F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	2021-922PT.1-AC	COOK	460	172
STA.		TO STA.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

62693

Illinois Department of Transportation SOIL BORING LOG

Division of Highways
CHICAGO DRILLING COMPANY

Page 1 of 1

Date 7/29/03

ROUTE F.A.I. 1-90 / I-94 DESCRIPTION Dan Ryan Expressway (D-91-419-01) LOGGED BY A.P.
(2021-922 PT 1.2 & 2122-921
SECTION PT1) R-4 LOCATION Chicago, Illinois

COUNTY Cook DRILLING METHOD Hollow Stem Auger HAMMER TYPE Automatic

STRUCT. NO. 7 SCD1
Station High Mast Light Poles

BORING NO. HML-130
Station 1423+36.73
Offset -168.67ft SBDR
Ground Surface Elev. 19.89 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 6.4 ft
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS	UCS Qu (tsf)	MOIST (%)
Asphalt, 2" / 19.72			
Concrete, 9" / 18.97			
Crushed Stone and Sand Sub Base (FILL)	8		
	5		
	4		
	3		
14.89	2		
Loose to Dense Light Brown, Fine to coarse SAND, trace gravel	4		
	3		
	5		
	11		
-10	14		
	19		
	5		
	6		
	7		
5.14	6		
-15	7		
Loose Gray SILTY LOAM	8		
	0		
	1		20.0
2.39	3		
Very Stiff Gray CLAY LOAM, trace gravel	3		
	4	2.1	15.0
-20	6	B	

DEPTH (ft)	BLOWS	UCS Qu (tsf)	MOIST (%)
Very Stiff Gray CLAY LOAM, trace gravel (continued)	3		
	4	2.7	17.0
	5	B	
	4		
	6	2.9	17.0
-25	8	B	
	9		
	9	3.2	18.0
-7.61	7	B	
Hard / Medium Dense Gray SILTY CLAY LOAM / SILTY LOAM	5		
	11	4.9	12.0
-30	13	S	
End of Boring -15.14 -35	12	5.7	11.0
	16	S	
-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 SOIL BORING LOG

Division of Highways
CHICAGO DRILLING COMPANY

Page 1 of 1

Date 8/12/03

ROUTE F.A.I. 1-90 / I-94 DESCRIPTION Dan Ryan Expressway (D-91-419-01) LOGGED BY A.P.
(2021-922PT1.2 &
SECTION 2122-921PT1) R-4 LOCATION Chicago, Illinois

COUNTY Cook DRILLING METHOD Hollow Stem Auger HAMMER TYPE Automatic

STRUCT. NO. 7 SCD1
Station Sign Trusses

BORING NO. STB-10
Station
Offset
Ground Surface Elev. ft

Surface Water Elev. ft
Stream Bed Elev. ft

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

DEPTH (ft)	BLOWS	UCS Qu (tsf)	MOIST (%)
Asphalt, 6"			
Crushed Stone Sub Base and gravel (FILL)	13		
	9		
	7		
Very Stiff Gray CLAY	3		
	7	2.0	21.0
-5	10	B	
	3		
	4	2.1	22.0
	8	B	
Very Stiff to Hard Gray CLAY LOAM	4		
	8	3.8	20.0
-10	11	B	
	6		
	11	6.6	16.0
	16	B	
	8		
	15	5.8	13.0
-15	17	B	
Hard / Very Dense Gray SILTY CLAY LOAM / SILTY LOAM	16		
	19	8.4	12.0
	23	S	
	16		
-20	23	7.4	13.0
	29	S	
-40			

DEPTH (ft)	BLOWS	UCS Qu (tsf)	MOIST (%)
Hard / Very Dense Gray SILTY CLAY LOAM / SILTY LOAM (continued)	12		
	19	8.2	14.0
	36	S	
	22		
	37	8.4	13.0
-25	33	S	
	12		
	29	8.9	12.0
	50	S	
	21		
	50	10	10.0
-30	-	S	
Possible Bed Rock @ 30'			
End of Boring			
-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 SOIL BORING LOG

Division of Highways
CHICAGO DRILLING COMPANY

Page 1 of 1

Date 7/10/03

ROUTE F.A.I. 1-90 / I-94 DESCRIPTION Dan Ryan Expressway (D-91-419-01) LOGGED BY A.P.
(2021-922 PT 1.2 & 2122-921
SECTION PT1) R-4 LOCATION Chicago, Illinois

COUNTY Cook DRILLING METHOD Hollow Stem Auger HAMMER TYPE Automatic

STRUCT. NO. 7 SCD2
Station High Mast Light Poles

BORING NO. HML-132
Station 1427+54.40
Offset -132.51ft SBDR
Ground Surface Elev. 10.68 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 5.7 ft
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS	UCS Qu (tsf)	MOIST (%)
Top Soil, 1"			
9.68	3		
Gray, trace roots Silty Clay (FILL)	4	13.0	
8.68	5		
Medium Dense Brown, medium SAND	6		
	6		
5.68	6		
-5			
Very Loose Gray SILTY LOAM	1		
	1	24.0	
	1		
3.18			
Very Stiff to Hard Gray SILTY CLAY LOAM	3		
	6	3.9	18.0
-10	8	B	
	4		
	6	3.4	15.0
	7	B	
	3		
	4	4.0	18.0
-15	9	B	
	5		
	7	4.6	18.0
-6.82	9	B	
Medium Dense Gray SILT	9		
	12	13.0	
-20	12		
-40			

DEPTH (ft)	BLOWS	UCS Qu (tsf)	MOIST (%)
Medium Dense Gray SILT (continued)	6		
	9		14.0
	13		
-11.82			
Hard / Very Dense Gray SILTY CLAY LOAM / SILTY LOAM	9		
	10	5.9	14.0
-25	11	S	
	6		
	9	8.2	12.0
	14	S	
	7		
	13	6.8	12.0
-30	18	S	
Possible Bed Rock @ 33' -22.32	50		
End of Boring			
-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 SOIL BORING LOG

Division of Highways
CHICAGO DRILLING COMPANY

Page 1 of 1

Date 6/5/03

ROUTE F.A.I. 1-90 / I-94 DESCRIPTION Dan Ryan Expressway (D-91-419-01) LOGGED BY A.P.
(2021-922 PT 1.2 & 2122-921
SECTION PT1) R-4 LOCATION Chicago, Illinois

COUNTY Cook DRILLING METHOD Hollow Stem Auger HAMMER TYPE Automatic

STRUCT. NO. 7 SCD3
Station High Mast Light Poles

BORING NO. HML-134
Station 1431+44.61
Offset -110.42ft SBDR
Ground Surface Elev. 1.17 ft

Surface Water Elev. ft
Stream Bed Elev. ft

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

DEPTH (ft)	BLOWS	UCS Qu (tsf)	MOIST (%)
Asphalt, 10"			
0.34	4		
Sub Base (FILL)	4		
-1.33	5		
Very Stiff Gray SILTY CLAY LOAM	3		
	4	3.2	17.0
-5	6	B	
	3		
	5	2.8	16.0
-6.33	6	B	
Very Stiff to Hard / Very Dense Gray SILTY CLAY LOAM / SILTY LOAM	3		
	5	2.8	14.0
-10	6	B	
	3		
	7	5.0	12.0
	11	B	
	5		
	9	7.2	12.0
-15	11	S	
	8		
	11	8.0	12.0
	14	S	
	6		
	10	6.4	15.0
-20	15	S	

DEPTH (ft)	BLOWS	UCS Qu (tsf)	MOIST (%)
Very Stiff to Hard / Very Dense Gray SILTY CLAY LOAM / SILTY LOAM (continued)	5		
	12		15.0
	13		
Possible Bed Rock @ 24' -22.83	50		13.0
End of Boring			
-25			
-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 SOIL BORING LOG

AMERICAN GEOENGINEERING, INC.

Page 1 of 1

Date 7/24/03

ROUTE F.A.I. 1-90 / I-94 DESCRIPTION Dan Ryan Expressway (D-91-419-01) LOGGED BY A.P.
(2021-922 PT 1.2 & 2122-921
SECTION PT1) R-4 LOCATION Chicago, Illinois

COUNTY Cook DRILLING METHOD Hollow Stem Auger HAMMER TYPE Automatic

STRUCT. NO. 7 SCD3
Station Wall Eq

BORING NO. RWEG-2
Station 517+10.18
Offset 41.80ft (WELL)
Ground Surface Elev. 0.87 ft

Surface Water Elev. ft
Stream Bed Elev. ft

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

DEPTH (ft)	BLOWS	UCS Qu (tsf)	MOIST (%)
Sub Base (FILL) 0.37			
Loose Brown, coarse SAND	11		
	3		
-1.63	3		
Very Stiff to Hard Gray, trace gravel SILTY CLAY LOAM	3		
	7	3.6	17.0
-5	10	B	
	4		
	10	4.0	18.0
	15	B	
	7		
	11	4.4	15.0
-10	14	B	
	7		
	12	6.0	18.0
	12	S	
	6		
	9	6.0	14.0
-14.13 -15	12	B	
Hard / Very Dense Gray SILTY CLAY LOAM / SILTY LOAM	7		
	14	7.0	12.0
	20	S	
	13		
	23	8.4	11.0
-20	32	S	

DEPTH (ft)	BLOWS	UCS Qu (tsf)	MOIST (%)
Hard / Very Dense Gray SILTY CLAY LOAM / SILTY LOAM (continued)	13		
	22		10.0
	26		
	50		11.0
End of Boring -23.13	-		
-25			
-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 SOIL BORING LOG

Division of Highways
CHICAGO DRILLING COMPANY

Page 1 of 1

Date 6/5/03

ROUTE F.A.I. 1-90 / I-94 DESCRIPTION Dan Ryan Expressway (D-91-419-01) LOGGED BY A.P.
(2021-922 PT 1.2 & 2122-921
SECTION PT1) R-4 LOCATION Chicago, Illinois

COUNTY Cook DRILLING METHOD Hollow Stem Auger HAMMER TYPE Automatic

STRUCT. NO. 7 SCD4
Station High Mast Light Poles

BORING NO. HML-136
Station 1435+45.88
Offset -109.09ft SBDR
Ground Surface Elev. -1.16 ft

Surface Water Elev. ft
Stream Bed Elev. ft

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

DEPTH (ft)	BLOWS	UCS Qu (tsf)	MOIST (%)
Asphalt, 11"			
-2.08	4		
Sub Base (FILL)	4		14.0
-3.16	5		
Very Stiff to Hard Gray SILTY CLAY LOAM	4		
	5	3.5	17.0
-5	6	B	
	4		
	6	4.2	17.0
	8	B	
	6		
	10	5.1	18.0
-11.16 -10	14	B	
Hard / Very Dense Gray SILTY CLAY LOAM / SILTY LOAM	6		
	9	4.6	12.0
	11	B	
	8		
	15	5.3	14.0
-15	19	B	
	6		
	10	6.8	14.0
	16	S	
	5		
	8	6.0	15.0
-20	12	S	

DEPTH (ft)	BLOWS	UCS Qu (tsf)	MOIST (%)
Hard / Very Dense Gray SILTY CLAY LOAM/ SILTY LOAM (continued)	6		
	11	6.1	13.0
	14	S	
	8		
	13	6.2	12.0
-25	16	S	
	10		
	11	6.4	11.0
Possible Bed Rock @ 27.5' -28.66	50	S	
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 SOIL BORING LOG

AMERICAN GEOENGINEERING, INC.

Page 1 of 2

Date 7/9/03

ROUTE F.A.I. 1-90 / I-94 DESCRIPTION Dan Ryan Expressway (D-91-419-01) LOGGED BY A.P.
(2021-922 PT 1.2 & 2122-921
SECTION PT1) R-4 LOCATION Chicago, Illinois

COUNTY Cook DRILLING METHOD Hollow Stem Auger HAMMER TYPE Automatic

STRUCT. NO. 7 SCD4
Station (Wall Eq)

BORING NO. RWEb-4
Station 521+17.63
Offset 4.26ft (WELL)
Ground Surface Elev. 17.72 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 6.7 ft
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS	UCS Qu (tsf)	MOIST (%)
Asphalt, 3" / 17.45			
Concrete, 8" / 16.82			
Sub Base (FILL)	12		
	13		
15.24	11		
Brown Sand and Clay (FILL)	5		
	9		15.0
	11		
-7.26 -25			
Hard / Very Dense Gray SILTY CLAY LOAM / SILTY LOAM	7		
	16		
	17		
	7		
	11		
	11		
Loose Gray SILTY LOAM 7.74 -10	6		
	3		22.0
	2		
Very Stiff Gray CLAY 5.24	3		
	4	3.0	20.0
-15	11	B	
	7		
	11	3.5	17.0
	14	B	
Very Stiff to Hard Gray SILTY CLAY LOAM 0.24	4		
	8	2.8	18.0
-20	13	B	

DEPTH (ft)	BLOWS	UCS Qu (tsf)	MOIST (%)
Very Stiff to Hard Gray SILTY CLAY LOAM (continued)	9		
	13	5.2	17.0
	30	B	
	17		
	15	5.2	16.0
-25	21	B	
	7		
	11	4.8	15.0
	18	B	
	7		
	12	7.0	12.0
-30	17	B	
	9		
	13	4.5	14.0
	18	B	
-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)

ES-02

CTE ENGINEERS
CONSOER TOWNSEND ENVIRODYNE ENGINEERS, INC.
303 EAST WACKER DRIVE, SUITE 600
CHICAGO, ILLINOIS 60601-5210, PHONE: (312) 938-0300

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
63rd ST TO 59th ST (FRONTAGE ROAD & RAMPS)

HIGH MAST TOWER FOUNDATION
SOIL BORINGS - SHEET 1

SCALE: None DRAWN BY: CHD
DATE: October 29, 2004 CHECKED BY: MK

10/21/2004 02:26:11 PM

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