86 sheets

Contract #72A76

Illinois Department SOIL BORING LOG of Transportation IL 78 Over the Sangamon River LOCATION SE 14, SEC. 30, TWP. 19 N, RNG. 9W, 3 PM COUNTY STRUCT, NO BORING NO. □ First Encounter 909+51 Ground Surface Elev. Brown and Dark Grey Moist SILTY CLAY (Temporary fill placed to facilitate drilling) Poor Recovery GRADATION P4-G4 Brown and Grey Very Moist CLAY LOAM Refer Class P2-1 GRADATION P4-G1 Begin Mud Rotary Drilling Adjusted Sample Interval GRADATION P4-G6

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer, E-Estimated)
Abbreviations W.O.H — Sampler Advanced By Weight of Hammer, W.O.P — Advanced by Weight of Pipe, B.S. — Before Seating
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)

| Division of Highways District 6 | | | | | | | - | Date | 12 | /18/0 7 | | | |
|---|-----------------------|-------------------------------------|----------|-----------------------|---|-------------|-----------------------|-----------------------|----------------------------|-----------------------|--|--|--|
| ROUTE FAP 614 (IL 78) DESCRIPTION | | IL 78 Over the Sangamon River LOGGE | | | | | _ | М. Тарр | M. Tappan | | | | |
| SECTION 144(B-1) | LOCATIO | _ ا | SE 14, S | BEC. 30, | TWP. 19 N, RNG. 9W, 3 PM | | | | | | | | |
| COUNTY Cass and Mason DRILLING METHOD | | | _ | | HSA/Rotary HAMMER TYPE | HAMMER TYPE | | | Auto | | | | |
| 009-0510 Pr | D E P T H | B L O W S | C S Ou | M O I S T | Surface Weter Elev. 442.1 (Nov.) Streem Bed Elev. 438° Groundwater Elev.: ▼ First Encounter 439.7 ▼ Upon Completion WA W After Hrs. Plugged | ft ft | D E P T H | B L O W S | U C S Qu (tsf) | M O I S T | | | |
| Grey Medium to Coarse SAND with some 14" Gravel (continued) | ц (ч | | 11 | 1,-4 | Grey Coarse SAND (continued) | 11. | ., | | (| (,-, | | | |
| Gey Medium SAND with some | 02.20 | 2 3 4 | | | | | -66 | | | | | | |
| 14" Pea Gravel GRADATION P4-G7 | - | 2 4 | | | Grey Coarse SAND | | _ | 2 | | | | | |
| | _ | 4 | | | Borehole repeatedly collapsed. Sand plugged drill pipes. | | _ | 7 | | | | | |
| | | | | | Light Grey Well indurated Cherty LIMESTONE Limestone chips in return mud Rotery Drilled 2.0 ft in 16 minutes | 377.70 | -76 — | | | | | | |
| | _ | | | | Borehole continued with rock coring. | 375.70 | | | | | | | |
| | 94.20 | | | | | | | | | | | | |
| Grey Coarse SAND | _ | 5 | | | | | -75 | | | | | | |
| | _ | | | | | | _ | | | | | | |
| GRADATION P4-G8 | _ | 1 3 3 | | | - | | | | | | | | |
| | | | | | | | -80 | | | | | | |

| | Division of Highways District 6 | U 70 O | | _ | | | | | M Tor | _ | | |
|----------------------|---|-------------------------------|----------------------|----------|-------|--------|--------|---------------------|----------|---|--|--|
| ROUTE _ | FAP 614 (IL 78) DESCRIPTIO | IL 78 Over the Sangamon River | | | | | | LOGGED BY M. Tappan | | | | |
| SECTION | 144(B-1) | LOCATION SE 14, SEC. 3 | 0, TWP. 19 N, RNG. | 9W, 3 PM | | | | I | | | | |
| COUNTY | Cass and Mason CORIN | G METHOD <u>Double Bar</u> | rei – Drilling Mud i | Flush | | | R | R | CORE | | | |
| STRUCT, NO. | 009-0510 Pr 009-0006 Ex | CORING BARREL TYPE & S | IZE | BWD4 | _ D | С | C | à | <u>†</u> | | | |
| Station | 913+16 | Core Diameter | 1.61 | in | _ E | Ö | v | ı. | I M | | | |
| BORING NO. | 0510-P4 Pier 4 | Top of Rock Elev. | 377.70 | ft . | P | R E | E R | D | E | | | |
| Station | 909+51 18.0ft RT | Begin Core Elev. | 375.70 | _ ft | Ĥ | • | Ÿ | • | | | | |
| Offset Ground Sur | | - ft | | | (ft) | (#) | (%) | (%) | (min/ft) | | | |
| | Spaced 2" to 12" ndurated Clayey Shele Seam 72.4 t | o 72.6 ft | | 372. | | | | | | Į | | |
| | | | | | | | | | | | | |

Cores will be stored for examination until None
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2939)
RQD is the ratio of the total length of sound core specimens >4" to total length of core run

BORINGS (SHEET 6)
F.A.P. 614 (IL 78) OVER SANGAMON RIVER
PUBLIC WATERS
CASS & MASON COUNTIES
SECTION 144 (B-1)
STA. 913+26.00
STRUCTURE NUMBER 009-0510

PROFESSIONAL DESIGN FIRM LICENSE #184-001084

BBS, form 138 (Rev. 8-99)

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