

Mail Message



Mail Properties

From: Brian Ingram <bingram@geohydro.com> Wednesday - January 23, 2013 4:41 PM
To: "dpatrick@jackson.k12.ga.us" <dpatrick@jackson.k12.ga.us>
Subject: West Jackson School Site
Attachments: DRAFT FIGURE 2.pdf (3726 KB) [Open] [Save As]
 Jackson DRAFT Boring Logs.pdf (766 KB) [View] [Open] [Save As]
 Mime.822 (6173 KB) [Save As]

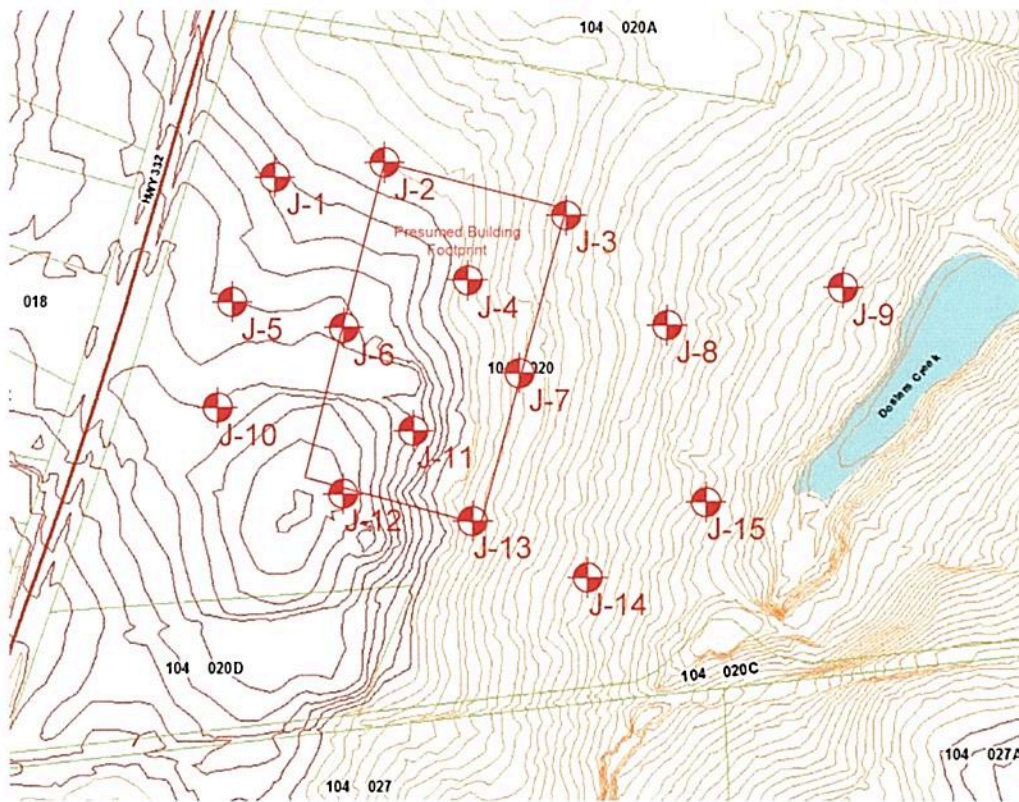
GroupWise has prevented images on this page from displaying. [Click here to display images.](#)

Dennis,

Please find the attached draft boring location plan and logs. Overall, the site appear suitable for the planned school. Some geotechnical items to note are as follows:

1. Cultivated soils (soils disturbed by agricultural activities) are present throughout the site. Generally, these soils have a higher than normal moisture content and may contain unsuitable amounts of organic materials making them difficult to use as structural fill materials. Thorough evaluation during mass grading will be required and some contingencies for dealing with the materials are recommended.
2. While none of the borings encountered rock, boulders were observed on site and it is likely that boulders could be encountered during mass grading.
3. The consistency of the soils are average. While shallow foundations appear suitable for support of the school, a more detailed exploration is recommended once a building type and footprint have been selected.
4. From a Seismic Site Class standpoint, this site is weak. A Site Class E is the current Site Class based on the results of the borings. We strongly recommend performing a shear wave velocity profile analysis within the anticipated building footprint to try and improve the structural engineer's seismic design criteria. Our original proposal outlined those services should you wish to review the scope and cost of those activities. We feel confident that by performing these site specific seismic hazard analyses we can improve the Site Class from E to D.
5. This is a farm and may have had a chicken house on it. (I need to confirm with the historical aerials.) It

PITS



LEGEND:  Soil Test Boring

Figure 2: Boring Location Plan

West Jackson County School Site
Houston, Georgia
Geo-Hydro Project Number 130009.00

DRAFT

J-1

Test Boring Record

GEOHYDRO
ENGINEERS

Project: West Jackson County School Site		Project No: 130009.00
Location: Houshton, Georgia		Date: 1/19/13
Method: HSA- ASTM D1586	GWT at Drilling: Not Encountered	G.S. Elev:
Driller: B&C - Auto Hammer	GWT at 24 hrs: NA (Boring Backfilled)	Logged By: BKI

Elev. (Ft)	Depth (Ft)	GWT	Symbol	Description	N	Standard Penetration Test (Blows/Foot)															
						0	10	20	30	40	50	60	70	80	90	100					
			[Cross-hatched symbol]	Topsoil (Approximately 1 inch)																	
			[Diagonal lines symbol]	Very loose brown clayey fine to medium sand (SC) with topsoil (CULTIVATED)	4																
	5		[Diagonal lines symbol]	Firm tan fine sandy clay (CL) (RESIDUUM)	6																
			[Vertical lines symbol]	Firm tan micaceous fine sandy silt (ML)	5																
	10		[Dotted symbol]	Loose brown highly micaceous silty fine sand (SM)	5																
	15			Boring Terminated at 15 feet	8																
	20																				
	25																				
	30																				
	35																				

Remarks:

TEST BORING RECORD BORINGS.GPJ GEO HYDRO GDT - 1/23/13

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Test Boring Record



Project: West Jackson County School Site		Project No: 130009.00
Location: Houshton, Georgia		Date: 1/19/13
Method: HSA- ASTM D1586	GWT at Drilling: Not Encountered	G.S. Elev:
Driller: B&C - Auto Hammer	GWT at 24 hrs: NA (Boring Backfilled)	Logged By: BKI

Elev. (Ft)	Depth (Ft)	GWT	Symbol	Description	N	Standard Penetration Test (Blows/Foot)
				Topsoil (Approximately 1 inch)		
				Loose brown clayey fine to medium sand (SC) with topsoil (CULTIVATED)	5	●
	5			Very stiff tan slightly micaceous fine sandy silt (ML) (RESIDUUM)	18	●
					21	●
	10				16	●
				Loose brown highly micaceous silty fine sand (SM)	6	●
	15					
	20			Boring Terminated at 20 feet	5	●
	25					
	30					
	35					

Remarks:

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J-3

Test Boring Record



Project: West Jackson County School Site		Project No: 130009.00
Location: Houshton, Georgia		Date: 1/18/13
Method: HSA- ASTM D1586	GWT at Drilling: Not Encountered	G.S. Elev:
Driller: B&C - Auto Hammer	GWT at 24 hrs: NA (Boring Backfilled)	Logged By: BKI

Elev. (Ft)	Depth (Ft)	GWT	Symbol	Description	N	Standard Penetration Test (Blows/Foot)										
						0	10	20	30	40	50	60	70	80	90	100
				Topsoil (Approximately 3 inches)												
				Loose brown clayey fine to medium sand (SC) with topsoil (CULTIVATED)	7		●									
	5			Firm tan micaceous fine sandy silt (ML) (RESIDUUM)	6		●									
				Loose tan micaceous silty fine sand (SM)	6		●									
	10				5		●									
	15			Boring Terminated at 15 feet	6		●									
	20															
	25															
	30															
	35															

Remarks:

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J-4

Test Boring Record



Project: West Jackson County School Site		Project No: 130009.00
Location: Houshton, Georgia		Date: 1/18/13
Method: HSA- ASTM D1586	GWT at Drilling: Not Encountered	G.S. Elev:
Driller: B&C - Auto Hammer	GWT at 24 hrs: NA (Boring Backfilled)	Logged By: BKI

Elev. (Ft)	Depth (Ft)	GWT	Symbol	Description	N	Standard Penetration Test (Blows/Foot)															
						0	10	20	30	40	50	60	70	80	90	100					
			X	Topsoil (Approximately 3 inches)																	
			/	Firm brown clayey fine to medium sand (SC) with topsoil (CULTIVATED)	8		●														
	5			Firm brown micaceous fine sandy silt (ML) (RESIDUUM)	8		●														
			.	Loose to firm brown micaceous silty fine sand (SM)	8		●														
	10		.		10		●														
	15		.		15			●													
	20		.	Boring Terminated at 20 feet	5		●														
	25																				
	30																				
	35																				

Remarks:

TEST BORING RECORD - BORINGS GPJ, GEO HYDRO GDT - 1/23/13

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J-5

Test Boring Record

GEOHYDRO
ENGINEERS

Project: West Jackson County School Site		Project No: 130009.00
Location: Houshton, Georgia		Date: 1/19/13
Method: HSA- ASTM D1586	GWT at Drilling: Not Encountered	G.S. Elev:
Driller: B&C - Auto Hammer	GWT at 24 hrs: NA (Boring Backfilled)	Logged By: BKI

Elev. (Ft)	Depth (Ft)	GWT	Symbol	Description	N	Standard Penetration Test (Blows/Foot)
				Topsoil (Approximately 3 inches)		
				Stiff brown fine sandy clay (CL) with topsoil (CULTIVATED)	10	●
	5			Soft to firm tan micaceous fine sandy silt (ML) (RESIDUUM)	4	●
				Loose brown highly micaceous silty fine sand (SM)	7	●
	10				7	●
	15			Boring Terminated at 15 feet	7	●
	20					
	25					
	30					
	35					

Remarks:

TEST BORING RECORD BORINGS GPJ GEO HYDRO GDT 1/23/13

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J-6

Test Boring Record

GEOHYDRO
ENGINEERS

Project: West Jackson County School Site		Project No: 130009.00
Location: Houshton, Georgia		Date: 1/19/13
Method: HSA- ASTM D1586	GWT at Drilling: Not Encountered	G.S. Elev:
Driller: B&C - Auto Hammer	GWT at 24 hrs: NA (Boring Backfilled)	Logged By: BKI

Elev. (Ft)	Depth (Ft)	GWT	Symbol	Description	N	Standard Penetration Test (Blows/Foot)															
						0	10	20	30	40	50	60	70	80	90	100					
				Topsoil (Approximately 2 inches)																	
				Stiff red-tan slightly micaceous fine sandy clay (CL) (CULTIVATED)	11																
				Stiff tan fine sandy clay (CL) (RESIDUUM)	14																
	5			Loose tan micaceous silty fine to medium sand (SM)	5																
	10			Dense brown micaceous silty fine sand (SM)	5																
	15			Loose tan highly micaceous silty fine sand (SM)	39																
	20			Boring Terminated at 20 feet	5																
	25																				
	30																				
	35																				

Remarks:

TEST BORING RECORD, BORINGS GPJ, GEO HYDRO GDT, 1/23/13

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J-7

Test Boring Record



Project: West Jackson County School Site		Project No: 130009.00
Location: Houshton, Georgia		Date: 1/18/13
Method: HSA- ASTM D1586	GWT at Drilling: Not Encountered	G.S. Elev:
Driller: B&C - Auto Hammer	GWT at 24 hrs: NA (Boring Backfilled)	Logged By: BKI

Elev. (Ft)	Depth (Ft)	GWT	Symbol	Description	N	Standard Penetration Test (Blows/Foot)															
						0	10	20	30	40	50	60	70	80	90	100					
				Topsoil (Approximately 2 inches)																	
				Very loose brown clayey fine to medium sand (SC) with topsoil (CULTIVATED)	4																
	5			Stiff red-brown slightly micaceous fine sandy clay (CL) (RESIDUUM)	14																
				Dense tan micaceous silty fine sand (SM)	44																
	10			Loose to firm tan micaceous silty fine sand (SM)	7																
	15			Boring Terminated at 15 feet	13																
	20																				
	25																				
	30																				
	35																				

Remarks:

TEST BORING RECORD BORINGS.GPJ GEO HYDRO GDT 1/23/13

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J-8

Test Boring Record



Project: West Jackson County School Site		Project No: 130009.00
Location: Houshton, Georgia		Date: 1/19/13
Method: HSA- ASTM D1586	GWT at Drilling: Not Encountered	G.S. Elev:
Driller: B&C - Auto Hammer	GWT at 24 hrs: NA (Boring Backfilled)	Logged By: BKI

Elev. (Ft)	Depth (Ft)	GWT	Symbol	Description	N	Standard Penetration Test (Blows/Foot)
				Topsoil (Approximately 1 inches)	0	
				Stiff tan fine sandy clay (CL) (RESIDUUM)	10	●
	5				9	●
				Loose to firm tan micaceous silty fine sand (SM)	15	●
	10				5	●
				Very firm tan and black highly micaceous silty fine sand (SM)	26	●
	15			Boring Terminated at 15 feet		
	20					
	25					
	30					
	35					

Remarks:

TEST BORING RECORD - BORINGS GPJ GEO HYDRO GDT 1/23/13

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J-9

Test Boring Record

GEOHYDRO
ENGINEERS

Project: West Jackson County School Site		Project No: 130009.00
Location: Houshton, Georgia		Date: 1/19/13
Method: HSA- ASTM D1586	GWT at Drilling: 7 feet	G.S. Elev:
Driller: B&C - Auto Hammer	GWT at 24 hrs: NA (Boring Backfilled)	Logged By: BKI

Elev. (Ft)	Depth (Ft)	GWT	Symbol	Description	N	Standard Penetration Test (Blows/Foot)															
						0	10	20	30	40	50	60	70	80	90	100					
			☒	Topsoil (Approximately 3 inches)																	
			☒	Very loose brown-gray silty fine to medium sand (SM) with roots (CULTIVATED)	3																
	5	▽		Firm to stiff tan slightly micaceous fine sandy silt (ML) (RESIDUUM)	10																
	10				7																
	15			Boring Terminated at 15 feet	7																
	20																				
	25																				
	30																				
	35																				

Remarks:

TEST BORING RECORD BORINGS GPJ GEO HYDRO GDT 1/23/13

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J-10

Test Boring Record

GEOHYDRO
ENGINEERS

Project: West Jackson County School Site		Project No: 130009.00
Location: Houshton, Georgia		Date: 1/19/13
Method: HSA- ASTM D1586	GWT at Drilling: Not Encountered	G.S. Elev:
Driller: B&C - Auto Hammer	GWT at 24 hrs: NA (Boring Backfilled)	Logged By: BKI

Elev. (Ft)	Depth (Ft)	GWT	Symbol	Description	N	Standard Penetration Test (Blows/Foot)															
						0	10	20	30	40	50	60	70	80	90	100					
			ML	Topsoil (Approximately 6 inches)																	
			ML	Firm tan fine sandy silt (ML) with roots (CULTIVATED)	6		●														
	5		SM	Loose to firm tan micaceous silty fine sand (SM) (RESIDUUM)	12			●													
	10		SM		5		●														
	15		SM		6		●														
	15			Boring Terminated at 15 feet	5		●														
	20																				
	25																				
	30																				
	35																				

Remarks:

TEST BORING RECORD BORINGS.GPJ GEO HYDRO GDT 1/23/13

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J-11

Test Boring Record



Project: West Jackson County School Site		Project No: 130009.00
Location: Houshton, Georgia		Date: 1/18/13
Method: HSA- ASTM D1586	GWT at Drilling: Not Encountered	G.S. Elev:
Driller: B&C - Auto Hammer	GWT at 24 hrs: NA (Boring Backfilled)	Logged By: BKI

Elev. (Ft)	Depth (Ft)	GWT	Symbol	Description	N	Standard Penetration Test (Blows/Foot)																
						0	10	20	30	40	50	60	70	80	90	100						
				Topsoil (Approximately 2 inches)																		
				Soft to firm tan-brown fine sandy silt (ML) (RESIDUUM)	8																	
	5			Very loose to loose highly micaceous silty fine sand (SM)	4																	
					4																	
	10				5																	
	15				5																	
	20			Boring Terminated at 20 feet	7																	
	25																					
	30																					
	35																					

Remarks:

TEST BORING RECORD BORINGS GPJ GEO HYDRO GDT 1/23/13

DRAFT

J-12

Test Boring Record



Project: West Jackson County School Site		Project No: 130009.00
Location: Houshton, Georgia		Date: 1/18/13
Method: HSA- ASTM D1586	GWT at Drilling: Not Encountered	G.S. Elev:
Driller: B&C - Auto Hammer	GWT at 24 hrs: NA (Boring Backfilled)	Logged By: BKI

Elev. (Ft)	Depth (Ft)	GWT	Symbol	Description	N	Standard Penetration Test (Blows/Foot)																	
						0	10	20	30	40	50	60	70	80	90	100							
				Topsoil (Approximately 3 inches)																			
				Firm red-tan silty clay (CL) (RESIDUUM)	8																		
	5			Very loose tan highly micaceous silty fine sand (SM)	4																		
				Loose to firm tan highly micaceous silty fine sand (SM)	13																		
	10				12																		
	15				7																		
	20				5																		
	25				5																		
	30			Boring Terminated at 30 feet	7																		
	35																						

TEST BORING RECORD BORINGS.GPJ GEO HYDRO GDT 1/23/13

Remarks:

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J-13

Test Boring Record

GEOHYDRO
ENGINEERS

Project: West Jackson County School Site		Project No: 130009.00
Location: Houshton, Georgia		Date: 1/19/13
Method: HSA- ASTM D1586	GWT at Drilling: Not Encountered	G.S. Elev:
Driller: B&C - Auto Hammer	GWT at 24 hrs: NA (Boring Backfilled)	Logged By: BKI

Elev. (Ft)	Depth (Ft)	GWT	Symbol	Description	N	Standard Penetration Test (Blows/Foot)																
						0	10	20	30	40	50	60	70	80	90	100						
	0			Topsoil (Approximately 4 inches)																		
	5			Loose to firm tan to purple highly micaceous silty fine sand (SM) (RESIDUUM)																		
	10					5																
	15					7																
	20					10																
	25																					
	30																					
	35																					

Boring Terminated at 20 feet

Remarks:

TEST BORING RECORD BORINGS GPJ GEO HYDRO GDT 1/23/13

DRAFT

J-14

Test Boring Record



Project: West Jackson County School Site		Project No: 130009.00
Location: Houshton, Georgia		Date: 1/19/13
Method: HSA- ASTM D1586	GWT at Drilling: Not Encountered	G.S. Elev:
Driller: B&C - Auto Hammer	GWT at 24 hrs: NA (Boring Backfilled)	Logged By: BKI

Elev. (Ft)	Depth (Ft)	GWT	Symbol	Description	N	Standard Penetration Test (Blows/Foot)															
						0	10	20	30	40	50	60	70	80	90	100					
				Topsoil (Approximately 3 inches)																	
				Loose brown clayey fine to medium sand (SC) (CULTIVATED)	7		●														
	5			Firm tan micaceous fine sandy silt (ML) (RESIDUUM)	7		●														
				Very loose to loose tan highly micaceous silty fine sand (SM)	4		●														
	10				9		●														
	15			Boring Terminated at 15 feet	5		●														
	20																				
	25																				
	30																				
	35																				

Remarks:

TEST BORING RECORD BORINGS.GPJ GEO HYDRO GDT 1/23/13

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J-15

Test Boring Record



Project: West Jackson County School Site		Project No: 130009.00
Location: Houshton, Georgia		Date: 1/19/13
Method: HSA- ASTM D1586	GWT at Drilling: 12 feet	G.S. Elev:
Driller: B&C - Auto Hammer	GWT at 24 hrs: NA (Boring Backfilled)	Logged By: BKI

Elev. (Ft)	Depth (Ft)	GWT	Symbol	Description	N	Standard Penetration Test (Blows/Foot)															
						0	10	20	30	40	50	60	70	80	90	100					
			[Cross-hatched symbol]	Topsoil (Approximately 3 inches)																	
			[Vertical lines symbol]	Stiff tan fine sandy clay (CL) (CULTIVATED)	10																
	5		[Vertical lines symbol]	Firm to stiff tan slightly micaceous fine sandy silt (ML)	12																
			[Vertical lines symbol]		8																
	10		[Dotted symbol]	Loose tan micaceous silty fine sand (SM)	9																
		▽																			
	15			Boring Terminated at 15 feet	8																
	20																				
	25																				
	30																				
	35																				

Remarks:

TEST BORING RECORD BORINGS.GPJ GEO HYDRO GDT 1/23/13