| (P) | Illinois Department of Transportation |
|-----|---|
| | Division of Highways SCI Engineering, Inc. |

| Illinois Depa of Transpor | artr | ner | nt | | | | | | |
|---|------------------|------------------|-------------|----------|---|--|--|--|--|
| Division of High | ways | on | | SO | Page 1 of 3 | | | | |
| SC) Engineering | Inc. | | | | Date <u>04/15/09</u> | | | | |
| ROUTE FAP 698 (IL 89) DE | SCRI | PTION | ۱ <u> </u> | over. | eplacement (proposed SN 062-0086) AT&SF Rallroad and Crow Creek LOGGED BY SCI | | | | |
| SECTION | | | | | | | | | |
| COUNTY Marshall DRILLING | ME1 | THOD | | C | ME 550/HSA HAMMER TYPE Automatic | | | | |
| STRUCT, NO. <u>062-0031 (existing)</u> Station | D E P T | B L O W | CS | N 0 s | Surface Water Elev. | | | | |
| BORING NO. B-1 Station 294140 Offset 14 ft L1 Ground Surface Elev. 647.3 ft | H (ft) | S | Qu (tsf) | T (%) | Groundwater Elev.: | | | | |
| ASPHALT - 18 inches | 1, 7 | , - , | / | ,, | FILL Brown, sity day | | | | |
| FILL: Brown, sitty clay | -1 | 3 | | | (A-6) | | | | |
| (A-6) | 닉 | 2 | 1.8 P | 20 | FILE: Dark brown and greenish 3 0.8 29 gray, slity clay loam (A-6) | | | | |
| With brown, silt | | 3 | | | | | | | |
| | | 1 | 0.6 B | 16 | FILL: Brown, slity loam 6 1.9 20 5 1.4.4) | | | | |
| | Ĭ | | | | - | | | | |
| | 7 | 2 1 3 | 0.6 B | 20 | FiLL: Brown, clay loam 621.1 5 6 2.3 19 (A-7) 8 B | | | | |
| | \exists | | | | FILL: Brown and gray, slity loam | | | | |
| | -10 | 2 2 2 | 0.3 B | 20 | (A-4) and clay loem (A-7) mixture 4 5 0.8 21 30 9 8/10 | | | | |
| FILL: Brown, slity clay loam, trace | | | | | - <u>- </u> | | | | |
| gravel (A-7) | | 1 2 2 | 0,5 P | 18 | 5 7 1.5 20 9 S/15 | | | | |
| | | | | | FILL: Greenish gray, gray, and brown, silly clay loam | | | | |
| With dark brown, silty loam | | 1 2 3 | 0.5 B | 25 | (A-6) 3 0.7 22 35 4 B | | | | |
| FILL: Brown, silty clay loam and silty clay, trace gravel | | | | ļ | FILL: Dark brown to black, sandy clay loam, trace organics 3 | | | | |
| (A-7) | | 3 2 3 | 0.7 B | 19 | (A-6) 3 0.7 23 5 B | | | | |
| 1 | | | 1 | 1 | | | | | |
| | | 2 | | | Hydrocarbon odor emitted from sample. Becomes greenish gray, 2 | | | | |

The Unconfined Compressive Strength (UCS) Failure Mode is Indicated by (B-Bulge, S-Shear, P-Penetrometer)

AASHTO Classifications are based on visual classifications unless otherwise noted BBS, form 137 (Rev. 8-99)

| Illinois Depa of Transpor | ways | me: tion | Page 2 of 3 | | | | | | |
|--|----------|-----------------------|-------------|-----------------------|--|-------|----------------|-------------------|-----------------------|
| SCI Engineering | , Iric. | iPTIOI | Br | idae B | teplacement (proposed SN 062-0086) AT&SF Railroad and Crow Creek | oggi | | 04/1 | |
| SECTION(125VBR)BR | _ ı | OCAT | LION _ | Аррго | x, 4.8 miles south of IL Rt 17; NW 1/4, SEC. | 20, T | WP. 2 | 9N, RI | <u>IG, 1W</u> |
| COUNTY Marshall DRILLING | 3 МЕ | THOE | · | | CME 550/HSA HAMMER TYPE | | Auto | matic | |
| STRUCT. NO. 062-0031 (existing) Station | DEPTH | B L O W S | U C S | M 0 1 s T | Surface Water Elev. ft Stream Bed Elev. ft Groundwater Elev.: First Encounter 605.3 ft ▼ Upon Completion ft | DEPTH | BLOWs | U C S Qu | M O I S T |
| Ground Surface Elev. 647,3 ft FILL: Dark brown to black, sandy | (ft) | (/6") | (tsf) | (%) | After - Hrs ft SAND: Gray, fine to coarse, trace | (ft) | (/6") | (tsf) | (%) |
| clay loam, trace organics (A-6) (continued) Driller Indicated easier to drill from 40 to 43.5 feet. Water level is estimated - sand blow in prior to sampling at 43.5 feet requiring water to be used to wash the fines, | Y | | | | to some clay, fine gravel, and trace coarse gravel (A-1) (continued) | | | | |
| SAND: Gray, fine to coarse, frace to some clay, fine gravel, and trace coarse gravel | | 8 11 10 | - | - | Gravel encountered during augering from 63.5 to 73.5 feet. | | 11 8 11 | - | - |
| (A-1) | | | | | | | | | |
| | -50 | 10 8 7 | - | - | | -70 | 10 13 15 | | - |
| | | | | ı | , | | | | |
| | -65 | 6 7 9 | - | - | | -75 | 12 11 11 | - | - |
| | | | | | Augors difficult to remove after drilling was completed (upon removal of augers from boring red head extension broke, due to skin friction around augers). CLAYLOAM: Grayish brown, | | | | |
| | -60 | 10 9 9 | - | - | trace fine gravel (A-7) (Qu (tsf) results of samples exceed the limit of the Rimac apparatus from 78.5 to 90 feet. | -80 | 25 32 52 | 10.9 B/10 | 10 |

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
AASHTO Classifications are based on visual classifications unless otherwise noted BBS, form 137 (Rev. 8-99)

| ROUTE FAP 698 (IL 89) DESCRIPTION De | Illinois Dep of Transpor | | mer ion | nt | ടറ | IL BORING LOG | . | | Page | <u>3</u> c | ıf <u>3</u> |
|--|--|-------------|------------|--------|------------------|---|------------------|------------------|------------------|------------|-----------------------|
| STRUCT. No062-0031 (existing) | SCI Englasering | g, inc. | IPTION | | | | | GGE | Date D BY | 04/1 St | 5/09 Cl |
| STRUCT. No062-0031 (existing) Station | SECTION (125VBR)BR | L | OCAT | TION _ | Арргох | . 4.8 miles south of IL Rt 17; NW 1/4, | SEC. | 20, T | WP. 2 | 9N, RI | IG. 1 |
| Stration | COUNTY Marshall DRILLIN | G ME | THOD | | | ME 550/HSA HAMMER T | YPE . | | Auto | matic | |
| SILTY LOAM: Grayish brown CAY | Station B-1 Station 294+40 Offset 14 ft Lt | E P T | L O W s | C S G | O I S T | Stream Bed Elev. Groundwater Elev.: First Encounter 605.3 Upon Completion | ft ft.▼ ft | E P T H | L O W s | C s Qu | M O I S T |
| 24 10.9 11 | Ground surrace siev. 04/35 in CLAY LOAM: Grayish brown, trace fine gravel (A-7) (continued) Mud rotary drilling started at 89 feet. Driller indicated hard to very hard drilling from 80 to 88.5 | (ft) | (/6") | (tsr) | (%) | After _ Hrs SILTY LOAM: Grayish brown (A-4) (continued) Driller indicated softer drilling at approximately 101 feet with intermittent soft zones to 103.5 feet. | <u>п</u> | | (/6-) | (IST) | (%) |
| 17 | • | -85 | 24 | | 11 | and gray | | -105 | 42 | | 13 |
| 26 10.9 14 Becomes greenish gray 537.8 50/4" 4.5 p | | _ | | | | | | _ | 38 | | 14 |
| CA-3 CA-3 | | 90 | 26 | | | | 537.8 | | 50/4" | | 15 |
| 28 | (A-4) Driller indicated very hard drilling from 92 to 92.5 feet (500 psi down pressure), then became | 3 | 40 48 | 1 | 14 | | | -119 | | | |

The Unconfined Compressive Strength (UCS) Failure Mode is Indicated by (B-Buige, S-Shear, P-Penetrometer)
AASHTO Classifications are based on visual classifications unless otherwise noted BBS, form 137 (Rev. 8-99)

| TT | USER NAME = Jdeen | DESIGNED - JOH | REVISED - |
|-----------------------------|-----------------------|-------------------|-----------|
| Hutchison Engineering, Inc. | PLOT SCALE = NONE | CHECKED - BAN | REVISED - |
| Jacksonville, Peoria, & | PLOT DATE = 7/25/2013 | DRAWN - TAC | REVISED - |
| Shorewood, Illinois | | CHECKED - JOH/BAN | REVISED - |

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

| SOIL BORINGS | | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--------------------------|-----|-----------------|----------|-----------------|--------------|
| STRUCTURE NO. 062-0086 | 698 | 125(VBR)BR | MARSHALL | 148 | 80 |
| SINUCIUME NO. 002-0000 | | | CONTRACT | NO. 6 | 8580 |
| SHEET NO 55 OF 62 SHEETS | | TILITHOTE EED A | TO DECIT | | |