08-04-2023 LETTING ITEM 084

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS
	60-(1,2) HL-1	MADISON	12 *
	ILLINOIS	CONTRACT NO. 7	

*12 + 1 = 13 TOTAL SHEETS

D-98-052-22

STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

PROPOSED HIGHWAY PLANS

FAI ROUTE 55 (I-55)
PROJECT NHPP-43E4(178)
SECTION: 60-(1,2) HL-1
PROJECT DESCRIPTION: HIGHWAY LIGHTING
MADISON COUNTY
C-98-082-22

SEE INDEX OF SHEETS, SEE SHEET NO.2

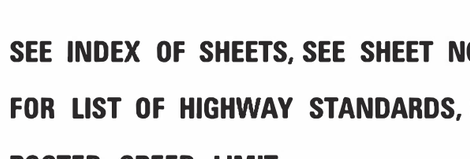
FOR LIST OF HIGHWAY STANDARDS, SEE SHEET NO.2

POSTED SPEED LIMIT

I-55	=	70 MPH
IL 140	=	40 MPH
RAMPS	=	50 MPH

	ADT (TOTAL)		(TRUCKS) MU	SU	
I-55	38,600	(2021)	6400	1,375	(2021)
IL-140	8,500	(2021)	1150	1,150	(2021)
NB I-55 TO IL-140	2,800	(2016)			
IL-140 TO NB I-55	2,300	(2016)			
IL-140 TO SB I-55	2,900	(2016)			
SB I-55 TO IL-140	2,300	(2016)			

MUNICIPALITY:
VILLAGE OF HAMEL

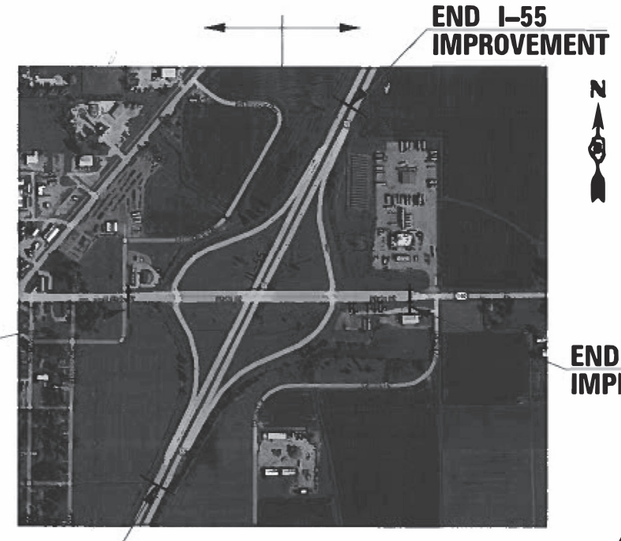


FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-892-0123
OR 811

PROJECT ENGINEER: CHERYL KEPLAR
PROJECT MANAGER: RICHARD BARBEE

CONTRACT NO. 76R27



LOCATION MAP
NOT TO SCALE

LOCATION OF SECTION INDICATED THUS:-

DELTA ENGINEERING GROUP

HANJA S MASTER 062-040209

LICENSE EXPIRES: 11-30-2023

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED Dec 5, 22
REGIONAL ENGINEER

May 12, 2023
ENGINEER OF DESIGN AND ENVIRONMENT

May 12, 2023
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

REV. - MS

1 REVISED 7-21-2023

INDEX OF SHEETS

1 COVER SHEET

2 INDEX OF SHEETS, HIGHWAY STANDARDS AND GENERAL NOTES

3 SUMMARY OF QUANTITIES

4 REMOVAL LIGHTING PLAN

5 PROPOSED LIGHTING PLAN

6 WIRING DIAGRAM AND LUMINAIRE PERFORMANCE TABLE

7 - 12A SOIL BORING LOGS

1

IDOT HIGHWAY STANDARDS

000001-08	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
701001-02	OFF-RD OPERATIONS, 2L, 2W, MORE THAN 15' AWAY
701006-05	OFF-RD OPERATIONS, 2L, 2W, 15' TO 24" FROM PAVEMENT EDGE
701101-05	OFF-RD OPERATIONS, MULTILANE, 15' TO 24" FROM PAVEMENT EDGE
701106-02	OFF-RD OPERATIONS, MULTILANE, MORE THAN 15' AWAY
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701901-08	TRAFFIC CONTROL DEVICES
821101-02	LUMINAIRE WIRING IN POLE
825026-04	LIGHTING CONTROLLER BASE MOUNT 480V
835001-01	LIGHT TOWER
837001-05	LIGHT TOWER FOUNDATION
001006	DECIMAL OF AN INCH AND OF A FOOT
805001-01	ELECTRICAL SERVICE INSTALLATION DETIALS

GENERAL NOTES:

1. THIS PROJECT INCLUDES THE INSTALLATION OF A NEW LIGHTING SYSTEM ALONG THE INTERCHANGE OF I-55 AND IL-140. PROPOSED LIGHTING SHALL BE OWNED AND MAINTAINED BY THE STATE OF ILLINOIS, DEPARTMENT OF TRANSPORTATION.
2. THE CONTRACTOR SHALL CONTACT THE LOCAL ELECTRIC UTILITY COMPANY TO COORDINATE THE ELECTRIC SERVICE INSTALLATION WORK.
3. THE QUANTITIES OF RACEWAY WHERE INDICATED ON THESE PLANS ARE APPROXIMATIONS ONLY. THE CONTRACTOR SHALL FIELD VERIFY ALL LENGTHS AND SHALL INSTALL RACEWAYS IN COMPLETE COMPLIANCE WITH THE SPECIFIED REQUIREMENTS
4. THE CONTRACTOR SHALL NOTIFY J.U.L.I.E. TO LOCATE AND MARK/STAKE ALL UNDERGROUND UTILITIES.
5. THE CONTRACTOR SHALL VERIFY LOCATIONS OF UNDERGROUND/OVERHEAD UTILITIES PRIOR TO INSTALLATION OF HIGH MAST TOWER AND CONDUITS. IF THERE IS A CONFLICT WITH THE HIGH MAST TOWERS/CONDUITS AS SHOWN ON PLANS, THE CONTRACTOR SHALL SUGGEST THE ALTERNATIVE LOCATIONS AND COORDINATE WITH THE ENGINEER PRIOR TO PERFORMING CONSTRUCTION WORK
6. TRENCHES FOR LIGHTING RACEWAYS SHALL HAVE A MINIMUM DEPTH OF 30".
7. LIGHTING SYSTEM INSTALLATION SHALL CONFORM TO THE LATEST IDOT STANDARDS, NEC AND LOCAL CODES.
8. ALL ELECTRICAL EQUIPMENT AND PRODUCTS SHALL BE UL LISTED AND LABELED.
9. THE CONTRACTOR SHALL TAKE CARE WHEN INSTALLING UNIT DUCT TO AVOID CONFLICTS WITH EXISTING UNDERGROUND UTILITIES, TREES AND ROOTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE AS DETERMINED BY THE ENGINEER.
10. THE CONTRACTOR SHALL TAKE CARE WHEN INSTALLING HIGH MAST TOWER FOUNDATIONS TO AVOID CONFLICTS WITH UNDERGROUND UTILITIES. WHEN CONFLICTS ARE ENCOUNTERED, THE CONTRACTOR SHALL REQUEST TO RELOCATE THE FOUNDATION. THE NEW LOCATION SHALL BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.
11. GROUND RODS SHALL BE INSTALLED AT EACH TOWER.

1 REVISED 7-21-2023

REV. - MS

LT–01

MODEL: $MODELNAME$
FILE NAME: $FILEL$

DELTA ENGINEERING GROUP

USER NAME = $USER$	DESIGNED - AM/HM	REVISED -
	DRAWN - AM	REVISED -
PLOT SCALE = $SCALE$	CHECKED - KK/HM	REVISED -
PLOT DATE = $DATE$	DATE - 01/31/23	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INDEX FOR SHEETS, HIGHWAY STANDARDS AND GERNERAL NOTES
I–55 AT IL 140

SCALE: NONE | SHEET 1 OF 1 SHEETS | STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	60-(1,2) HL-1	MADISON	12	2

CONTRACT NO. 76R27

ILLINOIS FED. AID PROJECT

SE 1/4, SE 1/4, Section 11, T 5 N, R 7 W, 3rd P.M.

FORM NO. B. D. 127 REV. 9-90 — Sh. 1 of 1 Sh.

BRIDGE FOUNDATION BORING LOG

PROJECT: ____ BRIDGE: FAI 55 & Route 140 Date: 8-2-73
ROUTE: FAI 55 & Route 140 High Mount Light Unit Bored By: J. King
SEC.: 60-1K,5L STA.: Ramp 4 Checked By: R. Nebelsick
COUNTY: Madison
Boring No.: 5
Station: 873+85
Offset: 65 Rt. ℄ Rte. 140

Surface Water El. ____
Groundwater El. at Completion ____
After ____ Hours ____

Ground Surface 561.2

Description	Elevation	N	Qu t/s.f.	w (%)	Type
BROWN AND GRAY SILTY CLAY	0				
	-5				
DAMP, MEDIUM		11	0.72 B	24	
553.2+					
	-10				
DAMP, HARD		17	4.16 S	24	
DARK GRAY SILTY CLAY (FILL)					
DAMP, STIFF	-15	3	1.30	24	B
DAMP, STIFF		7	1.30	25	B
DAMP, STIFF		10	1.96	23	B
543.5					
DARK GRAY AND BROWN SILTY CLAY					
542.2+					
DAMP, MEDIUM	-20	2	0.87	23	S
DAMP, MEDIUM		8	0.87	26	S
DAMP, MEDIUM		8	1.04	26	S
DARK GRAY SILTY CLAY					
539.7+					

Description	Elevation	N	Qu t/s.f.	w (%)	Type
DAMP, STIFF		4	1.79	27	B
DAMP, STIFF		11	1.65	26	B
DAMP, STIFF		8	1.43	25	B
BROWN AND GRAY SILTY CLAY					
DAMP, V. STIFF	-25	3	2.17	19	S
DAMP, STIFF		5	1.43	21	B
DAMP, MEDIUM		5	0.81	23	B
DAMP, MEDIUM		3	0.98	23	B
DAMP, MEDIUM		3	0.98	23	B
532.2+ DAMP, MEDIUM		6	0.98	23	B
GRAY MOTTLED WITH BROWN CLAY TILL					
DAMP, STIFF	-30	3	1.30	21	B
DAMP, STIFF		3	1.11	23	B
DAMP, STIFF		6	1.17	21	B
529.0 ▼					
DAMP, V. STIFF		1	1.30	21	B
DAMP, V. STIFF		3	1.43	23	B
527.2+ DAMP, V. STIFF		3	1.43	21	B
TAN SILTY CLAY TILL					
DAMP, SOFT	-35	1	0.33	21	B
DAMP, SOFT		3	0.39	19	B
DAMP, MEDIUM		4	0.98	17	B
DAMP, STIFF		5	1.30	13	B
DAMP, STIFF		12	1.30	12	S
522.2+ DAMP, STIFF		15	1.37	12	B
TAN AND GRAY SANDY SILTY CLAY					
DAMP, V. STIFF	-40	20	3.66	9	S
DAMP, V. STIFF		58	4.03	9	S
519.7+ DAMP, STIFF		75	1.16	9	S
GRAY CLAY TILL					
DAMP, V. STIFF		35	4.07	11	S
DAMP, V. STIFF		75	4.26	8	S
517.5 DAMP, V. STIFF		85	4.07	9	S
END OF BORING	-45				

N – Standard Penetration Test – Blows per foot to drive 2" O.D. Split Spoon Sampler 12" with 140# hammer falling 30".

Qu – Unconfined Compressive Strength – t/sf

w – Water Content – percentage of oven dry weight – %.

Type failure: B – Bulge Failure S – Shear Failure E – Estimated Value

SE 1/4, SE 1/4, Section 11, T 5 N, R 7 W, 3rd P.M.

FORM NO. B. D. 127 REV. 9-90 — Sh. 1 of 1 Sh.

BRIDGE FOUNDATION BORING LOG

PROJECT: ____ BRIDGE: FAI 55 & Route 140 Date: 7-27-73
ROUTE: FAI 55 & Route 140 High Mount Light Unit Bored By: J. King
SEC.: 60-1K,5L STA.: Ramp 4 Checked By: R. Nebelsick
COUNTY: Madison
Boring No.: 4
Station: 749+70
Offset: 95 Lt. ℄ I-55

Surface Water El. ____
Groundwater El. at Completion ____
After ____ Hours ____

Ground Surface 541.0

Description	Elevation	N	Qu t/s.f.	w (%)	Type
BROWN AND GRAY SILTY CLAY	0				
DAMP, MEDIUM		2	0.81	26	B
DAMP, MEDIUM		3	0.98	26	B
DAMP, MEDIUM		6	0.98	24	B
536.5+					
	-5				
DAMP, MEDIUM		2	0.85	23	B
DAMP, MEDIUM		2	0.98	23	B
DAMP, MEDIUM		4	0.98	24	B
GRAY MOTTLED WITH BROWN SILTY CLAY					
DAMP, MEDIUM		2	0.72	23	B
DAMP, MEDIUM		3	0.72	25	B
DAMP, MEDIUM		3	0.85	22	B
531.5+					
	-10				
DAMP, STIFF		3	1.30	23	B
DAMP, MEDIUM		2	0.98	27	B
DAMP, STIFF		4	1.17	23	B
528.6 ▼					
WET, V. SOFT		1	0.20	23	B
WET, V. SOFT		1	0.20	21	B
WET, V. SOFT		1	0.16	32	B
TAN MOTTLED WITH GRAY CLAY TILL					
	-15				
DAMP, MEDIUM		3	0.65	17	B
DAMP, MEDIUM		4	0.85	15	B
DAMP, MEDIUM		5	0.85	15	B
524.0+					
GRAY CLAY TILL					
DAMP, V. STIFF		10	2.13	9	S
DAMP, V. STIFF		39	2.13	10	S
522.0 DAMP, V. STIFF		50	2.32	9	S
BROWN AND GRAY COARSE SAND					
WET, MEDIUM		15	N.C.	-	
WET, MEDIUM	-20	25	N.C.	-	
DAMP, HARD		26	5.03	9	S
521.0					
DAMP, HARD		8	4.24	10	S

Description	Elevation	N	Qu t/s.f.	w (%)	Type
DAMP, HARD		17	4.89	11	S
DAMP, HARD		22	4.98	11	S
GRAY CLAY TILL					
DAMP, HARD		10	4.24	11	B
DAMP, HARD	-25	15	4.07	11	S
DAMP, HARD		20	4.89	11	S
DAMP, HARD		10	5.39	10	B
DAMP, HARD		16	5.19	10	S
DAMP, HARD		24	5.89	10	S
DAMP, HARD		12	5.22	10	S
DAMP, HARD	-30	19	4.89	11	S
510.5 DAMP, HARD		23	4.85	11	S
END OF BORING	-35				
	-40				
	-45				

N – Standard Penetration Test – Blows per foot to drive 2" O.D. Split Spoon Sampler 12" with 140# hammer falling 30".

Qu – Unconfined Compressive Strength – t/sf

w – Water Content – percentage of oven dry weight – %

Type failure: B – Bulge Failure S – Shear Failure E – Estimated Value

⚠1 REVISED SHEET 7-21-2023

SBL–01

MODEL: Default
FILE NAME: G:\P211025A W01 I-55 at IL-140 Lighting\03A Design\01 CADD\02 Sheets\D76R27-sht-Hlgs-001.dgn

DELTA ENGINEERING GROUP

USER NAME = amassey	DESIGNED - AM/HM	REVISED -	
	DRAWN - AM	REVISED -	
PLOT SCALE = 100.0000 ' / in.	CHECKED - KK/HM	REVISED -	
PLOT DATE = 7/20/2023	DATE - 01/31/23	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS

SCALE: NONE | SHEET 1 OF 1 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	60-(1,2) HL-1	MADISON	13	7

CONTRACT NO. 76R27

ILLINOIS | FED. AID PROJECT

SE 1/4, SE 1/4, Section 11, T 5 N, R W, 3rd P.M.

FORM NO. B. D. 137 REV. 9-60

Sh. 1 of 1 Sh.

BRIDGE FOUNDATION BORING LOG

PROJECT

ROUTE FAI 55 & Route 140

SEC. 60-1K,5L

COUNTY Madison

Boring No. 2

Station 863+15

Offset 65 Lt. ℄ Rte. 140

BRIDGE FAI 55 & Route 140 High Mount Light Unit

STA. Ramp 2

Date 7-27-73

Bored By J. King

Checked By R. Nebelsick

Surface Water El.

Groundwater El. at Completion

After Hours

Description	Elevation	N	Qu t/s.f.	w (%)		Description	Elevation	N	Qu t/s.f.	w (%)	
Ground Surface 545.2	0					TAN CLAY TILL	DAMP,STIFF	7	1.92	13	B
							DAMP,V.STIFF	18	2.83	13	S
DARK BROWN CLAYEY SILT						521.2+	DAMP,V.STIFF	27	2.75	12	S
	DRY,STIFF	6	1.04	14	B		DAMP,STIFF-25	11	1.55	10	S
	DRY,STIFF	8	1.04	18	B		DRY,HARD	21	4.40	10	S
541.2+	DRY,STIFF	7	1.04	19	B	GRAY CLAY TILL	DRY,V.STIFF	30	3.12	10	S
	DAMP,STIFF-5	3	1.17	25	B		DRY,V.STIFF	12	3.30	9	S
	DAMP,MEDIUM	4	0.85	25	B		DRY,V.STIFF	30	3.10	9	S
	DAMP,MEDIUM	6	0.85	26	B		DRY,HARD	53	4.50	9	S
BROWN AND GRAY SILTY CLAY	DAMP,MEDIUM	2	0.98	28	B		DRY,V.STIFF-30	15	3.64	10	S
	DAMP,STIFF	3	1.17	27	B		DRY,STIFF	28	3.46	9	B
	DAMP,STIFF	5	1.30	22	B	514.2	DRY,STIFF	42	3.10	9	S
	DAMP,MEDIUM-10	2	0.72	24	B						
	DAMP,MEDIUM	3	0.98	23	B						
	DAMP,STIFF	3	1.30	23	B	END OF BORING					
533.2							-35				
	WET,STIFF	2	1.04	22	B						
	DAMP,STIFF	3	1.30	21	B						
	DAMP,STIFF	3	1.43	23	B						
	DAMP,STIFF-15	2	1.04	22	B						
	DAMP,STIFF	3	1.37	23	B						
	DAMP,STIFF	4	1.17	24	B						
	DAMP,STIFF	2	1.10	22	S		-40				
	DAMP,STIFF	4	1.25	17	S						
526.2+	DAMP,STIFF	3	1.25	21	S						
	DAMP,MEDIUM-20	2	0.65	18	B						
	DAMP,MEDIUM	3	0.85	21	B						
	DAMP,MEDIUM	4	0.85	16	B						
							-45				

N – Standard Penetration Test – Blows per foot to drive 2" O.D. Split Spoon Sampler 12" with 140# hammer falling 30".

Qu – Unconfined Compressive Strength – t/sf

w – Water Content – percentage of oven dry weight – %

Type failure:
B – Bulge Failure
S – Shear Failure
E – Estimated Value

SE 1/4, SE 1/4, Section 11, T 5 N, R 7 W, 3rd P.M.

FORM NO. B. D. 137 REV. 9-60

Sh. 1 of 1 Sh.

BRIDGE FOUNDATION BORING LOG

PROJECT

ROUTE FAI 55 & Route 140

SEC. 60-1K,5L

COUNTY Madison

Boring No. 1

Station 727+70

Offset 95 Rt. ℄ I-55

BRIDGE FAI 55 & Route 140 High Mount Light Unit

STA. Ramp 2

Date 7-30-73

Bored By J. King

Checked By R. Nebelsick

Surface Water El.

Groundwater El. at Completion

After Hours

Description	Elevation	N	Qu t/s.f.	w (%)		Description	Elevation	N	Qu t/s.f.	w (%)	
Ground Surface 545.0	0						DAMP,HARD	6	4.24	12	B
							DAMP,V.STIFF	12	3.59	11	B
							DAMP,V.STIFF	15	2.94	11	S
						GRAY CLAY TILL					
	DAMP,STIFF	2	1.17	28	B		DAMP,V.STIFF-25	7	3.26	11	B
	DAMP,STIFF	4	1.30	24	B		DAMP,V.STIFF	12	3.59	11	S
	DAMP,MEDIUM	7	0.97	22	S		DAMP,HARD	15	4.24	11	S
	DAMP,MEDIUM-5	2	0.55	24	B		DAMP,V.STIFF	9	3.59	11	B
BROWN AND GRAY SILTY CLAY	DAMP,MEDIUM	2	0.65	23	B		DAMP,V.STIFF	15	3.46	11	S
	DAMP,SOFT	4	0.49	23	B		DAMP,HARD	25	4.89	11	B
	DAMP,MEDIUM	2	0.98	23	B		DAMP,V.STIFF-30	11	2.83	12	B
	DAMP,STIFF	4	1.50	22	B		DAMP,V.STIFF	15	3.59	11	B
	DAMP,STIFF	4	1.43	22	B	513.9	DAMP,V.STIFF	26	3.59	11	S
	DAMP,STIFF-10	2	1.11	24	B						
	DAMP,STIFF	4	1.37	22	B						
	DAMP,STIFF	4	1.50	22	B	END OF BORING					
							-35				
	DAMP,STIFF	3	1.63	23	B						
	DAMP,MEDIUM	3	0.65	28	B						
531.0+	DAMP,MEDIUM	3	0.52	27	B						
529.9	DAMP,STIFF-15	3	1.30	18	B						
	WET,MEDIUM	4	0.98	19	B						
GRAY MOTTLED WITH BROWN CLAY TILL	WET,SOFT	4	0.39	19	B						
	DAMP,V.STIFF	9	2.83	11	B		-40				
	DAMP,HARD	14	4.50	11	S						
526.0+	DAMP,V.STIFF	18	3.81	11	S						
	DAMP,V.STIFF-20	8	2.83	13	B						
	DAMP,V.STIFF	12	2.83	12	B						
	DAMP,V.STIFF	15	2.83	11	B						
							-45				

N – Standard Penetration Test – Blows per foot to drive 2" O.D. Split Spoon Sampler 12" with 140# hammer falling 30".

Qu – Unconfined Compressive Strength – t/sf

w – Water Content – percentage of oven dry weight – %

Type failure:
B – Bulge Failure
S – Shear Failure
E – Estimated Value

⚠1 REVISED SHEET 7-21-2023

SBL–02

MODEL: Default
FILE NAME: G:\P211025A W01 I-55 at IL-140 Lightning\03A Design\01 CADD\02 Sheets\D876R27-sht-Bor-002.dgn

DELTA ENGINEERING GROUP

USER NAME = amassey	DESIGNED - AM/HM	REVISED -	
	DRAWN - AM	REVISED -	
PLOT SCALE = 100.0000 ' / in.	CHECKED - KK/HM	REVISED -	
PLOT DATE = 7/20/2023	DATE - 01/31/23	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS

SCALE: NONE | SHEET 1 OF 1 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	60-(1,2) HL-1	MADISON	13	8

CONTRACT NO. 76R27

ILLINOIS | FED. AID PROJECT

FORM NO. B. D. 137 REV. 9-60

Sh. 10 of 10 Sh.

BRIDGE FOUNDATION BORING LOG

PROJECT

ROUTE FAI 55

SEC. 60-1HB-5

COUNTY Madison

Boring No. 5 (W. Pier)
Station (Cont.)
Offset 40' Rt. ℄

BRIDGE Rt. 140 over FAI 55

STA. 738+55.7

Date March 1967

Bored By Bob Ferree

Checked By R. Nebelsick

Surface Water El.

Groundwater El. at Completion

After Hours

Elevation	N	Qu t/s.f.	w (%)
Ground Surface			
HARD GRAY CLAY TILL			
-45			
	37	7.1S	10
	41	4.6B	13
-50			
	36	5.0E	NR
	30	6.1S	12
-55			
488.0	30	5.5E	NR
END OF BORING			
-60			
-65			
-70			
-75			
-80			
-85			

N – Standard Penetration Test – Blows per foot to drive 2" O.D. Split Spoon Sampler 12" with 140# hammer falling 30".

Qu – Unconfined Compressive Strength – t/sf

w – Water Content – percentage of oven dry weight – %.

Type failure:
B – Bulge Failure
S – Shear Failure
E – Estimated Value

FORM NO. B. D. 137 REV. 9-60

Sh. 9 of 10 Sh.

BRIDGE FOUNDATION BORING LOG

PROJECT

ROUTE FAI 55

SEC. 60-1HB-5

COUNTY Madison

Boring No. 5 (W. Pier)
Station 867+55.2
Offset 40' Rt. ℄

BRIDGE Rt. 140 over FAI 55

STA. 738+55.7

Date March 1967

Bored By Bob Ferree

Checked By R. Nebelsick

Surface Water El.

Groundwater El. at Completion

After Hours

Elevation	N	Qu t/s.f.	w (%)
Ground Surface 544.5			
0			
BLACK SILTY CLAY LOAM			
-5			
STIFF MOTTLED BROWN AND GRAY CLAY	10	1.6B	26
-10			
MEDIUM MOTTLED BROWN AND GRAY CLAY	6	0.6B	25
-10			
STIFF MOTTLED BROWN AND GRAY CLAY	6	1.0B	24
	5	1.0B	25
-15			
SOFT BROWN CLAY LOAM	3	0.3B	19
STIFF BROWN CLAY TILL	11	1.2B	13
-20			
	10	1.6B	13
-25			
	28	2.7S	11
	31	3.1S	10
STIFF GRAY CLAY TILL			
	23	3.0S	9
-30			
	129	4.1S	4
	25	4.0S	11
-35			
MEDIUM COARSE GRAY SANDY GRAVEL	23	–	–
HARD GRAY CLAY TILL	21	4.0E	NR
-40			
	21	6.8S	10
	27	7.3S	10
-45			

N – Standard Penetration Test – Blows per foot to drive 2" O.D. Split Spoon Sampler 12" with 140# hammer falling 30".

Qu – Unconfined Compressive Strength – t/sf

w – Water Content – percentage of oven dry weight – %.

Type failure:
B – Bulge Failure
S – Shear Failure
E – Estimated Value

REVISED SHEET 7-21-2023

SBL–03

MODEL: Default
FILE NAME: G:\P211025A W01 I-55 at IL-140 Upgrade\03A Design\01 CADD\02 Sheet\D876R27-sht-blgs-003.dgn

DELTA ENGINEERING GROUP

USER NAME = amassey	DESIGNED - AM/HM	REVISED -	
	DRAWN - AM	REVISED -	
PLOT SCALE = 100.0000 ' / in.	CHECKED - KK/HM	REVISED -	
PLOT DATE = 7/20/2023	DATE - 01/31/23	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS

SCALE: NONE | SHEET 1 OF 1 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	60-(1,2) HL-1	MADISON	13	9

CONTRACT NO. 76R27

ILLINOIS | FED. AID PROJECT

FORM NO. B. D. 137 REV. 9-60

Sh. 8 of 10 Sh.

BRIDGE FOUNDATION BORING LOG

PROJECT

ROUTE FAI 55

SEC. 60-1HB-5

COUNTY Madison

Boring No. 4 (Cont.)
Station 867+29
Offset 62.3' Rt. ℄

BRIDGE Ill. Route 140
FAI 55 over
STA. 738+55.70

Date March 1967
Bored By Bob Ferree
Checked By R. Nebelsick

Surface Water El.
Groundwater El. at Completion
After ___ Hours

Description	Elevation	N	Qu t/s.f.	w (%)
Ground Surface				
COARSE GRAY SANDY GRAVEL	-45			
497.8 Dense		42	-	-
END OF BORING				

Elevation
-50
-55
-60
-65
-70
-75
-80
-85

N – Standard Penetration Test – Blows per foot to drive 2" O.D. Split Spoon Sampler 12" with 140# hammer falling 30".

Qu – Unconfined Compressive Strength – t/sf

w – Water Content – percentage of oven dry weight – %

Type failure:
B – Bulge Failure
S – Shear Failure
E – Estimated Value

FORM NO. B. D. 137 REV. 9-60

Sh. 7 of 10 Sh.

BRIDGE FOUNDATION BORING LOG

PROJECT

ROUTE FAI 55

SEC. 60-1HB-5

COUNTY Madison

Boring No. 4 (W. Abut.)
Station 867+29
Offset 62.3 Rt. ℄

BRIDGE Ill. Route 140
FAI 55 over
STA. 738+55.70

Date March 1967
Bored By Bob Ferree
Checked By R. Nebelsick

Surface Water El.
Groundwater El. at Completion
After ___ Hours

Description	Elevation	N	Qu t/s.f.	w (%)
Ground Surface 544.3	0			
BLACK ORGANIC SILTY CLAY LOAM				
MOTTLED BROWN AND GRAY CLAY	Medium	6	1.0B	21
	-5			
	Stiff	6	1.1B	26
	Stiff	6	1.1B	25
	-10			
	Stiff	6	1.1B	25
BROWN CLAY LOAM				
	Stiff	7	1.3B	21
	-15			
BROWN CLAY LOAM	Soft	4	0.3B	22
BROWN CLAY LOAM				
	Stiff	11	1.4B	14
	-20			
	Hard	38	7.2S	11

Description	Elevation	N	Qu t/s.f.	w (%)
	Hard	62	9.2S	9
	-25			
	Hard	68	10.0S	11
SAND LAYER	Hard	66	8.0S	11
	-30			
	Hard	31	5.7S	10
GRAY CLAY TILL				
	Hard	28	6.6S	11
	-35			
	Hard	29	7.3S	10
	Hard	24	6.6S	10
	-40			
	Hard	26	6.5S	11
	Hard	25	6.3S	10
	-45			

N – Standard Penetration Test – Blows per foot to drive 2" O.D. Split Spoon Sampler 12" with 140# hammer falling 30".

Qu – Unconfined Compressive Strength – t/sf

w – Water Content – percentage of oven dry weight – %.

Type failure:
B – Bulge Failure
S – Shear Failure
E – Estimated Value

1 REVISED SHEET 7-21-2023

SBL–04

MODEL: Default
FILE NAME: G:\LR211025A W01 I-55 at IL-140 Lighting\03A Design\01 CADD\02 Sheet\0376R27-sht-Bdrg-004.dgn

DELTA ENGINEERING GROUP

USER NAME = amassey	DESIGNED - AM/HM	REVISED -	
	DRAWN - AM	REVISED -	
PLOT SCALE = 100.0000 ' / in.	CHECKED - KK/HM	REVISED -	
PLOT DATE = 7/20/2023	DATE - 01/31/23	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS

SCALE: NONE | SHEET 1 OF 1 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	60-(1,2) HL-1	MADISON	13	10

CONTRACT NO. 76R27

ILLINOIS | FED. AID PROJECT

BRIDGE FOUNDATION BORING LOG

PROJECT
ROUTE FAI 55
SEC. 60-1HB-5
COUNTY Madison

BRIDGE Ill. Route 140
FAI 55
STA. 738+55.70

Date March 15, 1967
Bored By Bob Ferree
Checked By R. Nebelsick

Boring No. 3 (Cont.)
Station 869+05.8
Offset 44' Rt. ℄

Surface Water El. ____
Groundwater El. at Completion ____
After ____ Hours ____

		Elevation	N	Qu t/s.f.	w (%)
Ground Surface					
		-45			
496.9	Hard		22	7.8S	17
END OF BORING					
		-50			
		-55			
		-60			
		-65			
		-70			
		-75			
		-80			
		-85			

N – Standard Penetration Test – Blows per foot to drive 2" O.D. Split Spoon Sampler 12" with 140# hammer falling 30".

Qu – Unconfined Compressive Strength – t/sf

w – Water Content – percentage of oven dry weight – %.

Type failure:
B – Bulge Failure
S – Shear Failure
E – Estimated Value
P – Penetrometer

FORM NO. B. D. 137 REV. 8-60

BRIDGE FOUNDATION BORING LOG

PROJECT
ROUTE FAI 55
SEC. 60-1HB-5
COUNTY Madison

BRIDGE Ill. Route 140
FAI 55 over
STA. 738+55.70

Date March 15, 1967
Bored By Bob Ferree
Checked By R. Nebelsick

Boring No. 3 (E. Pier)
Station 869+05.8
Offset 44' Rt. ℄

Surface Water El. ____
Groundwater El. at Completion ____
After ____ Hours ____

		Elevation	N	Qu t/s.f.	w (%)
Ground Surface 543.4		0			
BLACK ORGANIC SILTY CLAY LOAM					
		-5			
MOTTLED BROWN AND GRAY CLAY	Stiff		9	1.6B	25
GRAY CLAY LOAM	Stiff		7	1.3B	23
		-10			
	Stiff		6	1.1B	26
BROWN CLAY LOAM					
	Soft		4	0.4B	32
		-15			
	Soft		4	0.3B	25
BROWN COARSE SAND WITH PEBBLES					
	V. Loose		4	-	-
		-20			
	Hard		29	5.4S	11
GRAY CLAY TILL	Hard		34	5.2S	10
		-25			
	Hard		41	6.0S	9
	Hard		38	6.0S	14
		-30			
	Hard		22	5.4S	13
	Hard		22	6.6S	13
		-35			
	Hard		21	6.8S	13
	Hard		24	7.0S	12
		-40			
	Hard		21	6.4S	12
	Hard		24	7.7S	10
		-45			

N – Standard Penetration Test – Blows per foot to drive 2" O.D. Split Spoon Sampler 12" with 140# hammer falling 30".

Qu – Unconfined Compressive Strength – t/sf

w – Water Content – percentage of oven dry weight – %.

Type failure:
B – Bulge Failure
S – Shear Failure
E – Estimated Value

1 REVISED SHEET 7-21-2023

SBL–05

MODEL: Default
FILE NAME: G:\P211025A W01 I-55 at IL-140 Lightning\03A Design\01 CADD\02 Sheet\D876R27-sht-Bor-005.dgn

DELTA ENGINEERING GROUP

USER NAME = amassey	DESIGNED - AM/HM	REVISED -	
	DRAWN - AM	REVISED -	
PLOT SCALE = 100.0000 ' / in.	CHECKED - KK/HM	REVISED -	
PLOT DATE = 7/20/2023	DATE - 01/31/23	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS

SCALE: NONE | SHEET 1 OF 1 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	60-(1,2) HL-1	MADISON	13	11

CONTRACT NO. 76R27

ILLINOIS | FED. AID PROJECT

FORM NO. B. D. 137 REV. 9-60

Sh. 4 of 10 Sh.

BRIDGE FOUNDATION BORING LOG

PROJECT

ROUTE FAI 55

SEC. 60-1HB-5

COUNTY Madison

Boring No. 2 (Cont.)
Station 869+29.73
Offset 55' Rt. ℄

BRIDGE Ill. Route 140
FAI 55 over
STA. 738+55.70

Date March 1967
Bored By Bob Ferree
Checked By R. Nebelsick

Surface Water El. ____
Groundwater El. at Completion ____
After ____ Hours ____

		Elevation	N	Qu t/s.f.	w (%)
Ground Surface					
		-45			
496.9	Hard		28	6.4S	-
END OF BORING					
		-50			
		-55			
		-60			
		-65			
		-70			
		-75			
		-80			
		-85			

N – Standard Penetration Test – Blows per foot to drive 2" O.D. Split Spoon Sampler 12" with 140# hammer falling 30".

Qu – Unconfined Compressive Strength – t/sf

w – Water Content – percentage of oven dry weight – %.

Type failure:
B – Bulge Failure
S – Shear Failure
E – Estimated Value

FORM NO. B. D. 137 REV. 9-60

Sh. 3 of 10 Sh.

BRIDGE FOUNDATION BORING LOG

PROJECT

ROUTE FAI 55

SEC. 60-1HB-5

COUNTY Madison

Boring No. 2 (E.Abut.)
Station 869+29.73
Offset 55' Rt. ℄

BRIDGE Ill. Route 140
FAI 55 over
STA. 738+55.70

Date March 1967
Bored By Bob Ferree
Checked By R. Nebelsick

Surface Water El. ____
Groundwater El. at Completion ____
After ____ Hours ____

		Elevation	N	Qu t/s.f.	w (%)
Ground Surface 543.4		0			
BLACK ORGANIC SILTY CLAY LOAM					
MOTTLED BROWN AND GRAY CLAY	Medium	-5	7	0.9B	22
	Stiff		9	1.6B	24
	Stiff		7	1.4B	24
MOTTLED BROWN AND GRAY CLAY		-10			
	Stiff		6	1.2B	25
	Stiff		4	1.1B	24
		-15			
	Stiff		5	1.1B	23
BROWN CLAY LOAM					
	Soft		12	0.5B	24
BROWN CLAY TILL		-20			
	V.Stiff		32	2.5S	25
GRAY CLAY TILL	Hard		40	6.1S	-
		-25			
	Hard		61	6.2S	15
	Hard		102	6.3S	17
		-30			
	Hard		38	8.2S	15
	Hard		29	N.R.	-
		-35			
	Hard		29	N.R.	-
	Hard		34	7.8S	6
		-40			
	Hard		30	7.6S	-
	Hard		28	6.8S	48
		-45			

N – Standard Penetration Test – Blows per foot to drive 2" O.D. Split Spoon Sampler 12" with 140# hammer falling 30".

Qu – Unconfined Compressive Strength – t/sf

w – Water Content – percentage of oven dry weight – %.

Type failure:
B – Bulge Failure
S – Shear Failure
E – Estimated Value

⚠1 REVISED SHEET 7-21-2023

SBL–06

MODEL: Default
FILE NAME: GULP211025A W01 I-55 at IL-140 Lighting\03A Design\01 CADD\02 Sheet\0876R27-sht-blog-006.dgn

DELTA ENGINEERING GROUP

USER NAME = amassey	DESIGNED - AM/HM	REVISED -	
	DRAWN - AM	REVISED -	
PLOT SCALE = 100.0000 ' / in.	CHECKED - KK/HM	REVISED -	
PLOT DATE = 7/20/2023	DATE - 01/31/23	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS

SCALE: NONE | SHEET 1 OF 1 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	60-(1,2) HL-1	MADISON	13	12

CONTRACT NO. 76R27

ILLINOIS | FED. AID PROJECT

FORM NO. B. D. 137 REV. 9-60

BRIDGE FOUNDATION BORING LOG

PROJECT
ROUTE FAI 55
SEC. 60-1HB-5
COUNTY Madison

BRIDGE Ill. Route 140
FAI 55 over
STA. 738+55.70

Date March 1967
Bored By Bob Ferree
Checked By R. Nebelsick

Boring No. 1 (Cont.)
Station 868+43.2
Offset 43.3' Rt. ℄

Surface Water El.
Groundwater El. at Completion
After ___ Hours

Elevation	N	Qu t/s.f.	(%) w
Ground Surface			
-45			
Hard	36	7.4S	11
Hard	31	5.8S	11
-50			
COARSE CAP-GRADED SANDY GRAVEL			
491.3	35		
END OF BORING			
-55			
-60			

Elevation	N	Qu t/s.f.	(%) w
-65			
-70			
-75			
-80			
-85			

N – Standard Penetration Test – Blows per foot to drive 2" O.D. Split Spoon Sampler 12" with 140# hammer falling 30".

Qu – Unconfined Compressive Strength – t/sf

w – Water Content – percentage of oven dry weight – %.

Type failure:
B – Bulge Failure
S – Shear Failure
E – Estimated Value

FORM NO. B. D. 137 REV. 9-60

BRIDGE FOUNDATION BORING LOG

PROJECT
ROUTE FAI 55
SEC. 60-1HB-5
COUNTY Madison

BRIDGE Ill. Route 140 over
FAI 55
STA. 738+55.70

Date March 1967
Bored By Bob Ferree
Checked By R. Nebelsick

Boring No. 1 (Mid Pier)
Station 868+43.2
Offset 43.3' Rt. ℄

Surface Water El.
Groundwater El. at Completion
After ___ Hours

Elevation	N	Qu t/s.f.	(%) w
Ground Surface 542.8			
0			
BLACK ORGANIC SILTY CLAY LOAM			
-5			
MOTTLED BROWN AND GRAY CLAY — Medium	5	0.7B	27
MOTTLED BROWN AND GRAY CLAY — Stiff	7	1.1B	27
-10			
GRAY CLAY LOAM — Medium	6	0.6B	29
GRAY CLAY LOAM — Stiff	5	1.1B	23
-15			
BROWN AND GRAY CLAY LOAM — Medium	5	0.8B	15
Medium	6	0.7B	14
-20			
BROWN AND GRAY CLAY LOAM — Stiff	16	1.6B	13

Elevation	N	Qu t/s.f.	(%) w
Hard	32	4.5S	10
-25			
Hard	34	8.7S	9
Hard	31	6.1S	10
-30			
GRAY CLAY TILL — Hard	22	4.3S	13
Hard	22	5.5S	10
-35			
Hard	22	5.0S	8
Hard	21	4.1S	11
-40			
Hard	21	7.4S	10
Hard	29	6.5S	7
-45			

N – Standard Penetration Test – Blows per foot to drive 2" O.D. Split Spoon Sampler 12" with 140# hammer falling 30".

Qu – Unconfined Compressive Strength – t/sf

w – Water Content – percentage of oven dry weight – %

Type failure:
B – Bulge Failure
S – Shear Failure
E – Estimated Value

⚠1 SHEET ADDED 7-21-2023

SBL–07

MODEL: $MODELNAME$
FILE NAME: $FILEL$

DELTA ENGINEERING GROUP

USER NAME = $USER$	DESIGNED - AM/HM	REVISED -	
	DRAWN - AM	REVISED -	
PLOT SCALE = $SCALE$	CHECKED - KK/HM	REVISED -	
PLOT DATE = $DATE$	DATE - 01/31/23	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS

SCALE: NONE | SHEET 1 OF 1 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	60-(1,2) HL-1	MADISON	13	12A

CONTRACT NO. 76R27

ILLINOIS FED. AID PROJECT