



CLIENT:		BORING LOCATION PLAN				
MASON & HANGER GROUP, INC.		DESIGNED:	DRAWN:	CHECKED:	APPROVED:	FIGURE:
PROJECT:		MCP	STM	STM	MCP	
MPMGR - HOTEL RANGE		SCALE:	DATE:	FILE NO.:	PROJECT NO.:	
FORT DEVENS RFTA		As Shown	10/6/2019	9505-000F1	9505-000	2
LANCASTER, MA						





GeoInsight®

Environmental Strategy & Engineering

SOIL BORING LOG

Client: Mason & Hanger Group, Inc.

Boring Identification: B-1

Project: MPMGR Hotel Range

Sheet: 1 of 2

Location: 1 Jackson Road, Devens, MA

Checked By: MCP

Project Number: 9505-000

Drilling Company: Technical Drilling Services, Inc.

Boring Location: See Site Plan

Foreman: Donnie Watson

Ground Surface Elevation: ~228 feet

Datum: NAVD 88

GeoInsight Engineer/Geologist: A. Stitt

Date Started: 11/18/19

Date Completed: 11/18/19

DRILLING METHOD			SAMPLER		GROUNDWATER MEASUREMENTS				
Vehicle: Truck			Type: SPT (Auto)		Date	Depth (ft)	Reference	Stabilization	
Model: Diedrich D-120			Hammer (lb): 140		11/18/2019	6.5	Ground Surface	After Drilling	
Method: 4.25" Hollow-Stem Auger			Fall (in): 30						
DEPTH (ft)	SAMPLE INFORMATION				SAMPLE DESCRIPTION	STRATUM DESCRIPTION	FIELD SCREENING (ppm)	NOTE	
	#	Pen/Rec (in)	Depth (ft)	Blows/6"					
0	S1	24/14	0-2	3	S1: Medium dense, brown, fine to coarse SAND and GRAVEL, trace Silt, damp.	Sand and Gravel			
1				7		FILL			
				23					
				34					
2					Apparent change in material based upon drill rig behavior.	NATIVE OUTWASH DEPOSIT			
3									
4									
5	S2	24/13	5-7	6	S2: Very dense, gray and brown, fine to coarse SAND and GRAVEL, little Silt, damp.	Sand and Gravel with Silt			
6				46					
				27					
				24					
7									
8									
9									
10	S3	24/12	10-12	14	S3: Medium dense, gray and brown, fine to coarse SAND and GRAVEL, little Silt, wet.	Sand and Gravel with Silt			
11				9					
				8					
				11					
12									
13									
14									
15	S4	24/14	15-17	7	S4: Dense, brown, fine to coarse SAND, some Gravel, trace Silt, wet.	Gravelly Sand			
16				18					
				17					
				10					
17									
18									
19									
20									
GRANULAR SOILS				COHESIVE SOILS		NOTES			
Blows/ft.		Density		Blows/ft.		Consistency			
0-4		V. LOOSE		<2		V. SOFT			
5-10		LOOSE		2-4		SOFT			
11-30		M. DENSE		4-8		M. STIFF			
31-50		DENSE		8-15		STIFF			
>50		V. DENSE		15-30		V. STIFF			
				>30		HARD			



GeoInsight®

Environmental Strategy & Engineering

SOIL BORING LOG

Client: Mason & Hanger Group, Inc.

Boring Identification: B-1

Project: MPMGR Hotel Range

Sheet: 2 of 2

Location: 1 Jackson Road, Devens, MA

Checked By: MCP

Project Number: 9505-000

Drilling Company: Technical Drilling Services, Inc.

Boring Location: See Site Plan

Foreman: Donnie Watson

Ground Surface Elevation: ~228 feet

Datum: NAVD 88

GeoInsight Engineer/Geologist: A. Stitt

Date Started: 11/18/19

Date Completed: 11/18/19

DRILLING METHOD				SAMPLER	GROUNDWATER MEASUREMENTS				
Vehicle: Truck				Type: SPT (Auto)	Date	Depth (ft)	Reference	Stabilization	
Model: Diedrich D-120				Hammer (lb): 140	11/18/2019	6.5	Ground Surface	After Drilling	
Method: 4.25" Hollow-Stem Auger				Fall (in): 30					
DEPTH (ft)	SAMPLE INFORMATION				SAMPLE DESCRIPTION	STRATUM DESCRIPTION	FIELD SCREENING (ppm)	NOTE	
	#	Pen/Rec (in)	Depth (ft)	Blows/6"					
20	S5	24/10	20-22	6	S5: Medium dense, brown, fine to coarse SAND, some Gravel, trace Silt, wet.	Gravelly Sand NATIVE OUTWASH DEPOSIT			
21				11					
				18					
22				25					
23									
24									
25	S6	21/15	25-26.8	18	S6: Very dense, dark gray, weathered ROCK, wet.	Apparent Weathered Bedrock			
26				28					
				93					
27				120/3"					
28									
29									
30	S7	9/7	30-30.8	33	S7: Very dense, dark gray, weathered ROCK, wet. Boring terminated at 30.8 feet. No auger refusal encountered.	Apparent Weathered Bedrock			
				120/3"					
31									
32									
33									
34									
35									
36									
37									
38									
39									
40	GRANULAR SOILS			COHESIVE SOILS		NOTES			
	Blows/ft.		Density	Blows/ft.	Consistency				
	0-4		V. LOOSE	<2	V. SOFT				
	5-10		LOOSE	2-4	SOFT				
	11-30		M. DENSE	4-8	M. STIFF				
	31-50		DENSE	8-15	STIFF				
	>50		V. DENSE	15-30	V. STIFF				
				>30	HARD				



GeoInsight
Environmental Strategy & Engineering

SOIL BORING LOG

Client: Mason & Hanger Group, Inc.

Boring Identification: B-2

Project: MPMGR Hotel Range

Sheet: 1 of 1

Location: 1 Jackson Road, Devens, MA

Checked By: MCP

Project Number: 9505-000

Drilling Company: Technical Drilling Services, Inc.

Boring Location: See Site Plan

Foreman: Donnie Watson

Ground Surface Elevation: ~228 feet

Datum: NAVD 88

GeoInsight Engineer/Geologist: A. Stitt

Date Started: 11/18/19

Date Completed: 11/18/19

DRILLING METHOD	SAMPLER	GROUNDWATER MEASUREMENTS			
Vehicle: Truck	Type: SPT (Auto)	Date	Depth (ft)	Reference	Stabilization
Model: Diedrich D-120	Hammer (lb): 140	11/18/2019	5.5	Ground Surface	After Drilling
Method: 4.25" Hollow-Stem Auger	Fall (in): 30				

DEPTH (ft)	SAMPLE INFORMATION				SAMPLE DESCRIPTION	STRATUM DESCRIPTION	FIELD SCREENING (ppm)	NOTE
	#	Pen/Rec (in)	Depth (ft)	Blows/6"				
0	S1A	4/4	0-0.3	6	S1A: Medium dense, dark brown, fine to medium SAND, little Silt and fine Roots, damp.	TOPSOIL		
1	S1B	20/12	0.3-2	8				
				7	S1B: Medium dense, brown, fine to coarse SAND, trace Gravel and Silt, damp.	Sand		
				12				
2	S2	24/17	2-4	17	S2: Dense, gray/brown, fine SAND and SILT, damp.	Sand and Silt		
				16				
3				17				
				20				
4	S3	24/24	4-6	8	S3: Medium dense, dark brown, fine to coarse SAND, trace Gravel and Silt, damp.	Sand		
				7				
5				19				
				14				
6					S4: Very dense, dark gray/brown, fine to coarse SAND and GRAVEL, trace Silt, wet.	NATIVE OUTWASH DEPOSIT		
7								
8								
9								
10	S4	24/18	10-12	7				
				17				
11				36				
12				43				
13								
14								
15	S5	24/15	15-17	25	S5: Very dense, gray, fine to coarse SAND and GRAVEL, little Silt, wet.	Sand and Gravel with Silt		
				77				
16				33				
				18				
17					S6: Medium dense, dark gray, weathered ROCK, wet.	Apparent Weathered Bedrock		
18								
19								
20	S6	24/14	20-22	12	Boring terminated at 22 feet. No auger refusal encountered.			
				14				
21				16				
				16				
22								
23								

GRANULAR SOILS		COHESIVE SOILS		NOTES
Blows/ft.	Density	Blows/ft.	Consistency	
0-4	V. LOOSE	<2	V. SOFT	
5-10	LOOSE	2-4	SOFT	
11-30	M. DENSE	4-8	M. STIFF	
31-50	DENSE	8-15	STIFF	
>50	V. DENSE	15-30	V. STIFF	
		>30	HARD	



GeoInsight®
Environmental Strategy & Engineering

SOIL BORING LOG

Client: Mason & Hanger Group, Inc.

Boring Identification: B-3

Project: MPMGR Hotel Range

Sheet: 1 of 2

Location: 1 Jackson Road, Devens, MA

Checked By: MCP

Project Number: 9505-000

Drilling Company: Technical Drilling Services, Inc.

Boring Location: See Site Plan

Foreman: Donnie Watson

Ground Surface Elevation: ~228 feet

Datum: NAVD 88

GeoInsight Engineer/Geologist: A. Stitt

Date Started: 11/18/19

Date Completed: 11/18/19

DRILLING METHOD				SAMPLER	GROUNDWATER MEASUREMENTS					
Vehicle: Truck				Type: SPT (Auto)	Date	Depth (ft)	Reference	Stabilization		
Model: Diedrich D-120				Hammer (lb): 140	11/18/2019	6.0	Ground Surface	After Drilling		
Method: 4.25" Hollow-Stem Auger				Fall (in): 30						
DEPTH (ft)	SAMPLE INFORMATION				SAMPLE DESCRIPTION	STRATUM DESCRIPTION	FIELD SCREENING (ppm)	NOTE		
	#	Pen/Rec (in)	Depth (ft)	Blows/6"						
0	S1A	4/4	0-0.3	2	S1A: Loose, dark brown, fine to medium SAND, little Silt and fine Roots, damp. S1B: Loose, brown, fine to medium SAND, little Silt, damp.	TOPSOIL				
1	S1B	20/6	0.3-2	2						
				4						
2				5						
3										
4						NATIVE OUTWASH DEPOSIT				
5	S2	24/13	5-7	11	S2: Very dense, brown, fine to coarse SAND and GRAVEL, little Silt, damp.	Sand and Gravel with Silt				
6				30						
				38						
				31						
7										
8										
9										
10	S3	24/14	10-12	16			S3: Dense, gray and dark brown, fine to coarse SAND and GRAVEL, little Silt, wet. Cobbles present 12-13 feet based upon drill rig behavior.	Sand and Gravel with Silt		
				22						
11				16						
				10						
12										
13										
14										
15	S4	24/16	15-17	20	S4: Dense, dark gray/brown, fine to coarse SAND, little Gravel, trace Silt, wet.	Gravelly Sand				
				21						
16				11						
				11						
17										
18										
19										
20										
GRANULAR SOILS				COHESIVE SOILS			NOTES			
Blows/ft.		Density		Blows/ft.	Consistency					
0-4		V. LOOSE		<2	V. SOFT					
5-10		LOOSE		2-4	SOFT					
11-30		M. DENSE		4-8	M. STIFF					
31-50		DENSE		8-15	STIFF					
>50		V. DENSE		15-30	V. STIFF					
				>30	HARD					



GeoInsight®

Environmental Strategy & Engineering

SOIL BORING LOG

Client: Mason & Hanger Group, Inc.

Boring Identification: B-3

Project: MPMGR Hotel Range

Sheet: 2 of 2

Location: 1 Jackson Road, Devens, MA

Checked By: MCP

Project Number: 9505-000

Drilling Company: Technical Drilling Services, Inc.

Boring Location: See Site Plan

Foreman: Donnie Watson

Ground Surface Elevation: ~228 feet

Datum: NAVD 88

GeoInsight Engineer/Geologist: A. Stitt

Date Started: 11/18/19

Date Completed: 11/18/19

DRILLING METHOD			SAMPLER		GROUNDWATER MEASUREMENTS				
Vehicle: Truck			Type: SPT (Auto)		Date	Depth (ft)	Reference	Stabilization	
Model: Diedrich D-120			Hammer (lb): 140		11/18/2019	6.0	Ground Surface	After Drilling	
Method: 4.25" Hollow-Stem Auger			Fall (in): 30						
DEPTH (ft)	SAMPLE INFORMATION				SAMPLE DESCRIPTION	STRATUM DESCRIPTION	FIELD SCREENING (ppm)	NOTE	
	#	Pen/Rec (in)	Depth (ft)	Blows/6"					
20	S5	24/14	20-22	16	S5: Medium dense, dark gray/brown, fine to coarse SAND, little Gravel, trace Silt, wet.	Gravelly Sand			
21				14					
				12					
22				10					
23					Very slow and difficult drilling 23-25 feet.				
24									
25	S6	11/6	25-25.9	30	S6: Very dense, dark gray, weathered ROCK, wet.	Apparent Weathered Bedrock			
26				75/5"	Boring terminated at 25.9 feet. No auger refusal encountered.				
27									
28									
29									
30									
31									
32									
33									
34									
35									
36									
37									
38									
39									
40	GRANULAR SOILS			COHESIVE SOILS		NOTES			
	Blows/ft.		Density	Blows/ft.	Consistency				
	0-4		V. LOOSE	<2	V. SOFT				
	5-10		LOOSE	2-4	SOFT				
	11-30		M. DENSE	4-8	M. STIFF				
	31-50		DENSE	8-15	STIFF				
	>50		V. DENSE	15-30	V. STIFF				
				>30	HARD				



GeoInsight
Environmental Strategy & Engineering

SOIL BORING LOG

Client: Mason & Hanger Group, Inc.

Boring Identification: B-4

Project: MPMGR Hotel Range

Sheet: 1 of 1

Location: 1 Jackson Road, Devens, MA

Checked By: MCP

Project Number: 9505-000

Drilling Company: Technical Drilling Services, Inc.

Boring Location: See Site Plan

Foreman: Donnie Watson

Ground Surface Elevation: ~228 feet

Datum: NAVD 88

GeoInsight Engineer/Geologist: A. Stitt

Date Started: 11/18/19

Date Completed: 11/18/19

DRILLING METHOD	SAMPLER	GROUNDWATER MEASUREMENTS			
Vehicle: Truck	Type: SPT (Auto)	Date	Depth (ft)	Reference	Stabilization
Model: Diedrich D-120	Hammer (lb): 140	11/18/2019	6.0	Ground Surface	After Drilling
Method: 4.25" Hollow-Stem Auger	Fall (in): 30				

DEPTH (ft)	SAMPLE INFORMATION				SAMPLE DESCRIPTION	STRATUM DESCRIPTION	FIELD SCREENING (ppm)	NOTE
	#	Pen/Rec (in)	Depth (ft)	Blows/6"				
0	S1A	6/6	0-0.5	2	S1A: Medium dense, dark brown, fine to medium SAND, little Silt and fine Roots, damp.	TOPSOIL		
1	S1B	18/10	0.5-2	4				
				9	S1B: Medium dense, brown, fine SAND, little Silt, damp.	Silty Sand		
				12				
2	S2	24/14	2-4	7	S2: Medium dense, brown, fine SAND, little Silt, damp.	Silty Sand		
				9				
3				9				
				8				
4	S3	24/16	4-6	2	S3: Medium dense, light brown, SILT, damp.	Silt		
				4				
5				7				
				9				
6						NATIVE OUTWASH DEPOSIT		
7								
8								
9								
10	S4	24/14	10-12	3	S4: Medium dense, dark gray/brown, fine to coarse SAND and GRAVEL, trace Silt, wet.	Sand and Gravel		
				9				
11				19				
				19				
12								
13								
14								
15	S5	24/10	15-17	9	S5: Very dense, dark gray/brown, fine to coarse SAND and GRAVEL, trace Silt, wet.	Sand and Gravel		
				18				
16				60				
				58				
17								
18								
19								
20	S6	24/12	20-22	26	S6: Very dense, dark gray/brown, fine to coarse SAND and GRAVEL, little Silt, wet.	Sand and Gravel with Silt		
				22				
21				37				
				55				
22					Boring terminated at 22 feet. No auger refusal encountered.			
23								

GRANULAR SOILS		COHESIVE SOILS		NOTES
Blows/ft.	Density	Blows/ft.	Consistency	
0-4	V. LOOSE	<2	V. SOFT	
5-10	LOOSE	2-4	SOFT	
11-30	M. DENSE	4-8	M. STIFF	
31-50	DENSE	8-15	STIFF	
>50	V. DENSE	15-30	V. STIFF	
		>30	HARD	



GeoInsight®
Environmental Strategy & Engineering

SOIL BORING LOG

Client: Mason & Hanger Group, Inc.

Boring Identification: B-5

Project: MPMGR Hotel Range

Sheet: 1 of 2

Location: 1 Jackson Road, Devens, MA

Checked By: MCP

Project Number: 9505-000

Drilling Company: Technical Drilling Services, Inc.

Boring Location: See Site Plan

Foreman: Donnie Watson

Ground Surface Elevation: ~234 feet

Datum: NAVD 88

GeoInsight Engineer/Geologist: A. Stitt

Date Started: 11/18/19

Date Completed: 11/18/19

DRILLING METHOD				SAMPLER	GROUNDWATER MEASUREMENTS						
Vehicle: Truck				Type: SPT (Auto)	Date	Depth (ft)	Reference	Stabilization			
Model: Diedrich D-120				Hammer (lb): 140	11/18/2019	10.0	Ground Surface	After Drilling			
Method: 4.25" Hollow-Stem Auger				Fall (in): 30							
DEPTH (ft)	SAMPLE INFORMATION				SAMPLE DESCRIPTION		STRATUM DESCRIPTION	FIELD SCREENING (ppm)	NOTE		
	#	Pen/Rec (in)	Depth (ft)	Blows/6"							
0	S1A	6/6	0-0.5	3	S1A: Loose, dark brown, fine to medium SAND, little Silt and fine Roots, damp.		TOPSOIL				
1	S1B	18/12	0.5-2	5							
				8	S1B: Loose, light brown, fine to medium SAND, little Silt, damp.		Silty Sand				
2				9							
3											
							POSSIBLE FILL				
4											
5											
	S2A	10/10	5-5.8	6	S2A: Medium dense, brown, fine to medium SAND, trace Silt, damp.		Sand				
6	S2B	14/10	5.8-7	8							
				11	S2B: Medium dense, gray, fine SAND and Organic SILT, damp.		Apparent Organics				
7				20							
8											
9											
10	S3	24/16	10-12	4				S3: Medium dense, gray/ light brown, fine SAND and SILT, wet.	Sand and Silt		
				4							
11				9							
				11	Cobbles present 12-13 feet based upon drill rig behavior.						
12											
13											
14											
15											
	S4	24/16	15-17	10	S4: Loose, gray/brown, fine to medium SAND, trace Silt, wet.		Silty Sand				
16				6							
				4							
17				3							
							NATIVE OUTWASH DEPOSIT				
18											
19											
20											
GRANULAR SOILS				COHESIVE SOILS		NOTES					
Blows/ft.		Density		Blows/ft.	Consistency						
0-4		V. LOOSE		<2	V. SOFT						
5-10		LOOSE		2-4	SOFT						
11-30		M. DENSE		4-8	M. STIFF						
31-50		DENSE		8-15	STIFF						
>50		V. DENSE		15-30	V. STIFF						
				>30	HARD						



GeoInsight®

Environmental Strategy & Engineering

SOIL BORING LOG

Client: Mason & Hanger Group, Inc.

Boring Identification: B-5

Project: MPMGR Hotel Range

Sheet: 2 of 2

Location: 1 Jackson Road, Devens, MA

Checked By: MCP

Project Number: 9505-000

Drilling Company: Technical Drilling Services, Inc.

Boring Location: See Site Plan

Foreman: Donnie Watson

Ground Surface Elevation: ~234 feet

Datum: NAVD 88

GeoInsight Engineer/Geologist: A. Stitt

Date Started: 11/18/19

Date Completed: 11/18/19

DRILLING METHOD				SAMPLER		GROUNDWATER MEASUREMENTS				
Vehicle: Truck				Type: SPT (Auto)		Date	Depth (ft)	Reference	Stabilization	
Model: Diedrich D-120				Hammer (lb): 140		11/18/2019	10.0	Ground Surface	After Drilling	
Method: 4.25" Hollow-Stem Auger				Fall (in): 30						
DEPTH (ft)	SAMPLE INFORMATION				SAMPLE DESCRIPTION	STRATUM DESCRIPTION	FIELD SCREENING (ppm)	NOTE		
	#	Pen/Rec (in)	Depth (ft)	Blows/6"						
20	S5	24/12	20-22	10	S5: Medium dense, gray/brown, fine to coarse SAND and GRAVEL, little Silt, wet.	Sand and Gravel with Silt				
21				10						
				11						
22				15						
23										
24										
25	S6	24/14	25-27	17	S6: Medium dense, gray, fine to coarse SAND and GRAVEL, little Silt, wet.	Sand and Gravel with Silt				
				11						
26				13						
				30						
27										
28										
29										
30	S7	24/14	30-32	21	S7: Medium dense, gray, fine to coarse SAND and GRAVEL, little Silt, wet.	Sand and Gravel with Silt				
				19						
31				11						
				11						
32					Boring terminated at 32 feet. No refusal encountered.					
33										
34										
35										
36										
37										
38										
39										
40	GRANULAR SOILS			COHESIVE SOILS		NOTES				
	Blows/ft.		Density	Blows/ft.	Consistency					
	0-4		V. LOOSE	<2	V. SOFT					
	5-10		LOOSE	2-4	SOFT					
	11-30		M. DENSE	4-8	M. STIFF					
	31-50		DENSE	8-15	STIFF					
	>50		V. DENSE	15-30	V. STIFF					
				>30	HARD					



GeoInsight®

Environmental Strategy & Engineering

SOIL BORING LOG

Client: Mason & Hanger Group, Inc.

Boring Identification: B-6

Project: MPMGR Hotel Range

Sheet: 1 of 1

Location: 1 Jackson Road, Devens, MA

Checked By: MCP

Project Number: 9505-000

Drilling Company: Technical Drilling Services, Inc.

Boring Location: See Site Plan

Foreman: Brett Balyk

Ground Surface Elevation: ~226 feet

Datum: NAVD 88

GeoInsight Engineer/Geologist: A. Stitt

Date Started: 11/19/19

Date Completed: 11/19/19

DRILLING METHOD	SAMPLER	GROUNDWATER MEASUREMENTS			
Vehicle: ATV	Type: SPT (Auto)	Date	Depth (ft)	Reference	Stabilization
Model: Diedrich D-50	Hammer (lb): 140	11/19/2019	7.0	Ground Surface	After Drilling
Method: 4.25" Hollow-Stem Auger	Fall (in): 30				

DEPTH (ft)	SAMPLE INFORMATION				SAMPLE DESCRIPTION	STRATUM DESCRIPTION	FIELD SCREENING (ppm)	NOTE
	#	Pen/Rec (in)	Depth (ft)	Blows/6"				
0	S1A	6/6	0-0.5	1	S1A: Very loose, dark brown, fine to medium SAND, little Silt and fine Roots, damp.	FOREST MAT		
1	S1B	18/12	0.5-2	1				
				1	S1B: Very loose, brown, fine to medium SAND, trace Silt and fine roots, damp.	Sand		
				3				
2	S2	24/16	2-4	4	S2: Medium dense, brown, fine to coarse SAND, trace Silt, damp.	Sand		
				7				
3				9				
				9	S3: Stiff, gray/light brown, SILT, damp.	Silt		
4	S3	24/18	4-6	2				
				4				
5				6				
				7	S4: Medium stiff, gray, SILT, wet.	NATIVE OUTWASH DEPOSIT		
6								
7								
8								
9								
10	S4	24/21	10-12	2				
				2				
11				2				
				2				
12								
13								
14								
15	S5	24/11	15-17	1	S5: Soft, gray, SILT, wet.	Silt		
				2				
16				2				
				2				
17					Boring terminated at 17 feet. No refusal encountered.			
18								
19								
20								
21								
22								
23								

GRANULAR SOILS		COHESIVE SOILS		NOTES
Blows/ft.	Density	Blows/ft.	Consistency	
0-4	V. LOOSE	<2	V. SOFT	
5-10	LOOSE	2-4	SOFT	
11-30	M. DENSE	4-8	M. STIFF	
31-50	DENSE	8-15	STIFF	
>50	V. DENSE	15-30	V. STIFF	
		>30	HARD	



GeoInsight
Environmental Strategy & Engineering

SOIL BORING LOG

Client: Mason & Hanger Group, Inc.

Boring Identification: B-7

Project: MPMGR Hotel Range

Sheet: 1 of 1

Location: 1 Jackson Road, Devens, MA

Checked By: MCP

Project Number: 9505-000

Drilling Company: Technical Drilling Services, Inc.

Boring Location: See Site Plan

Foreman: Brett Balyk

Ground Surface Elevation: ~235 feet

Datum: NAVD 88

GeoInsight Engineer/Geologist: A. Stitt

Date Started: 11/19/19

Date Completed: 11/19/19

DRILLING METHOD		SAMPLER	GROUNDWATER MEASUREMENTS			
Vehicle: ATV		Type: SPT (Auto)	Date	Depth (ft)	Reference	Stabilization
Model: Diedrich D-50		Hammer (lb): 140	11/19/2019	15.5	Ground Surface	After Drilling
Method: 4.25" Hollow-Stem Auger		Fall (in): 30				

DEPTH (ft)	SAMPLE INFORMATION				SAMPLE DESCRIPTION	STRATUM DESCRIPTION	FIELD SCREENING (ppm)	NOTE
	#	Pen/Rec (in)	Depth (ft)	Blows/6"				
0								
	S1A	6/6	0-0.5	1	S1A: Very loose, dark brown, fine to medium SAND, little Silt and fine Roots, damp.	FOREST MAT		
1	S1B	18/7	0.5-2	1				
				1	S1B: Very loose, brown, fine to medium SAND, little Silt, damp.	Silty Sand		
				2				
2	S2	24/16	2-4	2	S2: Medium dense, brown, fine to medium SAND, little Silt, damp.	Silty Sand		
				4				
3				7				
4				6				
5	S3	24/24	5-7	3	S3: Medium dense, light brown, fine SAND and SILT, damp.	Sand and Silt		
				7				
6				10				
				11				
7								
8								
9								
10	S4	24/24	10-12	3	S4: Loose, light brown, fine SAND and SILT, damp.	Sand and Silt		
				2				
11				5				
				8				
12								
13								
14								
15	S5	24/15	15-17	4	S5: Medium stiff, light brown, SILT, wet.	Silt		
				4				
16				6				
				7				
17					Boring terminated at 17 feet. No refusal encountered.			
18								
19								
20								
21								
22								
23								

GRANULAR SOILS		COHESIVE SOILS		NOTES
Blows/ft.	Density	Blows/ft.	Consistency	
0-4	V. LOOSE	<2	V. SOFT	
5-10	LOOSE	2-4	SOFT	
11-30	M. DENSE	4-8	M. STIFF	
31-50	DENSE	8-15	STIFF	
>50	V. DENSE	15-30	V. STIFF	
		>30	HARD	



GeoInsight®
Environmental Strategy & Engineering

SOIL BORING LOG

Client: Mason & Hanger Group, Inc.

Boring Identification: B-8

Project: MPMGR Hotel Range

Sheet: 1 of 2

Location: 1 Jackson Road, Devens, MA

Checked By: MCP

Project Number: 9505-000

Drilling Company: Technical Drilling Services, Inc.

Boring Location: See Site Plan

Foreman: Brett Balyk

Ground Surface Elevation: ~237 feet

Datum: NAVD 88

GeoInsight Engineer/Geologist: A. Stitt

Date Started: 11/19/19

Date Completed: 11/19/19

DRILLING METHOD				SAMPLER	GROUNDWATER MEASUREMENTS				
Vehicle: ATV				Type: SPT (Auto)	Date	Depth (ft)	Reference	Stabilization	
Model: Diedrich D-50				Hammer (lb): 140	11/19/2019	15.0	Ground Surface	After Drilling	
Method: 4.25" Hollow-Stem Auger				Fall (in): 30					
DEPTH (ft)	SAMPLE INFORMATION				SAMPLE DESCRIPTION	STRATUM DESCRIPTION	FIELD SCREENING (ppm)	NOTE	
	#	Pen/Rec (in)	Depth (ft)	Blows/6"					
0	S1A	6/6	0-0.5	1	S1A: Very loose, dark brown, fine to medium SAND, little Silt and fine Roots, damp.	FOREST MAT			
1	S1B	18/12	0.5-2	1					
				1	S1B: Very loose, light brown, fine SAND, little Silt, damp.	Silty Sand			
				2					
2	S2	24/20	2-4	2	S2: Loose, light brown, fine to medium SAND, little Silt, damp.				
				2					
3				2					
				3					
4				5					
				5					
4	S3	24/20	4-6	2	S3: Very loose, light brown, fine to medium SAND, little Silt, damp.	Silty Sand			
				2					
5				2					
				5					
6						NATIVE OUTWASH DEPOSIT			
7									
8									
9									
10									
10	S4	24/15	10-12	17	S4: Medium dense, brown, fine to coase SAND, some fine Gravel, little Silt, damp.	Gravelly Sand with Silt			
				13					
11				14					
				15					
12									
13									
14									
15									
15	S5	24/3	15-17	11	S5: Medium dense, brown, fine to coase SAND, some fine Gravel, little Silt, wet..	Gravelly Sand with Silt			
				12					
16				12					
				11					
17									
18									
19									
20									
GRANULAR SOILS				COHESIVE SOILS		NOTES			
Blows/ft.		Density		Blows/ft.		Consistency			
0-4		V. LOOSE		<2		V. SOFT			
5-10		LOOSE		2-4		SOFT			
11-30		M. DENSE		4-8		M. STIFF			
31-50		DENSE		8-15		STIFF			
>50		V. DENSE		15-30		V. STIFF			
				>30		HARD			



GeoInsight®

Environmental Strategy & Engineering

SOIL BORING LOG

Client: Mason & Hanger Group, Inc.

Boring Identification: B-8

Project: MPMGR Hotel Range

Sheet: 2 of 2

Location: 1 Jackson Road, Devens, MA

Checked By: MCP

Project Number: 9505-000

Drilling Company: Technical Drilling Services, Inc.

Boring Location: See Site Plan

Foreman: Brett Balyk

Ground Surface Elevation: ~237 feet

Datum: NAVD 88

GeoInsight Engineer/Geologist: A. Stitt

Date Started: 11/19/19

Date Completed: 11/19/19

DRILLING METHOD		SAMPLER	GROUNDWATER MEASUREMENTS			
Vehicle: ATV		Type: SPT (Auto)	Date	Depth (ft)	Reference	Stabilization
Model: Diedrich D-50		Hammer (lb): 140	11/19/2019	15.0	Ground Surface	After Drilling
Method: 4.25" Hollow-Stem Auger		Fall (in): 30				

DEPTH (ft)	SAMPLE INFORMATION				SAMPLE DESCRIPTION	STRATUM DESCRIPTION	FIELD SCREENING (ppm)	NOTE
	#	Pen/Rec (in)	Depth (ft)	Blows/6"				
20	S6	24/7	20-22	6	S6: Medium dense, gray, fine to coarse SAND and GRAVEL, trace Silt, wet.	Sand and Gravel NATIVE OUTWASH DEPOSIT		
21				9				
22				13				
23				16				
24					Difficult drilling 23-24.5 feet.			
25					Boring terminated at 24.5 feet. Auger refusal encountered.			
26								
27								
28								
29								
30								
31								
32								
33								
34								
35								
36								
37								
38								
39								
40								
GRANULAR SOILS					COHESIVE SOILS		NOTES	
Blows/ft.					Density			
0-4					V. LOOSE		<2	
5-10					LOOSE		2-4	
11-30					M. DENSE		4-8	
31-50					DENSE		8-15	
>50					V. DENSE		15-30	
							>30	
							V. SOFT	
							SOFT	
							M. STIFF	
							STIFF	
							V. STIFF	
							HARD	



GeoInsight®

Environmental Strategy & Engineering

SOIL BORING LOG

Client: Mason & Hanger Group, Inc.

Boring Identification: B-9

Project: MPMGR Hotel Range

Sheet: 1 of 1

Location: 1 Jackson Road, Devens, MA

Checked By: MCP

Project Number: 9505-000

Drilling Company: Technical Drilling Services, Inc.

Boring Location: See Site Plan

Foreman: Brett Balyk

Ground Surface Elevation: ~237 feet

Datum: NAVD 88

GeoInsight Engineer/Geologist: A. Stitt

Date Started: 11/18/19

Date Completed: 11/18/19

DRILLING METHOD	SAMPLER	GROUNDWATER MEASUREMENTS			
Vehicle: ATV	Type: SPT (Auto)	Date	Depth (ft)	Reference	Stabilization
Model: Diedrich D-50	Hammer (lb): 140	11/18/2019	15.0	Ground Surface	After Drilling
Method: 4.25" Hollow-Stem Auger	Fall (in): 30				

DEPTH (ft)	SAMPLE INFORMATION				SAMPLE DESCRIPTION	STRATUM DESCRIPTION	FIELD SCREENING (ppm)	NOTE
	#	Pen/Rec (in)	Depth (ft)	Blows/6"				
0								
	S1A	6/6	0-0.5	1	S1A: Very loose, dark brown, fine to medium SAND, little Silt and fine Roots, damp.	FOREST MAT		
1	S1B	18/4	0.5-2	2				
				2	S1B: Very loose, brown, fine to medium SAND, trace Silt, damp.	Sand		
2				2				
3								
4								
5								
	S2	24/8	5-7	5	S2: Medium dense, light brown, fine to medium SAND, trace Silt, damp.	NATIVE OUTWASH DEPOSIT		
6				6				
				6				
7				5				
8								
9					S3: Medium dense, gray/light brown, fine to medium SAND, trace Silt, damp.	Sand		
10	S3	24/14	10-12	8				
				6				
11				9				
12				8				
13					S4: Medium dense, light brown, fine to medium SAND, trace Silt, wet.	Sand		
14								
15	S4	24/15	15-17	5				
				5				
16				7				
17				6	S5: Medium dense, light brown, fine to coarse SAND, trace Silt, wet.	Sand		
18								
19								
20	S5	24/12	20-22	2				
				2				
21				5	Boring terminated at 22 feet. No refusal encountered.			
				4				
22								
23								

GRANULAR SOILS		COHESIVE SOILS		NOTES
Blows/ft.	Density	Blows/ft.	Consistency	
0-4	V. LOOSE	<2	V. SOFT	
5-10	LOOSE	2-4	SOFT	
11-30	M. DENSE	4-8	M. STIFF	
31-50	DENSE	8-15	STIFF	
>50	V. DENSE	15-30	V. STIFF	
		>30	HARD	



GeoInsight®

Environmental Strategy & Engineering

SOIL BORING LOG

Client: Mason & Hanger Group, Inc.

Boring Identification: B-10

Project: MPMGR Hotel Range

Sheet: 1 of 1

Location: 1 Jackson Road, Devens, MA

Checked By: MCP

Project Number: 9505-000

Drilling Company: Technical Drilling Services, Inc.

Boring Location: See Site Plan

Foreman: Brett Balyk

Ground Surface Elevation: ~238 feet

Datum: NAVD 88

GeoInsight Engineer/Geologist: A. Stitt

Date Started: 11/18/19

Date Completed: 11/18/19

DRILLING METHOD	SAMPLER	GROUNDWATER MEASUREMENTS			
Vehicle: ATV	Type: SPT (Auto)	Date	Depth (ft)	Reference	Stabilization
Model: Diedrich D-50	Hammer (lb): 140	11/18/2019	20.0	Ground Surface	After Drilling
Method: 4.25" Hollow-Stem Auger	Fall (in): 30				

DEPTH (ft)	SAMPLE INFORMATION				SAMPLE DESCRIPTION	STRATUM DESCRIPTION	FIELD SCREENING (ppm)	NOTE
	#	Pen/Rec (in)	Depth (ft)	Blows/6"				
0	S1A	6/6	0-0.5	1	S1A: Very loose, dark brown, fine to medium SAND, little Silt and fine Roots, damp.	FOREST MAT		
1	S1B	18/9	0.5-2	1				
				2	S1B: Very loose, brown, fine to medium SAND, little Silt, damp.	Silty Sand		
				1				
2								
3						NATIVE OUTWASH DEPOSIT		
4								
5	S2	24/6	5-7	8	S2: Dense, light brown, fine SAND, little fine Gravel and Silt, damp.	Gravelly Sand with Silt		
				18				
6				20				
				18				
7								
8								
9								
10	S3	24/15	10-12	8	S3: Medium dense, dark brown, fine to coarse SAND, some Gravel, little Silt, damp.	Gravelly Sand with Silt		
				11				
11				10				
				13				
12								
13								
14								
15	S4	24/0	15-17	17	S4: No recovery. Auger cuttings consistent with S3.	Gravelly Sand with Silt		
				19				
16				18				
				20				
17								
18								
19								
20	S5	24/4	20-22	4	S5: Loose, brown, fine to coarse SAND and GRAVEL, little Silt, wet.	Sand and Gravel with Silt		
				4				
21				6				
				6				
22					Boring terminated at 22 feet. No refusal encountered.			
23								

GRANULAR SOILS		COHESIVE SOILS		NOTES
Blows/ft.	Density	Blows/ft.	Consistency	
0-4	V. LOOSE	<2	V. SOFT	
5-10	LOOSE	2-4	SOFT	
11-30	M. DENSE	4-8	M. STIFF	
31-50	DENSE	8-15	STIFF	
>50	V. DENSE	15-30	V. STIFF	
		>30	HARD	



GeoInsight®

Environmental Strategy & Engineering

SOIL BORING LOG

Client: Mason & Hanger Group, Inc.

Boring Identification: B-11

Project: MPMGR Hotel Range

Sheet: 1 of 2

Location: 1 Jackson Road, Devens, MA

Checked By: MCP

Project Number: 9505-000

Drilling Company: Technical Drilling Services, Inc.

Boring Location: See Site Plan

Foreman: Brett Balyk

Ground Surface Elevation: ~238 feet

Datum: NAVD 88

GeoInsight Engineer/Geologist: A. Stitt

Date Started: 11/18/19

Date Completed: 11/18/19

DRILLING METHOD				SAMPLER	GROUNDWATER MEASUREMENTS				
Vehicle: ATV				Type: SPT (Auto)	Date	Depth (ft)	Reference	Stabilization	
Model: Diedrich D-50				Hammer (lb): 140	11/18/2019	21.0	Ground Surface	After Drilling	
Method: 4.25" Hollow-Stem Auger				Fall (in): 30					
DEPTH (ft)	SAMPLE INFORMATION				SAMPLE DESCRIPTION	STRATUM DESCRIPTION	FIELD SCREENING (ppm)	NOTE	
	#	Pen/Rec (in)	Depth (ft)	Blows/6"					
0	S1A	6/6	0-0.5	1	S1A: Very loose, dark brown, fine to medium SAND, little Silt and fine Roots, damp.	FOREST MAT			
1	S1B	18/12	0.5-2	1					
				3	S1B: Very loose, brown, fine to medium SAND, trace Silt, damp.	Sand			
2				2					
3									
4									
5					S2: Loose, light brown, fine to medium SAND, trace Silt, damp.	Sand			
	S2	24/16	5-7	2					
6				2					
				4					
7				5	S3: Loose, light brown, fine to medium SAND, trace Silt, damp.	NATIVE OUTWASH DEPOSIT			
8									
9									
10					S4: Loose, light brown, fine to medium SAND, trace Silt, damp.	Sand			
	S3	24/17	10-12	2					
11				3					
				5					
12				6	S4: Loose, light brown, fine to medium SAND, trace Silt, damp.	Sand			
13									
14									
15					S4: Loose, light brown, fine to medium SAND, trace Silt, damp.	Sand			
	S4	24/13	15-17	2					
16				2					
				4					
17				5					
18									
19									
20									



GeoInsight®

Environmental Strategy & Engineering

SOIL BORING LOG

Client: Mason & Hanger Group, Inc.

Boring Identification: B-11

Project: MPMGR Hotel Range

Sheet: 2 of 2

Location: 1 Jackson Road, Devens, MA

Checked By: MCP

Project Number: 9505-000

Drilling Company: Technical Drilling Services, Inc.

Boring Location: See Site Plan

Foreman: Brett Balyk

Ground Surface Elevation: ~238 feet

Datum: NAVD 88

GeoInsight Engineer/Geologist: A. Stitt

Date Started: 11/19/19

Date Completed: 11/19/19

DRILLING METHOD		SAMPLER	GROUNDWATER MEASUREMENTS			
Vehicle: ATV		Type: SPT (Auto)	Date	Depth (ft)	Reference	Stabilization
Model: Diedrich D-50		Hammer (lb): 140	11/19/2019	21.0	Ground Surface	After Drilling
Method: 4.25" Hollow-Stem Auger		Fall (in): 30				

DEPTH (ft)	SAMPLE INFORMATION				SAMPLE DESCRIPTION	STRATUM DESCRIPTION	FIELD SCREENING (ppm)	NOTE
	#	Pen/Rec (in)	Depth (ft)	Blows/6"				
20	S5	24/24	20-22	6	S5: Medium dense, light brown, fine to medium SAND, trace Silt, wet.	Sand NATIVE OUTWASH DEPOSIT		
21				9				
				13				
22				16				
23								
24								
25	S6	24/24	25-27	1	S5: Very loose, light brown, fine to medium SAND, trace Silt, wet.	Sand		
				1				
26				1				
				2				
27								
28								
29								
30	S7	24/24	30-32	1	S5: Very loose, gray/light brown, fine to medium SAND, trace Silt, wet.	Sand		
				1				
31				2				
				1				
32					Boring terminated at 32 feet. No refusal encountered.			
33								
34								
35								
36								
37								
38								
39								
40	GRANULAR SOILS			COHESIVE SOILS		NOTES		
	Blows/ft.		Density	Blows/ft.	Consistency			
	0-4		V. LOOSE	<2	V. SOFT			
	5-10		LOOSE	2-4	SOFT			
	11-30		M. DENSE	4-8	M. STIFF			
	31-50		DENSE	8-15	STIFF			
	>50		V. DENSE	15-30	V. STIFF			
				>30	HARD			



GeoInsight
Environmental Strategy & Engineering

SOIL BORING LOG

Client: Mason & Hanger Group, Inc.

Boring Identification: B-12

Project: MPMGR Hotel Range

Sheet: 1 of 1

Location: 1 Jackson Road, Devens, MA

Checked By: MCP

Project Number: 9505-000

Drilling Company: Technical Drilling Services, Inc.

Boring Location: See Site Plan

Foreman: Brett Balyk

Ground Surface Elevation: ~238 feet

Datum: NAVD 88

GeoInsight Engineer/Geologist: A. Stitt

Date Started: 11/18/19

Date Completed: 11/18/19

DRILLING METHOD				SAMPLER	GROUNDWATER MEASUREMENTS				
Vehicle: ATV				Type: SPT (Auto)	Date	Depth (ft)	Reference	Stabilization	
Model: Diedrich D-50				Hammer (lb): 140	11/18/2019	Not Encountered	NA	NA	
Method: 4.25" Hollow-Stem Auger				Fall (in): 30					
DEPTH (ft)	SAMPLE INFORMATION				SAMPLE DESCRIPTION	STRATUM DESCRIPTION	FIELD SCREENING (ppm)	NOTE	
	#	Pen/Rec (in)	Depth (ft)	Blows/6"					
0					S1A: Very loose, dark brown, fine to medium SAND, little Silt and fine Roots, damp.	FOREST MAT			
1	S1A	6/6	0-0.5	1					
	S1B	18/8	0.5-2	1	S1B: Very loose, brown, fine to medium SAND, trace Silt, damp.	Sand			
				2					
2				2	S2: Very loose, light brown, fine to medium SAND, trace Silt, damp.	Sand			
	S2	24/16	2-4	2					
3				2	NATIVE OUTWASH DEPOSIT				
				4					
4				5					
5					S3: Loose, brown, fine to medium SAND, trace Silt, damp.	Sand			
	S3	24/14	5-7	2					
6				3					
				4					
7				4					
8									
9									
10					S4: Medium dense, dark brown, fine to coarse SAND, trace fine Gravel and Silt, damp.	Sand			
	S4	24/12	10-12	6					
11				8					
				10					
12				14					
13									
14									
15					S4: Medium dense, dark brown, fine to coarse SAND, trace fine Gravel and Silt, damp.	Sand			
	S5	24/14	15-17	12					
16				11					
				10					
17				10	Boring terminated at 17 feet. No refusal encountered.				
18									
19									
20									
21									
22									
23									
GRANULAR SOILS		COHESIVE SOILS		NOTES					
Blows/ft.		Density		Blows/ft.			Consistency		
0-4		V. LOOSE		<2			V. SOFT		
5-10		LOOSE		2-4			SOFT		
11-30		M. DENSE		4-8			M. STIFF		
31-50		DENSE		8-15			STIFF		
>50		V. DENSE		15-30			V. STIFF		
				>30			HARD		



GeoInsight
Environmental Strategy & Engineering

SOIL BORING LOG

Client: Mason & Hanger Group, Inc.

Boring Identification: B-13

Project: MPMGR Hotel Range

Sheet: 1 of 1

Location: 1 Jackson Road, Devens, MA

Checked By: MCP

Project Number: 9505-000

Drilling Company: Technical Drilling Services, Inc.

Boring Location: See Site Plan

Foreman: Brett Balyk

Ground Surface Elevation: ~238 feet

Datum: NAVD 88

GeoInsight Engineer/Geologist: A. Stitt

Date Started: 11/19/19

Date Completed: 11/19/19

DRILLING METHOD	SAMPLER	GROUNDWATER MEASUREMENTS			
Vehicle: ATV	Type: SPT (Auto)	Date	Depth (ft)	Reference	Stabilization
Model: Diedrich D-50	Hammer (lb): 140	11/19/2019	15.0	Ground Surface	After Drilling
Method: 4.25" Hollow-Stem Auger	Fall (in): 30				

DEPTH (ft)	SAMPLE INFORMATION				SAMPLE DESCRIPTION	STRATUM DESCRIPTION	FIELD SCREENING (ppm)	NOTE
	#	Pen/Rec (in)	Depth (ft)	Blows/6"				
0	S1	24/20	0-2	2	S1: Medium dense, light brown, fine to medium SAND, trace Silt,	Sand		
1				4		FILL		
				7				
2	S2A	16/16	2-3.3	8	S2A: Medium dense, dark brown, fine SAND and organic SILT, damp.	Organics		
				11				
3	S2B	8/6	3.3-4	17	SB: Medium dense, brown, fine to medium SAND, trace Silt, damp.	Sand		
				24				
4	S3	24/15	4-6	5	S3: Medium dense, brown, fine to medium SAND, trace Silt, damp.	Sand		
				8				
				9				
6					S4: Loose, gray, fine SAND and SILT, damp.	NATIVE OUTWASH DEPOSIT		
7								
8								
9								
10								
11								
12								
13								
14								
15								
15	S5	24/15	15-17	6	S4: Stiff, gray, SILT, wet.	Silt		
				4				
				8				
17				7	Boring terminated at 17 feet. No refusal encountered.			
18								
19								
20								
21								
22								
23								

GRANULAR SOILS		COHESIVE SOILS		NOTES
Blows/ft.	Density	Blows/ft.	Consistency	
0-4	V. LOOSE	<2	V. SOFT	
5-10	LOOSE	2-4	SOFT	
11-30	M. DENSE	4-8	M. STIFF	
31-50	DENSE	8-15	STIFF	
>50	V. DENSE	15-30	V. STIFF	
		>30	HARD	



GeoInsight®

Environmental Strategy & Engineering

SOIL BORING LOG

Client: Mason & Hanger Group, Inc.

Boring Identification: B-14

Project: MPMGR Hotel Range

Sheet: 1 of 1

Location: 1 Jackson Road, Devens, MA

Checked By: MCP

Project Number: 9505-000

Drilling Company: Technical Drilling Services, Inc.

Boring Location: See Site Plan

Foreman: Donnie Watson

Ground Surface Elevation: ~247 feet

Datum: NAVD 88

GeoInsight Engineer/Geologist: A. Stitt

Date Started: 11/19/19

Date Completed: 11/19/19

DRILLING METHOD	SAMPLER	GROUNDWATER MEASUREMENTS			
Vehicle: Truck	Type: SPT (Auto)	Date	Depth (ft)	Reference	Stabilization
Model: Diedrich D-120	Hammer (lb): 140	11/19/2019	12.0	Ground Surface	After Drilling
Method: 4.25" Hollow-Stem Auger	Fall (in): 30				

DEPTH (ft)	SAMPLE INFORMATION				SAMPLE DESCRIPTION	STRATUM DESCRIPTION	FIELD SCREENING (ppm)	NOTE
	#	Pen/Rec (in)	Depth (ft)	Blows/6"				
0	S1	24/6	0-2	3	S1: Medium dense, brown, fine to coarse SAND, some Gravel,	Gravelly Sand		
1				10				
				10				
				8				
2	S2	24/18	2-4	7	S2: Medium dense, light brown, fine to medium SAND, trace Silt, damp.	Sand		
3				6				
				7				
				7				
4	S3	24/14	4-6	2	S3: Loose, light brown, fine to medium SAND, trace Silt, damp.	Sand		
5				4				
				6				
6				7		NATIVE OUTWASH DEPOSIT		
7								
8								
9								
10	S4	24/14	10-12	2	S4: Loose, brown, fine to medium SAND, trace Silt, damp.	Sand		
				4				
11				4				
				4				
12								
13								
14								
15	S5	24/16	15-17	2	S5: Stiff, gray/light brown, SILT, wet. (Cohesive Silt)	Silt		
				4				
16				6				
				7				
17					Boring terminated at 17 feet. No auger refusal encountered.			
18								
19								
20								
21								
22								
23								

GRANULAR SOILS		COHESIVE SOILS		NOTES
Blows/ft.	Density	Blows/ft.	Consistency	
0-4	V. LOOSE	<2	V. SOFT	
5-10	LOOSE	2-4	SOFT	
11-30	M. DENSE	4-8	M. STIFF	
31-50	DENSE	8-15	STIFF	
>50	V. DENSE	15-30	V. STIFF	
		>30	HARD	



GeoInsight
Environmental Strategy & Engineering

SOIL BORING LOG

Client: Mason & Hanger Group, Inc.

Boring Identification: B-15

Project: MPMGR Hotel Range

Sheet: 1 of 1

Location: 1 Jackson Road, Devens, MA

Checked By: MCP

Project Number: 9505-000

Drilling Company: Technical Drilling Services, Inc.

Boring Location: See Site Plan

Foreman: Donnie Watson

Ground Surface Elevation: ~255 feet

Datum: NAVD 88

GeoInsight Engineer/Geologist: A. Stitt

Date Started: 11/19/19

Date Completed: 11/19/19

DRILLING METHOD	SAMPLER	GROUNDWATER MEASUREMENTS			
Vehicle: Truck	Type: SPT (Auto)	Date	Depth (ft)	Reference	Stabilization
Model: Diedrich D-120	Hammer (lb): 140	11/19/2019	10.0	Ground Surface	After Drilling
Method: 4.25" Hollow-Stem Auger	Fall (in): 30				

DEPTH (ft)	SAMPLE INFORMATION				SAMPLE DESCRIPTION	STRATUM DESCRIPTION	FIELD SCREENING (ppm)	NOTE
	#	Pen/Rec (in)	Depth (ft)	Blows/6"				
0	S1	24/14	0-2	2	S1: Loose, brown, fine to medium SAND, trace Silt, damp.	Sand		
1				3				
				3				
2	S2	24/15	2-4	3	S2: Loose, gray/light brown, fine SAND and SILT, damp.	Sand and Silt		
3				4				
				4				
4	S3	24/14	4-6	2	S3: Soft, gray, SILT, damp.	Silt		
5				2				
				4				
6						NATIVE OUTWASH DEPOSIT		
7								
8								
9								
10	S4	24/16	10-12	4	S4: Stiff, gray, SILT, wet. (Cohesive Silt)	Silt		
				5				
11				4				
12				7				
13								
14								
15	S5	24/14	15-17	2	S5: Medium stiff, gray, SILT, wet. (Cohesive Silt)	Silt		
				3				
16				4				
				4				
17					Boring terminated at 17 feet. No auger refusal encountered.			
18								
19								
20								
21								
22								
23								

GRANULAR SOILS		COHESIVE SOILS		NOTES
Blows/ft.	Density	Blows/ft.	Consistency	
0-4	V. LOOSE	<2	V. SOFT	
5-10	LOOSE	2-4	SOFT	
11-30	M. DENSE	4-8	M. STIFF	
31-50	DENSE	8-15	STIFF	
>50	V. DENSE	15-30	V. STIFF	
		>30	HARD	



GeoInsight®

Environmental Strategy & Engineering

SOIL BORING LOG

Client: Mason & Hanger Group, Inc.

Boring Identification: B-16

Project: MPMGR Hotel Range

Sheet: 1 of 1

Location: 1 Jackson Road, Devens, MA

Checked By: MCP

Project Number: 9505-000

Drilling Company: Technical Drilling Services, Inc.

Boring Location: See Site Plan

Foreman: Brett Balyk

Ground Surface Elevation: ~246 feet

Datum: NAVD 88

GeoInsight Engineer/Geologist: A. Stitt

Date Started: 11/20/19

Date Completed: 11/20/19

DRILLING METHOD		SAMPLER	GROUNDWATER MEASUREMENTS			
Vehicle: ATV		Type: SPT (Auto)	Date	Depth (ft)	Reference	Stabilization
Model: Diedrich D-50		Hammer (lb): 140	11/20/2019	15.0	Ground Surface	After Drilling
Method: 4.25" Hollow-Stem Auger		Fall (in): 30				

DEPTH (ft)	SAMPLE INFORMATION				SAMPLE DESCRIPTION	STRATUM DESCRIPTION	FIELD SCREENING (ppm)	NOTE
	#	Pen/Rec (in)	Depth (ft)	Blows/6"				
0								
1	S1A	6/6	0-0.5	4	S1A: Medium dense, dark brown, fine to medium SAND, little Silt and fine Roots, damp.	FOREST MAT		
	S1B	18/6	0.5-2	8				
2				16	S1B: Medium dense, brown, fine to medium SAND and GRAVEL, little Silt, damp.	Sand and Gravel FILL		
				23				
3	S2	24/18	2-4	19	S2: Dense, brown, fine to coarse SAND, little Gravel and Silt, damp.	Gravelly Sand with Silt		
				15				
4				17				
				18				
5	S3	24/18	4-6	2	S3: Very loose, gray/brown, fine SAND and organic SILT, damp. (Tip of sampler inorganic Silt)	Organics		
				2				
6				2				
7					S4: No recovery. Auger cuttings consisted of gray/light brown, SILT	NATIVE OUTWASH DEPOSIT		
8								
9								
10								
11								
12								
13								
14								
15								
16								
17	S4	24/0	10-12	6	S4: Medium stiff, gray, SILT, wet. (Seams of gray, fine to medium SAND)	Silt		
				7				
18				9	Boring terminated at 17 feet. No refusal encountered.			
19				13				
20								
21								
22								
23								

GRANULAR SOILS		COHESIVE SOILS		NOTES
Blows/ft.	Density	Blows/ft.	Consistency	
0-4	V. LOOSE	<2	V. SOFT	
5-10	LOOSE	2-4	SOFT	
11-30	M. DENSE	4-8	M. STIFF	
31-50	DENSE	8-15	STIFF	
>50	V. DENSE	15-30	V. STIFF	
		>30	HARD	



GeoInsight
Environmental Strategy & Engineering

SOIL BORING LOG

Client: Mason & Hanger Group, Inc.

Boring Identification: B-17

Project: MPMGR Hotel Range

Sheet: 1 of 1

Location: 1 Jackson Road, Devens, MA

Checked By: MCP

Project Number: 9505-000

Drilling Company: Technical Drilling Services, Inc.

Boring Location: See Site Plan

Foreman: Brett Balyk

Ground Surface Elevation: ~246 feet

Datum: NAVD 88

GeoInsight Engineer/Geologist: A. Stitt

Date Started: 11/20/19

Date Completed: 11/20/19

DRILLING METHOD	SAMPLER	GROUNDWATER MEASUREMENTS			
Vehicle: ATV	Type: SPT (Auto)	Date	Depth (ft)	Reference	Stabilization
Model: Diedrich D-50	Hammer (lb): 140	11/20/2019	11.5	Ground Surface	After Drilling
Method: 4.25" Hollow-Stem Auger	Fall (in): 30				

DEPTH (ft)	SAMPLE INFORMATION				SAMPLE DESCRIPTION	STRATUM DESCRIPTION	FIELD SCREENING (ppm)	NOTE
	#	Pen/Rec (in)	Depth (ft)	Blows/6"				
0								
	S1A	6/6	0-0.5	2	S1A: Loose, dark brown, fine to medium SAND, little Silt and fine Roots, damp.	TOPSOIL		
1	S1B	18/14	0.5-2	3				
				3				
				4				
2	S2	24/20	2-4	3	S1B: Loose, brown, fine to medium SAND, little Gravel and Silt, damp.	Gravelly Sand with Silt Sand and Silt		
				3				
3				5				
				6				
4	S3	24/16	4-6	5	S2: Loose, light brown, fine to coarse SAND and SILT, damp.	Silt		
				5				
5				8				
				8				
6					S3: Stiff, light brown, SILT, damp.	NATIVE OUTWASH DEPOSIT		
7								
8								
9								
10	S4	24/18	10-12	2	S4: Stiff, light brown, SILT, damp.	Silt		
				4				
11				7				
				8				
12					S4: Medium dense, gray, fine to coarse SAND, trace Silt, wet.	Sand		
13								
14								
15	S5	24/18	15-17	3	Boring terminated at 17 feet. No refusal encountered.			
				4				
16				9				
				8				
17								
18								
19								
20								
21								
22								
23								

GRANULAR SOILS		COHESIVE SOILS		NOTES
Blows/ft.	Density	Blows/ft.	Consistency	
0-4	V. LOOSE	<2	V. SOFT	
5-10	LOOSE	2-4	SOFT	
11-30	M. DENSE	4-8	M. STIFF	
31-50	DENSE	8-15	STIFF	
>50	V. DENSE	15-30	V. STIFF	
		>30	HARD	



GeoInsight
Environmental Strategy & Engineering

SOIL BORING LOG

Client: Mason & Hanger Group, Inc.

Boring Identification: B-18

Project: MPMGR Hotel Range

Sheet: 1 of 1

Location: 1 Jackson Road, Devens, MA

Checked By: MCP

Project Number: 9505-000

Drilling Company: Technical Drilling Services, Inc.

Boring Location: See Site Plan

Foreman: Brett Balyk

Ground Surface Elevation: ~246 feet

Datum: NAVD 88

GeoInsight Engineer/Geologist: A. Stitt

Date Started: 11/20/19

Date Completed: 11/20/19

DRILLING METHOD	SAMPLER	GROUNDWATER MEASUREMENTS			
Vehicle: ATV	Type: SPT (Auto)	Date	Depth (ft)	Reference	Stabilization
Model: Diedrich D-50	Hammer (lb): 140	11/20/2019	11.5	Ground Surface	After Drilling
Method: 4.25" Hollow-Stem Auger	Fall (in): 30				

DEPTH (ft)	SAMPLE INFORMATION				SAMPLE DESCRIPTION	STRATUM DESCRIPTION	FIELD SCREENING (ppm)	NOTE
	#	Pen/Rec (in)	Depth (ft)	Blows/6"				
0								
1	S1A	10/10	0-0.8	1	S1A: Loose, light brown, fine to medium SAND, little Silt, damp. S1B: Loose, dark brown, fine to medium SAND, little Silt, damp.	Silty Sand FILL		
	S1B	14/10	0.8-2	2				
				4				
2				4	S2A : Loose, dark brown, fine SAND and organic SILT, damp.	Organics		
	S2A	14/14	2-3.2	2				
	S2B	10/4	3.2-4	2				
3				6	S2B: Stiff, gray, SILT, damp.	Silt		
				10				
				4				
4	S3	24/16	4-6	4	S3: Stiff, light brown, SILT, damp.	Silt		
				7				
				7				
5				7				
				10				
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								

GRANULAR SOILS		COHESIVE SOILS		NOTES
Blows/ft.	Density	Blows/ft.	Consistency	
0-4	V. LOOSE	<2	V. SOFT	
5-10	LOOSE	2-4	SOFT	
11-30	M. DENSE	4-8	M. STIFF	
31-50	DENSE	8-15	STIFF	
>50	V. DENSE	15-30	V. STIFF	
		>30	HARD	