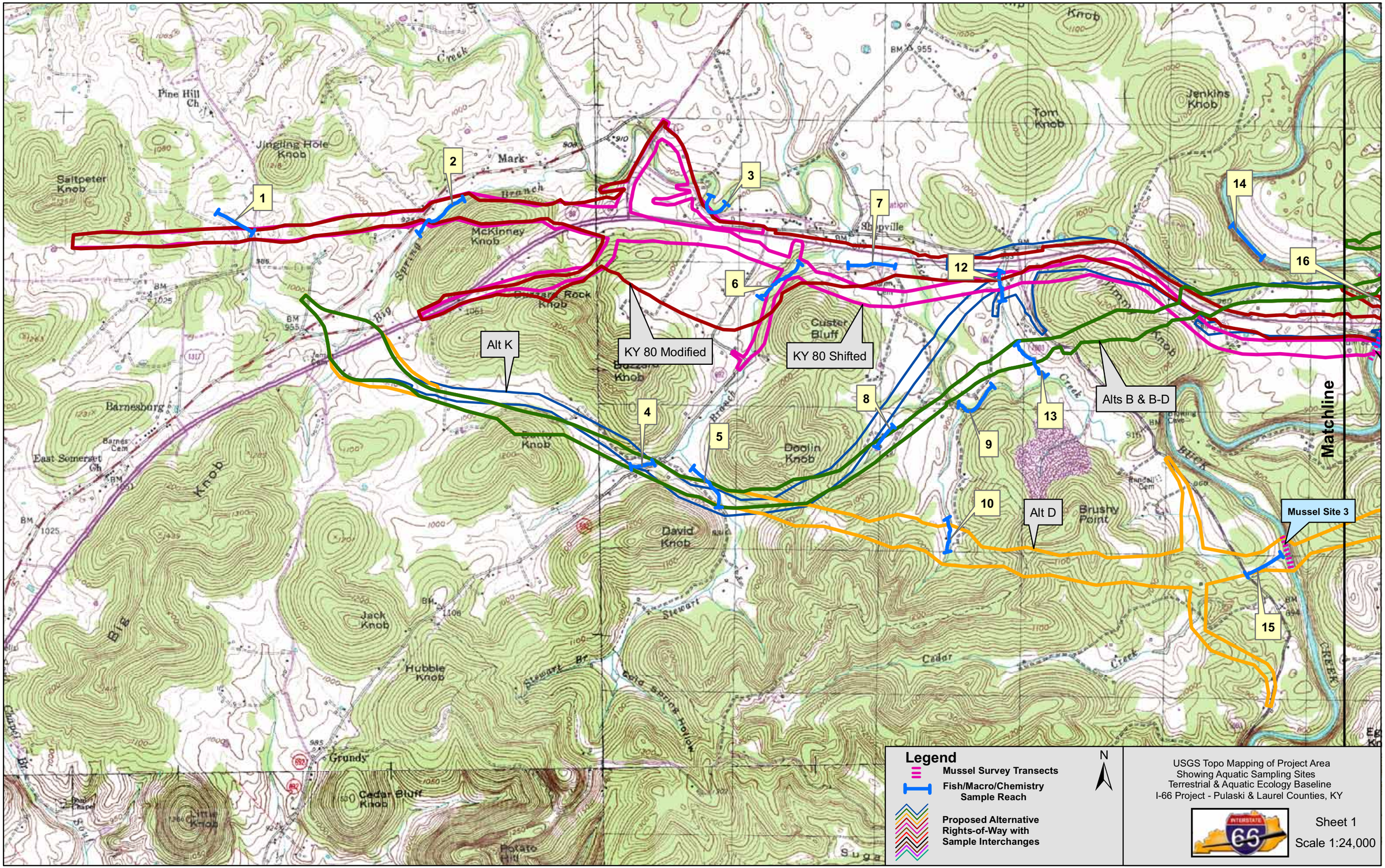
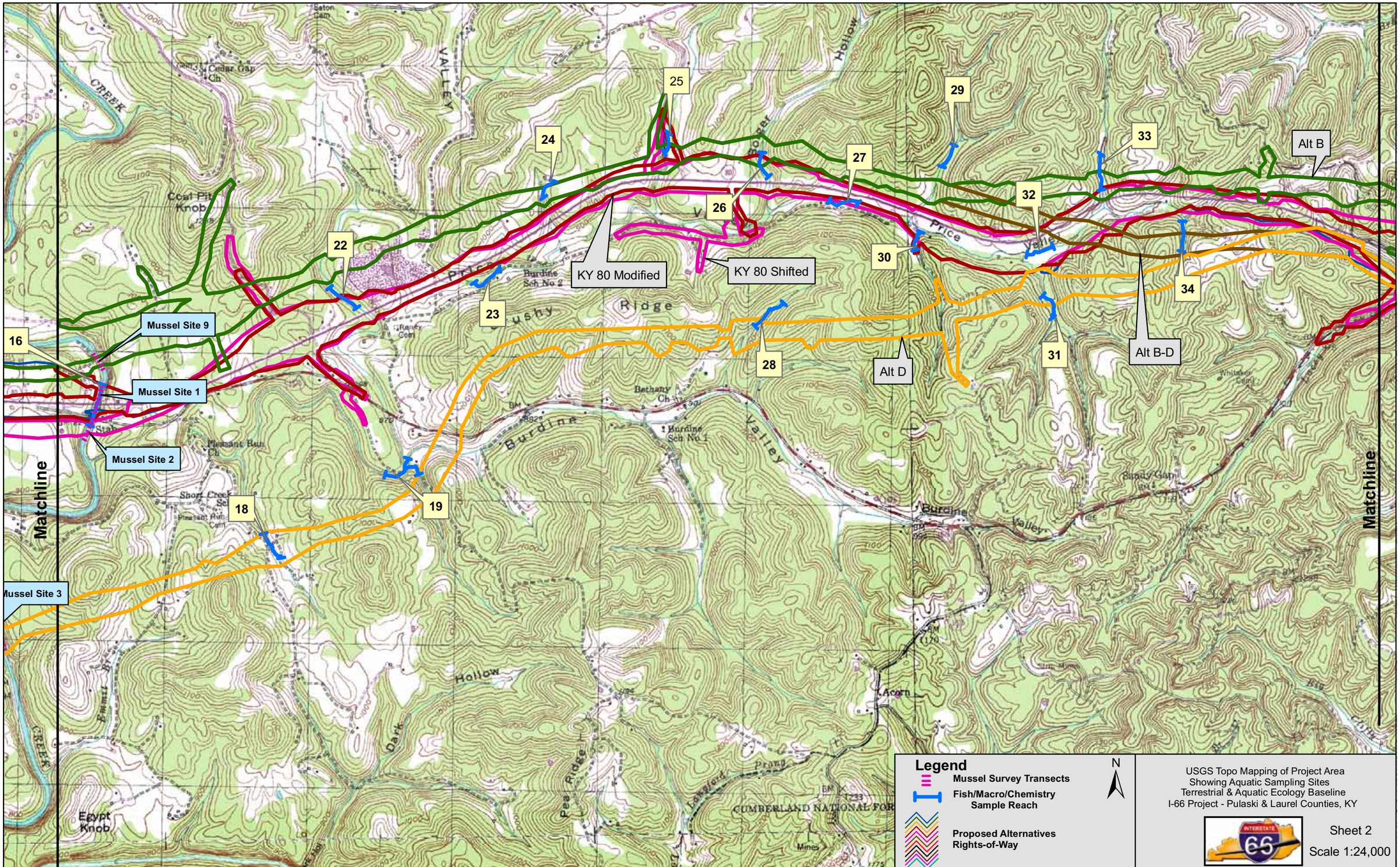
Appendix C – Supporting Figures and Tables

Figure 4.2.6-1 – Stream and Mussel Sampling Locations (6 Sheets)


1
2
3
4
5
6
7
8
9
10
12
13
14
15
16
Alt K
KY 80 Modified
KY 80 Shifted
Alts B & B-D
Alt D
Mussel Site 3
Matchline
Pine Hill Ch
Jingling Hole Knob
Saltpeter Knob
Mark
Branch
McKinney Knob
Big Spring
Buzzard Rock Knob
Buzzard Knob
Custer Bluff
Shopville
Tom Knob
Jenkins Knob
Barnesburg
East Somerset Ch
Barnes Cem
Doolin Knob
David Knob
Brushy Point
Buck Creek
Jack Knob
Hubble Knob
Stewart Br
Cold Spring Hollow
Cedar Creek
Grundy
Cedar Bluff Knob
Potato Hill
Legend
Mussel Survey Transects
Fish/Macro/Chemistry Sample Reach
Proposed Alternative Rights-of-Way with Sample Interchanges
N
USGS Topo Mapping of Project Area
Showing Aquatic Sampling Sites
Terrestrial & Aquatic Ecology Baseline
I-66 Project - Pulaski & Laurel Counties, KY
Sheet 1
Scale 1:24,000
Miles
0
0.25
0.5
1
1.5
2


16
Mussel Site 9
Mussel Site 1
Mussel Site 2
Mussel Site 3
Matchline
Matchline
18
19
22
23
24
25
26
27
28
29
30
31
32
33
34
KY 80 Modified
KY 80 Shifted
Alt B
Alt B-D
Alt D
Legend
Mussel Survey Transects
Fish/Macro/Chemistry Sample Reach
Proposed Alternatives Rights-of-Way
N
USGS Topo Mapping of Project Area
Showing Aquatic Sampling Sites
Terrestrial & Aquatic Ecology Baseline
I-66 Project - Pulaski & Laurel Counties, KY
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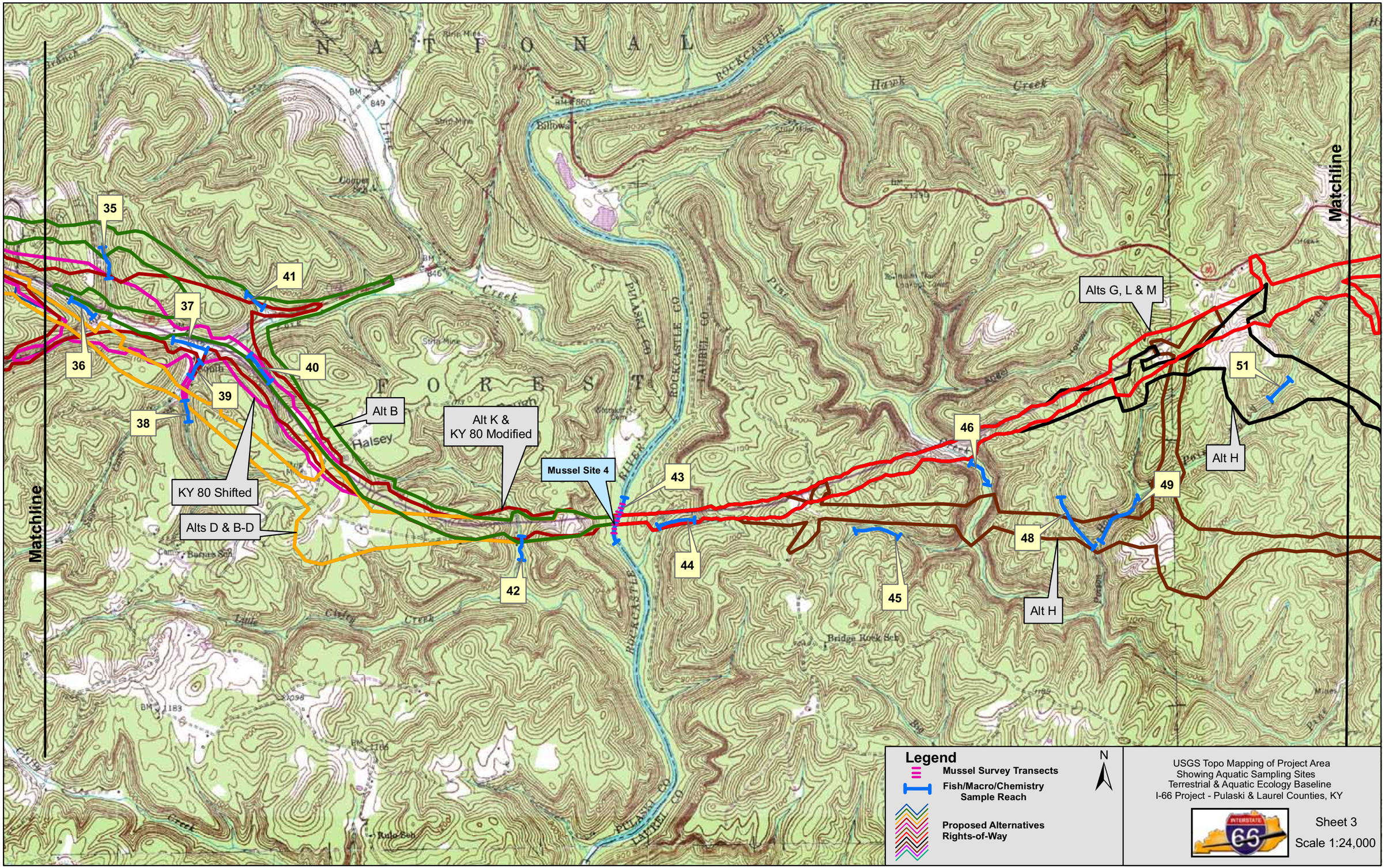
1
1.5
2


Matchline
Matchline
35
36
37
38
39
40
41
42
43
44
45
46
48
49
51
Alt B
Alt K &
KY 80 Modified
KY 80 Shifted
Alts D & B-D
Mussel Site 4
Alts G, L & M
Alt H
Alt H
Legend
Mussel Survey Transects
Fish/Macro/Chemistry
Sample Reach
Proposed Alternatives
Rights-of-Way
N
USGS Topo Mapping of Project Area
Showing Aquatic Sampling Sites
Terrestrial & Aquatic Ecology Baseline
I-66 Project - Pulaski & Laurel Counties, KY
Sheet 3
Scale 1:24,000
Miles
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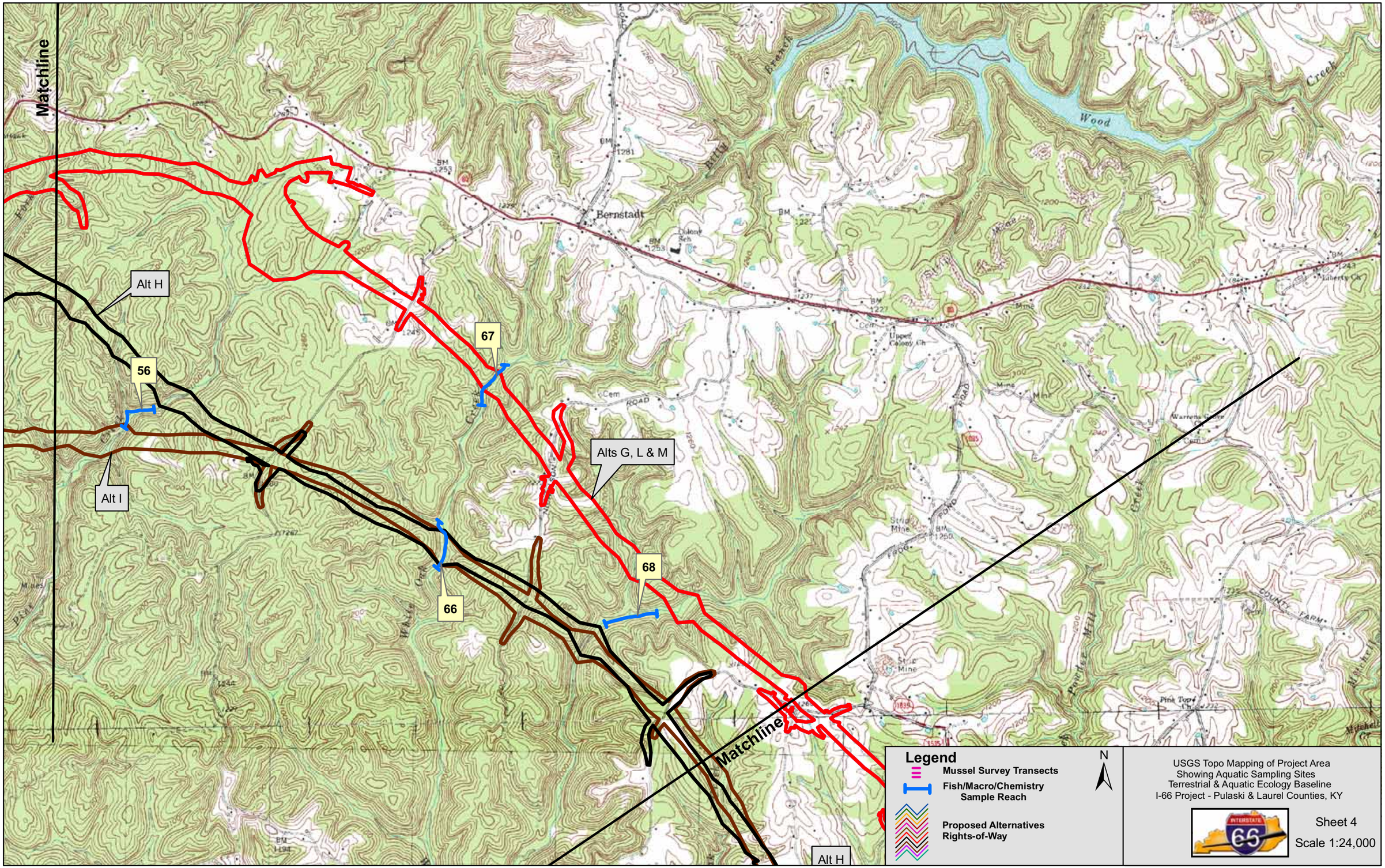
0.25
0.5
1
1.5
2


Matchline
Alt H
56
67
Alt I
Alts G, L & M
66
68
Matchline
Alt H
Bernstadt
Wood
Creek
Legend
Mussel Survey Transects
Fish/Macro/Chemistry Sample Reach
Proposed Alternatives Rights-of-Way
N
USGS Topo Mapping of Project Area
Showing Aquatic Sampling Sites
Terrestrial & Aquatic Ecology Baseline
I-66 Project - Pulaski & Laurel Counties, KY
Sheet 4
Scale 1:24,000
Miles
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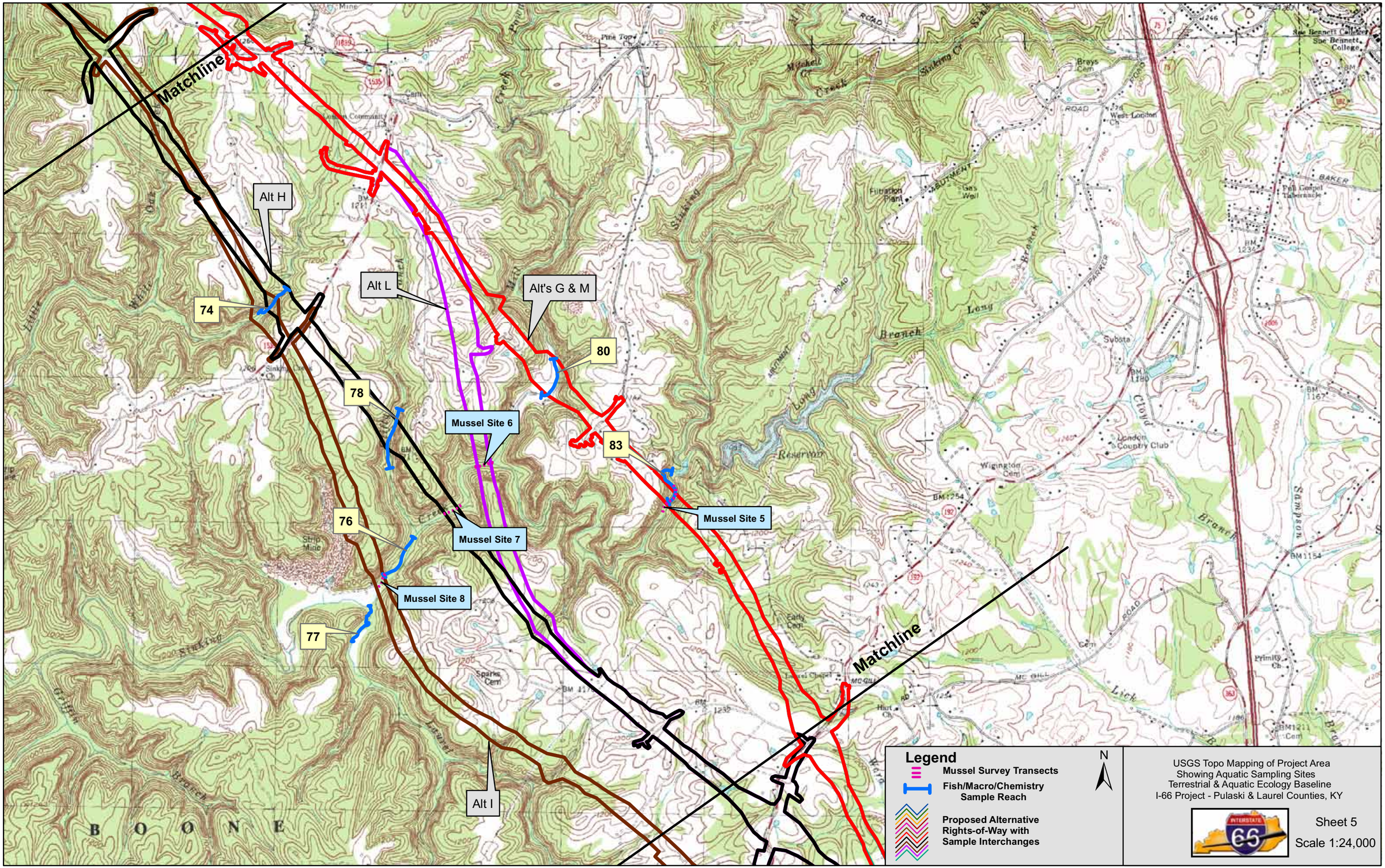
0.5
1
1.5
2


Matchline
Alt H
Alt L
Alt's G & M
74
78
80
83
76
77
Mussel Site 6
Mussel Site 7
Mussel Site 5
Mussel Site 8
Alt I
Matchline
Legend
Mussel Survey Transects
Fish/Macro/Chemistry Sample Reach
Proposed Alternative Rights-of-Way with Sample Interchanges
N
USGS Topo Mapping of Project Area
Showing Aquatic Sampling Sites
Terrestrial & Aquatic Ecology Baseline
I-66 Project - Pulaski & Laurel Counties, KY
Sheet 5
Scale 1:24,000
Miles
0
0.25
0.5
1
1.5
2

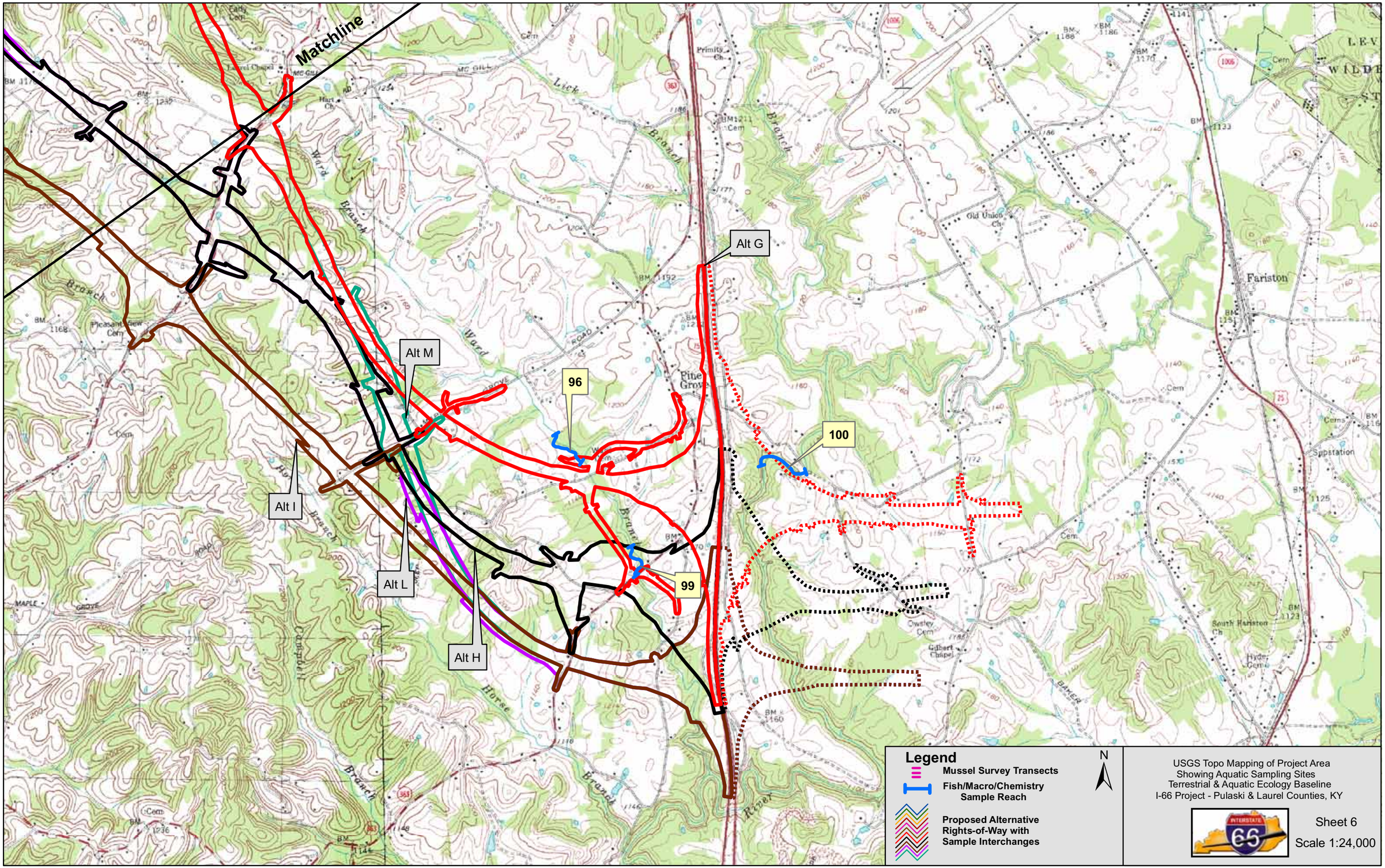

Matchline
Alt G
Alt M
96
100
Alt I
Alt L
Alt H
99
Fariston
Pine Grove
Legend
Mussel Survey Transects
Fish/Macro/Chemistry Sample Reach
Proposed Alternative Rights-of-Way with Sample Interchanges
N
USGS Topo Mapping of Project Area
Showing Aquatic Sampling Sites
Terrestrial & Aquatic Ecology Baseline
I-66 Project - Pulaski & Laurel Counties, KY
Sheet 6
Scale 1:24,000
Miles
0
0.25
0.5
1
1.5
2

Figure 4.2.7-1 – Kentucky Wild River
(Rockcastle River) within the Project Area

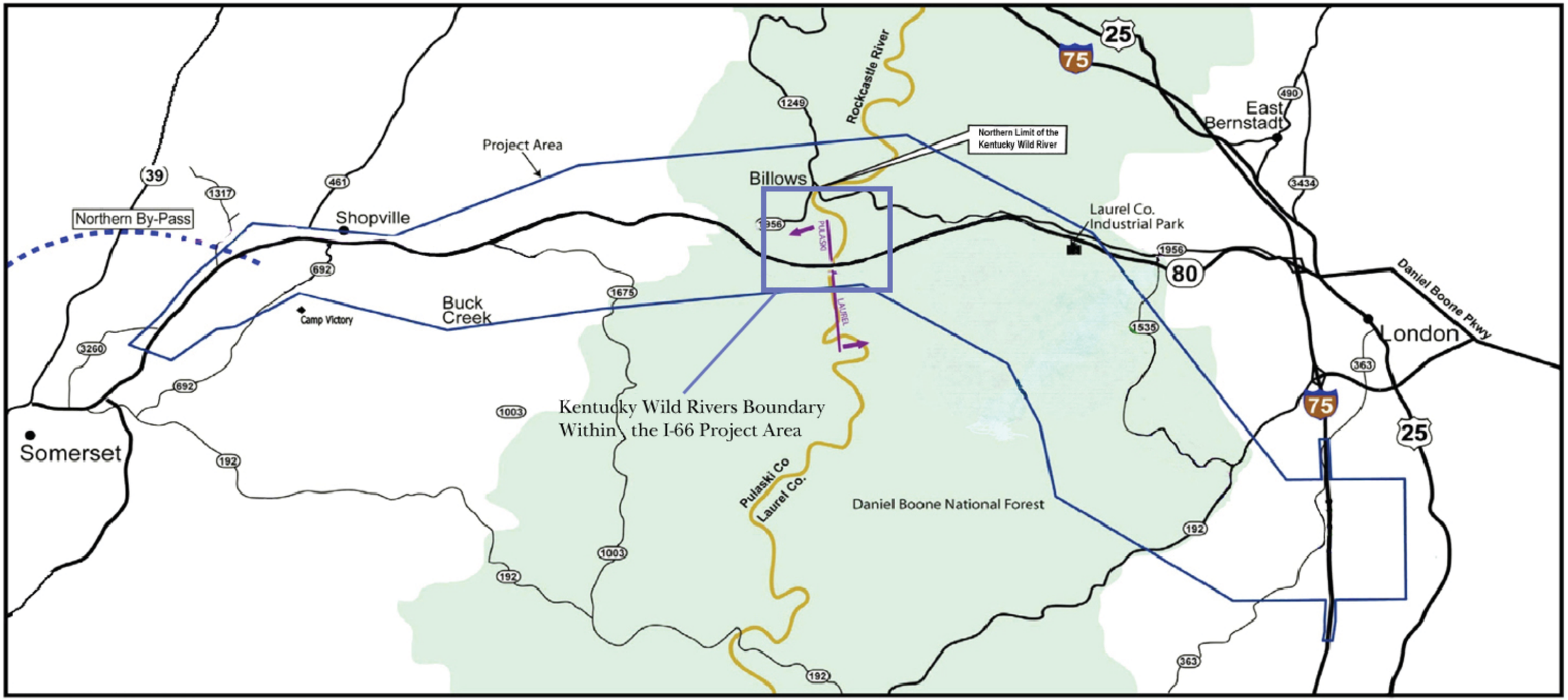


Figure 4.2.7-1 – Extents of Kentucky Wild River (Rockcastle River) within the Project Area

Figure 4.2.17-2 – Noise Receptor Field Monitoring Locations (6 Sheets)

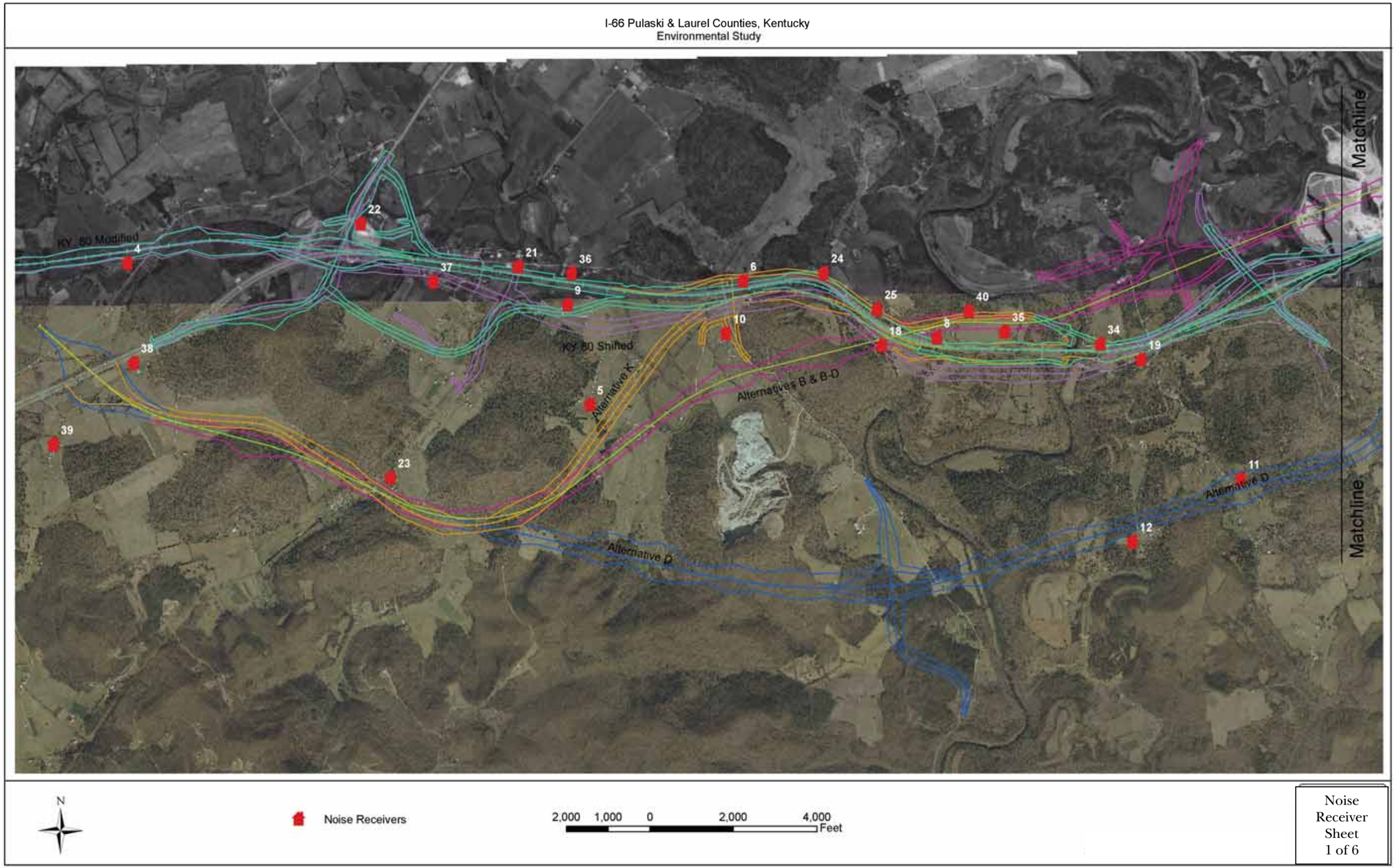


Figure 4.2.17-2 – Highway Traffic Noise Impact Study – Ambient Noise Receiver Locations

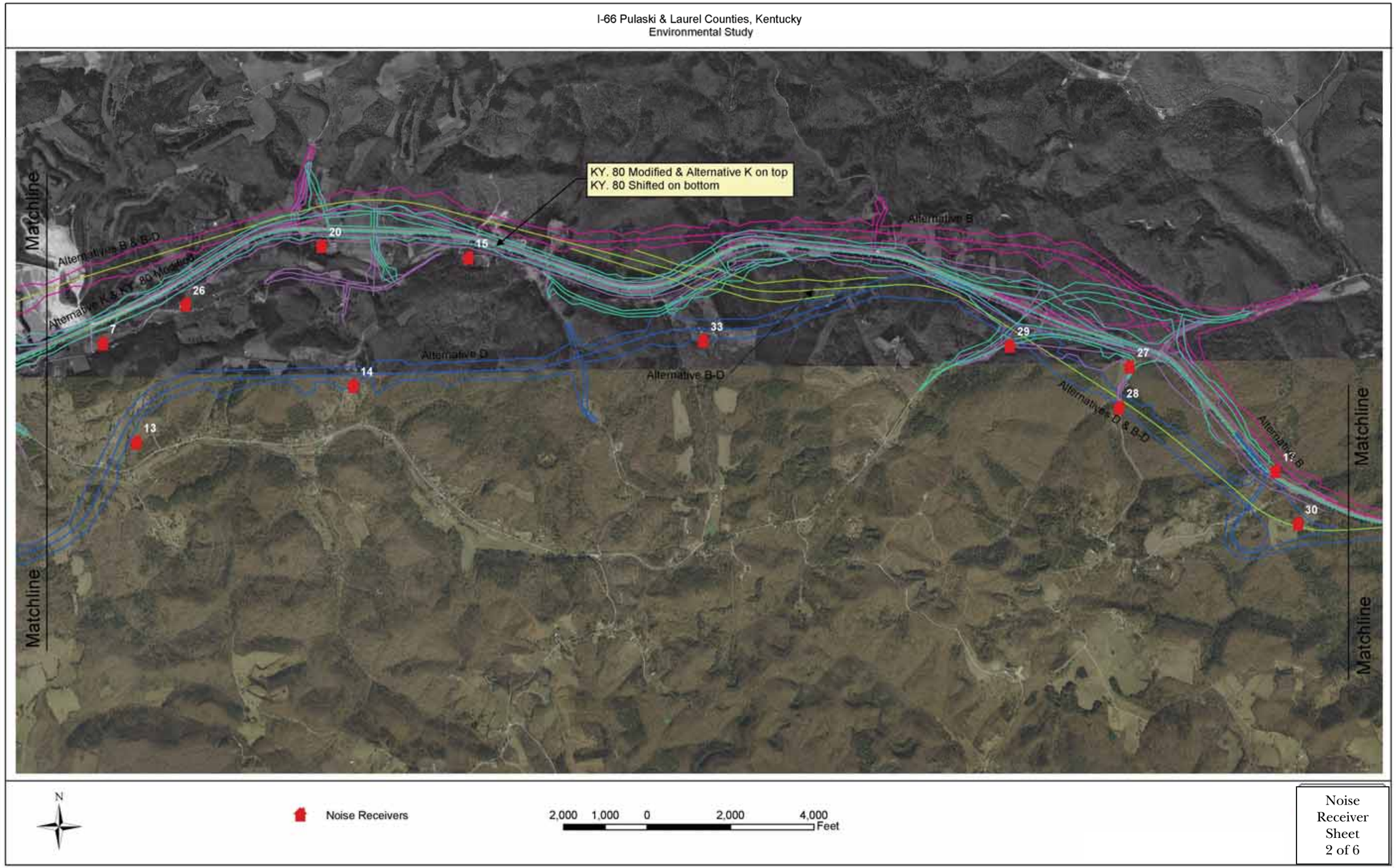


Figure 4.2.17-2 – Highway Traffic Noise Impact Study – Ambient Noise Receiver Locations

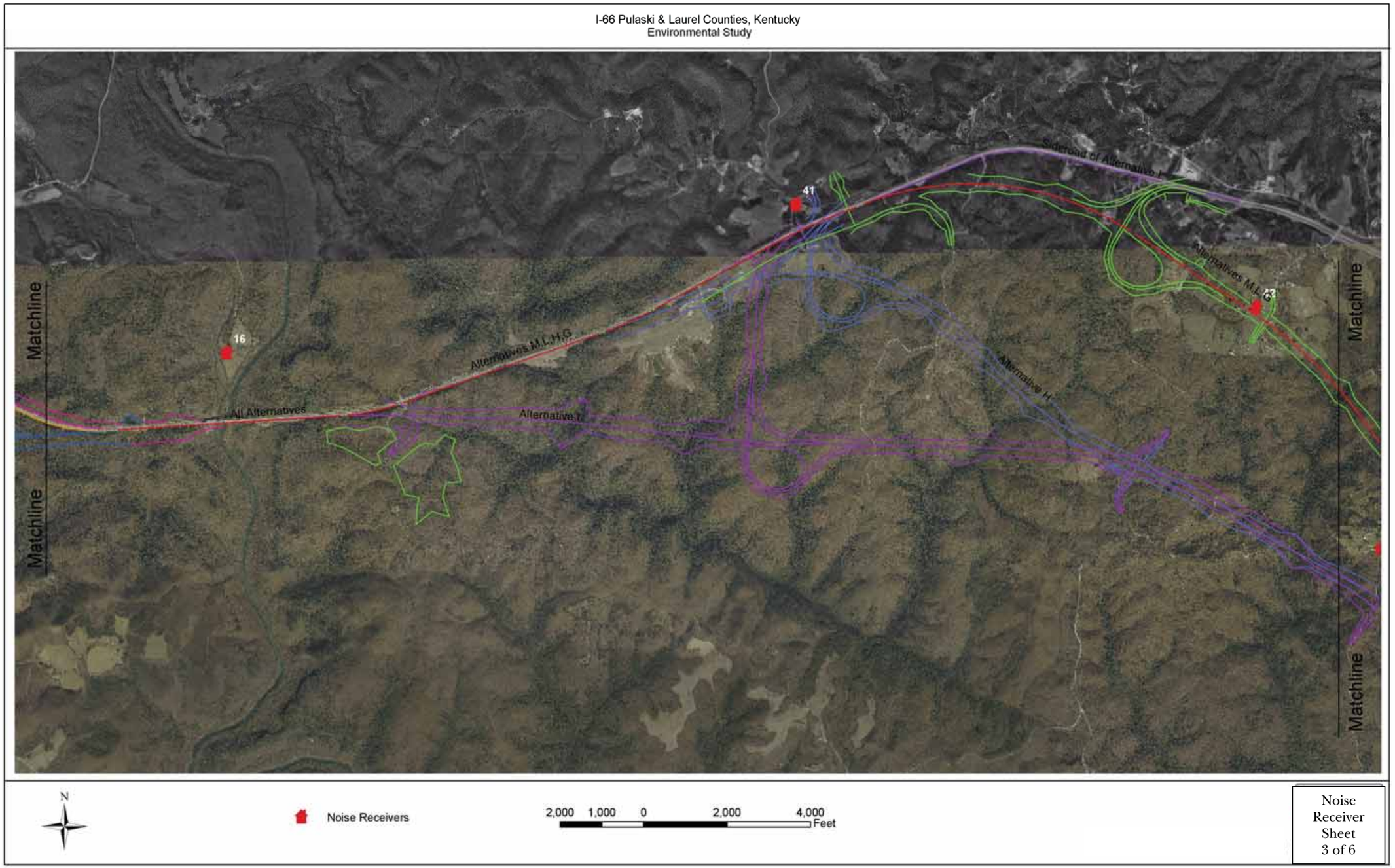


Figure 4.2.17-2 – Highway Traffic Noise Impact Study – Ambient Noise Receiver Locations

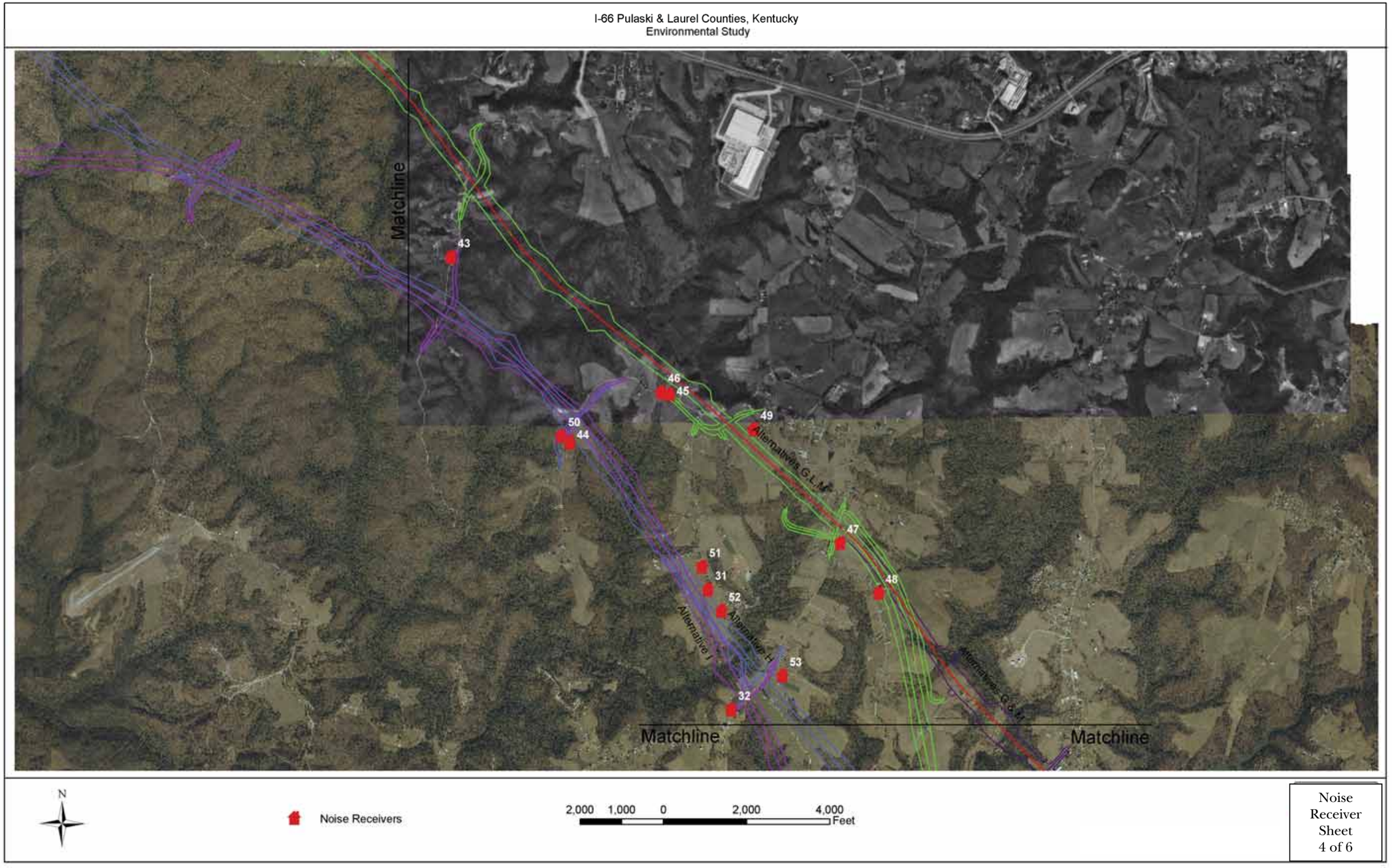


Figure 4.2.17-2 – Highway Traffic Noise Impact Study – Ambient Noise Receiver Locations

I-66 Pulaski & Laurel Counties, Kentucky
Environmental Study

N

Noise Receivers

2,000 1,000 0 2,000 4,000 Feet

Noise Receiver Sheet 5 of 6

Figure 4.2.17-2 – Highway Traffic Noise Impact Study – Ambient Noise Receiver Locations

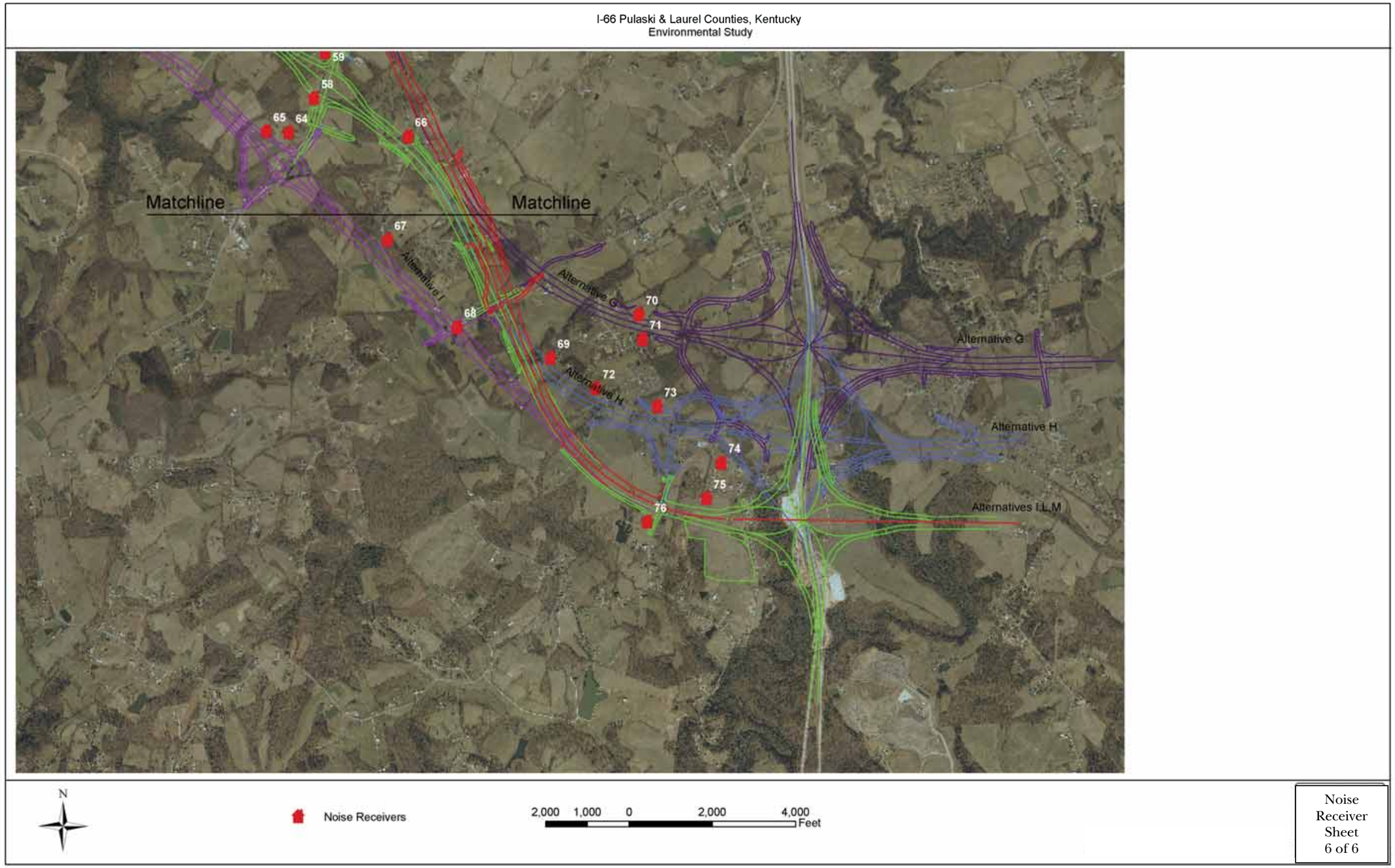
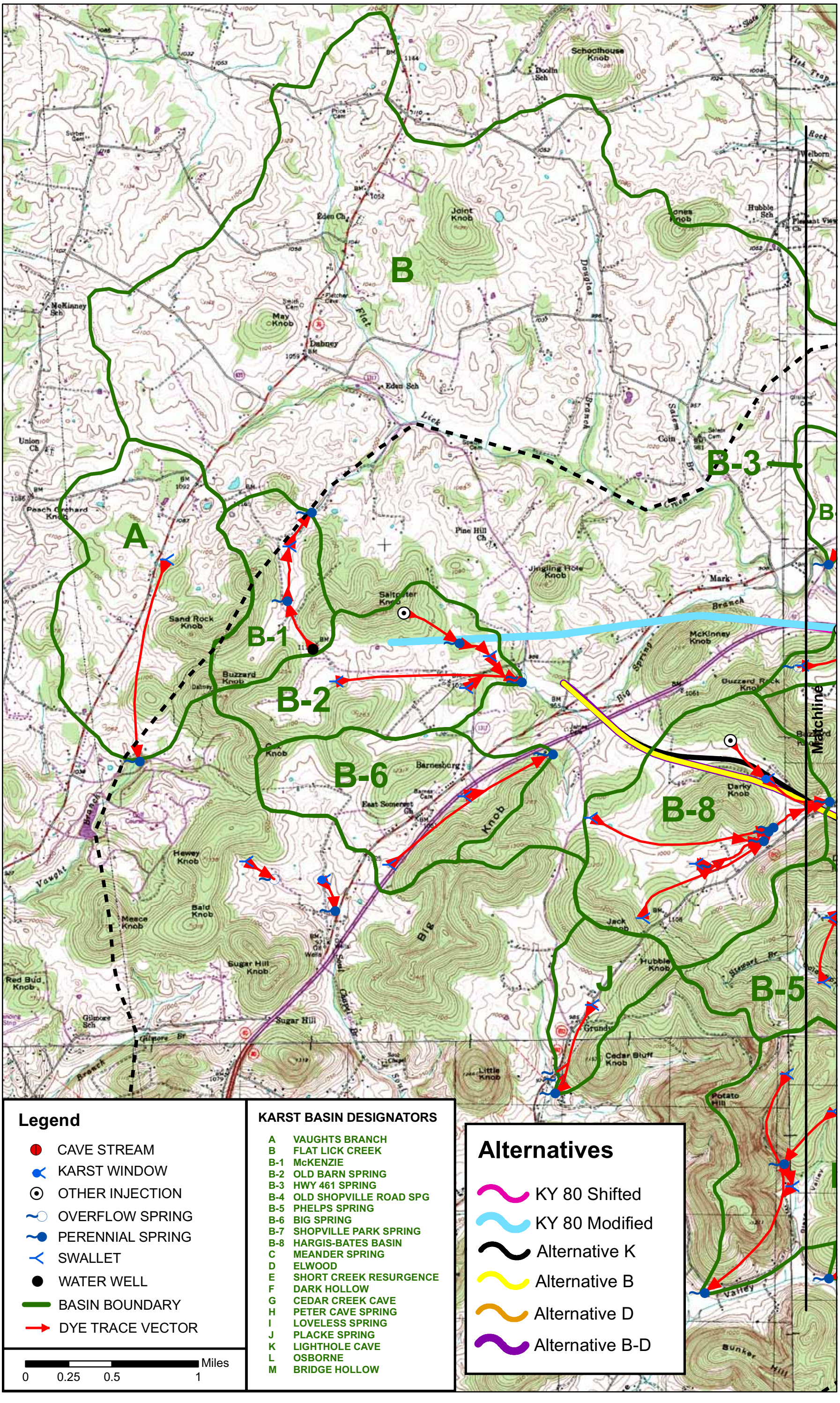
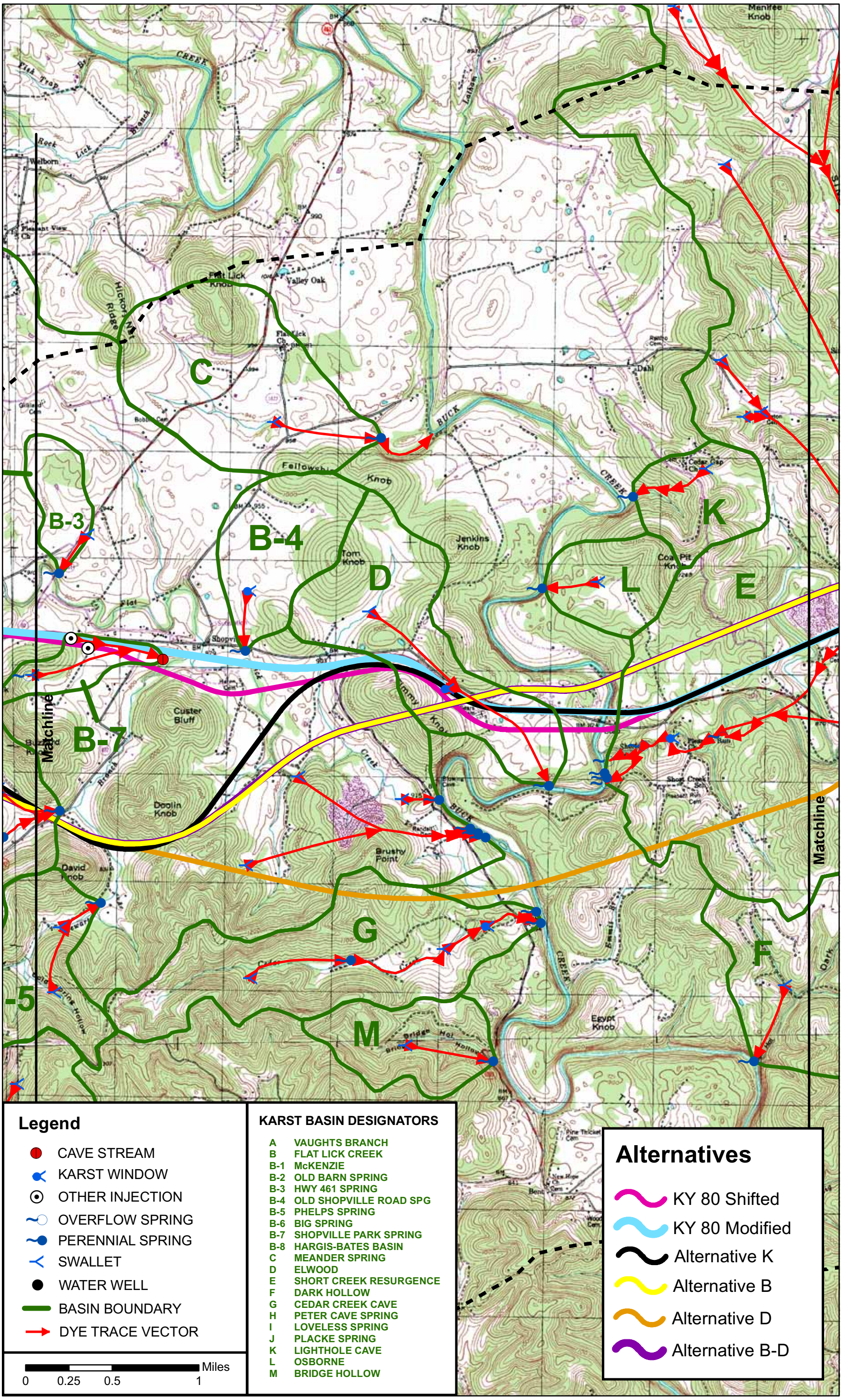


Figure 4.2.17-2 – Highway Traffic Noise Impact Study – Ambient Noise Receiver Locations

Figure 4.4.4-1 – Historic Structures Survey Sites (6 Sheets)

Figure 5.2.7-1 – Dye Tracing and Hydrogeologic Basin Maps (3 Sheets)


A
B
B-1
B-2
B-3
B-5
B-6
B-8
J
Matchline
Legend
CAVE STREAM
KARST WINDOW
OTHER INJECTION
OVERFLOW SPRING
PERENNIAL SPRING
SWALLET
WATER WELL
BASIN BOUNDARY
DYE TRACE VECTOR
0 0.25 0.5 1 Miles
KARST BASIN DESIGNATORS
A VAUGHTS BRANCH
B FLAT LICK CREEK
B-1 McKENZIE
B-2 OLD BARN SPRING
B-3 HWY 461 SPRING
B-4 OLD SHOPVILLE ROAD SPG
B-5 PHELPS SPRING
B-6 BIG SPRING
B-7 SHOPVILLE PARK SPRING
B-8 HARGIS-BATES BASIN
C MEANDER SPRING
D ELWOOD
E SHORT CREEK RESURGENCE
F DARK HOLLOW
G CEDAR CREEK CAVE
H PETER CAVE SPRING
I LOVELESS SPRING
J PLACKE SPRING
K LIGHTHOLE CAVE
L OSBORNE
M BRIDGE HOLLOW
Alternatives
KY 80 Shifted
KY 80 Modified
Alternative K
Alternative B
Alternative D
Alternative B-D


Legend
CAVE STREAM
KARST WINDOW
OTHER INJECTION
OVERFLOW SPRING
PERENNIAL SPRING
SWALLET
WATER WELL
BASIN BOUNDARY
DYE TRACE VECTOR
0 0.25 0.5 1 Miles
KARST BASIN DESIGNATORS
A VAUGHTS BRANCH
B FLAT LICK CREEK
B-1 McKENZIE
B-2 OLD BARN SPRING
B-3 HWY 461 SPRING
B-4 OLD SHOPVILLE ROAD SPG
B-5 PHELPS SPRING
B-6 BIG SPRING
B-7 SHOPVILLE PARK SPRING
B-8 HARGIS-BATES BASIN
C MEANDER SPRING
D ELWOOD
E SHORT CREEK RESURGENCE
F DARK HOLLOW
G CEDAR CREEK CAVE
H PETER CAVE SPRING
I LOVELESS SPRING
J PLACKE SPRING
K LIGHTHOLE CAVE
L OSBORNE
M BRIDGE HOLLOW
Alternatives
KY 80 Shifted
KY 80 Modified
Alternative K
Alternative B
Alternative D
Alternative B-D
Matchline
Matchline
B-3
B-4
B-7
-5
C
D
E
F
G
K
L
M
Menifee Knob
Welborn
Valley Oak
Custer Bluff
Doolin Knob
David Knob
Brushy Point
Jenkins Knob
Tom Knob
Egypt Knob
Fellowship Knob
Buck Creek
Short Creek

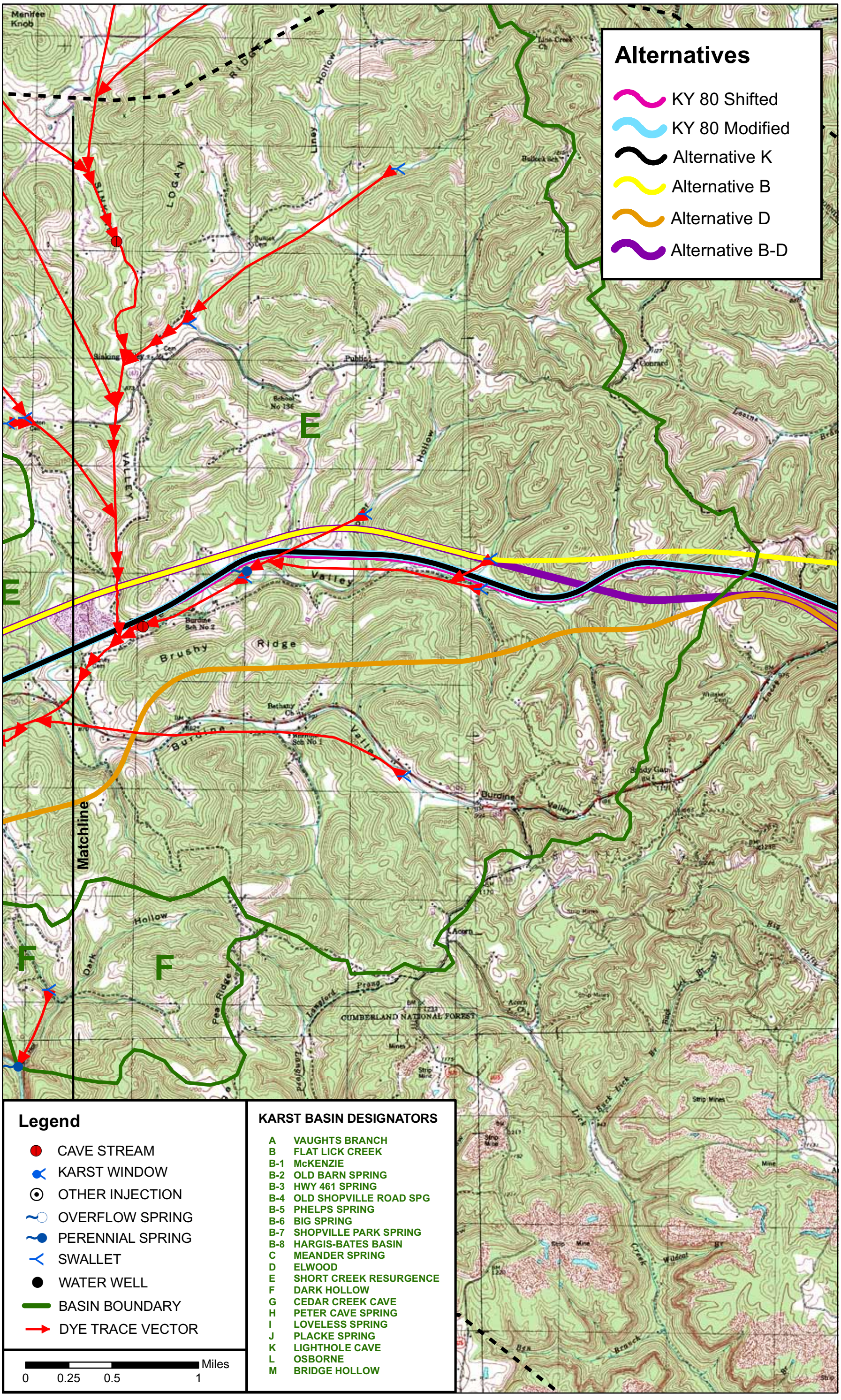

Alternatives
KY 80 Shifted
KY 80 Modified
Alternative K
Alternative B
Alternative D
Alternative B-D
Legend
CAVE STREAM
KARST WINDOW
OTHER INJECTION
OVERFLOW SPRING
PERENNIAL SPRING
SWALLET
WATER WELL
BASIN BOUNDARY
DYE TRACE VECTOR
0 0.25 0.5 1 Miles
KARST BASIN DESIGNATORS
A VAUGHTS BRANCH
B FLAT LICK CREEK
B-1 McKENZIE
B-2 OLD BARN SPRING
B-3 HWY 461 SPRING
B-4 OLD SHOPVILLE ROAD SPG
B-5 PHELPS SPRING
B-6 BIG SPRING
B-7 SHOPVILLE PARK SPRING
B-8 HARGIS-BATES BASIN
C MEANDER SPRING
D ELWOOD
E SHORT CREEK RESURGENCE
F DARK HOLLOW
G CEDAR CREEK CAVE
H PETER CAVE SPRING
I LOVELESS SPRING
J PLACKE SPRING
K LIGHTHOLE CAVE
L OSBORNE
M BRIDGE HOLLOW
Matchline
E
E
F
F
Brushy Ridge
Burdine Valley
Dark Hollow
Pea Ridge
CUMBERLAND NATIONAL FOREST
Burdine
Acorn
Strip Mines

Figure 5.2.22-1 – Karst Vulnerability Rating Map (1 Sheet)

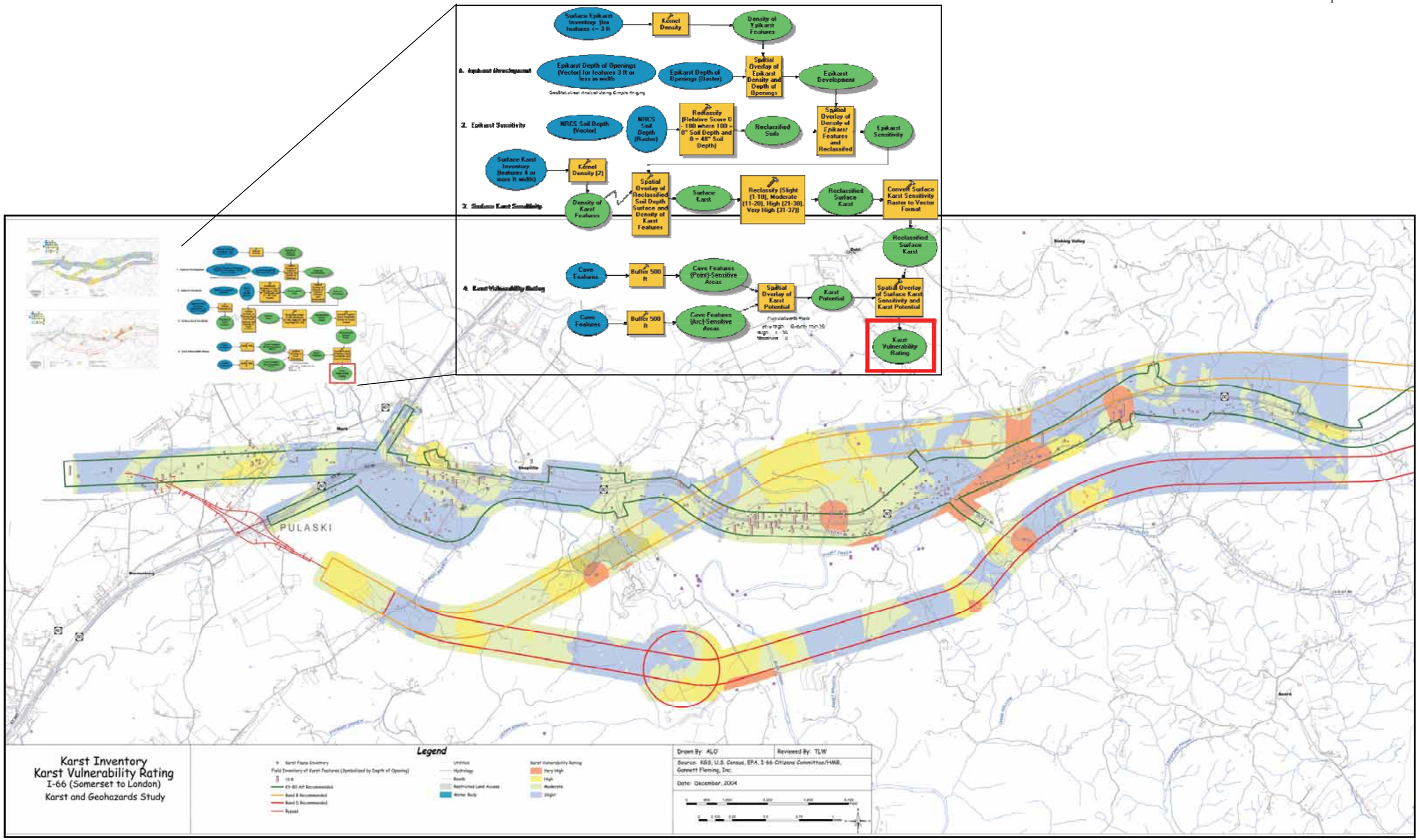

Surface Epikarst Inventory (Sink features <= 3 ft)
Kernel Density
Density of Epikarst Features
Epikarst Depth of Openings (Vector) for features 3 ft or less in width
Epikarst Depth of Openings (Raster)
Spatial Overlay of Epikarst Density and Depth of Openings
Epikarst Development
2. Epikarst Sensitivity
NRCS Soil Depth (Vector)
NRCS Soil Depth (Raster)
Reclassify (Relative Score 0 - 100 where 100 = 0" Soil Depth and 0 = 48" Soil Depth)
Reclassified Soils
Spatial Overlay of Density of Epikarst Features and Reclassified
Epikarst Sensitivity
Surface Karst Inventory (features 6 or more ft width)
Kernel Density (2)
Density of Karst Features
Spatial Overlay of Reclassified Soil Depth Surface and Density of Karst Features
Surface Karst
Reclassify (Slight (1-10), Moderate (11-20), High (21-30), Very High (31-37))
Reclassified Surface Karst
Convert Surface Karst Sensitivity Raster to Vector Format
Reclassified Surface Karst
Cave Features
Buffer 500 ft
Cave Features (Point) Sensitive Areas
Cave Features
Buffer 500 ft
Cave Features (Arc) Sensitive Areas
Spatial Overlay of Karst Potential
Karst Potential
Spatial Overlay of Surface Karst Sensitivity and Karst Potential
Karst Vulnerability Rating
PULASKI
Karst Inventory
Karst Vulnerability Rating
I-66 (Somerset to London)
Karst and Geohazards Study
Legend
Drawn By: ALO
Reviewed By: TLW
Source: KGS, U.S. Census, EPA, I-66 Citizens Committee/HMB, Gannett Fleming, Inc.
Date: December, 2004

Table 5.2.25-1 – Stream Impacts Table

Table 5.2.25-1 – Impacts to Project Area Streams in Linear Feet per Alternative

	Impacts (in linear feet)										
	Pulaski County Alternative						Laurel County Alternative				
Stream	K	KY 80 Modified	KY 80 Shifted	B	D	B/D	G	H	I	L	M
Big Spring Branch	1,158.74	1,560.76	1,659.70	1,161.08	1,154.48	1,161.08	0.00	0.00	0.00	0.00	0.00
Stewart Branch	675.70	2,908.28	1,351.15	637.73	618.69	637.73	0.00	0.00	0.00	0.00	0.00
Stewart Branch Trib 1	552.55	0.00	0.00	706.55	691.36	706.55	0.00	0.00	0.00	0.00	0.00
Flat Lick Creek	294.11	3,905.10	803.52	270.60	0.00	270.60	0.00	0.00	0.00	0.00	0.00
Flat Lick Creek Trib 1	0.00	0.00	0.00	0.00	958.22	0.00	0.00	0.00	0.00	0.00	0.00
Flat Lick Creek Trib 2	1,232.38	382.86	396.20	704.27	0.00	704.27	0.00	0.00	0.00	0.00	0.00
Cedar Creek	0.00	0.00	0.00	0.00	804.76	0.00	0.00	0.00	0.00	0.00	0.00
Buck Creek	566.53	808.84	315.06	211.07	815.80	211.07	0.00	0.00	0.00	0.00	0.00
Buck Creek Trib 1	0.00	0.00	0.00	0.00	453.04	0.00	0.00	0.00	0.00	0.00	0.00
Pleasant Run Trib 1	0.00	0.00	0.00	0.00	873.10	0.00	0.00	0.00	0.00	0.00	0.00
Pleasant Run Trib 2	987.22	995.63	880.62	639.33	0.00	639.33	0.00	0.00	0.00	0.00	0.00
Pleasant Run Trib 3	0.00	0.00	0.00	0.00	625.47	0.00	0.00	0.00	0.00	0.00	0.00
Burdine Valley	0.00	0.00	0.00	0.00	653.75	0.00	0.00	0.00	0.00	0.00	0.00
Burdine Valley Trib 1	0.00	0.00	0.00	0.00	1,088.88	0.00	0.00	0.00	0.00	0.00	0.00
Price Valley	7,449.70	7,410.24	8,841.61	0.00	0.00	761.05	0.00	0.00	0.00	0.00	0.00
Price Valley Trib 1	23.50	56.60	173.48	441.52	0.00	441.52	0.00	0.00	0.00	0.00	0.00
Price Valley Trib 2	1,250.70	1,088.99	458.04	698.70	0.00	698.70	0.00	0.00	0.00	0.00	0.00
Price Valley Trib 3	342.56	345.27	287.23	632.96	0.00	632.96	0.00	0.00	0.00	0.00	0.00
Price Valley Trib 4	488.21	485.93	204.62	0.00	1,190.87	0.00	0.00	0.00	0.00	0.00	0.00
Price Valley Trib 5	572.91	573.75	574.80	0.00	1,003.71	0.00	0.00	0.00	0.00	0.00	0.00
Price Valley Trib 6	380.14	379.88	369.91	665.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Price Valley Trib 7	0.00	0.00	0.00	0.00	565.06	481.35	0.00	0.00	0.00	0.00	0.00
Price Valley Trib 8	244.92	243.65	92.35	832.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Bolger Hollow	702.03	698.75	804.11	715.06	0.00	715.06	0.00	0.00	0.00	0.00	0.00
Lacy Fork	3,398.31	3,143.72	3,705.45	1,786.38	1,023.32	1,023.32	0.00	0.00	0.00	0.00	0.00
Lacy Fork Trib 1	2,989.94	2,379.92	3,063.74	0.00	1,991.02	1,991.02	0.00	0.00	0.00	0.00	0.00
Lacy Fork Trib 2	1,115.58	1,117.18	1,134.83	951.42	96.89	96.89	0.00	0.00	0.00	0.00	0.00
Lacy Fork Trib 3	199.47	1,911.47	1,578.73	1,515.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lacy Fork Trib 4	414.84	417.66	0.00	1,460.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sugar Camp Branch	429.38	188.47	1,143.55	0.00	287.49	287.49	0.00	0.00	0.00	0.00	0.00
Sugar Camp Branch Trib 1	0.00	0.00	0.00	0.00	194.85	194.85	0.00	0.00	0.00	0.00	0.00
Little Clifty Creek Trib 1	281.58	367.59	278.56	693.49	281.00	281.00	0.00	0.00	0.00	0.00	0.00
Rockcastle River	0.00	0.00	0.00	0.00	0.00	0.00	230.94	230.94	230.94	230.94	230.94
Rockcastle River Trib 1	0.00	0.00	0.00	0.00	0.00	0.00	1,175.74	1,165.77	1,163.78	1,175.74	1,175.74
Pine Creek	0.00	0.00	0.00	0.00	0.00	0.00	0.00	781.76	2,547.12	0.00	0.00
Pine Creek Trib 1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,802.53	0.00	0.00
Pine Creek Trib 2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	575.74	0.00	0.00
Pine Creek Trib 3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	157.63	0.00	0.00
Pine Creek Trib 4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	538.98	0.00	0.00	0.00
Pine Creek Trib 5	0.00	0.00	0.00	0.00	0.00	0.00	711.15	0.00	0.00	711.15	711.15
Pine Creek Trib 6	0.00	0.00	0.00	0.00	0.00	0.00	1,383.71	0.00	0.00	1,383.71	1,383.71
Pine Creek Trib 7	0.00	0.00	0.00	0.00	0.00	0.00	963.37	0.00	0.00	963.37	963.37
Poison Honey Fork	0.00	0.00	0.00	0.00	0.00	0.00	713.58	1,922.11	1,834.44	713.58	713.5

	Impacts (in linear feet)										
	Pulaski County Alternative						Laurel County Alternative				
Stream	K	KY 80 Modified	KY 80 Shifted	B	D	B/D	G	H	I	L	M
											8
Poison Honey Fork Trib 1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	893.61	0.00	0.00
Poison Honey Fork Trib 2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	173.03	731.93	0.00	0.00
Poison Honey Fork Trib 3	0.00	0.00	0.00	0.00	0.00	0.00	1,198.12	423.00	0.00	1,198.12	1,198.12
White Oak Creek	0.00	0.00	0.00	0.00	0.00	0.00	540.12	865.09	819.08	540.12	540.12
White Oak Creek Trib 1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	644.37	820.64	0.00	0.00
White Oak Creek Trib 2	0.00	0.00	0.00	0.00	0.00	0.00	667.47	0.00	0.00	667.47	667.47
White Oak Creek Trib 3	0.00	0.00	0.00	0.00	0.00	0.00	779.21	778.71	774.62	779.21	779.21
White Oak Creek Trib 3: Trib 1	0.00	0.00	0.00	0.00	0.00	0.00	788.53	0.00	0.00	788.53	788.53
Little White Oak Creek	0.00	0.00	0.00	0.00	0.00	0.00	0.00	992.72	823.04	0.00	0.00
Little White Oak Creek Trib 1	0.00	0.00	0.00	0.00	0.00	0.00	689.06	976.68	799.00	689.06	689.06
Clifty Branch	0.00	0.00	0.00	0.00	0.00	0.00	0.00	705.42	0.000	0.000	0.00
Sinking Creek	0.00	0.00	0.00	0.00	0.00	0.00	352.27	321.54	336.54	314.73	352.27
Sinking Creek Trib 1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	481.13	0.00	557.75	0.00
Sinking Creek Trib 2	0.00	0.00	0.00	0.00	0.00	0.00	1,294.89	0.00	0.00	0.00	1,294.89
Sinking Creek Trib 2: Trib 1	0.00	0.00	0.00	0.00	0.00	0.00	403.37	0.00	0.00	0.00	403.37
Powder Mill Creek	0.00	0.00	0.00	0.00	0.00	0.00	960.59	0.00	0.00	0.00	960.59
Laurel Branch	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	971.68	0.00	0.00
Laurel Branch Trib 1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	519.78	0.00	0.00
Laurel Branch Trib 1: Trib 1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	483.33	0.00	0.00
Laurel Branch Trib 2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	703.10	0.00	0.00
Laurel Branch Trib 3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	737.97	357.23	737.97	0.00
Ward Branch	0.00	0.00	0.00	0.00	0.00	0.00	1,921.57	2,996.36	2,311.17	2,394.17	3,166.45
Ward Branch Trib 1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,237.00	0.00	1,237.00	0.00
Ward Branch Trib 2	0.00	0.00	0.00	0.00	0.00	0.00	673.58	1,088.05	0.00	1,088.05	879.39
Ward Branch Trib 2: Trib 1	0.00	0.00	0.00	0.00	0.00	0.00	280.88	424.06	0.00	424.06	614.18
Ward Branch Trib 2: Trib 1: Trib 1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	440.39	0.00	440.39	776.11
Ward Branch Trib 3	0.00	0.00	0.00	0.00	0.00	0.00	333.69	0.00	0.00	0.00	0.00
Ward Branch Trib 4	0.00	0.00	0.00	0.00	0.00	0.00	907.17	0.00	0.00	0.00	0.00
Horse Branch Trib 1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	69.64	69.64	69.64
Horse Branch Trib 2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	316.53	316.53	316.53
Little Laurel River	0.00	0.00	0.00	0.00	0.00	0.00	2,752.24	2,908.96	689.06	689.06	689.06
Little Laurel River Trib 1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	635.38	0.00	0.00	0.00
Little Laurel River Trib 2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	506.01	506.01	506.01
Little Laurel River Trib 3	0.00	0.00	0.00	0.00	0.00	0.00	730.98	0.00	0.00	0.00	0.00
Little Laurel River Trib 4	0.00	0.00	0.00	0.00	0.00	0.00	278.07	0.00	0.00	0.00	0.00
Total Linear Feet per Alternative	**25,751.00**	**31,370.54**	**28,117.26**	**14,723.94**	**15,371.76**	**11,935.84**	**20,730.30**	**21,469.42**	**21,238.17**	**18,616.36**	**19,869.49**
Alternative Ranking per County	**4**	**6**	**5**	**2**	**3**	**1**	**3**	**5**	**4**	**1**	**2**

Table 5.2.35-1 – Wetland Impacts Table

Table 5.2.35-1 – Wetland Impacts per Wetland Type by Alternative (in acres)

Wetland Impacts per Wetland Type by Alternative (in acres)															
	Wetland Impacts per Type														
Cowardin Wetland Type	PUB	POW	PEM	PEM/PUB	PEM/POW	PEM/PSS	PSS/PUB	PSS/PFO	PEM/PFO	PFO/PUB	PFO	PSS	PEM/PUB/PFO	PEM/PSS/PUB	Total Impacts
Pulaski County Alternative															
K	0.685	0	5.346	0.410	0.106	0.783	0	0	0.233	0	0	0	0	0	**7.563**
KY80-Modified	0.797	0	8.156	0.410	0.106	0.783	0	0	0.233	0	0	0	0	0	**10.485**
KY80-Shifted	1.152	0	5.566	0.292	0.163	0.783	0	0	0.233	0	0	0	0	0	**8.189**
B	1.460	0	3.464	0.214	0.057	0.548	0	0	0	0	0	0	0	0	**5.743**
D	1.620	0	1.165	0.780	0	0.783	0	0	0	0	0	0.155	0.575	0	**5.078**
B/D	0.829	0	1.165	0.780	0	0.783	0	0	0	0	0	0	0.575	0	**4.132**
	Wetland Impacts per Type														
Cowardin Wetland Type	PUB	POW	PEM	PEM/PUB	PEM/POW	PEM/PSS	PSS/PUB	PSS/PFO	PEM/PFO	PFO/PUB	PFO	PSS	PEM/PUB/PFO	PEM/PSS/PUB	TOTAL
Laurel County Alternative															
G	3.284	1.248	7.178	0.300	0	0.877	0	0.266	0.218	0	0.743	0.649	1.670	1.670	**18.103**
H	8.967	0	3.038	0.646	0	0	0.890	0	0.049	0	1.493	0.808	0	0	**15.891**
I	2.808	0	2.802	0	0	0	0	0.103	0	0.013	0.074	0.999	0	0	**6.799**
L	6.915	0	3.067	0.441	0	0.877	0.890	0.266	0	0	0.100	0.796	1.669	1.670	**16.691**
M	4.280	0.315	4.872	0.638	0	0.877	0.616	0.266	0	0	0.071	0.528	1.669	1.670	**15.802**

PUB = Palustrine Unconsolidated Bottom
POW = Palustrine Open Water
PEM = Palustrine Emergent
PEM/PUB = Palustrine Emergent/Palustrine Unconsolidated Bottom
PEM/POW = Palustrine Emergent/Palustrine Open Water
PEM/PSS = Palustrine Emergent/Palustrine Scrub Shrub
PSS/PUB = Palustrine Scrub Shrub/Palustrine Unconsolidated Bottom
PSS/PFO = Palustrine Scrub Shrub
PEM/PFO = Palustrine Emergent/Palustrine Forested
PFO/PUB = Palustrine Forested/Palustrine Unconsolidated Bottom
PFO = Palustrine Forested
PSS = Palustrine Scrub Shrub
PEM/PUB/PFO = Palustrine Emergent/Palustrine Unconsolidated Bottom/Palustrine Forested
PEM/PSS/PUB = Palustrine Emergent/Palustrine Scrub Shrub/Palustrine Unconsolidated Bottom

Table 5.2.40-1 – Rare Species Documented in the Project Area

Table 5.2.40-1: KSNPC and Federal Listed Species Known Historically from the I-66 Project Area				
Common Name	**Scientific Name**	**Source**	**KSNPC/Federal**	**Habitat in Project Area [1]**
Vascular Plants				
Mountain maple	*Acer spicatum*	KSNPC coordination	KSNPC-E	Cool, moist, mesic wooded habitat near caves
Blue monkshood	*Aconitum uncinatum*	KSNPC coordination	KSNPC-T	Wooded lower slopes and terraces along larger streams; Cliff Section
Southern maidenhair-fern	*Adiantum capillus-veneris*	KSNPC coordination, & located during field sampling	KSNPC-T	Moist to wet limestone seeps, waterfalls, and travertine deposits along Buck Creek
Lucy Braun's white snakeroot	*Ageratina luciae-brauniae*	KSNPC coordination	KSNPC-S	Moist sandstone rockhouses
Tarheel sedge	*Carex austrocaroliniana*	Campbell et al. 1994	KSNPC-S	Moist hemlock slope forest below sandstone cliffs; Cliff Section
Prairie redroot	*Ceanothus herbaceous*	KSNPC coordination	KSNPC-T	Sandstone boulder-cobble bars and limestone cobble bars; along the Rockcastle River
Small spreading pogonia	*Cleistes bifaria*	Campbell et al. 1994 & USFS coordination	DBNF-S	Open pine-oak woods and adjacent clearings; Cumberland Plateau
Kentucky lady's-slipper	*Cypripedium kentuckiense*	KSNPC & USFS coordination	DBNF-S; KSNPC-E	Wooded sandy floodplains of mid-size to large streams; Cliff Section
Rockcastle aster	*Eurybia saxicastellii*	KSNPC & USFWS coordination	KSNPC-T; Federal-SOMC	Thickets in transition from open boulder-cobble bars to adjacent slope forest
Short's hedgehyssop	*Gratiola viscidula*	KSNPC coordination	KSNPC-S	Edges of wooded floodplain wetlands; London Plain
Shortleaf skeleton-grass	*Gymnopogon brevifolus*	KSNPC coordination	KSNPC-E	Sandy open wetlands; Dissected Eastern Highland Rim
Southern heartleaf	*Hexastylis contracta*	KSNPC coordination	KSNPC-E	Mesic slope forests near cliffs; Cumberland Plateau
St. Peter's-wort	*Hypericum crux-andreae*	KSNPC coordination	KSNPC-T	Seasonally wet grasslands on acid soils; Cumberland Plateau
White walnut	*Juglans cinerea*	KSNPC, USFWS, USFS coordination, & located during field sampling	DBNF-S; Federal-SOMC; KSNPC-S	Mesic wooded ravines, and along streams
Ground juniper	*Juniperus communis var. depressa*	KSNPC coordination	KSNPC-T	Sandstone cliff edges and adjacent pine-oak woodlands;

Table 5.2.40-1: KSNPC and Federal Listed Species Known Historically from the I-66 Project Area				
Common Name	**Scientific Name**	**Source**	**KSNPC/Federal**	**Habitat in Project Area [1]**
				Cumberland Plateau
Round-head bush-clover	*Lespedeza capitata*	KSNPC coordination	KSNPC-S	Limestone prairie patches
Wood lily	*Lilium philadelphicum*	KSNPC coordination	KSNPC-T	Maintained openings near roads and powerlines; Cumberland Plateau
Nuttall's lobelia	*Lobelia nuttallii*	KSNPC coordination	KSNPC-T	Sandy wet meadows, swamps, and pond edges; London Plain
Appalachian sandwort	*Minuartia glabra*	KSNPC coordination	KSNPC-T	Flatter sandstone outcrops near the cliffline; Cliff Section
Yellow-crested orchid	*Platanthera cristata*	KSNPC coordination	KSNPC-T	Narrow, forested, upland, mossy stream bottoms ("moist streamheads"), and pond margins; Cumberland Plateau
White fringeless orchid	*Platanthera integrilabia*	KSNPC, USFWS, & USFS coordination	KSNPC-E; Federal-C; DBNF- S	Forested, upland, mossy streambanks ("boggy streamheads"); Cliff Section
Crossleaf milkwort	*Polygala cruciata*	KSNPC coordination	KSNPC-E	Open sandy wetlands; Cliff Section
Gaywings	*Polygala paucifolia*	KSNPC coordination	KSNPC-E	Mesic hemlock forest below sandstone cliffs
Illinois pondweed	*Potamogeton illinoensis*	KSNPC coordination	KSNPC-S	Calcareous waters of streams, lakes and ponds; Rockcastle River
Southern bog goldenrod	*Solidago gracillima*	KSNPC coordination	KSNPC-S	Cobble bars
Rand's goldenrod	*Solidago randii*	KSNPC coordination	KSNPC-S	Rock crevices and sand dunes, dry, often calcareous ledges, rocky banks, boulder-cobble bars; along the Rockcastle River
Virginia spiraea	*Spiraea virginiana*	KSNPC & USFWS coordination	KSNPC-T; Federal-T	High gradient streams, especially gravel bar, meander scrolls, and natural levees; floodprone areas
Shining ladies'-tresses	*Spiranthes lucida*	KSNPC coordination	KSNPC-T	Limestone banks of streams; Cliff Section
Northern white cedar	*Thuja occidentalis*	KSNPC & USFWS coordination, & located during field sampling	KSNPC-T; Federal-SOMC	Rocky limestone slopes along Buck Creek
Eelgrass	*Vallisneria americana*	Campbell et al. 1994, & located during field sampling	KSNPC-S	Clean, clear waters; Sinking Creek

Table 5.2.40-1: KSNPC and Federal Listed Species Known Historically from the I-66 Project Area				
Common Name	**Scientific Name**	**Source**	**KSNPC/Federal**	**Habitat in Project Area [1]**
New York ironweed	*Vernonia noveboracensis*	KSNPC coordination	KSNPC-S	Wet acidic open woods and adjacent meadows; Cumberland Plateau
Sand grape	*Vitis rupestris*	KSNPC & USFS coordination	KSNPC-T; DBNF- S	The outer edge of vegetation along cobble banks; Rockcastle River, Sinking Creek
Plant Communities				
Appalachian acid seep		KSNPC coordination	KSNPC-N	
Appalachian mesophytic forest		KSNPC coordination	KSNPC-N	
Appalachian pine-oak forest		KSNPC coordination	KSNPC-N	
Cumberland plateau gravel/cobble bar		KSNPC coordination	KSNPC-N	
Floodplain ridge/terrace forest		KSNPC coordination	KSNPC-N	
Hemlock-mixed forest		KSNPC coordination	KSNPC-N	
Insects				
A Geometrid moth	*Lytrosis permagnaria*	KSNPC coordination	KSNPC-E	Dry oak, oak-hickory, or scrub, sometimes with southern pines; Corbin, KY
Gastropods				
Shortspire hornsnail	*Pleurocera curta*	USFWS coordination	KSNPC-S; Federal-SOMC; DBNF- S	Not known historically from the project area
Onyx rocksnail	*Leptoxis praerosa*	KSNPC coordination	KSNPC-S	Rocks in shallow, slow-moving riffles in medium-sized rivers; Rockcastle River, Pine Creek
Freshwater Mussels				
Cumberland elktoe	*Alasmidonta atropurpurea*	KSNPC & USFWS coordination	KSNPC-E; Federal-E	Areas of little current in silt, sand and gravel substrates; lower Sinking Creek
Elktoe	*Alasmidonta marginata*	KSNPC coordination	KSNPC-T	Sand and gravel substrates; Rockcastle River
Cumberland papershell	*Anodontoides denigratus*	KSNPC & USFS coordination	KSNPC-E; Federal-SOMC; DBNF- S	Silt, mud or sand substrates; lower Sinking Creek
Cumberlandian combshell	*Epioblasma brevidens*	KSNPC & USFWS coordination, & located during field sampling	KSNPC-E; Federal-E	Sand, gravel, cobble and boulder substrates; Buck Creek, Rockcastle River
Oyster mussel	*Epioblasma capsaeformis*	KSNPC & USFWS coordination	KSNPC-E; Federal-E	Sand, gravel, boulder or mud substrates; Buck Creek, Rockcastle River
Snuffbox	*Epioblasma triquetra*	KSNPC & USFS	KSNPC-E;	Mud, rocky or gravel

Table 5.2.40-1: KSNPC and Federal Listed Species Known Historically from the I-66 Project Area				
Common Name	**Scientific Name**	**Source**	**KSNPC/Federal**	**Habitat in Project Area [1]**
		coordination	Federal-SOMC; DBNF- S	and sand substrates; Buck Creek
Longsolid	*Fusconaia subrotunda subrotunda*	KSNPC coordination	KSNPC-S; DBNF- S	Sand and gravel substrates; Rockcastle River
Pocketbook	*Lampsilis ovata*	KSNPC coordination	KSNPC-E	Sand and gravel substrates; Rockcastle River
Little-wing pearlymussel	*Pegias fabula*	KSNPC & USFWS coordination	KSNPC-E; Federal-E	In sand, gravel and cobble substrates; Buck Creek, Rockcastle River
Tennessee clubshell	*Pleurobema oviforme*	KSNPC & USFS coordination, & located during field sampling	KSNPC-E; Federal-SOMC; DBNF- S	Sand and gravel, and occasionally mud substrates; Buck Creek
Fluted kidneyshell	*Ptychobranchus subtentum*	KSNPC & USFWS coordination, & located during field sampling	KSNPC-E; Federal-C; DBNF- S	In sand and gravel; Buck Creek, Rockcastle River
Rabbitsfoot	*Quadrula cylindrica cylindrica*	KSNPC coordination	KSNPC-T; DBNF- S	Sand and gravel substrates; Rockcastle River
Purple lilliput	*Toxolasma lividus*	KSNPC & USFS coordination	KSNPC-E; Federal-SOMC; DBNF- S	Mud, sand and gravel substrates; Buck Creek
Little spectaclecase	*Villosa lienosa*	KSNPC coordination	KSNPC-S	Mud, sand and gravel substrates; Buck Creek, Rockcastle River
Cumberland bean	*Villosa trabalis*	KSNPC & USFWS coordination	KSNPC-E; Federal-E	In sand and gravel; Buck Creek, Rockcastle River, Sinking Creek
Crustaceans				
Appalachian cave crayfish	*Orconectes australis packardi*	Located during field sampling	KSNPC-T	Caves; Cumberland River drainage
Fishes				
Ashy darter	*Etheostoma cinereum*	KSNPC & USFS coordination, & located during field sampling	KSNPC-S; Federal-SOMC; DBNF- S	Medium-sized rivers; slow to moderate current, usually associated with boulders, snags, and detritus; Buck Creek, Rockcastle River
Mountain brook lamprey	*Ichthyomyzon greeleyi*	KSNPC & USFS coordination	KSNPC-T; DBNF- S	Clean, clear, small- to medium-sized streams; high gradient; mixed sand and gravel substrates; Rockcastle River
Sawfin shiner	*Notropis* sp. 4	KSNPC coordination	KSNPC-E	Pitman Creek
Olive darter	*Percina squamata*	KSNPC & USFS coordination	KSNPC-E; Federal-SOMC; DBNF- S	Boulder, cobble and pebble substrates; Rockcastle River
Stargazing minnow	*Phenacobius uranops*	KSNPC coordination	KSNPC-S	Streams of moderate to

Table 5.2.40-1: KSNPC and Federal Listed Species Known Historically from the I-66 Project Area				
Common Name	**Scientific Name**	**Source**	**KSNPC/Federal**	**Habitat in Project Area [1]**
				high gradient, clear water; pebble/gravel; Rockcastle River
Blackside dace	*Phoxinus cumberlandensis*	KSNPC & USFWS coordination	KSNPC-T; Federal-T	Small, shaded, cool upland creeks; Cumberland Plateau
Breeding Birds				
Sharp-shinned hawk	*Accipiter striatus*	KSNPC coordination, & located during field sampling	KSNPC-S	Nesting habitat is coniferous, mixed or deciduous forest and open woodlands
Henslow's sparrow	*Ammodramus henslowii*	KSNPC coordination	KSNPC-S	Nesting habitat is open fields and meadows with grass interspersed with weeds or shrubby vegetation, esp. damp or low-lying areas
Great blue heron	*Ardea herodias*	KSNPC coordination, & located during field sampling	KSNPC-S	Nesting habitat is wooded areas with large trees along riparian corridors, swamps, and reservoirs
Sedge wren	*Cistothorus platensis*	KSNPC coordination	KSNPC-S	Nesting habitat is hayfields, overgrown pastures, and fallow fields
Bald eagle	*Haliaeetus leucocephalus*	KSNPC coordination	KSNPC-T; Federal-T	Nesting habitat is wooded areas adjacent to reservoirs and large rivers
Red-cockaded woodpecker	*Picoides borealis*	KSNPC coordination	KSNPC-X; Federal-E	Nesting habitat is old-growth pines-oak-hickory forests with a closed to partially-open canopy
Bewick's wren	*Thryomanes bewickii*	KSNPC coordination	KSNPC-S; DBNF- S	Nesting habitat is brushy areas, thickets and scrub in open country
Mammals				
Rafinesque's big-eared bat	*Corynorhinus rafinesquii*	KSNPC & USFS coordination, & located during field sampling	KSNPC-S; Federal-SOMC; DBNF- S	Hibernates in caves, abandoned mines and wells. During summer, roost in unoccupied buildings, barns, large tree hollows, rock shelters, and cave entrances
Least weasel	*Mustela nivalis*	KSNPC coordination	KSNPC-S	Grassy and brushy fields and marshes
Gray bat	*Myotis grisescens*	KSNPC & USFWS	KSNPC-T;	Perennial streams,

Table 5.2.40-1: KSNPC and Federal Listed Species Known Historically from the I-66 Project Area				
Common Name	**Scientific Name**	**Source**	**KSNPC/Federal**	**Habitat in Project Area [1]**
		coordination, & located during field sampling	Federal-E	ponds, lakes and caves
Eastern small-footed bat	*Myotis leibii*	KSNPC & USFS coordination, & located during field sampling	KSNPC-T; Federal-SOMC; DBNF- S	Caves, mines, protected areas along clifflines, abandoned buildings, and under rocks on the ground or on the floor of caves
Indiana bat	*Myotis sodalis*	KSNPC & USFWS coordination	KSNPC-E; Federal-E	Maternity colonies are in mature bottomland forests near water; Hibernation is in cold caves and mine portals
Evening bat	*Nycticeius humeralis*	KSNPC coordination, & located during field sampling	KSNPC-S	Forages along streams in bottomlands and lakes or ponds; roosts in tree crevices and behind loose bark

[1] The following sources were used to determine habitat:
Bat Conservation International Inc. 2001
Burr and Warren 1986
Campbell et al. 1994
Cicerello and Schuster 2003
Personal communication with Guenter Schuster, PhD, EKU
Personal communication with John Omer, USFS Wildlife Biologist
KSNPC correspondence 2004
Palmer-Ball 1996
Palmer-Ball 2003
USFWS 1992
USFWS 2003

*KSNPC = Kentucky State Nature Preserves Commission; KSNPC- indicates species on the July 2004 list entitled "Endangered, Threatened, Special Concern, and Historical Biota of Kentucky"; KSNPC-E = state endangered; KSNPC-T = state threatened; KSNPC-S = state special concern; KSNPC-H = historic; KSNPC-N = no status; KSNPC-X = extirpated
Federal- indicates rare species listed by the U.S. Fish and Wildlife Service; Federal-E = endangered; Federal-T = threatened species; Federal-C = candidate; Federal-SOMC = species of management concern
DBNF-S indicates species on the U.S. Forest Service "Regional Forester's Sensitive Species List for the Daniel Boone National Forest", dated 21 August 2001

Table 5.2.40-2 – Rare Species Habitat Impacts

Table 5.2.40-2 - Impacts to Potential Habitat of KSNPC and Federal Listed Species per Alternative												
		Potential Habitat Impacted per Alternative (in acres) [1, 2]										
		Pulaski County Alternative						Laurel County Alternative				
Scientific Name	**Common Name/ Listed Status**	**K**	**KY 80 Modified**	**KY 80 Shifted**	**B**	**D**	**B/D**	**G**	**H**	**I**	**L**	**M**
KSNPC Listed Species												
Vascular Plants												
Acer spicatum	Mountain Maple KSNPC-E	2.9	2.9	1.9	0	1	0	0	0	0	0	0
Aconitum uncinatum	Blue monkshood KSNPC-T	24.5	24.5	24.7	14.9	7.9	10.6	1.5	1.5	8.6	1.5	1.5
Adiantum capillus-veneris	Southern maidenhair-fern KSNPC-T	0.8	0.8	0	0.8	2.9	0.8	0	0	0	0	0
Ageratina luciae-brauniae	Lucy Braun's white snakeroot KSNPC-S	11.9	12.1	11.9	11.4	11.9	11.9	46.5	31.8	58.6	37.4	46.5
Carex austrocaroliniana	Tarheel sedge KSNPC-S	0	0	0	0	0	0	45.5	141.3	189.4	33.3	35.4
Ceanothus herbaceous	Prairie redroot KSNPC-T	0	0	0	0	0	0	0.1	0.1	0.1	0.1	0.1
Cleistes bifaria	Small spreading pogonia DBNF-S	40.7	41	37	38.1	106.7	87.1	155.9	65.2	59.6	137.5	158.4
Cypripedium kentuckiense	Kentucky lady's-slipper DBNF-S; KSNPC-E	14.9	14.9	16.3	10.1	6.1	6.3	18.3	37.3	32.5	25.4	28.9

Table 5.2.40-2 - Impacts to Potential Habitat of KSNPC and Federal Listed Species per Alternative												
		Potential Habitat Impacted per Alternative (in acres) [1, 2]										
		Pulaski County Alternative						Laurel County Alternative				
Scientific Name	**Common Name/ Listed Status**	**K**	**KY 80 Modified**	**KY 80 Shifted**	**B**	**D**	**B/D**	**G**	**H**	**I**	**L**	**M**
Gratiola viscidula	Short's hedgehyssop KSNPC-S	0	0	0	0	0	0	4.64	6.16	2.47	2.52	1.66
Gymnopogon brevifolius	Shortleaf skeleton-grass KSNPC-E	1.8	1.8	1.6	1.8	1.3	1.4	4.2	1.9	1.7	2.8	2.9
Hexastylis contracta	Southern heartleaf KSNPC-E	0.7	0.8	0	0.8	2.9	0	45.5	141.3	189.4	33.3	35.4
Hypericum crux-andreae	St. Peter's-wort KSNPC-T	0.8	0.8	0.8	0.8	0.8	0.8	1.0	0.62	0.27	0	1.0
Juniperous communis var. depressa	Ground juniper KSNPC-T	7.2	6.5	7.1	7.9	7.1	7.1	25	15.3	27.9	20.1	25
Lespedeza capitata	Round-head bush-clover KSNPC-S	0	0	0	0	0	0	0	0	0	0	0
Lilium philadelphicum	Wood lily KSNPC-T	1.7	1.6	1.9	1.1	3.6	0.8	1	2.5	3.7	1	1
Lobelia nuttallii	Nuttall's lobelia KSNPC-T	0	0	0	0	0	0	8.2	10.91	4.18	9.7	7.59
Minuartia glabra	Appalachian sandwort KSNPC-T	7.2	6.5	7.1	7.9	7.1	7.1	25	15.3	27.9	20.1	25
Platanthera cristata	Yellow-crested orchid KSNPC-T	0	0	0	0	0	0	3.41	11.33	7.95	3.41	3.41

Table 5.2.40-2 - Impacts to Potential Habitat of KSNPC and Federal Listed Species per Alternative												
		Potential Habitat Impacted per Alternative (in acres) [1, 2]										
		Pulaski County Alternative						Laurel County Alternative				
Scientific Name	**Common Name/ Listed Status**	**K**	**KY 80 Modified**	**KY 80 Shifted**	**B**	**D**	**B/D**	**G**	**H**	**I**	**L**	**M**
Polygala cruciata	Crossleaf milkwort KSNPC-E	1.8	1.8	1.6	1.8	1.3	1.4	4.2	1.9	1.7	2.8	2.9
Polygala paucifolia	Gaywings KSNPC-E	0	0	0	0	0	0	45.5	141.3	189.4	33.3	35.4
Potamogeton illinoensis	Illinois pondweed KSNPC-S	0	0	0	0	0	0	0.6	0.6	0.6	0.6	0.6
Solidago gracillima	Southern bog goldenrod KSNPC-S	0	0	0	0	0	0	0.1	0.1	0.1	0.1	0.1
Solidago randii	Rand's goldenrod KSNPC-S	0	0	0	0	0	0	0.1	0.1	0.1	0.1	0.1
Spiranthes lucida	Shining ladies'-tresses KSNPC-T	0.5	0.6	0.2	0.1	0.7	0.1	0	0	0	0	0
Vallisneria americana	Eelgrass KSNPC-S	0.948	1.296	0.502	0.321	1.770	0.322	1.007	0.754	0.859	0.761	1.007
Vernonia noveboracensis	New York ironweed KSNPC-S	5.4	5.4	5.5	3.9	4.1	4.4	9.8	12	9.1	10.8	8.7
Vitis rupestris	Sand grape KSNPC-T; DBNF- S	0	0	0	0	0	0	0.1	0.1	0.1	0.1	0.1

Table 5.2.40-2 - Impacts to Potential Habitat of KSNPC and Federal Listed Species per Alternative												
		Potential Habitat Impacted per Alternative (in acres) [1, 2]										
		Pulaski County Alternative						Laurel County Alternative				
Scientific Name	**Common Name/ Listed Status**	**K**	**KY 80 Modified**	**KY 80 Shifted**	**B**	**D**	**B/D**	**G**	**H**	**I**	**L**	**M**
Plant Communities (Direct Impacts) [3]												
N/A	Appalachian acid seep KSNPC-N	0	0	0	0	0	0	0	0	0	0	0
N/A	Appalachian mesophytic forest KSNPC-N	0	0	0	0	0	0	15.0	15.0	0	15.0	15.0
N/A	Appalachian pine-oak forest KSNPC-N	0	0	0	0	0	0	0	0	0	0	0
N/A	Cumberland plateau gravel/cobble bar KSNPC-N	0	0	0	0	0	0	0	0	0	0	0
N/A	Floodplain ridge/terrace forest KSNPC-N	0	0	0	0	0	0	0	0	0	0	0
N/A	Hemlock-mixed forest KSNPC-N	0	0	0	0	0	0	0	0	0	0	0
Insects												
Lytrosis permagnaria	A Geometrid moth KSNPC-E	0	0	0	0	0	0	0	0	0	0	0

Table 5.2.40-2 - Impacts to Potential Habitat of KSNPC and Federal Listed Species per Alternative												
		Potential Habitat Impacted per Alternative (in acres) [1, 2]										
		Pulaski County Alternative						Laurel County Alternative				
Scientific Name	**Common Name/ Listed Status**	**K**	**KY 80 Modified**	**KY 80 Shifted**	**B**	**D**	**B/D**	**G**	**H**	**I**	**L**	**M**
Gastropods												
Leptoxis praerosa	Onyx rocksnail KSNPC-S	0	0	0	0	0	0	0.5	0.5	1.2	0.5	0.5
Freshwater Mussels												
Alasmidonta marginata	Elktoe KSNPC-T	0.18	0.18	0.35	0.27	0.88	0.26	0.63	0.73	0.69	0.7	0.63
Fusconaia subrotunda subrotunda	Longsolid KSNPC-S; DBNF- S	0.18	0.18	0.35	0.27	0.88	0.26	0.63	0.73	0.69	0.7	0.63
Lampsilis ovata	Pocketbook KSNPC-E	0.18	0.18	0.35	0.27	0.88	0.26	0.63	0.73	0.69	0.7	0.63
Quadrula cylindrica cylindrica	Rabbitsfoot KSNPC-T; DBNF- S	0.18	0.18	0.35	0.27	0.88	0.26	0.63	0.73	0.69	0.7	0.63
Villosa lienosa	Little spectaclecase KSNPC-S	0.14	0.24	0.09	0.2	0.55	0.2	0.4	0.4	0.4	0.4	0.4
Crustaceans [2]												
Orconectes australis packardi	Appalachian cave crayfish KSNPC-T	211 karst features	262 karst features	181 karst features	80 karst features	137 karst features	80 karst features	0	0	0	0	0
Fishes												

Table 5.2.40-2 - Impacts to Potential Habitat of KSNPC and Federal Listed Species per Alternative												
		Potential Habitat Impacted per Alternative (in acres) [1, 2]										
		Pulaski County Alternative						Laurel County Alternative				
Scientific Name	**Common Name/ Listed Status**	**K**	**KY 80 Modified**	**KY 80 Shifted**	**B**	**D**	**B/D**	**G**	**H**	**I**	**L**	**M**
Ichthyomyzon greeleyi	Mountain brook lamprey KSNPC-T; DBNF- S	0	0	0	0	0	0	0.6	0.6	0.6	0.6	0.6
Notropis sp. 4	Sawfin shiner KSNPC-E	0	0	0	0	0	0	0	0	0	0	0
Phenacobius uranops	Stargazing minnow KSNPC-S	0	0	0	0	0	0	0.6	0.6	0.6	0.6	0.6
Birds												
Accipiter striatus	Sharp-shinned hawk KSNPC-S	347.7	417	371.6	406.8	480.9	385.68	381.5	392.4	539.3	368.5	371.9
Ammodramus henslowii	Henslow's sparrow KSNPC-S	138.1	166.5	95.5	34	16	20.7	21.9	14	7.2	19.1	21.9
Ardea herodias	Great blue heron KSNPC-S	4.1	4.9	2.5	1.2	5.3	1.2	11.6	12.4	5.4	5.5	6
Cistothorus platensis	Sedge wren KSNPC-S	165.6	191.9	111.7	45.5	16	32.2	22	14	14.9	19.1	22
Thryomanes bewickii	Bewick's wren KSNPC-S; DBNF- S	225.7	258.5	177	82.4	78.6	69.3	165.8	129.1	65.1	119.3	128.6
Mammals												
Mustela nivalis	Least weasel KSNPC-S	225.7	258.6	177	82.4	78.6	69.3	165.8	129.1	65.1	119.3	128.6

Table 5.2.40-2 - Impacts to Potential Habitat of KSNPC and Federal Listed Species per Alternative												
		Potential Habitat Impacted per Alternative (in acres) [1, 2]										
		Pulaski County Alternative						Laurel County Alternative				
Scientific Name	**Common Name/ Listed Status**	**K**	**KY 80 Modified**	**KY 80 Shifted**	**B**	**D**	**B/D**	**G**	**H**	**I**	**L**	**M**
Nycticeius humeralis	Evening bat KSNPC-S	2.0	2.7	0.7	1.4	2.8	1.4	8	8.5	5.4	3.4	2.9
Alternative Ranking (KSNPC Listed Species) [4]		**2**	**4**	**2**	**3**	**5**	**1**	**3**	**5**	**4**	**1**	**2**
Federal Listed Species												
Plants												
Eurybia saxicastellii	Rockcastle aster KSNPC-T; Federal-SOMC	0	0	0	0	0	0	0.1	0.1	0.1	0.1	0.1
Juglans cinerea	White walnut DBNF-S; Federal-SOMC; KSNPC-S	30.7	33	28.2	37.5	28.6	19.9	97.4	191.8	197.4	100.9	102.7
Platanthera integrilabia	White fringeless orchid KSNPC-E; Federal-C; DBNF- S	0	0	0	0	0	0	3.4	11.3	7.9	3.4	3.4
Spiraea virginiana	Virginia spiraea KSNPC-T; Federal-T	0	0	0	0	0	0	0.1	0.1	0.1	0.1	0.1
Thuja occidentalis	Northern white cedar KSNPC-T; Federal-SOMC	0.7	0.8	0	0.8	2.9	0.8	0	0	0	0	0

Table 5.2.40-2 - Impacts to Potential Habitat of KSNPC and Federal Listed Species per Alternative												
		Potential Habitat Impacted per Alternative (in acres) [1, 2]										
		Pulaski County Alternative						Laurel County Alternative				
Scientific Name	**Common Name/ Listed Status**	**K**	**KY 80 Modified**	**KY 80 Shifted**	**B**	**D**	**B/D**	**G**	**H**	**I**	**L**	**M**
Gastropoda												
Pleurocera curta	Shortspire hornsnail KSNPC-S; Federal-SOMC; DBNF- S	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Freshwater Mussels												
Alasmidonta atropurpurea	Cumberland elktoe KSNPC-E; Federal-E	0	0	0	0	0	0	0	0.14	0.04	0.23	0
Anadontoides denigratus	Cumberland papershell KSNPC-E; DBNF- S; Federal -SOMC	0	0	0	0	0	0	0	0.14	0.04	0.23	0
Ptychobranchus subtentum	Fluted kidneyshell KSNPC-E; Federal-C; DBNF- S	0.18	0.18	0.35	0.27	0.88	0.26	0.63	0.73	0.69	0.7	0.63
Epioblasma brevidens	Cumberlandian combshell KSNPC-E; Federal-E	0.18	0.18	0.35	0.27	0.88	0.26	0.63	0.73	0.69	0.7	0.63

Table 5.2.40-2 - Impacts to Potential Habitat of KSNPC and Federal Listed Species per Alternative												
		Potential Habitat Impacted per Alternative (in acres) [1, 2]										
		Pulaski County Alternative						Laurel County Alternative				
Scientific Name	**Common Name/ Listed Status**	**K**	**KY 80 Modified**	**KY 80 Shifted**	**B**	**D**	**B/D**	**G**	**H**	**I**	**L**	**M**
Epioblasma capsaeformis	Oyster mussel KSNPC-E; Federal-E	0.18	0.18	0.35	0.27	0.88	0.26	0.63	0.73	0.69	0.7	0.63
Epioblasma triquetra	Snuffbox KSNPC-E; DBNF- S; Federal -SOMC	0.18	0.18	0.35	0.27	0.88	0.26	0.63	0.73	0.69	0.7	0.63
Pegias fabula	Little-wing pearlymussel KSNPC-E; Federal-E	0.18	0.18	0.35	0.27	0.88	0.26	0.63	0.73	0.69	0.7	0.63
Pleurobema oviforme	Tennessee clubshell KSNPC-E; DBNF- S; Federal -SOMC	0.18	0.18	0.35	0.27	0.88	0.26	0.63	0.73	0.69	0.7	0.63
Toxolasma lividus	Purple lilliput KSNPC-E; DBNF- S; Federal -SOMC	0.11	0.21	0.06	0.17	0.52	0.17	0	0	0	0	0
Villosa trabalis	Cumberland bean KSNPC-E; Federal-E	0.18	0.18	0.35	0.27	0.88	0.26	0.63	0.73	0.69	0.7	0.63
Fishes												

Table 5.2.40-2 - Impacts to Potential Habitat of KSNPC and Federal Listed Species per Alternative												
		Potential Habitat Impacted per Alternative (in acres) [1, 2]										
		Pulaski County Alternative						Laurel County Alternative				
Scientific Name	**Common Name/ Listed Status**	**K**	**KY 80 Modified**	**KY 80 Shifted**	**B**	**D**	**B/D**	**G**	**H**	**I**	**L**	**M**
Etheostoma cinereum	Ashy darter KSNPC-S; DBNF- S; Federal -SOMC	1.1	1.5	0.5	0.4	1.8	0.4	0.5	0.5	0.5	0.5	0.5
Percina squamata	Olive darter KSNPC-E; DBNF- S; Federal -SOMC	0	0	0	0	0	0	0.6	0.6	0.6	0.6	0.6
Phoxinus cumberlandensis	Blackside dace KSNPC-T; Federal-T	0	0	0	0	0.5	0	0.3	1.7	1.5	0.2	0.3
Birds												
Haliaeetus leucocephalus	Bald eagle KSNPC-T; Federal-T	0.5	0.5	0.5	0.5	0.5	0.5	2.9	2.9	2.9	2.9	2.9
Picoides borealis	Red-cockaded woodpecker KSNPC-X; Federal-E	0	0	0	0	0	0	0	0	0	0	0
Bats												
Corynorhinus rafinesquii	Rafinesque's big-eared bat KSNPC-S; DBNF- S; Federal -SOMC	20.7	20.3	19.1	20.9	22.9	22.9	71.5	47.1	86.5	57.5	71.5
Myotis grisescens	Gray bat KSNPC-T; Federal-E	191.9	250.8	209.5	65.5	105.2	51.0	49.3	75.3	100.3	43.8	47.6

Table 5.2.40-2 - Impacts to Potential Habitat of KSNPC and Federal Listed Species per Alternative												
		Potential Habitat Impacted per Alternative (in acres) [1, 2]										
		Pulaski County Alternative						Laurel County Alternative				
Scientific Name	**Common Name/ Listed Status**	**K**	**KY 80 Modified**	**KY 80 Shifted**	**B**	**D**	**B/D**	**G**	**H**	**I**	**L**	**M**
Myotis leibii	Eastern small-footed bat KSNPC-T; DBNF- S; Federal -SOMC	19.1	18.6	19.1	19.3	19	19	71.5	47.1	86.5	57.5	71.5
Myotis sodalis	Indiana bat KSNPC-E; Federal-E	358.6	440.7	382.3	409.3	495.5	390.7	399.4	433.8	569.7	407.5	408.2
Alternative Ranking (Federal Listing Species) [4]		**1**	**2**	**1**	**3**	**4**	**2**	**1**	**4**	**3**	**2**	**1**

[1] Potential habitat includes all habitat indicated, with the exception of that shown in the Plant Communities section, which is a direct impact to a known extant plant community.
[2] The potential habitat of *Orconectes australis packardi* (southern cave crayfish) was determined in terms of numbers of karst feature potential habitats versus acres of potential habitat.
[3] Impacts to the Plant Communities are direct impacts to a known extant community, versus potential habitat.
[4] 1 = least number of listed species impacted per alternative. Ranking was determined by totaling the number of times each alternative had the greatest amount of impacts to the potential habitat of KSNPC and federal listed species. The alternative with the least number of greatest impacts to listed species was ranked 1; the alternative with the second least number of greatest impacts was ranked two, etcetera.

KSNPC = Kentucky State Nature Preserves Commission; KSNPC- indicates species on the July 2004 list entitled "Endangered, Threatened, Special Concern, and Historical Biota of Kentucky"; KSNPC-E = state endangered; KSNPC-T = state threatened; KSNPC-S = state special concern; KSNPC-H = historic; KSNPC-N = no status; KSNPC-X = extirpated
Federal- indicates rare species listed by the U.S. Fish and Wildlife Service; Federal-E = Federal endangered; Federal-T = Federal threatened; Federal-C = Federal candidate; Federal-SOMC = Federal species of management concern
DBNF-S indicates species on the U.S. Forest Service "Regional Forester's Sensitive Species List for the Daniel Boone National Forest", dated 21 August 2001

Table 5.2.44-1 – Habitat Types and Loss
Due to Proposed Project

Table 5.2.44-1 - Total Impact Habitat Summary per Alternative (per acre)											
	Pulaski County						Laurel County				
Habitat Types	**Alternative K**	**KY 80 Modified**	**KY 80 Shifted**	**Alternative B**	**Alternative D**	**Alternative B/D**	**Alternative G**	**Alternative H**	**Alternative I**	**Alternative L**	**Alternative M**
Residential/Mowed Grass	76.80	125.59	101.90	18.04	7.26	10.35	110.98	105.86	36.33	49.48	43.52
Cropland and Pasture	239.00	229.47	190.67	207.16	206.70	210.83	380.09	342.38	276.66	403.13	352.74
Old Field Herbaceous	138.08	166.49	95.47	33.97	15.97	20.68	21.95	14.01	7.19	19.12	21.95
Shrublands	60.05	66.67	65.30	36.87	62.67	37.09	143.84	88.18	50.22	100.18	106.68
Mixed Rangeland	27.53	25.39	16.27	11.56	0.00	11.56	0.00	26.95	7.70	0.00	0.00
Red Cedar/ Oak Forest	124.01	129.34	132.54	90.55	113.60	95.00	0.00	0.00	0.00	0.00	0.00
Pine/Oak Forest	40.67	41.04	37.04	38.10	106.68	87.11	155.88	65.18	59.61	137.52	158.36
Calcareous Oak Forest	109.98	189.15	177.83	157.46	156.56	144.21	0.00	0.00	0.00	0.00	0.00
Noncalcareous Oak Forest	197.01	186.82	156.81	211.19	217.67	154.36	180.23	186.54	290.30	197.74	178.07
Forest by Watercourse	9.46	21.88	10.09	1.43	9.23	3.88	17.47	40.20	29.87	38.39	36.00
Hemlock Forest	0.00	0.00	0.00	0.00	0.00	0	45.46	141.27	189.41	33.29	35.40
S. Maple/Hemlock/ W. Cedar	0.75	0.76	0.00	0.81	2.92	0.81	0.00	0.00	0.00	0.00	0.00
Rock/Gravel/Sand Bar	0.00	0.00	0.00	0.00	0.00	0	0.08	0.08	0.08	0.08	0.08
Major Watercourse	0.72	1.02	0.48	0.30	1.45	0.30	0.40	0.66	0.55	0.60	0.40
Commercial	0.82	12.62	4.72	38.13	0.00	38.13	3.12	1.70	14.32	17.01	17.01
Major Roadway	10.73	123.30	92.38	25.24	14.29	16.92	77.92	55.89	40.00	68.98	68.98
Total	**1035.61**	**1319.55**	**1081.49**	**870.81**	**915.01**	**831.23**	**1137.42**	**1068.88**	**1002.22**	**1065.52**	**1019.20**

Figure 5.2.59-1 – Shopville Park Location Exhibit

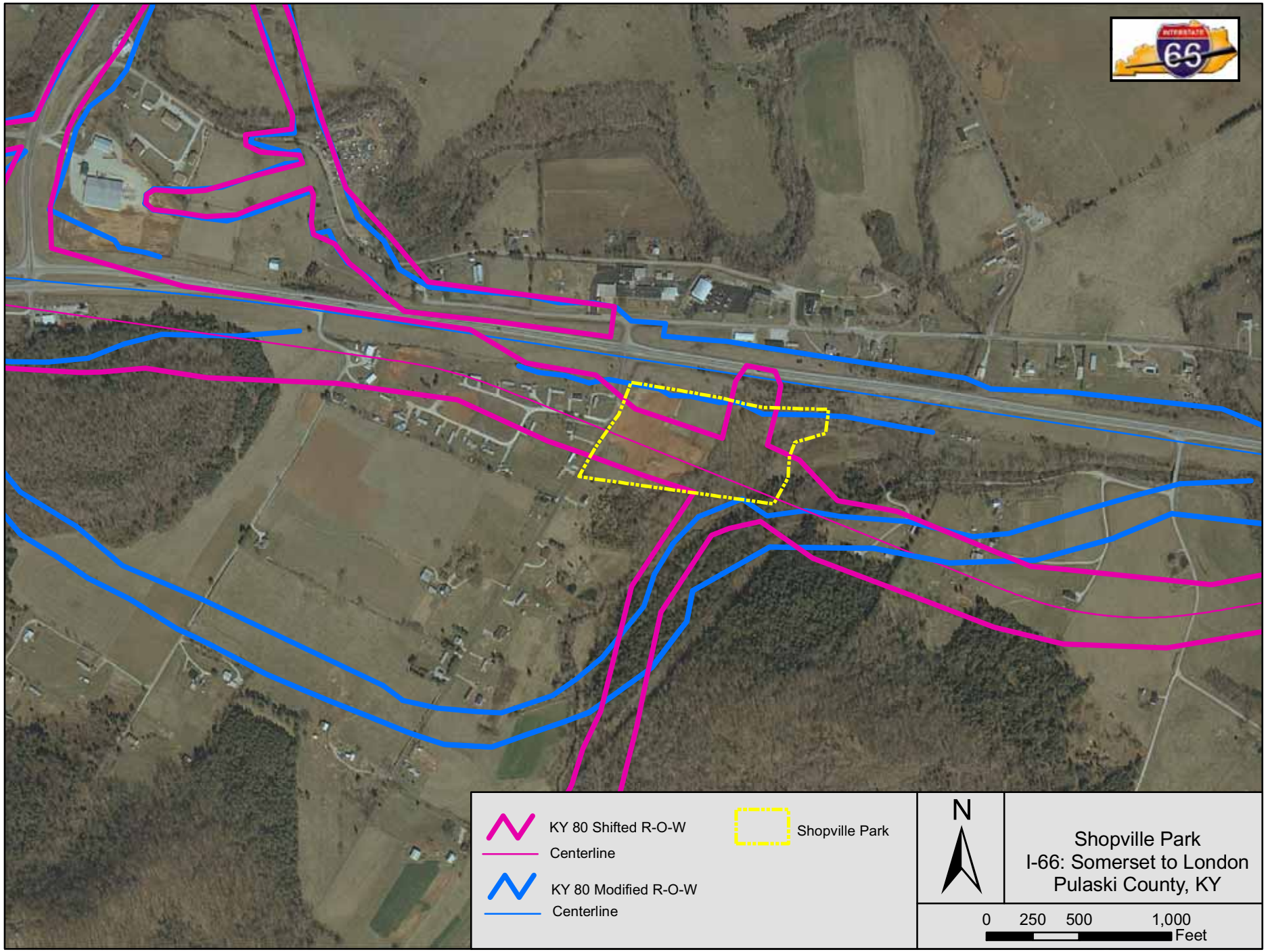
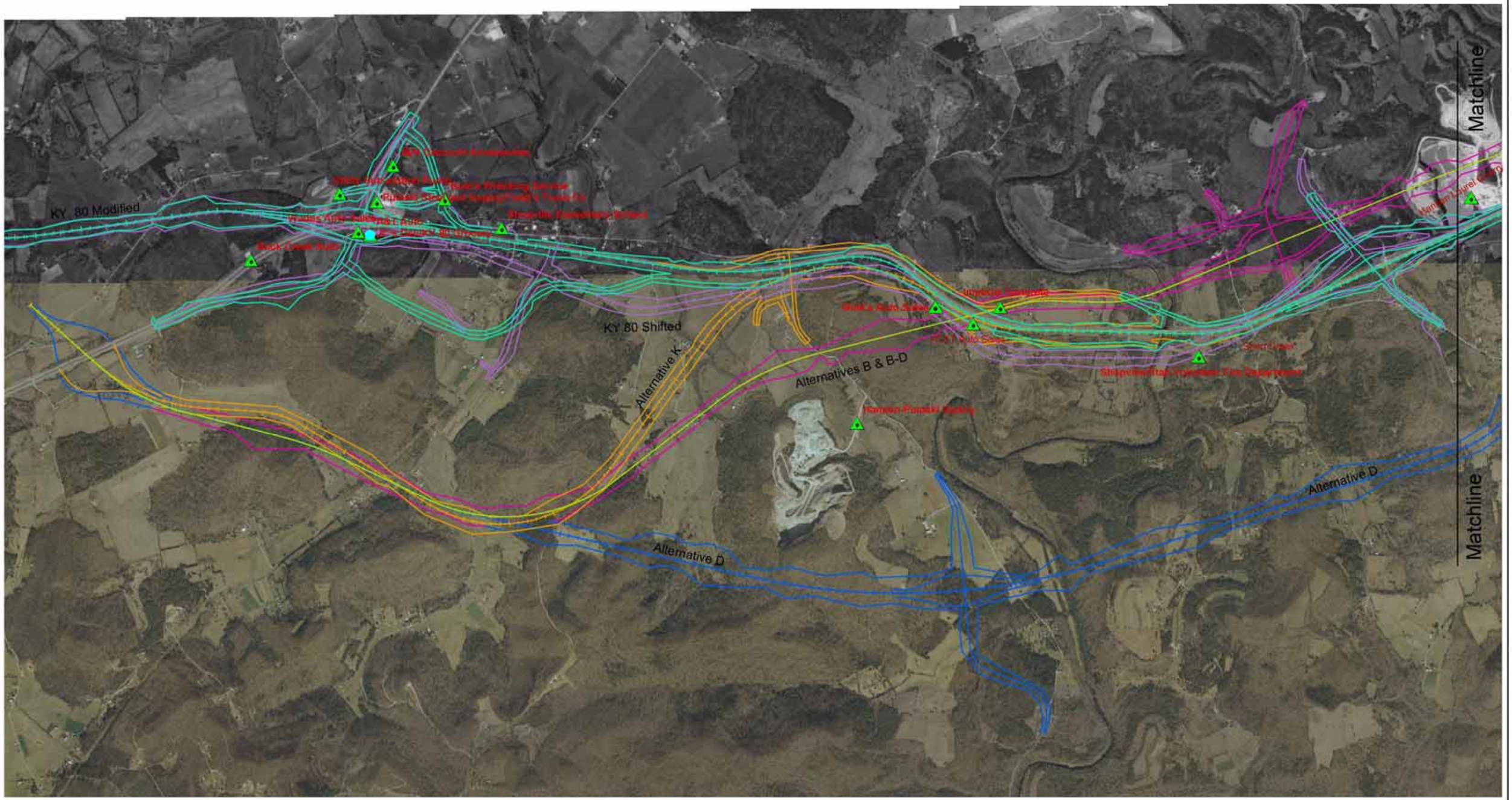

KY 80 Shifted R-O-W
Centerline
KY 80 Modified R-O-W
Centerline
Shopville Park
N
Shopville Park
I-66: Somerset to London
Pulaski County, KY
0 250 500 1,000
Feet

Figure 5.2.60-1 – Hazardous Materials Sites

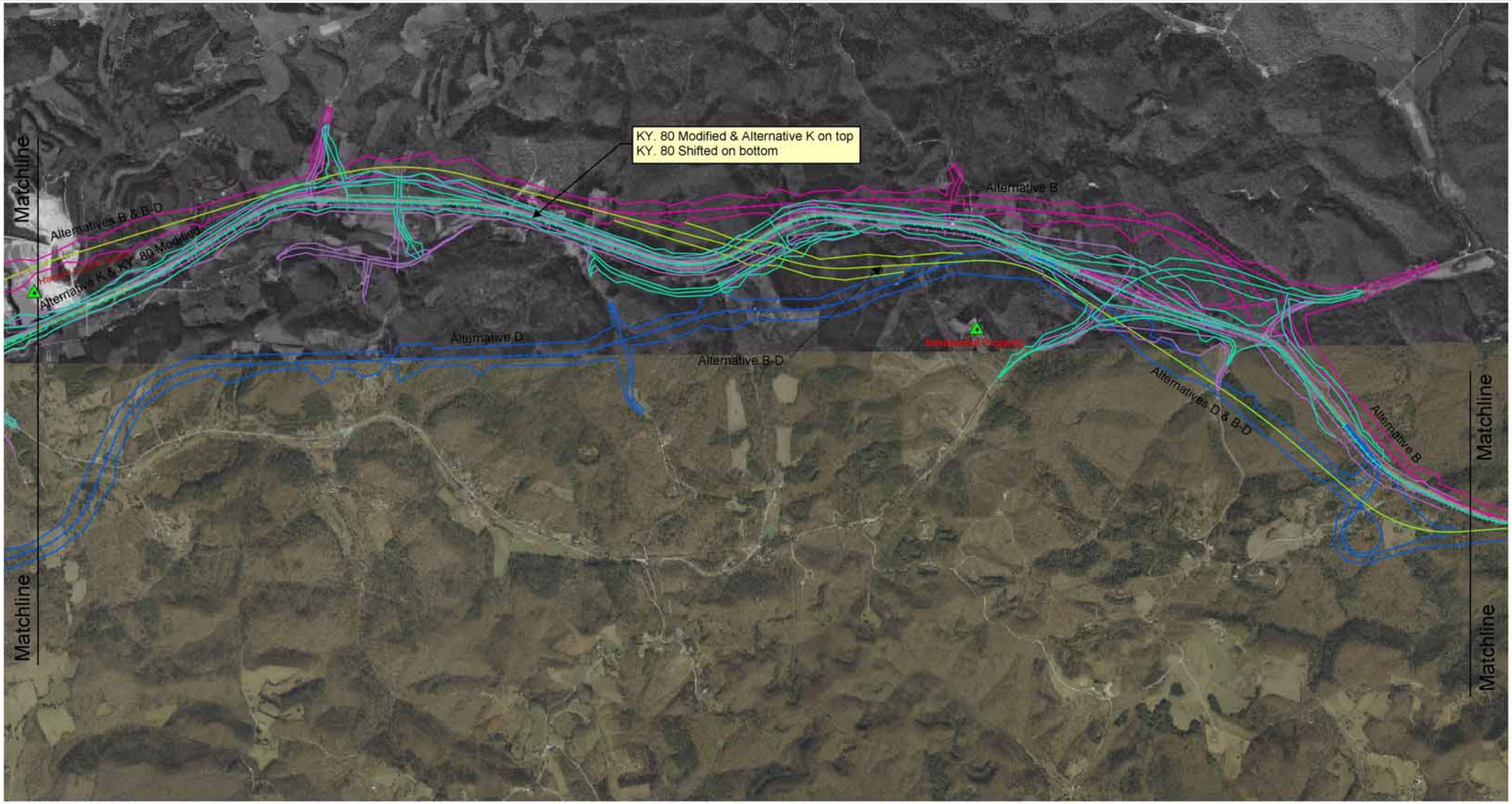


N

Alternative D
Alternative B, B-D
Alternative K

2,000 1,000 0 2,000 4,000 Feet

KY 80 Shifted
KY 80 Modified
Investigated Sites

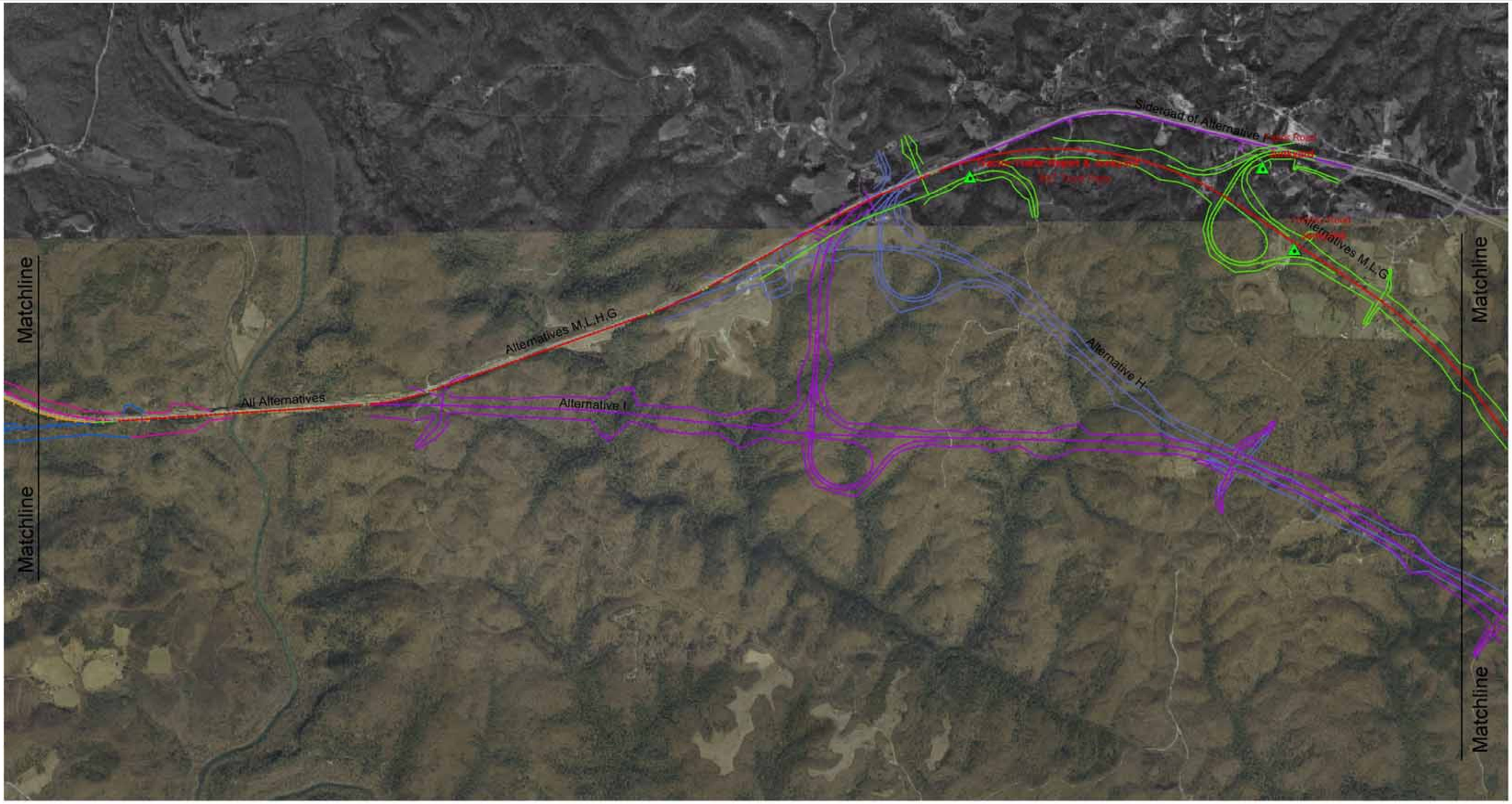


N

Alternative D
Alternative B
Alternative B-D
Alternative K

2,000 1,000 0 2,000 4,000 Feet

KY 80 Shifted
KY 80 Modified
Investigated Sites



N

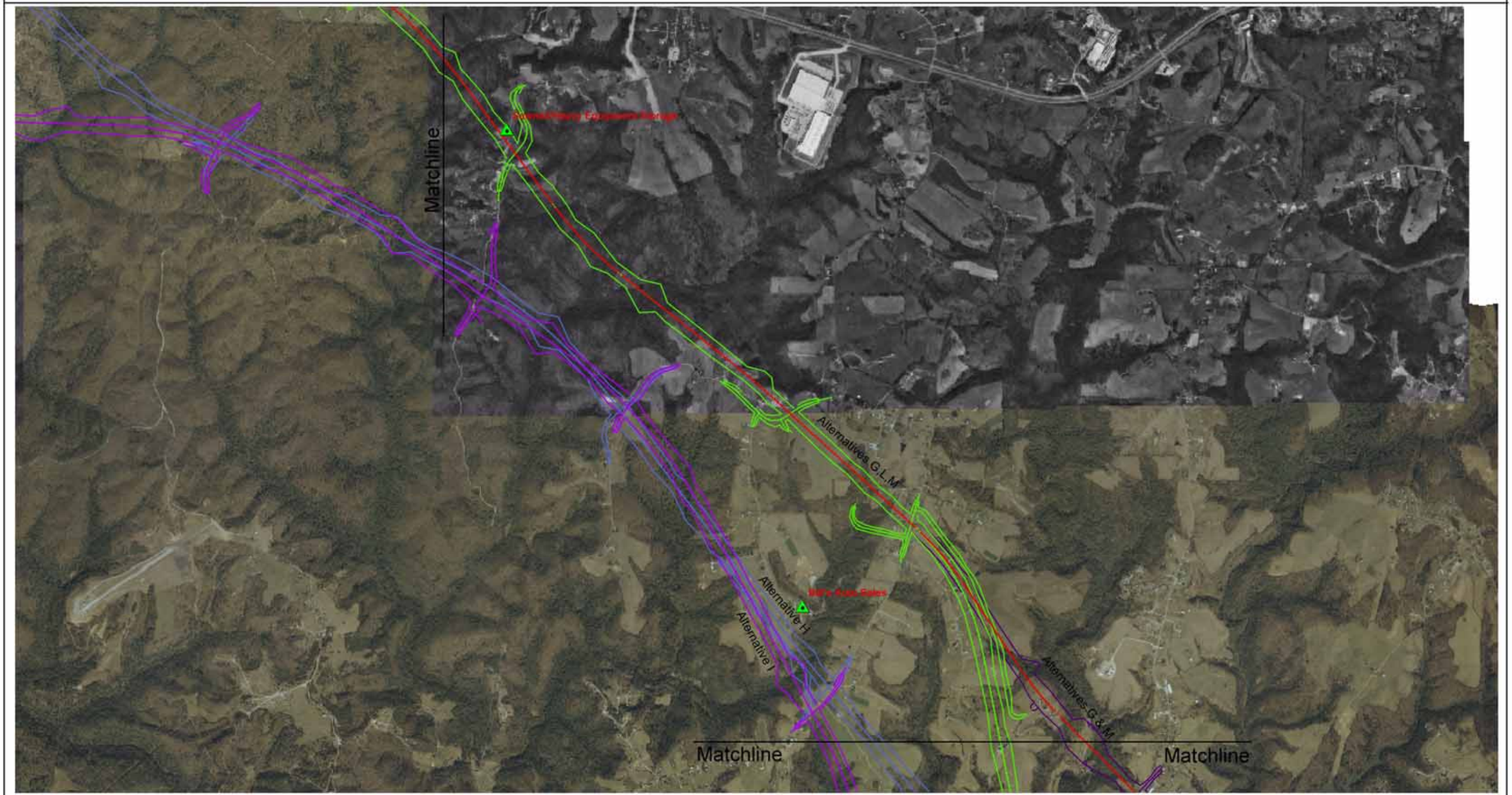
Alternative B
Alternative K
Alternative D

2,000 1,000 0 2,000 4,000 Feet

Investigated Sites

Alternative I
Alternative H
Alternative M, L, G

I-66 Pulaski & Laurel Counties, Kentucky
Environmental Study



N

Alternative H
Alternative I
Alternative G, M

2,000 1,000 0 2,000 4,000 Feet

Alternative L
Investigated Sites

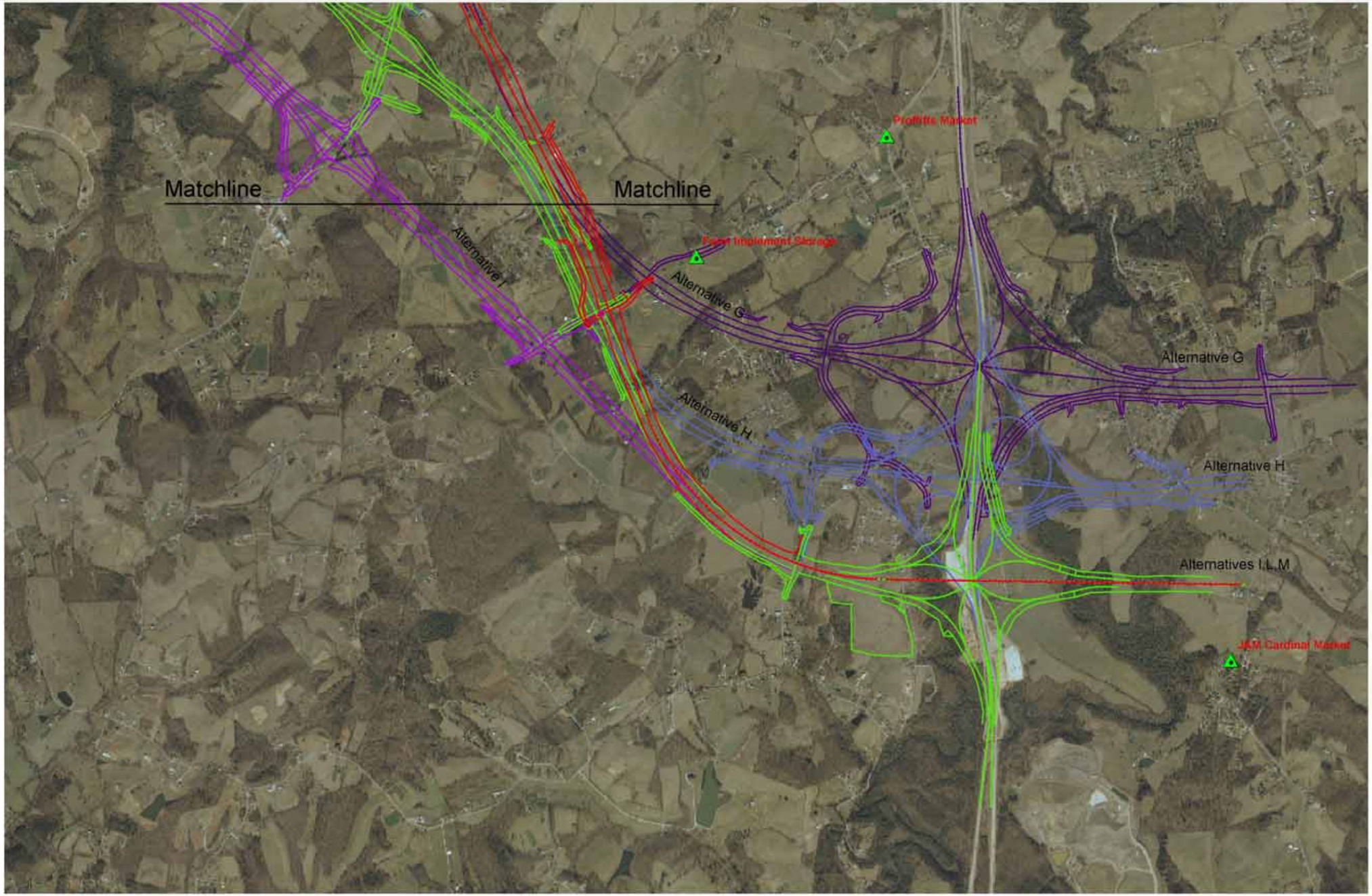
I-66 Pulaski & Laurel Counties, Kentucky
Hazardous Materials/UST Impact Analysis

N

Alternative H
Alternative I
Alternative G, M

2,000 1,000 0 2,000 4,000 Feet

Alternative L
Investigated Sites



N

Alternative H
Alternative I
Alternative G, M

2,000 1,000 0 2,000 4,000 Feet

Alternative L
Investigated Sites

Table 5.2.63-1 – Noise Abatement Tables

Table 5.2.63-1 - Noise Abatement Tables

I-66 Somerset to London Noise Impact and Abatement Classifications For Alternative B									
Receiver	2004 Existing Measured	Model Calibration Factor	2030 No-Build Predicted	2030 Build Noise Level	Difference Between Existing and Build	Difference Between No-Build and Build	NAC	Impact	Impact Category & Barrier Category*
1	50		50	47	-3	-3	67	No	
2	39		41	53	14	12	67	Yes	4/C
3	61		65	64	3	-1	67	No	
4	61	6	61	62	1	1	67	No	
5	62		64	70	8	6	67	Yes	2/A
6	57		57	54	-3	-3	67	No	
7	49		49	55	6	6	67	No	
8	42		42	43	1	1	67	No	
9	45		45	43	-2	-2	67	No	
10	43		43	45	2	2	67	No	
11	45		45	45	0	0	67	No	
12	55		55	58	3	3	67	No	
13	47		48	50	3	2	67	No	
14	69	2	75	ROW			67	Invalid	
15	59	3	59	78	19	19	67	Yes	1/A
16	56	2	61	61	5	0	67	No	
17	60	7	63	66	6	3	67	Yes	2/B
18	50		64	64	14	0	67	Yes	3/B
19	59	9	61	61	2	0	67	No	
20	47		47	63	16	16	67	Yes	3/A
21	57		60	60	3	0	67	No	
22	56		61	62	6	1	67	No	
23	54		54	56	2	2	67	No	
24	45		58	58	13	0	67	Yes	4/B
25	53		53	50	-3	-3	67	No	
26	55		55	50	-5	-5	67	No	
27	49		55	59	10	4	67	Yes	4/C
28	46		46	38	-8	-8	67	No	
29	48		48	37	-11	-11	67	No	
30	51	9	53	57	6	4	67	No	
31	60	-2	63	63	3	0	67	No	
32	53		57	72	19	15	67	Yes	1/C
33	60	1	63	63	3	0	67	No	
34	54	2	57	57	3	0	67	No	
35	63		63	66	3	3	67	Yes	2/B/C
36	53		53	51	-2	-2	67	No	
37	46	-1	49	67	21	18	67	Yes	1/A
38	53		57	58	5	1	67	No	
39	51		51	46	-5	-5	67	No	
40	45		45	41	-4	-4	67	No	
41	44		44	39	-5	-5	67	No	
42	40		40	40	0	0	67	No	
43	41		41	40	-1	-1	67	No	
44	45		45	38	-7	-7	67	No	
45	44		44	38	-6	-6	67	No	
46	50		50	39	-11	-11	67	No	
47	44		44	39	-5	-5	67	No	
48	50		50	38	-12	-12	67	No	
49	42		42	37	-5	-5	67	No	
50	46		46	37	-9	-9	67	No	
51	38		38	36	-2	-2	67	No	
52	37		37	36	-1	-1	67	No	
53	36		36	35	-1	-1	67	No	
54	32		35	36	4	1	67	No	
55	56		56	37	-19	-19	67	No	
56	62		62	37	-25	-25	67	No	
57	44		44	36	-8	-8	67	No	
58	50		50	37	-13	-13	67	No	
59	41		41	36	-5	-5	67	No	
60	43		43	36	-7	-7	67	No	
61	49		49	37	-12	-12	67	No	
62	45		45	37	-8	-8	67	No	
63	47		47	38	-9	-9	67	No	
64	43		43	39	-4	-4	67	No	
65	43		43	42	-1	-1	67	No	
66	46		46	45	-1	-1	67	No	
67	47		47	46	-1	-1	67	No	
68	55		55	44	-11	-11	67	No	
69	46		46	47	1	1	67	No	
70	50		52	52	2	0	67	No	
71	46		50	50	4	0	67	No	
72	52		52	46	-6	-6	67	No	

*A – Possible barrier location (feasibility/reasonableness study necessary) if build alternative is selected.
*B -- Proposed project does not appreciably alter (>3 dBA) future noise levels.
*C -- Isolated receiver

I-66 Somerset to London Noise Impact and Abatement Classifications For Alternative D									
Receiver	2004 Existing Measured	Model Calibration Factor	2030 No-Build Predicted	2030 Build Noise Level	Difference Between Existing and Build	Difference Between No-Build and Build	NAC	Impact	Impact Category & Barrier Category*
1	50		50	47	-3	-3	67	No	
2	39		41	46	7	5	67	No	
3	61		65	64	3	-1	67	No	
4	61	6	61	61	0	0	67	No	
5	62		64	64	2	0	67	No	
6	57		57	54	-3	-3	67	No	
7	49		49	48	-1	-1	67	No	
8	42		42	69	27	27	67	Yes	1/A
9	45		45	64	19	19	67	Yes	3/A
10	43		43	64	21	21	67	Yes	3/A
11	45		45	69	24	24	67	Yes	1/A
12	55		55	55	0	0	67	No	
13	47		48	50	3	2	67	No	
14	69	2	75	78	9	3	67	Yes	2/B/C
15	59	3	59	59	0	0	67	No	
16	56	2	61	60	4	-1	67	No	
17	60	7	63	63	3	0	67	No	
18	50		64	64	14	0	67	Yes	3/B
19	59	9	61	61	2	0	67	No	
20	47		47	63	16	16	67	Yes	3/A
21	57		60	60	3	0	67	No	
22	56		61	60	4	-1	67	No	
23	54		54	54	0	0	67	No	
24	45		58	60	15	2	67	Yes	3/B
25	53		53	73	20	20	67	Yes	1/A
26	55		55	65	10	10	67	Yes	3/C
27	49		55	79	30	24	67	Yes	1/C
28	46		46	38	-8	-8	67	No	
29	48		48	37	-11	-11	67	No	
30	51	9	53	77	26	24	67	Yes	1/C
31	60	-2	63	63	3	0	67	No	
32	53		57	57	4	0	67	No	
33	60	1	63	63	3	0	67	No	
34	54	2	57	57	3	0	67	No	
35	63		63	66	3	3	67	Yes	2/B/C
36	53		53	51	-2	-2	67	No	
37	46	-1	49	48	2	-1	67	No	
38	53		57	58	5	1	67	No	
39	51		51	46	-5	-5	67	No	
40	45		45	41	-4	-4	67	No	
41	44		44	39	-5	-5	67	No	
42	40		40	40	0	0	67	No	
43	41		41	40	-1	-1	67	No	
44	45		45	38	-7	-7	67	No	
45	44		44	38	-6	-6	67	No	
46	50		50	39	-11	-11	67	No	
47	44		44	39	-5	-5	67	No	
48	50		50	38	-12	-12	67	No	
49	42		42	37	-5	-5	67	No	
50	46		46	37	-9	-9	67	No	
51	38		38	36	-2	-2	67	No	
52	37		37	36	-1	-1	67	No	
53	36		36	36	0	0	67	No	
54	32		35	36	4	1	67	No	
55	56		56	37	-19	-19	67	No	
56	62		62	37	-25	-25	67	No	
57	44		44	36	-8	-8	67	No	
58	50		50	37	-13	-13	67	No	
59	41		41	36	-5	-5	67	No	
60	43		43	36	-7	-7	67	No	
61	49		49	37	-12	-12	67	No	
62	45		45	37	-8	-8	67	No	
63	47		47	38	-9	-9	67	No	
64	43		43	39	-4	-4	67	No	
65	43		43	42	-1	-1	67	No	
66	46		46	45	-1	-1	67	No	
67	47		47	46	-1	-1	67	No	
68	55		55	44	-11	-11	67	No	
69	46		46	47	1	1	67	No	
70	50		52	52	2	0	67	No	
71	46		50	50	4	0	67	No	
72	52		52	46	-6	-6	67	No	

*A – Possible barrier location (feasibility/reasonableness study necessary) if build alternative is selected.
*B -- Proposed project does not appreciably alter (>3 dBA) future noise levels.
*C -- Isolated receiver

I-66 Somerset to London Noise Impact and Abatement Classifications For Alternative B-D									
Receiver	2004 Existing Measured	Model Calibration Factor	2030 No-Build Predicted	2030 Build Noise Level	Difference Between Existing and Build	Difference Between No-Build and Build	NAC	Impact	Impact Category & Barrier Category*
1	50		50	47	-3	-3	67	No	
2	39		41	53	14	12	67	Yes	4/C
3	61		65	64	3	-1	67	No	
4	61	6	61	62	1	1	67	No	
5	62		64	70	8	6	67	Yes	2/A
6	57		57	54	-3	-3	67	No	
7	49		49	55	6	6	67	No	
8	42		42	43	1	1	67	No	
9	45		45	43	-2	-2	67	No	
10	43		43	45	2	2	67	No	
11	45		45	45	0	0	67	No	
12	55		55	58	3	3	67	No	
13	47		48	50	3	2	67	No	
14	69	2	75	78	9	3	67	Yes	2/B/C
15	59	3	59	78	19	19	67	Yes	1/A
16	56	2	61	61	5	0	67	No	
17	60	7	63	66	6	3	67	Yes	2/B
18	50		64	64	14	0	67	Yes	3/A
19	59	9	61	61	2	0	67	No	
20	47		47	63	16	16	67	Yes	3/A
21	57		60	60	3	0	67	No	
22	56		61	62	6	1	67	No	
23	54		54	56	2	2	67	No	
24	45		58	60	15	2	67	Yes	3/B
25	53		53	73	20	20	67	Yes	1/A
26	55		55	65	10	10	67	Yes	3/C
27	49		55	79	30	24	67	Yes	1/C
28	46		46	38	-8	-8	67	No	
29	48		48	37	-11	-11	67	No	
30	51	9	53	61	10	8	67	Yes	3/C
31	60	-2	63	63	3	0	67	No	
32	53		57	72	19	15	67	Yes	1/C
33	60	1	63	63	3	0	67	No	
34	54	2	57	57	3	0	67	No	
35	63		63	66	3	3	67	Yes	2/B/C
36	53		53	51	-2	-2	67	No	
37	46	-1	49	67	21	18	67	Yes	1/A
38	53		57	58	5	1	67	No	
39	51		51	46	-5	-5	67	No	
40	45		45	41	-4	-4	67	No	
41	44		44	39	-5	-5	67	No	
42	40		40	40	0	0	67	No	
43	41		41	40	-1	-1	67	No	
44	45		45	38	-7	-7	67	No	
45	44		44	38	-6	-6	67	No	
46	50		50	39	-11	-11	67	No	
47	44		44	39	-5	-5	67	No	
48	50		50	38	-12	-12	67	No	
49	42		42	37	-5	-5	67	No	
50	46		46	37	-9	-9	67	No	
51	38		38	36	-2	-2	67	No	
52	37		37	36	-1	-1	67	No	
53	36		36	35	-1	-1	67	No	
54	32		35	36	4	1	67	No	
55	56		56	37	-19	-19	67	No	
56	62		62	37	-25	-25	67	No	
57	44		44	36	-8	-8	67	No	
58	50		50	37	-13	-13	67	No	
59	41		41	36	-5	-5	67	No	
60	43		43	36	-7	-7	67	No	
61	49		49	37	-12	-12	67	No	
62	45		45	37	-8	-8	67	No	
63	47		47	38	-9	-9	67	No	
64	43		43	39	-4	-4	67	No	
65	43		43	42	-1	-1	67	No	
66	46		46	45	-1	-1	67	No	
67	47		47	46	-1	-1	67	No	
68	55		55	44	-11	-11	67	No	
69	46		46	47	1	1	67	No	
70	50		52	52	2	0	67	No	
71	46		50	50	4	0	67	No	
72	52		52	46	-6	-6	67	No	

*A – Possible barrier location (feasibility/reasonableness study necessary) if build alternative is selected.
*B -- Proposed project does not appreciably alter (>3 dBA) future noise levels.
*C -- Isolated receiver

I-66 Somerset to London Noise Impact and Abatement Classifications For Alternative K									
Receiver	2004 Existing Measured	Model Calibration Factor	2030 No-Build Predicted	2030 Build Noise Level	Difference Between Existing and Build	Difference Between No-Build and Build	NAC	Impact	Impact Category & Barrier Category*
1	50		50	47	-3	-3	67	No	
2	39		41	60	21	19	67	Yes	3/C
3	61		65	68	7	3	67	Yes	2/B
4	61	6	61	69	8	8	67	Yes	2/A
5	62		64	71	9	7	67	Yes	2/A
6	57		57	54	-3	-3	67	No	
7	49		49	59	10	10	67	Yes	4/A
8	42		42	44	2	2	67	No	
9	45		45	43	-2	-2	67	No	
10	43		43	46	3	3	67	No	
11	45		45	45	0	0	67	No	
12	55		55	63	8	8	67	No	
13	47		48	51	4	3	67	No	
14	69	2	75	80	11	5	67	Yes	1/C
15	59	3	59	69	10	10	67	Yes	1/A
16	56	2	61	70	14	9	67	Yes	1/A
17	60	7	63	72	12	9	67	Yes	1/A
18	50		64	64	14	0	67	Yes	3/A
19	59	9	61	61	2	0	67	No	
20	47		47	62	15	15	67	Yes	3/A
21	57		60	63	6	3	67	No	
22	56		61	67	11	6	67	Yes	1/A
23	54		54	62	8	8	67	No	
24	45		58	62	17	4	67	Yes	3/A
25	53		53	52	-1	-1	67	No	
26	55		55	56	1	1	67	No	
27	49		55	60	11	5	67	Yes	3/C
28	46		46	38	-8	-8	67	No	
29	48		48	37	-11	-11	67	No	
30	51	9	53	ROW			67	Invalid	
31	60	-2	63	71	11	8	67	Yes	1/A
32	53		57	63	10	6	67	Yes	3/C
33	60	1	63	63	3	0	67	No	
34	54	2	57	57	3	0	67	No	
35	63		63	66	3	3	67	Yes	2/B/C
36	53		53	51	-2	-2	67	No	
37	46	-1	49	56	10	7	67	Yes	4/A
38	53		57	58	5	1	67	No	
39	51		51	46	-5	-5	67	No	
40	45		45	41	-4	-4	67	No	
41	44		44	39	-5	-5	67	No	
42	40		40	40	0	0	67	No	
43	41		41	40	-1	-1	67	No	
44	45		45	38	-7	-7	67	No	
45	44		44	38	-6	-6	67	No	
46	50		50	39	-11	-11	67	No	
47	44		44	39	-5	-5	67	No	
48	50		50	38	-12	-12	67	No	
49	42		42	37	-5	-5	67	No	
50	46		46	37	-9	-9	67	No	
51	38		38	36	-2	-2	67	No	
52	37		37	36	-1	-1	67	No	
53	36		36	36	0	0	67	No	
54	32		35	36	4	1	67	No	
55	56		56	37	-19	-19	67	No	
56	62		62	37	-25	-25	67	No	
57	44		44	36	-8	-8	67	No	
58	50		50	37	-13	-13	67	No	
59	41		41	36	-5	-5	67	No	
60	43		43	36	-7	-7	67	No	
61	49		49	37	-12	-12	67	No	
62	45		45	37	-8	-8	67	No	
63	47		47	38	-9	-9	67	No	
64	43		43	39	-4	-4	67	No	
65	43		43	42	-1	-1	67	No	
66	46		46	45	-1	-1	67	No	
67	47		47	46	-1	-1	67	No	
68	55		55	44	-11	-11	67	No	
69	46		46	47	1	1	67	No	
70	50		52	52	2	0	67	No	
71	46		50	50	4	0	67	No	
72	52		52	46	-6	-6	67	No	

*A – Possible barrier location (feasibility/reasonableness study necessary) if build alternative is selected.
*B -- Proposed project does not appreciably alter (>3 dBA) future noise levels.
*C -- Isolated receiver

I-66 Somerset to London Noise Impact and Abatement Classifications For Alternative KY 80 Modified									
Receiver	2004 Existing Measured	Model Calibration Factor	2030 No-Build Predicted	2030 Build Noise Level	Difference Between Existing and Build	Difference Between No-Build and Build	NAC	Impact	Impact Category & Barrier Category*
1	50		50	69	19	19	67	Yes	1/A
2	39		41	46	7	5	67	No	
3	61		65	72	11	7	67	Yes	1/A
4	61	6	61	69	8	8	67	Yes	2/A
5	62		64	72	10	8	67	Yes	1/A
6	57		57	62	5	5	67	No	
7	49		49	56	7	7	67	No	
8	42		42	44	2	2	67	No	
9	45		45	43	-2	-2	67	No	
10	43		43	46	3	3	67	No	
11	45		45	45	0	0	67	No	
12	55		55	63	8	8	67	No	
13	47		48	51	4	3	67	No	
14	69	2	75	80	11	5	67	Yes	1/C
15	59	3	59	68	9	9	67	Yes	2/A
16	56	2	61	70	14	9	67	Yes	1/A
17	60	7	63	72	12	9	67	Yes	1/A
18	50		64	72	22	8	67	Yes	1/A
19	59	9	61	68	9	7	67	Yes	2/A
20	47		47	44	-3	-3	67	No	
21	57		60	67	10	7	67	Yes	
22	56		61	68	12	7	67	Yes	1/A
23	54		54	62	8	8	67	No	
24	45		58	62	17	4	67	Yes	3/A
25	53		53	52	-1	-1	67	No	
26	55		55	56	1	1	67	No	
27	49		55	60	11	5	67	Yes	3/C
28	46		46	38	-8	-8	67	No	
29	48		48	37	-11	-11	67	No	
30	51	9	53	59	8	6	67	No	
31	60	-2	63	71	11	8	67	Yes	1/A
32	53		57	64	11	7	67	Yes	3/C
33	60	1	63	71	11	8	67	Yes	1/A
34	54	2	57	65	11	8	67	Yes	3/A
35	63		63	66	3	3	67	Yes	2/B/C
36	53		53	49	-4	-4	67	No	
37	46	-1	49	56	10	7	67	Yes	4/A
38	53		57	58	5	1	67	No	
39	51		51	46	-5	-5	67	No	
40	45		45	41	-4	-4	67	No	
41	44		44	39	-5	-5	67	No	
42	40		40	40	0	0	67	No	
43	41		41	40	-1	-1	67	No	
44	45		45	38	-7	-7	67	No	
45	44		44	38	-6	-6	67	No	
46	50		50	39	-11	-11	67	No	
47	44		44	39	-5	-5	67	No	
48	50		50	38	-12	-12	67	No	
49	42		42	37	-5	-5	67	No	
50	46		46	37	-9	-9	67	No	
51	38		38	36	-2	-2	67	No	
52	37		37	36	-1	-1	67	No	
53	36		36	36	0	0	67	No	
54	32		35	36	4	1	67	No	
55	56		56	37	-19	-19	67	No	
56	62		62	37	-25	-25	67	No	
57	44		44	36	-8	-8	67	No	
58	50		50	37	-13	-13	67	No	
59	41		41	36	-5	-5	67	No	
60	43		43	36	-7	-7	67	No	
61	49		49	37	-12	-12	67	No	
62	45		45	37	-8	-8	67	No	
63	47		47	38	-9	-9	67	No	
64	43		43	39	-4	-4	67	No	
65	43		43	42	-1	-1	67	No	
66	46		46	45	-1	-1	67	No	
67	47		47	46	-1	-1	67	No	
68	55		55	44	-11	-11	67	No	
69	46		46	47	1	1	67	No	
70	50		52	52	2	0	67	No	
71	46		50	50	4	0	67	No	
72	52		52	46	-6	-6	67	No	

*A – Possible barrier location (feasibility/reasonableness study necessary) if build alternative is selected.
*B -- Proposed project does not appreciably alter (>3 dBA) future noise levels.
*C -- Isolated receiver

I-66 Somerset to London Noise Impact and Abatement Classifications For Alternative KY 80 Shifted									
Receiver	2004 Existing Measured	Model Calibration Factor	2030 No-Build Predicted	2030 Build Noise Level	Difference Between Existing and Build	Difference Between No-Build and Build	NAC	Impact	Impact Category & Barrier Category*
1	50		50	70	20	20	67	Yes	1/A
2	39		41	49	10	8	67	Yes	4/C
3	61		65	66	5	1	67	Yes	2/B
4	61	6	61	69	8	8	67	Yes	2/A
5	62		64	65	3	1	67	No	
6	57		57	64	7	7	67	No	
7	49		49	60	11	11	67	Yes	3/A
8	42		42	45	3	3	67	No	
9	45		45	44	-1	-1	67	No	
10	43		43	46	3	3	67	No	
11	45		45	45	0	0	67	No	
12	55		55	66	11	11	67	Yes	1/A
13	47		48	52	5	4	67	No	
14	69	2	75	ROW			67	Invalid	
15	59	3	59	0	0	0	67	No	
16	56	2	61	ROW			67	Invalid	
17	60	7	63	75	15	12	67	Yes	1/A
18	50		64	65	15	1	67	Yes	3/B
19	59	9	61	67	8	6	67	Yes	2/A
20	47		47	44	-3	-3	67	No	
21	57		60	62	5	2	67	No	
22	56		61	64	8	3	67	No	
23	54		54	ROW			67	Invalid	
24	45		58	64	19	6	67	Yes	3/A
25	53		53	53	0	0	67	No	
26	55		55	57	2	2	67	No	
27	49		55	60	11	5	67	Yes	3/C
28	46		46	38	-8	-8	67	No	
29	48		48	37	-11	-11	67	No	
30	51	9	53	60	9	7	67	No	
31	60	-2	63	64	4	1	67	No	
32	53		57	59	6	2	67	No	
33	60	1	63	64	4	1	67	No	
34	54	2	57	72	18	15	67	Yes	1/A
35	63		63	66	3	3	67	Yes	2/B/C
36	53		53	49	-4	-4	67	No	
37	46	-1	49	52	6	3	67	No	
38	53		57	58	5	1	67	No	
39	51		51	46	-5	-5	67	No	
40	45		45	41	-4	-4	67	No	
41	44		44	39	-5	-5	67	No	
42	40		40	40	0	0	67	No	
43	41		41	40	-1	-1	67	No	
44	45		45	38	-7	-7	67	No	
45	44		44	38	-6	-6	67	No	
46	50		50	39	-11	-11	67	No	
47	44		44	39	-5	-5	67	No	
48	50		50	38	-12	-12	67	No	
49	42		42	37	-5	-5	67	No	
50	46		46	37	-9	-9	67	No	
51	38		38	36	-2	-2	67	No	
52	37		37	36	-1	-1	67	No	
53	36		36	36	0	0	67	No	
54	32		35	36	4	1	67	No	
55	56		56	37	-19	-19	67	No	
56	62		62	37	-25	-25	67	No	
57	44		44	36	-8	-8	67	No	
58	50		50	37	-13	-13	67	No	
59	41		41	36	-5	-5	67	No	
60	43		43	36	-7	-7	67	No	
61	49		49	37	-12	-12	67	No	
62	45		45	37	-8	-8	67	No	
63	47		47	38	-9	-9	67	No	
64	43		43	39	-4	-4	67	No	
65	43		43	42	-1	-1	67	No	
66	46		46	45	-1	-1	67	No	
67	47		47	46	-1	-1	67	No	
68	55		55	44	-11	-11	67	No	
69	46		46	47	1	1	67	No	
70	50		52	52	2	0	67	No	
71	46		50	50	4	0	67	No	
72	52		52	46	-6	-6	67	No	

*A – Possible barrier location (feasibility/reasonableness study necessary) if build alternative is selected.
*B -- Proposed project does not appreciably alter (>3 dBA) future noise levels.
*C -- Isolated receiver

I-66 Somerset to London Noise Impact and Abatement Classifications For Alternative G									
Receiver	2004 Existing Measured	Model Calibration Factor	2030 No-Build Predicted	2030 Build Noise Level	Difference Between Existing and Build	Difference Between No-Build and Build	NAC	Impact	Impact Category & Barrier Category*
1	50		50	44	-6	-6	67	No	
2	39		41	40	1	-1	67	No	
3	61		65	64	3	-1	67	No	
4	61	6	61	60	-1	-1	67	No	
5	62		64	64	2	0	67	No	
6	57		57	53	-4	-4	67	No	
7	49		49	47	-2	-2	67	No	
8	42		42	38	-4	-4	67	No	
9	45		45	37	-8	-8	67	No	
10	43		43	39	-4	-4	67	No	
11	45		45	39	-6	-6	67	No	
12	55		55	55	0	0	67	No	
13	47		48	51	4	3	67	No	
14	69	2	75	78	9	3	67	Yes	2/B/C
15	59	3	59	58	-1	-1	67	No	
16	56	2	61	60	4	-1	67	No	
17	60	7	63	63	3	0	67	No	
18	50		64	64	14	0	67	Yes	3/B
19	59	9	61	60	1	-1	67	No	
20	47		47	39	-8	-8	67	No	
21	57		60	60	3	0	67	No	
22	56		61	60	4	-1	67	No	
23	54		54	53	-1	-1	67	No	
24	45		58	56	11	-2	67	Yes	4/B
25	53		53	48	-5	-5	67	No	
26	55		55	47	-8	-8	67	No	
27	49		55	56	7	1	67	No	
28	46		46	45	-1	-1	67	No	
29	48		48	43	-5	-5	67	No	
30	51	9	53	52	1	-1	67	No	
31	60	-2	63	63	3	0	67	No	
32	53		57	57	4	0	67	No	
33	60	1	63	63	3	0	67	No	
34	54	2	57	57	3	0	67	No	
35	63		63	66	3	3	67	Yes	2/B/C
36	53		53	48	-5	-5	67	No	
37	46	-1	49	47	1	-2	67	No	
38	53		57	61	8	4	67	No	
39	51		51	73	22	22	67	Yes	1/A
40	45		45	51	6	6	67	No	
41	44		44	46	2	2	67	No	
42	40		40	64	24	24	67	Yes	3/A
43	41		41	62	21	21	67	Yes	3/A
44	45		45	68	23	23	67	Yes	1/A
45	44		44	66	22	22	67	Yes	1/A
46	50		50	66	16	16	67	Yes	1/A
47	44		44	46	2	2	67	No	
48	50		50	46	-4	-4	67	No	
49	42		42	45	3	3	67	No	
50	46		46	45	-1	-1	67	No	
51	38		38	68	30	30	67	Yes	1/A
52	37		37	42	5	5	67	No	
53	36		36	42	6	6	67	No	
54	32		35	43	11	8	67	Yes	4/A
55	56		56	48	-8	-8	67	No	
56	62		62	51	-11	-11	67	No	
57	44		44	60	16	16	67	Yes	3/A
58	50		50	64	14	14	67	Yes	3/A
59	41		41	43	2	2	67	No	
60	43		43	45	2	2	67	No	
61	49		49	46	-3	-3	67	No	
62	45		45	45	0	0	67	No	
63	47		47	60	13	13	67	Yes	3/A
64	43		43	48	5	5	67	No	
65	43		43	51	8	8	67	No	
66	46		46	70	24	24	67	Yes	1/A
67	47		47	67	20	20	67	Yes	1/A
68	55		55	50	-5	-5	67	No	
69	46		46	51	5	5	67	No	
70	50		52	53	3	1	67	No	
71	46		50	51	5	1	67	No	
72	52		52	47	-5	-5	67	No	

*A – Possible barrier location (feasibility/reasonableness study necessary) if build alternative is selected.
*B -- Proposed project does not appreciably alter (>3 dBA) future noise levels.
*C -- Isolated receiver

I-66 Somerset to London Noise Impact and Abatement Classifications For Alternative H									
Receiver	2004 Existing Measured	Model Calibration Factor	2030 No-Build Predicted	2030 Build Noise Level	Difference Between Existing and Build	Difference Between No-Build and Build	NAC	Impact	Impact Category & Barrier Category*
1	50		50	44	-6	-6	67	No	
2	39		41	40	1	-1	67	No	
3	61		65	64	3	-1	67	No	
4	61	6	61	60	-1	-1	67	No	
5	62		64	64	2	0	67	No	
6	57		57	53	-4	-4	67	No	
7	49		49	47	-2	-2	67	No	
8	42		42	38	-4	-4	67	No	
9	45		45	37	-8	-8	67	No	
10	43		43	39	-4	-4	67	No	
11	45		45	39	-6	-6	67	No	
12	55		55	55	0	0	67	No	
13	47		48	51	4	3	67	No	
14	69	2	75	78	9	3	67	Yes	2/B/C
15	59	3	59	58	-1	-1	67	No	
16	56	2	61	60	4	-1	67	No	
17	60	7	63	63	3	0	67	No	
18	50		64	64	14	0	67	Yes	3/B
19	59	9	61	60	1	-1	67	No	
20	47		47	39	-8	-8	67	No	
21	57		60	60	3	0	67	No	
22	56		61	60	4	-1	67	No	
23	54		54	53	-1	-1	67	No	
24	45		58	56	11	-2	67	Yes	4/B
25	53		53	48	-5	-5	67	No	
26	55		55	47	-8	-8	67	No	
27	49		55	56	7	1	67	No	
28	46		46	70	24	24	67	Yes	1/A
29	48		48	54	6	6	67	No	
30	51	9	53	52	1	-1	67	No	
31	60	-2	63	63	3	0	67	No	
32	53		57	57	4	0	67	No	
33	60	1	63	63	3	0	67	No	
34	54	2	57	57	3	0	67	No	
35	63		63	66	3	3	67	Yes	2/B/C
36	53		53	48	-5	-5	67	No	
37	46	-1	49	47	1	-2	67	No	
38	53		57	58	5	1	67	No	
39	51		51	48	-3	-3	67	No	
40	45		45	54	9	9	67	No	
41	44		44	66	22	22	67	Yes	1/A
42	40		40	47	7	7	67	No	
43	41		41	48	7	7	67	No	
44	45		45	45	0	0	67	No	
45	44		44	45	1	1	67	No	
46	50		50	45	-5	-5	67	No	
47	44		44	64	20	20	67	Yes	3/A
48	50		50	62	12	12	67	Yes	3/A
49	42		42	73	31	31	67	Yes	1/A
50	46		46	65	19	19	67	Yes	3/A
51	38		38	44	6	6	67	No	
52	37		37	46	9	9	67	No	
53	36		36	45	9	9	67	No	
54	32		35	57	25	22	67	Yes	4/A
55	56		56	62	6	6	67	No	
56	62		62	59	-3	-3	67	No	
57	44		44	44	0	0	67	No	
58	50		50	47	-3	-3	67	No	
59	41		41	49	8	8	67	No	
60	43		43	62	19	19	67	Yes	3/A
61	49		49	51	2	2	67	No	
62	45		45	49	4	4	67	No	
63	47		47	70	23	23	67	Yes	1/A
64	43		43	50	7	7	67	No	
65	43		43	67	24	24	67	Yes	1/A
66	46		46	49	3	3	67	No	
67	47		47	51	4	4	67	No	
68	55		55	65	10	10	67	Yes	3/A
69	46		46	63	17	17	67	Yes	3/A
70	50		52	59	9	7	67	No	
71	46		50	53	7	3	67	No	
72	52		52	49	-3	-3	67	No	

*A – Possible barrier location (feasibility/reasonableness study necessary) if build alternative is selected.
*B -- Proposed project does not appreciably alter (>3 dBA) future noise levels.
*C -- Isolated receiver

I-66 Somerset to London Noise Impact and Abatement Classifications For Alternative I									
Receiver	2004 Existing Measured	Model Calibration Factor	2030 No-Build Predicted	2030 Build Noise Level	Difference Between Existing and Build	Difference Between No-Build and Build	NAC	Impact	Impact Category & Barrier Category*
1	50		50	44	-6	-6	67	No	
2	39		41	40	1	-1	67	No	
3	61		65	64	3	-1	67	No	
4	61	6	61	60	-1	-1	67	No	
5	62		64	64	2	0	67	No	
6	57		57	53	-4	-4	67	No	
7	49		49	47	-2	-2	67	No	
8	42		42	38	-4	-4	67	No	
9	45		45	37	-8	-8	67	No	
10	43		43	39	-4	-4	67	No	
11	45		45	39	-6	-6	67	No	
12	55		55	55	0	0	67	No	
13	47		48	51	4	3	67	No	
14	69	2	75	78	9	3	67	Yes	2/B/C
15	59	3	59	58	-1	-1	67	No	
16	56	2	61	60	4	-1	67	No	
17	60	7	63	63	3	0	67	No	
18	50		64	64	14	0	67	Yes	3/B
19	59	9	61	60	1	-1	67	No	
20	47		47	39	-8	-8	67	No	
21	57		60	60	3	0	67	No	
22	56		61	60	4	-1	67	No	
23	54		54	53	-1	-1	67	No	
24	45		58	56	11	-2	67	Yes	4/B
25	53		53	48	-5	-5	67	No	
26	55		55	47	-8	-8	67	No	
27	49		55	56	7	1	67	No	
28	46		46	63	17	17	67	Yes	3/A
29	48		48	62	14	14	67	Yes	3/A
30	51	9	53	52	1	-1	67	No	
31	60	-2	63	63	3	0	67	No	
32	53		57	57	4	0	67	No	
33	60	1	63	63	3	0	67	No	
34	54	2	57	57	3	0	67	No	
35	63		63	66	3	3	67	Yes	2/B/C
36	53		53	48	-5	-5	67	No	
37	46	-1	49	47	1	-2	67	No	
38	53		57	58	5	1	67	No	
39	51		51	48	-3	-3	67	No	
40	45		45	53	8	8	67	No	
41	44		44	60	16	16	67	Yes	3/A
42	40		40	48	8	8	67	No	
43	41		41	49	8	8	67	No	
44	45		45	45	0	0	67	No	
45	44		44	44	0	0	67	No	
46	50		50	45	-5	-5	67	No	
47	44		44	59	15	15	67	Yes	4/A
48	50		50	60	10	10	67	Yes	3/A
49	42		42	62	20	20	67	Yes	3/A
50	46		46	55	9	9	67	No	
51	38		38	43	5	5	67	No	
52	37		37	69	32	32	67	Yes	1/A
53	36		36	71	35	35	67	Yes	1/A
54	32		35	50	18	15	67	Yes	4/A
55	56		56	50	-6	-6	67	No	
56	62		62	46	-16	-16	67	No	
57	44		44	42	-2	-2	67	No	
58	50		50	44	-6	-6	67	No	
59	41		41	70	29	29	67	Yes	1/A
60	43		43	51	8	8	67	No	
61	49		49	59	10	10	67	Yes	4/A
62	45		45	67	22	22	67	Yes	1/A
63	47		47	47	0	0	67	No	
64	43		43	62	19	19	67	Yes	3/A
65	43		43	54	11	11	67	Yes	4/A
66	46		46	48	2	2	67	No	
67	47		47	48	1	1	67	No	
68	55		55	52	-3	-3	67	No	
69	46		46	50	4	4	67	No	
70	50		52	55	5	3	67	No	
71	46		50	62	16	12	67	Yes	3/A
72	52		52	63	11	11	67	Yes	3/A

*A – Possible barrier location (feasibility/reasonableness study necessary) if build alternative is selected.
*B -- Proposed project does not appreciably alter (>3 dBA) future noise levels.
*C -- Isolated receiver

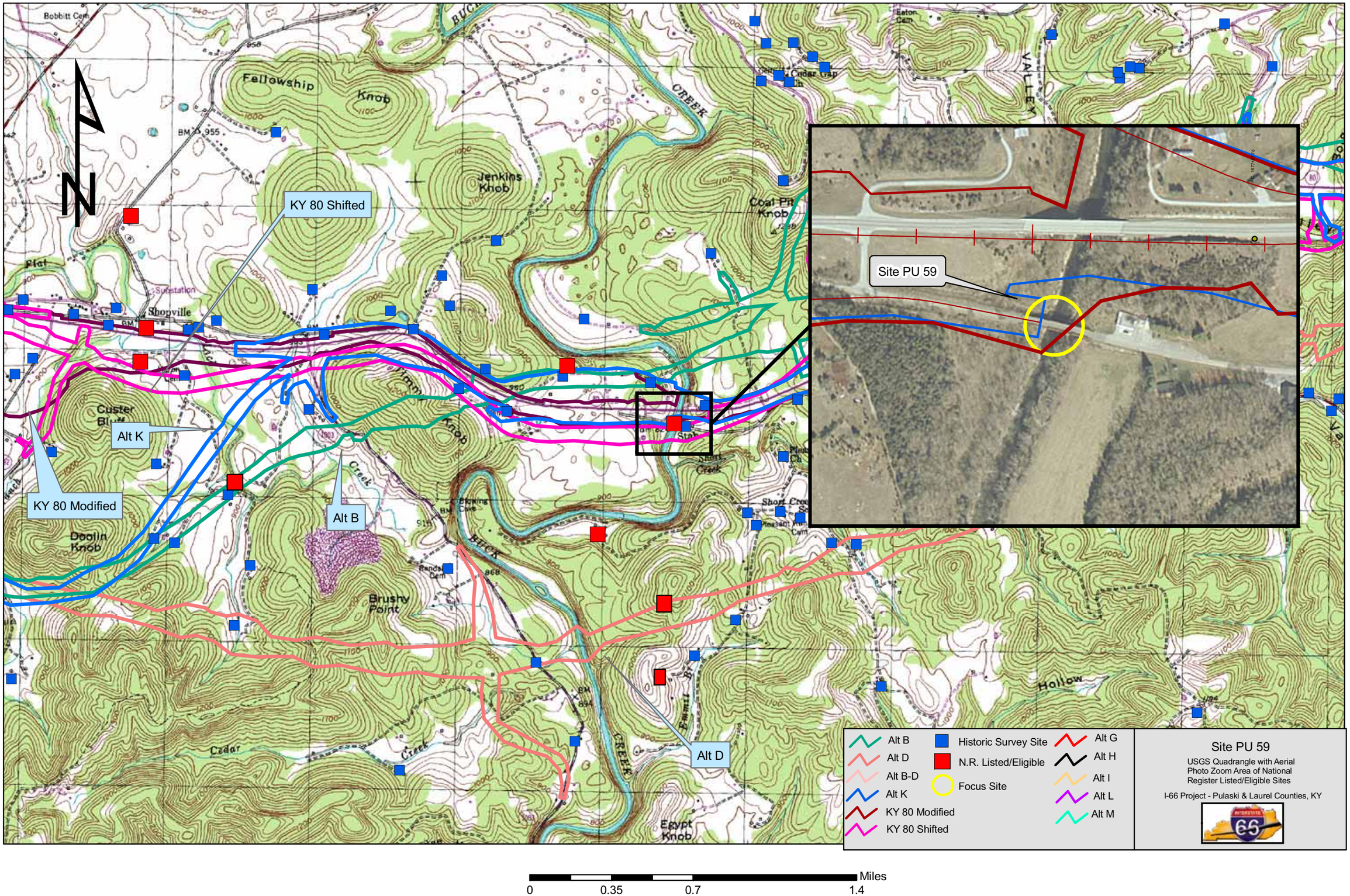
I-66 Somerset to London Noise Impact and Abatement Classifications For Alternative L									
Receiver	2004 Existing Measured	Model Calibration Factor	2030 No-Build Predicted	2030 Build Noise Level	Difference Between Existing and Build	Difference Between No-Build and Build	NAC	Impact	Impact Category & Barrier Category*
1	50		50	44	-6	-6	67	No	
2	39		41	40	1	-1	67	No	
3	61		65	64	3	-1	67	No	
4	61	6	61	60	-1	-1	67	No	
5	62		64	64	2	0	67	No	
6	57		57	53	-4	-4	67	No	
7	49		49	47	-2	-2	67	No	
8	42		42	38	-4	-4	67	No	
9	45		45	37	-8	-8	67	No	
10	43		43	39	-4	-4	67	No	
11	45		45	39	-6	-6	67	No	
12	55		55	55	0	0	67	No	
13	47		48	51	4	3	67	No	
14	69	2	75	78	9	3	67	Yes	2/B/C
15	59	3	59	58	-1	-1	67	No	
16	56	2	61	60	4	-1	67	No	
17	60	7	63	63	3	0	67	No	
18	50		64	64	14	0	67	Yes	3/B
19	59	9	61	60	1	-1	67	No	
20	47		47	39	-8	-8	67	No	
21	57		60	60	3	0	67	No	
22	56		61	60	4	-1	67	No	
23	54		54	53	-1	-1	67	No	
24	45		58	56	11	-2	67	Yes	4/B
25	53		53	48	-5	-5	67	No	
26	55		55	47	-8	-8	67	No	
27	49		55	56	7	1	67	No	
28	46		46	45	-1	-1	67	No	
29	48		48	44	-4	-4	67	No	
30	51	9	53	52	1	-1	67	No	
31	60	-2	63	63	3	0	67	No	
32	53		57	57	4	0	67	No	
33	60	1	63	63	3	0	67	No	
34	54	2	57	57	3	0	67	No	
35	63		63	66	3	3	67	Yes	2/B/C
36	53		53	48	-5	-5	67	No	
37	46	-1	49	47	1	-2	67	No	
38	53		57	61	8	4	67	No	
39	51		51	73	22	22	67	Yes	1/A
40	45		45	51	6	6	67	No	
41	44		44	46	2	2	67	No	
42	40		40	64	24	24	67	Yes	3/A
43	41		41	62	21	21	67	Yes	3/A
44	45		45	68	23	23	67	Yes	1/A
45	44		44	71	27	27	67	Yes	1/A
46	50		50	66	16	16	67	Yes	1/A
47	44		44	46	2	2	67	No	
48	50		50	46	-4	-4	67	No	
49	42		42	45	3	3	67	No	
50	46		46	46	0	0	67	No	
51	38		38	46	8	8	67	No	
52	37		37	46	9	9	67	No	
53	36		36	45	9	9	67	No	
54	32		35	52	20	17	67	Yes	4/A
55	56		56	62	6	6	67	No	
56	62		62	59	-3	-3	67	No	
57	44		44	44	0	0	67	No	
58	50		50	47	-3	-3	67	No	
59	41		41	50	9	9	67	No	
60	43		43	63	20	20	67	Yes	3/A
61	49		49	51	2	2	67	No	
62	45		45	49	4	4	67	No	
63	47		47	69	22	22	67	Yes	1/A
64	43		43	50	7	7	67	No	
65	43		43	60	17	17	67	Yes	3/A
66	46		46	48	2	2	67	No	
67	47		47	49	2	2	67	No	
68	55		55	54	-1	-1	67	No	
69	46		46	51	5	5	67	No	
70	50		52	55	5	3	67	No	
71	46		50	62	16	12	67	Yes	3/A
72	52		52	63	11	11	67	Yes	3/A

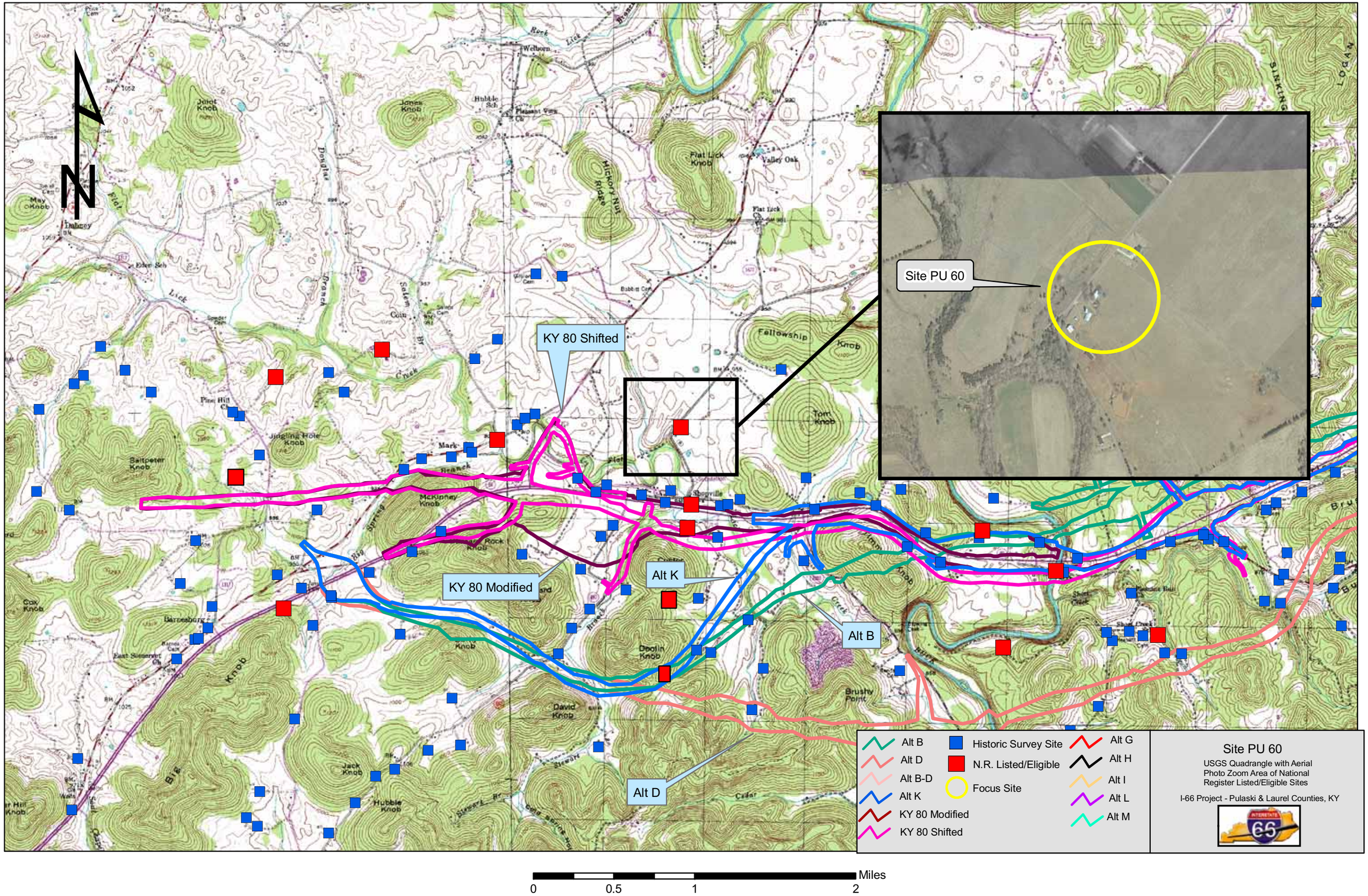
*A – Possible barrier location (feasibility/reasonableness study necessary) if build alternative is selected.
*B -- Proposed project does not appreciably alter (>3 dBA) future noise levels.
*C -- Isolated receiver

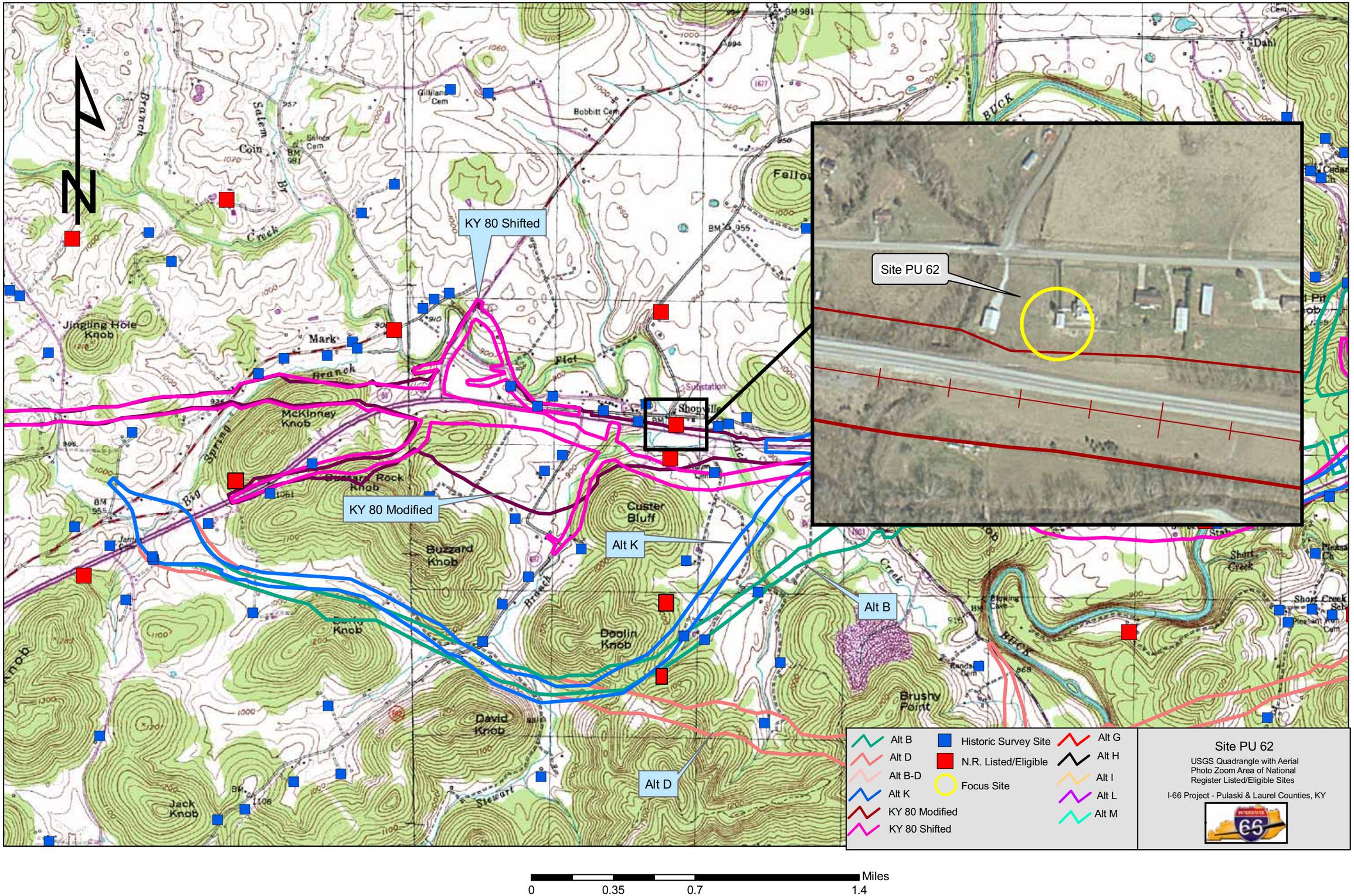
I-66 Somerset to London Noise Impact and Abatement Classifications For Alternative M									
Receiver	2004 Existing Measured	Model Calibration Factor	2030 No-Build Predicted	2030 Build Noise Level	Difference Between Existing and Build	Difference Between No-Build and Build	NAC	Impact	Impact Category & Barrier Category*
1	50		50	44	-6	-6	67	No	
2	39		41	40	1	-1	67	No	
3	61		65	64	3	-1	67	No	
4	61	6	61	60	-1	-1	67	No	
5	62		64	64	2	0	67	No	
6	57		57	53	-4	-4	67	No	
7	49		49	47	-2	-2	67	No	
8	42		42	38	-4	-4	67	No	
9	45		45	37	-8	-8	67	No	
10	43		43	39	-4	-4	67	No	
11	45		45	39	-6	-6	67	No	
12	55		55	55	0	0	67	No	
13	47		48	51	4	3	67	No	
14	69	2	75	78	9	3	67	Yes	2/B/C
15	59	3	59	58	-1	-1	67	No	
16	56	2	61	60	4	-1	67	No	
17	60	7	63	63	3	0	67	No	
18	50		64	64	14	0	67	Yes	3/B
19	59	9	61	60	1	-1	67	No	
20	47		47	39	-8	-8	67	No	
21	57		60	60	3	0	67	No	
22	56		61	60	4	-1	67	No	
23	54		54	53	-1	-1	67	No	
24	45		58	56	11	-2	67	Yes	4/B
25	53		53	48	-5	-5	67	No	
26	55		55	47	-8	-8	67	No	
27	49		55	56	7	1	67	No	
28	46		46	45	-1	-1	67	No	
29	48		48	43	-5	-5	67	No	
30	51	9	53	52	1	-1	67	No	
31	60	-2	63	63	3	0	67	No	
32	53		57	57	4	0	67	No	
33	60	1	63	63	3	0	67	No	
34	54	2	57	57	3	0	67	No	
35	63		63	66	3	3	67	Yes	2/B/C
36	53		53	48	-5	-5	67	No	
37	46	-1	49	47	1	-2	67	No	
38	53		57	61	8	4	67	No	
39	51		51	73	22	22	67	Yes	1/A
40	45		45	51	6	6	67	No	
41	44		44	46	2	2	67	No	
42	40		40	64	24	24	67	Yes	3/A
43	41		41	62	21	21	67	Yes	3/A
44	45		45	67	22	22	67	Yes	1/A
45	44		44	66	22	22	67	Yes	1/A
46	50		50	66	16	16	67	Yes	1/A
47	44		44	46	2	2	67	No	
48	50		50	46	-4	-4	67	No	
49	42		42	45	3	3	67	No	
50	46		46	45	-1	-1	67	No	
51	38		38	68	30	30	67	Yes	1/A
52	37		37	42	5	5	67	No	
53	36		36	42	6	6	67	No	
54	32		35	43	11	8	67	Yes	4/A
55	56		56	48	-8	-8	67	No	
56	62		62	51	-11	-11	67	No	
57	44		44	60	16	16	67	Yes	3/A
58	50		50	64	14	14	67	Yes	3/A
59	41		41	43	2	2	67	No	
60	43		43	45	2	2	67	No	
61	49		49	45	-4	-4	67	No	
62	45		45	45	0	0	67	No	
63	47		47	59	12	12	67	Yes	4/A
64	43		43	48	5	5	67	No	
65	43		43	61	18	18	67	Yes	3/A
66	46		46	48	2	2	67	No	
67	47		47	49	2	2	67	No	
68	55		55	54	-1	-1	67	No	
69	46		46	51	5	5	67	No	
70	50		52	55	5	3	67	No	
71	46		50	62	16	12	67	Yes	3/A
72	52		52	63	11	11	67	Yes	3/A

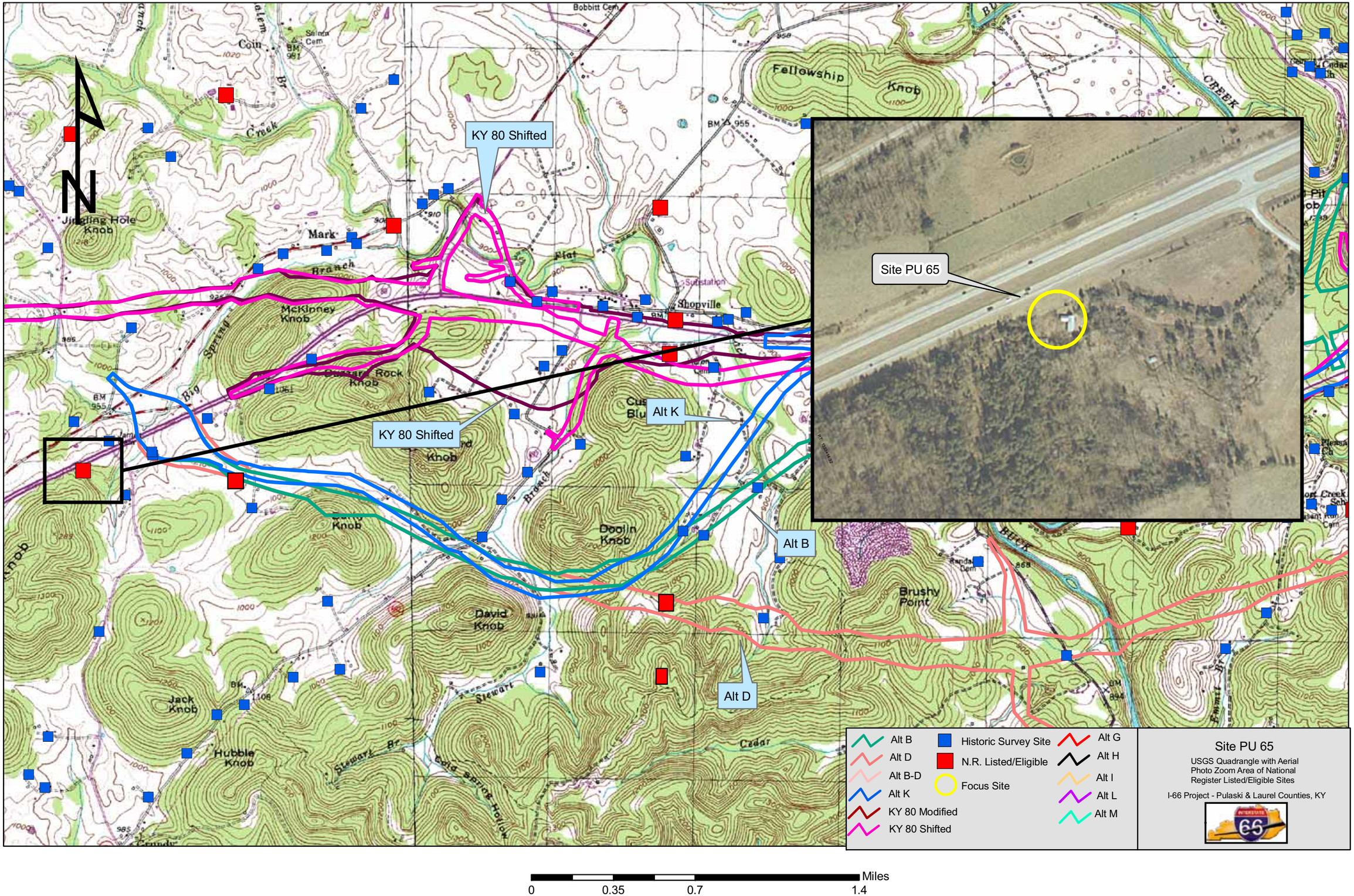
*A – Possible barrier location (feasibility/reasonableness study necessary) if build alternative is selected.
*B -- Proposed project does not appreciably alter (>3 dBA) future noise levels.
*C -- Isolated receiver

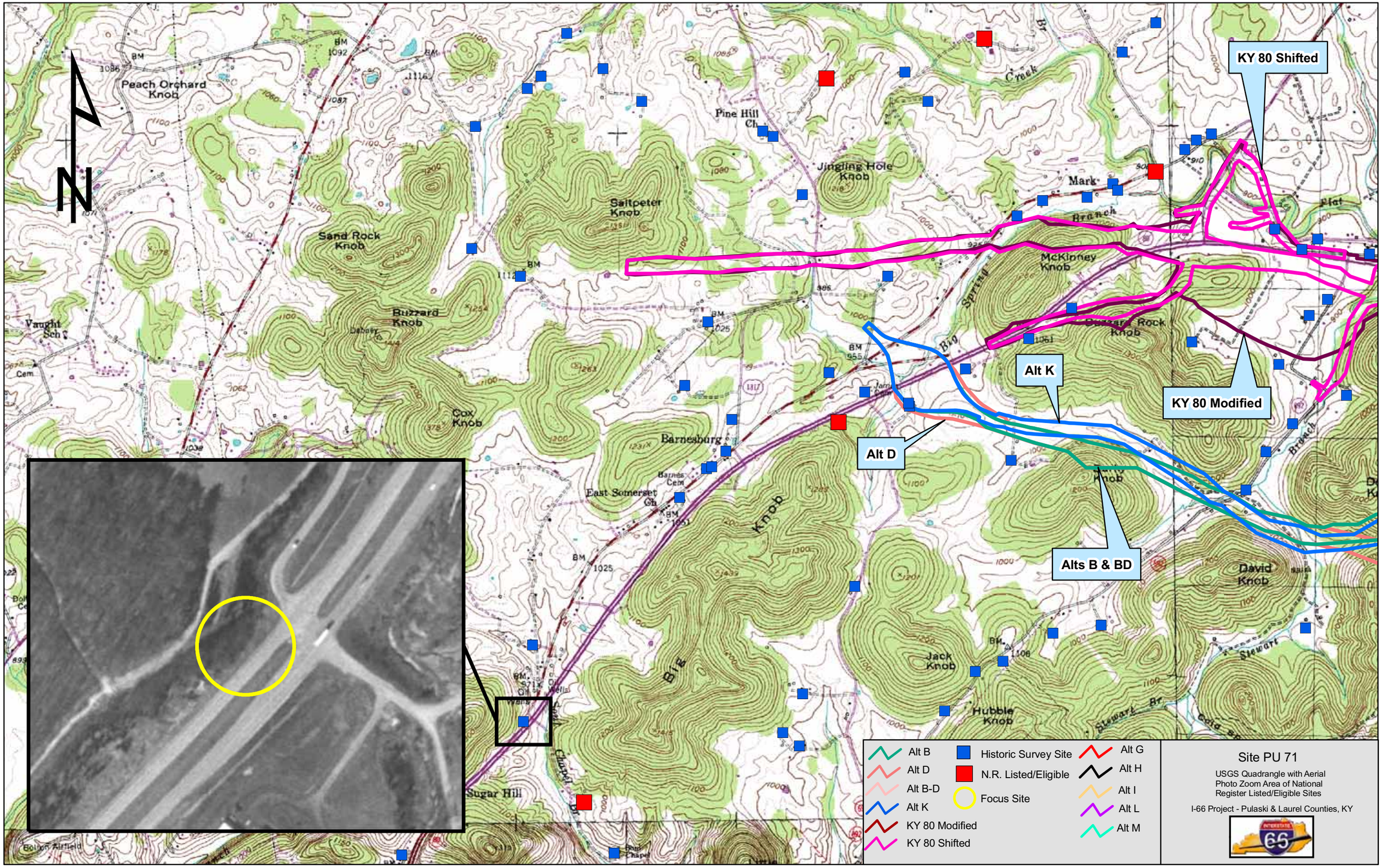
Figure 5.4.3-1 – Historic Properties On or Eligible for the NRHP (27 Sheets)

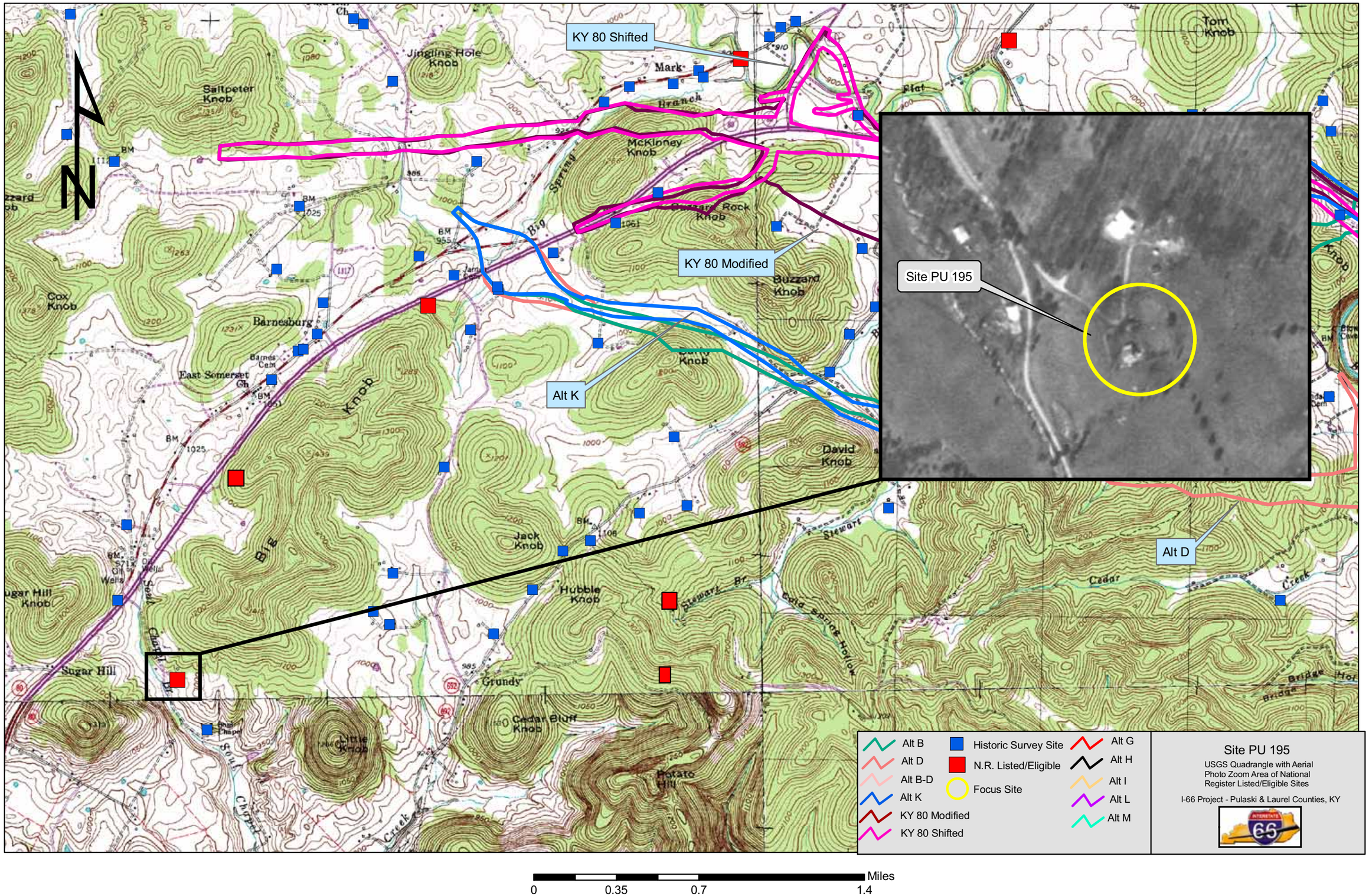

KY 80 Shifted
Site PU 59
Alt K
KY 80 Modified
Alt B
Alt D
Fellowship Knob
Jenkins Knob
Coal Pit Knob
Shopville
Custer Bluff
Doolin Knob
Brushy Point
Egypt Knob
Alt B
Alt D
Alt B-D
Alt K
KY 80 Modified
KY 80 Shifted
Historic Survey Site
N.R. Listed/Eligible
Focus Site
Alt G
Alt H
Alt I
Alt L
Alt M
Site PU 59
USGS Quadrangle with Aerial Photo Zoom Area of National Register Listed/Eligible Sites
I-66 Project - Pulaski & Laurel Counties, KY
Miles
0
0.35
0.7
1.4

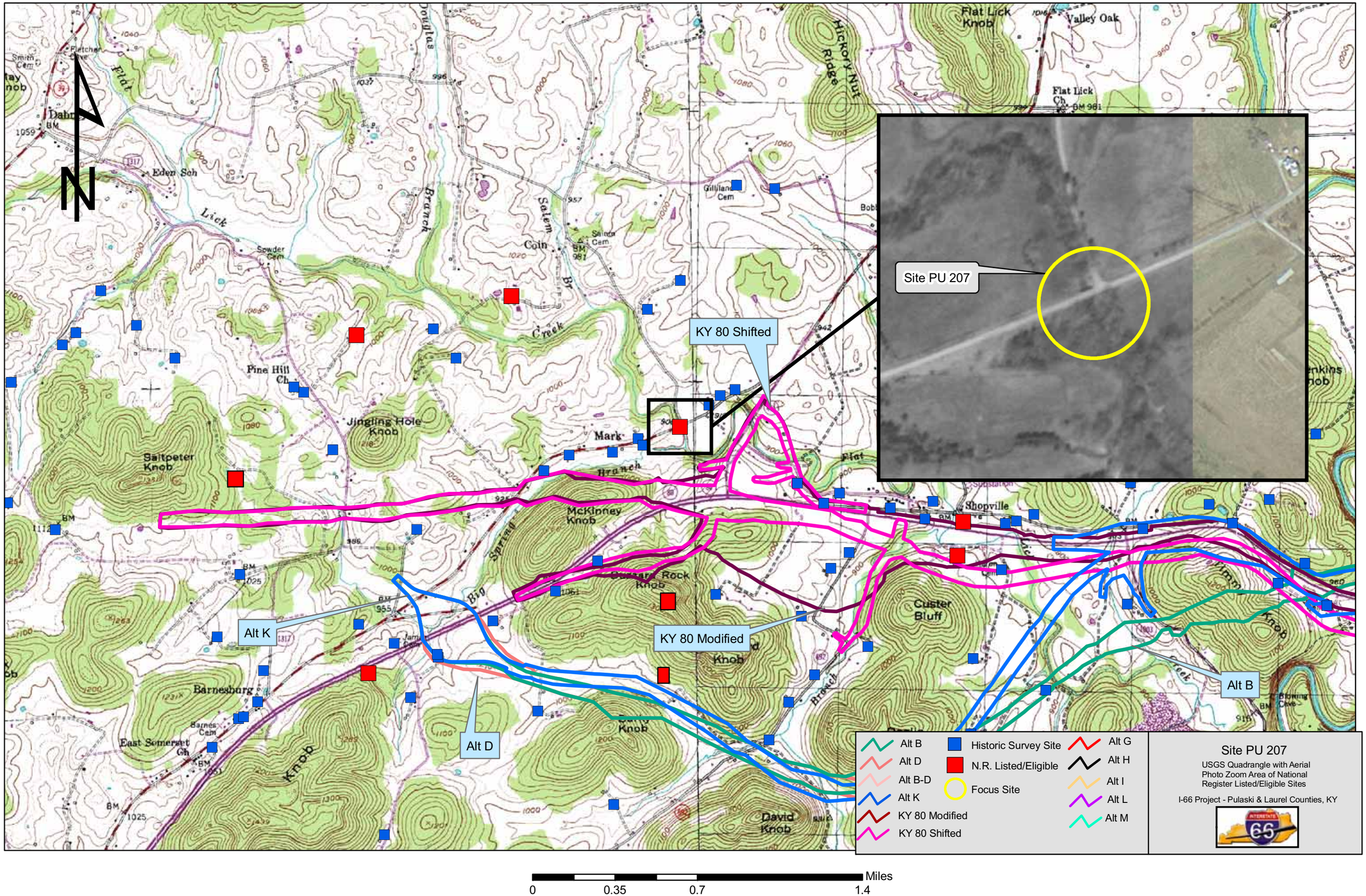

Site PU 60
KY 80 Shifted
KY 80 Modified
Alt K
Alt B
Alt D
Alt B
Alt D
Alt B-D
Alt K
KY 80 Modified
KY 80 Shifted
Historic Survey Site
N.R. Listed/Eligible
Focus Site
Alt G
Alt H
Alt I
Alt L
Alt M
Site PU 60
USGS Quadrangle with Aerial Photo Zoom Area of National Register Listed/Eligible Sites
I-66 Project - Pulaski & Laurel Counties, KY
0
0.5
1
2
Miles

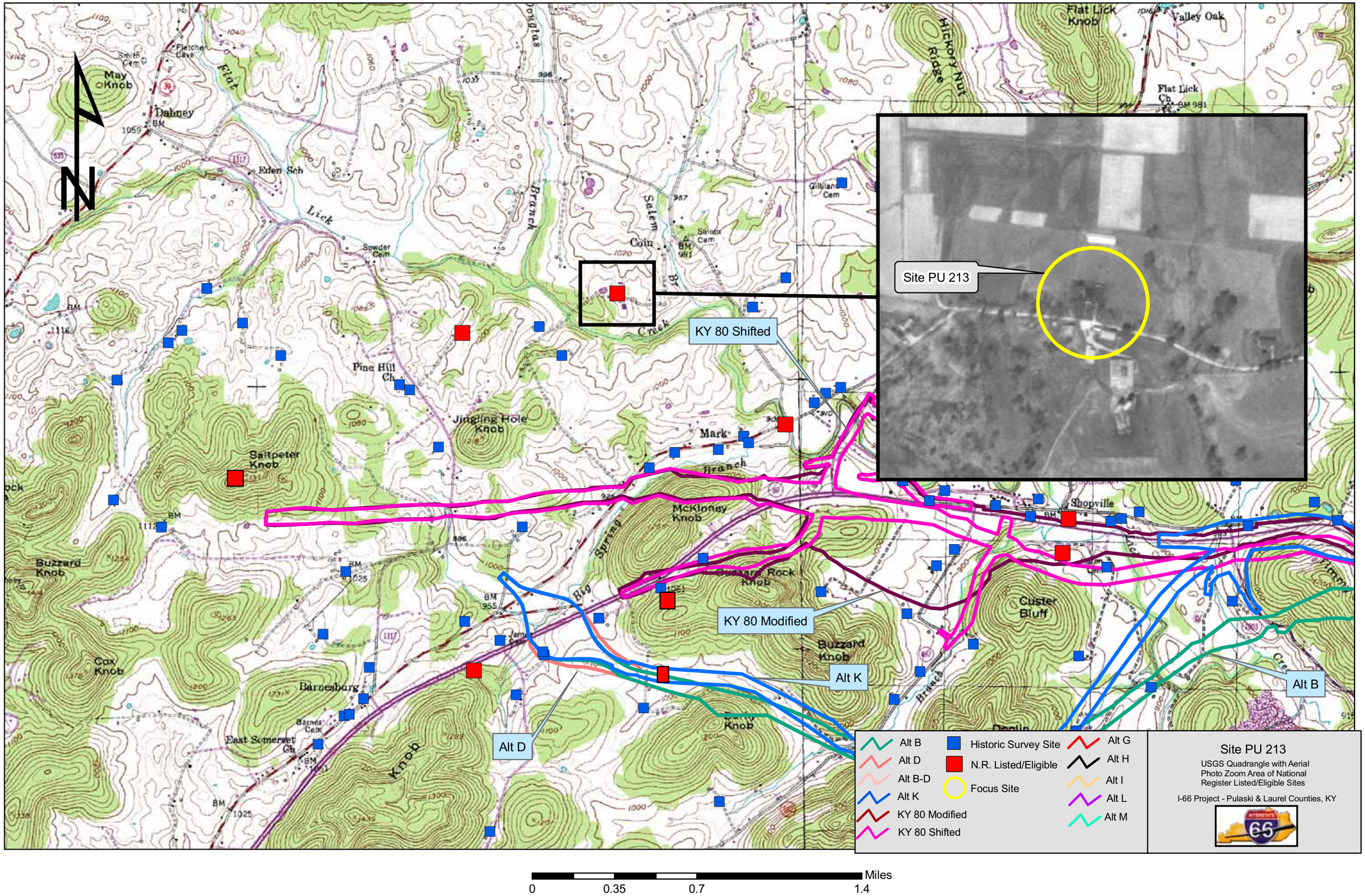

KY 80 Shifted
KY 80 Modified
Alt K
Alt B
Alt D
Site PU 62
Jingling Hole Knob
Mark
Branch
McKinney Knob
Spring
Big
Buzzard Rock Knob
Buzzard Knob
Custer Bluff
Doolin Knob
David Knob
Jack Knob
Brushy Point
Salem
Coin
Creek
Flat
Substation
Shopville
Bobbitt Cem
Gilliland Cem
Dahl
Short Creek
Alt B
Alt D
Alt B-D
Alt K
KY 80 Modified
KY 80 Shifted
Historic Survey Site
N.R. Listed/Eligible
Focus Site
Alt G
Alt H
Alt I
Alt L
Alt M
Site PU 62
USGS Quadrangle with Aerial Photo Zoom Area of National Register Listed/Eligible Sites
I-66 Project - Pulaski & Laurel Counties, KY
Miles
0
0.35
0.7
1.4

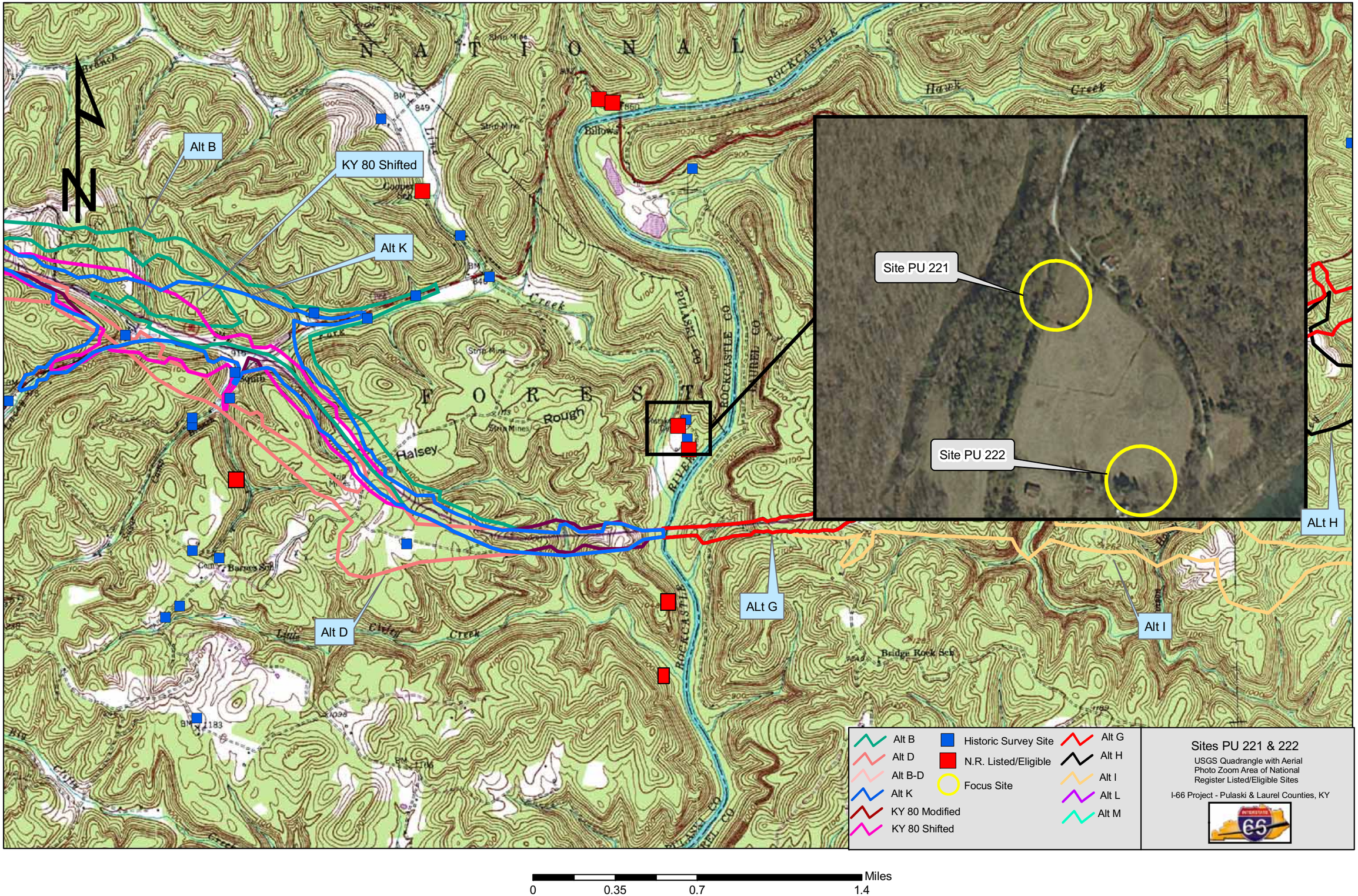

KY 80 Shifted
KY 80 Shifted
Site PU 65
Alt K
Alt B
Alt D
Fellowship Knob
Shopville
McKinney Knob
Doolin Knob
David Knob
Brushy Point
Jack Knob
Hubble Knob
Jingling Hole Knob
Alt B
Alt D
Alt B-D
Alt K
KY 80 Modified
KY 80 Shifted
Historic Survey Site
N.R. Listed/Eligible
Focus Site
Alt G
Alt H
Alt I
Alt L
Alt M
Site PU 65
USGS Quadrangle with Aerial Photo Zoom Area of National Register Listed/Eligible Sites
I-66 Project - Pulaski & Laurel Counties, KY
Miles
0
0.35
0.7
1.4

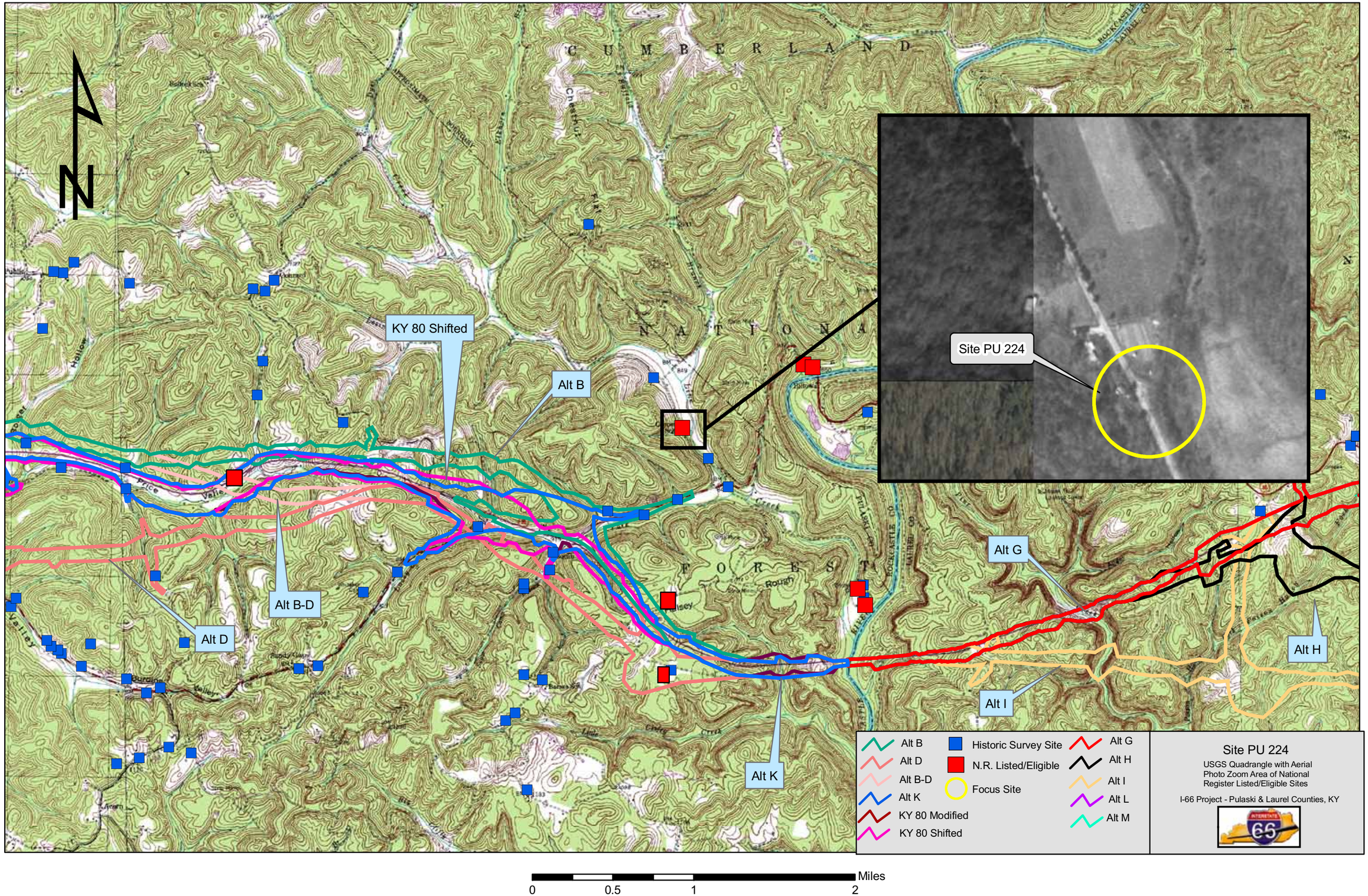

KY 80 Shifted
KY 80 Modified
Alt K
Alt D
Alts B & BD
Peach Orchard Knob
Pine Hill Ch
Jingling Hole Knob
Saltpeter Knob
Sand Rock Knob
Buzzard Knob
Cox Knob
Barnesburg
East Somerset Ch
McKinney Knob
Buzzard Rock Knob
Big Knob
Jack Knob
Hubble Knob
David Knob
Sugar Hill
Vaught Sch
Mark
Branch
Big Spring
Stewart Br
Cold Br
Chapel Br
Bolton Airfield
Alt B
Alt D
Alt B-D
Alt K
KY 80 Modified
KY 80 Shifted
Historic Survey Site
N.R. Listed/Eligible
Focus Site
Alt G
Alt H
Alt I
Alt L
Alt M
Site PU 71
USGS Quadrangle with Aerial Photo Zoom Area of National Register Listed/Eligible Sites
I-66 Project - Pulaski & Laurel Counties, KY
0
0.5
1
2
Miles

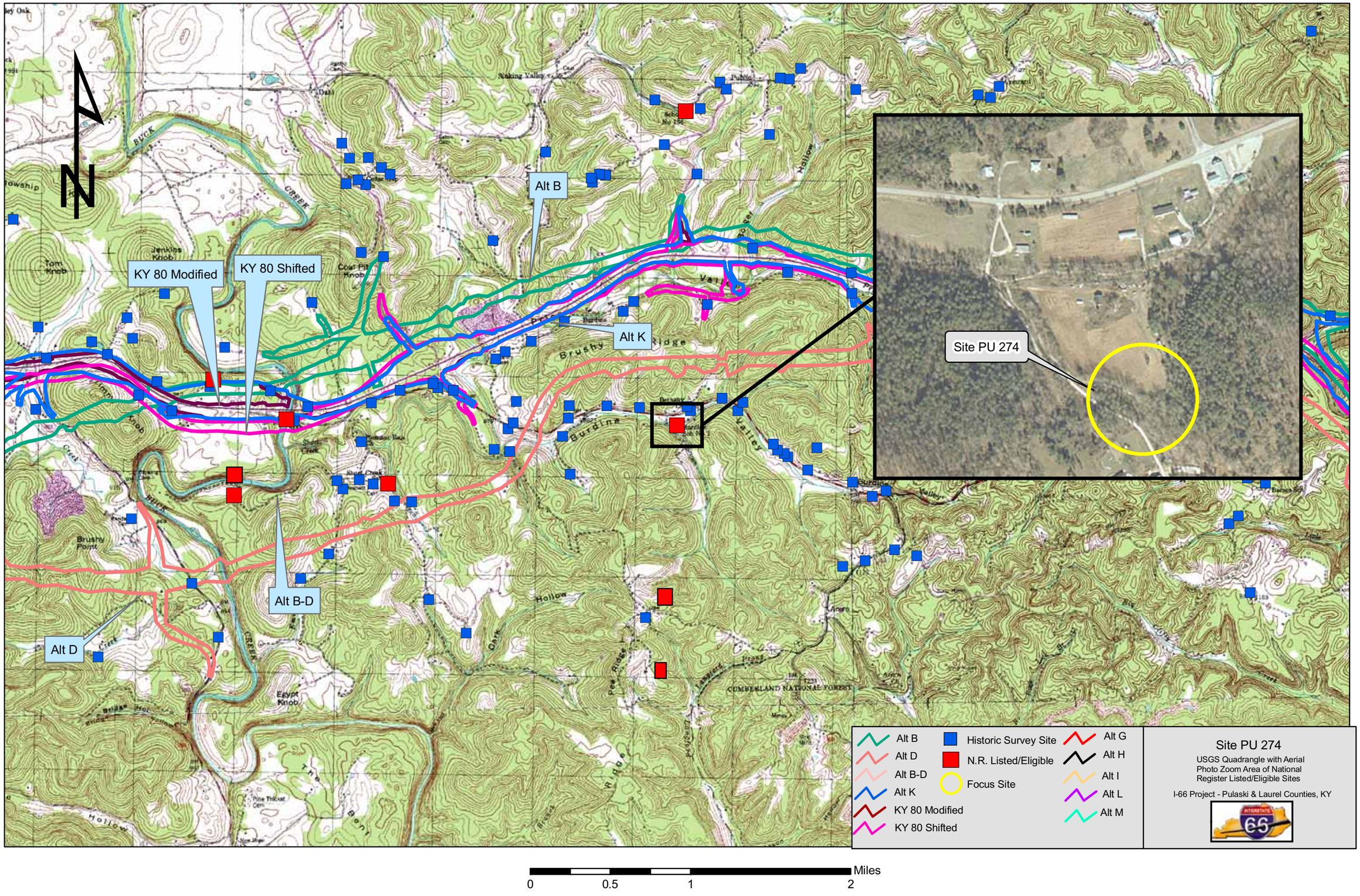

KY 80 Shifted
KY 80 Modified
Alt K
Alt D
Site PU 195
Jingling Hole Knob
Saltpeter Knob
Mark
Branch
McKinney Knob
Big Spring
Buzzard Rock Knob
Buzzard Knob
Tom Knob
Flat
Cox Knob
Barnesburg
East Somerset Ch
Knob
David Knob
Jack Knob
Hubble Knob
Stewart
Stewart Br
Cedar
Creek
Sugar Hill Knob
Sugar Hill
Big
Grundy
Cedar Bluff Knob
Little Knob
Potato Hill
Soul Chapel
Alt B
Alt D
Alt B-D
Alt K
KY 80 Modified
KY 80 Shifted
Historic Survey Site
N.R. Listed/Eligible
Focus Site
Alt G
Alt H
Alt I
Alt L
Alt M
Site PU 195
USGS Quadrangle with Aerial Photo Zoom Area of National Register Listed/Eligible Sites
I-66 Project - Pulaski & Laurel Counties, KY
Miles
0
0.35
0.7
1.4

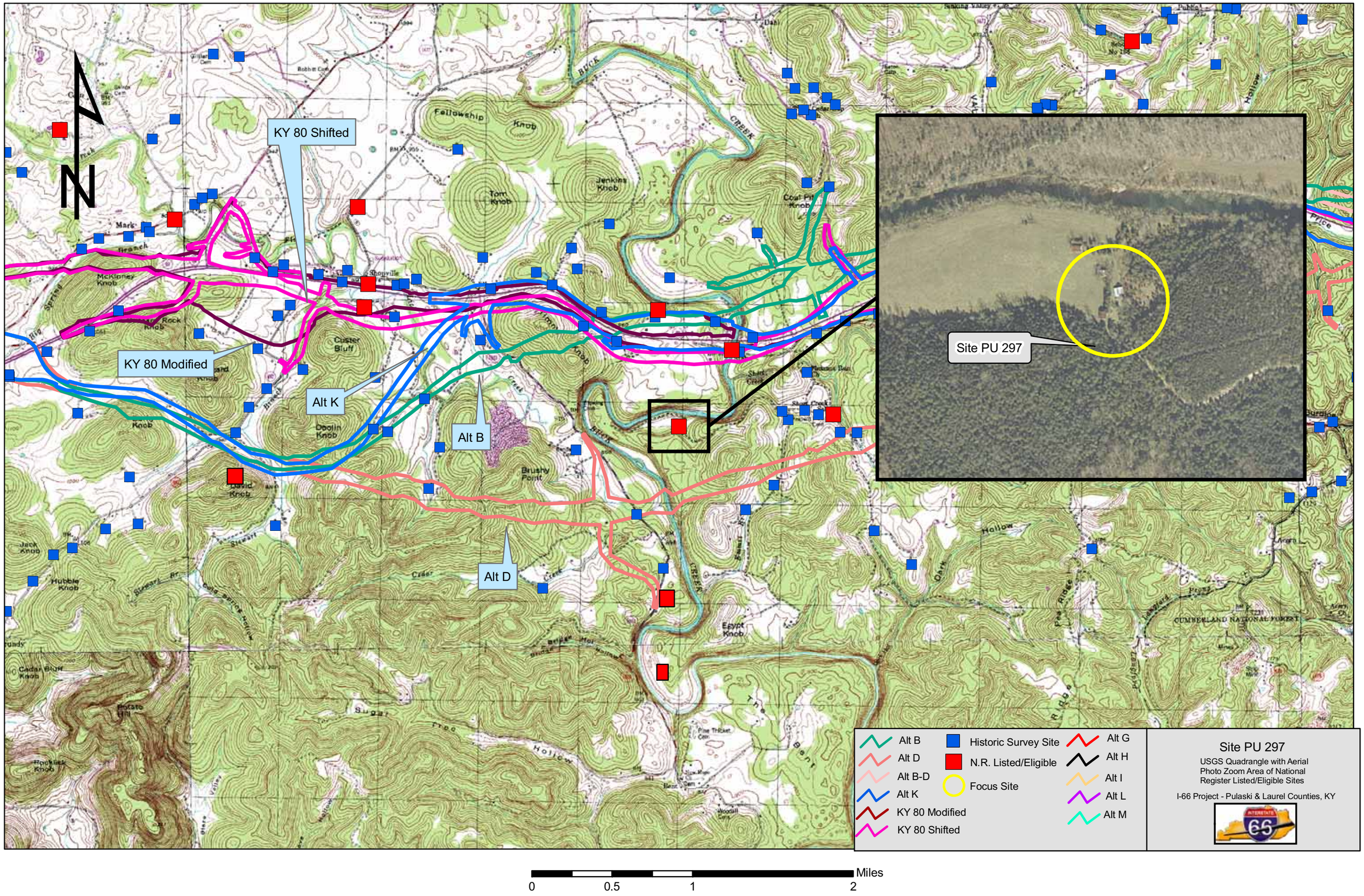

Site PU 207
KY 80 Shifted
KY 80 Modified
Alt K
Alt D
Alt B
Flat Lick Knob
Valley Oak
Hickory Nut Ridge
Eden Sch
Salem Coin Br
Pine Hill Ch
Jingling Hole Knob
Saltpeter Knob
Mark Branch
McKinney Knob
Shopville
Custer Bluff
Barnesburg
East Somerset Ch
David Knob
Alt B
Alt D
Alt B-D
Alt K
KY 80 Modified
KY 80 Shifted
Historic Survey Site
N.R. Listed/Eligible
Focus Site
Alt G
Alt H
Alt I
Alt L
Alt M
Site PU 207
USGS Quadrangle with Aerial Photo Zoom Area of National Register Listed/Eligible Sites
I-66 Project - Pulaski & Laurel Counties, KY
0
0.35
0.7
1.4
Miles

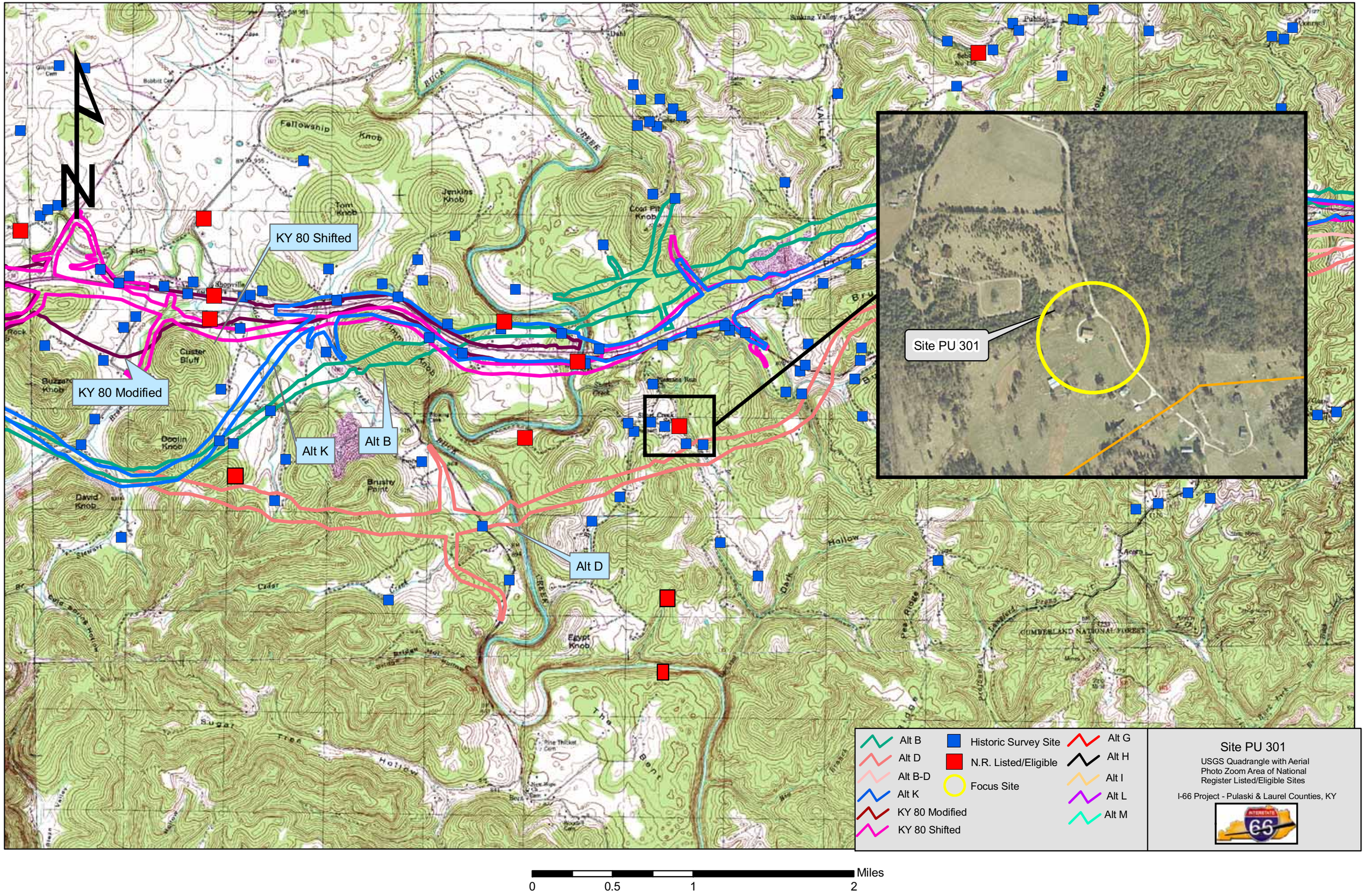

Site PU 213
KY 80 Shifted
KY 80 Modified
Alt K
Alt D
Alt B
Alt B
Alt D
Alt B-D
Alt K
KY 80 Modified
KY 80 Shifted
Historic Survey Site
N.R. Listed/Eligible
Focus Site
Alt G
Alt H
Alt I
Alt L
Alt M
Site PU 213
USGS Quadrangle with Aerial Photo Zoom Area of National Register Listed/Eligible Sites
I-66 Project - Pulaski & Laurel Counties, KY
Miles
0
0.35
0.7
1.4

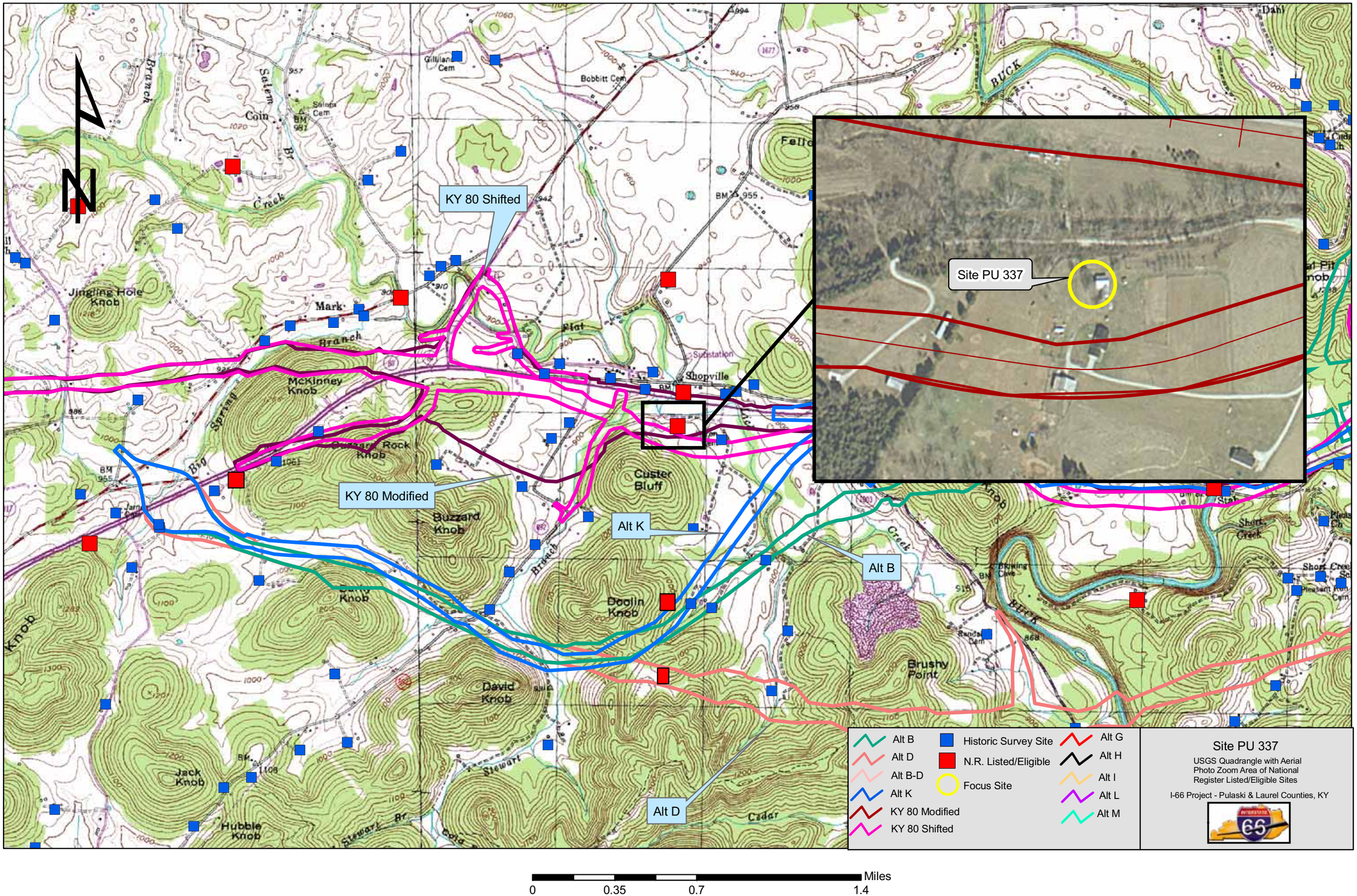

N
Alt B
KY 80 Shifted
Alt K
Site PU 221
Site PU 222
ALt H
ALt G
Alt I
Alt D
Alt B
Alt D
Alt B-D
Alt K
KY 80 Modified
KY 80 Shifted
Historic Survey Site
N.R. Listed/Eligible
Focus Site
Alt G
Alt H
Alt I
Alt L
Alt M
Sites PU 221 & 222
USGS Quadrangle with Aerial Photo Zoom Area of National Register Listed/Eligible Sites
I-66 Project - Pulaski & Laurel Counties, KY
Miles
0
0.35
0.7
1.4

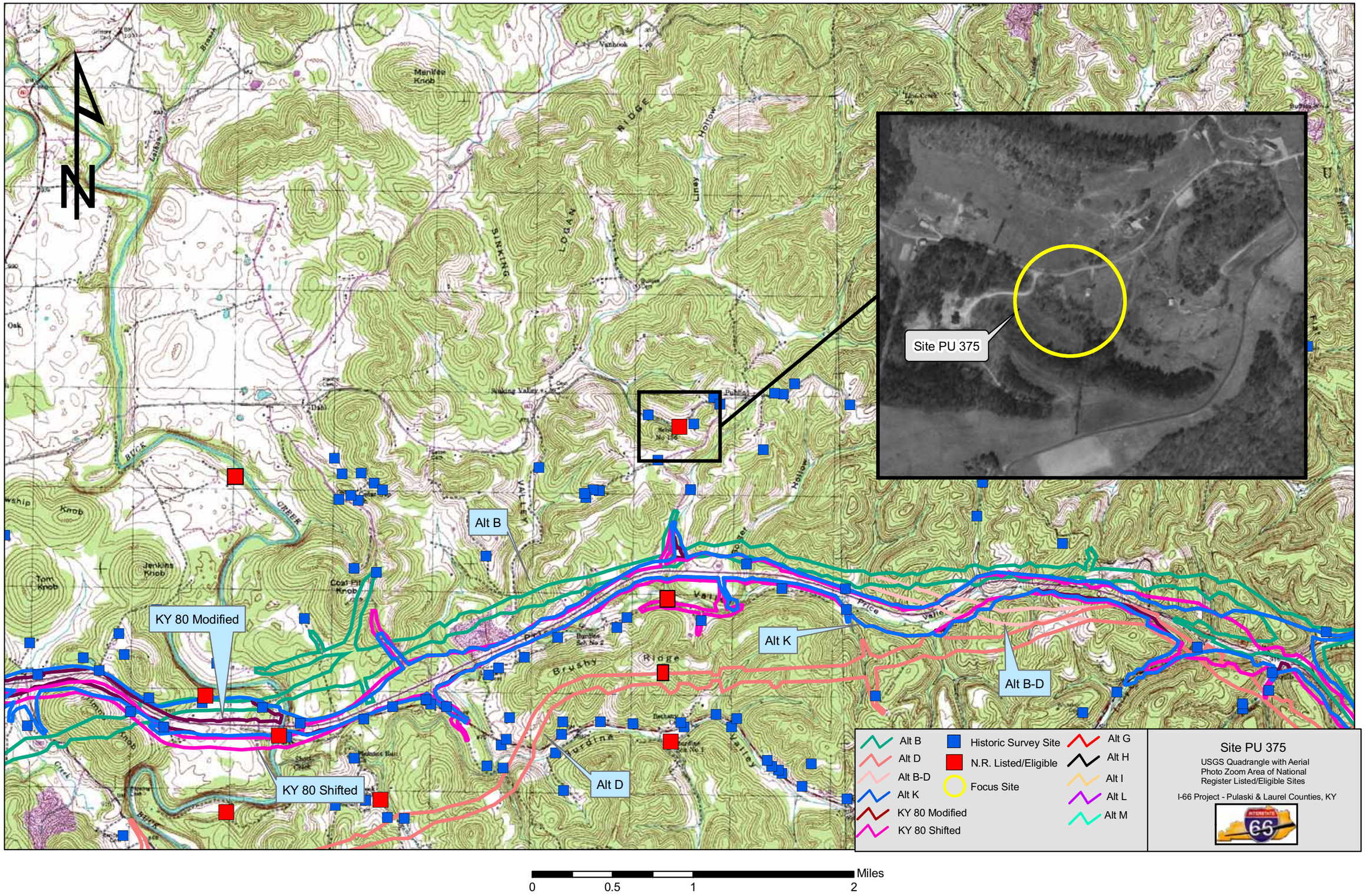

N
KY 80 Shifted
Alt B
Alt B-D
Alt D
Alt K
Alt G
Alt H
Alt I
Site PU 224
Alt B
Alt D
Alt B-D
Alt K
KY 80 Modified
KY 80 Shifted
Historic Survey Site
N.R. Listed/Eligible
Focus Site
Alt G
Alt H
Alt I
Alt L
Alt M
Site PU 224
USGS Quadrangle with Aerial Photo Zoom Area of National Register Listed/Eligible Sites
I-66 Project - Pulaski & Laurel Counties, KY
0
0.5
1
2
Miles

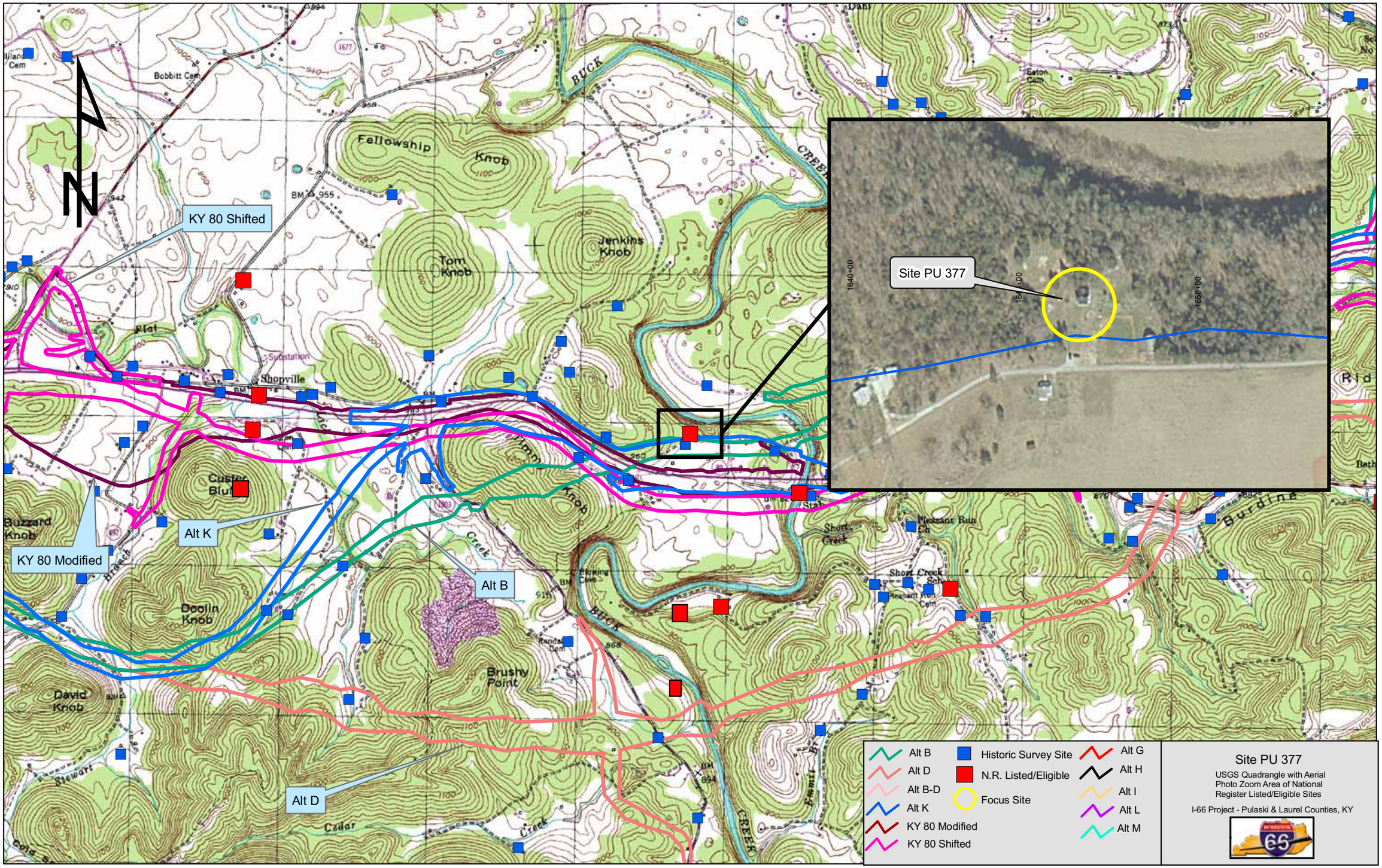

Alt B
KY 80 Modified
KY 80 Shifted
Alt K
Alt B-D
Alt D
Site PU 274
Alt B
Alt D
Alt B-D
Alt K
KY 80 Modified
KY 80 Shifted
Historic Survey Site
N.R. Listed/Eligible
Focus Site
Alt G
Alt H
Alt I
Alt L
Alt M
Site PU 274
USGS Quadrangle with Aerial Photo Zoom Area of National Register Listed/Eligible Sites
I-66 Project - Pulaski & Laurel Counties, KY
0
0.5
1
2
Miles

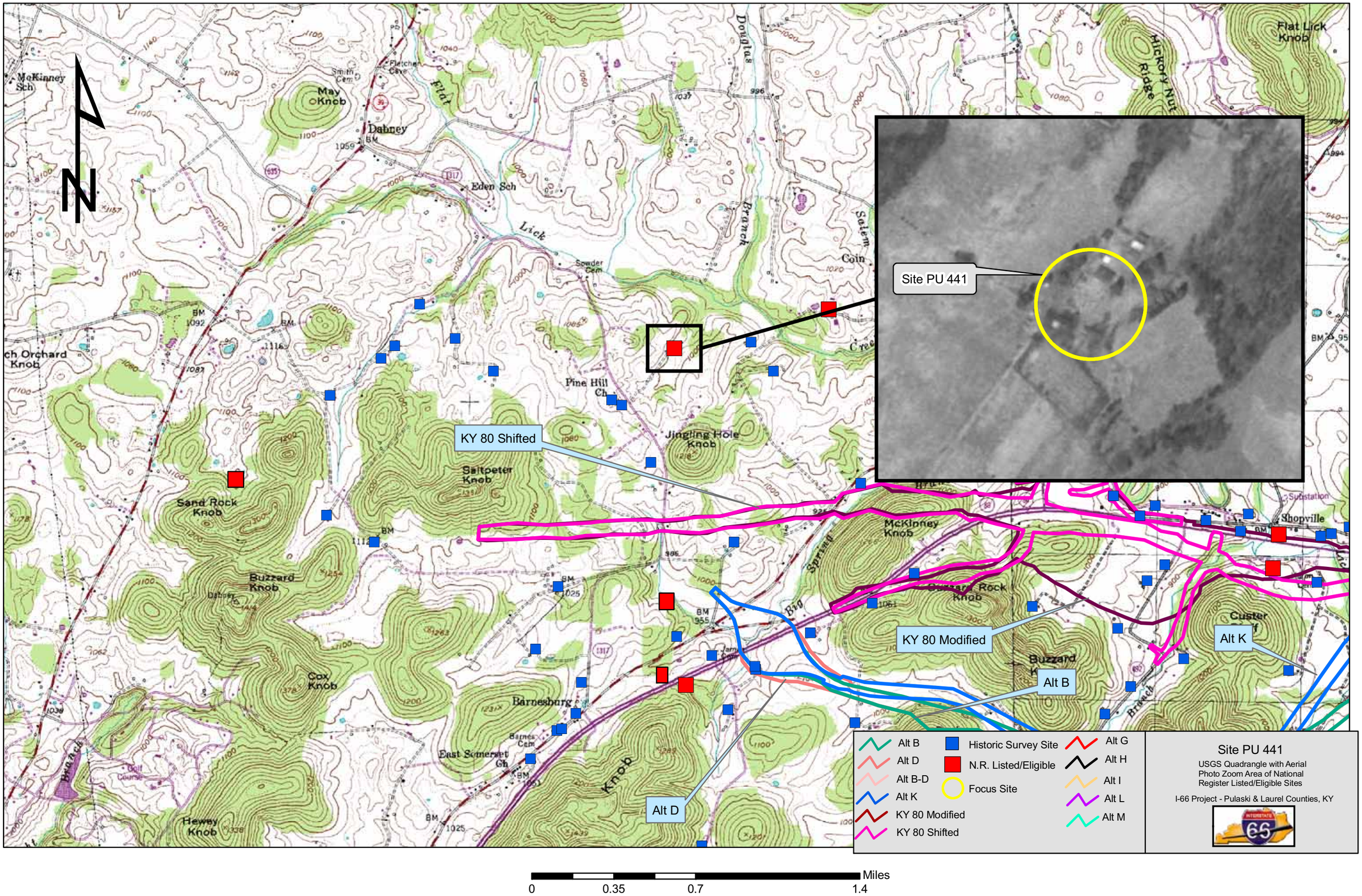

KY 80 Shifted
KY 80 Modified
Alt K
Alt B
Alt D
Site PU 297
Fellowship Knob
Tom Knob
Jenkins Knob
Coal Pit Knob
Custer Bluff
Doolin Knob
Brushy Point
Egypt Knob
Mark Branch
McKinney Knob
Rock Knob
Jack Knob
Hubble Knob
Cedar Bluff Knob
Potato Hill
Rocklick Knob
David Knob
Sugar Tree Hollow
Oak Hollow
Pea Ridge
CUMBERLAND NATIONAL FOREST
Alt B
Alt D
Alt B-D
Alt K
KY 80 Modified
KY 80 Shifted
Historic Survey Site
N.R. Listed/Eligible
Focus Site
Alt G
Alt H
Alt I
Alt L
Alt M
Site PU 297
USGS Quadrangle with Aerial Photo Zoom Area of National Register Listed/Eligible Sites
I-66 Project - Pulaski & Laurel Counties, KY
0
0.5
1
2
Miles

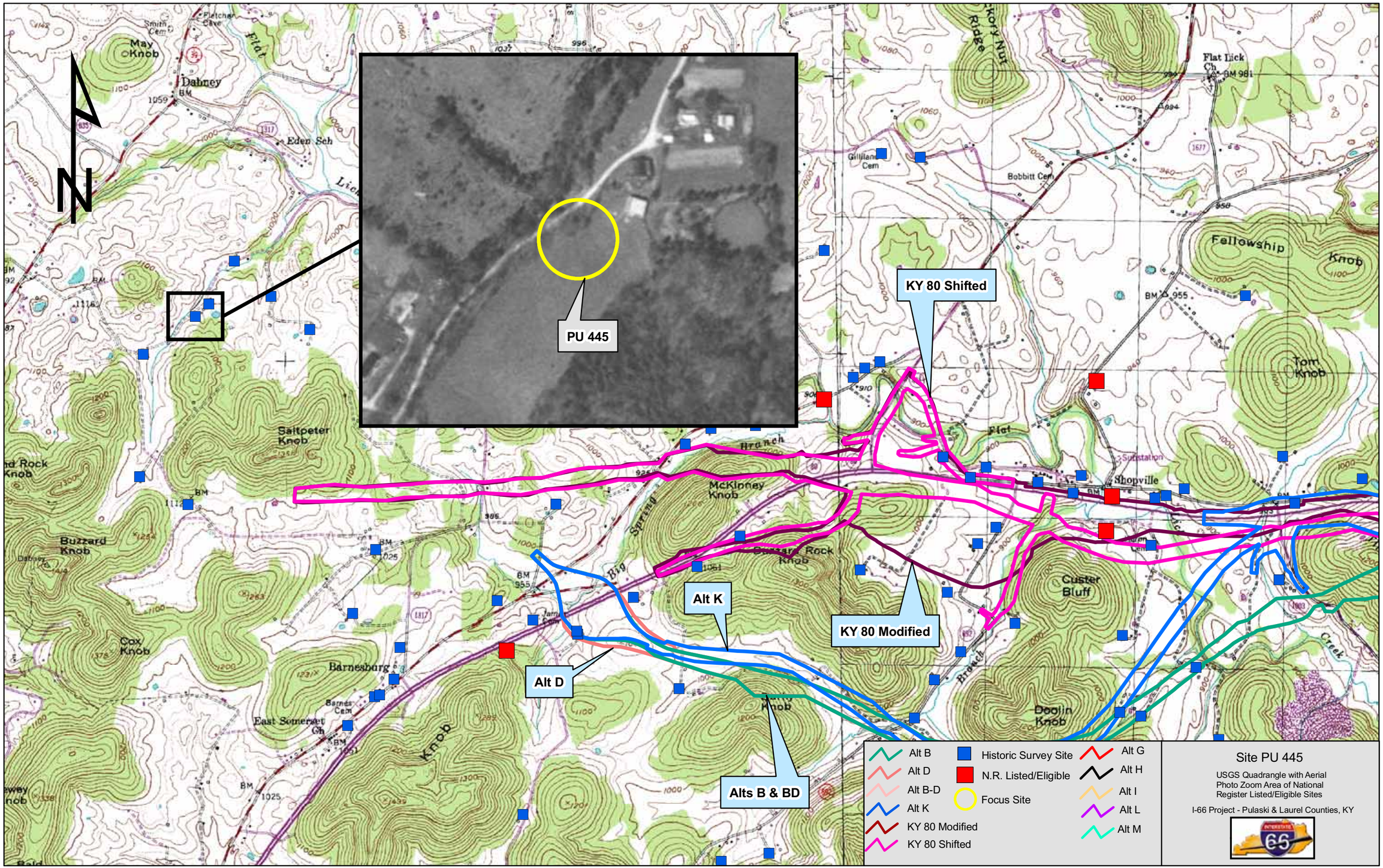

KY 80 Shifted
KY 80 Modified
Alt K
Alt B
Alt D
Site PU 301
Alt B
Alt D
Alt B-D
Alt K
KY 80 Modified
KY 80 Shifted
Historic Survey Site
N.R. Listed/Eligible
Focus Site
Alt G
Alt H
Alt I
Alt L
Alt M
Site PU 301
USGS Quadrangle with Aerial Photo Zoom Area of National Register Listed/Eligible Sites
I-66 Project - Pulaski & Laurel Counties, KY
Miles
0
0.5
1
2

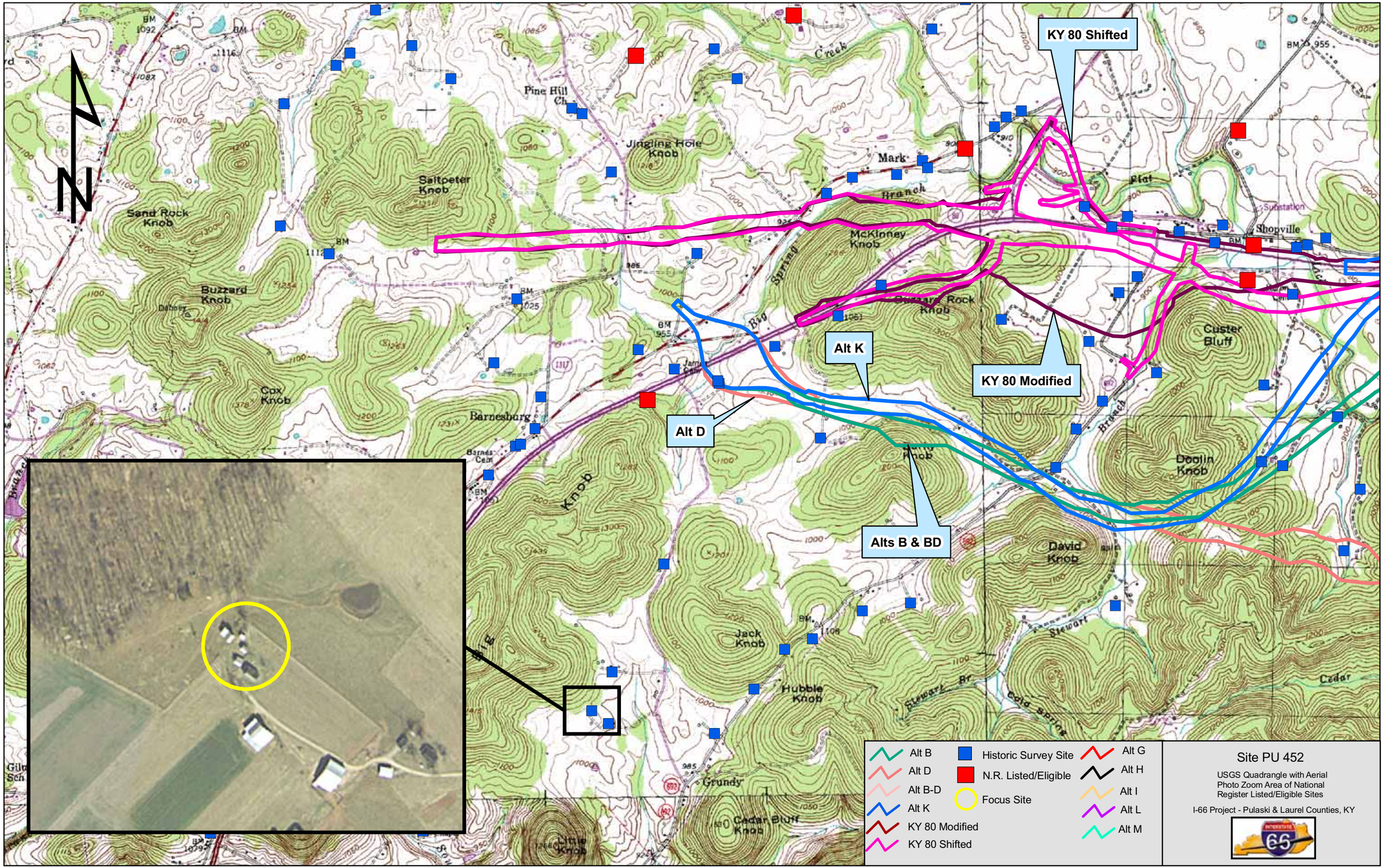

KY 80 Shifted
KY 80 Modified
Alt K
Alt B
Alt D
Site PU 337
Jingling Hole Knob
Mark
Branch
McKinney Knob
Big Spring
Cutaway Rock Knob
Buzzard Knob
Custer Bluff
Shopville
Substation
Flat
Bobbitt Cem
Gilliam Cem
Salem Cem
Coin
Br
Creek
Branch
Doolin Knob
David Knob
Jack Knob
Hubble Knob
Stewart
Stewart Br
Cedar
Brushy Point
Buck
Creek
Short Creek
Knob
Dahl
Miles
0
0.35
0.7
1.4
Alt B
Alt D
Alt B-D
Alt K
KY 80 Modified
KY 80 Shifted
Historic Survey Site
N.R. Listed/Eligible
Focus Site
Alt G
Alt H
Alt I
Alt L
Alt M
Site PU 337
USGS Quadrangle with Aerial Photo Zoom Area of National Register Listed/Eligible Sites
I-66 Project - Pulaski & Laurel Counties, KY

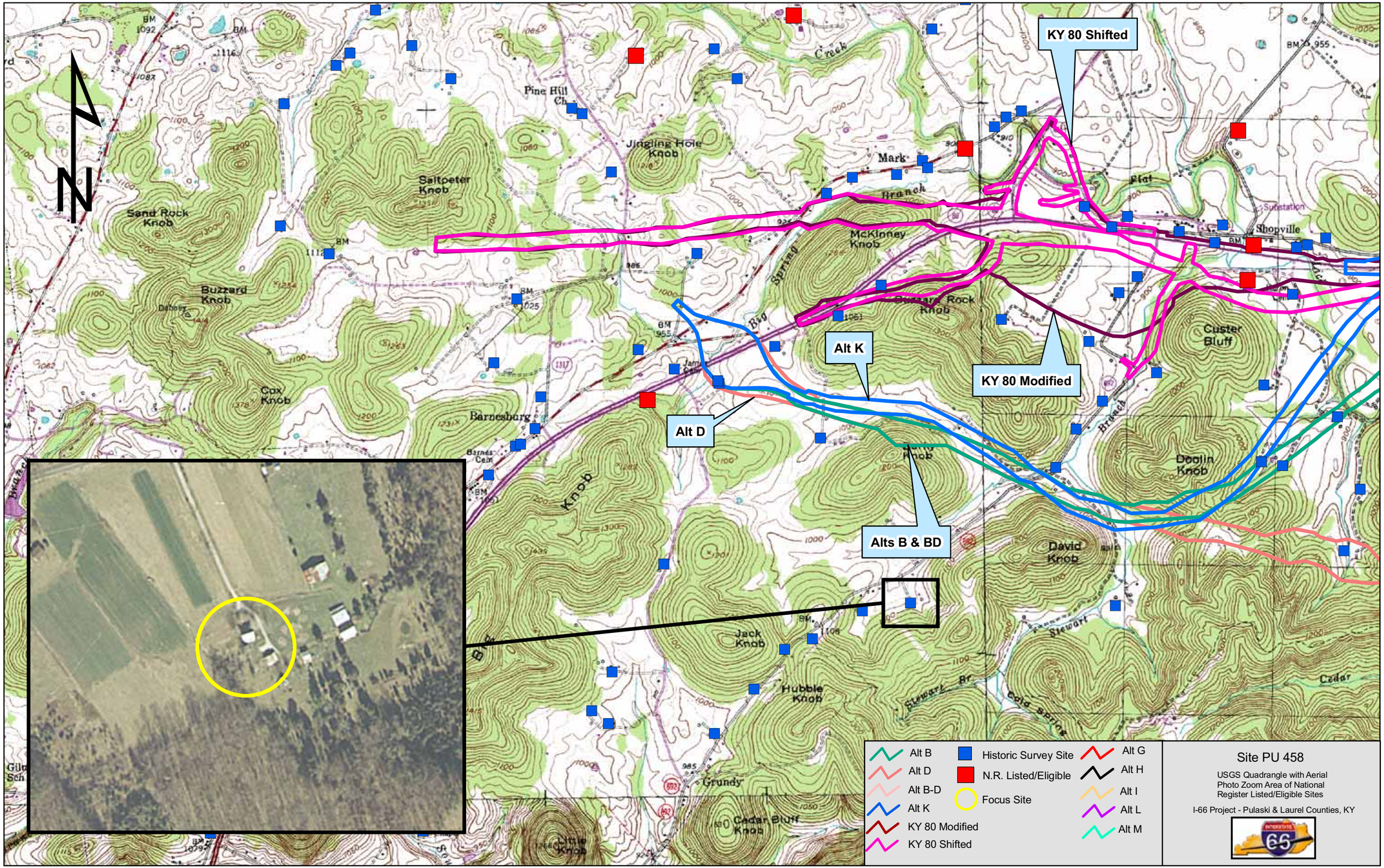

N
Site PU 375
Alt B
KY 80 Modified
KY 80 Shifted
Alt K
Alt B-D
Alt D
Alt B
Alt D
Alt B-D
Alt K
KY 80 Modified
KY 80 Shifted
Historic Survey Site
N.R. Listed/Eligible
Focus Site
Alt G
Alt H
Alt I
Alt L
Alt M
Site PU 375
USGS Quadrangle with Aerial Photo Zoom Area of National Register Listed/Eligible Sites
I-66 Project - Pulaski & Laurel Counties, KY
Miles
0
0.5
1
2

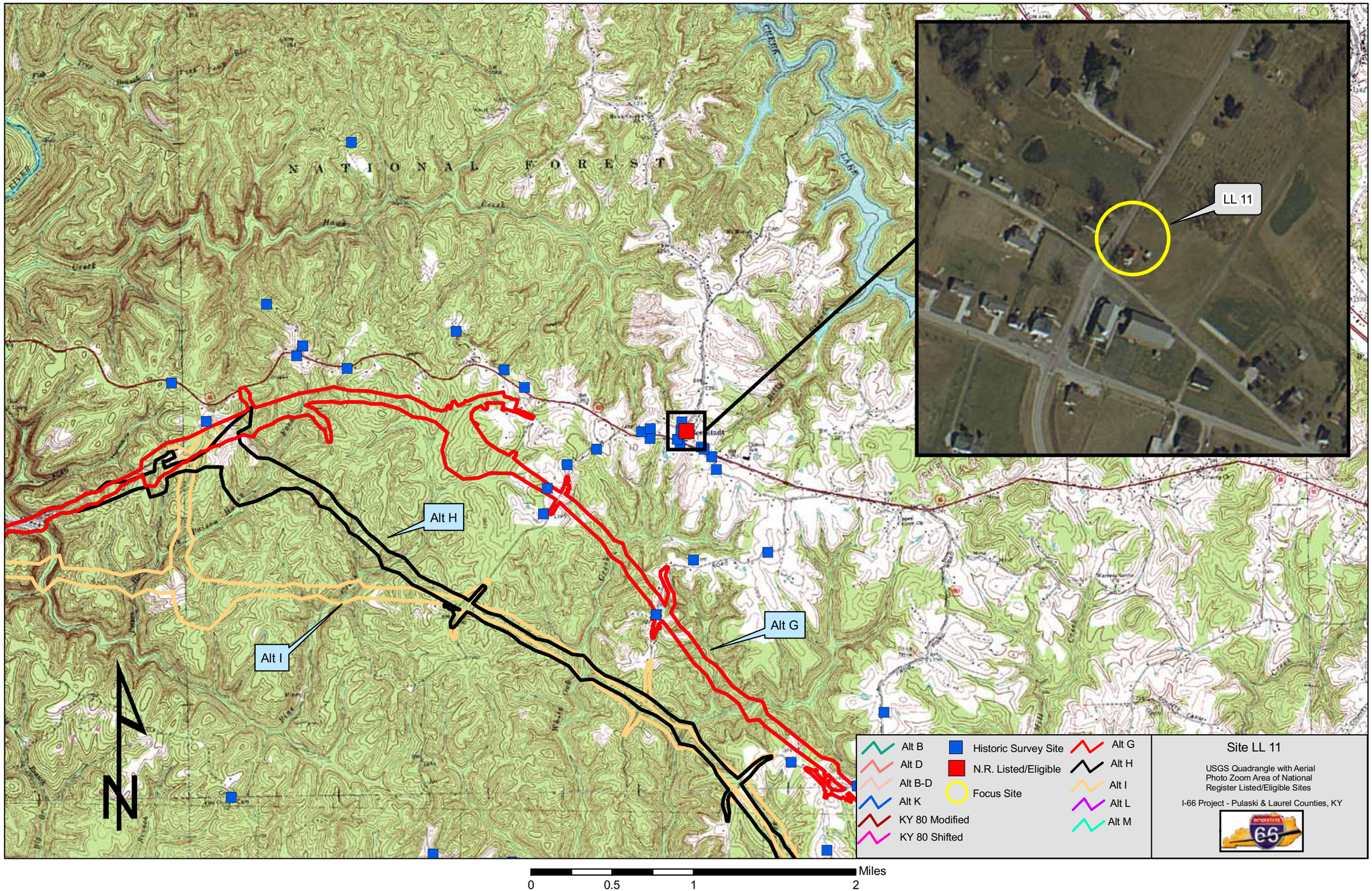

KY 80 Shifted
KY 80 Modified
Alt K
Alt B
Alt D
Site PU 377
1640+00
1650+00
Fellowship Knob
Tom Knob
Jenkins Knob
Custer Bluff
Buzzard Knob
Doolin Knob
David Knob
Brushy Point
Shopville
Substation
Bobbitt Cem
Eaton Cem
Pleasant Run Ch
Short Creek Sch
Pleasant Run Cem
Randal Cem
Blowing Cave
BUCK CREEK
Cedar Creek
Stewart Branch
Burdine
Alt B
Alt D
Alt B-D
Alt K
KY 80 Modified
KY 80 Shifted
Historic Survey Site
N.R. Listed/Eligible
Focus Site
Alt G
Alt H
Alt I
Alt L
Alt M
Site PU 377
USGS Quadrangle with Aerial Photo Zoom Area of National Register Listed/Eligible Sites
I-66 Project - Pulaski & Laurel Counties, KY
0
0.35
0.7
1.4
Miles

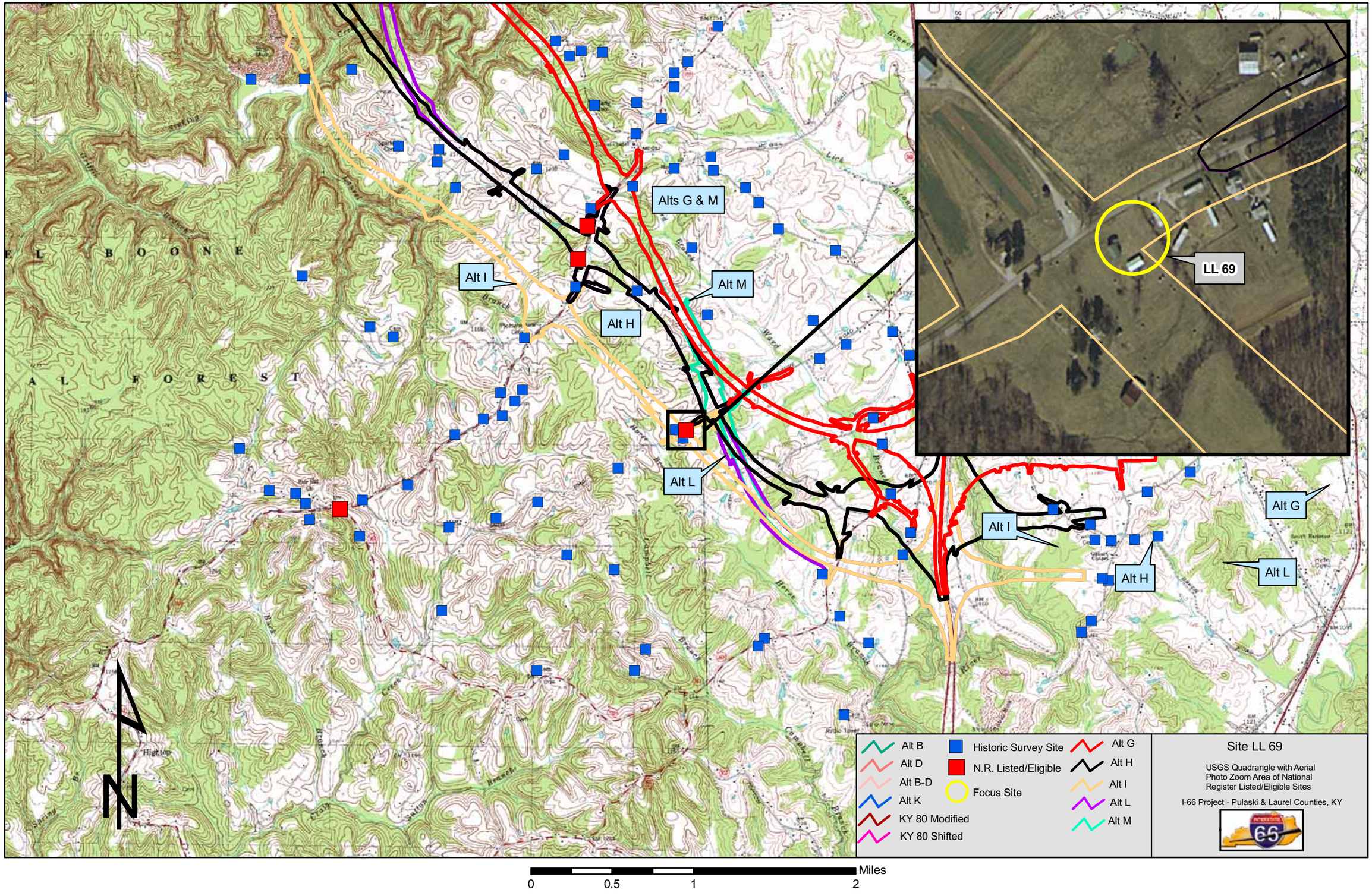

Site PU 441
KY 80 Shifted
KY 80 Modified
Alt K
Alt B
Alt D
Alt B
Alt D
Alt B-D
Alt K
KY 80 Modified
KY 80 Shifted
Historic Survey Site
N.R. Listed/Eligible
Focus Site
Alt G
Alt H
Alt I
Alt L
Alt M
Site PU 441
USGS Quadrangle with Aerial Photo Zoom Area of National Register Listed/Eligible Sites
I-66 Project - Pulaski & Laurel Counties, KY
Miles
0
0.35
0.7
1.4

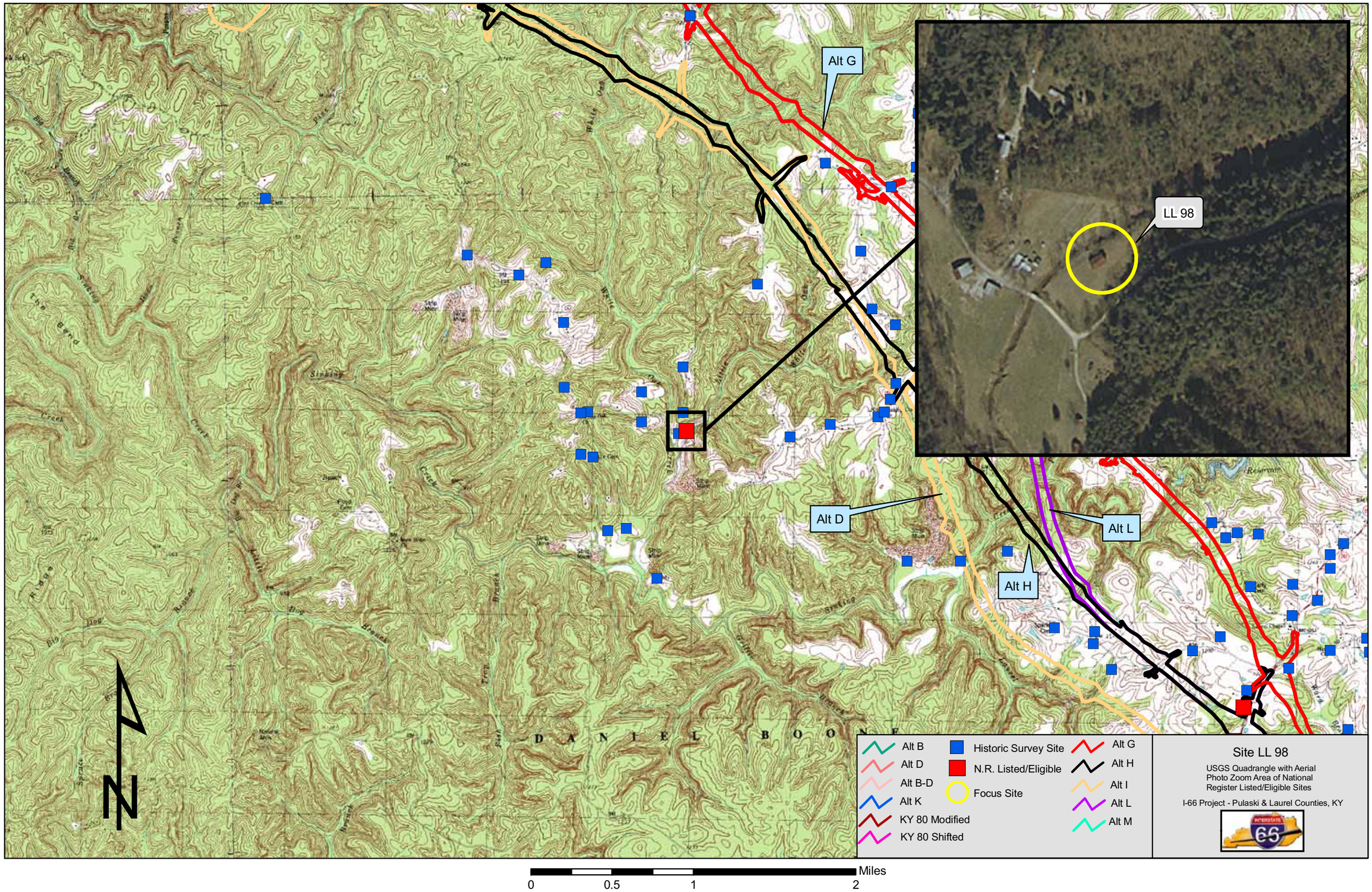

PU 445
KY 80 Shifted
KY 80 Modified
Alt K
Alt D
Alts B & BD
Alt B
Alt D
Alt B-D
Alt K
KY 80 Modified
KY 80 Shifted
Historic Survey Site
N.R. Listed/Eligible
Focus Site
Alt G
Alt H
Alt I
Alt L
Alt M
Site PU 445
USGS Quadrangle with Aerial Photo Zoom Area of National Register Listed/Eligible Sites
I-66 Project - Pulaski & Laurel Counties, KY
Miles
0
0.5
1
2

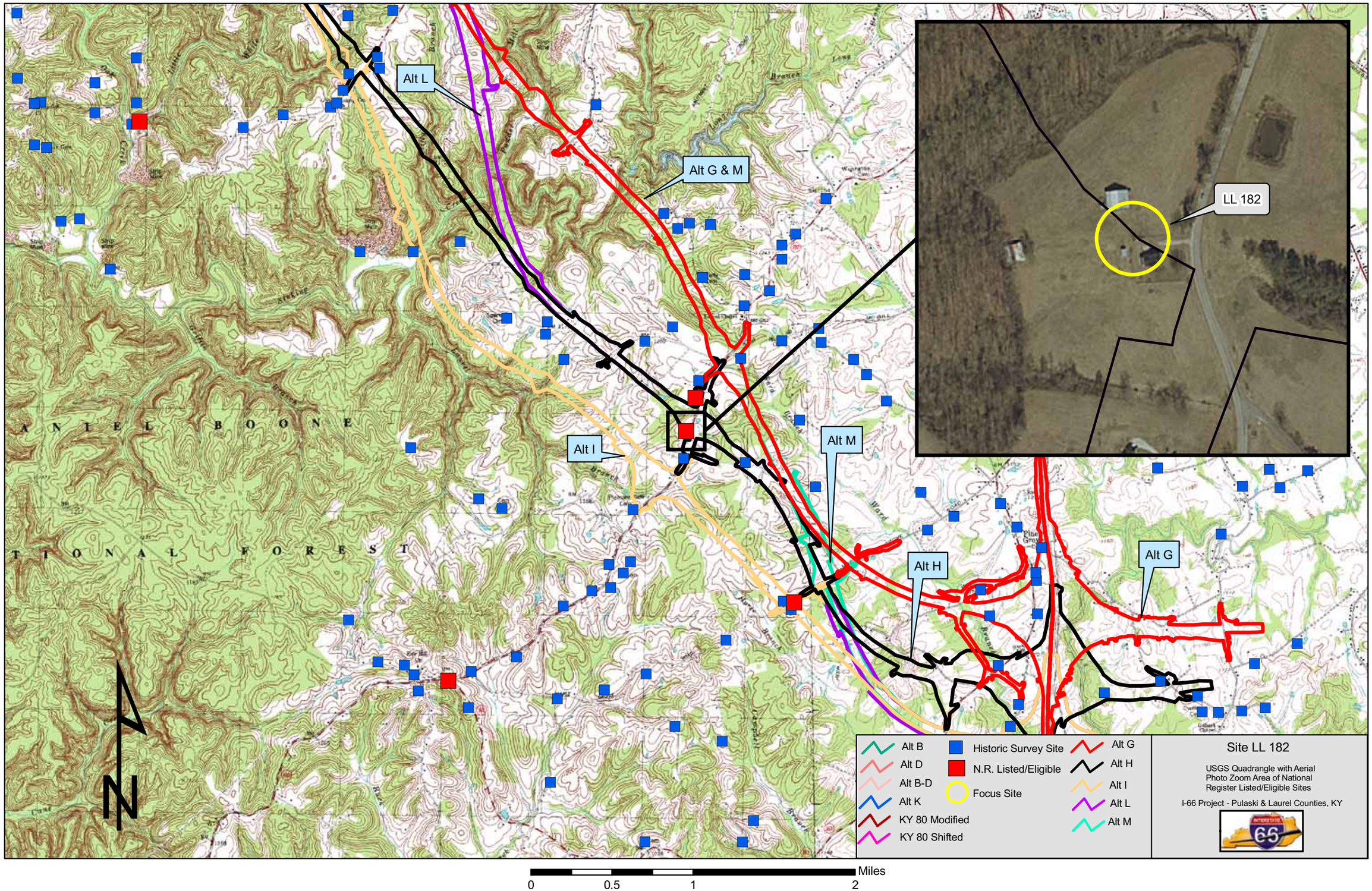

KY 80 Shifted
KY 80 Modified
Alt K
Alt D
Alts B & BD
Pine Hill Ch
Jingling Hole Knob
Saltpeter Knob
Sand Rock Knob
Buzzard Knob
Cox Knob
Barnesburg
McKinney Knob
Mark
Shopville
Custer Bluff
Doolin Knob
David Knob
Jack Knob
Hubble Knob
Grundy
Cedar Bluff Knob
Little Knob
Alt B
Alt D
Alt B-D
Alt K
KY 80 Modified
KY 80 Shifted
Historic Survey Site
N.R. Listed/Eligible
Focus Site
Alt G
Alt H
Alt I
Alt L
Alt M
Site PU 452
USGS Quadrangle with Aerial Photo Zoom Area of National Register Listed/Eligible Sites
I-66 Project - Pulaski & Laurel Counties, KY
0
0.5
1
2
Miles

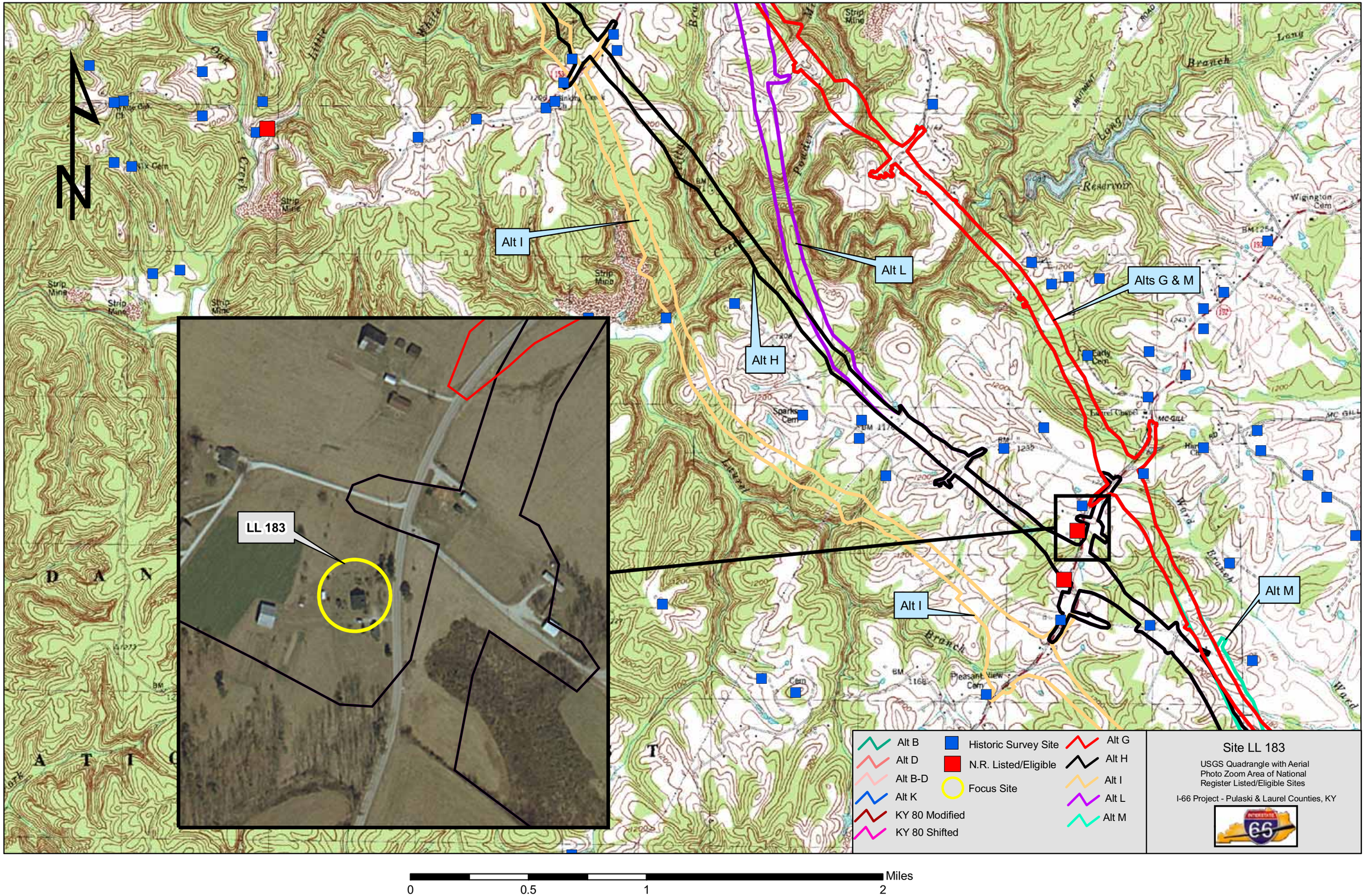

KY 80 Shifted
KY 80 Modified
Alt K
Alt D
Alts B & BD
Pine Hill Ch
Jingling Hole Knob
Saltpeter Knob
Sand Rock Knob
Buzzard Knob
Cox Knob
Barnesburg
Mark
McKinney Knob
Shopville
Custer Bluff
Doolin Knob
David Knob
Jack Knob
Hubble Knob
Grundy
Cedar Bluff Knob
Little Knob
Stewart Br
Cedar
Alt B
Alt D
Alt B-D
Alt K
KY 80 Modified
KY 80 Shifted
Historic Survey Site
N.R. Listed/Eligible
Focus Site
Alt G
Alt H
Alt I
Alt L
Alt M
Site PU 458
USGS Quadrangle with Aerial Photo Zoom Area of National Register Listed/Eligible Sites
I-66 Project - Pulaski & Laurel Counties, KY
0
0.5
1
2
Miles

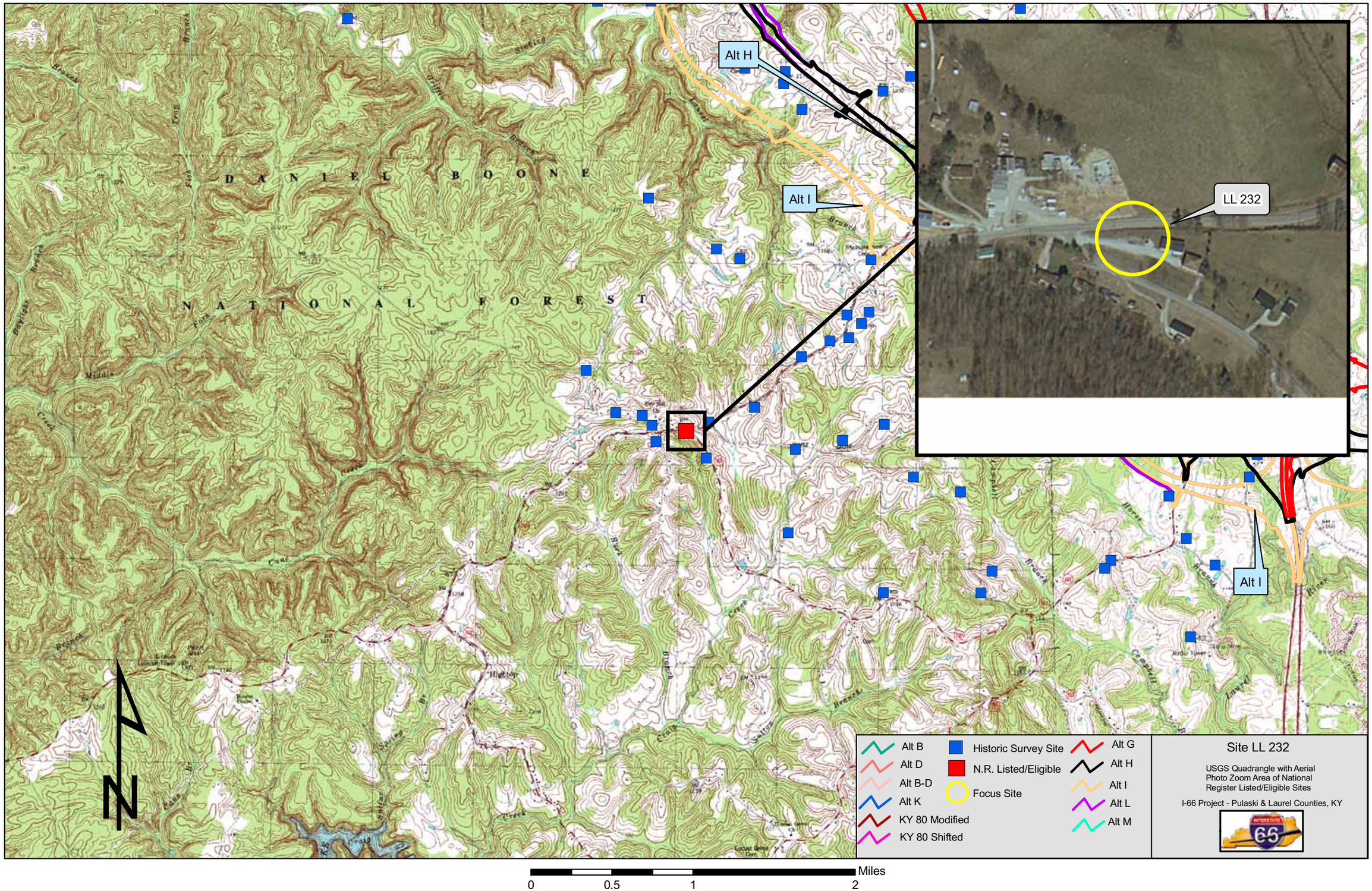

LL 11
Alt H
Alt I
Alt G
Alt B
Alt D
Alt B-D
Alt K
KY 80 Modified
KY 80 Shifted
Historic Survey Site
N.R. Listed/Eligible
Focus Site
Alt G
Alt H
Alt I
Alt L
Alt M
Site LL 11
USGS Quadrangle with Aerial Photo Zoom Area of National Register Listed/Eligible Sites
I-66 Project - Pulaski & Laurel Counties, KY
0
0.5
1
2
Miles


Alts G & M
Alt I
Alt M
Alt H
Alt L
LL 69
Alt I
Alt G
Alt H
Alt L
N
Alt B
Alt D
Alt B-D
Alt K
KY 80 Modified
KY 80 Shifted
Historic Survey Site
N.R. Listed/Eligible
Focus Site
Alt G
Alt H
Alt I
Alt L
Alt M
Site LL 69
USGS Quadrangle with Aerial Photo Zoom Area of National Register Listed/Eligible Sites
I-66 Project - Pulaski & Laurel Counties, KY
Miles
0
0.5
1
2


Alt G
LL 98
Alt D
Alt L
Alt H
D A N I E L B O O N E
N
Alt B
Alt D
Alt B-D
Alt K
KY 80 Modified
KY 80 Shifted
Historic Survey Site
N.R. Listed/Eligible
Focus Site
Alt G
Alt H
Alt I
Alt L
Alt M
Site LL 98
USGS Quadrangle with Aerial Photo Zoom Area of National Register Listed/Eligible Sites
I-66 Project - Pulaski & Laurel Counties, KY
Miles
0
0.5
1
2


Alt L
Alt G & M
LL 182
Alt I
Alt M
Alt H
Alt G
A N E L B O O N E
T I O N A L F O R E S T
N
Alt B
Alt D
Alt B-D
Alt K
KY 80 Modified
KY 80 Shifted
Historic Survey Site
N.R. Listed/Eligible
Focus Site
Alt G
Alt H
Alt I
Alt L
Alt M
Site LL 182
USGS Quadrangle with Aerial Photo Zoom Area of National Register Listed/Eligible Sites
I-66 Project - Pulaski & Laurel Counties, KY
Miles
0
0.5
1
2


N
Alt I
Alt L
Alt H
Alts G & M
Alt M
Alt I
LL 183
Alt B
Alt D
Alt B-D
Alt K
KY 80 Modified
KY 80 Shifted
Historic Survey Site
N.R. Listed/Eligible
Focus Site
Alt G
Alt H
Alt I
Alt L
Alt M
Site LL 183
USGS Quadrangle with Aerial Photo Zoom Area of National Register Listed/Eligible Sites
I-66 Project - Pulaski & Laurel Counties, KY
0
0.5
1
2
Miles


Alt H
Alt I
LL 232
Alt I
D A N I E L B O O N E
N A T I O N A L F O R E S T
Alt B
Alt D
Alt B-D
Alt K
KY 80 Modified
KY 80 Shifted
Historic Survey Site
N.R. Listed/Eligible
Focus Site
Alt G
Alt H
Alt I
Alt L
Alt M
Site LL 232
USGS Quadrangle with Aerial Photo Zoom Area of National Register Listed/Eligible Sites
I-66 Project - Pulaski & Laurel Counties, KY
Miles
0
0.5
1
2

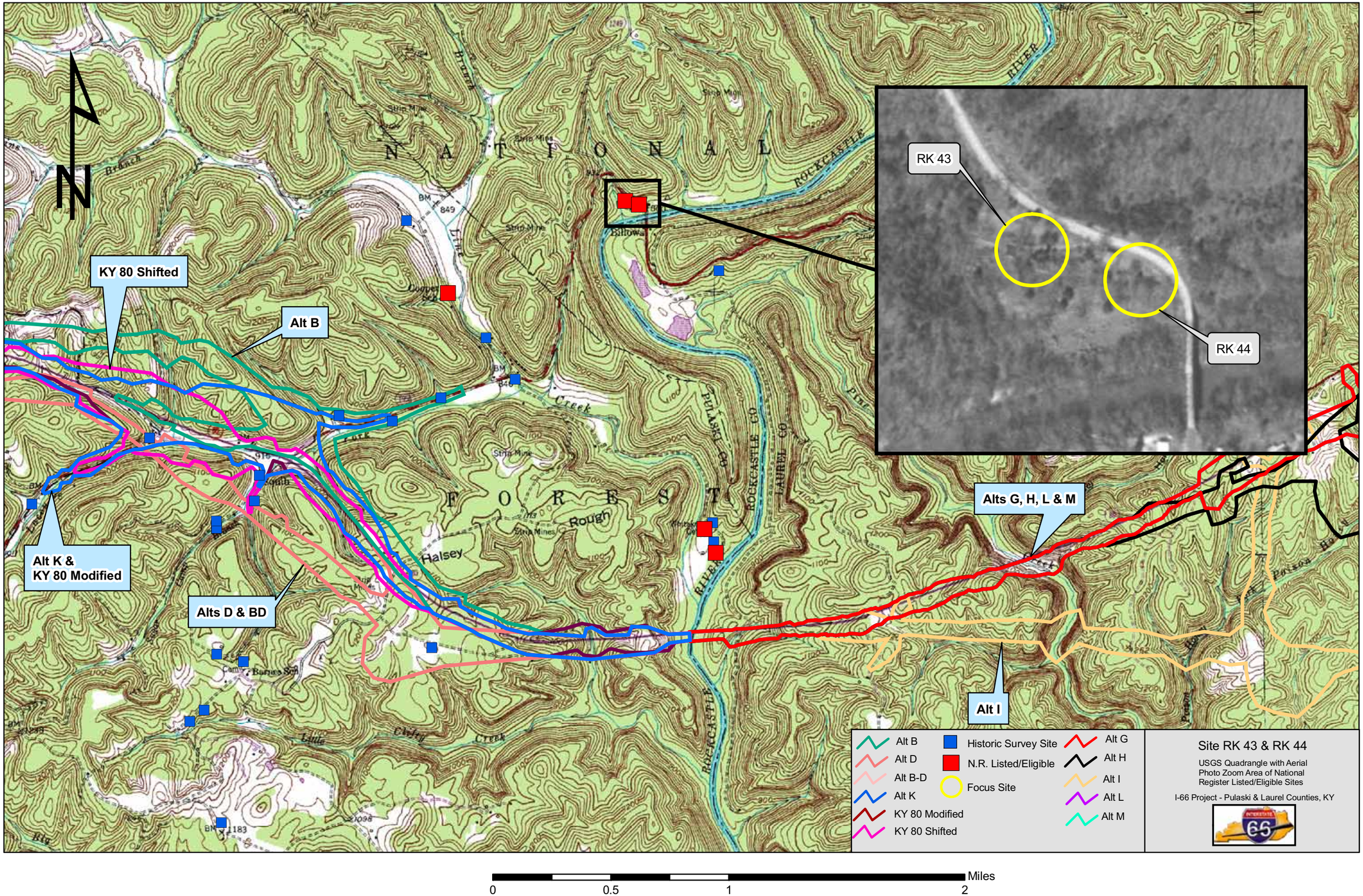
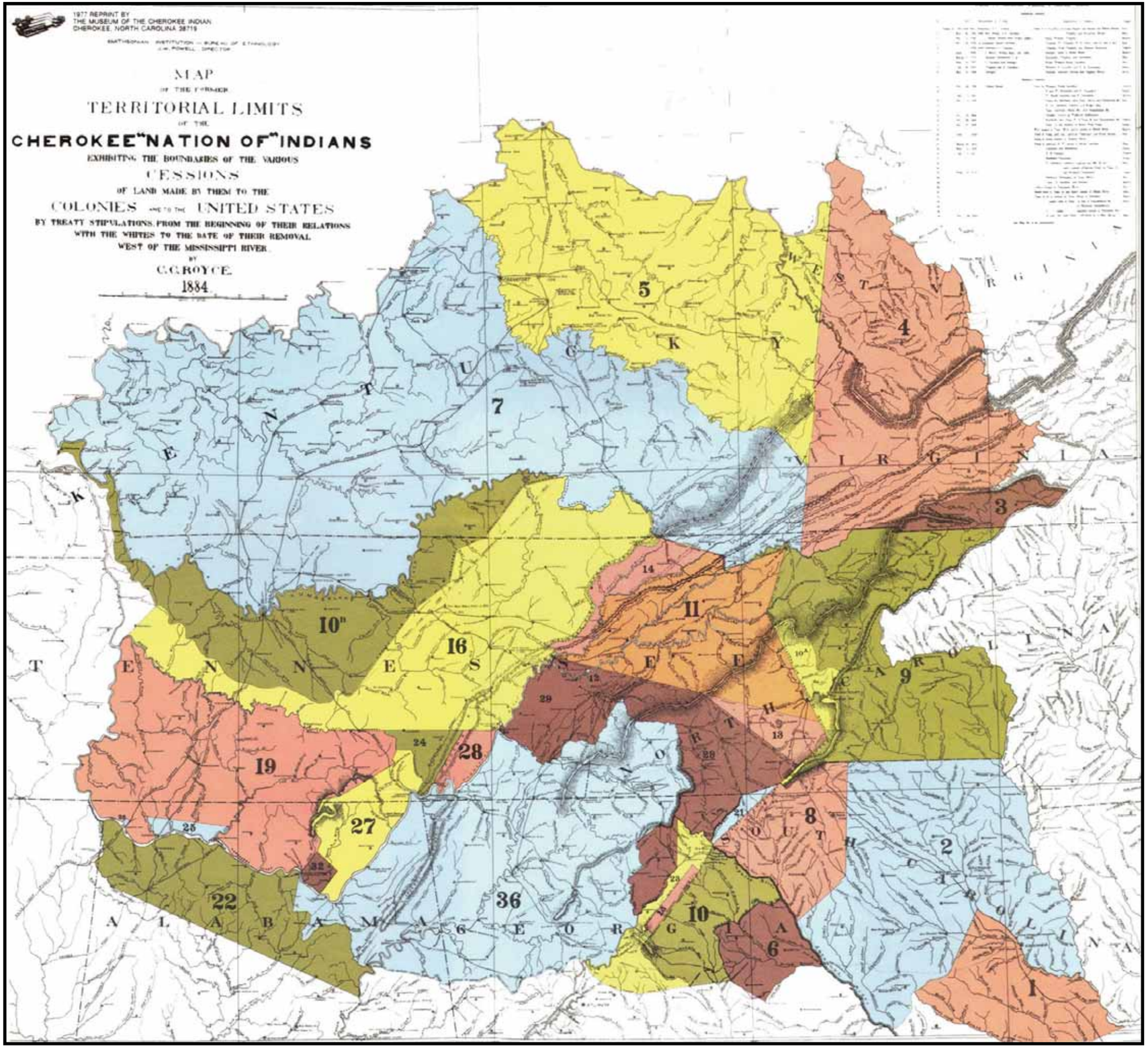

N
KY 80 Shifted
Alt B
Alt K &
KY 80 Modified
Alts D & BD
Alts G, H, L & M
Alt I
RK 43
RK 44
N A T I O N A L
F O R E S T
Halsey
Rough
Billows
Alt B
Alt D
Alt B-D
Alt K
KY 80 Modified
KY 80 Shifted
Historic Survey Site
N.R. Listed/Eligible
Focus Site
Alt G
Alt H
Alt I
Alt L
Alt M
Site RK 43 & RK 44
USGS Quadrangle with Aerial
Photo Zoom Area of National
Register Listed/Eligible Sites
I-66 Project - Pulaski & Laurel Counties, KY
0
0.5
1
2
Miles

Figure 8.3.2-1 – Map of the Former Territorial Limits of the Cherokee Nation of Indians



Map of the Former Territorial Limits of the Cherokee Nation of Indians

Utilized in the Project Consultation with Native Americans