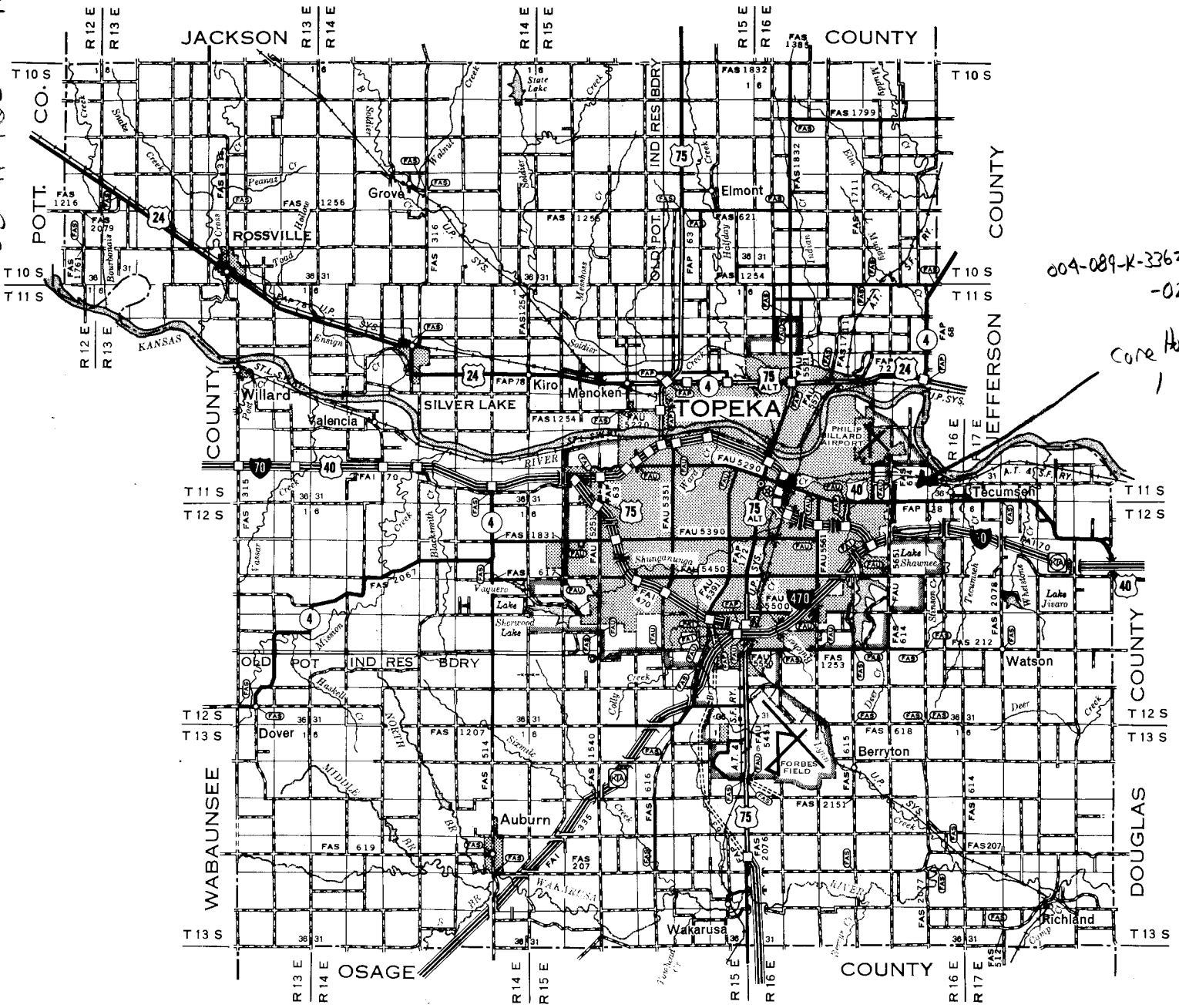
Oakland Expressway over SE 2nd Street
In Topeka

NW NW SE
35-11-16E

009-089-K-3362
-02
Core Hub
1



LEGEND

ROADS AND ROADWAY FEATURES

- PRIMITIVE ROAD
- UNIMPROVED ROAD
- GRADED AND DRAINED ROAD
- SOIL SURFACED ROAD
- GRAVEL OR STONE ROAD—NOT GRADED OR DRAINED
- GRAVEL OR STONE ROAD—GRADED AND DRAINED
- GRAVEL OR STONE ROAD WITH STABILIZED SURFACE
- BITUMINOUS ROAD—LOW TYPE
- PAVED ROAD
- DIVIDED HIGHWAY
- HIGHWAY WITH FULL CONTROL OF ACCESS AND INTERCHANGE

ROAD SYSTEM DESIGNATION

- FEDERAL-AID INTERSTATE HIGHWAY SYSTEM — FAI
- FEDERAL-AID PRIMARY HIGHWAY SYSTEM — FAP
- FEDERAL-AID SECONDARY HIGHWAY SYSTEM — FAS
- INTERSTATE NUMBERED HIGHWAY — 70
- U S NUMBERED HIGHWAY — 40
- STATE HIGHWAY SYSTEM OR STATE NUMBERED HIGHWAY — 20
- END OF DESIGNATED SYSTEM OR MARKED ROUTE — 24 FAP

POLYCONIC PROJECTION

KEY TO COUNTIES

FA SYSTEM REVISED TO MAR. 15, 1988

GENERAL HIGHWAY MAP
SHAWNEE COUNTY
KANSAS

PREPARED BY THE
KANSAS DEPARTMENT OF TRANSPORTATION
BUREAU OF TRANSPORTATION PLANNING
IN COOPERATION WITH THE
U. S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

SCALE 0 1 2 3 4 MILES

1986

KANSAS DEPARTMENT OF TRANSPORTATION

1. ROUTE-COUNTY NO. 004-089	7. SOUNDING NO. 1	12. SHEET 01 OF 03
2. BRIDGE STA. 511+87.21	8. PROJECT NO. K-3362-04	13. BRIDGE NO. 26, 28
3. DESCRIPTION W.B. Oakland Expressway over SE 2nd St.		14. HOLE STA. 510+85.42 Lt ℄
4. GEOLOGIST Billinger	9. VERTICLE SCALE 1"=10'	15. DATE 1-5-94
5. DRILLER Shull	10. RIG B-61	16. ELEVATION TOP OF HOLE 889.7
6. GROUND WATER ELEV. ———	11. TOTAL DEPTH OF HOLE 76.9	17. ELEVATION TOP OF ROCK 884.3

BIT TYPE & NO.	GEOLOGIC NAME	STRATIGRAPHIC COLUMN	DEPTH	ELEVATION	CLASSIFICATION OF MATERIALS DESCRIPTION AND REMARKS	UNCONFINED COMPRESSION	STANDARD PENETRATION OR CASING DRIVE Depth	STANDARD PENETRATION OR CASING DRIVE ELEV.
			0°	889.7				
	Mantle		5.4	884.3	Brown Clay grading to an orange till. Small erratic gravel.	1.41	4°	885.7 Shelby
	Ozawkie Mbr.	1	10.05	880	Limestone, weathered, orangish, Vuggy, fossiliferous	131.59	8.3	881.4
		879.7						
		2			Shale, gray-green, sandy. numerous hard Sandstone lenses.	2.52	11.6	878.1
		3				4.85	16°	873.7
		4		870	871.3	7.07	21°	868.7
		5			Shale, gray grading to dark gray, clayey with sandy zones.	4.56	24'	865.6
Diamond		6		860		20.04	31.5	858.2
	Tecumseh Frm.	7			853.2	11.53	35°	854.7
		8		850	Shale, dark gray, clayey, very firm	25.93	38.8	850.9
		9				21.51	43.9	845.9
		10		840		14.95	48.6	841.1
Hawthorn			70.4	820	819.3			
	Avoca Mbr.		74.4	815.3	Limestone, hard unit bedded, shaly break ±1° from top 0.4 thick			
	King Hill Mbr.		76.9	812.8	Shale, gray green, very firm grades to limy. Shale lower 0.5			
				810				

J. Jimenez

KANSAS DEPARTMENT OF TRANSPORTATION

Report of sample of Geology Cores

Laboratory No. 94-0022

Date Rep'td. January 18, 1994

Date Rec'd. January 06, 1994

Specification No. - - Quantity - - -

Source of material Project

Sample from Project

Submitted by John Jimenez, Lawrence Geology Office

Identification marks Tags with samples

Project or POV 4-89 K-3362-04, Bridge #26.28, Shawnee County, District 1

Type of construction Bridge

TEST RESULTS

Sample No.	Station	Dist.ft. CL	Depth ft.	Description	Qu. t.s.f.	Sample p.c.f. by Dry Wt.	Moisture (% of Dry Wt.)
Sh-1	510+85	42 Lt	2^{0}-4^{0}	Clay, Till	1.412	94.1	17.0
CD-1	"	"	7^{6}-8^{25}	Ls orange weathered	131.596	137.1	8.7
CD-2	"	"	10^{85}-11^{6}	Sh, olive gray	2.519	118.3	16.0
CD-3	"	"	15^{1}-16^{0}	Sh, Sandy	4.850	121.3	14.3
CD-4	"	"	20^{1}-21^{0}	Shale, gray, firm	7.075	123.7	12.3
CD-5	"	"	23^{5}-24^{1}	" " "	4.563	121.0	13.9
CD-6	"	"	30^{75}-31^{5}	" " "	20.040	130.1	10.7
CD-7	"	"	34^{35}-35^{0}	" " "	11.533	128.5	11.4
CD-8	"	"	38^{0}-38^{8}	" " "	25.929	131.3	10.6
CD-9	"	"	43^{3}-43^{85}	" " "	21.514	132.0	10.6
CD-10	"	"	48^{0}-48^{6}	" " "	14.956	123.9	11.7

See attached routine analysis results.

cc: L.S. Ingram
L.A. Rockers
J. Jimenez ✓
J.J. Brennan
Soil Section
File

Reported by Mavis Hunt for

Title James J. Brennan, Soils Engineer

Rev. 3-76

D.O.T. Form No. 623

Project # 004-089-K-3362-02 Oakland Expressway over SE 2nd Street in Topeka

12 SE 2nd Street Bridge

Core hole
Log
Sta 510+85, 12 Lt & project
B-61
Randy, Harold, Bryan.
Matt, John A.

889.7	0°-2°
	2°-4°
	4°-5⁴
884.3	5⁴-10⁰⁵
879.7	10⁰⁵-18⁴
	18⁴-36⁵
	36⁵-70⁴
819.3	70⁴-70⁹
	70⁹-71³
	71³-74⁴
815.3	74⁴-76⁵
	76⁵-76⁹
812.8	76⁹

mantle, Clay, brown
Shelby 1. pushed 2°, Recov 1⁹ clay, glacial till, orange, small erratic gravel mixed.
mantle, till orange
Ozawkie Ls
Ls, weathered, orange, vuggy, hard, fossil. ferous (R)
Shale, olive gray, sandy, ss lenses
Shale, gray grading to dark gray, clayey to sandy, scattered ss lenses, grades
Shale, dark gray, clayey, very firm.
lower 0⁵ grades to limy shale
Tecumseh Shale
Ls, hard
Ls shaly
Avoca Ls
Ls, hard, unit bedded
shale, limey, gray-green
Shale, more limy
King Hill shale
SLS

Note; casing 0°-5⁴
cored 5⁵-50°
Strat 50°-76⁹

Core hole 1

Core 1 5^5-7^6 cored 2' Recov. 1^{75} 2' RQD = $0^7/2'$ X100 = 33%		5^5-7^6	LS, very weathered, orange, vuggy fossiliferous, hard (R) No Sample taken
Core 2 7^6-12^2 Cored 4^6 Recov 4^6 RQD $3^6/4^6$ X100 = 78.2%	 sample 1 sample 2	7^6-10^{05} 10^{05}-12^2 7^6-8^{25} 10^{85}-11^6	LS, weathered, vuggy, orange, fossiliferous Shale, olive, gray, clayey, firm LS, weathered, orange Shale, olive gray clayey
Core 3 12^2-17^0 cored 4^2 Recov. 4^7 RQD = $3^6/4^4$ X100 = 81%	 sample 3	12^2-17^0 15^1-16^0	Shale, sandy, hard iron ss lenses gray-green Shale, sandy, gray-green, ss lenses very firm 15^1-16^0
Core 4 17^0-21^5 cored 4^5 Recov. 4^5 RQD. $32/45$ X100 = 71%	 sample 4	17^0-18^4 18^9-21^5 20^1-21^0	Shale, sandy, gray green shale grades to dark gray, clayey, firm some ss lenses in upper part Shale, gray, clayey firm

core 5 21⁵-26⁵ cored 5⁰ Recov. 5⁰ RQD = 3⁵/₅⁰ = 70%	/ Sample 5	21⁵-26⁵ 23⁵-24'	Shale, dark gray, clayey, firm Shale, dark gray
Core 6 26⁵-31⁵ cored 5⁰ Recov 5⁰ RQD = 100%	Sample 6	26⁵-31⁵ 30⁷⁵-31⁵	Shale, dark gray, firm, clayey Shale, dark gray
core 7 31⁵-36⁵ cored 5⁰ Recov 5⁰ RQD = 4³/₅⁰ = 86%	Sample 7	31⁵-36⁵ 34³⁵-35⁰	Shale, dark gray, clayey to sandy in zones, very firm Shale, dark gray, clayey
Core 8 36⁵-41³ cored 4⁸ Recov. 5⁰ RQD 2⁵/₄⁸ = 52%	Sample 8 RQD may actually be higer. beleive we broke some.	36⁵-41³ 38⁰-38⁸	all shale, dark gray clayey Shale, gray, very firm

core 9
41^3-45^8
cored 4^5
Recov. 4^5
RQD = 100%

Sample 9

43^3-43^{85} shale, gray, firm

core 10
45^8-50^0
Cored 4^2
Recov 3^9
RQD = 100%

Sample 10

45^8-50^0 shale, dark gray, very firm

98^0-98^6 shale, gray

70 25 80
65