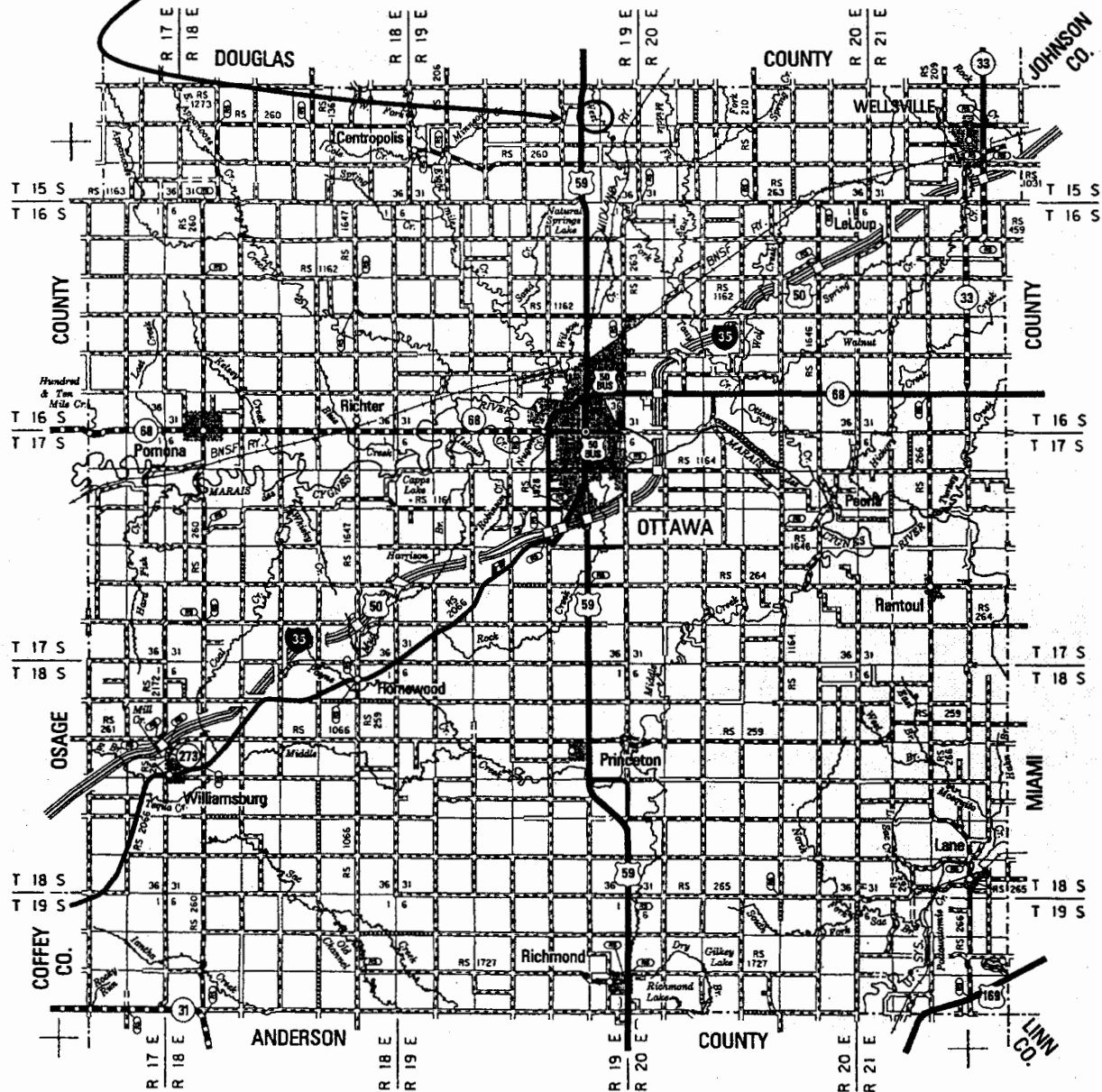


Project 59-30 K-7889-01
US-59 over West Fork Taub Creek

14-15-19E
SW-SE



Franklin County

KANSAS DEPARTMENT OF TRANSPORTATION

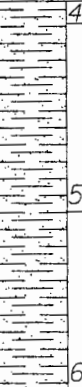


RTE./CO. 59-30	SOUNDING NO. 1	SHEET 1 OF 2
BRIDGE STA. 411+79 North Bound 411+93 South Bound	PROJ. NO. K-7889-01	BRIDGE NO. 59-30 25.61 (115) 25.62 (116)
SITE NAME US-59 over Tany Creek (N)	HOLE STA. 411+33 25 Lt	
GEOLOGIST Billinger	SCALE 1 unit= 2 ft	DATE 6/8/05
DRILLER Burns	RIG TYPE CME-55	TOP HOLE ELEV. 949.40
GW ELEV. ft	TOTAL DEPTH 38.8 ft	M/B ELEV. 935.40

BIT TYPE	GEOLOGIC NAME	STRATIGRAPHIC COLUMN	DEPTH	ELEVATION	CLASSIFICATION OF MATERIALS DESCRIPTION AND REMARKS	UNCONFINED COMPRESSION (tsf)	STANDARD PENETRATION TEST (SPT)	
							N COUNT	ELEVATION
					THE-949.40			
8" Augers	Mantle			949	Brown to light brown silty clay, moist	0.268		
				947				
				945				
				943				
				941				
				939				
				937				
				935.4				
				935				
				933				
"WC" Diamond	Haskell LS Member		17.9	935	Limestone-Upper two tenths weathered brown and shaly. Below weathered zone, hard dense gray limestone, with thin shaly seam	419.5		934.2
				933				
	Vinland Shale Member		1	931	Shale-gray firm, sandy. Thin coal seam present with a thin zone of soft clayey shale beneath it.	10.95		930.4
				929				
				927				
				925				
				923				
			4			8.9		921.6

KANSAS DEPARTMENT OF TRANSPORTATION

RTE./CO. 59-30	SOUNDING NO. 1	SHEET 2 OF 2
BRIDGE STA. 411+79 North Bound 411+93 South Bound	PROJ.NO. K-7889-01	BRIDGE NO. 59-30 25.61 (115) 25.62 (116)
SITE NAME US-59 over Tavy Creek (N)		HOLE STA. 411+33 25 Lt

BIT TYPE	GEOLOGIC NAME	STRATIGRAPHIC COLUMN	DEPTH	ELEVATION	CLASSIFICATION OF MATERIALS DESCRIPTION AND REMARKS	UNCONFINED COMPRESSION (tsf)	STANDARD PENETRATION TEST (SPT)	
							N COUNT	ELEVATION
"NC" Diamond	Vinland Shale Member		38.8	921	Shale-continued,sandy in lower 17 feet.			
				919				
				917				
				915				
				913				
				911				

US-59 over West Fork Taub Creek Bridge 115 & 116

Project No. 59-30 K-7889-01

Note: All measurements are in English

	<u>Elevation</u>	<u>Depth</u>	
Core Hole #1	949.40	0.00	Silty clay, brown.
Sta. 411+ 33	944.40	5.00	Pushed shelby #1. 5.0 to 7.0 ft. Silty clay, brown.
25 Lt. of centerline	942.40	7.00	Silty clay, brown. Mantle
Date Drilled 6/8/05	939.40	10.00	Pushed shelby #2. 10.0 to 12.0 ft. Silty clay, light brown wet.
Geologist: R. Billinger	937.40	12.00	Silty clay, brown.
Driller: Jim Burns	935.40	14.00	Limestone. Begin coring.
Water depth not recorded			

Haskell Limestone Member

Core # 1	935.40	14.00	Limestone, shaly, brown.
14.0 to 19.0 ft.	935.20	14.20	Limestone, massive, gray.
Cut 5.0 ft.	933.00	16.40	Limestone very shaly, gray.
Recovered 5.0 ft.	932.80	16.60	Limestone, massive, gray.
RQD = 96%	931.50	17.90	Shale, sandy, firm, gray.
	930.40	19.00	End core 1.

Vinland Shale Member

Sample 1 14.6 to 15.2 Limestone, gray.
Sample 2 18.4 to 19.0 Shale, gray.

Core # 2	930.40	19.00	Shale, gray, firm.
19.0 to 21.2 ft.	929.50	19.90	Coal seam.
Cut 2.2 ft.	929.30	20.10	Shale, gray, crumbly, soft.
Recovered 2.2 ft.	929.00	20.40	Shale, firm, blocky, gray.
RQD = 41%	928.20	21.20	End core 2.

Core # 3	928.20	21.20	Shale, gray, sandy to silty.
21.2 to 24.0 ft.	925.40	24.00	End core 3.
Cut 2.8 ft.			
Recovered 2.8 ft.			
RQD = 71%			

Vinland Shale Member

Core # 4	925.40	24.00	Shale, firm, gray, sandy to silty.
24.0 to 29.0 ft.	920.40	29.00	End core 4.
Cut 5.0 ft.			
Recovered 5.3 ft.			Sample 3 27.0 to 27.8 Shale firm, gray sandy to silty.
RQD = 96%			

US-59 over West Fork Taub Creek Bridge 115 & 116

Project No. 59-30 K-7889-01

	<u>Elevation</u>	<u>Depth</u>	
Core # 5	920.40	29.00	Shale, firm, gray, sandy to silty.
29.0 to 34.0 ft.	915.40	34.00	End core 5.
Cut 5.0 ft.			
Recovered 5.2 ft.			
RQD = 92%			

Vinland Shale Member

Core # 6	915.40	34.00	Shale, firm, gray, sandy to silty.
34.0 to 38.8 ft.	910.60	38.80	End core 6. Total depth.
Cut 4.8 ft.			
Recovered 5.3 ft.			Sample 4 37.4 to 37.9 Shale gray.
RQD = 92%			

US-59 over Tany Creek
 Matl Floresh land $\frac{1}{2}$ mile North of
 Stafford Terrace. Core on key on
 South side of creek
 Randy, Jim, Shawn, Justin Andy
 June 8, 2005
 Station
 411+33, 25 Lt
 About 1 SB

973.25 0°-5°

968.25 5°-7°

966.25 7°-10°

963.25 10°-12°

961.25 12°-13° 140

959.25 13°-140

54.25

973.25

115.25

14

179.8

154.25

35.35

3.70

Soil mantle, brown Top Soil
~~grades into yellow-brown silty clay~~
 Shelby 1 Silty clay, brown
 pushed 2° Recovered 1°
 Silty clay brown
 Shelby 2 pushed 2° Recov. 2°
 Silty clay light brown wet
 Same
 LS.

Start coring @ 138 140

Core 1
 140-190
 Cut 5'
 Recov 45/50
 RQD = 48/50

959.25 140-142
 959.05 142-164
 956.85 164-166
 956.65 166-174
 955.35 174-190
 954.25 190-

Core 2
 190-212
 Cut 2'
 Recov 22
 RQD = 09/22

954.25 190-199
 953.35 199-201
 953.15 201-204
 952.85 204-212
 952.05 212

Core 3
 212-240
 Cut 2'
 Recov 28
 RQD = 20/28

952.05 212-240
 949.25 240

LS, shaly, brown
 LS, massive, gray
 LS, very shaly gray
 LS, massive, gray
 Shale, sandy, firm gray

End core 1 958.65-958.05

Sample 1 146-152

Sample 2 184-190

954.85-954.25

LS gray

Shale, gray

Shale firm gray

Coal

Shale, crumbly soft

Shale firm blocky

End core 2

Shale, gray, slightly sandy/silty
 firm

End Core 3

Core 4
24°-29°
Cut 5⁰
Recov. 53
RQD = 48/50

~~229~~
949.25 24°-29°
944.25 29°

Shale, firm, gray, sandy/silty
End core 4

Sample 3 27°-278 shale, gray
944.25 - 945.45

Core 5
29°-34°
Cut 5⁰
Recov. 52
RQD = 46/50

944.25 29°-34°
939.25 34°

Shale, gray, firm, sandy
~~core~~ End core 5
~~Sample~~

Core 6
34°-388
Cut 48
Recov. 53
RQD = 44/48

939.25 34°-388
934.45 388

Shale, gray sandy/silty
End core 6
Sample 4 374-379 shale gray
935.85 - 935.35

934.45 388

Total Depth
Drill broke down

Kansas Department of Transportation

Report of sample of shelby tubes

Laboratory No. 05-2102

Date Reported: 6/13/2005

Date Received: 6/9/2005

Specification N°. AASHTO T-208

Source of Material 59-30 K-7889-01

Sampled from 59-30 K-7889-01

Submitted by: Randy Billinger

Identification marks: Tags on samples

Project or POV 59-30 K-7889-01

Description of site: Bridges 115 & 116 north of Stafford Terrace

Type of Construction Bridge

Quantity: 2

County: Franklin

TEST RESULTS

Sample No.	Station	Offset (FT)	Depth (FT)	Description	Unconfined. Compression Qu (psf)	Elastic Modulus E (psf)	Dry Density γ_d (pcf)	Moisture Percent w %
SH-1	411+33	25 LT	5.0-7.0	Silty clay	535	5200	88	32.9
SH-2	"	"	10.0-12.0	Silty clay, wet	*	*	92	37.8

* not tested

See attached routine test results

cc: L.S. Ingram
R. Fuller
R. Henthorne
R. Billinger
Soil Section
File 18-3

Reported by: _____

Title: Robert A. Fuller; Soils Engineer

Kansas Department of Transportation

Report of sample of geology cores

Laboratory No. 05-2103

Date Reported: 6/13/2005

Date Received: 5/9/2005

Specification N°. AASHTO T-208

Source of Material 59-30 K-7889-01

Sampled from 59-30 K-7889-01

Submitted by: Randy Billinger

Identification marks: Tags on samples

Project or POV 59-30 K-7889-01

Description of site: Bridges 115 & 116 north of Stafford Terrace

Type of Construction Bridge

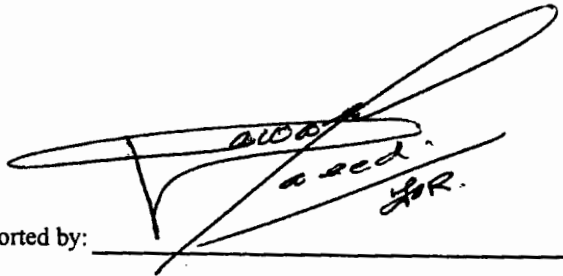
Quantity: 4

County: Franklin

TEST RESULTS

Sample No.	Station	Offset (FT)	Depth (FT)	Description	Unconfined. Compression Qu (psf)	Elastic Modulus E (psf)	Dry Density γ_d (pcf)	Moisture Percent w %
S-1	411+33	25FT LT	14.6-15.2	LS, gray	839000	221000000	164	1.4
S-2	"	"	18.4-19.0	Shale, gray	21900	602000	134	10.0
S-3	"	"	27.0-27.8	Shale, gray	17800	474000	131	10.4
S-4	"	"	37.4-37.9	Shale, gray	22800	783000	136	9.1

cc: L.S. Ingram
R. Fuller
R. Henthorne
R. Billinger
Soil Section
File 18-3

Reported by: 

Title: Robert A. Fuller; Soils Engineer

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Volume 3

XS-261 - XS-417 Cross Sections

STATE OF KANSAS DEPARTMENT OF TRANSPORTATION

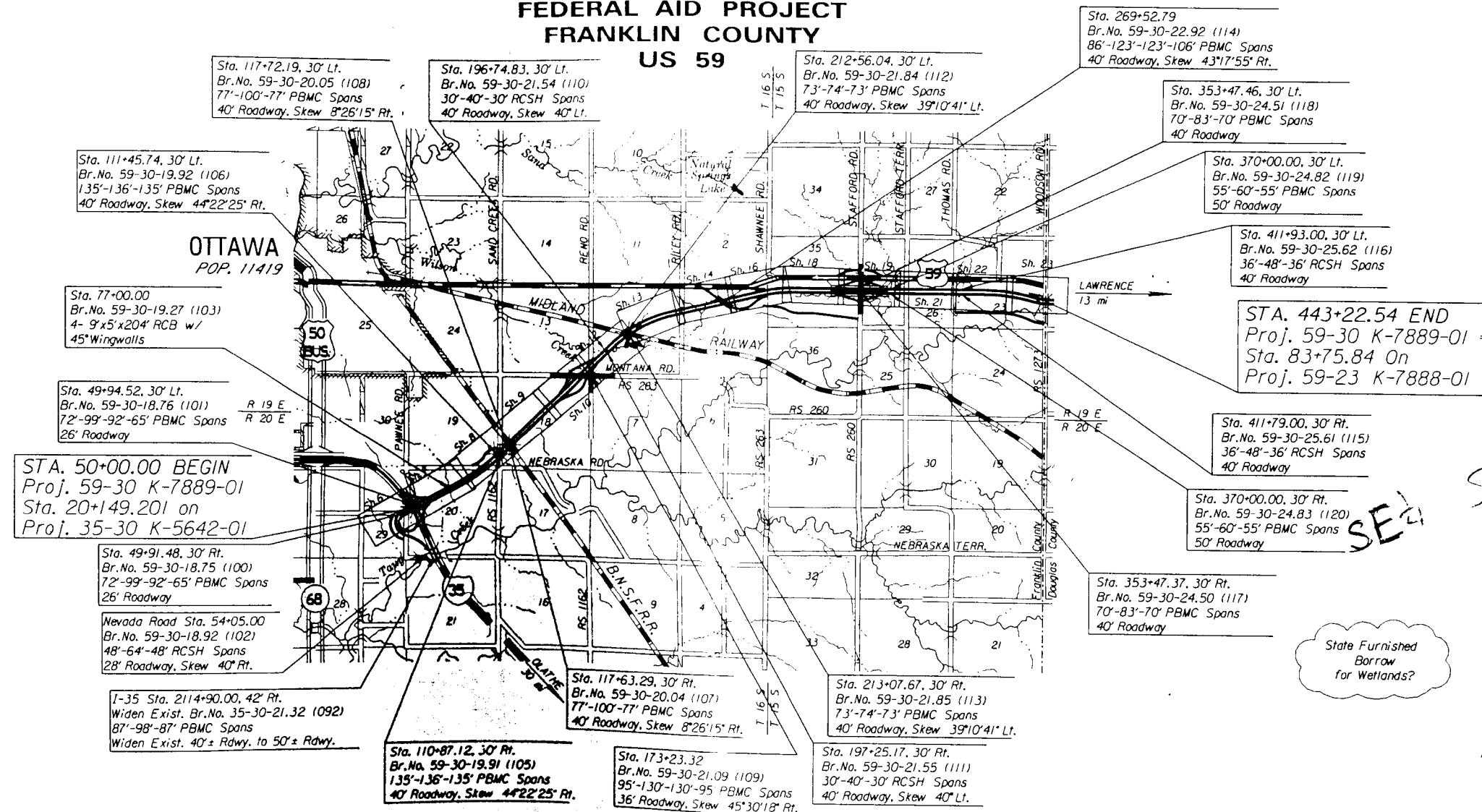


PLAN AND PROFILE OF PROPOSED STATE HIGHWAY

FEDERAL AID PROJECT
FRANKLIN COUNTY
US 59

PROJ. NO. 59-30 K-7889-01
K788-0(901)

GRADING
BRIDGES
FENCING
SEEDING



Scale = 1" = 4,000'

Sec 23 T15S R15E

DESIGN DESIGNATION

AADT (2007) = 6900
AADT (2027) = 10500
DHV = 11%
D = 60/40
T = 7%
V = 70 mph
C of A = FULL
Clear Zone = 34'

CONVENTIONAL SIGNS

COUNTY LINE	-----	CENTER LINE OF PROJECT	-----
CITY LIMITS	=====	TERRACE	-----
STATE OR NATIONAL LINE	-----	CULVERTS	-----
TOWNSHIP, SECTION or GRANT LINE	-----	DROP INLET & STORM SEWER	-----
PROPERTY LINE	-----	ACCESS CONTROL	-----
HIGHWAY FENCE	=====	POWER POLE	-----
EXISTING FENCE	=====	TELEPHONE POLE	-----
GUARD FENCE	=====	MARSH	-----
CONSTRUCTION LIMITS	=====	HEDGE	-----
RIGHT OF WAY LINE	=====	TREES	-----
TRAVELED WAY	=====	PROFILE ELEVATION	-----
RAILROADS	=====	STREAM or CREEK	-----

GROSS LENGTH OF PROJECT	39,322.54
EXCEPTIONS	None
ADDITIONS	None
NET LENGTH OF PROJECT	39,322.54 FT.
NET LENGTH OF BRIDGES	1,511.00 FT.
NET LENGTH OF ROAD	37,811.54 FT.

FEB 23 2005

NOTE: TRAFFIC TO BE CARRIED THRU CONSTRUCTION.
FOR CONSTRUCTION SEQUENCE SEE SH. NO. 141

PLANS PREPARED AND SUBMITTED BY:
GEORGE BUTLER ASSOCIATES, INC.
LENEXA KANSAS

RECOM. FOR APPROVAL-DATE
CHIEF, BUREAU OF DESIGN KANSAS DEPARTMENT OF TRANSPORTATION
APPROVED - DATE
STATE TRANSPORTATION ENGINEER KANSAS DEPARTMENT OF TRANSPORTATION

RECOM. FOR APPROVAL-DATE
ENGINEER FEDERAL HIGHWAY ADMINISTRATION DEPARTMENT OF TRANSPORTATION
APPROVED - DATE
DIVISION ADMINISTRATOR FEDERAL HIGHWAY ADMINISTRATION DEPARTMENT OF TRANSPORTATION