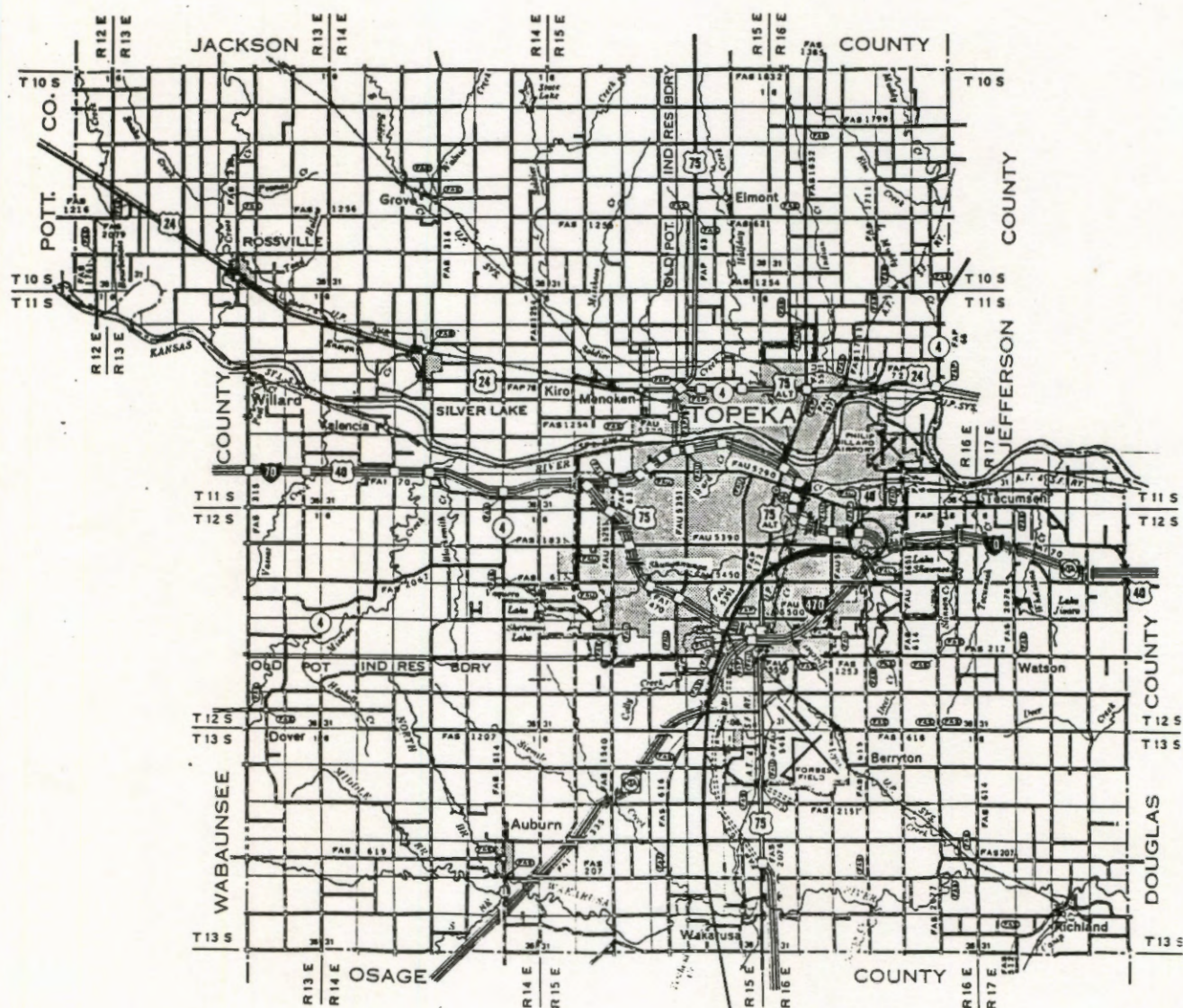


# Kansas Department of Transportation

## BRIDGE FOUNDATION GEOLOGY REPORT



SW-3-12S-16E

0-78'

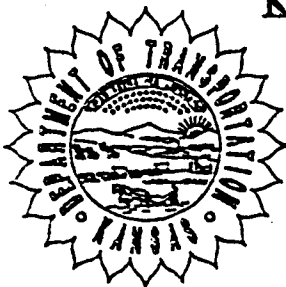
Shawnee

Curzon limestone to  
upper Eruke Creek  
limestone

4-89 K-3362-03

Br. No. 19.22

Shawnee County



# KANSAS DEPARTMENT OF TRANSPORTATION

|                              |                             |                                 |
|------------------------------|-----------------------------|---------------------------------|
| 1. ROUTE-COUNTY NO. 004-089  | 7. SOUNDING NO. 1           | 6. SHEET 01 OF 03               |
| 2. BRIDGE STA. 401+94.03     | 8. PROJECT NO. K3362-03     | 9. BRIDGE NO. 19.22             |
| 3. DESCRIPTION Ramp B        | 10. HOLE STA. 403+68.1748   | 11. DATE 5-18-93                |
| 4. GEOLOGIST Billinger       | 12. VERTICLE SCALE 1"=10'   | 13. ELEVATION TOP OF HOLE 969.1 |
| 5. DRILLER Farley            | 14. RIG B-61                | 15. ELEVATION TOP OF ROCK 954.9 |
| 16. GROUND WATER ELEV. 946.6 | 17. TOTAL DEPTH OF HOLE 79' |                                 |

| BIT TYPE & NO. | GEOLOGIC NAME | STRATIGRAPHIC COLUMN | DEPTH | ELEVATION | CLASSIFICATION OF MATERIALS<br>DESCRIPTION<br>AND REMARKS                        | UNCONFINED<br>COMPRESSION | STANDARD PENETRATION<br>OR<br>CASING DRIVE |       |
|----------------|---------------|----------------------|-------|-----------|----------------------------------------------------------------------------------|---------------------------|--------------------------------------------|-------|
|                |               |                      |       |           |                                                                                  |                           | Depth                                      | ELEV. |
|                |               |                      | 0°    | 969.1     |                                                                                  |                           | 0°                                         |       |
| Casing         | Mantle        |                      |       | 960       | Mantle, clay with limestone rubble, some larger limestone pieces in the lower 1' |                           |                                            | 960   |
|                | Curzon Mbr.   |                      | 14'   | 954.1     |                                                                                  |                           |                                            |       |
|                | Iowa Point    |                      | 15.7  | 953.4     | Limestone weathered, orange to gray brown                                        |                           |                                            |       |
|                |               |                      | 16.5  | 952.6     | Shale, soft, clayey                                                              |                           |                                            |       |
|                |               |                      | 17.8  | 951.3     | Limestone, grayish-brown, weathered                                              |                           |                                            |       |
|                | Hartford Mbr. |                      | 19.3  | 949.8     | Shale, soft, yellowish brown to orangish                                         | 183.140                   | 20°                                        | 949.1 |
|                |               |                      |       |           | Limestone, upper 0.5' weathered, orange-brown                                    | 500.400                   | 21°                                        | 947.3 |
|                |               |                      | 24'   | 944.4     | middle section massive, hard, gray                                               |                           |                                            |       |
|                |               |                      |       |           | lower 0.8' shaly, impure, gray                                                   | 6.117                     | 25°                                        | 943.3 |
|                |               |                      | 28.1  | 941.0     | Shale, dark gray, sandy, micaceous                                               |                           |                                            |       |
|                |               |                      | 30.2  | 938.4     | Sandstone, very shaly, dark gray                                                 | 12.007                    | 29°                                        | 939.7 |
|                |               |                      | 33.2  | 936.1     | Shale, sandy, dark gray                                                          | 33.007                    | 32°                                        | 936.9 |
|                |               |                      | 36.2  | 932.5     | Sandstone, shaly upper + lower, gray                                             | 63.423                    | 34°                                        | 934.4 |
|                |               |                      |       | 931       | Shale, sandy, numerous thin sandstone lenses, gray                               | 52.053                    | 38.2°                                      | 930.9 |
|                |               |                      | 43.1  | 926.0     |                                                                                  | 5.432                     | 41°                                        | 927.2 |
|                |               |                      | 44.2  | 924.2     | Sandstone, gray                                                                  |                           |                                            |       |
|                |               |                      | 48.2  | 920.3     | Shale, very sandy, gray                                                          | 10.273                    | 46°                                        | 922.2 |
|                |               |                      |       |           | Sandstone, shaly upper 2' and lower 0.5', gray                                   | 149.625                   | 51°                                        | 917.7 |
|                |               |                      | 54.2  | 914.4     |                                                                                  |                           |                                            |       |
|                |               |                      |       | 910       | Shale, sandy, gray grades to clayey lower 2'                                     | 26.881                    | 56°                                        | 912.8 |
|                |               |                      |       |           |                                                                                  | 54.042                    | 57°                                        | 911.8 |
|                |               |                      |       |           |                                                                                  |                           |                                            | 910   |
|                |               |                      | 72.3  | 896.8     |                                                                                  |                           |                                            | 900   |
|                |               |                      | 75.1  | 894.0     | Shale, limy                                                                      |                           |                                            |       |
|                |               |                      | 77.6  | 891.5     | Limestone, shaly, shale lenses                                                   |                           |                                            |       |
|                |               |                      |       |           | Limestone, hard, gray                                                            |                           |                                            |       |

TD 890.1