Appendix C

APPENDIX C

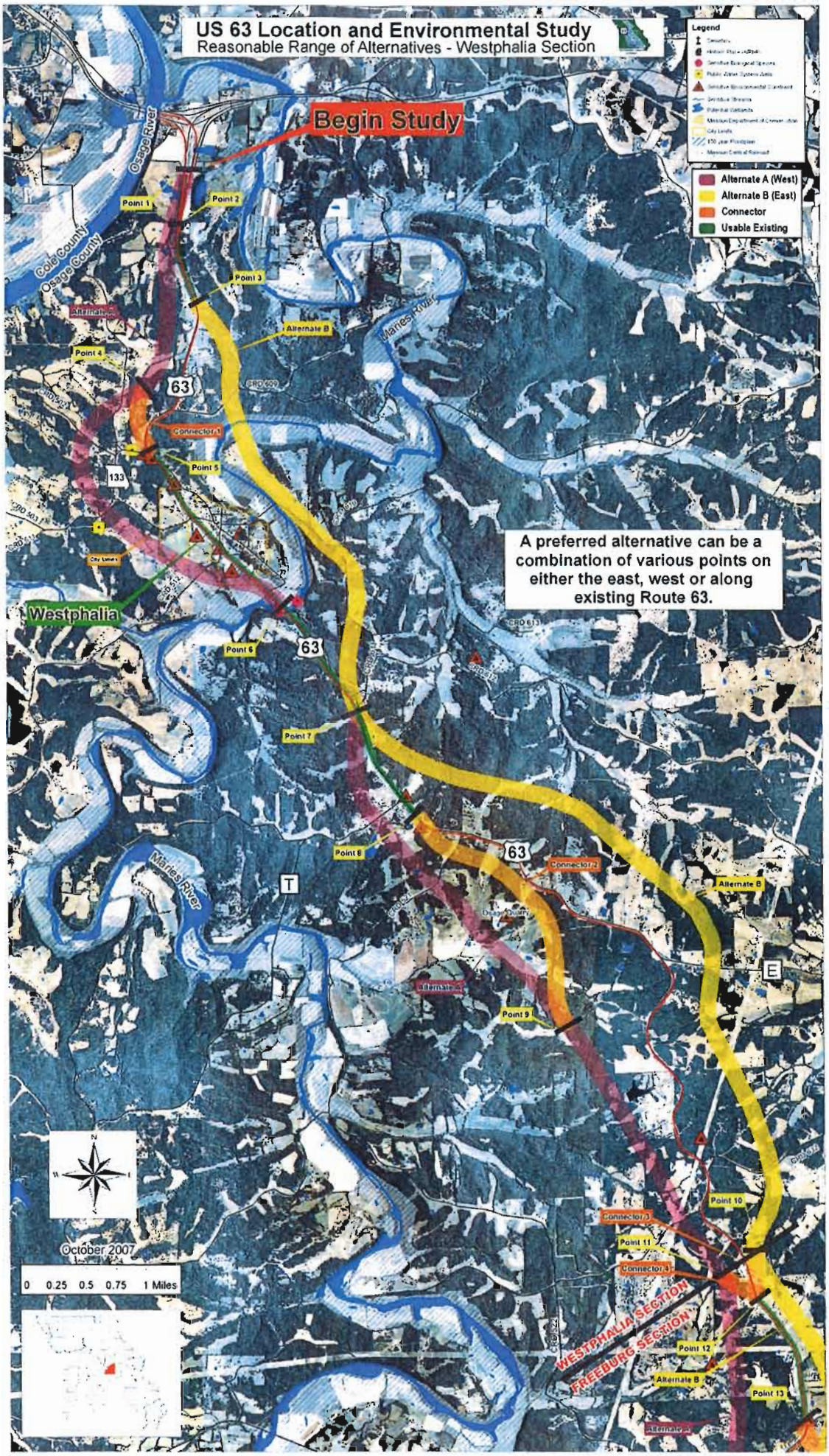
ALTERNATE EVALUATIOIN
AND
TRAFFIC DATA

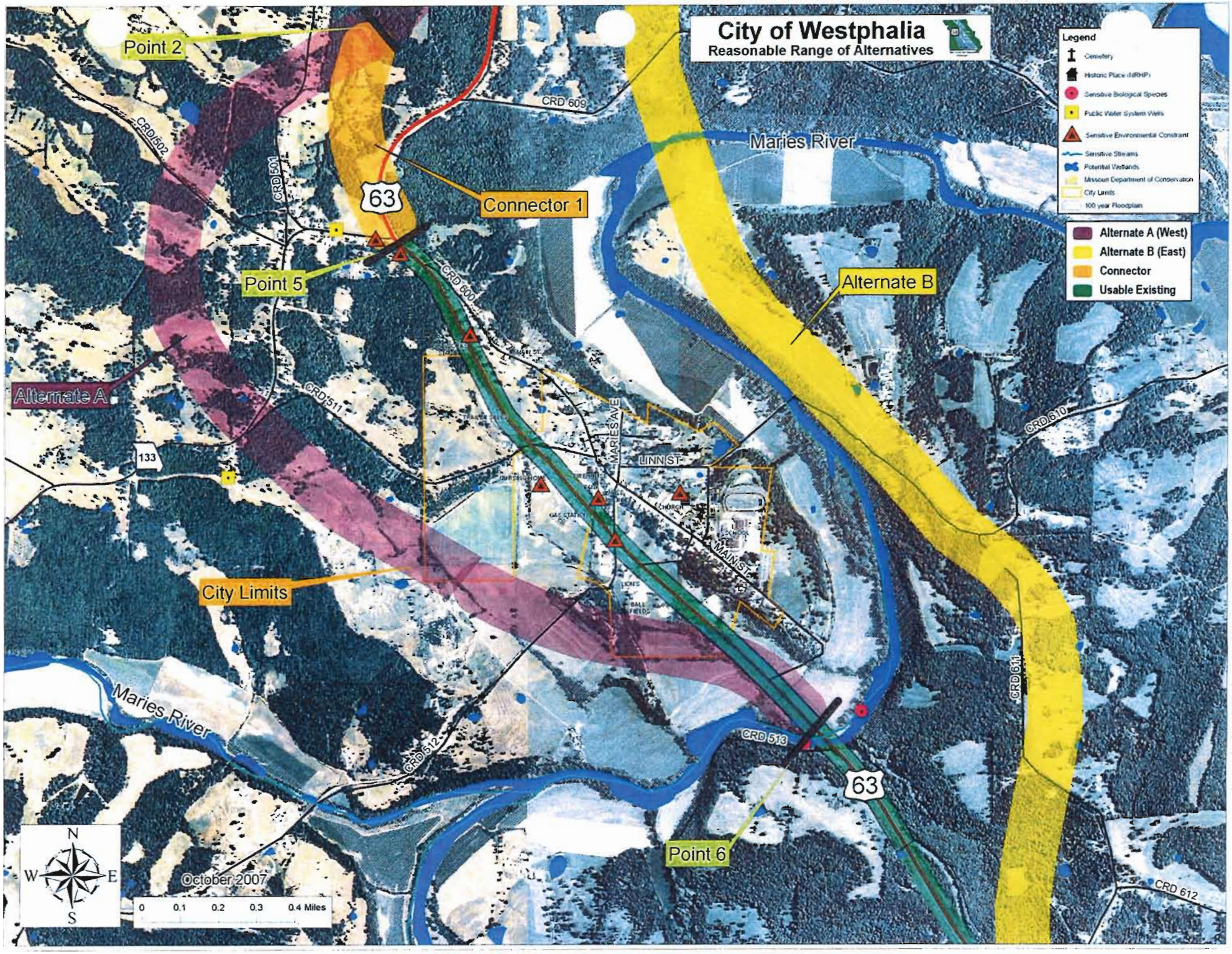
RECOMMENDED PREFERRED ALTERNATIVE, ALTERNATIVE 1 AND ALTERNATIVE 2 MATRIX - ROUTE 63 EIS

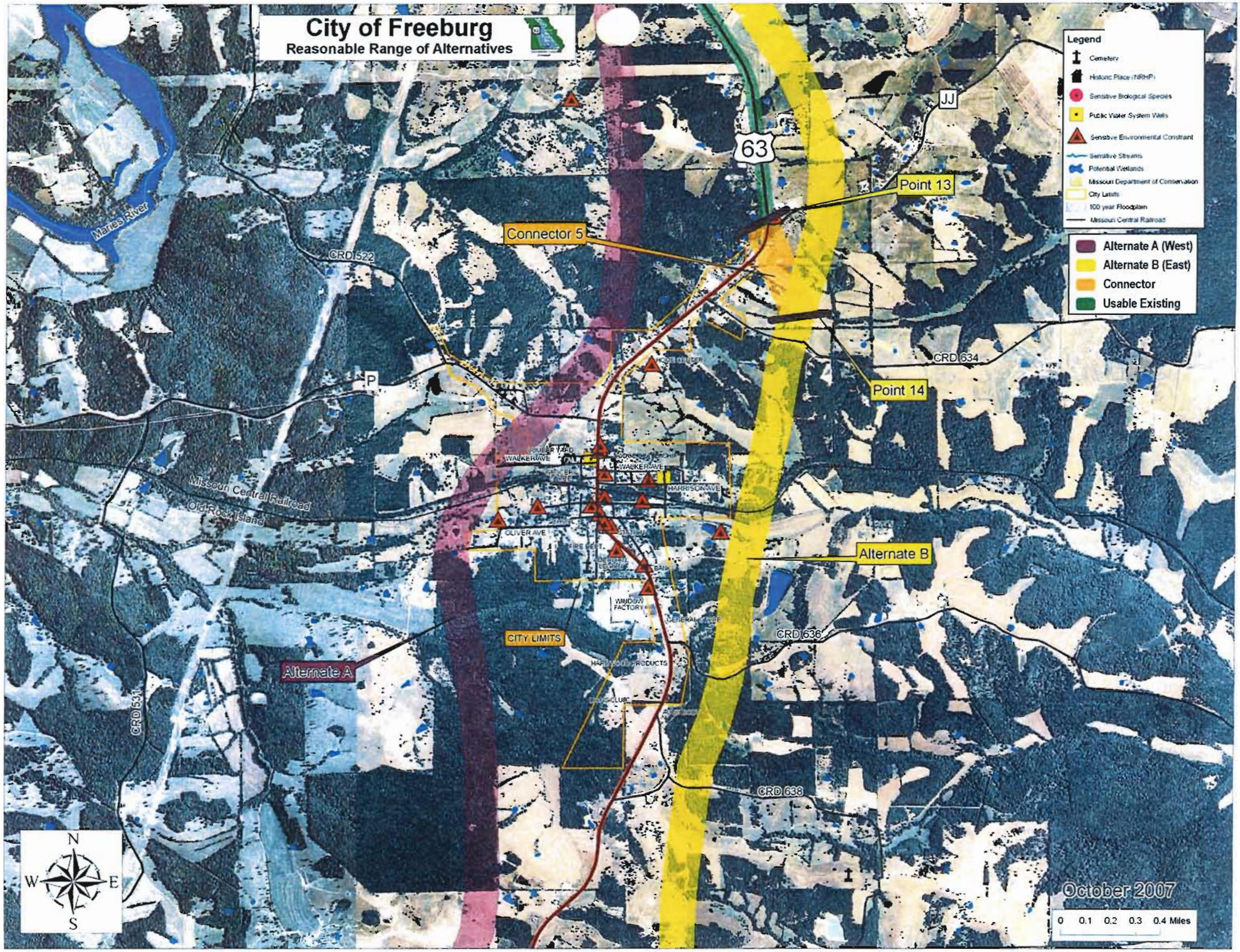
IMPACT SUMMARY

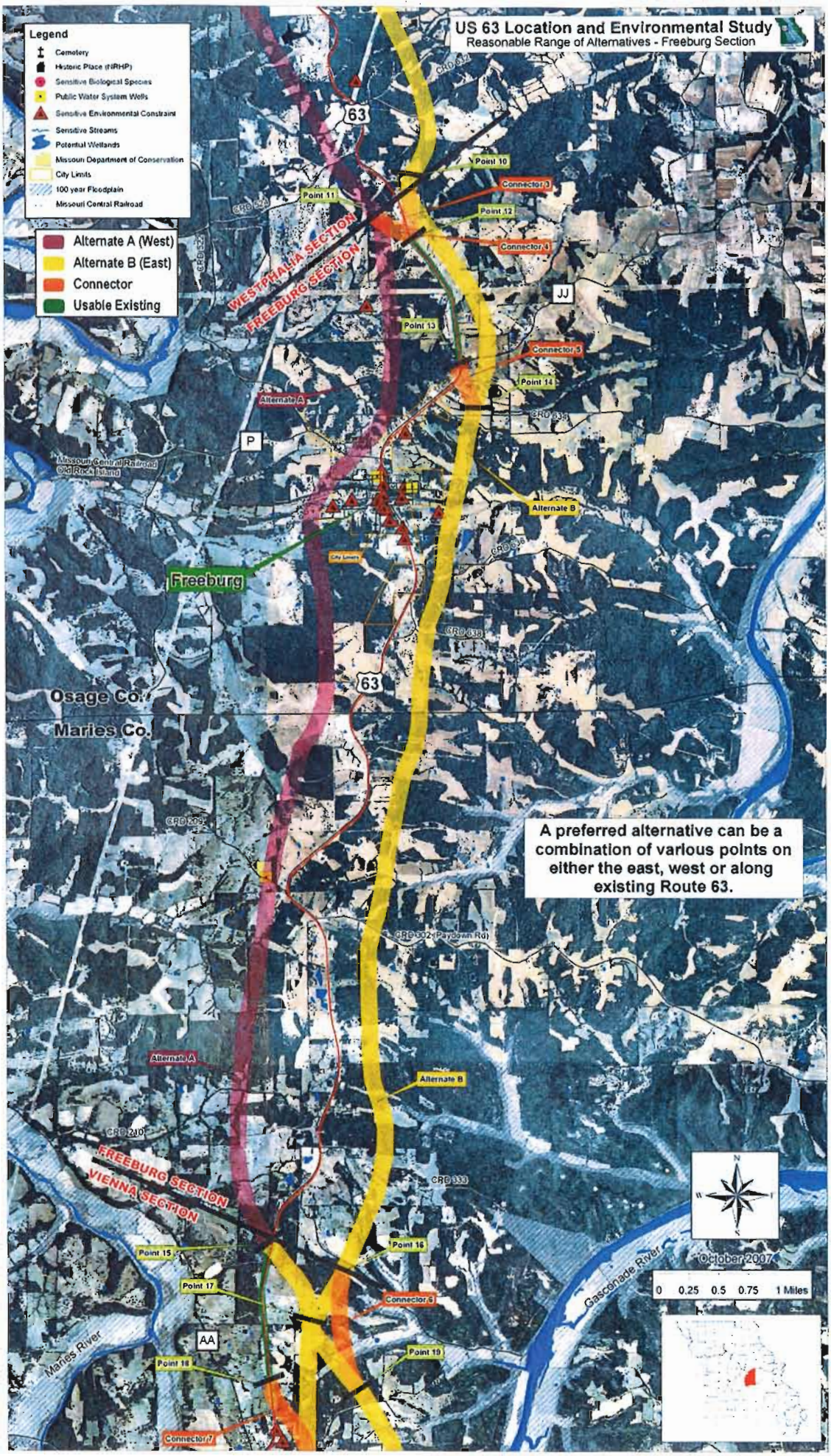
		Recommended Preferred	Alt 1	Alt 2	Recommended Preferred	Alt 1	Alt 2	Recommended Preferred	Alt 1	Alt 2	Recommended Preferred	Alt 1	Alt 2	Recommended Preferred	Alt 1	Alt 2	Recommended Preferred	Alt 1	Alt 2
Engineering Considerations *																			
	Measurement	**WESTPHALIA**			**SOUTH OF WESTPHALIA**			**FREEBURG**			**VIENNA**			**VICHY**			**TOTALS**		
New Alignment Length	mile	6.0	5.2	5.4	5.9	6.5	6.0	9.0	9.6	9.4	12.3	13.4	11.9	11.4	10.9	11.4	44.6	45.6	44.0
Traffic Flow (Travel Time)	minutes	5.5	4.8	5.5	5.4	6.0	5.5	8.3	8.8	8.7	11.3	12.4	10.9	11.1	10.1	11.1	41.7	42.0	41.7
Bridges	#	1	2	1	0	0	0	0	0	0	1	1	1	0	0	0	2	3	2
Creek/Stream/River Crossings	#	11	4	7	10	13	8	18	22	19	21	25	22	10	15	10	70	79	66
Stream length impact	ft	16687	2,542	8,546	10,303	10,951	7,720	19,468	17,705	16,010	13,260	15,690	14,020	5,093	7,943	5,093	64811	54831	51389
Stream mitigation costs (millions)	$	3.4	0.5	1.7	2.1	2.0	1.6	4.0	3.2	2.9	2.4	2.8	2.5	0.9	1.4	0.9	13	10	10
Construction costs (millions)	$	20.2	43.8	15.5	26.1	30.7	24.5	40.0	45.1	40.1	36.2	39.0	34.6	14.4	24.2	14.4	136.9	182.8	129.1
Access Points	#	11	17	39	16	22	5	18	19	27	32	40	29	89	45	89	166	143	189
R/W Impacts *																			
Parcels Impacted	#	38	33	48	25	19	35	43	39	43	69	90	63	131	117	131	306	298	320
Residential Diplacements	#	2	9	6	3	3	8	6	7	7	1	8	2	15	1	15	27	28	38
Commercial Displacements	#	1	2	15	0	0	4	0	0	0	0	0	0	14	0	14	15	2	33
ROW Costs (millions)****	$	3.7	4.4	9.3	3.5	3.9	5.9	5.6	6.1	6.0	6.6	8.2	6.5	9.6	5.9	9.6	29.0	28.4	37.3
ROW - New (acres)	acres	474	304	305	534	589	455	820	870	777	691	734	655	277	464	277	2796	2961	2468
ROW - Existing (acres)	acres	11	12	28	0	0	36	0	0	12	78	86	78	138	96	138	226	194	292
Environmental Impacts **																			
Potential Section 4(f) Parklands	#	0	1	1	0	0	0	1	0	0	1	1	1	1	0	1	3	2	3
Wetlands TOTAL	acres	8.1	4.4	1.9	1.6	1.2	2.5	2.8	3.1	2.9	20.1	22.8	20.0	0.9	1.3	0.9	33.54	32.80	28.15
PEM (Palustrine Emergent Wetland)	acres	0.4	0.2	0.3	0.0	0.0	0.0	0.0	0.2	0.2	0.0	0.1	0.0	0.3	0.3	0.3	0.7	0.8	4.9
PFO (Palustrine Forested Wetland)	acres	0.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19.6	19.6	19.6	0.0	0.0	0.0	19.60	22.60	19.60
PSS (Palustrine Scrub Shrub Wetland)	acres	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.00
PUB- Ponds (Palustrine Unconsolidated Bottom)	acres	7.8	0.8	1.7	1.6	1.2	2.5	2.8	2.9	2.7	0.5	3.1	0.4	0.6	1.0	0.6	13.28	9.00	7.85
Riverine (Riverine Wetlands)	acres	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.4	0.0
Farmland																			
Open Area	acres	237	216	116	174	162	144	302	433	376	400	473	362	319	249	319	1432	1533	1317
Forested Area	acres	165	181	182	366	400	359	448	432	407	402	353	360	94	320	94	1475	1686	1402
Floodplain	acres	48	28	17	0	0	0	0	0	0	121.6	67.4	127.7	5.5	5.5	5.5	174.8	100.8	149.8
Threatened & Endangered Species	yes/no	yes	yes	yes	no known	no known	no known	no known	no known	no known	yes	yes	yes	no known	possibly	no known	yes	yes	yes
Potential Hazardous Waste Location	#	2	0	7	0	0	3	0	0	2	0	0	0	9	5	9	11	5	21
Airports	#	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	1
Cultural Resource Impacts																			
Cemeteries	#	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Potential Historic/4(f) Properties ***	#	3	4	4	1	0	0	****	2	2	1	1	1	2	0	2	7	7	9
Cost Estimate (millions)	$	27	49	26	32	37	32	50	54	49	45	50	44	25	31	25	179	221	176

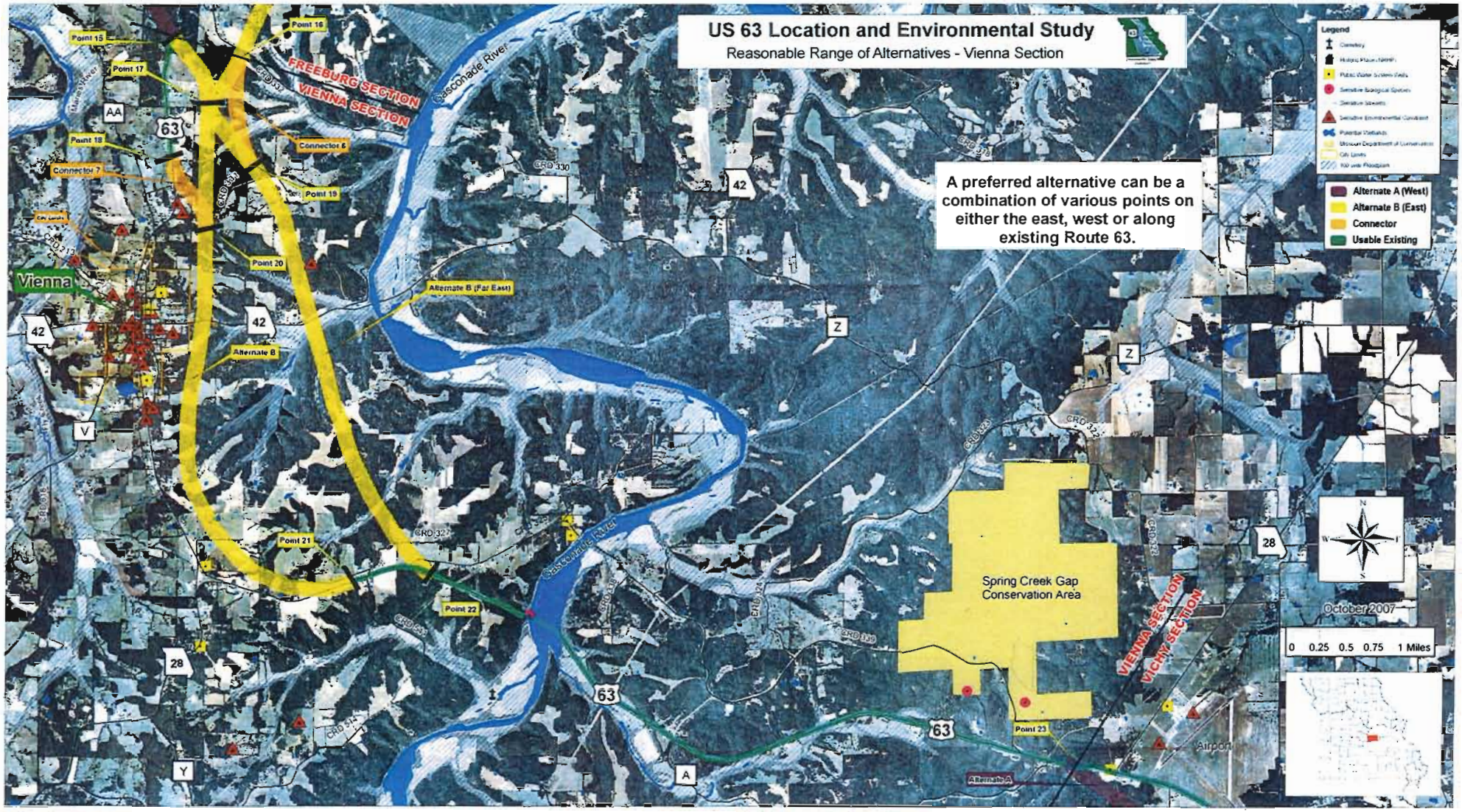
*New construction links have a 750' wide corridor; Links along the existing route have a 300' wide corridor.
**Data based on screening only - no field data available at this stage
***Data based on preliminary field investigations only
**** Property owner has denied permission to conduct field survey

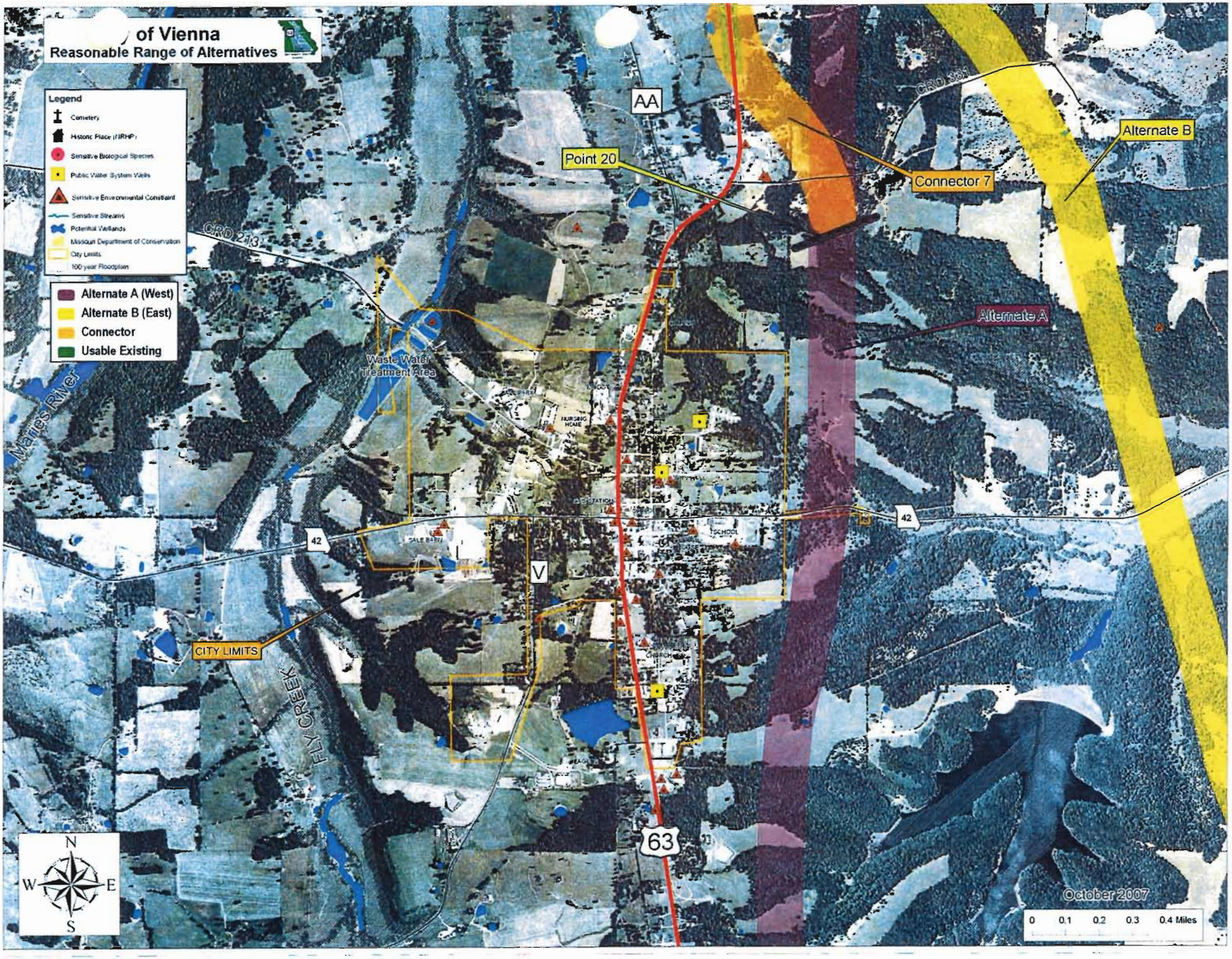

US 63 Location and Environmental Study
Reasonable Range of Alternatives - Westphalia Section
Legend
Alternate A (West)
Alternate B (East)
Connector
Usable Existing
Begin Study
Osage River
Cole County
Osage County
Point 1
Point 2
Point 3
Point 4
Point 5
Point 6
Point 7
Point 8
Point 9
Point 10
Point 11
Point 12
Point 13
Alternate A
Alternate B
Connector 1
Connector 2
Connector 3
Connector 4
63
133
Maries River
Westphalia
A preferred alternative can be a combination of various points on either the east, west or along existing Route 63.
WESTPHALIA SECTION
FREEBURG SECTION
October 2007
0 0.25 0.5 0.75 1 Miles

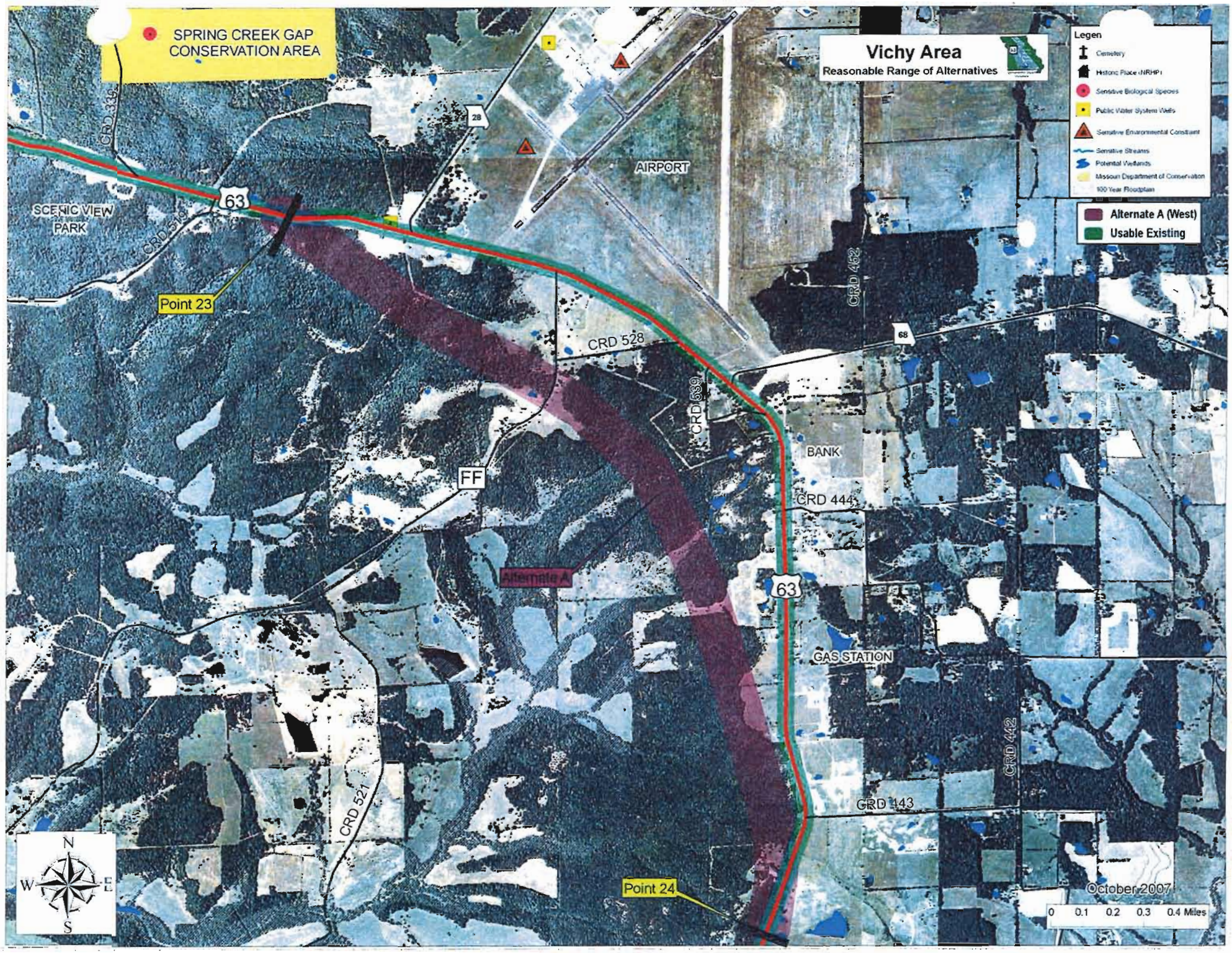

City of Westphalia
Reasonable Range of Alternatives
Legend
Cemetery
Historic Place (NRHP)
Sensitive Biological Species
Public Water System Wells
Sensitive Environmental Constraint
Sensitive Streams
Potential Wetlands
Missouri Department of Conservation
City Limits
100 year Floodplain
Alternate A (West)
Alternate B (East)
Connector
Usable Existing
Point 2
Point 5
Point 6
Connector 1
Alternate A
Alternate B
City Limits
Maries River
Maries River
63
63
133
CRD 502
CRD 501
CRD 609
CRD 600
CRD 511
CRD 610
CRD 611
CRD 612
CRD 513
CRD 512
MARIES AVE
LINN ST
MAIN ST
N
W
E
S
October 2007
0
0.1
0.2
0.3
0.4 Miles


City of Freeburg
Reasonable Range of Alternatives
Legend
Cemetery
Historic Place (NRHP)
Sensitive Biological Species
Public Water System Wells
Sensitive Environmental Constraint
Sensitive Streams
Potential Wetlands
Missouri Department of Conservation
City Limits
100 year Floodplain
Missouri Central Railroad
Alternate A (West)
Alternate B (East)
Connector
Usable Existing
Point 13
Point 14
Connector 5
Alternate A
Alternate B
CITY LIMITS
63
JJ
P
CRD 522
CRD 634
CRD 636
CRD 638
CRD 531
Maries River
Missouri Central Railroad
Old Rock Island
WALKER AVE
HARRISON AVE
OLIVER AVE
WINDOW FACTORY
HARWOOD PRODUCTS
N
S
E
W
October 2007
0 0.1 0.2 0.3 0.4 Miles


US 63 Location and Environmental Study
Reasonable Range of Alternatives - Freeburg Section
Legend
Cemetery
Historic Place (NRHP)
Sensitive Biological Species
Public Water System Wells
Sensitive Environmental Constraint
Sensitive Streams
Potential Wetlands
Missouri Department of Conservation
City Limits
100 year Floodplain
Missouri Central Railroad
Alternate A (West)
Alternate B (East)
Connector
Usable Existing
WESTPHALIA SECTION
FREEBURG SECTION
VIENNA SECTION
Point 10
Point 11
Point 12
Point 13
Point 14
Point 15
Point 16
Point 17
Point 18
Point 19
Connector 3
Connector 4
Connector 5
Connector 6
Connector 7
Alternate A
Alternate B
Freeburg
Osage Co.
Maries Co.
Missouri Central Railroad
Old Rock Island
Maries River
Gasconade River
63
JJ
P
AA
A preferred alternative can be a combination of various points on either the east, west or along existing Route 63.
October 2007
0 0.25 0.5 0.75 1 Miles


US 63 Location and Environmental Study
Reasonable Range of Alternatives - Vienna Section
A preferred alternative can be a combination of various points on either the east, west or along existing Route 63.
Legend
Alternate A (West)
Alternate B (East)
Connector
Usable Existing
FREEBURG SECTION
VIENNA SECTION
VICHY SECTION
Point 15
Point 16
Point 17
Point 18
Point 19
Point 20
Point 21
Point 22
Point 23
Connector 6
Connector 7
Alternate B (Far East)
Alternate B
Alternate A
Vienna
Gasconade River
Spring Creek Gap Conservation Area
Airport
October 2007
0 0.25 0.5 0.75 1 Miles


of Vienna
Reasonable Range of Alternatives
Legend
Cemetery
Historic Place (NRHP)
Sensitive Biological Species
Public Water System Wells
Sensitive Environmental Constraint
Sensitive Streams
Potential Wetlands
Missouri Department of Conservation
City Limits
100 year Floodplain
Alternate A (West)
Alternate B (East)
Connector
Usable Existing
AA
Point 20
Connector 7
Alternate B
Alternate A
CRD 213
CRD 3381
Waste Water Treatment Area
Maries River
42
V
CITY LIMITS
FLY CREEK
63
N
W
E
S
October 2007
0
0.1
0.2
0.3
0.4 Miles


Vichy Area
Reasonable Range of Alternatives
Legen
Cemetery
Historic Place (NRHP)
Sensitive Biological Species
Public Water System Wells
Sensitive Environmental Constraint
Sensitive Streams
Potential Wetlands
Missouri Department of Conservation
100 Year Floodplain
Alternate A (West)
Usable Existing
SPRING CREEK GAP
CONSERVATION AREA
AIRPORT
SCENIC VIEW
PARK
CRD 330
CRD 310
63
28
Point 23
CRD 528
CRD 539
CRD 452
68
BANK
FF
CRD 444
Alternate A
63
GAS STATION
CRD 442
CRD 521
CRD 443
Point 24
N
W
E
S
October 2007
0 0.1 0.2 0.3 0.4 Miles

US 63 Location and Environmental Study
Reasonable Range of Alternatives - Vichy Area Section
Legend
Alternate A (West)
Usable Existing
VIENNA SECTION
VICHY SECTION
Vichy Area
Alternate A
Point 23
Point 24
Point 25
Airport
MILL CREEK
SPRING CREEK
Maries Co.
Phelps Co.
A preferred alternative can be a combination of various points on either the east, west or along existing Route 63.
End Study
Rolla
October 2007
0 0.25 0.5 0.75 1 Miles