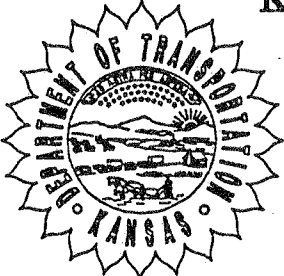
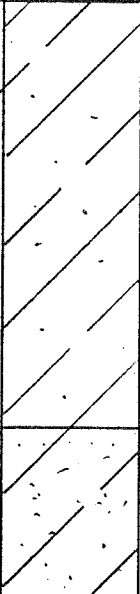
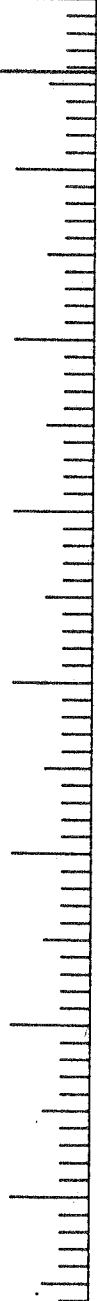


22-11-16E
E2 SE NE



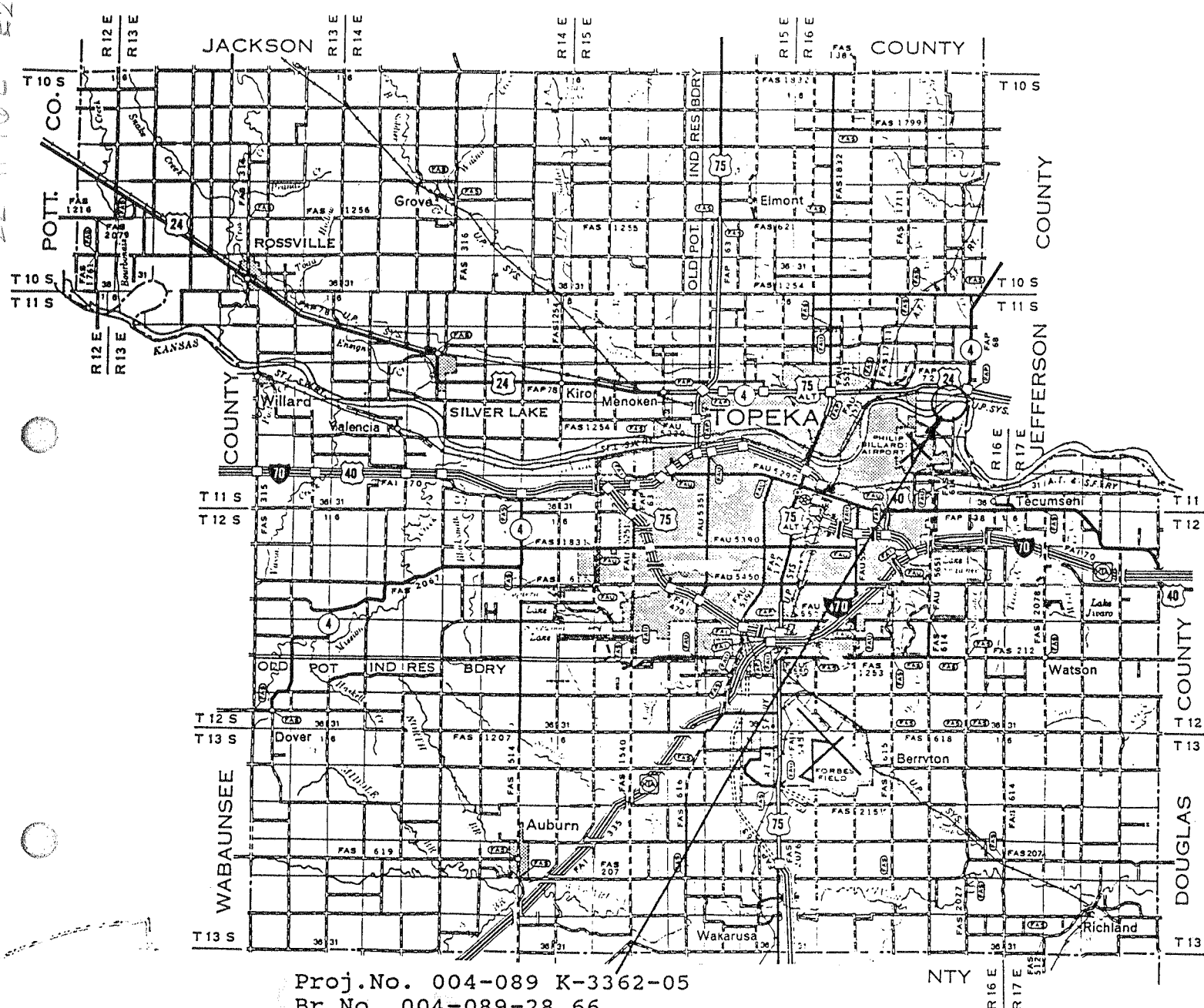
KANSAS DEPARTMENT OF TRANSPORTATION

1. ROUTE-COUNTY NO. 004-089	7. SOUNDING NO. 5	12. SHEET 01 OF 04
2. BRIDGE STA. 637+48.25	8. PROJECT NO. K-3362-01	13. BRIDGE NO. 28.66
3. DESCRIPTION Oakland Expressway	9. VERTICLE SCALE 1"=10'	14. HOLE STA. 618+50
4. GEOLOGIST Billinger	10. RIG B-61	15. DATE 4-19-93
5. DRILLER Shall	11. ELEVATION TOP OF HOLE 865.9	16. ELEVATION TOP OF ROCK 794.4
6. GROUND WATER ELEV. 855.9	17. TOTAL DEPTH OF HOLE 107'6"	

BIT TYPE & NO.	GEOLOGIC NAME	STRATIGRAPHIC COLUMN	DEPTH	ELEVATION	CLASSIFICATION OF MATERIALS DESCRIPTION AND REMARKS	UNCONFINED COMPRESSION	STANDARD PENETRATION OR CASING DRIVE	
							BLOWS	ELEV.
Casing	Alluvium		0°	865.9	Silt, slightly Sandy brown grading to gray-brown			
				860				
				850	Silt, Sandy, gray			
			25°	840.9				
				830.9	Sand with gravel beds.			
			35°					
				820				
				810				
				800				
				794.4				
			71°5'					

DRILLING LOG (con't sheet)			SOUNDING NO. 5		PROJECT NO. K-3362-01		SHEET 02 OF 04	
ELEVATION TOP OF HOLE 865.9			GROUND WATER ELEV. 855.9		TOTAL DEPTH OF HOLE 107'6"		ELEVATION TOP OF ROCK 794.4	
BIT TYPE & NO.	GEOLOGIC NAME	STRATIGRAPHIC COLUMN	DEPTH	ELEVATION	CLASSIFICATION OF MATERIALS DESCRIPTION AND REMARKS	UNCONFINED COMPRESSION	STANDARD PENETRATION OR CASING DRIVE	
							BLOWS	ELEV.
D. mond	Tecumseh shale	1	79'05"	790	Shale, gray, Firm	2.9		789.8
		2		786.9		5.9		787.1
	Avoca LS	3	83'95"	782.0	Limestone, gray, massive impure zones.	542.7		785.2
		4	86'0"	779.9	Shale, gray-green	792.8		782.6
	King Hill shale	5	89'3"	776.6	Limestone, greenish	38.7		780.8
		6	91'9"	774.0	shale, limy, greenish gray	265.4		778.3
	Beil LS	7	100'7"	765.2	Limestone, massive, gray upper 1' shaly breaks	12.4		774.9
		8	104'45"	761.5	shale, fissile, black	116.0		772.3
	Queen Hill shale	9	107'6"	758.3	Limestone, gray	193.4		768.3
Big Spring LS					125.8		766.2	
					93.1		762.7	
					503.5		760.8	

22-1-16 E2 E2

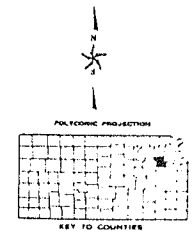


Proj.No. 004-089 K-3362-05
Br.No. 004-089-28.66
Oakland Expressway over the Kansas River
Sta.637+48.25
Shawnee County

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
 - FEDERAL-AID PRIMARY HIGHWAY SYSTEM
 - FEDERAL-AID SECONDARY HIGHWAY SYSTEM
 - INTERSTATE NUMBERED HIGHWAY
 - U.S. NUMBERED HIGHWAY
 - STATE HIGHWAY SYSTEM OR STATE NUMBERED HIGHWAY
 - END OF DESIGNATED SYSTEM OR MARKED ROUTE



FA SYSTEM REVISED TO MAR. 15, 1968

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

