ABBREVIATED ROADWAY GEOTECHNICAL REPORT LONGMEADOW PARKWAY / BOLZ ROAD IDOT No. P-91-393-94, SECTION: 94-00215-01-ES DEVISION OF TRANSPORTATION, KANE COUNTY, ILLINOIS

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February 6, 2012



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ABBREVIATED ROADWAY GEOTECHNICAL REPORT

LONGMEADOW PARKWAY / BOLZ ROAD

KANE COUNTY, ILLINOIS

FOR

MCDONOUGH ASSOCIATES, INC.

1.0 INTRODUCTION

This report presents the results of subsurface investigation, laboratory testing, and geotechnical evaluation for the realignment and construction of Longmeadow Parkway / Bolz Road (Bolz Road). The project site is located in Kane County, Illinois. The purpose of our geotechnical work was to investigate and evaluate the subsurface soil and groundwater conditions within this project area that would form a basis for design and construction recommendations and provide an abbreviated report summarizing the results of our studies, conclusions, and recommendations.

1.1 Project Description

The Kane County Division of Transportation has planned a new access across the Fox River. This new roadway corridor referred to as "Longmeadow Parkway / Bolz Road over the Fox River" extends 5.2 miles from Huntley Road (1-mile west of Randall Road) on the west to Illinois Route 62 on the east and generally follows township section lines in northern Kane County. The proposed roadway will traverse the communities of Algonquin, Carpentersville, Barrington Hills and unincorporated Kane County. The new roadway will cross Boyer Road, Randall Road, Sleepy Hollow Road, Illinois Route 31, Old Bolz Road, Illinois 25 and Illinois 62.



The project includes construction/realignment of approximately 5.82 miles of mainline and 2.70 miles of frontage/cross road enhancement. The proposed roadway cross-section will consist of two-lanes in each direction separated by a landscaped median area. The median area will be utilized at intersections as left turn lanes. Traffic signals will be installed at all major intersection locations. Other work included in the project consists of bike path construction, open space preservation, drainage and floodplain storage.

There are six structures proposed along the improvement, the bridge over Fox River and five retaining walls:

- Retaining wall number 1 is located immediately west of Sleepy Hollow Road and north of Longmeadow Parkway;
- Retaining wall number 2 is located 1100 feet west of IL Route 31 and south of proposed Longmeadow Parkway;
- Retaining wall number 3 is located immediately east of east abutment of the Fox River Bridge on south side;
- Retaining wall number 4 is located south of Carpentersville Quarry and south of proposed Bolz Road;
- Retaining wall number 5 is located near the intersection of proposed Longmeadow Parkway and Westborne Parkway south of the proposed Forest Parkway.

Exhibit 1 shows the location of the project corridor.

1.2 Other Geotechnical Reports

Wang Engineering, Inc. (Wang) has submitted draft Structure Geotechnical Reports (SGR) for the Longmeadow Parkway Bridge over Fox River, final SGR for the retaining walls numbers 1 to 2, and draft SGR for the retaining wall number 3. Wang was not authorized to perform geotechnical engineering services for the retaining wall numbers 4 and 5.

2.0 GEOLOGIC SETTING

The project area is located in the northeastern part of Kane County, in the communities of Algonquin, Carpentersville, South Barrington, and unincorporated Kane County. On the USGS "*Crystal Lake Quadrangle 7.5 Minute Series*" and "*Barrington Quadrangle 7.5 Minute Series*" maps, the investigated area runs west to east across the southern portion of sections 1 through 5 and northern portion of sections 7 through 12 of Twp 42 N and Range 8 E of the



Third Principal Meridian. A Site Location Map is presented as Exhibit 1.

The following review of the published geologic data is meant to place within a regional framework the results of our subsurface investigation and, thus, to confirm their general reliability. For the study of the regional geologic framework, Wang considered northeastern Illinois area in general and northeastern Kane County in particular. Exhibit 2 illustrate the *Site and Regional Geology*.

2.1 Glacial Cover

The surficial cover is the result of Wisconsin-age glacial activity (Hansel and Johnson, 1996). The glacigenic deposits were emplaced during pulsating advances and retreats of an icesheet lobe responsible for the formation of end moraines and associated low-relief till and lake plains.

The project site extends north to south trending Barlina Moraine to the west and the Woodstock Moraine to the east. The Barlina Moraine contains deposits of diamicton and sorted sediments associated with the Yorkville Member and Batestown Member of the Lemont Formation intercalated with lenses and layers of sorted sands and gravels outwash deposits of the Henry Formation overlying thick deposits of clay loamy diamictons the Tiskilwa Formation. Multiple advances and retreats of the ice front in the area account for the layers in the moraine (Hansel and Johnson, 1996, Dey et al., 2004, and Curry, 1995).

The moraines are separated by the lower lying Fox River Valley. Large volumes of meltwater carved the river valley. This meltwater deposited thick accumulations of sand and gravel outwash (Henry Formation) in the form of terraces and point bars.

Periodic flooding along the Fox River deposited organic rich, fine grained sediments associated with the Cahokia Formation (Dey et al., 2004 and Curry, 2005).

2.2 Bedrock Geology

The bedrock surface represents a significant unconformity in Kane County. Roughly 400 million year old bedrock is buffed below younger glacial drift deposited less than 500,000 years ago. The uppermost bedrock unit in the area consists of nearly horizontal Silurian and Ordovician age dolomites (Curry, 2005, Dey et al., 2004). The Ordovician age dolomites tend to be softer and shaly where as the Silurian age dolomites tend to be harder. The bedrock top in the project area lies at about 620 to 680 feet elevation (NGDV) (Curry, 2005).



Our subsurface investigation results fit into the local geologic context. The borings drilled in the project area revealed that the native sediments at the project site consist of brown (weathered) to gray clayey diamicton with sand and silt lenses and thick accumulations of sand and gravel outwash deposits.

3.0 METHODS OF INVESTIGATION

3.1 **Subsurface Exploration**

Wang drilled 139 subgrade borings (R-001 to R-049, R-055 to R-066, R-075, R-076, and R-079 to R-154) for the roadway subsurface investigation. Selected structure borings from the 122 structure borings (S-001 to S-050, S-052, S-054, S-055, S-060 to S-084, S-088 to S-123, and SX-01 to SX-04) drilled for proposed retaining walls and bridge were used to supplement the roadway data. The borings were drilled in 2005 and in 2010. The investigated roadway alignments, existing ground surface elevations, and termination depths of the borings are summarized in Table 1. The boring locations were stacked in the field by Engineering Enterprises, Inc., subconsultant to McDonough Associates, Inc. (MAI) elevation, station and offset information for each boring was provided by MAI. Boring location data are presented in the Boring Logs (Appendix A). The as-drilled locations are shown in the Boring Location Plans (Appendix D) and Soil Profiles (Appendix E).

Roadway Alignment	Reference Borings	Existing Surface Elevation (feet)	Boring Depth (feet)
Main Alignment	R-001 to R-098	796.7 to 925.7	10.0 to 28.0
Boyer Road	R-099 to R-105	910.9 to 919.9	10.0 to 14.0
Westborne Road	R-106 to R-108	880.4 to 890.0	10.0
Sandbloom	R-127	738.4	11.0

Table 1. Romina I



Roadway Alignment	Reference Borings	Existing Surface Elevation (feet)	Boring Depth (feet)
IL 25	R-138 to R-144	866.8 to 899.7	10.0 to 13.0
IL 65	R-145 to R-154	862.2 to 889.7	10.0 to 12.0
IL 31	R-115 to R-123	794.5 to 811.6	10.0 to 18.0
Bolz Road	R-124 to R-137	725.3 to 844.7	10.0 to 40.0
Bolz Road Connector	R-134 and R-135	825.0 to 826.8	12.0 and 16.0

Truck and ATV-mounted drilling rigs, equipped with hollow stem augers, were used to advance and maintain an open borehole. Soil sampling was performed according to AASHTO T 206, "*Penetration Test and Split Barrel Sampling of Soils*." The soil in the roadway and peat borings was continuously sampled to the boring termination depths. The soil in the structure borings was sampled at 2.5-foot intervals to 35 feet and at 5-foot intervals to termination depth. Samples collected from each interval were placed in sealed jars and transported to Wang Geotechnical Laboratory in Lombard, Illinois for further examination and laboratory testing.

Field boring logs, prepared and maintained by a Wang engineer, include lithological descriptions, visual-manual soil classifications, results of Rimac and pocket penetrometer unconfined compressive strength tests, and results of Standard Penetration Tests (SPT), recorded as blows per 6 inches of penetration. Theses values are shown on the boring logs as SPT values. The N value (shown on the soil profile) is the sum of the second and third blows per 6 inches). The soils were described and classified according to Illinois Division of Highways (IDH) Textural Classification system. The field logs were finalized by an experienced engineering geologist after verifying the field visual classifications and laboratory test results.



Groundwater observations were made during and at the end of drilling operations. Due to safety considerations, boreholes were backfilled with soil cutting or bentonite chips immediately upon completion.

3.2 Laboratory Testing

All soil samples were tested in the laboratory for moisture content (AASHTO T-265). Atterberg limits (AASHTO T 89/T 90) and particle size (AASHTO T 88) analyses were performed to classify selected samples representing the main soil layers encountered during the investigation in structure borings. Field visual descriptions of the soil samples were verified in the laboratory. Tested soils were classified according to the IDH system. Laboratory test results are shown in the *Boring Logs* (Appendix A), and in the *Laboratory Test Results* (Appendix B).

4.0 RESULTS OF FIELD AND LABORATORY INVESTIGATIONS

Detailed descriptions of the soil conditions encountered during the subsurface investigation are presented in the attached *Boring Logs* (Appendix A) and in the *Soil Profiles* (Appendix E). Please note that strata contact lines represent approximate boundaries between soil types. The actual transition between soil types in the field may be gradual in horizontal and vertical directions.

The following sections summarize topsoil, existing pavement, and subgrade composition and properties for the project alignments; where appropriate, references will be made to the distribution of specific material characteristics over the entire project area.

4.1 Topsoil Characterization

Topsoil observations and measurements were performed in 203 boreholes throughout the project. In general the topsoil consists of black to dark brown silty clays with thicknesses ranging from 2 to 18 inches, and averaging 9 inches. Between IL 31 and Sandbloom Road topsoil measurements show thicknesses varying from 12 to 36 inches.

In approximately 70% of the measurements topsoil thickness ranged from 6 to 12 inches.



4.2 Existing Pavement Structure

Pavement coring was not in the scope of our investigation. Existing pavement structure was observed in 16 boreholes when drilled through existing pavement. Sections along main alignment were drilled along existing roadway thus the pavement was measured in three roadway borings showing thicknesses of 6 to 10 inches asphalt pavement over gravel or crushed stone base coarse. The rest of the pavement measurements were performed along the crossroads were the pavement structure thicknesses varies from 12 to 24 inches of asphalt over granular base coarse, asphalt over concrete with granular base coarse, or concrete over granular base coarse (see Appendix A – *Boring Logs* and Appendix D – *Borings Location Plans*).

4.3 Subgrade Properties

The project is situated on west and east sides of Fox River valley and crosses the river floodplain, thus most of the subsurface soils encountered are granular and part of the outwash deposits and alluvium. The river valley was curved in the thick diamicton deposits. Underneath the diamicton, older outwash deposits (Ashmore Toungue) represent an important aquifer which may rest over the dolostone bedrock. Thus, the lithologic succession may be succinctly described as follows:

Beneath topsoil or pavement, borings encountered (1) fill: man-made cohesive and granular materials; (2) loose to very dense silt, sand, to gravelly sand outwash deposits; and (3) medium stiff to hard clay, clay loam, and silty clay loam diamictons. Granular soils make up approximately 65% of the subsurface soil encountered.

1) Man-made ground (fill)

Underneath topsoil or pavement, most of the borings drilled within an existing road encountered fill. Generally fill consists of up to 7-foot thick cohesive and granular soils. Up to 77% of the fill consists of stiff to hard cohesive soils.

2) Loose to very dense silt, sand, to gravelly sand outwash

Loose to dense silt, silty loam, sand and gravelly sand outwash deposits with thicknesses of up to 17.8 feet were encountered along the proposed roadway. Between IL 31 and IL 25, within Fox River valley, up to 35.0 feet of medium dense to very dense gravelly sand outwash was measured.



3) Medium stiff to hard clay to silty clay loam diamicton

In general, the cohesive deposits are characterized as medium stiff to hard clay, clay loam and silty clay to silty clay loam diamicton with thicknesses of more than 85.0 feet. Occasional pockets of organic silty clay and peat were encountered. Loose to medium dense, silt, silty loam, loam, sandy loam, and sand lenses were encountered at various depth.

4.4 Groundwater Conditions

Groundwater was encountered in 34 roadways boring at depths varying from 2.5 to 20.5 feet below ground surface (bgs) and in 103 structure borings at depth varying from 3.8 to 82.5 feet bgs. The groundwater was generally associated with silt, sand, and gravelly sand outwash deposits. The groundwater encountered at depth higher than 10 feet is likely perched above cohesive, poorly-draining soils. Based on the majority of the roadway borings, as well as the groundwater levels encountered in the structure borings, we estimate the regional groundwater level is deep seated and will not adversely affect the pavement design or performance. In the proximity of the Fox River valley, groundwater will fluctuate with the river water surface level.

5.0 ANALYSES AND RECOMMENDATIONS

Based on the project information (plans, profile, cross sections drawings, etc.), provided by MAI and the subsurface soil conditions revealed during investigations, recommendations are presented in the following sections for the design and construction of the proposed improvements. The results of the field and laboratory data were utilized to evaluate the engineering properties of the soils encountered during site investigation.

The Longmeadow Parkway roadway will be built from Station 2000+00 to Station 2307+16.79 and supported by embankment or excavating cuts, creating 1:3 (V:H) or gentler slopes.

The reconstruction of the side streets will be as follow: Boyer Road from Station 102+50 to Station 122+50, Westborne Parkway from Station 1200+00 to Station 1208+26.00, IL Route 31 from Station 408+00 to Station 433+50,



Sandbloom Road from Station 902+00 to Station 909+30, IL Route 25 from Station 600+50 to Station 622+50, IL Route 62 from Station 800+50 to Station 829+25, Bolz Road from Station 500+00 to Station 532+00 Bolz Road Connector from Station 700+00 to Station 706+50.

At the time of this report submittal, the proposed pavement thickness was unknown, thus all recommendation are taking in consideration a assumed pavement thickness of 12 inches.

5.1 Topsoil Stripping and Reuse

Prior to embankment construction, the ground surface should be stripped of topsoil and organic matter including root zone materials. For quantity estimating purposes, the average topsoil thickness to be stripped is nine (9) inches. The actual depth of stripping should be determined in the field during construction. The required topsoil stripping will also depend on the construction season and precipitation during mass grading operations. Excavated topsoil meeting the requirements of Section 211 of the IDOT Standard Specifications for Road and Bridge Construction can be reused in areas where topsoil is required.

5.2 Subgrade Preparation and Treatment

All vegetation, pavements, surface topsoil, and debris should be cleared and stripped from the roadway construction areas and where embankment fills are to be placed. Following stripping of topsoil, surficial vegetation and the excavation to proposed subgrade elevations (or prior to placement of new embankment fill where required); it is recommended that the exposed subgrade be proofrolled and observed under construction equipment. Proffrolling aids in identifying soft or unstable soil conditions that may exist at or near the exposed subgrade level. It is recommended that the proofrolling be accomplished with a fully-loaded, 25-ton dump truck or other equipment providing an equivalent loading such as heavy vibratory roller. A minimum of 4 passes should be made over the entire subgrade areas in both the direction. In confined areas and in areas where a dump truck or a roller can not be used effectively, such as at edges of the excavation bottom, proofrolling/compaction may be performed with hand-operated heavy vibratory equipment with enough number of passes so that unstable subgrade can be detected. The exposed subgrade should be observed for the amount of deflection or rutting and tested with static or dynamic cone penetrometer. All unstable and soft areas should be treated in accordance with criteria given in the IDOT "Subgrade Stability Manual."



Remedial work for unstable subgrade should consist of disking, aerating, and recompacting exposed subgrade soils, as provided in Art. 301 of the IDOT Standard Specifications. Solutions to a persistent pumping problem may include removal of unsuitable soils and replacement with granular fill, use of an appropriate Geotextile or a combination thereof.

We recommend to anticipate removal and replacement at locations shown in Table 2 along the project alignments where the borings have indicated softer and/or wet soils at shallow depths from the proposed grade. We recommend that contract plan quantities be calculated for the areas shown in Tables 2. Any Porous Granular Embankment, Subgrade (PGE,Sub) not needed at the time of construction can be deleted from the contract with no extra compensation to the contractor. It should be noted that some removal of the existing poor subgrade soils will occur due to lowering of the proposed subgrade level. Areas where subgrade treatment was not identified by the borings, or the areas in between borings, the subgrade treatment may become necessary during construction. Where removal and replacements are required, all such areas should extend to at least one foot beyond the back of the curb or outside edge of new shoulders. We recommend that the undercuts are sloped from the width limits down to the depth levels shown in Table 2 at no greater than 1:2 (V:H) slope.

Some portion of the cross roads will be widened. It is possible that unstable soil conditions may be encountered during the construction where borings are not performed. Subgrade treatment should be decided during construction.

The stability of prepared roadway subgrade will depend upon such factors as surface drainage provided by the contractor as well as prevailing temperature and precipitation experienced during construction. The amount of construction traffic and subgrade disturbance created by heavy vehicles will also have an influence on subgrade stability. The contractor should try to make full use of ditches in order to maintain positive drainage for subgrade areas. Temporary drainage ditches or pumping from depressed areas should be provided as needed during construction in order to prevent ponded water from affecting the stability of the roadway.

Aggregate fill may be required for bridging over weak subgrade soils that demonstrate persistent stability problems. Aggregate materials needed beneath the proposed pavement structure lower layer should consist of IDOT District One PGE, Sub.



Some portion of the roadway widening will be over the exiting ditches. We anticipate soft subgrade soil condition at the bottom of the ditches particularly during the wet seasons. The removal of soft and unstable soils will need to be determined during the construction.

Existing unsuitable soils below topsoil, mostly due to high moisture content and low shear strength, will be removed as part of excavation required to the proposed subgrade. We do not recommend removing unsuitable soils which exist at some locations at depths of 3 or more feet below the proposed subgrade elevation.

Alignment	Limits (Station to Station)	Proposed Treatment	Treatment Depth (inches)	Treatment Width	Boring / Concerns (Qu, MC)
Main	2094+50 to 2097+50	Disk, Dry and Recompact	6	Full Width	R-033, SX-03 N=6, >31%
Alignment	2256+50 to 2259+00	PGE,Sub	12	Full Width	R-082 N=9, 1.0 tsf
Bolz Road	505+00 to 507+50	PGE,Sub	12	Full Width	R-128 0.25-0.5 tsf, 22%
IL 31	430+50 to 433+00	PGE,Sub	12	Full Width	R-123 0.5 tsf, 23-31%
IL 62	808+50 to 817+00	PGE,Sub	12	Full Width	R-148 to R-150 N=3-7 blows/foot, <0.25-1.0 tsf, 30%

Table 2: Subgrade Treatment Recommendations for Longmeadow Parkway and Cross Roads

• Full Width treatment corresponds to the proposed width of the proposed pavement structure.

• Treatment depth is below the proposed subgrade elevation.

5.3 Embankment Material and Stability

The material to be used for the roadway embankment construction should be in accordance with Section 204 and 205 of the IDOT SSRBC. According to the IDOT District One policy a shrinkage factor of 15% should be used to measure the borrowed and furnished excavation quantities.



The computer program, SLIDE Version 5.0, was used to calculate the factors of safety against global stability. The Simplified Bishop Method was used for slope stability analyses. The soil parameters for the proposed embankment fill were selected as per IDOT requirements. Details of stability analysis with the critical failure surface and results are also shown in Appendix C.

Slope stability analyses were performed for the embankment side slopes for the areas which are judged to be the most critical sections. The critical locations at Stations 2096+00 and 2158+00 were analyzed considering nearby soil borings. The estimated soil parameters considered and results of stability analysis are shown in Appendix C. The calculated minimum factor of safety (FOS) was 1.79 at Station 2096+00 and 3.22 at Station 2158+00. Both results are greater or equal to the minimum FOS required by IDOT of 1.5 for embankment slopes and 1.7 for cut slopes when the stability analysis is based on the field (Rimac) tests of split-spoon samples.

The slopes will require permanent protection to prevent erosion due to precipitation and storm water runoff. A 6-inch thick layer of topsoil should be provided on the slopes and seeded. The slope protection system should provide a structurally-stable topsoil environment for grass growth.

6.0 CONSTRUCTION CONSIDERATIONS

6.1 Excavation

Temporary excavations should have a slope as required to provide a stable side slopes. All temporary cut excavation should be analyzed individually for excavation of more than 4 feet deep or slope steeper than 1:2 (V:H). Excavations should be performed in accordance with local, state, and federal regulations. The potential effect of ground movements upon nearby roadways and utilities should also be taken into consideration.

6.2 Reuse of Excavated Materials

Excavated materials free of organic matters and miscellaneous debris can be reused in the general grading areas, as an embankment material or to backfill utility trenches. The roadway cut areas for this project will generally provide a good borrow source for the embankment fill. At some locations, excavated clayey soils particularly soils containing perched groundwater will



require moisture conditioning during embankment construction. The excavated material should be approved by the engineer.

6.3 Dewatering

Groundwater level measurements were made in the borings at the time of drilling. The granular soils may exhibit perched groundwater conditions. These layers may be intercepted during cut slope excavation. Seepage water that does accumulate in open excavations above groundwater level can be removed using the sump pump method. Some difficulty in dewatering is anticipated during deep cut excavation areas. Surface runoff and ditches should be directed away from the excavation to facilitate dewatering operations.

6.4 Roadway Embankment/Cut Construction

Embankment should be constructed as early as possible in the project construction period in order to allow the embankment to adjust or settle under its own weight as much as possible prior to pavement construction. It is recommended that embankment construction be performed in accordance with Section 205 of the IDOT Standard Specifications for Road and Bridge Construction (SSRBC).

Maintenance of the slope during the construction will be required for localized areas of cut slopes where erosion prone soils (silt and sand) are encountered. These soils will develop minor sloughing however; major sloughing may develop if these soils are saturated with perched groundwater. These conditions should be observed during construction and corrective measures335519141.148 should be taken. Heavy construction equipment and material should not be placed near the top of the slope, unless the stability of slope is acceptable.

6.5 Earthwork Operations

The required earthwork can be accomplished with conventional construction equipment. Precautions should be taken by the Contractor to prevent water erosion of the exposed subgrade. A compacted subgrade will minimize water runoff erosion. Silt and fine sands are sensitive to mechanical disturbance such as traffic and construction crew and will cause deterioration of exposed subgrade soils. Earthwork procedures should include provisions to minimize soil disturbance and exposure.



Earth moving operations should be scheduled not to coincide with excessive cold or wet weather (early spring, late fall or winter). Wet sand exposed to cold weather should be protected from freezing. Any soil allowed to freeze or soften due to the standing water should be removed from the subgrade. Wet weather can cause problems with subgrade compaction when the water contents exceed optimum.

6.6 Construction Monitoring

There is no need for a special construction monitoring for the earthwork except normally required by the IDOT SSRBC, Special Provisions and Contract Plans.

During construction, an experienced geotechnical engineer should be retained to perform the following tasks:

- Monitor earthwork operations;
- Evaluate the suitability of the soils for subgrade support and embankment construction;
- Observe excavation including cut slopes;
- Check soil materials and compaction for project specifications compliance;
- Monitor locations and depths of undercuts; and
- Advise the IDOT/Resident Engineer of any conditions not apparent during the subsurface exploration.



7.0 QUALIFICATIONS

The analysis and recommendations submitted in this report are based upon the data obtained from borings by Wang during investigations. This report does not reflect any variations that may occur between the borings or elsewhere on the site, variations whose nature and extent may not become evident until the course of construction. In the event that any changes in the design are planned, we should be timely informed so that changes can be reviewed, modified, and approved in writing by the geotechnical engineer.

It has been a pleasure to assist McDonough Associates, Inc. and Kane County Division of Transportation on this project. Please call if there are any questions, or if we can be of further service.

Respectfully Submitted,

WANG ENGINEERING, INC.

Mohammed (Mike) Kothawala, P.E., D.GE Project Manager/Senior Geotechnical Engineer

Jerry W.H. Wang, Ph.D., P.E. Principal



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EXHIBITS

Project and Site Location Maps
 Site and Regional Geology











APPENDIX A: Boring Logs

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928	Client Project Lon	B(M ngmead	ORIN WEI Jo IcDonou ow Park	GL bb No. ugh As way c	OG : 201-2 ssociat	R-001 23-01 tes Inc. ox River, Section	Datum: NG ¹ Elevation: 9 North: 1994 East: 97792 Station: 200	VD 04.75 ft 270.28 ft 20.44 ft 0+03.15	Page 1 of 1
		timple No. 7T Values blw/6 in)	Qu (tsf) Aoisture	Profile	Elevation (ft)	SOIL AND ROC	K tage	mple Type recovery Type No.	ow/o In) Qu (tsf) Aoisture Intent (%)
Beinch thick ASPHALT Beinch thick ASPHALT Boring terminated at 11	ZOURSE	3 5 4 5 7 6 5 9 9 9	2.50 11 P 7 NP 6 NP 7 NP 2	<u>5</u> , 1					
Begin Drilling 06-01-200 Drilling Contractor PREC Driller K Lo Drilling Method 3.25-inch H	ENERAL NOTE Complete ON DRILLING gger J. Koslos ISA	_S Drilling _ Drill Riq _ki Ch	06-0 g CMI lecked by	01-200 E-75 A B. Fu)5 ATV ugiel	WATE While Drilling At Completion of Drilling Time After Drilling Depth to Water	Image: Constraint of the second se	DATA 10.50 1 DRY	i t

v 1 L T F	Vangeng@wangeng.com 145 N Main Street ombard, IL 60148 relephone: 630-953-9928 rax: 630-953-9938	Client Project Location	Long	B(N mead	OR WE IcDo ow P	ING I Job noug arkw	No. Ih As vay o C	OG : 201-2 ssocia over Fe o.	R-002 23-01 ites Inc. ox River, Section	Datum: NG Elevation: North: 199 East: 9781 Station: 20 Offset: 12.	GVD 904.34 4120.3 80.77 902+09 79 R	4 ft 39 ft ft).33		
Profile	SOIL AND ROCK	Depth (ft) -	Sample Type recovery Sample No	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROC DESCRIPTION	Depth D	Sample Type	Sample No. SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	8-inch thick CRUSHED STC AGGREGATE SHOULDER AGGREGA 902. ³ Stiff, brown SILTY CLAY LO Medium dense to dense, bro GRAVELLY SAND	ONE	1	2 4 5 4	1.00 P	18								
		-\ - 5	2	6 8 10 10	NP	5								
		-\ -/	3	7 10 9 8	NP	7								
		-\ -/	4	4 6 6	NP	6								
0 0 0 0		10 <u>∨</u>	5	4 6 14 19	NP	8								
0 0 0 0	891.3	-	6	14 16 15 15	NP	10								
	Boring terminated at 13.00 h	 												
		-												
		20 												
טן ויוויוב														
WANGENG.G		- - 25_												
۲ <u>-</u>	GENE	RAL NO	DTE	S			•		WATE	R LEVE	L D/	ATA	•	
DEZ BE	egin Drilling 06-01-2005	Comp	olete D	rilling)6-01	-200)5	While Drilling	<u> </u>	1	0.00 ft		
	illing Contractor PRECON I			Drill Ri	g		75/		At Completion of Drilling	¥	1	1.00 ft		
Dr Dr	illing Method 3 25-inch USA	J. 1\0S	NUSK	Ch	ecked	i. ya	<u>). Fl</u>	igiel	Depth to Water	ΝΑ / ΝΔ				
		•••••	• • • • • • • • •		• • • • • • • • •	•••••	•••••	•••••	The stratification lines rep	resent the app	roxima	e bounda	ry	

POPING LOG P 002



WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

Client McDonough Associates Inc. Project Longmeadow Parkway over Fox River, Section Datum: NGVD Elevation: 900.71 ft North: 1994035.73 ft East: 978464.21 ft Station: 2005+01.83 Offset: 27.70 L

F	Fax: 630-953-9938	Lc	ocation					C	ю.		Offset: 27	70 L			
Profile	Elevation (t) DESC	AND ROCK CRIPTION	Depth (ft) Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROC DESCRIPTION	Cepth X	Sample Type	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	12-inch thick	, black SILTY LOAI TOPSOIL	M	1	2 4 3	NP	19								
					4	1 25	24								
	Loose, brown	n SANDY LOAM			3 4 2	P	24								
			5	3	2 3 3 3	NP	20								
				4	3 3 3 6	NP	17								
	Medium dens GRAVELLY	se, brown SAND		5	7 7 7 7	NP	14								
<u> </u>	Boring termir	nated at 10.00 ft													
			-												
			 15												
			-												
			-												
			20												
			-												
DT 1/11/12			-												
ANGENG.GE															
		OENED	²⁰												
301.GF		GENERA 6-01-2005		ES Dri	lling	0	16-01	-20	05	While Drilling			1 A		
ID 2012:	rilling Contractor	PRECON DRI	LLING	ווע ב	Drill Ric		CME-	75	ATV	At Completion of Drilling	÷ ¥		DRY	•••••	•••••
	riller K	Logger	J. Koslo	ski	Ch	, ecked	by E	3. F i	ugiel	Time After Drilling	NA	·····		• • • • • • • • • •	• • • • • •
DI DI	rilling Method 3.	25-inch HSA							•••••	Depth to Water	NA				
MAN										I he stratification lines repr	esent the app ual transition	roximat nav be	e boundar aradual.	У	

Wang Engineering		B				• 201	R-004	Datum: NO	GVD			
wangeng@wangeng.com		P /	VVEI	500	h A-	. 201-		Elevation: North: 199	903.62 ft 3885.55 f	ť		
Lombard, IL 60148	Client	VI.		noug	n As		ates Inc.	East: 9787	734.07 ft			
Telephone: 630-953-9928	Project LOI	igineau					OX RIVEL, SECTION	Station: 20	08+08.46 68 R	i		
Fax: 630-953-9938		•••••			y	v .		011301.12	.00 1			
Building Soil AND ROCK	Depth (ft) sample Type	Sample No. SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROC DESCRIPTION	Depth X	ample Type recovery Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
10-inch thick ASPHALT	<u>ه</u>								<u>س</u> ،			
AGGREGATE BASE COUF BASE COUF BASE COUF BASE COUF BASE COUF	ENT DNE RSE	1 3 3 6	1.50 P	10								
Medium stiff, brown-gray CL LOAM	AY 5	2 7 8 11	1.50 P	31								
Medium dense, saturated, b	rown	3 4 4 4	0.50 P	17								
		4 6 6 6	NP	18								
9 C 6 6 C 6 8 92.6	10	5 5 7 7	NP	15								
GENE		ES					WATE	R LEVE		A		
Begin Drilling 06-01-2005	Complete	Drilling	0	6-01	-200)5	While Drilling	Į.	8.0	0 ft		
Drilling Contractor PRECON I	ORILLING	Drill Ri	g	CME-	75 A	TV	At Completion of Drilling	9 <u>¥</u>	10.5	50 ft		
Driller K Logger	J. Koslos	ki Ch	ecked	by E	3. Fi	igiel	Time After Drilling	NA				
Drilling Method 3.25-inch HSA							Depth to Water	NA NA				
	<u></u>	<u></u>	<u></u>		<u></u>		The stratification lines rep between soil types; the ac	resent the app tual transition	roximate b may be gra	oundary dual.		

WANGEN

Page 1 of 1

Γ



The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148	Client	BOF W McD meadow	RING El Job N Conough	LOG lo.: 201-2 Associa	R-006 23-01 tes Inc.	Datum: NGVD Elevation: 905.5 North: 1993686 East: 979301.3	Page 1 of 1 59 ft 6.65 ft 9 ft
Telephone: 630-953-9928 Fax: 630-953-9938	Location			Co.	·····	Offset: 19.05 R	
Lotie Brokense Brokense Bescription	Depth (ft) Sample Type recovery Samble No.	SPT Values (blw/6 in) Qu	(tsf) Moisture Content (%)	Elevation (ft)	SOIL AND ROC DESCRIPTION	Depth (ft) (ft) Sample Type	Sample No. SPT Values (blw/6 in) Qu (tsf) Moisture Content (%)
AGGREGATE SHOULDER AGGREG/ Very stiff, brown SILTY CLA LOAM	DNE	3 3 2.9 5 F	50 20				
Medium dense to dense, bro GRAVELLY SAND	own2	4 8 Ni 15 16	P 6				
	3	16 16 Ni 19 20	P 5				
	¥ - 4	5 13 12 12	P 16				
Boring terminated at 11.00 f	10 2 5	5 12 Ni 10 8	P 12				
	- - - 15 -						
	25_						
GENE Begin Drilling 06-01-2005 Drilling Contractor PRECON I Driller K Logger	Complete D DRILLING J. Koslosk	S rilling Drill Rig . i Checke	06-01-2 CME-7 ed by B.	2005 5 ATV Fugiel	WATE While Drilling At Completion of Drilling Time After Drilling	R LEVEL D ♀ ▼ NA	ATA 8.00 ft 10.00 ft
Drilling Method 3.25-inch HSA				·····	Depth to Water The stratification lines repr between soil types; the act	esent the approxim	ate boundary e gradual.



WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

 Client
 McDonough Associates Inc.

 Project
 Longmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 907.57 ft North: 1993645.96 ft East: 979568.72 ft Station: 2017+66.87 Offset: 24.01 L

F	ax: 630-953-9938	o.	Offset: 24.01 L												
Profile	Elevation (II) SOIL AND ROCK DESCRIPTION	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	907.16-inch thick, brown SILTY LOAM TOPSOIL Stiff to very stiff, brown SILTY CLAY LOAM		1	3 4 4 7	1.00 P	20									
	Medium dense to dense, brown GRAVELLY SAND		2	4 5 6 9	3.00 P	18									
> () 0 > () 2 0	5_		3	6 15 19 23	NP	6									
0 0 0 0	-		4	10 13 13 13	NP	6									
0 0 0 0	897.6 10 Reging terminated at 10,00, ft		5	5 10 10 11	NP	12									
	Boning terminated at 10.00 it	-													
		-													
	15_														
		-													
	20_	-													
	- - -	-													
		-													
	GENEDAL N		 										•		
R	GENERAL C		E3 e Dri	llina	0	6-02	-200)5	While Drilling		LU	9 N	A 0 ft		
	Illing Contractor PRECON DRILLIN			Drill Ric	y	CME-	75 A	TV	At Completion of Drillina	<u>∓</u> Ţ		D	RY		
Dr	iller K Logger J. Ko	oslo	ski	Ch	ecked	by E	3. Fı	ıgiel	Time After Drilling	NA	•••••	···· · ·			
Dr	Iling Method 3.25-inch HSA					•••••••			Depth to Water	NA					
		<u></u>							The stratification lines repre- between soil types; the actual	sent the app al transition r	roxim nay b	ate b e gra	oundar idual.	/	



WEI Job No.: 201-23-01

1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

 Client
 McDonough Associates Inc.

 Project
 Longmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 908.30 ft North: 1993551.09 ft East: 979887.36 ft Station: 2021+0.04 Offset: 0.00 R

	Fax: 63	30-953-9938	ocation					C	0.	0. Offset: 0.00 R						
Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft) Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCH DESCRIPTION	Depth (ff)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	907.3	12-inch thick, dark brown SILT LOAM TOPSOIL Very stiff, brown SILTY CLAY		1	2 2 3 3	NP	18									
		LOAM		2	4 5 6 6	3.50 P	20									
	903.3	Loose to dense, brown GRAVELLY SAND	5	3	4 4 4 10	NP	10									
	2 2 2			4	8 17 19 19	NP	4									
000	898.3	Poring terminated at 10.00 ft		5	6 20 21 21	NP	8									
WANGENG.GDT 1/11/12																
GPJ		GENERA		ES))			·	I	WATE	R LEVE		AT	Α		
IC 201230	Begin Dr Drilling C	rilling 06-02-2005 Contractor PRECON DR	Complet	e Dri	lling Drill Rig	0 1)6-02 CME-	-20	05 ATV	While Drilling At Completion of Drilling	¥	1	10.0 DI	00 ft RY		
	Driller Drilling N	K Logger	J. KOSIO	<u>Ski</u>	Ch	ecked	by E	3. FI	ugiel	Time After Drilling Depth to Water	NA NA					
WANC				· · · · · ·				· · · · · · · ·		The stratification lines repre- between soil types; the actu	sent the app al transition	roxima may be	ate bo e gra	oundary dual.	/	



WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928

Client McDonough Associates Inc.

Project Longmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 907.47 ft North: 1993519.17 ft East: 980185.41 ft Station: 2023+99.93 Offect: 0.00 I

F	ax: 630	0-953-9938	ocation		•••••			С	0.		Offset: 0.0	00 L				
Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft) Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCH DESCRIPTION	Depth (ff)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	906.5L	12-inch thick, dark brown SILT _OAM TOPSOI Very loose to loose, brown	Y -	1	2 3 4 3	NP	15									
		_OAM		2	1 2 1 2	NP	15									
	- - -		5_	3	5 4 3 4	NP	12									
	901.0 \ L 899.5	Very stiff, brown SILTY CLAY _OAM		4	4 8 11 14	3.00 P	11									
	897.5	Medium dense, brown GRAVELLY SAND		5	4 7 7 7	NP	15									
	E	Boring terminated at 10.00 ft	-													
			 15 _													
			-													
			-													
		CENED		F 6										· A		
Be	ain Dr	illing 06-02-2005	While Drilling			8.0	0 ft									
Dri	illing C	Contractor PRECON DR	At Completion of Drilling	.	•••••	D	RY	•••••	•••••							
Dri	iller .	K Logger	Time After Drilling	NA												
Dri	illing N	Nethod 3.25-inch HSA	Depth to Water	NA												
										The stratification lines repre- between soil types: the actu	esent the app al transition	roxim mav b	ate b e gra	oundar	/	



WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

Client McDonough Associates Inc.

Project Longmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 910.41 ft North: 1993516.77 ft East: 980485.45 ft Station: 2027+00.06 Offset: 0.02 L

F	ax: 6	30-953-9938	cation	••••	•••••			<u> </u>	0.		Offset: 0.0)2 L				
Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft) Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	909.4	12-inch thick, dark brown SILTY LOAM TOPSOIL- Stiff, dark brown SILTY CLAY		1	2 3 3 3	NP	16									
		LOAM		2	3 3 5 6	1.50 P	19									
	905.4	Loose, brown LOAM	5	3	2 2 3 3	NP	13									
				4	1 3 3 3	NP	13									
	901.9 900.4	Medium dense, brown GRAVELLY SAND		5	4 11 13 18	NP	10									
		Boring terminated at 10.00 it														
			-													
			15													
			20													
			-													
			- - - - - -													
			²⁰ –													
	air D	GENERA		ES	lling	~	6 02	201)5			LD				
Dr	illina	Contractor PRECON DRII	LLING	Uril : ז	uing Drill Ric		CME-	-200 75 4		At Completion of Drilling	<u>÷.</u>		ע D	RY	• • • • • • • • •	
Dr	iller	K Logger J	. Koslos	ski	Ch	, ecked	by E	3. Fi	ıgiel	Time After Drilling	NA					
Dr	illing	Method 3.25-inch HSA			· · ·					Depth to Water	NA					
										The stratification lines represented between soil types; the actual	ent the app I transition	proxim may b	ate b e gra	oundar adual.	/	



WEI Job No.: 201-23-01

Co.

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

Location

Client McDonough Associates Inc.

Project Longmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 914.62 ft North: 1993521.24 ft East: 980785.35 ft Station: 2030+00.00 Offset: 0.06 L

Profile		SOIL AND ROCK	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCH DESCRIPTION	Depth (ff)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		12-inch thick, dark brown SILTY 913.6LOAM TOPSOIL Stiff to very stiff, brown SILTY		X	1	2 2 2 4	1.50 P	18									
		CLAY LOAM 911.6 Medium dense, brown SILT	- -		2	3 3 7 8	2.00 P	22									
			5	$\left \right\rangle$	3	5 6 9 13	NP	21									
		907.6 Medium dense, brown LOAM		$\left \right\rangle$	4	4 18 9 11	NP	12									
		905.6 Medium dense to very dense, brown GRAVELLY SAND			5	5 9 20 24	NP	10									
		902.6	-	$\left \right\rangle$	6	5 26 28 23	NP	10									
WANGENG.GDT 1/11/12																	
GPJ		GENERA		ΟΤ	ËS		•	•	•		WATE	R LEVE	LD	AT	Α		
2301	Beg	jin Drilling 06-02-2005	Com	plete	e Dril	ling)6-02	-200)5	While Drilling	<u> </u>		DF	RY		
201	Dril	ling Contractor PRECON DRIL	LIN	G	[Drill Rig	g (CME-	75 A	ATV	At Completion of Drilling	Ţ		DF	RY		
	Dril	ler K Logger J.	. Ko	slos	ski	Che	ecked	by .	3. Fi	ugiel	Time After Drilling	NA					
	Dril	ling Method 3.25-inch HSA	•••••						•••••		Depth to Water	NA esent the app	 roxima	ate bo	oundary	/	
≶∟											between soil types; the actu	al transition	may be	e grad	dual.		

W 1 ⁴ Lo Fi	angeng@wangeng.com 145 N Main Street ombard, IL 60148 elephone: 630-953-9928 ax: 630-953-9938	Client Project Location	Lon	E gmea	SOR WE McDo Idow I	El Job onoug Parkv	G L o No gh A vay	.OG .: 201-2 ssocia over Fe So.	R-012 23-01 Ites Inc. ox River, Section	Datum: No Elevation: North: 199 East: 9810 Station: 20 Offset: 2.4	GVD 915.93 93515.1; 987.09 f 933+01. 41 R	ft 3 ft t 74	Page 1 of 1
Profile	SOIL AND ROCK	Depth (ft)	Sample Type	Sample No. SPT Values	(blw/6 in) Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROO DESCRIPTION	N Eept N: (∰)	Sample Type recovery Sample No	SPT Values (blw/6 in)	Qu (tsf) Moisture Content (%)
	915.38-inch thick, black SILTY LO 914.7TOPS Very stiff, black and brown S \CLAY	OIL	X	1 4 5 6	3.75 P	5 14							
	Loose to medium dense, bro and gray SILTY LOAM	wn - - -		2 4 5 7	NP	19							
		5 -	X	3 6 9	NP	18							
	Dense, gray LOAM Medium stiff, gray and browr CLAY. with interbedded silt	- - עַר	Å	4 19 4 19 10	5 NP	16							
	lenses	- - 	X	5 3	0.50 P	23							
	SAND	um - - -		6 8 1 ⁻¹	NP	13							
WANGENG.GDT 1/11/12	Boring terminated at 12.00 t												
01.GPJ	GENE	RAL N	OTE	S	- 1	07.44	1 20	05		R LEVE		TA	
ECTO2 Re Re		Com NRII I IN	ipiete I G	Uniling Drill	 Pia		1-2U 55 1		At Completion of Drilling	<u>÷.</u>			•••••

Ģ	GENERAL NOTES	WAIER LEVEL DAIA
2301	Begin Drilling 07-11-2005 Complete Drilling 07-11-2005	While Drilling 7.50 ft
201	Drilling Contractor PRECON DRILLING Drill Rig CME 55 TMR	At Completion of Drilling
ONIE	Driller J&D Logger J. Kasnick Checked by B. Fugiel	Time After Drilling NA
GEN	Drilling Method 3.25-inch HSA	Depth to Water 🖳 🙀
WAN		The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

. . .



WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

 Client
 McDonough Associates Inc.

 Project
 Longmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 916.88 ft North: 1993519.09 ft East: 981385.40 ft Station: 2036+00.10 Offset: 0.15 R

Fa	ax: 630-953-9938	Location		••••	•••••	•••••	•••••	C	0.		Offset: 0.1	οĸ			
Profile	SOIL AND ROCK DESCRIPTION	Depth (ft) Samnle Tvne	recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No. SPT Values	(blw/6 in) Qu (tsf)	Moisture Content (%)
	916.46-inch thick, black SILTY LO TOPS 915.4Hard, brown and black SILT CLAY LOAM	AM DIL		1	3 5 8 12	4.00 P	15								
, 0 , 0	Dense, brown GRAVELLY SAND			2	11 18 13 13	NP	7								
	SANDY LOAM	5		3	5 6 6	NP	22								
	910.0 Stiff to very stiff, gray CLAY, v interbedded silt lenses	vith		4	4 5 4 6	NP	20								
		10		5	4 3 5	3.50 P	19								
	904.9			6	4 3 8 12	1.25 P	24								
	Boring terminated at 12.00 ft	-													
		15													
		-													
		- - 20													
		-													
		25								1					
	GENE	RAL NO	DTE	S						WATER		L D/			
Be	gin Drilling 07-11-2005		lete I	Drill	ling Drill Dia	0	7-11 ME	-20(55 T)5 MP	While Drilling	¥		5.40 יפח	rt 1	
Dri	ller K Loader	J. Kas	nic	. ∟ k	Che Che	ecked	by E	3. Fi	ugiel	Time After Drilling	 NA		ואט	•••••	
Dri	lling Method 3.25-inch HSA			.:			, , , . .			Depth to Water	NA				
										The stratification lines represent between soil types; the actual	ent the appr I transition n	oximat nay be	te bour gradua	idary al.	

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938	Client Project L Location	.ongr	BC M meado	OR WE cDoi	Job noug arkw	No. h A ay c	OG : 201-2 ssocia over Fe	R-014 23-01 tes Inc. ox River, Section	Datum: NC Elevation: North: 199 East: 9816 Station: 20 Offset: 0.0	GVD 916.98 ft 3522.60 85.27 ft 38+99.98 5 R	ft 3	Page	1 of 1
SOIL AND ROCK DESCRIPTION	Depth (ft) Samnle Tvne	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROC DESCRIPTION	Depth (ff)	Sample Type recovery Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
916.73-inch thick, black SILTY LO. 916/2TOPS(Very stiff, black and gray SIL CLAY LOAM	AM DIL TY		2 5 8 9	2.50 P	25								
and gray SANDY LOAM, with	wn T i T	2	6 8 6	NP	12								
910.7	5	3	3 4 3 3	NP	21								
Medium dense, gray SILTY LOAM		4	4 6 6 7	NP	25								
Medium dense, gray, fine SA Medium dense, gray SILTY LOAM	ND	5	5 7 7 8	NP	21								
GENE		TES	 ;					WATE	R LEVE	L DAT	A		
Begin Drilling 07-11-2005 Drilling Contractor PRECON D Driller K Drilling Method 3,25-inch HSA	Comp RILLING J. Kas	lete Dri nick	lling Drill Rig Cho	c ecked	07-11 CME (by E	-20(55 T 3. Fi	05 MR ugiel	While Drilling At Completion of Drilling Time After Drilling Depth to Water	✓ ✓ NA NA esent the app	4.1 3.3	0 ft 30 ft	y	

WAN


WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

Client McDonough Associates Inc.

Datum: NGVD Elevation: 919.44 ft North: 1993527.62 ft East: 981985.24 ft Station: 2041+99.98 Offset: 0.13 L

Project Longmeadow Parkway over Fox River, Section
Location Co.

Profile	SOIL AND ROCK DESCRIPTION	Depth (ft) ample Type	sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	ample Type	sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	949.23-inch thick, black SILTY LOAM TOPSOIL Very stiff, brown and gray SILTY		1	2 5 6 7	3.75 P	20					S	0,	0,		
	Loose to medium dense, brown and gray SANDY LOAM		2	4 5 7 7	NP	24									
		5	3	5 4 4 5	NP	17									
	911.9 Medium stiff, brown and gray		4	4 5 6 7	NP	20									
	CLAY, with interbedded silt lenses		5	2 4 4 5	0.50 P	24									
	908.7fine SAND -														
	Boring terminated at 12.00 ft														
		15 _ _ _													
		- 20 -													
		_ 25													
	GENERAI		WATER	LEVE	L D		A								
Be	gin Drilling 07-11-2005	While Drilling	 V		7.0	0 ft									
Dr	illing Contractor PRECON DRIL	LING	۔ ا	Drill Rig	, C	ME (55 T	MR	At Completion of Drilling	Ţ		D	RY		
Dr	iller K Logger J.	Kasni	ck	Ch	ecked	by E	3. Fi	ugiel	Time After Drilling	NA					
Dr	illing Method 3.25-inch HSA		•••••						Depth to Water The stratification lines represe	NA nt the app	 roxima	ate b	oundar	y	
			••••						between soil types; the actual t	ransition i	<u>may b</u>	e gra	idual.		



WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

Client McDonough Associates Inc. Project Longmeadow Parkway over Fox River, Section Datum: NGVD Elevation: 916.93 ft North: 1993511.92 ft East: 982282.48 ft Station: 2045+00.01 Offset: 19.78 R

F	ax: 6	630-953-9938	Location					С	0.		Offset: 19	.78 R				
Profile	Elevation	SOIL AND ROCK DESCRIPTION	Depth (ft) Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCH DESCRIPTION	Depth (ff)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	916 915	73-inch thick, black SILTY LOA TOPSC 4Stiff, black, brown, and gray SILTY CLAY		1	4 5 6 7	1.50 P	24									
	913	Loose, brown and gray SILTY LOAM Loose, gray and brown SANE)Y	2	3 3 5 7	NP	15									
		LOAM	5	3	3 3 4 4	NP	26									
	<u>910</u>	.4 Medium dense, gray SILT		4	5 6 10 11	NP	17									
	906	Very stiff, gray SILTY CLAY	10	5	5 6 4 6	2.00 P	20									
		Boring terminated at 10.00 ft														
		GENER		ES)	•		•	•	WATE	R LEVE	LD	AT	Α		
Be	gin l	Drilling 07-11-2005	Complete	e Dri	lling)7-11	-200)5	While Drilling	<u>¥</u>		4.2	5 ft		
Dr	'illing 'iller	Contractor PRECOND	KILLING J. Kasni	 ck	Drill Riq Ch) ecked	, IVIE. ∮ by F	55 3. Fi	NIK Jaiel	At Completion of Drilling	. ΝΔ		D	KY	•••••	•••••
	illino	Method 3.25-inch HSA		Ϋ́́Υ.	01	CUNCU	∪у .⊨		giei	Depth to Water	NA	•••••				
					· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · ·	· · · · · · · · · · · ·	· · · · · · · · ·		The stratification lines repre- between soil types: the actu	sent the app al transition	roxima may be	ate b e gra	oundar	у	



BORING LOG R-017

WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

Client McDonough Associates Inc. Project Longmeadow Parkway over Fox River, Section Datum: NGVD Elevation: 920.65 ft North: 1993534.15 ft East: 982572.99 ft Station: 2047+96.01 Offset: 5.52 R

F	ax: 6	630-953-9938	cation					C	ю.		Offset: 5.5	52 R				
Profile	Elevation	SOIL AND ROCK DESCRIPTION	Depth (ft) Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	<u>920</u>	.08-inch thick, black SILTY LOAM TOPSOIL- Hard, black and brown SILTY		1	2 7 8 9	4.00 P	20									
	918	Medium dense, brown and gray SANDY LOAM		2	4 6 5	NP	13									
	<u>916</u>	Very loose, brown and gray SILTY LOAM	5	3	2 2 2 2	NP	22									
	914	Loose, brown and gray SANDY LOAM		4	3 5 4 8	NP	24									
	<u>912</u> 912	Medium dense, gray SILTY LOAM	-	5	5 8 7 6	NP	18									
		Boring terminated at 10.00 ft	-													
			-													
			-													
			-													
			15													
			-													
			-													
			-													
			-													
			20													
			-													
			_													
			-													
			-													
<u> </u>		OFNED A	²⁰ -													
R	nin	GENERA			lling	ſ)7_11	-200	05	While Drilling	<u>< LEVE</u>		AI 55	A 0 ft		
Dr	illing	Contractor PRECON DRIL	LING		Drill Rig) ME	55 T	MR	At Completion of Drilling	÷ ¥	•••••	D	RY	•••••	•••••
Dr	iller	K Logger J	. Kasni	ck	Ch	ecked	by E	3. Fi	ugiel	Time After Drilling	NA					
Dr	illing	Method 3.25-inch HSA					••••			Depth to Water	NA		atah	oundor		
										between soil types; the actu	al transition	may b	ale D e gra	adual.	у	



WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928

Client McDonough Associates Inc. Project Longmeadow Parkway over Fox River, Section Datum: NGVD Elevation: 923.11 ft North: 1993577.83 ft East: 982886.53 ft Station: 2050+96.63

F	ax: 630-953-9938	ocation					С	0.		' C	Offset: 23.	93 L				
Profile	SOIL AND ROCK DESCRIPTION	Depth (ft) Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND DESCRIF	ROCK PTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	9-inch thick, black SILTY LOAN 922.4TOPSOIL 921.6 Very stiff, brown SILTY CLAY Medium dense, brown		1	3 6 9	2.25 P	16										
	GRAVELLY SAND		2	3 14 12 10	NP	10										
		5	3	7 9 6 6	NP	10										
	^{915.6} Loose, brown, coarse SAND		4	4 6 8 6	NP	14										
	912 6		5	3 3 4 5	NP	24										
	912.1Medium dense, brown and gray SILTY LOAM 911.1Medium dense, gray, fine SANE		6	4 6 12 12												
	Boring terminated at 12.00 ft															
		15 														
		-														
		_ 20 _														
1/11/12																
ANGENG.GUI		- - - 25														
∧ Ld:			 F						\ \			ם ו		Δ		
5. 1000 Re	ain Drillina 07-11-2005			lina	0)7-11	-200)5	While Drilling			LU	AI 2.50	⊷ 0 ft		
2012 Dr	illing Contractor PRECON DRI		<u>ح</u>	Drill Ric		ME	55 T	MR	At Completion of	of Drilling			DF	RY		
Dr	iller K Logger	J. Kasnio	ck	Che	ecked	by E	3. Fi	ıgiel	Time After Drilli	ng	NA	· · · · · · ·				
Dr	Iling Method 3.25-inch HSA		•••••			••••			Depth to Water	<u>¥</u>	NA					
WAN		<u></u>							The stratification between soil type	lines represe es; the actual	nt the app transition i	roxima nay b	ate bo e grad	oundary dual.	/	

WANGENG GDT 2301 GP.I 500 WANGENGINC



WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

ClientMcDonough Associates Inc.ProjectLongmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 923.59 ft North: 1993529.85 ft East: 983185.31 ft Station: 2053+99.90 Offset: 19.72 R

Fax: 630-953-9938 Location	<u></u>	•••••			C	0.		Offset: 19	.72 R					
Profile Profile Profile Profile DESCRIPTION (f)	sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	
923.33-inch thick, brown SILTY LOAM TOPSOIL Stiff, dark brown SILTY CLAY LOAM	1	3 4 5 6	1.25 P	22										
Loose, brown SANDY LOAM	2	3 5 6 5	1.75 P	22										
5 918.1 Stiff to very stiff, brown SILTY	3	3 5 3 5	NP	13										
	4	2 2 4 5	1.25 P	18										
I I I I I I Medium dense, brown and gray 10	5	5 6 8	2.25 P	24										
SILT	6	6 10 10 7	NP	25										
Boring terminated at 12.00 ft -														
							WATER		חו		Δ			
Begin Drilling 07-11-2005 Comple	te Dril	lling	0	7-11	-200)5	While Drilling	<u>, LLVC</u> <u><u>V</u></u>			RY			
Drilling Contractor PRECON DRILLING	[Drill Rig	g	ME	55 T	MR	At Completion of Drilling	¥	•••••	DR	RY			
Driller K Logger J. Kasn	ick	Ch	ecked	by .	3. Fi	ugiel	Time After Drilling	<u>NA</u>	•••••					
	•••••		· · · · · · · · · · ·	• • • • • • • • • • • • • • • • • • •			The stratification lines repre	sent the app al transition	roxim mav b	ate bo <u>e gr</u> ad	undary dual.	/		



WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

Client McDonough Associates Inc.

Datum: NGVD Elevation: 925.21 ft North: 1993528.04 ft East: 983482.34 ft Station: 2056+97.29 Offset: 16.49 R

Project Longmeadow Parkway over Fox River, Section

Location Co.

Profile		Elevation Elevation SOIL AND ROCK DESCRIPTION	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ff)	Sample Type	Sample No. SPT Values	Qu (tsf)	Moisture Content (%)
		11-inch thick, black SILTY LOAM 924.3TOPSOIL Hard, black and brown SILTY - CLAY LOAM		1	5 7 8 12	NP	17								
		921.7 Medium dense, brown SILTY		2	5 9 12 11	4.00 P	22								
	- - -	919.7 Stiff, brown SILTY CLAY LOAM		3	5 6 7 8	NP	15								
		-		4	4 3 4 4	1.50 P	20								
		 <u>915.7</u> Loose to medium dense, brown 10型 SANDY LOAM		5	3 3 5 8	1.50 P	28								
				6	3 5 8 4	NP	24								
		911.2 Boring terminated at 14.00 ft	<u> </u>	7	7 10 11	NP	22								
		20													
DT 1/11/12															
U WANGENG.G		 								1					
1.GPJ		GENERAL N	ΟΤΙ	ES						WATER	R LEVE	LD	ATA		
D1230	Beg	gin Drilling 06-03-2005 Con	nplete	Dril	ling	0	6-03	-200)5	While Drilling	<u>¥</u>	•••••	9.90 f	t	
NC 2(Drill ייייר	lling Contractor PRECON DRILLIN	G	[~k	Drill Rig			55 T	MR	At Completion of Drilling	¥		DRY		
	Jrill)rill	lling Method 3 25-inch HSA	191110	۲ ۳	Che	скеа	uy .	2. FL	uyiel	Depth to Water V		• • • • •			
WANG			·····		•••••	·····	· · · · · · · · · · · ·			The stratification lines repre	sent the app al transition	roxima may be	te bound gradual	lary	



WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

 Client
 McDonough Associates Inc.

 Project
 Longmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 925.69 ft North: 1993546.06 ft East: 983785.04 ft Station: 2059+99.95 Offset: 0.03 R

	Fa	ax: 630-953-9938	Loca	ation			•••••		С	0.		Offset: 0.0)3 R			
Profile	2	SOIL AN DESCR	D ROCK IPTION	Depth (ft) Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROO DESCRIPTION	K fi€ €	Sample Type recovery Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		Loose, dark bro	wn to black	-												
1000		924.2	TOPSOIL			4										
		Loose, brown S	ANDY LOAM		1	4 3 6	NP	13								
	л с 2 - 6 2 - С	Medium dense, GRAVELLY SA	brown ND	-	2	9 9 8 8	NP	7								
	<u>بر</u>	^{920.2} Loose, brown S.	ANDY LOAM		3	3 3 5 7	NP	25								
		917.9				5										
	2 2 2 2 0	Medium dense, GRAVELLY SA	brown ND		4	6 6 6	NP	10								
	<u>18</u>	Loose, brown S	LT	10	5	3 4 5 7	NP	26								
		914.2 Medium dense,	brown	-	6	5		16								
	3 0 7. (GRAVELLY SA	ND	$\exists \land$	0	9 11	INP	10								
2				- - 15_ - - - - - - - - - - - 20_ - - - - - - - - - - - - - - - - - - -												
GDT 1/11/1.																
/ANGENG.				25												
× L45			GENERAI		l FS						WAT	R I FVF		 TA		
2301.(Beg	gin Drilling	3-2005	Complete	e Dril	ling	0	6-03	-200)5	While Drilling	 Ţ	8.	00 ft		
C 201	Dril	ling Contractor	PRECON DRIL	LING	[Drill Rig	C	CME-	75 A	TV	At Completion of Drillin	g ¥	<u>ן</u>	DRY		
	Dril	ller K	Logger J.	Koslo	ski	Che	ecked	by .	3. Fı	ıgiel	Time After Drilling	NA	•••••			
NANGE	Dril	ling Method 3.25-	inch HSA				•••••	•••••			Depth to Water The stratification lines re	resent the app	roximate	boundar	у	



WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

 Client
 McDonough Associates Inc.

 Project
 Longmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 924.54 ft North: 1993533.80 ft East: 984084.82 ft Station: 2062+99.98 Offset: 0.18 R

F	ax: 63	0-953-9938	ation				С	o.	I	Offset: 0.1	8 R			
Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft) Sample Type recovery	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	923.5l	12-inch thick, dark brown SILTY _OAM TOPSOIL Medium dense, brown SANDY _OAM		8 1 8 5 4	NP	13								
		Stiff, brown and gray SILTY CLAY LOAM	5	2 4 4 6	1.75 P	25								
	<u>919.0</u>	Loose, brown SILT		3 3 4 5	NP	20								
	916.8	Loose, brown LOAM		4 3 5 5	NP	14								
	915.0 1 1 913.5	Very stiff, brown SILTY CLAY LOAM	10	5 5 5 5 5	3.00 P	18								
		Boring terminated at 11.00 ft												
			- - 15_											
			20											
21/11/1 TC														
WANGENG.GI			25											
GPJ		GENERA	L NOTE	S			•		WATEF	LEVE		TA		
12301 Be	egin Dr	illing 06-03-2005	Complete I	Drilling)6-03	-200)5	While Drilling	<u> </u>		DRY		
	rilling C	Contractor PRECON DRIL	LING	Drill Ri	g	CME-	75 /	TV	At Completion of Drilling	¥		DRY	•••••	
	riller	K Logger J.	. Koslosi	(I Ch	ecked	by .	3. Fi	ıgiel	Time After Drilling	NA	••••			
	ning N					•••••			The stratification lines represent	sent the approximation r	roximate	e boundar gradual	у	



WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

 Client
 McDonough Associates Inc.

 Project
 Longmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 922.91 ft North: 1993521.51 ft East: 984384.56 ft Station: 2065+99.97 Offset: 0.08 L

F	ax: 63	30-953-9938	cation			•••••			<u> </u>	0.	I	Offset: 0.0)8 L				
Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft) Sample Tyne	recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ff)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	004.0	12-inch thick black SILTY LOAN															
	921.9	Loose to medium dense, gray	-	/		7											
		GRAVELLY SAND			1	9 4 6	NP	11									
	918.9			\langle	2	3 7	NP	7									
		Soft, gray SILTY CLAY LOAM	5_	\mathbb{Z}		1 2											
					2	1	0.25	20									
			-//	\mathbb{A}		1	P.25	29									
	01/ 0		-			1											
	014.3	Loose, brown and gray SANDY	/	X	4	3	NP	20									
		LOAM		7		2											
			10/	X	5	3 3	NP	20									
	911.4					2											
		Very soft, gray SILTY CLAY	-)	X	6	0	0.10	25									
			7			Ő											
			-	\langle	7	0	0.00	22									
			15			2	P										
	907.4	Medium dense, gray LOAM	/	\langle	8	2 6	NP	11									
	905.9	1	/			7 7											
		Boring terminated at 17.00 ft	_														
			-														
			20														
			-														
			-														
			-														
			-														
			-														
			25_														
		GENERA	LNC)T	ES				0.0		WATER		LD	AT			
Be Dri	gin D illina (rilling U6-U3-2005 Contractor PRECON DRII	Comp	lete	Dril I	lling Drill Ric	00	06-03 CME-	-200 75 /		While Drilling At Completion of Drilling	<u>¥</u>		<u>ת</u> ם	кĭ RY	•••••	
Dri	iller	K Logger J	. Kos	los	ski	Ch	ecked	by E	3. Fi	ıgiel	Time After Drilling	NA	·····				
Dri	illing l	Method 3.25-inch HSA									Depth to Water	NA		ate h	ounda	,	
											between soil types; the actua	ent the app I transition	noxim may b	ale D e gra	adual.	ý	



WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

 Client
 McDonough Associates Inc.

 Project
 Longmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 924.62 ft North: 1993508.70 ft East: 984684.33 ft Station: 2069+00.02 Offset: 0.17 R

F	ax: 6	30-953-9938	cation					C	0.		Offset: 0.1	17 R				
Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft) Sample Type	recovery Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROC DESCRIPTION	Depth D	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	923.6	12-inch thick, dark brown SILTY SLOAM TOPSOIL Medium dense, brown, medium SAND		1	5 6 8 8	NP	9									
	<u>920.6</u>	Soft to stiff, gray and brown SILTY CLAY LOAM	5_	2	5 3 2 3	0.25 P	25									
				3	1 3 3 5	1.50 P	22									
	917.1	Loose, brown SANDY LOAM		4	1 2 6 9	NP	18									
		Very soft to medium stiff, gray SILTY CLAY	10	5	2 3 3 3	0.00 P	19									
				6	1 1 2 2	0.50 P	20									
			15	7	1 1 1 1	0.50 P	22									
	908.6 907.6	Medium dense, gray GRAVELL SAND Boring terminated at 17.00 ft	r - -	8	6 7 8 11	NP	21									
		-														
			20 - - -													
			-													
			 25													
	1	GENERA				I				WATF			AT	Δ		
Be	ain D	orilling 06-03-2005	Comple	te Dr	illina	0	6-03	-200)5	While Drilling			16.0)0 ft		
Dri	illing	Contractor PRECON DRI	LLING		Drill Rig	g (CME-	75 A	ATV	At Completion of Drilling	Ţ.		DI	RY		
Dri	iller	K Logger	. Koslo	oski	Ch	ecked	by E	3. Fi	ugiel	Time After Drilling	NA					
Dri	illing	Method 3.25-inch HSA					•••••			Depth to Water	NA					
										The stratification lines repr between soil types; the act	esent the app al transition	proxima may be	ate bo e grad	oundary dual.	/	



WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928

Client McDonough Associates Inc. Project Longmeadow Parkway over Fox River, Section Datum: NGVD Elevation: 922.65 ft North: 1993496.30 ft East: 984984.14 ft Station: 2072+00.08 Offset: 0.02 R

between soil types; the actual transition may be gradual.

F	ax: 6	30-953-9938	ocation					C	0.		Offset: 0.0)2 R				
Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft) Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROO DESCRIPTION	Depth X	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	<u>92</u> 1.6	12-inch thick, dark brown SILTY SLOAM TOPSOIL Loose to medium dense, brown SANDY LOAM		1	3 6 4 4	NP	19									
	<u>918.6</u>	Stiff, gray SILTY CLAY	5_	2	4 3 2 4	1.00 P	25									
	916.6	Loose, gray SILTY LOAM		3	4 4 5 5	NP	17									
				4	3 3 3 3	NP	19									
	913.1	Very soft to very stiff, gray SILT CLAY LOAM	(10	5	1 3 3 4	0.25 P	21									
				6	1 1 2 2	0.20 P	21									
	907.6	Boring terminated at 15 00 ft	15	7	1 2 6 7	2.00 P	11									
			-													
			20													
			-													
		CENED/									=R I E\/=		ΔT			
Be Dr Dr	egin D illing iller	rilling 06-06-2005 Contractor PRECON DRI K Logger	Complete LLING J. Koslo	e Dri ski	, Iling Drill Rig Ch	c ecked)6-06)ME-	-200 75 / 3. Fi)5 ATV ugiel	While Drilling At Completion of Drillin Time After Drilling	Ţ g Ţ NA	<u> </u>	D	RY RY		
Dr	illing	Method 3.25-inch HSA								Depth to Water	NA	roxim	ate b	oundar	v	

Co



WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

Client McDonough Associates Inc. Project Longmeadow Parkway over Fox River, Section Datum: NGVD Elevation: 922.63 ft North: 1993483.71 ft East: 985283.68 ft Station: 2074+99.89 Offset: 0.06 R

	Fa	ax: 630-953-9938	cation		•••••			C	о.		Offset: 0.06	6 R			
Profile		SOIL AND ROCK	Depth (ft) Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCH DESCRIPTION	Depth (ft)	Sample Type recovery Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		12-inch thick, dark brown SILTY 921.6LOAM TOPSOIL Stiff, brown SILTY CLAY LOAM			53	1.75	24								
	<u>'</u>	Loose, brown SILTY LOAM	-		22	Р									
		918.1 Loose, brown SANDY LOAM	5	2	3 3 6 5	NP	15								
		^{916.6} Loose, brown SILTY LOAM		3	3 3 5 5	NP	19								
		914.6 Medium dense, brown		4	3 10 8	NP	10								
		GRAVELLY SAND Very stiff to hard, brown SILTY CLAY LOAM		5	5 1 1 3	2.00 P	15								
				6	4 6 14	> 4.50 P	15								
	<u>' </u>	Boring terminated at 13.00 ft	-		33										
			15 												
			-												
			-												
			20 												
21/11/1			-												
NGENG.GUI															
U WAI			25							· · · · · · · · · · · · · · · · · · ·					
301.GF	Ren	GENERA		ES	lling	-)6-0e	201)5	While Drilling	<u>≺ LEVEl</u> ▽				
2012	Dril	ling Contractor PRECON DRI	LLING	ווע -	Drill Ric	,	CME-	75 /		At Completion of Drilling	<u>+.</u>	E	RY	•••••	•••••
	Dril	ller K Logger J	. Koslo	ski	Ch	ecked	by E	3. Fi	ıgiel	Time After Drilling	NA				
ANGEN	Dril	ling Method 3.25-inch HSA						•••••	•••••	Depth to Water The stratification lines represent	NA sent the appr	oximate	boundar	у	
31										between soil types: the actu	al transition m	nav be ar	adual.		



WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

 Client
 McDonough Associates Inc.

 Project
 Longmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 921.00 ft North: 1993471.14 ft East: 985583.50 ft Station: 2077+99.96 Offset: 0.07 R

F	ax: 630-953-9938	ocation				C	.	I	Offset: 0.0	7 R			
Profile	SOIL AND ROCK DESCRIPTION	Depth (ft) Sample Type recovery	Sample No.	(blw/6 in) Qu	(tst) Moisture Content (%)	Profile	Elevation (ff)	SOIL AND ROCH DESCRIPTION	Depth (ft)	Sample Type	Sample No. SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	36-inch, stiff to very stiff, black SILTY CLAY LOAM TOPSOIL		1	2 2 2.(1 P	00 20								
	918.0 Medium stiff to stiff, brown and gray SILTY CLAY, with		2	4 4 1.2 4 P	25 26								
	interbedded sand ienses	5	3	5 4 0.7 6 P	75 15								
	913.5 Medium dense, brown and gray		4	2 5 1.5 6 P	50 14								
	SANDY LOAM	⊻ 10	5	9 7 11 17									
	Very stiff, gray SILTY CLAY LOAM		6	4 16 0.7 7 P	75 13								
	907.0		7	3 4 2.2 7 P	25 11								
	Boning terminated at 14.00 ft	15 											
		-											
		_ _ 20_											
		-											
		25						1					
	GENERA	AL NOT	ES		04.0	7 00	05	WATE					
Dr.	gin Drilling 04-27-2005 Illing Contractor PRECON DRI		Drillin	ig ill Ria	CME	<u>, -20</u> 55 1	MR	At Completion of Drilling	<u>÷</u> ▼	 ع	3.00 ft	•••••	
Dr	iller K&D Logger	J. Kasnic	:. :k	Checke	ed by	B. F	ugiel	Time After Drilling	NA	·····		•••••	•••••
Dr	Illing Method 3.25-inch HSA	••••••••••••••						Depth to Water	NA				
								The stratification lines repre- between soil types; the actu	sent the app al transition r	roxima nav be	te boundar gradual.	у	

	Wang				B	OR	ING) L	OG	R-028					Page	1 of 1
	Engineering				_	WF	Lloh	No	· 201-2	23-01	Datum: No	GVD				
	angeng@wangeng.com	Olivert			N/			h A			Elevation: North: 199	919.1 93453	14 ft 3.47 ⁻	ft		
'	ombard, IL 60148	Client		 nar	<u>vi</u> beog		arku		ssocia	ox Pivor Section	East: 9858	393.2	5 ft			
	elephone: 630-953-9928	Location		<u>igi</u>	licau			ay C	0. 0.	OX INVEL, SECTION	Station: 20 Offset: 0.4)81+(17 L	9.97	7		
	ax. 030-933-9930	Loodion	••••					•••••					_			
e		ح	Type	Ň	in)		ure (%)	e	ion		V -	Type	No.	ilues in)		ure : (%)
Profi		(ft)	nple	mple	T Va Iw/6	(tsf	loistu	Profi	levat (ft)			nple	mple	T Va olw/6	(tsf	loistu ntent
			San	Sal	ч С С		≥ō Ŭ		ш			San ,	Sa	dS d)		Sol
	12-inch thick, black SILTY C	LAY _	$\Lambda/$		3											
TT	917.4TOPS	0IL/_		1	2	2.75 P	17									
Ø	Very stiff, brown and black S	SILTY /-	$\left(\right)$		3											
	916.1F	=ILL/ /	łχ	2	3	NP	12									
l¦ı¦ı	Loose, brown LOAM		/		2											
	Medium stiff to very stiff brow	-ILL/ _	$\Lambda/$		3											
	913.6black, and gray SILTY CLAY	/	۱Å <mark>ا</mark>	3	3	0.75 P	20									
Ľ	F	<u>- </u>	$\left(\right)$		4	-										
l'i¦i		LAY -	1/1	4	3	1.25	16									
l¦ı¦ı		-	$\left \right\rangle$		2 4	P										
		-	$\Lambda/$		3											
	909.6	-	IX.	5	24	4.25	13									
	Medium stiff, gray SILT CLA	Y 10_	$\left(\right)$		4	- '										
		-		6	2	0.50	62									
辭	907.6 Very soft, gray SILTY CLAY			ľ	3	P										
		-	$\left(\right)$		2											
l'!'!	905.6	-	¦X∎	7	2	¢ 0.25	30									
	Soft to stiff, gray SILTY CLA	Y	$\langle \cdot \rangle$		3											
		15	\mathbb{N}	0	2	0.25	16									
ĽÜ		-			4	P										
l'i¦i		-	()		1	-										
l¦I¦I		-	X	9	2	1.25	15									
<u> </u>	901.1		\square	1	4	P 										
	Boring terminated at 18.00 ft	-	-													
			-													
		20														
		-														
		-	1													
		-														
		-	1													
		-														
		25														
	GENE	RAL N	ОТ	ES)			•		WATE	R LEVE	LD	AT	Ά		
Be	gin Drilling 04-27-2005	Con		e Dri	lling)4-27	-20	05	While Drilling	¥		D	RY	• • • • • • • • • •	
Dr		JKILLIN	l <u>G</u> Jeni	 r.k	Urill Riq			35 3 =		At Completion of Drilling	<u>₹.</u>		<u>D</u>	<u>Kĭ</u>		
	illing Method 3 25-inch HSA	J. Nă	19110	<u>vn</u>	CN	ecked	DA T	J. []	ugiel	Depth to Water	NA NA	• • • • •				
						•••••		•••••		The stratification lines rep	resent the app	roxim	ate b	oundar	у	
										- Setween son types, the du		mayu	<u> </u>			

WANG

Wang	I		B	OR	ING) L	OG	R-029				Page	1 of 1
Engineering				WE			· 201_	23-01	Datum: NO	GVD			
wangeng@wangeng.com					100	NO.	. 201-		Elevation: North: 199	917.45)3435 (5 ft 62 ft		
Lombard, IL 60148	Client	 nar	IVI boad		noug arku		ssocia	ates Inc.	East: 9861	82.82	ft		
Telephone: 630-953-9928		<u>iigi</u>	neau			C C	0.	OX INIVEL, Section	Station: 20 Offset: 0.0)83+99)1 L	9.81		
T AX. 030-933-9930													
	Type	No.	in)		ure (%)	e	u			Type	in) No.		ure (%)
	Dept (ff)	mple	T Va olw/6	(tsf	10isti Inteni	Profi	(ft)	DESCRIPTION	Lept N	nple	T Va	(tsf	10istu Intent
	Sar	Sa	R S		≥ °		ш		•	Sar	SP Sa		≥ ° 0
1916.96-inch thick ASPHAL I	ENT/												
6-inch thick CRUSHED STO			5										
' ' \AGGREGATE \	$RSF-/ \downarrow$	1	77	3.00 P	11								
Soft to very stiff, brown SILT	$\frac{1}{Y}$		7										
	====	2	10 6	2.25	14								
	5		6 9	Р									
	-\/		4										
	IX	3	5 5	1.50 P	13								
			6										
	1	4	4 5	1.75	15								
	-//		7	Р									
	10		3										
		5	3	0.25 P	16								
			4										
		6	5	2.50	15								
Medium stiff to stiff, gray SIL	.тү //		4	P									
	-\/		3										
		7	5	0.50 P	15								
			4										
	- X	8	4	0.50	14								
	-/ \		5	P 									
		0	2	1 25	12								
	- //		6	P									
Boring terminated at 19.00 f	t _	`											
	20												
	-												
	-												
	-												
2 CDT													
	-												
	25												
GENE	RAL NOT	ES	;					WATE		L D/			
Begin Drilling 04-27-2005		e Dri	lling Drill Dia	()4-27 CMF	-20(55 T	15 MR	While Drilling	, ¥	•••••		•••••	
Driller K&D Logger	J. Kasn	ick	Chi	ecked	by E	3. Fi	ugiel	Time After Drilling	, <u>+</u> NA			•••••	
Drilling Method 3.25-inch HSA	••••••		· · ·					Depth to Water	NA	·····			
MAN	<u></u>							The stratification lines rep between soil types; the ac	resent the app tual transition	roximat may be	te boundar gradual.	у	

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938 Loc	nt ject LO I ation	ngme	BOR WE McDo adow F	INC I Job noug Parkw	SL No. h As vay o C	OG : 201-2 ssocia over Fe	R-030 23-01 tes Inc. ox River, Section	Datum: N Elevation: North: 199 East: 986 Station: 20 Offset: 0.0	GVD 919.5 93434 482.73 986+9 92 R	5 ft 10 ft 3 ft 9.96	Page	1 of 1
BOIL AND ROCK	Depth (ft) Sample Type	Sample No. SPT Values	(blw/6 in) Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROC DESCRIPTION	Depth (#)	Sample Type	Sample No. SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
919.34-inch thick, dark brown SILTY 918/6CLAY LOAM TOPSOIL- Hard, black and brown SILTY CLAY		1	$ \begin{array}{c} 6 \\ 5 \\ 5 \\ 5 \\ 7 $	0 10								
915.8Very stiff, brown SILTY CLAY Medium dense, brown and gray LOAM	5	3	7 2.75 8 P 7 7 8 NP 7 7 8 NP	14								
Medium dense, brown GRAVELLY SAND		4	4 9 7 7	12								
Boring terminated at 10.00 ft		5 1 1 1	2 NP 4 4	12								
	-											
	15 _ _ _											
	 25						1					
GENERA Begin Drilling 04-27-2005 Drilling Contractor PRECON DRIL Driller K&D Logger J Drilling Method 3.25-inch HSA	L NOT Complete LING . Kasnie	ES Drilling Drill Ck	Rig Checked	04-27 CME by	-200 55 T 3. Fi	05 MR ugiel	While Drilling At Completion of Drilling Time After Drilling Depth to Water	R LEVE ♀ ▼ NA NA	LD	ATA 6.25 ft 6.50 ft		

AN N



WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

 Client
 McDonough Associates Inc.

 Project
 Longmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 921.25 ft North: 1993422.40 ft East: 986782.46 ft Station: 2089+99.92 Offset: 0.09 L

F	ax: 630-953-9938	ocation					<u> </u>	o.		Offset: 0.0)9 L			
Profile	SOIL AND ROCK DESCRIPTION	Depth (ft) Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROC DESCRIPTION	I Depth A	Sample Type	Sample No. SPT Values	(blw/6 in) Qu (tsf)	Moisture Content (%)
	^{921.0} 4-inch thick, dark brown SILTY CLAY LOAM Very stiff, brown SILTY CLAY		1	4 7 5	3.25 P	17								
	LOAM 918.8 Medium dense, brown SANDY LOAM		2	8 9 9	2.50 P	13								
		5	3	6 6 7	NP	10								
			4	8 4 7 6	NP	10								
		T T T	5	8 5 5 8	NP	10								
	Boring terminated at 10.00 ft			10										
		-												
		-												
		-												
		-												
		-												
		-												
		-												
		20												
		-												
		-												
		-												
		-												
		25												
	GENER	 ■ NUL	 F.S						WATE	RIFVE		 ΔΤΔ		
Ве	gin Drilling 04-27-2005		e Dri	, Iling	0	4-27	-200)5	While Drilling	<u>-1 \ L V L</u> <u><u><u><u> </u></u></u></u>		9.25	t	
Dr	Iling Contractor PRECON DR	ILLING	۱	Drill Rig	gC	ME	55 T	MR	At Completion of Drilling	g ¥		DRY	,	
Dr	iller K&D Logger	J. Kasni	ck	Ch	ecked	by .	3. Fi	ıgiel	Time After Drilling	NA	•••••			
Dr	Illing Method 3.25-inch HSA		••••			•••••			Depth to Water	NA present the app	roxima	ite bour	dary	
									between soil types; the ac	tual transition	may be	e gradua	al.	

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938 Location	B Longmeac	ORING WEI Job McDonoug Iow Parkw	B LOG No.: 201-2 Ih Associa Vay over Fo Co.	R-032 23-01 tes Inc. ox River, Section	Datum: NGVD Elevation: 921.31 ft North: 1993410.59 ft East: 987082.36 ft Station: 2093+00.05 Offset: 0.09 L	Page 1 of 1
Description Description	Sample Type recovery Sample No. SPT Values (blw/6 in)	Qu (tsf) Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROC DESCRIPTION	A Depth (ft) Sample Type recovery Sample No. Sample No. (blw/6 in)	Qu (tsf) Moisture Content (%)
921.04-inch thick, dark brown SILTY CLAY LOAM TOPSOIL/ 919.0Very stiff, black and brown SILTY 	1 4 6 7 2 6 7 7 9 6	3.50 P 2.50 P 16				
SANDY LOAM	3 9 13 11 4 4 4 4 4 5	1.75 11 P NP 11				
- 10 		NP 12 NP 9				
	7 7 9 10	NP 9				
15						
25	OTES					
GENERAL N Begin Drilling 04-27-2005 Con Drilling Contractor PRECON DRILLIN Driller K&D Logger J. Ka Drilling Method 3,25-inch HSA	nplete Drilling	04-27 ig CME hecked by E	7-2005 55 TMR 3. Fugiel	While Drilling At Completion of Drilling Time After Drilling Depth to Water The stratification lines reproduces the act		 y

2301 GP.I WANGENG GDT 1/11/12 201 **UGINC** WANGEN



WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

Profile

Client McDonough Associates Inc. Project Longmeadow Parkway over Fox River, Section Datum: NGVD Elevation: 914.97 ft North: 1993426.60 ft East: 987383.31 ft Station: 2096+00.13 Offset: 27.94 L

Location SPT Values (blw/6 in) SPT Values (blw/6 in) Moisture Content (%) Moisture Content (%) Sample Type Sample No Sample No Elevation (ft) Elevation (ft) Profile SOIL AND ROCK Depth (ft) SOIL AND ROCK Depth (ft) Sample 1 Qu (tsf) Qu (tsf) DESCRIPTION DESCRIPTION Dark brown SILTY LOAM 3 --TOPSOIL-914.0 5 NP 13 4 Loose to medium dense, black 6 SILTY LOAM 4 7 NP 31 2 9 ğ 3 3 3 NP 3 37 5 908.5 2 Very soft, black SILTY CLAY 4 0.20 68 4 Ρ 4 3 Dark brown PEAT 2 3 3 NP 239 5 1 10 <u>\/</u> 1 1 904 0 1 0.50 86 6 Very soft to medium stiff, gray 1 Ρ SILTY CLAY LOAM 1 1 0 0.00 53 0 Ρ 0 1 0 0.00 65 8 0 Ρ 0 1 0 0.00 a 34 0 Ρ õ Very soft to stiff, gray SILTY 1 CLAY LOAM 2 0 1.25 17 4 Ρ 6 895.0 Boring terminated at 20.00 ft 25 WATER LEVEL DATA **GENERAL NOTES** ∑ DRY 06-06-2005 Complete Drilling 06-06-2005 Begin Drilling While Drilling PRECON DRILLING Drill Rig CME 55 TMR DRY Drilling Contractor At Completion of Drilling K Logger J. Kosloski Checked by B. Fugiel Time After Drilling NA Driller NA Drilling Method 3.25-inch HSA Depth to Water Ţ The stratification lines represent the approximate boundary between soil types: the actual transition may be gradual.

Co.



WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

Client McDonough Associates Inc.

Project Longmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 920.60 ft North: 1993410.98 ft East: 987685.08 ft Station: 2098+99.69 Offset: 26.61 L

F	ax: 63	0-953-9938	cation					<u> </u>	0.	I	Offset: 26.6	1 L			
Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft) Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	919.6	12-inch thick, dark brown SILTY LOAM TOPSOIL- Very stiff to hard, brown SILTY		1	4 5 5 5	NP	22								
		CLAY LOAM		2	5 7 7 9	> 4.50 P	21								
			5	3	11 9 10 11	> 4.50 P	12								
	912 1			4	6 6 17 22	3.50 P	12								
	910.1	Stiff, brown SILTY CLAY	10	5	3 6 7 8	1.50 P	17								
	(Hard, brown and gray SILTY CLAY LOAM		6	4 8 11 14	> 4.50 P	11								
	906.6	Boring terminated at 14.00 ft	-	7	9 11 11	> 4.50 P	11								
			15 - - -												
			-												
			20 												
			-												
		-	25												
		GENERA	LNOT	ES	5	-				WATER		. DA1	Α		
Be	egin Dr			e Dri	lling	0	06-06 `M⊏	-20(15 \T\/	While Drilling	¥	<u>ם</u>		•••••	
ית יח	iller		. Koslo	 ski	UTIII KIQ Ch	ecked	by F	3. Fi	Jaiel	Time After Drilling	 NA		<u></u>	•••••	
	illina N	Method 3.25-inch HSΔ	0310	<u>Airi</u>	01	CONCU	~,	.	.3.9.	Depth to Water	NA	•••			
								· · · · · · · · ·	· · · · · · · · · · · ·	The stratification lines repres	ent the appro	ximate l ay be or	ooundar adual.	/	



WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

Client McDonough Associates Inc.

Datum: NGVD Elevation: 915.86 ft North: 1993375.04 ft East: 987981.62 ft Station: 2102+00.01 Offset: 0.01 R

Project Longmeadow Parkway over Fox River, Section

Location Co.

Profile	ī	SOIL AND ROCK	Depth (ft) Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		12-inch thick, dark brown SILTY 914.9LOAM TOPSOIL 913.9Loose, brown LOAM	./	1	3 3 5 5	NP	14									
		Stiff to hard, brown SILTY CLAY LOAM		2	5 7 6 7	> 4.50 P	17									
			5	3	3 6 6 7	2.50 P	13									
		207.4		4	3 4 4 5	1.50 P	12									
		Medium dense, brown SANDY LOAM	10	5	3 5 5 5	NP	10									
	ç	903.9		6	3 6 8 10	NP	11									
		Boring terminated at 12.00 ft	-	`												
			-													
			15													
			-													
			-													
			-													
			_													
			20													
			-													
1/12			_													
П 1/1																
IG.GD			-													
NGEN																
4w Lo			²⁰													
01.GF				ES	llina	~	6 00	200	15			LD		A bv		
20123 T	segi Drilli	ing Contractor PRECON DRIL		e Dri I	uing Drill Ric		CME-	75 4		At Completion of Drilling	<u>÷</u> ▼	• • • • • • •	וע. ום	RY	•••••	
	Drille	er K Logger J.	Koslo	ski	Ch	, ` ecked	by b	3. Fi	ugiel	Time After Drilling	NA				••••	
D GENC	Drilli	ing Method 3.25-inch HSA								Depth to Water	NA	· · · · ·				
WAN										The stratification lines represent the stratification lines represent the strategy of the stra	ent the app I transition	roxima nay be	ate b e gra	oundar dual.	y	

	Wang Engineering			B) L	OG	R-036	Datum: NO	GVD		i age	
	wangeng@wangeng.com					JOD	NO.	: 201-4	23-01	Elevation:	907.11 2262 1	ft off		
	1145 N Main Street	Client	• • • • • •	M	cDo	noug	h As	ssocia _	ites Inc.	East: 9882	81.41	ft		
	Telephone: 630-953-9928	Project LC	ongr	nead	ow P	arkw	ay o	over Fo	ox River, Section	Station: 21	05+00	.04		
L	Fax: 630-953-9938	Location .		•••••			<u> </u>	0.	I	Offset: 0.0	6 R			
Г		e	٦.	ŝ							e (-; v;		
, e		e Tyl	le N	/alue 6 in)	ъ÷	ture nt (%	file	ation t)	SOIL AND ROC	K ಕೆವ	e Tyl	(alue 6 in)	n (j	nt (%
			amp	PT /	la€	Mois	Pro	Eleva (f	DESCRIPTION	De De	mplo reco		Ω₿	Mois onte
		NAM N	Ű	<u> </u>		ΞŬ					Sa	ñ <u>0</u> 0		-ŭ
				3										
	101 005 4 Stiff, brown SILTY CLAY		1	2	1.00 P	25								
F	F	ILL/		6										
	Medium dense, brown SILTY	′\	2	3	0 50	22								
Π		····		5	P.50	32								
	902.6Medium stiff, black SILTY CL													
Ī		∕₅\	3	34	4 00	11								
	Hard, brown SILTY CLAY LC)/_ `MAQ	Ĭ	6 11	P									
	 _ 900.6			2										
· ·	Medium dense, gray LOAM	- X	4	7	NP	10								
, i		-//\		7										
· ·				3										
, i		- X	5	6	NP	9								
		10_/		0 7										
,		-\/		5										
		-ΙX	6	10	NP	10								
Ź	895.1		2	11										
	Boring terminated at 12.00 ft	-												
		-												
		_												
		15												
		_												
		-												
		_												
		-												
		-												
		-												
		20												
		-												
		-												
12		_												
1/11/		_												
GDT		-												
ENG.(_												
ANGE		25												
N La														
301.GL				lling	ſ	90-96	-200)5	While Drilling		LUA			
2012	Drilling Contractor PRECON F			nn ig Drill Ric		CME-	75 4	ATV	At Completion of Drilling	÷. ▼		DRY	• • • • • • • • • •	
INC	Driller K Loager	J. Koslo	ski	Ch	, ` ecked	by F	3. Fi	ugiel	Time After Drilling	••••••••••••••••••••••••••••••••••••••	•••••		• • • • • • • • • •	
BNG	Drilling Method 3.25-inch HSA					,			Depth to Water	NA	••••			
VANC	•								The stratification lines repu	resent the app	roximate	e boundar	У	
~									- Serveen son types, the det		nuy De	gradual.		



	W	Vangeng@wangeng.com			B		Job	SL No.	OG : 201-:	R-038 23-01	Datum: N Elevation: North: 199	GVD 911.73 ft 93339.66	ft	Page ·	1 of 1
	Lo Te Fa	ombard, IL 60148 elephone: 630-953-9928 ax: 630-953-9938	Project Location	ongr	nead	ow P	arkw	n A: vay c C	over F	ox River, Section	East: 9888 Station: 2 Offset: 0.0	380.98 ft 111+00.0 05 R	4		
	Profile	SOIL AND ROCK DESCRIPTION	Depth (ft) Sample Type	recovery Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROO DESCRIPTION	D Depth X:	Sample Type recovery Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		911.26-inch thick, black CLAY LOA TOPS Medium stiff to very stiff, brow SILTY CLAY LOAM	AM DIL// /n	1	1 3 6 7	2.50 P	26								
				2	3 4 4 4	0.50 P	16								
			5	3	3 4 5 8	1.50 P	14								
				4	3 4 7 6	1.50 P	14								
-		901.7 Boring terminated at 10 00 ft	10	5	2 4 6 7	2.00 P	13								
			-												
			-												
			15 												
			-												
			 20												
1/11/12															
ANGENG.GDT			- - - 25												
× ΓďΞ		GENE								WATI		דעם <u>ו</u>	I ► ∆		
2301.G	Be	gin Drilling 04-11-2005	Comple	te Dri	lling)4-11	-200)5	While Drilling	LLVL <u>\</u>		RY		
201	Dri	illing Contractor PRECON D	RILLING		Drill Riq	g	CME-	75 A	TV	At Completion of Drillin	g <u>¥</u>	D	RY		
NGINC	Dri	iller J&R Logger	Y. Sh	iu	Ch	ecked	by .	3. Fu	ıgiel	Time After Drilling	NA				
ANGEI	Dri	illing Method 3.25-inch HSA		•••••	• • • • • • • • • •			• • • • • • • •	•••••	Depth to Water The stratification lines rep	NA present the app	 proximate t	oundar	y	
≥L										between soil types; the ad	tual transition	may be gra	adual.	-	

MAN

	wa 11 Lo Te Fa	angeng@wangeng.com 145 N Main Street ombard, IL 60148 elephone: 630-953-9928 ax: 630-953-9938	Client Project L Location	ongi	B(M nead	OR WE IcDoi ow P	Job Job noug arkw	BL No. h As vay c C	OG : 201- ssocia over F o.	R-039 23-01 ates Inc. ox River, Section	Datum: N Elevation: North: 199 East: 989 Station: 2 Offset: 0.0	GVD 910.78 ft 93336.67 180.92 ft 114+00.0 ⁻ 00 R	ft 1	Page 7	1 of 1
	Profile	SOIL AND ROCK DESCRIPTION	Depth (ft) Sample Tvpe	recovery Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROO DESCRIPTION	N Depth X	Sample Type recovery Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		910.18-inch thick, black CLAY LOA TOPS Very stiff to hard, brown SILT CLAY LOAM	AM DIL Y	1	3 5 7 8	2.00 P	12								
		F	ILL	2	4 5 7 8	3.00 P	17								
		905.3 Stiff, brown SILTY CLAY LO/	5	3	5 10 8 9	3.75 P	12								
				4	4 4 5 6	1.00 P	14								
		900.8 Boring terminated at 10.00 ft	- - 10	5	4 5 8 12	1.00 P	13								
			- - 15												
			20												
71/11/1															
VANGENG.GUI			_ _ 25												
		GENFI			 \$	I		I		WATI			Γ <u>Α</u>		
2301.6	Bee	gin Drilling 04-11-2005	Compl	ete Dr	illing)4-11	-200)5	While Drilling	<u> </u>		RY		
201	Dri	Iling Contractor PRECON D	RILLING		Drill Rig	g	CME-	75 A	NTV	At Completion of Drillin	g <u>¥</u>	D	RY		
RGINC	Dri	ller J&R Logger	Y. Sh	iu	Ch	ecked	by .	3. Fi	ıgiel	Time After Drilling	NA	•••••			
ANGE	Dri	Iling Method 3.25-inch HSA		•••••	•••••			• • • • • • •	•••••	Depth to Water The stratification lines rep	present the app	proximate b	oundar	y	
≶L										between soil types; the ad	ctual transition	may be gra	adual.	,	

WANG



WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

Client McDonough Associates Inc.

Project Longmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 911.67 ft North: 1993334.71 ft East: 989481.92 ft Station: 2117+00.0 Offset: 0.04 R

Fa	ax: 630-953-9938	n				C	0.		Offset: 0.0	4 R			
Profile	BESCRIPTION	Sample Type recovery Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCI DESCRIPTION	Depth (ff)	Sample Type recovery Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	911.26-inch thick, black SILTY LOAM TOPSOIL/ 910.2Stiff, brown SILTY CLAY LOAM, with gravel		2 5 6 6	1.50 P	10								
	Very stiff to hard, brown and gray SILTY CLAY LOAM	2	3 3 4 5	2.25 P	15								
	5_	3	2 2 4 7	2.75 P	14								
		4	5 8 12 16	4.00 P	13								
	901.7 10 Boring terminated at 10.00 ft	5	8 11 11 14	3.50 P	10								
		-											
	20_												
	25_												
	GENERAL	OTES	S				•	WATE	R LEVE	LDA	ŤΑ		
Ве	gin Drilling 04-11-2005 Co	mplete Di	rilling	0	94-11	-200)5	While Drilling	¥	I	DRY		
Dri	ling Contractor PRECON DRILLI	NG	Drill Rig	g	CME-	75 /		At Completion of Drilling	¥	I	DRY	•••••	•••••
Dri	lier J&K Logger Y.	อกเน	Ch	ecked	by .	5. Fl	lgiel	Depth to Water	NA NA	••••			
ווט					•••••			The stratification lines repr	esent the approximation r	roximate	boundar	у	

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148	ent	G LOG No.: 201-: gh Associa	Datum: NGVD 1-23-01 ciates Inc. Fox River, Section						
Telephone: 630-953-9928 Pro Fax: 630-953-9938 Loc	cation	meauov		Co.	ox River, Section	Station: 2120+0 Offset: 0.04 R	0.04		
BUIL AND ROCK DESCRIPTION	Depth (ft) Sample Type recovery Sample No.	SPT Values (blw/6 in)	(tsf) Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROC DESCRIPTION	Depth (ft) Sample Type	Sample No. SPT Values (blw/6 in) Qu (tsf) Moisture Content (%)		
908.96-inch thick, dark brown CLAY		2 3 6	2.00 17 P						
FILL- Medium dense, brown SANDY	-/-	/ 11 / 11 13	NP 10						
2003.6	53	9 6 5 4	NP 12						
Very stiff, brown SILTY CLAY LOAM	4								
	5								
Boring terminated at 10.00 ft									
		WATER LEVEL DATA							
Begin Drilling 04-11-2005 Drilling Contractor PRECON DRI Driller J&R Logger Drilling Method 3.25-inch HSA	While Drilling At Completion of Drilling Time After Drilling Depth to Water The stratification lines report between soil types: the action lines in the soil types: the action lines in types: the action lines in the soil types: the action lines is the soil types: the action lines in the soil types: the action lines is the action lines in the soil types: the action lines is the action lines in the soil types: the action lines is the action lines in the soil types: the action lines is the action lines in the soil types: the action lines is the action lines in the soil types: the action lines is the action lines is the action lines in the soil types: the action lines is the action lines in the action lines is the action lines	Y NA Image: NA Image: NA present the approximation may be studied transition may be studied to the approximation to the approx	DRY bry						

		W ang	I		OG	R-042		Page	1 of 1						
		Engineering				WE	l loh		· 201_	23-01					
	wangeng	g@wangeng.com					100	NO.	. 201-	23-01	Elevation: North: 199	903.99 ft 3331 03 f	ft		
	Lombard	d, IL 60148	Client		<u>vi</u> mood		noug		SSOCIA	ates Inc.	East: 9900)75.27 ft			
	Telephor	ne: 630-953-9928		ung	neau	OW P	ainw	ay (C		ox River, Section	Station: 2	23+00.12 4	2		
	Fax: 630	1-953-9938	Location	•••••					.						
0	LO LO			ypc No.	ues n)		re (%)	n.	ч			ر ype ر No.	ues n)		re (%)
rofile	evatic (ft)	SOIL AND ROCK	Cepth		r Val w/6 j	Qu (tsf)	oistu itent	rofile	evatic (ft)	SOIL AND ROC	K feb	ple 7	r Val w/6 i	Qu (tsf)	oistu itent
1	Ē	DESCRIPTION		San	Ld)		ΩĞ		Ξ	DESCRIPTION		Sam re Sar	ld)		CCX
	_{903.4} 7	-inch thick, dark brown SIL	TY	/	3										
		TOPS	50IL/]/		3	1.75	13								
	il s	Stiff to very stiff, brown SILT	▼		15										
-HH		LAY LOAM	-FUI -1	2	8 10	1 00	10								
ΠH			-//		8	P 1.00									
- Hi			1	7											
lili			5/	3											
出出			1												
11					3	1 50	00								
]/	\]"	3	P	32								
	895.7	Stiff brown and grav SILTY			2	1									
-HH		CLAY LOAM		5	2	1.50	24								
ĽĽ	894.0		10	7	5	P -									
	B	Soring terminated at 10.00 f	t _												
			-												
			-												
			_												
			-												
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en			-												
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VANG			25_												
		GENE			 }	1	I	L							
-102Z B	egin Dril	lling 04-11-2005	. Comp	lete Dr	illing)4-11	-200)5	While Drilling While Drilling					
D 201	rilling Co	ontractor PRECON I	DRILLING	i	Drill Ri	g	CME-	75 A	TV	At Completion of Drilling	g <u>¥</u>	D	RY	•••••	
	oriller	J&R Logger	Y. SI	niu	Ch	ecked	by .	3. Fi	ıgiel	Time After Drilling	NA	•••••			
	Drilling Method 3.25-inch HSA									Depth to Water	NA	 roximate b	oundar	y	
≩∟			between soil types; the ac	tual transition	may be gra	adual.	-								



WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 . . -

Client McDonough Associates Inc. Project Longmeadow Parkway over Fox River, Section Datum: NGVD Elevation: 905.70 ft North: 1993328.72 ft East: 990380.78 ft Station: 2125+99.90 Offset: 0.25 R

between soil types; the actual transition may be gradual.

Fax: 630-953-9938	3 Lo	Offset: 0.25 R													
Elevation (ff) DE	L AND ROCK SCRIPTION	Depth (ft) Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROO DESCRIPTION	N ^{Dept}	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture
905.26-inch thic Loose, bro	k, brown CLAY LOAN TOPSOIL own LOAM	M	1	2 2 3 4	NP	22									
Loose to r SILT, with lenses	nedium dense, brown interbedded sand		2	1 2 4 8	NP	20									
900.5	o hard, brown and gra AY I OAM, gravelly	5	3	4 9 11 15	NP	16									
			4	6 7 11 17	2.00 P	10									
	minated at 10 00 ft	10	5	6 11 12 15	4.00 P	11									
		-													
		15 - - -													
		20													
		25													
Begin Drilling	GENERA 04-12-2005	AL NOT	While Drilling Z DRY												
Drilling Contractor	PRECON DRI	At Completion of Drillin Time After Drilling	g I NA		D	RY									
Drilling Method	3.25-inch HSA	Depth to Water			ata h	oundan									



WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

Client McDonough Associates Inc. Project Longmeadow Parkway over Fox River, Section Datum: NGVD Elevation: 904.68 ft North: 1993327.00 ft East: 990680.86 ft Station: 2128+99.98 Offset: 0.04 R

Fax: 630-953-9938 Location Co.										Offset: 0.04 R						
Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft) Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCH DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	904.26	inch thick, brown CLAY LOAN	Λ													
		TOPSOIL Stiff, brown CLAY LOAM	··/ 1/		2											
	902.2	,	-	1	5	1.75	15									
	_ N	Aedium dense, brown SILT	\rightarrow		5	P 										
	900.7			2	3 5	NP	17									
		/ery stiff to hard, brown SILTY CLAY LOAM	5		7 7											
				3	3 4 7 6	2.00 P	15									
				4	5 8	3.50	13									
			=													
				5	7 12 15 14	4.00 P	10									
	891.7			6	6 11 12 13	4.00 P	12									
	B	Boring terminated at 13.00 ft	_ _ 15_													
			-													
			_													
			-													
			-													
			-													
			20													
			-													
4			-													
			-													
10.01			-													
			25													
		CENEDA														
Be	eain Dri	GENEKA Illing 04-12-2005)5	While Drilling	<u>\ LEVE</u> V	LU	DF	A RY								
Dr	rilling Co	ontractor PRECON DRI	LLING	l	Drill Rig		CME-	75 A	ATV	At Completion of Drilling	¥		D	RY		
Dr	riller	K&S Logger	Time After Drilling	NA	•••••											
Dr	rilling M	lethod 3.25-inch HSA	Depth to Water	NA sent the app	 roxim	ate br	oundar	/								
			between soil types: the actu	al transition	may b	e ara	dual.	,								



Location

BORING LOG R-045

Co.

WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

2012301.GPJ WANGENG.GDT 1/11/12

WANGENGINC

Client McDonough Associates Inc.

Elevation: 888.11 ft North: 1993325.00 ft East: 990980.99 ft Station: 2132+00.11 Offset: 0.12 R

Datum: NGVD

Project Longmeadow Parkway over Fox River, Section

SPT Values (blw/6 in) SPT Values (blw/6 in) Moisture Content (%) Moisture Content (%) Sample Type Sample No Sample No Elevation (ft) Elevation (ft) Profile Profile Sample Ty recovery SOIL AND ROCK Depth (ft) SOIL AND ROCK Depth (ft) Qu (tsf) Qu (tsf) DESCRIPTION DESCRIPTION 887.66-inch thick, black CLAY LOAM --TOPSOIL-2 3 0.50 32 Stiff to hard, brown SILTY CLAY Ρ 4 LOAM 2 2 4 5 20 2 1.75 Ρ 6 7 3 4.00 13 8 Ρ 9 881.6 4 Medium dense, brown SILT 7 880 4.50 14 4 8 Hard, brown SILTY CLAY Р 9 8 Medium dense, gray LOAM, 9 NP 5 8 gravelly 15 16 10 Boring terminated at 10.00 ft 15 20 25 WATER LEVEL DATA **GENERAL NOTES** ∑ DRY 04-13-2005 Complete Drilling 04-13-2005 Begin Drilling While Drilling PRECON DRILLING Drill Rig CME-75 ATV DRY At Completion of Drilling Drilling Contractor K&S Logger Y. Shiu Checked by B. Fugiel Time After Drilling NA Driller Depth to Water NA Drilling Method 3.25-inch HSA Ţ The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

 Client
 McDonough Associates Inc.

 Project
 Longmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 881.33 ft North: 1993323.14 ft East: 991280.86 ft Station: 2134+99.99 Offset: 0.05 R

	Fax: 63	0-953-9938	cation	0.	Offset: 0.05 R										
Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft) Sample Type _{recovery}	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCI DESCRIPTION	Depth (ft)	Sample Type	Sample No. SPT Values	Qu (tsf)	Moisture Content (%)
	880.3	12-inch thick, black CLAY LOAM TOPSOIL- Very stiff, brown SILTY CLAY		1	1 4 4 4	2.50 P	26								
				2	1 3 4 4	2.00 P	24								
	877.1 875.8	Loose, brown SILTY LOAM	5_	3	2 3 3 4	NP	23								
		CLAY		4	5 5 7 8	1.50 P	23								
	872.3 871.8 871.3	Medium dense, gray SILT Hard. gray SILTY CLAY LOAM	10	5	3 6 5 5	4.00 P	13								
		Boring terminated at 10.00 ft													
			-												
			- 15 -												
			-												
			- - 20												
1/12															
GENG.GDI 1/1															
MAN			1												
01.GP.	a alta D	GENERA		ES	line er		4 4 9	200)5						
В 50123 П	egin Dr Irillina (Contractor PRECON DRII	Complete	Dril Г	ling Drill Ric		24-13 CME-	-200 75 A	UTV	At Completion of Drilling	¥ ¥	••••	DRY	•••••	•••••
	riller	K&S Logger	Y. Shiu		Ch	, . ecked	by E	3. Fı	ıgiel	Time After Drilling	NA	•••••			•••••
	rilling N	Aethod 3.25-inch HSA	Depth to Water	NA esent the app	roximat	te bound	ary								
Š.			between soil types: the actu	al transition	nav be	gradual.									



BORING LOG R-047A

WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928

Client McDonough Associates Inc. Project Longmeadow Parkway over Fox River, Section Datum: NGVD Elevation: 881.10 ft North: 1993324.67 ft East: 991717.36 ft Station: 2139+36.52 **____** 4. 0 02

Fax: 630-953-9938 Location Onset. 0.05 L																
Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft) Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL ANI DESCR	D ROCK	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
880.66-incl	h thick, brown CLAY LOAN TOPSOIL o very stiff, brown SILTY Y LOAM		1	2 4 4 5	2.25 P	17										
			2	2 4 4 3	1.25 P	16										
 		5	3	2 4 3 7	2.25 P	16										
Medi	um dense, brown LOAM		4	5 6 7 13	NP	10										
872.1 Dens 871.1SANI	e, brown GRAVELLY D	10	5	4 11 23 25	NP	8										
WANGENG.GDI 1/11/12																
2 <u>5</u>	GENERA		WATER	LEVE	LD	AT	A									
Begin Drilling	04-13-2005	Complete	e Dril	ling	0	94-13	-200)5	While Drilling		<u> </u>		DF	RY		
Drilling Contra	Actor PRECON DR	LLING	[Drill Rig	<u>،</u> ر	CME-	75 /	ATV	At Completion	of Drilling	¥		DF	RY		
	K&S Logger	Y. Shiu	!	Ch	ecked	by .	3. Fl	ıgiel	Time After Dr	illing	NA	• • • • •				
Drilling Method 3.25-Inch HSA										er <u>¥</u> on lines repres	NA ent the app	roxima	ate bo	oundar	/	
غ ا	<u></u>			<u></u>	<u></u>				between soil ty	pes: the actual	transition r	nay be	e grad	dual.		



WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

 Client
 McDonough Associates Inc.

 Project
 Longmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 885.42 ft North: 1993328.06 ft East: 991880.74 ft Station: 2140+99.94 Offset: 0.09 L

F	ax: 6	30-953-9938	0.	Offset: 0.09 L													
Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft) Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROC DESCRIPTION	Depth D	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	
	884.9 883.	96-inch thick, black and brown CLAY LOAM ,		1	1 4 3 3	1.75 P	20										
		Medium stiff, brown SILTY CLAY		2	2 2 3 2	0.50 B	27										
	880.4	4 Loose to medium dense, brown SANDY LOAM	5	3	3 3 3 4	NP	16										
	877.4			4	3 5 7 8	NP	11										
	875.4	LOAM	10	5													
Image: State of the state o																	
-	1	GENERAI	WATF	R LEVF			А										
Ве	gin E	Drilling 04-13-2005	While Drilling	<u> </u>	/	D	RY										
Dr	illing	Contractor PRECON DRIL	LING	[Drill Rig	g	CME-	75 A	ATV	At Completion of Drilling	Ţ	•••••	D	RY			
Dr	iller	K&S Logger	Y. Shiu	i	Ch	ecked	by .	3. Fi	ugiel	Time After Drilling	NA	•••••					
Dr	illing	Method 3.25-inch HSA	Depth to Water	esent the apr		ate h	oundar	v									
										The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.							



WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

 Client
 McDonough Associates Inc.

 Project
 Longmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 890.20 ft North: 1993337.75 ft East: 992180.53 ft Station: 2143+99.89 Offset: 0.05 L

F	ax: 630-953-9938	L	ocation .	Offset: 0.05 L												
Profile	Elevation (t) DES	AND ROCK CRIPTION	Depth (ft) Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROO DESCRIPTIO	N Depth M	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	Very loose, b	black LOAM TOPSOII prown LOAM		1	0 1 2 2	NP	14									
	Stiff, brown	CLAY LOAM		2	1 3 2 4	1.00 P	18									
	884.5		5	3	1 2 3 4	1.50 P	21									
	LOAM	own SILTY CLAY														
	880.2															
	Boring termi	nated at 10.00 ft	-													
			-													
			-													
			_													
			-													
			15													
			-													
			_													
			-													
			-													
			-													
			20													
			-													
			-													
			-													
			_													
			25													
-		CENED														
Be	egin Drilling (94-13-2005	While Drilling	<u>_i\ LLVC</u> <u>V</u>			RY									
Dr	illing Contractor	PRECON DR	ILLING		Drill Riq	g	CME-	75 A	λTV	At Completion of Drillin	g <u>¥</u>		D	RY		
Dr	iller K&S	Logger	Time After Drilling	NA	•••••											
Dr	illing Method .3,	25-inch HSA	Depth to Water The stratification lines re	present the app	roxim	ate b	oundar	y								
										between soil types; the a	ctual transition	may b	e gra	dual.		



WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

Client McDonough Associates Inc.

Project Longmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 816.45 ft North: 1993209.16 ft East: 993968.19 ft Station: 2162+00.00 Offset: 0.10 L

Location Co. SPT Values (blw/6 in) Moisture Content (%) les Sample Type Sample No Sample No Moisture Content (% SPT Value (blw/6 in) Elevation (ft) Elevation (ft) Profile Profile SOIL AND ROCK Depth (ft) SOIL AND ROCK Depth (ft) Qu (tsf) Qu (tsf) Sample DESCRIPTION DESCRIPTION 12-inch thick, brown SILTY 3 815.5LOAM 5 NP 9 --TOPSOIL-12 12 Medium stiff to stiff, brown CLAY I OAM 6 5 5 6 1.25 12 2 Ρ 3 3 0.75 21 3 4 Ρ 4 1 2 NP 15 3 4 Loose, brown SANDY LOAM 1 Very soft, brown CLAY LOAM 2 2 4 0.00 25 5 Ρ 10 1 1 0.00 24 6 1 Ρ 2 1 1 0.00 21 1 Ρ 2 1 2 8 0.20 21 Verv stiff. brown SILTY CLAY 1 Ρ 2 LOAM 2 5 8 2.75 14 Ρ 12 Boring terminated at 18.00 ft 20 25 WATER LEVEL DATA **GENERAL NOTES** ∑ DRY 06-07-2005 Complete Drilling 06-07-2005 Begin Drilling While Drilling PRECON DRILLING Drill Rig CME-75 ATV DRY Drilling Contractor At Completion of Drilling K Logger J. Kosloski Checked by B. Fugiel Time After Drilling NA Driller NA Drilling Method 3.25-inch HSA Depth to Water Ţ The stratification lines represent the approximate boundary between soil types: the actual transition may be gradual.


WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

 Client
 McDonough Associates Inc.

 Project
 Longmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 802.48 ft North: 1993155.43 ft East: 994263.34 ft Station: 2165+00.00 Offset: 0.03 L

Fa	ax: 630-953-9938 ' Location	n					C	0.		Offset: 0.0	3 L			
Profile	SOIL AND ROCK	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No. SPT Values	(IblW/6 III) Qu (tsf)	Moisture Content (%)
	12-inch thick, brown CLAY 801.5LOAM TOPSOIL Medium dense, black SILTY		1	2 5 7 6	3.00 P	12								
	LOAM		2	7 6 6 7	NP	28								
	Medium stiff to stiff, brown SILTY 5_ CLAY LOAM		3	3 4 5 5	1.50 P	27								
			4	2 3 4 4	0.50 P	24								
	Medium dense, brown SANDY LOAM		5	3 3 8 11	NP	15								
* C * C	^{791.5} Medium dense to dense, brown GRAVELLY SAND		6	7 7 4 5	NP	11								
	788.5		7	6 16 16 16	NP	9								
	Boring terminated at 14.00 π 15_													
	-													
	- 20_													
4														
	25_													
2	GENERAL N	İOTE	ES				•		WATER	LEVE	LD	ATA		
Ве	gin Drilling 06-07-2005 Co	mplete	Drill	ing	0	6-07	-200)5	While Drilling	<u>¥</u>		DRY		
Dri	Iling Contractor PRECON DRILLIN	IG	. D	orill Rig	C	ME-	75 A	ATV	At Completion of Drilling	¥		DRY		
	lier K. Logger J. Ko	DSIOS	KI	Che	ecked	by E	5. Fl	igiel	I ime After Drilling		••••			
	ining wethoa 3.23-INCN.HSA	•••••	••••	• • • • • • • • •	•••••			•••••	The stratification lines repres	ent the appr	roxima	te bound	lary	
:∟									between soil types; the actual	transition r	<u>nay be</u>	gradua		



BORING LOG R-057

WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

Client McDonough Associates Inc. Project Longmeadow Parkway over Fox River, Section Datum: NGVD Elevation: 806.75 ft North: 1993160.11 ft East: 994576.81 ft Station: 2168+06.32 Offset: 67.59 L

F	ax: 630-953-9938	cation	•••••				С	0.		Offset: 67	.59 L				
Profile	SOIL AND ROCK DESCRIPTION	Depth (ft) Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROC DESCRIPTION	Depth D	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	8-inch thick, dark brown SILTY CLAY 		1	1 2 3 4	1.25 P	23									
	CLAY 803.3 Loose, brown SANDY LOAM		2	2 2 5 4	1.50 P	24									
0	801.3 Medium dense, brown	5_	3	1 2 2 1	NP	18									
	GRAVELLY SAND		4	5 9 10 10	NP	5									
	706.8		5	4 10 9 11	NP	4									
<u>handa</u>	Boring terminated at 10.00 ft	-													
		-													
		- 15													
		-													
		-													
		20													
		-													
		- - 25													
	GENERA		ES				•		WATE	R LEVE	LD	AT	Α		
Be	gin Drilling 05-03-2005	Complete	Drill	ing	0	5-03	-200)5	While Drilling	<u> </u>		D	RY		
Dr	illing Contractor PRECON DRIL	LING	. C	rill Rig	C	ME-	75 A	TV	At Completion of Drilling	.		D	RY	•••••	
Dr	iller S&D Logger	W. Wang	9	Che	ecked I	by .	3. Fi	ıgiel	Time After Drilling	NA	•••••				
Dr	illing Method 3.25-inch HSA	•••••	••••		•••••	•••••			Depth to Water	esent the apr	roxima	ate b	oundar	V	
									between soil types; the act	ual transition	may b	e gra	idual.	-	



WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928

Client McDonough Associates Inc. Project Longmeadow Parkway over Fox River, Section Elevation: 800.61 ft North: 1993061.01 ft East: 994853.80 ft Station: 2170+97.83

	Fa	ix: 6	30-953-9938 Loc	ation		•••••			C	0.		Offset: 12	.74 L				
Profile		Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft) Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROC DESCRIPTION	Depth X	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		<u>799</u> .′	18-inch thick, black SILTY CLAY LOAM 1TOPSOIL- Stiff, brown SILTY CLAY LOAM		1	2 3 3 5	1.25 P	22									
					2	2 3 3 5	1.50 P	25									
		<u>795.′</u>	1 Loose, brown SANDY LOAM	5	3	2 3 2 4	1.00 P	21									
	TT TT	<u>793. ′</u>	1 Stiff to very stiff, brown and gray		4	2 3 3 5	NP	13									
			SILTY CLAY LOAM		5	2 1 3 6	2.25 P	14									
		<u>788.6</u>			6	2 3 8 6	1.25 P	13									
			boning terminated at 12.00 it	- - - 15 -													
4				20													
				- - - 25_													
			GENERA		ES	;		·		1	WATE	R LEVE	LD	AT	Ά		
E	Beg	gin D	Drilling 05-03-2005	Complete	e Dri	lling	0	5-03	-200)5	While Drilling	Į		D	RY		
	Drill	ling	Contractor PRECON DRIL	LING		Drill Rig	g	CME-	75 A	ATV	At Completion of Drilling	¥	•••••	D	RY		
	Drill	ler	S&D Logger	W. Wan	<u>g</u>	Ch	ecked	by E	3. Fi	ugiel	Time After Drilling	NA					
	Drill	ling	Method 3.25-inch HSA					•••••			Depth to Water	NA NA	<u></u>				
											I he stratification lines rep between soil types; the ac	resent the app tual transition	roxima may b	ate b <u>e qra</u>	oundar	y	

Datum: NGVD



The stratification lines represent the approximate boundary between soil types: the actual transition may be gradual.

ſ		Wang			R				OG	R-060	I		Page	1 of 1
	W	vangeng@wangeng.com				WE	Job	No.	: 201-2	23-01	Datum: No Elevation:	GVD 806.17 ft		
	11	145 N Main Street	Client		M	lcDoi	noug	h A	ssocia	ates Inc.	North: 199	92996.80 ft 150 42 ft		
	Lo Te	ombard, IL 60148 elephone: 630-953-9928	Project L	ongr	nead	ow P	arkw	ay o	over F	ox River, Section	Station: 2	177+00.03		
l	Fa	ax: 630-953-9938	Location					C	0.		Offset: 0.0	JU R		
	Profile	SOIL AND ROCK DESCRIPTION	Depth (ft) ample Tvpe	sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROO DESCRIPTION	Depth X:	ample Type recovery Sample No.	(DIW/0 III) Qu (tsf)	Moisture Content (%)
		_{805.6} 7-inch thick, black and brown	<u></u>	/	1							<u>ω</u> 0, 0, 0,	_	
		SILTY CLAY LOAM TOPSC Stiff. brown SILTY CLAY LOA		1	2 3 3	1.25 P	26							
				2	2 3 3	1.50 P	23							
		801.7			5									
0 O	, C , , O (Medium dense, brown GRAVELLY SAND	5	3	6 7 9	NP	6							
				4	9 10 16	NP	2							
0	0. (1		16 6									
	، ن ہ 0. (706.0		5	11 16 14	NP	3							
ľ	<u>*:(</u> *:	Boring terminated at 10.00 ft	-											
			-											
			-											
			-											
			-											
			-											
			-											
			-											
			-											
			20											
			-											
1/11/12			-											
GDT			-											
NGENO			-											
PJ WA										\A/A TI				
2301.G	Be	gin Drilling 05-02-2005	Compl	ete Dri	lling)5-02	-200)5	While Drilling	<u> </u>			
C 201.	Dri	illing Contractor PRECON D	RILLING		Drill Rig	g(CME-	75 A	TV	At Completion of Drilling	g ¥	DRY		
NGIN	Dri	iller S&D Logger	W. Wa	ang	Ch	ecked	by .	3. Fi	ıgiel	Time After Drilling		•••••		
WANG	Dri									The stratification lines rep between soil types: the ad	present the app tual transition	 proximate bound may be gradual	lary	

WANG

Build Solid AND ROCK DESCRIPTION Image: Solid AND ROCK DESCRIPTION <thimage: and="" rock<="" solid="" th=""> Image: Solid AND ROC</thimage:>	wange 1145 Lomba Telept Fax: 6	eng@wangeng.com N Main Street pard, IL 60148 hone: 630-953-9928 530-953-9938	Client Project LO Location	ngn	B(M neado	OR WE cDoi ow P	Job noug arkw	SL No. h As vay c C	OG : 201- ssocia over F o.	R-061 23-01 ates Inc. ox River, Section	Datum: N Elevation: North: 199 East: 995 Station: 2 Offset: 0.0	GVD 802.83 f 93018.15 749.37 ff 179+99.8 07 L	ft 5 ft t 38	Page	1 of 1
GENERAL NOTES Water Diling GENERAL NOTES WATER LEVEL DATA GENERAL NOTES VATER LEVEL DATA Stilling Contractor Set Contractor Set Contractor	Profile Elevation	SOIL AND ROCK DESCRIPTION	Depth (ft) Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROC DESCRIPTION	N Cepth D	Sample Type recovery Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
1993 100		37-inch thick, black SILTY CL LOAM 	AY OIL/	1	2 2 3 5	1.25 P	26								
Pizza	 <u>799.</u>	.3 Medium dense, brown GRAVELLY SAND		2	2 3 4 8	1.50 P	21								
Image: second			5	3	4 7 9 11	NP	5								
Boring terminated at 10.00 ft 5 13 14 11 NP 2 Boring terminated at 10.00 ft 1<				4	9 15 10 10	NP	4								
a a	0 0 792	 Boring terminated at 10.00 ft		5	16 13 14 11	NP	2								
15 15 16 15 20 16 20 16 20 16 20 16 20 16 20 17 20 17 20 17 <td></td> <td></td> <td>-</td> <td></td>			-												
15 15 15 16 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>															
20 20 20 20 <td></td> <td></td> <td>15 </td> <td></td>			15 												
20 1			-												
Image: state of the state			_ 20												
Image: state of the state															
Image: Segin Drilling O5-02-2005 Complete Drilling O5-02-2005 While Drilling Image: Secience of the secince of the secience of the secience of the															
GENERAL NOTES Begin Drilling 05-02-2005 Complete Drilling 05-02-2005 While Drilling Q DRY Drilling Contractor PRECON DRILLING Drill Rig CME-75 ATV At Completion of Drilling Q DRY Driller S&D Logger W. Wang Checked by B. Fugiel Time After Drilling NA Drilling Method 3.25-inch HSA Depth to Water Y NA		CENE											 T ^		
Drilling Contractor PRECON DRILLING Drill Rig CME-75 ATV At Completion of Drilling Time After Drilling DRY Driller S&D Logger W. Wang Checked by B. Fugiel Time After Drilling NA Drilling Method 3.25-inch HSA Depth to Water Y NA	Begin [GENE Drilling 05-02-2005	Complete	ES e Dril	llina	()5-02	-200)5	While Drilling	<u>-r leve</u>				
Driller S&D Logger W. Wang Checked by B. Fugiel Time After Drilling NA Drilling Method 3.25-inch HSA Depth to Water Y NA	Drilling	Contractor PRECON D	RILLING		Drill Rig	, (CME-	75 /	λTV	At Completion of Drilling	 g ¥		DRY		
Drilling Method 3.25-inch HSA Depth to Water ¥ NA	Driller	S&D Logger	W. War	<u>g</u>	Ch	ecked	by E	3. Fi	ıgiel	Time After Drilling	NA	•••••			
The stratification lines represent the approximate boundary	Drilling	Method 3.25-inch HSA							•••••	Depth to Water Image: Comparison of the stratification lines represented by the strati	NA NA present the app	roximate	boundar	у	



WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

 Client
 McDonough Associates Inc.

 Project
 Longmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 796.84 ft North: 1993070.53 ft East: 996044.81 ft Station: 2183+00.08 Offset: 0.02 R

F	ax: 630	-953-9938 Lo	cation				•••••	<u> </u>	0.		Offset: 0.0)2 R				
Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft) Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROC DESCRIPTION	l Kff	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	1 796.0 S	0-inch thick, black SILTY LOAN TOPSOIL tiff, black SILTY CLAY LOAM		1	2 3 3 5	1.25	41									
				2	2 3 3 5	1.75	23									
	792.3 S C	tiff to very stiff, brown SILTY LAY LOAM	5	3	2 5 7 8	2.75	20									
	789.1			4	2 3 3 4	1.50	25									
		OAM, gravelly		5	2 2 2 2	< 0.25	30									
	785.3 V	ery loose to loose, brown		6	2 2 2 4	< 0.25	22									
	C	RAVELLY SAND		7	2 3 2 2	NP	17									
			15	8	4 3 4 8	NP	19									
	778.8			9	2 1 2 1	NP	12									
	В	oring terminated at 18.00 ft	_ 20													
			-													
			25_													
		GENERA		ËS				·	·	WATE		L D	AT	Α		
Ве	egin Dril	ling 05-02-2005	Complete	e Dril	ling	0	5-02	-200)5	While Drilling	<u> </u>		D	RY		
Dr	illing Co	ontractor PRECON DRII		[a	Drill Rig		ME-	75 / 2 E		At Completion of Drilling) <u>¥</u>	•••••	D	RY	•••••	
	illina M	ethod 3 25-inch HSA	vv. vvan	<u>y</u>	Ch	ecked	uy .	.	JUIL	Depth to Water	ΝΑ Ζ ΝΔ	••••				
			•••••	·····	•••••			•••••		The stratification lines rep between soil types: the ac	resent the app	roxim mav b	ate b e ara	oundary	/	

		Wang				B	OR	ING) L	OG	6 R-063	I				raye	1 01 1
	Wa	angeng@wangeng.com					WE	l Job	No	.: 201	I-23-01	Datum: Elevation	NGVD n: 799.	27 ft			
	11	145 N Main Street	Client			M	lcDo	noug	<u>ih A</u>	ssoc	iates Inc.	North: 1	99315 6332 8	3.59 37 ft	ft		
	Lo Te	elephone: 630-953-9928	Project	Lo	ngr	nead	ow P	arkw	/ay	over	Fox River, Section	Station:	2186+	00.0	1		
L	Fa	ax: 630-953-9938	Location	·	• • • • •					0.		Offset: ().04 L				
	е		٩	Type	No.	llues in)		ure : (%)	e	ion			Type	No.	llues in)		Jre (%)
	LIOT		(ff)	mple	ample	blw/6	(tsf	Moisti ontent	Profi	Elevat (ft)	DESCRIPTIO	N Dept AC	mple	ample	blw/6	Qu (tsf	Moistu
		10-inch thick dark brown SI	TY	Sa	ű	S S		² ŏ					Sa	Ň	ю,		² č
	η			X	1	23	0.75	25									
ľ		Medium stiff to very stiff, brov	<u>OIL/</u> _ vn _	$\langle \rangle$		2 4	P										
		SILTY CLAY LOAM	-	\mathbb{N}	2	2	2 00	22									
	ļļ	795.5		\square		4	P										
		brown SAND	, – –	\mathbb{N}		1											
			-	Ň	3	1 2	NP	9									
			-	$\left(\right)$		3											
			-	X	4	34	NP	5									
			_	$\left(\right)$		3	-										
			-	X	5	6	NP	8									
		-	10	$\langle \rangle$		7	-										
0	с (С	Dense, brown GRAVELLY		\mathbb{N}	6	5 14	NP	3									
0.0	о. С	SAND 787.3	-	\square		27 16											
		Boring terminated at 12.00 ft	_														
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			-														
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			20														
			-														
12			-														
1/11/			-														
G.GDT			-														
NGEN																	
AW L		CENE													-		
2301.G	Beg	gin Drilling 05-02-2005	Con	nplete	e Dri	I ling)5-02	2-20	05	While Drilling	<u>ir Lev</u> <u><u> </u></u>		D	RY		
IC 201	Dril	Iling Contractor PRECON D	RILLIN	G		Drill Riç	g9	CME-	75	ATV	At Completion of Drillin	ng <u>¥</u>	•••••	D	RY		•••••
ENGIN	Dril Dril	Iller S&D Logger	W. V	van	<u>.</u>	Ch	ecked	by .	3. F	ugiel	Time After Drilling	<u>NA</u> ▼ NA	•••••				
WANG	2/11				· · · · · ·	· · · · · · · · · · · · · · · · · · ·		<u></u>		•••••	The stratification lines re between soil types; the a	present the a	pproxin n may	nate t <u>be g</u> ra	oundar adual.	у	

Depth to Water **V NA** The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

Datum: NGVD Elevation: 808.26 ft North: 1993254.71 ft East: 996615.27 ft Station: 2188+99.97

Client McDonough Associates Inc. Project Longmeadow Parkway over Fox River, Section Offset: 0.13 L Location Co. SPT Values (blw/6 in) Sample Type % Sample No Moisture Content (% Elevation (ft) Profile SOIL AND ROCK Depth (ft) SOIL AND ROCK Depth (ft) Qu (tsf) Sample⁻ DESCRIPTION 2 2 3 3 1.00 24 --TOPSOIL-Ρ 2 3 2.25 25 4 4 Ρ 2 5 5 NP 3 4 5 10 4 5 NP 4 5 6 6 6 NP 3 5

SPT Values (blw/6 in) Moisture Content (%) Sample No Elevation (ft) Profile Qu (tsf) DESCRIPTION 12-inch thick, black and brown 807.3SILTY LOAM Stiff to very stiff, brown SILTY CLAY LOAM 804.5 Medium dense, brown SAND 9 9 3 7 NP 4 8 8 4 6 NP 4 6 10 2 6 NP 8 3 8 6 792.3 Boring terminated at 16.00 ft 20 25 WATER LEVEL DATA **GENERAL NOTES** 05-02-2005 DRY Complete Drilling 05-02-2005 Begin Drilling While Drilling PRECON DRILLING Drill Rig CME-75 ATV DRY At Completion of Drilling Drilling Contractor Driller S&D Logger W. Wang Checked by B. Fugiel Time After Drilling NA NA Drilling Method 3.25-inch HSA Depth to Water Ţ The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938	Client Project LO Location	ngn	BC Mo neado	DRI WEI CDor	Job noug arkw	BL No. h As vay o C	OG : 201-: ssocia over F o.	R-065 23-01 ntes Inc. ox River, Section	Datum: N Elevation: North: 199 East: 9968 Station: 2 Offset: 0.0	GVD 810.17)3355.8)97.65 1)91+99.)3 L	ft 1 ft t 90	Page	1 of 1
Bievation Bievation BESCRIPTION	Depth (ft) Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROO DESCRIPTION	L Depth X:	Sample Type recovery Sample No	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
809.67-inch thick, black SILTY CL LOAM CHARTER Stiff, brown SILTY CLAY LO	AY OIL/ - AM	1	1 2 3 5	1.00 P	25								
 805.9		2	1 2 2 3	1.75 P	25								
Medium dense, brown GRAVELLY SAND	5	3	4 8 12 17	NP	7								
A Medium dense, brown, medi SAND		4	15 15 13 13										
800.2 Boring terminated at 10.00 fl	10	5	6 8 8 10	NP	4								
	·												
	-												
	15 _ _ _												
	-												
	- 20 -												
	_ _ 25												
GENE	RAL NOT	ES	ı I		<u> </u>		1	WATI	ER LEVE	LDA	TA		
Begin Drilling 05-02-2005 Drilling Contractor PRECON I Driller S&D	Complet DRILLING W. War	e Dril [ling Drill Rig Che	Cked)5-02)ME- by F	2-200 75 / 3. Fi)5 ATV Jaiel	While Drilling At Completion of Drilling Time After Drilling	 ⊊ NA		DRY DRY		
Drilling Method 3,25-inch HSA			One		~, ,•			Depth to Water The stratification lines report to between soil types: the action lines and types the action lines report to the stratification lines report	NA present the app tual transition	 roximate may be o	boundar aradual.	у	

	Wang	l			B	OR	ING) L	OG	R-066					Page	1 of 1
						WE	Job	No.	: 201-	23-01	Datum: N	NGVD	⁄18 ft			
	angeng@wangeng.com 145 N Main Street	Client			м	cDo	noud	h A	ssocia	ates Inc.	North: 19	99345	40 II 2.67	ft		
L	ombard, IL 60148	Project	Loi	ngn	nead	ow P	arkw	ay o	over F	ox River, Section	East: 99	7181.5 2104+	52 ft aa a	1		
E E	elephone: 630-953-9928 ax: 630-953-9938	Location						С	о.		Offset: 0	.02 R	00.0			
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file		t) oth	erv	e No	(alues 6 in)	٦÷	ture nt (%	file	ation ()	SOIL AND ROC	K ह	eTyp	e No	(alues 6 in)	n (j;	ture nt (%
Pro		(fl	ample reco	amp	PT V (blw/	Ω₽	Mois	Pro	Eleva (f	DESCRIPTION		ample	amp	blw/	Q ŝĵ	Mois ontei
	ore 7-inch thick brown and black	<	°õ ∖∖/	S	S		0					Ň	S	S		0
		`	V	1	2 2	1.75	24									
	Stiff to very stiff, brown SILT	$\frac{SOIL}{V}$	/		3 3	Р										
	CLAY LOAM		\setminus		2											
		-	Ň	2	2	1.50 P	23									
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	808.5 Modium dopage to dopage har	5	X	3	35	2.00	16									
ەن. م	GRAVELLY SAND		/		6 10	P										
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Be	gin Drilling 05-02-2005	Com	plete	Dri	lling)5-02	-200)5	While Drilling	<u>-1 \ L \ \</u>	<u> </u>		RY		
Dri	illing Contractor PRECON I	DRILLIN	G	[- Drill Rig	g	CME-	75 /	ATV	At Completion of Drilling	g <u>¥</u>		D	RY		
Dri	iller S&D Logger	W. V	Van	g	Ch	ecked	by .	3. Fi	ugiel	Time After Drilling	NA					
Dri	illing Method 3.25-inch HSA	••••••						•••••		Depth to Water The stratification lines rep	resent the ap	proxin	nate b	oundar	у	
٤L										between soil types; the ac	tual transition	n may l	be gra	adual.	-	

WANG



WANGENGINC



WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

 Client
 McDonough Associates Inc.

 Project
 Longmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 833.68 ft North: 1993549.41 ft East: 1001675.66 ft Station: 2240+04.53 Offset: 6.65 R

F	ax: 63	30-953-9938 Location	n .					С	0.		Offset: 6.6	5 R				
Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
, C , C , O , Q , Q	832.2	Dense, brown GRAVELLY SAND FILL Dense, brown SAND		1	10 15 17 19	NP	4									
	830.7 829.9	FILL Hard, black, brown and gray SILTY CLAY		2	19 18 13 16	> 4.50 P	10									
				3	10 5 8 7	3.25 P	21									
	827.2 825.8	Medium dense, brown SILTY		4	8 4 6 7	NP	18									
	823.7	Dense, brown GRAVELLY SAND 10		5	11 20 17 11	NP	5									
		Boring terminated at 10.00 ft	-													
		-	-													
		15_	_													
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		25_														
		GENERAL N	, IOI	ES	;;		·		I	WATE	R LEVE	L D	AT	Ά	I	
Be	gin D	rilling 07-13-2005 Cor	nplet	e Dri	lling	0	7-13	-200)5	While Drilling	<u> </u>		D	RY		
Dri	illing (Contractor PRECON DRILLIN	IG	I	Drill Rig	g C	ME-	75 A	ATV.	At Completion of Drilling	Ţ		D	RY	•••••	
Dri	iller	J&L Logger J.K	asn	ick	Ch	ecked	by .	3.F ./	J.K.	Time After Drilling	NA					
Dri	illing I	Method 3.25-inch HSA		••••	• • • • • • • • • •		•••••			Depth to Water	NA sent the app	roxim	ate h	oundar		
										between soil types; the actua	al transition i	may b	e gra	idual.	<i>r</i>	

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938	Client Project Long i Location	BO W McI meadow	RING VEI Job Donoug / Parkw	B LO No.: 2 h Asso ay ove Co.	G R-079 01-23-01 ociates Inc. or Fox River, Section	Datum: NGVD Elevation: 864.39 ft North: 1993562.49 ft East: 1002573.18 ft Station: 2249+00.08 Offset: 0.35 L	Page 1 of 1
Boil AND ROCK	Depth (ft) Sample Type recovery Sample No.	SPT Values (blw/6 in) Qu	(tsf) Moisture Content (%)	Profile Elevation	E SOIL AND ROC DESCRIPTION	Depth (ff) Sample Type recovery Sample No. SPT Values (blw/6 in)	Qu (tsf) Moisture Content (%)
BE4 14-inch thick, brown SILTY LC TOPS Dense to very dense, brown GRAVELLY SAND	DAM OIL	5 16 N 14 17	IP 1				
	2	15 17 N 25 36	IP 3				
	53	19 38 49 30	IP 3				
		22 N 19 50/3" 39	1P 4				
Boring terminated at 9.75 ft		33 N 39 50 <u>/</u> 3"	IP 3				
	_ _ _ 15						
2							
ENG.GDT 1/1/							
MANG	25						
de GENE Begin Drilling 07-22-2005 Drilling Contractor PRECON I	RAL NOTES Complete Dr DRILLING	illing Drill Ria	07-22 CME-	-2005 75 TMI	While Drilling At Completion of Drilling	ER LEVEL DATA ♀ DRY a ▼ DRY	
Drilling Method 3.25-inch HSA	W. Wang	Check	ked by	3.F./ J.	K. Time After Drilling Depth to Water The stratification lines rep between soil types; the ac	NA V NA resent the approximate bounda tual transition may be gradual.	iry

Wang Engineeringwangeng@wangeng.com1145 N Main StreetLombard, IL 60148Telephone: 630-953-9928Fax: 630-953-9938	BORING LOG R- WEI Job No.: 201-23-0 McDonough Associates ton Co.	D80 Datum: NGVD 1 Elevation: 870.52 ft Inc. North: 1993564.86 ft East: 1002873.15 ft Station: 2252+00.06 Offset: 0.05 L Offset: 0.05 L
BOIL AND ROCK	Depution Clepton Sample Type recovery SPT Values (blw/6 in) (blw/6 in) (tsf) Moisture Content (%) Profile Elevation (ft)	Depth Depth (ft) Sample Type Content (%) Content (%)
LOAM Very stiff, brown SIL TY CLAY	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	
LOAM B67.0 Dense to very dense, brown	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	
GRAVELLY SAND	5 3 18 22 NP 4 25 14	
	4 21 NP 5 22 27	
860.5 Regina terminated at 10.00 ft	5 40 NP 4 28 39	
GENERAI	NOTES	
Drilling Contractor PRECON DRIL Driller J&R Logger J. Drilling Method 3.25-inch HSA	ING Drill Rig CME-75 TMR At Kasnick Checked by B.F./ J.K. Tin De The bet	Completion of Drilling NA pth to Water e stratification lines represent the approximate boundary ween soil types; the actual transition may be gradual.

WANG



WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

Client McDonough Associates Inc.

Datum: NGVD Elevation: 874.33 ft North: 1993567.53 ft East: 1003173.07 ft Station: 2254+99.99 Offset: 0.05 L

Project	Longmeadow Parkway over Fox River, Section
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Location

on Co.

Profile	UDESCRIPTION	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	874.13-inch thick, brown SILTY LOAM TOPSOIL/ Stiff, brown CLAY LOAM		1	3 4 5 6	1.50 P	14									
	Medium dense to dense, brown GRAVELLY SAND		2	9 9 36 18	NP	3									
	- 5_ -		3	9 15 13 22	NP	6									
0 0 0	- 		4	17 17 11 9	NP	10									
0 0 0 0 0			5	6 11 12 15	NP	3									
		-													
	20	-													
71/17		-													
	25														
2 0			E 3	llina	~	17.04	200	5		IVE	LD				
	Illing Contractor PRECON DRIFT IN	npiete I G	טרו: וירט י	ning Drill Die		:MF-'	-200 75 T	MR	At Completion of Drilling	· • • • • • • • • •	• • • • • • •	<u>ת</u>	ι <u>ν</u> ι RY	•••••	
	iller J&R Loader J.Ka	asnia	' ck	Chi	ecked	by F	3.F./	J.K.	Time After Drilling	NA			13.1	•••••	
	Illing Method 3.25-inch HSA			011		~, . .			Depth to Water	NA	••••				
		<u>.</u>	· · · · ·	· · · · · · · · · · · · · · · · · · ·	·····				The stratification lines represent to between soil types: the actual transport	he appr	roxima nay be	ate b e gra	oundar adual.	у	



WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

Client McDonough Associates Inc. Project Longmeadow Parkway over Fox River, Section Datum: NGVD Elevation: 880.06 ft North: 1993571.41 ft East: 1003473.90 ft Station: 2257+99.83 Offset: 0.27 L

Location Co. SPT Values (blw/6 in) SPT Values (blw/6 in) Moisture Content (%) Moisture Content (%) Sample Type Sample No Sample No Elevation (ft) Elevation (ft) Profile Profile SOIL AND ROCK (ff) SOIL AND ROCK Depth (ft) Qu (tsf) Qu (tsf) Sample DESCRIPTION DESCRIPTION 12-inch thick black SILTY LOAM 2 --TOPSOIL--879.1 3 NP 12 4 Very stiff, black, brown and gray 5 SILTY CLAY LOAM --FILL--12 7 3.50 15 2 8 7 876.6 Ρ Medium dense, brown and black SILTY LOAM 10 --FILL-- 5 6 3 NP 22 9 10 Stiff to very stiff, brown and gray 2 SILTY CLAY LOAM 4 1.00 21 5 5 --FILL-Ρ Very stiff, black SILTY CLAY 6 LOAM 5 3.00 22 5 --BURIED TOPSOIL--8 7 Р 869.6 6 Soft to stiff, brown SILTY CLAY 7 6 1.75 24 8 Ρ 8 5 5 6 1.00 26 Ρ 6 4 15 4 8 0.25 24 5 7 Ρ 2 2 3 19 0.50 23 Ρ Very dense, brown GRAVELLY SAND 10 NP 3 17 861.2 50/4' Boring terminated at 18.83 ft 20 25 WATER LEVEL DATA **GENERAL NOTES** ∑ DRY 07-20-2005 Complete Drilling 07-20-2005 Begin Drilling While Drilling PRECON DRILLING Drill Rig CME-75 ATV At Completion of Drilling DRY Drilling Contractor Driller J&D Logger J. Kasnick Checked by B.F./ J.K. Time After Drilling NA NA Drilling Method 3.25-inch HSA Depth to Water Ţ The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

	Wang	I		B	OR	ING) L	OG	R-083					Page	I OF I
	Engineering				WFI	Joh	No	· 201-	23-01	Datum: NO	GVD				
	wangeng@wangeng.com	Client		N			h A/			Elevation: North: 199	882.2)3573	24 ft .15 ft			
	Lombard, IL 60148	Project	na	noad		arkw		SOCIA	ov River Section	East: 1003	3773.1	14 ft			
	Telephone: 630-953-9928	Location	, i i gi	neau	.		C	0.		Station: 22 Offset: 0.3	261+0 32 L	0.09			
	AX. 050-955-9950						•••••								
l o		Type	≥ No.	lues in)		Ire (%)	υ	Б			Type	No.	in)		(%)
rofil			nple	T Va Iw/6	(tsf)	oistu	Profil	levati (ft)				nple	lw/6	(tsf)	oistu ntent
		San	Sal	ds g		So		ш		•	San ,	Sal	р _а		Sol
	^{882.0} 2-inch thick, brown SANDY			6											
- TH	TOPOS	50IL//¯]/		6	NP	10									
	Medium dense, brown LOA			4											
	Very stiff, brown and gray S		2	5	3.75	16									
		/ 1/	\mathbf{i}	3 4	P										
	Medium dense, brown SAN			7											
	876.7LOAM	/		6	NP	9									
	Stiff brown and black SII T	$\frac{FILL-}{V}$		5											
	CLAY LOAM	· - X	4	3											
lili	BURIED TOPS	SOIL/ '		4											
	Very soft to very stiff, brown		/ 	3		0.4									
- lili	SILTY CLAY	\F_1	\ ⁵	4											
- ji ji					-										
- ¦		- X	6	3	1.50	26									
		1)	5	P 										
		-1/		3											
	1	٦/		4	P	23									
+++	868.0 Loose, brown SILTY LOAM														
	866.7	15	8	1	NP	18									
• • •	Medium dense, brown,			4	-										
0. 0	GRAVELLI SAIND	ΞV	9	8 9	NP	7									
ن د م	0 864.2	-//`		19 16											
	Boring terminated at 18.00 f	ft _	_												
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I.GPJ	GENE	WATE	ER LEVE	L D		\									
01230	egin Drilling 07-20-2005	Comple	While Drilling	<u>¥</u>		DR	Y								
NC 2(Prilling Contractor PRECON	At Completion of Drilling	₽ <u>₹</u>	•••••	DR	Υ	•••••								
	Drilling Method 3 25-inch HSA	Depth to Water		•••••											
VANG		••••••		•••••	•••••	•••••	•••••	·····	The stratification lines rep between soil types: the ac	resent the app	roxima may be	ate bou	undary ual		
									T botwoon con typeo, the de		nay be	<u>o graa</u>	aur.		

Page 1 of 1

BODING I OG P-083

wa 11 Lo Fa	angeng@ 145 N M ombard, elephone ax: 630-9	Wang Engineering wangeng.com ain Street IL 60148 a: 630-953-9928 953-9938	Client Project L Location	ongi	B(M mead	OR WE IcDoi	INC I Job noug arkw	No. h A ay c	OG : 201-2 ssocia over Fe	R-084 23-01 tes Inc. ox River, Section	Datum: N Elevation: North: 199 East: 1004 Station: 22 Offset: 0.0	GVD 885.19 93575. 1074.3 264+0 99 R	9 ft 41 ft 8 ft 1.33	Page	1 of 1
Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft) Sample Tvne	recovery Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROC DESCRIPTION	Depth Deft	Sample Type	Sample No. SPT Values	Qu (tsf)	Moisture Content (%)
	885.02-i LC Ha 882.7 Me GF	nch thick, dark brown SA DAM TOPS ard, dark brown CLAY LO, f edium dense, brown RAVELLY SAND	NDY SOIL	1 2 3 4	7 8 10 10 14 10 10 4 6 8 13 12 8 8	> 4.50 P NP NP	13 3 3 3								
	Ме <u>876.2</u> Ме bro	edium dense, brown SILT edium dense to very dense own GRAVELLY SAND		5 6 7	5 10 9 20 41 14 28 20 40 16 27 23	NP NP	17 2 15								
	870.9 Bo	oring terminated at 14.25 f		8	25	NP	4								
De		GENE		While Drilling	R LEVE	L D									
Dri Dri Dri	lling Cor ller lling Met	htractor PRECON I L&D Logger thod 3.25-inch HSA	ORILLING W. Wa		Drill Rię Ch	ecked	by E	-200 75 T 3.F./	MR J.K.	At Completion of Drilling Time After Drilling Depth to Water	× ▼ NA NA esent the app ual transition	 roxima mav be	te bound	ary	

MAN

	Wang			B	OR	ING) L	OG	R-085				i age	
					WE	Job	No.	: 201-	23-01	Datum: N	GVD	0 ft		
wa 11	angeng@wangeng.com	Client		M	CDO		hΔ.	seocia	ates Inc	North: 199	93578.	45 ft		
Lo	ombard, IL 60148	Project I (nar	nead	ow P	arkw	in 🕁	over F	ox River Section	East: 1004	4373.1	3 ft		
Te	ephone: 630-953-9928	Location			T.TT		C. term	0.		Offset: 0.2	267+00 28 L	U.11		
r⁻d	ル、 しつし つうつ つ つ つ つ つ つ つ つ つ つ つ つ つ つ つ つ													
	5	Type	No.	ues n)		re (%)	D.	5			ype ر	No.		e e
jije L		ple (ff)	cover ple	- Val w/6 i	(tsf)	bistu tent	rofile	evatio (ft)	SOIL AND ROC	K febt	ple 7	v/6 i	Qu (tsf)	bistu
^		Sam	San	(bly		GGR	₽	Ë	DESCRIPTION		Sam	SPT (blv		ĮΣ,
	882.96-inch thick, dark brown LOA			2										
	TOPS	<u>oil/ _</u>	1	5	NP	15								
11	^{881.9} Medium dense, brown SANE	ру _[/\		10										
1	F	ill/ 🗍		18										
	Hard, brown CLAY LOAM	+X	2	8	4.50	16								
FI	F	FILL <u>1</u> / \		9	l P									
Ł4	878.9 Medium dense, brown SANF	7 5 //	Ί	12										
	877.9LOAM		3	8 6	NP	19								
0.9	Dense, brown GRAVELLY			16										
р. С	SAND	$\exists \lor$	4	18 16		_								
0°			4	14		5								
р ç				12										
ں م		17	5	16 20	NP	5								
C. J. d	873.4	10 - 1/ \		20 19										
<u></u>	Boring terminated at 10.00 ft		1											
		-												
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	GENE	RAL NO	res		-				WATE		LD	ATA		
Beg	yin Drilling 07-22-2005	Comple	te Dri	lling)7-22	-20()5	While Drilling	¥		DRY		••••
Drill	Ing Contractor PRECON D			Drill Riq	ر انت ا		/5 [2 = /		At Completion of Drilling	} <u>₹</u>		UKY		
Drill		vv. vva	n <u>g</u>	Ch	ecked	by .	5.F./	J.K.	Lime After Drilling		•••••			
Drill	ing wethoa 3.25-Inch HSA			•••••	•••••	•••••		•••••	The stratification lines rep	resent the app	 proxima	ite bounda	ry	
									between soil types; the ac	tual transition	may be	gradual.	,	

Wang Engineeringwangeng@wangeng.com1145 N Main StreetLombard, IL 60148Telephone: 630-953-9928Fax: 630-953-9938Location	Longm	BOR WE McDo eadow P	ING I Job nougl arkw	b LOG No.: 201-2 h Associa ay over Fe Co.	R-086 23-01 tes Inc. ox River, Section	Datum: NGVD Elevation: 892.3 North: 1993580. East: 1004672.6 Station: 2269+99 Offset: 0.10 R	Page 1 of 1 7 ft 73 ft 1 ft 9.59							
Brofile Beaution DESCRIPTION	Sample Type recovery Sample No.	SPT Values (blw/6 in) Qu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCI DESCRIPTION	Depth (ft) Sample Type	Sample No. SPT Values (blw/6 in) Qu (tsf) Moisture Content (%)							
9-inch thick, brown SILTY CLAY 891.6 LOAM Wery dense, gray GRAVEL FILL Medium stiff to stiff, black, brown, and gray SILTY CLAY LOAM	1	6 8 46 11 11 5 4 5 9 0.75 4 5	13 20											
1 1 5 1 886.9 5 1 1 886.9 1 1 1 1 1 1	3	3 2 3 3 2 1.50 P	23											
$\begin{array}{c c c c c c c c c c c c c c c c c c c $														
Dense, blown Gravella SAND														
GENERAL NG Begin Drilling 07-14-2005 Comp Drilling Contractor PRECON DRILLING Driller J&L Logger J. Kas	DTES plete Drillin G Dr snick	ng(ill Rig Checked)7-14 CME-7 by B	-2005 75 ATV 8.F./ J.K.	WATE While Drilling At Completion of Drilling Time After Drilling	R LEVEL D/ ♀ ▼ NA	ATA DRY DRY							
Drilling Method 3.25-inch HSA					Depth to Water	esent the approxima	te boundary							

WANGENGINC 2012301.GPJ WANGENG.GDT 1/11/12

Engineeringwangeng@wangeng.com1145 N Main StreetLombard, IL 60148Telephone: 630-953-9928Fax: 630-953-9938District ConditionImage: Solid AND ROCKImage: Solid And Rock <th>Qu (tsf)</th> <th>oisture htent (%)</th>	Qu (tsf)	oisture htent (%)
Indigende wangenge wan	Qu (tsf)	oisture htent (%)
Lombard, IL 60148 Project Longmeadow Parkway over Fox River, Section Station: 2272+97.40 Telephone: 630-953-9938 Location Co. Station: 2272+97.40 Image: Solid control of the section Image: Solid control of the section Station: 2272+97.40 Image: Solid control of the section Image: Solid control of the section Station: 2272+97.40 Image: Solid control of the section Image: Solid control of the section Station: 2272+97.40 Image: Solid control of the section Image: Solid control of the section Station: 2272+97.40 Image: Solid control of the section Image: Solid control of the section Station: 2272+97.40 Image: Solid control of the section Image: Solid control of the section Station: 2272+97.40 Image: Solid control of the section Image: Solid control of the section Station: 2272+97.40 Image: Solid control of the section Image: Solid control of the section Station: 2272+97.40 Image: Solid control of the section Image: Solid control of the section Station: 2272+97.40 Image: Solid control of the section Image: Solid control of the section Station: 2272+97.40 Image: Solid control of the section Image: Solid control of the section Station: 2272+97.40	Qu (tsf)	oisture ntent (%)
Lax 030-992-9938 From output Lax 030-992-992-9938 From output Lax 030-992-992-9928 From output Lax 02-9928 Lax 02-9928 Lax 02-9928 Lax 02-9928 Lax 02-9928 Lax 02-9928	Qu (tsf)	oisture itent (%)
	Qu (tsf)	oisture itent (%)
		ΣΩ
Hard, brown CLAY LOAM		
GRAVELLY SAND with cobbles		
5 = 12 = 12 = 12 = 13 = 12		
$\begin{bmatrix} 1 \\ -1 \\ -1 \\ -1 \\ -1 \\ -1 \\ -1 \\ -1 \\$		
$- \begin{array}{ c c } \hline & & & \\ \hline \\ \hline$		
$- \begin{array}{ c c } \hline & & & \\ \hline \\ \hline$		
$ \begin{array}{c c} 15 \\ \hline \\ 15 \\ \hline \\ 18 \\ 22 \\ \hline \\ 18 \\ 18 \\ 18 \\ 18 \\ 18 \\ 18 \\ 18 $		
$ \begin{array}{c} - \\ - \\ - \\ - \\ - \\ - \\ - \\ - \\ - \\ - $		
Very stiff, brown and gray SILTY 9 0 10 CLAY 20 12 12		
$\frac{1}{2} \frac{1}{12} $		
GENERAL NOTES WATER LEVEL DATA 0 Begin Drilling 12-16-2005 0 Depy		
Drilling Contractor PRECON DRILLING Drill Rig CME-75 ATV At Completion of Drilling V DRY		
Model Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix Matrix		
Drilling Method 3.25-INCN.HSA.	у	



2012301.GPJ WANGENG.GDT 1/11/12

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938	Client . Project Location	Lor	ngn	B(M neade	ORI WEI IcDor	Job noug arkw	No No h A vay C	OG : 201- ssocia over F	R-089 23-01 ates Inc. ox River, Section	Datum: N Elevation: North: 199 East: 1009 Station: 22 Offset: 0.0	GVD 905.9 93781 5531.(278+9 03 L	98 ft .18 ft 32 ft 9.94		Page 1	of 1
SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROC DESCRIPTION	N Dept H	Sample Type	Sample No.	(blw/6 in)	uu (tsf)	Moisture Content (%)
905 7Brown SILTY LOAM 905,2TOPS Brown CLAY LOAM with cob Loose to medium dense, bro GRAVELLY SAND	DIL/- bles/- wn -	\mathbf{X}	1	4 4 3	NP	4									
	5		2	6 7 <u>6</u>	NP	11									
3 8 10 9 3 8 10 9 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1															
Medium dense, brown, fine to medium SAND	2 		4	7 7 9	NP	3									
GRAVELLY SAND		X	5	8 10 11 13	NP	4									
Hard, brown and gray SILTY CLAY with sand interbedded lenses	-	$\overline{\langle}$	6	5 6 7 10	> 4.50 P	15									
gravelly SANDY LOAM with cobbles	15		7	13 16 14 15	NP	8									
Very stiff, brown and gray SIL	TY -	X	8	11 12 8 6	3.00 P	21									
Very stiff, brown CLAY LOAN 886.0 Boring terminated at 20.00 ft	/	X	9	7 13 11 9	2.75 P	10									
	 _25														
GENE	WATE	ER LEVE		∟∟ ATA											
Begin Drilling 12-15-2005 Drilling Contractor PRECON D Driller K&N Logger Drilling Method 3.25-inch HSA	egin Drilling 12-15-2005 Complete Drilling 12-15-2005 illing Contractor PRECON DRILLING Drill Rig CME-75 ATV iller K&N Logger J. Kasnick Checked by B. Fugiel rilling Method 3.25-inch HSA												Y Y		

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938	Client Project Location	Loi	ņgņ	B(M neade	ORI WEI IcDor ow P	INC Job noug arkw	BL No. hA ay c	OG : 201-2 ssocia over Fo	R-090 23-01 tes Inc. ox River, Section	Datum: No Elevation: North: 199 East: 1009 Station: 22 Offset: 0.7	GVD 891.88 93925.3 5795.9 282+02 17 L	3 ft 37 ft 3 ft 2.06		Page 1	of 1
SOIL AND ROCK	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROC DESCRIPTION	Depth Depth	Sample Type	Sample No. SPT Values		(tsf)	Moisture Content (%)
¹¹¹ ^{891.6} Stiff, brown SILTY CLAY LO TOPS ^{890.4} Very stiff, brown CLAY LOA with sand interbedded lense	AM OIL/ M		1	1 3 4 10	2.25 P	23									
Medium dense to dense, bro GRAVELLY SAND	own - 		2	7 10 8 8	NP	3									
	5		3	14 17 13 14	NP	3									
Very stiff, brown SILTY CLAY LOAM with silt interbedded lenses 5 8 3.00 16															
HILL 882.4 Medium dense to very dense	- - 2, 10_	X	5	9 8 9 25	3.00 P	16									
silt interbedded lense	ith _ 		6	7 23 33 48	NP	6									
	-	X	7	6 14 12 16	NP	6									
875.9 Baring terminated at 16.00 f	15		8	9 21 19 18	NP	2									
Boring terminated at 16.00 h	· _														
	- - 20														
	-														
	25	<u></u>													-
GENE Begin Drilling 12-15-2005 Drilling Contractor PRECON I Driller K&N	Com Com Com Com Com Com Com Com Com Com	ori Iplete G Isnie	⊑う : [[ck	lling Drill Rig Ch	1 (ecked	2-15 CME-	-20 75 / 3. Fi)5 ATV ugiel	While Drilling At Completion of Drilling Time After Drilling	<u>₹ LEVE</u> <u>¥</u> NA		DRY DRY			
Drilling Method 3.25-inch HSA						·····	·····		Depth to Water The stratification lines represented between soil types; the act	NA esent the app ual transition	 proximat may be	te bound gradual	dary I.		

WANGENGINC 2012301.GPJ WANGENG.GDT 1/11/12



WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

 Client
 McDonough Associates Inc.

 Project
 Longmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 884.75 ft North: 1993994.23 ft East: 1006085.43 ft Station: 2285+00.60 Offset: 0.03 L

Fa	ax: 630-95	53-9938 Loc	cation		••••				C	0.		Offset: 0.0)3 L				
Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (11)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	884.3Stiff	, brown SILTY CLAY LOAM TOPSOIL- y stiff, brown CLAY LOAM	-/-		1	1 4 6 11	2.75 P	30									
	882.3 SAN SAN Mec 881.0 SILT	NDY LOAM lium dense, brown gravelly IY LOAM	/- /-		2	8 13 14 16	NP	8									
0 0 0 0	Mec GR/	lium dense to dense, brown AVELLY SAND with cobbles	5		3	10 22 13 13	NP	4									
			-		4	9 9 9 10	NP	3									
	$\begin{array}{c c} & & & & & \\ \hline & & & \\ \hline & & \\ \hline & & \\ &$																
	LOAM B73.3 Medium dense, brown GRAVELLY SAND with cobbles																
	Medium dense, brown 7 GRAVELLY SAND with cobbles 7 7 10 7 10 10 10 870.8 50/5"																
			15														
			-														
			20														
			-														
			-														
			25														
Ro		GENERA			ES	ling	1	2.15	-200	5		≺ LEVE	LD		A RY		
Dri	illing Conti	ractor PRECON DRIL		G	ווים :]	Drill Ric	! g (CME-	75 A	TV	At Completion of Drilling	÷	•••••	D	RY	• • • • • • • • •	
Dri	iller	K&N Logger J	. Ka	isnio	ck	Ch	ecked	by E	3. Fı	ıgiel	Time After Drilling	NA	·····				
Dri	illing Meth	od 3.25-inch HSA							•••••		Depth to Water	NA		ato h	ounder	,	
											between soil types; the actu	al transition	may b	ale D e qra	oundary	/	

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938	Client Project Lon Location	B M Igmead	ORI WEI IcDor ow Pa	NG Job noug arkw	No. h As ay c C	OG : 201-2 ssocia over Fo o.	R-092 23-01 tes Inc. ox River, Section	Datum: No Elevation: North: 199 East: 1006 Station: 22 Offset: 20	GVD 888.89 f 3979.10 3384.30 f 287+99.4 73 R	t ft ft 4	Page 1	1 of 1		
BOIL AND ROCK	Depth (ft) Sample Type	Sample No. SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROC DESCRIPTION	Depth X	Sample Type recovery Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)		
Brown SILTY CLAY LOAM 887.9TOPS Brown CLAY LOAM Hard, brown gravelly SANDY 885.9 CLAY		1 9 31 16	> 4.50 P	7										
Medium dense to dense, bro GRAVELLY SAND		2 19 17 16	NP											
0 3 8 NP 5 0 9 8 15 2.50 19														
Very stiff, brown SILTY CLA B79.4 Dense to very dense, brown GRAVELLY SAND with cobl	Y -	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	2.50 P NP	19 4										
		22 8 6 16 25 24	NP	3										
		16 7 34 25 20 41 8 22	NP	4										
Boring terminated at 18.00 ft	20	21 21	-	-										
		=												
GENE Begin Drilling 12-15-2005 Drilling Contractor PRECON D Driller K&N Logger Drilling Method 3.25-inch HSA	Complete DRILLING J. Kasnic	While Drilling At Completion of Drilling Time After Drilling Depth to Water	✓ ✓ NA esent the app ual transition	roximate may be or	DRY DRY	y								

MAN

w 1	Vangeng@wangeng.com 145 N Main Street	Client			BC	OR WE	Job Job	BL No.	OG : 201-2 ssocia	R-093 23-01 ates Inc.	Datum: No Elevation: North: 199 East: 1006	GVD 893.3 94004. 6691.3	8 ft 87 ft 89 ft	Page	1 of 1
F	elephone: 630-953-9928 ax: 630-953-9938	Project Location	Lor	ngn	nead	ow P	arkw	C C	o.	ox River, Section	Station: 22 Offset: 2.7	291+06 77 L	6.69		
Profile	SOIL AND ROCK	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROC DESCRIPTION	K ^{Dept}	Sample Type	Sample No. SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	Brown SILTY CLAY LOAM Base 6TOPS Brown CLAY LOAM Medium dense to dense, bro GRAVELLY SAND	OIL/-		1	4 10 14	NP	3								
		- - 5_ -		2	11 20 24	NP.	4								
	886.6 Stiff to very stiff, brown SILT CLAY to SILTY CLAY LOAM silt interbedded lenses	- Y - I with -		3	10 11 7 7	1.50 P	20								
		 10		4	5 7 6 8	1.25 P	21								
		-	X	5	4 7 10 13	3.00 P	20								
	879.1		Ă	6	4 8 5	1.75 P	21								
	GRAVELLY SAND with cob	oles 15	X	7	8 8 10 8	NP	4								
0000		-	Å	8	20 18 15 19	NP	5								
	_{873.4} Boring terminated at 20.00 ft	20	X	9	13 18 14 13	NP	4								
/11/12		-													
NGENG.GDT		-													
M L L L	GENE	25 RAI N		 FS						WATF	RIFVF		 ΔτΔ		
Be 2012301.(gin Drilling 12-14-2005 illing Contractor PRECON I	Com DRILLIN	While Drilling At Completion of Drilling			DRY DRY									
Dr Dr	illing Method .3.25-inch HSA	Depth to Water The stratification lines rep	NA resent the app tual transition	 Proxima may be	ate bounda e gradual.	Ŋ									

V 1 L F	wangen 145 N Lombaro Felepho Fax: 630	g@wangeng.com Main Street d, IL 60148 ne: 630-953-9928 0-953-9938	BORING LOG R-094 WEI Job No.: 201-23-01 Client McDonough Associates Inc. Project Longmeadow Parkway over Fox River, Section Location Co.												
Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ff)	Sample Type	Sample No. SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROO DESCRIPTIO	CK Depth X	Sample Type recovery Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	884.8N	Aedium dense, brown SILT OAM TOPS Aedium dense, brown SILT	OIL/ - with -		1 6 8 10	NP	37								
	l s ti	silty clay interbedded lenses race organics	and - - -		2 6 6 5	NP	16								
	879.8	/ery stiff, brown SILTY CLA	5_ Y		5 3 11 13 9	NP	13								
	v 	vith silt interbedded lenses	-		4 5 7 9 10	3.00 P	21								
	875.3		- - 10		5 5 6 6	2.50 P	21								
WANGENG.GDT 1/11/12															
01.GFJ		GENE		OTE	S		10.44			WAT					
WANGENGINC 20123	egin Dri rilling C riller rilling M	ining 12-14-2005 iontractor PRECON I K&J Logger lethod 3.25-inch HSA	Com DRILLIN J. Ka	piete I G snic	Drilling Drill Ri k Cł	ig	i ∠-14 CME- by [-201 75 / 3. Fi	ATV ugiel	VVNIIE Drilling At Completion of Drillin Time After Drilling Depth to Water The stratification lines re between soil types: the a	g ¥ NA Y NA present the appresent the a	D proximate b may be gra	RY	y	



WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

 Client
 McDonough Associates Inc.

 Project
 Longmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 883.36 ft North: 1994008.22 ft East: 1007281.85 ft Station: 2296+97.18 Offset: 1.68 L

Fa	ax: 630-953-9938	Location					С	o.		Offset: 1.6	68 L				
Profile	SOIL AND ROCK DESCRIPTION	Depth (ft) Samole Tvoe	recovery Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCH DESCRIPTION	Depth (fft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	882.9Stiff, brown SILTY CLAY LOA TOPSC 881.9 Very stiff, brown CLAY LOAN 881.1Very stiff, brown SANDY CLA	M DIL A Y	1	1 2 4 5	2.50 P	24									
, (, 0 , 0 , 0	Medium dense, brown GRAVELLY SAND		2	4 6 10 13	2.75 P	16									
		5	3	15 9 10 8	NP	3									
, C , C	875.9 Medium dense, brown, fine		4	12 15 11 8	NP	2									
	873.4	10	5	16 14 13 11	NP	4									
	Boring terminated at 10.00 ft	-													
		-													
		- 15_ -													
		-													
		20 													
		-													
		25													
	GENER		IES			0.4.4	000		WATE		LD				
Be	gin Drilling 12-14-2005		ete Dri	lling	1	2-14	-200 75 ^	15 TV	While Drilling	¥	• • • • • • •		KY DV	•••••	
Dri		At Completion of Drilling	- <u>₹.</u> ΝΔ		U	Γ.T									
Dri	Iling Method 3 25-inch HSA	Depth to Water V	NΔ	• • • • •											
								•••••	Deptn to Water Y. NA. The stratification lines represent the approximate boundary						
									E DELWEEN SUIL LYPES, LIE ACLU	ແແຜນອາເປັນ	nay D	<u>u yid</u>	uual.		



WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

Client McDonough Associates Inc. Project Longmeadow Parkway over Fox River, Section Datum: NGVD Elevation: 889.99 ft North: 1994020.59 ft East: 1007588.27 ft Station: 2300+03.69 Offset: 11.75 L

NA

Ţ The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

Depth to Water

Location Co. SPT Values (blw/6 in) SPT Values (blw/6 in) Moisture Content (%) Sample Type % Sample No Sample No Moisture Content (% Elevation (ft) Elevation (ft) Profile Profile SOIL AND ROCK Depth (ft) SOIL AND ROCK Depth (ft) Qu (tsf) Sample⁻ Qu (tsf) DESCRIPTION DESCRIPTION 889.5 Stiff, brown SILTY CLAY LOAM 1 --TOPSOIL-2 6 4.50 23 888.5Hard, brown SILTY CLAY Ρ 12 887.7Hard, brown SANDY CLAY 6 Medium dense to very dense, 18 2 4.50 15 brown and black GRAVELLY 14 9 Ρ SAND with cobbles 7 11 NP 6 3 14 12 5 9 NP 13 14 14 18 NP 5 4 13 14 12 17 NP 2 14 16 50 36 NP 2 23 27 876.0 Boring terminated at 14.00 ft 15 20 25 WATER LEVEL DATA **GENERAL NOTES** ∑ DRY 12-14-2005 Complete Drilling **12-14-2005** Begin Drilling While Drilling PRECON DRILLING Drill Rig CME-75 ATV DRY Drilling Contractor At Completion of Drilling Driller K&J Logger J. Kasnick Checked by B. Fugiel Time After Drilling NA

Drilling Method

3.25-inch HSA

wa 11 Lo Fa	angeng@wangeng.com l45 N Main Street ombard, IL 60148 elephone: 630-953-9928 ax: 630-953-9938	Client Project Location	Lor	igņ	B(M neade	ORI WEI IcDor ow P	Job noug arkw	βL No. h As ay c C	OG : 201-2 ssocia over Fo	R-097 23-01 tes Inc. ox River, Section	Datum: No Elevation: North: 199 East: 1007 Station: 23 Offset: 0.9	GVD 893.(94029 7884. 303+(91 R	34 ft).11 1 15 ft)0.53	ft 3	Page ·	1 of 1
Profile	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROC DESCRIPTION	Depth (ff)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	893.13-inch thick, brown SILTY LO 892.8TOPSC Hard, brown CLAY LOAM Medium dense to dense, brow	AM		1	4 6 17 12	> 4.50 P	11									
	GRAVELLY SAND			2	16 10 13 10	NP	2									
0 (, C , C , C		5	X.	3	5 8 9 12	NP	6									
0 0 0 0 0 0			X	4	15 11 14 13	NP	6									
			X	5	16 10 13 14	NP	7									
, C	880.8		X	6	15 16 34 21	NP	6									
	Medium dense to dense, brow fine SAND	vn,	X	7	19 17 27 23	NP	5									
	877.3 Boring terminated at 16.00 ft	15	X	8	13 13 15	NP	6									
		-														
		_ 20 _														
		-														
		- - - 25														
	GENER		от	=S						WATE	RIFVE			Δ		
Beș Dri Dri	gin Drilling 07-20-2005 Iling Contractor PRECON D Iler J&D Logger	Com RILLIN J. Ka	plete G snic	Dril	lling Drill Rig Ch	C c c c ked)7-20 CME- by E	-20(75 / 3.F./	05 ATV / J.K.	While Drilling At Completion of Drilling Time After Drilling			D	RY RY		
Dri	lling Method 3.25-inch HSA									Depth to Water	esent the app ual transition	oroxim may b	ate b	oundar Idual.	у	

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The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

WANGENGINC



WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

Client McDonough Associates Inc.

Project Longmeadow Parkway over Fox River, Section Location Co. Datum: NGVD Elevation: 919.90 ft North: 1992578.45 ft East: 980939.95 ft Station: 103+49.98 Offset: 0.16 L

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft) Sample Type	recovery Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No. SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	<u>919.46</u> N	-inch thick GRAVEL FILL- /ledium dense, brown SANDY OAM		1	3 6 7 5	NP	8								
				2	8 8 11 11	NP	9								
			5	3	8 11 11 11	NP	9								
				4	5 10 12 14	NP	9								
	909.9	Roring terminated at 10 00 ft	10	5	6 10 9 12	NP	9								
		oning terminated at 10.00 it	-												
			-												
			15 												
			-												
			- - 20 -												
1/11/12			-												
WANGENG.GUI			25_												
		GENERA			I			I	I	WATER			ΔΤΔ	1	
201.6	Begin Dri	lling 06-01-2005		te Dri	, Iling	C)6-01	-200)5	While Drilling	⊻⊥		DRY		
2012	Drilling C	ontractor PRECON DRII	LLING	I	Drill Rig	g	CME-	75 A	λTV	At Completion of Drilling	¥		DRY		
	Driller	K Logger J	I. Koslo	oski	Ch	ecked	by .	3. Fı	ugiel	Time After Drilling	NA	•••••			
	Drilling M	ethod 3.25-inch HSA		•••••		•••••			•••••	Depth to Water	NA ent the app	 roxima	te bounda	ry	
š∟_										between soil types; the actua	transition	may be	gradual.	-	

w 11 Lo Fa	Pangeng@wangeng.com 145 N Main Street ombard, IL 60148 elephone: 630-953-9928 ax: 630-953-9938	Client Project Lo Location	ongr	B(M nead	OR WEI IcDoi ow P	INC I Job noug arkw	No. h As ay c	OG : 201-2 ssocia over Fo o.	R-100 23-01 tes Inc. ox River, Section	Datum: No Elevation: North: 199 East: 9809 Station: 10 Offset: 0.0	GVD 914.20 2878.4 939.57 96+50.0 99 L) ft 47 ft ft 04	Page	1 of 1
Profile	SOIL AND ROCK	Depth (ft) Sample Type	<i>recovery</i> Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCI DESCRIPTION	Depth X	Sample Type	Sample No. SPT Values (hlw/6 in)	Qu (tsf)	Moisture Content (%)
	913.76-inch thick, dark brown SILT LOAM 		1	4 7 40 50	NP	10								
	LOAM		2	8 12 16 19	NP	5								
		5	3	6 9 15 6	NP	10								
	Medium dense, brown GRAVELLY SAND, with cob	oles	4	5 17 9 8	NP	6								
	904.2	10	5	3 5 9 12	NP	5								
Po		RAL NO	TES			,)6_02	-201)5	While Drilling	R LEVE	L D/			
Dri Dri Dri	illing Contractor PRECON D iller K Logger illing Method 3.25-inch HSA	RILLING J. Koslo	oski	ning Drill Rig Ch	ecked	by E	-∠0(75 / 3. Fi	ATV Jgiel	At Completion of Drilling Time After Drilling Depth to Water	×. NA NA esent the app ual transition	 roximat	DRY DRY	ary	

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Wangeng@wangeng.com Borning Log R-101 1145 N Main Street Wei Job No.: 201-23-01 Date Lombard, IL 60148 Client McDonough Associates Inc. Nor Project Longmeadow Parkway over Fox River, Section Sta Location Co. Off														Page 1 of 1 atum: NGVD levation: 915.24 ft orth: 1993178.84 ft ast: 980950.12 ft tation: 109+50.13 offset: 20.90 R						
Profile	SOIL AND ROCK DESCRIPTION	Depth (ft) Sample Type	sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROC DESCRIPTION	Depth Def	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)					
	914.76-inch thick, dark brown SIL LOAM LOOSE to medium dense, bro SANDY LOAM	CIL/	2	3 4 6 7 3 5 3 4	NP	12 10														
	^{909.7} Very dense, brown GRAVEL SAND, with cobbles	5_ LY	3	3 7 9 9 6 58/3	NP	7 5														
			5	40 20 65 22 35 33	NP	5														
	901.2 Boring terminated at 14.00 ft		7	33 34 18 28 29 29	NP	2														
		- - 20 - -																		
		- - - - 25																		
	CENE											ΔΤ	Δ							
Beg Dri Dri Dri	gin Drilling 06-02-2005 lling Contractor PRECON I ller K Logger lling Method 3.25-inch HSA	Compl Compl DRILLING J. Kosl	WATER LEVEL DATA While Drilling Image: DRY At Completion of Drilling Image: DRY Time After Drilling NA Depth to Water Image: NA The stratification lines represent the approximate boundary																	

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Wang			B	OR	ING	; L	OG	R-102
wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928	Client Project	Long	N mead	WE IcDo ow P	l Job noug arkw	No. h As ay c	: 201 ssoci over l	-23-01 ates Inc. Fox River, Section
Fax: 630-953-9938	Location						<u>v.</u>	
BOIL AND ROCK	Depth (ft)	Sample Type recovery Sample No	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND RO DESCRIPTIC
12-inch thick, dark brown S 914.0LOAM TOPS	ILTY _ SOIL/ _	1	2 3 3 3	NP	17			
	-	2	4 4 4 8	NP	11			
Dense to very dense, browr		\bigvee	7					

WANGENGINC 2012301.GPJ WANGENG.GDT 1/11/12

Profile	Elevation Elevation SOIL AND ROCK DESCRIPTION	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	12-inch thick, dark brown SILTY 914.0LOAM TOPSOIL Loose, brown LOAM		1	2 3 3 3	NP	17									
			2	4 4 4 8	NP	11									
	Dense to very dense, brown 5_ GRAVELLY SAND, with cobbles		3	7 27 31 22	NP	4									
0 0 0 0			4	14 19 12 14	NP	7									
	10_		5	12 20 16 14	NP	4									
<u>8.0</u>	Medium dense, brown SAND		6	7 11 10 12	NP	14									
	Medium dense, brown GRAVELLY SAND		7	13 10 13 11	NP	7									
		-													
		-													
	20	-													
		-													
		-													
	25_														
	GENERAL N	OT	ËS						WATER	LEVE	L D	AT	Α		
Be	gin Drilling 06-02-2005 Cor	nplete	e Dril	ling	0	6-02	-200)5	While Drilling	<u>¥</u>		DF	RY		
Dri	Iling Contractor PRECON DRILLIN	IG	. [Drill Rig		CME-	75 A	ATV.	At Completion of Drilling	¥		DF	RY		
Dri	ller K Logger J.Kc	slos	ski	Che	ecked	by E	3. Fi	ugiel	Time After Drilling	NA	•••••				
Dri	lling Method 3.25-inch HSA				•••••			•••••	Depth to Water	nt the app	 roxima	ite bo	oundary	/	
									between soil types: the actual	transition i	<u>may be</u>	e grad	dual.		

Elevation: 914.99 ft North: 1993476.84 ft

East: 980897.14 ft

Station: 112+49.03 Offset: 37.68 L



WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928

Client McDonough Associates Inc. Project Longmeadow Parkway over Fox River, Section Datum: NGVD Elevation: 910.86 ft North: 1993778.78 ft East: 980955.29 ft Station: 115+50.39 Offset: 15 50 R

F	ax: 6	130-953-9938	ation					С	0.	······	Offset: 15.	50 R				
Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft) Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	<u>910</u> .	9-inch thick, black SILTY LOAM TOPSOIL Very stiff, black and dark brown SILTY CLAY		1	1 2 4 4	NP	18									
				2	5 8 7 4	3.50 P	21									
	906.	4 Very stiff, brown SILTY CLAY LOAM	5	3	6 10 10 7	2.50 P	23									
				4	3 5 8 5	2.00 P	11									
			10	5	4 10 8 7	2.00 P	10									
	<u>898.</u> '	9														
		Boring terminated at 12.00 ft	-													
			-													
			15													
			-													
			-													
			-													
			-													
			20													
			-													
			-													
			-													
			-													
			25_													
	1	GENERAI		ES	;			 		WATER	LEVE	L D	AT	A		
Be	egin D	Drilling 06-02-2005	Complet	e Dri	lling		6-02	-200)5	While Drilling	<u> </u>		DI	RY		
Dr	illing	Contractor PRECON DRIL	LING		Drill Rig	g (ME-	75 A	TV	At Completion of Drilling	¥		DI	RY	•••••	
Dr	iller	K Logger J.	nosio	<u>SKI</u>	Ch	ecked	by .	5. Fl	igiel	I ime After Drilling	<u>ΝΑ</u>	••••				
	ıy		•••••	· · · · · ·	••••	· · · · · · · · · · · ·	• • • • • • • • • • • • • • • • • • •			The stratification lines represented between soil types: the actual	ent the appr transition n	roxima nav be	ate bo e ara	oundary dual.	/	

	Wang	1		В	OR	ING) L	OG	R-104	l			Page	1 01 1
	Engineering					l loh	No	· 201	23_01	Datum: NO	GVD			
W	angeng@wangeng.com					1300		. 201-	23-01	Elevation:	913.10 f 14078 47	ft 7 ft		
	ombard. IL 60148	Client		I		noug	in A	SSOCIA	ates Inc.	East: 9809	950.93 ft			
Te	elephone: 630-953-9928	Project	Loui	ymead	IOW P	агки	ay (UX RIVER, SECTION	Station: 11	8+50.09	9		
Fa	ax: 630-953-9938	Location						, 0.		Offset: 13	.54 K			
	Ę		, ype	nes.		e (%)		ç			Ype Vo.	u) (u		e (%)
Cofile		(if)		Valt Valt	(tsf)	bistur	rofile	(ft)	SOIL AND ROC	K fage	ple T	Valı v/6 i	Qu (tsf)	bistur tent
			sam re	SPT (b)	· -	GG		Ш	DESCRIPTION		Sam re Sarr	SPT (b)		Con
	9-inch thick, dark brown SIL	TY		2										
			X	1 3	NP	18								
	Medium stiff, dark brown SI		Δ	4										
	CLAY LOAM	/		5										
	Medium dense, brown SILT	Y	ХI	2 4	0.75	27								
	LOAM			5	- -									
		5		5		40								
			\land	3 6		16								
		+	\rightarrow	6	-									
	906.1		$\mathbf{\mathbf{v}}$	4 7										
	Medium dense, brown SAN	DY -//	$^{\prime}$	9										
	904 3	T.		6										
	Stiff, brown SILTY CLAY LC	DAM -	X	5 10										
	903.1	10	Δ	11	_ P									
	Boring terminated at 10.00 f	ft _												
		-												
		_												
		-												
		-												
		-												
		15												
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		-												
		20												
		-												
21/12		-												
-														
G.GD		-												
CER		-												
WAN		25												
[45]	GENE		DTE	S		•			WATE	R LEVE		ΤA	·	
Be	gin Drilling 06-03-2005	Comp	olete [Drilling		06-03	8-20	05	While Drilling	<u> </u>]	DRY		
ຊີ Dri	Iling Contractor PRECON	DRILLING	.	Drill R	ig	CME	75	ATV	At Completion of Drilling	9 ₹	I	DRY		
Z Dri	ller K Logger	J. Kos	losl	<u>ki</u> C	hecked	by .	B. F	ugiel	Time After Drilling	NA				
Dri	Iling Method 3,25-inch HSA	•••••							Depth to Water	NA	 roximate	boundar	v	
Ă Ă									between soil types; the ac	tual transition	nay be g	radual.	3	



Co.

WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

Location

Datum: NGVD Elevation: 915.87 ft North: 1994378.13 ft East: 980953.89 ft Station: 121+49.75 Offset: 14.90 R

Client	McDonough Associates Inc.
Project	Longmeadow Parkway over Fox River, Section

SPT Values (blw/6 in) Moisture Content (%) SPT Values (blw/6 in) Moisture Content (%) Sample Type Sample No Sample No Elevation (ft) Elevation (ft) Profile Profile SOIL AND ROCK Depth (ft) SOIL AND ROCK Depth (ft) Sample 1 Qu (tsf) Qu (tsf) DESCRIPTION DESCRIPTION 12-inch thick, black SILTY LOAM 2 --TOPSOIL--914.9 23 NP 16 Very stiff, brown SILTY CLAY 3 LOAM 3 3 6 5 18 2.00 2 Ρ 3 6 3.00 19 3 6 Ρ 7 6 908.9 8 NP 16 Medium dense, brown SANDY 9 12 LOAM 907.4 4 Very stiff, gray SILTY CLAY 8 5 3.00 12 LOAM 7 Р 6 905 9 10 Boring terminated at 10.00 ft 15 20 2012301.GPJ WANGENG.GDT 1/11/12 25 WATER LEVEL DATA **GENERAL NOTES** DRY 06-03-2005 Complete Drilling 06-03-2005 ∇ Begin Drilling While Drilling PRECON DRILLING Drill Rig CME-75 ATV DRY **Drilling Contractor** At Completion of Drilling WANGENGINC K Logger J. Kosloski Checked by B. Fugiel Time After Drilling NA Driller Depth to Water NA Drilling Method 3.25-inch HSA Ţ The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

	Wang Engineering			B			3 L	OG	R-106	Datum: N	GVD			
W	vangeng@wangeng.com			_	WE	JOD	NO.	: 201-	-23-01	Elevation:	890.02 f	t ft		
	145 N Main Street	Client			CDO	noug	ih As	ssoci	ates Inc.	East: 991	312.25 ft	п		
T	elephone: 630-953-9928	Project L	ongr	nead	ow P	arkw	ay o	over H	-ox River, Section	Station: 1	199+99.9	5		
F	ax: 630-953-9938	Location		•••••				0.		Offset: 0.0	15 K			
	5	ype	No.	ues n)		re (%)		L.			ype No.	n)		re (%)
rofile		Depth		- Val	(tsf)	aistu tent	rofile	evatic (ft)	SOIL AND ROC	K (€		- Val	Qu (tsf)	oistu tent
		Sam	San	ld)		Cor		ă	DESCRIPTION		Sam re San	LdS lq)		Con
	889.56-inch thick, brown CLAY L		/	3										
	Stiff to very stiff brown SILT	× _	1	6 5	2.75	24								
	CLAY LOAM	. +		7										
			2	35	1 00	16								
		- /\		6	P									
		T.		3										
		5_	3	5	3.50	19						1		
		1/)	8	P							1		
	Medium dense, brown			6										
ں ہ م	GRAVELLY SAND]/	4	10		6								
	Dense, brown SANDY LOA	M T		13										
		- X	5	20	NP	11								
	880.0	10		10										
	Boring terminated at 10.00 f	t _												
		-												
		-												
		_												
		-												
		15												
		-												
		_												
		_												
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		20												
		-												
~		-												
1/11/1		_												
GDT		-												
ENG.		-										1		
WANG		25_												
GPJ	GENE		TES	;;	I	I	I	I	WATE	ER LEVE		ΓΑ		
12301 Be	gin Drilling 04-13-2005	. Comple	ete Dri	lling)4-13	8-200)5	While Drilling	<u>\</u>	<u> </u>	RY		
Dr	illing Contractor PRECON I	DRILLING		Drill Rig	g	CME-	75 /	ATV	At Completion of Drilling	g <u>¥</u>	<u>C</u>	ORY		
lg Dr	iller K&S Logger	Y.Sh	iu	Ch	ecked	by .	3. Fι	lgiel	Time After Drilling		•••••			
BNG Dr	illing Method 3,25-Inch HSA							•••••	The stratification lines rep	resent the app	proximate	boundar	у	
≤∟									between soil types; the ac	tual transition	<u>may be gr</u>	adual.		

Page 1 of 1

Γ



BORING LOG R-107

WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

Client McDonough Associates Inc. Project Longmeadow Parkway over Fox River, Section Datum: NGVD Elevation: 883.38 ft North: 1993224.64 ft East: 991347.95 ft Station: 1203+00 Offset: 0.04 R

	Fax: 63	30-953-9938	Location					C	o.		Offset: 0.0	4 R			
Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft) Samole Tvoe	recovery Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCH DESCRIPTION	Depth (ff)	Sample Type	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	882.9	6-inch thick, brown CLAY LOA TOPSC Very stiff to hard, brown SILTY CLAY LOAM	AM DIL Y -	1	3 3 5 4	3.50 P	20								
	879.1			2	4 4 6 5	4.00 P	17								
	877.6	Loose, brown SILT	5	3	7 5 4	NP	18								
		Loose, brown SANDY LOAM		4	3 4 3 5	NP	12								
	874.6	Very stiff, brown CLAY LOAM		5	2 4 8 7	2.00 P	10								
WANGENG.GDT 1/1/12		Boring terminated at 10.00 ft													
GPJ		GENER		TES	`	I		·	I	WATE	R LEVE		TA		
WANGENGINC 2012301	Begin D Drilling (Driller Drilling N	rilling 04-13-2005 Contractor PRECON DI K&S Logger Method 3.25-inch HSA	Compl RILLING Y.St	ete Dr niu	While Drilling At Completion of Drilling Time After Drilling Depth to Water	Image: Second state Image: Second	roximate nay be o	.80 ft DRY e boundar gradual.	у						



WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 . . -

Client McDonough Associates Inc. Project Longmeadow Parkway over Fox River, Section Datum: NGVD Elevation: 880.44 ft North: 1993525.61 ft East: 991348.91 ft Station: 1205+99.97 Offset: 0.07 R

	Fa	ax: 630-953-9938	cation .		•••••			C	0.		Offset: 0.0	7 R			
i (Protile	SOIL AND ROCK DESCRIPTION	Depth (ft) Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery Sample No	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		879.96-inch thick, black and brown CLAY LOAM TOPSOIL Stiff, brown SILTY CLAY		1	0 1 2 2	1.00 P	37								
		876.7		2	1 3 3 3	1.50 P	17								
		LOUSE, DIOWIT SILTT LOAIVI	5	3	3 4 4 4	NP	23								
		872.7		4	1 2 4 5	NP	16								
		Medium stiff, gray CLAY LOAM		5	6 8 3 4	0.75 P	12								
	1,L	Boring terminated at 10.00 ft													
			-												
			15												
			-												
			-												
			20 _ _												
DT 1/11/12			-												
VANGENG.GE			_ _ 25_												
		GENEDA		F6	I			L					ΤΔ		
301.G	Be	ain Drilling 04-13-2005		e Dri	llina	(4-13	-200)5	While Drilling		<u>8</u>	.00 ft		
2012	Dri	illing Contractor PRECON DRI	LLING		Drill Ric	.	CME-	75 /	ATV	At Completion of Drilling	+ •		DRY		•••••
GINC	Dri	iller K&S Logger	Y. Shi	u	Ch	ecked	by E	3. Fi	ıgiel	Time After Drilling	NA	. 	•••••	•••••	•••••
IGEN	Dri	illing Method 3.25-inch HSA					••••••••			Depth to Water	NA				
WAN										The stratification lines repre- between soil types; the actu	sent the appr al transition r	oximate	boundar radual.	у	



WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

Client McDonough Associates Inc.

Project Longmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 883.27 ft North: 1993164.54 ft East: 991731.53 ft Station: 1105+26.10 Offset: 0.84 L

F	ax: 630-953-9938	Location					<u> </u>	0.		ittset: 0.84					
Profile	SOIL AND ROCK	Depth (ft) Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft) Samnle Tvne	sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	
	882.77-inch thick, dark brown CLAY LOAM 		1	1 3 4 3	1.50 P	18									
	CLAY LOAM 879.5 Medium dense, brown LOAM		2	3 3 9 15	2.00 P	14									
	gravelly	5	3	11 14 13 14	NP	10									
			4	6 7 6 7	NP	11									
	873.3	10	5	11 9 12 16	NP	10									
	1: 873.3 10 //) 10 Boring terminated at 10.00 ft - - -														
		-													
		15 _													
		-													
		-													
		20													
		-													
		-													
		25													
_	GENER		ES) 	~	1 40	200				DAT				
Be			e Dri	IIING Drill Dia	, (-13 ME-	-2UL 75 /		At Completion of Drilling	<u>↓</u>	<u>יי</u> ח		••••		
Dr		Y. Shi	' J	Chi	ecked	by F	3. Fi	uaiel	Time After Drilling	+ NA					
Dr	illing Method 3.25-inch HSA								Depth to Water	NA	••				
			<u></u>	<u></u>	<u></u>	<u></u>	<u></u> .		The stratification lines represent between soil types; the actual t	nt the approx	imate l v be gr	ooundar adual.	/		

		Wang	1		BO	RI	NG	; L	OG	R-110	1				Faye	
		Engineering			1	WEI	Job	No.	: 201-2	23-01	Datum: N	GVD	10 #			
	w 1	angeng@wangeng.com 145 N Main Street	Client		Mc	Don	nona	h A	ssocia	tes Inc	North: 19	892.4 93173	19 π .02 1	ft		
	Lo	ombard, IL 60148	Project Lor	ign	neado	w Pa	arkw	ay o	over Fo	ox River, Section	East: 991 Station: 1	932.7 107+2	6 ft	-		
	Te Fa	elephone: 630-953-9928 ax: 630-953-9938	Location					С	о.		Offset: 0.	61 L	.0.00	,		
ſ			υ		<i>(</i> 0		<u> </u>	-				Ð		(0		
	Profile	SOIL AND ROCK	Depth (ft) Sample Typ	Sample No	SPT Values (blw/6 in)	(tsf)	Moisture Content (%	Profile	Elevation (ft)	SOIL AND ROC DESCRIPTION	Depth X:	Sample Typ	Sample No	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%
		892.06-inch thick, black CLAY LO TOPS Medium stiff to stiff, brown S CLAY LOAM	OIL	1	1 2 2 4	1.00 P	23									
				2	2 2 3 4	1.50 P	18									
		886.3	5	3	3 2 4 4	0.75 P	18									
		Medium stiff, brown SILTY C		4	2 2 2 2	0.50 P	24									
		882.5		5	2 3 4 6	0.50 P	21									
		Boring terminated at 10.00 f														
			-													
			-													
			-													
			-													
			15													
			-													
			-													
			-													
			-													
			-													
			20													
			-													
			-													
1/11/1			-													
GDT																
BUG																
WAN			25_													
I.GPJ		GENE	RAL NOT	ES						WATE	ER LEVE	LD	AT	Α		
12301	Be	gin Drilling 04-13-2005	Complete	Dril	ling .	0	4-13	-20)5	While Drilling	<u> </u>		D	RY		
ž	Dri	Iling Contractor PRECON I	DRILLING	. [Drill Rig	C	ME-	75 /	ATV	At Completion of Drilling	g <u>¥</u>		D	RY		

Time After Drilling

NA

..

Depth to Water **V NA** The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

WANGENGINC

Drilling Method

Driller K&S Logger Y. Shiu Checked by B. Fugiel

3.25-inch HSA



WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

Client McDonough Associates Inc. Project Longmeadow Parkway over Fox River, Section Datum: NGVD Elevation: 898.30 ft North: 1993187.37 ft East: 992245.35 ft Station: 1110+41.46 Offset: 0.04 R

	Fax: 6	630-953-9938	Location .		•••••			С	o.		Offset: 0.0	4 R			
Profile	Elevation	E SOIL AND ROCK DESCRIPTION	Depth (ff) Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCH DESCRIPTION	Depth (ff)	Sample Type	Sample No.	(blw/6 in) Qu	Moisture (%)
	898	3.03-inch thick, black CLAY LOA TOPSO Very stiff, brown SILTY CLAY LOAM	AM DIL/	1	1 3 4 6	2.50 P	21								
	894	4.0		2	4 4 6 6	3.00 P	14								
		Medium dense, brown LOAM gravelly	1, 5_	3	4 9 14 13	NP	9								
				4	5 8 9 7	NP	11								
		3.3	10	5	8 6 8 12	NP	11								
		boning terminated at 10.00 ft	-												
			- - 15_												
			-												
			_ _ _ 20												
11/12															
NGENG.GDT 1/															
			25												
01.GP		GENE	RAL NOT	ES	<u>;</u>		4.40	000		WATE		L D/			
20123 B	Segin Drilling	Drilling U4-13-2005	Complet	e Dri	lling Drill Ric	U	24-13 CMF-	-200 75 4	UTV	At Completion of Drilling	<u>¥</u> ▼	•••••		T Y	•••••
	Driller	K&S Logger	Y. Shi	u	Ch	, ecked	by E	3. Fi	igiel	Time After Drilling		•••••			•••••
	Drilling	Method 3.25-inch HSA								Depth to Water	NA				
MAN										The stratification lines repre- between soil types; the actu	sent the app al transition r	roxima nay be	te bou gradu	ndary al.	



WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

 Client
 McDonough Associates Inc.

 Project
 Longmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 900.79 ft North: 1993202.55 ft East: 992544.65 ft Station: 1113+41.15 Offset: 0.77 L

Fa	ax: 630-953-9938	Location						<u> </u>	.	······	Offset: 0.7	7 L				
Profile	SOIL AND ROCK DESCRIPTION	Depth (ft)	recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	9990.53-inch thick, dark brown LOA TOPSC Loose, brown LOAM 898.8	M DIL/ - -/		1	4 3 3 3	NP	17									
	Very stiff, brown CLAY LOAN			2	3 2 4 5	2.00 P	17									
	Very stiff, brown SILTY CLAY LOAM	5		3	3 4 6 8	2.50 P	17									
				4	5 6 9 12	2.00 P	13									
	890.8	- - 10		5	3 7 8 8	3.50 P	15									
	Boring terminated at 10.00 ft	-														
		-														
		-														
		-														
		-														
		15														
		-														
		-														
		-														
		-														
		-														
		20														
		_														
		-														
		-														
		-														
		25														
	CENE)TE											· ^		
Be	gin Drilling 04-13-2005		lete l	Dril	ling	0)4-13	-20	05	While Drillina	V LEVE V			A RY		
Dri	Iling Contractor PRECON D	RILLING		. [Drill Rig	, <u>(</u>	CME-	75 /	ATV	At Completion of Drilling	<u>.</u>		D	RY	• • • • • • • • • •	
Dri	ller K&S Logger	Y. SI	niu		Che	ecked	by .	<u>3. F</u> i	ugiel	Time After Drilling	NA					
Dri	Iling Method 3.25-inch HSA			••••			•••••			Depth to Water	NA ent the app	roxim	ate h	oundan	/	
										between soil types; the actua	I transition	may b	e gra	idual.	·	



WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

 Client
 McDonough Associates Inc.

 Project
 Longmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 895.08 ft North: 1993231.75 ft East: 992844.24 ft Station: 1116+41.70 Offset: 13.58 L

F	Fax: 630-953-9938	Location			•••••	С	o .		Offset: 13.58	۶L		
Profile	SOIL AND ROCK	Depth (ft) Sample Type recovery Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft) Sample Tvpe	Sample No. SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	894.66-inch thick, black CLAY LO. TOPS Stiff to hard, brown SILTY C	AM OIL LAY - 1	0 2 3 3	1.75 P	21							
		2	3 3 6 5	2.75 P	16							
		53	2 4 6 7	2.50 P	14							
		4	4 6 9 10	> 4.50 P	12							
	885.1 Boring terminated at 10.00 ff	10 5	3 6 7 9	> 4.50 P	13							
	Boning terminated at 10.00 it											
		15 										
		20										
		25										
; ;	GENE	RAL NOTES	5					WATER		DATA		L
Be	egin Drilling 04-13-2005	Complete Dr	illing	0	4-13	-200)5	While Drilling	<u> </u>	DRY		
Dr	illing Contractor PRECON I	ORILLING	Drill Rig	g C	ME-	75 A	TV	At Completion of Drilling	Ţ	DRY		•••••
Dr	iller K&S Logger	Y. Shiu	Ch	ecked	by .	3. Fı	ıgiel	Time After Drilling	NA			
Dr	illing Method 3.25-inch HSA		•••••••				•••••	Depth to Water	NA ent the approx		arv	
								between soil types; the actua	I transition ma	v be gradual.	агу	



WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

Location

Client McDonough Associates Inc.

Project Longmeadow Parkway over Fox River, Section Co. Datum: NGVD Elevation: 891.74 ft North: 1993217.03 ft East: 993151.21 ft Station: 1119+41.13 Offset: 3.93 R

								-							
Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft) Samnle Tyne	recovery Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ff)	Sample Type recovery Sample No	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	+	BLIND DRILLIN	G	<u> </u>									1		
	890.7 (Stiff to very stiff, brown SILTY CLAY LOAM		1	2 9 6 6	1.75 P	19								
			5	2	4 10 14 12	2.50 P	14								
				3	5 6 7 7	2.75 P	18								
				4	3 4 4 6	1.50 P	15								
	882.2 882.2 880.7	Dense, brown GRAVELLY SAND	10	5	2 17 24 24	NP	7								
	E	Boring terminated at 11.00 ft	_												
			-												
			-												
			-												
			-												
			-												
			-												
			-												
			20												
			-												
11/12			-												
3DT 1/			-												
GENG.(-												
MANG			25_												
1.GP.		GENERA	LNC	TE	5					WATER	R LEVE	L DA	TA		
201230 B	egin Dr	illing 05-26-2005		ete D	rilling	9)5-26 `M⊏	5-20	05 ATV	While Drilling	<u>₹</u>	•••••			•••••
	nning C Iriller	K&J Logger J		losk	Ch	ecked	- <mark>بالاا</mark> ج by E	B. F		Time After Drilling	 NA	•••••			•••••
D	orilling N	Nethod 3.25-inch HSA					······	· · · · · · ·		Depth to Water	NA	•••••			
WAN										The stratification lines repre- between soil types; the actua	sent the app al transition	roximate may be o	e boundar gradual.	У	



WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

ClientMcDonough Associates Inc.ProjectLongmeadow Parkway over Fox River, Section

Location Co.

Datum: NGVD Elevation: 794.50 ft North: 1992045.64 ft East: 993877.14 ft Station: 408+13.22 Offset: 19.32 R

Drofila		SOIL AND ROCK DESCRIPTION	Depth (ft) Samnle Tyne	recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND DESCRI	ROCK	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
<u>+</u> + + + +		21-inch thick ASPHALT PAVEMENT																
		Medium stiff to stiff, black, brown, and gray CLAY LOAM FILL			1	3 2 4 7	1.25 P	22										
		788.2	5		2	3 3 4 7	0.75 P	26										
		Very soft to stiff, brown and gray SILTY CLAY LOAM			3	2 2 3 3	< 0.25 P	29										
					4	2 2 4 4	1.00 P	25										
		Loose to medium dense, gray GRAVELLY SAND			5	3 2 4 2	0.50 P	22										
	5 0 0 0 6 0 0 0	780.5			6	0 5 15 15	NP	10										
		Boring terminated at 14.00 ft	15 _ _ _															
/12			20															
NGENG.GDT 1/11																		
AW L			T- - 1 3 1.25 22 5 2 3 0.75 26 y - 3 2 0.25 29 1 4 2 1.00 25 1 10 4 2 1.00 25 1 10 4 2 1.00 25 1 10 5 3 0.50 22 1 6 5 NP 10 10 10 15 15 NP 10 10 10 15 15 0.50 22 22 22 20 6 5 NP 10 10 15 15 NP 10 10 10 15 15 NP 10 10 10 16 15 NP 10 10 10 15 15 NP 10 10 10 20 15 2 NC 10 10 20															
01.GP		GENERAL		TE	ES						\\	WATER		LD	AT	A		
20123(Beg Driv	gin Drilling 06-29-2005		ete	Dril -	ling Srill Di-	0)6-29 `M⊏	-20()5 \T\/	While Drilling	of Drilling	¥		11.	50 ft	•••••	•••••
	Dril	Iller S&J Logger J.	Kas	nic	1 24 1.25 22 2 3 0.75 26 3 2 2.0.25 29 4 2 1.00 25 5 3 0.50 22 6 5 15 7 P 10 5 2 0.50 22 6 5 15 7 P 10 7 P 10 1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 1 P P 2 P P 3 P P 1 P P 1 P P <		•••••											
IGENG	Dril	Iling Method 3.25-inch HSA						·····			Depth to Water	<u> </u>	NA	<u>.</u>				
WAN											The stratification	n lines represe es: the actual	ent the app transition	roxima nav b	ate b e ara	oundar adual.	ý	



WEI Job No.: 201-23-01

 Client
 McDonough Associates Inc.

 Project
 Longmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 794.66 ft North: 1992246.62 ft East: 994042.17 ft Station: 410+85.10 Offset: 23.45 L

F	ax: 63	0-953-9938	Location					C	0.	·····	Offset: 23	45 L				
Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft) Samole Tvoe	recovery Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	793.0 791.4	5-inch thick ASPHALT over 15-inch thick CONCRETE PAVEME Stiff, brown and black SILTY CLAY F Loose to medium dense, bro GRAVELLY SAND, with cot Boring terminated at 12.00 f	NT		2 2 3 2 3 5 4 4 5 8 10 7 5 10 6 6 9 8	1.50 P NP NP	12 4 5 10									
		GENE	RAL NO	TES	5	-				WATE		LD	AT	Α		
Be	gin Dr	rilling 06-30-2005	Compl	ete Dr	illing	0	6-30	-200)5	While Drilling	¥	•••••	7.2	5 ft		•••••
Dri	lling (Contractor PRECON			Drill Rig	و و	-ME	75 /	ALA V	At Completion of Drilling	¥	•••••	D	KY		••••
Dri	ller	S&J Logger	J. Kas	nick	Ch	ecked	by .	3. Fi	lgiel	Time After Drilling	NA	•••••				
Dri	lling N	Method 3.25-inch HSA					•••••			Depth to Water	NA	<u>.</u>				
										The stratification lines repre- between soil types; the actu	sent the app al transition	roxima may be	ate bo e gra	oundary dual.	/	



Location

BORING LOG R-117

WEI Job No.: 201-23-01

Co.

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

ClientMcDonough Associates Inc.ProjectLongmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 799.35 ft North: 1992517.35 ft East: 994226.38 ft Station: 413+98.75 Offset: 17.68 R

									-									
Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft) Somulo Tumo	odiliple lype	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL ANI DESCRI	D ROCK	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	1 1 - 797.4	11-inch thick ASPHALT over 13-inch thick CONCRTETE PAVEMENT-	-															
	C C	Vedium stiff to stiff, brown SILT) CLAY LOAM FILL-	Y _\ /		1	4 3 5 7	1.75 P	21										
	^{794.9} L	Loose to medium dense, brown GRVELLY SAND	5_		2	3 3 5 9	0.75 P	19										
	7 <u>91.6</u>	oose, brown, medium SAND	/ - - 		3	5 7 6 7	NP	3										
			⊻ - 10_		4	4 2 5 4	NP	26										
					5	1 3 2 4	NP	29										
				$\langle]$	6	1 2 4 5	NP	18										
	783.9	/ery dense, brown GRAVELLY	15_		7	4 5 3 9	NP	19										
	782.4 V 781.40	SAND /ery stiff, gray CLAY LOAM Ωp = 2.25 tsf			8	5 39 23 11	NP	8										
	E	Boring terminated at 18.00 ft	20_															
7			-															
46.6DI 1/11/1			-															
WANGEL			25															
<u></u>	1)TF	=0	l	I	I	I	I				חו		Δ - Δ		
2.00 Do					_ _	ling	~	16.20	-204	15	While Drilling	VVAIER			A 1 8 5	A 0 ft		
	illina C	Contractor PRFCON DRI			Г	nny Drill Ric		CMF-	.75		At Completion	of Drilling	<u>÷.</u>	•••••	0.0	<u></u>	•••••	•••••
	iller	S&J Logger J	. Kas	nic	. ⊾ :k	Ch	, ` ecked	by b	B. F	ugiel	Time After Dri	illing	NA	•••••			•••••	•••••
Dri	illing M	lethod 3,25-inch HSA						· · · ·			Depth to Wate	er 🏆	NA	•••••				
VAN	-										The stratification	on lines repres	ent the app	roxima	ate b	oundar	у	



BORING LOG R-118

WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

Client McDonough Associates Inc. Project Longmeadow Parkway over Fox River, Section Datum: NGVD Elevation: 802.20 ft North: 1992811.07 ft East: 994305.99 ft Station: 416+98.92 Offset: 18.05 R

	Fax: 630)-953-9938	Location .					С	0.		Offset: 18	.05 R				
Profile	Elevation (ff)	SOIL AND ROCK DESCRIPTION	Depth (ft) Sample Type	recovery Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROC DESCRIPTION	I ^{Depth}	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
14 10 10 10 10 10 10 10 10 10 10 10 10 10	<pre></pre>	B-inch thick ASPHALT over 0-inch thick CONCRETE PAVEMEN Medium dense, brown SAND OAM	IT	1	8 4 8	NP	10									
	<u>798.4</u> L L	FIL oose, black and brown SILT OAM Stiff, brown SILTY CLAY LOA	L M 5	2	3 3 4 4	NP	22									
	<u> </u> <u>795.4</u> ∴ N	Aedium dense, brown SAND		3	3 5 5 5	1.25	26									
6. d	793.7 N	OAM Medium dense, brown		4	2 3 8 14	NP	10									
5°°°°	791.2 E	Boring terminated at 11.00 ft	10	5	4 9 12 9	NP	6									
			-													
			_ 15													
			-													
			_ _ _ 20													
/ 15			-													
			25													
<u>;</u>		GENER	AL NO	TES	5			-		WATE	R LEVE	LD	AT	Α		
B	egin Dri	Iling 06-29-2005	Comple	te Dri	illing)6-29	-200)5	While Drilling	¥		DI	RY		
	orilling C Oriller	S&J Logger	ILLING	ick	Drill Riq Ch)	-IVIE- by F	(5/ 3 Fi		At Completion of Drilling	} <u>₹.</u> ΝΔ		••••	• • • • • • • • • •		
	nillina M	lethod 3.25-inch HSΔ		ιγñ.	01	CONCU	.у₽		9101	Depth to Water	<u></u> NA	•••••				
			<u></u>		· · · · · · · · · · · · ·		<u></u>		<u></u>	The stratification lines rep between soil types: the ac	resent the app tual transition	proxima may be	ate bo <u>e q</u> ra	oundary dual.	y	

wa 11 Lo Te Fa	angeng@wangeng.com 145 N Main Street ombard, IL 60148 elephone: 630-953-9928 ax: 630-953-9938	Client Project Location	Long	B N gmead	OR WE IcDoi ow P	INC I Job noug Parkw	BL No. Ih A /ay (C	OG : 201-2 ssocia over F	R-119 23-01 Ites Inc. ox River, Section	Datum: No Elevation: North: 199 East: 9943 Station: 42 Offset: 17	GVD 805.4 93127. 373.20 20+23. .47 R	5 ft 27 ft ft 22	Page	1 of 1
Profile	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCI DESCRIPTION	Depth X	Sample Type	Sample No. SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	16-inch thick ASPHALT PAVEME 804.1 803.5 LOAM 802.7 F Loose, brown SANDY LOAM Medium stiff, black and brow CLAY LOAM, with interbedd sand lenses 800.0 Dense, brown GRAVELLY SAND	ENT ELAY FILL /n ed - 10 - - - - - - - - - - - - -		$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	0.75 P 0.50 P NP NP	19 21 5 4 3								
		25												
Beq Dri Dri Dri	GENE gin Drilling 06-29-2005 Iling Contractor PRECON I Iler S&J Logger Iling Method 3.25-inch HSA	RAL NO Com DRILLINO J. Kas	DTE plete [G snicl	S Drilling Drill Rig Ç Ch	g()6-29 C ME - by [)-20(-75 / 3. Fi)5 ATV ugiel	WATE While Drilling At Completion of Drilling Time After Drilling Depth to Water The stratification lines repr between soil types: the act	RLEVE	LD/	ATA 8.00 ft	ry	



WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

ClientMcDonough Associates Inc.ProjectLongmeadow Parkway over Fox River, Section

Location Co.

Datum: NGVD Elevation: 806.59 ft North: 1993360.94 ft East: 994429.62 ft Station: 422+64.97 Offset: 17.33 R

_																		
Profile	Elevation	E SOIL AND ROCK DESCRIPTION	Depth (ft)	recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AN DESCR	D ROCK IPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
1:0 1:0 1:0 1:0 1:0 1:0 1:0 1:0 1:0 1:0	11 11 11 11 11 804	10-inch thick ASPHALT over 11-inch thick CONCRETE .8PAVEMENT-		0										0)				
0.0		Medium dense to dense, brown GRAVELLY SAND			1	5 6 9 11	NP	8										
0,00	С Х С		5		2	6 11 20 19	NP	4										
0,00	6 C C				3	9 8 18 20	NP	5										
0.0			- - 10		4	8 8 10 8	NP	4										
	C C 794	Boring terminated at 12 00 ft	 - - -		5	9 9 9 8	NP	3										
			-															
			15															
			-															
			- 20_ -															
1/11/12			-															
VANGENG.GDT			_ _ 25_															
		GENERA		וד(FS	I			L	I		WATER		חו	ΔΤ	Δ		
2301.6	Beain	Drilling 06-30-2005	Comp	lete	Dril	lina	()6-30	-200	05	While Drilling		⊻⊥⊥⊥			RY		
2012	Drilling	Contractor PRECON DRIL	LING)	. [Drill Rig	,	CME-	75 /	ATV	At Completion	n of Drilling	Ţ	•••••	D	RY	•••••	
GINC	Driller	S&J Logger J	l. Kas	nic	ck.	Ch	ecked	by	3. Fi	ugiel	Time After Dr	rilling	NA					
ANGEN	Drilling	Method 3.25-inch HSA		••••	•••••				•••••	•••••	Depth to Wat	er <u>¥</u> on lines repres	NA ent the app	roxima	ate b	oundar	/	
ŝ											between soil ty	pes: the actual	transition	nav b	e ara	idual.		



WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

ClientMcDonough Associates Inc.ProjectLongmeadow Parkway over Fox River, Section

Location Co.

Datum: NGVD Elevation: 808.67 ft North: 1993695.87 ft East: 994489.46 ft Station: 426+02.27 Offset: 39.05 L

Drofile		SOIL AND ROCK DESCRIPTION	Depth (ft) Sample Type	recovery Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCH DESCRIPTION	Depth (ff)	Sample Type	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
1444		8-inch thick ASPHALT over 12-inch thick CONCRETE 807.0PAVEMENT-	-												
		806.2 SILTY LOAM Stiff, brown SILTY CLAY LOAM		1	0 0 1 2	1.00 P	27								
		Loose, brown SANDY LOAM 803.2 Medium dense to very dense,	5_	2	2 3 6 9	NP	24								
	۵ ۵ ۵ ۵	brown GRAVELLY SAND		3	6 8 11 20	NP	4								
	С 0 0 С		10	4	16 17 22 32	NP	5								
	2 0 0 0 0 0 0	796.7		5	9 31 37 50	NP	5								
			- - - 15_ -												
1/12			20												
VANGENG.GDT 1/1			- - - 25_												
		CENEDA			 :			I							
301.G	Bo			to Dri	lling	ſ	16-30	-200	18	While Drilling					
2012;	Dri	Iling Contractor PRECON DRIL	LING		nn ig Drill Ric		CME-	75 A		At Completion of Drilling	÷ ¥		DRY		•••••
OINC	Dri	ller S&J Logger J	l. Kasn	ick	Ch	, ecked	by	3. Fı	ıgiel	Time After Drilling	NA	· · · · · · · · · · · · · ·			
IGENC	Dri	Iling Method 3.25-inch HSA			••••••••					Depth to Water	NA				
MA										I he stratification lines repre- between soil types; the actu	esent the app al transition	roximat mav be	e boundar aradual.	у	



Location

BORING LOG R-122

WEI Job No.: 201-23-01

Co.

1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

ClientMcDonough Associates Inc.ProjectLongmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 810.04 ft North: 1993993.20 ft East: 994477.05 ft Station: 428+98.88 Offset: 21.74 R

_																
Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	sample Iype	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND RO DESCRIPTIO	CK the deal of the	Sample Type recovery Sample No	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	809.3	9-inch thick, black and brown SILTY LOAM TOPSOIL- Stiff to hard, brown SII TY CLAY			1	4 6 5 8	4.00 P	11								
	 <u>806.3</u>	LOAM			2	6 4 5 9	1.50 P	20								
		GRAVELLY SAND	5_ 		3	7 9 11 12	NP	5								
					4	3 6 9 10	NP	12								
	6 C <u>6</u> 800.0) Boring terminated at 10.00 ft	_ _ 		5	6 8 9 9	NP	13								
			-													
			-													
			15 													
			-													
			 20													
- 1/11/12																
WANGENG.GD			25_													
GP		GENFRA		ЭТ	ES	L				I	TAW	ER LEVF		TA		<u> </u>
2301.(B	Begin D	rilling 06-29-2005	Com	olete	Dril	ling	()6-29	-20)5	While Drilling	<u></u>	5	.50 ft		
201	- Drilling (Contractor PRECON DRIL	LINC	3	[Drill Rig	99	CME-	75 /	NTV	At Completion of Drilli	ng 🍹		DRY		•••••
	Driller	S&J Logger J	l. Kas	sniq	ck	Ch	ecked	by .	B. F i	ugiel	Time After Drilling	NA	•••••			
	Drilling I	Method 3.25-inch HSA		•••••	••••			•••••	•••••		Depth to Water The stratification lines r	Present the appresent the appr	roximate	e boundar	у	



Location

BORING LOG R-123

Co.

WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

ClientMcDonough Associates Inc.ProjectLongmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 811.56 ft North: 1994288.70 ft East: 994560.87 ft Station: 432+00.94 Offset: 17.19 R

									-								
Drofila		SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND RO DESCRIPTIO	CK ^{then}	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
1444		8-inch thick ASPHALT over 13-inch thick CONCRETE 809.8PAVEMENT															
		Medium stiff, brown and black SILTY CLAY LOAM 808.1FILL Medium stiff to stiff brown and			1	2 1 3 5	0.50 P	23									
		gray SILTY CLAY	5	$\left \right $	2	2 2 3 6	1.00 P	31									
				$\left \right\rangle$	3	1 2 3 4	0.50 P	26									
			_ 10/		4	1 2 2 4	0.50 P	28									
		800.8 Medium dense, brown GRAVELLY SAND			5	1 1 2 4	0.50 P	26									
	0 0 0 2 0 0				6	2 4 5 7	NP	14									
		795.6	15		7	2 5 10 13	NP	12									
		Boring terminated at 16.00 ft	-														
			- - 20_														
/12			-														
ENG.GDI 1/11			-														
WANG			25_														
	1	GENERAI		ОТ	ES		I	ļ		I	WAT	ER LEVE			Ά		
2301.	Beg	gin Drilling 06-30-2005	Com	plete	e Dri	ling	0)6-30	-20	05	While Drilling	<u> </u>		12.0	00 ft		
C 201	Drill	Iling Contractor PRECON DRIL	LIN	<u>G</u>	[Drill Rig		CME-	75	ATV.	At Completion of Drilli	ng <u>¥</u>		D	RY		
NGIN	Drill	ller S&J Logger J	. Ka	sni	ck	Ch	ecked	by .	<u>3. F</u>	ugiel	Time After Drilling	NA	•••••				
ANGE	Drill	iling Method 3,25-inch HSA					•••••		•••••	•••••	Depth to Water The stratification lines re	Present the app	roxima	ate b	oundary	у	

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938 Location	Long	B(M meade	OR WEI IcDoi	INC Job noug arkw	No. h As ay c	OG : 201-2 ssocia over Fo co.	R-124 23-01 tes Inc. ox River, Section	Datum: N Elevation: North: 199 East: 9990 Station: 50 Offset: 12	GVD 725.29 ft 93357.48 075.24 ft 00+00 .2 L	: ft	Page '	1 of 1
Building Soil AND ROCK (i) DESCRIPTION	Sample Type recovery Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROC DESCRIPTION	Depth (ff)	Sample Type recovery Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
725.03-inch thick, black SILTY LOAM TOPSOIL/ Medium dense, brown, GRAVELLY SAND FILL/		6 8 7 5 2 2	NP	4								
LOAM 5	3	2 5 2 4 4 4	NP	25								
 716.8	4	1 1 5 3	NP	32								
Medium dense, brown GRAVELLY SAND 715.3 10 Boring terminated at 10.00 ft	5	9 18 21	NP	8								
20												
25_												
GENERAL N Begin Drilling 07-08-2005 Corr Drilling Contractor PRECON DRILLIN Driller S&J Logger J. Ka Drilling Method 3,25-inch HSA	OTES nplete Dr G Isnick	illing Drill Rig Ch	c ecked)7-08 CME- by E	-20(75 / 3.F./)5 ATV J.K.	While Drilling At Completion of Drilling Time After Drilling Depth to Water	R LEVE ♀ NA NA esent the app	L DA 2.9 Foximate	DO ft DRY	· · · · · · · · · · · · · · · · · · ·	

WAN



WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

Client McDonough Associates Inc. Project Longmeadow Parkway over Fox River, Section

Location Co.

Datum: NGVD Elevation: 728.74 ft North: 1993440.27 ft East: 999355.52 ft Station: 502+99.79 Offset: 0.50 R

Page 1 of 1

	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND R DESCRIPT		Sample Type recovery Sample No	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		728.26- Ve CI	inch thick, black SILTY LOA TOPSC ery stiff, black and brown SII LAY	AM DIL/_ LTY -		1	3 2 2 3	3.00 P	18								
		726.0 Sc Cl	FI Dft to medium stiff, gray SIL⊺ LAY LOAM	LL FY -		2	2 3 5 6	0.75 P	20								
				5		3	1 2 4 4	0.50 P	26								
		722.2 721.7Ve	ery loose, gray LOAM ense, brown GRAVELLY AND, with cobbles		X	4	2 1 3 14	0.25 P	35								
	0 0 0 0	718.7		- - 10		5	6 14 23 20	NP	7								
		BC	oring terminated at 10.00 ft	-													
				-													
				- 15 -													
				- - 20_													
11/12				-													
NGENG.GDT 1,				-													
MAI				25													
1.GPJ			GENER	RAL N	OT	ES						W	ATER LEVE	LDA	TA		
01230	Be	gin Drilli	ing 07-08-2005	Com		e Dril	ling)7-08	-200)5	While Drilling	<u>.</u>		.60 ft		•••••
NC 2(Dri	Illing Co iller	ntractor PRECON D	KILLIN J Ka	G	[ck	Jrill Rig		-IVIE- by F	/5/ 3 F /	YI K	At Completion of E	Drilling Ţ	•••••	UKY		•••••
BNG	Dri	illing Me	ethod 3.25-inch HSA	J . I\d	311	<u>~ñ</u>	010	CUNEU	Jy .		. <u></u>	Depth to Water	I INA. I INA. I NA.				
WANG					•••••				•••••	· · · · · · · · ·		The stratification lin	es represent the ap	proximate may be o	e boundar aradual	у	

	Wang		B		ING	S L	OG	R-126	Datum: No	GVD		Page 7	1 of 1		
wa 11 Loi Te Fa	angeng@wangeng.com 45 N Main Street ombard, IL 60148 elephone: 630-953-9928 ax: 630-953-9938	Client Project Lon Location	N gmead	IcDoi ow P	noug arkw	h As ay c C	o.	ates Inc. ox River, Section	Elevation: North: 199 East: 999 Station: 22 Offset: 30	735.53 f 93340.35 459.40 ft 218+64.8 .31 R	t 5 ft 88				
Profile	SOIL AND ROCK	Depth (ft) Sample Type recovery	Sample No. SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROC DESCRIPTION	L Depth X	Sample Type recovery Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)		
	Arrow Content and		1 6 6 8	2.00 P	18										
	Very stiff, black, and brown		2 4 4 3	0.50 P	20										
	Medium stiff, brown CLAY Medium dense to very dense brown GRAVELLY SAND, v	- ILL// 55, vith	4 3 10 15 18	NP	3										
	cobbles		4 7 17 23 42	NP	4										
	30 - </td														
	Boring terminated at 10.00 f														
		20													
1/11/12															
NGENG.GDI															
		25													
301.GF		RAL NOTE	Drilling	·	17_09	-200)5	While Drilling	R LEVE	L DA					
	ling Contractor PRECON I	DRILLING	Drill Rid	y	CME-	75 /	ATV	At Completion of Drilling	÷		DRY	•••••			
	ller S&J Logger	J. Kasnic	k Ch	ecked	by E	3.F./	J.K.	Time After Drilling	NA						
Drill	ling Method 3.25-inch HSA		•••••		• • • • • • • •			Depth to Water The stratification lines rep	resent the app	roximate	boundar	у			
<u> ۲</u>								petween soil types; the ac	tual transition	may be g	radual.				

WAN

wang 1145 Lomb Telep Fax: 6	eng@wangeng.com N Main Street ard, IL 60148 hone: 630-953-9928 530-953-9938	Client Project Lc Location	ongr	B(M mead	OR WEI IcDoi	INC Job noug arkw	SL No Ih A Vay C	OG : 201- ssocia over F co.	R-127 23-01 ates Inc. ox River, Section	Datum: N0 Elevation: North: 199 East: 9994 Station: 90 Offset: 0.0	GVD 738.37 3846.6 85.86 8+93.8 1 R	ft 55 ft ft 39	Page	1 of 1
Profile Elevation	SOIL AND ROCK DESCRIPTION	Depth (ft) Sample Type	recovery Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROC DESCRIPTION	Depth X	Sample Type	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	96-inch thick ASPHALT 6-inch thick CRUSHED STC AGGREGATE BASE COUF 9 Medium dense, dark gray, GRAVELLY SAND F Medium stiff to very stiff, brov and gray CLAY LOAM, with interbedded sand lenses 9 Very dense, brown GRAVEL SAND 4 4 Boring terminated at 11.00 ft	ENT DNE - - - - - - - - - - - - -		6 10 10 9 9 7 8 5 4 13 7 29 30 40 38 46 40 34 21	NP 2.25 P 0.75 P NP	6 13 16 3 5								
	CENE		 [ES						\A/ATE	:D E\/F				
Begin I Drilling Driller Driller	GENE Drilling 07-08-2005 Contractor PRECON I S&J Logger Method 3.25-inch HSA	Comple Comple DRILLING J. Kasn	te Dri iick	lling Drill Rig Ch	c ecked)7-08 CME- by E	3-20(75 / 3.F./	D5 ATV J.K.	VVAILE While Drilling At Completion of Drilling Time After Drilling Depth to Water The stratification lines rep between soil types; the ac	Image: Second state Image: Second state Ima		DRY DRY DRY	у	

wan 114: Lom Tele Fax:	www.engineering egeng@wangeng.com 5 N Main Street abard, IL 60148 ephone: 630-953-9928 : 630-953-9938	Client Project LO Location	ngņ	BC M neado	ORI WEI cDor ow P	INC Job noug arkw	SL No. Ih A /ay (C	OG : 201- ssocia over F o.	R-128 23-01 ates Inc. ox River, Section	Datum: N Elevation: North: 199 East: 999 Station: 50 Offset: 28	GVD 745.7 93417. 958.21 96+00 .12 R	4 ft 80 ft ft 89	Page	1 of 1
Profile	SOIL AND ROCK	Depth (ft) Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROC DESCRIPTION	R Depth	Sample Type	Sample No. SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
<u>4</u> , <u>4</u> , <u>7</u> 4 	44-inch thick CRUSHED STC AGGREGATE SHOULDER AGGREG/ Very soft to medium stiff, brc SILTY CLAY LOAM, with interbedded sand lenses F	NE ATE/ FILL	1	5 3 2 3 2 1 1 2	0.50 P < 0.25 P	18 22								
	41.5 Very loose, brown and black SILTY LOAM Medium dense, brown	5_	3	1 1 2 2	NP	27								
	GRAVELLT SAND		4	3 9 14 13	NP	10								
	LOAM ^{35.7} Boring terminated at 10.00 f			87										
	GENE	RAL NOT	l ES				L		WATE			ATA		I
Begir Drillir Drille Drille	n Drilling 07-08-2005 ng Contractor PRECON I er S&J Logger ng Method 3.25-inch HSA	Complete DRILLING J. Kasni	e Dril [ck	ling Drill Rig Che	c c cked	07-08 CME- by E	-200 75 / 3.F./)5 ATV J.K.	While Drilling At Completion of Drilling Time After Drilling Depth to Water The stratification lines rep between soil types; the ac	↓ ↓ NA ∠ NA resent the apprunction	 proxima may be	DRY DRY	ry	·····



WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

 Client
 McDonough Associates Inc.

 Project
 Longmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 766.43 ft North: 1993414.83 ft East: 999955.86 ft Station: 508+98.62 Offset: 12.62 L

	Fa	ax: 630-953-9938	Location					<u>с</u>	0.		Offset: 12	.62 L				
Profile	-	SOIL AND ROCK DESCRIPTION	Depth (ft) Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCH DESCRIPTION	Depth (ft)	Sample Type	Sample No.	(blw/6 in)	(tsf)	Moisture Content (%)
		Medium dense, brown SAND LOAM FI Medium stiff to stiff, black and	Y -	1	6 6 5 4	NP	10									
		brown SILTY CLAY LOAM FI		2	3 2 2 3	0.50 P	74									
		760.9 Very stiff, brown SILTY CLAY	5_	3	3 3 4 6	1.50 P	22									
		LOAM		4	4 4 5 5	2.00 P	13									
		756.4	10	5	3 4 7 9	3.50 P	13									
/12			20 													
ANGENG.GDT 1/1																
×۲ ۲					Ļ											
301.GF	30		Complet	ES Dri	lling	0	17_09	-200)5	While Drilling				₹ v		
2012	Dri	Iling Contractor PRECON D	RILLING	ווע ט	nn y Drill Ric		CME-	75 /	ATV	At Completion of Drilling	<u>÷.</u> Ţ	• • • • • • • •	DR	ΥΥ	• • • • • • • • •	••••
	Dri	ller S&J Logger	J. Kasni	ck	Ch	ecked	by E	3.F./	J.K.	Time After Drilling	NA	·····		•••••		••••
	Dri	Iling Method 3,25-inch HSA							•••••	Depth to Water	NA	· · · · ·	to be	under:		
MAI										between soil types; the actu	sent the app al transition	noxima mav be	aradı	undary ual.		







WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

ClientMcDonough Associates Inc.ProjectLongmeadow Parkway over Fox River, Section

Location Co.

Datum: NGVD Elevation: 830.86 ft North: 1993414.64 ft East: 1000852.73 ft Station: 517+99.71 Offset: 23.56 R

_															
Profile	SOIL AND ROCK	Depth (ft) Sample Type	recovery Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	12-inch thck, brown SANDY 829.9CLAY LOAM TOPSOIL Stiff to very stiff, brown SILTY		1	5 3 4 4	1.00 P	23									
	CLAY LOAM		2	4 3 5 6	1.50 P	25									
	Medium dense to dense, brown	5_	3	3 5 6 14	2.00 P	21									
	and gray GRAVELLY SAND		4	12 14 16 15	NP	5									
		10	5	11 18 12 20	NP	4									
			6	15 18 21 24	NP	5									
			7	22 24 20 17											
		15	8	12 14 14 20											
	812.9		9	12 13 11 14	NP	3									
	Bonng terminated at 18.00 it	- - 20_													
<u>.</u>		-													
		-													
		25_													
-	GENERAL	NO.					<u> </u>				חו	ΔΤ	Δ		
 F			te Dri	, Ilina	()7-14	-200)5	While Drilling	⊻⊻⊥					
	Drilling Contractor PRECON DRILL	LING		Drill Riq		CME-	75 A	ATV	At Completion of Drilling	Ţ		DF	RY		
	Driller K&J Logger K.	Ande	rson	Ch	ecked	by J	. Ka	snick	Time After Drilling	NA					
	Drilling Method 3.25-inch HSA			•••••					Depth to Water	NA ent the app		ite br	undar	,	
									between soil types; the actua	I transition	may be	e arac	dual.		

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v 1 L F	vangeng@wangeng.com 145 N Main Street .ombard, IL 60148 felephone: 630-953-9928 fax: 630-953-9938	Client Project Location	Lo	ngr	B(M nead	OR WEI IcDoi ow P	INC Job noug arkw	SL No hA vay C	OG : 201-2 ssocia over F :o.	R-133 23-01 Ites Inc. ox River, Section	Datum: No Elevation: North: 199 East: 100 Station: 52 Offset: 50	GVD 822.4 93306. 1123.1 20+87. 49 L	4 ft 67 f 6 ft .37	t	Page	1 of 1
Profile	SOIL AND ROCK	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROC DESCRIPTION	Depth D	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	11-inch thick, dark brown SI ^{821.5} LOAM TOPS ^{820.6} Loose, brown SILTY LOAM	LTY _ ;0IL/ _		1	3 3 4 6	NP	16									
	Stiff to very stiff, brown SILT CLAY LOAM	Y -		2	8 5 8 7	3.00 P	25									
		5		3	5 4 7 8	2.00 P	21									
	Loose to medium dense, bro SILTY LOAM	- own _ -		4	5 4 5 6	1.00 P	23									
	812.4 Boring terminated at 10.00 f	- - 10 t		5	4 7 13 15	NP	19									
			-													
		 15 	-													
			-													
4		20 	•													
0EN0.001 1111		-	-													
		25_														
	GENE	RAL N	ОТ	ĖS	;				•	WATE	R LEVE		AT	Α		
	egin Drilling 07-13-2005 rilling Contractor PRECON I riller J&L Logger rilling Method 3.25-inch HSA	Con DRILLIN J. Ka	nplete I G Asni	e Dri L	lling Drill Riç Ch	c g (ecked)7-13 CME- by E	-20 75 / 3.F./	05 ATV / J.K.	While Drilling At Completion of Drilling Time After Drilling Depth to Water	<u>⊽</u> ▼ NA ∠ NA	······	DI	RY RY		
		· · · · · · · · · · · · · · · · · · ·		· · · · · · ·	· · · · · · · · · · · ·	· · · · · · · · · · · ·	••••••••••••••••••••••••••••••••••••••	• • • • • • • • • • • • • • • • • • •	· · · · · · · · · · · · · · · · · · ·	The stratification lines republic between soil types: the act	resent the app	roxima may be	ate bo e grad	oundar dual.	у	

WANGE



WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

 Client
 McDonough Associates Inc.

 Project
 Longmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 821.23 ft North: 1993253.68 ft East: 1001403.64 ft Station: 701+07.17 Offset: 21.44 L

Fa	x: 630-953-9938	Location						С	o.		Offset: 21	.44 L				
Profile	SOIL AND ROCK	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCH DESCRIPTION	Depth (fft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	Loose, brown SILTY LOAM 320.2 TOPS Very soft to very stiff, brown aray SILTY CLAY LOAM	OIL and -		1	3 3 4 6	NP	17									
	giay oil i i ola i loaini	-		2	6 4 5	2.00 P	21									
		5		3	4 4 4 6	0.75 P	27									
		-		4	3 4 7	< 0.25 P	26									
		- - 10		5	2 2 4 3	0.50 P	24									
		-		6	4 3 4 5	0.50 P	27									
		- - -		7	2 3 5 4	0.50 P	23									
	Medium dense, brown, and SANDY LOAM, gravelly	gray 15		8	3 5 7 10	NP	15									
	Boring terminated at 16.001	۔ ۔ - -														
		- - 20_														
		- - -														
		- - -														
		25_														
	GENE	RAL N	ΟΤ	ES						WATE	R LEVE	LD	AT	Α		
Beg	in Drilling 07-13-2005	Con	nplete	Dril	ling	0	7-13	-200)5	While Drilling	<u>¥</u>		D	RY		
Drill	ing Contractor PRECON		G	[Drill Rig		ME-	75 A		At Completion of Drilling	¥		D	RY	• • • • • • • • •	
Drill	ing Method 3 25-inch HSA	J. Nč	191110	۲ ۳	Che	ескеа І	uy E	.	<u>y.n.</u>	Depth to Water	NA NA	•••••				
2111			••••••	••••	•••••	••••••••••	•••••	•••••		The stratification lines represented between soil types: the actu	sent the app al transition	roxim mav b	ate b e ara	oundary	/	

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938	Client Project L.O. Location	E ngmea	SOR WE McDo dow P	INC I Job noug Parkw	BL No IhA Vay C	OG : 201- ssocia over F	R-135 23-01 ates Inc. ox River, Section	Datum: No Elevation: North: 199 East: 1007 Station: 70 Offset: 0.1	GVD 825.05 ft 93740.53 1420.73 f 95+86.97 11 R	: ft t	Page ·	1 of 1
SOIL AND ROCK	Depth (ff) Sample Type	Sample No. SPT Values	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROC DESCRIPTION	Cepth X	Sample Type recovery Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
824.66-inch thick, loose, brown GRAVELLY SAND F Stiff to very stiff, brown, black and gray CLAY LOAM, with asphalt pieces F Soft, black and gray SANDY	=ILL	$\begin{array}{c} 2\\1\\3\\5\\4\\2\\4\\4\\4\\4\end{array}$	3.50 P 1.25 P	17								
B19 6F Loose, gray SANDY LOAM 		4 32 3 3 42 3	0.25 P < 0.25	16								
brown, and gray CLAY LOA F	M =ILL - - 10	1 5 3 3 3	0.50 P	25								
813.1 Boring terminated at 12.00 f	- - - t	6 2 5 5	2.50 P	19								
	_ _ _ 15											
	20 											
GENE	25	ES					WATE	RLEVE				
Begin Drilling 07-13-2005 Drilling Contractor PRECON I Driller J&L Logger Drilling Method 3.25-inch HSA	Complete DRILLING J. Kasnie	Drilling Drill I CR	Rig Checked	D7-13 CME- by	8-20 -75 / B.F./	D5 ATV J.K.	While Drilling At Completion of Drilling Time After Drilling Depth to Water The stratification lines rep between soil types: the ac	↓ ↓ NA ↓ Image: NA Image:	5.(D roximate I may be gr	DO ft DRY		

301 GP.I WANGENG GDT 1/11/12 201 UNIC

w 1 L T F	vangeng@wangen 145 N Main Street ombard, IL 60148 felephone: 630-95 fax: 630-953-9938	g.com t 3-9928	Client Project Location	Lor	ngn	BC M neado	OR WE cDoi ow P	ING Job noug arkw	No. h As ay c	OG : 201-2 ssocia over Fe	R-136 23-01 tes Inc. ox River, Section	Datum: N Elevation: North: 199 East: 100 Station: 52 Offset: 57	GVD 826.8 03295 1711.6 28+50 .23 L	84 ft .01 f 62 ft 0.08	ït	Page 1	of 1
Profile	Elevation (III) SOIL	- AND ROCK SCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROC DESCRIPTION	Depth Depth	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	B26.36-inch thic LOAM Stiff, brown Medium de brown GR	k, dark brown SIL TOPS n SILTY CLAY LO ense to very dense AVELLY SAND	TY OIL/ _ AM e,		1	2 2 3 3 5 8 11	1.75 P NP	20 10									
			5 		3	12 15 21 16 18 21	NP	4									
	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$																
	Boring terminated at 10.00 ft																
			- - 15 -														
			 20														
Ве	egin Drilling	GENE 07-13-2005	25 RAL N Corr	OTI	ES Dril	ling		07-13	-200	05	WATE While Drilling	R LEVE ♀		AT	A RY		
Dr Dr Dr	illing Contractor iller J& illing Method	PRECON I L Logger 3.25-inch HSA	DRILLIN J. Ka	G Isnic	٦ ck	Drill Rig Cho	ecked	DME-	75 / 3.F./	ATV J.K.	At Completion of Drilling Time After Drilling Depth to Water	NA NA esent the app ual transition	roxima	ate be	oundary	······	

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	•	Wang			B	ORI	NG	6 L	OG	R-137				Page '	1 of 1		
v 1 L T F	vangen 145 N .ombaro elepho fax: 630	g@wangeng.com Main Street d, IL 60148 one: 630-953-9928 0-953-9938	Client Project Lc Location	ongr	M nead	WEI cDor ow P	Job noug arkw	No. h As ay c C	: 201- ssocia over F o.	23-01 ates Inc. ox River, Section	Datum: N Elevation: North: 19 East: 100 Station: 5 Offset: 8.	GVD 844.73 ft 93428.13 1991.96 f 31+33.14 53R	ft ft				
Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft) Sample Type	sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROO DESCRIPTION	K dept	Sample Type recovery Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)		
	843.7L	Loose, black to brown SANI LOAM TOPS /ery soft, black to brown CL	SOIL	1	3 3 4 4	NP	10										
	L	_OAMF	=ILL	2	3 0 1 1	< 0.25 P	14										
	839.2	Medium dense to dense, bro	5	3	1 8 6 4	< 0.25 P	15										
		SAND		4	2 5 9 14	NP	7										
	834.7			5	19 20 26 18	NP	11										
Image: Normal and Sector Sec																	
01.GPJ		GENE		TES) :			201									
ANGENGINC 20123	egin Dri rilling C riller rilling M	Contractor PRECON I L&D Logger Method 3.25-inch HSA	Complet DRILLING W. Wai	ie Dri I 	ning Drill Rig Ch	ecked	ME - by J	-200 75 T Kas	MR snick	While Drilling At Completion of Drilling Time After Drilling Depth to Water The stratification lines ret	g ¥ NA <u>¥. NA</u> present the ap	L. C. 	DRY	······	·····		
w 1 ⁴ Lo Fa	angengo 145 N M ombard, elephone ax: 630-	Wang Engineering @wangeng.com lain Street IL 60148 e: 630-953-9928 953-9938	Client Project Location	Lor	ngm	BC M eado	ORI WEI cDor ow P	Job noug arkw	No. h As ay c	OG : 201-2 ssocia over Fe co.	R-138 23-01 tes Inc. ox River, Section	Datum: N Elevation: North: 199 East: 100 Station: 60 Offset: 35	GVD 883.1 92403 1779.1 00+98 .49 R	4 ft .50 f 80 ft 8.61	t	Page 7	1 of 1
---------------------------------	---	---	-------------------------------	--------------------	-------------------------	--------------------------	----------------------------	-------------------------	-----------------------	---	--	---	---	--------------------------------	--------------------------	-------------	-------------------------
Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ff)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROC DESCRIPTION	Depth Depth	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	AC	Inch thick CRUSHED ST GGREGATE SHOULDER AGGREG	ATE/		1	5 5 4 4	1.25 P	20									
	879.6 St	 iff, brown SILTY CLAY LC	FILL	X	2	4 2 3 3	1.25 P	23									
			5		3	3 4 3 4	1.50 P	26									
	876.1 Me	edium dense, brown SAN	- D														
	873.1		- - - 10														
	I	GENE		ΟΤΙ	ES		·				WATE		LD	AT	Α		
Be Dri Dri Dri	gin Drilli illing Cor iller illing Me	ng 07-15-2005 ntractor PRECON J&L Logger thod 3.25-inch HSA	DRILLIN J. Ka	plete G snic	Drilli D k	ng rill Rig . Che	c c cked	07-15 CME- by E	-200 75 / 3.F./	D5 ATV J.K.	While Drilling At Completion of Drilling Time After Drilling Depth to Water	↓ ↓ NA ∠ NA resent the apprunction ual transition	 proxima	DI DI ate be	RY RY		

WANGENGINC 2012301.GPJ WANGENG.GDT 1/11/12

w 1 ¹ Lo Fa	Vangeng@wangeng.com 145 N Main Street ombard, IL 60148 elephone: 630-953-9928 ax: 630-953-9938	Client Project LO Location	ngn	BC M neado	OR WE cDoi ow P	Job noug arkw	SL No. h A ay c	OG : 201- ssocia over F co.	R-139 23-01 ates Inc. ox River, Section	Datum: No Elevation: North: 199 East: 1004 Station: 60 Offset: 45	GVD 894.81 92707.33 1708.25 93+99.0 .52 L	ft 3 ft ft 6	Page	1 of 1
Profile	SOIL AND ROCK	Depth (ft) Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROC DESCRIPTION	Cepth X	Sample Type recovery Sample No	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	B94-54-inch thick CRUSHED STO AGGREGATE SHOULDER AGGREG/ B92.6Very stiff, black, brown and g SILTY CLAY LOAM F Medium dense to very dense	DNE ATE	1	9 5 4 3 3 3 7	2.00 P NP	18 12								
	brown GRAVELLY SAND	5	3	6 9 9 10	NP	7								
			4	14 28 50/4"	NP	2								
		10	5	50/3"	NP	4								
	882.8 Boring terminated at 12.00 f	t _	6	29 17 14 13	NP	5								
		 15 												
		20_ - - - -												
			Еб						\\/\TE			 T ^		
Be	ain Drilling 07-15-2005	Complet	e Dril	lina	()7-15	-20)5	While Drilling					
Dri	illing Contractor PRECON I	DRILLING	[Drill Rig	· · · · ·	CME-	75/	ATV	At Completion of Drilling	, <u> </u>		ORY		
Dri	iller J&L Logger	J. Kasn	ck	Che	ecked	by .	3.F ./	J.K.	Time After Drilling	NA	•••••			
Dri	illing Method 3,25-inch HSA					•••••			Depth to Water	resent the apr		boundar	v	
									between soil types; the ac	tual transition	may be c	radual.	у	

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938	Client Project Lo i Location	B M ngmead	ORI WEI IcDor ow Pa	NC Job noug arkw	SL No. h As vay o C	OG : 201-2 ssocia over F o.	R-140 23-01 Ites Inc. ox River, Section	Datum: No Elevation: North: 199 East: 1004 Station: 60 Offset: 44	GVD 899.76 f 2996.00 1781.10 f 06+91.67 .96 R	t ft t	Page	1 of 1
BIL AND ROCK	Depth (ft) Sample Type	Sample No. SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROC DESCRIPTION	Depth (ff)	Sample Type recovery Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
899.35-inch thick, black SILTY LO 898.8 TOF Hard, brown SILTY CLAY L 897.8 Medium dense, brown SILT LOAM Very dense, brown GRAVE SAND 894.3 Medium stiff to stiff, brown S CLAY LOAM Boring terminated at 10.00	DAM PSOIL OAM FILL Y FILL Y FILL SILTY 5 SILTY 10	$\begin{array}{c} 1 \\ 1 \\ 1 \\ 9 \\ 7 \\ 8 \\ 17 \\ 2 \\ 37 \\ 31 \\ 29 \\ 29 \\ 3 \\ 28 \\ 26 \\ 23 \\ 19 \\ 4 \\ 10 \\ 4 \\ 5 \\ 8 \\ 5 \\ 12 \\ 5 \\ 6 \\ 8 \\ 8 \\ 5 \\ 12 \\ 7 \\ 6 \\ 8 \\ 8 \\ 5 \\ 12 \\ 7 \\ 6 \\ 8 \\ 8 \\ 5 \\ 12 \\ 7 \\ 6 \\ 8 \\ 8 \\ 5 \\ 12 \\ 7 \\ 6 \\ 8 \\ 8 \\ 5 \\ 12 \\ 7 \\ 6 \\ 8 \\ 8 \\ 5 \\ 12 \\ 7 \\ 6 \\ 8 \\ 8 \\ 5 \\ 12 \\ 7 \\ 6 \\ 8 \\ 8 \\ 5 \\ 12 \\ 7 \\ 6 \\ 8 \\ 8 \\ 5 \\ 12 \\ 7 \\ 6 \\ 8 \\ 8 \\ 5 \\ 12 \\ 7 \\ 6 \\ 8 \\ 8 \\ 5 \\ 12 \\ 7 \\ 6 \\ 8 \\ 8 \\ 5 \\ 12 \\ 7 \\ 6 \\ 8 \\ 8 \\ 5 \\ 12 \\ 7 \\ 6 \\ 8 \\ 8 \\ 5 \\ 12 \\ 7 \\ 6 \\ 8 \\ 10 \\ 10 \\ 10 \\ 10 \\ 10 \\ 10 \\ 10 $	 4.50 P NP 0.75 P 1.75 	13 2 5 19 20								
GENE	ERAL NOT	ES			ļ	ļ	WATE	R LEVE	 L DA	ΓΑ		
Begin Drilling 07-15-2005 Drilling Contractor PRECON Driller J&L Logger Drilling Method 3.25-inch HSA	Complete DRILLING J. Kasni	e Drilling Drill Ri ck Ch	g C	07-15 CME- by E	-200 75 / 3.F./)5 ATV J.K.	While Drilling At Completion of Drilling Time After Drilling Depth to Water The stratification lines repr between soil types: the act		C C roximate may be gr	DRY DRY	y	



Datum: NGVD Elevation: 896.30 ft North: 1993298.80 ft East: 1004687.44 ft Station: 609+93.67 Offset: 51.92 L

Profile	SOIL AND ROCK	Depth (ft) Samole Tyne	recovery	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery Sample No	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	10-inch thick CONCRETE													
	AGGREGATE			13 6 4 5	NP	7								
	LOAM	5		9 4 5 5	3.25 P	16								
				4 5 5 4	2.75 P	15								
				5 5 8 8	2.00 P	15								
	886.3 Dense, brown GRAVELLY 885.3SAND	<u>10</u>	{ •	5 5 15 20 11	NP	5								
	Boring terminated at 11.00 ft	-												
		-												
		-												
		15												
		-												
		-												
		-												
		20												
		-												
2		_												
T 1/11/1		-												
NG.GD		_												
WANGE		25												
GP	GENERAL		TE	s			•		WATER	R LEVE		TA		L
Be	egin Drilling 07-14-2005	Comp	lete D	rilling	()7-14	-200	05	While Drilling	<u> </u>		DRY		
Dr	illing Contractor PRECON DRIL	LING		Drill R	g	CME	75 /	ATV	At Completion of Drilling	Ţ		DRY		
Dr	iller J&L Logger K.	Ande	erso	n Cl	necked	by <u>J</u>	. Ka	snick	Time After Drilling	NA				
Dr	illing Method 3.25-inch HSA		••••			•••••	••••		Depth to Water	NA		bound		
WAI									between soil types: the actua	ent the app	roximate nav be o	e boundai iradual.	У	

Page 1 of 1



WEI Job No.: 201-23-01

1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

Client McDonough Associates Inc. Project Longmeadow Parkway over Fox River, Section Datum: NGVD Elevation: 883.09 ft North: 1993913.02 ft East: 1004723.31 ft Station: 615+96.89 Offset: 45.50 L

Fax: 63	0-953-9938	Location		•••••		C	о.		Offset: 45.50) L		
Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft) Sample Type	Sample No. SPT Values (hlw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCH DESCRIPTION	Depth (ft)	Servery Sample No. SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	11-inch thick CONCRETE PAVEM CRUSHED STONE AGGREGATE BASE COU Stiff, brown SANDY CLAY Medium dense, brown GRAVELLY SAND Medium stiff to stiff, brown S CLAY LOAM Boring terminated at 11.00	IENT RSE - FILL - - - - - - - - - - - -	$ \begin{array}{c} \mathbb{E} \\ \mathbb{E} $	2 1.00 P NP 0.50 P 1.00 P	2 10 13							Co≥
		25										
I	GENE		ES		I		1	WATE		DATA		L
Begin Dr	illing 07-14-2005	Complete	Drilling	()7-14	-200)5	While Drilling	<u> </u>	DRY		
Drilling C	Contractor PRECON	DRILLING	Drill F	Rig (CME-	75 A	λTV	At Completion of Drilling	V	DRY		
Driller	J&L Logger	J. Kasni	ck (becked	by F	3.F./	J.K.	Time After Drilling	• NA	·····. // ····	•••••	• • • • • •
Drilling		J. 130311	C	. ICONCU	~y	.		Denth to Water	ΝΔ	••		
	Jeunou 3,45-INCN HSA	• • • • • • • • • • • • • • • • • • • •	•••••		• • • • • • • •		•••••	The stratification lines represent	esent the approx	 ximate bounda	ry	
		<u></u>	<u></u>					between soil types; the actu	al transition ma	ay be gradual.		



VANGENGINC



C~

WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

1

 Client
 McDonough Associates Inc.

 Project
 Longmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 866.81 ft North: 1994507.02 ft East: 1004722.17 ft Station: 622+02.09 Offset: 43.46 L

F	ax: 630-953-9938	Location	·	• • • • •	•••••		•••••		0.		Unsel. 43	.40 L				
Profile	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROC DESCRIPTION	Depth	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	12-inch thick, brown SILTY 865.8LOAM TOPS Medium dense, brown LOA	- SOIL/ M, /-		1	6 15 12 15	NP	5									
	\gravelly Dense, brown GRAVELLY SAND	- / - -		2	17 11 21 29	NP	4									
		5		3	20 21 15 15	NP	3									
\$0 •0 •0 •0		-		4	29 25 19 22	NP	3									
	856.8 Boring terminated at 10.00 f	- - - 10 t		5	30 16 16 15	NP	3									
	Boning terminated at 10.001	۔ 	-													
		-	-													
		15	-													
			-													
		 20	-													
			•													
		- - - 25	•													
<u> </u>					ļ											
- Po	GENE				lling	ſ)7_1/	20	05	While Drilling		LU	<u>אי</u> ח	A RV		
Dr	Illing Contractor PRECON	DRILLIN	IG	ווש <i>.</i> 	Drill Ric		CME-	75		At Completion of Drilling	÷ ¥		D	RY	••••	•••••
Dr	iller J&L Logger	J. Ka	asni	ck	Ch	ecked	by	3.F./	J.K.	Time After Drilling	NA	· · · · · · · ·		· · · · · · · · ·	•••••	•••••
Dr	illing Method 3.25-inch HSA								••••••	Depth to Water	NA	<u></u>				
			<u></u>							The stratification lines repr between soil types; the act	esent the app ual transition	oroxim may b	ate b e gra	oundar adual.	y	



Co.

WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

Location

McDonough Associates Inc. Client Datum: NGVD Elevation: 888.71 ft North: 1992837.53 ft East: 1009165.08 ft Station: 801+21.72 Offset: 19.96 R

		•••••••••••••••••••••••••••••••••••••••		
Project	Longme	adow Parkw	ay over Fox	River, Section

Profile	SOIL AND ROCK	Depth (ft) Sample Type recovery	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth	Sample Type	Sample No.	(blw/6 in) Qu (tsf)	Moisture Content (%)
	12-inch thick, brown SILTY 887.7LOAM TOPSOIL- Medium stiff to stiff, brown SILTY		1 2 3 3 2	1.50 P	16								
	CLAY LOAM		2 2 3 4 4	1.50 P	20								
		5	4 3 3 2 3	1.50 P	21								
			5 5 7 7	1.50 P	12								
	878.2		6 4 4 7	0.50 P	15								
	876.7 Boring terminated at 12.00 ft		9 10 10 10	1.00 P	11								
		-											
		15 											
		-											
		20											
1/11/12		-											
NANGENG.GD1		25_											
GPJ	GENERA		S	I	I	I	I	WATER				I	
.12301. B	egin Drilling 07-19-2005	Complete E	rilling)7-19	-200)5	While Drilling	<u> </u>		DR	Y	
D 20	rilling Contractor PRECON DRIL	LING	Drill Rig	g (CME-	75 A	ATV	At Completion of Drilling	¥		DR	Y	
	riller J&D Logger K.	Anderso	n Ch	ecked	by <u>J</u> .	Ka	SNICK	Time After Drilling	<u>ΝΑ</u> ΝΔ	•••••			
WANG		<u></u>	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · ·	· · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·		The stratification lines repres	ent the app transition	 proxima may be	ate bou e gradu	ndary Ial.	

W 1 Lu T	Vangeng@wangeng.com 145 N Main Street ombard, IL 60148 elephone: 630-953-9928 ax: 630-953-9938	Client Project LC Location	ongn	BC M neado	OR WE cDor ow P	INC I Job noug arkw	SL No. h As ay c C	OG : 201-2 ssocia over Fe o.	R-146 23-01 tes Inc. ox River, Section	Datum: No Elevation: North: 199 East: 1008 Station: 80 Offset: 22	GVD 889.72 92995.3(3931.02 94+00.7 .63 L	ft 5 ft ft 8	Page	1 of 1
Profile	SOIL AND ROCK	Depth (ft) Sample Type	recovery Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROC DESCRIPTION	R Depth M	Sample Type recovery Sample No	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	889.26-inch thick, dark bown SAN LOAM TOPS Medium dense, brown and g LOAM, with gravel		1	4 15 10 8 7 7 8 12 7 10	NP NP NP	2 7 9								
	883.2 Medium dense, brown GRAVELLY SAND		4	8 16 12 12 6 9	NP	5								
	Boring terminated at 10.00 f			0										
Be Be	GENE gin Drilling 07-19-2005	RAL NOT	T ES te Dri	lling)7-19	-200)5	WATE While Drilling	ER LEVE ♀	L DA	TA DRY	<u> </u>	
	illing Contractor PRECON I iller J&D Logger illing Method 3.25-inch HSA	DRILLING K. Ander	ו son	Drill Rig Che	ecked	CME- by J	75 / . Ka	ATV snick	At Completion of Drilling Time After Drilling Depth to Water The stratification lines rep between soil types; the ac	NA NA resent the app tual transition	 roximate may be c	boundar	 У	



Location

BORING LOG R-147

Co.

WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

ClientMcDonough Associates Inc.ProjectLongmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 888.73 ft North: 1993241.86 ft East: 1008770.01 ft Station: 806+87.85 Offset: 24.38 R

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROO DESCRIPTIO	CK th t⊟ N O	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	888.2V	/ery stiff, brown CLAY LOAM FILL- /ledium dense, brown SANDY	-/-		1	14 7 6 8	2.50 P	9									
 > 0	885.7 N	Addium dense, brown			2	5 8 8 12	NP	6									
0.0 00		Shaveler Sand	5		3	15 9 10	NP	3									
			-		4	12 7 10	NP	6									
			-		5	16 11 10 7	NP	6									
	<u>& 878.7</u> E	Boring terminated at 10.00 ft		<u>/</u>		1											
			-														
			 15														
			-														
			-														
			20														
GDT 1/11/12			-														
U WANGENG.			25_														
<u>با</u>		GENERA		UT	ES						WAT	EK LEVE	LD	AT	Α		
B B	egin Dri	lling 07-19-2005	Com	plete	e Dril	ling	0)7-19	-200)5	While Drilling	<u> </u>		DI	RY	••••	•••••
D 20	rilling Co	ontractor PRECON DRIL		G	[Drill Rig		CME-	75 /	ATV	At Completion of Drillin	ng <u>¥</u>		DI	RY	•••••	•••••
		J&D Logger K	. And	iers	son	Ch	ecked	by J	. K a	SNICK	Time After Drilling		•••••				
NANGE D	rilling M	etnoa 3.25-INCH HSA		•••••	•••••		•••••				The stratification lines re	present the appletual transition	roxima	ate be	oundary	4	



WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

 Client
 McDonough Associates Inc.

 Project
 Longmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 889.71 ft North: 1993478.08 ft East: 1008562.03 ft Station: 810+05.15 Offset: 17.22 L

Back Bit And PROCK Back Bit														
Profile	DESCRIPTION	(ft) Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCI DESCRIPTION	Depth D	Sample Type recovery Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	Medium dense, brown SANDY LOAM 888.2FILL Very soft to stiff, brown and gray		1	12 7 3 2	NP	2								
	CLAY LOAMFILL		2	3 3 3 3	0.75 P	16								
	5		3	2 2 3 2	1.00 P	17								
	001 0		4	1 0 1 1	< 0.25 P	14								
	Stiff, brown SILTY CLAY 879.7 10 Boring terminated at 10.00 ft		5	1 1 3 3	1.00 P	22								
		-												
	45													
		-												
	20	-												
		-												
Dr			E3	ling	^	7.40	200)5						
Be	Iling Contractor PRECON DRI LI	nnpiete NG	: DLII ר	nng Srill Pio	ייייי ר	:MF-19	-200 75 /	NTV	At Completion of Drilling	<u>÷.</u> ▼	 ר	/R.1)RY	••••	
Dri	ller J&D Loaaer K. A	nders	「 on	Che	ecked l	by J.	Ka	snick	Time After Drilling	+ NA	ħ	<13.1	•••••	
Dri	lling Method 3.25-inch HSA	Depth to Water	NA	•••••										
			<u></u> .					<u></u>	The stratification lines repr between soil types; the actu	esent the app al transition r	roximate nay be a	boundar adual	у	

Page 1 of 1



Drilling Method

3.25-inch HSA

NA

Ţ The stratification lines represent the approximate boundary between soil types: the actual transition may be gradual.

Depth to Water

Page 1 of 1

	Wang	1			B	OR	ING	ìL	OG	R-150					Page	1 of 1
	Engineering							No	· 201 4	23_01	Datum: N	GVD				
w	vangeng@wangeng.com						JOD	NO.	. 201-2	23-01	Elevation:	888.2 24053	21 ft	ft		
	ombard, IL 60148	Client			NI bood		noug		SSOCIA	tes Inc.	East: 100	8333.	47 ft			
<u>T</u>	elephone: 630-953-9928			ngr	nead	ow P	агкм	ay (ox River, Section	Station: 8	16+24 / 47 R	1.87			
L	ax: 630-953-9938	LUCALIUI	·								Oliset. II	.47 13				
	ç		ype	ġ	ues (L		e (%)		ç			ype	Poj	n))		e (%)
rofile)epth			⁻Valı w/6 i	(tsf)	bistur	rofile	evatio (ft)	SOIL AND ROC	K Jepth		l aldr	- Valı w/6 i	(tsf)	tent
			Sam	San	LdS (b)		Gĕ	₽	Ē	DESCRIPTION		Sam	San	SPT (b)		Cor
أحزح	****.03-inch thick CRUSHED STO	DNE	$\overline{\Lambda}$		3											
		ATF/ -	18.	1	4	1.00	3									
li!!	Soft to stiff, brown SILTY CL	AY -	$\left\langle \cdot \right\rangle$		4	P 										
	LOAM	-		2	1	1 00	15									
		-			3	P 1.00	15									
		-	$\left(\right)$		2											
		5_	XI	3	3	0.25	30									
Li.i		-	\square		0	P										
		-	\mathbb{N}		3											
ΗH		-		4	2	1.25 P	22									
		-	$\left(\right)$		3											
li!!		-	171	5	3	1.75	27									
	878.2	10	/		4 5	Р										
	Boring terminated at 10.00 f	't _	{													
		-	1													
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		-	1													
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		20	-													
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		-	-													
		-	1													
		-	-													
		-	1													
		25														
-	GENE			F.S				<u> </u>		WATE			ΔΤ	Δ		
Be	egin Drilling 07-19-2005	. Cor	nplete	e Dri	lling)7-19	-20	05	While Drilling	<u> </u>		D	RY		
Dr	illing Contractor PRECON	DRILLIN	IG	I	Drill Riq	g	CME-	75 /	ATV	At Completion of Drilling	, <u>¥</u>		D	RY	•••••	
Dr	iller J&D Logger	K. An	der	son	Ch	ecked	by J.	Ka	snick	Time After Drilling	NA					
Dr	illing Method 3.25-inch HSA			••••	•••••		••••		•••••	Depth to Water	NA	novim	ato h	nundar	V	
										between soil types; the act	tual transition	may b	e gra	adual.	У	

WANGENGINC 2012301.GPJ WANGENG.GDT 1/11/12



WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

 Client
 McDonough Associates Inc.

 Project
 Longmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 887.66 ft North: 1994307.16 ft East: 1008207.54 ft Station: 819+05.29 Offset: 19.70 L

F	Fax: 630-953-9938 Location								Co. Offset: 19.70 L										
Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft) Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROC DESCRIPTION	Depth (#)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)			
	N 886.2	/ery stiff, brown and gray SANDY CLAY LOAM FILI -oose, brown SANDY LOAM		1	8 9 8 10	2.75 P	10												
	884.2	Medium dense to very dense,		2	2 3 5 6	NP	10												
	b	prown GRAVELLY SAND	5	3	8 10 11 8	NP	5												
				4	2 32 20 16	NP	5												
0	877.7	Poring terminated at 10.00 ft		5	14 18 16 17	NP	4												
		sonng terminated at 10.00 it	-																
			15 - -																
			-																
			- - 20																
71/1			-																
JENG.GUI III																			
WAIN			25_																
19.10 		GENER	AL NOT	ES	;					WATE		LD	AT	Α					
	egin Dri	illing 07-19-2005	Complete	e Dri ۱	lling Drill Pic	, <u>(</u>)7-19 CMF-	-200 75 /)5 \TV	While Drilling	¥ ▼		DI יח	RY RY	•••••				
Driller J&D Logger K. Anderson Checked by J. Kasnick										Time After Drilling	÷ NA	 		IN					
Dr	illing N	1ethod 3.25-inch HSA	Depth to Water	NA															
WAL			<u></u>		<u></u>	<u>.</u>		<u></u> .	<u>.</u>	I he stratification lines repr between soil types; the act	esent the app ual transition	proxim <u>may</u> b	ate bo	oundar <u>)</u> dual.	/				

Wangeng@wangeng.com McDonough Associates Inc. Datum: NGVD 1145 N Main Street Client McDonough Associates Inc. Datum: NGVD Lombard, IL 60148 Project Longmeadow Parkway over Fox River, Section Datum: NGVD Fax: 630-953-9938 Location Co. Co. Datum: NGVD											
Profile Profile Elevation Elevation (ff) Elevation (ff) Depth (ff) Sample No. Sample Type Elevation (ff) (ff) (ff) (ff) <th>Qu (tsf) Moisture Content (%)</th>	Qu (tsf) Moisture Content (%)										
888.91-inch thick CRUSHED STONE 1 10 10 AGGREGATE - - 1 10 0 885.5 SHOULDER AGGREGATE - - Loose, brown GRAVELLY SAND - - 5											
Medium dense, brown LOAM											
5 - 3 = 3 = 3 = 3 = 3 = 3 = 3 = 3 = 3 = 3											
B80.5 Medium dense to dense, brown GRAVELLY SAND											
5 8 8 NP 6											
6 13 12 12 12 12											
GENERAL NOTES WATER LEVEL DATA											
Begin Drilling 07-20-2005 While Drilling V DRY Drilling Contractor PRECON DRILLING Drill Rig CME-75 ATV At Completion of Drilling V DRY											
Driller J&D Logger J. Kasnick Checked by B.F./ J.K. Time After Drilling NA Drilling Method 3.25-inch HSA Depth to Water V NA The stratification lines represent the approximate boundary The stratification lines represent the approximate boundary	ary										

WANGENGINC 2012301.GPJ WANGENG.GDT 1/11/12



WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

 Client
 McDonough Associates Inc.

 Project
 Longmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 879.67 ft North: 1994830.88 ft East: 1007945.66 ft Station: 825+04.78 Offset: 33.84 L

Fax: 630-953-9938 Location Co.									Offset: 33.84 L						
Profile	Elevation (ff)	SOIL AND ROCK DESCRIPTION	Depth (ft) Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROO DESCRIPTION	N ^D	Sample Type	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	868.7 B	-inch thick ASPHALT over -inch thick CONCRETE PAVEMEN Medium stiff to very stiff, brown SILTY CLAY LOAM Foring terminated at 11.00 ft		3 1 2 3 4 5	2 1 4 3 5 11 10 20 7 8 3 17 13 48 3 12 16 50/3"	0.50 P 3.00 P 3.25 P 2.50 P	14 13 15 13								
_		GENER	AL NOT	ES			-			WATI		LDA			
Be	egin Dril	ling 07-19-2005	Complete	e Dril	lling	0)7-19	-200)5 \T\/	While Drilling	¥			• • • • • • • • • •	•••••
Drilling Contractor PRECON DRILLING Drill Rig CME-75 AIV										At Completion of Drilling	9 ¥.		<u>DKI</u>	• • • • • • • • •	•••••
Driller J&D Logger K. Anderson Checked by J. Kasnick										Time After Drilling		•••••			
Dr	niing Me	etnod 3.25-Inch HSA		• • • • • •			•••••		•••••	Depth to Water -	resent the app	 proximat	e boundar	у	
1										between soil types; the ad	ctual transition	may be	aradual.	,	

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938	Client Project Lor Location	B(M ngmead	ORIN WEI J IcDono ow Par	Page 1 of Datum: NGVD Elevation: 862.20 ft North: 1995075.09 ft East: 1007760.71 ft Station: 828+00.97 Offset: 0.47 R						
Biginal SOIL AND ROCK DESCRIPTION	Depth (ft) Sample Type	Sample No. SPT Values (blw/6 in)	Qu (tsf) Moisture	Content (%) Profile	Elevation (ft)	SOIL AND ROC DESCRIPTION	Depth (ff)	Sample Type recovery Sample No.	SPT Values (blw/6 in)	(tsf) Moisture Content (%)
11-inch thick ASPHALT over 11-inch thick CONCRETE 11-inch thick CONCRETE 11-inch thick CONCRETE 11-inch thick CONCRETE 11-inch thick ASPHALT over 11-inch thick CONCRETE 11-inch thick CONCRETE	n	1 3 13 11	0.50 P	17						
Medium dense, brown GRAVELLY SAND	5	2 7 9 7	NP	3						
		3 6 6 6	NP	2						
		4 10 11 9	NP	2						
Boring terminated at 11.00 ft		5 9 11 8	NP	2						
GENE		ES				WATE	RLEVE	L DAT		
Begin Drilling 07-20-2005 Drilling Contractor PRECON I Driller J&D Drilling Method 3.25-inch HSA	Complete DRILLING J. Kasnic	While Drilling At Completion of Drilling Time After Drilling Depth to Water	✓ ✓ NA ✓ ✓ NA ✓ Image: Second Sec	DI DI roximate bo nay be grad	RY RY Dundary dual.					

AN N





WEI Job No.: 201-23-01

Co.

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

Location

ClientMcDonough Associates Inc.ProjectLongmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 897.80 ft North: 1993266.79 ft East: 992299.53 ft Station: 2145+16.52 Offset: 74.73R

Profile		Elevation (ft)	SOIL AND ROCI DESCRIPTION	Depth (ff)	ample Type recovery Sample No	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND RO DESCRIPTIO	CK ^{ta} ⊕ N	sample Type recovery Sample No	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
													0, 1			
				-												
					1	3 4 6	0.82	13								
				55 <u>/</u> _ _		9	В									
				-												
						4	1.72	13								
1		_{837.8} Во	pring terminated at 60.00	60 / 0 ft		10	В									
				-												
				-												
				65												
				-												
				-												
				70												
/12				-												
G.GDT 1/11																
U WANGEN				_ _ 75												
.GP	B GENERAL NOTES										WAT	ER LEVE	L DA	TA		
Begin Drilling 05-23-2005 Complete Drilling 05-23-2005)5	While Drilling	<u> </u>	28	.50 ft		
R Drilling Contractor PRECON DRILLING Drill Rig CME-75 ATV										ATV	At Completion of Drilling T 19.00 ft					
briller S&D Logger I. KICKey Checked by N. Davis										avis	Time After Drilling NA					
Drilling Method 3.25-Inch HSA										The stratification lines represent the approximate boundary between soil types: the actual transition may be gradual						





Location

BORING LOG S-002

WEI Job No.: 201-23-01

Co.

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

Client McDonough Associates Inc.

Project Longmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 897.05 ft North: 1993416.51 ft East: 992300.01 ft Station: 2145+21.86 Offset: 74.88L

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND RO DESCRIPTIO	DCK figure de la constantia de la consta	Sample Type	Sample No. SPT Values /hlw/6 in)	Qu (tsf)	Moisture Content (%)
ANGENG.GDT 1/1/1/2	B	oring terminated at 51.50 ft			18		1.64 B	12								
GPJ M											WA	TER LEVE	L D			
Begin Drilling 05-09-2005 Complete Drilling 05-09-2005										While Drilling	<u> </u>	2	5.00 f	t		
Drilling Contractor PRECON DRILLING Drill Rig CME-75 ATV Driller S&D Logger J. Kosloski Checked by N. Davis									ATV	At Completion of Drilling						
									Time After Drilling NA							
Drilling Method 3.25-inch HSA										The stratification lines represent the approximate boundary						





WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

Client McDonough Associates Inc. Project Longmeadow Parkway over Fox River, Section Datum: NGVD Elevation: 900.90 ft North: 1993271.17 ft East: 992379.57 ft Station: 2145+96.66 Offset: 72.95R

Location Co. SPT Values (blw/6 in) SPT Values (blw/6 in) Moisture Content (%) Sample Typ Sample No Sample No Elevation (ft) Moisture Content (% Elevation (ft) Profile Profile SOIL AND ROCK Depth (ft) SOIL AND ROCK Depth (ft) Qu (tsf) Sample⁻ Qu (tsf) DESCRIPTION DESCRIPTION 4 10 19 2.13 13 В 55 13 8 12 <u>18</u> 2.54 20 12 В 60 11 15 19 1.80 12 21 В 65 Boring terminated at 65.00 ft 70 75 WATER LEVEL DATA **GENERAL NOTES** ∑ 31.00 ft 04-18-2005 Complete Drilling 04-18-2005 Begin Drilling While Drilling PRECON DRILLING Drill Rig CME-75 ATV DRY **Drilling Contractor** At Completion of Drilling Driller S&J Logger Y. Shiu Checked by N. Davis Time After Drilling NA Depth to Water NA Drilling Method 3.25-inch HSA Ţ The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

Page 2 of 2



^{2012301.}GPJ WANGENG.GDT VANGENGINC

1/11/12



WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

Client McDonough Associates Inc. Project Longmeadow Parkway over Fox River, Section Datum: NGVD Elevation: 902.24 ft North: 1993271.50 ft East: 992454.51 ft Station: 2146+71.57 Offset: 75.05R





WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

Client McDonough Associates Inc.

Project Longmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 902.24 ft North: 1993271.50 ft East: 992454.51 ft Station: 2146+71.57 Offset: 75.05R





2012301.GPJ WANGENG.GDT



VANGENGINC



WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

Client McDonough Associates Inc. Project Longmeadow Parkway over Fox River, Section Datum: NGVD Elevation: 901.31 ft North: 1993274.02 ft East: 992529.49 ft Station: 2147+46.55 Offset: 75.0R

Location Co. SPT Values (blw/6 in) SPT Values (blw/6 in) Moisture Content (%) Sample Typ Sample No Sample No Moisture Content (% Elevation (ft) Elevation (ft) Profile Profile SOIL AND ROCK Depth (ft) SOIL AND ROCK Depth (ft) Qu (tsf) Qu (tsf) Sample DESCRIPTION DESCRIPTION 7 20 2.30 13 В 10 55 5 8 2.79 13 21 В 60 9 5 7 1.80 22 12 В 10 65 5 7 9 23 2.54 13 В Boring terminated at 70.00 ft 2012301.GPJ WANGENG.GDT 1/11/12 75 WATER LEVEL DATA **GENERAL NOTES** 05-20-2005 ⊊ 31.50 ft Complete Drilling 05-23-2005 Begin Drilling While Drilling PRECON DRILLING Drill Rig CME-75 ATV DRY At Completion of Drilling Drilling Contractor WANGENGINC Driller S&D Logger T. Rickey Checked by N. Davis Time After Drilling NA Depth to Water NA Drilling Method 3.25-inch HSA Ţ The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.





WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

Client McDonough Associates Inc. Project Longmeadow Parkway over Fox River, Section Datum: NGVD Elevation: 899.84 ft North: 1993423.95 ft East: 992525.03 ft Station: 2147+46.93 Offset: 74.99L

Location Co. SPT Values (blw/6 in) SPT Values (blw/6 in) Moisture Content (%) Sample Type Sample No Sample No Moisture Content (% Elevation (ft) Elevation (ft) Profile Profile SOIL AND ROCK Depth (ft) SOIL AND ROCK Depth (ft) Qu (tsf) Qu (tsf) Sample DESCRIPTION DESCRIPTION Medium stiff to very stiff, brown CLAY LOAM to SILTY CLAY LOAM 4 5 0.74 14 12 В 10 55 3 6 0.90 13 13 В 60 8 6 1.48 13 14 11 В 13 65 12 15 3.03 15 12 В 20 Boring terminated at 70.00 ft 2012301.GPJ WANGENG.GDT 1/11/12 75 WATER LEVEL DATA **GENERAL NOTES** ⊊_____31.00 ft 05-19-2005 Complete Drilling 05-20-2005 Begin Drilling While Drilling PRECON DRILLING Drill Rig CME-75 ATV 31.00 ft At Completion of Drilling Drilling Contractor Ţ WANGENGINC Driller K&J Logger J. Kosloski Checked by N. Davis Time After Drilling NA Depth to Water NA Drilling Method 3.25-inch HSA Ţ The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

Client McDonough Associates Inc. Project Longmeadow Parkway over Fox River, Section Datum: NGVD Elevation: 900.18 ft North: 1993276.36 ft East: 992604.50 ft Station: 2148+21.64 Offset: 75.06L





1/11/1





WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

Client McDonough Associates Inc. Project Longmeadow Parkway over Fox River, Section Datum: NGVD Elevation: 898.67 ft North: 1993426.33 ft East: 992599.84 ft Station: 2148+21.93 Offset: 75.00L

Location Co. SPT Values (blw/6 in) SPT Values (blw/6 in) Moisture Content (%) Sample Typ Sample No Sample No Moisture Content (% Elevation (ft) Elevation (ft) Profile Profile SOIL AND ROCK Depth (ft) SOIL AND ROCK Depth (ft) Qu (tsf) Sample⁻ Qu (tsf) DESCRIPTION DESCRIPTION 4 6 1.48 14 21 В 8 8 10 22 22 3.12 13 В 60 836.7 Dense, gray SANDY LOAM 6 20 20 NP 16 23 65 833.7 Boring terminated at 65.00 ft 70 75 WATER LEVEL DATA **GENERAL NOTES** ∑ 31.00 ft 04-15-2005 Complete Drilling 04-15-2005 Begin Drilling While Drilling PRECON DRILLING Drill Rig CME-75 ATV DRY **Drilling Contractor** At Completion of Drilling Driller K&S Logger Y. Shiu Checked by N. Davis Time After Drilling NA Depth to Water NA Drilling Method 3.25-inch HSA Ţ The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

Page 2 of 2



NANGENGINC


WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

 Client
 McDonough Associates Inc.

 Project
 Longmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 899.85 ft North: 1993278.07 ft East: 992654.41 ft Station: 2148+71.55 Offset: 75.00R

F	ax: 630-953-9938	Location			Co.		Offset: 75.00R		
Profile	SOIL AND ROCK	Depth (ft) Sample Type recovery Sample No.	SPT Values (blw/6 in) Ou	(tsf) Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCH DESCRIPTION	Depth (ft) (ft) sample Type	Sample No. SPT Values (blw/6 in) Qu	(tsf) Moisture Content (%)
	847.9 Stiff to very stiff, gray CLAY LOAM Boring terminated at 60.00 f			2.79 12 B					
Be	egin Drilling 05-20-2005	Complete Dr	rilling	05-20	-2005	While Drilling		29.50 ft	
Dr	illing Contractor PRECON	DRILLING	At Completion of Drilling	Ţ	DRY				
Dr	iller S&D Logger	T. Rickey	Time After Drilling	NA					
Dr	illing Method 3.25-inch HSA					Depth to Water	NA		
						The stratification lines repre- between soil types; the actu	sent the approximation may b	ate boundary e gradual.	



WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

Client McDonough Associates Inc. Project Longmeadow Parkway over Fox River, Section Datum: NGVD Elevation: 898.06 ft North: 1993428.03 ft East: 992649.88 ft Station: 2148+71.93 Offset: 75.00L





WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

 Client
 McDonough Associates Inc.

 Project
 Longmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 898.06 ft North: 1993428.03 ft East: 992649.88 ft Station: 2148+71.93 Offset: 75.00L

Fax: 630-953-9938	cation	•••••	630-953-9938 Location Co.													
BOIL AND ROCK DESCRIPTION	Depth (ft) Sample Type recovery Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)			
841.1 Medium stiff to stiff, gray CLAY		29 13 12	NP	9												
LOAM																
Boring terminated at 65.00 ft																
GENERA	L NOTES	5					WATER	RLEVE	LD	AT	Α					
Begin Drilling 05-20-2005	Complete Dr)5 (T) (While Drilling	<u>¥</u>		30.0	0 ft									
Drilling Contractor PRECON DRI	LLING I Kosloski	ALV	At Completion of Drilling	<u>₹</u> N∆		20.0	π									
Drilling Method 3 25-inch HSA	. 1.0310381	00	CUNEU	ыў . І	ч. D	413	Depth to Water V	NΔ	•••••							



WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

Client McDonough Associates Inc. Project Longmeadow Parkway over Fox River, Section Datum: NGVD Elevation: 898.92 ft North: 1993279.71 ft East: 992704.38 ft Station: 2149+21.55 Offset: 74.99R



Page 1 of 2



WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

Client McDonough Associates Inc. Project Longmeadow Parkway over Fox River, Section Datum: NGVD Elevation: 898.92 ft North: 1993279.71 ft East: 992704.38 ft Station: 2149+21.55 Offset: 74.99R

Location Co. SPT Values (blw/6 in) SPT Values (blw/6 in) Moisture Content (%) Moisture Content (%) Sample Type Sample No Sample No Elevation (ft) Elevation (ft) Profile Profile SOIL AND ROCK Depth (ft) SOIL AND ROCK Depth (ft) Qu (tsf) Sample⁻ Qu (tsf) DESCRIPTION DESCRIPTION 5 5 NP 12 13 55 6 6 9 NP 14 14 60 14 836.9 Very dense, gray, fine SAND 25 36 NP 15 15 32 65 831.9 Very stiff, gray CLAY LOAM 21 25 16 2.62 12 В 50/5" 70 1/11/10 2012301.GPJ WANGENG.GDT 6 2.13 12 17 8 В 20 Boring terminated at 75.00 ft WATER LEVEL DATA **GENERAL NOTES** ⊻ 30.00 ft 05-25-2005 05-25-2005 Begin Drilling Complete Drilling While Drilling PRECON DRILLING Drill Rig CME-75 ATV DRY At Completion of Drilling Drilling Contractor WANGENGINC Driller S&R Logger T. Rickey Checked by N. Davis Time After Drilling NA Depth to Water NA Drilling Method 3.25-inch HSA Ţ The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.





WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

 Client
 McDonough Associates Inc.

 Project
 Longmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 897.64 ft North: 1993429.56 ft East: 992699.94 ft Station: 2149+22.00 Offset: 74.96L

F	ax: 630-	953-9938	Location	•••••				С	o.		Offset: 74	.96L				
Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft) Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCH DESCRIPTION	Depth (ff)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	843.1 St	iff, brown CLAY LOAM	55	21	4 6 7	1.31 B	12									
	8 <u>37.6</u> Bo	oring terminated at 60.00 ft	60 	22	4 6 10											
2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		CENE		 							2 E\/E	ח		<u> </u>		
Be	egin Drilli	ing 05-12-2005		e Dril	ling	0	5-12	-200)5	While Drilling	<u>, LL V C</u> Ţ		29.0	 0.ft		
Dr	illing Co	ntractor PRECON D	RILLING	[Drill Rig	, <u>(</u>	CME-	75 A	TV	At Completion of Drilling	¥		DR	RY		
Dr	iller	J&R Logger	J. Koslo	ski	Ch	ecked	by 👖	N. D	avis	Time After Drilling	NA	••••				
Dr	illing Me	thod 3.25-inch HSA				•••••				Depth to Water	NA sent the apr	roxim	ate ho	undar	/	
¥X										between soil types: the actu	al transition	may b	ate DOI e grad	unuary lual	1	





WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

WANGENGINC 2012301.GPJ WANGENG.GDT 1/11/12

 Client
 McDonough Associates Inc.

 Project
 Longmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 897.79 ft North: 1993281.31 ft East: 992754.33 ft Station: 2149+71.56 Offset: 74.98R

Fa	ax: 630-9	953-9938	Location		•••••		•••••	С	0.		Offset: 74.	98R			
Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft) Sample Tvpe	recovery Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ff)	Sample Type	Sample No. SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	847.3 Sti LC	iff to very stiff, gray CLAY DAM		21	2 3 7 4 3 5	1.80 B 1.39 B	13								
			60	23	6 8 11	2.54 B	14								
	832.8 Bo	oring terminated at 65.00 ft	- - - - - - - - - - - - - - - - - - -	24	7 11 11	2.71 B	12								
		GENE		TES						WATER					
Beg	gin Drillii	ng 04-15-2005	Compl	While Drilling	¥	2	9.25 ft								
Dri	lling Cor	I&R Locar		At Completion of Drilling		•••••	DKI								
Dri		thad 3 25 inch USA	Denth to Water		••••										
ווט	ining iviet			•••••		•••••	• • • • • • • • •		••••••	The stratification lines repres	ent the app	roximat	e boundar	у	
										between soil types; the actual	transition r	<u>nay be</u>	gradual.		



WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

Client McDonough Associates Inc. Project Longmeadow Parkway over Fox River, Section Datum: NGVD Elevation: 897.17 ft North: 1993431.26 ft East: 992749.87 ft Station: 2149+71.96 Offset: 75.03L





WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

2012301.GPJ WANGENG.GDT 1/11/12

VANGENGINC

Client McDonough Associates Inc. Project Longmeadow Parkway over Fox River, Section Datum: NGVD Elevation: 897.17 ft North: 1993431.26 ft East: 992749.87 ft Station: 2149+71.96 Offset: 75.03L

Location Co. Fax: 630-953-9938 SPT Values (blw/6 in) SPT Values (blw/6 in) Moisture Content (%) Sample Type Sample No Sample No Moisture Content (% Elevation (ft) Elevation (ft) Profile Profile SOIL AND ROCK Depth (ft) SOIL AND ROCK Depth (ft) Qu (tsf) Qu (tsf) Sample DESCRIPTION DESCRIPTION 8 Dense, gray GRAVELLY SAND NP 12 2 25 12 4 1.56 12 13 Stiff to very stiff, gray to brown В 55 9 CLAY LOAM 2 6 2.21 13 14 В 60 11 Medium dense, brown SANDY LOAM 7 13 NP 15 15 65 15 Boring terminated at 65.00 ft 70 75 WATER LEVEL DATA **GENERAL NOTES ∑** 29.00 ft 05-23-2005 Complete Drilling 05-23-2005 Begin Drilling While Drilling PRECON DRILLING Drill Rig CME-75 ATV 29.00 ft **Drilling Contractor** At Completion of Drilling Driller J&R Logger T. Rickey Checked by N. Davis Time After Drilling NA Depth to Water NA Drilling Method 3.25-inch HSA Ţ The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



Location

BORING LOG S-017

WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

Client McDonough Associates Inc.

Project Longmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 897.12 ft North: 1993282.88 ft East: 992804.22 ft Station: 2150+21.73 Offset: 75.00R

Page 1 of 2









WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

 Client
 McDonough Associates Inc.

 Project
 Longmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 896.89 ft North: 1993432.83 ft East: 992799.99 ft Station: 2150+21.84 Offset: 75.00L

Fax: 630-	953-9938 ['] Lo	ocation					С	0.	· · · · · ·	Offset: 75.00	-		
Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft) Sample Type	recovery Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ff) Sample Type	recovery Sample No. SPT Values	(blw/6 in) Qu (tsf)	Moisture Content (%)
			21	4 6 8	NP	11							
		55	22	4 4 6	NP	13							
:: 839.9 Ha	ard, brown to gray CLAY LOA	M	23	6 9 13	4.50 P	12							
			24	7	4 00	12							
831.9 Bo	oring terminated at 65.00 ft			30	P	12							
		- - 70 - -											
		- - - - 75_											
	GENERA	AL NO	TES	•					WATER	LEVEL	DATA		
Begin Drilli	ing 05-13-2005	Comple	te Dri	lling)5-13	-200)5	While Drilling	<u>¥</u>	28.00	ft	•••••
Drilling Co	ntractor PRECON DRI			Drill Riq	g	ME-	75 A		At Completion of Drilling	¥	24.00	<u>n</u>	•••••
Drilling Ma	Jak Logger	J. NOSI	JSKI	Ch	ecked	DY	N. D	avis	Dopth to Water	NA NA			
				•••••		•••••		•••••	The stratification lines represe	ent the approxi	mate bour	dary	
									between soil types; the actual	transition may	be gradua	al.	





WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

Client McDonough Associates Inc.

Project Longmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 896.65 ft North: 1993283.91 ft East: 992852.99 ft Station: 2150+71.76 Offset: 75.00R

Location Co. SPT Values (blw/6 in) les Moisture Content (%) Sample Type Sample No Sample No SPT Value (blw/6 in) Elevation (ft) Elevation (ft) Profile Profile Moistur Content (SOIL AND ROCK Depth (ft) SOIL AND ROCK Depth (ft) Qu (tsf) Qu (tsf) Sample DESCRIPTION DESCRIPTION 8 NP 13 15 15 Dense to very dense, brown **GRAVELLY SAND** 11 19 NP 14 55 22 10 23 NP 15 18 32 838.7 Medium dense, brown SANDY LOAM 3 NP 22 24 4 60 6 Stiff to very stiff, brown CLAY 5 9 25 3.44 11 LOAM В 65 15 13 16 26 1.80 13 В 826.7 25 Boring terminated at 70.00 ft 75 WATER LEVEL DATA **GENERAL NOTES** ∑ 26.50 ft 05-19-2005 Complete Drilling 05-20-2005 Begin Drilling While Drilling PRECON DRILLING Drill Rig CME-75 ATV DRY Drilling Contractor At Completion of Drilling Driller S&D Logger J. Kosloski Checked by N. Davis Time After Drilling NA Depth to Water NA Drilling Method 3.25-inch HSA Ţ The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

Client McDonough Associates Inc. Project Longmeadow Parkway over Fox River, Section Datum: NGVD Elevation: 896.63 ft North: 1993433.85 ft East: 992851.18 ft Station: 2150+71.73 Offset: 74.99L

Location Co. SPT Values (blw/6 in) SPT Values (blw/6 in) Moisture Content (%) Sample Type Sample No % Sample No Moisture Content (% Elevation (ft) Elevation (ft) Profile Profile SOIL AND ROCK Depth (ft) recoven SOIL AND ROCK Depth (ft) Qu (tsf) Sample⁻ Qu (tsf) DESCRIPTION DESCRIPTION --BLIND DRILLING TO 28.5 FEET---868.1 Dense, brown fine to medium 10 NP SAND 20 1 16 30 24 366.1 Hard, brown CLAY LOAM 11 2 4.51 18 24 В 38 Very dense, brown SANDY LOAM 42 NP 3 8 50/4' 10 35 861.1 Medium dense to very dense, brown LOAM 18 NP 4 9 23 34 8 5 NP 9 10 15 40 16 9 6 NP 10 11 17 13 NP 9 7 18 20 45 18 13 8 2.50 11 12 2012301.GPJ WANGENG.GDT 1/11/12 Ρ 9 6 1.15 11 9 7 В 25 **GENERAL NOTES** WATER LEVEL DATA **♀** 28.00 ft Complete Drilling 05-24-2005 05-24-2005 Begin Drilling While Drilling PRECON DRILLING Drill Rig CME-75 ATV At Completion of Drilling DRY Drilling Contractor VANGENGINC NA Driller K&J Logger J. Kosloski Checked by N. Davis Time After Drilling Depth to Water NA Drilling Method 3.25-inch HSA Ţ The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.





WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

Client McDonough Associates Inc. Project Longmeadow Parkway over Fox River, Section Datum: NGVD Elevation: 896.46 ft North: 1993283.98 ft East: 992901.68 ft Station: 2151+21.83 Offset: 75.03R

The stratification lines represent the approximate boundary between soil types: the actual transition may be gradual.

Location Co. SPT Values (blw/6 in) SPT Values (blw/6 in) Moisture Content (%) Sample Typ Sample No Sample No Elevation (ft) Elevation (ft) Profile Profile Moistur Content (SOIL AND ROCK Depth (ft) SOIL AND ROCK Depth (ft) Qu (tsf) Qu (tsf) Sample DESCRIPTION DESCRIPTION --BLIND DRILLING TO 31 FEET---30 865.5 Dense, brown SANDY LOAM 18 NP 19 14 26 863.5 Medium dense to dense, brown LOAM 11 NP 2 14 13 10 35 18 11 NP 3 10 12 17 14 NP 4 11 15 15 40 19 8 5 NP 9 12 18 Very dense, brown GRAVELLY SAND, with cobbles 48 6 NP 5 28 20 45 26 Stiff, brown CLAY LOAM 21 21 7 1.97 12 В 29 348.5 Medium dense, brown **GRAVELLY SAND** 9 NP 13 8 7 25 WATER LEVEL DATA **GENERAL NOTES** ♀ 31.00 ft 05-27-2005 Complete Drilling 05-27-2005 Begin Drilling While Drilling PRECON DRILLING Drill Rig CME-75 ATV 48.00 ft Drilling Contractor At Completion of Drilling Driller S&J Logger T. Rickey Checked by N. Davis Time After Drilling NA NA Depth to Water Ţ

Drilling Method

3.25-inch HSA

Page 1 of 2



2012301.GPJ WANGENG.GDT WANGENGINC





WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

 Client
 McDonough Associates Inc.

 Project
 Longmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 896.65 ft North: 1993434.02 ft East: 992903.53 ft Station: 2151+22.75 Offset: 75.02L

Fa	ax: 630	-953-9938	Location		••••				C	o.		Offset: 75	.02L				
Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROC DESCRIPTION	Lepth X:	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	844.6 S	tiff, gray SILTY CLAY		X	21	8 9 17	NP	17									
	N N	Idelium dense to dense, gray nedium to coarse SAND	',		22	9 19 18	NP	14									
				X	23	8 8 10	NP	19									
	837.6 S	tiff, brown CLAY LOAM		X	24	5 8 10	1.48 B	12									
	831.6																
	Boring terminated at 65.00 ft																
			- - 70_ -														
1																	
			 75														
	1	CENE		Ωт	 Fe						\\/\T				٨		
Re		GENER				lling	n)4-14	-200)5	While Drilling			28 N	A)0 ft		
	illing Co	ontractor PRECON D	RILLIN	At Completion of Drilling	 ;		DI	RY		•••••							
Dri	iller	K&S Logger	J. Ka	sni	ck	Ch	ecked	by .	N. D	avis	Time After Drilling	NA	· · · · · · · · ·				•••••
Dri	illing Me	ethod 3.25-inch HSA									Depth to Water	NA NA					
											The stratification lines rep between soil types; the ac	resent the app tual transition	roxim mav b	ate bo e orac	oundary dual.	y	



2012301.GPJ WANGENG.GDT



WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

ClientMcDonough Associates Inc.ProjectLongmeadow Parkway over Fox River, Section

Location Co.

Datum: NGVD Elevation: 896.37 ft North: 1993283.24 ft East: 992950.28 ft Station: 2151+71.74 Offset: 75.04R

ofile	ତ୍ରି କୁଳି SOIL AND ROCK କିଲ୍ଲ	le Type	ole No.	Values /6 in)	Su Sf)	sture ant (%)	ofile	ation ft)	SOIL AND ROCK	ipth ff)	le Type	ole No.	Values /6 in)	дu sf)	sture int (%)
Pre		Sampl	Samp	SPT / (blw	0 2	Mois Conte	Pro	Elev	DESCRIPTION	De	Sampl	Samp	SPT \ (blw	0 Đ	Mois Conte
	845.9 Hard. grav CLAY LOAM														
			21	21	6.31	13									
	Very dense, brown, fine SAND			<u>63</u>	s										
	-			45											
			22	36 57	NP	14									
<u> </u>	840.9 Very dense, gray, medium to														
	coarse SAND		23	10	NP	10									
	Hard, gray CLAY LOAM			26											
	837.4														
	Very dense, gray SANDY LOAM		24	9 31 50/5"	5.82 B	11									
	835.9 Stiff to hard, gray CLAY LOAM														
	-		25	13	5.28	10									
	-			28	В										
	-														
			26	12 18 30	6.15 B	10									
	-														
	-														
	-														
	-														
			27	25 26 48	1.64 B	14									
				10											
	-		28	15	5.66	11									
	-			38	В										
	-														
			29	12 25 45	3.44 B	11									
	Boring terminated at 75.00 ft GENERAL N		ES						WATER		L D	AT	A		
Ве	gin Drilling 05-17-2005 Con	While Drilling	<u> </u>		25.5	50 ft									
Dr	illing Contractor PRECON DRILLIN	IG	. [Drill Rig	g(CME-	75 /	ATV	At Completion of Drilling	¥	•••••	D	RY	•••••	•••••
	Iller S&D Logger J.KO	SIOS	KI	Ch	ecked	by	N. D	avis	Time After Drilling	NA NA	•••••				
						••••			The stratification lines represent	sent the app	roxima	ate b	oundar	у	



WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

Client McDonough Associates Inc. Project Longmeadow Parkway over Fox River, Section Datum: NGVD Elevation: 896.44 ft North: 1993433.20 ft East: 992953.94 ft Station: 2151+71.88 Offset: 74.96L

Location Co. SPT Values (blw/6 in) SPT Values (blw/6 in) Moisture Content (%) Sample Type Sample No Sample No Moisture Content (% Elevation (ft) Elevation (ft) Profile Profile SOIL AND ROCK Depth (ft) SOIL AND ROCK Depth (ft) Qu (tsf) Sample⁻ Qu (tsf) DESCRIPTION DESCRIPTION --BLIND DRILLING TO 31 FEET--30 865.4 Dense, brown LOAM 20 NP 18 20 19 863.4 Dense, gray SILTY LOAM 10 NP 2 17 20 10 35 29 860.9 Very stiff, brown CLAY LOAM 10 3 2.50 16 10 Ρ 11 Dense to very dense, brown LOAM 12 NP 4 8 18 15 40 22 18 5 NP 9 20 36 18 NP 6 8 18 20 45 28 13 NP 9 21 25 29 NP 7 8 36 25 41 **GENERAL NOTES** WATER LEVEL DATA <u>⊻</u> < 31 05-24-2005 Complete Drilling 05-24-2005 Begin Drilling While Drilling PRECON DRILLING Drill Rig CME-75 ATV DRY At Completion of Drilling Drilling Contractor Driller K&J Logger J. Kosloski Checked by N. Davis Time After Drilling NA Depth to Water NA Drilling Method 3.25-inch HSA Ţ The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

Page 1 of 2



WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

 Client
 McDonough Associates Inc.

 Project
 Longmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 896.44 ft North: 1993433.20 ft East: 992953.94 ft Station: 2151+71.88 Offset: 74.96L

F	ax: 630-953-9938	Location					С	0.	I	Offset: 74.	96L			
Profile	SOIL AND R DESCRIPT	Depth Depth (ft) (ft) Sample Type	recovery Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No. SPT Values	(blw/6 in) Qu (tsf)	Moisture Content (%)
	843.4		9	12 15 24	NP	9								
	Very dense, gray GR SAND ^{840.9}	AVELLY 55	10	24 40 <u>30</u>	NP	12								
	838.4		11	9 18 <u>22</u>	NP	12								
	Very stiff, brown CLA		12	10 25 30	6.97 B	10								
			13	12 20 21										
	8 <u>31.4</u> Boring terminated at	65.00 ft	14											
		70												
			WATER	LEVE	LD									
Be	gin Drilling 05-24-20	005 Comple	te Dri	While Drilling	¥		< 31							
Dri	illing Contractor		 Jeki	Drill Riq		ME-	75 A	AIV avie	At Completion of Drilling	<u>¥</u>	•••••	DRY	• • • • • • • • • • • •	
Dri	illing Method 3 25-inch		1911	UN	euneu	ыу I	N. D		Depth to Water	NA	••••			
		·····	<u></u>						The stratification lines repres	ent the appr transition r	roxima nav b	ate bour e gradua	dary I.	



WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

Client McDonough Associates Inc. Project Longmeadow Parkway over Fox River, Section Datum: NGVD Elevation: 895.95 ft North: 1993281.71 ft East: 992998.91 ft Station: 2152+21.70 Offset: 75.00R



Page 1 of 1





WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

Location

ClientMcDonough Associates Inc.ProjectLongmeadow Parkway over Fox River, Section

Co.

Elevation: 895.42 ft North: 1993431.51 ft East: 993005.42 ft Station: 2152+22.07 Offset: 74.93L

Datum: NGVD

Profile	Elevation	E SOIL AND ROCK DESCRIPTION	Depth (ft) Sample Type	recovery Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROO DESCRIPTIO	CK the dept	Sample Type	Sample No. SPT Values	(blw/6 in) Qu (tsf)	Moisture Content (%)
	· · · · · · · · · · · · · · · · · · ·			21	20 29 47	NP	6								
		9.9	55	22	14 24 36	NP	10								
		Very stiff to hard, brown CLAY LOAM		23	8 10 <u>18</u>	3.12 B	12								
			60	24	10 14 23	4.35 B	11								
				25	15 22 37	3.12 B	10								
			65	26	13 14 24	3.12 B	10								
			70	27											
NGENG.GDT 1/11/12				28	16 18	5.17	9								
	1,820	Boring terminated at 75.00 ft			36	В									
301.G	leain	GENERA Drilling 05-16-2005		While Drilling			AIA 0.50	ft							
2012.) rilling	g Contractor PRECON DRI	LLING	At Completion of Drillir	 ng		DR	**							
	Driller	S&D Logger	J. Koslo	Time After Drilling	NA										
	Drilling	g Method 3.25-inch HSA								Depth to Water			te hour	Idary	
AN										between soil types; the a	ctual transition	may be	gradua	al.	





Client

BORING LOG S-027

WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

McDonough Associates Inc. Project Longmeadow Parkway over Fox River, Section Datum: NGVD Elevation: 895.25 ft North: 1993279.32 ft East: 993047.58 ft Station: 2152+71.77 Offset: 75.00R

Location Co. SPT Values (blw/6 in) SPT Values (blw/6 in) Moisture Content (%) Sample Type Sample No Sample No Elevation (ft) Moisture Content (% Elevation (ft) Profile Profile SOIL AND ROCK Depth (ft) SOIL AND ROCK Depth (ft) Qu (tsf) Sample⁻ Qu (tsf) DESCRIPTION DESCRIPTION 12 8.53 11 9 23 В 32 12 18 6.97 10 20 S 25 4.50 13 21 24 Very dense, brown SANDY 50/4" Ρ LOAM 22 NP 12 32 50/5" 60 834 7 Very dense, brown, medium to coarse SAND 11 NP 23 10 32 833.0 27 Hard, brown CLAY LOAM 16 9.59 26 10 24 В 34 Boring terminated at 65.00 ft 70 75 WATER LEVEL DATA **GENERAL NOTES** ∑ 26.50 ft 04-13-2005 Complete Drilling 04-13-2005 Begin Drilling While Drilling PRECON DRILLING Drill Rig CME-75 ATV DRY **Drilling Contractor** At Completion of Drilling NA Driller K&S Logger Y. Shiu Checked by N. Davis Time After Drilling Depth to Water NA Drilling Method 3.25-inch HSA Ţ The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



WEI Job No.: 201-23-01

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Client McDonough Associates Inc. Project Longmeadow Parkway over Fox River, Section Datum: NGVD Elevation: 894.59 ft North: 1993429.04 ft East: 993056.38 ft Station: 2152+71.77 Offset: 74.99L

Location Co. SPT Values (blw/6 in) SPT Values (blw/6 in) Moisture Content (%) Moisture Content (%) Sample Type Sample No Sample No Elevation (ft) Elevation (ft) Profile Profile SOIL AND ROCK Depth (ft) recoven SOIL AND ROCK Depth (ft) Qu (tsf) Sample⁻ Qu (tsf) DESCRIPTION DESCRIPTION --BLIND DRILLING TO 33.5 FEET---30 861.1 Medium dense to very dense, 14 NP 19 brown SILTY LOAM 23 10 35 43 17 NP 2 19 26 27 18 NP 3 20 12 15 40 9 854.1 Medium dense to very dense, brown LOAM 7 4 NP 9 11 15 --A-4 (0)--12 GRAVEL=8.5% NP 5 8 18 SAND=39.3%45 20 22 SILT=39.8% CLAY=12.5% 6 NP 7 16 29 7 NP 8 50/4 50 25 WATER LEVEL DATA **GENERAL NOTES** ⊻ < 33.5 05-25-2005 Complete Drilling 05-25-2005 Begin Drilling While Drilling PRECON DRILLING Drill Rig CME-75 ATV 39.00 ft At Completion of Drilling Drilling Contractor Ţ Driller K&J Logger J. Kosloski Checked by N. Davis Time After Drilling NA NA Drilling Method 3.25-inch HSA Depth to Water Ţ The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



WEI Job No.: 201-23-01

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 Client
 McDonough Associates Inc.

 Project
 Longmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 894.59 ft North: 1993429.04 ft East: 993056.38 ft Station: 2152+71.77 Offset: 74.99L

F	ax: 630)-953-9938	ation					C	0.	ا ······	Offset: 74	.99L				
Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft) Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROC DESCRIPTION	Depth X	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
				8	27 38 <u>36</u>	NP	8									
21		/ery dense, gray SANDY LOAM	55	9	40 '50/4"	NP	8									
	: <u>838.1</u> E S	Dense to very dense, moist, gray SILTY LOAM		10	34 36 41	NP	11									
	834.1	/ery dense, gray SANDY LOAM	60	11	13 15 25	NP	14									
				12	14 23 28	NP	10									
	828.1		65_ -	13	30 50/4"-	NP	8									
		/ery stiff to hard, brown CLAY .OAM		14	12	4.02	11									
12			70		20 28	В										
ANGENG.GDI 1/11	819.6		75	15	13 20 27	3.53 B	12									
≥ G	E	Boring terminated at 75.00 ft														
301.G	ain Dri)5	While Drilling			417 < 33	35								
2012 DI	illing C	ontractor PRECON DRIL	LING	וויט <i>,</i>]	Drill Ric	, C	CME-	75 /	ATV	At Completion of Drilling	_ `. ₽	3	9.00	0 ft	•••••	•••••
	iller	K&J Logger J.	Time After Drilling	NA	····· ·				•••••							
Dr	illing M	lethod 3.25-inch HSA								Depth to Water	NA	· · · · <u>·</u>				
NAN NAN										The stratification lines rep between soil types: the ac	resent the app ual transition	roxima mav be	te bou aradi	undary lual.		



WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

Client McDonough Associates Inc.

Datum: NGVD Elevation: 893.53 ft North: 1993276.08 ft East: 993099.74 ft Station: 2153+25.41 Offset: 74.68R

Project Longmeadow Parkway over Fox River, Section

Location Co.





WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

Client McDonough Associates Inc. Project Longmeadow Parkway over Fox River, Section Datum: NGVD Elevation: 893.53 ft North: 1993276.08 ft East: 993099.74 ft Station: 2153+25.41 Offset: 74.68R

Location Co. SPT Values (blw/6 in) les Moisture Content (%) Sample Type Sample No Sample No SPT Value (blw/6 in) Moisture Content (% Elevation (ft) Elevation (ft) Profile Profile SOIL AND ROCK Depth (ff) SOIL AND ROCK Depth (ft) Qu (tsf) Qu (tsf) Sample DESCRIPTION DESCRIPTION NP 7 7 52 50/4 340.0 8 Hard, brown CLAY LOAM 50/1" 55 13 5.74 10 18 В 25 16 5.82 10 0 26 29 В 60 16 8.94 10 27 30 В Very dense, fine to coarse SAND 26 NP 12 14 46 Hard, brown CLAY LOAM 65 24 11 13 5.90 10 22 В 43 15 28 10.25 10 14 50/5" В Boring terminated at 70.00 ft 2012301.GPJ WANGENG.GDT 1/11/12 75 WATER LEVEL DATA **GENERAL NOTES** <36 06-27-2005 Complete Drilling 06-27-2005 Begin Drilling While Drilling PRECON DRILLING Drill Rig CME-75 ATV DRY At Completion of Drilling Drilling Contractor VANGENGINC Driller K&J Logger J. Kasnick Checked by N. Davis Time After Drilling NA Depth to Water NA Drilling Method 3.25-inch HSA Ţ The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.








WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

Client McDonough Associates Inc. Project Longmeadow Parkway over Fox River, Section Datum: NGVD Elevation: 892.54 ft North: 1993281.02 ft East: 993125.15 ft Station: 2153+50.96 Offset: 67.68R Page 2 of 2

Location Co. SPT Values (blw/6 in) les Moisture Content (%) Sample Type Sample No Sample No SPT Value (blw/6 in) Moisture Content (% Elevation (ft) Elevation (ft) Profile Profile SOIL AND ROCK Depth (ft) SOIL AND ROCK Depth (ft) Qu (tsf) Qu (tsf) Sample DESCRIPTION DESCRIPTION 31 NP 11 38 35 Dense, gray, medium to coarse SAND 8 20 NP 13 55 16 836.0 11 Hard, gray CLAY LOAM 23 10.25 13 25 32 В Dense to very dense, gray, fine to coarse SAND 8 NP 16 36 60 50/5 9 NP 16 25 46 50/5.5 Hard, gray CLAY LOAM 14 26 7.63 10 18 В 65 23 14 27 7.71 10 31 В 31 15 20 28 4.51 11 В 30 Boring terminated at 70.00 ft 2012301.GPJ WANGENG.GDT 1/11/12 75 WATER LEVEL DATA **GENERAL NOTES** ∑ 28.50 ft 06-09-2005 Complete Drilling 06-10-2005 Begin Drilling While Drilling PRECON DRILLING Drill Rig CME-75 ATV DRY At Completion of Drilling Drilling Contractor VANGENGINC Driller S&B Logger T. Rickey Checked by N. Davis Time After Drilling NA NA Drilling Method 3.25-inch HSA Depth to Water Ţ The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

 Client
 McDonough Associates Inc.

 Project
 Longmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 893.44 ft North: 1993429.36 ft East: 993171.77 ft Station: 2153+83.70 Offset: 84.30L Page 1 of 2

	ω		
Profile Profile Profile Profile Profile Profile Profile Profile (fi) (fi)	Depth XX	Sample No. SPT Values (blw/6 in) Qu (tsf)	Moisture Content (%)
B92.8 ^{8-inch thick brown LOAM TOPSOIL BLIND DRILL TO 38.5 FEET 5_ 5_ }	- - - - - - - - - - - - - - - - - - -		
10 10	AM	1 9 16 22	17
B50.4 Very stiff, gray CLAY LO		2 3 3.50 <u>12</u> B	15
	45	3 4 6 2.25 15 S	13
LOAM	wn	4 10 16 24	9
	50	5 25 NP 30	11
GENERAL NOTES WAT	ER LEVEL D		
Begin Drilling	<u> </u>	48.00 ft	
Drilling Contractor PRECON DRILLING Drill Rig CME-75 ATV At Completion of Drillin	g ¥	DRY	•••••
Zoriller K&J Logger J. Kasnick Checked by N. Davis Time After Drilling	NA		
Billing Method 3.25-inch HSA Image: Second statistication lines reserved and the stratification lines reserved.	Present the approximation	ate boundary	
The stratification lines re	present the approximation may be	ate boundary	



WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

2012301.GPJ WANGENG.GDT 1/11/12

WANGENGINC

Client McDonough Associates Inc. Project Longmeadow Parkway over Fox River, Section Datum: NGVD Elevation: 893.44 ft North: 1993429.36 ft East: 993171.77 ft Station: 2153+83.70 Offset: 84.30L

Location Co. SPT Values (blw/6 in) SPT Values (blw/6 in) Moisture Content (%) Sample Type Sample No Sample No Elevation (ft) Moisture Content (% Elevation (ft) Profile Profile SOIL AND ROCK Depth (ft) SOIL AND ROCK Depth (ft) Qu (tsf) Qu (tsf) Sample DESCRIPTION DESCRIPTION 13 NP 7 17 31 18 30 NP 7 55 48 11 NP 10 27 43 Dense, brown GRAVELLY SAND 9 NP 17 15 60 28 832.9 Very stiff to hard, brown and gray CLAY LOAM 8 10 7.22 10 13 В 21 5 12 4.18 10 В 65 30 6 2 4.10 12 11 В 19 6 13 3.12 11 29 57 S Boring terminated at 70.00 ft 75 WATER LEVEL DATA **GENERAL NOTES ∑** 48.00 ft 06-24-2005 Complete Drilling 06-24-2005 Begin Drilling While Drilling PRECON DRILLING Drill Rig CME-75 ATV DRY At Completion of Drilling Drilling Contractor NA Driller K&J Logger J. Kasnick Checked by N. Davis Time After Drilling NA Drilling Method 3.25-inch HSA Depth to Water Ţ The stratification lines represent the approximate boundary between soil types: the actual transition may be gradual.

Page 2 of 2



WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

McDonough Associates Inc. Client

Datum: NGVD Elevation: 888.93 ft North: 1993266.95 ft East: 993193.10 ft Station: 2154+21.74 Offset: 75.01R

Project Longmeadow Parkway over Fox River, Section

Location Co.





WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 ~~ ~~~ ~~~

Client McDonough Associates Inc. Project Longmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 888.93 ft North: 1993266.95 ft East: 993193.10 ft Station: 2154+21.74 Offset: 75.01R

	Fax: 63	0-953-9938	Location	••••				С	o.		Offset: 75	.01R				
Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft) Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROC DESCRIPTION	Depth X	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	838.4 837.4	∟oose, gray, medium SAND Very stiff to hard, brown CLAY ∟OAM		6	2 4 6	6.31 B	11									
			55	7	5 20 21	3.69 B	11									
	830.9			8	10 22 30	9.10 B	10									
		√ery dense, brown, fine SANI		9	18 50/4"	NP	14									
				10	25 49 50/3"	NP	16									
	823.4		65	11	23 47 <u>50/5</u> "	NP	13									
		Hard, brown CLAY LOAM		12	14 25 29	5.66 B	10									
	818.9	Boring terminated at 70.00 ft	70	13	12 19 <u>30</u>	5.82 B	10									
BDT 1/11/12																
PJ WANGENG.(CENE		Fe									<u>лт</u>	^		
301.G	Regin Dr	illing 06-27-2005			ling	0	6-27	-200)5	While Drilling			50 /			
2012 1	Drillina C	Contractor PRECON DI	RILLING	ווי <i>ם .</i> 1	Drill Ric	, C	CME-	75 A		At Completion of Drilling	÷		D	RY	• • • • • • • • •	•••••
	Driller	S&J Logger	J. Kasni	ck	Ch	ecked	by I	N. D	avis	Time After Drilling	NA	•••••		· · · · · · · ·		• • • • • •
	Drilling N	Nethod 3.25-inch HSA								Depth to Water	<u>' NA</u>					
WAN										The stratification lines rep between soil types: the ac	resent the app tual transition	roxima mav be	ate b	oundary dual.	/	





WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

 Client
 McDonough Associates Inc.

 Project
 Longmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 892.79 ft North: 1993416.30 ft East: 993209.87 ft Station: 2154+21.77 Offset: 74.99L

F	ax: 630-953-9938	Lo	cation				С	o.	۱ 	Offset: 74.	99L				
Profile	Elevation (III) SOIL A DESC	ND ROCK CRIPTION	Depth (ft) Sample Type recovery Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	
			21	20 29 34	NP	8									
	837.3		55222	17 30 50/3"	NP	8									
	Very dense, b SAND	rown GRAVELLY	23	31 45 60/4"	NP	13									
			60224	20 43 30	NP	17									
	Base, gray SILTY LOAM														
	827.3 Very dense, g	ray GRAVELLY	65225	11 16 22	NP	11									
	SAND 824.8 Hard, brown (CLAY LOAM	226	19 50 <u>50</u>	NP	6									
	822.8 Boring termin	ated at 70.00 ft	70 27	, 18 14 25	4.00 P	10									
3.GDI 1/11/12															
			75												
- 10 - 1		GENERA	L NOTES	5			000		WATER						
E2102 E	egin Drilling	DRECON DPI	Complete Dr	illing	0	15-27 ME	-200	15 \T\/	While Drilling	<u>⊻</u>	2	9.00 ft	•••••	••••	
	iller K		LLING J. Kosloski	Ch Ch	ecked	by I	13 F N. D	avis	Time After Drilling	 NA		עזא	•••••	••••	
	illing Method 3.2	5-inch HSA		011					Depth to Water	NA	••••				
VANC									The stratification lines repre- between soil types: the actua	sent the appr al transition r	roximat nav be	e boundar gradual.	у		





Location

BORING LOG S-035

WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

McDonough Associates Inc.

Co.

Project Longmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 887.63 ft North: 1993266.09 ft East: 993241.61 ft Station: 2154+71.26 Offset: 70.08R





Location

BORING LOG S-036

WEI Job No.: 201-23-01

Co.

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

ClientMcDonough Associates Inc.ProjectLongmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 892.13 ft North: 1993410.05 ft East: 993260.75 ft Station: 2154+71.77 Offset: 74.99L

	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft) Sample Tvpe	sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	SPT Values (hlw/6 in)	Qu (tsf)	Moisture Content (%)
		1	0-inch thick, brown LOAM													
		891.3	TOPSOIL	-/=								-				
												-				
			BLIND DRILLING TO 4	1 -								_				
			FEET													
				-								-				
				5								30				
				-								-				
				_								_				
				-								_				
				-								-				
				-								-				
				-								_				
				10								35				
				-								-				
				-								-				
				-								_				
				_								_				
				-								_				
												-				
				15								40				
				_						851.1						
				-						CL	AY LOAM	10	X	1 9	3.50	20
				-								-		16	В	
				-						849.1 Dei	nse to very dense, browr					
				_						LO	AM	-	\bigvee	_ 16		
				20								45	\wedge	2 20 26	NP	8
												-				
				-					$\langle \rangle$			_				
112				_								-	Х	3 24 21	NP	7
1/11				-					$\langle \rangle$			-		30	-	
GDT												-				
0 ENG				-								-	X	4 32	NP	7
WAN				25_								50_	\square	40	_	
GPJ-		·	GENERA		TES	;	·				WATER	R LEVE		TA		·
12301	Be	gin Dril	lling 06-22-2005	Compl	lete Dri	lling)6-23	-200)5	While Drilling	<u> </u>	5	8.00 f		
IC 20	Dri	lling Co	ontractor PRECON DRI	LLING		Drill Rig	g	CME-	75 A	TV	At Completion of Drilling	¥	2	8.50 f		•••••
NGIN	Dri	ller	S&J Logger J	. Kosl	IOSKI	Ch	ecked	by	N. D	avis	Time After Drilling	NA	••••			
ANGE	Dri	lling M	etnoa 3.25 -inch HSA				•••••			•••••	Depth to Water The stratification lines repres	ent the appr	 oximat	e bounda	ary	
2I											between soil types: the actua	I transition r	nav he	Isubern	-	



WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

WANGENGINC 2012301.GPJ WANGENG.GDT 1/11/12

 Client
 McDonough Associates Inc.

 Project
 Longmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 892.13 ft North: 1993410.05 ft East: 993260.75 ft Station: 2154+71.77 Offset: 74.99L

F	ax: 630-9	953-9938	ocation		•••••			С	0.	 	Offset: 74	.99L				
Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft) Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCH DESCRIPTION	Depth	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	841.6 HA CC	ARD DRILLING THROUGH DBBLES AND BOULDERS		5	5 <u>9/</u> 4*	. NP	1									
0 0 0 0 0				6	52 50 <u>/</u> 5"											
0 0 0 0	833.6		 	7	70 52 50/3"											
	Sti	iff to hard, gray CLAY LOAM	60	8	22 22 35											
				9	12 10 18											
			65	10	10 13 26	4.50 B	10									
				11	35 31 <u>42</u>	> 4.50 P	11									
	822.1 Bo	pring terminated at 70.00 ft		12	14 23 34	4.25 B	11									
			75													
	1	GENER		L ES	 }					WATE	R LEVF	L D	AT	A		-
Be	gin Drillir	ng 06-22-2005	Complete	e Dri	lling	0)6-23	-200)5	While Drilling	<u> </u>		58.0)0 ft		
Dri	illing Cor	ntractor PRECON DR	ILLING	I	Drill Rig	g C	CME-	75 A	TV.	At Completion of Drilling	Y		28.5	50 ft		
Dri	iller	S&J Logger	J. Koslo	ski	Ch	ecked	by 👖	1. D	avis	Time After Drilling	NA	•••••				
Dri	IIIng Met	thoa 3.25 -inch HSA					•••••		•••••	Depth to Water	esent the app	roxima	ate be	oundary	/	—
										Detween son types; the actual son types;	iai transition	may be	e gra	uual.		

Page 2 of 2



WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

ClientMcDonough Associates Inc.ProjectLongmeadow Parkway over Fox River, Section

Location Co.

Datum: NGVD Elevation: 886.19 ft North: 1993254.42 ft East: 993289.68 ft Station: 2155+21.74 Offset: 75.09R

L																		
	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		1 885.4	0-inch thick, brown LOAM	-														
Γ			TOPSC BLIND DR										-	1				
				-									-	{				
				-									-	1				
				1										1				
				5									30	-				
				-										1				
				-									-	1				
				-									-	{				
				-									-	1				
				-									-					
				10									35					
				-														
				-									-	1				
				_									-	1				
				-									-	-				
				-									-	1				
				15									40					
				-							845.2			-				
				-						17	Stif	f, brown CLAY LOAM		\mathbb{N}		5	1 72	12
				-									-	\square	'	5 8	B	15
				-									-	1				
				-						23			-	\mathbb{N}	2	6	1.64	13
				20						F.F.			45_		-	7 <u>10</u>	B	15
				-							840.7 Me	dium dense, brown LOAN	1					
				-										╢	3	9	NP	17
1/11/12				-									-	\square		12		
GDT				-							838.2 Stif	ff to very stiff, brown CLAY	·					
GENG.				-							LO	AM	-	\mathbb{N}	4	5	1.48	12
WANG				25_						17			50_	\mathbb{Z}		8	В	
1.GPJ		•	GENEI	RAL N	ОТ	ES						WATER	LEVE	LD	AT	Ά		-
01230	Be	gin Dril	lling 06-28-2005		plete	Dril	ling)6-28 `M⊏	-200	5	While Drilling	<u>₹</u>		35.(74 4	00 ft	•••••	•••••
SINC 2	Dri	ller	K&J Logaer	K. And	lers	. ∟ on	Chi Chi	ecked	by I	N. Da	avis	Time After Drilling	 NA		<u>(].</u>			•••••
GENG	Dri	lling Me	ethod 3.25 -inch HSA									Depth to Water	NA					
VAN												The stratification lines represe between soil types: the actual	ent the app transition	proxim may b	ate b	oundar	у	



BORING LOG S-037

WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

McDonough Associates Inc.

Project Longmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 886.19 ft North: 1993254.42 ft East: 993289.68 ft Station: 2155+21.74 Offset: 75.09R







WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

 Client
 McDonough Associates Inc.

 Project
 Longmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 889.93 ft North: 1993402.90 ft East: 993311.44 ft Station: 2155+21.73 Offset: 74.97L

F	ax: 630-953-9938	Location .					C	0.	·····	Offset: 74.	.97L				
Profile	SOIL AND ROCK	Depth (ft) Sample Type	sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SP1 Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	Medium dense to very dense brown GRAVELLY SAND	,	21	40 <u>59</u>	NP	14									
		55	22	10 2 12	NP	19									
	Very stiff to hard, brown CLA LOAM	Y I	23	16 26 40	10.25 S	10									
		60	24	9 17 <u>28</u>	7.22 B	11									
			25	9 12 28	3.28 S	10									
		65	26	16 19 <u>43</u>	9.02 S	10									
			27	14 20 <u>35</u>	9.84 B	10									
		70	28	15 35 <u>43</u>	8.28 B	10									
.GDT 1/11/12			29	17 29 <u>42</u>	7.87 B	10									
.GPJ WANGENG	Boring terminated at 75.00 ft GENE	75 RAL NOT	30 1 1 ES	10 26 43	9.02 B	11			WATE	R LEVE					
Be	egin Drilling 05-31-2005	Comple	te Dri	lling	0)5-31	-200)5	While Drilling	<u>¥</u>		26.0	0 ft		
02 Dr	illing Contractor PRECON D	RILLING		Drill Riç	g	CME-	75 /	ATV	At Completion of Drilling	¥		DR	RY		
NION _	iller K Logger	J. Koslo	ski	Ch	ecked	by .	N. D	avis	Time After Drilling	NA	•••••				
Dr Dr	Illing Method 3.25-inch HSA			•••••			• • • • • • •	•••••	Depth to Water	sent the app	roxima	te bo	undary	,	
≤L	·····	<u></u>							Detween son types; the actual	<u>ii transition r</u>	nay be	e grad	ual.		



2012301.GPJ WANGENG.GDT



BORING LOG S-039

WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

McDonough Associates Inc.

Project Longmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 884.34 ft North: 1993246.66 ft East: 993337.74 ft Station: 2155+71.74 Offset: 75.38R



Page 2 of 2



WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

 Client
 McDonough Associates Inc.

 Project
 Longmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 888.27 ft North: 1993400.98 ft East: 993362.26 ft Station: 2155+70.91 Offset: 80.88L

Big Big SolLAND ROCK Big		Fa	ax: 630-95	53-9938	Location						С	o.		Offset: 80	.88L				
	Drofilo	Profile	Elevation (ft)	SOIL AND ROCH DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND RO DESCRIPTIO	CK ded N	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
15 40 20 45 21 22 22 47 23 06-23-2005 Medium dense, brown, medium 57 20 47 20 20 21 47 22 47 23 06-23-2005 Complete Drilling 06-23-2005 Milling Contractor PRECON DRILLING Drilling Contractor PRECON DRILLING Drilling Method			887.86-ind	DESCRIPTION	SOIL/ TO 46 EET 10 10 10 10 10 	Sampl	Samp	SPT V (blw)		Conte	Pro		DESCRIPTIO	N	Sampl	Samp	SPT V (blw)	(11 0	Conte
Construction GENERAL NOTES WATER LEVEL DATA Begin Drilling 06-23-2005 Complete Drilling 06-23-2005 While Drilling ✓ 48.00 ft Drilling Contractor PRECON DRILLING Drill Rig CME-75 ATV At Completion of Drilling ✓ DRY Driller K&J Logger J. Kasnick Checked by N. Davis Time After Drilling NA Drilling Method 3.25-inch HSA Depth to Water ¥ NA	VANGENG.GDT 1/11/12				15 20 							842.3 Ver 840.3 Me SA	ry dense, brown LOA dium dense, brown, r ND	40_ - - 45_ M - - - - - - - - - - - - - - - - - -		1	57 59/3* 4 7 10	1.75 P NP	12 20
Begin Drilling 06-23-2005 Complete Drilling 06-23-2005 While Drilling ☑ 48.00 ft Drilling Contractor PRECON DRILLING Drill Rig CME-75 ATV At Completion of Drilling ☑ DRY Driller K&J Logger J. Kasnick Checked by N. Davis Time After Drilling NA Drilling Method 3.25-inch HSA Depth to Water ☑ NA	GPJ			GEN	ERAL N	ОТ	ES						WAT	ER LEVE		AT.	A		
Drilling Contractor PRECON DRILLING Drill Rig CME-75 ATV At Completion of Drilling Time After Drilling DRY Driller K&J Logger J. Kasnick Checked by N. Davis Time After Drilling NA Drilling Method 3.25-inch HSA Depth to Water Y NA The stratification lines represent the approximate boundary The stratification lines represent the approximate boundary	2301.	Be	gin Drilling	06-23-2005		plete	e Dril	ling	0	6-23	-200)5	While Drilling	<u> </u>		8.0	00 ft		
Zord Weight W	C 201	Dri	illing Contr	actor PRECON	DRILLIN	G	[Drill Rig	gC	ME-	75 A	TV.	At Completion of Drillin	ng <u>¥</u>		DF	RY		
Billing Method 3.25-inch HSA Depth to Water Y NA The stratification lines represent the approximate boundary	NGIN	Dri	iller	K&J Logger	J. Ka	sni	ck	Ch	ecked	by _l	N. D	avis	Time After Drilling	NA	•••••				
> hoterson call times the actual transition may be actual	VANGE	Dri	illing Metho	od 3.25-inch HSA									Depth to Water The stratification lines re	Present the appresent the appr	proxima	te bo	oundary	/	





WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

Client McDonough Associates Inc. Project Longmeadow Parkway over Fox River, Section Datum: NGVD Elevation: 883.35 ft North: 1993239.03 ft East: 993380.77 ft Station: 2156+16.62 Offset: 75.57R

Location Co. SPT Values (blw/6 in) SPT Values (blw/6 in) Moisture Content (%) Sample Type Sample No % Sample No Moisture Content (% Elevation (ft) Elevation (ft) Profile Profile SOIL AND ROCK Depth (ft) SOIL AND ROCK Depth (ft) Qu (tsf) Sample⁻ Qu (tsf) DESCRIPTION DESCRIPTION 882.87-inch thick brown LOAM --TOPSOIL---BLIND DRILLING TO 43.5 FEET---30 10 35 15 40 839.9 Stiff, gray CLAY LOAM 8 1.64 12 7 В 20 45 7 Medium dense, gray SANDY LOAM, gravelly NP 2 10 5 2012301.GPJ WANGENG.GDT 1/11/12 10 Stiff to hard, gray CLAY LOAM 3 1.89 13 3 6 В 25 WATER LEVEL DATA **GENERAL NOTES** ⊊ 45.50 ft 06-27-2005 Complete Drilling 06-28-2005 Begin Drilling While Drilling PRECON DRILLING Drill Rig CME-75 ATV DRY At Completion of Drilling Drilling Contractor VANGENGINC K&J Logger J. Kasnick Checked by N. Davis Time After Drilling NA Driller Depth to Water NA Drilling Method 3.25-inch HSA Ţ The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

Page 1 of 2



BORING LOG S-041

WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

McDonough Associates Inc.

Project Longmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 883.35 ft North: 1993239.03 ft East: 993380.77 ft Station: 2156+16.62 Offset: 75.57R







BORING LOG S-042

WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

McDonough Associates Inc.

Project Longmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 887.46 ft North: 1993386.44 ft East: 993394.74 ft Station: 2156+04.47 Offset: 71.99L







BORING LOG S-043

WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

McDonough Associates Inc.

Project Longmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 881.09 ft North: 1993229.86 ft East: 993437.70 ft Station: 2156+74.36 Offset: 74.41R

Location Co. SPT Values (blw/6 in) SPT Values (blw/6 in) Moisture Content (%) Sample Type % Sample No Sample No Moisture Content (% Elevation (ft) Elevation (ft) Profile Profile SOIL AND ROCK Depth (ft) SOIL AND ROCK Depth (ft) Qu (tsf) Sample⁻ Qu (tsf) DESCRIPTION DESCRIPTION 10.25 10 11 В 28 12 25 38 1.50 12 22 Ρ 55 22 23 9.43 11 30 В 35 21 31 10.25 10 24 В 60 50/5' 15 25 8.20 10 27 В 35 19 26 23 2.30 12 В 65 35 17 27 4.00 11 25 Р 33 15 21 28 10.25 9 В 70 25 9 29 4.35 11 13 1/11/12 В 21 2012301.GPJ WANGENG.GDT 18 30 2.75 12 22 В 35 Boring terminated at 75.00 ft WATER LEVEL DATA **GENERAL NOTES ∑** 28.00 ft 06-06-2005 Complete Drilling 06-07-2005 Begin Drilling While Drilling PRECON DRILLING Drill Rig CME-75 ATV DRY At Completion of Drilling Drilling Contractor WANGENGINC Driller S&J Logger W. Wang Checked by N. Davis Time After Drilling NA NA Drilling Method 3.25-inch HSA Depth to Water Ţ The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

McDonough Associates Inc. Client

Datum: NGVD Elevation: 886.34 ft North: 1993382.60 ft East: 993471.09 ft Station: 2156+79.89 Offset: 81.83L

Project Longmeadow Parkway over Fox River, Section

Location Co.





WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

Client McDonough Associates Inc.

Project Longmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 886.34 ft North: 1993382.60 ft East: 993471.09 ft Station: 2156+79.89 Offset: 81.83L

F	ax: 630-9	953-9938	Location				С	o.	I	Offset: 81	.83L			
Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft) Sample Type recovery Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No. SPT Values (blw/6 in)	, Qu (tsf)	Moisture Content (%)
			3	6 18 23	5.74 B	11								
			554	15 29 33	6.07 B	10								
			5	14 24 34										
			606	13 20 26	4.51 B	11								
			7	13 20 27	5.41 B	10								
			658	11 20 29	9.43 B	10								
			9	13 27 32	6.89 B	11								
			70110	13 23 35	4.84 B	10								
3.GDI 1/11/12				11 19 39	7.79 B	10								
	811.3 BO	ring terminated at 75.00 ft GENE	TE NOTES	2 17 25 38 3 8	4.35 B	10			WATEF	R LEVE				
05210 ■	egin Drillir	ng 06-17-2005	Complete Di	rilling	0	6-17	-200)5	While Drilling	<u>¥</u>	4	5.00 ft		•••••
Dr Dr Z	illing Con iller	Itractor PRECONE	J. Kasnick	Drill Rig	ecked	-WE و	(5 A N. D	ALV	At Completion of Drilling	<u>Ψ.</u> ΝΔ		DRY	• • • • • • • • • • •	•••••
	illing Met	hod 3.25-inch HSA		01		~y		·····	Depth to Water	NA	•••••			
MAN									The stratification lines repre- between soil types; the actua	ent the app I transition	roxima may be	te bounda gradual.	iry	



WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

Client McDonough Associates Inc. Project Longmeadow Parkway over Fox River, Section Datum: NGVD Elevation: 877.76 ft North: 1993170.83 ft East: 993484.14 ft Station: 2157+30.61 Offset: 124.18R

Location Co. SPT Values (blw/6 in) SPT Values (blw/6 in) Moisture Content (%) Moisture Content (%) Sample Typ Sample No Sample No Elevation (ft) Elevation (ft) Profile Profile SOIL AND ROCK Depth (ft) SOIL AND ROCK Depth (ft) Qu (tsf) Sample⁻ Qu (tsf) DESCRIPTION DESCRIPTION --BLIND DRILLING TO 47 FEET---30 10 35 15 40 20 45 6 9 8.36 11 830.8 Hard, brown CLAY LOAM В 14 5 2 7.38 10 10 В 25 16 **GENERAL NOTES** WATER LEVEL DATA ♀ 46.00 ft Complete Drilling 06-03-2005 06-02-2005 Begin Drilling While Drilling PRECON DRILLING Drill Rig CME-75 ATV 37.50 ft At Completion of Drilling Drilling Contractor Driller S&J Logger T. Rickey Checked by N. Davis Time After Drilling NA Depth to Water NA Drilling Method 3.25-inch HSA Ţ The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

Client McDonough Associates Inc.

Project Longmeadow Parkway over Fox River, Section
Location Co.

Datum: NGVD Elevation: 877.76 ft North: 1993170.83 ft East: 993484.14 ft Station: 2157+30.61 Offset: 124.18R

Г	1			1,	บไ			-	<u> </u>				(J)	. 1			-
;	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	sample Type recovery Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCH DESCRIPTION	Depth (ff)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
F	N			-													
ł				1		12											
F				-//	3	16	9.02 B	10									
ĺ				Ť.		24											
ł				+													
ľ		1		55	4	15	5.74 B	10									
Į,				-		41											
ł		1		1		12											
Į,		1			5	13	7.54 B	11									
ł				-		32											
ĺ				+													
Į,					6	13	6.81 B	10									
K	1			- 00													
ĺ				1													
ł					7	18	5.90 B	11									
ľ		1		-		21											
Į,	ł			+													
ł	11			65	8	13	4.84 B	11									
ļ		1		-		20											
ł				1		20											
ĺ					X 9	29 25	NA	13									
Į,				-		- 31											
ł	\mathcal{V}			1		10											
ł					X 10	23	8.36 B	10									
ł				/0 <u>/</u>		20											
		1		1													
112					X 11	24	10.25 B	10									
Ę	1			-													
GG.GD				+		40											
ANGE		802.8		75	12	43 27 21	9.84 B	11									
≩⊢ ⊒	<u></u>	Bo	pring terminated at 75.00 f												^		
301.G	Reg	ain Drillin	06-02-2005		lete Dr	illina	ſ)6-03	-200)5	While Drilling	<u>v Leve</u> V	ע בו. ⊿	H I /	A)0 ft		
2012	Dril	lling Cor	ntractor PRECON)	Drill Rig		CME-	75 A	ΛTV	At Completion of Drilling	Ţ	3	37.5	50 ft	•••••	•••••
GINC	Dril	ller	S&J Logger	T. Ric	:key	Ch	ecked	by I	N. D	avis	Time After Drilling	NA					
NGEN	Dril	lling Met	thod 3.25-inch HSA			•••••					Depth to Water	NA		1. 1			
WAN											I he stratification lines repre-	esent the app al transition	roxima may be	ate bo	oundary dual	/	







Location

BORING LOG S-047

WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

Client McDonough Associates Inc.

Project Longmeadow Parkway over Fox River, Section

Co.

Datum: NGVD Elevation: 875.35 ft North: 1993149.18 ft East: 993509.49 ft Station: 2157+59.42 Offset: 140.95R





WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

Client McDonough Associates Inc.

Project Longmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 875.35 ft North: 1993149.18 ft East: 993509.49 ft Station: 2157+59.42 Offset: 140.95R

F	ax: 63	0-953-9938	L	ocation		•••••			С	o.		Offset: 14	0.95R			
Profile	Elevation (ft)	SOIL A DESC	ND ROCK RIPTION	Depth (ft) Sample Tvpe	recovery Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROO DESCRIPTIO	Depth X	Sample Type	Sample No. SPT Values /htw/6 in/	Qu (tsf)	Moisture Content (%)
					21	12 19 24	7.38 B	10								
				55	22	7 14 23	7.05 B	10								
					23	14 18 5 <u>0/4</u> "	10.25 B	11								
				60	24	26 31 <u>35</u>	> 4.50 P	13								
					25	9 15 27	6.56 B	11								
				65	26	_10 50/2*	5.74 B	11								
					27	9 26 26	5.82 B	10								
	805.4 E	Boring termina	ated at 70.00 ft	70	28	11 19 <u>28</u>	7.79 B	11								
3D1 1/11/12																
GPJ WANGENG			GENER	75	TES						WAT	ER LEVE				
5301 Be	egin Dr	rilling 06	-01-2005	Comple	ete Dri	lling	0	6-01	-200)5	While Drilling	<u> </u>		1.00 f		
Dr	rilling C	Contractor	PRECON DR	ILLING		Drill Rig	g	CME-	75 A	TV	At Completion of Drillin	g <u>¥</u>		DRY		•••••
Dr	riller .	S&J	Logger	T. Ricl	key	Ch	ecked	by _	N. D	avis	Time After Drilling	NA	•••••			
Dr Dr	rilling N	Method 3.2	5-inch HSA					•••••			Depth to Water The stratification lines re	Present the app	roxima	te bound	ary	


SOIL AND ROCK

Location

BORING LOG S-048

WEI Job No.: 201-23-01

Co.

SOIL AND ROCK

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

McDonough Associates Inc. Client

Datum: NGVD Elevation: 877.46 ft North: 1993370.70 ft East: 993575.21 ft Station: 2157+84.46 Offset: 88.75L

Depth (ft)

Project Longmeadow Parkway over Fox River, Section

Qu (tsf)

SPT Values (blw/6 in) SPT Values (blw/6 in) Moisture Content (%) Sample Typ Sample No Sample No Elevation (ft) Elevation (ft) Profile Profile Depth (ff) Sample 1 DESCRIPTION DESCRIPTION --BLIND DRILLING TO 46 FEET---30 10 35 15 40 45 20 831.5 Hard, brown CLAY LOAM 8 11 2012301.GPJ WANGENG.GDT 1/11/12 20 328.7 Dense, brown SILTY LOAM 15 2 21 22 827.7 25 WATER LEVEL DATA **GENERAL NOTES** 45.50 ft 06-16-2005 Complete Drilling 06-17-2005 Ā Begin Drilling While Drilling PRECON DRILLING Drill Rig CME-75 ATV DRY Drilling Contractor At Completion of Drilling VANGENGINC S&J Logger J. Kasnick Checked by N. Davis Time After Drilling NA Driller Depth to Water NA Drilling Method 3.25-inch HSA Ţ The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

Moisture Content (%)

Qu (tsf)

7.05

В

NP

10

14



Location

BORING LOG S-048

WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

McDonough Associates Inc. Client

Project Longmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 877.46 ft North: 1993370.70 ft East: 993575.21 ft Station: 2157+84.46 Offset: 88.75L





Location

BORING LOG S-049

WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

Client McDonough Associates Inc. Project Longmeadow Parkway over Fox River, Section Datum: NGVD Elevation: 868.57 ft North: 1993132.74 ft East: 993564.24 ft Station: 2158+16.23 Offset: 147.34R





Location

BORING LOG S-049

WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

McDonough Associates Inc.

Co.

Project Longmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 868.57 ft North: 1993132.74 ft East: 993564.24 ft Station: 2158+16.23 Offset: 147.34R





The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



BORING LOG S-050

WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

McDonough Associates Inc.

Project Longmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 872.38 ft North: 1993348.89 ft East: 993608.25 ft Station: 2158+20.87 Offset: 73.19L







WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928

Client McDonough Associates Inc.

Project Longmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 860.78 ft North: 1993236.23 ft East: 993628.29 ft Station: 2158+60.73 Offset: 34 06R

F	ax: 630-	-953-9938	Location				C	0.		Offset: 34.	06R			
Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft) Sample Type recovery Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No. SPT Values /htm/6 in/	Qu (tsf)	Moisture Content (%)
			- - - - -	1 50/2"										
			55222	2 12 20 37	4.26 B	10								
			2:	3 12 16 20	4.51 B	10								
			6024	9 18 22	4.26 B	11								
	7 <u>95.8</u>	oring terminated at 65 00 ft	65	5 7 12 18	3.44 B	11								
VANGENG.GUI 1/11/1			- - - 75_											
> - -	1	GENE		WATER			ΔΤΔ							
	egin Drill	ing 06-10-2005	Complete Di)5	While Drilling	<u> </u>		DRY						
Dr	illing Co	ontractor PRECON D	RILLING	TV	At Completion of Drilling	¥		DRY						
Dr	iller	K&J Logger	J. Koslosk	avis	Time After Drilling NA									
Dr	illing Me	ethod 3.25-inch HSA		•••••		• • • • • • • •		•••••	Depth to Water	ent the app	roxima	ite bound	ary	
2									between soil types; the actua	I transition	nav be	aradual.		



WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

 Client
 McDonough Associates Inc.

 Project
 Longmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 858.63 ft North: 1993378.37 ft East: 993642.32 ft Station: 2158+49.12 Offset: 108.29L

	Fa	ax: 630-95	53-9938	Location				0.		Offset: 10	8.29L						
Profile		Elevation (ff)	SOIL AND ROCI DESCRIPTION	Depth (ft) Sample Type	sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROO DESCRIPTIO	CK ^{Depth}	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
			BLIND DRILLING	- TO 31 - FEET								- - -	-				
				- - - 5_								 30	-				
				-						827.6 Ver LO	y stiff to hard, brown AM	CLAY		1	3 9 15	3.03 B	11
				_ _ 10 _								35_		2	8 14 21	6.31 B	10
						-		3	10 15 15	9.02 B	10						
				- - 15								40_		4	8 16 20	> 4.50 P	13
												- - -		5	9 12 <u>24</u>	5.58 B	10
				- 20_ - -								45		6	7 16 21	5.17 B	11
71/11/10000												-		7	7 11 15	6.23 B	11
						50_		8	6 14 18	5.90 B	11						
;			GEN		WAT	ER LEVE	LD	AT	Ά								
E E	Begin Drilling 06-16-2005 Complete Drilling 06-16-2005										While Drilling ♀ 28.00 ft						
	Dri	lling Contr	ractor PRECON	DRILLING		Drill Riq	g(CME-	75 A	TV	At Completion of Drillin	ıg <u>¥</u>		DI	RY		
	Dri	ller	K&J Logger	avis	Time After Drilling NA												
	Dri	lling Meth	od 3.25-inch HS4		Depth to Water ¥. NA.												
						I he stratification lines re between soil types; the a	present the app ctual transition	proxima may be	ate bo e gra	oundary dual.	y						



BORING LOG S-052

WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

McDonough Associates Inc.

Project Longmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 858.63 ft North: 1993378.37 ft East: 993642.32 ft Station: 2158+49.12 Offset: 108.29L

Location Co. SPT Values (blw/6 in) SPT Values (blw/6 in) Moisture Content (%) Sample Type Sample No Sample No Moisture Content (% Elevation (ft) Elevation (ft) Profile Profile SOIL AND ROCK Depth (ft) SOIL AND ROCK Depth (ft) Qu (tsf) Sample⁻ Qu (tsf) DESCRIPTION DESCRIPTION 4.92 11 10 В 10 6 12 2.79 12 0 В 55 14 9 3.28 12 11 В 16 7 2.05 12 12 15 Dense, brown, medium SAND В 60 24 798 1 Very stiff, brown CLAY LOAM 3 13 2.71 13 17 В 20 4 3.12 11 14 11 В 15 793.6 Boring terminated at 65.00 ft 70 2012301.GPJ WANGENG.GDT 1/11/12 75 WATER LEVEL DATA **GENERAL NOTES** ∑ 28.00 ft 06-16-2005 Complete Drilling 06-16-2005 Begin Drilling While Drilling PRECON DRILLING Drill Rig CME-75 ATV DRY At Completion of Drilling Drilling Contractor WANGENGINC NA Driller K&J Logger J. Kosloski Checked by N. Davis Time After Drilling NA Drilling Method 3.25-inch HSA Depth to Water Ţ The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



2012301.GPJ WANGENG.GDT 1/11/12 WANGENGINC Page 1 of 1





WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

Client McDonough Associates Inc.

Project Longmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 848.34 ft North: 1993332.73 ft East: 993707.89 ft Station: 2159+21.80 Offset: 75.11L

Location Co. SPT Values (blw/6 in) SPT Values (blw/6 in) Moisture Content (%) Sample Type Sample No Sample No Elevation (ft) Moisture Content (% Elevation (ft) Profile Profile SOIL AND ROCK Depth (ft) SOIL AND ROCK Depth (ft) Qu (tsf) Qu (tsf) Sample DESCRIPTION DESCRIPTION 2.71 12 6 В 11 5 5 2.46 12 22 В 11 6 9 23 1.23 12 В 60 17 6 8 1.64 24 12 В 65 13 5 11 25 3.28 11 В 16 Boring terminated at 70.00 ft 2012301.GPJ WANGENG.GDT 1/11/12 75 WATER LEVEL DATA **GENERAL NOTES** 06-16-2005 ⊻ 8.00 ft Complete Drilling 06-16-2005 Begin Drilling While Drilling PRECON DRILLING Drill Rig CME-75 ATV DRY At Completion of Drilling Drilling Contractor WANGENGINC Driller S&J Logger J. Kasnick Checked by N. Davis Time After Drilling NA Depth to Water NA Drilling Method 3.25-inch HSA Ţ The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



2012301.GPJ WANGENG.GDT VANGENGINC



Location

BORING LOG S-056

Co.

WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

Client McDonough Associates Inc. Project Longmeadow Parkway over Fox River, Section Datum: NGVD Elevation: 841.82 ft North: 1993320.24 ft East: 993756.32 ft Station: 2159+71.68 Offset: 71.49L

SPT Values (blw/6 in) SPT Values (blw/6 in) Moisture Content (%) Sample Type Sample No. Sample No Elevation (ft) Elevation (ft) Profile Profile Moistur Content (SOIL AND ROCK Depth (ft) SOIL AND ROCK Depth (ft) Qu (tsf) Qu (tsf) Sample . DESCRIPTION DESCRIPTION 18-inch dark brown LOAM --TOPSOIL--840.3 5 3.12 11 11 В 10 --BLIND DRILLING TO 16 FEET--8 6 3.28 11 12 В 30 14 5 7 3.61 10 9 В 12 4 8 1.89 12 9 В 10 35 10 7 9 3.36 12 9 В 13 5 6 10 2.38 11 В 15 40 10 825.8 Stiff to very stiff, brown CLAY 7 6 LOAM 3.85 10 11 3.20 12 10 7 В В 10 14 5 8 5 6 2.87 10 12 2.30 12 2 В В 20 12 45 10 17 2.95 11 3 13 2012301.GPJ WANGENG.GDT 1/11/12 В 13 7 8 3.20 13 2.46 13 11 9 10 В В 10 **GENERAL NOTES** WATER LEVEL DATA 06-16-2005 ∑ DRY Complete Drilling 06-16-2005 Begin Drilling While Drilling PRECON DRILLING Drill Rig CME-75 ATV DRY At Completion of Drilling Drilling Contractor WANGENGINC Driller K&J Logger J. Kasnick Checked by N. Davis Time After Drilling NA Depth to Water NA Drilling Method 3.25-inch HSA Ţ The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



WEI Job No.: 201-23-01

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 Client
 McDonough Associates Inc.

 Project
 Longmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 841.82 ft North: 1993320.24 ft East: 993756.32 ft Station: 2159+71.68 Offset: 71.49L

F	Fax: 630-953-9938	Location	•••••	0.		Offset: 71	49L						
Profile	SOIL AND ROCK	Depth (ft) Sample Type recovery Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROC DESCRIPTION	Depth X	Sample Type recovery Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	781.8 Boring terminated at 60.00		6 8 10 7 7 11	2.79 B	11								
	GENE		WATE	R LEVE		TA							
Be	egin Drilling 06-16-2005	Complete Dri	While Drilling	<u> </u>		DRY							
Dr	illing Contractor PRECON	DRILLING	At Completion of Drilling										
Dr	iller K&J Logger	J. Kasnick	Time After Drilling NA										
Dr	illing Method 3.25-inch HSA							Depth to Water	NA				
								The stratification lines rep between soil types; the ac	resent the app ual transition	roximate may be g	boundar radual.	у	



NA

Ţ The stratification lines represent the approximate boundary between soil types: the actual transition may be gradual.

Depth to Water

2012301.GPJ WANGENG.GDT NANGENGINC

Drilling Method

3.25-inch HSA





Location

BORING LOG S-058

WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

McDonough Associates Inc.

Co.

Datum: NGVD Elevation: 834.76 ft North: 1993314.62 ft East: 993806.13 ft Station: 2160+21.69 Offset: 74.87L

	_	
Project	Longmeadow Parkway over Fox River, Section	j





	Wang		B	ORI	NG	LOC	G S-060				Page	1 of 2
	wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938	Client Project Long Location	M gmeade	WEI IcDon ow Pa	Job N ough urkwa	No.: 20 Assoc Ny over Co.	1-23-01 ciates Inc. Fox River, Section	Datum: NGVI Elevation: 830 North: 19933 East: 993842 Station: 2160 Offset: 75.38) 9.94 ft 08.50 .63 ft +58.7	ft 0		
Profile	SOIL AND ROCK	Depth (ft) Sample Type	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROC DESCRIPTION	Depth (ff) (ff) Sample Type	recovery Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	10-inch dark brown LOAM ^{830.1} TOPSC BLIND DRILLING TO FF	OIL							8	6 9 12	2.25 P	12
		- - 5						30	9	3 6 9	2.30 B	12
		-							10	6 8 <u>10</u>	2.79 B	11
	^{822.4} ¹ Very stiff, brown SILTY CLAY ¹ LOAM		1 2 7 12	2.95 B	12			35	11	7 8 <u>10</u>	3.44 B	12
	Medium dense, brown, mediu SAND	um -	2 3 9 7	NP	21				12	4 6 <u>10</u>	2.05 B	12
	Stiff to hard, brown CLAY LO	DAM	3 3 8 11	4.02 B	11			40	13	3 6 21	2.46 B	12
			4 5 7 <u>12</u>	4.10 B	11							
		20	5 5 8 <u>11</u>	5.33 B	11			45	14	4 7 <u>8</u>	2.46 B	12
			6 6 10 10	4.59 B	11			-				
NANGENG.GU		25	7 5 9 9	3.61 B	12			50	15	3 6 9	1.80 B	8

נקט.	GENERAL NOTES	WATER LEVEL DATA
2301	Begin Drilling 06-15-2005 Complete Drilling 06-15-2005	While Drilling
201	Drilling Contractor PRECON DRILLING Drill Rig CME-75 ATV	At Completion of Drilling T 15.80 ft
JINC	Driller K&J Logger J. Kasnick Checked by N. Davis	Time After Drilling NA
C EN	Drilling Method 3.25-inch HSA	Depth to Water 🖳 🛛 🗛
NAN		The stratification lines represent the approximate boundary between soil types: the actual transition may be gradual



WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

 Client
 McDonough Associates Inc.

 Project
 Longmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 830.94 ft North: 1993308.50 ft East: 993842.63 ft Station: 2160+58.70 Offset: 75.38L

Fa	ax: 630-9	53-9938	Location	• • • • • •	0.		Offset: 75.	.38L								
Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft) Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCH DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	775.9 Bor	ing terminated at 55.00 ft		16	688	1.15 B	12									
		GENE	WATER LEVEL DATA													
Be	gin Drillin	g 06-15-2005	While Drilling V 11.25 ft													
Dri	illing Cont	tractor PRECON D	At Completion of Drilling T 15.80 ft													
Dri	iller	K&J Logger	Time After Drilling NA						•••••							
Dri	illina Meth	and 3.25-inch HSA	Depth to Water V NA													
		·····							•••••	The stratification lines repre-	sent the app	roxima	ate bo	oundary	/	
	• • • • • • • • • • •									Detween Son types; the actu	ai ii al ISI(101)	IIIdy De	- yra	uudi.		

Page 2 of 2



2012301.GPJ WANGENG.GDT 1/11/12 NANGENGINC Page 1 of 2



WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

Client McDonough Associates Inc. Project Longmeadow Parkway over Fox River, Section Datum: NGVD Elevation: 820.85 ft North: 1993281.70 ft East: 993940.33 ft Station: 2161+59.61 Offset: 66.49L

Location Co. SPT Values (blw/6 in) SPT Values (blw/6 in) Moisture Content (%) Moisture Content (%) Sample Typ Sample No Sample No Elevation (ft) Elevation (ft) Profile Profile SOIL AND ROCK Depth (ft) SOIL AND ROCK Depth (ft) Qu (tsf) Sample⁻ Qu (tsf) DESCRIPTION DESCRIPTION 6 10 2.05 11 17 В 13 8 13 <u>18</u> 11 18 4.51 В Boring terminated at 60.00 ft 65 70 75 WATER LEVEL DATA **GENERAL NOTES** DRY 06-09-2005 Complete Drilling 06-09-2005 ∇ Begin Drilling While Drilling PRECON DRILLING Drill Rig CME-75 ATV DRY **Drilling Contractor** At Completion of Drilling K&J Logger J. Kosloski Checked by N. Davis Driller Time After Drilling NA Depth to Water NA Drilling Method 3.25-inch HSA Ţ The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.





WEI Job No.: 201-23-01

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WANGENGINC 2012301.GPJ WANGENG.GDT 1/11/12

McDonough Associates Inc Cliont

Datum: NGVD Elevation: 815.14 ft North: 1993276.52 ft East: 994003.21 ft Station: 2162+22.40 Offset: 72.63L

Chern	MeDonough Associates inc.
Project	Longmeadow Parkway over Fox River, Section
Locatior	Co.

Profile	DESCRIPTION	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	760.1 55 Boring terminated at 55.00 ft 60 65 70_ 70_ 75		17	8 14 18	3.28 B	11									
	GENERAL		L ES	I	WATERI	VF			Ά						
Be	ain Drilling 06-08-2005 Co	05	VVAIER LEVEL DATA While Drilling Z 35 00 ft												
Dri	ling Contractor PRECON DRILLI		At Completion of Drilling												
Dri	ller K Loaaer J.K	oslos	ski	Che	, . ecked	by I	N. D	avis	S Time After Drilling NA						
Dri	ling Method 3 25-inch HSA		Depth to Water Y NA												
		•••••	••••	•••••		••••			The stratification lines represent t	ne app	roxim	ate b	oundary	/	
									between soil types; the actual tran	sition	may b	e gra	idual.	,	





2012301.GPJ WANGENG.GDT VANGENGINC

1/11/10



Co.

WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

Location

Datum: NGVD Elevation: 803.78 ft North: 1993251.91 ft East: 994150.49 ft Station: 2163+71.71 Offset: 74.77L

Client	McDonough Associates Inc.
Project	Longmeadow Parkway over Fox River, Section

Profile	Elevation	SOIL AND ROCK DESCRIPTION	Depth (ft) Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	
VGENG.GDT 1/1/12	748	⁸ Boring terminated at 55.00 ft		17	8 13 16	2.46 B	11					Sa la construction de la		S		0	
		GENED	^{י»_} גו אס	 F9													
D.1052 D.1052 B	egin [Drilling 06-07-2005		e Dri	lling)6-08	-200)5	While Drilling 2 14.00 ft							
D 2015	rilling	Contractor PRECON DR	RILLING		Drill Rig	,	CME-	75 A	λTV	At Completion of Drilling T 11.00 ft							
D B	riller	K Logger	J. Koslo	ski	Ch	ecked	by I	N. D	avis	Time After Drilling NA							
D B	rilling	Method 3.25-inch HSA		Depth to Water Y NA													
WAN			The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.														







WEI Job No.: 201-23-01

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 Client
 McDonough Associates Inc.

 Project
 Longmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 814.19 ft North: 1993403.17 ft East: 997287.05 ft Station: 2195+90.55 Offset: 75.11R

Fa	ax: 630-953-9938	Location		••••				С	o.		Offset: 75	.11R					
Profile	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROC DESCRIPTION	Depth X	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	
		-															
		- - 55 -		18	6 11 <u>15</u>	4.35 B	10										
			\mathbf{X}^{\bullet}	19	11 16	4.50	12										
		60 - - -															
	^{749.2} Boring terminated at 65.00 ft	- - 65 -	$\left \right\rangle$	20	9 14 20	3.53 B	10										
		70															
		- - - 75_															
	GENE	RAL N	ΟΤΙ	ES		· · · · ·	·	•	·	WATE	R LEVE	LD	AT	Α	I		
Be	gin Drilling 04-29-2005	While Drilling															
Dri	Iling Contractor PRECON D	At Completion of Drilling	¥		51.8	30 ft											
Dri Dri	Iling Method 3 25-inch HCA	c . L	JaiZ	• • • • •	Ch	ecked	uy j.	na	SIIICK	Depth to Water V NA							
				 	•••••		••••••	· · · · · · · · ·		Depth to Water NA The stratification lines represent the approximate boundary between soil types: the actual transition may be gradual							

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WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

ClientMcDonough Associates Inc.ProjectLongmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 813.38 ft North: 1993548.91 ft East: 997251.08 ft Station: 2195+90.50 Offset: 74.99L

F	Fax: 630-953-9938 Location CO. Ottset: 74.99L																		
Profile	Elevation (ft)	SOIL AND DESCRIP	ROCK	(ft) Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND DESCRIP	ROCK TION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	
			58		19	12 10 15	4.59 B	11											
			60		20	10 14 20	2.46 B	14											
	748.4 Bor	ring terminated a	<u>68</u> at 65.00 ft 70		21	19 10 14	2.54 B	15											
Be	egin Drillin	g 04-29 -:	75 GENERAL 2005 C		ES ES			94-29	-200	05	While Drilling	VATER	_ EVE ⊽_	LD	AT 33.(A 20 ft			
Dr Dr Dr	Drilling Contractor PRECON DRILLING Drill Rig CME-75 ATV Driller S&J Logger W. Wang Checked by J. Kasnick Drilling Method 3.25-inch HSA											At Completion of Drilling Time After Drilling Depth to Water The difference in the second seco							

Page 2 of 2

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.





BORING LOG S-069

WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

McDonough Associates Inc. Project Longmeadow Parkway over Fox River, Section Datum: NGVD Elevation: 813.76 ft North: 1993561.32 ft East: 997326.60 ft Station: 70.20L Offset: 75.09 L

Page 1 of 1




1/11/12









between soil types; the actual transition may be gradual.







WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

Client McDonough Associates Inc.

Project Longmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 806.63 ft North: 1993460.97 ft East: 997644.77 ft Station: 2199+65.59 Offset: 74.97R









WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

Client McDonough Associates Inc.

Project Longmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 803.56 ft North: 1993464.93 ft East: 997717.11 ft Station: 2200+40.50 Offset: 75.47R

F	ax: 630-	953-9938	Offset: 75.47R											
Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft) Sample Type recovery	Sample No. SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No. SPT Values (hlw/6 in)	Qu (tsf)	Moisture Content (%)
	751.1	pring terminated at 52 50 ft		16 7 11 <u>10</u>	4.18 B	11								
			- - - 55_											
			- - - 60											
			- - 65 -											
			- - 70 -											
.GDI 1/11/12														
1.GPJ WANGENG		GENE	WATEF		L D	ATA								
Be Be Dr	egin Drill rilling Co	ing 05-03-2005 ntractor PRECON D	Complete I	Drilling Drill Rig)5-03 CME-	-200 75 A)5 \TV	While Drilling At Completion of Drilling	<u>₹</u>		24.75 ft 32.50 ft		
	riller	K&J Logger	Time After Drilling	NA										
	rilling Me	thod 3.25-inch HSA		Depth to Water	ent the app	roxima	ate bounda	ary						





WEI Job No.: 201-23-01

Co.

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Location

ClientMcDonough Associates Inc.ProjectLongmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 806.53 ft North: 1993605.29 ft East: 997710.30 ft Station: 2200+40.06 Offset: 65.05L

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft) Sample Tvpe	recovery Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No. SPT Values	(DIW/O IN) Qu (tsf)	Moisture Content (%)
WANGENG.GDT 1/11/12	746.5 E	Boring terminated at 60.00 ft		20	6 9 16 10 11 14 5 10 12	4.02 B 3.03 B	12								
GPJ		GENER		TES	;					WATEF			ATA		
301. B	Begin Dri	lling 04-26-2005	Comple	ete Dri	, Ilina	0)4-27	-200)5	While Drilling	<u> </u>	_ 07	DRY		
2012 D)rillina Ca	ontractor PRECON DR			9 Drill Ric	9 1 (CME-	75 4	ATV	At Completion of Drilling		•••••	DRY		•••••
	nning U Driller			ang		J		Kor Kor	snick		 ΝΔ	• • • • • • • •			•••••
			VV. VVč	<u></u>	Un	ecked	nà ả.	nd	SIIICK			• • • • •			
			Depth to Water NA The stratification lines represent the approximate boundary between soil types: the actual transition may be gradual												



Location

BORING LOG S-080

WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

Client McDonough Associates Inc.

Project Longmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 799.62 ft North: 1993466.99 ft East: 997789.11 ft Station: 2201+14.99 Offset: 75.50R





WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 -. .

Client McDonough Associates Inc.

Project Longmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 799.62 ft North: 1993466.99 ft East: 997789.11 ft Station: 2201+14.99 Offset: 75.50R

F	ax: 630)-953-9938	Offset: 75.50R											
Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft) Sample Type recovery Sample No	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery Sample No	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
				5 11 14 15	3.85 B	11								
			55 11	7 7 10 14	3.28 B	10								
				³ 5 11	3.20	12								
2	7 <u>39.6</u> B	Boring terminated at 60.00 ft		14	В									
			- - 70 -											
2.GDI 1/11/1/2														
WANGEN			75											
-1.		GENE	RAL NOTE	WATER	LEVE	L DA	TA							
.02210 B	egin Dril	lling 04-21-2005	Complete D	rilling	0)4-25	-200)5	While Drilling	<u>¥</u>	20).50 ft		
	rilling Co	ontractor PRECON D	RILLING	Drill Rig	g (CME-	75 A	TV	At Completion of Drilling	¥		DRY	•••••	
	riller	K&L Logger	I'me After Drilling											
	niing M		The stratification lines repres	ent the app	roximate	e boundar aradual	у							





WEI Job No.: 201-23-01

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 Client
 McDonough Associates Inc.

 Project
 Longmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 803.63 ft North: 1993622.48 ft East: 997787.14 ft Station: 2201+15.00 Offset: 79.99L

Fax: 630-953-9938 Location CO. Offset: 79.99L												
	Depth (ft) Sample Type recovery Sample No.	SPT Values (blw/6 in) Qu	(tsf) Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery Sample No.	SPT Values (blw/6 in)	(tsf) Moisture Content (%)		
743.6 Boring terminated at 60.00 ft		5 5 12 12 12 12 12 12	90 13 21 12									
GENERA		WATER	LEVE		A L							
Begin Drilling 05-06-2005	Complete Drill	While Drilling		/(I	RY							
Drilling Contractor PRECON DRI	LLING D	At Completion of Drilling	X	40.0	00 ft							
Driller K&J Logger M	. Kothawala	Time After Drilling	NA									
Drilling Method 3.25-inch HSA		Depth to Water	NA									
	· · · · · · · · · · · · · · · · · · ·	<u></u>	The stratification lines repres	ent the appr transition n	oximate b	oundary idual.						





2012301.GPJ WANGENG.GDT



WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

Client McDonough Associates Inc. Project Longmeadow Parkway over Fox River, Section Datum: NGVD Elevation: 799.18 ft North: 1993617.10 ft East: 997863.56 ft Station: 2201+90.85 Offset: 74.10L

F	ax: 630-	-953-9938	^I Offset: 74.10L												
Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft) Sample Type	Sample No. SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth	Sample Type	Sample No.	blw/6 in)	Qu (tsf)	Moisture Content (%)
WANGENG.GDI 1/1/1/2	744.2 Bo	oring terminated at 55.00 ft		17 8 10 17	3.85 B	12									
	1	GENE		ES			I	I	WATER		L D		•		
Be	gin Drill	ing 04-21-2005	Complete	Drilling)4-21	-200)5	While Drilling	<u> </u>		30.50	0 ft		
Dr	illing Co	ontractor PRECON I	RILLING	Drill R	ig	CME-	75 A	ATV	At Completion of Drilling	Ţ		DR	RY		
Dr	iller	S&J Logger	Y. Shiu	С	necked	by J	. Ka	snick	Time After Drilling	NA					
Dr	illing Me	ethod 3.25-inch HSA							Depth to Water	NA		-1.1			
WAN			The stratification lines represent between soil types: the actual	ent the app I transition	roxim mav b	ate bou e grad	undary ual.								











WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

Client McDonough Associates Inc. Project Longmeadow Parkway over Fox River, Section Datum: NGVD Elevation: 787.41 ft North: 1993618.93 ft East: 998013.49 ft Station: 2203+40.76 Offset: 75.00L

Location Co. SPT Values (blw/6 in) SPT Values (blw/6 in) Moisture Content (%) Moisture Content (%) Sample Typ Sample No Sample No Elevation (ft) Elevation (ft) Profile Profile SOIL AND ROCK Depth (ft) SOIL AND ROCK Depth (ft) Qu (tsf) Sample⁻ Qu (tsf) DESCRIPTION DESCRIPTION 6 8 2.79 12 17 В 9 16 9 18 3.44 13 В 13 Boring terminated at 60.00 ft 65 70 75 WATER LEVEL DATA **GENERAL NOTES** 04-20-2005 DRY Complete Drilling 04-21-2005 ∇ Begin Drilling While Drilling PRECON DRILLING Drill Rig CME-75 ATV DRY Drilling Contractor At Completion of Drilling Driller S&J Logger Y. Shiu Checked by J. Kasnick Time After Drilling NA Depth to Water NA Drilling Method 3.25-inch HSA Ţ The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



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WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

2012301.GPJ WANGENG.GDT 1/11/12

WANGENGINC

Client McDonough Associates Inc. Project Longmeadow Parkway over Fox River, Section Datum: NGVD Elevation: 783.18 ft North: 1993469.43 ft East: 998088.62 ft Station: 2204+15.02 Offset: 74.92R

Location Co. SPT Values (blw/6 in) SPT Values (blw/6 in) Moisture Content (%) Sample Typ Sample No Sample No Moisture Content (% Elevation (ft) Elevation (ft) Profile Profile SOIL AND ROCK Depth (ft) SOIL AND ROCK Depth (ft) Qu (tsf) Sample⁻ Qu (tsf) DESCRIPTION DESCRIPTION 9 13 2.46 12 17 В 12 6 18 3.85 13 13 В 60 16 5 6 2.00 19 13 Ρ 65 11 Boring terminated at 65.00 ft 70 75 WATER LEVEL DATA **GENERAL NOTES** 04-20-2005 ⊊ 46.20 ft Complete Drilling 04-20-2005 Begin Drilling While Drilling PRECON DRILLING Drill Rig CME-75 ATV DRY **Drilling Contractor** At Completion of Drilling Driller K&L Logger W. Wang Checked by J. Kasnick Time After Drilling NA Depth to Water NA Drilling Method 3.25-inch HSA Ţ The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.





WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

 Client
 McDonough Associates Inc.

 Project
 Longmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 781.35 ft North: 1993619.35 ft East: 998088.44 ft Station: 2204+15.74 Offset: 75.00L

	-ax: 630	0-953-9938	Offset: 75.00L												
Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft) Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ff)	Sample Type recovery Sample No	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	729.4	Medium dense. grav. medium	- - - - - - - - - - - - - - - - - - -												
	727.6	SAND													
	726.4	Stiff, gray CLAY LOAM	55	17	5 9 11	1.89 B	11								
		Boring terminated at 55.00 ft	-												
			-												
			-												
			60												
			_												
			-												
			-												
			65												
			_												
			-												
			 70												
21/11/1			-												
ENG.GUI			-												
MANG			75_												
1.GP		GENEF	RAL NO	ES						WATER	R LEVE	_ DA	TA		
B 1230	egin Dri	illing 04-19-2005	Comple	e Dri	lling)4-20)-20()5	While Drilling	<u>¥</u>	52	2.00 ft	•••••	
	rilling C riller	S&. Logger	KILLING Y Shi	 U	Drill Riq Ch) erked	• IVIE- by	(5/ Ka	ALV snick	At Completion of Drilling	 ΝΔ	!	UKY	•••••	•••••
	rillina M	Aethod 3.25-inch HSA		M	01	CONCU	Jy Y			Depth to Water	NA	••••			
MANG		······································	<u></u>	The stratification lines repre	sent the appr al transition n	oximate	boundar radual.	У							





WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

Client McDonough Associates Inc. Project Longmeadow Parkway over Fox River, Section Datum: NGVD Elevation: 778.75 ft North: 1993468.91 ft East: 998162.70 ft Station: 2204+89.09 Offset: 75.87R

Location Co. SPT Values (blw/6 in) SPT Values (blw/6 in) Moisture Content (%) Sample Type Sample No Sample No Moisture Content (% Elevation (ft) Elevation (ft) Profile Profile SOIL AND ROCK Depth (ft) SOIL AND ROCK Depth (ft) Qu (tsf) Qu (tsf) Sample DESCRIPTION DESCRIPTION 8 12 18 2.46 12 В 12 55 9 19 3.20 13 10 В 60 11 --@64'0" - 2-inch thick organic 6 9 20 2.13 (root) lens--14 В 65 10 5 9 1.80 14 21 В 12 708.7 Boring terminated at 70.00 ft 2012301.GPJ WANGENG.GDT 1/11/12 75 WATER LEVEL DATA **GENERAL NOTES** DRY 04-19-2005 Complete Drilling 04-19-2005 Begin Drilling While Drilling ∇ PRECON DRILLING Drill Rig CME-75 ATV DRY At Completion of Drilling Drilling Contractor WANGENGINC Driller S&J Logger Y. Shiu Checked by J. Kasnick Time After Drilling NA Depth to Water NA Drilling Method 3.25-inch HSA Ţ The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

Page 2 of 2





WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

Client McDonough Associates Inc. Project Longmeadow Parkway over Fox River, Section Datum: NGVD Elevation: 773.85 ft North: 1993618.28 ft East: 998163.97 ft Station: 2204+91.26 Offset: 73.47L

Location Co. SPT Values (blw/6 in) SPT Values (blw/6 in) Moisture Content (%) Sample Typ Sample No Sample No Moisture Content (% Elevation (ft) Elevation (ft) Profile Profile SOIL AND ROCK Depth (ft) SOIL AND ROCK Depth (ft) Qu (tsf) Qu (tsf) Sample DESCRIPTION DESCRIPTION 6 11 2.62 13 17 В 55 15 5 9 18 1.80 13 В 60 12 3 6 1.23 19 12 В 65 9 6 9 20 2.71 12 В 10 703.9 Boring terminated at 70.00 ft 75 WATER LEVEL DATA **GENERAL NOTES ♀** 43.50 ft 05-09-2005 Complete Drilling 05-10-2005 Begin Drilling While Drilling PRECON DRILLING Drill Rig CME-75 ATV 44.00 ft At Completion of Drilling Drilling Contractor Driller K&J Logger W. Wang Checked by J. Kasnick Time After Drilling NA NA Drilling Method 3.25-inch HSA Depth to Water Ţ The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

Page 2 of 2



VANGENGINC



WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

Client McDonough Associates Inc.

Project Longmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 771.32 ft North: 1993515.22 ft East: 998239.46 ft Station: 2205+66.13 Offset: 30.03R






1/11/10 2012301.GPJ WANGENG.GDT WANGENGINC



NANGENGINC



WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

Client McDonough Associates Inc.

Project Longmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 752.64 ft North: 1993516.01 ft East: 998358.59 ft Station: 2206+85.26 Offset: 29.96R







WEI Job No.: 201-23-01

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Client McDonough Associates Inc.

Project Longmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 749.36 ft North: 1993576.04 ft East: 998358.63 ft Station: 2206+85.66 Offset: 30.06L







WEI Job No.: 201-23-01

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Location

Client McDonough Associates Inc. Project Longmeadow Parkway over Fox River, Section

Co.

Datum: NGVD Elevation: 726.29 ft North: 1993536.94 ft East: 998549.60 ft Station: 2208+76.4 Offset: 10.17R





1/11/10 2012301.GPJ WANGENG.GDT



WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 -.

Client McDonough Associates Inc.

Project Longmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 725.83 ft North: 1993581.20 ft East: 998542.73 ft Station: 2208+69.79 Offset: 34,12L

Fa	ax: 630-953-9938	Offset: 34.12L												
Profile	SOIL AND ROCK DESCRIPTION	Depth (ft) Sample Type	recovery Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCI DESCRIPTION	Depth (ft) Sample Type	recovery Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture
11			1					RC	QD = 26%		2			
		-					<u></u> ⊢_⊤			- 1				
		-						648.3		-				
		_						Во	ring terminated at 77.50) ft				
ł			7	4						-				
		55_	17	10 13	2.54 B	13				80_				
		-								-				
		-								-				
		_								_				
FJ		_								-				
				7	1 70					-				
F.		60	18	10 16	1.72 B	14				85				
		-								-				
		-								-				
FU		-								-				
		-								-				
			7	5	1 15	14				_				
		65	19	26 15	B	14				90_				
		-								-				
FIJ		-								-				
	658.3AUGER REFUS	AL								-				
	Very strong, white to gray with	ı _		c						_				
	green nue, moderately weathered, fossiliferous, finely	/ _		R						-				
	crystalline LIMESTONE,	- 70								95				
Ц	narrow to moderately wide joi	n – nt –	1							-				
Ц	spacing, with vugs and	-								-				
	RUN 1: 67.5 to 72.5 feet	-								-				
	Recovery = 97% ROD = 19%	-		С						_				
		-		O R						-				
	RUN 2: 72.5 to 77.5 feet Recovery = 100%	75		E						100				
'	CENE		┓ ┰╒╺								 	Δ		
Bec	gin Drilling 05-17-2005	Comple	ete Dr	illing	()5-18	8-200)5	While Drilling		6.5	o ft		
Dril	Iling Contractor PRECON D	RILLING		Drill Riq	g	CME-	-75 A	λTV	At Completion of Drilling	Ţ.	4.0	0 ft		• • • • • •
Dril	ller K&J Logger	T. Rick	<u>(ey</u>	Ch	ecked	by 🧎	. Ka	snick	Time After Drilling	NA	•			
Dril	Iling Method 3.25-inch HSA	Depth to Water	esent the approx	imate h	oundar	/								
									between soil types: the actu	ual transition ma	v be gra	idual.	,	





WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

Client McDonough Associates Inc.

Project Longmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 725.34 ft North: 1993511.85 ft East: 998858.63 ft Station: 2211+85.27 Offset: 37.12R

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

Location Co. SPT Values (blw/6 in) SPT Values (blw/6 in) Moisture Content (%) Sample Type Sample No Sample No Elevation (ft) Elevation (ft) Profile Profile Moistur Content (SOIL AND ROCK (ff) SOIL AND ROCK Qu (tsf) Qu (tsf) Sample DESCRIPTION DESCRIPTION crystalline, thinly laminated to Ō thinly bedded, slight to R moderately weathered F DOLOMITIC LIMESTONE, with 2 vuggy porosity --RECOVERY=96%----RQD=31%--7 11 2.38 13 17 В Very strong, gray, finely 13 80 С crystalline, thinly bedded, slightly Ô weathered DOLOMITIC R F LIMESTONE, with vuggy porosity --RECOVERY=95%--3 --RQD=36%--6 18 2.46 13 640.8 12 В Very strong, gray, fine crystalline, 85 60 13 C O thinly laminated, slightly weathered DOLOMITIC R LIMESTONE, with vuggy porosity Е and channel porosity 4 --RECOVERY=95%----RQD=53%--6 2.87 12 19 635.8 13 В Boring terminated at 89.50 ft 90 65 22 20 2.75 13 9 --WEATHERED BEDROCK--Р 655.8 50<u>/</u>1" --AUGER REFUSAL--70 95 С 0 R Very strong, bluish green, finely crystalline, thinly bedded, F moderatley weathered DOLOMITIC LIMESTONE, with 1/11/10 vuggy porosity, channel porostiy and frequent fractures 2012301.GPJ WANGENG.GDT --RECOVERY =99%----RQD=33%--650.8 Very strong, gray, finely 75 100 WATER LEVEL DATA **GENERAL NOTES** Complete Drilling 06-30-2005 ⊊ 5.50 ft 06-30-2005 Begin Drilling While Drilling PRECON DRILLING Drill Rig CME-75 ATV 4.00 ft Drilling Contractor At Completion of Drilling VANGENGINC Driller K&J Logger K. Anderson Checked by B. Fugiel Time After Drilling NA Drilling Method 3.25-inch HSA NA Depth to Water Ţ





WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928

Client McDonough Associates Inc. Project Longmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 726.44 ft North: 1993585.81 ft East: 998858.47 ft Station: 2211+85.55

Fax: 630-953-9938 Location CO. Onset: 36.83L														
Profile	SOIL AND DESCRIF		Sample Type recovery Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No. SPT Values /hlw/6 in)	Qu (tsf)	Moisture Content (%)
	^{671.7} Dense, gray, fine t SAND	- - - - - - - - - - - - - - - - - - -	17	6 11 24	5.00 B	13								
	^{667.4} Stiff to very stiff, br LOAM	own CLAY	18	6 10 16	2.71 B	12								
		- - - 65 - - - -	19	6 12 14	3.53 B	12								
12	657.2 WEATHERE 656.4AUGE Boring terminated	D BEDROCK	20	5 59/2*	1.97 B	14								
301.GPJ WANGENG.GDI 1/11	vin Drilling 07-04	75_ GENERAL NO	DTES)7_01	-200	05		R LEVE		ATA 5 50 #		
VANGENGINC 2013	ling Contractor Pl ler S&J ling Method 3.25-in	RECON DRILLING Logger J. Kas	While Drilling ¥ 5.50 ft At Completion of Drilling ¥ 4.75 ft Time After Drilling NA Depth to Water ¥ NA The stratification lines represent the approximate boundary between soil types: the actual transition may be gradual											





WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

Client McDonough Associates Inc. Project Longmeadow Parkway over Fox River, Section Datum: NGVD Elevation: 725.32 ft North: 1993520.74 ft East: 999059.38 ft Station: 2213+86.07 Offset: 29.44R

Location Co. SPT Values (blw/6 in) SPT Values (blw/6 in) Moisture Content (%) Sample Typ Sample No Sample No Moisture Content (% Elevation (ft) Elevation (ft) Profile Profile SOIL AND ROCK Depth (ft) SOIL AND ROCK Depth (ft) Qu (tsf) Sample⁻ Qu (tsf) DESCRIPTION DESCRIPTION 5 6 3.20 14 17 В 12 10 12 15 18 3.69 12 В 60 Dense, gray SANDY LOAM 8 17 NP 19 13 65 18 660.3 Boring terminated at 65.00 ft 70 75 WATER LEVEL DATA **GENERAL NOTES** ⊊ 8.00 ft 07-05-2005 Complete Drilling 07-05-2005 Begin Drilling While Drilling PRECON DRILLING Drill Rig CME-75 ATV 4.00 ft At Completion of Drilling Drilling Contractor S&R Logger J. Kasnick Checked by B. Fugiel Driller Time After Drilling NA Depth to Water NA Drilling Method 3.25-inch HSA Ţ The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.





WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

 Client
 McDonough Associates Inc.

 Project
 Longmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 726.07 ft North: 1993579.98 ft East: 999058.47 ft Station: 2213+85.52 Offset: 29.80L

F	ax: 630-953-9938	Location	Offset: 29.80L										
Profile	SOIL AND ROCK	Depth (ft) Sample Type recovery Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
			8 12 15	3.28 B	13								
	Boring terminated at 60.00 f	60 t t 65 65 70 70 75	9 15 17	3.03 B	13								
	GENE			I				WATER		_ DA	ΓΑ		
Be	egin Drilling 07-05-2005	. Complete Dril	While Drilling	<u> </u>	5.	50 ft							
Dr	illing Contractor PRECON	DRILLING I	At Completion of Drilling	¥	7.	50 ft							
Dr	illing Method 2 25 inch LOA	J. Kasnick	Depth to Water	NA NA	••••								
		The stratification lines represented between soil types: the actual	ent the appr transition n	oximate	boundar	/							





WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

Client McDonough Associates Inc. Project Longmeadow Parkway over Fox River, Section Datum: NGVD Elevation: 728.90 ft North: 1993520.93 ft East: 999178.38 ft Station: 2215+05.07 Offset: 29.97R

	Fax: 63	30-953-9938	Offset: 29.97R												
Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft) Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery Sample No	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	673.9) Boring terminated at 55 00 fi	55	17	1 3 7	2.30 B	13								
		Boring terminated at 55.00 h	·												
			-												
			60 _												
			-												
			65												
			-												
			70												
21/11/1Z															
			75												
101.6		GENE			<u>_ DA</u>	IA									
20123 B	egin D)rillina (Contractor PRECON I	νο ΔTV	At Completion of Drilling	<u>÷</u>	Ծ. 7	.00 ft	•••••	•••••						
	Driller	S&J Logger	ıgiel	Time After Drilling	NA		.	•••••	• • • • • •						
	Drilling I	Method 3.25-inch HSA	Depth to Water	NA		hourd									
WAI										between soil types: the actua	I transition m	oximate	i poundar Iradual.	у	





WEI Job No.: 201-23-01

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Location

McDonough Associates Inc. Client

Project Longmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 728.83 ft North: 1993580.85 ft East: 999178.46 ft Station: 2215+05.51 Offset: 29.95L

Co. SPT Values (blw/6 in) SPT Values (blw/6 in) Moisture Content (%) Sample Type Sample No Sample No Elevation (ft) Elevation (ft) Profile Profile Moistur Content (SOIL AND ROCK Depth (ff) SOIL AND ROCK Depth (ff) Qu (tsf) Qu (tsf) Sample DESCRIPTION DESCRIPTION fractures --RECOVERY =87.5%----RQD=40%--651.8 Boring terminated at 77.00 ft 7 9 2.30 15 17 В 11 80 6 9 18 2.05 13 В 60 11 85 6 2.87 19 13 10 В 65 14 90 12 20 3.94 12 18 В 70 19 95 657.8 --WEATHERED BEDROCK--50/1 --AUGER REFUSAL--656.8 1/11/12 Very strong, gray, finely С crystalline, thinly bedded, 0 2012301.GPJ WANGENG.GDT R moderatley weathered Е DOLOMITIC LIMESTONE, with vuggy porosity and frequent 4 75 100 **GENERAL NOTES** WATER LEVEL DATA **♀** 8.00 ft 07-05-2005 Complete Drilling 07-06-2005 Begin Drilling While Drilling PRECON DRILLING Drill Rig CME-75 ATV 6.80 ft Drilling Contractor At Completion of Drilling NANGENGINC Driller K&J Logger J. Kasnick Checked by B. Fugiel Time After Drilling NA NA Drilling Method 3.25-inch HSA Depth to Water Ţ The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.





WEI Job No.: 201-23-01

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Client McDonough Associates Inc. Project Longmeadow Parkway over Fox River, Section Datum: NGVD Elevation: 726.33 ft North: 1993518.51 ft East: 999300.82 ft Station: 2216+27.49 Offset: 33.12R

between soil types; the actual transition may be gradual.

F	ax: 630-953-9938	Offset: 33.12R													
Profile	SOIL AND ROCK	Depth (ft) Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROC DESCRIPTION	Depth X	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	^{671.3} Boring terminated at 55.00 ft		17	8 9 12	3.61 B	11									
		\\\\\				•									
Be Dr Dr	GENE gin Drilling 07-07-2005 illing Contractor PRECON D iller S&J Logger	VVAIEK LEVEL DATA While Drilling Image: Second state of the second state of													
Dr	illing Method 3.25-inch HSA	Depth to Water The stratification lines rec	NA	roxima	ate b	oundar	v								











WEI Job No.: 201-23-01

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 Client
 McDonough Associates Inc.

 Project
 Longmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 741.75 ft North: 1993522.46 ft East: 999538.07 ft Station: 2218+64.88 Offset: 30.31R

F	Fax: 630-953-9938	0.	Offset: 30.31R										
Profile	SOIL AND ROCK	Depth (ft) Sample Type recovery Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	684.7 Dense, gray SILTY LOAM		7 7 11 18	2.75 P	13								
			⁸ 15 22 20	NP	19								
	676.7 Boring terminated at 65.00 ft		9 10 11 17	3.53 B	13								
		75											
	GENE	Complete D	5 rilling	0	7_11	-200)5				ΔΓΑ 5 50 ft		
	rilling Contractor PRECON [At Completion of Drilling	÷		DRY		•••••						
D	riller J&L Logger	ıgiel	Time After Drilling	NA									
D	rilling Method 3.25-inch HSA	Depth to Water	NA										
		I he stratification lines repres	ent the appr I transition r	oximate nav be (e boundar aradual.	у							





WEI Job No.: 201-23-01

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McDonough Associates Inc. Client

Project Longmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 742.29 ft North: 1993589.19 ft East: 999538.22 ft Station: 2218+65.17 Offset: 36.42L

Location Co. SPT Values (blw/6 in) SPT Values (blw/6 in) Moisture Content (%) Sample Typ Sample No Sample No Moisture Content (% Elevation (ft) Elevation (ft) Profile Profile SOIL AND ROCK Depth (ft) SOIL AND ROCK Depth (ft) Qu (tsf) Qu (tsf) Sample DESCRIPTION DESCRIPTION 6 9 2.62 14 17 В 55 11 6 7 13 18 2.71 13 В 60 8 13 1.25 17 19 Ρ 17 65 12 22 18 20 1.75 16 Ρ Boring terminated at 70.00 ft 2012301.GPJ WANGENG.GDT 1/11/12 75 WATER LEVEL DATA **GENERAL NOTES ∑** 20.50 ft 07-08-2005 Complete Drilling 07-11-2005 Begin Drilling While Drilling PRECON DRILLING Drill Rig CME-75 ATV 24.00 ft At Completion of Drilling Drilling Contractor WANGENGINC Driller K&J Logger K. Anderson Checked by B. Fugiel Time After Drilling NA NA Drilling Method 3.25-inch HSA Depth to Water Ţ The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.





WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

Client McDonough Associates Inc. Project Longmeadow Parkway over Fox River, Section Datum: NGVD Elevation: 745.91 ft North: 1993522.28 ft East: 999657.38 ft Station: 2219+84.19 Offset: 30.73R Page 2 of 2

Location Co. SPT Values (blw/6 in) SPT Values (blw/6 in) Moisture Content (%) Sample Typ Sample No Sample No Moisture Content (% Elevation (ft) Elevation (ft) Profile Profile SOIL AND ROCK Depth (ft) SOIL AND ROCK Depth (ft) Qu (tsf) Sample⁻ Qu (tsf) DESCRIPTION DESCRIPTION 5 8 11 2.05 17 В 10 6 18 NP 21 15 Medium dense, gray to brown, 60 11 fine SAND to SANDY LOAM 5 6 NP 19 19 65 8 12 12 29 NP 20 11 675.9 Boring terminated at 70.00 ft 2012301.GPJ WANGENG.GDT 1/11/12 75 WATER LEVEL DATA **GENERAL NOTES** ⊊ 59.50 ft 07-11-2005 Complete Drilling 07-12-2005 Begin Drilling While Drilling PRECON DRILLING Drill Rig CME-75 ATV DRY Drilling Contractor At Completion of Drilling WANGENGINC Driller J&L Logger K. Anderson Checked by B. Fugiel Time After Drilling NA Depth to Water NA Drilling Method 3.25-inch HSA Ţ The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.





Client

BORING LOG S-111

WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928

McDonough Associates Inc. Project Longmeadow Parkway over Fox River, Section Datum: NGVD Elevation: 751.91 ft North: 1993581.33 ft East: 999655.10 ft Station: 2219+82.04 Offset: 28.31L



1/11/10





Location

BORING LOG S-112

WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

Client McDonough Associates Inc.

Project Longmeadow Parkway over Fox River, Section

Co.

Datum: NGVD Elevation: 761.89 ft North: 1993521.62 ft East: 999777.17 ft Station: 2221+03.98 Offset: 31.63R


	Wang				B	OR	INC) L	OG	S-112				Page	3 of 3
	Engineering					WE	Job	No.	: 201-2	23-01	Datum: NO	GVD			
	wangeng@wangeng.com 1145 N Main Street	Client			M			h A	seocia	tos Inc	North: 199	761.89 f 3521.62	t 1 ft		
1	_ombard, IL 60148	Project		nan	noad		arkw	iii. A i iav (over F	ox River Section	East: 9997	777.17 ft			
	Telephone: 630-953-9928 Fax: 630-953-9938	Location	. ?!			¥.11.!.		C.X.	0.		Station: 22 Offset: 31	21+03.9 .63R	98		
	ax. 030-330-3330														
6		-	Type	N	lues in)		lre (%)	U	5			No.	lues in)		lre (%)
rofil		(ff)	- aldu	nple	T Va Iw/6	(tsf)	oistu	Profil	(ft)			- ecove mple	T Va lw/6	(tsf)	oistu
1			San	Sar	-dS Q		SΩ	 [±]	Ξ	DESCRIPTION	-	San	-dS (b		ZΩ
	661.4AUGER REFUS	SAL		27											
F	Very strong, gray, thinly	_			50/1"										
F	weathered DOLOMITIC	-			Ö										
É	LIMESTONE, with vuggy	-			E										
7	porosity, nighly weathered at 103'1" to 103'3"	rea at -		1											
	Recovery = 97%														
	RQD = 15%	105													
É	Very strong, gray, thinly		╉		_	-									
	laminated, finely crystalline,	-			C O										
	weathered DOLOMITIC	_			R										
Z	porosity, highly weathered a	reas _		2											
Z	at 105'11" to 106'4", 106'10'	" to 🛛 –		-											
É	107', 107'2.5" to 107'4" and 108'2.5" to 108'5"														
Ź	Recovery = 91%	110													
	= 1000000000000000000000000000000000000	# -													
	Bonng terminated at 110.50		-												
		-	1												
		_	-												
		-	1												
		115	-												
			1												
			-												
		-													
		-	-												
		-	1												
		-	-												
		120	1												
		-	-												
		-	1												
21/1		-	-												
		-	1												
6.61		-	-												
NGEN		-	1												
MA		125													
- - - -	GENE	RAL N	OT	ES	;					WATE	R LEVE	L DA	TA		
B	egin Drilling 08-01-2005	Con		e Dri	lling)8-01	-200)5	While Drilling	¥		.50 ft	•••••	
	rilling Contractor PRECON		IG Sect	[ck	Drill Riq	g	-ME ک	/5/ 2 E		At Completion of Drilling) <u>¥.</u>	<u>[</u>	JKY	•••••	
	rilling Method 3 25-inch UCA	J. Nč	1911	UN.	Cn	ecked	uy .	יד יל	JUICI	Depth to Water	<u>ΝΑ</u> ΝΔ	•••••			
		• • • • • • • • • • • • • • • •	• • • • • • •	• • • • • •				••••	••••	The stratification lines rep	resent the app	roximate	boundar	у	
>	•••••••••••••••••	• • • • • • • • • • • • •	• • • • • •	• • • • •	• • • • • • • • •	•••••		• • • • • •		Dermeen son rypes, the ac	เนลา และเราแบก	nay ne g	auual.		

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WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

Client McDonough Associates Inc. Project Longmeadow Parkway over Fox River, Section Datum: NGVD Elevation: 764.56 ft North: 1993582.38 ft East: 999783.54 ft Station: 2221+10.47L Offset: 29.11L

Location Co. SPT Values (blw/6 in) SPT Values (blw/6 in) Moisture Content (%) Sample Type Sample No Sample No Moisture Content (% Elevation (ft) Elevation (ft) Profile Profile SOIL AND ROCK Depth (ft) SOIL AND ROCK Depth (ft) Qu (tsf) Qu (tsf) Sample DESCRIPTION DESCRIPTION 7 10 18 2.62 13 В 55 14 7 9 19 2.05 14 В 60 13 702.6 Dense, gray SILTY LOAM 15 18 NP 20 14 65 18 698 Stiff, gray CLAY LOAM 8 1.39 14 21 10 В 70 13 1/11/10 2012301.GPJ WANGENG.GDT 8 1.48 14 8 В Boring terminated at 75.00 ft WATER LEVEL DATA **GENERAL NOTES** DRY 07-29-2005 Complete Drilling 07-29-2005 ∇ Begin Drilling While Drilling PRECON DRILLING Drill Rig CME-75 ATV DRY At Completion of Drilling Drilling Contractor VANGENGINC Driller K&J Logger J. Kasnick Checked by B. Fugiel Time After Drilling NA Depth to Water NA Drilling Method 3.25-inch HSA Ţ The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.





WEI Job No.: 201-23-01

Co.

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

Location

ClientMcDonough Associates Inc.ProjectLongmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 761.61 ft North: 1993501.54 ft East: 999834.79 ft Station: 2221+61.56 Offset: 51.82R

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft) Sample Type	recovery Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCH DESCRIPTION	Depth	Sample Type	Sample No.	(blw/6 in) (du/6 in)	(tsf) Moisture Content (%)
	701.6 Bi	oring terminated at 60.00 ft		17	11 5 7 2 5 8	1.80 B	15								
∧ L		CENED											<u> </u>		
01.G			AL NU		lling	·	17_10	200)5			LU		4 V	
20123 B	egin Drill rilling Co			ete Dri	ning Drill Die	U	CMF-	-201 75 /	UTV	At Completion of Drilling	<u>↓</u>	•••••	אט אט	.f Y	
	riller		(Ande	rson	C.h.	ecked	hv F	3. Fi	uaiel		. ΝΔ	•••••			•••••
	rilling Me			13011	01	CUNEU	.у		Sign	Depth to Water V	Ν <u>Α</u> ΝΔ	•••••			
WANG				•••••		•••••	•••••	• • • • • • • • •		The stratification lines repre-	sent the app al transition	roxima may be	ate bou e arad	undary	





WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928

Client McDonough Associates Inc. Project Longmeadow Parkway over Fox River, Section Datum: NGVD Elevation: 773.61 ft North: 1993633.27 ft East: 999833.60 ft Station: 2221+60.64 Offect: 70.001

F	ax: 630-953-9938	Location				С	0.	Of	set: 79.9	OL			
Profile	SOIL AND ROCK	Depth (ft) Sample Type recovery Sample No	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft) Somelo Timo	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	713.6 Boring terminated at 60.00 f		9 9 9 13 8 11 13 9 8 11 13	1.15 B	13)))		
	GENE		6					WATER L	EVEL	DAT	ГА_		
Ве	gin Drilling 07-29-2005	. Complete D	rilling	0	7-29	-200)5	While Drilling	<u>Z</u>	<u> </u>	RY		
Dri	illing Contractor PRECON	DRILLING	Drill Rig	<u> </u>	ME-	75 A	TV	At Completion of Drilling		C	RY		
Dri	iller K&J Logger	J. Kasnick	Che	ecked b	by E	5. Fl	igiel	Time After Drilling	NA				
Dri	illing Method 3.25-inch HSA					• • • • • • •	•••••	Depth to Water	the appro	ximate	boundar	v	
								between soil types; the actual tra	ansition ma	av be ar	adual.	,	

Page 2 of 2





Co.

WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

Location

ClientMcDonough Associates Inc.ProjectLongmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 775.92 ft North: 1993479.81 ft East: 999912.64 ft Station: 2222+39.37 Offset: 73.70R

_																		
Profile	Elevation	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ff)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROO DESCRIPTION	Cept A	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
J WANGENG.GDT 1/1/12		20.9 Bc	pring terminated at 55.00 f	t		17	6 12 17	3.03 B	14									
.GPJ	_		GENE	RAL NO	OTE	S				-		WATI	ER LEVE	LD	AT	Α		
2301	Begir	n Drilli	ng 07-13-2005	. Comp	plete [Drill	ling	0	7-13	-200)5	While Drilling	<u> </u>		47.	50 ft		
201	Drillir	ng Cor	ntractor PRECON	DRILLING	G	D	Drill Rig		ME-	75 A	TV	At Completion of Drillin	g <u>¥</u>		47.	50 ft		
OING [Drille	er	K&J Logger	K. And	erso	n	Che	ecked	by .	3. Fi	ıgiel	Time After Drilling	NA					
GEN [Drillir	ng Met	thod 3.25-inch HSA									Depth to Water	NA NA					
WAN												The stratification lines re	present the app	roxim	ate b	oundar	у	





WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

 Client
 McDonough Associates Inc.

 Project
 Longmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 792.65 ft North: 1993629.93 ft East: 999920.43 ft Station: 2222+47.46 Offset: 76.38L

F	ax: 630-953-9938	Location				С	0.	I	Offset: 76.	38L				
Profile	SOIL AND ROCK	Depth (ft) Sample Type recovery Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	732.7 Boring terminated at 60.00 f	00 1 - - - - - - - - - - - - -	5 8 10 6 9 12	1.64 B	13									
		75												
	GENE		I S				<u> </u>	WATER	LEVE	LD		A		
Be	gin Drilling 07-28-2005	. Complete Dr	illing	0	7-28	-200)5	While Drilling	<u> </u>		DF	RY		
Dr	illing Contractor PRECON	DRILLING	Drill Rig	С	ME-	75 A	TV	At Completion of Drilling	<u>¥</u>		DF	RY		
Dr	iller K&J Logger	J. Kasnick	Che	ecked b	by E	<u>3. Fι</u>	ıgiel	Time After Drilling	NA					
Dr	illing Method 3.25-inch HSA							Depth to Water	NA					
								The stratification lines repres between soil types; the actual	ent the appr transition r	roxima nay be	ate bo e grad	oundary dual.	/	

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Location

BORING LOG S-118

Co.

WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

Client McDonough Associates Inc. Project Longmeadow Parkway over Fox River, Section Datum: NGVD Elevation: 779.92 ft North: 1993501.60 ft East: 999985.75 ft Station: 2223+12.52 Offset: 52.06R

SPT Values (blw/6 in) SPT Values (blw/6 in) Moisture Content (%) Sample Type Sample No Sample No Moisture Content (% Elevation (ft) Elevation (ft) Profile Profile SOIL AND ROCK Depth (ft) SOIL AND ROCK Depth (ft) Qu (tsf) Qu (tsf) Sample DESCRIPTION DESCRIPTION --BLIND DRILLING TO 6 FEET--13 9 3.12 12 9 В 10 4 9 10 2.87 12 В 30 12 773.9 Dense, brown SANDY LOAM 13 10 NP 11 11 1.75 12 16 13 Ρ 18 17 771.9 Stiff to hard, brown CLAY LOAM 8 12 5.17 10 12 1.50 11 2 13 16 В Ρ 10 16 35 20 6 10 3 3.85 9 В 13 4 15 13 13 2.62 10 20 8 В 40 15 12 24 5 7 2.46 11 5 В 9 2 8 3.20 11 14 2.46 12 6 8 13 В В 20 11 45 18 3 9 4.76 12 2012301.GPJ WANGENG.GDT 1/11/12 В 11 5 15 3.94 15 1.07 14 12 8 14 В В 10 10 **GENERAL NOTES** WATER LEVEL DATA DRY 07-12-2005 Complete Drilling 07-13-2005 $\overline{\Delta}$ Begin Drilling While Drilling PRECON DRILLING Drill Rig CME-75 ATV DRY At Completion of Drilling Drilling Contractor WANGENGINC Driller K&J Logger K. Anderson Checked by B. Fugiel Time After Drilling NA Depth to Water NA Drilling Method 3.25-inch HSA Ţ The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



Co.

WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

Location

Client McDonough Associates Inc. Project Longmeadow Parkway over Fox River, Section Datum: NGVD Elevation: 779.92 ft North: 1993501.60 ft East: 999985.75 ft Station: 2223+12.52 Offset: 52.06R

L														
Profile	SOIL AND ROCK DESCRIPTION	Depth (ft) Sample Type	recovery Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No. SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	719.9 Boring terminated at 60.00 ft		16 17	7 9 13 8 10 14	1.25 P	16								
	GENER		res						WATER			ATA		
Re	ain Drilling 07-12-2005		te Dri	illina	ſ	7-13	-200)5	While Drilling	<u>↓ ⊢∟ ۷ ∟</u> ∑		DRY		
	Iling Contractor PRECON DR			Drill Rid	9 1 C	CME-	75 4		At Completion of Drilling	<u>+.</u>		DRY	• • • • • • • • • • •	•••••
		K. Ander	 'son		, s ecked	by F	3. Fi	uaiel	Time After Drilling	-÷ ΝΔ		. MINI		•••••
			301	01	CUNCU	⊳у .		Sign	Depth to Water	Ν <u>Α</u>	••••			
				•••••	•••••	•••••		•••••	The stratification lines repres	ent the app	roxima	te bounda	iry	
1									Derween soll types: the actual	i transition i	nav be	oradual		

Page 2 of 2





Client

Location

BORING LOG S-119

WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

McDonough Associates Inc.

Co.

Project Longmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 804.69 ft North: 1993635.63 ft East: 999982.01 ft Station: 2223+09.05 Offset: 81.96L







BORING LOG S-121A

Co.

WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

Location

Client McDonough Associates Inc. Project Longmeadow Parkway over Fox River, Section Datum: NGVD Elevation: 804.94 ft North: 1993751.63 ft East: 1000060.41 ft Station: 2223+87.68 Offset: 197.81L





BORING LOG S-121A

WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

Client McDonough Associates Inc. Project Longmeadow Parkway over Fox River, Section Datum: NGVD Elevation: 804.94 ft North: 1993751.63 ft East: 1000060.41 ft Station: 2223+87.68 Offset: 197.81L

	Fa	ax: 630-	953-9938	Location .					C	0.		Offset: 19	7.81L				
Drofilo	Prome	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft) Sample Type	recovery Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROC DESCRIPTION	Depth X	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
					17	7 9 11	2.62 B	12									
				55	18	7 10 <u>10</u>	2.50 P	13									
				60	19	5 10 15	2.21 B	12									
		7 <u>39.9</u> Bc	oring terminated at 65.00 ft	- - - - - - - - - - - - - - - - - - -	20	7 13 17	2.79 . B	12									
U WANGENG.GDT 1/11/12				- - - - - 75_							1						
1.GP.			GENE	RAL NO	FES	\$					WATE	R LEVE	LD	AT	Ά		
01230	Be	gin Drilli	ng 07-26-2005	Comple	te Dri	illing)7-27	-200)5	While Drilling	 ₽		D	RY	•••••	•••••
NC 2	Dri	lling Cor ller		KILLING		Drill Riq Ch	g	- IVIE - by	() 7 Fi		At Completion of Drilling	} <u>₹.</u> ΝΔ		U	KT	•••••	•••••
ENG	Dri	llina Mei	thod 3.25-inch HSA	J. NA31		01	CUNEU	. у .		-giel	Depth to Water		•••••				
WANG				•••••••••••••••••••••••••••••••••••••••		•••••	•••••	•••••	•••••		The stratification lines rep between soil types: the ac	resent the app tual transition	oroxima mav be	ate b e ara	oundary	/	





WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

Client McDonough Associates Inc.

Project Longmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 807.94 ft North: 1993512.11 ft East: 1000135.06 ft Station: 2224+61.85 Offset: 41.86R

Fax	IX: 630-9	953-9938	Location					C	o.	ا 	Offset: 41	.86R				
Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft) Sample Tvpe	recovery Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROC	Depth X	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
				21	8 15 17	4.10 B	11									
			55	22	11 14 18	2.87 B	12									
			60	23	9 16 16	2.13 B	12									
			65	24	25 13 14	2.05 B	12									
	<u>737.9</u> Во	ring terminated at 70.00 ft	70	25	9 16 16	2.62 B	11									
		GENE	75	TES				200	05	While Drilling	R LEVE	LD		A		
Beg Drill Drill Drill	Jin Drillir ling Cor ler ling Met	ng U8-U3-2UU5 htractor PRECON D K&J Logger hod 3.25-inch HSA	Compl RILLING J. Kasi	ete Dri nick	Iling Drill Rig Ch	ecked	by E	-200 75 / 3. Fi	z ATV ugiel	While Drilling At Completion of Drilling Time After Drilling Depth to Water	¥ ¥ NA NA esent the app al transition	 proxima mav b	DI DI ate be e gra	CUNDAR	y	· • • • • • • • • • • • • • • • • • • •





Client

BORING LOG S-123

WEI Job No.: 201-23-01

wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630-953-9928 Fax: 630-953-9938

McDonough Associates Inc.

Project Longmeadow Parkway over Fox River, Section

Datum: NGVD Elevation: 808.57 ft North: 1993692.72 ft East: 1000143.34 ft Station: 2224+70.50 Offset: 138.72L



wa 11 Lo Te Fa	angeng@wangeng.com 145 N Main Street ombard, IL 60148 elephone: 630-953-9928 ax: 630-953-9938	Client Project Location	Long	BC M gmead	DRII WEI IcDoi ow P	NG Job noug arkw	LC No. h As vay c C	DG S : 201-2 ssocia over F o.	SPT-09 23-01 Ites Inc. ox River, Section	Datum: N0 Elevation: North: 199 East: 1000 Station: 22 Offset: 0.2	GVD 829.94 ft 13555.85 1973.12 ft 233+00.00	ft t D	Page -	1 of 1
Profile	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROC DESCRIPTION	Cepth J	Sample Type recovery Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	Brown SAND and GRAVEL <u>828.7</u> QUARRY DRIVEW Very stiff, brown and gray SANDY CLAY	/AY		1 9	2.25	10								
	Medium dense, brown SANI LOAM with asphalt debris F	ILL 4 DY 7 ILL 1 5_4		9 2 12 9 6	NP	8								
	Stiff to very stiff, dark brown gray SILTY CLAY to CLAY	and		3 6 4 6	1.89 B	23								
	819.4	 10		4 5 8	2.38 B	22								
	Stiff, brown SANDY CLAY L	MAC 		5 4 12 15	1.00 P	12								
	815.9 Medium dense to very dense brown GRAVELLY SAND	- - 15		6 7 13 15	NP	5								
				7 13 15 <u>18</u>	NP	5								
		20		8 34 27 25	NP	4								
3DT 1/11/12	^{807.4} Boring terminated at 22.50 fl	-		9 8 19 <u>18</u>	NP	8								
ANGENG.														
	GENE			S					WATE	RIFVE		Δ		
MANGENGINC 2012301.0 Ind Ind Ind Ind Ind Ind Ind Ind Ind Ind	gin Drilling 07-14-2005 Iling Contractor PRECON I Iler K&J Logger Iling Method 3.25-inch HSA	Comp Comp Comp Comp Comp Comp	olete [G	Drilling Drill Rig	g (ecked)7-14 CME- by J.	-20(75 / Ka)5 ATV snick	While Drilling At Completion of Drilling Time After Drilling Depth to Water The stratification lines report the soil types; the action	↓ ↓ NA ∠ NA ∠ NA ∠ NA	D D roximate b may be gra	RY RY	y	



M 1 L T F	vangengo 145 N M ombard, elephone ax: 630-	Wang Engineering @wangeng.com lain Street IL 60148 e: 630-953-9928 953-9938	Client Project LO Location	ngn	BC M neado	DRII WEI IcDor ow P	NG Job noug arkw	LC No. h As ay c C	DG S : 201-2 ssocia over Fe o.	SPT-14 23-01 Ites Inc. ox River, Section	Datum: No Elevation: North: 199 East: 1002 Station: 22 Offset: 0.1	GVD 860.6 93558 2172.9 244+9 14L	68 ft .70 f 92 ft 99.80	īt)	Page	1 of 1
Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft) Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROC DESCRIPTION	Cepth (ff)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	12 859.7LC St	-inch thick, dark brown SI DAM TOPS iff to very stiff, brown, blac ay SILTY CLAY F	CIY SOIL/ k and	1	13 11 7	2.50 P	20									
	855.2	iff brown CLAY	5	2	9 5 10	2.25 P	30									
				3	5 5 7	1.48 P	22									
	851.7 Ve SA	ery dense, brown GRAVEI AND	LY	4	22 34 31	NP	4									
				5	44 30 43	NP	5									
			15	6	50/3"	NP	2									
	843.2 Bc	pring terminated at 17.50 f		7	50 50 23	NP	4									
			20 													
10ENG.001 11111																
2			25													
Be Dr Dr Dr Dr	egin Drilli illing Cor iller illing Me	GENE ng 07-22-2005 ntractor PRECON I L&D Logger thod 3.25-inch HSA	Complete DRILLING W. Wan	ES Pril g	ling Drill Rig Cho	c g C ecked	07-22 ME- by J.	-20(75 T Ka)5 MR snick	While Drilling At Completion of Drilling Time After Drilling Depth to Water	R LEVE	LD	AT DI DI	A RY RY	······	

MAN



2012301.GPJ WANGENG.GDT 1/11/12 NANGENGINC





2012301.GPJ WANGENG.GDT 1/11/12 VANGENGINC



2012301.GPJ WANGENG.GDT 1/11/12 VANGENGINC



APPENDIX B: Laboratory Test Results



ATTERBERG LIMITS IDH

ЧE

Fax: 630-953-9938

Number: 201-23-01



ŝ d C 2012301 НО SIZE GRAIN



L L L U U U AD ŝ d C 2012301 НО SIZE GRAIN



L L L U U U AD ŝ d C 2012301 НО SIZE GRAIN



L L U U U AD ŝ d C 2012301 НО SIZE GRAIN



Number: 201-23-01

WANGENG.GDT 1/11/12 GPJ 201 ò НQ ų

Fax: 630-953-9938




APPENDIX C: Global Stability Evaluations



Soil Properties

Soil ID	Soil Type	Unit Weight (pcf)	Soil Para Cu (psf)	ameter ∲(deg.)
Fill	IDOT Cohesive FILL	125	1000	0
1	Loose to Medum Dense Silty Loam	120	0	28
2	Medium Stiff Silty Clay	115	500	0
3	Soft Peat	60	400	0
4	Very Soft Clay	90	200	0
5	Medium Stiff Silty Loam to Silty Clay Loam	115	740	0
6	Stiff Silty Loam to Silty Clay Loam	120	1230	0
7	Stiff Silty Loam to Silty Clay Loam	120	1720	0
8	Hard Silty Loam to Silty Clay Loam	120	4100	0

SLOPE STABILITY A	ANALYSIS: BOLZ ROAD / LONGMEADO	W PARCKWAY
CALE: GRAPHICAL	APPENDIX C-1	DRAWN BY: A.A.K. CHECKED BY: M.A.K.
	Wang Engineering	1145 N. Main Street Lombard, IL 60148 www.wangeng.com
OR MCDON	DUGH ASSOCIATES, INC.	201-23-01



Soil Properties

Soil ID	Soil Type	Unit Weight (pcf)	Soil Para C _u (psf)	ameter ∲(deg.)
Fill	IDOT Cohesive FILL	125	1000	0
1	Loose to Medum Dense Silty Loam	120	0	28
2	Medium Stiff Silty Clay	115	500	0
3	Soft Peat	60	400	0
4	Very Soft Clay	90	200	0
5	Medium Stiff Silty Loam to Silty Clay Loam	115	740	0
6	Stiff Silty Loam to Silty Clay Loam	120	1230	0
7	Stiff Silty Loam to Silty Clay Loam	120	1720	0
8	Hard Silty Loam to Silty Clay Loam	120	4100	0

SLOPE STABILITY OVER THE FOX RI	ANALYSIS: BOLZ ROAD / LONGMEADC VER, Kane County, IL	W PARCKWAY
SCALE: GRAPHICAL	APPENDIX C-2	DRAWN BY: A.A.K. CHECKED BY: M.A.K.
	Wang Engineering	1145 N. Main Street Lombard, IL 60148 www.wangeng.com
FOR MCDON	OUGH ASSOCIATES, INC.	201-23-01



Soil Properties

Soil ID

FOR MCDONOUGH ASSOCIATES, INC.

201-23-01



APPENDIX D: Boring Locations Plans































BORINGS R67 - R74 & R77 - R78 HAVE BEEN ELIMINATED



S85

S84

22034-00

Sieg





2213+00

2+00

S98























APPENDIX E: Soil Profiles

925						
920						
915						
0 * 0						
910	Verv	stiff. dark brown				
510		FILL				
			E	XISTING		
				gi uue		
	R+001 ELE. 9¢4.75ft /·	. R-002 .				
905	2000+03.15, 51.41 L/	ELE. 904.34ft 2002+09.33, 12.79 R			ELE.	R-004 903.62ft
		N, Q MC	f. brown and aray		2008+0 N,Q-	08.46, 12.68 R
			SILTY CLAY to	R 003		Medium stiff to s
	8, 2.50 + 15	9,1.00 18	20	ELE. 900./1ft 05+01.83, 27.70 L		CLAY LOAM TO SILTY CLAY LOAM
900	14, NP 7 Medium dense	e to		QMC	0,1.00	
	LOAM to GRAV SAND	VELLY 18, NP - 5	7	NP 19	15 , 1.50	31
	24 , NP 6					
			6, 1	2524	8 , 0.50	17
895	11 , NP /	12 , NP 6		NP 20		
	17 , NP 21				Loose to medium dense, brown	
	EOB 893.75 ft	20 , NP 8	6,	NP 17	SANDY LOAM 13 , NP	15
		31 , NP 10			EOB	892.62 ft
890		EOB 891.34 ft	14	NP 14		
				EOB 890.71 ft		
885						
			MI 5 8 7 7 8 8			
	905.1 905.1 905.1 905.1	905. 905. 905. 905.5 905.5 905.5 905.5 905.5	905.8 904. 904. 904. 904. 904. 904.	904. 903. 903. 903. 903. 903. 903.	903. 903. 903. 903. 903. 903. 903.	903. 903. 903. 904. 903. 903. 903.
	50 <u>2000</u> ±00 2000+50 <u>2001</u> ±0	<u> </u>	<u>↓ </u>	<u>7005+00_2005+50_2006</u> 3	<u> </u>	<u> </u>
	USER NAME =	DESIGNED - DRAWN -	REVISED - REVISED -	STA	TE OF ILLINOIS	
	PLOT SCALE = PLOT DATE =	CHECKED - DATE -	REVISED - REVISED -	DEPARTMEN	T OF TRANSPORTATION	SCALE:1''=50'

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																						92	0
												P	r i	ор а	0 S (2 a	/					91	5
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1							6, 18	NP , NF)		. 1	0										90	0
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								EOE	89	3.2	!7 f	t										89	0
																						88	5
904.0	0°°0	 904.0	<u>301</u>	B05.07	904.5	6°+06 201	4 905.27	905.1	206 201	± 905.48	905.5	20	902°e	8°206	0.906 2013 ION	02°83	© 906.2	201	906.10	0 906.6	8,906 2012 TOT	000.30	EET
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925																									
920																									
																					Exist	ing			
																					g r	ade			
015														Pr	opose	d									
915															<u> y u c</u>								\rightarrow		
										Loose, Da SILTY	IR brow	n													
910											, 50IL		\backslash	R=	008									\	Ν
/r						ELE	R-007 907. <u>57ft</u>							ELE. 90 2021+0.0	08.30ft 04, 0.00 R			\frown		к-(ELE. 90	009 7.47ft				
		R-006				N, Q	66.87, 24.0 M		\frown			\searrow							20	023+99.5	аз, 0.00 L <u>— MC</u>		\sim		0
	2014+	. 98 5.591t 99.25, 19.05 R	Stif	f to verv s	stiff.	9 1 C	20					\square		5,NP_	18	Very stiff SILTY CI	, brown AY LOAM /		-		15				8
905	N , Q-	MC	brow	n SILTY CL	AY LOAM	0,1.0							1	1.3.50	20				/	, NP	_ 15				5
						11 , 3.0	0 18										1		3	, NP	15		Very mediur	pose to n dense,	Ű
	φ, 2.3	20				34 , NI	P 6		Loose	to dense.	brown			<u>8,NP</u>	10				7	NP	12		brown GRAVE	LOAM to	6
1900 t	23 , NF	° <u> </u>								GRAVELLY	SAND			36 , NP _	4			\langle		,					24
	35 NF	. 5				26 , N	P 6	-											19	, <u>3.00</u>	11				
			x			 20 , N		- <u>*</u>						41, NP_		Very	stiff, brow	n/	14	, NP	15				
NI	5 25 , NF	P 16				EOB	897.57 ft							LUD OS	10.30 IL		CLAT LUAN	1		EOB 897	7.47 ft				
895	22 , NF	<u> </u>																							
	EOB	894.59 ft																							
890																									
885																									
63 78 77	- 06 <u>00</u>	31 31 44 144	57 71 58	98 98 33	11 25 97	38 52 28	65 78 21	92 05	17 19 32	46 59 59	72	86 39	<u>13</u> 81	26 10 26	23	30 33 33	<u> </u>	54 7 56	11 14)1 48	99 28	41 55 23	18 <u>3</u> 2 8	22 28 28 28 28	35
906	906. 906.		907.	907.	908. 908.	908. 908. 907.	908 908	908. 909.	909. 909.	* 606 * 606	909.	-606 -606	910.1	910.	910.0	910.1 910.5	911.2 911.2 908.4	911.5 911.4 908.5	911.6 911.7 911.7 907.	912.(907	912.2 912.2 906.	912	912.6 912.6 908.	912. 913.0 908.0 913.2	913 909
2014+		USER NA	2016 ME =	UTUU	DESIG	NED -	2018	RE	ZU VISED - VISED -	JTUU		2020+0	U	202 ST		ILLINOIS	2700	202	J-UU	2024		2025	TUU	2026+0	0
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	<u> </u>	ting								920
	LXTS 	rade								
										915
										515
_						FLE.				
					Ν	2027+0 , Q	D.06, 0.02 L MC	Stiff to ver	y stiff,	910
90	009 7.47ft				6	×₽ -	16	SILTY CL	AY LOAM	
/. [MC				-	4.50	19			
	15				×	, 1.50 -				905
	15		Very mediu	loose to m dense.	5	, NP -	13			
	12		GRAV	LOAM to ELLY SAND	6	, NP -	13			
	11				2	4,NP -	10			900
						FOR	900.41 ft			
9	<u>15</u> 7.47 ft									
										895
										890
										885
										005
301.40	912.14 912.28	912.41 912.55 912.55 907.23	912.68 912.82 908.18	912.95 913.08 908.54	913.22 913.35 909.36	913.49 913.62	910.17 913.76 913.89 911.41	914.02 914.16 913.06 914.29	914.43 913.70 914.56 914.70 913.54	914.83 914.96
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925																											Very stir	ff, black d brown	<, 1				925
920			E x	isting grade 1		oyer Robd 2031+48.79			R– ELE. 91	C12 5.93ft			/-	Very black c	stiff to and browr CLAY E 200	hard, SILTY R-013 ELE. 916.8 36+00.10,	8ft 0.15 R			F	"r o p (0 S e d <u>g r q d e</u> EL 2038	<u>C</u> R-014 LE. 916 9 3+99.98,	8ft 0.05 R			ŠILŤY CL	AY LOAM	R-0 ELE. 919 041+99.98	15 44ft 3, 0.13 L MC			920
915		20	ELE. 914	52ft , 0.06 L				N	2033+01.; , Qu —	74, 2,41 R MC					N , C	QU	— MC	to (se to de m SANDY RAVELLY	SAND		N , Qu	u	- MC				11,	, NP	20 24	Loose	to medium	915
		N ,	Qu	MC		V		9	3.75 -	14					31,1	NP	- 7				1	16 , N	NP	<u>12</u>				8 ,	NP	— 17 · <u> </u>	brown	and gray SILTY LOA	LOAM to
910	1	10 , 2.	.00	- 22	Loose	to mediu	um dense	9 , 15	, NP -	19					12,-tt	1P	- 22	¥				7 , N		- 21				11 , 8 ,	NP	— 20 Medium — 24	stiff, br gray CLA)	wn and	910
905		15 , 1 27 , 29 , 54 .	NP	- 21 - 12 - 10	Medium dense, br	own and to SILT dense cown, me	gray Y LOAM	7 7 19 M	, NP -	16 23 - 13 03.93 ft		Medium gray	n stiff stiff and br	to very F, own CLA1	9 , N , 6 , 3. 11 , 1.	IP	- 20 - 19 - 24 38 ft		> gray	dium dens LOAM to LOAM	se, SILTY	12 , N 14 , N E	IP	– 25 Me – 21 98 ft	dium dens	se, black a	ind gray,	16	, NP EOB 907	<u> </u>	Mediu S	n dense, g LLTY LOAM	905
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805 914.70 913.54 913.54	00++ 914.96	914.01 915.10	915.23 914.47	0 915.50 915.50 914.25 915.64	915.77 914.22 041.22 041.22	0 916.04 913.99 016.17	916.31 916.31 913.45	916.44 916.58 914.68	916.71 916.85 916.85	916.98 917.11	917.25 917.25 917.38 017.38	917.65 917.65	917.79	917.92 916.30 918.06	0 918.19 916.38 918.32	+918.46 916.14 918.59	00 918.72 915.55	2018.80 918.82 918.82 918.82 918.82 918.80 918.82 918.80 918.90 918.90 918.90 918.90 918.90 918.90 918.90 918.90 918.90 918.90 918.90 918.90 918.90 918.90 910 918.90 910 910 910	00+ 918.79 918.71 918.71	918.57 918.57 918.37 918.37	00+82 915.68 018.13	917.88 916.29 917.69		917.49 917.56 917.56	917.66 917.66 918.31 + 917.85	00 918.09 918.80 918.34	918,55 919,08 919,08 918,84	0 919.09 919.28 919.28	919.54 919.59 919.32	6019.84 920.09 919.40	920.34 920.59 919.66	920.84 921.09 919.08	921.34 921.56 921.56 921.71 921.71 921.81
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925							R-017						ELE. 2050+9	R–018 923.1 6.63,	3 1ft					R- ELE. 92 2053+99.9	019 359ft 0. 19.72 B				2 N,								
						N N	ELE. 920.65	5ft 5.52 R					2 , 2.25		- 16	TF to	very st AY to Si LOAM	iff, brown ILTY CLAY	9	, Qu, 1.25 -	мс — 22		Medium SIL	dense, b TY LOAM	rown 15 , 21 ,								
920	ELE. 2045+C	R-016 916 93ft 0.01 19.78 R		Stiff br	to hard, ewn and e	black, ¹⁵	, 4.00	20	Lc	ose to m	edium de	inse,	26 , NP		- 10		L	.oose, brov SANDY LOA	wn 11 M 8	, 1.75	22		St St	Iff to v bro SILTY CL	13 ery stiff, own .AY LOAM								
915	N , Qu -	MC		oose, bro SILTY LO	wn and g		, NP	13 	SAND	Y LOAM to	GRAVELI	.Y SAND	14, NP						6	, 1.25 _					8,								
9105	8 , NP 7 , NP		Loos SA	se, brown ND to SAN	and gray	9	, NP	24					7 , NP		- 24 - 22				20	, 2.23 _), NP _ EOB 9	24 25 11.59 ft				8,								
	16 , NP	17		Very	stiff, gr TY CLAY t	ay o	EOB 910.6	5 ft					E0 Medium fir	3 911. densi ne SA	11 ft e, gray ND						Very s SILTY	stiff, gray ¢LAY LOAM											
905	EOB	906.93 ft		SILT	Y CLAY LO	AM			edium den ray SILT	se, browr to SILTY	LOAM																						
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921.56 921.56 918.44	00 921.71 921.81 917.93 921.84 921.84	00421-56 921-56 0017-71 921-56	921.34 921.34 921.11 921.11	920.95 920.86 920.86	98.026 204 204		921.34 921.62 920.28 920.28	922.13 922.13 922.13 921.13	- 922.44 922.72 922.72 921.63	922.99 00 923.27 923.27	923.82 00 923.82	00+05245 924.05 924.05 924.37	923.19 924.64	924.92 923.17	00 925.20 925.47 923.19 925.75	926.02 924.07	926.57 926.57 926.57	926.85 926.85 927.12 923.91	927.67	928.22 928.22	928.66 928.48 928.48 928.66	928.78 928.83 925.60 925.60	928.72 928.72 925.62	928.56 928.34 00	927.68 925.39 925.39								
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		R-C	21						<u> </u>											<u>yıuu</u>	024										
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925		QU	MC		\square			2062+99.	98, 0.18 R	R				R- ELE. 9:	023 2 <u>2.91ft</u>					2069+00.	.02, 0.17 R					R-025 ELE. 922.65f	ft				925
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	7	NP -	13	Lc	ose to m	nedium der	nse, to	Ì				\frown		Qu-	MC			1	+								Me				
920	17.	NP —	7		GRAVEL	LLY SAND	1	3 , 1.50 —	22						Loc	ose to meo SAND	dium dens to GRAVEI	e, gray, n LY SAND	nedium 1	4 , NP —	9	9+64.8	Loose dense, b L	to mediur rown SAN .0AM	n IDY						920
	8,	NP —	25	\sum			8	1.75 —	— 25	Soft	to stiff, br	own and	13	, NP —	11				5	, 0.25 —	25	D D N Soft to	stiff, br	own and	10,	1.75	16				
	 	 NP	10	Loc	ose, brow	un SILT to	LOAM	3 , 0.75	20	gr	ay SILTY CLA SILTY CLAY LO	Y to DAM	8	, NP —	- 7				6	, 1.50 _	22	U SANDY (CLAY to SIL	TY CLAY	5,	1.00	25		/		
915	9,	NP	26				3	3,NP	14				2,	0.25	_ 29	Lo	ose, brow	n and gro	γ	8,NP_	18				9,	NP	17 	pose, b SI	rown and TY LOAM	gray	915
	18,	NP	16				10	, 3.00	18 3.54 ft				6	, NP	20		SILTY	LOAM	6	, <0.25	19	St			6,	₩	19 -				-
Q10		EOB 912	.69 ft						V. br	ery soft : own and g	to very stif ray SILTY CL to	f, AY	ô	, NP	20	V br	ery soft own and	to very gray SILT	stiff, Y CLAY	3,0.50 _	20				6,0).25	21				010
JIU Mec	GRAVELL	ISE, Drom Y SAND	'n							SILIT	LAT LOAM		1/24",	<0.25	25		SILTY	CLAY LOAN		2,0.50_	22				3, <	<0.25	21	Very and g	ay SILTY to CLAY	ard, bro CLAY LO LOAM	A JIU
													1,	<0.25	22					15 , NP _	21				8,2	2.00 <u> </u>	11 ft				
905													13	, NP	11 5.91_ft	Mediu	um dense,	gray LOA	M to GRAY	VELLY SAND)										905
900																															900
895																															895
26.83 25.14 26.84	26.81 26.68 26.72	26.59 25.62 25.62	26.43 26.26 25.20	26.10 25.99 26.87	25.93 25.93	25.98 25.98 26.09 24.45	26.24 26.24 26.39	26.55 26.70 24.17	26.84 26.93 24.20	26.98 26.98 26.98 23.93	26.93 26.84 23.36 26.71	26.59 22.89 26.46	26.34 22.84	26.09 22.86	25.96 25.84 23.47	25.71 25.71 25.59	25.34 25.34	25.21 25.21 25.09	24.96 24.84 24.84	24.71 24.71 24.59 224.59	24.34 24.34 22.95 22.95	24.21 24.09 23.85 23.96	23.84 23.00 23.71	23.59 22.73 23.46	23.34 22.71 23.21	23.09 22.57 22.96	22.84 23.35 22.71	22.59 23.52	22.46 22.34 24.01	22.21 22.09	21.96
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			PLOT DAT	Е =		DAT	E -		REVI	ISED -									SCALE:									ILLINOIS			

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925		R−026													P	roposed grade								+ 3,
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				TY CLAY to	CLAY LOA	M N	Qu	<u> мс </u>		Loose	, brown		ELE.	919.14ft						020				ett
<u> 920</u>	5 175	0.4									FILL	\rightarrow	2081+0	9.97, 0.47	L			\square		UZ9 7 /5#				arre
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				\rightarrow		$[-\pi]$;†1.50 	14	/		AY to CLA PAM	4 Y	, 0.70					12	2.25	14			/	4
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						11	, 2.25 —	11		Mediu	im stiff, - gray		6, 0.50	62		-	1		0.25	16 /		_/ _		-
							EOB 90	7.00 ft		SILTY (with	LAY LOAN 1 peat	м, —						0,	0.25					
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15			/	1				/				0	, NP EOB	90	— 9.55	ı∠ ft		GRAVE		SANE))		
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							Existing grade
925			Proposed grade		0.070		
	EL 2089	R-031 E. 921.25ft +99.92, 0.09 L 		El 2093	K-UJZ LE. 921.31ft IJ-00.05, 0.09 L Very stiff, t brow SILTY C FILE	black and vn CLAY Loose, black, brown - / and gray ELE. 920.60ft	
920 =	N Qu	MC		N, Qu	u MC	/ SILTY LOAM 2098+99.69, 26.61 L FILL N Qu MC	
AM	12 , 3.25	17		12 , 3.5		R-033 ELE. 914.968ft	
915	13 , NF	10	Loose to me	11um dense, 22 , 1.75	5 - 11	2096+00.13, 27.94 L N Qu MC N Qu MC N Qu N Qu MC N Stiff to hard, brown c	N bht
	13 , NF 	10				gray SILTY CLAY to gray SILTY CLAY to CLAY LDAM gray SILTY CLAY to CLAY LDAM	13
910	13 , NF EC	911.25 ft		8 , NP	P 12	16, NP - 31	12
						6, NP 37 19, >4.50 11	8
905				EC	COB 907.31 ft	20, \$4.50 - 11 EOB 906.60 ft -	10
					Dark brown PEAT		14
900						1/24", <0.25 - 53 stiff, gray SILTY CLAY LOAM with organics	
						1/24", <0.25 b5 1/24", <0.25 - 34	
895					Stiff, gray CLAY Li	DY SILTY 0AM 6 1.25 17	
	0.5					EOB 894.968 ft	
920.36 920.36 920.36	920.90 920.64 921.03	00000000000000000000000000000000000000	921.53 921.65 921.48 921.48 921.78 921.59 921.59	922.05 922.10 922.11 922.07 922.07 922.07 922.07 922.07	221.81 221.60 220.92 221.60 221.60 221.60 220.67 220.67 220.67 220.67 220.67 220.67 220.67 220.67 220.67 220.67 2004+00 220.67 2004 220.57 2004 220.57 2004 220.57 2004 220.57 2004 220.57 2004 220.57 2004 220.57 2004 220.57 2004 2004 2004 2004 2004 2004 2004 200	500 919.57 919.57 919.56 919.56 919.56 919.56 919.56 919.56 919.56 919.56 919.56 919.56 919.56 919.56 919.56 919.56 919.56 919.56 919.56 919.56 919.56 919.57 919.57 919.57 919.57 919.57 919.57 919.57 919.57 919.57 919.57 919.57 919.57 919.57 919.57 919.57 919.57 919.57 919.57 920.55 920.55 921.57 920.55 921.57 921.57 921.57 921.55 921.57 921.55 921.57 921.55 921.57 921.55 921.57 921.55 921.57 921.55 921.57 921.55 921.57	00+10 919.21 918.60 918.64
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				+1LL											ELE.	911.73ft					R-0)39				
		Modiu	donso	Pr	oposed grade			R-	037						2111+00).04, 0.05 R	2				ELE. 910	0.78ft				
		brown 3	SILTY LOAN FILL	1				ELE. 90	9.94ft		-			N .	Qu	MC-					2114+00.0	л, 0.00 к				
910			036			$ \rangle$		2108+00	.01, 0.05 L			9.12								N ,	Qu	MC	Stiff to	very st	ff, brown	
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	N ,	. Qu	<u> </u>				11	7 76	07			Lai								12,	3.00	17				
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							6	, 1.50	27			lewo		11 .	1.50 –	14				10,	5.75	12				20 4
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900		, 1.00					13	, 3.00 _	13						EOB 9	01.73 ft						13				
	14	, NP —	+ 10					EOB 89	9.94 ft																	
	10	ND	<u> </u>																							
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895	19	, NP —	10			<u> </u>																				
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			PLOT SC PLOT DA	ALE =		CHEC	CKED -		REVIS REVIS	ED -				DEP	ARTME	NT OF T	RANSPO	RTATION		SCALE:	<u>''=50'</u>					

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Ex	istina								
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1, 0.00 R		$\left \right\rangle$							
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MC	Stiff to	very st	ff, brown	 					910
10	and bla	to CLAY L	CLAY LUAM QAM		, 1.50	10			
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1.03 0.85	1.18 1.18	1.64 1.82 1.51	1.94 2.00 1.86	1.99 1.92 2.10	1.79 1.61	1.25 0.49	11.07 0.89 0.70	0.53	0.08 09.13 09.75
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21194	HUU	212	USER NA	212 MME = CALE = NTE =	1+00	2122+ DESIGN DRAWN CHECKE DATE	ED - - D - -	2123+0	U REVI REVI REVI REVI	212 ISED - ISED - ISED - ISED -	24+00		∠5+00 D	2 S EPARTM	TATE OF	212 ILLINOIS TRANSPO	RTATION	2128 N	SCALE:	2129 [.] 1."=50′	+00	21304
910.08 990.13 999.13	909.79 909.46 909.21	909.09 908.68 90.6.30	908.25 908.25 907.83	906.97	906.54 906.11 905.99	905.73 905.39 904.87 905.11	904.10 904.10 904.70	904.58 903.78 904.51	904.50 903.93	904.62 904.62	903.59 904.75 904.87	905.00 905.12	905.16 905.25 905.37	905.33 905.49 905.55	905.43 905.56 905.49	905.37 905.37 905.18 906.76	904.93 904.62 907.05	904.24 903.81 907.04	903.31 902.74 906.04	902.12 901.43 904.44	900.68 899.87 901.62	899.00 898.13 897.97
								EOB 893.99	9 ft										27,	4.00 — 4.00 — EOB 891	— 10 — 12 .68 ft	Medi br¢v CLAY
895							5,1	.50	32		Stiff to ar SILTY C CL	hard, bi nd gray CLAY LOAM	-dwn to 23	3 , 4.00 EOB	11 895.70 ft				19 ,	3.50 —	- 13	
900	23	. 2.00 – EOB 89	10 99.39 ft				18 , - 18 , - 8 , 2	1.00 <u> </u>	10 17				1	20 , NP 8 , 2.00	16 10				12	, NP	- 15	
	11	, NP -	12		Stiff browr	to very s and gray DAM to CIA FILL-	tiff, biack SILTY CLAY Y LOAM - 7, 1	.75	13		K			6 , NP	20	Loose brow	to medium n LOAM to	dense, SILT	9	1.75	- 15	
905	¥	2 , NP =					N.	ELE. 903.9 2123+00.12,	∠ 99ft . 0.14 L					2125+ N. Qu	99.90, 0.25	R			N .	ELE. 90 2128+99.9	04.68ft 98, 0.04 R MC	
310	N6	Qu	MC		Me b	uium dense, rown LOAM		R-UT	,		Propos gra	ed de		ELE.	R-043 905.70ft			CL.	AY LOAM	R-	044	
010		ELE. \$	2-041 909.39ft	2														C+1:=	if brown			
915									Whit													
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Ve	ery loose,	brown L(AM						R-	.049			
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2.50	10		Loose	+0	medium	dense	∍,						
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905			
900 Existing	S-010 ELE. 898.67ft 2148+21.93, 75.00 L	S=022	
	N , Qu MC 7 , 1.64 20	ELE. 896.65ft 2151+22.75, 75.02 L N , Qu MC	
STIFF to very stiff, bro CLAY LOAM to SILTY CLAY	own 9,1.56 — 19	ELE 892.79ft 10 , 2.46 22 N , Qu NC	
	7 , 1.3 <u>–</u> 18		
	11 , 1.89 17	23, 2.79 13 Medium stiff to hard, brown CLAY LOAM to SILTY CLAY LOAM 17, 2.79 14	
Proposed grade	20 , 1.89 13	18, 2.38 - 13	ELE.
	23 , 2.87 11	24,1.50 — 14 N,	Qu -
	4Q, NP - 3		3.77
	32 , NF 3	34, NP 11 13, 0,90 - 21	1.64
	26, NP 3 Medium dense to very de	24 , NP 11 18	, NP
Medium dense to very den brown GRAVELLY SAND to L	LOAM 25 , NF - 4	Stop, T/, NI TI Ti LOAM 52, NP 4 15	, NP
	50/3", NP 3	54 , NP 4 29	, NP
	27 , NF - 8	47, NP 16 25	, NP
	17, NP 19 Medium stiff, brown	51, NP + 19 38,	, NP
		42, NP 18 44,	, NP
891.89 891.89 890.77 890.77 890.77 899.77 899.17 889.51 889.17 888.51 888.51 888.51 888.51 888.51 888.51 888.51 888.51 888.51 888.525 888.16 888.128 885.25 885.25 888.25 884.28	883.25 900.61 882.15 882.15 880.99 879.12 874.77 874.77 871.02 898.51 871.02 898.51 871.02 898.51 871.02 898.51 871.02 898.51 871.02 868.52 866.77 868.52	866.02 8867.27 867.27 867.27 867.27 864.77 864.77 859.70 885.52 885.02 885.27 859.77 859.77 859.77 859.77 859.77 859.77 855.22 895.60 895.62 895.62 895.62 895.62 895.62 895.62 895.62 895.52 895.62 895.52 895.52 895.52 895.52 895.52 895.52 895.52 895.55 855.55 8	836.01 885.43 834.76
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			18 , NP		10	//						
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dium d	ense to v	ery dens	29 , NP e,		7							
wn GR	AVELLY-SA	ND [*] to-L04	м 25 , NP		5							
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	5-022	17 2 79 14		
18 , 2.38	13 ELE. 896.65ft	17, 2.73 <u>1</u> T		
885	2151+22.75, 75.02 L	19 , 4.59 12		ELE 883.97tt 2157+81.38, 77.77 L
24 , 1.50 —	14			N, Qu MC
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17,0.98	<u> </u>			
880 34 NB		20 , 2.50 — 12		
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24 , NP				18 , NP 10
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54, NP -			Medium dense to very	29, NP 7
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865		88 , NP 3		
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50/5", NP —				29, NP 8 brown SILTY LOAM
		58 , NP 19		
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31 , NP				
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82 , NP	11 Hard, brown			61 , NP 8
	<u>}</u>	72 , NP 8		
	Medium dense to very der brown GRAVELLY SAND to Li	nse, 0AM 54 , NP — 8		58 , NP 8
8.52 5.97 7.27 5.02 5.02 5.02 1.77	3.52 2.21 2.22 3.77 3.77 3.77 3.77 3.52 3.52 3.52 3.52 3.52 3.52 3.52 3.52	2.27 2.27 3.77 3.77 3.52 3.52 3.52 3.52 3.52	5.02 4.77 4.77 2.52 2.27 5.01 1.77	8.52 7.26 7.26 7.26 4.76 9.51 4.76 9.71 9.71 9.71 9.70 0.37 1.40 1.71 1.40 1.71 1.40 1.71 1.40 1.72 1.40 1.71 1.40 1.71 1.40 1.72 1.40 1.72 1.40 1.72 1.40 1.72 1.40 1.72 1.40 1.72 1.40 1.72 1.40 1.72 1.40 1.77 0.50 1.37 1.70 1.40 1.72 1.40 1.40 1.72 1.40 1.40 1.40 1.40 1.40 1.72 1.40 1.72 1.40 1.72 1.55 1.50 1.55 1.50 1.55 1.50 1.55 1.50 1.55 1.50 1.55 1.50 1.55 1.50 1.55 1.50 1.55 1.50 1.55 1.50 1.55 1.50 1.55 1.50 1.55 1.55
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B10 R=60 Mpdum shift youry shift, brown Silit youry shift, shift, block brown and grade Proposed grade Mpdum shift youry shift, brown Silit youry shift, shift, block brown and grade Proposed grade Stift, block brown and grade Stift, block brown and gradegrade <th>N 5, 7 10</th>	N 5, 7 10
010 R=060 SILTY CLAY ELE. 806.17ft Stiff, block, brown and array SILTY CLAY Proposed grade N 90 MC R=061 N 90 MC R=063 N 0u MC R=063 Stiff, DAM 5, 1.25 26 R=062 13 NP 6 7 1.50 21 28, NP 2 7 1.50 21 2183+00,08, 0.02 R	N 5, 7 10
2177+00.03, 0.00 R Stift, Black, Sultry LLAY LOAM Office 805 MC R-061 Iack, 5, 1.25 26 13, NP 6 26, NP 2 26, NP 2	7 7 10
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27, NP 3 795 EOB 796.17 ft 25, NP 4	15
27, NP 2 6, 1.75 23 3, NP 9	
EOB 792.83 ft 12 , 2.75 20 Very soft to very stiff, brown SILTY CLAY LOAM to SANDY 7 , NP 5	
6,1.50 - 25 12,NP 8	
Very loose to medium dense, brown SAND to Brown SAND to CRAVELLY SAND	
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			735	2218++64.88, 30. / 1 R N , Qu MC	
750			Medium stiff, bro SILTY CLAY	wn 12 2:00 18 Medium dense to v brown SRAVELLY S	Pery dense,
745				$\begin{array}{c c} & & & & \\ & & & & \\ & & & & \\ & & & \\ & & & & \\ & & & \\ &$	
				E 93 , NP 2	
				EOB 725.53 ft	Stiff SLTY
5002+00 775.42 402-00 702-00 702-00 712-60 772-12 772-12 772-12 772-12 772-12 772-12 772-12 772-12 772-12 722-22 72-22 72-22 72-22 72-22 72-22 72-22 72 72-22 72 72-22 72 72 72-22 72 72 72 72 72 72 72 72 72 72 72 72 7	00+1/25 173.06 173.0	0048024 772.550 772.510 772.510 772.510 772.513 772.13 772.13 772.13 772.13 772.13 772.13 772.13 772.13 772.13 777.18 777.19 777.19 777.19 777.19 777.19 777.19 777.19	2010 2010	201 201 <th>2011 2011 2011 2011 2011 2011 2011 2011 2011 2011 2011 2011 2011 2011 2011 2011 2011 2011 2012</th>	2011 2011 2011 2011 2011 2011 2011 2011 2011 2011 2011 2011 2011 2011 2011 2011 2011 2011 2012
2200-	USER NAME = PLOT SCALE =	DESIGNED - DRAWN - CHECKED -	REVISED - REVISED - REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	



		2221700 USE PL0 PL0	Z R NAME = T SCALE = T DATE =	220TUU	DESIG DRAWN CHECK DATE	NED - N - ED - -	2230+00	REVISED REVISED REVISED REVISED	- - - -		2232+00	DEPA	STA RTMEN	TE OF	ILLINOI RANSP	S DRTATIO	N	SCALE:	 		2231		2230700
780.75 811.08 782.00	8 811.25 784.50	785.75 810.71 787.00	809.90 789.50 790.75	809.81 792.00 793.25 809.31	794.50 795.75 820.97	797.00 798.25 836.82	799.50 800.71 826.85 801.89	803.02 822.55 804.11	805.15 843.09 806.15	807.11 838.00 808.02	808.89 833.08 809.72	810.54 829.59 811.36	812.17 826.56	812.99 813.81 825.32	814.62	816.26 816.26 817.07	824.94 817.89 818.71 818.71	825.91 819.52 820.34 820.34	821.16 821.16 821.97 826.82	823.79 823.61 823.61 824.42	825.24 829.07	826.06 826.87 829.63 827.69	829.37 830.37 829.32 830.14
805													EOB 752	36 ft									
							- Pro	posed (Grade			<u>52</u>	, NP	4									
810									Medium brown	dense to dense, GRAVELLY	SAND	33	, NP	5							LOR AL).40 [
815				Exsisting Grade								27, 	1.00	12						3,0	NP -	<u> </u>	
820									Stiff to and g SA	o very s- Iray SILTY ANDY CLAY	tiff, bro Y CLAY to LOAM	13 ,	2.38	22				DANUY LO	Aut	6,	NP	- 10	Mediu
													1.89	23			Med	IND GRAY S SILTY (F IUM dense d gray LO	ANDY CLAY CLAY LOAM ILL brown AM to	+o 14, 1 10	.25	- 19	
825												17, 1	2.25 -	10			Sti	ff to ver	stiff. b	36, 19, 2	NP	- 17	
830												2	2233+00.0	0, 0.20 L <u> </u>						22 N ,	36+99.7 Qu	5, 0.39 L	
													SPT- ELE. 82	-09 9.94ft					-	-FILL	R-0 Ele. 829)75	
835							\sim											Ver	y soft to nd gray Cl	hard, black, AY LOAM to CLAY	brown SILTY	Bolz Roc	
840																						Jd Comnecto	
845																						r 2237+51.35	

						.35))																	845
						57+5																		
						22																		
						ector								Der	າຣຄ ດ	, br Ravei	own	SA SAN	ND to					810
						Comn									0	F	ILL	5/41						040
						pao																	1	
+0	bard		ck	brown		N N N	1												R-	076			K	
CL	AY LO	DAM -	10	SILTY-			í												ELE. 8. 2240+04.	53, 68	ft 5.65 R			835
_	TF ILL-																M	V,	Qu —		- MC			
				R-	075	f+	Y								/			1					_	
			22	36+99. ⁻	75, 0	.39 L				_	_	/		1			0		, 141 _	F	4			830
		N	,	Qu		- MC	+	+		/	_		/		/		31	1	>4.50 -		15			0.50
		73	6.	NP _		3		A			/	/			/		13		3.25 -		21			-
/						/				/	/	/												
b	rown.	19	, 2	2.50 -	$\frac{1}{1}$	17									_			10	, NP _		18			825
M		14	, 1	.25 _	\vdash	19				×	/	/					-	37	, NP -		5			
/		1	_		-				4	/									EOB 82	3.68	ft			
_			υ,	NP _	F		1																	820
			6,	NP _	╞	10			/															
>			. 0	.25 _		20	1			M b	edi. row	um m (de GR/ SIL	ense AVELL' <u>TY L(</u>	+0 Y :)AN	den SAND 4	se, †o							
		2	2,	NP —	-	3																		815
				EOB 81	5.46	ft																		
																								810
																								805
0	6	5 51	2	4 -	96	2	20	<u> </u>	25	2	4	2	15	7	7	6	ب و	20	i 44	5	1	6	0 m	
826.8	822.7	823.6 827.6	824.4	825.2 829.0	826.0	826.8	829.6 827.6	828.5	830.3	829.3	830.1	831.2	830.9	831.7	832.1	832.5	833.4 833.0	834.2	835.0 835.0 833.6	835.8	836.6 834.2	837.4	838.3 839.3	839.1
23	6+00			223	7+00)		2	238	+00				22	239)+ <u>00</u>		5	2240 SECTION	00+00			224 TO SHE	11+00 TAL SHEET ETS NO.
																			ILLINOIS				3	7 18
1						1									-				Lection 3					

																									Τ
						+	<u> </u>		 																+
870						4	+																		_
865			E x i	sting grade					<u> </u>																
							SP1	T-14	/	7															
							2244+99	80 0.14 1															<u> </u>		+
860				ļ į		N	, Qu —	МС													Stiff SILTY (to very CLAY LOAM	stiff, bri to CLAY	bwn LOAM	
						18	3, 2.50 _	20													R-1 Ele. 87	080 0.52ft			
																	Exis	sting			2252+00.0)6, <u>0.05 L</u>			ŧ
855						15	5, 2.25 _											grade		N ,	Qu	MC			
						1	2, 1.48 _	22							R-	-079				9	2.00 —	14			/
											Proposed grade				ELE. 86	64.39ft				12	3.00	16	Mediu	m dense	, +0
850			if to bar				55, NP _	4						N	2249+00. , Qu	.08. 0.35 L				47,	NP _	4	brow	dense n GRAVEL	*, _LY
	Ы	cck, brov SILT	r lo hard vn and gr CLAY				73,NP _	5						3	, NP =	<u> </u> 1				43,	NP —	_ 5			
845						50/	3 [°] , NP	2						42	, NP _	3				68 .	NP	4			
							73,NP _	4						87	, NP _	3					EOB 860).52 ft			
0.4.0							EOB 84	13.18 ft				/		50/3"	, NP —	4									
040									\square	1				72	NP _	3									-
	ť.				/				ĺ		Dens bro	se to ver wn GRAVE	y dense, LY SAND		EOB 85	54.61 ft									
835																									
					Medium	dense to GRAVEL	very dens LY SAND	se, brown																	T
																									+
830																									_
				Very stiff to med	dium stiff	, brown																			
838.30 339.23	839.12 839.94 336.33	840.75 841.57 841.57	842.39 842.39 843.20 843.20	8445.61 844.02 854.42 345.65 345.65 346.47 347.47 3	863.14 11 847.29 11 848.10 848.10	870.69 848.92 849.74 849.74 23.74	850.55 851.37 851.37	852.19 853.00 358.88	853.82 854.64 360.16	855.45 856.27 856.27	857.09 857.90 862.16	858.72 859.54 362.88	860.35 861.17 363.55	861.99 862.80 364.13	863.62 864.44 864.60	865.25 866.07 866.07	866.85 866.85 867.58	868.25 868.86 868.86 366.63	869.42 869.42 869.91 367.87 370.35	870.74 369.27	871.06 871.33 370.44	871.53 871.69 370.78	871.81 871.94 371.59	872.06 372.19	872.1U 372 31
2241	1+00	22	42+00	2243+00	22	44+00	224	15+00	224	6+00	2247	+00	224	8+00	224	19+00	225	0+00	2251+0	00	2252	2+00	2253	3+00	
			DI OT C	CALE -	DR	AWN -		REVIS	ED -				ST	ATE OF											
			PLUT S	ATE =	DA'	TE -		REVIS	ED -			DEF	AKIME	NI UF T	RANSPO	UIIAIIU		SCALE:	. 1=50						

														R-	081						
													ELE	E. 87	4.33f	t			_		
Stiff SILTY	to N CLAY	/ery LOAM	stif I to	f, br CLAY	own Lûan	1							2254-	+99.9	9, 0	.05	L			87	5
R-	080					``						Ν	, Qu	_	<	МС					
ELE. 87	0.52ft											0	1 50			-14	/	/			
252+00.0	06 <u>, 0.</u>	05-L-			-		Ŧ					5	, 1.50	/		· 1 T					
Qu		мс							/			45	, NP			3				870)
2 00		14									,	10				0					
2.00 -											4	20	, NF			б					
3.00	_	16		Mediu	m de	ense	+	o very	,		1	28	, NP		L	1()				
ID		4		brow	n Gf	ense RAVEL		r sand												863	5
·		4									2	3	NP	_		3					
VP —	_	5					_						EOE	3 864	1.33	ft					
IP		4																		86	0
EOB 800	0.5Z T	τ																			
																				0.5	_
							-													85.	5
							+														_
							+														\neg
																					_
				_	6		+		~ ~ ~					c+	6		~				
871.33 370.44	871.53	871.65 370.75	871.81	871.94 371.59	872.01	872.15	17.2020	872.44	872.62	872.5(872.69	872.95	872.81	872.9 874.19	873.01	873.15	875.67	873.31	873.4 [,] 376.5 [,]	873.5(
2252	2+00			225	3+00			22	254	1+00 			CEOTT.	225	5+00				225 TOT	1 6+00 AL SHF	ET
													SECII						SHEE 37	TS NC 7 19).
													IL	LINOIS.							

900				900
			Proposed grøde	
895			Medium stiff to hardf,	R-\$86 895
	Exis g	ting rade н.	Hard, brown SILTY CLAY to	ELE. 892.37ft 2269+99.59 0.18 R
890			Medium dense, brown	N Qu MC 54,>4.50 13 890
	Loose to medium dense, brown and plack SILTY LOAM to SANDY	R-084	FILL	9,0.75 20
885	FILL / 2264+1 R-083	01.33, 0.08 R	R-085 ELE. 883.40ft	5, 1.50 23 885
R-D82 Medium dense, brown R-D82 and black SILTY LOAM FILL	ELE. 882.24ft Medicin Browh 2261+00.09, 0.32 L SANDY LOAM -FILL- 16 , >4.50	SILTY CLAY FILL 13	N, Qu MC	6, NP 10
880 N, Qu MC	N, QU MC 24, NP	3	15, NP 15 Loose to a LOAM to GR	dense, brown RAVELLY SAND EOB 882.37 ft 8880
7, NP 12 Stiff to very stiff, brown black and gray SILTY CLA	8, 3.75 16 14, NP	3		6.7
875 15, 3.50 15FILL		Medium dense d dense, brown 17 to GRAVELLY	to very n LOAM ' SAND 30 , NP 5	270
15, NP 22	8,1.50 23 / 48, NP	2	40 , NP 5	ute 25
870 9,1.00 21 Very soft to very stiff brown and black SILTY CL to SILTY CLAY LOAM	8, 2.00 24 Y 7, 1.50 26 50/3", NP NP	15 4	EUB 073.40 ft	
15 , 1.75 24	7, <0.25 23	5 6/0.34 IC		
865	5, NP 18			865
9, 0.25 24 Loose to very d	28 , NP 7 EOB 864.239 ft			
860 EOB 861.23 ft				860
873.44 873.44 876.54 875.56 873.81 873.81 873.81 873.81 873.81 873.81 873.81 873.81 873.81 873.81 873.81 874.19 874.19 874.19 874.19 874.56 874.61 874.61 874.61 874.61 874.61 874.61 874.61 874.61 874.61 874.61 874.61 875.06 875.19 875.44 875.44 875.64 875.64	875.69 875.81 875.81 875.81 875.81 875.81 875.81 875.81 875.81 875.81 875.81 875.81 875.81 882.60 876.31 876.31 876.59 876.59 876.59 876.59 876.59 876.59 876.59 876.59 876.59 876.59 876.51 877.81 873.15 877.81 879.31 879.31 884.53 884.53 888.92 880.31 880.31	885.30 881.31 881.81 881.81 882.31 882.81 882.81 882.81 882.81 882.81 882.81 882.81 882.81 883.81 883.81	887,48 884,81 884,81 884,81 885,81 885,31 885,81 885,31 885,81 885,31 886,81 886,81 886,81 886,81 886,81 886,81 886,81 886,81 887,31 887,31 888,31 887,31 888,81 888,81 888,81 888,81 888,931 888,81 888,931 888,81 888,931 888,81 888,931 888,931 888,931 888,931 888,931 889,931 889,931 889,931 889,931 889,931 889,931 889,931 889,931 889,931 889,931 890,31 890,31 890,31	890.81 891.31 891.31 891.31 892.41 892.41 893.41 893.41 893.40 893.40 893.40 893.40 893.40 893.40 893.40
ZZSD+UU ZZS1+UU ZZS3+UU ZZS3+UU ZZS3+UU ZZS0+UU ZZS0+UU <t< td=""><td>REVISED - 2262+00 2263+00 2 REVISED - STATE OF ILLINO DEPARTMENT OF TRANSF REVISED - DEPARTMENT OF TRANSF</td><td>264+00 2265+00 PIS PORTATION</td><td>2268+00 2268+00</td><td>ZZCBSHUD ZZC10H00 ZZC1H00 SECTION TOTAL SHEET SHEET NO. JULINOIS JULINOIS</td></t<>	REVISED - 2262+00 2263+00 2 REVISED - STATE OF ILLINO DEPARTMENT OF TRANSF REVISED - DEPARTMENT OF TRANSF	264+00 2265+00 PIS PORTATION	2268+00 2268+00	ZZCBSHUD ZZC10H00 ZZC1H00 SECTION TOTAL SHEET SHEET NO. JULINOIS JULINOIS

910						to medium	dense bri																							910
					and b	lack SILTY	LOAM to LC	MAC		R-0	88 69.ft	Ha	rd, browr	N SILTY CL	_AY LOA	.M E	R-089 LE. 905.98	ift												
0.05				R-I	087		LOAM		2	275+96.39	, 3.96 L					227	8+99.94, (D.03 L				Existi gi	ing ade							
903				2272+97.4	40, 0.87 L			`		yu	MC					7 . NF														903
				Qu	MC }		\nearrow			, NP	- 5																			
900			37	', NP	6				42 , >	4.50	_ 15					13 NP		11												900
			25 ,	, NP	4				15	, NP	- 9					19 , NF	>	3			<u></u>			Very stif	ff, brown _0AM	CLAY		Drapaad		
895			49	, NP —	3	Medium den SAND †	nse to der o GRAVELLI	ise, browr 1 SAND	ב י	, NP	- 2					16 , N	P	3					R-	-090				grade		895
			38	3, NR					20	, NP	2					21 , NF	<u> </u>	4	\supset				ELE. 8	91.88ft 2.06, 0.17 L					Vory otiff	to bard
890			29	, NP	3				17	, NP —	- 3	Hard, gray	brown a SILTY CL	nd AY		13 , >4.	50 —	15				N	, Qu	MC					brown, grav CLAY to CL	elly SAND .AY LOAM
			26	, NP —	- 2				10	, NP —	— 4		Medi	ium dense own LOAM	ə,	30 , N		8		prown GRA to	very de AVELLY S SAND	ense, 7 Sand	, 2.25 _	23				D	001	
			34	, NP —	3				24	, NP —	- 3					20, 3.0	75	21	\geq			1	18, NP -	3		Medium den gravelly SI	se, Drown LTY LOAM	ELE. 8	-091 384.75ft	
885			28	, NP —	2				15,	NP	_ 4					Very sti	<u>FOB 885.98</u> ff, brown	8 ft and gra	у				17, NR _					N , Qu —	MC	<u> </u>
			18	, NP —	- 5				15	3.50	- 4							LAT LUAM				1	7,3.00-	16				10 , 2.75		
880			14	EOB 8	+ 17 81.37 ft	Very s	stiff, brow gray <u>SILTY CLAY</u>	n and	26	, NR									ī	Very stif	ff, CLAY—		56,NP -	6				27,NP -	8	880
									28	, NP	— 4	Me	dium den:	se, brown	1					LUAM			26,NP -	6				35 , NP -	4	Mediu dense
875										EOB 87	7.69 ft		GNAVELE	SAND									40 , NP -	2		Medium dense dense, browr LOAM to GRAV	e to very a, gravelly 'ELLY SAND	18 , NP -	3	875
																							FOR	575.68 ft				49, NP -	3	
Q70																												28,NP -	4	870
																												EÔB	870.75 ft	
69.	69 69			69 47 37	22		-11 -47 -26 69	.97 .06 .31	.72 .48	.19 .69 .57	.19 .69 .12	.19	.13		.24	.36 .30	.39 .96 .31	.17 .03 .96	.68 .34 .34	.94 .26 .47	.93 .33	.75	.15 .56			.59 .99 .41	.89 .67 .44	.05 .19 .72 .45	.25 .25 .12 .14	г. <u>60</u> 60
227	1+00	2008 80 2272 2272	2+00 USER NAT	168 168 227 ME =	3+00 891. 903.	2274- DESIGN	- 100 - 001 891. 891.	-168 906 2275+0	26 70 6 00 REVISE	2276 2276	894 906	22 22	968 968 77+00	206 206 22	<u>506</u> 278+00	897 906 897.	2279+00	897 904 896	968 2280+00	899 895 895 895 895 895 895 895 895 895	468 868 2281	+00 893, 894, 894,	228	2+00		68 88 68 88<	2284+00	221 SECTION	85+00	2286+00
			PLOT SC	ALE =		DRAWN CHECKE	- ID		REVISE REVISE	ED -			DE	S [.] PARTMI	TATE Ent o	OF ILLI	NOIS Isport <i>i</i>	ATION												<u>37 21</u>
			PLOT DA	TE =		DATE	-		REVISE	ED -									S	CALE:	50′							ILLINO	IS	

910																												910
905																												905
								Exist gr	ing dde																			
900																												900
												Brown SIL	TY CLAY L	0.AM														
895									R- ELE. 8	-093 93.38ft			Medi	um dense to	dense,		Propose grad	d de				+12.73						895
	9 9			R_1	192		_		2291+00	MC				GRAVELLY SAN								ail 2298				R-	096	
890	Y \			ELE. 88	8.89ft 4, 20.73 R			2	4 , NP -	3	,				Medium d SILTY LC	ense, brown AM to SILT	n					tumn			N	2300+03.	69, <u>11</u> .75 L	890
			N	, Qu	мс				44,NP -	4				ELE	R-094 . 885.26ft						Very s SILTY C SAN	STIFF, DRO CLAY LOAN NDY CLAY	to		8,	>4.50		
885			47,	>4.50	7				18 , 1.50 _	20				2294- N , Qu	-06.32, 7.83	R				R-095 ELE. 883.3	oft				32,	>4.50 –	15	885
			33	, NP	\			1.	3,1.25 -	21				14 , NP			Very	stiff b	N	2290+97.10,	- MC				2:	5,NP _	6	
880	>		19	9,NP	_ 5	Stiff SILTY C	to very s <u>At to SIL</u>	1 Hiff, brow FY CLAY LC	7 , 3.00 - AM	20				12 , NP	16		SILTY	CLAY LOA SANDY CLA	AM ^{to} 6	, 2.50	24					2,NP _ 1,NP _	4	880
	m dense , brown SAND	to very GRAVELLY	34	, 2.50 —	— 19			1	6,1.75 - 18,NP -	21				24 , NP	13 0 <u>21</u>			/	16	, 2.75 — , NP —	16 	Medium brown	dense to SAND to (o very de <u>GRAVELLY</u>	ense, 3 SAND	1,NP —	2	
875			43	, NP —	— 4 — 3 —	Medium den brown	se to very GRAVELLY S	dense, AND	33,NP -	5			<u></u>	11 , 2.5) 21				2	6,NP	2				5:	9 , NP — EOB 8	2 75.88 ft	875
			59), NP —	4				32 , NP - EOB	4 873.38 ft					в 875.26 ft				2	, NP	4 56 ft							
870			43	, NP —	— 2 70.89 ft																							870
228	886.20 886.20 90+99	886.60 886.58 886.60 889.34 889.34 889.34	+ 886.82 887.04 889.46	887.26 887.48 887.35 887.35	887.70 887.92 884.83 888.14	888.36 885.71 888.58 888.58 888.85.71 888.85.71 888.85.71 888.85.71 888.85.71 888.85.71	889.25 889.25 889.25 889.25	00+00 889.62 889.62 888.87 888.87	8893.34 575 8893.34 575 893.34	00-11 889.61 895.59	889.44 889.21 889.21 889.21	00+2 888.55 893.40 888.12 888.12	887.68 889.96 887.25 50340	0 886.82 887.33 886.13 886.13	882°28 882°28 882°28 882°28 882°28 882°29 88	885.57 885.57 885.24 885.24 885.24 885.24	00+ 885.50 887.34 887.34	885.68 885.81 886.83	00000000000000000000000000000000000000	886.18 886.31 886.43 464 883.64 886.43	00 886.56 885.03 886.68	886.93 886.93 886.93	0 887.05 887.89 887.18	887.72 887.72 887.43	887.55 888.60	89*J88 08*288 2300	00+ 888.05 891.37	888.30 888.30 891.57 891.57 888.40 888.40
			USER NAM	ME = ALE = TE =		DESIGNED - DRAWN - CHECKED - DATE -		REVI REVI REVI REVI	SED - SED - SED - SED - SED -			DEPAF	STATI RTMENT	OF ILLING OF TRANS	IS PORTATIO	N	SCALE:	1''=50'								SECTION		TOTAL SHEET SHEETS NO. 37 22

910																			910
905																			905
900													is Route 62						900
895		sting grade	N	R-0 ELE. 89 2303+00.5	097 3.34ft 53, 0.91 B MC		Ve	ery stif	f to he LAY LOA Pro	posed grade	'n		ouilli						895
890			23	, >4.50	11 2				N_,	R=0 ELE. 88 2305+99.9 Qu	9.49ft 9.49ft 01, 0.07 R MC								890
885			2	5,NP	6	Madium			24	, NP —	2								885
880			5	3 , NP — 0 , NP — 4 , NP —	- 7 - 6 - 5	brown LC	AM to GRAVE	ELLY SAN	^e , 38 JD 32 50	, NP	2 3 4								880
875			2	6 , NP — EOB 87	— 6 77.34 ft				45 38	, NP	<u> </u>								875
870																			870
0	0 0 ci	4 1 6	8 ~ 2	о 2 м 9	9 0 0 1 1	4 20 /	0, <u>2</u> m	1		و ہو جا	τ τ ε	6 13	1 œ						
2301 2301	00 888.4 888.4 888.4 891.9	4. 888 51. 888 7305 74. 888 88 7305	11.2 11.2	2303 4E = NLE =	00 887.4 887.4 887.3 887.3	2304+0 DESIGNED DRAWN CHECKED DATE	886.6 895.1 886.6 892.1 886.6	2305+00	REVISE REVISE REVISE REVISE	I'988 2306 230 - 20 - 20 - 20 - 20 - 20 - 20 - 20 - 20 - 20 - 20 - 20 -	886.2 886.3 886.3 891.3	2.988 230 230	17+00 DE	STATE OF ILLINOIS PARTMENT OF TRANSPORTATION	SCALE:	i0′		SECTION ILLINOIS	TOTAL SHEET HEETS NO. 37 23

																							-
																							-
		P	000																				
		ELE.	919.90ft																			<u> </u>	-
920	N	103+49	.98, 0.16 L																				
	1.	3 NP	8					EXISTING	CENTERLIN	B				R-	-101					R-	-102		
							Ŕ	ELE. 9'	4.20ft					ELE. 9 ⁻ 109+50.1	5.24ft 3, 20.90 R					ELE. 91	4.99ft		
915		9, NP	99				The second secon	196+50.0	04, 0.09 L				N	, Qu	мс				N N	, Qu			
	2	2,NP _	9	Med	lium dense	to dense	N N	Qu —	MC_				10	0,NP —	12					8, NP _			
	2	2,NP_	9	Dr	GRAVELLY	SAND	47	, NP LINE		ILE GRADE			8	, NP -	10				8	8,NP			
910	1	9, NP	9				28	3,NP_	5				10	6 ND	7				50			12:01	✐
		EOB 9	09.90 ft				24	4, NP _	10				50 (7)	, NI —		LOOSE - LOAM	to very c 1 to GRAV	ELLY SAND	wn Jo	, NF _		112+0	$\left \right $
							26	5,NP_	6				58/3	_, <u>NP _</u>	- 5				31	, NP _			
905							14	, NP _	5				85	, NP _	5				36	5 NP	4		-
								EOB 90)4.20 ft				68	, NP	5				21	, NP _	14		
lann													57	, NP _	2				23	5, NP _	7		
														EOB 90	1.24 ft					EOB 90	1 0.99 ft		-
																					<u> </u>	<u> </u>	-
895																							
314.4	915.2 315.7	<u>915.8</u>	<u>316.0</u>	<u>915.9</u>	915.9 916.0	316.6 317.2	316.9 315.9	915.1	914.0 313.8	913.6 913.6	913.2 913.2	<u>913.2</u>	914.1	915.2 315.8	<u>316.0</u>	<u>316.0</u>	<u>316.0</u>	<u>316.0</u>	<u>316.0</u>	915.5 915.5	<u>914.4</u> 113.7	913.6 113.4	
102	+50 103	3+00 10	3+50 104	1+00 10	04+50 10	5+00 105	5+50 106	5+00 106	5+50 107	7+00 10	7+50 10	B+00 10	8+50 109	<u>)+00 105</u>	<u>+50 110</u>	+00 110	+50 111	+00 111	+50 11	2+00 112	<u>+50 113</u>	<u>+00 113</u>	<u> </u> 1+50
890			PLOT SC	ALE =		DRAV	NN -		REVI	SED -			DF	ST. PARTME	ATE OF Nt of t	ILLINOIS RANSPO	RTATIO	N				BOYER	RO
			PLOT DA	TE =		DATE	-		REVI	SED -									SCALE:				

								000
								920
				Me	dium dens SILTY l	se, brown OAM		
			R-	103 — E	XISTING CET	ITERLINE		915
			ELE. 9	0.86ft			TT	
			115+58.3	9, 15.50 R			T \	
Vor		N	, Qu	MC		/		910
Ver	SILTY C	n ILAY É	, NP —	- 18				
$\overline{)}$		15	, 3.50 —	21				
\backslash			0.50	07				905
		20	, 2.50 —	- 23				
		13	, 2.00 —	11	Mediu	m dense, Sandy Loan	brown	
\	\backslash	18	, 2.00	10	S+1++	to very s	" :+iff	900
		14	, 2.50		brown	and gray LOAM	CLAY	
			EOB 89	— у 8.86 ft				
	\							
								895
913. ² 913.2	913.1 912.8	912.4 912.0	912.2 912.4	912.6 912.8	912.5	913.4 913.6	913.£ 914.1	
<u>114</u>	+00 114	+50 115	+00 115	+50 116-	+00 116 SECTION	+50 117-	+00 117- TOT/ CUEE	+50 AL SHEET
AD							37	24
					ILLINOIS			

920																			920
915		R- ELE. 91 148750.00	104 3.1011	Loose, brown an black SILTY LOAM	N,	R- ELE. 9 121+49.7 Qu	-105 1 <u>5</u> .87ft 75, 14.90 R MC												915
	N	, Qu	MC	Medium stiff to stiff, brown and	very gray	5, NP	16 18	Mediu	um dense,	brown									
910	8	, 0.75 —	- 27	SILTY CLAY LO	DAM 12	2 , 3.00	19		SANDY LO.	AM									910
905	1	0, NP —	— 16 — 19 — 11	Stiff to very sti brown and gray C LDAM	15 Iff, CLAY	5 , 3.00 EOB 90	12 12 15.87 ft												905
900		EOB 90	3.10 ft																900
895	914.5 914.8	915.4	915.8 916.1 916.4	916.7 917.0 917.1 917.2	917.4 917.5 917.5	917.6 617.6	<u></u>	917.8 918.0	918.1 918.5	918.8 919.0									895
117	+50 118	3+00 118-	+50 119+00 USER NAME = PLOT SCALE = PLOT DATE =	119+50 120+00 120 DES DRA CHEL DAT	0+50 121 IGNED - WN - ICKED - E -	1+00 121	+50 122 REVI REVI REVI REVI	2+00 122 SED - SED - SED - SED - SED -	+50 123	3+00	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTAT	TION	SCALE:	1.'=50'	BOYER	ROAD	s	TOTA SHEET 37	L SHEET NO. 25

			R	-106																			
			1199+99	9.95, 0.05 F	२																		
890		N	Qu	-MC																		8	<u>90</u>
		11	2 75 -	24																			
			, 2.70		Stiff	<u> to hard,</u> \$ILTY CLA	<u>brown</u>		R-	107													
885		1	1, 1.00 -	16					LLE. 88	9.38ft) <mark>, 0.04 R</mark>												8	85
		11	3.50 -	19				N N		мс				R-108			SISTING CE	NTERLINE					
		2	Ø, NP -	6			PROPOSED LINE	PROFILE GR.	ADE				ELE. 1205+9	88 <u>0.44ft</u> 9.97, 0.07 R		/							
880								8	3.50 -	20		X D M Y	N Qu	MC								8	80
			EOB 8	380.02 ft				10), 4:00 -	17				s s	tiff, brov	wn SILTY	CLAY						
				Lo SANDY	ose to der LOAM to C	se, brow RAVELLY	n SAND		, NP	18		98.12 .12	3 , 1.00										
875								Y		12		E + Loose, bro	own 6, 1.50 AM	17								8	275
									<u>, NP · -</u>				8 , NP	23									1.5
								12	2, 2.00 -	10	Me	dium stiff to very		16									
										/0.00 IL		Brown and gray CLAY LOAM	V , NE		T								,
8/0													11 , 0.75 FOB 3	12 12 12								8	10
865																						8	65
		877.7	888.2 889.3 889.3	890.0 890.1	890.2 890.5 890.6	890.5 889 a	888.8 888.8 888.8	1 300 4.000 4.000	884.6 884.6	881.9	880.9	880.0 880.5 881.4 882.2 882.7	882.3 881.7 880.9	880.1 880.8 881.4	882.0	882.1 882.1	881.9	881.3 881.3	879.5 879.2				
	Us	119 R NAME =	99+50 120	00+00 120 DES	00+50 1201 SIGNED -	1+00 120)1+50 120 REV)2+00 120 ISED -)2+50 120) <u>3+00 12</u> (<u>)3+50 12</u>	04+00 1204+50 1205	+00 1205+50 12	06+00 120	6+50 120 ⁻	<u> </u> 7+00 120	7+50 120	08+00 120	08+50 1209+00	SECTION		TOTAL	SHEET
	PL)T SCALE =		DRA	AWN - ECKED -		REV	ISED - ISED -			DE	STATE OF I PARTMENT OF T	ILLINOIS RANSPORTATIO	N			WE	STBORN	IE PARKWAY		<u> </u>	37 i	26
	PL)T DATE =		DAT	re -		REV	ISED -							SCALE:	1''=50'				ILLINOIS			

755																												755
750																												750
100																												100
7 4 5																												
/45																												145
																							R	-127				
740								EXI	STING CEN	TERLINE —													ELE. 7	738.37ft .89, 0.0	J.R			740
									F					-								N	, Qu ,		ic			
735										- PROPO	SED PROFIL	E GRADE		ba ba					4	Ver	y dense,	gray 20), NP —					735
														tolz Roc	04+00		\ \		_		FILL-	16	, 2.25 –	1	3			
730															n					Medium	stitt to rown and CLAY L	aray AM 17	, 0.75 –	1	6			730
150																				Verg	y dense, RAVELLY :	brown SAND 70	, NP —		5			130
																						74	-, NP	7.37 ft	5			
725																												725
720																												720
715																												715
		738.0	738.0	738.0	738.0	738.0 738.0	738.0	738.0	737.9	737.8	737.6	737.0	737.9	737.6	737.3	735.2	734.8	735.3	735.8	736.0	736.5	737.5	738.4	738.9 739.3				
		900 USER NAM	+00 90 1E =	0+50 90	D1+00 9	901+50 ESIGNED RAWN	902+00 - -) 902	2+50 90 REVI	<u>1 </u> 3+00 900 SED - SED -	3+50 90	4+00 9C	4+50 9	05+00	0 905+50 STATI	906+			907+0	<u> </u>	-50 908	+00 90	8+50 90	59+00 SANDI	BLOOM ROAD	SECTION	TOTA SHEET 37	L SHEET
		PLOT DAT	ΓE =		D	ATE	-		REVI	SED -				erai			141191	UNIAI	UN		SCALE: _	1=50				ILLINOI		



~																
_															arkw	900
NC	G CEN	TERLI	-R=14 NE	1	<u> </u>	/	/								- wop	
		ELE. 09+9	896. 3.67,	50ft 51.92		, / ,	/								gmea	
	Ν,	Qu -		— мс)	Pc	ıvem	ent d	ind E	Base	1				Lon	895
					<u> </u>	/		Loar	se						- -	
	10	, NP	_	- 7			/	/								
	9,3	8.25	_	- 16	6						/				 	890
	10,	2.75		_ 15	5			Med	ium s rowr	stiff n SILT	to v Y CL	very AY L(stift DAM	, .		0.00
	13.	2.00		- 15)					O CLA	4Y L(MAC				
	75			5			/	_								885
	55,	EOB	885.3	– 5 30 ft											I	005
D	ense,	bro	wn G	RAVEL	LY S.	AND						<u> </u>				
														~		880
																000
																875
																870
																510
																865
00.3	00.1	99.7	99 . 5	99.1	98.7	98.2	97.7	97.2	96.8	96.4	95.8	95.3	94.7	94 . 0	93.3	
ة)	ਰਾਂ 609	+50	610	∞ +00	ōö 610	∞ +50	611-	∞ +00,	م 611-	∞ +50	612·	∞ +00	δö 612	τώ +50	ω <u>613</u>	+00
	25									SECTIO	NC				SHEE 37	TS NO. 7 28
										IL	LINOIS					

900																													
895																													
890																													
									Pavement Coai	and Bas "se	e																		
885										F ELE. 615+96: , Qu —	2-142 883.09ft 89, 45.50	L		<u></u> s	Stiff	to v browi <u>AY L</u>	ery stiff and gro DAM to SA -FILL	, black, y NDY CLAY											
880									41	1.00	13						- PROPOS LINE	ED PROFIL	E GRADE										
									20	NP	4								ement an Coarse	d Base									
875				Me	ədium (GRAVI	dense, ELLY SA	brown ND —⁄		28	3 , NP	1			\mathcal{I}			X	R- ELE:	143	OVERLA	Y								
									9	, 0.50	- 10)					N	, Qu —	2, 48.64 R			Medium	i dense,	, black					
870									7	, 1.00 EOB		;					2	7 , NP -	- 4	XISTING CE	ENTERLINE		own SANU FILL	υνιφαμ	R-1	44			
													Medium brown C	stiff stiff, SILTY (CLAY LOA	to ver <u>:</u> CLAY to AM	y \ }	45	, 3.00 -	13		\mathbb{P}			<u> </u>	ELE. 866	5.81ft , 43.46 L			
865																	25	, NP -	6 - 26					N,	Qu	<u>₩C</u>			
																	5	, 1.00 -	24		Medium	dense †		32,	NP	4			
860																	9	2.00 -	24		GR	own LOAM	AND	36 ,	NP _	3			
																		E0B 8	60.68 ft					44 ,	NP —	3			
855																								32,	NP	3 56.81 ft			
			893.3	892.5	891.8	891.0 890.2	889.4 888 6	887.9	887.0 886.2	884.7 884.7	884.0 883.1	882.3	881.5 880.7	880.0	879.2 878.3	877.5	876.6 875.7	875.0 874.2	873.5 873.0	872.4 071.0	870.8	869.8 869.8	868.9 868.8	868.1	867.9 867.0	866.9 866.9	866.6	866.0	865.8 865.8
		USER NA	L 613 ме =	+00	613+50) 614- DESIG	+00 614 SNED - N -	+50 6	15+00 61 REV	5+50 /ISED - /ISED -	616+00	616+50) 617-	+00 6	17+50	618 ST/	+00 618 \TE OF	+50 619	1 1+00 619	1+50 62	0+00 62	20+50 6	<u> </u>	621+50	622-	+00 622 TE 25	<u>1 </u> <u>2+50 6</u>	523+00	
		PLOT SC PLOT DA	ALE =			CHECK	KED - -		REV REV	'ISED - 'ISED -				D	EPART	MEN	IT OF T	RANSPO	RTATION		SCALE:	1''=50'							

					 I	ILLINOIS		
, 021		622 ITF 25		· 4		SECTION	TOT SHEE	AL SHEET TS NO. 29
3 868 3 868	+50 622	+00 622	998 +50 627	865				
8 1	EOB 8	56.81 ft م: م	0					855
32	, NP	3					_	0
44	4,NP —	3						
36	, NP	3						860
32 nse,	, NP	4						
	7 , NP _	5						005
N	, Qu 上			·				865
>	ELE. 86	6.81ft), 43.46 L						
	R-1	144						870
se, blac ANDY L(sk Dam							
								875
								880
								885
								-
								890
								895
								900

798	+50 79	<u>99+0(</u>	<u> </u>		800+00 NAME =) 8	300+5	0	801+C	00 = 1 DI DI	801+ ESIGN	50 8 ED -	302+I	3 OC	302+5	0 80 REV) <u>3+00</u> /ISED /ISED	/ [∞] 803 - -	3+50 8	804+	-00 804	ά <u>4+50</u>	۵ <u>805</u>	+00	805 805 8 T A	<u>+50</u>	806- DF I	+00 LLIN	 	+50	807+	+00	807+5	50 8	08+0	<u> </u>		<u> </u>		<u> </u>	<u>)</u> 09+50 00 T F	<u>81</u>	~ ° 0+00	~ ° 81()+50	
855 	390.6	890.5	890.5 390.2	390.0	890°0	0*068	0.068	390.0	390.0	390.0	390.0	390.0	390.0	390.0	390.0	890°0	890.0 390.0	0.08	390.0	390.0	0.068		0.06	390.0	390.0	390.0	390.0	390.0	390.0	390.0	390.1	890.1	390.0	390.0	889.9	889 . 5	889 . 5	889 . 5	<u>889.6</u>	889 . 6	889.7	003.1	003°P	2004°D	389.4	
																																													<u> </u>	
860																																													<u> </u>	
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865																																														
870																																														
										070.7																																				
875								20,	1.00 FOR	876 71	1 1	1																		EOB_8	378.73	<u>3 ft</u>														
								8,(0.50	+	15	;						1	5, NP EOB	879	— 6 0.722 ft							2	1 , NI	P -		6						/			4 , 1.0	0 EOB	879.	22 71 ft	SI	L
880								<u>5,1</u> 12,1	.50	+	21 12							2	8,NP	+	— 5							1	9,N 7,N	<u>г</u> -		<u>з</u> 6							$\left \right $	1	, <0.:	25		14		_
		SILT	T ULAY	DAM 1	O ULA	r		7,1	.50	+	20)			+			2	2 , NP	+	— 9		<u>Mediu</u> LOAM	<u>m de</u> 1 to	gray GRAVE	browr Elly s	n and SAND	± 1	6, N	P-	+	6									5 , 1.	00	#	17		ſ
885	Me	edium	stiff	to sti	ff, br	own		6,1	.50	+	16	;						2 1:	5,NP 5,NP	_	<u> </u>							13	, 2.5	50 -	+	9									6 , 0.	75		2 16 t	Very : prown	
				<u> </u>				8	01+21 Qu	I.72, 1	9.96 — M(R C						N	, Qu _		MC					OVER	RLAY			6+87.0 RE	85, 2 CONS	4.38 R truct - MC				<u></u> е	EXIST	ING CE	ENTER	RLINE				<u> </u>		/
890									ELE.	R-145 888.7	1ft								ELE. 804+0	889 0.78	9.72ft , 22.63 L									R ELE. 8	-147 388.73	3ft					B				8	ELE.	889.7 .15, 1	1ft 7.22 L	-	_
095																				R-1	46															- PRO	POSE		FILE	3R A DE		F	2-148			
805																																														
900													_																																	

						90	0
						89.	5
SED PROFILE G	RADE F	2-148					
	ELE. 810+05	889.71ft .15, 17.22 L	Medium / SAN / -	dense, brown NDY LOAM -FILL	R-1 ELE. 888 812+98.55,	49 .23ft 89(17.86 R	2
ISTING CENTERL	INE 10, NP 6, 0.75	2 Vers 16 brow	y soft to very 'n and gray CL, to SILTY CLA' -FILL	stiff, 3 AY LOAM	, Qu , 0.75	— MC — 13 885	5
	5 , 1.00	17			7 , NP —	— 2 — — — —	
	1 , <0.25 4 , 1.00	14	Stiff, br SILTY CLAY to	dlay loam	<0.25 <u> </u>	— 21 <u>— 23</u> 88(2
	EOB	879.71 ft		8	, 1.75 EOB 87	— 24 8.23 ft	
						875	5
						870	2
						86.	5
						86	0
<u>36</u> 9.6	<u>7.9</u>		9.9.4 2.3 -4 2 -3	9.1	0.0.0.0.	85.	5
3+50 809+00	809+50 81	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	811+00 81	8 8 8 8 1+50 812+00 8 SECTION	∞ ∞ ∞ ∞ 2+50 813	+00 813+50 TOTAL SHE SHEETS NC	ET
	L ROUTE 62			ILLIN	JIS	37 30	

89)	Loo SAI	se, gray NDY LOAM FILL				۵	ELE	R-15 E. 888.	50 .21ft 17 47	R				- PI Ll	ROPOSE INE	D PROF	FILE GR	ADE R—151 887.661	ft		a	Very st nd gray -	iff, bro / SAND LOAM FILL-	own)Y CL 	AY.			R-15:	2													
			Very soft	t to very s	stiff,		N ,	Qu		— MC	2						N.	<u>819±05</u> Qu —	29, 19	MC				ех		IG CEN	TERLI	822+01 NEQu -	.25,	20.79 R			– GF	oose, I RAVELL' ———Fi	browr Y SAI ILL	n NDY =							
883	5 -		brown an to	a gray CL/ SILTY CL/ FILL-		M	4	1.00		- 15	ō		rkwa -				17 , 1	2.75		10							9	, NP	-	4													
				·	+		6,0).25)			4			8,	NP		10	Loose	e to	very de	ense, b MELLY	rown		17,	NP	_	- 7													
88)		SILTY	Stiff, bro	own GLAY I	LOAM	3,1	.25		_ 22	2			1+23			52	NP ·		5					54112		20,	NP	_	- 7		RECO	ONSTR	UCT	OVER					R-15	53		
							7,1	.75		- 27	7						34 ,	NP		4							24	, NP	_	- 2						/	/		ELE 825+0	. 876. 4.78,	.67ft 33.84	L	
87:	5							EC	OB 878	3.21 ft								EOB 8	77.66 f	ft							17	, NP		- 6								N	, Qu		— мс		
																											<u> </u>	EOB	874.	- 11 97 ft								2	, 0.50		- 14		
870)																															Me	edium	n stiff	to ve	ery		16 27	, 3.00		- 13		
																																bro	own S	SILTY Ó	ČLAY	LOAM		30	3.25	_	- 15		
86.	5																																					28,	2.50 EOB	865.6	— 13 7 ft		
86)																																										
85	5																																										
85	2																																										
	889.0	889.0 889.0	0.088	0.000	889.0 889.0 889.0	0.688	889.1	889.1	889.1	889.0	889.0	889.0	0.000 00000000000000000000000000000000	889.0	889.0	889.0	888.7	80 80 80 80 80 80 80 80 80 80 80 80 80 8	888.8 888.8	888. 888. 88	888.8	888.8	888.7	000 000 888 4.0	888	888.2	888.0	887.5	887.2	886.7	886.2	885.5 881.5	884.8 8	884.0 88.3.1		881.1	880.1	878.9	877.7	876.5	875.2	874.0	8/2./
8	313+5	50 814	+00 81	4+50 81 USER N PLOT S	5+00 IAME =	815	5+50	816+	00+ 00 0 0 0	816+5 DESIGNE DRAWN CHECKED	50 8 20 - - 0 -	317+00	0 81	7+50	818+ REVISE REVISE REVISE	-00 D - D - D -	818+50	0 81	9+00	819-	+ <u>50</u> 8	20+0 EPA	00 82 S1 RTME	0+50 ATE	82 [.] OF DF T	1+00 ILLIN RAN	821 1015 SPO	+ 50	822+ ON	00 82	22+5	0 82	23+00) 823	3+50	824	+00	824 ROU	+50 ITE 62	325+1	00 8:	25+50	1 82
L									L	JAIE	-				NEV15E	- u																JUALE:		·× · · · ·									

										890
										0.00
rown										
										885
$\overline{}$										
VERLAY			457							880
		ELE 83	153 76 67ft							
/		825+04.7	B, 33.84 L							
	N	, Qu	MC							
										875
/		0.50								
	2	, 0.50 –	14							
	16	, 3.00 –	- 13							
o very					$\overline{\ }$					870
AY LOAM	27	, 1.50 –	- 15							
	30	3.25 –	- 15			Ϊ <u>λ</u>	Me	dium stiff,	brown	
								FIL	L	
	28,	2.50 –	13		,	Á	\searrow	R-1	54	865
		EOB 803	.67 ft			N,	/ /	ELE. 86:	2.20ft	
								828+00.9	7, 0.47 R	
							N	, Qu 🗡	MC	
										860
								0.50	17	
							16	NP _		\square
							10	, 11	- 0	
						Medium den	12	, NP	2	855
						GRAVELL	Y SAND	ND		
					-		21	, NY —	2	
							20	, NP —	2	٥٢٨
						+		EOB 85	1.20 ft	000
i					1					
<u>882.1</u> 881.1	880.1 878.9	<u>877.7</u> 876.5	<u>875.2</u> 874.0	<u>872.7</u> 871.4	870.2	869.(867.6 866.4	865.3 863.9	862.7 861.5	860.2 859.0	857.5
+50 824	+00 824	+50 825	+00 825	+50 826	+00 8;	26+50 827	+00 827	+50 828	+00 <u>82</u> 8	+50
	IL ROU	ITE 62			-		SECTION		TOTA SHEE 37	TS NO.
							ILLINOIS			

																-
810																
														Loos	se, black c SILTY L FILL	anc .041
805										Medium SAN -	dense, br DY LOAM -FILL	þwn	EL 416+	R–118 E. 802.20ft 98.92, 18.0	25 R -	/ /
800						Stiff, black, b gray SILTY CLA FILL-	rown and Y to CLAY	ELE 413+9	R-117 . 799.35ft 98.75, 17.68 R		Pavemen				МС	
		R-115			R-116	PROLIN	OPOSED PROFILE GRAD	3 N Qu	EXI	STING CENTERI	INE _		12 , NP			s
795 -	<u> </u>	ELE. 794.50ft 408+13.22, 19.32 R Qu MC	OVERLAY	RECONST	ELE. /94.66ft 410+85.10, 23.45	t	Pavement	8 , 1.75	21		(10 , 1.25		22	-
		M	ledium stiff to	o stiff, black gray CLAY	-			8 , 0.75	19 3	_			11 , NP		10	_
790	6	0.75. <u>22</u>			9, NP 4			7 , NP	26				<u> </u>	<u>0B 791.20</u>	ft	+
785 LA	to stiff, 5, d gray Y LOAM	<0.25 29			9, NP 4	gray c	s to vory denso, and brown SAND to RAVELLY SAND	5 , NP 6 , NP	<u>29</u> 18							
	6	1.00 <u>25</u> ▼ • 0.50 22		medium dense.	12 , NP 5			8 , NP				 				_
780	20	, NP 10	gray and b	SAND GRAVELLY	EOB 782.66 ft			62 , NP EQE Very stif	B 781.35 ft f, gray CLAY L	0AM						
775																
	95.7 95.5 95.4	95.2 95.0 95.0	95.0 95.0 95.1	'95.3 '95.4 '95.6	795.7 795.8 795.8	796.0 796.1 796.2	796.4 796.7 797.0 797.4	797.7 798.1 798.4	798.9	799.9 300.3	801.1 801.3	801.4 801.9	302.4 7_7	802.9 803.9	803.5 803.5 803.8	0.00
	2 2 2															

М	edium stit	f, brown					oose, bro SANDY LOA FILL	<u>×810</u>
	FIL	L		R-	119			
brown	7		\square	ELE. 80	5. 45£t . 0 . 13≩47 P			1
l				420+23.22 Qu	, <u>1247 K</u> _ - 6 - 1€ MC	P	ovement	805
					. » 000	/		
	dveillent	2		0.75	d d d d			
	T		,		420	1/		000
/			3,	0.50 —	21	7		000
iff, br SILTY C	own LAY		39	NP -	5	Medium	stiff. blo	ick
			29	, NP —	4	and bro	wn SANDY -FILL	CLAY
		r 	10	ND				795
			13	EOB 794	.45 ft			
<u>Mec</u> gray	<u>tium dense</u> and browi to	<u>to dens</u> n SANDY L	e, OAM					
	GRAVELLY	(SAND						790
								785
								100
								700
								100
1			1		1	1	1	775
804.0 804.3	804.6 804.8	805.1 805.3	805.6 805.8	806.0 806.2/	806.4 / /806.4	806.5 806.8	807.1 807.3	
18+00	418+50	419+00	419+50	420+00	420+50 SECTION	421+00	4 21+50	- AL SHEET
31							37	32
					ILLINOIS]

				PLOT S	SCALE = DATE =			DRAI CHEC	WN - CKED - E -			REVI REVI REVI	SED - SED - SED -						DEP	ST ARTMI	TA1 ENT	re of i f of tf	LLINO Ransi	DIS Por	TATIO	N		SCA	LE:	1''=50'.	-		IL	ROUT
	422±0(422	+50	423+00 USER N	423+5	50	424+00	424+50 DESI	425+00 IGNED -	425+5		126+00 REVI	426+5 SED -	50 4	427+00	42	27+50	428	+00	428+50) .	429+00	429+5	0	430+00	430	+50	431-	+00	431+	50	432+00	432	<u>+50</u>
	807.4	807.5	807.7	807.8	807.9 808.0	808.0	808.0 808.0	808.0 808.0	808.1	809.1	809.2	809.4 809.5	809.6	809.8	810.0	810.1	810.2 810.3	810.4	810.6	810.7	810.8	811.0	811.1	811.2	811.3	811.5	811.6	811.7	811.7	811.8	811.9	812.0	812.1 812.2	812.3
775																																		
780																																		
785																																		
790																																		
		EOB	794.5	9 ft																												2 / 50.00	-	
795	18	R NP		4						68	, NP EOB	 796.67	5 ft																	15	, NP	B 795 56	12 6 ft	
	26	, NP		5	SAND	Y LO	brown AM to GF	AVELLY S	AND	39,	NP		5								EØB	3 800.04 f	ť							9	, NP		14	
800	3	1 , NP		4	Mediu	um de	ense to	very der	nse,	19,	NP	_	4								NP		3	ery d Gf	loose † ense, b RAVELLY	o med rown SAND	lium			4,	0.50		28 	
	15	5, NP	_							9,	NP		11							20 , N 15 , N	NP	1/2	2				<u> </u>			5,	0.50		26	
805	<u> </u>									1,	1.00		24		SIL		CLAY LO	JAM		9 , 1. V	.50	2	20							5	, 1.00	·	31	
	N	422 <u>+6</u>	806.5 <u>4.9</u> 7, 1	-7. 33 R						N,	Qu –		MC							11 , 4	4.00	1	1	SILT	Medium bro Y CLAY	stiff <u>wn an</u> to SI	: to <u>d gr</u> LTY	hard, ay CLAY I	LOAM	4,	0.50			
810			R-120)				FILL - PROPOSE LINE	D PROFILE	GRADE	ELE. 26+0	. 80 <u>8</u> .67 2.27, 21	ft 74_R			RECO	ONSTRU	СТ		428 OVERLA	28+98 2u - XY	8.83, 39.0	15 L 1C						Pav	/ement	-			\rightarrow
							Very log	ose, blaci SILTY L	k and			R-121									ELE.	R–122 81 <u>0.04ft</u>			EXISTI	NG CEI	NTERI	LINE		- N	EL <u>432+</u> 	E. 81 <u>1</u> .56 -00.94, 1 	Sft 7.19 R ————	/
																																R-123		

Mea	dium stiff black SIL	, brown Ty clay						
/	FILL-	-						
								810
								805
	-							800
								795
								TJJ
								700
								790
								785
								780
						<u></u>		
						1		
								775
								IIJ
812.4 812.5	812.6 812.7	812.8 812.8 812.9	813.0 813.1 813.1	813.3 813.4 813.4	813.6 813.8 813.8	814.0 814.2	814.5 814.8 814.8	
33+00	433+50	434+00	434+50	435+00	435+50	436+00	436+50	
33 FOU	00700				SECTION		TOT. SHEE	AL SHEET
- 51							31	100
					ILLINOIS			



	18 , 3.4	4 +	- 10				785
	16 , 4.	10	- 11				
	23 , 5.0	38	- 10				
	21 56	36	_ 11				780
	32 , 6.	15	- 11				
	23 , 6.2	23	- 10				775
	32 , 3.6	59 <u> </u>	- 11				
	21 , 2.6	32	- 12				
	25 , 5.6	ie	- 11				770
		EOB 770.	.03 ft				
							765
stiff, brown							760
U CEAT LUAM							
							755
							100
							750
							130
							745
							740
785.5	805.3 308.8	815.4	819.9 824.7 200.6	832.9 336.3	831.6 319.0	810.0 310.0	
510+50 51	1+00 511	+50 51	2+00 512	2+50 513	+00 513	+50 514	+00 AI SHEET
AD		-		SECTION		SHEE 37	TS NO. 7 34
				ILLINOIS			

511+00 511+50 512+00 512+50 5 USER NAME = PLOT SCALE = PLOT DATE =	013+00 513+50 514+00 514+50 5 DESIGNED - DRAWN - CHECKED - DATE -	515+00 515+50 516+00 516 REVISED - - -	6+50 517+00 517+50 518+00 51 STATE OF DEPARTMENT OF	ILLINOIS TRANSPORTATION	00 520+50 521+00 521+5 SCALE:1''=50'	50 522+00 522+50 523+00 BOLZ ROAD
765 25,5.66 11 12 765 25,5.66 11 11 12 12 12 12 12 12 12 12	836.3 831.6 819.0 810.0 812.2 812.2 819.6 821.0 821.0	821.4 822.3 817.4	837.1 837.1 837.3 835.2 833.5 833.5 833.5 833.5 833.5 831.2	829.8 827.5 825.6 824.9 824.0 823.8 823.8	823.3 823.0 823.0 823.5 824.1 824.0	824.1 823.8 823.6 823.8 823.8 823.8 821.6 821.6 821.6
770 23, 6.23 10 10 32, 3.69 11	35 , NP 23 , 3.00	7 PROPOSED PROFILE GRADE				
32,6.15 11	Medium dense to dense, gray GRAVELLY SAND 29, NP	2				
775 21, 5.66 11	20, 26,NP		24 , NP 3 EOB 812.86 ft		20 NP 19 EOB 812.44 ft	
780 18, 3.44 10		B ISTING CENTERLINE /	um dense to dense, brown and gray GRAVELLY SAND 28, NP 6		9, 1.00 23 Loose 1	to medium dense,
49, 2.54 11	16 2.25 16 2.25		39 , NP 5		13, 3.00 25	Very stiff, brown SILTY CLAY LOAM
785 10 3 60	N, Qu -	00.30, 0.13 L	30 NP 5 30 NP 4		520+87.37, 50.49 L N, Qu MC 7, NP 16	
	brown CL	R=131	8,1.50 25		R-133 ELE. 822.44ft	SILTY LOAM
13 , 2.46 10	Very s	tiff to medium	N Qu MC 7 1.00 23	Stiff to very stiff brown SILTY CLAY LOAM	f,	Loose, brown
/ 13 , 2.62 11			R-132 ELE: 830.86ft 517+99.71, 23.56 R			
50/5", NP 2						
ELE. 810.03ft 511+85.31, 36.24 L N, QMC						
R-130						

0°521°	1.42 +50 522 BOLZ	9. 8. 27 28 27 +00 522	821.6 +20 253 821 821	+00 523	6.918 +50 524	+00 524	+50 525 SECTION	820.2 820.2 820.2	6, 7, 91 +50 526 T07/ SHEE 37	+OC AL SHEET TS NO. 35
										800
										805
										810
Loose	to mediu own SILTY	m dense, LOAM								815
	Very st SILTY	tiff, brow Clay loam	'n							820
		Loose, t SILTY (orown _OAM							825

855																							855
850							PROPOSED	PROFILE GI	RADE														850
								R-137	761														
845							53 N, C	1+33.14, /8	53 L														845
840				Very sof br <u>CLA</u> F	t, black and rown Y LOAM TILL		7, N		10 EXISTIN 14	NG CENTER	LINE												840
							14 , <0.	.25 —	15														
835			Stiff, brown SILTY CLAY L	.0AM			14 , N		7														835
								EOB 834.7	'3 ft														
830)			136																			830
			528+50.08 N, Qu	5, 57.23 L	Medium dens brown SAND	e to ver <u>y</u> to GRAVEL	y dense, L LY SAND																
825	. /		5, 1.75	- 20																			825
			19 , NP	- 10																			
			37 , NP	- 4 - 3																			
			50/3", NP	_ 4 6.84 ft																			
0	819.7 826.7	825.5 824.2	824.0 824.2 825.1 825.2 826.2 827.7 827.7	830.5 831.4 832.6	833.9 835.4 835.4	839.0	840.9 841.5	843.4 845.1 845.1	846.6 848.1	849.8	851.5 853.2	856.4 856.4	859.0	860.1									
52	6+00 526	+50 527-	+00 527+50 528+00 528+ USER NAME = PLOT SCALE = PLOT DATE =	50 529+00 DESIGNED - DRAWN - CHECKED - DATE -	<u>529+50</u> 53(- - -	0+00 53 REV REV REV REV	0+50 531 ISED - ISED - ISED - ISED -	+00 53	1+50 532	2+00 53 DE	2+50 53 S1 PARTME	3+00 53 TATE OF INT OF 1	3+50 5 ILLINO FRANSP	34+00 IS Portati	ON	SCALE:	. 1=50	BOL	Z ROAD	1		SECTION	TOTAL SHEET SHEETS NO. 37 36

	USER NAME = PLOT SCALE =	DESIGNED - DRAWN - CHECKED -	REVISED -	STATE O	F ILLINOIS TRANSPORTATION	BOLZ R	DAD CONNECTOR	SECTION	TOTAL SHEET SHEETS NO. 37 37
		818.2	819.4 819.4 819.9 819.5 820.3 820.3 821.2 821.2 821.2 819.5	821.8 821.9 821.9 823.5 823.5 823.5 823.5 823.5 823.7 823.7 823.5 835.7 829.2 835.7	829.0 829.0 829.0 828.1 828.1 827.4 826.9 826.5 826.5	800.7 800.7 804.1 804.1 807.1 813.8 813.8			
790									790
795									795
800									800
			Medium dense, brown and SANDY LOAM	i gray					
805			12 , NP 15 FOB 805 23 ft						805
			7,0.50 27						
810			8, <0.25 26	SILTY CLAY LOAM	7,2	50 19 EOB 815405 ft /			810
815			8 0.75 - 27	Very soft to very stiff, brown and gray	FILL 3 , <	25 - 13 50 - 25			815
820			7 , NP 17	PROPOSED PROFILE GRADE	/ery soft to very stiff, 5, 0. brown, black and gray				820
			EXISTING CENTIERLINE ELE. 821.23ft 701+07.17, 21.44		2. ' 8 2. ' 8 2. ' 8 2. ' 8 2. ' 8 2. ' 8 2. ' 10.00 2. ' 10.00 2. ' 10.00				
825		Loose, brov	wn			ELE. 825.05ft 05 ⇒86- 97, 0.11 R 2uMC			825
						R-135			
830									830
835									835