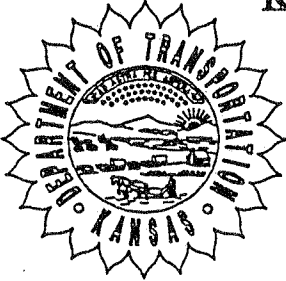


KANSAS DEPARTMENT OF TRANSPORTATION



1. ROUTE-COUNTY NO. 004-089	7. SOUNDING NO. 3	12. SHEET 01 OF 03
2. BRIDGE STA. 637+48.25	8. PROJECT NO. K-3362-01	13. BRIDGE NO. 28.66
3. DESCRIPTION Oakland Expressway		14. HOLE STA. 612+23
4. GEOLOGIST Billinger	5. VERTICLE SCALE 1"=10'	6. DATE 4-6-93
7. DRILLER shall	8. RIG B-61	9. ELEVATION TOP OF HOLE 865.7
10. GROUND WATER ELEV. 857.7	11. TOTAL DEPTH OF HOLE 966	12. ELEVATION TOP OF ROCK 795.7

BIT TYPE & NO.	GEOLOGIC NAME	STRATIGRAPHIC COLUMN	DEPTH	ELEVATION	CLASSIFICATION OF MATERIALS DESCRIPTION AND REMARKS	UNCONFINED COMPRESSION	CASING DRIVE	
							BLOWS	ELEV.
			00	865.7	Strat. Hole			
				860				860
				850	very fine sandy silt grades to fine sand		31	
							24	850
							16	
			233	842.4				
				840			44	840
							58	
				830	sand with numerous gravel beds.		38	830
							45	
				820			55	820
							47	
				810			80	810
							68	
				800			70	800
			700	795.7			153	795
	Recumseh Shale				Shale weathered			

22-11-16E
E2 SE NE

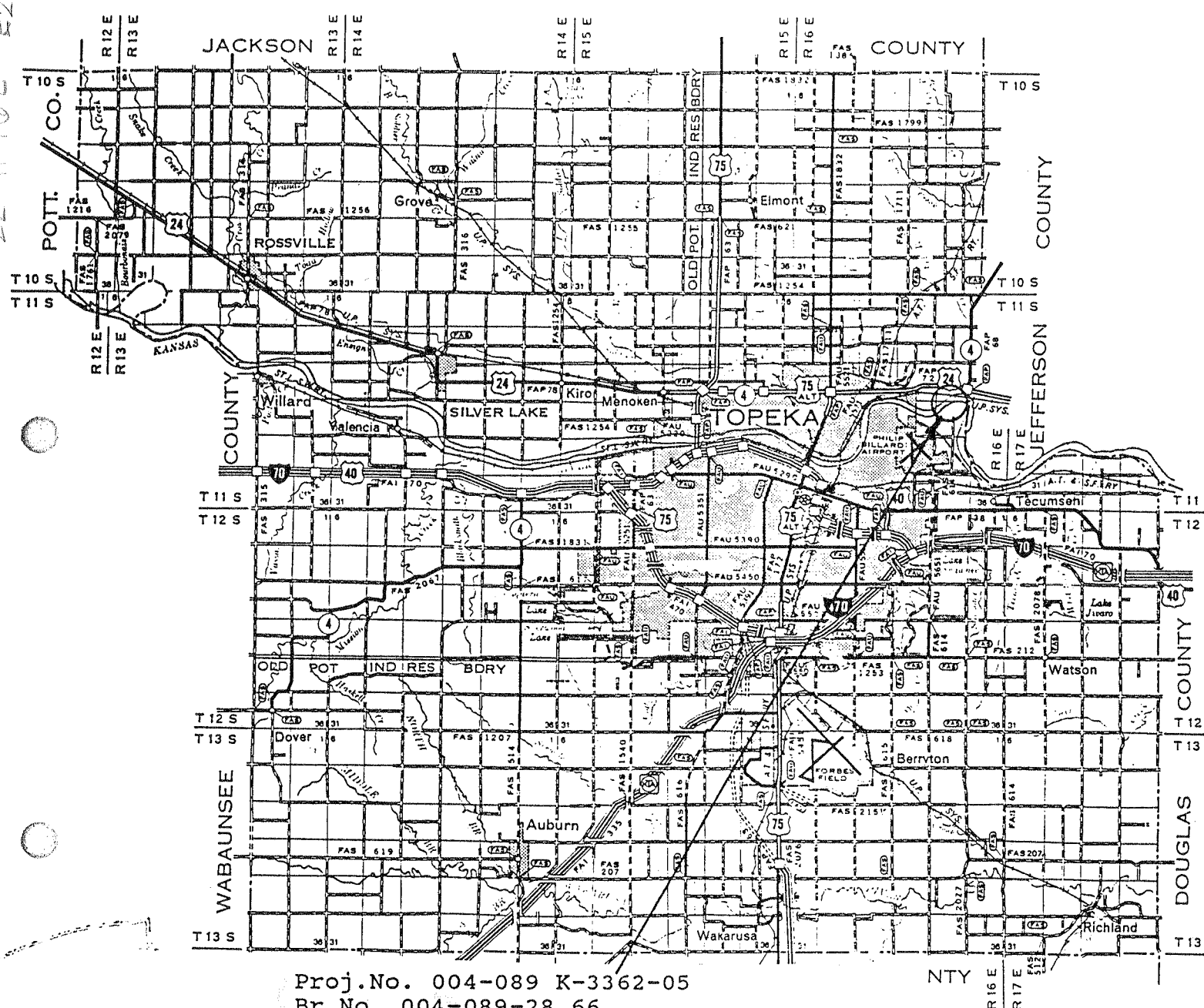


KANSAS DEPARTMENT OF TRANSPORTATION

1. ROUTE-COUNTY NO. 009-089	7. SOUNDING NO. 3	12. SHEET 02 OF 03
2. BRIDGE STA. 637+48.25	6. PROJECT NO. K-3362-01	13. BRIDGE NO. 28.66
3. DESCRIPTION Oakland Expressway	14. HOLE STA. 612+23	
4. GEOLOGIST Billinger	5. VERTICLE SCALE 1"=10'	15. DATE 4-6-93
5. DRILLER Shull	16. RIG B-61	17. ELEVATION TOP OF HOLE 865.7
6. GROUND WATER ELEV. 857.7	18. TOTAL DEPTH OF HOLE 96.6	19. ELEVATION TOP OF ROCK 795.7

BIT TYPE & NO.	GEOLOGIC NAME	STRATIGRAPHIC COLUMN	DEPTH	ELEVATION	CLASSIFICATION OF MATERIALS DESCRIPTION AND REMARKS	UNCONFINED COMPRESSION	STANDARD PENETRATION CASING DRIVE	
							BLOWS	ELEV.
Diamond			70.0	795.7				
	Tecumseh shale		76.1	790.6	Shale, gray		153	795.7
	Avoca Ls.		79.2	786.5	Limestone, hard, dense, massive		Refusal	792.4
	King Hill shale		82.1	783.6	Shale, gray, firm			
			84.3	781.4	Limestone, gray, hard, medium bedded			
			87.9	777.8	Shale, limy, gray-green			
	Beil Ls.		96.6	770.1	Limestone, gray, hard			
				760				

22-1-16 E2 E2

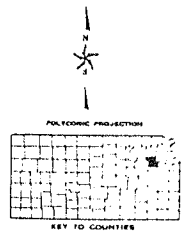


Proj.No. 004-089 K-3362-05
Br.No. 004-089-28.66
Oakland Expressway over the Kansas River
Sta.637+48.25
Shawnee County

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

