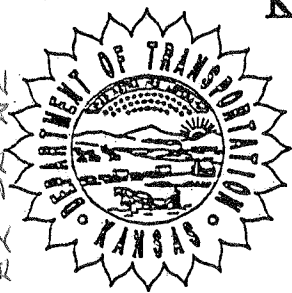
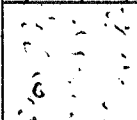
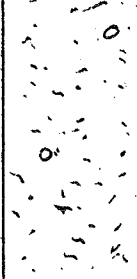
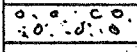


22-11-16 E
E2 SE A

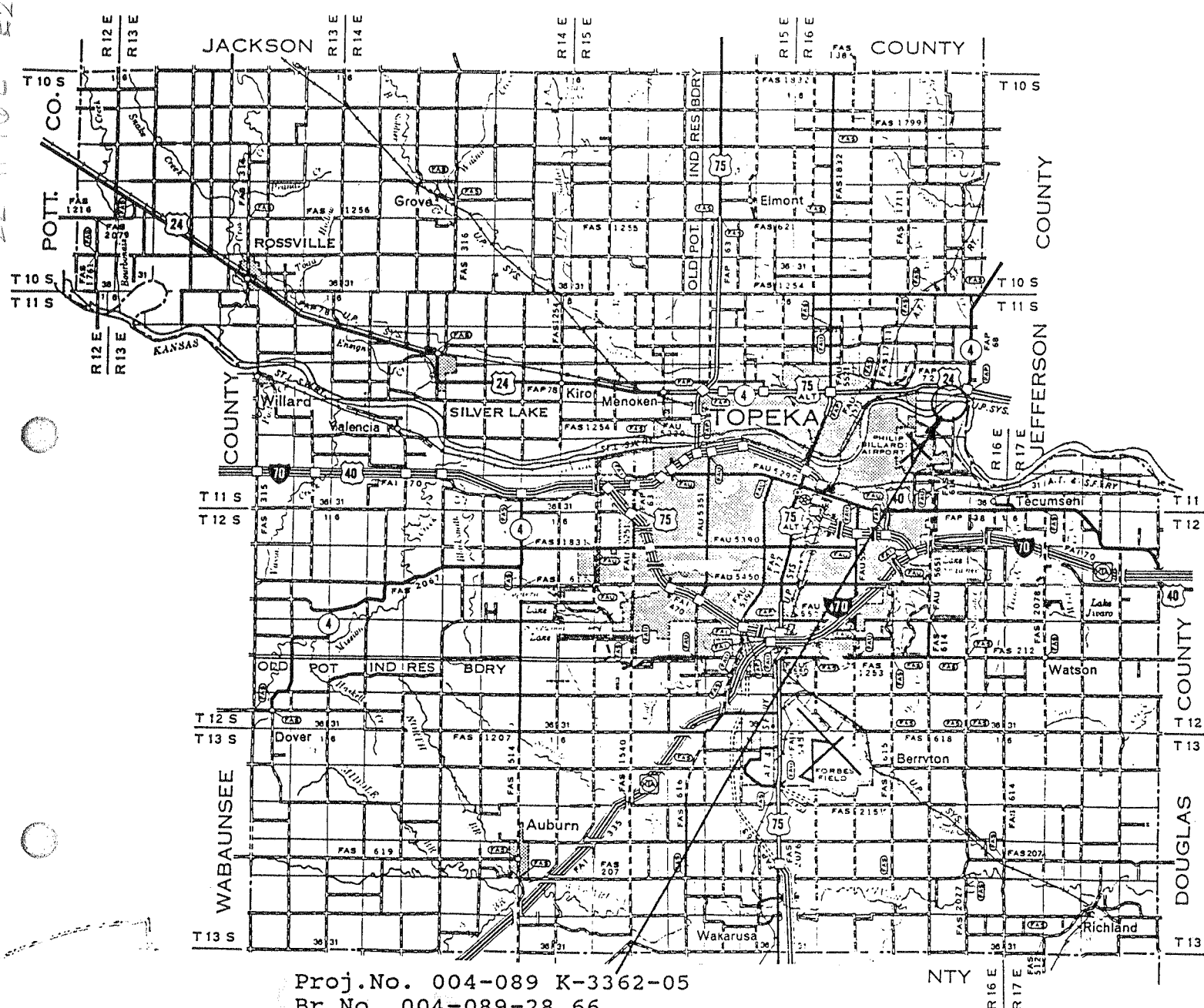


1. ROUTE-COUNTY NO. 004-089	7. SOUNDING NO. 7	2. SHEET 01 OF 04
2. BRIDGE STA. 637+48.25	8. PROJECT NO. K-3362-01	3. BRIDGE NO. 28.66
3. DESCRIPTION Oakland Expressway over Kansas River	4. GEOLOGIST Billinger	4. HOLE STA. 644+50
5. DRILLER Shall	5. VERTICLE SCALE 1"=10'	5. DATE 4-30-93
6. GROUND WATER ELEV. 852.3	6. RIG B-61	6. ELEVATION TOP OF HOLE 868.3
	7. TOTAL DEPTH OF HOLE 845	7. ELEVATION TOP OF ROCK 826.5

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°	868.3	Silt, Sandy. brown			
			7°	861.3				
								
			850					
			30°	840				
			838.3					
		32°	836.3	Gravel + coarse sand sand, and some small gravel				
		830						
	418	826.5						
Tecumseh Shale				Shale weathered, upper 10° Shale, gray, firm shale, limy. gray shale, gray, firm				
		1	820					
		2						
		3						
		4	810					
		5						
		6	801.7					
		800						
		7						
		8						

DRILLING LOG (con't sheet)		SOUNDING NO. 7		PROJECT NO. K-3362-01		SHEET 02 OF 04	
ELEVATION TOP OF HOLE 868.3		GROUND WATER ELEV. 852.3		TOTAL DEPTH OF HOLE 845		ELEVATION TOP OF ROCK 826.5	
BIT TYPE & NO.	GEOLOGIC NAME	STRATIGRAPHIC COLUMN	DEPTH	ELEVATION	CLASSIFICATION OF MATERIALS DESCRIPTION AND REMARKS	UNCONFINED COMPRESSION	STANDARD PENETRATION OR CASING DRIVE ELEV.
	Tecumseh Shale	9	78 ⁹	789.4	Shale, gray, firm		
	Avoca Ls.	10	83 ⁹	784.9	Limestone, unit bedded, gray, hard upper 1' impure gradational, fossiliferous	761.0	787.8
	King Hill shale		84.5	783.8	Shale, clayey, greenish limestone, earthy, dull white-gray	764.3	785.5

22-1-16 E2 E2

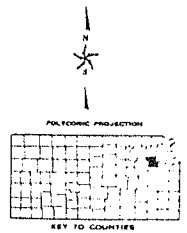


Proj.No. 004-089 K-3362-05
Br.No. 004-089-28.66
Oakland Expressway over the Kansas River
Sta.637+48.25
Shawnee County

LEGEND

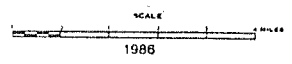
- ROADS AND ROADWAY FEATURES**
- PRIMITIVE ROAD.....
 - UNIMPROVED ROAD.....
 - GRADED AND DRAINED ROAD.....
 - SOIL SURFACED ROAD.....
 - GRAVEL OR STONE ROAD.....
 - NOT GRADED OR DRAINED.....
 - GRAVEL OR STONE ROAD.....
 - GRADED AND DRAINED.....
 - GRAVEL OR STONE ROAD WITH STABILIZED SURFACE.....
 - 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.....



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



FA SYSTEM REVISED TO MAR. 15 1968