SURFACE ELEVATION: NA	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
						9" TOPSOIL							
				0.8									
SS 1	12	M 19	3-4-5-7 (9)	1		SILTY CLAY, brown, moist, trace sand & gravel, POSSIBLE FILL, hard	CL	4.5					
				3.0									
SS 2	24	M 24	4-8-10-12 (18)	4		SILTY CLAY TO CLAYEY SILT, brown/light brown mottled, moist, trace sand, hard	CL-ML	4.5					
				5.0									

End of Boring at 5.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

J:\COUNTIES\OZAUKEE\1229-04-01-143-SILVERSPRING DR TO 5TH 60GINT\1229-04-01 OZAUKEE CO.GPJ 143 8/21/15



WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID:

1229-04-01

BORING ID:

SR73

WISDOT STRUCTURE ID:

PAGE NO:

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WISDOT PROJECT NAME: I-43		CONSULTANT: Giles		CONSULTANT PROJECT NO:		LATITUDE:	LONGITUDE:
ROADWAY NAME:		DRILLING CONTRACTOR: Giles		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 364866.995	EASTING: 602901.654
DATE STARTED: 11/20/14		CREW CHIEF: Chip		DRILL RIG:		COORDINATE SYSTEM: WCCS	
DATE COMPLETED: 11/20/14		LOGGED BY: GILES		HOLE SIZE: 4 in		HORIZONTAL DATUM:	VERTICAL DATUM:
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA	
STATION 2045+00	MEQUON B	OFFSET 0	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
						4" TOPSOIL							
				0.3		SILTY CLAY, brown, moist, trace sand, POSSIBLE FILL, stiff							
SS 1	9	M 20	1-2-4-4 (6)	1				1.75					
				2									
				3		Very stiff							
SS 2	18	M 20	3-5-9-9 (14)	4			CL	3.0					
				5									
				6									
				7									
				8									
SS 3	18	M 25	3-4-7-7 (11)	9		SILTY CLAY, gray, moist, with roots, very stiff	CL	2.5					
				10									

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.

2) NE = Not Encountered; NMR = No Measurement Recorded

J:\COUNTIES\OZAUKEE\1229-04-01-1-43-SILVERSPRING DR TO 5TH 60GINT\1229-04-01 OZAUKEE CO.GPJ 143 8/21/15



WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID:

1229-04-01

BORING ID:

SR74

WISDOT STRUCTURE ID:

PAGE NO:

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WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:	
ROADWAY NAME:		DRILLING CONTRACTOR: Giles		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 365964.031		EASTING: 602976.192	
DATE STARTED: 11/19/14		CREW CHIEF: Chip		DRILL RIG:		COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 11/19/14		LOGGED BY: GILES		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA			
STATION 2056+00	OFFSET 0	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:		
MequonB									

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
						10" TOPSOIL						HSA	
				0.8									
				1		SILTY CLAY, brown, moist, trace sand & gravel, very stiff							
SS 1	18	M 20	2-3-5-5 (8)	2			CL	3.0					
				3									
SS 2	24	M 16	4-6-7-12 (13)	4				4.0					
				5									
				5.0									

End of Boring at 5.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

WATER ENCOUNTERED DURING DRILLING: NE	CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
WATER LEVEL AT COMPLETION: NMR	CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID:

1229-04-01

BORING ID:

SR75

WISDOT STRUCTURE ID:

PAGE NO:

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WISDOT PROJECT NAME: I-43		CONSULTANT: Giles	CONSULTANT PROJECT NO:		LATITUDE:	LONGITUDE:
ROADWAY NAME:		DRILLING CONTRACTOR: Giles	DRILLING CONTRACTOR PROJECT NO:		NORTHING: 365854.024	EASTING: 602631.239
DATE STARTED: 11/19/14		CREW CHIEF: Chip	DRILL RIG:		COORDINATE SYSTEM: WCCS	
DATE COMPLETED: 11/19/14		LOGGED BY: GILES	HOLE SIZE: 4 in		HORIZONTAL DATUM:	VERTICAL DATUM:
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski	HAMMER TYPE:		STREAMBED ELEVATION: NA	
STATION 2055+00	OFFSET MeguonC	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	SURFACE ELEVATION:

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		24" TOPSOIL						HSA	
				2		2.0							
SS 1	12	M 22	4-5-6-5 (11)	3		SILTY CLAY, dark brown, moist, trace sand & gravel, FILL, very stiff	CL	3.5					
				4									
SS 2	12	M 24	3-5-4-6 (9)	5				2.75					
				6		5.5							
				7		SILTY CLAY, brown mottled, moist, trace sand, very stiff							
				8			CL						
				9		Hard							
SS 3	24	M 16	7-11-13-13 (24)	10				4.5					
				10		10.0							

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID:

1229-04-01

BORING ID:

SR76

WISDOT STRUCTURE ID:

PAGE NO:

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WISDOT PROJECT NAME: I-43		CONSULTANT: Giles	CONSULTANT PROJECT NO:		LATITUDE:	LONGITUDE:
ROADWAY NAME:		DRILLING CONTRACTOR: Giles	DRILLING CONTRACTOR PROJECT NO:		NORTHING: 366004.563	EASTING: 602580.755
DATE STARTED: 11/19/14		CREW CHIEF: Chip	DRILL RIG:		COORDINATE SYSTEM: WCCS	
DATE COMPLETED: 11/19/14		LOGGED BY: GILES	HOLE SIZE: 4 in		HORIZONTAL DATUM: VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski	HAMMER TYPE:		STREAMBED ELEVATION: NA	
STATION 2056+50	OFFSET 50' Lt	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:
MegunC		SURFACE ELEVATION:				

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		15" TOPSOIL						HSA	
SS 1	9	M 24	4-3-4-3 (7)	2		1.3 SILTY CLAY, brown, moist, with sand & gravel, FILL, very stiff	CL	2.25					
SS 2	18	M	2-3-4-6 (7)	4				2.5					
				5		5.0 SILTY CLAY, brown mottled, moist, trace gravel, very stiff	CL						
				6									
				7									
SS 3	24	M 18	5-8-12-15 (20)	9				4.0					
				10		10.0							

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID:

1229-04-01

BORING ID:

SR77

WISDOT STRUCTURE ID:

PAGE NO:

1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT: Giles		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:	
ROADWAY NAME:		DRILLING CONTRACTOR: Chip		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 366387.437		EASTING: 602630.735	
DATE STARTED: 11/18/14		CREW CHIEF: GILES		DRILL RIG: 4 in		COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 11/18/14		LOGGED BY:		HOLE SIZE:		HORIZONTAL DATUM:		VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA			
STATION 2060+00	OFFSET MequonD	0	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
						8" TOPSOIL							
				0.7									
SS 1	18	M 14	3-3-4-3 (7)	1		SILTY CLAY, brown mottled, moist, trace sand & gravel, very stiff		2.75					
				2									
				3									
SS 2	24	M 19	3-5-6-7 (11)	4			CL	3.0					
				5									
				6									
				7									
				8									
				8.0									
SS 3	24	M 21	4-4-5-5 (9)	9		SILTY SAND, gray/brown, moist, loose	SM						
				10									
				10.0									
				11		SILTY CLAY, gray, moist, trace fine sand							
				12			CL						
				13		Stiff							
SS 4	24	M 22	4-5-5-6 (10)	14		A-6(8)		1.75	31	17			
				15									
				15.0									


End of Boring at 15.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded





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 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704	WISDOT PROJECT ID: 1229-04-01		BORING ID: SR78					
	WISDOT STRUCTURE ID:		PAGE NO: 1 of 1					
WISDOT PROJECT NAME: I-43		CONSULTANT:	CONSULTANT PROJECT NO:	LATITUDE:	LONGITUDE:			
ROADWAY NAME:		DRILLING CONTRACTOR: Giles	DRILLING CONTRACTOR PROJECT NO:	NORTHING: 376822.502	EASTING: 602377.347			
DATE STARTED: 11/21/14		CREW CHIEF: Chip	DRILL RIG:	COORDINATE SYSTEM: WCCS				
DATE COMPLETED: 11/21/14		LOGGED BY: GILES	HOLE SIZE: 4 in	HORIZONTAL DATUM:		VERTICAL DATUM:		
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski	HAMMER TYPE:	STREAMBED ELEVATION: NA				
STATION 11+50	HighlandW	OFFSET 20' Lt	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
						10" TOPSOIL						HSA	
				0.8									
				1		SILTY CLAY, dark brown, moist, with fine organics, very stiff							
SS 1	12	M 20	3-4-4-4 (8)	2				2.25					
				3		Stiff							
SS 2	12	M 29	3-3-3-6 (6)	4		A-7	CL	1.5	49	30			
				5									
				6									
				7									
				8									
				8.0									
						SILTY CLAY, brown, moist, trace sand & gravel, hard							
SS 3	24	M 16	8-13-21-32 (34)	9			CL	4.5					
				10									
				10.0									


End of Boring at 10.0 ft.

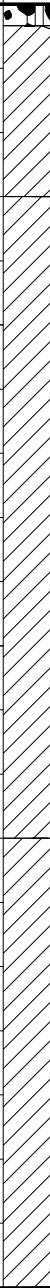
WATER LEVEL & CAVE-IN OBSERVATION DATA





	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

J:\COUNTIES\OZAUKEE\1229-04-01-1-143-SILVERSPRING DR TO 5TH 60\GINT\1229-04-01 OZAUKEE CO.GPJ 143 8/21/15

 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704	WISDOT PROJECT ID: 1229-04-01		BORING ID: SR79				
	WISDOT STRUCTURE ID:		PAGE NO: 1 of 1				
WISDOT PROJECT NAME: I-43		CONSULTANT:	CONSULTANT PROJECT NO:	LATITUDE:	LONGITUDE:		
ROADWAY NAME:		DRILLING CONTRACTOR: Giles	DRILLING CONTRACTOR PROJECT NO:	NORTHING: 376761.024	EASTING: 602930		
DATE STARTED: 11/21/14		CREW CHIEF: Chip	DRILL RIG:	COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 11/21/14		LOGGED BY: GILES	HOLE SIZE: 4 in	HORIZONTAL DATUM:	VERTICAL DATUM:		
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski	HAMMER TYPE:	STREAMBED ELEVATION: NA			
STATION 17+03HighlandE	OFFSET 5' Rt	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
						0.3 Crushed stone 4" SHOULDER GRAVEL	GW-GM						
SS 1	12	M 8	3-3-3-5 (6)	1		SILTY CLAY, brown, moist, with sand & gravel, FILL, medium	CL						
				2									
SS 2	18	M 21	2-3-3-3 (6)	3		3.0	SILTY CLAY, dark brown, moist, with sand & gravel, POSSIBLE FILL, medium		0.75				
				4									
				5									
SS 3	24	M 15	3-6-6-9 (12)	6			Stiff						
				7									
				8			Hard	CL					
SS 4	24	M 12	7-10-10-12 (20)	9					4.5				
				10									
				11			Very stiff						
SS 5	24	M 18	5-7-9-9 (16)	12					2.75				
				13			13.0	SILTY CLAY, brown mottled, moist, trace sand & gravel, hard					
SS 6	24	M 15	5-7-9-10 (16)	14					4.5				
				15									
				16									
SS 7	24	M 15	6-9-11-14 (20)	17				CL	4.5				
				18									
SS 8	24	M 20	3-7-9-11 (16)	19			Very stiff		3.5				
				20			20.0						
End of Boring at 20.0 ft.													

WATER LEVEL & CAVE-IN OBSERVATION DATA					
	WATER ENCOUNTERED DURING DRILLING: NE			CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR			CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected. 2) NE = Not Encountered; NMR = No Measurement Recorded					

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WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID:

1229-04-01

BORING ID:

SR80

WISDOT STRUCTURE ID:

PAGE NO:

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WISDOT PROJECT NAME: I-43		CONSULTANT: Giles		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:	
ROADWAY NAME:		DRILLING CONTRACTOR: Chip		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 376808.451		EASTING: 603727.298	
DATE STARTED: 11/21/14		CREW CHIEF:		DRILL RIG:		COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 11/21/14		LOGGED BY: GILES		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA			
STATION 25+00HighlandW	OFFSET 12' Lt	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:		

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		12" TOPSOIL						HSA	
SS 1	12	M 18	2-3-4-5 (7)	2		SILTY CLAY, brown mottled, moist, trace sand, very stiff		2.5					
SS 2	24	M 17	3-3-6-6 (9)	4				2.5					
				5			CL						
				6									
				7									
				8									
SS 3	24	M 22	3-6-8-9 (14)	9				3.5					
				10									


End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded





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 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704	WISDOT PROJECT ID: 1229-04-01		BORING ID: SR81		
	WISDOT STRUCTURE ID:		PAGE NO: 1 of 1		
WISDOT PROJECT NAME: I-43		CONSULTANT:	CONSULTANT PROJECT NO:	LATITUDE:	LONGITUDE:
ROADWAY NAME:		DRILLING CONTRACTOR: Giles	DRILLING CONTRACTOR PROJECT NO:	NORTHING: 376761.74	EASTING: 603927.012
DATE STARTED: 11/21/14		CREW CHIEF: Chip	DRILL RIG:	COORDINATE SYSTEM: WCCS	
DATE COMPLETED: 11/21/14		LOGGED BY: GILES	HOLE SIZE: 4 in	HORIZONTAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski	HAMMER TYPE:	STREAMBED ELEVATION: NA	
STATION 27+00HighlandE	OFFSET 0	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
						Crushed stone 10" SHOULDER GRAVEL	GW-GM					HSA	
				0.8									
SS 1	12	M 6	7-2-2-4 (4)	1		SAND & GRAVEL, brown, moist, with crushed asphalt, FILL, very loose	GW-GM						
				2									
				3.0									
SS 2	24	M 15	3-4-5-6 (9)	3		SILTY CLAY, brown mottled, moist, trace sand & gravel, very stiff		3.25					
				4									
				5									
				6									
				7									
				8									
SS 3	24	M 19	5-6-10-12 (16)	9			CL	3.0					
				10									
				11									
				12									
				13									
SS 4	24	M 18	5-7-10-12 (17)	14				3.25					
				15									
				15.0									

End of Boring at 15.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

J:\COUNTIES\OZAUKEE\1229-04-01 - I-43 - SILVERSPRING DR TO 8TH 60\GINT\1229-04-01 OZAUKEE CO.GPJ 143 8/21/15



WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID:

1229-04-01

BORING ID:

SR83

WISDOT STRUCTURE ID:

PAGE NO:

1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT: Giles		CONSULTANT PROJECT NO:		LATITUDE: 377386.26		LONGITUDE: 603357.772	
ROADWAY NAME:		DRILLING CONTRACTOR: Giles		DRILLING CONTRACTOR PROJECT NO:		NORTHING:		EASTING:	
DATE STARTED: 12/09/14		CREW CHIEF: Chip		DRILL RIG: 4 in		COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 12/09/14		LOGGED BY: GILES		HOLE SIZE:		HORIZONTAL DATUM:		VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA			
STATION 2170+00HighlandA		OFFSET 0		TOWNSHIP:		RANGE:		SECTION:	
				1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		18" TOPSOIL							
				1.5									
SS 1	18	M 18	3-5-7-9 (12)	2		SILTY CLAY, brown mottled, moist, with roots, trace sand, very stiff		3.5					
				3									
				4		No roots							
SS 2	24	M 19	5-6-9-9 (15)	5				2.75					
				6									
				7									
				8		Pushed rock							
SS 3	12	M 17	9-9-12-12 (21)	9			CL						
				10									
				11									
				12									
				13									
SS 4	24	M 19	4-4-6-6 (10)	14		Gray		3.0					
				15									
				15.0									

End of Boring at 15.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

J:\COUNTIES\OZAUKEE\1229-04-01 - I-43 - SILVERSPRING DR TO 5TH 60GINT1229-04-01 OZAUKEE CO.GPJ 143 8/21/15



WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID:

1229-04-01

BORING ID:

SR84

WISDOT STRUCTURE ID:

PAGE NO:

1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT: Giles		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:	
ROADWAY NAME:		DRILLING CONTRACTOR: Giles		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 377985.089		EASTING: 603321.615	
DATE STARTED: 12/09/14		CREW CHIEF: Chip		DRILL RIG:		COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 12/09/14		LOGGED BY: GILES		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA			
STATION 2176+00HighlandA		OFFSET 0		TOWNSHIP:		RANGE:		SECTION:	
				1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
						6" TOPSOIL						HSA	
				0.5									
SS 1	18	M 18	3-5-7-7 (12)	1		SILTY CLAY, brown mottled, moist, trace sand & gravel, hard		4.5					
				2									
				3		Very stiff	CL						
SS 2	24	M 15	3-5-7-9 (12)	4				3.0					
				5									
				5.0									

End of Boring at 5.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

<input type="checkbox"/>	WATER ENCOUNTERED DURING DRILLING: NE	<input type="checkbox"/>	CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/>
<input type="checkbox"/>	WATER LEVEL AT COMPLETION: NMR	<input type="checkbox"/>	CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/>
				DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

J:\COUNTIES\OZAUKEE\1229-04-01-143-SILVERSPRING DR TO 5TH 60\GINT\1229-04-01 OZAUKEE CO.GPJ 143 8/21/15



WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID:

1229-04-01

BORING ID:

SR85

WISDOT STRUCTURE ID:

PAGE NO:

1 of 1

WISDOT PROJECT NAME:		I-43		CONSULTANT:		CONSULTANT PROJECT NO:			LATITUDE:		LONGITUDE:				
ROADWAY NAME:				DRILLING CONTRACTOR:		Giles		DRILLING CONTRACTOR PROJECT NO:			NORTHING:		EASTING:		
DATE STARTED:				12/09/14		CREW CHIEF:		Chip		DRILL RIG:			COORDINATE SYSTEM:		
DATE COMPLETED:				12/09/14		LOGGED BY:		GILES		HOLE SIZE:			4 in		
COUNTY:				Ozaukee		LOG QC BY:			C. Wierzchowski			HAMMER TYPE:		STREAMBED ELEVATION:	
STATION		OFFSET		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	
2150+00		HighlandB		6.5' Rt										NA	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
						7" TOPSOIL							
				0.6									
SS 1	12	M 17	2-3-4-5 (7)	1		SILTY CLAY, brown, moist, trace sand, with gravel, very stiff		2.5					
				2									
				3		Hard							
SS 2	24	M 18	3-4-9-10 (13)	4				4.5					
				5									
				6									
				7									
				8		Gray	CL						
SS 3	24	M 18	5-7-8-9 (15)	9				4.5					
				10									
				11									
				12									
				13		Very stiff							
SS 4	24	M 22	4-5-6-9 (11)	14				2.5					
				15									


End of Boring at 15.0 ft.















WATER LEVEL & CAVE-IN OBSERVATION DATA

WATER ENCOUNTERED DURING DRILLING: NE	CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
WATER LEVEL AT COMPLETION: NMR	CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded





J:\COUNTIES\OZAUKEE\1229-04-01 - I-43 - SILVERSPRING DR TO 5TH 60GINT1229-04-01 OZAUKEE CO.GPJ 143 8/21/15

 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704	WISDOT PROJECT ID: 1229-04-01		BORING ID: SR87				
	WISDOT STRUCTURE ID:		PAGE NO: 1 of 1				
WISDOT PROJECT NAME: I-43		CONSULTANT:	CONSULTANT PROJECT NO:	LATITUDE:	LONGITUDE:		
ROADWAY NAME:		DRILLING CONTRACTOR: Giles	DRILLING CONTRACTOR PROJECT NO:	NORTHING: 376668.212	EASTING: 603359.606		
DATE STARTED: 12/09/14		CREW CHIEF: Chip	DRILL RIG:	COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 12/09/14		LOGGED BY: GILES	HOLE SIZE: 4 in	HORIZONTAL DATUM:		VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski	HAMMER TYPE:	STREAMBED ELEVATION: NA			
STATION 2163+33	OFFSET HighlandB	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
 SS 1	12	M 24	2-4-6-6 (10)	1		0.5 5.5" TOPSOIL	CL	2.5					
				2		SILTY CLAY, brown mottled, moist, trace organics, very stiff							
 SS 2	24	M 16	4-7-7-12 (14)	3		3.0		4.5					
				4		SILTY CLAY, brown mottled, moist, trace sand & gravel, hard							
 SS 3	24	M 18	5-10-12-15 (22)	5				4.5					
				6									
 SS 4	24	M 19	5-10-12-15 (22)	8				4.5					
				9									
 SS 5	24	M 18	4-5-6-7 (11)	13		Gray, very stiff		3.0					
				14									
 SS 6	24	M 19	5-6-9-10 (15)	18		Hard		4.5					
				19									
 SS 7	24	M 20	7-8-9-10 (17)	23		Stiff		2.0					
				24									
				25									
				26									
				27									
				28									
				29									
				30									


End of Boring at 30.0 ft.

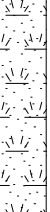
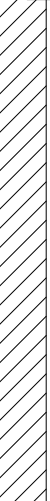
WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded





J:\COUNTIES\OZAUKEE\1229-04-01-143-SILVERSPRING DR TO 5TH 60GINT1229-04-01 OZAUKEE CO GRP 143 8/21/15

 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704	WISDOT PROJECT ID: 1229-04-01		BORING ID: SR88				
	WISDOT STRUCTURE ID:		PAGE NO: 1 of 1				
WISDOT PROJECT NAME: I-43		CONSULTANT:	CONSULTANT PROJECT NO:	LATITUDE:	LONGITUDE:		
ROADWAY NAME:		DRILLING CONTRACTOR: Giles	DRILLING CONTRACTOR PROJECT NO:	NORTHING: 375738.098	EASTING: 603128.379		
DATE STARTED: 12/05/14		CREW CHIEF: Chip	DRILL RIG:	COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 12/05/14		LOGGED BY: GILES	HOLE SIZE: 4 in	HORIZONTAL DATUM:	VERTICAL DATUM:		
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski	HAMMER TYPE:	STREAMBED ELEVATION: NA			
STATION 2154+00	OFFSET HighlandC 15' Rt	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
						11" TOPSOIL						HSA	
				0.9									
				1		SILTY CLAY, brown mottled, moist, trace gravel, very stiff							
SS 1	18	M 24	3-3-5-7 (8)	2				3.0					
				3			CL						
SS 2	24	M 17	1-5-5-8 (10)	4				4.0					
				5									
				5.0									


End of Boring at 5.0 ft.




























WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded





J:\COUNTIES\OZAUKEE\1229-04-01-143-SILVERSPRING DR TO 5TH 60\GINT\1229-04-01 OZAUKEE CO.GPJ 143 8/21/15

 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704	WISDOT PROJECT ID: 1229-04-01		BORING ID: SR90		
	WISDOT STRUCTURE ID:		PAGE NO: 1 of 1		
WISDOT PROJECT NAME: I-43		CONSULTANT:	CONSULTANT PROJECT NO:	LATITUDE:	LONGITUDE:
ROADWAY NAME:		DRILLING CONTRACTOR: Giles	DRILLING CONTRACTOR PROJECT NO:	NORTHING: 376940.359	EASTING: 603104.71
DATE STARTED: 12/09/14		CREW CHIEF: Chip	DRILL RIG:	COORDINATE SYSTEM: WCCS	
DATE COMPLETED: 12/09/14		LOGGED BY: GILES	HOLE SIZE: 4 in	HORIZONTAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski	HAMMER TYPE:	VERTICAL DATUM:	
STATION 2166+00HighlandD		OFFSET 35' Rt	TOWNSHIP:	RANGE:	SECTION:
			1/4 SECTION:	1/4 1/4 SECTION:	
			SURFACE ELEVATION: NA		

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		18" TOPSOIL							
SS 1	12	M 28	2-6-3-7 (9)	2		SILTY CLAY, brown, moist, trace gravel, POSSIBLE FILL, stiff	CL						
				3		SANDY SILT, brown, moist, with gravel, stiff							
SS 2	24	M 17	5-8-7-10 (15)	4			SM						
				5				2.0					
				6		SILTY CLAY, brown, moist, trace sand & gravel, stiff							
SS 3	12	M 15	8-10-14-14 (24)	7									
				8		Hard							
				9				4.5					
				10									
				11									
				12									
SS 4	24	M 20	5-6-6-7 (12)	13		Gray, very stiff							
				14				3.0					
				15									
				16									
				17									
SS 5	24	M 17	6-7-7-10 (14)	18			CL						
				19				3.75					
				20									
				21									
				22									
SS 6	24	M 20	6-6-11-8 (17)	23									
				24				3.0					
				25									
				26									
				27									
SS 7	24	M 21	5-6-6-10 (12)	28		Hard							
				29				4.5					
				30									
				30.0									

End of Boring at 30.0 ft.





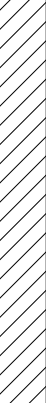






WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.

2) NE = Not Encountered; NMR = No Measurement Recorded

J:\COUNTIES\OZAUKEE\1229-04-01 - I-43 - SILVERSPRING DR TO 5TH (60)GINT\1229-04-01 OZAUKEE CO.GPJ 143 8/21/15

 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704				WISDOT PROJECT ID: 1229-04-01				BORING ID: SR92										
				WISDOT STRUCTURE ID:				PAGE NO: 1 of 1										
WISDOT PROJECT NAME: I-43				CONSULTANT:				CONSULTANT PROJECT NO:				LATITUDE:		LONGITUDE:				
ROADWAY NAME:				DRILLING CONTRACTOR: Giles				DRILLING CONTRACTOR PROJECT NO:				NORTHING: 387610.277		EASTING: 601728.142				
DATE STARTED: 12/03/14				CREW CHIEF: Chip				DRILL RIG:				COORDINATE SYSTEM: WCCS						
DATE COMPLETED: 12/03/14				LOGGED BY: GILES				HOLE SIZE: 4 in				HORIZONTAL DATUM:		VERTICAL DATUM:				
COUNTY: Ozaukee				LOG QC BY: C. Wierzchowski				HAMMER TYPE:				STREAMBED ELEVATION: NA						
STATION 250+00CTHC		OFFSET 10' Rt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:				
SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments					USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes	
AUGER BC	12	W 8				6" HMA												
				0.5														
				1		12" BASE COURSE					GW							
				1.5														
SS 1	18	M 11	8-9-8-8 (17)	2		SILTY CLAY, dark brown, moist, with sand & gravel, FILL, hard						4.5						
				3														
				4		Very stiff					CL							
SS 2	24	M 9	5-19-5-6 (24)	5								3.0						
				6														
End of Boring at 6.0 ft.																		
WATER LEVEL & CAVE-IN OBSERVATION DATA																		
	WATER ENCOUNTERED DURING DRILLING: NE					CAVE - IN DEPTH AT COMPLETION: NMR				WET <input type="checkbox"/> DRY <input type="checkbox"/>								
	WATER LEVEL AT COMPLETION: NMR					CAVE - IN DEPTH AFTER 0 HOURS: NMR				WET <input type="checkbox"/> DRY <input type="checkbox"/>								
NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected. 2) NE = Not Encountered; NMR = No Measurement Recorded																		

J:\COUNTIES\OZAUKEE\1229-04-01-143-SILVERSPRING DR TO 5TH 60\GINT\1229-04-01 OZAUKEE CO.GPJ 143 8/21/15



WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID:

1229-04-01

BORING ID:

SR93

WISDOT STRUCTURE ID:

PAGE NO:

1 of 1

WISDOT PROJECT NAME:

I-43

CONSULTANT:

CONSULTANT PROJECT NO:

LATITUDE:

LONGITUDE:

ROADWAY NAME:

DRILLING CONTRACTOR:

Giles

DRILLING CONTRACTOR PROJECT NO:

NORTHING: 387631.573

EASTING: 602227.945

DATE STARTED:

12/01/14

CREW CHIEF:

Chip

DRILL RIG:

COORDINATE SYSTEM:

WCCS

DATE COMPLETED:

12/01/14

LOGGED BY:

GILES

HOLE SIZE:

4 in

HORIZONTAL DATUM:

VERTICAL DATUM:

COUNTY:

Ozaukee

LOG QC BY:

C. Wierzchowski

HAMMER TYPE:

STREAMBED ELEVATION:

NA

STATION
255+00CTHC

OFFSET
6' Lt

TOWNSHIP:

RANGE:

SECTION:

1/4 SECTION:

1/4 1/4 SECTION:

SURFACE ELEVATION:

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				0.9		SILTY CLAY, brown, moist, FILL 11" TOPSOIL							
SS 1	12	M 8	4-4-13-5 (17)	1		SAND & GRAVEL, brown, moist, trace silt, FILL, stiff	GW-GM	2.0					
				3.0		12" HMA							
SS 2	18	M 19	3-7-5-6 (12)	4		SILTY CLAY, brown, moist, with sand & gravel, FILL, very stiff		3.5					
				5			CL						
				6									
				7									
SS 3	6	M 78	2-3-3-5 (6)	8		SILT, black, moist, with organics, medium, BURIED TOPSOIL							
				9									
				10.0		SILTY CLAY, brown mottled, moist, trace gravel, very stiff							
				11									
				12			CL						
SS 4	24	M 19	4-6-7-8 (13)	14				3.5					
				15									

End of Boring at 15.0 ft.






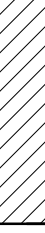




WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>





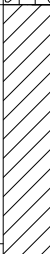






NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.

2) NE = Not Encountered; NMR = No Measurement Recorded










J:\COUNTIES\OZAUKEE\1229-04-01 - I-43 - SILVERSPRING DR TO 5TH 60GINT\1229-04-01 OZAUKEE CO.GPJ 143 8/21/15

 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704				WISDOT PROJECT ID: 1229-04-01				BORING ID: SR94										
				WISDOT STRUCTURE ID:				PAGE NO: 1 of 1										
WISDOT PROJECT NAME: I-43				CONSULTANT:				CONSULTANT PROJECT NO:				LATITUDE:		LONGITUDE:				
ROADWAY NAME:				DRILLING CONTRACTOR: Giles				DRILLING CONTRACTOR PROJECT NO:				NORTHING: 387616.178		EASTING: 603228.164				
DATE STARTED: 12/01/14				CREW CHIEF: Chip				DRILL RIG:				COORDINATE SYSTEM: WCCS						
DATE COMPLETED: 12/01/14				LOGGED BY: GILES				HOLE SIZE: 4 in				HORIZONTAL DATUM:		VERTICAL DATUM:				
COUNTY: Ozaukee				LOG QC BY: C. Wierzchowski				HAMMER TYPE:				STREAMBED ELEVATION: NA						
STATION 265+00CTHC		OFFSET 20' Rt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:				
SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments					USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes	
						12" BASE COURSE					GW-GM						HSA	
				1		SILTY CLAY, brown mottled, moist, with gravel, medium												
SS 1	0	M 16	3-3-3-5 (6)	2														
				3		Very stiff					CL							
SS 2	24	M 17	3-5-7-9 (12)	4								4.0						
				5		End of Boring at 5.0 ft.												
WATER LEVEL & CAVE-IN OBSERVATION DATA																		
	WATER ENCOUNTERED DURING DRILLING: NE						CAVE - IN DEPTH AT COMPLETION: NMR					WET <input type="checkbox"/>			DRY <input type="checkbox"/>			
	WATER LEVEL AT COMPLETION: NMR						CAVE - IN DEPTH AFTER 0 HOURS: NMR					WET <input type="checkbox"/>			DRY <input type="checkbox"/>			
NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected. 2) NE = Not Encountered; NMR = No Measurement Recorded																		


J:\COUNTIES\OZAUKEE\1229-04-01-143-SILVERSPRING DR TO 5TH 60GINT\1229-04-01 OZAUKEE CO.GPJ 143 8/21/15

 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704				WISDOT PROJECT ID: 1229-04-01				BORING ID: SR95										
				WISDOT STRUCTURE ID:				PAGE NO: 1 of 1										
WISDOT PROJECT NAME: I-43				CONSULTANT:				CONSULTANT PROJECT NO:				LATITUDE:		LONGITUDE:				
ROADWAY NAME:				DRILLING CONTRACTOR: Giles				DRILLING CONTRACTOR PROJECT NO:				NORTHING: 387674.175		EASTING: 603227.549				
DATE STARTED: 12/01/14				CREW CHIEF: Chip				DRILL RIG:				COORDINATE SYSTEM: WCCS						
DATE COMPLETED: 12/01/14				LOGGED BY: GILES				HOLE SIZE: 4 in				HORIZONTAL DATUM:		VERTICAL DATUM:				
COUNTY: Ozaukee				LOG QC BY: C. Wierzchowski				HAMMER TYPE:				STREAMBED ELEVATION: NA						
STATION 265+00CTHC		OFFSET 38' Lt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:				
SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments					USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes	
						12" BASE COURSE					GW-GM						HSA	
				1		1.0 SILTY SAND & GRAVEL, brown, moist, FILL, loose												
SS 1	6	M 6	2-3-3-4 (6)	2							GM							
				3		3.0 SILTY CLAY, brown, moist, with gravel, POSSIBLE FILL, very stiff												
SS 2	18	M 16	4-4-6-7 (10)	4							CL	3.5						
				5		5.0 End of Boring at 5.0 ft.												
WATER LEVEL & CAVE-IN OBSERVATION DATA																		
	WATER ENCOUNTERED DURING DRILLING: NE						CAVE - IN DEPTH AT COMPLETION: NMR					WET <input type="checkbox"/>			DRY <input type="checkbox"/>			
	WATER LEVEL AT COMPLETION: NMR						CAVE - IN DEPTH AFTER 0 HOURS: NMR					WET <input type="checkbox"/>			DRY <input type="checkbox"/>			
NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected. 2) NE = Not Encountered; NMR = No Measurement Recorded																		

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 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704				WISDOT PROJECT ID: 1229-04-01				BORING ID: SR96										
				WISDOT STRUCTURE ID:				PAGE NO: 1 of 1										
WISDOT PROJECT NAME: I-43				CONSULTANT:				CONSULTANT PROJECT NO:				LATITUDE:		LONGITUDE:				
ROADWAY NAME:				DRILLING CONTRACTOR: Giles				DRILLING CONTRACTOR PROJECT NO:				NORTHING: 387656.478		EASTING: 603727.765				
DATE STARTED: 12/02/14				CREW CHIEF: Chip				DRILL RIG:				COORDINATE SYSTEM: WCCS						
DATE COMPLETED: 12/02/14				LOGGED BY: GILES				HOLE SIZE: 4 in				HORIZONTAL DATUM:		VERTICAL DATUM:				
COUNTY: Ozaukee				LOG QC BY: C. Wierzchowski				HAMMER TYPE:				STREAMBED ELEVATION: NA						
STATION: 270+00CTHC		OFFSET: 15' Lt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:				
SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments					USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes	
AUGER BC	2	5		1		10" HMA												
						0.8 2" BASE COURSE												
SS 1	12	M 5	6-8-6-5 (14)	2		SAND & GRAVEL, brown, moist, FILL, medium dense					GW							
SS 2	12	M 20	3-4-5-5 (9)	4		SILTY CLAY, brown mottled, moist, trace gravel, stiff					CL	1.5						
				5		End of Boring at 5.0 ft.												
WATER LEVEL & CAVE-IN OBSERVATION DATA																		
	WATER ENCOUNTERED DURING DRILLING: NE						CAVE - IN DEPTH AT COMPLETION: NMR					WET <input type="checkbox"/>			DRY <input type="checkbox"/>			
	WATER LEVEL AT COMPLETION: NMR						CAVE - IN DEPTH AFTER 0 HOURS: NMR					WET <input type="checkbox"/>			DRY <input type="checkbox"/>			
NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected. 2) NE = Not Encountered; NMR = No Measurement Recorded																		





J:\COUNTIES\OZAUKEE\1229-04-01-143-SILVERSPRING DR TO 5TH 60GINT\1229-04-01 OZAUKEE CO.GPJ 143 8/21/15

 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704	WISDOT PROJECT ID: 1229-04-01		BORING ID: SR97		
	WISDOT STRUCTURE ID:		PAGE NO: 1 of 1		
WISDOT PROJECT NAME: I-43		CONSULTANT:	CONSULTANT PROJECT NO:	LATITUDE:	LONGITUDE:
ROADWAY NAME:		DRILLING CONTRACTOR: Giles	DRILLING CONTRACTOR PROJECT NO:	NORTHING: 387721.723	EASTING: 603064.228
DATE STARTED: 12/01/14		CREW CHIEF: Chip	DRILL RIG:	COORDINATE SYSTEM: WCCS	
DATE COMPLETED: 12/01/14		LOGGED BY: GILES	HOLE SIZE: 4 in	HORIZONTAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski	HAMMER TYPE:	VERTICAL DATUM:	
STATION 2274+07CTHCA		OFFSET 0	TOWNSHIP:	RANGE:	SECTION:
			1/4 SECTION:	SURFACE ELEVATION: NA	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
						7" TOPSOIL							
				0.6									
SS 1	6	M 19	2-1-2-3 (3)	1		SILTY CLAY, dark brown, moist, with sand & gravel, FILL, stiff	CL	2.0					
				2									
				3		Very stiff							
SS 2	18	M 21	1-3-3-3 (6)	4				3.0					
				5									
				6			CL						
				7									
				8									
SS 3	24	M 19	4-4-5-5 (9)	9				4.25					
				10		10.0 BURIED TOPSOIL							
				11									
				12		11.8 SILTY CLAY, red/brown mottled, moist, trace gravel, very stiff							
				13									
SS 4	24	M	6-8-12-16 (20)	14			CL	4.0					
				15		15.0							

End of Boring at 15.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID:

1229-04-01

BORING ID:

SR98

WISDOT STRUCTURE ID:

PAGE NO:

1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:	
ROADWAY NAME:		DRILLING CONTRACTOR: Giles		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 388805.773		EASTING: 602931.003	
DATE STARTED: 12/05/14		CREW CHIEF: Chip		DRILL RIG:		COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 12/05/14		LOGGED BY: GILES		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA			
STATION 2285+00CTHCA	OFFSET 0	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:		

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
						5" TOPSOIL							
				0.4									
SS 1	18	M 20	2-3-4-5 (7)	1		SILTY CLAY, dark brown/black mottled, moist, trace sand & gravel, FILL, very stiff		3.75					
				2									
				3			CL						
SS 2	18	M 22	3-3-4-4 (7)	4				2.25					
				5									
				6		6.0	BURIED TOPSOIL						
				7		7.0							
						SILTY CLAY, brown mottled, moist, trace gravel, very stiff to hard							
				8									
SS 3	24	M 17	3-4-7-10 (11)	9			CL	4.5					
				10		10.0							


End of Boring at 10.0 ft.




WATER LEVEL & CAVE-IN OBSERVATION DATA

WATER ENCOUNTERED DURING DRILLING: NE	CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
WATER LEVEL AT COMPLETION: NMR	CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded





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 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704	WISDOT PROJECT ID: 1229-04-01				BORING ID: SR99		
	WISDOT STRUCTURE ID:				PAGE NO: 1 of 1		
WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:	LONGITUDE:
ROADWAY NAME:		DRILLING CONTRACTOR: Giles		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 386527.659	EASTING: 603037.257
DATE STARTED: 12/09/14		CREW CHIEF: Chip		DRILL RIG:		COORDINATE SYSTEM: WCCS	
DATE COMPLETED: 12/09/14		LOGGED BY: GILES		HOLE SIZE: 4 in		HORIZONTAL DATUM: VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA	
STATION 2262+00CTHCB		OFFSET 0		TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION: 1/4 1/4 SECTION: SURFACE ELEVATION:

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
						4.5" TOPSOIL						HSA	
				0.4		SILTY CLAY, brown mottled, moist, trace gravel, stiff							
SS 1	18	M 31	1-1-4-5 (5)	1			CL	1.5					
				2									
				3		Hard							
SS 2	24	M 18	4-5-9-10 (14)	4				4.5					
				5									

End of Boring at 5.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

J:\COUNTIES\OZAUKEE\1229-04-01-143-SILVERSPRING DR TO 5TH 60\GINT\1229-04-01 OZAUKEE CO.GPJ 143 8/21/15



WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID:

1229-04-01

BORING ID:

SR100

WISDOT STRUCTURE ID:

PAGE NO:

1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT: Giles		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:	
ROADWAY NAME:		DRILLING CONTRACTOR: Chip		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 387577.014		EASTING: 603069.642	
DATE STARTED: 12/01/14		CREW CHIEF: GILES		DRILL RIG:		COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 12/01/14		LOGGED BY:		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION:		NA	
STATION 2272+50CTHCB	OFFSET 0	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:		

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
						6" TOPSOIL							
				0.5									
SS 1	18	M 20	1-3-3-3 (6)	1		SILTY CLAY, brown to light brown mottled, moist, with roots, very stiff		2.25					
				2									
				3									
SS 2	24	M 20	3-4-5-5 (9)	4				2.25					
				5									
				6			CL						
				7									
				8		Stiff							
SS 3	24	M 22	3-3-4-4 (7)	9				2.0					
				10									


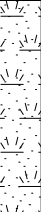






End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA


	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

J:\COUNTIES\OZAUKEE\1229-04-01 - I-43 - SILVERSPRING DR TO 5TH 60\GINT\1229-04-01 OZAUKEE CO.GPJ 143 8/21/15

 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704				WISDOT PROJECT ID: 1229-04-01				BORING ID: SR101																					
				WISDOT STRUCTURE ID:				PAGE NO: 1 of 1																					
WISDOT PROJECT NAME: I-43				CONSULTANT:				CONSULTANT PROJECT NO:				LATITUDE:		LONGITUDE:															
ROADWAY NAME:				DRILLING CONTRACTOR: Giles				DRILLING CONTRACTOR PROJECT NO:				NORTHING: 386405.596		EASTING: 602837.426															
DATE STARTED: 12/05/14				CREW CHIEF: Chip				DRILL RIG:				COORDINATE SYSTEM: WCCS																	
DATE COMPLETED: 12/05/14				LOGGED BY: GILES				HOLE SIZE: 4 in				HORIZONTAL DATUM:		VERTICAL DATUM:															
COUNTY: Ozaukee				LOG QC BY: C. Wierzchowski				HAMMER TYPE:				STREAMBED ELEVATION: NA																	
STATION 2261+00CTHCC		OFFSET 5' Rt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:															
SAMPLE TYPE NUMBER		RECOVERY (in) (RQD)		Moisture		BLOW COUNTS (N VALUE)		Depth (ft)		Graphic		Soil / Rock Description and Geological Origin for Each Major Unit / Comments				USCS / AASHTO		Strength Qp (tsf)		Liquid Limit (%)		Plasticity Index (%)		Boulders		Drilling Method		Notes	
								1				11" TOPSOIL												HSA					
								2				SILTY CLAY, brown, moist, trace gravel, hard				CL		4.5											
SS 1		12		M 18		4-5-9-16 (14)		3																					
SS 2		24		M 17		4-3-8-10 (11)		4										4.5											
								5				End of Boring at 5.0 ft.																	
WATER LEVEL & CAVE-IN OBSERVATION DATA																													
		WATER ENCOUNTERED DURING DRILLING: NE														CAVE - IN DEPTH AT COMPLETION: NMR												WET <input type="checkbox"/>	
		WATER LEVEL AT COMPLETION: NMR														CAVE - IN DEPTH AFTER 0 HOURS: NMR												WET <input type="checkbox"/>	
NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected. 2) NE = Not Encountered; NMR = No Measurement Recorded																													





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 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704	WISDOT PROJECT ID: 1229-04-01		BORING ID: SR102	
	WISDOT STRUCTURE ID:		PAGE NO: 1 of 1	
WISDOT PROJECT NAME: I-43		CONSULTANT: Giles	CONSULTANT PROJECT NO:	
ROADWAY NAME:		DRILLING CONTRACTOR: Giles	DRILLING CONTRACTOR PROJECT NO:	
DATE STARTED: 12/01/14		CREW CHIEF: Chip	DRILL RIG:	
DATE COMPLETED: 12/01/14		LOGGED BY: GILES	HOLE SIZE: 4 in	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski	HAMMER TYPE:	
STATION 2272+50CTHCC		OFFSET 0	TOWNSHIP: RANGE: SECTION: 1/4 SECTION: 1/4 1/4 SECTION:	
				SURFACE ELEVATION: NA

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
						0.5 6" TOPSOIL							
SS 1	24	M 16	3-6-7-8 (13)	1		SILTY CLAY, red/brown, moist, trace gravel, very stiff		4.0					
				2									
				3		Hard							
SS 2	24	M 16	6-8-14-17 (22)	4				4.5					
				5									
				6									
				7									
				8		Very stiff							
SS 3	24	M 18	4-7-9-11 (16)	9				3.25					
				10									
				11									
				12									
				13		Gray							
SS 4	24	M 19	3-4-5-5 (9)	14				2.25					
				15									
				16									
				17									
				18		Stiff							
SS 5	24	M 21	4-4-6-4 (10)	19									
				20									
				20.0									


End of Boring at 20.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

J:\COUNTIES\OZAUKEE\1229-04-01 - I-43 - SILVERSPRING DR TO 5TH (60)GINT\1229-04-01 OZAUKEE CO.GPJ 143 8/21/15


 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704		WISDOT PROJECT ID: 1229-04-01		BORING ID: SR103	
WISDOT STRUCTURE ID:		PAGE NO: 1 of 1			
WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:	
ROADWAY NAME:		DRILLING CONTRACTOR: Giles		DRILLING CONTRACTOR PROJECT NO:	
DATE STARTED: 12/02/14		CREW CHIEF: Chip		DRILL RIG:	
DATE COMPLETED: 12/02/14		LOGGED BY: GILES		HOLE SIZE: 4 in	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:	
STATION 2272+79CTHD		TOWNSHIP:		RANGE:	
OFFSET 0		SECTION:		1/4 SECTION:	
				SURFACE ELEVATION: NA	


SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
1	12	5		0.6		7" HMA							
2	12	M 16	3-4-3-4 (7)	1.6		12" BASE COURSE	GW						
3													
4													
5	24	M 19	2-2-2-4 (4)			SANDY SILT, brown, moist, trace clay & gravel, FILL, very stiff	SM	1.25					
6						Medium		1.0					
7													
8													
9	24	M 17	5-6-10-10 (16)	8.0		SILTY CLAY, dark brown, trace gravel, with organics, hard		4.5					
10													
11													
12													
13	24	M 26	4-5-8-9 (13)				CL	4.5					
14													
15													
16													
17													
18													
19	24	M 16	7-11-16-18 (27)	18.0		SILTY CLAY, gray, trace gravel, hard		4.5					
20													
21													
22							CL						
23													
24	24	M 19	6-7-8-9 (15)			Very stiff		2.75					
25				25.0		End of Boring at 25.0 ft.							

WATER LEVEL & CAVE-IN OBSERVATION DATA				
<div> <div></div> </div>	WATER ENCOUNTERED DURING DRILLING: NE	<div> <div></div> </div>	CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
<div> <div></div> </div>	WATER LEVEL AT COMPLETION: NMR	<div> <div></div> </div>	CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded





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 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704	WISDOT PROJECT ID: 1229-04-01		BORING ID: SR104				
	WISDOT STRUCTURE ID:		PAGE NO: 1 of 1				
WISDOT PROJECT NAME: I-43		CONSULTANT:	CONSULTANT PROJECT NO:	LATITUDE:	LONGITUDE:		
ROADWAY NAME:		DRILLING CONTRACTOR: Giles	DRILLING CONTRACTOR PROJECT NO:	NORTHING: 388022.146	EASTING: 602655.513		
DATE STARTED: 12/05/14		CREW CHIEF: Chip	DRILL RIG:	COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 12/05/14		LOGGED BY: GILES	HOLE SIZE: 4 in	HORIZONTAL DATUM:		VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski	HAMMER TYPE:	STREAMBED ELEVATION: NA			
STATION 2277+00CTHCD	OFFSET 0	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
						9" TOPSOIL						HSA	
SS 1	15	M 16	3-4-7-6 (11)	1		SILTY CLAY, brown, moist, trace sand & gravel, POSSIBLE FILL, hard to very stiff	CL	4.5					
SS 2	24	M 20	4-3-4-5 (7)	4		SILTY CLAY, dark brown/black mottled, moist, very stiff	CL	3.0					
				5									
				6									
				7									
SS 3	24	M 19	1-3-4-4 (7)	9		SILTY CLAY, brown mottled, moist, trace gravel, stiff	CL	2.0					
				10									

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID:

1229-04-01

BORING ID:

SR105

WISDOT STRUCTURE ID:

PAGE NO:

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WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:	
ROADWAY NAME:		DRILLING CONTRACTOR: Giles		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 392944.037		EASTING: 602738.251	
DATE STARTED: 12/03/14		CREW CHIEF: Chip		DRILL RIG:		COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 12/03/14		LOGGED BY: GILES		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA			
STATION 41+90Lakefield	OFFSET 0	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:		

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
AUGER BC	8	5				10" HMA							
				0.8		8" BASE COURSE	GW						
SS 1	18	M 9	3-3-5-5 (8)	1.5		SAND & GRAVEL, brown, moist, FILL, loose							
				2									
				3									
				4									
SS 2	18	M 4	6-7-10-10 (17)	4		Medium dense	GW-GM						
				5									
				6									

End of Boring at 6.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

WATER ENCOUNTERED DURING DRILLING: NE	CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
WATER LEVEL AT COMPLETION: NMR	CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

J:\COUNTIES\OZAUKEE\1229-04-01 - I-43 - SILVERSPRING DR TO 5TH 60GINT\1229-04-01 OZAUKEE CO.GPJ 143 8/21/15



WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID:

1229-04-01

BORING ID:

SR106

WISDOT STRUCTURE ID:

PAGE NO:

1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT: Giles		CONSULTANT PROJECT NO:		LATITUDE: 392955.561		LONGITUDE: 603248.087	
ROADWAY NAME: 12/03/14		DRILLING CONTRACTOR: Chip		DRILLING CONTRACTOR PROJECT NO:		NORTHING: WCCS		EASTING:	
DATE STARTED: 12/03/14		CREW CHIEF: GILES		DRILL RIG: 4 in		COORDINATE SYSTEM:			
DATE COMPLETED: 12/03/14		LOGGED BY: GILES		HOLE SIZE:		HORIZONTAL DATUM:		VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION:		NA	
STATION 47+00Lakefield		OFFSET 10' Lt		TOWNSHIP:		RANGE:		SECTION:	
				1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
AUGER BC	12	4				4" HMA							
				0.3		12" BASE COURSE							
				1			GW						
				1.3									
SS 1	18	M 17	3-4-4-4 (8)	2		SILTY CLAY, brown, moist, with sand, trace gravel, FILL, very stiff	CL	2.75					
				3									
				4									
				4.0									
				4		SILTY SAND, black to gray, moist, FILL, stiff							
SS 2	24	M 26	3-6-4-4 (10)	5			SM	1.5					
				6									
				6.0									

End of Boring at 6.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

WATER ENCOUNTERED DURING DRILLING: NE	CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
WATER LEVEL AT COMPLETION: NMR	CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

J:\COUNTIES\OZAUKEE\1229-04-01 - I-43 - SILVERSPRING DR TO 5TH 60\GINT\1229-04-01 OZAUKEE CO.GPJ 143 8/21/15



WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID:

1229-04-01

BORING ID:

SR107

WISDOT STRUCTURE ID:

PAGE NO:

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WISDOT PROJECT NAME: I-43		CONSULTANT: Giles		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:	
ROADWAY NAME:		DRILLING CONTRACTOR: Chip		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 398248.739		EASTING: 602381.29	
DATE STARTED: 12/03/14		CREW CHIEF: GILES		DRILL RIG:		COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 12/03/14		LOGGED BY: GILES		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA			
STATION 35+00Falls	OFFSET 7' Rt	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:		

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		12" CRUSHED STONE	GW-GM					HSA	
SS 1	12	M 21	2-2-4-4 (6)	2		SILTY CLAY, brown, moist, with organics, POSSIBLE FILL, very stiff		2.25					
SS 2	18	M 24	2-2-3-3 (5)	4		Stiff	CL	1.25					
				5									
				6		SILTY CLAY, brown, moist, trace gravel, very stiff							
				7									
				8			CL						
SS 3	24	M 17	6-8-10-10 (18)	9				3.25					
				10		End of Boring at 10.0 ft.							

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

J:\COUNTIES\OZAUKEE\1229-04-01 - I-43 - SILVERSPRING DR TO 5TH 60\GINT\1229-04-01 OZAUKEE CO.GPJ 143 8/21/15



WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID:

1229-04-01

BORING ID:

SR108

WISDOT STRUCTURE ID:

PAGE NO:

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WISDOT PROJECT NAME: I-43		CONSULTANT: Giles	CONSULTANT PROJECT NO:		LATITUDE:	LONGITUDE:
ROADWAY NAME:		DRILLING CONTRACTOR: Giles	DRILLING CONTRACTOR PROJECT NO:		NORTHING: 398274.61	EASTING: 603281.079
DATE STARTED: 12/03/14		CREW CHIEF: Chip	DRILL RIG:		COORDINATE SYSTEM: WCCS	
DATE COMPLETED: 12/03/14		LOGGED BY: GILES	HOLE SIZE: 4 in		HORIZONTAL DATUM:	VERTICAL DATUM:
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski	HAMMER TYPE:		STREAMBED ELEVATION: NA	
STATION 44+00Falls	OFFSET 10' Lt	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
						6" HMA							
				0.5		12" BASE COURSE							
AUGER BC	12	4		1			GW						
				1.5		SILTY CLAY, brown mottled, moist, trace gravel, hard							
SS 1	12	M 16	4-6-7-8 (13)	2				4.5					
				3									
				4			CL						
SS 2	24	M 16	5-7-12-12 (19)	5				4.5					
				6									

End of Boring at 6.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

<input type="checkbox"/>	WATER ENCOUNTERED DURING DRILLING: NE	<input type="checkbox"/>	CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
<input type="checkbox"/>	WATER LEVEL AT COMPLETION: NMR	<input type="checkbox"/>	CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

J:\COUNTIES\OZAUKEE\1229-04-01 - I-43 - SILVERSPRING DR TO 5TH 60GINT\1229-04-01 OZAUKEE CO.GPJ 143 8/21/15



WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

BORING ID: SR109

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT: Giles		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: Giles		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 401189.326		EASTING: 603319.859							
DATE STARTED: 12/05/14		CREW CHIEF: Chip		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 12/05/14		LOGGED BY: GILES		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 2409+00STH60B		OFFSET 0		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
						6" TOPSOIL						HSA	
				0.5									
SS 1	12	M 18	1-3-3-4 (6)	1		SILTY CLAY, brown mottled, moist, with roots, trace organics, very stiff		2.5					
				2									
				3		No roots	CL						
SS 2	24	M 19	1-3-4-7 (7)	4				3.25					
				5									
				5.0									

End of Boring at 5.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

<input type="checkbox"/>	WATER ENCOUNTERED DURING DRILLING: NE	<input type="checkbox"/>	CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
<input type="checkbox"/>	WATER LEVEL AT COMPLETION: NMR	<input type="checkbox"/>	CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

J:\COUNTIES\OZAUKEE\1229-04-01-143-SILVERSPRING DR TO 5TH 60GINT\1229-04-01 OZAUKEE CO.GPJ 143 8/21/15



WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID:

1229-04-01

BORING ID:

SR110

WISDOT STRUCTURE ID:

PAGE NO:

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WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:	
ROADWAY NAME:		DRILLING CONTRACTOR: Giles		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 401576.158		EASTING: 603420.789	
DATE STARTED: 12/05/14		CREW CHIEF: Chip		DRILL RIG:		COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 12/05/14		LOGGED BY: GILES		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA			
STATION 2413+00STH60B	OFFSET 0	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:		

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
						6" TOPSOIL						HSA	
				0.5									
SS 1	12	M 21	3-3-3-5 (6)	1		SILTY CLAY, brown, moist, with organics, POSSIBLE FILL, stiff	CL	2.0					
				2									
				3									
				3.0									
SS 2	24	M 20	3-7-8-6 (15)	4		SILTY CLAY, brown, moist, with gravel, POSSIBLE FILL, stiff	CL	1.5					
				5									
				5.0									

End of Boring at 5.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

BORING ID: SR111

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: Giles		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 401305.527		EASTING: 603130.754							
DATE STARTED: 12/05/14		CREW CHIEF: Chip		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 12/05/14		LOGGED BY: GILES		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 2410+00STH60C		OFFSET 0		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
						6" TOPSOIL							
				0.5		SILTY SAND & GRAVEL, gray/brown, moist, medium dense							
SS 1	12	M 10	3-7-4-7 (11)	1									
				2									
				3									
SS 2	0		4-8-7-9 (15)	4			GM						
				5									
				6									
				7									
				8									
				8.0		CLAYEY SILT, gray, moist, with sand, very stiff							
SS 3	24	M 10	5-7-8-9 (15)	9			CL-ML	2.5					
				10									
				10.0									

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

<input type="checkbox"/>	WATER ENCOUNTERED DURING DRILLING: NE	<input type="checkbox"/>	CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
<input type="checkbox"/>	WATER LEVEL AT COMPLETION: NMR	<input type="checkbox"/>	CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID:

1229-04-01

BORING ID:

MP16

WISDOT STRUCTURE ID:

PAGE NO:

1 of 1

WISDOT PROJECT NAME:

I-43

CONSULTANT:

CONSULTANT PROJECT NO:

LATITUDE:

LONGITUDE:

ROADWAY NAME:

DRILLING CONTRACTOR:

AET

DRILLING CONTRACTOR PROJECT NO:

NORTHING:

363469.682

EASTING:

603028.238

DATE STARTED:

11/03/14

CREW CHIEF:

MD

DRILL RIG:

COORDINATE SYSTEM:

WCCS

DATE COMPLETED:

11/03/14

LOGGED BY:

AET

HOLE SIZE:

4 in

HORIZONTAL DATUM:

VERTICAL DATUM:

COUNTY:

Ozaukee

LOG QC BY:

C. Wierzchowski

HAMMER TYPE:

STREAMBED ELEVATION:

NA

STATION

231+00NB

OFFSET

75' Rt

TOWNSHIP:

RANGE:

SECTION:

1/4 SECTION:

1/4 1/4 SECTION:

SURFACE ELEVATION:

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
						6" TOPSOIL							
				0.5									
				1		SILTY CLAY, brown, moist, trace sand, POSSIBLE FILL, very stiff							
SS 1	11	M 20	2-5-4-7 (9)	2				3.5					
				3									
SS 2	12	M 25	3-4-3-4 (7)	4			CL	2.5					
				5									
				6									
				7									
				8									
				8.0									
				9		SILTY CLAY, brown, moist, hard							
SS 3	24	M 17	5-9-6-13 (15)	9				4.5					
				10			CL						
				11									
				12									
				13									
				13		Gray, moist, very stiff							
SS 4	24	M 19	2-7-6-9 (13)	14			CL	2.75					
				15									
				15.0									

End of Boring at 15.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.

2) NE = Not Encountered; NMR = No Measurement Recorded

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WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

BORING ID: MP18

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:	
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 363641.575		EASTING: 602848.855	
DATE STARTED: 1/15/15		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 1/15/15		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA			
STATION 2032+75SB		OFFSET 63' Lt		TOWNSHIP:		RANGE:		SECTION:	
				1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
						24" BASE COURSE							
				1			GW						
SS 1	8	M 11	22-3-8-4 (11)	2		SILTY CLAY, reddish brown, moist, trace sand & gravel, hard							
				3									
SS 2	10	M 28	2-5-3-5 (8)	4				4.5					
				5									
				6			CL						
				7									
				8		Gray/brown, moist, very stiff							
SS 3	20	M 20	2-5-3-5 (8)	9				3.0					
				10									

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

<input type="checkbox"/>	WATER ENCOUNTERED DURING DRILLING: NE	<input type="checkbox"/>	CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/>
<input type="checkbox"/>	WATER LEVEL AT COMPLETION: NMR	<input type="checkbox"/>	CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/>
				DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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WI Dept. of Transportation
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Madison, WI 53704

WISDOT PROJECT ID:

1229-04-01

BORING ID:

MP19

WISDOT STRUCTURE ID:

PAGE NO:

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WISDOT PROJECT NAME:

I-43

CONSULTANT:

CONSULTANT PROJECT NO:

LATITUDE:

LONGITUDE:

ROADWAY NAME:

DRILLING CONTRACTOR:

AET

DRILLING CONTRACTOR PROJECT NO:

NORTHING:

363672.256

EASTING:

603042.328

DATE STARTED:

11/03/14

CREW CHIEF:

MD

DRILL RIG:

COORDINATE SYSTEM:

WCCS

DATE COMPLETED:

11/03/14

LOGGED BY:

AET

HOLE SIZE:

4 in

HORIZONTAL DATUM:

VERTICAL DATUM:

COUNTY:

Ozaukee

LOG QC BY:

C. Wierzchowski

HAMMER TYPE:

STREAMBED ELEVATION:

NA

STATION

2333+00NB

OFFSET

100' Rt

TOWNSHIP:

RANGE:

SECTION:

1/4 SECTION:

1/4 1/4 SECTION:

SURFACE ELEVATION:

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
						13" TOPSOIL							
				1		1.1							
SS 1	13	M 16	2-6-4-9 (10)	2		SILTY CLAY, brown/light brown, moist, trace sand & gravel, hard		4.25					
SS 2	15	M 16	4-12-8-16 (20)	4				4.5					
				5									
				6									
				7									
				8									
SS 3	24	M 20	5-9-7-11 (16)	9		Very stiff	CL	3.25					
				10									
				11									
				12									
				13		13.0							
SS 4	20	M 21	1-3-3-4 (6)	14		SILTY CLAY, gray, moist, trace sand, stiff	CL	1.5					
				15		15.0							
End of Boring at 15.0 ft.													

WATER LEVEL & CAVE-IN OBSERVATION DATA

<input type="checkbox"/>	WATER ENCOUNTERED DURING DRILLING:	NE	<input type="checkbox"/>	CAVE - IN DEPTH AT COMPLETION:	NMR	WET <input type="checkbox"/>
<input type="checkbox"/>	WATER LEVEL AT COMPLETION:	NMR	<input type="checkbox"/>	CAVE - IN DEPTH AFTER 0 HOURS:	NMR	WET <input type="checkbox"/>
						DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.

2) NE = Not Encountered; NMR = No Measurement Recorded

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WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID:

1229-04-01

BORING ID:

MP21

WISDOT STRUCTURE ID:

PAGE NO:

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WISDOT PROJECT NAME: I-43		CONSULTANT: AET		CONSULTANT PROJECT NO:		LATITUDE: 363871.879		LONGITUDE: 603008.009	
ROADWAY NAME: 11/03/14		DRILLING CONTRACTOR: MD		DRILLING CONTRACTOR PROJECT NO:		NORTHING: WCCS		603008.009	
DATE STARTED: 11/03/14		CREW CHIEF: AET		DRILL RIG: 4 in		COORDINATE SYSTEM:			
DATE COMPLETED: 11/03/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION:		NA	
STATION 2035+00NB	OFFSET 80' Rt	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:		

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				0.5		6" TOPSOIL							
				1		SILTY CLAY, brown, moist, trace sand, POSSIBLE FILL, stiff							
SS 1	10	M 23	1-2-2-3 (4)	2			CL	1.75					
SS 2	10	M 24	0-1-0-2 (1)	4				1.5					
				5		SILTY CLAY, brown, moist, trace sand & gravel, very stiff							
				6									
				7									
SS 3	24	M 18	6-8-6-11 (14)	9				2.75					
				10			CL						
				11									
				12									
SS 4	24	M 19	2-4-3-5 (7)	14		Gray/brown, stiff		1.5					
				15									

End of Boring at 15.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID:

1229-04-01

BORING ID:

MP22

WISDOT STRUCTURE ID:

PAGE NO:

1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:	CONSULTANT PROJECT NO:		LATITUDE:	LONGITUDE:
ROADWAY NAME:		DRILLING CONTRACTOR: AET	DRILLING CONTRACTOR PROJECT NO:		NORTHING: 363862.599	EASTING: 602806.102
DATE STARTED: 1/15/15		CREW CHIEF: MD	DRILL RIG:		COORDINATE SYSTEM: WCCS	
DATE COMPLETED: 1/15/15		LOGGED BY: AET	HOLE SIZE: 4 in		HORIZONTAL DATUM:	VERTICAL DATUM:
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski	HAMMER TYPE:		STREAMBED ELEVATION: NA	
STATION 2035+00SB	OFFSET 90' Lt	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:
SURFACE ELEVATION:						

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		24" TOPSOIL							
SS 1	10	M 31	0-3-1-3 (4)	2		SILTY CLAY, reddish brown, moist, trace sand & gravel, hard							
SS 2	21	M 17	1-4-2-7 (6)	4				4.25					
				5									
				6			CL						
				7									
SS 3	20	M 14	4-8-6-9 (14)	9				4.5					
				10									


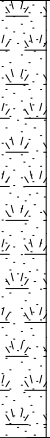




End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704			WISDOT PROJECT ID: 1229-04-01				BORING ID: MP23								
			WISDOT STRUCTURE ID:				PAGE NO: 1 of 1								
WISDOT PROJECT NAME: I-43			CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:						
ROADWAY NAME:			DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 364074.42		EASTING: 603010.066						
DATE STARTED: 1/19/15			CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS								
DATE COMPLETED: 1/19/15			LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:						
COUNTY: Ozaukee			LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA								
STATION 2037+00NB		OFFSET 100' Rt	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:							
SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments			USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		12" TOPSOIL								Hand Auger	
				2											
End of Boring at 2.5 ft.															
WATER LEVEL & CAVE-IN OBSERVATION DATA															
	WATER ENCOUNTERED DURING DRILLING: NE					CAVE - IN DEPTH AT COMPLETION: NMR				WET <input type="checkbox"/> DRY <input type="checkbox"/>					
	WATER LEVEL AT COMPLETION: NMR					CAVE - IN DEPTH AFTER 0 HOURS: NMR				WET <input type="checkbox"/> DRY <input type="checkbox"/>					
NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected. 2) NE = Not Encountered; NMR = No Measurement Recorded															

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WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID:

1229-04-01

BORING ID:

MP25

WISDOT STRUCTURE ID:

PAGE NO:

1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:	CONSULTANT PROJECT NO:		LATITUDE:	LONGITUDE:	
ROADWAY NAME:		DRILLING CONTRACTOR: AET	DRILLING CONTRACTOR PROJECT NO:		NORTHING: 364172.363	EASTING: 602980.038	
DATE STARTED: 1/16/15		CREW CHIEF: MD	DRILL RIG:		COORDINATE SYSTEM: WCCS		
DATE COMPLETED: 1/16/15		LOGGED BY: AET	HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski	HAMMER TYPE:		STREAMBED ELEVATION: NA		
STATION 2038+00NB	OFFSET 80' Rt	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	
						SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		24" TOPSOIL						HSA	
SS 1	12	M 32	1-2-2-5 (4)	2		SILTY CLAY, reddish brown, moist, trace fine gravel, very stiff							
SS 2	16	M 19	2-4-2-6 (6)	4				2.75					
				5									
				6			CL						
				7									
				8									
SS 3	21	M 17	3-8-6-10 (14)	9				2.75					
				10		End of Boring at 10.0 ft.							

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

J:\COUNTIES\OZAUKEE\1229-04-01-1-43-SILVERSPRING DR TO 5TH 60\GINT\1229-04-01 OZAUKEE CO.GPJ 143 8/21/15



WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

BORING ID: MP26

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:	
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 364258.297		EASTING: 602763.113	
DATE STARTED: 1/15/15		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 1/15/15		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA			
STATION 2039+00SB		OFFSET 95' Lt		TOWNSHIP:		RANGE:		SECTION:	
				1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		12" TOPSOIL						HSA	
SS 1	17	M 17	1-4-2-8 (6)	2		SILTY CLAY, reddish brown mottled, moist, trace sand & gravel, very stiff		3.75					
SS 2	24	M 16	2-11-6-14 (17)	4		Hard	CL	4.5					
				5									
				6									
				7									
SS 3	24	M 17	4-10-7-12 (17)	9				4.5					
				10									


End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded





J:\COUNTIES\OZAUKEE\1229-04-01-1-43-SILVERSPRING DR TO 5TH 60\GINT\1229-04-01 OZAUKEE CO.GPJ 143 8/21/15

 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704	WISDOT PROJECT ID: 1229-04-01		BORING ID: MP27				
	WISDOT STRUCTURE ID:		PAGE NO: 1 of 1				
WISDOT PROJECT NAME: I-43		CONSULTANT:	CONSULTANT PROJECT NO:	LATITUDE:	LONGITUDE:		
ROADWAY NAME:		DRILLING CONTRACTOR: AET	DRILLING CONTRACTOR PROJECT NO:	NORTHING: 367828.529	EASTING: 603034.056		
DATE STARTED: 11/04/14		CREW CHIEF: MD	DRILL RIG:	COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 11/04/14		LOGGED BY: AET	HOLE SIZE: 4 in	HORIZONTAL DATUM:	VERTICAL DATUM:		
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski	HAMMER TYPE:	STREAMBED ELEVATION: NA			
STATION 2074+85NB	OFFSET 70' Rt	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
						10" TOPSOIL						HSA	
				0.8									
SS 1	17	M 21	0-4-2-6 (6)	1		SILTY CLAY, light brown mottled, moist, trace fine sand, very stiff		2.75					
SS 2	24	M 19	3-8-5-11 (13)	4			CL	3.5					
				5									
				6									
				7									
				8									
				8.0									
						SILTY CLAY, gray/brown, moist, little sand, stiff							
SS 3	24	M 22	1-3-3-5 (6)	9			CL	1.8					
				10									
				10.0									

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID:

1229-04-01

BORING ID:

MP28

WISDOT STRUCTURE ID:

PAGE NO:

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WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:	
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 368362.641		EASTING: 602936.415	
DATE STARTED: 1/15/15		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 1/15/15		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA			
STATION 2080+00SB	OFFSET 70' Lt	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:		

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		24" TOPSOIL						HSA	
SS 1	10	M 48	2-4-3-6 (7)	2		SILTY CLAY, gray, moist, stiff							
SS 2	14	M 31	3-4-3-5 (7)	4			CL	1.75					
				5									
				6									
				7									
				8									
SS 3	19	M 19	3-4-5-7 (9)	9		Trace sand & gravel, very stiff		3.75					
				10		End of Boring at 10.0 ft.							

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

BORING ID: MP29

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 368563.039		EASTING: 602947.795							
DATE STARTED: 1/15/15		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 1/15/15		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 2082+00SB		OFFSET 87' Lt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		12" TOPSOIL						HSA	
SS 1	11	M 24	0-2-1-3 (3)	2		SILTY CLAY, gray/brown mottled, moist, stiff		1.25					
SS 2	24	M 23	1-3-1-4 (4)	4		Soft		0.5					
				5			CL						
				6									
				7									
				8		Light brown, hard							
SS 3	21	M 16	3-11-7-13 (18)	9				4.25					
				10		End of Boring at 10.0 ft.							

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID:

1229-04-01

BORING ID:

MP30

WISDOT STRUCTURE ID:

PAGE NO:

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WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:	
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 368758.534		EASTING: 602992.804	
DATE STARTED: 1/15/15		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 1/15/15		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA			
STATION 2084+00SB	OFFSET 70' Lt	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:		

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		24" TOPSOIL						HSA	
SS 1	12	M 37	0-3-1-3 (4)	2		SILTY CLAY, light brown, moist, trace sand & gravel, very stiff							
SS 2	24	M 19	2-3-1-6 (4)	4				2.5					
				5									
				6			CL						
				7									
				8		Hard							
SS 3	23	M 17	4-10-8-11 (18)	9				4.25					
				10									


End of Boring at 10.0 ft.

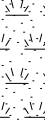
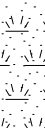
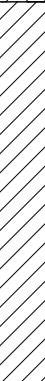
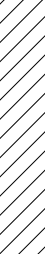
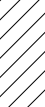

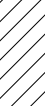

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

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2) NE = Not Encountered; NMR = No Measurement Recorded





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 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704	WISDOT PROJECT ID: 1229-04-01		BORING ID: MP31				
	WISDOT STRUCTURE ID:		PAGE NO: 1 of 1				
WISDOT PROJECT NAME: I-43		CONSULTANT:	CONSULTANT PROJECT NO:	LATITUDE:	LONGITUDE:		
ROADWAY NAME:		DRILLING CONTRACTOR: AET	DRILLING CONTRACTOR PROJECT NO:	NORTHING: 368956.627	EASTING: 603010.95		
DATE STARTED: 1/15/15		CREW CHIEF: MD	DRILL RIG:	COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 1/15/05		LOGGED BY: AET	HOLE SIZE: 4 in	HORIZONTAL DATUM:	VERTICAL DATUM:		
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski	HAMMER TYPE:	STREAMBED ELEVATION: NA			
STATION 2086+00SB	OFFSET 78' Lt	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		24" TOPSOIL						HSA	
SS 1	7	M 41	2-4-3-4 (7)	2		2.0 SILTY CLAY, gray/brown mottled, moist, medium							
SS 2	12	M 24	2-3-3-4 (6)	4				0.75					
				5			CL						
				6									
				7									
				8		8.0							
SS 3	22	M 14	3-9-5-9 (14)	9		SILTY CLAY, gray/brown, moist, trace sand, very stiff	CL	4.0					
				10		10.0							

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

BORING ID: MP32

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 369153.161		EASTING: 603041.678							
DATE STARTED: 1/15/15		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 1/15/15		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 2088+00SB		OFFSET 70' Lt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		12" TOPSOIL						HSA	
SS 1	19	M 15	2-9-6-11 (15)	2		SILTY CLAY, light brown, moist, hard		4.5					
SS 2	24	M 16	3-11-7-13 (18)	4				4.5					
				5			CL						
				6									
				7									
				8		Very stiff							
SS 3	24	M 19	4-8-6-7 (14)	9				3.25	37	22			
				10									

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID:

1229-04-01

BORING ID:

MP33

WISDOT STRUCTURE ID:

PAGE NO:

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WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:	
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 369648.38		EASTING: 603084.182	
DATE STARTED: 1/15/15		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 1/15/15		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA			
STATION 2093+00SB	OFFSET 70' Lt	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:		

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		12" TOPSOIL						HSA	
SS 1	10	M 23	1-3-2-5 (5)	2		SILTY CLAY, light brown, moist, trace gravel, very stiff		3.0					
SS 2	16	M 18	4-11-9-12 (20)	4		Hard		4.5					
				5			CL						
				6									
				7									
				8		Very stiff							
SS 3	22	M 19	4-8-5-9 (13)	9				3.2					
				10									

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID:

1229-04-01

BORING ID:

MP35

WISDOT STRUCTURE ID:

PAGE NO:

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WISDOT PROJECT NAME:

I-43

CONSULTANT:

CONSULTANT PROJECT NO:

LATITUDE:

LONGITUDE:

ROADWAY NAME:

DRILLING CONTRACTOR:

AET

DRILLING CONTRACTOR PROJECT NO:

NORTHING:

370035.058

EASTING:

603285.965

DATE STARTED:

1/22/15

CREW CHIEF:

MD

DRILL RIG:

COORDINATE SYSTEM:

WCCS

DATE COMPLETED:

1/22/15

LOGGED BY:

AET

HOLE SIZE:

4 in

HORIZONTAL DATUM:

VERTICAL DATUM:

COUNTY:

Ozaukee

LOG QC BY:

C. Wierzchowski

HAMMER TYPE:

STREAMBED ELEVATION:

NA

STATION

2097+00NB

OFFSET

70' Rt

TOWNSHIP:

RANGE:

SECTION:

1/4 SECTION:

1/4 1/4 SECTION:

SURFACE ELEVATION:

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
						36" TOPSOIL							
SS 1	12	M 84	0-3-2-3 (5)	1									
				2									
				3		3.0							
SS 2	19	M 25	1-3-1-3 (4)	4		SILTY CLAY, gray/brown, moist, trace fine gravel, stiff		1.0					
				5									
				6									
				7									
				8									
SS 3	0	M	3-7-4-11 (11)	9									
				10									
SS 4	23	M 17	5-9-7-14 (16)	11		Very stiff		4.0					
				12		12.0							
End of Boring at 12.0 ft.													


WATER LEVEL & CAVE-IN OBSERVATION DATA

WATER ENCOUNTERED DURING DRILLING:	NE	CAVE - IN DEPTH AT COMPLETION:	NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
WATER LEVEL AT COMPLETION:	NMR	CAVE - IN DEPTH AFTER 0 HOURS:	NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.

2) NE = Not Encountered; NMR = No Measurement Recorded





J:\COUNTIES\OZAUKEE\1229-04-01 - I-43 - SILVERSPRING DR TO 5TH 60\GINT\1229-04-01 OZAUKEE CO.GPJ 143 8/21/15

 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704	WISDOT PROJECT ID: 1229-04-01		BORING ID: MP36				
	WISDOT STRUCTURE ID:		PAGE NO: 1 of 1				
WISDOT PROJECT NAME: I-43		CONSULTANT:	CONSULTANT PROJECT NO:	LATITUDE:	LONGITUDE:		
ROADWAY NAME:		DRILLING CONTRACTOR: AET	DRILLING CONTRACTOR PROJECT NO:	NORTHING: 370045.563	EASTING: 603103.269		
DATE STARTED: 1/14/15		CREW CHIEF: MD	DRILL RIG:	COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 1/14/15		LOGGED BY: AET	HOLE SIZE: 4 in	HORIZONTAL DATUM:		VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski	HAMMER TYPE:	STREAMBED ELEVATION: NA			
STATION 2097+00SB	OFFSET 70' Lt	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
						12" TOPSOIL						HSA	
				1		1.0							
SS 1	6	M 21	0-1-0-2 (1)	2		SILTY CLAY, dark brown, moist, trace sand & gravel, POSSIBLE FILL, very soft	CL						
				3		Stiff							
SS 2	2	M 23	1-6-4-9 (10)	4		4.0							
				5									
				6									
				7									
				8									
				9									
SS 3	20	W 21	1-6-4-8 (10)	9				3.0					
				10		10.0							

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: 8.8ft.		CAVE - IN DEPTH AT COMPLETION: 9.7ft.	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

BORING ID: MP37

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:	
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 370235.648		EASTING: 603312.38	
DATE STARTED: 1/22/15		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 1/22/15		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA			
STATION 2099+00NB		OFFSET 90' Rt		TOWNSHIP:		RANGE:		SECTION:	
				1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		36" TOPSOIL						HSA	
SS 1	11	M 39	1-4-3-6 (7)	2									
				3		CLAYEY SILT, gray/brown mottled, moist, very stiff							
SS 2	15	M 27	3-4-3-5 (7)	4		A-6(9)		2.20	47	31			
				5			CL-ML						
				6									
				7									
				8									
				8.0		SILTY CLAY, brown, moist, trace sand, very stiff							
SS 3	23	M 18	3-8-5-11 (13)	9			CL	3.5					
				10									
				10.0									


End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

WATER ENCOUNTERED DURING DRILLING: NE	CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
WATER LEVEL AT COMPLETION: NMR	CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded





J:\COUNTIES\OZAUKEE\1229-04-01-1-43-SILVERSPRING DR TO 5TH 60\GINT\1229-04-01 OZAUKEE CO.GPJ 143 8/21/15

 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704	WISDOT PROJECT ID: 1229-04-01		BORING ID: MP38				
	WISDOT STRUCTURE ID:		PAGE NO: 1 of 1				
WISDOT PROJECT NAME: I-43		CONSULTANT:	CONSULTANT PROJECT NO:	LATITUDE:	LONGITUDE:		
ROADWAY NAME:		DRILLING CONTRACTOR: AET	DRILLING CONTRACTOR PROJECT NO:	NORTHING: 370244.339	EASTING: 603107.832		
DATE STARTED: 1/14/15		CREW CHIEF: MD	DRILL RIG:	COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 1/14/15		LOGGED BY: AET	HOLE SIZE: 4 in	HORIZONTAL DATUM:		VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski	HAMMER TYPE:	STREAMBED ELEVATION: NA			
STATION 2099+00SB	OFFSET 70' Lt	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
						12" TOPSOIL						HSA	
SS 1	12	M 20	1-3-2-4 (5)	1		SILTY CLAY TO CLAYEY SILT, light brown, moist, trace sand & gravel, stiff	CL-ML	1.5					
SS 2	10	M 27	2-3-1-3 (4)	2		SANDY CLAY, gray/brown, moist, trace gravel, soft	SC	0.5					
				3									
				4									
				5									
				6									
				7									
SS 3	19	M 17	2-9-6-11 (15)	8		SILTY CLAY, gray/brown, moist, hard	CL	4.5					
				9									
				10									

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

BORING ID: MP39

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 370437.261		EASTING: 603295.453							
DATE STARTED: 1/22/15		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 1/22/15		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 2101+00NB		OFFSET 70' Rt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

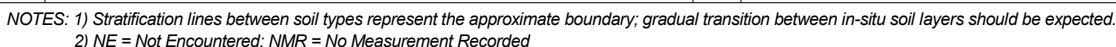
SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		12" TOPSOIL						HSA	
SS 1	14	M 25	1-1-1-3 (2)	2		SILTY CLAY, light brown/gray mottled, moist, trace sand & gravel, stiff		1.5					
				3		Very stiff							
SS 2	15	M 18	2-5-4-5 (9)	4				2.5					
				5			CL						
				6									
				7									
				8		Hard							
SS 3	23	M 18	3-8-5-10 (13)	9				4.5					
				10		End of Boring at 10.0 ft.							

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

BORING ID: MP41

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 371537.286		EASTING: 603302.327							
DATE STARTED: 11/04/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 11/04/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 2112+00NB		OFFSET 70' Rt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		14" TOPSOIL						HSA	
SS 1	15	M 20	1-5-2-6 (7)	2		SILTY CLAY, light brown mottled, moist, trace sand, stiff	CL	1.75					
SS 2	15	M 17	2-7-5-9 (12)	4			CL						
				5									
				6									
				7									
				8									
				8.0		SILTY CLAY, gray, moist, trace gravel, hard							
SS 3	23	M 18	3-10-7-12 (17)	9			CL	4.25					
				10									
				10.0									

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID:

1229-04-01

BORING ID:

MP42

WISDOT STRUCTURE ID:

PAGE NO:

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WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:	
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 371638.552		EASTING: 603099.956	
DATE STARTED: 1/14/15		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 1/14/15		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA			
STATION 2113+00SB	OFFSET 87' Lt	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:		

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		12" TOPSOIL						HSA	
SS 1	13	M 16	1-3-2-5 (5)	2		SILTY CLAY, light brown mottled, moist, trace sand & gravel, stiff		1.5					
SS 2	19	M 17	2-6-4-8 (10)	4		Hard		4.25					
				5			CL						
				6									
				7									
				8									
SS 3	22	M 16	4-8-6-9 (14)	9		Trace gravel, no mottling, very stiff		4.0					
				10		End of Boring at 10.0 ft.							

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

BORING ID: MP43

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 371737.033		EASTING: 603343.576							
DATE STARTED: 11/04/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 11/04/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 2114+00NB		OFFSET 110' Rt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		14" TOPSOIL						HSA	
SS 1	17	M 23	1-5-3-7 (8)	2		SILTY CLAY, brown mottled, moist, trace sand & gravel, stiff		1.5					
SS 2	15	M 16	3-7-5-11 (12)	4		Very stiff		3.75					
				5			CL						
				6									
				7									
				8		Hard							
SS 3	23	M	3-9-7-11 (16)	9				4.5					
				10									


End of Boring at 10.0 ft.

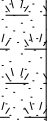

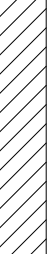


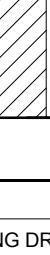
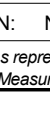
WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded





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 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704	WISDOT PROJECT ID: 1229-04-01		BORING ID: MP44		
	WISDOT STRUCTURE ID:		PAGE NO: 1 of 1		
WISDOT PROJECT NAME: I-43		CONSULTANT:	CONSULTANT PROJECT NO:	LATITUDE:	LONGITUDE:
ROADWAY NAME:		DRILLING CONTRACTOR: AET	DRILLING CONTRACTOR PROJECT NO:	NORTHING: 371838.442	EASTING: 603118.205
DATE STARTED: 1/14/15		CREW CHIEF: MD	DRILL RIG:	COORDINATE SYSTEM: WCCS	
DATE COMPLETED: 1/14/15		LOGGED BY: AET	HOLE SIZE: 4 in	HORIZONTAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski	HAMMER TYPE:	STREAMBED ELEVATION: NA	
STATION 2115+00SB	OFFSET 70' Lt	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		12" TOPSOIL						HSA	
SS 1	10	M 17	2-5-2-4 (7)	2		SILTY CLAY, light brown mottled, moist, stiff		1.25					
SS 2	17	M 20	2-6-4-7 (10)	4		Very stiff	CL	2.25					
				5									
				6									
				7									
				8									
SS 3	4	M 11	1-7-5-8 (12)	9		SILTY CLAY, brown, moist, trace sand & gravel, stiff	CL						
				10									

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded



WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

BORING ID: MP45

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 371937.278		EASTING: 603304.826							
DATE STARTED: 11/05/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 11/05/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 2116+00NB		OFFSET 70' Rt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
						12" TOPSOIL						HSA	
				1		1.0							
SS 1	12	M 16	1-2-2-3 (4)	2		SILT, green/brown, moist, trace sand, little clay & gravel, soft	SM						
				3		3.0							
SS 2	15	M 18	3-5-3-8 (8)	4		SILTY CLAY, brown, moist, trace gravel, very stiff		3.75					
				5									
				6			CL						
				7									
				8		Stiff							
SS 3	24	M 17	4-8-6-10 (14)	9				1.5					
				10		10.0							

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

<input type="checkbox"/>	WATER ENCOUNTERED DURING DRILLING: NE	<input type="checkbox"/>	CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
<input type="checkbox"/>	WATER LEVEL AT COMPLETION: NMR	<input type="checkbox"/>	CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID:

1229-04-01

BORING ID:

MP46

WISDOT STRUCTURE ID:

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WISDOT PROJECT NAME: I-43		CONSULTANT:			CONSULTANT PROJECT NO:			LATITUDE:		LONGITUDE:	
ROADWAY NAME:		DRILLING CONTRACTOR: AET			DRILLING CONTRACTOR PROJECT NO:			NORTHING: 372038.569		EASTING: 603098.454	
DATE STARTED: 1/14/15		CREW CHIEF: MD			DRILL RIG:			COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 1/14/15		LOGGED BY: AET			HOLE SIZE: 4 in			HORIZONTAL DATUM:		VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski			HAMMER TYPE:			STREAMBED ELEVATION: NA			
STATION 2117+00SB	OFFSET 91' Lt	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:				

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		12" TOPSOIL						HSA	
SS 1	8	M 28	1-4-2-4 (6)	2		SILTY CLAY, brown/gray mottled, moist, stiff	CL	1.25					
SS 2	22	M 20	2-2-3-5 (5)	4		SILTY CLAY, light brown, moist, very stiff		2.5					
				5			CL						
				6									
				7									
				8									
SS 3	21	M 17	3-9-7-10 (16)	9		Gray, trace gravel		3.25					
				10									

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

BORING ID: MP47

WISDOT STRUCTURE ID:

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WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 372187.274		EASTING: 603306.387							
DATE STARTED: 11/05/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 11/05/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 2118+50NB		OFFSET 70' Rt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	


SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		12" TOPSOIL						HSA	
SS 1	14	M 17	2-4-2-7 (6)	2		SILTY CLAY, light brown mottled, moist, trace sand, very stiff		3.75					
SS 2	20	M 15	4-11-7-15 (18)	4		Hard		4.5					
				5			CL						
				6									
				7									
				8									
SS 3	23	M 16	3-11-8-14 (19)	9		Trace gravel		4.5					
				10		End of Boring at 10.0 ft.							

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded





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 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704	WISDOT PROJECT ID: 1229-04-01		BORING ID: MP48				
	WISDOT STRUCTURE ID:		PAGE NO: 1 of 1				
WISDOT PROJECT NAME: I-43		CONSULTANT:	CONSULTANT PROJECT NO:	LATITUDE:	LONGITUDE:		
ROADWAY NAME:		DRILLING CONTRACTOR: AET	DRILLING CONTRACTOR PROJECT NO:	NORTHING: 372238.434	EASTING: 603120.703		
DATE STARTED: 1/13/15		CREW CHIEF: MD	DRILL RIG:	COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 1/13/15		LOGGED BY: AET	HOLE SIZE: 4 in	HORIZONTAL DATUM:	VERTICAL DATUM:		
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski	HAMMER TYPE:	STREAMBED ELEVATION: NA			
STATION 2119+00SB	OFFSET 70' Lt	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
						12" TOPSOIL						HSA	
				1		1.0							
SS 1	16	M 12	1-3-4-2 (7)	2		SILTY CLAY, light brown mottled, moist, stiff	CL	2.0					
				3		3.0							
SS 2	24	M 33	2-4-3-4 (7)	4		SILTY CLAY, brown/gray mottled, moist, trace gravel, stiff		2.0					
				5			CL						
				6									
				7									
				8		8.0							
SS 3	24	M 17	4-9-6-12 (15)	9		SILTY CLAY, gray/brown, moist, trace gravel, hard	CL	4.5					
				10		10.0							

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded



WI Dept. of Transportation
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WISDOT PROJECT ID:

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BORING ID:

MP49

WISDOT STRUCTURE ID:

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WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:	
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 372437.081		EASTING: 603337.948	
DATE STARTED: 11/05/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 11/05/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA			
STATION 2121+00NB	OFFSET 100' Rt	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:		

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		14.5" TOPSOIL						HSA	
SS 1	13	M 28	1-3-3-4 (6)	2		SILTY CLAY, reddish brown, moist, trace sand & gravel, very stiff		3.0					
SS 2	15	M 16	3-7-5-11 (12)	4				4.0					
				5			CL						
				6									
				7									
				8		Hard							
SS 3	24	M 17	3-8-6-11 (14)	9				4.5					
				10									

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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WISDOT PROJECT ID: 1229-04-01

BORING ID: MP50

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 372438.617		EASTING: 603091.953							
DATE STARTED: 1/13/15		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 1/13/15		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 2121+00SB		OFFSET 100' Lt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
						12" TOPSOIL						HSA	
SS 1	10	W 22	2-2-2-4 (4)	1		CLAYEY SAND TO SANDY CLAY, brown, wet, trace gravel, very loose							
				2									
				3		Loose	SC						
SS 2	8	W 17	1-3-2-2 (5)	4									
				5		SILTY CLAY, brown, moist, trace sand & gravel, very stiff							
				6									
				7									
				8									
SS 3	21	W 16	5-8-6-10 (14)	9				3.5					
				10									

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: 0.25ft.		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

BORING ID: MP51

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 372538.428		EASTING: 603122.577							
DATE STARTED: 12/18/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 12/18/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 2122+00SB		OFFSET 70' Lt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		12" TOPSOIL						HSA	
SS 1	12	M 16	0-4-2-8 (6)	2		SILTY CLAY, brown to light brown mottled, moist, trace gravel, hard		4.5					
SS 2	22	M 16	3-12-9-15 (21)	4				4.5					
				5			CL						
				6									
				7									
SS 3	24	M 17	5-11-7-13 (18)	9				4.5					
				10									

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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WISDOT PROJECT ID:

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BORING ID:

MP52

WISDOT STRUCTURE ID:

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WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:	
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 372637.265		EASTING: 603309.198	
DATE STARTED: 1/22/15		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 1/22/15		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA			
STATION 2123+00NB	OFFSET 70' Rt	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:		






SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1	1.0	12" TOPSOIL						HSA	
SS 1	11	W 22	0-3-1-6 (4)	2		SILTY CLAY, brown, wet, trace gravel, very stiff		4.0					
SS 2	22	W 19	3-9-7-14 (16)	4		Hard		4.5					
				5			CL						
				6									
				7									
				8									
SS 3	23	W 18	9-10-6-12 (16)	9		Very stiff		3.25					
				10	10.0	End of Boring at 10.0 ft.							

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: 0ft.		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704				WISDOT PROJECT ID: 1229-04-01				BORING ID: MP53										
				WISDOT STRUCTURE ID:				PAGE NO: 1 of 1										
WISDOT PROJECT NAME: I-43				CONSULTANT:				CONSULTANT PROJECT NO:				LATITUDE:		LONGITUDE:				
ROADWAY NAME:				DRILLING CONTRACTOR: AET				DRILLING CONTRACTOR PROJECT NO:				NORTHING: 372837.074		EASTING: 603340.447				
DATE STARTED: 1/22/15				CREW CHIEF: MD				DRILL RIG:				COORDINATE SYSTEM: WCCS						
DATE COMPLETED: 1/22/15				LOGGED BY: AET				HOLE SIZE: 4 in				HORIZONTAL DATUM:		VERTICAL DATUM:				
COUNTY: Ozaukee				LOG QC BY: C. Wierzchowski				HAMMER TYPE:				STREAMBED ELEVATION: NA						
STATION 2125+00NB		OFFSET 100' Rt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:				
SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments					USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes	
						36" TOPSOIL											HSA	
SS 1	11	W 50	0-5-3-6 (8)	1														
				2														
				3		3.0												
SS 2	12	W 36	1-3-2-4 (5)	4		CLAYEY LOAM, dark gray, wet, stiff					CL-ML	1.25						
				5		5.0												
				6		SILTY CLAY, brown, wet, trace sand & gravel, very stiff												
				7							CL							
				8														
SS 3	24	W 23	1-6-3-8 (9)	9								3.25						
				10		10.0												
End of Boring at 10.0 ft.																		
WATER LEVEL & CAVE-IN OBSERVATION DATA																		
	WATER ENCOUNTERED DURING DRILLING: 0ft.						CAVE - IN DEPTH AT COMPLETION: NMR					WET <input type="checkbox"/>			DRY <input type="checkbox"/>			
	WATER LEVEL AT COMPLETION: NMR						CAVE - IN DEPTH AFTER 0 HOURS: NMR					WET <input type="checkbox"/>			DRY <input type="checkbox"/>			
NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected. 2) NE = Not Encountered; NMR = No Measurement Recorded																		

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WISDOT PROJECT ID: 1229-04-01

BORING ID: MP54

WISDOT STRUCTURE ID:

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WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 372912.259		EASTING: 603310.916							
DATE STARTED: 1/22/15		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 1/22/15		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 2125+75NB		OFFSET 70' Rt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		36" TOPSOIL						HSA	
SS 1	10	M 44	0-1-0-2 (1)	2									
				3		3.0							
SS 2	24	M 40	1-3-2-3 (5)	4		CLAYEY LOAM, dark gray/brown, moist, medium	CL-ML						
				5		5.0							
				6		SILTY CLAY, brown, moist, trace sand, very stiff							
				7			CL						
				8									
SS 3	24	M 17	2-7-3-11 (10)	9				3.60					
				10		10.0							

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

<input type="checkbox"/>	WATER ENCOUNTERED DURING DRILLING: NE	<input type="checkbox"/>	CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/>
<input type="checkbox"/>	WATER LEVEL AT COMPLETION: NMR	<input type="checkbox"/>	CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

J:\COUNTIES\OZAUKEE\1229-04-01-1-43-SILVERSPRING DR TO 5TH 60\GINT\1229-04-01 OZAUKEE CO.GPJ 143 8/21/15



WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

BORING ID: MP55

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 381487.621		EASTING: 603313.182							
DATE STARTED: 11/07/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 11/07/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 2211+50NB		OFFSET 60' Rt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
						8" TOPSOIL						HSA	
				0.7		SILTY CLAY, brown, wet to moist, trace sand & gravel, stiff							
SS 1	6	M 26	0-3-1-3 (4)	1				1.75					
				2									
				3		Hard							
SS 2	15	M 18	2-5-3-8 (8)	4				4.5					
				5			CL						
				6									
				7									
				8									
SS 3	24	M 13	4-12-8-14 (20)	9				4.5					
				10									

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

<input type="checkbox"/>	WATER ENCOUNTERED DURING DRILLING: NE	<input type="checkbox"/>	CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
<input type="checkbox"/>	WATER LEVEL AT COMPLETION: NMR	<input type="checkbox"/>	CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

J:\COUNTIES\OZAUKEE\1229-04-01-1-43-SILVERSPRING DR TO 5TH 60GINT\1229-04-01 OZAUKEE CO.GPJ 143 8/21/15



WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

BORING ID: MP56

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:	
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 381587.693		EASTING: 603228.266	
DATE STARTED: 1/21/15		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 1/21/15		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA			
STATION 2212+50NB		OFFSET 25' Lt		TOWNSHIP:		RANGE:		SECTION:	
				1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		12" TOPSOIL						HSA	
SS 1	8	M 19	2-4-2-4 (6)	2		CLAYEY LOAM, reddish brown, moist, trace gravel, medium	CL-ML	1.0					
				3		SILTY CLAY, brown, moist, trace sand, medium							
SS 2	13	M 21	2-3-2-5 (5)	4				1.0					
				5			CL						
				6									
				7									
				8		Stiff							
SS 3	24	M 22	2-8-4-9 (12)	9				2.0					
				10									

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID:

1229-04-01

BORING ID:

MP57

WISDOT STRUCTURE ID:

PAGE NO:

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WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:	
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 381637.584		EASTING: 603358.308	
DATE STARTED: 11/07/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 11/07/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA			
STATION 2213+00NB	OFFSET 105' Rt	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:		

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		14" TOPSOIL						HSA	
SS 1	16	M 29	0-3-3-4 (6)	2		SILTY CLAY, brown mottled, moist, trace sand, stiff	CL	2.0					
SS 2	14	M 25	2-3-3-4 (6)	4		Medium	CL						
				5									
				6									
				7									
				8		8.0							
SS 3	16	W 13	2-5-2-6 (7)	9		SILTY CLAY, gray/brown, moist, little sand & gravel, very stiff	CL	2.25					
				10		10.0							

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: 6.3ft.		CAVE - IN DEPTH AT COMPLETION: 7.6ft.	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID:

1229-04-01

BORING ID:

MP58

WISDOT STRUCTURE ID:

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WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:	
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 381687.693		EASTING: 603228.35	
DATE STARTED: 1/21/15		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 1/21/15		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA			
STATION 2213+50NB	OFFSET 25' Lt	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:		

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		12" TOPSOIL						HSA	
SS 1	10	M 22	2-3-2-4 (5)	2		SILTY CLAY, brown, moist, trace sand, very stiff		2.25					
SS 2	18	M 21	1-3-3-6 (6)	4				3.5					
				5			CL						
				6									
				7									
				8									
SS 3	24	M 19	1-6-3-8 (9)	9				3.5					
				10									

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID:

1229-04-01

BORING ID:

MP59

WISDOT STRUCTURE ID:

PAGE NO:

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WISDOT PROJECT NAME: I-43		CONSULTANT: AET		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:	
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 381837.609		EASTING: 603328.475	
DATE STARTED: 11/12/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 11/12/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA			
STATION 2215+00NB	OFFSET 75' Rt	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:		

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		12" TOPSOIL						HSA	
SS 1	11	M 20	3-5-3-6 (8)	2		SILTY CLAY, brown, moist, trace fine gravel, very stiff		3.0					
SS 2	23	M 17	4-10-7-12 (17)	4		Hard		4.5					
				5			CL						
				6									
				7									
				8		Very stiff							
SS 3	22	M 18	3-9-7-10 (16)	9				4.0					
				10									


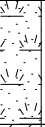
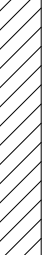
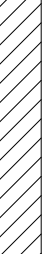

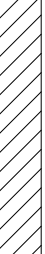
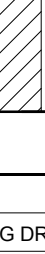
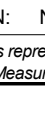




End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA


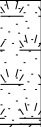





	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

J:\COUNTIES\OZAUKEE\1229-04-01-1-43-SILVERSPRING DR TO 5TH 60\GINT\1229-04-01 OZAUKEE CO.GPJ 143 8/21/15

 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704		WISDOT PROJECT ID: 1229-04-01				BORING ID: MP60									
		WISDOT STRUCTURE ID:				PAGE NO: 1 of 1									
WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 382638.042		EASTING: 603108.146							
DATE STARTED: 12/11/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 12/11/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 2223+00SB		OFFSET 95' Lt		TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:						
SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments		USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes	
				1		12" TOPSOIL								HSA	
				2		SILTY CLAY, brown, moist, trace sand, very stiff			2.75						
SS 1	13	M 20	1-4-2-4 (6)	3		Hard									
SS 2	22	M 18	2-7-5-9 (12)	4					4.5						
				5				CL							
				6											
				7											
				8											
				9		Gray/brown, very stiff									
SS 3	24	M 17	4-10-7-12 (17)	10					3.8						
End of Boring at 10.0 ft.															
WATER LEVEL & CAVE-IN OBSERVATION DATA															
	WATER ENCOUNTERED DURING DRILLING: NE					CAVE - IN DEPTH AT COMPLETION: NMR				WET <input type="checkbox"/> DRY <input type="checkbox"/>					
	WATER LEVEL AT COMPLETION: NMR					CAVE - IN DEPTH AFTER 0 HOURS: NMR				WET <input type="checkbox"/> DRY <input type="checkbox"/>					
NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected. 2) NE = Not Encountered; NMR = No Measurement Recorded															

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 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704				WISDOT PROJECT ID: 1229-04-01				BORING ID: MP61										
				WISDOT STRUCTURE ID:				PAGE NO: 1 of 1										
WISDOT PROJECT NAME: I-43				CONSULTANT:				CONSULTANT PROJECT NO:				LATITUDE:		LONGITUDE:				
ROADWAY NAME:				DRILLING CONTRACTOR: AET				DRILLING CONTRACTOR PROJECT NO:				NORTHING: 382837.692		EASTING: 603229.313				
DATE STARTED: 1/21/15				CREW CHIEF: MD				DRILL RIG:				COORDINATE SYSTEM: WCCS						
DATE COMPLETED: 1/21/15				LOGGED BY: AET				HOLE SIZE: 4 in				HORIZONTAL DATUM:		VERTICAL DATUM:				
COUNTY: Ozaukee				LOG QC BY: C. Wierzchowski				HAMMER TYPE:				STREAMBED ELEVATION: NA						
STATION 2225+00NB		OFFSET 25' Lt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:				
SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments					USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes	
						12" TOPSOIL											HSA	
				1	1.0													
SS 1	12	M 19	1-4-3-6 (7)	2		SILTY CLAY, gray/brown, moist, trace sand, very stiff						3.75						
				3														
SS 2	13	M 20	2-4-3-5 (7)	4								3.0						
				5														
				6							CL							
				7														
				8														
SS 3	24	M 18	3-9-5-10 (14)	9								4.0						
				10	10.0													
End of Boring at 10.0 ft.																		
WATER LEVEL & CAVE-IN OBSERVATION DATA																		
	WATER ENCOUNTERED DURING DRILLING: NE						CAVE - IN DEPTH AT COMPLETION: NMR					WET <input type="checkbox"/>			DRY <input type="checkbox"/>			
	WATER LEVEL AT COMPLETION: NMR						CAVE - IN DEPTH AFTER 0 HOURS: NMR					WET <input type="checkbox"/>			DRY <input type="checkbox"/>			
NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected. 2) NE = Not Encountered; NMR = No Measurement Recorded																		

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WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

BORING ID: MP62

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 382837.622		EASTING: 603313.313							
DATE STARTED: 11/12/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 11/12/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 2225+00NB		OFFSET 59' Rt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		12" TOPSOIL						HSA	
SS 1	14	M 16	1-3-2-4 (5)	2		SILTY CLAY, light brown mottled, moist, trace fine gravel, stiff		2.0					
SS 2	15	M 19	2-5-3-6 (8)	4		Very stiff		3.5					
				5			CL						
				6									
				7									
				8									
SS 3	24	M 16	4-11-8-14 (19)	9		Hard		4.5					
				10									


End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded





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 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704	WISDOT PROJECT ID: 1229-04-01		BORING ID: MP63				
	WISDOT STRUCTURE ID:		PAGE NO: 1 of 1				
WISDOT PROJECT NAME: I-43		CONSULTANT:	CONSULTANT PROJECT NO:	LATITUDE:	LONGITUDE:		
ROADWAY NAME:		DRILLING CONTRACTOR: AET	DRILLING CONTRACTOR PROJECT NO:	NORTHING: 382838.008	EASTING: 603148.314		
DATE STARTED: 12/11/14		CREW CHIEF: MD	DRILL RIG:	COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 12/11/14		LOGGED BY: AET	HOLE SIZE: 4 in	HORIZONTAL DATUM:		VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski	HAMMER TYPE:	STREAMBED ELEVATION: NA			
STATION 2225+00SB	OFFSET 48' Lt	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		MEDIUM TO COARSE SAND, brown/dark brown, moist, with gravel, very loose 36" BASE COURSE							
SS 1	6	M 10	3-2-1-2 (3)	2			GW						
				3									
SS 2	10	M 19	2-2-2-3 (4)	4		SILTY CLAY, brown, moist, POSSIBLE FILL, very stiff	CL	3.75					
				5									
				6		SANDY CLAY, brown, moist, trace gravel, medium							
				7									
				8									
SS 3	9	M 21	3-2-1-2 (3)	9			CL	1.0					
				10									
				11									
				12									
				13									
SS 4	24	M 16	3-5-4-7 (9)	14		SANDY SILT, gray, moist, trace clay & gravel, very stiff	SM	2.7					
				15									

End of Boring at 15.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

J:\COUNTIES\OZAUKEE\1229-04-01-1-43-SILVERSPRING DR TO 5TH 60GINT\1229-04-01 OZAUKEE CO GPRJ -43 8/21/15



WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

BORING ID: MP64

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 382987.612		EASTING: 603324.439							
DATE STARTED: 1/23/15		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 1/23/15		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 2226+50NB		OFFSET 70' Rt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
						12" TOPSOIL						HSA	
SS 1	13	M 19	1-4-3-4 (7)	1		SILTY CLAY, brown, moist, trace sand, FILL, stiff	CL	2.0					
SS 2	13	M 19	2-4-3-4 (7)	4		SILTY CLAY, dark brown, moist, trace sand, medium	CL	0.75					
				5			CL						
				6									
				7									
SS 3	23	M 19	3-6-3-8 (9)	9		SILTY CLAY, brown, moist, trace sand & gravel, very stiff	CL	3.0					
				10									

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

<input type="checkbox"/>	WATER ENCOUNTERED DURING DRILLING: NE	<input type="checkbox"/>	CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
<input type="checkbox"/>	WATER LEVEL AT COMPLETION: NMR	<input type="checkbox"/>	CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID:

1229-04-01

BORING ID:

MP65

WISDOT STRUCTURE ID:

PAGE NO:

1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:	
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 383037.692		EASTING: 603229.481	
DATE STARTED: 1/21/15		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 1/21/15		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA			
STATION 2227+00NB	OFFSET 25' Lt	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:		

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
						12" TOPSOIL						HSA	
				1		1.0							
SS 1	10	M 15	1-3-2-4 (5)	2		SILTY CLAY, reddish brown, moist, trace sand & fine roots, stiff	CL	1.5					
				3		3.0							
SS 2	13	M 15	1-8-4-9 (12)	4		SILTY CLAY, brown mottled, moist, trace sand, hard		4.5					
				5									
				6			CL						
				7									
				8									
				9		With fine sand lenses, medium		1.0					
SS 3	24	M 16	2-4-3-5 (7)	10		10.0							


End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded





J:\COUNTIES\OZAUKEE\1229-04-01-1-43-SILVERSPRING DR TO 5TH 60\GINT\1229-04-01 OZAUKEE CO.GPJ 143 8/21/15

 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704	WISDOT PROJECT ID: 1229-04-01				BORING ID: MP66		
	WISDOT STRUCTURE ID:				PAGE NO: 1 of 1		
WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:	LONGITUDE:
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 383038.008	EASTING: 603148.481
DATE STARTED: 12/11/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS	
DATE COMPLETED: 12/11/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM: VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA	
STATION 2227+00SB	OFFSET 53' Lt	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
						SAND & GRAVEL, brown to dark brown, moist, trace silt, slight petro odor, very loose 36" BASE COURSE							
				1									
SS 1	2	M 32	4-2-1-2 (3)	2			GW						
				3									
				3		FINE TO MEDIUM SAND, brown, moist, trace gravel, FILL, loose							
SS 2	10	M 10	2-4-4-3 (8)	4									
				5									
				6			SP						
				7									
				8									
				8									
				8		SILTY CLAY, brown mottled, moist, trace sand, stiff							
SS 3	11	W 19	1-2-2-4 (4)	9			CL	2.0					
				10									

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: 7.6ft.		CAVE - IN DEPTH AT COMPLETION: 8ft.	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

BORING ID: MP67

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 383137.623		EASTING: 603311.565							
DATE STARTED: 11/12/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 11/12/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 2228+00NB		OFFSET 57' Rt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		12" TOPSOIL						HSA	
SS 1	8	M 28	1-2-1-1 (3)	2		SILTY CLAY, brown, moist, trace sand, soft							
SS 2	16	M 19	1-4-3-5 (7)	4		Stiff	CL	2.0					
				5									
				6									
				7									
SS 3	16	M 17	3-8-5-10 (13)	9		Hard		4.25					
				10									

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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3502 Kinsman Blvd.
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WISDOT PROJECT ID: 1229-04-01

BORING ID: MP68

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 383237.692		EASTING: 603229.649							
DATE STARTED: 1/21/15		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 1/21/15		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 2229+00NB		OFFSET 25' Lt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		12" TOPSOIL						HSA	
SS 1	12	M 19	1-2-2-3 (4)	2		SILTY CLAY, brown, moist, trace sand & gravel, medium		1.0					
SS 2	16	M 20	0-2-1-3 (3)	4				1.0					
				5			CL						
				6									
				7									
				8		Stiff							
SS 3	24	M 19	2-3-3-4 (6)	9				1.25					
				10									

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID:

1229-04-01

BORING ID:

MP69

WISDOT STRUCTURE ID:

PAGE NO:

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WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:	
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 383238.008		EASTING: 603148.649	
DATE STARTED: 12/11/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 12/11/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA			
STATION 2229+00SB	OFFSET 48' Lt	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:		

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		MEDIUM TO COARSE SAND & GRAVEL, brown, moist 30" BASE COURSE							
SS 1	11	M 13	3-2-1-2 (3)	2			GW						
SS		M 19		2.5		SILTY CLAY, dark brown, moist, FILL, stiff							
SS 2	6	M 13	2-2-3-3 (5)	4		With sand lenses & concrete fragments	CL	1.5					
				5		SILTY CLAY, brown mottled, moist, with sand, trace gravel, stiff							
				6			CL						
				7									
SS 3	17	M 11	1-4-3-5 (7)	9				1.5					
				10									

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

WATER ENCOUNTERED DURING DRILLING: NE	CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
WATER LEVEL AT COMPLETION: NMR	CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID:

1229-04-01

BORING ID:

MP70

WISDOT STRUCTURE ID:

PAGE NO:

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WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:	
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 383437.692		EASTING: 603229.816	
DATE STARTED: 1/21/15		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 1/21/15		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA			
STATION 2231+00NB	OFFSET 25' Lt	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:		

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		12" TOPSOIL						HSA	
SS 1	15	M 18	1-6-4-6 (10)	2		SILTY CLAY, brown, moist, trace sand & gravel, very stiff		2.25					
SS 2	20	M 11	2-8-4-8 (12)	4				3.75					
				5			CL						
				6									
				7									
				8									
SS 3	23	M 17	4-12-8-14 (20)	9		Hard		4.5					
				10									

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

BORING ID: MP71

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 383438.042		EASTING: 603108.817							
DATE STARTED: 1/29/15		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 1/29/15		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 2231+00SB		OFFSET 100' Lt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		12" TOPSOIL						HSA	
SS 1	13	M 25	2-6-4-6 (10)	2		SILTY CLAY, gray/brown mottled, moist, trace fine roots, stiff	CL	1.25					
SS 2	20	M 13	3-6-5-7 (11)	4		SILTY CLAY, brown, moist, trace gravel, very stiff		2.25					
				5			CL						
				6									
				7									
				8									
SS 3	23	M 17	5-11-7-13 (18)	9		Hard		4.5					
				10									


End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded





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 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704	WISDOT PROJECT ID: 1229-04-01		BORING ID: MP72				
	WISDOT STRUCTURE ID:		PAGE NO: 1 of 1				
WISDOT PROJECT NAME: I-43		CONSULTANT:	CONSULTANT PROJECT NO:	LATITUDE:	LONGITUDE:		
ROADWAY NAME:		DRILLING CONTRACTOR: AET	DRILLING CONTRACTOR PROJECT NO:	NORTHING: 383537.608	EASTING: 603329.9		
DATE STARTED: 11/12/14		CREW CHIEF: MD	DRILL RIG:	COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 11/12/14		LOGGED BY: AET	HOLE SIZE: 4 in	HORIZONTAL DATUM:		VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski	HAMMER TYPE:	STREAMBED ELEVATION: NA			
STATION 2232+00NB	OFFSET 75' Rt	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
						12" TOPSOIL						HSA	
				1		1.0							
SS 1	11	M 19	1-1-2-3 (3)	2		CLAYEY SILT, gray mottled, moist, soft	CL-ML						
				3		3.0							
SS 2	21	M 18	3-8-6-9 (14)	4		SILTY CLAY, brown, moist, trace sand & gravel, hard		4.5					
				5									
				6			CL						
				7									
				8									
SS 3	24	M 19	3-7-6-9 (13)	9				4.5					
				10		10.0							

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

J:\COUNTIES\OZAUKEE\1229-04-01-1-43-SILVERSPRING DR TO 5TH 60\GINT\1229-04-01 OZAUKEE CO.GPJ 143 8/21/15



WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID:

1229-04-01

BORING ID:

MP73

WISDOT STRUCTURE ID:

PAGE NO:

1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT: AET		CONSULTANT PROJECT NO:		LATITUDE: 383637.692		LONGITUDE: 603229.984	
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 383637.692		EASTING: 603229.984	
DATE STARTED: 1/21/15		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 1/21/15		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA			
STATION 2233+00NB	OFFSET 25' Lt	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:		

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		12" TOPSOIL						HSA	
SS 1	6	M 18	1-5-4-4 (9)	2		SILTY CLAY, brown, moist, trace sand & gravel, very stiff		2.5					
SS 2	19	M 20	2-5-4-6 (9)	4				3.25					
				5			CL						
				6									
				7									
				8									
SS 3	22	M 17	5-13-9-15 (22)	9		Hard		4.5					
				10									


End of Boring at 10.0 ft.




WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded





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 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704	WISDOT PROJECT ID: 1229-04-01		BORING ID: MP74				
	WISDOT STRUCTURE ID:		PAGE NO: 1 of 1				
WISDOT PROJECT NAME: I-43		CONSULTANT:	CONSULTANT PROJECT NO:	LATITUDE:	LONGITUDE:		
ROADWAY NAME:		DRILLING CONTRACTOR: AET	DRILLING CONTRACTOR PROJECT NO:	NORTHING: 383638.008	EASTING: 603148.984		
DATE STARTED: 12/11/14		CREW CHIEF: MD	DRILL RIG:	COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 12/11/14		LOGGED BY: AET	HOLE SIZE: 4 in	HORIZONTAL DATUM:		VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski	HAMMER TYPE:	STREAMBED ELEVATION: NA			
STATION 2233+00SB	OFFSET 48' Lt	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
						MEDIUM TO COARSE SAND & GRAVEL, brown, moist, loose 30" BASE COURSE							
SS 1	10	M 8	3-3-2-3 (5)	1			GW						
		2											
		17		2.5		SILTY CLAY, brown mottled, moist, trace gravel, very stiff to stiff							
SS 2	13	M 29	2-3-2-5 (5)	3				2.0					
		4											
				5									
				6			CL						
				7									
				8									
SS 3	18	M 18	3-5-7-4 (12)	9		With sand lenses							
		10											
				10.0									

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

J:\COUNTIES\OZAUKEE\1229-04-01-1-43-SILVERSPRING DR TO 5TH 60GINT\1229-04-01 OZAUKEE CO GPJ - 43 8/21/15



WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID:

1229-04-01

BORING ID:

MP75

WISDOT STRUCTURE ID:

PAGE NO:

1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:	
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 383837.692		EASTING: 603230.152	
DATE STARTED: 1/21/15		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 1/21/15		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA			
STATION 2235+00NB	OFFSET 25' Lt	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:		

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		12" TOPSOIL						HSA	
SS 1	8	M 18	1-3-3-4 (6)	2		SILTY CLAY, brown, moist, trace fine roots, very stiff		3.5					
SS 2	10	M 22	1-1-1-2 (2)	4		Soft	CL	0.5					
				5									
				6									
				7									
				8		8.0							
SS 3	23	M 15	3-2-4-2 (6)	9		SANDY SILT, gray, moist, with sand lenses, soft	SM	0.5					
				10		10.0							






End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704	WISDOT PROJECT ID: 1229-04-01				BORING ID: MP76									
	WISDOT STRUCTURE ID:				PAGE NO: 1 of 1									
WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:						
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 383838.008		EASTING: 603149.152						
DATE STARTED: 12/01/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS								
DATE COMPLETED: 12/11/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:						
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA								
STATION 2235+00SB		OFFSET 50' Lt		TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:					
SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments		USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
						12" BASE COURSE		GW					HSA	
				1		1.0								
SS 1	5	M 19	3-2-1-1 (3)	2		SILTY CLAY, brown, moist, with sand, trace gravel, POSSIBLE FILL, stiff		CL	2.0					
SS 2	10	M 21	2-3-2-4 (5)	4					2.0					
				5		5.0								
				6		FINE SANDY SILT, gray/brown, moist, trace clay & gravel, stiff								
				7										
				8										
SS 3	12	M 16	1-1-2-1 (3)	9					1.25					
				10				SM						
				11										
				12										
SS 4	24	M 17	2-5-3-5 (8)	14					2.0					
				15		15.0								
End of Boring at 15.0 ft.														
WATER LEVEL & CAVE-IN OBSERVATION DATA														
	WATER ENCOUNTERED DURING DRILLING: NE					CAVE - IN DEPTH AT COMPLETION: NMR				WET <input type="checkbox"/> DRY <input type="checkbox"/>				
	WATER LEVEL AT COMPLETION: NMR					CAVE - IN DEPTH AFTER 0 HOURS: NMR				WET <input type="checkbox"/> DRY <input type="checkbox"/>				
NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected. 2) NE = Not Encountered; NMR = No Measurement Recorded														

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WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

BORING ID: MP77

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 383937.621		EASTING: 603315.235							
DATE STARTED: 1/26/15		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 1/26/15		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 2236+00NB		OFFSET 60' Rt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		12" TOPSOIL						HSA	
SS 1	12	M 31	1-5-1-5 (6)	2		SILTY CLAY, dark brown, moist, stiff	CL	1.5					
SS 2	11	M 27	3-3-3-4 (6)	4		SILTY CLAY, gray, moist, trace sand, stiff		2.0					
				5			CL						
				6									
				7									
				8									
SS 3	24	M 21	3-3-3-4 (6)	9		SILTY CLAY, brown mottled, moist, trace sand, stiff	CL	1.5					
				10									

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

J:\COUNTIES\OZAUKEE\1229-04-01-1-43-SILVERSPRING DR TO 5TH 60' GINT\1229-04-01 OZAUKEE CO GPRJ - 43 8/21/15



WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

BORING ID: MP78

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 384037.692		EASTING: 603230.319							
DATE STARTED: 1/21/15		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 1/21/15		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 2237+00NB		OFFSET 25' Lt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	


SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		12" TOPSOIL						HSA	
SS 1	11	M 19	2-5-5-5 (10)	2		SILTY CLAY, brown mottled, moist, trace sand, soft		0.5					
				3		Very stiff							
SS 2	11	M 16	2-4-4-6 (8)	4			CL	3.75					
				5			CL						
				6			CL						
				7			CL						
				8			CL						
SS 3	24	M 17	3-5-3-8 (8)	9		Gray/brown, hard		4.5					
				10		End of Boring at 10.0 ft.							




WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded





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 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704	WISDOT PROJECT ID: 1229-04-01		BORING ID: MP79				
	WISDOT STRUCTURE ID:		PAGE NO: 1 of 1				
WISDOT PROJECT NAME: I-43		CONSULTANT:	CONSULTANT PROJECT NO:	LATITUDE:	LONGITUDE:		
ROADWAY NAME:		DRILLING CONTRACTOR: AET	DRILLING CONTRACTOR PROJECT NO:	NORTHING: 384038.008	EASTING: 603149.319		
DATE STARTED: 12/11/14		CREW CHIEF: MD	DRILL RIG:	COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 12/11/14		LOGGED BY: AET	HOLE SIZE: 4 in	HORIZONTAL DATUM:		VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski	HAMMER TYPE:	STREAMBED ELEVATION: NA			
STATION 2237+00SB	OFFSET 50' Lt	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		SAND & GRAVEL, brown to dark brown, moist, very loose	GW					HSA	
SS 1	6	M 16	2-2-2-1 (4)	2									
				3									
				3		FINE TO MEDIUM SAND, brown, moist, little gravel, trace silt, FILL, very loose	SP						
SS 2	7	M 10	1-1-1-2 (2)	4									
				5									
				6									
				7									
				8		SILTY CLAY, brown mottled, moist, trace sand & gravel, soft	CL	0.25					
SS 3	7	M 23	1-2-2-2 (4)	9									
				10									

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

BORING ID: MP80

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 384235.992		EASTING: 603117.559							
DATE STARTED: 12/11/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 12/11/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 2239+00SB		OFFSET 90' Lt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		12" TOPSOIL						HSA	
SS 1	10	M 17	2-3-2-3 (5)	2		SILTY CLAY, gray/brown mottled, moist, trace sand, very stiff		3.25					
SS 2	12	M 17	2-4-3-4 (7)	4		Stiff	CL	2.0					
				5									
				6									
				7									
SS 3	24	M 19	2-4-4-6 (8)	9				2.0					
				10									


End of Boring at 10.0 ft.

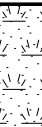
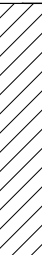

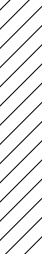

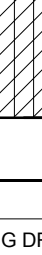
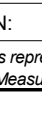
WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded





J:\COUNTIES\OZAUKEE\1229-04-01-1-43-SILVERSPRING DR TO 5TH 60\GINT\1229-04-01 OZAUKEE CO.GPJ 143 8/21/15

 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704	WISDOT PROJECT ID: 1229-04-01		BORING ID: MP81				
	WISDOT STRUCTURE ID:		PAGE NO: 1 of 1				
WISDOT PROJECT NAME: I-43		CONSULTANT:	CONSULTANT PROJECT NO:	LATITUDE:	LONGITUDE:		
ROADWAY NAME:		DRILLING CONTRACTOR: AET	DRILLING CONTRACTOR PROJECT NO:	NORTHING: 384340.377	EASTING: 603330.707		
DATE STARTED: 1/26/15		CREW CHIEF: MD	DRILL RIG:	COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 1/26/15		LOGGED BY: AET	HOLE SIZE: 4 in	HORIZONTAL DATUM:	VERTICAL DATUM:		
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski	HAMMER TYPE:	STREAMBED ELEVATION: NA			
STATION 2240+00NB	OFFSET 80' Rt	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		12' TOPSOIL						HSA	
SS 1	11	M 20	2-3-3-4 (6)	2		SILTY CLAY, brown, moist, trace sand, stiff		1.5					
SS 2	6	M 36	2-2-2-3 (4)	4			CL	1.20					
				5									
				6									
				7									
				8		CLAYEY SILT, gray mottled, moist, trace sand, stiff							
SS 3	24	M 19	2-4-3-4 (7)	9			CL-ML	1.75					
				10									

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

BORING ID: MP82

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 384436.348		EASTING: 603221.687							
DATE STARTED: 1/20/15		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 1/20/15		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 2241+00NB		OFFSET 25' Lt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		12" TOPSOIL						HSA	
SS 1	4	M 27	1-2-2-2 (4)	2		SILTY CLAY, gray/brown mottled, moist, trace sand, medium		0.75					
SS 2	19	M 23	1-2-2-3 (4)	4		Very stiff		2.75					
				5			CL						
				6									
				7									
SS 3	24	M 17	2-5-3-6 (8)	9				3.5					
				10									

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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Madison, WI 53704

WISDOT PROJECT ID:

1229-04-01

BORING ID:

MP83

WISDOT STRUCTURE ID:

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WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:	
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 384434.953		EASTING: 603140.661	
DATE STARTED: 12/11/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 12/11/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA			
STATION 2241+00SB		OFFSET 51' Lt		TOWNSHIP:		RANGE:		SECTION:	
				1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		36" TOPSOIL						HSA	
SS 1	4	M 19	1-8-2-6 (10)	2									
				3		3.0							
SS 2	7	M 20	2-3-1-3 (4)	4		SILTY CLAY, brown mottled, moist, trace sand, soft		0.5					
				5									
				6			CL						
				7									
				8		Stiff							
SS 3	16	M 19	2-3-3-5 (6)	9				1.25					
				10		10.0							

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID:

1229-04-01

BORING ID:

MP84

WISDOT STRUCTURE ID:

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WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:	
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 384635.331		EASTING: 603209.654	
DATE STARTED: 1/20/15		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 1/20/15		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA			
STATION 2243+00NB	OFFSET 25' Lt	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:		

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
						12" TOPSOIL						HSA	
				1		1.0							
SS 1	11	M 19	1-2-2-3 (4)	2		SILTY CLAY, brown, moist, trace sand, stiff	CL	1.5					
				3		3.0							
SS 2	18	M 27	1-1-1-2 (2)	4		SILTY CLAY, dark gray, moist, trace sand, very stiff		2.5					
				5			CL						
				6									
				7									
				8		8.0							
				9		SILTY CLAY, reddish brown, moist, hard	CL	4.5					
SS 3	24	M 17	2-10-5-12 (15)	10		10.0							
End of Boring at 10.0 ft.													

WATER LEVEL & CAVE-IN OBSERVATION DATA

WATER ENCOUNTERED DURING DRILLING: NE	CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
WATER LEVEL AT COMPLETION: NMR	CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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WISDOT PROJECT ID: 1229-04-01

BORING ID: MP85

WISDOT STRUCTURE ID:

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WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 384633.017		EASTING: 603128.605							
DATE STARTED: 12/10/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 12/10/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 2243+00SB		OFFSET 60' Lt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		12" TOPSOIL						HSA	
SS 1	15	M 19	0-3-1-5 (4)	2		SILTY CLAY, brown, moist, with silt lenses, hard		4.5					
SS 2	23	M 19	2-8-6-11 (14)	4				4.25					
				5			CL						
				6									
				7									
				8		Very stiff							
SS 3	24	M 18	4-9-7-10 (16)	9				2.25					
				10									

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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WISDOT PROJECT ID: 1229-04-01

BORING ID: MP86

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 384693.795		EASTING: 603315.49							
DATE STARTED: 1/26/15		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 1/26/15		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 2243+50NB		OFFSET 85' Rt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		12" TOPSOIL						HSA	
SS 1	15	M 20	1-5-3-8 (8)	2		SILTY CLAY, brown, moist, trace sand, very stiff		3.75					
SS 2	19	M 21	3-10-5-14 (15)	4		Hard		4.5					
				5			CL						
				6									
				7									
				8									
SS 3	24	M 24	3-6-5-7 (11)	9		Very stiff		2.75					
				10		End of Boring at 10.0 ft.							

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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WISDOT PROJECT ID: 1229-04-01

BORING ID: MP87

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WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 384833.936		EASTING: 603192.47							
DATE STARTED: 1/20/15		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 1/20/15		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 2245+00NB		OFFSET 25' Lt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		12" TOPSOIL						HSA	
SS 1	20	M 16	2-6-4-8 (10)	2		SILTY CLAY, brown, moist, trace sand, very stiff		2.6					
SS 2	24	M 18	5-8-5-9 (13)	4				4.0					
				5			CL						
				6									
				7									
				8		With sand lenses, stiff							
SS 3	24	M 14	2-5-4-5 (9)	9				1.25					
				10									

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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WISDOT PROJECT ID: 1229-04-01

BORING ID: MP88

WISDOT STRUCTURE ID:

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WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 384828.705		EASTING: 603091.49							
DATE STARTED: 1/29/15		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 1/29/15		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 2245+00SB		OFFSET 80' Lt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		12" TOPSOIL						HSA	
SS 1	11	W 25	1-2-1-2 (3)	2		CLAYEY SILT, reddish brown, wet, trace sand & gravel, soft	CL-ML	0.25					
SS 2	14	W 27	1-2-2-3 (4)	4		SILTY CLAY TO CLAYEY SILT, gray/brown, wet, trace sand & gravel, stiff		1.5					
				5			CL						
				6									
				7									
				8		Very stiff							
SS 3	23	W 18	3-8-4-10 (12)	9				4.0					
				10									

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: 0.5ft.		CAVE - IN DEPTH AT COMPLETION: 6ft.	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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WISDOT PROJECT ID: 1229-04-01

BORING ID: MP89

WISDOT STRUCTURE ID:

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WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 385027.866		EASTING: 603089.03							
DATE STARTED: 12/10/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 12/10/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 2247+00SB		OFFSET 60' Lt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		12" TOPSOIL						HSA	
SS 1	19	M 16	2-5-3-8 (8)	2		SILTY CLAY, light brown, moist, trace sand & gravel, hard		4.5					
SS 2	24	M 18	4-9-6-12 (15)	4				4.5					
				5			CL						
				6									
				7									
				8		Gray, stiff							
SS 3	24	M 21	3-6-4-7 (10)	9				2.0					
				10									

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

BORING ID: MP90

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 385175.322		EASTING: 603068.891							
DATE STARTED: 12/10/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 12/10/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 2248+50SB		OFFSET 52' Lt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		12" TOPSOIL						HSA	
SS 1	10	M 16	1-4-3-6 (7)	2		SILTY CLAY, light brown, moist, trace sand, very stiff		4.0					
SS 2	22	M 16	4-11-8-12 (19)	4				4.0					
				5			CL						
				6									
				7									
SS 3	24	M 18	4-8-6-9 (14)	9				3.1					
				10									


End of Boring at 10.0 ft.

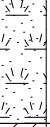



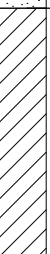

WATER LEVEL & CAVE-IN OBSERVATION DATA





	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

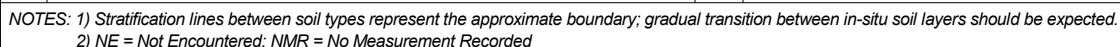
J:\COUNTIES\OZAUKEE\1229-04-01-1-43-SILVERSPRING DR TO 5TH 60\GINT\1229-04-01 OZAUKEE CO.GPJ 143 8/21/15























 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704	WISDOT PROJECT ID: 1229-04-01		BORING ID: MP91		
	WISDOT STRUCTURE ID:		PAGE NO: 1 of 1		
WISDOT PROJECT NAME: I-43		CONSULTANT:	CONSULTANT PROJECT NO:	LATITUDE:	LONGITUDE:
ROADWAY NAME:		DRILLING CONTRACTOR: AET	DRILLING CONTRACTOR PROJECT NO:	NORTHING: 386895.332	EASTING: 602963.509
DATE STARTED: 11/13/14		CREW CHIEF: MD	DRILL RIG:	COORDINATE SYSTEM: WCCS	
DATE COMPLETED: 11/13/14		LOGGED BY: AET	HOLE SIZE: 4 in	HORIZONTAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski	HAMMER TYPE:	STREAMBED ELEVATION: NA	
STATION 2265+75NB	OFFSET 60' Rt	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		12" TOPSOIL						HSA	
SS 1	15	M 17	3-6-4-8 (10)	2		SILTY CLAY, brown, moist, trace sand & gravel, POSSIBLE FILL, very stiff	CL	4.25					
SS 2	17	M 18	3-7-6-9 (13)	4		SILTY CLAY, light brown/gray, moist, trace sand, POSSIBLE FILL, very stiff	CL	3.25					
SS 2A		M 20		5		FINE TO MEDIUM SAND, dark gray, moist, some clay, little silt, medium dense	SP						
				8		SILTY CLAY, brown, wet, trace sand & gravel, very stiff	CL	3.25					
SS 3	24	W 18	2-6-4-8 (10)	9									
				10		End of Boring at 10.0 ft.							


WATER LEVEL & CAVE-IN OBSERVATION DATA						
	WATER ENCOUNTERED DURING DRILLING:	9.6ft.		CAVE - IN DEPTH AT COMPLETION:	9.8ft.	WET <input type="checkbox"/>
	WATER LEVEL AT COMPLETION:	NMR		CAVE - IN DEPTH AFTER 0 HOURS:	NMR	WET <input type="checkbox"/>
NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected. 2) NE = Not Encountered; NMR = No Measurement Recorded						

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 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704		WISDOT PROJECT ID: 1229-04-01				BORING ID: MP93																																																																																																																																																																																																																									
		WISDOT STRUCTURE ID:				PAGE NO: 1 of 1																																																																																																																																																																																																																									
WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:																																																																																																																																																																																																																							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 387286.146		EASTING: 602936.633																																																																																																																																																																																																																							
DATE STARTED: 11/13/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS																																																																																																																																																																																																																									
DATE COMPLETED: 11/13/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:																																																																																																																																																																																																																							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA																																																																																																																																																																																																																									
STATION 2269+70NB		OFFSET 75' Rt		TOWNSHIP:		RANGE:		SECTION:																																																																																																																																																																																																																							
				1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:																																																																																																																																																																																																																							
<table><thead><tr><th>SAMPLE TYPE NUMBER</th><th>RECOVERY (in) (RQD)</th><th>Moisture</th><th>BLOW COUNTS (N VALUE)</th><th>Depth (ft)</th><th>Graphic</th><th>Soil / Rock Description and Geological Origin for Each Major Unit / Comments</th><th>USCS / AASHTO</th><th>Strength Qp (tsf)</th><th>Liquid Limit (%)</th><th>Plasticity Index (%)</th><th>Boulders</th><th>Drilling Method</th><th>Notes</th></tr></thead><tbody><tr><td></td><td></td><td></td><td></td><td></td><td></td><td>12" TOPSOIL</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td rowspan="3"></td><td rowspan="3">SS 1</td><td rowspan="3">14</td><td rowspan="3">M 14</td><td rowspan="3">3-4-4-3 (8)</td><td>1</td><td>1.0</td><td>SILT, light brown, moist, trace clay, medium</td><td>SM</td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>2</td><td>2.0</td><td>FINE TO MEDIUM SAND, brown, moist, some gravel, trace silt, loose</td><td>SP</td><td></td><td></td><td></td><td></td></tr><tr><td>3</td><td>3.0</td><td>SILTY CLAY, brown, moist, little sand, trace gravel, very stiff</td><td></td><td></td><td></td><td></td><td></td></tr><tr><td rowspan="2"></td><td rowspan="2">SS 2</td><td rowspan="2">16</td><td rowspan="2">M 19</td><td rowspan="2">2-4-3-5 (7)</td><td>4</td><td></td><td></td><td></td><td>3.5</td><td></td><td></td><td></td><td></td></tr><tr><td>5</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td>6</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td>7</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td rowspan="2"></td><td rowspan="2">SS 3</td><td rowspan="2">24</td><td rowspan="2">M 19</td><td rowspan="2">3-6-4-8 (10)</td><td>8</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>9</td><td></td><td></td><td></td><td>3.25</td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td>10</td><td>10.0</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td colspan="14">End of Boring at 10.0 ft.</td></tr><tr><td colspan="14">WATER LEVEL & CAVE-IN OBSERVATION DATA</td></tr><tr><td></td><td colspan="4">WATER ENCOUNTERED DURING DRILLING: NE</td><td></td><td colspan="4">CAVE - IN DEPTH AT COMPLETION: NMR</td><td colspan="4">WET <input type="checkbox"/> DRY <input type="checkbox"/></td></tr><tr><td></td><td colspan="4">WATER LEVEL AT COMPLETION: NMR</td><td></td><td colspan="4">CAVE - IN DEPTH AFTER 0 HOURS: NMR</td><td colspan="4">WET <input type="checkbox"/> DRY <input type="checkbox"/></td></tr><tr><td colspan="14">NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected. 2) NE = Not Encountered; NMR = No Measurement Recorded</td></tr></tbody></table>										SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes							12" TOPSOIL									SS 1	14	M 14	3-4-4-3 (8)	1	1.0	SILT, light brown, moist, trace clay, medium	SM						2	2.0	FINE TO MEDIUM SAND, brown, moist, some gravel, trace silt, loose	SP					3	3.0	SILTY CLAY, brown, moist, little sand, trace gravel, very stiff							SS 2	16	M 19	2-4-3-5 (7)	4				3.5					5													6														7										SS 3	24	M 19	3-6-4-8 (10)	8									9				3.25									10	10.0								End of Boring at 10.0 ft.														WATER LEVEL & CAVE-IN OBSERVATION DATA															WATER ENCOUNTERED DURING DRILLING: NE					CAVE - IN DEPTH AT COMPLETION: NMR				WET <input type="checkbox"/> DRY <input type="checkbox"/>					WATER LEVEL AT COMPLETION: NMR					CAVE - IN DEPTH AFTER 0 HOURS: NMR				WET <input type="checkbox"/> DRY <input type="checkbox"/>				NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected. 2) NE = Not Encountered; NMR = No Measurement Recorded													
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	SS 3	24	M 19	3-6-4-8 (10)	8																																																																																																																																																																																																																										
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



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 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704	WISDOT PROJECT ID: 1229-04-01		BORING ID: MP94				
	WISDOT STRUCTURE ID:		PAGE NO: 1 of 1				
WISDOT PROJECT NAME: I-43		CONSULTANT:	CONSULTANT PROJECT NO:	LATITUDE:	LONGITUDE:		
ROADWAY NAME:		DRILLING CONTRACTOR: AET	DRILLING CONTRACTOR PROJECT NO:	NORTHING: 387336.191	EASTING: 603007.949		
DATE STARTED: 11/13/14		CREW CHIEF: MD	DRILL RIG:	COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 11/13/14		LOGGED BY: AET	HOLE SIZE: 4 in	HORIZONTAL DATUM:	VERTICAL DATUM:		
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski	HAMMER TYPE:	STREAMBED ELEVATION: NA			
STATION 2270+15NB	OFFSET 150' Rt	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
						12" TOPSOIL						HSA	
				1		1.0							
SS 1	17	M 24	2-6-3-7 (9)	2		2.0	CL	2.75					
SS 1A		M 14					SM						
				3		3.0							
SS 2	12	M 18	5-4-7-4 (11)	4				2.75					
				5			CL						
				6									
				7									
				8		8.0							
SS 3	5	M 19	4-10-9-12 (19)	9			CL						
				10		10.0							

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

BORING ID: MP95

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 387422.766		EASTING: 602730.418							
DATE STARTED: 12/10/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 12/10/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 2271+25SB		OFFSET 75' Lt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		12" TOPSOIL						HSA	
SS 1	19	M 20	1-3-2-4 (5)	2		SILTY CLAY, brown, moist, trace sand & gravel, stiff		2.0					
SS 2	15	M 18	3-11-5-13 (16)	4		Very stiff		4.5					
				5			CL						
				6									
				7									
SS 3	24	M 14	4-10-8-14 (18)	9				4.5					
				10									

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

BORING ID: MP96

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 387518.447		EASTING: 603021.518							
DATE STARTED: 11/13/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 11/13/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 2272+00NB		OFFSET 175' Rt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		18" TOPSOIL						HSA	
SS 1 SS 1A	15	M 37 M 18	2-4-3-6 (7)	2		1.5 SILTY CLAY, brown, moist, trace sand & gravel, hard		4.5					
				3		Very stiff							
SS 2	21	M 19	2-5-4-7 (9)	4				3.75					
				5									
				6			CL						
				7									
				8		Hard							
SS 3	19	M 14	3-9-6-11 (15)	9				4.5					
				10		10.0							


End of Boring at 10.0 ft.

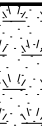
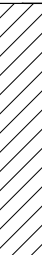

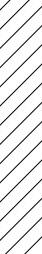
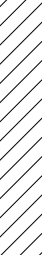
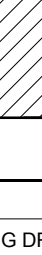
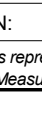
WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded





J:\COUNTIES\OZAUKEE\1229-04-01-1-43-SILVERSPRING DR TO 5TH 60GINT\1229-04-01 OZAUKEE CO.GPJ 143 8/21/15

 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704	WISDOT PROJECT ID: 1229-04-01		BORING ID: MP97				
	WISDOT STRUCTURE ID:		PAGE NO: 1 of 1				
WISDOT PROJECT NAME: I-43		CONSULTANT:	CONSULTANT PROJECT NO:	LATITUDE:	LONGITUDE:		
ROADWAY NAME:		DRILLING CONTRACTOR: AET	DRILLING CONTRACTOR PROJECT NO:	NORTHING: 387552.481	EASTING: 602909.752		
DATE STARTED: 11/14/14		CREW CHIEF: MD	DRILL RIG:	COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 11/14/14		LOGGED BY: AET	HOLE SIZE: 4 in	HORIZONTAL DATUM:		VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski	HAMMER TYPE:	STREAMBED ELEVATION: NA			
STATION 2272+40NB	OFFSET 65' Rt	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		12" TOPSOIL						HSA	
SS 1	12	M 20	2-3-2-3 (5)	2		SILTY CLAY, brown, wet, trace sand & gravel, stiff		2.0					
SS 2	15	M 21	2-4-4-4 (8)	4				1.5					
				5			CL						
				6									
				7									
SS 3	20	M	2-7-4-8 (11)	9									
				10									

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

BORING ID: MP98

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 387713.702		EASTING: 603014.175							
DATE STARTED: 11/14/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 11/14/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 2274+00NB		OFFSET 175' Rt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		12" TOPSOIL						HSA	
SS 1	13	M 18	2-5-4-5 (9)	2		SILTY CLAY, light brown, moist, trace sand & gravel, hard		4.5					
SS 2	16	M 17	3-6-4-9 (10)	4				4.5					
				5			CL						
				6									
				7									
				8									
SS 3	28	M 18	5-9-6-10 (15)	9				4.5					
				10									


End of Boring at 10.0 ft.

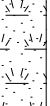


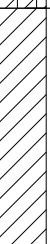
WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded





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 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704	WISDOT PROJECT ID: 1229-04-01		BORING ID: MP99				
	WISDOT STRUCTURE ID:		PAGE NO: 1 of 1				
WISDOT PROJECT NAME: I-43		CONSULTANT:	CONSULTANT PROJECT NO:	LATITUDE:	LONGITUDE:		
ROADWAY NAME:		DRILLING CONTRACTOR: AET	DRILLING CONTRACTOR PROJECT NO:	NORTHING: 387711.258	EASTING: 602914.205		
DATE STARTED: 1/27/15		CREW CHIEF: MD	DRILL RIG:	COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 1/27/15		LOGGED BY: AET	HOLE SIZE: 4 in	HORIZONTAL DATUM:		VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski	HAMMER TYPE:	STREAMBED ELEVATION: NA			
STATION 2274+00NB	OFFSET 75' Rt	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		12" TOPSOIL						HSA	
SS 1	6	M 24	0-1-0-2 (1)	2		SILTY CLAY LOAM, dark brown to black, moist, with organic matter, medium	CL	1.0					
SS 2	10	M 27	1-3-2-2 (5)	4		CLAYEY SILT, dark brown, moist, trace sand, medium	CL-ML	1.0					
				5									
				6									
				7									
				8		SILTY CLAY, brown, moist, trace sand, very stiff	CL	2.5					
SS 3	24	M 17	3-6-5-8 (11)	9									
				10									

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: 1ft.		CAVE - IN DEPTH AT COMPLETION: 1ft.	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

BORING ID: MP100

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 387750.665		EASTING: 602717.31							
DATE STARTED: 1/29/15		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 1/29/15		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 1274+50SB		OFFSET 75' Lt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		36" TOPSOIL						HSA	
SS 1	3	M 66	2-2-1-5 (3)	2									
				3		3.0							
SS 2	21	M 19	2-5-5-9 (10)	4		SILTY CLAY, brown, moist, trace sand, very stiff		3.0					
				5			CL						
				6									
				7									
				8									
SS 3	24	M 21	2-5-3-5 (8)	9				3.0					
				10		10.0							

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded



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Madison, WI 53704

WISDOT PROJECT ID:

1229-04-01

BORING ID:

MP101

WISDOT STRUCTURE ID:

PAGE NO:

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WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:	
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 387809.126		EASTING: 602812.442	
DATE STARTED: 1/20/15		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 1/20/15		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA			
STATION 2275+00NB		OFFSET 25' Lt		TOWNSHIP:		RANGE:		SECTION:	
				1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		12" TOPSOIL						HSA	
SS 1	14	M 20	2-6-3-7 (9)	2		SILTY CLAY, brown, moist, trace sand, very stiff		2.25					
SS 2	19	M 17	3-8-5-10 (13)	4				4.25					
				5			CL						
				6									
				7									
				8									
SS 3	19	M 16	7-11-7-13 (18)	9		Hard		4.5					
				10		End of Boring at 10.0 ft.							

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

BORING ID: MP102

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 387884.585		EASTING: 602961.964							
DATE STARTED: 11/17/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 11/17/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 2275+75		OFFSET 125' Rt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	


SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		12" TOPSOIL						HSA	
SS 1	14	M 24	1-3-3-3 (6)	2		CLAYEY SILT, light brown, moist, trace sand, stiff		2.0					
				3		Very stiff							
SS 2	13	M 19	2-8-5-9 (13)	4				3.5					
				5			CL-ML						
				6									
				7									
				8		Stiff							
SS 3	21	M 16	3-8-6-10 (14)	9				1.8					
				10		End of Boring at 10.0 ft.							

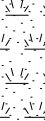
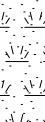








WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded





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 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704	WISDOT PROJECT ID: 1229-04-01		BORING ID: MP103				
	WISDOT STRUCTURE ID:		PAGE NO: 1 of 1				
WISDOT PROJECT NAME: I-43		CONSULTANT:	CONSULTANT PROJECT NO:	LATITUDE:	LONGITUDE:		
ROADWAY NAME:		DRILLING CONTRACTOR: AET	DRILLING CONTRACTOR PROJECT NO:	NORTHING: 387909.267	EASTING: 602911.969		
DATE STARTED: 1/27/15		CREW CHIEF: MD	DRILL RIG:	COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 1/27/15		LOGGED BY: AET	HOLE SIZE: 4 in	HORIZONTAL DATUM:	VERTICAL DATUM:		
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski	HAMMER TYPE:	STREAMBED ELEVATION: NA			
STATION 2276+00NB	OFFSET 75' Rt	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		36" TOPSOIL						HSA	
SS 1	11	W 25	0-2-2-3 (4)	2									
				3		3.0							
SS 2	14	M 28	2-3-2-4 (5)	4		SILTY LOAM, gray/dark gray, moist, trace sand, medium		0.90					
				5			CL-ML						
				6									
				7									
				8		8.0							
SS 3	15	M 12	8-8-7-8 (15)	9		MEDIUM TO COARSE SAND, brown, moist, with gravel, trace silt, medium dense	SP						
				10		10.0							

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: 3ft.		CAVE - IN DEPTH AT COMPLETION: 7.4ft.	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID:

1229-04-01

BORING ID:

MP104

WISDOT STRUCTURE ID:

PAGE NO:

1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:	
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 387927.372		EASTING: 602716.023	
DATE STARTED: 12/10/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 12/10/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA			
STATION 2276+25SB	OFFSET 75' Lt	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:		

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		12" TOPSOIL						HSA	
SS 1	19	M 15	1-5-3-6 (8)	2		SILTY CLAY, brown, moist, trace sand & gravel, very stiff		3.75					
SS 2	24	M 17	3-8-6-13 (14)	4		Hard		4.5					
				5			CL						
				6									
				7									
				8									
SS 3	24	M 18	4-7-6-8 (13)	9		Gray/brown, very stiff		2.75					
				10									

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID:

1229-04-01

BORING ID:

MP105

WISDOT STRUCTURE ID:

PAGE NO:

1 of 1

WISDOT PROJECT NAME:

I-43

CONSULTANT:

CONSULTANT PROJECT NO:

LATITUDE:

LONGITUDE:

ROADWAY NAME:

DRILLING CONTRACTOR:

AET

DRILLING CONTRACTOR PROJECT NO:

NORTHING:

388009.777

EASTING:

602812.815

DATE STARTED:

1/20/15

CREW CHIEF:

MD

DRILL RIG:

COORDINATE SYSTEM:

WCCS

DATE COMPLETED:

1/20/15

LOGGED BY:

AET

HOLE SIZE:

4 in

HORIZONTAL DATUM:

VERTICAL DATUM:

COUNTY:

Ozaukee

LOG QC BY:

C. Wierzchowski

HAMMER TYPE:

STREAMBED ELEVATION:

NA

STATION

2270+00

OFFSET

25' Lt

TOWNSHIP:

RANGE:

SECTION:

1/4 SECTION:

1/4 1/4 SECTION:

SURFACE ELEVATION:

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
						12" TOPSOIL						HSA	
				1		1.0							
SS 1	11	M 22	0-3-2-3 (5)	2		CLAYEY SAND, light brown, moist, medium	SC						
				3		3.0							
SS 2	12	M 20	1-5-3-5 (8)	4		SILTY FINE SAND, light brown, moist, loose							
				5			SM						
				6									
				7									
				8		8.0							
				9		SILTY CLAY, gray, moist, trace sand, very stiff	CL	3.5					
SS 3	12	M 18	3-5-3-7 (8)	10		10.0							
End of Boring at 10.0 ft.													

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.

2) NE = Not Encountered; NMR = No Measurement Recorded

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WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

BORING ID: MP106

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 388010.81		EASTING: 602716.82							
DATE STARTED: 12/10/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 12/10/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 2277+00SB		OFFSET 75' Lt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		12" TOPSOIL						HSA	
SS 1	19	M 16	1-7-5-10 (12)	2		SILTY CLAY, brown, moist, trace sand, hard		4.5					
SS 2	24	M 14	2-10-17-14 (27)	4		A-6(2)		4.5	31	17			
				5			CL						
				6									
				7									
				8		Very stiff							
SS 3	23	M 19	3-7-5-9 (12)	9				2.75					
				10									






End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704	WISDOT PROJECT ID: 1229-04-01				BORING ID: MP107										
	WISDOT STRUCTURE ID:				PAGE NO: 1 of 1										
WISDOT PROJECT NAME: I-43				CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:					
ROADWAY NAME:				DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 388082.522		EASTING: 602914.284					
DATE STARTED: 11/18/14				CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS							
DATE COMPLETED: 11/18/14				LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:					
COUNTY: Ozaukee				LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA							
STATION 2277+75NB		OFFSET 75' Rt		TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:						
SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments			USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
						12" TOPSOIL								HSA	
				1		1.0									
SS 1	15	M 18	2-5-5-4 (10)	2		SILTY CLAY TO CLAYEY SILT, brown, moist, trace sand & gravel, very stiff			CL-ML	2.25					
				3											
				3.5											
SS 2	14	M 21	3-6-3-14 (9)	4		SILT, brown/yellow/gray mottled, moist, little sand & gravel, trace clay, stiff				1.5					
SS 2A	15			5											
				6											
				7					SM						
				8											
SS 3	18	M 15	4-11-4-13 (15)	9											
				10		10.0									
End of Boring at 10.0 ft.															
WATER LEVEL & CAVE-IN OBSERVATION DATA															
	WATER ENCOUNTERED DURING DRILLING: 3ft.					CAVE - IN DEPTH AT COMPLETION: 8ft.				WET <input type="checkbox"/>					
	WATER LEVEL AT COMPLETION: NMR					CAVE - IN DEPTH AFTER 0 HOURS: NMR				WET <input type="checkbox"/>					
NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected. 2) NE = Not Encountered; NMR = No Measurement Recorded															

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WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

BORING ID: MP108

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 388210.68		EASTING: 602810.47							
DATE STARTED: 1/20/15		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 1/20/15		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 2279+00NB		OFFSET 33' Lt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		12" TOPSOIL						HSA	
SS 1	15	M 16	2-5-4-6 (9)	2		SILTY CLAY, light brown, moist, trace sand, stiff	CL	1.70					
SS 2	9	M-W 19	3-5-4-6 (9)	4		SILTY CLAY, brown, moist to wet, little sand, stiff							
				5									
				6			CL						
				7									
				8		Wet, hard							
SS 3	0	W	28-15-16-12 (31)	9									
				10									

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: 5.2ft.		CAVE - IN DEPTH AT COMPLETION: 6.8ft.	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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WISDOT PROJECT ID: 1229-04-01

BORING ID: MP110

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 388360.42		EASTING: 602825.788							
DATE STARTED: 1/20/15		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 1/20/15		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 2280+50NB		OFFSET 25' Lt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		12" TOPSOIL						HSA	
SS 1	11	M 19	2-6-5-6 (11)	2		SILTY LOAM, brown/yellow mottled, moist, trace sand & gravel, very stiff	CL-ML	2.75					
SS 2	17	M 15	3-7-4-8 (11)	4		SILTY CLAY, gray/brown mottled, moist, trace sand, very stiff		3.75					
				5			CL						
				6									
				7									
				8									
SS 3	24	M 17	3-8-6-11 (14)	9		Hard		4.5					
				10									

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

BORING ID: MP111

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 389604.158		EASTING: 602979.793							
DATE STARTED: 11/18/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 11/18/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 2293+00NB		OFFSET 65' Rt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		12" TOPSOIL						HSA	
SS 1	7	M 18	2-3-3-3 (6)	2		SILTY CLAY, light brown, moist, trace sand, stiff		1.25					
SS 2	23	M 18	2-7-3-7 (10)	4		Gray/brown, very stiff		3.75					
				5			CL						
				6									
				7									
SS 3	24	M 17	4-9-6-11 (15)	9				3.25					
				10									

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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Madison, WI 53704

WISDOT PROJECT ID:

1229-04-01

BORING ID:

MP112

WISDOT STRUCTURE ID:

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WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:	
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 389613.186		EASTING: 602804.025	
DATE STARTED: 12/09/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 12/09/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA			
STATION 2293+00SB		OFFSET 65' Lt		TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
						12" TOPSOIL						HSA	
SS 1	12	M 16	2-3-2-1 (5)	1		FINE TO MEDIUM SAND, brown, moist to wet, some silt, little gravel, loose	SP						
SS 2	10	M 10	3-5-5-4 (10)	2									
				3									
				4									
				5									
				6									
				7									
				8									
				8		SANDY SILT, brown, wet, soft	SM						
SS 3	14	W 20	2-2-2-2 (4)	9									
				10									

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: 6.4ft.		CAVE - IN DEPTH AT COMPLETION: 7.8ft.	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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WISDOT PROJECT ID:

1229-04-01

BORING ID:

MP113

WISDOT STRUCTURE ID:

PAGE NO:

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WISDOT PROJECT NAME: I-43		CONSULTANT: AET		CONSULTANT PROJECT NO: 389803.894		LATITUDE: 602990.053		LONGITUDE: WCCS	
ROADWAY NAME: 11/18/14		DRILLING CONTRACTOR: MD		DRILLING CONTRACTOR PROJECT NO: 4 in		NORTHING: NA		EASTING: NA	
DATE STARTED: 11/18/14		CREW CHIEF: AET		DRILL RIG: 4 in		COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 11/18/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM: NA		VERTICAL DATUM: NA	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE: NA		STREAMBED ELEVATION: NA			
STATION 2295+00NB	OFFSET 65' Rt	TOWNSHIP: NA	RANGE: NA	SECTION: NA	1/4 SECTION: NA	1/4 1/4 SECTION: NA	SURFACE ELEVATION: NA		

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		12" TOPSOIL						HSA	
SS 1	14	M 19	2-4-3-5 (7)	2		SILTY CLAY, brown, moist, trace sand & gravel, very stiff		2.5					
SS 2	13	M 20	2-4-3-6 (7)	4		Stiff	CL	2.0					
				5									
				6									
				7									
SS 3	24	M 16	4-12-8-16 (20)	9		Hard		4.5					
				10		End of Boring at 10.0 ft.							

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

BORING ID: MP114

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 390002.605		EASTING: 603020.286							
DATE STARTED: 11/18/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 11/18/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 2297+00NB		OFFSET 85' Rt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		14" TOPSOIL						HSA	
SS 1 SS 1A	12	M 33 M 17	2-3-2-5 (5)	2		SILTY CLAY, brown, moist, trace sand, very stiff		2.25					
SS 2	8	M 24	2-5-3-5 (8)	4		Stiff		1.5					
				5			CL						
				6									
				7									
SS 3	24	M 18	2-6-4-8 (10)	9		Gray, trace gravel, very stiff		3.0					
				10									

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

BORING ID: MP115

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 390012.659		EASTING: 602824.544							
DATE STARTED: 12/09/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 12/09/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 2297+00SB		OFFSET 65' Lt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		48" TOPSOIL						HSA	
SS 1	19	M 18	2-4-3-5 (7)	2									
SS 2	19	M 18	2-6-4-5 (10)	4		4.0 FINE TO MEDIUM SAND, brown, moist, trace silt, loose							
SS 2A		M 17											
				5									
				6									
				7			SP						
				8									
SS 3	14	W 22	2-8-5-9 (13)	9		Wet, medium dense							
				10		10.0							

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: 7.4ft.		CAVE - IN DEPTH AT COMPLETION: 8.2ft.	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

J:\COUNTIES\OZAUKEE\1229-04-01-1-43-SILVERSPRING DR TO 5TH 60GINT\1229-04-01 OZAUKEE CO.GPJ 143 8/21/15



WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

BORING ID: MP116

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 390203.368		EASTING: 603010.572							
DATE STARTED: 11/18/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 11/18/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 2299+00NB		OFFSET 65' Rt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
						12" TOPSOIL						HSA	
SS 1	11	M 19	1-1-2-3 (3)	1		SILTY FINE TO MEDIUM SAND, brown, moist, trace gravel, very loose to loose	SM						
SS 2	11	M 13	1-5-4-7 (9)	4									
				5									
				6									
				7									
				8		CLAYEY SILT, gray/brown, moist, little sand, loose	CL-ML						
SS 3	24	M 17	1-3-2-2 (5)	9									
				10									


End of Boring at 10.0 ft.

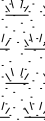
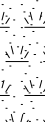
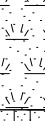







WATER LEVEL & CAVE-IN OBSERVATION DATA

<input type="checkbox"/>	WATER ENCOUNTERED DURING DRILLING: NE	<input type="checkbox"/>	CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/>
<input type="checkbox"/>	WATER LEVEL AT COMPLETION: NMR	<input type="checkbox"/>	CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded





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 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704	WISDOT PROJECT ID: 1229-04-01		BORING ID: MP118				
	WISDOT STRUCTURE ID:		PAGE NO: 1 of 1				
WISDOT PROJECT NAME: I-43		CONSULTANT:	CONSULTANT PROJECT NO:	LATITUDE:	LONGITUDE:		
ROADWAY NAME:		DRILLING CONTRACTOR: AET	DRILLING CONTRACTOR PROJECT NO:	NORTHING: 390310.963	EASTING: 602824.847		
DATE STARTED: 12/09/14		CREW CHIEF: MD	DRILL RIG:	COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 12/09/14		LOGGED BY: AET	HOLE SIZE: 4 in	HORIZONTAL DATUM:	VERTICAL DATUM:		
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski	HAMMER TYPE:	STREAMBED ELEVATION: NA			
STATION 2300+00SB	OFFSET 73' Lt	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		54" TOPSOIL						HSA	
SS 1	10	M 17	2-4-4-6 (8)	2									
SS 2	13	M 32	3-4-4-6 (8)	4									
SS		M 16		4.5		SILTY FINE TO MEDIUM SAND, brown, moist to wet, trace clay, loose							
				5									
				6			SM						
				7									
				8									
SS 3	14	M 18	4-7-5-7 (12)	9		FINE SAND, gray/brown, wet, trace silt, medium dense	SP						
				10									

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: 7ft.		CAVE - IN DEPTH AT COMPLETION: 7.8ft.	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.

2) NE = Not Encountered; NMR = No Measurement Recorded



WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

BORING ID: MP119

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 390552.907		EASTING: 603028.527							
DATE STARTED: 11/18/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 11/18/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 2302+50NB		OFFSET 65' Rt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
						12" TOPSOIL						HSA	
				1		1.0							
SS 1	14	M 8	4-8-3-10 (11)	2		MEDIUM TO COARSE SAND, brown, moist, some gravel, medium dense							
				3									
SS 2	17	M 8	4-11-9-9 (20)	4			SP						
				5									
				6									
				7									
				8		8.0							
						FINE SANDY SILT, gray, moist, trace clay, medium							
SS 3	23	M 20	1-3-2-3 (5)	9			SM	0.75					
				10		10.0							

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

<input type="checkbox"/>	WATER ENCOUNTERED DURING DRILLING: NE	<input type="checkbox"/>	CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/>
<input type="checkbox"/>	WATER LEVEL AT COMPLETION: NMR	<input type="checkbox"/>	CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/>
				DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID:

1229-04-01

BORING ID:

MP120

WISDOT STRUCTURE ID:

PAGE NO:

1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:	
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 390612.126		EASTING: 602850.33	
DATE STARTED: 12/09/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 12/09/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA			
STATION 2303+00SB	OFFSET 70' Lt	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:		

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		54" TOPSOIL						HSA	
SS 1	10	M 22	2-5-4-6 (9)	2									
SS 2	15	M 25	3-5-5-7 (10)	4									
		18		4.5		SANDY LOAM, dark brown, moist							
				5			CL-ML						
				6									
				7									
				8									
SS 3	16	W 17	3-3-3-3 (6)	9		SILTY FINE SAND, gray, moist, trace clay, loose	SM	0.5					
				10									

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

WATER ENCOUNTERED DURING DRILLING: 8ft.	CAVE - IN DEPTH AT COMPLETION: 8.2ft.	WET <input type="checkbox"/> DRY <input type="checkbox"/>
WATER LEVEL AT COMPLETION: NMR	CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

BORING ID: MP121

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 390701.683		EASTING: 603056.195							
DATE STARTED: 11/19/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 11/19/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 2340+00NB		OFFSET 85' Rt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
						12" TOPSOIL						HSA	
SS 1	4	M 27	1-2-2-3 (4)	1		FINE SANDY LOAM, gray to dark gray, moist, soft	CL-ML						
SS 2	12	M 16	2-3-2-2 (5)	2		FINE TO MEDIUM SILTY SAND, brown, moist, trace gravel, loose	SM						
SS 2A		M 18		3		FINE SANDY SILT, light brown mottled, moist, trace gravel, medium							
				4									
				5									
				6									
				7									
				8									
SS 3	17	M 19	3-4-4-3 (8)	8		SILTY FINE SAND, gray, moist, medium	SM						
				9									
				10									


End of Boring at 10.0 ft.

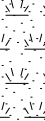
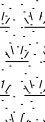








WATER LEVEL & CAVE-IN OBSERVATION DATA

<input type="checkbox"/>	WATER ENCOUNTERED DURING DRILLING: NE	<input type="checkbox"/>	CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/>
<input type="checkbox"/>	WATER LEVEL AT COMPLETION: NMR	<input type="checkbox"/>	CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded





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 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704	WISDOT PROJECT ID: 1229-04-01		BORING ID: MP122				
	WISDOT STRUCTURE ID:		PAGE NO: 1 of 1				
WISDOT PROJECT NAME: I-43		CONSULTANT:	CONSULTANT PROJECT NO:	LATITUDE:	LONGITUDE:		
ROADWAY NAME:		DRILLING CONTRACTOR: AET	DRILLING CONTRACTOR PROJECT NO:	NORTHING: 390902.446	EASTING: 603046.481		
DATE STARTED: 11/19/14		CREW CHIEF: MD	DRILL RIG:	COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 11/19/14		LOGGED BY: AET	HOLE SIZE: 4 in	HORIZONTAL DATUM:		VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski	HAMMER TYPE:	STREAMBED ELEVATION: NA			
STATION 2306+00NB	OFFSET 65' Rt	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		36" TOPSOIL						HSA	
SS 1	10	M 24	2-3-2-3 (5)	2									
				3		3.0							
SS 2	15	M 14	2-4-3-4 (7)	4		MEDIUM TO COARSE SAND, brown, moist, trace silt, with gravel, loose	SP						
SS 2A		M 16		5		4.0							
				6		SILTY FINE SAND, brown, moist, loose	SM						
				7									
				8		8.0							
SS 3	24	M 20	2-4-2-4 (6)	9		SILTY FINE SAND, gray, wet, little clay, loose	SM	1.5					
				10		10.0							


End of Boring at 10.0 ft.

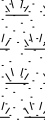
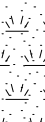
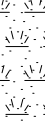







WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: 7.8ft.		CAVE - IN DEPTH AT COMPLETION: 7.8ft.	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded





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 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704	WISDOT PROJECT ID: 1229-04-01		BORING ID: MP123				
	WISDOT STRUCTURE ID:		PAGE NO: 1 of 1				
WISDOT PROJECT NAME: I-43		CONSULTANT:	CONSULTANT PROJECT NO:	LATITUDE:	LONGITUDE:		
ROADWAY NAME:		DRILLING CONTRACTOR: AET	DRILLING CONTRACTOR PROJECT NO:	NORTHING: 390911.474	EASTING: 602870.713		
DATE STARTED: 12/09/14		CREW CHIEF: MD	DRILL RIG:	COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 12/09/14		LOGGED BY: AET	HOLE SIZE: 4 in	HORIZONTAL DATUM:		VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski	HAMMER TYPE:	STREAMBED ELEVATION: NA			
STATION 2306+00SB	OFFSET 65' Lt	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		36" TOPSOIL						HSA	
SS 1	12	M 30	2-3-3-3 (6)	2									
				3		3.0							
SS 2	14	M 16	2-5-4-5 (9)	4		FINE TO MEDIUM SAND, brown, moist, trace silt, loose							
				5									
				6			SP						
				7									
				8		8.0							
SS 3	17	M 23	2-2-2-2 (4)	9		SILTY FINE SAND, gray, moist, trace clay, very loose	SM						
				10		10.0							

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: 7.7ft.		CAVE - IN DEPTH AT COMPLETION: 7.9ft.	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

J:\COUNTIES\OZAUKEE\1229-04-01-143-SILVERSPRING DR TO 5TH 60GINT\1229-04-01 OZAUKEE CO.GPJ 143 8/21/15



WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

BORING ID: MP124

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 391152.117		EASTING: 603059.306							
DATE STARTED: 11/19/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 11/19/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 2308+50NB		OFFSET 65' Rt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		36" TOPSOIL						HSA	
SS 1	11	M 48	2-4-2-4 (6)	2									
				3		3.0							
SS 2	12	M 23	1-4-2-4 (6)	4		FINE TO MEDIUM SAND, brown, moist, trace silt, loose							
				5			SP						
				6									
				7									
				8		8.0							
SS 3	21	M 22	2-2-2-3 (4)	9		FINE SANDY SILT, gray, moist, trace clay, soft	SM	0.75					
				10		10.0							

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

J:\COUNTIES\OZAUKEE\1229-04-01-1-43-SILVERSPRING DR TO 5TH 60GINT\1229-04-01 OZAUKEE CO.GPJ 143 8/21/15



WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

BORING ID: MP125

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 391211.849		EASTING: 602871.122							
DATE STARTED: 12/09/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 12/09/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 2309+00SB		OFFSET 77' Lt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
						12" TOPSOIL						HSA	
				1		1.0							
SS 1	13	M 6	2-5-3-5 (8)	2		FINE TO MEDIUM SAND, brown, moist, trace gravel, loose							
				3		Medium dense							
SS 2	17	M 21	4-6-5-7 (11)	4			SP						
				5									
				6									
				7									
				8		8.0							
				9		SILTY FINE SAND, gray, wet, trace clay, very loose	SM						Fines = 67%
				10		10.0							

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

▽	WATER ENCOUNTERED DURING DRILLING: 6.7ft.	☒	CAVE - IN DEPTH AT COMPLETION: 8ft.	WET <input type="checkbox"/> DRY <input type="checkbox"/>
▽	WATER LEVEL AT COMPLETION: NMR	☒	CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

J:\COUNTIES\OZAUKEE\1229-04-01-143-SILVERSPRING DR TO 5TH 60GINT\1229-04-01 OZAUKEE CO GPR 143 8/21/15



WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID:

1229-04-01

BORING ID:

MP126

WISDOT STRUCTURE ID:

PAGE NO:

1 of 1

WISDOT PROJECT NAME:

I-43

CONSULTANT:

CONSULTANT PROJECT NO:

LATITUDE:

LONGITUDE:

ROADWAY NAME:

DRILLING CONTRACTOR:

AET

DRILLING CONTRACTOR PROJECT NO:

NORTHING:

391301.15

EASTING:

603081.981

DATE STARTED:

11/19/14

CREW CHIEF:

MD

DRILL RIG:

COORDINATE SYSTEM:

WCCS

DATE COMPLETED:

11/19/14

LOGGED BY:

AET

HOLE SIZE:

4 in

HORIZONTAL DATUM:

VERTICAL DATUM:

COUNTY:

Ozaukee

LOG QC BY:

C. Wierzchowski

HAMMER TYPE:

STREAMBED ELEVATION:

NA

STATION

2310+00NB

OFFSET

80' Rt

TOWNSHIP:

RANGE:

SECTION:

1/4 SECTION:

1/4 1/4 SECTION:

SURFACE ELEVATION:

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		36" TOPSOIL							
SS 1	13	M 24	2-4-3-5 (7)	2									
				3		3.0							
SS 2	10	M 12	1-7-4-6 (11)	4		FINE GRAVEL, light brown, moist, some sand, trace silt, medium dense							
				5			GP						
				6									
				7									
				8		8.0							
SS 3	24	M 19	2-2-1-3 (3)	9		FINE SANDY SILT, light brown, moist, trace clay, soft		0.5					
				10			SM						
				11									
				12									
				13		13.0							
SS 4	24	M 22	2-2-2-3 (4)	14		FINE TO MEDIUM SAND, gray, moist, some silt, trace clay, very loose	SP						
				15		15.0							
End of Boring at 15.0 ft.													

WATER LEVEL & CAVE-IN OBSERVATION DATA

<input type="checkbox"/>	WATER ENCOUNTERED DURING DRILLING:	NE	<input type="checkbox"/>	CAVE - IN DEPTH AT COMPLETION:	NMR	WET <input type="checkbox"/>
<input type="checkbox"/>	WATER LEVEL AT COMPLETION:	NMR	<input type="checkbox"/>	CAVE - IN DEPTH AFTER 0 HOURS:	NMR	WET <input type="checkbox"/>
						DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.

2) NE = Not Encountered; NMR = No Measurement Recorded

J:\COUNTIES\OZAUKEE\1229-04-01 - I-43 - SILVERSPRING DR TO 5TH 60\GINT\1229-04-01 OZAUKEE CO.GPJ 143 8/21/15



WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID:

1229-04-01

BORING ID:

MP127

WISDOT STRUCTURE ID:

PAGE NO:

1 of 1

WISDOT PROJECT NAME:

I-43

CONSULTANT:

CONSULTANT PROJECT NO:

LATITUDE:

LONGITUDE:

ROADWAY NAME:

DRILLING CONTRACTOR:

AET

DRILLING CONTRACTOR PROJECT NO:

NORTHING:

391501.656

EASTING:

603077.261

DATE STARTED:

11/19/14

CREW CHIEF:

MD

DRILL RIG:

COORDINATE SYSTEM:

WCCS

DATE COMPLETED:

11/19/14

LOGGED BY:

AET

HOLE SIZE:

4 in

HORIZONTAL DATUM:

VERTICAL DATUM:

COUNTY:

Ozaukee

LOG QC BY:

C. Wierzchowski

HAMMER TYPE:

STREAMBED ELEVATION:

NA

STATION

2312+00NB

OFFSET

65' Rt

TOWNSHIP:

RANGE:

SECTION:

1/4 SECTION:

1/4 1/4 SECTION:

SURFACE ELEVATION:

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		18" TOPSOIL							
				1.5									
SS 1 SS 1A	16	M 26 M 11	3-7-5-7 (12)	2		FINE TO MEDIUM SAND, brown, moist, trace silt, medium dense	SP						
				3									
SS 2	14	M 12	3-6-6-11 (12)	4		SAND, brown, moist, some gravel, trace silt, medium dense							
				5									
				6			SW						
				7									
				8									
				8		Loose							
SS 3	18	M 14	3-3-6-4 (9)	9		SILT, gray, moist, trace fine sand, stiff	SM	1.4					
				10									
				10.0									

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.

2) NE = Not Encountered; NMR = No Measurement Recorded

J:\COUNTIES\OZAUKEE\1229-04-01-1-43-SILVERSPRING DR TO 5TH 60GINT\1229-04-01 OZAUKEE CO.GPJ 143 8/21/15



WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID:

1229-04-01

BORING ID:

MP128

WISDOT STRUCTURE ID:

PAGE NO:

1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:	LONGITUDE:
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 391511.454	EASTING: 602886.512
DATE STARTED: 12/09/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS	
DATE COMPLETED: 12/09/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:	VERTICAL DATUM:
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA	
STATION 2312+00SB	OFFSET 80' Lt	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		36" TOPSOIL						HSA	
SS 1	6	M 22	3-5-4-5 (9)	2									
				3		3.0							
SS 2	13	M 11	5-3-3-4 (6)	4		FINE TO MEDIUM SAND, brown, moist to wet, trace gravel, loose							
				5									
				6			SP						
				7									
				8		8.0							
SS 3	17	W 16	4-3-5-3 (8)	9		FINE SILTY SAND, gray, wet, trace clay, medium	SM						
				10		10.0							

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: 6.9ft.		CAVE - IN DEPTH AT COMPLETION: 7.8ft.	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.

2) NE = Not Encountered; NMR = No Measurement Recorded

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WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704



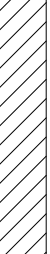


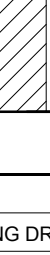
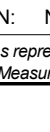
WISDOT PROJECT ID: 1229-04-01

BORING ID: MP129

WISDOT STRUCTURE ID:





PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 393007.287		EASTING: 602926.105							
DATE STARTED: 1/28/15		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 1/28/15		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 2326+60SB		OFFSET 100' Lt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		12" BASE COURSE	GW					HSA	
SS 1	13	M 16	5-7-4-7 (11)	2		SILTY CLAY, reddish brown, moist, trace sand & gravel, POSSIBLE FILL, very stiff	CL	3.65					
SS 2	11	M 15	4-6-5-11 (11)	4			CL	2.80					
				5									
				6									
				7									
				8									
SS 3	23	M 19	2-5-3-6 (8)	9		SILTY CLAY, light brown mottled, moist, trace sand, hard	CL	4.5					
				10									


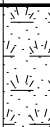
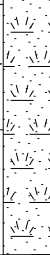


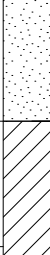
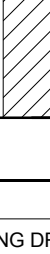
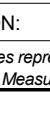




End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

J:\COUNTIES\OZAUKEE\1229-04-01-1-43 - SILVERSPRING DR TO 5TH 60GINT\1229-04-01 OZAUKEE CO.GPJ 143 8/21/15

 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704		WISDOT PROJECT ID: 1229-04-01				BORING ID: MP130								
		WISDOT STRUCTURE ID:				PAGE NO: 1 of 1								
WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:						
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 393204.435		EASTING: 602903.716						
DATE STARTED: 1/28/15		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS								
DATE COMPLETED: 1/28/15		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:						
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA								
STATION 2329+00SB		OFFSET 124' Lt		TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:					
SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments		USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		36" TOPSOIL								
SS 1	7	M 75	0-1-1-3 (2)	2										
				3		3.0								
SS 2	17	M 7	2-10-8-11 (18)	4		MEDIUM TO COARSE SAND, brown, moist, some gravel, medium dense								
				5				SP						
				6										
				7										
				8		8.0								
SS 3	16	M 19	5-10-6-13 (16)	9		SILTY CLAY, gray, moist, trace sand, very stiff		CL	3.90					
				10		10.0								
End of Boring at 10.0 ft.														
WATER LEVEL & CAVE-IN OBSERVATION DATA														
	WATER ENCOUNTERED DURING DRILLING: 1.5ft.					CAVE - IN DEPTH AT COMPLETION: 1.5ft.				WET <input type="checkbox"/> DRY <input type="checkbox"/>				
	WATER LEVEL AT COMPLETION: NMR					CAVE - IN DEPTH AFTER 0 HOURS: NMR				WET <input type="checkbox"/> DRY <input type="checkbox"/>				
NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected. 2) NE = Not Encountered; NMR = No Measurement Recorded														

J:\COUNTIES\OZAUKEE\1229-04-01-1-43-SILVERSPRING DR TO 5TH 60GINT\1229-04-01 OZAUKEE CO.GPJ 143 8/21/15



WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

BORING ID: MP131

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 393355.752		EASTING: 602927.797							
DATE STARTED: 1/28/15		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 1/28/15		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 2330+50SB		OFFSET 100' Lt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		12" TOPSOIL						HSA	
SS 1	16	M 21	2-5-3-8 (8)	2		SILTY CLAY, gray/brown mottled, moist, trace sand, very stiff		3.10					
SS 2	16	M 21	2-5-4-7 (9)	4			CL	4.0					
				5									
				6									
				7									
				8									
SS 3	24	M 22	3-5-4-5 (9)	9		Gray, moist, very stiff	CL	2.75					
				10									

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

J:\COUNTIES\OZAUKEE\1229-04-01-1-43-SILVERSPRING DR TO 5TH 60\GINT\1229-04-01 OZAUKEE CO.GPJ 143 8/21/15



WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

BORING ID: MP132

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 393903.199		EASTING: 602940.852							
DATE STARTED: 12/02/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 12/02/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 2336+00SB		OFFSET 85' Lt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		12" TOPSOIL						HSA	
SS 1	16	M 19	1-3-2-5 (5)	2		SILTY CLAY, light brown, moist, very stiff		3.0					
SS 2	8	M 24	2-8-5-11 (13)	4				3.0					
				5			CL						
				6									
				7									
				8		Brown							
SS 3	23	M 20	4-8-6-9 (14)	9				2.75					
				10									


End of Boring at 10.0 ft.

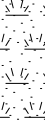
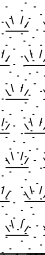


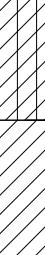
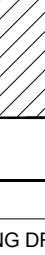
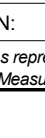
WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded





J:\COUNTIES\OZAUKEE\1229-04-01-1-43-SILVERSPRING DR TO 5TH 60\GINT\1229-04-01 OZAUKEE CO.GPJ 143 8/21/15

 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704	WISDOT PROJECT ID: 1229-04-01		BORING ID: MP133				
	WISDOT STRUCTURE ID:		PAGE NO: 1 of 1				
WISDOT PROJECT NAME: I-43		CONSULTANT:	CONSULTANT PROJECT NO:	LATITUDE:	LONGITUDE:		
ROADWAY NAME:		DRILLING CONTRACTOR: AET	DRILLING CONTRACTOR PROJECT NO:	NORTHING: 394103.162	EASTING: 602930.139		
DATE STARTED: 1/29/15		CREW CHIEF: MD	DRILL RIG:	COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 1/29/15		LOGGED BY: AET	HOLE SIZE: 4 in	HORIZONTAL DATUM:	VERTICAL DATUM:		
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski	HAMMER TYPE:	STREAMBED ELEVATION: NA			
STATION 2338+00SB	OFFSET 95' Lt	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		36" TOPSOIL						HSA	
SS 1	9	M 35	0-3-2-4 (5)	2									
				3		CLAYEY SILT, dark gray, moist, medium							
SS 2	15	M 50	1-2-1-2 (3)	4				0.75					
				5			CL-ML						
				6									
				7									
				8									
				8.0		SILTY CLAY, brown, moist, trace sand, very stiff							
SS 3	12	M 20	3-4-3-6 (7)	9			CL	2.50					
				10									
				10.0									

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

BORING ID: MP134

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 394278.232		EASTING: 602949.514							
DATE STARTED: 12/02/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 12/02/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 2339+75SB		OFFSET 75' Lt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		36" TOPSOIL						HSA	
SS 1	6	M 26	0-0-0-0 (0)	2									
				3		3.0							
SS 2	16	M 23	1-4-2-6 (6)	4		SILTY CLAY, reddish brown mottled, moist, trace sand, very stiff		3.0					
				5									
				6			CL						
				7									
				8		Brown							
SS 3	22	M 17	3-9-6-13 (15)	9				4.25					
				10		10.0							


End of Boring at 10.0 ft.

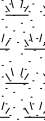
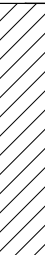
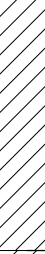

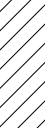
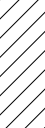
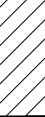
WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded





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 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704	WISDOT PROJECT ID: 1229-04-01		BORING ID: MP135		
	WISDOT STRUCTURE ID:		PAGE NO: 1 of 1		
WISDOT PROJECT NAME: I-43		CONSULTANT:	CONSULTANT PROJECT NO:	LATITUDE:	LONGITUDE:
ROADWAY NAME:		DRILLING CONTRACTOR: AET	DRILLING CONTRACTOR PROJECT NO:	NORTHING: 395803.921	EASTING: 603140.074
DATE STARTED: 11/20/14		CREW CHIEF: MD	DRILL RIG:	COORDINATE SYSTEM: WCCS	
DATE COMPLETED: 11/20/14		LOGGED BY: AET	HOLE SIZE: 4 in	HORIZONTAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski	HAMMER TYPE:	STREAMBED ELEVATION: NA	
STATION 2355+00NB	OFFSET 75' Rt	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		12" TOPSOIL						HSA	
SS 1	12	M 22	2-4-4-4 (8)	2		SILTY CLAY, reddish brown, moist, very stiff	CL	2.5					
SS 2	16	M 18	3-5-4-8 (9)	4			CL	4.25					
				5		SILTY CLAY, brown, moist, trace sand & gravel, very stiff	CL						
				6									
				7									
SS 3	24	M 19	5-9-7-11 (16)	9			CL	4.25					
				10									

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

BORING ID: MP136

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 395854.01		EASTING: 603164.896							
DATE STARTED: 11/20/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 11/20/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 2355+50NB		OFFSET 100' Rt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		36" TOPSOIL						HSA	
SS 1	19	M 18	1-3-2-5 (5)	2									
				3		3.0							
SS 2	11	M 23	1-4-3-5 (7)	4		SILTY CLAY, reddish brown, moist, trace sand & gravel, very stiff		2.5					
				5			CL						
				6									
				7									
				8									
SS 3	24	M 17	3-8-6-11 (14)	9		Brown, hard		4.5					
				10		10.0							

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

BORING ID: MP137

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 395973.92		EASTING: 603139.468							
DATE STARTED: 11/20/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 11/20/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 2356+75NB		OFFSET 75' Rt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		12" TOPSOIL						HSA	
SS 1	11	M 20	1-3-3-6 (6)	2		SILTY CLAY, reddish brown, moist, trace sand, very stiff		2.75					
SS 2	14	M 18	2-9-6-12 (15)	4		Brown, hard	CL	4.5					
				5									
				6									
				7									
SS 3	24	M 18	4-10-7-11 (17)	9				4.1					
				10									

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

BORING ID: MP138

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 396178.131		EASTING: 602917.738							
DATE STARTED: 12/02/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 12/02/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 2358+75SB		OFFSET 100' Lt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		36" TOPSOIL						HSA	
SS 1	10	M 23	2-4-3-5 (7)	2									
				3		3.0							
SS 2	15	M 18	2-6-3-9 (9)	4		SILTY CLAY, brown, moist, trace sand & gravel, hard		4.5					
				5			CL						
				6									
				7									
				8									
SS 3	24	M 16	5-12-9-15 (21)	9				4.5					
				10		10.0							

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded



WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

BORING ID: MP139

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 396303.101		EASTING: 602909.293							
DATE STARTED: 12/02/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 12/02/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 2360+00SB		OFFSET 108' Lt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		36" TOPSOIL						HSA	
SS 1	13	M 24	1-3-3-4 (6)	2									
				3		3.0							
SS 2	24	M 16	1-7-3-11 (10)	4		SILTY CLAY, reddish brown, moist, trace sand, hard		4.5					
				5									
				6			CL						
				7									
				8		Brown							
SS 3	24	M 18	5-14-10-17 (24)	9				4.5					
				10		10.0							

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

BORING ID: MP140

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 396428.129		EASTING: 602916.847							
DATE STARTED: 12/02/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 12/02/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 2361+25SB		OFFSET 100' Lt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		12" TOPSOIL						HSA	
SS 1	17	M 17	1-6-3-9 (9)	2		SILTY CLAY, brown mottled, moist, trace sand, hard		4.25					
SS 2	24	M 17	3-9-6-13 (15)	4				4.5					
				5			CL						
				6									
				7									
				8		Gray/brown							
SS 3	23	M 18	4-9-7-11 (16)	9				4.25					
				10									

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID:

1229-04-01

BORING ID:

MP141

WISDOT STRUCTURE ID:

PAGE NO:

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WISDOT PROJECT NAME: I-43		CONSULTANT: AET		CONSULTANT PROJECT NO:		LATITUDE:	LONGITUDE:
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 397728.909	EASTING: 603133.209
DATE STARTED: 11/20/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS	
DATE COMPLETED: 11/20/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:	VERTICAL DATUM:
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA	
STATION 2374+25NB	OFFSET 75' Rt	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		12" TOPSOIL						HSA	
SS 1	23	M 20	2-6-4-8 (10)	2		SILTY CLAY, brown, moist, trace sand, hard		4.5					
SS 2	21	M 19	5-6-6-8 (12)	4				2.0					
				5			CL						
				6									
				7									
				8		Trace gravel							
SS 3	24	M 19	2-7-5-9 (12)	9				2.0					
				10									

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

J:\COUNTIES\OZAUKEE\1229-04-01-143-SILVERSPRING DR TO 5TH 60\GINT\1229-04-01 OZAUKEE CO.GPJ 143 8/21/15



WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID:

1229-04-01

BORING ID:

MP142

WISDOT STRUCTURE ID:

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WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:	
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 397878.908		EASTING: 603132.674	
DATE STARTED: 11/20/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 11/20/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA			
STATION 2375+75NB	OFFSET 75' Rt	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:		

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		36" TOPSOIL						HSA	
SS 1	12	M 32	2-4-3-5 (7)	2									
				3		3.0							
SS 2	10	M 34	2-4-4-8 (8)	4		SILTY CLAY, dark reddish brown, moist, trace sand & gravel, stiff		1.25					
				5			CL						
				6									
				7									
				8									
SS 3	24	M 19	4-8-5-10 (13)	9		Gray/brown, trace gravel, very stiff		4.0					
				10		10.0							

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

BORING ID: MP143

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT: AET		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:	
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 397903.244		EASTING: 602946.586	
DATE STARTED: 12/02/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 12/02/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA			
STATION 2376+00SB		OFFSET 65' Lt		TOWNSHIP:		RANGE:		SECTION:	
				1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		12" TOPSOIL						HSA	
SS 1	16	M 25	1-2-2-2 (4)	2		SILTY CLAY, reddish brown, moist, little sand, medium	CL	1.0					
SS 2	17	M-W 15	1-5-3-9 (8)	4		FINE TO MEDIUM SAND, light brown, moist to wet, trace silt, loose							
				5									
				6			SP						
				7									
				8									
SS 3	21	W 17	4-7-7-8 (14)	9		Medium dense							
				10									

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: 3.7ft.		CAVE - IN DEPTH AT COMPLETION: 5.1ft.	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

BORING ID: MP144

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 398003.907		EASTING: 603132.228							
DATE STARTED: 11/20/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 11/20/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 2377+00NB		OFFSET 75' Rt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		12" TOPSOIL						HSA	
SS 1	16	M 18	2-6-5-8 (11)	2		SILTY CLAY, brown, moist, trace sand, very stiff		4.0					
SS 2	22	M 18	4-9-5-11 (14)	4				2.75					
				5									
				6			CL						
				7									
				8									
SS 3	24	M 21	3-8-6-10 (14)	9		Gray/brown		3.2					
				10									

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

BORING ID: MP145

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 398003.244		EASTING: 602946.23							
DATE STARTED: 12/02/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 12/02/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 2377+00SB		OFFSET 65' Lt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
						12" TOPSOIL						HSA	
SS 1	14	M 12	1-4-1-4 (5)	1		SILTY CLAY, reddish brown, moist, trace sand, very stiff	CL	3.7					
SS 2	24	M 18	1-7-4-10 (11)	3		CLAYEY SILT, brown, moist, trace sand, very stiff		3.5					
				5			CL-ML						
				6									
				7									
SS 3	23	M 19	4-8-7-11 (15)	8		SILTY CLAY, gray, moist, trace sand, very stiff	CL	3.8					
				10									

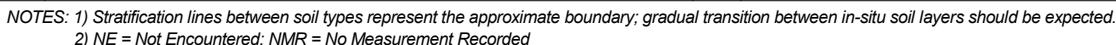
End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

WATER ENCOUNTERED DURING DRILLING: NE	CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
WATER LEVEL AT COMPLETION: NMR	CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

BORING ID: MP147

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 399006.575		EASTING: 602960.461							
DATE STARTED: 12/02/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 12/02/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 2387+00SB		OFFSET 65' Lt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		12" TOPSOIL						HSA	
SS 1	15	M 20	3-4-2-4 (6)	2		SILTY CLAY, reddish brown, moist, trace sand, very stiff		2.6					
SS 2	13	M 29	3-5-3-8 (8)	4				2.5					
				5			CL						
				6									
				7									
				8		Brown							
SS 3	24	M 19	4-8-6-11 (14)	9				3.5					
				10									














End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704		WISDOT PROJECT ID: 1229-04-01				BORING ID: MP148																																																																																																																																																																																																																																																	
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WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:																																																																																																																																																																																																																																															
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 399098.651		EASTING: 603151.947																																																																																																																																																																																																																																															
DATE STARTED: 11/20/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS																																																																																																																																																																																																																																																	
DATE COMPLETED: 11/20/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:																																																																																																																																																																																																																																															
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<table><thead><tr><th>SAMPLE TYPE NUMBER</th><th>RECOVERY (in) (RQD)</th><th>Moisture</th><th>BLOW COUNTS (N VALUE)</th><th>Depth (ft)</th><th>Graphic</th><th>Soil / Rock Description and Geological Origin for Each Major Unit / Comments</th><th>USCS / AASHTO</th><th>Strength Qp (tsf)</th><th>Liquid Limit (%)</th><th>Plasticity Index (%)</th><th>Boulders</th><th>Drilling Method</th><th>Notes</th></tr></thead><tbody><tr><td></td><td></td><td></td><td></td><td></td><td></td><td>36" TOPSOIL</td><td></td><td></td><td></td><td></td><td></td><td>HSA</td><td></td></tr><tr><td>SS 1</td><td>9</td><td>M 27</td><td>2-3-2-3 (5)</td><td>1</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td>2</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td>3</td><td></td><td>3.0</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>SS 2</td><td>13</td><td>M 26</td><td>1-3-3-5 (6)</td><td>4</td><td></td><td>SILTY CLAY, brown, moist, trace organics, little sand, stiff</td><td></td><td>1.0</td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td>5</td><td></td><td></td><td>CL</td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td>6</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td>7</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td>8</td><td></td><td>8.0</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td>9</td><td></td><td>SILTY FINE SAND, brown, moist, trace clay, medium dense</td><td>SM</td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>SS 3</td><td>19</td><td>M 14</td><td>2-5-6-8 (11)</td><td>10</td><td></td><td>10.0</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td colspan="14">End of Boring at 10.0 ft.</td></tr><tr><td colspan="14">WATER LEVEL & CAVE-IN OBSERVATION DATA</td></tr><tr><td></td><td colspan="5">WATER ENCOUNTERED DURING DRILLING: NE</td><td></td><td colspan="5">CAVE - IN DEPTH AT COMPLETION: NMR</td><td colspan="2">WET <input type="checkbox"/> DRY <input type="checkbox"/></td></tr><tr><td></td><td colspan="5">WATER LEVEL AT COMPLETION: NMR</td><td></td><td colspan="5">CAVE - IN DEPTH AFTER 0 HOURS: NMR</td><td colspan="2">WET <input type="checkbox"/> DRY <input type="checkbox"/></td></tr><tr><td colspan="14">NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected. 2) NE = Not Encountered; NMR = No Measurement Recorded</td></tr></tbody></table>										SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes							36" TOPSOIL						HSA		SS 1	9	M 27	2-3-2-3 (5)	1														2														3		3.0								SS 2	13	M 26	1-3-3-5 (6)	4		SILTY CLAY, brown, moist, trace organics, little sand, stiff		1.0										5			CL											6														7														8		8.0												9		SILTY FINE SAND, brown, moist, trace clay, medium dense	SM							SS 3	19	M 14	2-5-6-8 (11)	10		10.0								End of Boring at 10.0 ft.														WATER LEVEL & CAVE-IN OBSERVATION DATA															WATER ENCOUNTERED DURING DRILLING: NE						CAVE - IN DEPTH AT COMPLETION: NMR					WET <input type="checkbox"/> DRY <input type="checkbox"/>			WATER LEVEL AT COMPLETION: NMR						CAVE - IN DEPTH AFTER 0 HOURS: NMR					WET <input type="checkbox"/> DRY <input type="checkbox"/>		NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected. 2) NE = Not Encountered; NMR = No Measurement Recorded													
SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes																																																																																																																																																																																																																																										
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SS 1	9	M 27	2-3-2-3 (5)	1																																																																																																																																																																																																																																																			
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				3		3.0																																																																																																																																																																																																																																																	
SS 2	13	M 26	1-3-3-5 (6)	4		SILTY CLAY, brown, moist, trace organics, little sand, stiff		1.0																																																																																																																																																																																																																																															
				5			CL																																																																																																																																																																																																																																																
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				7																																																																																																																																																																																																																																																			
				8		8.0																																																																																																																																																																																																																																																	
				9		SILTY FINE SAND, brown, moist, trace clay, medium dense	SM																																																																																																																																																																																																																																																
SS 3	19	M 14	2-5-6-8 (11)	10		10.0																																																																																																																																																																																																																																																	
End of Boring at 10.0 ft.																																																																																																																																																																																																																																																							
WATER LEVEL & CAVE-IN OBSERVATION DATA																																																																																																																																																																																																																																																							
	WATER ENCOUNTERED DURING DRILLING: NE						CAVE - IN DEPTH AT COMPLETION: NMR					WET <input type="checkbox"/> DRY <input type="checkbox"/>																																																																																																																																																																																																																																											
	WATER LEVEL AT COMPLETION: NMR						CAVE - IN DEPTH AFTER 0 HOURS: NMR					WET <input type="checkbox"/> DRY <input type="checkbox"/>																																																																																																																																																																																																																																											
NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected. 2) NE = Not Encountered; NMR = No Measurement Recorded																																																																																																																																																																																																																																																							

J:\COUNTIES\OZAUKEE\1229-04-01-143-SILVERSPRING DR TO 5TH 60\GINT\1229-04-01 OZAUKEE CO.GPJ 143 8/21/15



WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

BORING ID: MP149

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 399106.979		EASTING: 602966.11							
DATE STARTED: 12/01/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 12/01/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 2388+00SB		OFFSET 65' Lt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		36" TOPSOIL						HSA	
SS 1	16	M 21	1-4-3-4 (7)	2									
				3		3.0							
SS 2	16	M 23	2-4-2-6 (6)	4		SILTY CLAY, brown, moist, trace sand, very stiff		2.75					
				5			CL						
				6									
				7									
				8									
SS 3	24	M 21	4-8-7-10 (15)	9				3.5					
				10		10.0							


End of Boring at 10.0 ft.

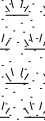








WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded





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 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704	WISDOT PROJECT ID: 1229-04-01		BORING ID: MP150				
	WISDOT STRUCTURE ID:		PAGE NO: 1 of 1				
WISDOT PROJECT NAME: I-43		CONSULTANT:	CONSULTANT PROJECT NO:	LATITUDE:	LONGITUDE:		
ROADWAY NAME:		DRILLING CONTRACTOR: AET	DRILLING CONTRACTOR PROJECT NO:	NORTHING: 401887.432	EASTING: 603382.311		
DATE STARTED: 12/03/14		CREW CHIEF: MD	DRILL RIG:	COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 12/03/14		LOGGED BY: AET	HOLE SIZE: 4 in	HORIZONTAL DATUM:		VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski	HAMMER TYPE:	STREAMBED ELEVATION: NA			
STATION 2416+00NB	OFFSET 75' Rt	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		20" TOPSOIL						HSA	
				1.7									
 SS 1 SS 1A	14	M 16 M 6	1-3-2-11 (5)	2		MEDIUM TO COARSE SAND, brown, moist, some gravel, trace silt, loose							
				3		Moist to wet, medium dense							
 SS 2	18	M 8	4-11-8-11 (19)	4									
				5			SP						
				6									
				7									
				8									
				8.0									
 SS 3	15	W 18	4-7-4-9 (11)	9		FINE TO MEDIUM SAND, light brown, wet, little clay, trace silt, medium dense							
				10									
				10.0									


End of Boring at 10.0 ft.

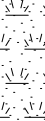
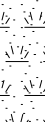
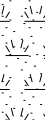






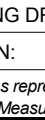
WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: 4.9ft.		CAVE - IN DEPTH AT COMPLETION: 7.8ft.	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded





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 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704	WISDOT PROJECT ID: 1229-04-01		BORING ID: MP151				
	WISDOT STRUCTURE ID:		PAGE NO: 1 of 1				
WISDOT PROJECT NAME: I-43		CONSULTANT:	CONSULTANT PROJECT NO:	LATITUDE:	LONGITUDE:		
ROADWAY NAME:		DRILLING CONTRACTOR: AET	DRILLING CONTRACTOR PROJECT NO:	NORTHING: 402136.561	EASTING: 603403.153		
DATE STARTED: 12/03/14		CREW CHIEF: MD	DRILL RIG:	COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 12/03/14		LOGGED BY: AET	HOLE SIZE: 4 in	HORIZONTAL DATUM:	VERTICAL DATUM:		
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski	HAMMER TYPE:	STREAMBED ELEVATION: NA			
STATION 2418+50SB	OFFSET 75' Rt	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		SANDY LOAM, dark brown to black, moist, trace to little organic matter, TOPSOIL, loose						HSA	
SS 1	15	M 30	2-2-2-5 (4)	2									
				3		Medium dense							
SS 2	15	M 21	2-8-5-11 (13)	4									
				5		SILTY FINE TO MEDIUM SAND, brown, moist, trace clay & gravel, medium dense							
				6									
				7			SP						
				8									
SS 3	24	M 12	6-11-7-11 (18)	9									
				10									

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

J:\COUNTIES\OZAUKEE\1229-04-01-1-43-SILVERSPRING DR TO 5TH 60\GINT\1229-04-01 OZAUKEE CO.GPJ 143 8/21/15



WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

BORING ID: MP158

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 357382.496		EASTING: 602457.993							
DATE STARTED: 12/04/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 12/04/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 344+00Port		OFFSET 130' Rt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		36" TOPSOIL						HSA	
SS 1	13	M 18	1-4-3-5 (7)	2									
				3		3.0							
SS 2	15	M 27	1-4-3-6 (7)	4		SILTY CLAY, reddish brown, moist, trace sand, stiff		1.75	55	37			
				5			CL						
				6									
				7									
				8									
SS 3	23	M 19	3-10-7-11 (17)	9		Hard		4.5					
				10		10.0							

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded



WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

BORING ID: MP159

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 357456.689		EASTING: 602433.407							
DATE STARTED: 12/04/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 12/04/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 344+75Port		OFFSET 152' Rt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		12" TOPSOIL						HSA	
SS 1	13	M 23	1-3-2-4 (5)	2		SILTY CLAY, gray/olive/brown mottled, moist, trace sand, stiff		2.0					
SS 2	13	M 30	2-4-2-5 (6)	4			CL	2.0					
				5									
				6									
				7									
				8									
				8.0		SILTY CLAY, brown, moist, trace sand, very stiff							
SS 3	24	M 13	3-9-7-9 (16)	9			CL	3.1					
				10									
				10.0									

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID:

1229-04-01

BORING ID:

MP160

WISDOT STRUCTURE ID:

PAGE NO:

1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT: AET		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:	
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 364713.16		EASTING: 602942.078	
DATE STARTED: 11/04/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 11/04/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA			
STATION 2043+45MeqB	OFFSET 40' Rt	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:		

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
						11" TOPSOIL							
				0.9									
SS 1	13	M 20	0-4-2-7 (6)	1		SILTY CLAY, gray/brown mottled, moist, trace sand, stiff		2.0					
				2									
				3		Hard							
SS 2	20	M 16	2-8-5-12 (13)	4			CL	4.5					
				5									
				6									
				7									
				7.0									
				8		SILTY CLAY, brown, moist, trace sand, hard							
				9				4.5					
SS 3	24	M 18	5-8-11-14 (19)	10									
				11			CL						
				12									
				13									
				14		Gray, trace organic matter, stiff							
SS 4	3	M 18	2-6-3-7 (9)	15									
				15.0									

End of Boring at 15.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

WATER ENCOUNTERED DURING DRILLING: NE	CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
WATER LEVEL AT COMPLETION: NMR	CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

BORING ID: MP161

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 364866.076		EASTING: 602941.643							
DATE STARTED: 1/16/15		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 1/16/15		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 2045+00MeqB		OFFSET 40' Rt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
						12" TOPSOIL						HSA	
				1		1.0							
SS 1	12	W 34	0-1-0-1 (1)	2		ORGANIC SILT, dark gray to dark brown, wet, little sand, trace gravel, very soft			NP	NP			
				3		Medium							
SS 2	9	M 19	2-2-1-3 (3)	4			OH	0.75	NP	NP			
				5									
				6									
				7									
				8		8.0							
				9		SILTY CLAY, reddish brown, wet, trace sand, hard	CL	4.5					
SS 3	24	M 17	2-10-6-11 (16)	10		10.0							
End of Boring at 10.0 ft.													

WATER LEVEL & CAVE-IN OBSERVATION DATA

WATER ENCOUNTERED DURING DRILLING: 1ft.	CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
WATER LEVEL AT COMPLETION: NMR	CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

BORING ID: MP162

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 365065.298		EASTING: 602927.849							
DATE STARTED: 1/19/15		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 1/19/15		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 2047+00MegB		OFFSET 15' Rt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		12" TOPSOIL						HSA	
SS 1	12	M 22	1-3-2-3 (5)	2		CLAYEY SILT, brown/gray/red, moist, medium		1.0					
SS 2	19	M 22	3-5-4-6 (9)	4		Very stiff		2.5					
				5			CL-ML						
				6									
				7									
SS 3	2	M 22	6-11-7-13 (18)	9									
				10									

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

J:\COUNTIES\OZAUKEE\1229-04-01-1-43-SILVERSPRING DR TO 5TH 60\GINT\1229-04-01 OZAUKEE CO.GPJ 143 8/21/15



WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

BORING ID: MP163

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 365264.695		EASTING: 602942.44							
DATE STARTED: 1/19/15		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 1/19/15		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 2049+00MeqB		OFFSET 10' Rt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		12" TOPSOIL						HSA	
SS 1	10	M 33	1-1-1-1 (2)	2		CLAYEY SILT, reddish brown, moist, trace fine sand, soft							
				3		Very stiff	CL-ML						
SS 2	0	M	5-15-9-17 (24)	4									
				5		SILTY CLAY, brown, trace sand, very stiff							
				6									
				7									
				8									
SS 3	24	M 18	4-9-6-11 (15)	9				3.25					
				10									


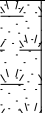

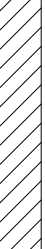

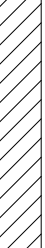
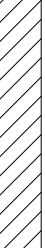

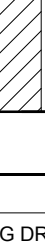



End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704				WISDOT PROJECT ID: 1229-04-01				BORING ID: MP164																					
				WISDOT STRUCTURE ID:				PAGE NO: 1 of 1																					
WISDOT PROJECT NAME: I-43				CONSULTANT:				CONSULTANT PROJECT NO:				LATITUDE:		LONGITUDE:															
ROADWAY NAME:				DRILLING CONTRACTOR: AET				DRILLING CONTRACTOR PROJECT NO:				NORTHING: 365463.007		EASTING: 602971.685															
DATE STARTED: 1/19/15				CREW CHIEF: MD				DRILL RIG:				COORDINATE SYSTEM: WCCS																	
DATE COMPLETED: 1/19/15				LOGGED BY: AET				HOLE SIZE: 4 in				HORIZONTAL DATUM:		VERTICAL DATUM:															
COUNTY: Ozaukee				LOG QC BY: C. Wierzchowski				HAMMER TYPE:				STREAMBED ELEVATION: NA																	
STATION 2051+00		MeqB		OFFSET 20' Rt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:													
SAMPLE TYPE NUMBER		RECOVERY (in) (RQD)		Moisture		BLOW COUNTS (N VALUE)		Depth (ft)		Graphic		Soil / Rock Description and Geological Origin for Each Major Unit / Comments				USCS / AASHTO		Strength Qp (tsf)		Liquid Limit (%)		Plasticity Index (%)		Boulders		Drilling Method		Notes	
								1				12" TOPSOIL												HSA					
		SS 1		14		M 18		1-5-3-8 (8)		2				SILTY CLAY, light brown, moist, little sand, hard				4.5											
		SS 2		22		M 18		3-10-6-10 (16)		4								4.5											
								5								CL													
								6																					
								7																					
		SS 3		0		M		2-5-4-8 (9)		9				Stiff															
								10																					



WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID:

1229-04-01

BORING ID:

MP165

WISDOT STRUCTURE ID:

PAGE NO:

1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT: AET		CONSULTANT PROJECT NO:		LATITUDE:	LONGITUDE:
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 365660.844	EASTING: 603026.006
DATE STARTED: 11/04/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS	
DATE COMPLETED: 11/04/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:	VERTICAL DATUM:
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA	
STATION 2053+00MeqB	OFFSET 60' Rt	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				0.3		3" TOPSOIL							
				1									
SS 1	17	M 16	1-6-3-9 (9)	2				3.75					
				3		Hard							
SS 2	24	M 18	5-10-8-15 (18)	4			CL	4.5					
				5									
				6									
				7									
				8		8.0							
SS 3	24	M 20	3-6-5-8 (11)	9		SILTY CLAY, gray/brown, moist, trace sand & fine gravel, very stiff		3.25					
				10									
				11			CL						
				12									
				13		Stiff							
SS 4	18	M 19	1-4-4-5 (8)	14				1.5					Qu = 2.4
				15		15.0							

End of Boring at 15.0 ft.






WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>




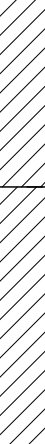
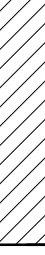




NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.

2) NE = Not Encountered; NMR = No Measurement Recorded








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 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704				WISDOT PROJECT ID: 1229-04-01				BORING ID: MP166										
				WISDOT STRUCTURE ID:				PAGE NO: 1 of 1										
WISDOT PROJECT NAME: I-43				CONSULTANT:				CONSULTANT PROJECT NO:				LATITUDE:		LONGITUDE:				
ROADWAY NAME:				DRILLING CONTRACTOR: AET				DRILLING CONTRACTOR PROJECT NO:				NORTHING: 365761.442		EASTING: 603035.913				
DATE STARTED: 11/04/14				CREW CHIEF: MD				DRILL RIG:				COORDINATE SYSTEM: WCCS						
DATE COMPLETED: 11/04/14				LOGGED BY: AET				HOLE SIZE: 4 in				HORIZONTAL DATUM:		VERTICAL DATUM:				
COUNTY: Ozaukee				LOG QC BY: C. Wierzchowski				HAMMER TYPE:				STREAMBED ELEVATION: NA						
STATION 2054+00MeqB		OFFSET 65' Rt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:				
SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments					USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes	
						0.3 3" TOPSOIL												
						SILTY CLAY, brown, moist, trace sand & gravel, very stiff												
SS 1	17	M 16	2-5-4-8 (9)	1														
				2								4.0						Qu = 6.8
SS 2	18	M 13	1-8-5-9 (13)	3							CL	4.0						Qu = 4.1
				4														
				5														
				6														
				7														
				8		8.0												
SS 3	24	M 19	2-7-5-8 (12)	9		SILTY CLAY, gray, moist, trace sand, stiff						2.0						Qu = 2.8
				10														
				11							CL							
				12														
				13														
SS 4	24	M 18	1-5-4-6 (9)	14		Very stiff						2.25						Qu = 3.2
				15		15.0												
End of Boring at 15.0 ft.																		
WATER LEVEL & CAVE-IN OBSERVATION DATA																		
	WATER ENCOUNTERED DURING DRILLING: NE					CAVE - IN DEPTH AT COMPLETION: NMR				WET <input type="checkbox"/>				DRY <input type="checkbox"/>				
	WATER LEVEL AT COMPLETION: NMR					CAVE - IN DEPTH AFTER 0 HOURS: NMR				WET <input type="checkbox"/>				DRY <input type="checkbox"/>				
NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected. 2) NE = Not Encountered; NMR = No Measurement Recorded																		

J:\COUNTIES\OZAUKEE\1229-04-01 - I-43 - SILVERSPRING DR TO 5TH 60GINT\1229-04-01 OZAUKEE CO GPRJ - I-43 8/21/15

 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704				WISDOT PROJECT ID: 1229-04-01				BORING ID: MP167										
				WISDOT STRUCTURE ID:				PAGE NO: 1 of 1										
WISDOT PROJECT NAME: I-43				CONSULTANT:				CONSULTANT PROJECT NO:				LATITUDE:		LONGITUDE:				
ROADWAY NAME:				DRILLING CONTRACTOR: AET				DRILLING CONTRACTOR PROJECT NO:				NORTHING: 366105.928		EASTING: 603120.742				
DATE STARTED: 11/04/14				CREW CHIEF: MD				DRILL RIG:				COORDINATE SYSTEM: WCCS						
DATE COMPLETED: 11/04/14				LOGGED BY: AET				HOLE SIZE: 4 in				HORIZONTAL DATUM:		VERTICAL DATUM:				
COUNTY: Ozaukee				LOG QC BY: C. Wierzchowski				HAMMER TYPE:				STREAMBED ELEVATION: NA						
STATION 38+25Mequon		OFFSET 35' Rt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:				
SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments					USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes	
				1		MEDIUM TO COARSE SAND, brown, moist, some gravel, trace silt, FILL, medium dense 36" BASE COURSE					SP						HSA	
SS 1	15	M 5	8-8-10-7 (18)	2														
				3		3.0												
				4		SILTY FINE TO MEDIUM SAND, brown, moist, trace gravel, FILL, very loose					SM							
SS 2	13	M 10	3-1-3-3 (4)	5		4.5												
SS 2A		M 26		6		SILTY CLAY, dark gray/black, moist, trace sand, stiff					CL	2.0						
				7														
				8														
				9		SILTY CLAY, brown/light brown mottled, moist, trace sand & gravel, hard					CL							
SS 3	24	M 17	2-10-7-14 (17)	10		10.0						4.5						Qu = 6.5
End of Boring at 10.0 ft.																		
WATER LEVEL & CAVE-IN OBSERVATION DATA																		
	WATER ENCOUNTERED DURING DRILLING: NE					CAVE - IN DEPTH AT COMPLETION: NMR				WET <input type="checkbox"/> DRY <input type="checkbox"/>								
	WATER LEVEL AT COMPLETION: NMR					CAVE - IN DEPTH AFTER 0 HOURS: NMR				WET <input type="checkbox"/> DRY <input type="checkbox"/>								
NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected. 2) NE = Not Encountered; NMR = No Measurement Recorded																		

J:\COUNTIES\OZAUKEE\1229-04-01-1-143-SILVERSPRING DR TO 5TH 60GINT\1229-04-01 OZAUKEE CO.GPJ 143 8/21/15

 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704				WISDOT PROJECT ID: 1229-04-01				BORING ID: MP168										
				WISDOT STRUCTURE ID:				PAGE NO: 1 of 1										
WISDOT PROJECT NAME: I-43				CONSULTANT:				CONSULTANT PROJECT NO:				LATITUDE:		LONGITUDE:				
ROADWAY NAME:				DRILLING CONTRACTOR: AET				DRILLING CONTRACTOR PROJECT NO:				NORTHING: 366102.378		EASTING: 603195.552				
DATE STARTED: 11/04/14				CREW CHIEF: MD				DRILL RIG:				COORDINATE SYSTEM: WCCS						
DATE COMPLETED: 11/04/14				LOGGED BY: AET				HOLE SIZE: 4 in				HORIZONTAL DATUM:		VERTICAL DATUM:				
COUNTY: Ozaukee				LOG QC BY: C. Wierzchowski				HAMMER TYPE:				STREAMBED ELEVATION: NA						
STATION 39+00		Mequon		OFFSET 35' Rt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:		
SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments						USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
SS 1	17	M 6	9-9-13-3 (22)	1		MEDIUM TO COARSE GRAVELLY SAND, brown, moist, trace silt, medium dense 36" BASE COURSE	GW											
				2														
				3														
SS 2	12	M 16	3-6-3-12 (9)	4		SILTY CLAY, brown, moist, trace sand, very stiff	CL	2.25										
5																		
6																		
SS 3	17	M 16	3-12-8-15 (20)	7														
				8														
				9														
				10		10.0	End of Boring at 10.0 ft.											
WATER LEVEL & CAVE-IN OBSERVATION DATA																		
	WATER ENCOUNTERED DURING DRILLING: NE							CAVE - IN DEPTH AT COMPLETION: NMR						WET <input type="checkbox"/> DRY <input type="checkbox"/>				
	WATER LEVEL AT COMPLETION: NMR							CAVE - IN DEPTH AFTER 0 HOURS: NMR						WET <input type="checkbox"/> DRY <input type="checkbox"/>				
NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected. 2) NE = Not Encountered; NMR = No Measurement Recorded																		

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WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

BORING ID: MP169

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 366939.125		EASTING: 602673.365							
DATE STARTED: 1/15/15		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 1/15/15		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 2065+50MeqD		OFFSET 53' Lt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		24" TOPSOIL						HSA	
SS 1	10	M 21	2-5-4-6 (9)	2		CLAYEY SILT, light brown, moist, stiff							
SS 2	2	M 21	1-3-2-4 (5)	4				1.25					
				5									
				6			CL-ML						
				7									
				8		Very stiff							
SS 3	24	M 20	3-8-6-10 (14)	9				3.10					Qu = 4.9
				10									

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

J:\COUNTIES\OZAUKEE\1229-04-01-1-43-SILVERSPRING DR TO 5TH 60\GINT\1229-04-01 OZAUKEE CO.GPJ 143 8/21/15



WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

BORING ID: MP170

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 367013.147		EASTING: 602711.44							
DATE STARTED: 1/15/15		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 1/15/15		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 2066+30MeqD		OFFSET 30' Lt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		24" TOPSOIL						HSA	
SS 1	11	M 27	2-2-2-3 (4)	2		2.0 FINE SANDY SILT, brown, moist to wet, trace clay, soft							
SS 2	17	M 22	2-2-1-2 (3)	4									
				5									
				6			SM						
				7									
				8		Medium							
SS 3	15	M 14	3-3-3-3 (6)	9									
				10		10.0							


End of Boring at 10.0 ft.

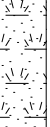








WATER LEVEL & CAVE-IN OBSERVATION DATA

<input type="checkbox"/>	WATER ENCOUNTERED DURING DRILLING: NMR	<input type="checkbox"/>	CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
<input type="checkbox"/>	WATER LEVEL AT COMPLETION: NMR	<input type="checkbox"/>	CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded





J:\COUNTIES\OZAUKEE\1229-04-01-1-43 - SILVERSPRING DR TO 5TH 60'GINT\1229-04-01 OZAUKEE CO.GPJ 143 8/21/15

 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704	WISDOT PROJECT ID: 1229-04-01		BORING ID: MP171					
	WISDOT STRUCTURE ID:		PAGE NO: 1 of 1					
WISDOT PROJECT NAME: I-43		CONSULTANT:	CONSULTANT PROJECT NO:	LATITUDE:	LONGITUDE:			
ROADWAY NAME:		DRILLING CONTRACTOR: AET	DRILLING CONTRACTOR PROJECT NO:	NORTHING: 367081.819	EASTING: 602725.013			
DATE STARTED: 1/15/15		CREW CHIEF: MD	DRILL RIG:	COORDINATE SYSTEM: WCCS				
DATE COMPLETED: 1/15/15		LOGGED BY: AET	HOLE SIZE: 4 in	HORIZONTAL DATUM:		VERTICAL DATUM:		
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski	HAMMER TYPE:	STREAMBED ELEVATION: NA				
STATION 2067+00MeqD		OFFSET 30' Lt	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		24" TOPSOIL							
SS 1	12	M 23	2-4-2-4 (6)	2		2.0 SILTY FINE SAND, brown, moist to wet, loose							
SS 2	21	M 19	1-3-3-4 (6)	4									
				5			SM						
				6									
				7									
				8		8.0 SILTY MEDIUM TO COARSE SAND, gray/brown, wet, trace gravel, loose							
SS 3	20	W 17	2-7-2-11 (9)	9			SM						
				10		10.0							

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: 7.2ft.		CAVE - IN DEPTH AT COMPLETION: 9.5ft.	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

J:\COUNTIES\OZAUKEE\1229-04-01-1-43-SILVERSPRING DR TO 5TH 60\GINT\1229-04-01 OZAUKEE CO.GPJ 143 8/21/15



WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

BORING ID: MP172

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 376936.288		EASTING: 603374.221							
DATE STARTED: 1/23/15		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 1/23/15		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 2165+50HighA		OFFSET 15' Rt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		12" TOPSOIL						HSA	
SS 1	11	M 22	3-3-2-5 (5)	2		SILTY CLAY, brown/gray mottled, moist, trace sand, stiff		1.30					
SS 2	19	M 17	4-7-5-10 (12)	4		Hard		4.5					
				5			CL						
				6									
				7									
SS 3	21	M 17	4-12-8-16 (20)	9				4.5					
				10									


End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA





	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

J:\COUNTIES\OZAUKEE\1229-04-01-1-143-SILVERSPRING DR TO 5TH 60\GINT\1229-04-01 OZAUKEE CO.GPJ 143 8/21/15

 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704	WISDOT PROJECT ID: 1229-04-01		BORING ID: MP173		
	WISDOT STRUCTURE ID:		PAGE NO: 1 of 1		
WISDOT PROJECT NAME: I-43		CONSULTANT:	CONSULTANT PROJECT NO:	LATITUDE:	LONGITUDE:
ROADWAY NAME:		DRILLING CONTRACTOR: AET	DRILLING CONTRACTOR PROJECT NO:	NORTHING: 377086.288	EASTING: 603374.006
DATE STARTED: 11/05/14		CREW CHIEF: MD	DRILL RIG:	COORDINATE SYSTEM: WCCS	
DATE COMPLETED: 11/05/14		LOGGED BY: AET	HOLE SIZE: 4 in	HORIZONTAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski	HAMMER TYPE:	STREAMBED ELEVATION: NA	
STATION 2167+00HighA	OFFSET 15' Rt	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:
				SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
						12" TOPSOIL						HSA	
SS 1	15	M 22	0-2-1-3 (3)	1	1.0	SILTY CLAY, black/dark gray, moist, trace sand, little organics, soft	CL						
SS 2	15	M 21	0-4-2-6 (6)	4	3.0	SILTY CLAY, brown/light brown, moist, trace sand, very stiff	CL	2.25					
				5									
				6									
				7									
SS 3	23	M 17	3-10-8-15 (18)	9	10.0	Hard		4.5					Qu = 5.9
				10		End of Boring at 10.0 ft.							

WATER LEVEL & CAVE-IN OBSERVATION DATA				
	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected. 2) NE = Not Encountered; NMR = No Measurement Recorded				

J:\COUNTIES\OZAUKEE\1229-04-01-143-SILVERSPRING DR TO 5TH 60\GINT\1229-04-01 OZAUKEE CO.GPJ 143 8/21/15



WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID:

1229-04-01

BORING ID:

MP174

WISDOT STRUCTURE ID:

PAGE NO:

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WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:	
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 377086.231		EASTING: 603334.006	
DATE STARTED: 11/05/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 11/05/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA			
STATION 2167+00HighA	OFFSET 25' Lt	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:		

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		12" TOPSOIL						HSA	
SS 1	14	M 21	1-3-2-5 (5)	2		SILT, black, moist, trace sand, some clay, little organics, medium	SM						
SS 2	16	M 20	2-3-2-5 (5)	4		SILTY CLAY, brown, moist, trace sand & gravel, stiff		1.75					
				5			CL						
				6									
				7									
				8		Very stiff							
SS 3	24	M 17	3-10-8-13 (18)	9				3.5					Qu = 5.8
				10									

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID:

1229-04-01

BORING ID:

MP175

WISDOT STRUCTURE ID:

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WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:	
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 377226.266		EASTING: 603358.805	
DATE STARTED: 11/05/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 11/05/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA			
STATION 2168+40HighA	OFFSET 0	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:		

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
		20				30" TOPSOIL						HSA	
				1									
SS 1	16	M	1-4-2-6 (6)	2				3.25					
SS		M 21		2.5		SILTY CLAY, light brown to brown, moist, trace sand, very stiff							
				3		Hard							
SS 2	24	M 18	2-6-2-8 (8)	4				4.5					
				5									
				6			CL						
				7									
				8									
SS 3	23	M 17	3-10-7-13 (17)	9				4.5					
				10									

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

WATER ENCOUNTERED DURING DRILLING: NE	CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
WATER LEVEL AT COMPLETION: NMR	CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

BORING ID: MP176

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 377335.938		EASTING: 603323.491							
DATE STARTED: 11/06/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 11/06/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 2169+50HighA		OFFSET 35' Lt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		12" TOPSOIL						HSA	
SS 1	14	M 19	0-2-2-2 (4)	2		SILTY CLAY, brown/light brown mottled, moist, trace sand, stiff		2.0					
				3		Very stiff							
SS 2	13	M 19	2-3-3-4 (6)	4			CL	3.8					
				5									
				6									
				7									
				8									
SS 3	23	W 19	2-6-4-8 (10)	9		Gray/brown		3.75					
				10		End of Boring at 10.0 ft.							

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: 8.2ft.		CAVE - IN DEPTH AT COMPLETION: 9.4ft.	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

J:\COUNTIES\OZAUKEE\1229-04-01-1-43-SILVERSPRING DR TO 5TH 60\GINT\1229-04-01 OZAUKEE CO.GPJ 143 8/21/15



WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID:

1229-04-01

BORING ID:

MP177

WISDOT STRUCTURE ID:

PAGE NO:

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WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:	
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 377426.113		EASTING: 603351.841	
DATE STARTED: 11/06/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 11/06/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA			
STATION 2170+40HighA	OFFSET 5' Lt	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:		

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		32.5" TOPSOIL						HSA	
SS 1	11	M 18	2-4-3-6 (7)	2									
SS 1A		M 27		3		2.7 SILTY CLAY, brown, moist, trace sand, very stiff							
SS 2	17	M 20	3-3-3-5 (6)	4				2.25					
				5									
				6			CL						
				7									
				8									
SS 3	23	M 16	3-9-7-11 (16)	9		Gray/brown, hard		4.5					
				10									

End of Boring at 10.0 ft.


























WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.

2) NE = Not Encountered; NMR = No Measurement Recorded

J:\COUNTIES\OZAUKEE\1229-04-01-1-43 - SILVERSPRING DR TO 5TH 60\GINT\1229-04-01 OZAUKEE CO.GPJ 143 8/21/15

 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704				WISDOT PROJECT ID: 1229-04-01				BORING ID: MP178																					
				WISDOT STRUCTURE ID:				PAGE NO: 1 of 1																					
WISDOT PROJECT NAME: I-43				CONSULTANT:				CONSULTANT PROJECT NO:				LATITUDE:		LONGITUDE:															
ROADWAY NAME:				DRILLING CONTRACTOR: AET				DRILLING CONTRACTOR PROJECT NO:				NORTHING: 377536.167		EASTING: 603352.629															
DATE STARTED: 11/06/14				CREW CHIEF: MD				DRILL RIG:				COORDINATE SYSTEM: WCCS																	
DATE COMPLETED: 11/06/14				LOGGED BY: AET				HOLE SIZE: 4 in				HORIZONTAL DATUM:		VERTICAL DATUM:															
COUNTY: Ozaukee				LOG QC BY: C. Wierzchowski				HAMMER TYPE:				STREAMBED ELEVATION: NA																	
STATION 2171+50HighA		OFFSET 0		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:															
SAMPLE TYPE NUMBER		RECOVERY (in) (RQD)		Moisture		BLOW COUNTS (N VALUE)		Depth (ft)		Graphic		Soil / Rock Description and Geological Origin for Each Major Unit / Comments				USCS / AASHTO		Strength Qp (tsf)		Liquid Limit (%)		Plasticity Index (%)		Boulders		Drilling Method		Notes	
								0.8				9" TOPSOIL												HSA					
SS 1		12		M 19		2-4-3-4 (7)		1				SILTY LOAM, dark brown/black, moist, trace organic matter, medium				CL-ML													
								3				Very stiff																	
SS 2 SS 2A		13		M 18 M 10		4-4-6-4 (10)		4				MEDIUM TO COARSE SAND, brown, moist, trace silt & gravel, loose				2.25													
								5																					
								6																					
								7																					
SS 3		10		W 16		1-0-1-0 (1)		8				Wet, very loose																	
								9																					
								10																					
								11								SP													
								12																					
SS 4		24		W 16		0-0-0-0 (0)		13				FINE TO MEDIUM																	
								14																					
								15																					
								16																					
								17																					
SS 1		1		W 5				18																					
								18.0																					
								18.1				Possible weathered bedrock - refusal																	
WATER LEVEL & CAVE-IN OBSERVATION DATA																													
		WATER ENCOUNTERED DURING DRILLING: 15.7ft.												CAVE - IN DEPTH AT COMPLETION: 17.3ft.										WET <input type="checkbox"/> DRY <input type="checkbox"/>					
		WATER LEVEL AT COMPLETION: NMR												CAVE - IN DEPTH AFTER 0 HOURS: NMR										WET <input type="checkbox"/> DRY <input type="checkbox"/>					
NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected. 2) NE = Not Encountered; NMR = No Measurement Recorded																													

J:\COUNTIES\OZAUKEE\1229-04-01 - I-43 - SILVERSPRING DR TO 5TH 60GINT\1229-04-01 OZAUKEE CO.GPJ 143 8/21/15



WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

BORING ID: MP179

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 377652.028		EASTING: 603360.613							
DATE STARTED: 11/06/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 11/06/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 2172+65HighA		OFFSET 15' Rt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		12" TOPSOIL						HSA	
SS 1	15	M 31	2-4-2-5 (6)	2		SILTY CLAY, brown, moist, trace sand & gravel, very stiff		2.25					
SS 2	9	M 23	3-4-3-5 (7)	4				1.5					
				5			CL						
				6									
				7									
				8		Hard							
SS 3	23	M 17	4-9-6-11 (15)	9				4.5					
				10									

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

J:\COUNTIES\OZAUKEE\1229-04-01-1-143-SILVERSPRING DR TO 5TH 60\GINT\1229-04-01 OZAUKEE CO.GPJ 143 8/21/15



WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID:

1229-04-01

BORING ID:

MP180

WISDOT STRUCTURE ID:

PAGE NO:

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WISDOT PROJECT NAME: I-43		CONSULTANT: AET		CONSULTANT PROJECT NO:		LATITUDE:	LONGITUDE:
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 378585.222	EASTING: 603334.141
DATE STARTED: 11/06/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS	
DATE COMPLETED: 11/06/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:	VERTICAL DATUM:
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA	
STATION 2182+00HighA	OFFSET 35' Rt	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		15" TOPSOIL							
SS 1 SS 1A	13	M 22 M 15	3-5-5-7 (10)	2		1.3 SILTY CLAY, dark brown, moist, with sand, trace gravel, POSSIBLE FILL, hard	CL	4.5					
SS 2	16	M 15	3-8-6-10 (14)	4		3.0 SILTY CLAY, brown, moist, trace sand, hard		4.5					
				5									
				6			CL						
				7									
SS 3	23	M 16	5-15-11-16 (26)	9		Gray/brown		4.5					
				10		10.0							

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

BORING ID: MP181

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 378684.514		EASTING: 603349.169							
DATE STARTED: 11/06/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 11/06/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 2183+00HighA		OFFSET 50' Rt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		12" TOPSOIL						HSA	
SS 1	7	M 23	2-6-4-9 (10)	2		SILTY CLAY, brown/dark brown, moist, trace sand & gravel, POSSIBLE FILL, hard	CL	4.5					
SS 2	3	M 21	3-7-8-7 (15)	4			CL	4.5					
				5		SILTY CLAY, light brown, moist, trace sand, hard							
				6			CL						
				7			CL						
				8			CL						
SS 3	23	M 16	5-15-9-17 (24)	9				4.5					
				10									

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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WISDOT PROJECT ID: 1229-04-01

BORING ID: MP182

WISDOT STRUCTURE ID:

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WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 378809.526		EASTING: 603329.244							
DATE STARTED: 11/07/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 11/07/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 2184+25HighA		OFFSET 30' Rt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		12" TOPSOIL							
SS 1	6	M 19	2-6-5-6 (11)	2		CLAYEY SILT, light brown/gray mottled, moist, trace sand, stiff	CL-ML	2.0					
SS 2	18	M 13	3-8-5-10 (13)	4		SILTY CLAY, light brown, moist, trace sand & gravel, hard		4.20					
				5			CL						
				6									
				7									
				8									
SS 3	24	M 18	3-8-6-11 (14)	9		Brown		4.5					
				10									

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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WISDOT PROJECT ID:

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MP183

WISDOT STRUCTURE ID:

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WISDOT PROJECT NAME: I-43		CONSULTANT: AET		CONSULTANT PROJECT NO:		LATITUDE:	LONGITUDE:
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 375186.098	EASTING: 603348.402
DATE STARTED: 11/05/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS	
DATE COMPLETED: 11/05/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:	VERTICAL DATUM:
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA	
STATION 2148+50HighB	OFFSET 50' Rt	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
		28				16" TOPSOIL						HSA	
				1									
SS 1 SS	13	M M 12	2-4-3-6 (7)	2		1.3 CLAYEY SILT, brown/reddish brown, moist, little sand, trace gravel, very stiff	CL-ML	2.75					
				3		3.0							
SS 2	16	M M 16	3-4-3-8 (7)	4		SILTY CLAY, brown, moist, trace sand & gravel, very stiff		3.25					
				5									
				6			CL						
				7									
				8									
SS 3	22	M M 16	3-8-6-13 (14)	9				3.75					
				10		10.0							

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

WATER ENCOUNTERED DURING DRILLING: NE	CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
WATER LEVEL AT COMPLETION: NMR	CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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Madison, WI 53704

WISDOT PROJECT ID:

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MP184

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WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:	
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 375334.16		EASTING: 603346.631	
DATE STARTED: 11/05/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 11/05/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA			
STATION 2150+00HighB	OFFSET 40' Rt	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:		

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		12" TOPSOIL						HSA	
SS 1	11	M 28	2-3-2-4 (5)	2		SILTY CLAY TO CLAYEY SILT, gray/brown, moist, trace sand, stiff		2.0					Qu = 1.5
SS 2	14	M 19	2-3-3-5 (6)	4		Reddish brown		1.25					
				5			CL						
				6									
				7									
				8		Very stiff							
SS 3	18	M 18	3-7-5-9 (12)	9				3.25					
				10		End of Boring at 10.0 ft.							

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

BORING ID: MP185

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 375434.603		EASTING: 603340.795							
DATE STARTED: 11/05/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 11/05/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 2151+00HighB		OFFSET 25' Rt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		12" TOPSOIL						HSA	
SS 1	3	M 26	1-5-3-6 (8)	2		SILTY CLAY, red/gray mottled, moist, trace sand, stiff		2.0					
SS 2	13	M 19	2-6-4-9 (10)	4		Brown, very stiff	CL	2.75					
				5									
				6									
				7									
SS 3	23	M 19	4-9-7-11 (16)	9		Gray/brown, trace gravel		4.0	38	25			
				10		A-6(6)							
				10.0									

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID:

1229-04-01

BORING ID:

MP186

WISDOT STRUCTURE ID:

PAGE NO:

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WISDOT PROJECT NAME: I-43		CONSULTANT: AET		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:	
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 375536.515		EASTING: 603325.338	
DATE STARTED: 11/05/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 11/05/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA			
STATION 2152+00HighB	OFFSET 0	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:		

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		12" TOPSOIL						HSA	
SS 1	15	M 16	2-5-3-8 (8)	2		SILTY CLAY, gray/brown, moist, trace sand & gravel, very stiff		2.90					
SS 2	17	M 16	2-8-5-9 (13)	4				4.2					
				5			CL						
				6									
				7									
				8									
				9		Very stiff		4.0					
SS 3	23	M 18	4-7-5-10 (12)	10									
				10									

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

BORING ID: MP189

WISDOT STRUCTURE ID:

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WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 376235.176		EASTING: 603335.227							
DATE STARTED: 1/23/15		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 1/23/15		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 2159+00HighB		OFFSET 25' Lt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		36" TOPSOIL						HSA	
SS 1	4	M 177	1-4-2-5 (6)	2									
				3		CLAYEY SILT, light brown, moist, trace sand, stiff							
SS 2	20	M 17	3-5-4-7 (9)	4				1.75					
				5									
				6			CL-ML						
				7									
				8									
SS 3	17	M 17	4-8-4-10 (12)	9		Brown, hard		4.20					
				10									

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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WISDOT PROJECT ID: 1229-04-01

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WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 375858.424		EASTING: 603133.033							
DATE STARTED: 12/17/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 12/17/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 2155+20HighC		OFFSET 25' Rt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		12" TOPSOIL						HSA	
SS 1	11	M 22	0-3-1-3 (4)	2		SILTY CLAY, light brown, moist, trace coarse sand, stiff		1.5					
SS 2	17	M 18	1-5-3-7 (8)	4		Trace sand, hard		4.25					
				5			CL						
				6									
				7									
SS 3	21	M 17	6-12-9-15 (21)	9		Brown, trace sand		4.5					
				10		End of Boring at 10.0 ft.							

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

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PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:	
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 375935.143		EASTING: 603057.546	
DATE STARTED: 12/17/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 12/17/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA			
STATION 2156+00HighC	OFFSET 47' Lt	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:		

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		12" TOPSOIL						HSA	
SS 1	9	M 18	1-3-2-5 (5)	2		CLAYEY SILT, light gray/brown mottled, moist, trace sand, very stiff		2.6					
SS 2	20	M 18	2-7-5-10 (12)	4		Light brown, trace gravel		3.75					
				5			CL-ML						
				6									
				7									
				8		Gray/brown, trace gravel							
SS 3	23	M 18	4-12-10-16 (22)	9				3.5					
				10									

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

J:\COUNTIES\OZAUKEE\1229-04-01-1-43-SILVERSPRING DR TO 5TH 60\GINT\1229-04-01 OZAUKEE CO.GPJ 143 8/21/15



WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

BORING ID: MP196

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 376288.444		EASTING: 603123.901							
DATE STARTED: 12/17/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 12/17/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 2159+50HighC		OFFSET 35' Rt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		12" TOPSOIL						HSA	
SS 1	19	M 17	1-6-4-10 (10)	2		SILTY CLAY, light brown, moist, trace sand, hard	CL	4.5					
SS 2	23	M 15	4-10-7-13 (17)	4			CL	4.5					
				5									
				6									
				7									
				8									
SS 3	24	M 15	4-9-6-12 (15)	9		SILTY CLAY TO CLAYEY SILT, gray/brown, moist, trace fine sand, very stiff	CL-ML	2.7					
				10									

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

BORING ID: MP199

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 376687.648		EASTING: 603097.121							
DATE STARTED: 12/17/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 12/17/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 2163+50HighC		OFFSET 26' Rt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		12" TOPSOIL						HSA	
SS 1	12	M 22	1-3-2-4 (5)	2		CLAY LOAM, red/gray/brown mottled, moist, stiff	CL-ML	1.6					
SS 2	10	M 24	2-3-3-5 (6)	4		CLAYEY SILT, light brown/gray/brown mottled, moist, trace medium sand, soft		0.5					
				5									
				6			CL-ML						
				7									
SS 3	21	M 18	5-11-7-14 (18)	9		Gray/brown, trace fine sand, very stiff		4.0					
				10									


End of Boring at 10.0 ft.

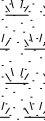
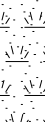








WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded





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 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704	WISDOT PROJECT ID: 1229-04-01		BORING ID: MP200					
	WISDOT STRUCTURE ID:		PAGE NO: 1 of 1					
WISDOT PROJECT NAME: I-43		CONSULTANT:	CONSULTANT PROJECT NO:	LATITUDE:	LONGITUDE:			
ROADWAY NAME:		DRILLING CONTRACTOR: AET	DRILLING CONTRACTOR PROJECT NO:	NORTHING: 377041.219	EASTING: 603073.108			
DATE STARTED: 12/17/14		CREW CHIEF: MD	DRILL RIG:	COORDINATE SYSTEM: WCCS				
DATE COMPLETED: 12/17/14		LOGGED BY: AET	HOLE SIZE: 4 in	HORIZONTAL DATUM:		VERTICAL DATUM:		
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski	HAMMER TYPE:	STREAMBED ELEVATION: NA				
STATION 2167+00HighD		OFFSET 0	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:


SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		36" TOPSOIL						HSA	
SS 1	19	M 27	1-3-2-3 (5)	2									
				3		3.0							
SS 2	20	M 20	1-3-3-5 (6)	4		CLAY LOAM, gray/brown/reddish brown mottled, moist, very stiff	CL-ML	2.0					
				5		5.0							
				6		CLAYEY SILT, light brown/gray mottled, moist, trace sand, very stiff							
				7			CL-ML						
				8									
SS 3	5	M 23	3-9-6-10 (15)	9		Dark brown to black, little gravel, stiff		1.25					
				10		10.0							

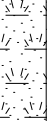


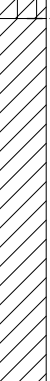
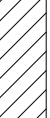
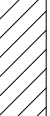

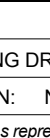

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>





NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704	WISDOT PROJECT ID: 1229-04-01				BORING ID: MP201		
	WISDOT STRUCTURE ID:				PAGE NO: 1 of 1		
WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:	LONGITUDE:
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 377240.732	EASTING: 603086.849
DATE STARTED: 12/17/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS	
DATE COMPLETED: 12/17/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM: VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA	
STATION 2169+00HighD		OFFSET 0		TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION: 1/4 1/4 SECTION: SURFACE ELEVATION:


SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		12" TOPSOIL						HSA	
SS 1	13	M 22	1-3-2-4 (5)	2		CLAYEY SILT, dark brown/gray, moist, trace sand & gravel, very stiff to stiff		2.75					
SS 2	12	M 28	2-3-3-4 (6)	4			CL-ML	1.5					
				5		SILTY CLAY, brown, moist, trace sand, stiff							
				6									
				7									
				8		Very stiff							
SS 3	21	M 19	3-9-7-12 (16)	9		A-6(4)	CL	3.4	35	21			
				10									

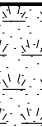
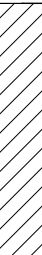

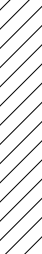
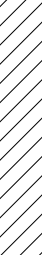
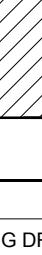
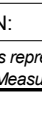
End of Boring at 10.0 ft.





WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704	WISDOT PROJECT ID: 1229-04-01		BORING ID: MP202					
	WISDOT STRUCTURE ID:		PAGE NO: 1 of 1					
WISDOT PROJECT NAME: I-43		CONSULTANT:	CONSULTANT PROJECT NO:	LATITUDE:	LONGITUDE:			
ROADWAY NAME:		DRILLING CONTRACTOR: AET	DRILLING CONTRACTOR PROJECT NO:	NORTHING: 377440.066	EASTING: 603103.162			
DATE STARTED: 12/17/14		CREW CHIEF: MD	DRILL RIG:	COORDINATE SYSTEM: WCCS				
DATE COMPLETED: 12/17/14		LOGGED BY: AET	HOLE SIZE: 4 in	HORIZONTAL DATUM:		VERTICAL DATUM:		
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski	HAMMER TYPE:	STREAMBED ELEVATION: NA				
STATION 2171+00HighD		OFFSET 0	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		12" TOPSOIL						HSA	
SS 1	12	M 20	2-4-3-5 (7)	2		SILTY CLAY, light brown/brown, moist, trace sand, stiff		2.0					
SS 2	22	M 16	3-7-4-9 (11)	4		Hard		4.5					
				5			CL						
				6									
				7									
SS 3	24	M 17	4-11-8-14 (19)	9				4.5					Qu = 3.9
				10		End of Boring at 10.0 ft.							

WATER LEVEL & CAVE-IN OBSERVATION DATA				
	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected. 2) NE = Not Encountered; NMR = No Measurement Recorded				

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WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

BORING ID: MP203

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 377639.4		EASTING: 603119.475							
DATE STARTED: 12/17/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 12/17/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 2173+00HighD		OFFSET 0		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		12" TOPSOIL						HSA	
SS 1	12	M 17	1-6-4-8 (10)	2		SILTY CLAY, light brown/gray mottled, moist, trace sand, hard		4.5					
SS 2	18	M 16	3-8-6-10 (14)	4				4.5					
				5			CL						
				6									
				7									
SS 3	20	M 17	4-11-8-14 (19)	9				4.25					
				10									

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

BORING ID: MP204

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 378537.997		EASTING: 603137.081							
DATE STARTED: 12/17/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 12/17/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 2182+00HighD		OFFSET 20' Lt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		12" TOPSOIL						HSA	
SS 1	13	M 17	0-5-2-6 (7)	2		SILTY CLAY, light brown/gray mottled, moist, trace sand & gravel, hard		4.5					
SS 2	22	M 17	3-8-6-12 (14)	4				4.5					
				5			CL						
				6									
				7									
				8									
SS 3	24	M 17	5-11-7-12 (18)	9		Brown, very stiff		3.25					
				10									

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

J:\COUNTIES\OZAUKEE\1229-04-01-1-143-SILVERSPRING DR TO 5TH 60\GINT\1229-04-01 OZAUKEE CO.GPJ 143 8/21/15



WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

BORING ID: MP205

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 378638.008		EASTING: 603119.141							
DATE STARTED: 12/12/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 12/12/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 2183+00HighD		OFFSET 38' Lt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		12" TOPSOIL						HSA	
SS 1	17	M 28	1-3-2-4 (5)	2		SILTY CLAY, light brown/gray mottled, moist, trace sand, very stiff		2.5					
SS 2	16	M 20	1-4-3-5 (7)	4				2.25					Qu = 1.7
				5			CL						
				6									
				7									
				8									
SS 3	24	M 14	5-12-10-16 (22)	9		Gray/brown, hard		4.5					
				10									

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID:

1229-04-01

BORING ID:

MP206

WISDOT STRUCTURE ID:

PAGE NO:

1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:	
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 378738.006		EASTING: 603122.201	
DATE STARTED: 12/12/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 12/12/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA			
STATION 2184+00HighD		OFFSET 35' Lt		TOWNSHIP:		RANGE:		SECTION:	
				1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		36" TOPSOIL						HSA	
SS 1	5	M 32	1-3-3-3 (6)	2									
				3		3.0							
SS 2	11	M 22	1-3-3-5 (6)	4		SILTY CLAY, reddish brown, moist, little sand, trace gravel, stiff	CL	2.0					
				5		5.0							
				6		SILTY CLAY, light brown to brown, moist, trace sand & gravel, hard							
				7			CL						
				8									
SS 3	24	M 17	4-10-7-12 (17)	9				4.5					
				10		10.0							

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

BORING ID: MP207

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 378784		EASTING: 603132.229							
DATE STARTED: 12/12/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 12/12/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 2184+46HighD		OFFSET 25' Lt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		12" TOPSOIL						HSA	
SS 1	24	M 15	1-3-2-3 (5)	2		SILTY CLAY, brown, moist, trace sand & gravel, very stiff		2.5					
SS 2	24	M 18	3-6-5-9 (11)	4		Hard		4.5					
				5			CL						
				6									
				7									
SS 3	24	M 18	5-10-8-11 (18)	9				4.5					
				10									

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

BORING ID: MP208

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 387723.655		EASTING: 603164.454							
DATE STARTED: 1/27/15		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 1/27/15		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 2274+00CTHCA		OFFSET 100' Rt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	



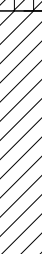
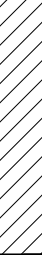

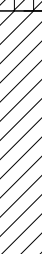
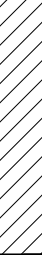

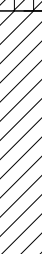
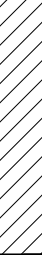




SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		12" TOPSOIL						HSA	
SS 1	12	M 24	0-4-1-4 (5)	2		SILTY CLAY, brown, moist, trace sand, stiff		2.0					
				3		Very stiff							
SS 2	13	M 24	2-4-3-7 (7)	4				3.25					
				5			CL						
				6									
				7									
				8		Hard							
SS 3	24	M 16	4-12-7-15 (19)	9				4.5					
				10		End of Boring at 10.0 ft.							

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

J:\COUNTIES\OZAUKEE\1229-04-01-1-43-SILVERSPRING DR TO 5TH 60GINT\1229-04-01 OZAUKEE CO.GPJ 143 8/21/15

 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704				WISDOT PROJECT ID: 1229-04-01				BORING ID: MP209																																																																																																																																				
				WISDOT STRUCTURE ID:				PAGE NO: 1 of 1																																																																																																																																				
WISDOT PROJECT NAME: I-43				CONSULTANT:				CONSULTANT PROJECT NO:				LATITUDE:		LONGITUDE:																																																																																																																														
ROADWAY NAME:				DRILLING CONTRACTOR: AET				DRILLING CONTRACTOR PROJECT NO:				NORTHING: 388076.35		EASTING: 603054.545																																																																																																																														
DATE STARTED: 1/27/15				CREW CHIEF: MD				DRILL RIG:				COORDINATE SYSTEM: WCCS																																																																																																																																
DATE COMPLETED: 1/27/15				LOGGED BY: AET				HOLE SIZE: 4 in				HORIZONTAL DATUM:		VERTICAL DATUM:																																																																																																																														
COUNTY: Ozaukee				LOG QC BY: C. Wierzchowski				HAMMER TYPE:				STREAMBED ELEVATION: NA																																																																																																																																
STATION 2277+60CTHCA		OFFSET 25' Rt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:																																																																																																																														
<table><thead><tr><th>SAMPLE TYPE NUMBER</th><th>RECOVERY (in) (RQD)</th><th>Moisture</th><th>BLOW COUNTS (N VALUE)</th><th>Depth (ft)</th><th>Graphic</th><th>Soil / Rock Description and Geological Origin for Each Major Unit / Comments</th><th>USCS / AASHTO</th><th>Strength Qp (tsf)</th><th>Liquid Limit (%)</th><th>Plasticity Index (%)</th><th>Boulders</th><th>Drilling Method</th><th>Notes</th></tr></thead><tbody><tr><td></td><td></td><td></td><td></td><td></td><td></td><td>12" TOPSOIL</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td rowspan="3">SS 1</td><td rowspan="3">9</td><td rowspan="3">M 23</td><td rowspan="3">0-2-0-4 (2)</td><td>1</td><td rowspan="3"></td><td>CLAYEY SILT, light brown mottled, moist, stiff</td><td rowspan="3">CL-ML</td><td rowspan="3">1.70</td><td rowspan="3"></td><td rowspan="3"></td><td rowspan="3"></td><td rowspan="3"></td><td rowspan="3"></td></tr><tr><td>2</td><td></td></tr><tr><td>3</td><td></td></tr><tr><td rowspan="3">SS 2</td><td rowspan="3">24</td><td rowspan="3">M 16</td><td rowspan="3">2-6-4-8 (10)</td><td>4</td><td rowspan="3"></td><td>SILTY CLAY, brown, moist, trace sand & gravel, hard</td><td rowspan="3">CL</td><td rowspan="3">4.10</td><td rowspan="3"></td><td rowspan="3"></td><td rowspan="3"></td><td rowspan="3"></td><td rowspan="3"></td></tr><tr><td>5</td><td></td></tr><tr><td>6</td><td></td></tr><tr><td></td><td></td><td></td><td></td><td>7</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td>8</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td rowspan="2">SS 3</td><td rowspan="2">19</td><td rowspan="2">M 19</td><td rowspan="2">5-8-6-9 (14)</td><td>9</td><td rowspan="2"></td><td>Very stiff</td><td rowspan="2"></td><td rowspan="2">3.10</td><td rowspan="2"></td><td rowspan="2"></td><td rowspan="2"></td><td rowspan="2"></td><td rowspan="2"></td></tr><tr><td>10</td><td></td></tr><tr><td colspan="16">End of Boring at 10.0 ft.</td></tr></tbody></table>																SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes							12" TOPSOIL								SS 1	9	M 23	0-2-0-4 (2)	1		CLAYEY SILT, light brown mottled, moist, stiff	CL-ML	1.70						2		3		SS 2	24	M 16	2-6-4-8 (10)	4		SILTY CLAY, brown, moist, trace sand & gravel, hard	CL	4.10						5		6						7														8											SS 3	19	M 19	5-8-6-9 (14)	9		Very stiff		3.10						10		End of Boring at 10.0 ft.															
SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes																																																																																																																															
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SS 2	24	M 16	2-6-4-8 (10)	4		SILTY CLAY, brown, moist, trace sand & gravel, hard	CL	4.10																																																																																																																																				
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WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

BORING ID: MP210

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 388310.045		EASTING: 602992.242							
DATE STARTED: 1/27/15		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 1/27/15		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 2280+00CTHCA		OFFSET 0		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
						12" TOPSOIL						HSA	
				1		1.0							
SS 1	14	M 22	0-4-2-6 (6)	2		MEDIUM TO COARSE SAND, brown/gray, moist, trace gravel, little silt, loose							
				3									
SS 2	10	M 12	3-2-2-3 (4)	4			SP						
				5									
				6									
				7									
				8		8.0							
				9		SILTY CLAY, gray/brown, moist, trace sand & gravel, very stiff	CL	3.5					
SS 3	11	M 17	4-7-6-11 (13)	10		10.0							


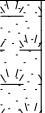














End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA


<input type="checkbox"/>	WATER ENCOUNTERED DURING DRILLING: NE	<input type="checkbox"/>	CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
<input type="checkbox"/>	WATER LEVEL AT COMPLETION: NMR	<input type="checkbox"/>	CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

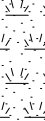
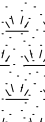
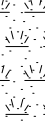






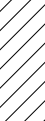

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

J:\COUNTIES\OZAUKEE\1229-04-01-1-43 - SILVERSPRING DR TO 5TH 60GINT\1229-04-01 OZAUKEE CO GPRJ - 43 8/21/15

 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704				WISDOT PROJECT ID: 1229-04-01				BORING ID: MP211																					
				WISDOT STRUCTURE ID:				PAGE NO: 1 of 1																					
WISDOT PROJECT NAME: I-43				CONSULTANT:				CONSULTANT PROJECT NO:				LATITUDE:		LONGITUDE:															
ROADWAY NAME:				DRILLING CONTRACTOR: AET				DRILLING CONTRACTOR PROJECT NO:				NORTHING: 388507.434		EASTING: 602960.031															
DATE STARTED: 11/18/14				CREW CHIEF: MD				DRILL RIG:				COORDINATE SYSTEM: WCCS																	
DATE COMPLETED: 11/18/14				LOGGED BY: AET				HOLE SIZE: 4 in				HORIZONTAL DATUM:		VERTICAL DATUM:															
COUNTY: Ozaukee				LOG QC BY: C. Wierzchowski				HAMMER TYPE:				STREAMBED ELEVATION: NA																	
STATION 2282+00CTHCA		OFFSET 0		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:															
SAMPLE TYPE NUMBER		RECOVERY (in) (RQD)		Moisture		BLOW COUNTS (N VALUE)		Depth (ft)		Graphic		Soil / Rock Description and Geological Origin for Each Major Unit / Comments				USCS / AASHTO		Strength Qp (tsf)		Liquid Limit (%)		Plasticity Index (%)		Boulders		Drilling Method		Notes	
								1				17" TOPSOIL												HSA					
		SS 1 SS 1A		15		M 57 M		2-2-3-1 (5)		2				1.4 FINE TO MEDIUM SAND, dark brown, moist, little gravel, trace silt, loose				SP											
		SS 2		10		W 21		1-1-2-2 (3)		4				3.0 MEDIUM TO COARSE SAND, brown, wet, some gravel, trace silt, trace gravel, very loose				SP											
								5								SP													
								6																					
								7																					
		SS 3		16		W 11		5-8-9-7 (17)		9				8.0 MEDIUM TO COARSE SAND, brown, wet, some gravel, trace silt, medium dense				SP											
								10				10.0																	
End of Boring at 10.0 ft.																													
WATER LEVEL & CAVE-IN OBSERVATION DATA																													
		WATER ENCOUNTERED DURING DRILLING: 6.4ft.												CAVE - IN DEPTH AT COMPLETION: 7.5ft.										WET <input type="checkbox"/> DRY <input type="checkbox"/>					
		WATER LEVEL AT COMPLETION: NMR												CAVE - IN DEPTH AFTER 0 HOURS: NMR										WET <input type="checkbox"/> DRY <input type="checkbox"/>					
NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected. 2) NE = Not Encountered; NMR = No Measurement Recorded																													





J:\COUNTIES\OZAUKEE\1229-04-01-1-143-SILVERSPRING DR TO 5TH 60\GINT\1229-04-01 OZAUKEE CO.GPJ 143 8/21/15

 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704	WISDOT PROJECT ID: 1229-04-01		BORING ID: MP212				
	WISDOT STRUCTURE ID:		PAGE NO: 1 of 1				
WISDOT PROJECT NAME: I-43		CONSULTANT:	CONSULTANT PROJECT NO:	LATITUDE:	LONGITUDE:		
ROADWAY NAME:		DRILLING CONTRACTOR: AET	DRILLING CONTRACTOR PROJECT NO:	NORTHING: 388608.8	EASTING: 602965.507		
DATE STARTED: 11/18/14		CREW CHIEF: MD	DRILL RIG:	COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 11/18/14		LOGGED BY: AET	HOLE SIZE: 4 in	HORIZONTAL DATUM:		VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski	HAMMER TYPE:	STREAMBED ELEVATION: NA			
STATION 2283+00CTHCA	OFFSET 20' Rt	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		36" TOPSOIL						HSA	
SS 1	13	M 43	2-8-5-11 (13)	2									
				3									
				3.0									
SS 2	15	M 9	2-11-8-12 (19)	4		MEDIUM GRAVEL, brown/gray, moist, some sand, trace silt, medium dense							
				5									
				6			GP						
				7									
				8									
				8.0									
						SILTY CLAY, gray/brown, moist, trace sand & gravel, very stiff							
SS 3	23	M 18	3-9-6-12 (15)	9			CL	3.5					
				10									
				10.0									

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

J:\COUNTIES\OZAUKEE\1229-04-01-143-SILVERSPRING DR TO 5TH 60GINT\1229-04-01 OZAUKEE CO GPJ -143 8/21/15



WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID:

1229-04-01

BORING ID:

MP213

WISDOT STRUCTURE ID:

PAGE NO:

1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:	
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 385493.301		EASTING: 603209.887	
DATE STARTED: 11/13/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 11/13/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA			
STATION 2251+50CTHCB	OFFSET 35' Rt	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:		

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		12" TOPSOIL						HSA	
SS 1	7	M 18	3-10-4-13 (14)	2		SILTY CLAY, brown, moist, trace sand & gravel, hard		4.5					
SS 2	21	M 14	6-19-13-25 (32)	4				4.5					
				5			CL						
				6									
				7									
				8		Very stiff							
SS 3	24	M 17	4-9-7-11 (16)	9				3.7					
				10									

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

BORING ID: MP214

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 386727.863		EASTING: 603022.272							
DATE STARTED: 11/13/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 11/13/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 2264+00CTHCB		OFFSET 15' Lt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		12" TOPSOIL						HSA	
SS 1	15	M 21	0-2-2-3 (4)	2		SILTY CLAY, reddish gray, moist, trace sand & gravel, stiff		1.25					
				3		Very stiff							
SS 2	24	M 20	2-4-3-6 (7)	4				2.25					
				5			CL						
				6									
				7									
				8									
SS 3	24	M 17	3-8-7-11 (15)	9		Gray/brown, hard		4.5	30	17			
				10									


End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded





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 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704	WISDOT PROJECT ID: 1229-04-01		BORING ID: MP215				
	WISDOT STRUCTURE ID:		PAGE NO: 1 of 1				
WISDOT PROJECT NAME: I-43		CONSULTANT:	CONSULTANT PROJECT NO:	LATITUDE:	LONGITUDE:		
ROADWAY NAME:		DRILLING CONTRACTOR: AET	DRILLING CONTRACTOR PROJECT NO:	NORTHING: 386927.57	EASTING: 603042.76		
DATE STARTED: 11/13/14		CREW CHIEF: MD	DRILL RIG:	COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 11/13/14		LOGGED BY: AET	HOLE SIZE: 4 in	HORIZONTAL DATUM:	VERTICAL DATUM:		
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski	HAMMER TYPE:	STREAMBED ELEVATION: NA			
STATION 2266+00CTHCB	OFFSET 0	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:


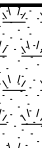









SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
						12" TOPSOIL						HSA	
				1		1.0							
SS 1	13	M 12	1-2-2-2 (4)	2		SILTY SAND, brown, moist, trace clay, little gravel, soft	SM						
				3		3.0							
SS 2	21	M 19	2-4-3-6 (7)	4		SILTY CLAY, gray/brown, moist, trace sand, very stiff		3.0					
				5									
				6			CL						
				7									
				8									
SS 3	24	M 15	3-5-4-6 (9)	9				2.25					
				10		10.0							

End of Boring at 10.0 ft.


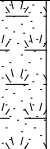






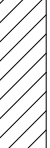





WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704				WISDOT PROJECT ID: 1229-04-01				BORING ID: MP216										
				WISDOT STRUCTURE ID:				PAGE NO: 1 of 1										
WISDOT PROJECT NAME: I-43				CONSULTANT:				CONSULTANT PROJECT NO:				LATITUDE:		LONGITUDE:				
ROADWAY NAME:				DRILLING CONTRACTOR: AET				DRILLING CONTRACTOR PROJECT NO:				NORTHING: 387126.365		EASTING: 603076.009				
DATE STARTED: 11/13/14				CREW CHIEF: MD				DRILL RIG:				COORDINATE SYSTEM: WCCS						
DATE COMPLETED: 11/13/14				LOGGED BY: AET				HOLE SIZE: 4 in				HORIZONTAL DATUM:		VERTICAL DATUM:				
COUNTY: Ozaukee				LOG QC BY: C. Wierzchowski				HAMMER TYPE:				STREAMBED ELEVATION: NA						
STATION 2268+00CTHCB		OFFSET 25' Rt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:				
SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments					USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes	
				1		15" TOPSOIL											HSA	
 SS 1 SS 1A	11	M 36 M 19	0-3-2-6 (5)	2		1.3 FINE TO MEDIUM SILTY SAND, brown/yellow/red mottled, moist, little clay, trace gravel, loose					SM							
 SS 2	19	M 18	2-5-3-7 (8)	3		3.0 SILTY CLAY, gray/brown, moist, trace sand, very stiff												
				4								3.25						
				5														
				6							CL							
				7														
 SS 3	24	M 18	3-8-6-11 (14)	8														
				9								3.5						
				10														
End of Boring at 10.0 ft.																		
WATER LEVEL & CAVE-IN OBSERVATION DATA																		
	WATER ENCOUNTERED DURING DRILLING: NE						CAVE - IN DEPTH AT COMPLETION: NMR					WET <input type="checkbox"/>			DRY <input type="checkbox"/>			
	WATER LEVEL AT COMPLETION: NMR						CAVE - IN DEPTH AFTER 0 HOURS: NMR					WET <input type="checkbox"/>			DRY <input type="checkbox"/>			
NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected. 2) NE = Not Encountered; NMR = No Measurement Recorded																		

J:\COUNTIES\OZAUKEE\1229-04-01-1-43-SILVERSPRING DR TO 5TH 60\GINT\1229-04-01 OZAUKEE CO.GPJ 143 8/21/15

 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704				WISDOT PROJECT ID: 1229-04-01				BORING ID: MP217																					
				WISDOT STRUCTURE ID:				PAGE NO: 1 of 1																					
WISDOT PROJECT NAME: I-43				CONSULTANT:				CONSULTANT PROJECT NO:				LATITUDE:		LONGITUDE:															
ROADWAY NAME:				DRILLING CONTRACTOR: AET				DRILLING CONTRACTOR PROJECT NO:				NORTHING: 387324.746		EASTING: 603119.251															
DATE STARTED: 11/13/14				CREW CHIEF: MD				DRILL RIG:				COORDINATE SYSTEM: WCCS																	
DATE COMPLETED: 11/13/14				LOGGED BY: AET				HOLE SIZE: 4 in				HORIZONTAL DATUM:		VERTICAL DATUM:															
COUNTY: Ozaukee				LOG QC BY: C. Wierzchowski				HAMMER TYPE:				STREAMBED ELEVATION: NA																	
STATION 2270+00CTHCB		OFFSET 60' Rt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:															
SAMPLE TYPE NUMBER		RECOVERY (in) (RQD)		Moisture		BLOW COUNTS (N VALUE)		Depth (ft)		Graphic		Soil / Rock Description and Geological Origin for Each Major Unit / Comments				USCS / AASHTO		Strength Qp (tsf)		Liquid Limit (%)		Plasticity Index (%)		Boulders		Drilling Method		Notes	
								1				15" TOPSOIL																	
		SS 1 SS 1A		12		M 28 M 10		1-7-4-14 (11)		2				1.3 MEDIUM TO COARSE SAND, brown/light brown, moist, some gravel, trace silt, medium dense															
		SS 2		12		M 7		7-19-15-22 (34)		4				Dense				SP											
										5																			
										6																			
										7																			
										8				8.0 SILTY CLAY, gray/brown, moist, trace sand, very dense															
		SS 3		23		W 19		3-7-5-9 (12)		9								CL		2.5									
										10				10.0															
End of Boring at 10.0 ft.																													
WATER LEVEL & CAVE-IN OBSERVATION DATA																													
		WATER ENCOUNTERED DURING DRILLING: 8.9ft.												CAVE - IN DEPTH AT COMPLETION: 9.7ft.										WET <input type="checkbox"/> DRY <input type="checkbox"/>					
		WATER LEVEL AT COMPLETION: NMR												CAVE - IN DEPTH AFTER 0 HOURS: NMR										WET <input type="checkbox"/> DRY <input type="checkbox"/>					
NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected. 2) NE = Not Encountered; NMR = No Measurement Recorded																													

J:\COUNTIES\OZAUKEE\1229-04-01-1-43-SILVERSPRING DR TO 5TH 60GINT\1229-04-01 OZAUKEE CO GPRJ -43 8/21/15



WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

BORING ID: MP219

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 386784.302		EASTING: 602701.98							
DATE STARTED: 1/28/15		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 1/28/15		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 2265+00CTHCC		OFFSET 30' Lt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		12" TOPSOIL						HSA	
SS 1	13	M 20	1-4-2-5 (6)	2		SILTY CLAY, dark brown to light brown, moist, trace sand, stiff		1.5					
SS 2	19	M 16	1-3-3-4 (6)	4			CL	2.0					
				5									
				6									
				7									
				8									
SS 3	23	M 18	4-6-4-7 (10)	9		Gray/brown, very stiff		3.0					
				10									

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded



WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID:

1229-04-01

BORING ID:

MP221

WISDOT STRUCTURE ID:

PAGE NO:

1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:	
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 386990.29		EASTING: 602706.954	
DATE STARTED: 12/10/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 12/10/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA			
STATION 2267+00CTHCC	OFFSET 50' Lt	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:		

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
						12" TOPSOIL						HSA	
SS 1	12	M 10	1-8-5-4 (13)	1		MEDIUM TO COARSE SAND, brown, moist, some gravel, trace silt, medium dense	SP						
SS 2	17	M 18	2-3-2-3 (5)	4		FINE SANDY CLAY, brown, moist, trace silt, medium	SC	0.75					
				5		SILTY CLAY, gray/brown, moist, trace sand, stiff	CL						
				6									
				7									
SS 3	20	M 17	2-6-5-7 (11)	9				1.75					
				10									


End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

WATER ENCOUNTERED DURING DRILLING: NE	CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
WATER LEVEL AT COMPLETION: NMR	CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded





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 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704	WISDOT PROJECT ID: 1229-04-01		BORING ID: MP222				
	WISDOT STRUCTURE ID:		PAGE NO: 1 of 1				
WISDOT PROJECT NAME: I-43		CONSULTANT:	CONSULTANT PROJECT NO:	LATITUDE:	LONGITUDE:		
ROADWAY NAME:		DRILLING CONTRACTOR: AET	DRILLING CONTRACTOR PROJECT NO:	NORTHING: 387085.013	EASTING: 602670.076		
DATE STARTED: 1/28/15		CREW CHIEF: MD	DRILL RIG:	COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 1/28/15		LOGGED BY: AET	HOLE SIZE: 4 in	HORIZONTAL DATUM:		VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski	HAMMER TYPE:	STREAMBED ELEVATION: NA			
STATION 2268+00CTHCC	OFFSET 0	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
						12" TOPSOIL						HSA	
SS 1	15	W 45	0-2-1-4 (3)	1		SANDY LOAM, gray to dark gray, wet, little clay, soft	CL-ML						
SS 2	13	M 17	3-5-2-9 (7)	3		CLAYEY FINE SAND, light brown, moist, loose							
				4									
				5			SC						
				6									
				7									
				8									
SS 3	19	M 17	3-6-4-8 (10)	8		SILTY CLAY, gray/brown, moist, trace sand, very stiff	CL	2.75					
				9									
				10									


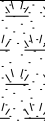
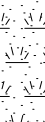






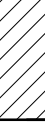





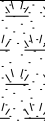
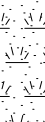






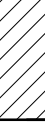





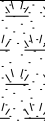
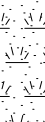






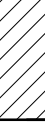





End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: 3ft.		CAVE - IN DEPTH AT COMPLETION: 3ft.	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704				WISDOT PROJECT ID: 1229-04-01				BORING ID: MP223																																																																																																																																																																																																																																													
				WISDOT STRUCTURE ID:				PAGE NO: 1 of 1																																																																																																																																																																																																																																													
WISDOT PROJECT NAME: I-43				CONSULTANT:				CONSULTANT PROJECT NO:				LATITUDE:		LONGITUDE:																																																																																																																																																																																																																																							
ROADWAY NAME:				DRILLING CONTRACTOR: AET				DRILLING CONTRACTOR PROJECT NO:				NORTHING: 387180.958		EASTING: 602631.32																																																																																																																																																																																																																																							
DATE STARTED: 12/10/14				CREW CHIEF: MD				DRILL RIG:				COORDINATE SYSTEM: WCCS																																																																																																																																																																																																																																									
DATE COMPLETED: 12/10/14				LOGGED BY: AET				HOLE SIZE: 4 in				HORIZONTAL DATUM:		VERTICAL DATUM:																																																																																																																																																																																																																																							
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<table><thead><tr><th>SAMPLE TYPE NUMBER</th><th>RECOVERY (in) (RQD)</th><th>Moisture</th><th>BLOW COUNTS (N VALUE)</th><th>Depth (ft)</th><th>Graphic</th><th>Soil / Rock Description and Geological Origin for Each Major Unit / Comments</th><th>USCS / AASHTO</th><th>Strength Qp (tsf)</th><th>Liquid Limit (%)</th><th>Plasticity Index (%)</th><th>Boulders</th><th>Drilling Method</th><th>Notes</th></tr></thead><tbody><tr><td></td><td></td><td></td><td></td><td>1</td><td></td><td>36" TOPSOIL</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>SS 1</td><td>10</td><td>M 44</td><td>1-2-2-2 (4)</td><td>2</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td>3</td><td></td><td>3.0</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>SS 2</td><td>8</td><td>M 10</td><td>1-5-3-9 (8)</td><td>4</td><td></td><td>MEDIUM TO COARSE SAND, brown, moist to wet, some gravel, trace silt, loose</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td>5</td><td></td><td></td><td>SP</td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td>6</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td>7</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td>8</td><td></td><td>8.0</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>SS 3</td><td>19</td><td>M 18</td><td>3-5-3-8 (8)</td><td>9</td><td></td><td>SILTY CLAY, gray/brown, wet, trace to little sand, very stiff</td><td>CL</td><td>2.75</td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td>10</td><td></td><td>10.0</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td colspan="14">End of Boring at 10.0 ft.</td><td colspan="2"></td></tr><tr><td colspan="16">WATER LEVEL & CAVE-IN OBSERVATION DATA</td></tr><tr><td></td><td colspan="5">WATER ENCOUNTERED DURING DRILLING: 7.5ft.</td><td></td><td colspan="5">CAVE - IN DEPTH AT COMPLETION: 9.6ft.</td><td colspan="2">WET <input type="checkbox"/> DRY <input type="checkbox"/></td></tr><tr><td></td><td colspan="5">WATER LEVEL AT COMPLETION: NMR</td><td></td><td colspan="5">CAVE - IN DEPTH AFTER 0 HOURS: NMR</td><td colspan="2">WET <input type="checkbox"/> DRY <input type="checkbox"/></td></tr><tr><td colspan="16">NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected. 2) NE = Not Encountered; NMR = No Measurement Recorded</td></tr></tbody></table>																SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes					1		36" TOPSOIL								SS 1	10	M 44	1-2-2-2 (4)	2														3		3.0								SS 2	8	M 10	1-5-3-9 (8)	4		MEDIUM TO COARSE SAND, brown, moist to wet, some gravel, trace silt, loose												5			SP											6														7														8		8.0								SS 3	19	M 18	3-5-3-8 (8)	9		SILTY CLAY, gray/brown, wet, trace to little sand, very stiff	CL	2.75										10		10.0								End of Boring at 10.0 ft.																WATER LEVEL & CAVE-IN OBSERVATION DATA																	WATER ENCOUNTERED DURING DRILLING: 7.5ft.						CAVE - IN DEPTH AT COMPLETION: 9.6ft.					WET <input type="checkbox"/> DRY <input type="checkbox"/>			WATER LEVEL AT COMPLETION: NMR						CAVE - IN DEPTH AFTER 0 HOURS: NMR					WET <input type="checkbox"/> DRY <input type="checkbox"/>		NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected. 2) NE = Not Encountered; NMR = No Measurement Recorded															
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WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

BORING ID: MP224

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 387723.168		EASTING: 602631.045							
DATE STARTED: 12/10/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 12/10/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 2274+00CTHCD		OFFSET 0		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		12" TOPSOIL						HSA	
SS 1	20	M 17	2-7-3-10 (10)	2		SILTY CLAY, light brown, moist, trace sand, very stiff		3.65					
SS 2	24	M 16	3-8-5-10 (13)	4				4.0					
				5			CL						
				6									
				7									
				8		Brown, stiff							
SS 3	24	M 20	3-6-5-7 (11)	9				2.0					
				10									


End of Boring at 10.0 ft.

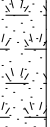
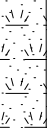
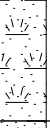








WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
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

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 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704	WISDOT PROJECT ID: 1229-04-01		BORING ID: MP225				
	WISDOT STRUCTURE ID:		PAGE NO: 1 of 1				
WISDOT PROJECT NAME: I-43		CONSULTANT:	CONSULTANT PROJECT NO:	LATITUDE:	LONGITUDE:		
ROADWAY NAME:		DRILLING CONTRACTOR: AET	DRILLING CONTRACTOR PROJECT NO:	NORTHING: 388418.453	EASTING: 602709.694		
DATE STARTED: 12/10/14		CREW CHIEF: MD	DRILL RIG:	COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 12/10/14		LOGGED BY: AET	HOLE SIZE: 4 in	HORIZONTAL DATUM:		VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski	HAMMER TYPE:	STREAMBED ELEVATION: NA			
STATION 2281+00CTHCD	OFFSET 0	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:


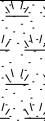
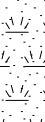
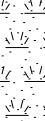


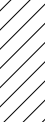

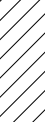






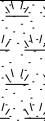
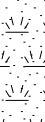
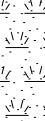


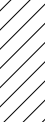

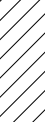






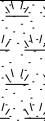
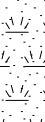
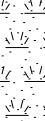


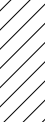

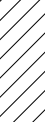






SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		36" TOPSOIL						HSA	
SS 1	18	M 31	1-3-1-7 (4)	2									
				3		3.0							
SS 2	16	M 14	2-7-3-11 (10)	4		FINE TO MEDIUM SAND, dark brown, moist, little gravel, trace clay, loose	SP						
SS 2A		M 17		4		4.0		4.0					
				5		FINE SANDY SILT, brown, moist, trace clay, very stiff							
				6									
				7			SM						
				8		Gray/brown							
SS 3	22	W 19	3-10-7-13 (17)	9				3.0					
				10		10.0							

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: 8.1ft.		CAVE - IN DEPTH AT COMPLETION: 9.1ft.	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704				WISDOT PROJECT ID: 1229-04-01				BORING ID: MP226																																																																																																																																																																																																																																																											
				WISDOT STRUCTURE ID:				PAGE NO: 1 of 1																																																																																																																																																																																																																																																											
WISDOT PROJECT NAME: I-43				CONSULTANT:				CONSULTANT PROJECT NO:				LATITUDE:		LONGITUDE:																																																																																																																																																																																																																																																					
ROADWAY NAME:				DRILLING CONTRACTOR: AET				DRILLING CONTRACTOR PROJECT NO:				NORTHING: 388617.924		EASTING: 602727.341																																																																																																																																																																																																																																																					
DATE STARTED: 12/10/14				CREW CHIEF: MD				DRILL RIG:				COORDINATE SYSTEM: WCCS																																																																																																																																																																																																																																																							
DATE COMPLETED: 12/10/14				LOGGED BY: AET				HOLE SIZE: 4 in				HORIZONTAL DATUM:		VERTICAL DATUM:																																																																																																																																																																																																																																																					
COUNTY: Ozaukee				LOG QC BY: C. Wierzchowski				HAMMER TYPE:				STREAMBED ELEVATION: NA																																																																																																																																																																																																																																																							
STATION 2283+00CTHCD		OFFSET 19' Lt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:																																																																																																																																																																																																																																																					
<table><thead><tr><th>SAMPLE TYPE NUMBER</th><th>RECOVERY (in) (RQD)</th><th>Moisture</th><th>BLOW COUNTS (N VALUE)</th><th>Depth (ft)</th><th>Graphic</th><th>Soil / Rock Description and Geological Origin for Each Major Unit / Comments</th><th>USCS / AASHTO</th><th>Strength Qp (tsf)</th><th>Liquid Limit (%)</th><th>Plasticity Index (%)</th><th>Boulders</th><th>Drilling Method</th><th>Notes</th></tr></thead><tbody><tr><td></td><td></td><td></td><td></td><td></td><td></td><td>36" TOPSOIL</td><td></td><td></td><td></td><td></td><td></td><td>HSA</td><td></td></tr><tr><td>SS 1</td><td>1</td><td>M 23</td><td>2-8-6-8 (14)</td><td>1</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td>2</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td>3</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>SS 2</td><td>20</td><td>M 10</td><td>8-6-8-6 (14)</td><td>4</td><td></td><td>FINE TO MEDIUM SAND, brown, moist, little gravel, trace silt, medium dense</td><td>SP</td><td>3.0</td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>SS 2A</td><td></td><td>M 17</td><td></td><td>5</td><td></td><td>SILTY CLAY, light brown, moist, little sand, trace gravel, very stiff</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td>6</td><td></td><td></td><td>CL</td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td>7</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td>8</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>SS 3</td><td>23</td><td>M 17</td><td>2-8-5-10 (13)</td><td>9</td><td></td><td>SILTY CLAY, brown, moist, trace sand, hard</td><td>CL</td><td>4.5</td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td>10</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td colspan="16">End of Boring at 10.0 ft.</td></tr><tr><td colspan="16">WATER LEVEL & CAVE-IN OBSERVATION DATA</td></tr><tr><td></td><td colspan="5">WATER ENCOUNTERED DURING DRILLING: NE</td><td></td><td colspan="5">CAVE - IN DEPTH AT COMPLETION: NMR</td><td colspan="2">WET <input type="checkbox"/> DRY <input type="checkbox"/></td></tr><tr><td></td><td colspan="5">WATER LEVEL AT COMPLETION: NMR</td><td></td><td colspan="5">CAVE - IN DEPTH AFTER 0 HOURS: NMR</td><td colspan="2">WET <input type="checkbox"/> DRY <input type="checkbox"/></td></tr><tr><td colspan="16">NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected. 2) NE = Not Encountered; NMR = No Measurement Recorded</td></tr></tbody></table>																SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes							36" TOPSOIL						HSA		SS 1	1	M 23	2-8-6-8 (14)	1														2														3										SS 2	20	M 10	8-6-8-6 (14)	4		FINE TO MEDIUM SAND, brown, moist, little gravel, trace silt, medium dense	SP	3.0						SS 2A		M 17		5		SILTY CLAY, light brown, moist, little sand, trace gravel, very stiff												6			CL											7														8										SS 3	23	M 17	2-8-5-10 (13)	9		SILTY CLAY, brown, moist, trace sand, hard	CL	4.5										10										End of Boring at 10.0 ft.																WATER LEVEL & CAVE-IN OBSERVATION DATA																	WATER ENCOUNTERED DURING DRILLING: NE						CAVE - IN DEPTH AT COMPLETION: NMR					WET <input type="checkbox"/> DRY <input type="checkbox"/>			WATER LEVEL AT COMPLETION: NMR						CAVE - IN DEPTH AFTER 0 HOURS: NMR					WET <input type="checkbox"/> DRY <input type="checkbox"/>		NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected. 2) NE = Not Encountered; NMR = No Measurement Recorded															
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J:\COUNTIES\OZAUKEE\1229-04-01 - I-43 - SILVERSPRING DR TO 5TH 60\GINT\1229-04-01 OZAUKEE CO.GPJ 143 8/21/15



WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

BORING ID: MP227

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 388905.669		EASTING: 602761.975							
DATE STARTED: 12/09/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 12/09/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 2285+75CTHCD		OFFSET 25' Lt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		12" TOPSOIL						HSA	
SS 1	20	M 16	2-6-3-9 (9)	2		SILTY CLAY, light brown, moist, trace sand, hard		4.5					
SS 2	20	M 18	4-10-7-12 (17)	4		A-6(4)		4.3	35	20			
				5			CL						
				6									
				7									
				8		Very stiff							
SS 3	24	M 19	3-7-5-8 (12)	9									
				10									

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID:

1229-04-01

BORING ID:

MP228

WISDOT STRUCTURE ID:

PAGE NO:

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WISDOT PROJECT NAME: I-43		CONSULTANT: AET		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:	
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 400392.815		EASTING: 603255.266	
DATE STARTED: 11/20/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 11/20/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA			
STATION 2401+00STH60B	OFFSET 25' Rt	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:		

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		12" TOPSOIL							
SS 1	15	M 22	1-4-2-5 (6)	2		SILTY CLAY, light brown, moist, trace sand & gravel, very stiff		3.5					
SS 2	18	M 19	1-5-3-8 (8)	4		Hard		4.5					Qu = 4.1
				5			CL						
				6									
				7									
SS 3	24	M 22	4-7-6-10 (13)	9		Very stiff		4.0					
				10									

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

BORING ID: MP229

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 400542.293		EASTING: 603267.771							
DATE STARTED: 11/20/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 11/20/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 2402+50STH60B		OFFSET 25' Rt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		12" TOPSOIL						HSA	
SS 1	8	M 29	1-2-2-4 (4)	2		SILTY CLAY, dark brown, moist, trace sand, stiff		1.25					
SS 2	9	M 28	2-2-2-4 (4)	4				1.0					
				5			CL						
				6									
				7									
				8		Brown, very stiff							
SS 3	24	M 20	3-8-6-11 (14)	9				4.0					
				10									

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

BORING ID: MP230

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 401109.489		EASTING: 603340.344							
DATE STARTED: 11/21/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 11/21/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 2408+25STH60B		OFFSET 35' Rt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		36" TOPSOIL							
SS 1	12	M 33	2-4-3-5 (7)	2									
				3		3.0							
SS 2	12	M 25	5-5-4-5 (9)	4		SILTY CLAY, brown/gray mottled, moist, trace sand, stiff		1.25					
				5			CL						
				6									
				7									
				8		8.0							
SS 3	4	M 14	3-5-6-6 (11)	9		SILTY CLAY, brown, moist, little gravel, stiff	CL	1.5					
				10		10.0							


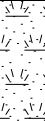
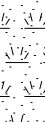






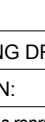




End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

WATER ENCOUNTERED DURING DRILLING: NE	CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
WATER LEVEL AT COMPLETION: NMR	CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

J:\COUNTIES\OZAUKEE\1229-04-01-1-43-SILVERSPRING DR TO 5TH 60GINT\1229-04-01 OZAUKEE CO.GPJ 143 8/21/15

 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704				WISDOT PROJECT ID: 1229-04-01				BORING ID: MP231																							
				WISDOT STRUCTURE ID:				PAGE NO: 1 of 1																							
WISDOT PROJECT NAME: I-43				CONSULTANT:				CONSULTANT PROJECT NO:				LATITUDE:		LONGITUDE:																	
ROADWAY NAME:				DRILLING CONTRACTOR: AET				DRILLING CONTRACTOR PROJECT NO:				NORTHING: 401282.581		EASTING: 603360.424																	
DATE STARTED: 11/21/14				CREW CHIEF: MD				DRILL RIG:				COORDINATE SYSTEM: WCCS																			
DATE COMPLETED: 11/21/14				LOGGED BY: AET				HOLE SIZE: 4 in				HORIZONTAL DATUM:		VERTICAL DATUM:																	
COUNTY: Ozaukee				LOG QC BY: C. Wierzchowski				HAMMER TYPE:				STREAMBED ELEVATION: NA																			
STATION 2410+00STH60B		OFFSET 20' Rt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:																	
SAMPLE TYPE NUMBER		RECOVERY (in) (RQD)		Moisture		BLOW COUNTS (N VALUE)		Depth (ft)		Graphic		Soil / Rock Description and Geological Origin for Each Major Unit / Comments				USCS / AASHTO		Strength Qp (tsf)		Liquid Limit (%)		Plasticity Index (%)		Boulders		Drilling Method		Notes			
								1				36" TOPSOIL														HSA					
SS 1		11		M 27		2-4-2-4 (6)		2				3.0																			
SS 2		13		M 18		2-2-2-5 (4)		4																							
								5																							
								6																							
								7																							
								8																							
SS 3		9		W 16		2-2-2-2 (4)		9																							
								10				10.0																			
End of Boring at 10.0 ft.																															
WATER LEVEL & CAVE-IN OBSERVATION DATA																															
		WATER ENCOUNTERED DURING DRILLING: NE												CAVE - IN DEPTH AT COMPLETION: NMR										WET <input type="checkbox"/> DRY <input type="checkbox"/>							
		WATER LEVEL AT COMPLETION: NMR												CAVE - IN DEPTH AFTER 0 HOURS: NMR										WET <input type="checkbox"/> DRY <input type="checkbox"/>							
NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected. 2) NE = Not Encountered; NMR = No Measurement Recorded																															

J:\COUNTIES\OZAUKEE\1229-04-01-1-43-SILVERSPRING DR TO 5TH 60GINT\1229-04-01 OZAUKEE CO.GPJ 143 8/21/15



WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID:

1229-04-01

BORING ID:

MP232

WISDOT STRUCTURE ID:

PAGE NO:

1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:	
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 401473.571		EASTING: 603415.421	
DATE STARTED: 1/27/15		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 1/27/15		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA			
STATION 2412+00STH60B	OFFSET 25' Rt	TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION:	1/4 1/4 SECTION:	SURFACE ELEVATION:		

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		36" TOPSOIL							
SS 1	10	M 31	1-2-2-3 (4)	2									
				3		3.0							
SS 2	8	M 26	1-2-2-3 (4)	4		SILTY CLAY, brown/gray, moist, little sand, trace gravel, stiff		1.25					
				5			CL						
				6									
				7									
				8		8.0							
SS 3	15	M 16	3-6-4-6 (10)	9		FINE TO MEDIUM SILTY SAND, brown, moist, loose	SM						
				10		10.0							

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

WATER ENCOUNTERED DURING DRILLING: NE	CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
WATER LEVEL AT COMPLETION: NMR	CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

J:\COUNTIES\OZAUKEE\1229-04-01-143-SILVERSPRING DR TO 5TH 60GINT\1229-04-01 OZAUKEE CO.GPJ 143 8/21/15



WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

BORING ID: MP233

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:	
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 401659.163		EASTING: 603485.861	
DATE STARTED: 11/21/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 11/21/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION:		NA	
STATION 2414+00STH60B		OFFSET 35' Rt		TOWNSHIP:		RANGE:		SECTION:	
				1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		36" TOPSOIL						HSA	
SS 1	12	M 21	2-4-3-4 (7)	2									
				3		3.0							
SS 2	4	M 18	3-3-3-4 (6)	4		FINE TO MEDIUM SAND, brown, moist, trace silt & gravel, loose							
				5			SP						
				6									
				7									
				8		8.0							
SS 3	18	W 17	3-6-9-8 (15)	9		MEDIUM TO COARSE SAND, brown, wet, medium dense	SP						
				10		10.0							

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: 7.5ft.		CAVE - IN DEPTH AT COMPLETION: 8.1ft.	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded



WI Dept. of Transportation
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Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

BORING ID: MP234

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:	
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 401840.673		EASTING: 603564.735	
DATE STARTED: 12/03/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 12/03/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION:		NA	
STATION 2416+00STH60B		OFFSET 43' Rt		TOWNSHIP:		RANGE:		SECTION:	
				1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		36" TOPSOIL						HSA	
SS 1	7	M 26	1-3-2-2 (5)	2									
				3		3.0							
SS 2	13	M 17	2-3-2-4 (5)	4		FINE TO MEDIUM SAND, brown, moist, trace silt, loose							
				5									
				6			SP						
				7		Wet							
				8									
SS 3	22	W 15	3-6-4-7 (10)	9									
				10		10.0							


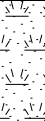

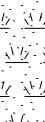

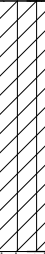








End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

▽	WATER ENCOUNTERED DURING DRILLING: 3.9ft.		CAVE - IN DEPTH AT COMPLETION: 7.1ft.	WET <input type="checkbox"/> DRY <input type="checkbox"/>
▽	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704				WISDOT PROJECT ID: 1229-04-01				BORING ID: MP235																					
				WISDOT STRUCTURE ID:				PAGE NO: 1 of 1																					
WISDOT PROJECT NAME: I-43				CONSULTANT:				CONSULTANT PROJECT NO:				LATITUDE:		LONGITUDE:															
ROADWAY NAME:				DRILLING CONTRACTOR: AET				DRILLING CONTRACTOR PROJECT NO:				NORTHING: 402018.687		EASTING: 603654.272															
DATE STARTED: 12/03/14				CREW CHIEF: MD				DRILL RIG:				COORDINATE SYSTEM: WCCS																	
DATE COMPLETED: 12/03/14				LOGGED BY: AET				HOLE SIZE: 4 in				HORIZONTAL DATUM:		VERTICAL DATUM:															
COUNTY: Ozaukee				LOG QC BY: C. Wierzchowski				HAMMER TYPE:				STREAMBED ELEVATION: NA																	
STATION 2418+00STH60B		OFFSET 53' Rt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:															
SAMPLE TYPE NUMBER		RECOVERY (in) (RQD)		Moisture		BLOW COUNTS (N VALUE)		Depth (ft)		Graphic		Soil / Rock Description and Geological Origin for Each Major Unit / Comments				USCS / AASHTO		Strength Qp (tsf)		Liquid Limit (%)		Plasticity Index (%)		Boulders		Drilling Method		Notes	
								1				60" TOPSOIL												HSA					
		SS 1		8		M 29		1-3-3-4 (6)		2																			
		SS 2		12		M-W 28		2-5-3-8 (8)		3				CLAYEY LOAM, dark brown to black, moist to wet, trace organic matter, medium				CL-ML											
								4																					
								5				FINE TO MEDIUM SAND, brown, wet, little gravel, trace silt, medium dense																	
								6																					
								7																					
								8																					
		SS 3		18		W 15		4-10-8-14 (18)		9								SP											
								10																					
End of Boring at 10.0 ft.																													
WATER LEVEL & CAVE-IN OBSERVATION DATA																													
		WATER ENCOUNTERED DURING DRILLING: 5.4ft.												CAVE - IN DEPTH AT COMPLETION: 7.4ft.										WET <input type="checkbox"/> DRY <input type="checkbox"/>					
		WATER LEVEL AT COMPLETION: NMR												CAVE - IN DEPTH AFTER 0 HOURS: NMR										WET <input type="checkbox"/> DRY <input type="checkbox"/>					
NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected. 2) NE = Not Encountered; NMR = No Measurement Recorded																													

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WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

BORING ID: MP236

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 400508.2		EASTING: 603069.176							
DATE STARTED: 12/01/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 12/01/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 2402+00STH60C		OFFSET 25' Lt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		12" TOPSOIL						HSA	
SS 1	15	M 23	1-2-2-4 (4)	2		SILTY CLAY, reddish brown, moist, little sand, stiff	CL	1.5					
SS 2	15	M 29	1-2-2-3 (4)	4		SILTY CLAY, brown, moist, trace sand, medium		0.75					
				5			CL						
				6									
				7									
				8									
SS 3	7	M 19	3-9-8-12 (17)	9		Very stiff		3.3					
				10									

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

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WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

BORING ID: MP237

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:	
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 400610.218		EASTING: 603040.589	
DATE STARTED: 1/28/15		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS			
DATE COMPLETED: 1/28/15		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION:		NA	
STATION 2403+00STH60C		OFFSET 51' Lt		TOWNSHIP:		RANGE:		SECTION:	
				1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	


SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		36" TOPSOIL						HSA	
SS 1	3	M 30	1-4-2-3 (6)	2									
				3		3.0							
SS 2	10	M 28	3-3-3-3 (6)	4		CLAYEY SAND, reddish brown, moist, loose							
				5									
				6			SC						
				7									
				8									
SS 3	5	M 15	6-7-5-9 (12)	9		Medium dense							
				10		10.0							

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>





NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704	WISDOT PROJECT ID: 1229-04-01				BORING ID: MP238		
	WISDOT STRUCTURE ID:				PAGE NO: 1 of 1		
WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:	LONGITUDE:
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 400805.249	EASTING: 603125.129
DATE STARTED: 12/01/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS	
DATE COMPLETED: 12/01/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM: VERTICAL DATUM:	
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA	
STATION 2405+00STH60C		OFFSET 12' Rt		TOWNSHIP:	RANGE:	SECTION:	1/4 SECTION: 1/4 1/4 SECTION: SURFACE ELEVATION:

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
						12" TOPSOIL						HSA	
SS 1	4	M 16	1-3-2-5 (5)	1		1.0 SILTY CLAY, reddish brown, moist, POSSIBLE FILL, medium	CL						
SS 2 SS 2A	12	M 28 M 19	2-4-4-5 (8)	2		3.5 SILTY CLAY, dark brown to black, moist, little sand, very stiff	CL	3.8 2.8					
				3									
				4									
				5									
				6									
				7									
SS 4	22	M 17	5-12-8-17 (20)	8		8.0 SILTY CLAY TO CLAYEY SILT, brown, moist, trace sand, hard	CL	4.5					
				9									
				10		10.0							

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

J:\COUNTIES\OZAUKEE\1229-04-01 - I-43 - SILVERSPRING DR TO 5TH 60GINT\1229-04-01 OZAUKEE CO.GPJ 143 8/21/15



WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

BORING ID: MP239

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 401005.629		EASTING: 603125.484							
DATE STARTED: 12/01/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 12/01/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 2407+00STH60C		OFFSET 0		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	

SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		14" TOPSOIL						HSA	
SS 1 SS 1A	9	M 7 M 16	4-2-2-4 (4)	2		SILTY CLAY, light brown, moist, very stiff		3.0					
SS 2	16	M 21	3-6-2-6 (8)	4		Silt lenses		3.27					
				5			CL						
				6									
				7									
SS 3	24	M 21	4-7-5-8 (12)	9		Gray, trace gravel		2.25					
				10									

End of Boring at 10.0 ft.

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

J:\COUNTIES\OZAUKEE\1229-04-01-1-43-SILVERSPRING DR TO STH 60\GINT\1229-04-01 OZAUKEE CO.GPJ 143 8/21/15



WI Dept. of Transportation
3502 Kinsman Blvd.
Madison, WI 53704

WISDOT PROJECT ID: 1229-04-01

BORING ID: MP240

WISDOT STRUCTURE ID:

PAGE NO: 1 of 1

WISDOT PROJECT NAME: I-43		CONSULTANT:		CONSULTANT PROJECT NO:		LATITUDE:		LONGITUDE:							
ROADWAY NAME:		DRILLING CONTRACTOR: AET		DRILLING CONTRACTOR PROJECT NO:		NORTHING: 401205.478		EASTING: 603139.219							
DATE STARTED: 12/01/14		CREW CHIEF: MD		DRILL RIG:		COORDINATE SYSTEM: WCCS									
DATE COMPLETED: 12/01/14		LOGGED BY: AET		HOLE SIZE: 4 in		HORIZONTAL DATUM:		VERTICAL DATUM:							
COUNTY: Ozaukee		LOG QC BY: C. Wierzchowski		HAMMER TYPE:		STREAMBED ELEVATION: NA									
STATION 2409+00STH60C		OFFSET 8' Rt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:	


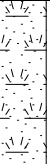











SAMPLE TYPE NUMBER	RECOVERY (in) (RQD)	Moisture	BLOW COUNTS (N VALUE)	Depth (ft)	Graphic	Soil / Rock Description and Geological Origin for Each Major Unit / Comments	USCS / AASHTO	Strength Qp (tsf)	Liquid Limit (%)	Plasticity Index (%)	Boulders	Drilling Method	Notes
				1		16" TOPSOIL						HSA	
SS 1 SS 1A	12	M 33 M 20	4-2-2-3 (4)	2		1.3 SILTY CLAY, brown, moist, trace sand, very stiff		3.3					
SS 2	17	M 20	3-5-4-7 (9)	4		Hard		4.3					
				5			CL						
				6									
				7									
SS 3	23	M 21	4-7-5-7 (12)	9		Gray/brown, very stiff		3.0					
				10		End of Boring at 10.0 ft.							

WATER LEVEL & CAVE-IN OBSERVATION DATA

	WATER ENCOUNTERED DURING DRILLING: NE		CAVE - IN DEPTH AT COMPLETION: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>
	WATER LEVEL AT COMPLETION: NMR		CAVE - IN DEPTH AFTER 0 HOURS: NMR	WET <input type="checkbox"/> DRY <input type="checkbox"/>

NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected.
2) NE = Not Encountered; NMR = No Measurement Recorded

J:\COUNTIES\OZAUKEE\1229-04-01-1-43-SILVERSPRING DR TO STH 60\GINT\1229-04-01 OZAUKEE CO.GPJ 143 8/21/15

 WI Dept. of Transportation 3502 Kinsman Blvd. Madison, WI 53704				WISDOT PROJECT ID: 1229-04-01				BORING ID: MP241																							
				WISDOT STRUCTURE ID:				PAGE NO: 1 of 1																							
WISDOT PROJECT NAME: I-43				CONSULTANT:				CONSULTANT PROJECT NO:				LATITUDE:		LONGITUDE:																	
ROADWAY NAME:				DRILLING CONTRACTOR: AET				DRILLING CONTRACTOR PROJECT NO:				NORTHING: 401280.61		EASTING: 603139.079																	
DATE STARTED: 12/01/14				CREW CHIEF: MD				DRILL RIG:				COORDINATE SYSTEM: WCCS																			
DATE COMPLETED: 12/01/14				LOGGED BY: AET				HOLE SIZE: 4 in				HORIZONTAL DATUM:		VERTICAL DATUM:																	
COUNTY: Ozaukee				LOG QC BY: C. Wierzchowski				HAMMER TYPE:				STREAMBED ELEVATION: NA																			
STATION 2409+75STH60C		OFFSET 8' Rt		TOWNSHIP:		RANGE:		SECTION:		1/4 SECTION:		1/4 1/4 SECTION:		SURFACE ELEVATION:																	
SAMPLE TYPE NUMBER		RECOVERY (in) (RQD)		Moisture		BLOW COUNTS (N VALUE)		Depth (ft)		Graphic		Soil / Rock Description and Geological Origin for Each Major Unit / Comments				USCS / AASHTO		Strength Qp (tsf)		Liquid Limit (%)		Plasticity Index (%)		Boulders		Drilling Method		Notes			
								1				16" TOPSOIL												HSA							
		SS 1 SS 1A		14		M 7 M 25		2				1.3 MEDIUM TO COARSE SAND, brown, moist, trace gravel & silt, POSSIBLE FILL, loose				SP															
		SS 2		19		M 21		3				3.0 CLAYEY SILT, brown, moist, trace sand, very stiff																			
								4										3.25													
								5								CL-ML															
								6																							
								7																							
		SS 3		16		W 12		8				8.0 FINE SAND, gray, moist, trace silt, loose				SP															
								9																							
								10				10.0																			
End of Boring at 10.0 ft.																															
WATER LEVEL & CAVE-IN OBSERVATION DATA																															
		WATER ENCOUNTERED DURING DRILLING: 6.8ft.														CAVE - IN DEPTH AT COMPLETION: 7.3ft.												WET <input type="checkbox"/>		DRY <input type="checkbox"/>	
		WATER LEVEL AT COMPLETION: NMR														CAVE - IN DEPTH AFTER 0 HOURS: NMR												WET <input type="checkbox"/>		DRY <input type="checkbox"/>	
NOTES: 1) Stratification lines between soil types represent the approximate boundary; gradual transition between in-situ soil layers should be expected. 2) NE = Not Encountered; NMR = No Measurement Recorded																															

J:\COUNTIES\OZAUKEE\1229-04-01-143-SILVERSPRING DR TO 5TH 60GINT\1229-04-01 OZAUKEE CO.GPJ 143 8/21/15

Appendix C

Laboratory Testing

LIQUID LIMIT, PLASTIC LIMIT & LOSS ON IGNITION OF SOILS

SAMPLE DESCRIPTION

Project ID: 1229-04-01 Date: 10/11/14

Road: I-43 (Mainline) Limits: N Milwaukee County Line to STH 60

Station: 1342+00 Location: 30' Rt Grd. Elev:

Boring No: 33 Sample No. 3 Depth: 8

Spliced By: AET Tested By: TLP Nat. Mois: 19%

Soil Classification: Brown Silty Clay, Trace Sand

LIQUID LIMIT & PLASTIC LIMIT

LIQUID LIMIT, LL (AASHTO-T-89), Falling cup, 100 gr of P40 Material

PLASTIC LIMIT, PL (AASHTO-T-90), 1/8TH" Thread, 8gr of P40 Material

TEST	LIQUID LIMIT, LL			PLASTIC LIMIT, PL	
TRIAL NO.:	1	2	3	1	2
DISH NO.:	11	15	19	21	28
DISH & WET SOIL	31.15	31.31	29.94	20.17	19.97
-DISH & DRY SOIL	27.11	27.42	26.48	19.49	19.31
=WT. OF WATER (A)	4.04	3.89	3.46	0.68	0.66
DISH & DRY SOIL	27.11	27.42	26.48	19.49	19.31
-WT. OF DISH	14.48	14.49	14.61	14.71	14.43
=WT. OF DRY SOIL (B)	12.63	12.93	11.87	4.78	4.88
(A)					
MOIST = — X 100	31.99	30.09	29.15	14.23	13.52
(B)					
NO. OF BLOWS	20	20	35		
formula:I	1.03	1.03	0.96		
LIQUID LIMIT, LL	31.10	29.25	30.50		
	AVG LIQUID LIMIT		30.28	AVG PL	13.88
PLASTICITY INDEX, PI = LL-PL			16.40		

LOSS ON IGNITION, LOI.

Weigh 3.00gr of oven-dried soil passing the #10 sieve

TRIAL NO.	1	2	3	4
CRUCIBLE NO:				
WT. CRUCIBLE & OVEN DRIED SOIL				
- WT. CRUCIBLE & IGNITED SOIL				
= WT. LOST				
WT. LOST				
LOSS ON IGNITION = $\frac{\text{WT. LOST}}{3.00 \text{ Grm}} \times 100$				

LIQUID LIMIT, PLASTIC LIMIT & LOSS ON IGNITION OF SOILS

SAMPLE DESCRIPTION

Project ID: 1229-04-01 Date: 03/10/15

Road: I-43 (Mainline) Limits: N Milwaukee County Line to STH 60

Station: 2010+00 Location: 0 Grd. Elev:

Boring No: 38 Sample No. 2 Depth: 3'

Spliced By: AET Tested By: TLP Nat. Mois: 16%

Soil Classification: Brown Silty Clay, trace fine Sand & Gravel, POSSIBLE FILL

LIQUID LIMIT & PLASTIC LIMIT

LIQUID LIMIT, LL (AASHTO-T-89), Falling cup, 100 gr of P40 Material

PLASTIC LIMIT, PL (AASHTO-T-90), 1/8TH" Thread, 8gr of P40 Material

TEST	LIQUID LIMIT, LL			PLASTIC LIMIT, PL	
TRIAL NO.:	1	2	3	1	2
DISH NO.:	1	18	23	26	31
DISH & WET SOIL	29.05	26.28	24.81	19.09	18.61
-DISH & DRY SOIL	25.35	23.39	22.38	18.53	18.11
=WT. OF WATER (A)	3.70	2.89	2.43	0.56	0.50
DISH & DRY SOIL	25.35	23.39	22.38	18.53	18.11
-WT. OF DISH	14.76	14.64	14.54	14.70	14.64
=WT. OF DRY SOIL (B)	10.59	8.75	7.84	3.83	3.47
(A)					
MOIST = — X 100	34.94	33.03	30.99	14.62	14.41
(B)					
NO. OF BLOWS	20	30	35		
formula: I	1.03	0.98	0.96		
LIQUID LIMIT, LL	33.96	33.85	32.43		
	AVG LIQUID LIMIT		33.41	AVG PL	14.52
PLASTICITY INDEX, PI = LL-PL			18.90		

LOSS ON IGNITION, LOI

Weigh 3.00gr of oven-dried soil passing the #10 sieve

TRIAL NO.	1	2	3	4
CRUCIBLE NO:				
WT. CRUCIBLE & OVEN DRIED SOIL				
- WT. CRUCIBLE & IGNITED SOIL				
= WT. LOST				
WT. LOST				
LOSS ON IGNITION = $\frac{\text{WT. LOST}}{3.00 \text{ Grm}} \times 100$				

LIQUID LIMIT, PLASTIC LIMIT & LOSS ON IGNITION OF SOILS

SAMPLE DESCRIPTION

Project ID: 1229-04-01 Date: 03/10/15

Road: I-43 (Mainline) Limits: N Milwaukee County Line to STH 60

Station: 2070+00 Location: 9' Lt Grd. Elev:

Boring No: 44 Sample No. 1 Depth: 1

Spliced By: AET Tested By: TLP Nat. Mois: 4%

Soil Classification: Brown Silty Clay

LIQUID LIMIT & PLASTIC LIMIT

LIQUID LIMIT, LL (AASHTO-T-89), Falling cup, 100 gr of P40 Material

PLASTIC LIMIT, PL (AASHTO-T-90), 1/8TH" Thread, 8gr of P40 Material

TEST	LIQUID LIMIT, LL			PLASTIC LIMIT, PL	
TRIAL NO.:	1	2	3	1	2
DISH NO.:	12	15	22	28	30
DISH & WET SOIL	28.98	31.30	28.08	19.31	19.98
-DISH & DRY SOIL	24.92	26.59	24.46	18.61	19.21
=WT. OF WATER (A)	4.06	4.71	3.62	0.70	0.77
DISH & DRY SOIL	24.92	26.59	24.46	18.61	19.21
-WT. OF DISH	14.58	14.50	14.59	14.43	14.59
=WT. OF DRY SOIL (B)	10.34	12.09	9.87	4.18	4.62
(A)					
MOIST = — X 100	39.26	38.96	36.68	16.75	16.67
(B)					
NO. OF BLOWS	20	25	35		
formula:I	1.03	1.00	0.96		
LIQUID LIMIT, LL	38.17	38.97	38.37		
	AVG LIQUID LIMIT		38.51	AVG PL	16.71
PLASTICITY INDEX, PI = LL-PL			21.80		

LOSS ON IGNITION, LOI

Weigh 3.00gr of oven-dried soil passing the #10 sieve

TRIAL NO.	1	2	3	4
CRUCIBLE NO:				
WT. CRUCIBLE & OVEN DRIED SOIL				
- WT. CRUCIBLE & IGNITED SOIL				
= WT. LOST				
WT. LOST				
LOSS ON IGNITION = $\frac{\text{WT. LOST}}{3.00 \text{ Grm}} \times 100$				

LIQUID LIMIT, PLASTIC LIMIT & LOSS ON IGNITION OF SOILS

SAMPLE DESCRIPTION

Project ID: 1229-04-01 Date: 03/10/15

Road: I-43 (Mainline) Limits: N Milwaukee County Line to STH 60

Station: 2080+00 Location: 0 Grd. Elev:

Boring No: 45 Sample No. 3 Depth: 8'

Spliced By: AET Tested By: TLP Nat. Mois: 17%

Soil Classification: Light brown mottled Silty Clay to Clayey Silt, trace fine Sand

LIQUID LIMIT & PLASTIC LIMIT

LIQUID LIMIT, LL (AASHTO-T-89), Falling cup, 100 gr of P40 Material

PLASTIC LIMIT, PL (AASHTO-T-90), 1/8TH" Thread, 8gr of P40 Material

TEST	LIQUID LIMIT, LL			PLASTIC LIMIT, PL	
TRIAL NO.:	1	2	3	1	2
DISH NO.:	7	11	19	32	35
DISH & WET SOIL	33.30	32.79	26.12	19.73	20.33
-DISH & DRY SOIL	29.15	28.91	23.88	19.15	19.67
=WT. OF WATER (A)	4.15	3.88	2.24	0.58	0.66
DISH & DRY SOIL	29.15	28.91	23.88	19.15	19.67
-WT. OF DISH	14.59	14.49	14.60	14.43	14.47
=WT. OF DRY SOIL (B)	14.56	14.42	9.28	4.72	5.20
(A)					
MOIST = — X 100	28.50	26.91	24.14	12.29	12.69
(B)					
NO. OF BLOWS	13	24	35		
formula: I	1.08	1.00	0.96		
LIQUID LIMIT, LL	26.27	26.77	25.25		
	AVG LIQUID LIMIT		26.10		
PLASTICITY INDEX, PI = LL-PL			13.61		

LOSS ON IGNITION, LOI.

Weigh 3.00gr of oven-dried soil passing the #10 sieve

TRIAL NO.	1	2	3	4
CRUCIBLE NO:				
WT. CRUCIBLE & OVEN DRIED SOIL				
- WT. CRUCIBLE & IGNITED SOIL				
= WT. LOST				
WT. LOST				
LOSS ON IGNITION = $\frac{\text{WT. LOST}}{3.00 \text{ Grm}} \times 100$				

LIQUID LIMIT, PLASTIC LIMIT & LOSS ON IGNITION OF SOILS

SAMPLE DESCRIPTION

Project ID: 1229-04-01 Date: 03/10/15

Road: I-43 (Mainline) Limits: N Milwaukee County Line to STH 60

Station: 2170-00 Location: 20' Lt Grd. Elev:

Boring No: 54 Sample No. 3 Depth: 8'

Spliced By: AET Tested By: TLP Nat. Mois: 16%

Soil Classification: Brown-light brown mottled Silty Clay, trace Sand & Gravel

LIQUID LIMIT & PLASTIC LIMIT

LIQUID LIMIT, LL (AASHTO-T-89), Falling cup, 100 gr of P40 Material

PLASTIC LIMIT, PL (AASHTO-T-90), 1/8TH" Thread, 8gr of P40 Material

TEST	LIQUID LIMIT, LL			PLASTIC LIMIT, PL	
TRIAL NO.:	1	2	3	1	2
DISH NO.:	9	14	16	33	36
DISH & WET SOIL	30.35	29.00	33.37	19.95	19.43
-DISH & DRY SOIL	26.21	25.22	28.52	19.28	18.79
=WT. OF WATER (A)	4.14	3.78	4.85	0.67	0.64
DISH & DRY SOIL	26.21	25.22	28.52	19.28	18.79
-WT. OF DISH	14.71	14.54	14.58	14.62	14.46
=WT. OF DRY SOIL (B)	11.50	10.68	13.94	4.66	4.33
(A)					
MOIST = — X 100	36.00	35.39	34.79	14.38	14.78
(B)					
NO. OF BLOWS	20	25	35		
formula: I	1.03	1.00	0.96		
LIQUID LIMIT, LL	35.00	35.41	36.40		
	AVG LIQUID LIMIT		35.60		
PLASTICITY INDEX, PI = LL-PL			21.02		

LOSS ON IGNITION, LOI.

Weigh 3.00gr of oven-dried soil passing the #10 sieve

TRIAL NO.	1	2	3	4
CRUCIBLE NO:				
WT. CRUCIBLE & OVEN DRIED SOIL				
- WT. CRUCIBLE & IGNITED SOIL				
= WT. LOST				
WT. LOST				
LOSS ON IGNITION = $\frac{\text{WT. LOST}}{3.00 \text{ Grm}} \times 100$				

LIQUID LIMIT, PLASTIC LIMIT & LOSS ON IGNITION OF SOILS

SAMPLE DESCRIPTION

Project ID: 1229-04-01 Date: 03/10/15

Road: I-43 (Mainline) Limits: N Milwaukee County Line to STH 60

Station: 2290+00 Location: 0 Grd. Elev:

Boring No: 66 Sample No. 3 Depth: 8'

Spliced By: AET Tested By: TLP Nat. Mois: 16%

Soil Classification: Gray brown mottled Silty Clay, trace Sand

LIQUID LIMIT & PLASTIC LIMIT

LIQUID LIMIT, LL (AASHTO-T-89), Falling cup, 100 gr of P40 Material

PLASTIC LIMIT, PL (AASHTO-T-90), 1/8TH" Thread, 8gr of P40 Material

TEST	LIQUID LIMIT, LL			PLASTIC LIMIT, PL	
TRIAL NO.:	1	2	3	1	2
DISH NO.:	4	6	10	27	34
DISH & WET SOIL	32.75	25.14	30.39	18.37	18.05
-DISH & DRY SOIL	27.92	22.38	26.35	17.93	17.54
=WT. OF WATER (A)	4.83	2.76	4.04	0.44	0.51
DISH & DRY SOIL	27.92	22.38	26.35	17.93	17.54
-WT. OF DISH	14.67	14.65	14.72	14.67	13.95
=WT. OF DRY SOIL (B)	13.25	7.73	11.63	3.26	3.59
(A)					
MOIST = — X 100	36.45	35.71	34.74	13.50	14.21
(B)					
NO. OF BLOWS	20	25	30		
formula: $\frac{L}{100} = \frac{25 - N}{70 - 10}$	1.03	1.00	0.98		
LIQUID LIMIT, LL	35.44	35.72	35.60		
	AVG LIQUID LIMIT		35.58	AVG PL	13.85
PLASTICITY INDEX, PI = LL-PL			21.73		

LOSS ON IGNITION, LOI.

Weigh 3.00gr of oven-dried soil passing the #10 sieve

TRIAL NO.	1	2	3	4
CRUCIBLE NO:				
WT. CRUCIBLE & OVEN DRIED SOIL				
- WT. CRUCIBLE & IGNITED SOIL				
= WT. LOST				
WT. LOST				
LOSS ON IGNITION = $\frac{\text{WT. LOST}}{3.00 \text{ Grm}} \times 100$				

LIQUID LIMIT, PLASTIC LIMIT & LOSS ON IGNITION OF SOILS

SAMPLE DESCRIPTION

Project ID: 1229-04-01 Date: 03/11/15

Road: I-43 (Mainline) Limits: N Milwaukee County Line to STH 60

Station: 2400+00 Location: 0 Grd. Elev:

Boring No: 77 Sample No. 2 Depth: 3'

Spliced By: AET Tested By: TLP Nat. Mois: 22%

Soil Classification: Brown Silty Clay, trace Sand

LIQUID LIMIT & PLASTIC LIMIT

LIQUID LIMIT, LL (AASHTO-T-89), Falling cup, 100 gr of P40 Material

PLASTIC LIMIT, PL (AASHTO-T-90), 1/8TH" Thread, 8gr of P40 Material

TEST	LIQUID LIMIT, LL			PLASTIC LIMIT, PL	
TRIAL NO.:	1	2	3	1	2
DISH NO.:	32	33	34	35	36
DISH & WET SOIL	31.75	33.18	29.63	18.47	18.83
-DISH & DRY SOIL	26.79	28.08	25.47	17.96	18.27
=WT. OF WATER (A)	4.96	5.10	4.16	0.51	0.56
DISH & DRY SOIL	26.79	28.08	25.47	17.96	18.27
-WT. OF DISH	14.43	14.62	13.96	14.47	14.46
=WT. OF DRY SOIL (B)	12.36	13.46	11.51	3.49	3.81
(A)					
MOIST = — X 100	40.13	37.89	36.14	14.61	14.70
(B)					
NO. OF BLOWS	16	25	33		
formula: I	1.06	1.00	0.96		
LIQUID LIMIT, LL	37.94	37.90	37.51		
	AVG LIQUID LIMIT		37.79		
PLASTICITY INDEX, PI = LL-PL			23.13		

LOSS ON IGNITION, LOI.

Weigh 3.00gr of oven-dried soil passing the #10 sieve

TRIAL NO.	1	2	3	4
CRUCIBLE NO:				
WT. CRUCIBLE & OVEN DRIED SOIL				
- WT. CRUCIBLE & IGNITED SOIL				
= WT. LOST				
WT. LOST				
LOSS ON IGNITION = $\frac{\text{WT. LOST}}{3.00 \text{ Grm}} \times 100$				

LIQUID LIMIT, PLASTIC LIMIT & LOSS ON IGNITION OF SOILS

SAMPLE DESCRIPTION

Project ID: 1229-04-01 Date: 03/18/15

Road: I-43 (Side Roads) Limits: N Milwaukee County Line to STH 60

Station: 337+00 Location: 15' Lt Grd. Elev:

Boring No: SR46 Sample No. 3 Depth: 8'

Spliced By: AET Tested By: TLP Nat. Mois: 20%

Soil Classification: Brown mottled Silty Clay, trace Sand & Gravel, very stiff

LIQUID LIMIT & PLASTIC LIMIT

LIQUID LIMIT, LL (AASHTO-T-89), Falling cup, 100 gr of P40 Material

PLASTIC LIMIT, PL (AASHTO-T-90), 1/8TH" Thread, 8gr of P40 Material

TEST	LIQUID LIMIT, LL			PLASTIC LIMIT, PL	
TRIAL NO.:	1	2	3	1	2
DISH NO.:	34	27	15	11	10
DISH & WET SOIL	32.42	31.90	29.53	19.27	20.15
-DISH & DRY SOIL	27.38	27.32	25.74	18.65	19.47
=WT. OF WATER (A)	5.04	4.58	3.79	0.62	0.68
DISH & DRY SOIL	27.38	27.32	25.74	18.65	19.47
-WT. OF DISH	13.95	14.67	14.51	14.50	14.73
=WT. OF DRY SOIL (B)	13.43	12.65	11.23	4.15	4.74
(A)					
MOIST = — X 100	37.53	36.21	33.75	14.94	14.35
(B)					
NO. OF BLOWS	20	27	35		
formula: I	1.03	0.99	0.96		
LIQUID LIMIT, LL	36.48	36.59	35.31		
	AVG LIQUID LIMIT		36.13	AVG PL	14.64
PLASTICITY INDEX, PI = LL-PL			21.48		

LOSS ON IGNITION, LOI

Weigh 3.00gr of oven-dried soil passing the #10 sieve

TRIAL NO.	1	2	3	4
CRUCIBLE NO:				
WT. CRUCIBLE & OVEN DRIED SOIL				
- WT. CRUCIBLE & IGNITED SOIL				
= WT. LOST				
WT. LOST				
LOSS ON IGNITION = $\frac{\text{WT. LOST}}{3.00 \text{ Grm}} \times 100$				

LIQUID LIMIT, PLASTIC LIMIT & LOSS ON IGNITION OF SOILS

SAMPLE DESCRIPTION

Project ID: 1229-04-01 Date: 03/18/15

Road: I-43 (Side Roads) Limits: N Milwaukee County Line to STH 60

Station: 1339+02 Location: 17' Rt Grd. Elev:

Boring No: SR53 Sample No. 4 Depth: 8

Spliced By: AET Tested By: TLP Nat. Mois: 13%

Soil Classification: Brown Clayey Silt, trace fine Sand & Gravel, very stiff

LIQUID LIMIT & PLASTIC LIMIT

LIQUID LIMIT, LL (AASHTO-T-89), Falling cup, 100 gr of P40 Material

PLASTIC LIMIT, PL (AASHTO-T-90), 1/8TH" Thread, 8gr of P40 Material

TEST	LIQUID LIMIT, LL			PLASTIC LIMIT, PL	
TRIAL NO.:	1	2	3	1	2
DISH NO.:	12	9	6	4	1
DISH & WET SOIL	30.33	31.57	34.92	20.93	20.75
-DISH & DRY SOIL	27.81	28.93	31.83	20.28	20.11
=WT. OF WATER (A)	2.52	2.64	3.09	0.65	0.64
DISH & DRY SOIL	27.81	28.93	31.83	20.28	20.11
-WT. OF DISH	14.59	14.72	14.65	14.69	14.77
=WT. OF DRY SOIL (B)	13.22	14.21	17.18	5.59	5.34
(A)					
MOIST = — X 100	19.06	18.58	17.99	11.63	11.99
(B)					
NO. OF BLOWS	20	25	35		
formula:I	1.03	1.00	0.96		
LIQUID LIMIT, LL	18.53	18.59	18.82		
	AVG LIQUID LIMIT		18.64	AVG PL	11.81
PLASTICITY INDEX, PI = LL-PL			6.84		

LOSS ON IGNITION, LOI.

Weigh 3.00gr of oven-dried soil passing the #10 sieve

TRIAL NO.	1	2	3	4
CRUCIBLE NO:				
WT. CRUCIBLE & OVEN DRIED SOIL				
- WT. CRUCIBLE & IGNITED SOIL				
= WT. LOST				
WT. LOST				
LOSS ON IGNITION = $\frac{\text{WT. LOST}}{3.00 \text{ Grm}} \times 100$				

LIQUID LIMIT, PLASTIC LIMIT & LOSS ON IGNITION OF SOILS

SAMPLE DESCRIPTION

Project ID: 1229-04-01 Date: 03/18/15

Road: I-43 (Side Roads) Limits: N Milwaukee County Line to STH 60

Station: 1339+02 Location: 17' Rt Grd. Elev:

Boring No: SR53 Sample No. 5 Depth: 13

Spliced By: AET Tested By: TLP Nat. Mois: 22%

Soil Classification: Gray Silty Clay, trace Gravel, very stiff

LIQUID LIMIT & PLASTIC LIMIT

LIQUID LIMIT, LL (AASHTO-T-89), Falling cup, 100 gr of P40 Material

PLASTIC LIMIT, PL (AASHTO-T-90), 1/8TH" Thread, 8gr of P40 Material

TEST	LIQUID LIMIT, LL			PLASTIC LIMIT, PL	
TRIAL NO.:	1	2	3	1	2
DISH NO.:	20	17	13	5	3
DISH & WET SOIL	32.50	30.94	30.00	19.91	19.82
-DISH & DRY SOIL	27.78	26.80	26.24	19.25	19.17
=WT. OF WATER (A)	4.72	4.14	3.76	0.66	0.65
DISH & DRY SOIL	27.78	26.80	26.24	19.25	19.17
-WT. OF DISH	14.59	14.60	14.78	14.72	14.65
=WT. OF DRY SOIL (B)	13.19	12.20	11.46	4.53	4.52
(A)					
MOIST = — X 100	35.78	33.93	32.81	14.57	14.38
(B)					
NO. OF BLOWS	20	27	35		
formula:I	1.03	0.99	0.96		
LIQUID LIMIT, LL	34.79	34.29	34.33		
	AVG LIQUID LIMIT		34.47	AVG PL	14.48
PLASTICITY INDEX, PI = LL-PL			19.99		

LOSS ON IGNITION, LOI.

Weigh 3.00gr of oven-dried soil passing the #10 sieve

TRIAL NO.	1	2	3	4
CRUCIBLE NO:				
WT. CRUCIBLE & OVEN DRIED SOIL				
- WT. CRUCIBLE & IGNITED SOIL				
= WT. LOST				
WT. LOST				
LOSS ON IGNITION = $\frac{\text{WT. LOST}}{3.00 \text{ Grm}} \times 100$				

LIQUID LIMIT, PLASTIC LIMIT & LOSS ON IGNITION OF SOILS

SAMPLE DESCRIPTION

Project ID: 1229-04-01 Date: 03/18/15

Road: I-43 (Side Roads) Limits: N Milwaukee County Line to STH 60

Station: 1343+56 Location: 20' Rt Grd. Elev: _____

Boring No: SR54 Sample No. 6 Depth: 18'

Spliced By: AET Tested By: TLP Nat. Mois: 19%

Soil Classification: Gray/Brown Silty Clay, trace Gravel, very stiff

LIQUID LIMIT & PLASTIC LIMIT

LIQUID LIMIT, LL (AASHTO-T-89), Falling cup, 100 gr of P40 Material

PLASTIC LIMIT, PL (AASHTO-T-90), 1/8TH" Thread, 8gr of P40 Material

TEST	LIQUID LIMIT, LL			PLASTIC LIMIT, PL	
TRIAL NO.:	1	2	3	1	2
DISH NO.:	29	25	21	8	2
DISH & WET SOIL	30.07	29.73	28.56	19.34	19.36
-DISH & DRY SOIL	25.98	25.82	25.03	18.75	18.75
=WT. OF WATER (A)	4.09	3.91	3.53	0.59	0.61
DISH & DRY SOIL	25.98	25.82	25.03	18.75	18.75
-WT. OF DISH	14.62	14.61	14.71	14.77	14.64
=WT. OF DRY SOIL (B)	11.36	11.21	10.32	3.98	4.11
(A)					
MOIST = — X 100	36.00	34.88	34.21	14.82	14.84
(B)					
NO. OF BLOWS	19	25	35		
formula: I	1.04	1.00	0.96		
LIQUID LIMIT, LL	34.77	34.89	35.79		
	AVG LIQUID LIMIT		35.15		
PLASTICITY INDEX, PI = LL-PL			20.32		

LOSS ON IGNITION, LOI.

Weigh 3.00gr of oven-dried soil passing the #10 sieve

TRIAL NO.	1	2	3	4
CRUCIBLE NO:				
WT. CRUCIBLE & OVEN DRIED SOIL				
- WT. CRUCIBLE & IGNITED SOIL				
= WT. LOST				
WT. LOST				
LOSS ON IGNITION = $\frac{\text{WT. LOST}}{3.00 \text{ Grm}} \times 100$				

LIQUID LIMIT, PLASTIC LIMIT & LOSS ON IGNITION OF SOILS

SAMPLE DESCRIPTION

Project ID: 1229-04-01 Date: 03/18/15

Road: I-43 (Side Roads) Limits: N Milwaukee County Line to STH 60

Station: 1348+50 Location: 0 Grd. Elev:

Boring No: SR55 Sample No. 2 Depth: 3

Spliced By: AET Tested By: TLP Nat. Mois: 19%

Soil Classification: Brown mottled Silty Clay, trace Gravel, very stiff

LIQUID LIMIT & PLASTIC LIMIT

LIQUID LIMIT, LL (AASHTO-T-89), Falling cup, 100 gr of P40 Material

PLASTIC LIMIT, PL (AASHTO-T-90), 1/8TH" Thread, 8gr of P40 Material

TEST	LIQUID LIMIT, LL			PLASTIC LIMIT, PL	
TRIAL NO.:	1	2	3	1	2
DISH NO.:	1	5	R	B1	K
DISH & WET SOIL	26.78	28.74	24.97	16.27	16.82
-DISH & DRY SOIL	22.46	24.06	21.37	15.56	16.06
=WT. OF WATER (A)	4.32	4.68	3.60	0.71	0.76
DISH & DRY SOIL	22.46	24.06	21.37	15.56	16.06
-WT. OF DISH	11.31	10.91	10.90	10.87	10.93
=WT. OF DRY SOIL (B)	11.15	13.15	10.47	4.69	5.13
(A)					
MOIST = — X 100	38.74	35.59	34.38	15.14	14.81
(B)					
NO. OF BLOWS	20	29	35		
formula: I	1.03	0.98	0.96		
LIQUID LIMIT, LL	37.66	36.31	35.97		
	AVG LIQUID LIMIT		36.65		
PLASTICITY INDEX, PI = LL-PL			21.67		

LOSS ON IGNITION, LOI.

Weigh 3.00gr of oven-dried soil passing the #10 sieve

TRIAL NO.	1	2	3	4
CRUCIBLE NO:				
WT. CRUCIBLE & OVEN DRIED SOIL				
- WT. CRUCIBLE & IGNITED SOIL				
= WT. LOST				
WT. LOST				
LOSS ON IGNITION = $\frac{\text{WT. LOST}}{3.00 \text{ Grm}} \times 100$				

LIQUID LIMIT, PLASTIC LIMIT & LOSS ON IGNITION OF SOILS

SAMPLE DESCRIPTION

Project ID: 1229-04-01 Date: 03/19/15

Road: I-43 (Side Roads) Limits: N Milwaukee County Line to STH 60

Station: 1320+00 Location: 20' Rt Grd. Elev:

Boring No: SR56 Sample No. 3 Depth: 6'

Spliced By: AET Tested By: TLP Nat. Mois: 17%

Soil Classification: Brown Silty Clay, trace Sand & Gravel, Hard

LIQUID LIMIT & PLASTIC LIMIT

LIQUID LIMIT, LL (AASHTO-T-89), Falling cup, 100 gr of P40 Material

PLASTIC LIMIT, PL (AASHTO-T-90), 1/8TH" Thread, 8gr of P40 Material

TEST	LIQUID LIMIT, LL			PLASTIC LIMIT, PL	
TRIAL NO.:	1	2	3	1	2
DISH NO.:	1	5	B1	K	R
DISH & WET SOIL	26.80	25.70	24.94	15.23	16.17
-DISH & DRY SOIL	22.65	21.79	21.27	14.67	15.47
=WT. OF WATER (A)	4.15	3.91	3.67	0.56	0.70
DISH & DRY SOIL	22.65	21.79	21.27	14.67	15.47
-WT. OF DISH	11.32	10.91	10.87	10.95	10.92
=WT. OF DRY SOIL (B)	11.33	10.88	10.40	3.72	4.55
(A)					
MOIST = — X 100	36.63	35.94	35.29	15.05	15.38
(B)					
NO. OF BLOWS	20	25	34		
formula:I	1.03	1.00	0.96		
LIQUID LIMIT, LL	35.61	35.95	36.78		
	AVG LIQUID LIMIT		36.11	AVG PL	15.22
PLASTICITY INDEX, PI = LL-PL			20.89		

LOSS ON IGNITION, LOI.

Weigh 3.00gr of oven-dried soil passing the #10 sieve

TRIAL NO.	1	2	3	4
CRUCIBLE NO:				
WT. CRUCIBLE & OVEN DRIED SOIL				
- WT. CRUCIBLE & IGNITED SOIL				
= WT. LOST				
WT. LOST				
LOSS ON IGNITION = $\frac{\text{WT. LOST}}{3.00 \text{ Grm}} \times 100$				

LIQUID LIMIT, PLASTIC LIMIT & LOSS ON IGNITION OF SOILS

SAMPLE DESCRIPTION

Project ID: 1229-04-01 Date: 03/19/15

Road: I-43 (Side Roads) Limits: N Milwaukee County Line to STH 60

Station: 1325+00 Location: 20' Rt Grd. Elev:

Boring No: SR57 Sample No. 5 Depth: 11'

Spied By: AET Tested By: TLP Nat. Mois: 20%

Soil Classification: Gray Silty Clay, trace Gravel, stiff

LIQUID LIMIT & PLASTIC LIMIT

LIQUID LIMIT, LL (AASHTO-T-89), Falling cup, 100 gr of P40 Material

PLASTIC LIMIT, PL (AASHTO-T-90), 1/8TH" Thread, 8gr of P40 Material

TEST	LIQUID LIMIT, LL			PLASTIC LIMIT, PL	
TRIAL NO.:	1	2	3	1	2
DISH NO.:	29	28	23	8	3
DISH & WET SOIL	31.43	27.60	29.62	19.17	19.87
-DISH & DRY SOIL	26.91	24.20	25.88	18.62	19.22
=WT. OF WATER (A)	4.52	3.40	3.74	0.55	0.65
DISH & DRY SOIL	26.91	24.20	25.88	18.62	19.22
-WT. OF DISH	14.63	14.42	14.54	14.77	14.66
=WT. OF DRY SOIL (B)	12.28	9.78	11.34	3.85	4.56
(A)					
MOIST = — X 100	36.81	34.76	32.98	14.29	14.25
(B)					
NO. OF BLOWS	16	25	35		
formula:I	1.06	1.00	0.96		
LIQUID LIMIT, LL	34.80	34.78	34.51		
	AVG LIQUID LIMIT		34.69	AVG PL	14.27
PLASTICITY INDEX, PI = LL-PL			20.42		

LOSS ON IGNITION, LOI.

Weigh 3.00gr of oven-dried soil passing the #10 sieve

TRIAL NO.	1	2	3	4
CRUCIBLE NO:				
WT. CRUCIBLE & OVEN DRIED SOIL				
- WT. CRUCIBLE & IGNITED SOIL				
= WT. LOST				
WT. LOST				
LOSS ON IGNITION = $\frac{\text{WT. LOST}}{3.00 \text{ Grm}} \times 100$				

LIQUID LIMIT, PLASTIC LIMIT & LOSS ON IGNITION OF SOILS

SAMPLE DESCRIPTION

Project ID: 1229-04-01 Date: 03/19/15

Road: I-43 (Side Roads) Limits: N Milwaukee County Line to STH 60

Station: 1325+00 Location: 20' Rt Grd. Elev: _____

Boring No: SR57 Sample No. 6 Depth: 13'

Spliced By: AET Tested By: TLP Nat. Mois: 22%

Soil Classification: Gray Silty Clay, trace Gravel, stiff

LIQUID LIMIT & PLASTIC LIMIT

LIQUID LIMIT, LL (AASHTO-T-89), Falling cup, 100 gr of P40 Material

PLASTIC LIMIT, PL (AASHTO-T-90), 1/8TH" Thread, 8gr of P40 Material

TEST	LIQUID LIMIT, LL			PLASTIC LIMIT, PL	
TRIAL NO.:	1	2	3	1	2
DISH NO.:	35	34	33	2	1
DISH & WET SOIL	30.05	29.46	29.21	20.16	20.54
-DISH & DRY SOIL	25.86	25.47	25.61	19.46	19.83
=WT. OF WATER (A)	4.19	3.99	3.60	0.70	0.71
DISH & DRY SOIL	25.86	25.47	25.61	19.46	19.83
-WT. OF DISH	14.49	13.97	14.62	14.65	14.77
=WT. OF DRY SOIL (B)	11.37	11.50	10.99	4.81	5.06
(A)					
MOIST = — X 100	36.85	34.70	32.76	14.55	14.03
(B)					
NO. OF BLOWS	17	30	35		
formula:I	1.05	0.98	0.96		
LIQUID LIMIT, LL	35.10	35.55	34.27		
	AVG LIQUID LIMIT		34.98	AVG PL	14.29
PLASTICITY INDEX, PI = LL-PL			20.68		

LOSS ON IGNITION, LOI.

Weigh 3.00gr of oven-dried soil passing the #10 sieve

TRIAL NO.	1	2	3	4
CRUCIBLE NO:				
WT. CRUCIBLE & OVEN DRIED SOIL				
- WT. CRUCIBLE & IGNITED SOIL				
= WT. LOST				
WT. LOST				
LOSS ON IGNITION = $\frac{\text{WT. LOST}}{3.00 \text{ Grm}} \times 100$				

LIQUID LIMIT, PLASTIC LIMIT & LOSS ON IGNITION OF SOILS

SAMPLE DESCRIPTION

Project ID: 1229-04-01 Date: 03/19/15

Road: I-43 (Side Roads) Limits: N Milwaukee County Line to STH 60

Station: 1334+00 Location: 9' Rt Grd. Elev:

Boring No: SR59 Sample No. 3 Depth: 8'

Spliced By: AET Tested By: TLP Nat. Mois: 23%

Soil Classification: Gray Silty Clay, trace fine Gravel, stiff

LIQUID LIMIT & PLASTIC LIMIT

LIQUID LIMIT, LL (AASHTO-T-89), Falling cup, 100 gr of P40 Material

PLASTIC LIMIT, PL (AASHTO-T-90), 1/8TH" Thread, 8gr of P40 Material

TEST	LIQUID LIMIT, LL			PLASTIC LIMIT, PL	
TRIAL NO.:	1	2	3	1	2
DISH NO.:	36	27	26	13	12
DISH & WET SOIL	31.42	30.25	28.82	19.94	19.98
-DISH & DRY SOIL	26.86	26.15	25.20	19.29	19.31
=WT. OF WATER (A)	4.56	4.10	3.62	0.65	0.67
DISH & DRY SOIL	26.86	26.15	25.20	19.29	19.31
-WT. OF DISH	14.47	14.68	14.71	14.79	14.59
=WT. OF DRY SOIL (B)	12.39	11.47	10.49	4.50	4.72
(A)					
MOIST = — X 100	36.80	35.75	34.51	14.44	14.19
(B)					
NO. OF BLOWS	20	25	35		
formula: I	1.03	1.00	0.96		
LIQUID LIMIT, LL	35.78	35.76	36.11		
	AVG LIQUID LIMIT		35.88		
PLASTICITY INDEX, PI = LL-PL			21.56		

LOSS ON IGNITION, LOI.

Weigh 3.00gr of oven-dried soil passing the #10 sieve

TRIAL NO.	1	2	3	4
CRUCIBLE NO:				
WT. CRUCIBLE & OVEN DRIED SOIL				
- WT. CRUCIBLE & IGNITED SOIL				
= WT. LOST				
WT. LOST				
LOSS ON IGNITION = $\frac{\text{WT. LOST}}{3.00 \text{ Grm}} \times 100$				

LIQUID LIMIT, PLASTIC LIMIT & LOSS ON IGNITION OF SOILS

SAMPLE DESCRIPTION

Project ID: 1229-04-01 Date: 03/19/15

Road: I-43 (Side Roads) Limits: N Milwaukee County Line to STH 60

Station: 1343+00 Location: 7' Rt Grd. Elev:

Boring No: SR61 Sample No. 3 Depth: 8'

Spliced By: AET Tested By: TLP Nat. Mois: 19%

Soil Classification: Gray mottled Silty Clay, trace Gravel, very stiff

LIQUID LIMIT & PLASTIC LIMIT

LIQUID LIMIT, LL (AASHTO-T-89), Falling cup, 100 gr of P40 Material

PLASTIC LIMIT, PL (AASHTO-T-90), 1/8TH" Thread, 8gr of P40 Material

TEST	LIQUID LIMIT, LL			PLASTIC LIMIT, PL	
TRIAL NO.:	1	2	3	1	2
DISH NO.:	25	22	20	17	5
DISH & WET SOIL	31.85	30.12	33.23	20.54	20.76
-DISH & DRY SOIL	27.28	26.16	28.60	19.77	20.00
=WT. OF WATER (A)	4.57	3.96	4.63	0.77	0.76
DISH & DRY SOIL	27.28	26.16	28.60	19.77	20.00
-WT. OF DISH	14.61	14.60	14.61	14.62	14.74
=WT. OF DRY SOIL (B)	12.67	11.56	13.99	5.15	5.26
(A)					
MOIST = — X 100	36.07	34.26	33.10	14.95	14.45
(B)					
NO. OF BLOWS	20	30	34		
formula:I	1.03	0.98	0.96		
LIQUID LIMIT, LL	35.06	35.10	34.49		
	AVG LIQUID LIMIT		34.89	AVG PL	14.70
PLASTICITY INDEX, PI = LL-PL			20.19		

LOSS ON IGNITION, LOI

Weigh 3.00gr of oven-dried soil passing the #10 sieve

TRIAL NO.	1	2	3	4
CRUCIBLE NO:				
WT. CRUCIBLE & OVEN DRIED SOIL				
- WT. CRUCIBLE & IGNITED SOIL				
= WT. LOST				
WT. LOST				
LOSS ON IGNITION = $\frac{\text{WT. LOST}}{3.00 \text{ Grm}} \times 100$				

LIQUID LIMIT, PLASTIC LIMIT & LOSS ON IGNITION OF SOILS

SAMPLE DESCRIPTION

Project ID: 1229-04-01 Date: 03/20/15

Road: I-43 (Side Roads) Limits: N Milwaukee County Line to STH 60

Station: 23+00 Location: 35' Rt Grd. Elev:

Boring No: SR65 Sample No. 3 Depth: 8'

Spliced By: AET Tested By: TLP Nat. Mois: 21%

Soil Classification: Brown mottled Silty Clay to Clayey Silt, trace Gravel, very stiff

LIQUID LIMIT & PLASTIC LIMIT

LIQUID LIMIT, LL (AASHTO-T-89), Falling cup, 100 gr of P40 Material

PLASTIC LIMIT, PL (AASHTO-T-90), 1/8TH" Thread, 8gr of P40 Material

TEST	LIQUID LIMIT, LL			PLASTIC LIMIT, PL	
TRIAL NO.:	1	2	3	1	2
DISH NO.:	30	21	18	6	4
DISH & WET SOIL	30.51	27.87	27.51	19.18	19.09
-DISH & DRY SOIL	25.87	24.11	23.93	18.55	18.46
=WT. OF WATER (A)	4.64	3.76	3.58	0.63	0.63
DISH & DRY SOIL	25.87	24.11	23.93	18.55	18.46
-WT. OF DISH	14.60	14.71	14.64	14.66	14.67
=WT. OF DRY SOIL (B)	11.27	9.40	9.29	3.89	3.79
(A)					
MOIST = — X 100	41.17	40.00	38.54	16.20	16.62
(B)					
NO. OF BLOWS	17	30	35		
formula: I	1.05	0.98	0.96		
LIQUID LIMIT, LL	39.22	40.99	40.32		
	AVG LIQUID LIMIT		40.17		
PLASTICITY INDEX, PI = LL-PL			23.77		

LOSS ON IGNITION, LOI.

Weigh 3.00gr of oven-dried soil passing the #10 sieve

TRIAL NO.	1	2	3	4
CRUCIBLE NO:				
WT. CRUCIBLE & OVEN DRIED SOIL				
- WT. CRUCIBLE & IGNITED SOIL				
= WT. LOST				
WT. LOST				
LOSS ON IGNITION = $\frac{\text{WT. LOST}}{3.00 \text{ Grm}} \times 100$				

LIQUID LIMIT, PLASTIC LIMIT & LOSS ON IGNITION OF SOILS

SAMPLE DESCRIPTION

Project ID: 1229-04-01 Date: 03/20/15

Road: I-43 (Side Roads) Limits: N Milwaukee County Line to STH 60

Station: 2059+00 Location: 0 Grd. Elev: _____

Boring No: SR71 Sample No. 3 Depth: 8'

Spliced By: AET Tested By: TLP Nat. Mois: 17%

Soil Classification: Gray mottled Silty Clay, trace Gravel, very stiff

LIQUID LIMIT & PLASTIC LIMIT

LIQUID LIMIT, LL (AASHTO-T-89), Falling cup, 100 gr of P40 Material

PLASTIC LIMIT, PL (AASHTO-T-90), 1/8TH" Thread, 8gr of P40 Material

TEST	LIQUID LIMIT, LL			PLASTIC LIMIT, PL	
TRIAL NO.:	1	2	3	1	2
DISH NO.:	36	35	34	17	5
DISH & WET SOIL	32.60	28.07	26.54	19.61	19.89
-DISH & DRY SOIL	27.62	24.44	23.32	19.00	19.27
=WT. OF WATER (A)	4.98	3.63	3.22	0.61	0.62
DISH & DRY SOIL	27.62	24.44	23.32	19.00	19.27
-WT. OF DISH	14.48	14.49	13.97	14.62	14.74
=WT. OF DRY SOIL (B)	13.14	9.95	9.35	4.38	4.53
(A)					
MOIST = — X 100	37.90	36.48	34.44	13.93	13.69
(B)					
NO. OF BLOWS	14	25	30		
formula: I	1.08	1.00	0.98		
LIQUID LIMIT, LL	35.25	36.50	35.29		
	AVG LIQUID LIMIT		35.68	AVG PL	13.81
PLASTICITY INDEX, PI = LL-PL			21.87		

LOSS ON IGNITION, LOI

Weigh 3.00gr of oven-dried soil passing the #10 sieve

TRIAL NO.	1	2	3	4
CRUCIBLE NO:				
WT. CRUCIBLE & OVEN DRIED SOIL				
- WT. CRUCIBLE & IGNITED SOIL				
= WT. LOST				
WT. LOST				
LOSS ON IGNITION = $\frac{\text{WT. LOST}}{3.00 \text{ Grm}} \times 100$				

LIQUID LIMIT, PLASTIC LIMIT & LOSS ON IGNITION OF SOILS

SAMPLE DESCRIPTION

Project ID: 1229-04-01 Date: 03/20/15

Road: I-43 (Side Roads) Limits: N Milwaukee County Line to STH 60

Station: 2060+00 Location: 0 Grd. Elev:

Boring No: SR77 Sample No. 4 Depth: 13'

Spliced By: AET Tested By: TLP Nat. Mois: 22%

Soil Classification: Gray Silty Clay, trace fine Sand, stiff

LIQUID LIMIT & PLASTIC LIMIT

LIQUID LIMIT, LL (AASHTO-T-89), Falling cup, 100 gr of P40 Material

PLASTIC LIMIT, PL (AASHTO-T-90), 1/8TH" Thread, 8gr of P40 Material

TEST	LIQUID LIMIT, LL			PLASTIC LIMIT, PL	
TRIAL NO.:	1	2	3	1	2
DISH NO.:	32	25	22	20	12
DISH & WET SOIL	31.50	30.54	26.33	20.23	21.19
-DISH & DRY SOIL	27.33	26.82	23.67	19.54	20.36
=WT. OF WATER (A)	4.17	3.72	2.66	0.69	0.83
DISH & DRY SOIL	27.33	26.82	23.67	19.54	20.36
-WT. OF DISH	14.45	14.64	14.61	14.65	14.59
=WT. OF DRY SOIL (B)	12.88	12.18	9.06	4.89	5.77
(A)					
MOIST = — X 100	32.38	30.54	29.36	14.11	14.38
(B)					
NO. OF BLOWS	15	25	35		
formula:I	1.07	1.00	0.96		
LIQUID LIMIT, LL	30.37	30.55	30.72		
	AVG LIQUID LIMIT		30.55	AVG PL	14.25
PLASTICITY INDEX, PI = LL-PL			16.30		

LOSS ON IGNITION, LOI.

Weigh 3.00gr of oven-dried soil passing the #10 sieve

TRIAL NO.	1	2	3	4
CRUCIBLE NO:				
WT. CRUCIBLE & OVEN DRIED SOIL				
- WT. CRUCIBLE & IGNITED SOIL				
= WT. LOST				
WT. LOST				
LOSS ON IGNITION = $\frac{\text{WT. LOST}}{3.00 \text{ Grm}} \times 100$				

LIQUID LIMIT, PLASTIC LIMIT & LOSS ON IGNITION OF SOILS

SAMPLE DESCRIPTION

Project ID: 1229-04-01 Date: 03/20/15

Road: I-43 (Side Roads) Limits: N Milwaukee County Line to STH 60

Station: 11+90 Location: 20' Lt Grd. Elev:

Boring No: SR78 Sample No. 2 Depth: 3'

Spliced By: AET Tested By: TLP Nat. Mois: 29%

Soil Classification: Dark brown Silty Clay, with organics, stiff

LIQUID LIMIT & PLASTIC LIMIT

LIQUID LIMIT, LL (AASHTO-T-89), Falling cup, 100 gr of P40 Material

PLASTIC LIMIT, PL (AASHTO-T-90), 1/8TH" Thread, 8gr of P40 Material

TEST	LIQUID LIMIT, LL			PLASTIC LIMIT, PL	
TRIAL NO.:	1	2	3	1	2
DISH NO.:	29	27	26	13	1
DISH & WET SOIL	29.71	25.28	21.24	18.95	18.69
-DISH & DRY SOIL	24.64	21.85	19.24	18.29	18.06
=WT. OF WATER (A)	5.07	3.43	2.00	0.66	0.63
DISH & DRY SOIL	24.64	21.85	19.24	18.29	18.06
-WT. OF DISH	14.64	14.68	14.72	14.80	14.76
=WT. OF DRY SOIL (B)	10.00	7.17	4.52	3.49	3.30
(A)					
MOIST = — X 100	50.70	47.84	44.25	18.91	19.09
(B)					
NO. OF BLOWS	20	29	35		
formula: I	1.03	0.98	0.96		
LIQUID LIMIT, LL	49.29	48.80	46.29		
	AVG LIQUID LIMIT		48.13		
PLASTICITY INDEX, PI = LL-PL			29.13		

LOSS ON IGNITION, LOI.

Weigh 3.00gr of oven-dried soil passing the #10 sieve

TRIAL NO.	1	2	3	4
CRUCIBLE NO:				
WT. CRUCIBLE & OVEN DRIED SOIL				
- WT. CRUCIBLE & IGNITED SOIL				
= WT. LOST				
WT. LOST				
LOSS ON IGNITION = $\frac{\text{WT. LOST}}{3.00 \text{ Grm}} \times 100$				

LIQUID LIMIT, PLASTIC LIMIT & LOSS ON IGNITION OF SOILS

SAMPLE DESCRIPTION

Project ID: 1229-04-01 Date: 03/11/15

Road: I-43 (Marsh Probes) Limits: N Milwaukee County Line to STH 60

Station: 2088+00 Location: 70' Lt Grd. Elev:

Boring No: MP32 Sample No. 3 Depth: 8'

Spliced By: AET Tested By: TLP Nat. Mois: 19%

Soil Classification: Light brown Silty Clay, very stiff

LIQUID LIMIT & PLASTIC LIMIT

LIQUID LIMIT, LL (AASHTO-T-89), Falling cup, 100 gr of P40 Material

PLASTIC LIMIT, PL (AASHTO-T-90), 1/8TH" Thread, 8gr of P40 Material

TEST	LIQUID LIMIT, LL			PLASTIC LIMIT, PL	
TRIAL NO.:	1	2	3	1	2
DISH NO.:	12	15	16	22	28
DISH & WET SOIL	30.44	30.13	32.74	18.48	18.70
-DISH & DRY SOIL	25.95	25.96	27.94	17.99	18.14
=WT. OF WATER (A)	4.49	4.17	4.80	0.49	0.56
DISH & DRY SOIL	25.95	25.96	27.94	17.99	18.14
-WT. OF DISH	14.58	14.51	14.59	14.61	14.44
=WT. OF DRY SOIL (B)	11.37	11.45	13.35	3.38	3.70
(A)					
MOIST = — X 100	39.49	36.42	35.96	14.50	15.14
(B)					
NO. OF BLOWS	19	25	35		
formula:I	1.04	1.00	0.96		
LIQUID LIMIT, LL	38.14	36.43	37.62		
	AVG LIQUID LIMIT		37.40		
PLASTICITY INDEX, PI = LL-PL			22.58		

LOSS ON IGNITION, LOI.

Weigh 3.00gr of oven-dried soil passing the #10 sieve

TRIAL NO.	1	2	3	4
CRUCIBLE NO:				
WT. CRUCIBLE & OVEN DRIED SOIL				
- WT. CRUCIBLE & IGNITED SOIL				
= WT. LOST				
WT. LOST				
LOSS ON IGNITION = $\frac{\text{WT. LOST}}{3.00 \text{ Grm}} \times 100$				

LIQUID LIMIT, PLASTIC LIMIT & LOSS ON IGNITION OF SOILS

SAMPLE DESCRIPTION

Project ID: 1229-04-01 Date: 03/11/15

Road: I-43 (Marsh Probes) Limits: N Milwaukee County Line to STH 60

Station: 2099+00 Location: 90' Rt Grd. Elev:

Boring No: MP37 Sample No. 2 Depth: 3'

Spliced By: AET Tested By: TLP Nat. Mois: 27%

Soil Classification: Gray/red/brown mottled Clayey Silt, very stiff

LIQUID LIMIT & PLASTIC LIMIT

LIQUID LIMIT, LL (AASHTO-T-89), Falling cup, 100 gr of P40 Material

PLASTIC LIMIT, PL (AASHTO-T-90), 1/8TH" Thread, 8gr of P40 Material

TEST	LIQUID LIMIT, LL			PLASTIC LIMIT, PL	
TRIAL NO.:	1	2	3	1	2
DISH NO.:	1	6	27	30	31
DISH & WET SOIL	32.55	28.29	28.85	18.34	18.66
-DISH & DRY SOIL	26.84	23.94	24.35	17.83	18.08
=WT. OF WATER (A)	5.71	4.35	4.50	0.51	0.58
DISH & DRY SOIL	26.84	23.94	24.35	17.83	18.08
-WT. OF DISH	14.76	14.65	14.66	14.59	14.63
=WT. OF DRY SOIL (B)	12.08	9.29	9.69	3.24	3.45
(A)					
MOIST = — X 100	47.27	46.82	46.44	15.74	16.81
(B)					
NO. OF BLOWS	20	25	32		
formula:I	1.03	1.00	0.97		
LIQUID LIMIT, LL	45.95	46.84	48.00		
	AVG LIQUID LIMIT		46.93		
PLASTICITY INDEX, PI = LL-PL			30.66		

LOSS ON IGNITION, LOI

Weigh 3.00gr of oven-dried soil passing the #10 sieve

TRIAL NO.	1	2	3	4
CRUCIBLE NO:				
WT. CRUCIBLE & OVEN DRIED SOIL				
- WT. CRUCIBLE & IGNITED SOIL				
= WT. LOST				
WT. LOST				
LOSS ON IGNITION = $\frac{\text{WT. LOST}}{3.00 \text{ Grm}} \times 100$				

LIQUID LIMIT, PLASTIC LIMIT & LOSS ON IGNITION OF SOILS

SAMPLE DESCRIPTION

Project ID: 1229-04-01 Date: 03/11/15

Road: I-43 (Marsh Probes) Limits: N Milwaukee County Line to STH 60

Station: 2277+00 Location: 75' Lt Grd. Elev:

Boring No: MP106 Sample No. 2 Depth: 3'

Spliced By: AET Tested By: TLP Nat. Mois: 14%

Soil Classification: Brown Silty Clay, trace Sand, hard

LIQUID LIMIT & PLASTIC LIMIT

LIQUID LIMIT, LL (AASHTO-T-89), Falling cup, 100 gr of P40 Material

PLASTIC LIMIT, PL (AASHTO-T-90), 1/8TH" Thread, 8gr of P40 Material

TEST	LIQUID LIMIT, LL			PLASTIC LIMIT, PL	
TRIAL NO.:	1	2	3	1	2
DISH NO.:	14	19	18	23	26
DISH & WET SOIL	32.40	33.93	35.01	18.53	19.62
-DISH & DRY SOIL	28.00	29.27	30.23	18.06	19.02
=WT. OF WATER (A)	4.40	4.66	4.78	0.47	0.60
DISH & DRY SOIL	28.00	29.27	30.23	18.06	19.02
-WT. OF DISH	14.55	14.64	14.59	14.54	14.70
=WT. OF DRY SOIL (B)	13.45	14.63	15.64	3.52	4.32
(A)					
MOIST = — X 100	32.71	31.85	30.56	13.35	13.89
(B)					
NO. OF BLOWS	16	23	34		
formula: I	1.06	1.01	0.96		
LIQUID LIMIT, LL	30.93	31.52	31.85		
	AVG LIQUID LIMIT		31.43		
PLASTICITY INDEX, PI = LL-PL			17.81		

LOSS ON IGNITION, LOI

Weigh 3.00gr of oven-dried soil passing the #10 sieve

TRIAL NO.	1	2	3	4
CRUCIBLE NO:				
WT. CRUCIBLE & OVEN DRIED SOIL				
- WT. CRUCIBLE & IGNITED SOIL				
= WT. LOST				
WT. LOST				
LOSS ON IGNITION = $\frac{\text{WT. LOST}}{3.00 \text{ Grm}} \times 100$				

LIQUID LIMIT, PLASTIC LIMIT & LOSS ON IGNITION OF SOILS

SAMPLE DESCRIPTION

Project ID: 1229-04-01 Date: 03/17/15

Road: I-43 (Marsh Probes) Limits: N Milwaukee County Line to STH 60

Station: 344+00(Port) Location: 130' Rt Grd. Elev:

Boring No: MP158 Sample No. 2 Depth: 3'

Spliced By: AET Tested By: TLP Nat. Mois: 27%

Soil Classification: Reddish brown Silty Clay, trace Sand, stiff

LIQUID LIMIT & PLASTIC LIMIT

LIQUID LIMIT, LL (AASHTO-T-89), Falling cup, 100 gr of P40 Material

PLASTIC LIMIT, PL (AASHTO-T-90), 1/8TH" Thread, 8gr of P40 Material

TEST	LIQUID LIMIT, LL			PLASTIC LIMIT, PL	
TRIAL NO.:	1	2	3	1	2
DISH NO.:	19	23	26	35	36
DISH & WET SOIL	31.75	29.87	28.27	17.65	18.24
-DISH & DRY SOIL	25.57	24.51	23.55	17.17	17.66
=WT. OF WATER (A)	6.18	5.36	4.72	0.48	0.58
DISH & DRY SOIL	25.57	24.51	23.55	17.17	17.66
-WT. OF DISH	14.61	14.54	14.70	14.47	14.46
=WT. OF DRY SOIL (B)	10.96	9.97	8.85	2.70	3.20
(A)					
MOIST = — X 100	56.39	53.76	53.33	17.78	18.13
(B)					
NO. OF BLOWS	20	27	30		
formula: I	1.03	0.99	0.98		
LIQUID LIMIT, LL	54.81	54.33	54.65		
	AVG LIQUID LIMIT		54.60		
PLASTICITY INDEX, PI = LL-PL			36.65		

LOSS ON IGNITION, LOI.

Weigh 3.00gr of oven-dried soil passing the #10 sieve

TRIAL NO.	1	2	3	4
CRUCIBLE NO:				
WT. CRUCIBLE & OVEN DRIED SOIL				
- WT. CRUCIBLE & IGNITED SOIL				
= WT. LOST				
WT. LOST				
LOSS ON IGNITION = $\frac{\text{WT. LOST}}{3.00 \text{ Grm}} \times 100$				

LIQUID LIMIT, PLASTIC LIMIT & LOSS ON IGNITION OF SOILS

SAMPLE DESCRIPTION

Project ID: 1229-04-01 Date: 03/17/15

Road: I-43 (Marsh Probes) Limits: N Milwaukee County Line to STH 60

Station: 2151+00 Location: 25' Rt Grd. Elev: _____

Boring No: MP185 Sample No. 3 Depth: 8'

Spliced By: AET Tested By: TLP Nat. Mois: 19%

Soil Classification: Gray/Brown Silty Clay, trace Gravel, very stiff

LIQUID LIMIT & PLASTIC LIMIT

LIQUID LIMIT, LL (AASHTO-T-89), Falling cup, 100 gr of P40 Material

PLASTIC LIMIT, PL (AASHTO-T-90), 1/8TH" Thread, 8gr of P40 Material

TEST	LIQUID LIMIT, LL			PLASTIC LIMIT, PL	
TRIAL NO.:	1	2	3	1	2
DISH NO.:	16	18	22	30	31
DISH & WET SOIL	28.97	26.61	31.22	19.65	20.61
-DISH & DRY SOIL	24.94	23.36	26.79	19.11	19.87
=WT. OF WATER (A)	4.03	3.25	4.43	0.54	0.74
DISH & DRY SOIL	24.94	23.36	26.79	19.11	19.87
-WT. OF DISH	14.58	14.64	14.60	14.60	14.64
=WT. OF DRY SOIL (B)	10.36	8.72	12.19	4.51	5.23
(A)					
MOIST = — X 100	38.90	37.27	36.34	11.97	14.15
(B)					
NO. OF BLOWS	19	29	32		
formula: l	1.04	0.98	0.97		
LIQUID LIMIT, LL	37.57	38.02	37.56		
	AVG LIQUID LIMIT		37.72	AVG PL	13.06
PLASTICITY INDEX, PI = LL-PL			24.66		

LOSS ON IGNITION, LOI.

Weigh 3.00gr of oven-dried soil passing the #10 sieve

TRIAL NO.	1	2	3	4
CRUCIBLE NO:				
WT. CRUCIBLE & OVEN DRIED SOIL				
- WT. CRUCIBLE & IGNITED SOIL				
= WT. LOST				
WT. LOST				
LOSS ON IGNITION = $\frac{\text{WT. LOST}}{3.00 \text{ Grm}} \times 100$				

LIQUID LIMIT, PLASTIC LIMIT & LOSS ON IGNITION OF SOILS

SAMPLE DESCRIPTION

Project ID: 1229-04-01 Date: 03/18/15

Road: I-43 (Marsh Probes) Limits: N Milwaukee County Line to STH 60

Station: 2169+00 Location: 0 Grd. Elev:

Boring No: MP201 Sample No. 3 Depth: 8'

Spliced By: AET Tested By: TLP Nat. Mois: 19%

Soil Classification: Brown Clayey Silt, trace Sand, very stiff

LIQUID LIMIT & PLASTIC LIMIT

LIQUID LIMIT, LL (AASHTO-T-89), Falling cup, 100 gr of P40 Material

PLASTIC LIMIT, PL (AASHTO-T-90), 1/8TH" Thread, 8gr of P40 Material

TEST	LIQUID LIMIT, LL			PLASTIC LIMIT, PL	
TRIAL NO.:	1	2	3	1	2
DISH NO.:	36	35	31	22	18
DISH & WET SOIL	28.99	30.07	25.55	18.50	17.87
-DISH & DRY SOIL	25.23	26.01	22.82	18.00	17.47
=WT. OF WATER (A)	3.76	4.06	2.73	0.50	0.40
DISH & DRY SOIL	25.23	26.01	22.82	18.00	17.47
-WT. OF DISH	14.46	14.46	14.64	14.60	14.63
=WT. OF DRY SOIL (B)	10.77	11.55	8.18	3.40	2.84
(A)					
MOIST = — X 100	34.91	35.15	33.37	14.71	14.08
(B)					
NO. OF BLOWS	20	24	35		
formula: I	1.03	1.00	0.96		
LIQUID LIMIT, LL	33.94	34.98	34.92		
	AVG LIQUID LIMIT		34.61		
PLASTICITY INDEX, PI = LL-PL			20.22		

LOSS ON IGNITION, LOI.

Weigh 3.00gr of oven-dried soil passing the #10 sieve

TRIAL NO.	1	2	3	4
CRUCIBLE NO:				
WT. CRUCIBLE & OVEN DRIED SOIL				
- WT. CRUCIBLE & IGNITED SOIL				
= WT. LOST				
WT. LOST				
LOSS ON IGNITION = $\frac{\text{WT. LOST}}{3.00 \text{ Grm}} \times 100$				

LIQUID LIMIT, PLASTIC LIMIT & LOSS ON IGNITION OF SOILS

SAMPLE DESCRIPTION

Project ID: 1229-04-01 Date: 03/18/15

Road: I-43 (Marsh Probes) Limits: N Milwaukee County Line to STH 60

Station: 2264+00 Location: 15' Lt Grd. Elev:

Boring No: MP214 Sample No. 3 Depth: 8'

Spliced By: AET Tested By: TLP Nat. Mois: 17%

Soil Classification: Gray/brown Silty Clay to Clayey Silt, trace Sand & Gravel, hard

LIQUID LIMIT & PLASTIC LIMIT

LIQUID LIMIT, LL (AASHTO-T-89), Falling cup, 100 gr of P40 Material

PLASTIC LIMIT, PL (AASHTO-T-90), 1/8TH" Thread, 8gr of P40 Material

TEST	LIQUID LIMIT, LL			PLASTIC LIMIT, PL	
TRIAL NO.:	1	2	3	1	2
DISH NO.:	30	26	19	16	14
DISH & WET SOIL	28.55	32.80	29.42	19.90	19.69
-DISH & DRY SOIL	25.26	28.57	26.02	19.32	19.11
=WT. OF WATER (A)	3.29	4.23	3.40	0.58	0.58
DISH & DRY SOIL	25.26	28.57	26.02	19.32	19.11
-WT. OF DISH	14.59	14.71	14.61	14.58	14.57
=WT. OF DRY SOIL (B)	10.67	13.86	11.41	4.74	4.54
(A)					
MOIST = — X 100	30.83	30.52	29.80	12.24	12.78
(B)					
NO. OF BLOWS	19	23	32		
formula: $\frac{25 - W}{100 - W} \times LL$	1.04	1.01	0.97		
LIQUID LIMIT, LL	29.78	30.20	30.80		
	AVG LIQUID LIMIT		30.26	AVG PL	12.51
PLASTICITY INDEX, $PI = LL - PL$			17.76		

LOSS ON IGNITION, LOI.

Weigh 3.00gr of oven-dried soil passing the #10 sieve

TRIAL NO.	1	2	3	4
CRUCIBLE NO:				
WT. CRUCIBLE & OVEN DRIED SOIL				
- WT. CRUCIBLE & IGNITED SOIL				
= WT. LOST				
WT. LOST				
LOSS ON IGNITION = $\frac{\text{WT. LOST}}{3.00 \text{ Grm}} \times 100$				

LIQUID LIMIT, PLASTIC LIMIT & LOSS ON IGNITION OF SOILS

SAMPLE DESCRIPTION

Project ID: 1229-04-01 Date: 03/18/15

Road: I-43 (Marsh Probes) Limits: N Milwaukee County Line to STH 60

Station: 2285+90 Location: 15' Lt Grd. Elev:

Boring No: MP227 Sample No. 2 Depth: 3'

Spliced By: AET Tested By: TLP Nat. Mois: 18%

Soil Classification: Light brown Silty Clay, trace Sand, hard

LIQUID LIMIT & PLASTIC LIMIT

LIQUID LIMIT, LL (AASHTO-T-89), Falling cup, 100 gr of P40 Material

PLASTIC LIMIT, PL (AASHTO-T-90), 1/8TH" Thread, 8gr of P40 Material

TEST	LIQUID LIMIT, LL			PLASTIC LIMIT, PL	
TRIAL NO.:	1	2	3	1	2
DISH NO.:	33	32	28	23	7
DISH & WET SOIL	29.16	30.99	31.54	19.70	19.22
-DISH & DRY SOIL	25.30	26.68	27.20	19.02	18.64
=WT. OF WATER (A)	3.86	4.31	4.34	0.68	0.58
DISH & DRY SOIL	25.30	26.68	27.20	19.02	18.64
-WT. OF DISH	14.64	14.44	14.43	14.55	14.61
=WT. OF DRY SOIL (B)	10.66	12.24	12.77	4.47	4.03
(A)					
MOIST = — X 100	36.21	35.21	33.99	15.21	14.39
(B)					
NO. OF BLOWS	19	25	35		
formula:I	1.04	1.00	0.96		
LIQUID LIMIT, LL	34.97	35.23	35.56		
	AVG LIQUID LIMIT		35.25	AVG PL	14.80
PLASTICITY INDEX, PI = LL-PL			20.45		

LOSS ON IGNITION, LOI.

Weigh 3.00gr of oven-dried soil passing the #10 sieve

TRIAL NO.	1	2	3	4
CRUCIBLE NO:				
WT. CRUCIBLE & OVEN DRIED SOIL				
- WT. CRUCIBLE & IGNITED SOIL				
= WT. LOST				
WT. LOST				
LOSS ON IGNITION = $\frac{\text{WT. LOST}}{3.00 \text{ Grm}} \times 100$				

Gradation

Project ID	1229-04-01
Highway	I-43 Mainline
Project Limits	North Milwaukee Co Line to STH 60

Test Boring No.	B68	Depth	8
Sample No.	3		

Test Date	March 22, 2015
Tester	TLP

Dry mass before wash			246.0 g		
Dry mass after wash			221.6 g		
Sieve SI, mm	Size U.S.	Accum Mass	% Retn'd	% Passing	
19	3/4"	0.0	0.0	100.00%	
4.75	#4	0.4	0.2	99.84%	
2.000	#10	2.2	0.9	99.11%	
0.425	#40	26.2	10.7	89.35%	
0.150	#100	178.0	72.4	27.64%	
0.075	#200	217.4	88.4	11.63%	
PAN		221.6	90.0813	0.099187	

Comments

Gradation

Project ID	1229-04-01
Highway	I-43 Mainline
Project Limits	North Milwaukee Co Line to STH 60

Test Boring No.	MP125	Depth	8'
Sample No.	3		

Test Date	March 22, 2015
Tester	TLP

Dry mass before wash			185.8 g		
Dry mass after wash			63.1 g		
Sieve SI, mm	Size U.S.	Accum Mass	% Retn'd	% Passing	
19	3/4"	0.0	0.0	100.00%	
4.75	#4	0.0	0.0	100.00%	
2.000	#10	1.4	0.8	99.25%	
0.425	#40	13.5	7.3	92.73%	
0.150	#100	37.9	20.4	79.60%	
0.075	#200	61.5	33.1	66.90%	
PAN		63.1	33.96125	0.660388	

Comments

Gradation

Project ID	1229-04-01
Highway	I-43 Mainline
Project Limits	North Milwaukee Co Line to STH 60

Test Boring No.	SR63	Depth	4'
Sample No.	2		

Test Date	March 22, 2015
Tester	TLP

Dry mass before wash			145.6 g		
Dry mass after wash			127.6 g		
Sieve SI, mm	Size U.S.	Accum Mass	% Retn'd	% Passing	
19	3/4"	0.0	0.0	100.00%	
4.75	#4	0.0	0.0	100.00%	
2.000	#10	0.0	0.0	100.00%	
0.425	#40	0.0	0.0	100.00%	
0.150	#100	86.9	59.7	40.32%	
0.075	#200	126.9	87.2	12.84%	
PAN		127.6	87.63736	0.123626	

Comments

Gradation

Project ID	1229-04-01
Highway	I-43 Mainline
Project Limits	North Milwaukee Co Line to STH 60

Test Boring No.	SR67	Depth	4'
Sample No.	2		

Test Date	March 22, 2015
Tester	TLP

Dry mass before wash			258.0 g		
Dry mass after wash			178.3 g		
Sieve SI, mm	Size U.S.	Accum Mass	% Retn'd	% Passing	
19	3/4"	0.0	0.0	100.00%	
4.75	#4	25.1	9.7	90.27%	
2.000	#10	49.3	19.1	80.89%	
0.425	#40	103.8	40.2	59.77%	
0.150	#100	160.9	62.4	37.64%	
0.075	#200	174.7	67.7	32.29%	
PAN		178.3	69.10853	0.308915	

Comments