Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Page 1 of 2

Date 2/19/14

ROUTE Unmarked DESCRIPTION Brussels Ferry - Seawall LOGGED BY TSI (JP)

SECTION LOCATION NW 1/4, SEC. 13, TWP. 6N, RNG. 14W, 3 PM

COUNTY Jersey DRILLING METHOD Hollow Stem Auger HAMMER TYPE Automatic

STRUCT. NO.
Station

BORING NO. B-4
Station
Offset
Ground Surface Elev. ft 429.3 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 412.8 ft
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Asphalt Concrete over Crushed Limestone 427.8			
Brown and Gray (Medium Stiff, Moist) Silty LOAM A-4(1) See Class @ 5 ft	3		
-5-	3 4	0.46 S	21
Trace Limestone Pieces	5		
421.3	4 6	0.52 S	20
Gray (Medium Stiff, Moist) Silty CLAY (Alluvium)	2		
-10-	3 4	0.95 B	30
Soft	WH		
	WH 3	0.46 B	38
	1		
-15-	1 2	0.16 B	43
Wet	1		
	2 1	0.82 B	28
	1		
-20-	1 2	0.16 B	30
Gray (Medium Stiff, Moist) Silty CLAY (Alluvium) *(continued)*			
Trace Shells	WH		
	WH WH	0.30 B	31
406.3			
Gray (Dense, Wet) Sandy Clay LOAM (Alluvium)	2		
-25-	28 14	--	21
403.8			
Brown and Gray (Dense, Wet) SAND with Trace Shells (Alluvium) See Gradation @ 26.5 ft	12		
	20 27	--	15
400.8			
LIMESTONE Pieces 400.3	50/1"	--	1
Borehole continued with rock coring. -30-			
-35-			
-40-			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Page 1 of 1

Date 2/20/14

ROUTE Unmarked DESCRIPTION Brussels Ferry - Seawall LOGGED BY TSI (JP)

SECTION LOCATION NW 1/4, SEC. 13, TWP. 6N, RNG. 14W, 3 PM

COUNTY Jersey DRILLING METHOD Hollow Stem Auger HAMMER TYPE Automatic

STRUCT. NO.
Station

BORING NO. B-5
Station
Offset
Ground Surface Elev. ft 429.2 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 411.2 ft
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Asphalt Concrete over Crushed Limestone 427.7			
Brown (Medium Stiff, Moist) Silty LOAM A-4(7) See Class @ 5 ft	3		
-5-	3 4	0.52 S	22
423.7			
Gray (Medium Stiff, Moist) Sandy LOAM (Alluvium) A-4(0) See Class @ 7 ft	3		
	3 5	-- --	21
421.2			
Gray (Medium Stiff, Moist) Silty CLAY (Alluvium)	2		
-10-	3 4	1.51 B	22
Very Soft	WH		
	WH WH	0.26 B	42
	WH		
-15-	1 1	0.30 B	43
	WH		
	WH WH	0.46 B	29
	2		
Wet	WH		
-20-	WH WH	0.16 B	30
Gray (Medium Stiff, Moist) Silty CLAY (Alluvium) *(continued)*			
	WH		
	WH 1	0.43 B	69
Trace Gravel and Shells	1		
-25-	2 2	--	28
403.7			
Gray (Dense, Wet) SAND with Limestone Pieces (Alluvium) See Gradation @ 26.5 ft	20		
	20 21	NC	15
401.2			
Weathered LIMESTONE 400.2	50/3"	--	8
Auger Refusal - END OF BORING -30-			
-35-			
-40-			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
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BBS, from 137 (Rev. 8-99)

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Division of Highways
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SOIL BORING LOG

Page 1 of 2

Date 2/20/14

ROUTE Unmarked DESCRIPTION Brussels Ferry - Seawall LOGGED BY TSI (JP)

SECTION LOCATION NW 1/4, SEC. 13, TWP. 6N, RNG. 14W, 3 PM

COUNTY Jersey DRILLING METHOD Hollow Stem Auger HAMMER TYPE Automatic

STRUCT. NO.
Station

BORING NO. B-6
Station
Offset
Ground Surface Elev. ft 429.1 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 404.2 ft
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Asphalt Concrete over Crushed Limestone 427.6			
Brown to Gray (Medium Stiff, Moist) Silty LOAM A-4(8) See Class @ 5 ft	1		
-5-	2 3	1.15 B	24
423.6			
Gray (Stiff, Moist) Silty LOAM (Alluvium) A-4(0) See Class @ 7 ft	1		
	5 9	--	19
421.1			
Gray (Medium Stiff, Moist) Silty CLAY (Alluvium)	3		
-10-	3 4	0.72 S	28
Soft	WH		
	2 2	0.46 B	40
Very Soft	1		
-15-	1 1	--	40
	WH		
	WH WH	0.30 B	29
Soft	WR		
-20-	1 2	0.52 B	29
Gray (Medium Stiff, Moist) Silty CLAY (Alluvium) *(continued)*			
Medium Stiff	WH		
Trace Limestone Pieces and Shells	3 4	0.66 B	25
Very Stiff	2		
-25-	3 16	--	25
403.6			
Brown (Very Dense, Wet) SAND with Trace Limestone Pieces and Shells (Alluvium) See Gradation @ 26.5 ft	15		
	48 43	NC	11
401.1			
Weathered LIMESTONE 400.6	50/0"	--	--
Borehole continued with rock coring. -30-			
-35-			
-40-			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

ROCK CORE LOG

Page 2 of 2

Date 2/19/14

ROUTE Unmarked DESCRIPTION Brussels Ferry - Seawall LOGGED BY TSI (JP)

SECTION LOCATION NW 1/4, SEC. 13, TWP. 6N, RNG. 14W, 3 PM

COUNTY Jersey CORING METHOD

STRUCT. NO.
Station

CORING BARREL TYPE & SIZE

Core Diameter 2 in
Top of Rock Elev. 400.30 ft
Begin Core Elev. 400.30 ft

BORING NO. B-4
Station
Offset
Ground Surface Elev. ft 429.3 ft

DEPTH (ft)	CORE (#)	RECOVERY (%)	R.Q.D. (%)	CORE TIME (min/ft)	STRENGTH (tsf)
Gray, Moderately Hard to Hard, Slightly Weathered, Finely Crystalline, Thin to Thick Bedded, LIMESTONE 400.30	1	100	83	3	
-30- Chert Nodules	1	100	83	3	
	1	100	83	3	
Chert Nodules	1	100	83	3	
395.30					
-35- END OF BORING AND ROCK CORE					
-40-					
-45-					

Color pictures of the cores
Cores will be stored for examination until
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)

BBS, form 138 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Page 1 of 1

Date 2/21/14

ROUTE Unmarked DESCRIPTION Brussels Ferry - Seawall LOGGED BY TSI (JO)

SECTION LOCATION NW 1/4, SEC. 13, TWP. 6N, RNG. 14W, 3 PM

COUNTY Jersey DRILLING METHOD Hollow Stem Auger HAMMER TYPE Automatic

STRUCT. NO.
Station

BORING NO. B-7
Station
Offset
Ground Surface Elev. ft 429.2 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 411.2 ft
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Asphalt Concrete over Crushed Limestone 427.7			
Gray (Soft, Moist) Silty Clay LOAM A04(6) See Class @ 5 ft	1		
-5-	2 2	--	25
423.7			
Brown (Medium Stiff, Moist) Silty LOAM A-4(3) See Class @ 7 ft	3		
	5 6	1.31 S	22
Gray	2		
-10-	3 2	0.66 S	31
418.7			
Dark Gray (Soft, Moist) CLAY with Trace Wood (Alluvium)	WH		
	WH WJ	0.33 B	30
	1		
-15-	1 3	1.31 B	37
413.7			
Gray (Soft, Moist) SILTY CLAY	WH		
	WH WH	0.16 B	32
	WH		
-20-	1 2	0.07 S	29
Gray (Soft, Moist) SILTY CLAY *(continued)*			
Trace Shells and Sand	WH		
	3 3	0.07 B	29
406.2			
Brown (Dense, Wet) SAND with some Shells See Gradation @ 25 ft	8		
-25-	14 19	NC	14
403.2			
Brown Weathered LIMESTONE	50/3"		
	- -	--	12
401.2	50/3"	--	--
Auger Refusal - END OF BORING -30-			
-35-			
-40-			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
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ROCK CORE LOG

Page 2 of 2

Date 2/20/14

ROUTE Unmarked DESCRIPTION Brussels Ferry - Seawall LOGGED BY TSI (JP)

SECTION LOCATION NW 1/4, SEC. 13, TWP. 6N, RNG. 14W, 3 PM

COUNTY Jersey CORING METHOD

STRUCT. NO.
Station

CORING BARREL TYPE & SIZE

Core Diameter 2 in
Top of Rock Elev. 400.60 ft
Begin Core Elev. 400.60 ft

BORING NO. B-6
Station
Offset
Ground Surface Elev. ft 429.1 ft

DEPTH (ft)	CORE (#)	RECOVERY (%)	R.Q.D. (%)	CORE TIME (min/ft)	STRENGTH (tsf)
400.60					
Gray, Moderately Hard, Slightly Weathered to Weathered, Finely Crystalline, Banded to Medium Bedded, LIMESTONE	1	100	60	4	
-30-	1	100	60	4	
Shale Partings	1	100	60	4	
Highly Fractured	1	100	60	3	
395.60					
-35- END OF BORING AND ROCK CORE					
-40-					
-45-					

Color pictures of the cores
Cores will be stored for examination until
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)

BBS, form 138 (Rev. 8-99)

Rock cores were not taken at Borings B-5 or B-7.

DESIGNED -	EXAMINED	DATE - SEPTEMBER 18, 2014	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**
CHECKED -	ENGINEER OF STRUCTURAL SERVICES		
DRAWN -	PASSED	REVISED	
CHECKED -	ENGINEER OF BRIDGES AND STRUCTURES	REVISED	

SOIL BORING LOGS B4-B7
042-W001
SHEET NO. 5 OF 5 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
304	21-5	JERSEY	20	14
		CONTRACT NO. 76G94		
	ILLINOIS	FED. AID PROJECT		