

APPENDIX D

ARCHITECTURAL OVERVIEW



20 February 2012

Mr. Tom Springer
Qk4, Inc.
814 West Market Street, Suite 300
Louisville, KY 4202

Re: Updated Architectural Overview Along KY321 in Johnson County, Kentucky

Dear Mr. Springer,

AMEC Environment & Infrastructure (AMEC) is pleased to provide an email describing the results of a windshield survey of architectural resources along KY321 in Johnson County, Kentucky. The purpose of this email is to identify potential historic architectural resources within the study area proposed for development.

Architectural Resource Overview

This cultural resource overview identifies potential historic architectural sites likely to require consideration during the needs assessment for the KY321 project. This overview summarizes the results of architectural researches based on available archival literature located at the Kentucky Heritage Council in Frankfort, Kentucky. The study of archival material, including historic maps was completed to gain a better comprehension of the property's development and potential for sites of historic significance.

The overview was prepared for planning purposes only. It does not provide a detailed analysis or assessment of any potential impacts to architectural resources. Moreover, it must be stressed that the information presented in this overview report does not meet the requirements of Section 106 of the National Historic Preservation Act (NHPA) of 1966 (36 CFR 400.4, as amended). Consultation is required between the Kentucky Heritage Council and the Kentucky Transportation Cabinet to determine the level of additional investigations necessary to fully comply with Section 106 regulations. To meet these requirements, an architectural assessment must be conducted by professional architectural historians.

Architectural Resources

According to the Kentucky Heritage Council site file and database research, five properties that are on the NRHP, and 26 previously identified historic structures (**Figure 1; Table 1**). For the 26 previously identified historic architectural sites, the eligibility for listing on the NRHP has not been determined (see **Table 1**). None of the site boundaries for the surveyed properties or the coded properties have been identified. One house was identified within the project area as 50 years or older that has not been previously surveyed, FS 1 (**Figures 1 and 2**). The house was likely built between 1905 and 1930 according to the architectural details of the house. These architectural details indicate that it is a vernacular Craftsman style house with the square pillars on the porch that extend to ground level.

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Table 1. Sites Listed on the NRHP within the study area.

SITE NUMBER	HISTORIC SITE NAME	LOCATION	STATUS
JOP 43	HOUSE	221 2ND	UNDETERMINED
JOP 48	HELTON MEAT MARKET	245-249 SECOND STREET	UNDETERMINED
JOP 49	HOBBS 5 AND 10	326-320 MAIN STREET	UNDETERMINED
JOP 51	ORA ANN BUILDING	216 MAIN STREET	UNDETERMINED
JOP 53	PHARMACY	316 MAIN STREET	UNDETERMINED
JOP 54	SIPP THEATER	336 MAIN STREET	UNDETERMINED
JOP 57	PAINTSVILLE FUNERAL HOME	236 SECOND ST	UNDETERMINED
JOP 64	WEBB BUILDING	209-225 MAIN STREET	UNDETERMINED
JOP 81	MARY PHELPS RESIDENCE	252 SECOND STREET	UNDETERMINED
JOP 82	MOVIE HOUSE	318 SECOND STREET	UNDETERMINED
JOP 83	S PARKS BUILDING	338 SECOND STREET	UNDETERMINED
JOP 84	COMMERCIAL BUILDING	140 MAIN STREET	UNDETERMINED
JOP 86	HOWARD COMMERCIAL BUILDING	312 MAIN STREET	UNDETERMINED
JOP 89	HAROLD MEADE BUILDING	229 MAIN STREET	UNDETERMINED
JOP 98	COMMERCIAL BUILDING	327 MAIN ST PAINTSVILLE	UNDETERMINED
JOP 100	COMMERCIAL BUILDING	337 MAIN STREET	UNDETERMINED
JOP 8	MCKENZIE BRANCH SCHOOL	ADJ HIG 2ND ADJ.	UNDETERMINED
JOP 45	PAINTSVILLE HOSPITAL	141 MAIN STREET	UNDETERMINED
JOP 59	JOHNSON COUNTY COURTHOUSE	MAIN STREET PAINTSVILLE	UNDETERMINED
JOP 66	MAGGARD'S FURNITURE	SECOND STREET	UNDETERMINED
JOP 68	BIG SANDY HARDWARE CO	MAIN STREET PAINTSVILLE	UNDETERMINED
JOP 74	PAINTSVILLE SUNDRY STORE	204 MAIN STREET	UNDETERMINED
JOP 95	COMMERCIAL BUILDING	DAVIS STREET PAINTSVILLE	UNDETERMINED
JOP 96	THE SECOND NATIONAL BANK	MAIN STREET PAINTSVILLE	UNDETERMINED
JOP 99	COMMERCIAL BUILDING	DAVIS STREET PAINTSVILLE	UNDETERMINED
JOP 44	BIG SANDY FEDERAL BANK	220-224 MAIN STREET	UNDETERMINED
JOP 5	JUDGE JIM TURNER HOME	315 3RD	NATIONAL REGISTER
JOP 39	TOM MAYO HOUSE	228 2ND	NATIONAL REGISTER
JOP 1	JOHN C C MAYO MANSION	3RD	NATIONAL REGISTER

Mr. Tom Springer
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JOP 10	FIRST METHODIST CHURCH	MAIN	NATIONAL REGISTER
JOP 40	PATTERSON HOUSE	2ND AT WEST	NATIONAL REGISTER

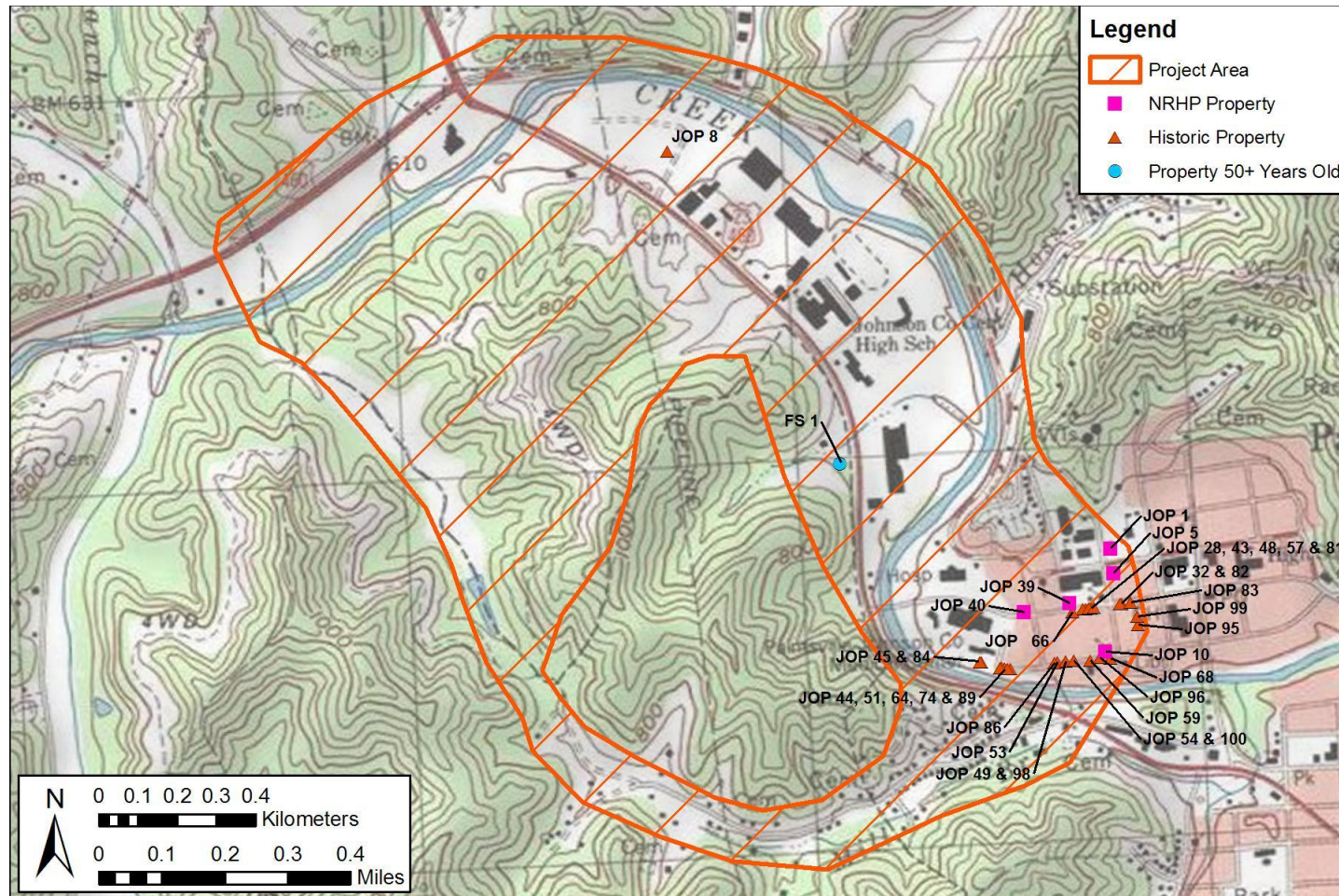


Figure 1. Results of Kentucky Heritage Council File Search.



Figure 2. FS 1, northwest of 229 N. Mayo Trail.



Figure 3. JOP 43, 221 Second St.



Figure 4. JOP 49, 326-330 Main St.



Figure 5. JOP 51, 216 Main St.



Figure 6. JOP 86, 312 Main St.



Figure 7. JOP 54 and JOP 96, 336 Main St.



Figure 8. JOP 82, 318 Second St.



Figure 9. JOP 59, Main Street Court House

RECOMMENDATIONS

Within the overview area there were five sites on the NRHP and 26 sites have been previously identified as being fifty years or older. An additional historic property was identified during the field work for this overview (FS 1). If future projects are developed in the study area, an architectural survey must be conducted when federal funds or a federal permit is involved.

The architectural survey will identify historic architectural sites and help determine whether a site is eligible for listing on the NRHP to comply with Section 106 of the National Historic Preservation Act of 1966 (as amended), 16 U.S.C. 470(f), and Presidential Executive Order 11593, Protection and Enhancement of the Cultural Environment. A Section 4(f) evaluation must be conducted and avoidance options considered if the right of way overlaps any NRHP listed or eligible for listing architectural site requiring preservation in place.

THREATENED AND ENDANGERED SPECIES

Both US and KY Species Information for Johnson County, KY

Records may include both recent and historical observations.

List Species observations in 1 selected county.

Selected county is: Johnson.

Scientific Name and Life History	Common Name and Pictures	Class	County	US Status	KY Status
Accipiter striatus	Sharp-shinned Hawk	Aves	Johnson	PS	S
Anas clypeata	Northern Shoveler	Aves	Johnson	N	E
Anas discors	Blue-winged Teal	Aves	Johnson	N	T
Buteo platyterus	Broad-winged Hawk	Aves	Johnson	PS	N
Cervus elaphus	Elk	Mammalia	Johnson	PS	N
Circus cyaneus	Northern Harrier	Aves	Johnson	N	T
Coccyzus americanus	Yellow-billed Cuckoo	Aves	Johnson	PS	N
Colinus virginianus	Northern Bobwhite	Aves	Johnson	PS	N
Corvus corax	Common Raven	Aves	Johnson	N	T
Fulica americana	American Coot	Aves	Johnson	N	E
Fusconaia subrotunda	Longsolid	Bivalvia	Johnson	N	S
Haliaeetus leucocephalus	Bald Eagle	Aves	Johnson	N	T
Ichthyomyzon fossor	Northern Brook Lamprey	Cephalaspidomorphi	Johnson	N	T
Junco hyemalis	Dark-eyed Junco	Aves	Johnson	N	S
Lampropeltis triangulum elapsoides	Scarlet Kingsnake	Reptilia	Johnson	N	S
Microtus pennsylvanicus	Meadow Vole	Mammalia	Johnson	PS	N
Odocoileus virginianus	White-tailed Deer	Mammalia	Johnson	PS	N
Oncorhynchus mykiss	Rainbow Trout	Actinopterygii	Johnson	PS	N
Pandion haliaetus	Osprey	Aves	Johnson	N	T
Percopsis omiscomaycus	Trout-Perch	Actinopterygii	Johnson	N	S
Phalacrocorax auritus	Double-crested Cormorant	Aves	Johnson	N	E
Podilymbus podiceps	Pied-billed Grebe	Aves	Johnson	N	E
Sciurus niger	Eastern Fox Squirrel	Mammalia	Johnson	PS	N
Ursus americanus	American Black Bear	Mammalia	Johnson	PS	S

US Status Definitions

NatureServe Explorer	Status Under the U.S. Endangered Species Act
Abbreviation	
LE	Listed endangered
LT	Listed threatened
PE	Proposed endangered
PT	Proposed threatened
C	Candidate
PDL	Proposed for delisting
E(S/A) or T(S/A)	Listed endangered or threatened because of similarity of appearance
XE	Essential experimental population
XN	Nonessential experimental population
PS	Partial status - indicating that the status applies only to a portion of the species' range.
N or Blank	Usually indicates that the taxon does not have any federal status. However, because of potential lag time between publication in the Federal Register and entry in the central databases and refresh of this website, some taxa may have a status which does not yet appear.

KY Status Definitions

Abbreviation	Kentucky State Nature Preserves Commission status
E	endangered
T	threatened
S	special concern
H	historic
X	extirpated
N or Blank	none

<http://fw.ky.gov/kfwis/speciesInfo/countyListSpecies.asp>

GEO TECHNICAL OVERVIEW

MEMORANDUM

P-002-2012

TO: Keith Damron, PE
Director
Division of Planning

FROM: Bart Asher, PE, PLS
Geotechnical Branch Manager
Division of Structural Design

BY: Christian Wallover, PG
Geotechnical Branch

DATE: March 29, 2012

SUBJECT: Johnson County
KY 321
MARS No. 8534008P
Planning Study

At your request, a geotechnical overview has been conducted for the proposed alternates from the KY 40/KY 321 interchange to Paintsville. In this report is an assessment of site conditions and potential geologic impacts to the project based upon available data and a field visit. A geologic map identifying areas of concern is attached.

The study area lies within the Cumberland Plateau Physiographic Region of Kentucky. This Region is known for economically rich coal seams which have been extensively mined. Geologic mapping indicates the project traverses across the Lee and Breathitt Formations known to consist of thick to thinly interbedded layers of sandstone, shale and coal. Alluvium deposits composed of silt, sand and gravel are found in valleys along Tays Branch and Paint Creek. Refer to the Geologic Map of the Paintsville Quadrangle (GQ-495) for more detailed information.

Geotechnical Concerns:

- 1) Due to anticipated depths of the alluvial deposits (0-95 feet), bridge piers located in alluvium may need to be founded on piles or drilled shafts.
- 2) Multiple adits (underground mine openings) in the Van Lear coal bed can be found on the attached geologic map indicating evidence of deep mining in the vicinity of the study area. Available historic mine maps (see attached mine maps: SFN 18707, 10573-1, and 94006) show underground, auger and strip mining has taken place in the Van Lear coal bed north of KY 40 between Tays and Hoss Mill Branch, and just north of Mill Branch. The labeled shaded areas found on the attached geologic map indicate the extent of know mined out areas. Mining activity in the Van Lear coal bed may affect alternates that cut into the hillside along KY 40

from KY 321 to West Street, and KY 321 from US Post Office Road to Mill Branch Road. If proposed cut slopes extend to the Van Lear coal bed (approximately elevation 800 along KY 40 and elevation 730 along KY 321) in these locations, remediation may be required to stabilize the rock cut slopes with flatter than normal slopes and additional costs such as backstowing of mine openings.

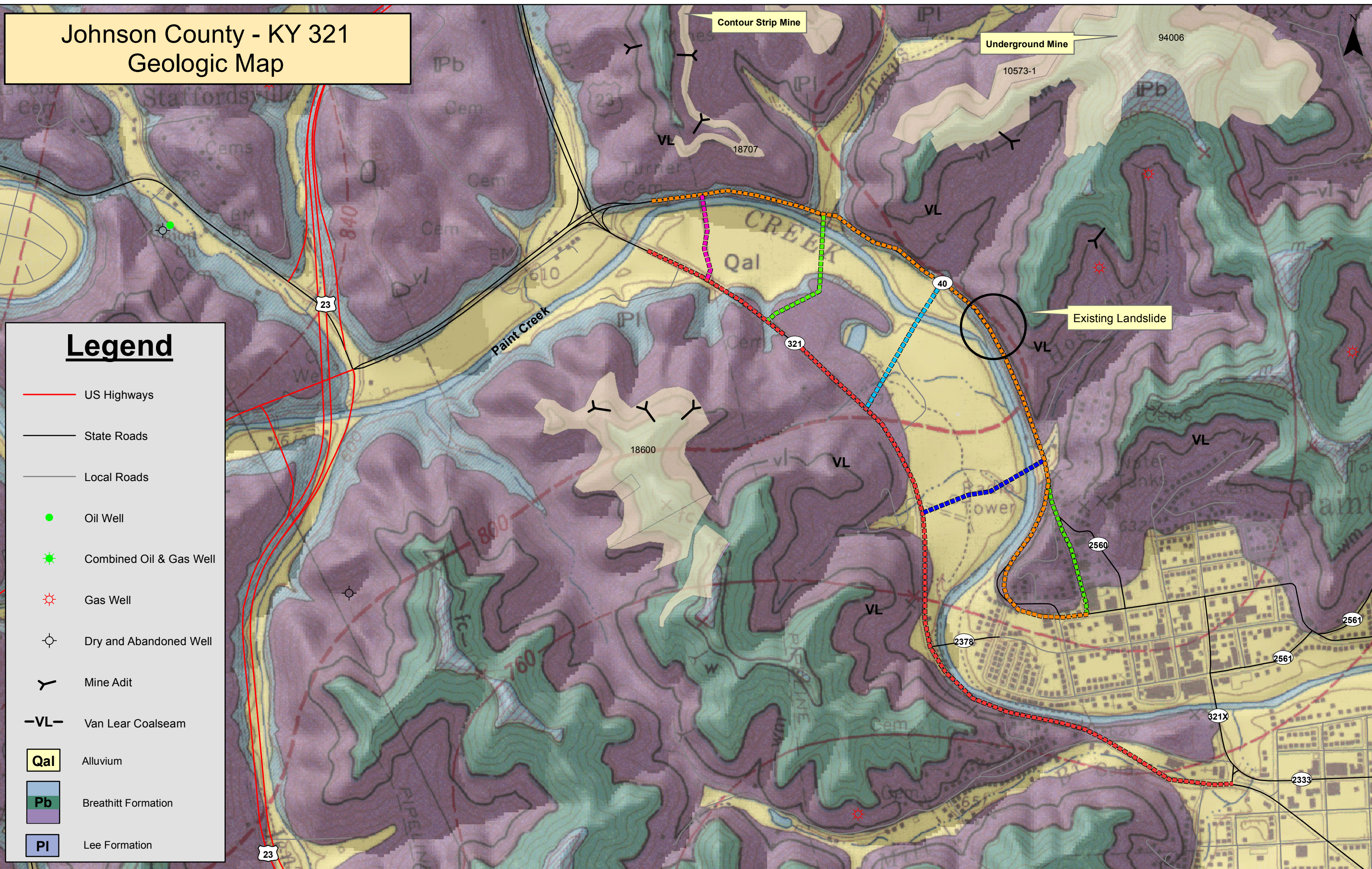
- 3) During a field review an existing landslide was noted on KY 40 at mile marker 10.0. The embankment failure appeared to be stabilized utilizing railroad rails and lagging. Additional embankment failures may be present on KY 40 along Paint Creek due to erosion or rapid drawdown, but were not seen. Alternates along KY 40 are recommended to move into the hillside opposite from Paint Creek to prevent existing and potential future embankment failures from affecting the roadway.

Should there be any questions, please call the Geotechnical Branch at 502-564-2374.

Johnson County - KY 321 Geologic Map

Legend

- US Highways
- State Roads
- Local Roads
- Oil Well
- ⊛ Combined Oil & Gas Well
- ⊛ Gas Well
- ⊙ Dry and Abandoned Well
- Y Mine Adit
- VL- Van Lear Coalseam
- Qal Alluvium
- Pb Breathitt Formation
- PI Lee Formation



0 625 1,250 2,500 Feet

Kentucky Department of Mines and Minerals
 Map File No. 18707
 Mine Name: 18707
 Mine No. 18707
 Mine City Location: Letcher, KY
 Mine State: KY
 Mine County: Letcher
 Mine Township: 10S, 10E, 10W
 Mine Section: 10S, 10E, 10W
 Mine Parcel No.: 18707
 Mine Parcel Area: 18707
 Mine Parcel Shape: 18707
 Mine Parcel Size: 18707
 Mine Parcel Type: 18707

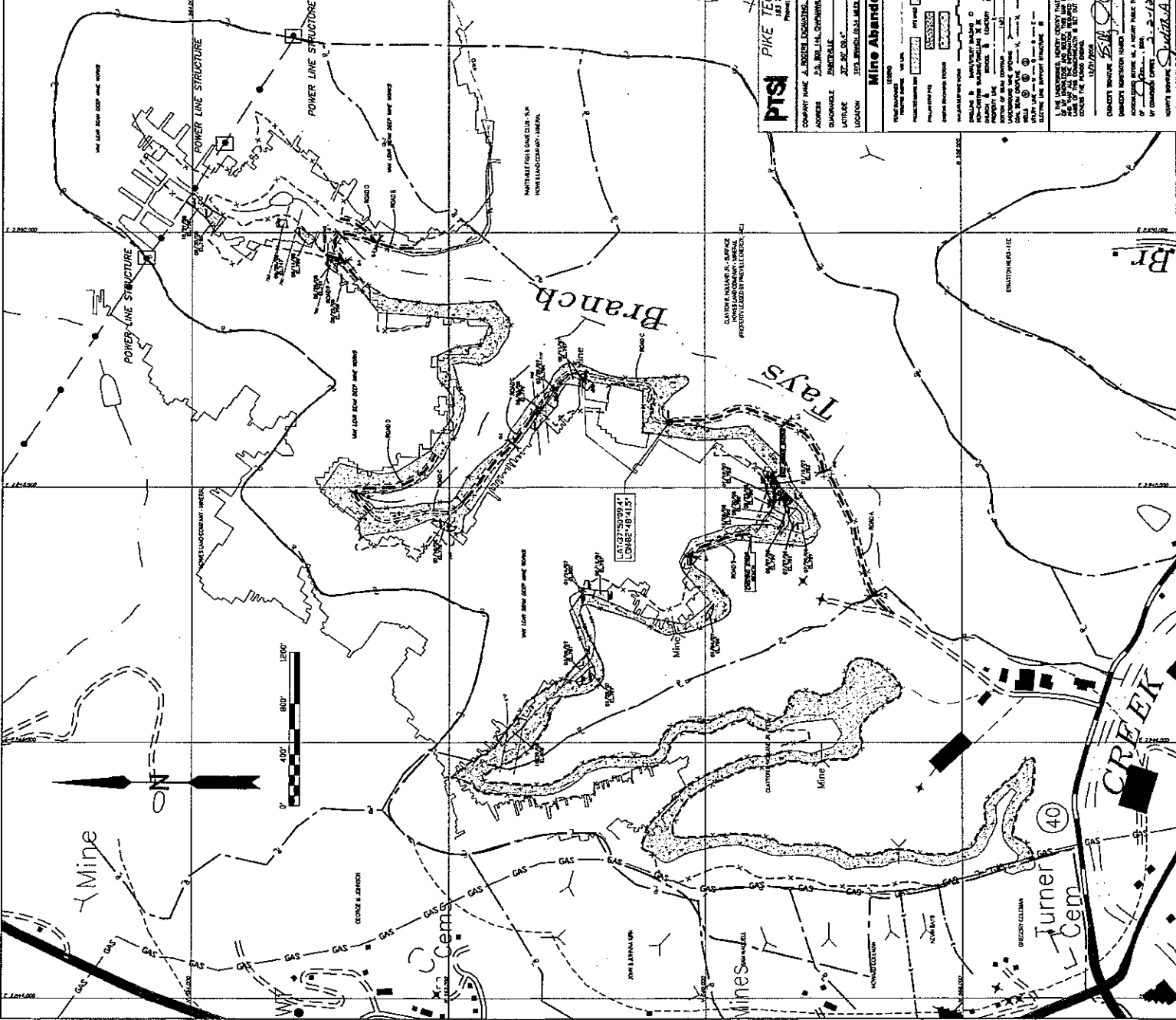
18707

OWNER
 J. FROBER ENGINEERING LLC
 10000 WASHINGTON ST
 HUNTSVILLE, AL 35894
 112236

MINER
 MARTIN

STATE
 KY

NOTE: THE GRID SYSTEM UTILIZED IS BASED ON THE STATE PLANE COORDINATE SYSTEM USED BY THE COMMONWEALTH OF KENTUCKY.



PIKE PIKE TECHNICAL SERVICES, INC. P.T.S.I.
 187 TAYLOR STREET, HUNTSVILLE, KY 40401
 Phone: (606) 437-0300 Fax: 637-1129

APPROVED BY: KY DEPT. OF MINES & REVENUE
 DATE: 12/31/2008

MAP SCALE: 1" = 500'

CONTOUR INTERVAL: 10'

OWNER: J. FROBER ENGINEERING LLC
MINER: MARTIN
COUNTY: LETCHER
TOWNSHIP: 10S
RANGE: 10E
SECTION: 10W

Mine Abandonment Map - Van Lear Seam

LEGEND

- POWER LINE STRUCTURE
- GAS LINE
- WATER
- ROAD
- RAILROAD
- CONTOUR
- BOUNDARY
- MINING
- MINES
- TURNER CREEK BRIDGE

NOTES:

1. THIS MAP IS A REPRESENTATION OF THE MINE AS IT EXISTED ON THE DATE OF THE SURVEY. IT IS NOT A GUARANTEE OF THE ACCURACY OF THE INFORMATION SHOWN ON THIS MAP.

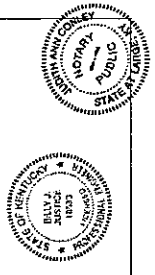
2. THE INFORMATION ON THIS MAP IS BASED ON THE RECORDS OF THE DEPARTMENT OF MINES AND REVENUE. THE DEPARTMENT DOES NOT WARRANT THE ACCURACY OF THE INFORMATION SHOWN ON THIS MAP.

3. THE INFORMATION ON THIS MAP IS NOT TO BE USED FOR ANY PURPOSE OTHER THAN THAT FOR WHICH IT WAS PREPARED.

4. THE INFORMATION ON THIS MAP IS NOT TO BE USED FOR ANY PURPOSE OTHER THAN THAT FOR WHICH IT WAS PREPARED.

CONDUCTED BY: P.T.S.I.
DATE: 12/31/2008
PROJECT NUMBER: 18707
PROJECT NAME: 18707
PROJECT LOCATION: Letcher, KY
PROJECT COUNTY: Letcher
PROJECT TOWNSHIP: 10S
PROJECT RANGE: 10E
PROJECT SECTION: 10W

APPROVED BY: KY DEPT. OF MINES & REVENUE
 DATE: 12/31/2008

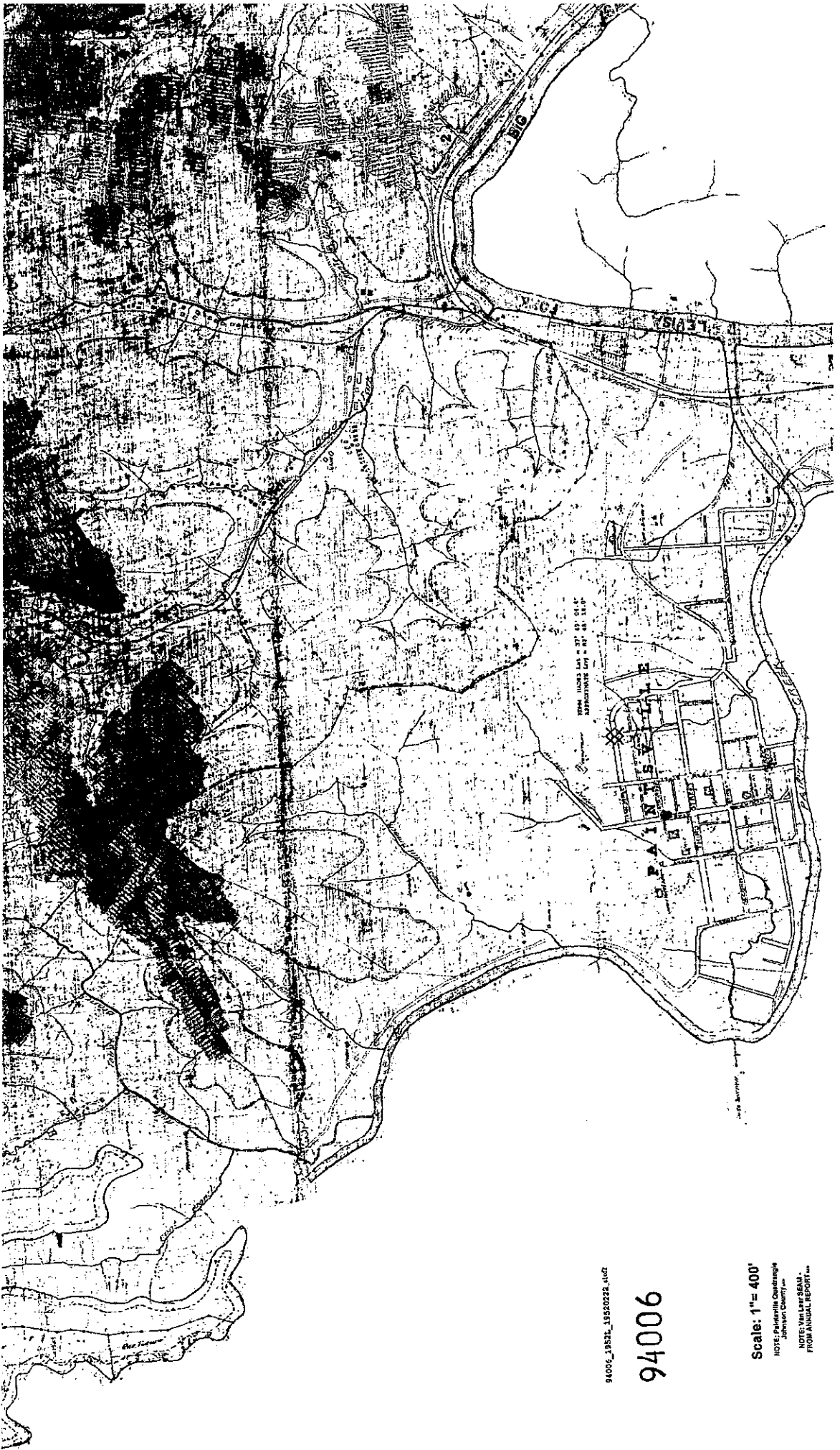




Name of County Alf W. Coal Company
 Address P.O. Box 936, Parkville, Mo.
 Permit No. _____
 Location (nearest Community) Trachler
 Principal Coal Mine Name Alf W. Coal Co. Mine No. 40
 Area to be surveyed or located 175.5 A.
 Contour Interval 20 feet
 Map Scale 1" = 400'
 Average height of highest 20' Foot
 Average height of lowest 40' Foot
 Property Lines _____
 Section 18 Township N. 40. Range E. 20. Meridian _____
 Access Road Coal
 Proposed track Coal
 Proposed ditch or ditch basin _____
 Date Jan 7, 1931

I, the undersigned, hereby certify that this map is correct, and that to the best of my knowledge and belief it was prepared by me or by a person under my direct supervision and that I am a duly Licensed Surveyor.
Clark J. Henry, L. Engineer
 My. Prof. Exam. No. 4502
 My. Prof. Exam. No. 312
 Notarized before me, a Notary Public this 7th day of Jan, 1931.
George E. [Signature] Notary Public
 Commission Expires Jan 1, 1934

ZONE ADJUSTED DATA - 27° 50' 13.24" N
 100° 00' 00.00" W
 COMPUTED FROM DATA OF 1927



94006_19532_19530229.dwg

94006

Scale: 1" = 400'

NOTE: Palmdale, Oxnard, and
Johnston County

NOTE: VALLEY SEAM -
FROM ANNUAL REPORT