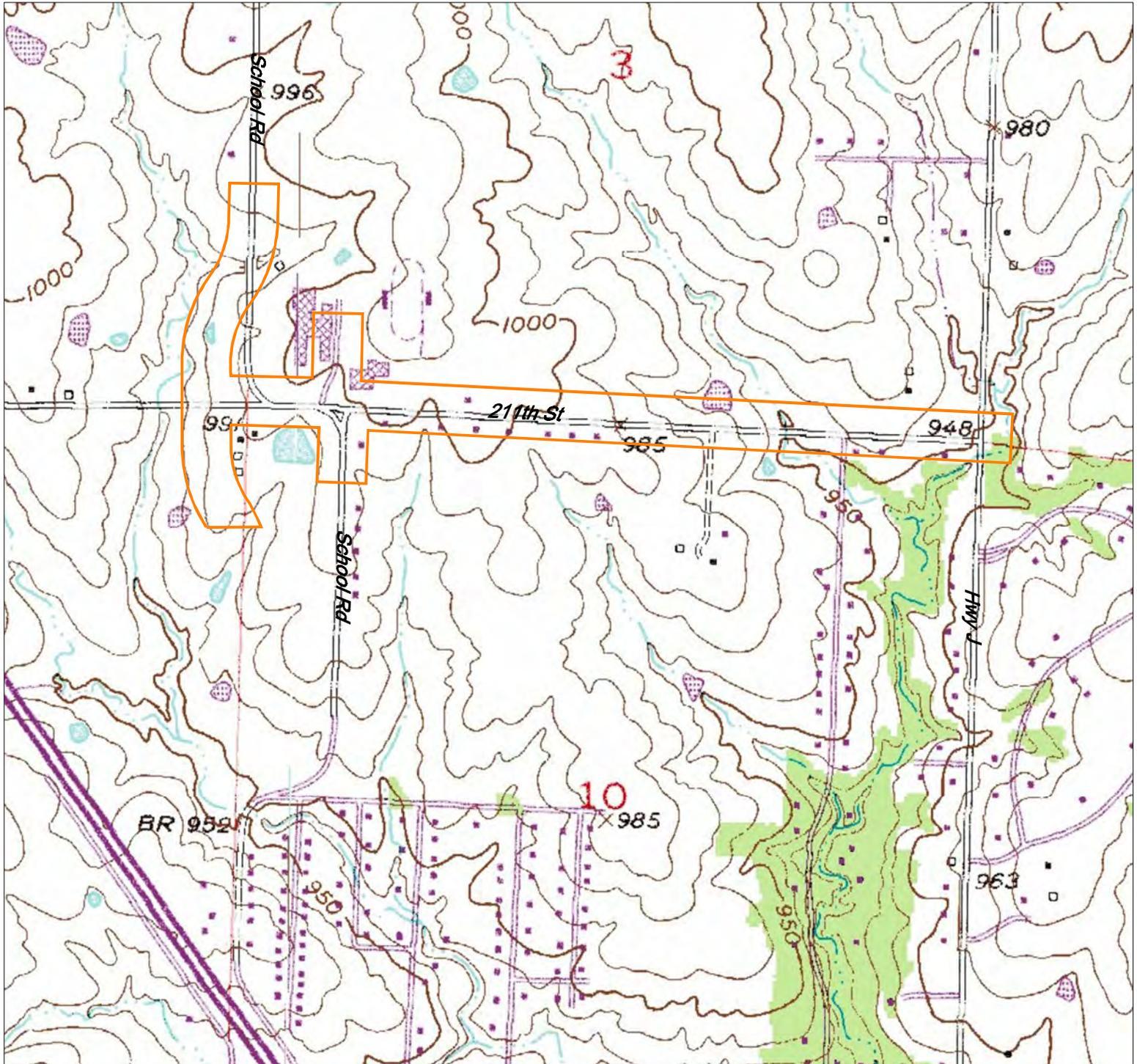
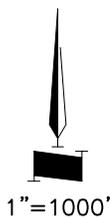


APPENDIX A
ENVIRONMENTAL ANALYSIS



SEGMENT A



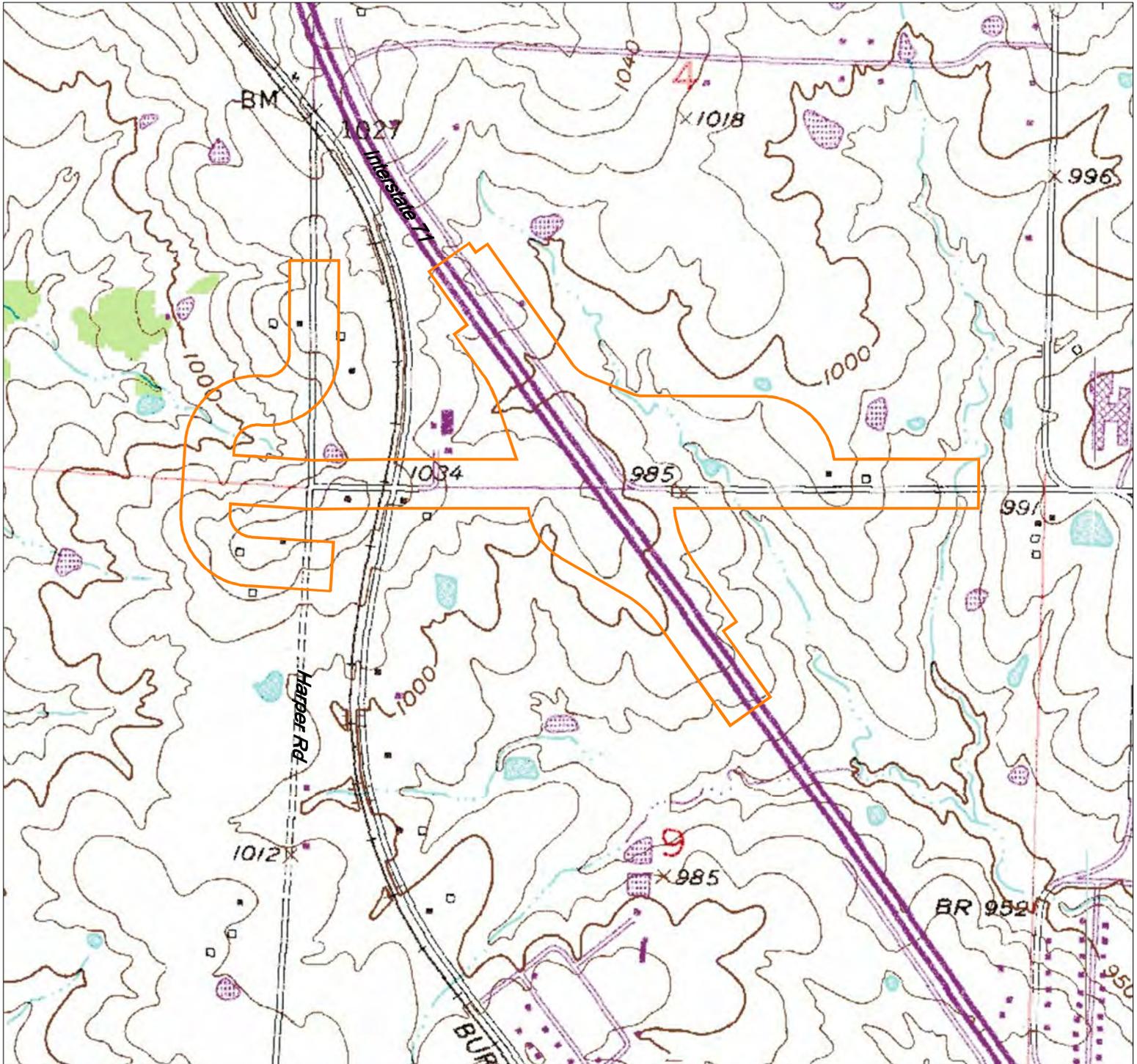
LEGEND

 Segment A

Source: USGS 7.5 Minute Quadrangle – Peculiar, MO 1981.

Project Location:

Sections: SW $\frac{1}{4}$ 2, S $\frac{1}{2}$ Section 3, SE $\frac{1}{4}$ 4, NE $\frac{1}{4}$ 9, N $\frac{1}{2}$ 10, and NW $\frac{1}{4}$ 11, Township 45N, Range 32W



SEGMENT B

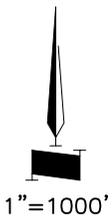
LEGEND

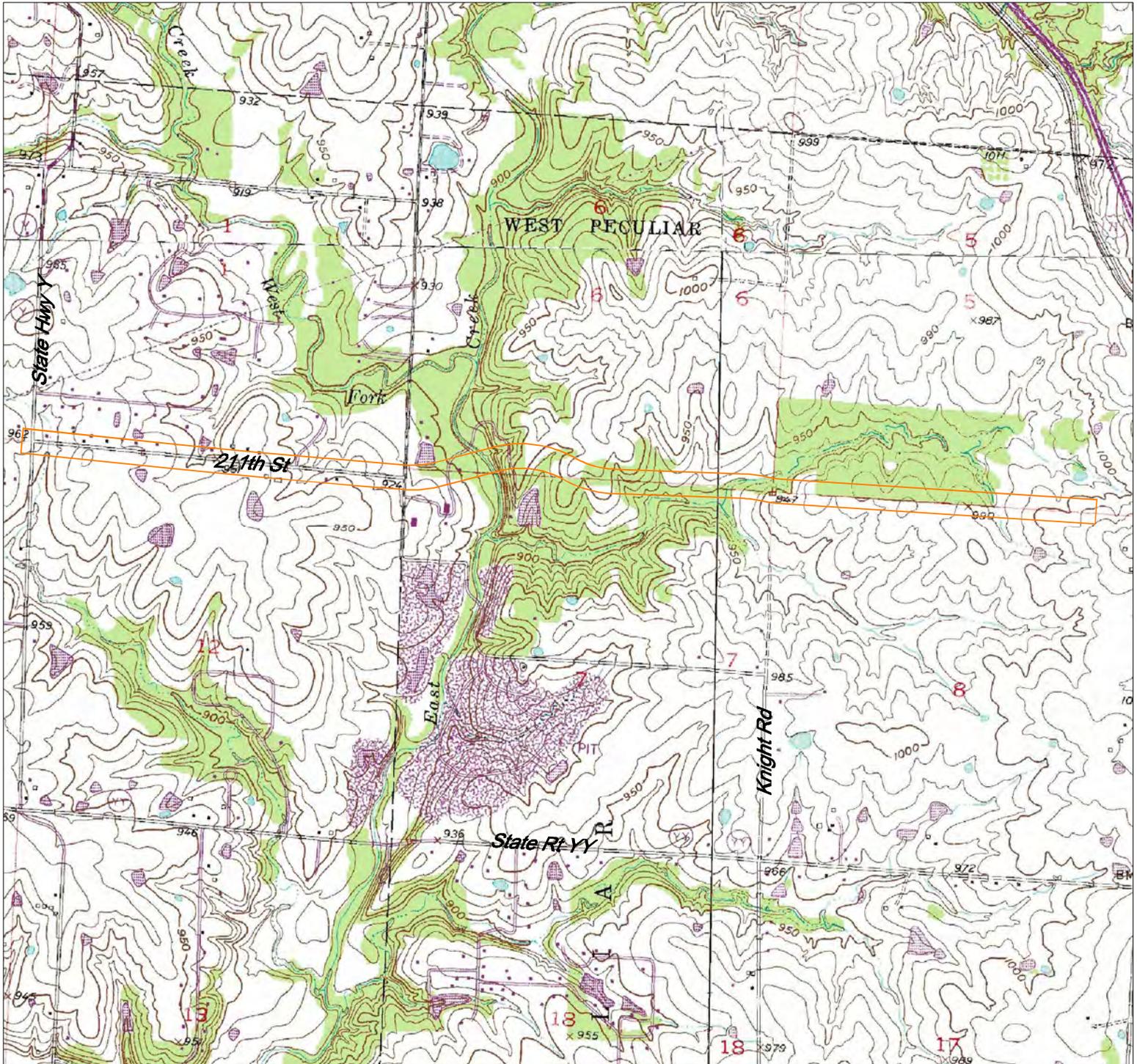
 Segment B

Source: USGS 7.5 Minute Quadrangle – Peculiar, MO 1981.

Project Location:

Sections: S $\frac{1}{2}$ 4, SE $\frac{1}{4}$ 5, NE $\frac{1}{4}$ 8, and N $\frac{1}{2}$ 9, Township 45N,
Range 32W





SEGMENT C1

LEGEND

 Segment C1


1"=1000'

Source: USGS 7.5 Minute Quadrangle – Peculiar, MO 1981 and West Line, MO-KS 1981

Project Location:

Sections: S $\frac{1}{2}$ 5, S $\frac{1}{2}$ 6, N $\frac{1}{2}$ 7, and N $\frac{1}{2}$ 8, Township 45N, Range 32W

Sections: S $\frac{1}{2}$ 1, SE $\frac{1}{4}$ 2, NE $\frac{1}{4}$ 11, and N $\frac{1}{2}$ 12, Township 45N, Range 33W



SEGMENT C2

LEGEND

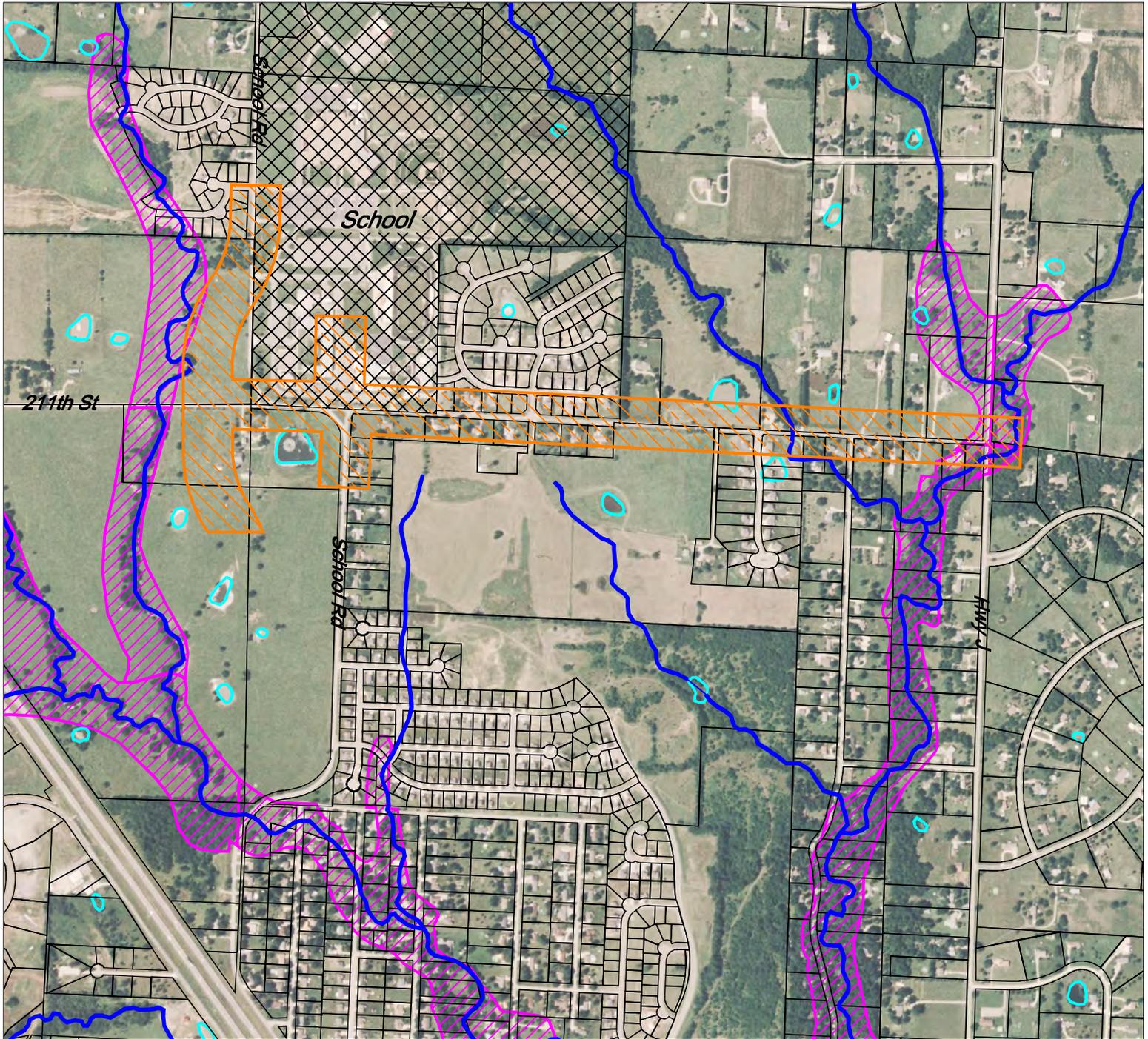
 Segment C2

Source: USGS 7.5 Minute Quadrangle – Peculiar, MO 1981 and West Line, MO-KS 1981

Project Location:

Sections: S $\frac{1}{2}$ 5, SE $\frac{1}{4}$ 6, E $\frac{1}{2}$ 7, and N $\frac{1}{2}$ 8, Township 45N, Range 32W


1"=1500'



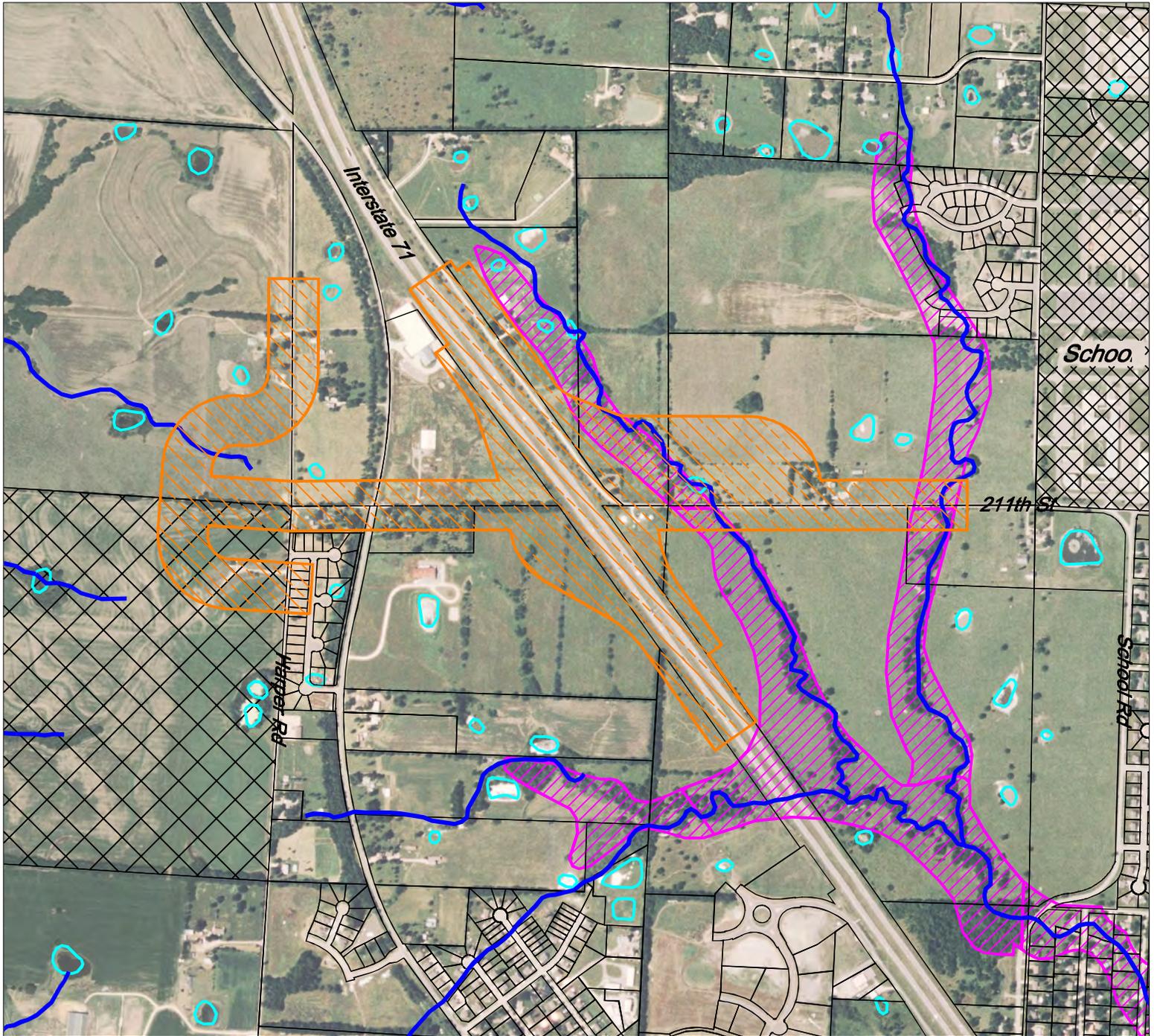
SEGMENT A

LEGEND

-  Segment A
-  FEMA 100yr Floodplain
-  School Property
-  NWI Pond / Wetland Area
-  USGS Streams
-  Property Lines



Source: 2010 Missouri CARES – cares.missouri.edu
 Project Location:
 Sections: SW $\frac{1}{4}$ 2, S $\frac{1}{2}$ Section 3, SE $\frac{1}{4}$ 4, NE $\frac{1}{4}$ 9, N $\frac{1}{2}$ 10, and
 NW $\frac{1}{4}$ 11, Township 45N, Range 32W



SEGMENT B

LEGEND

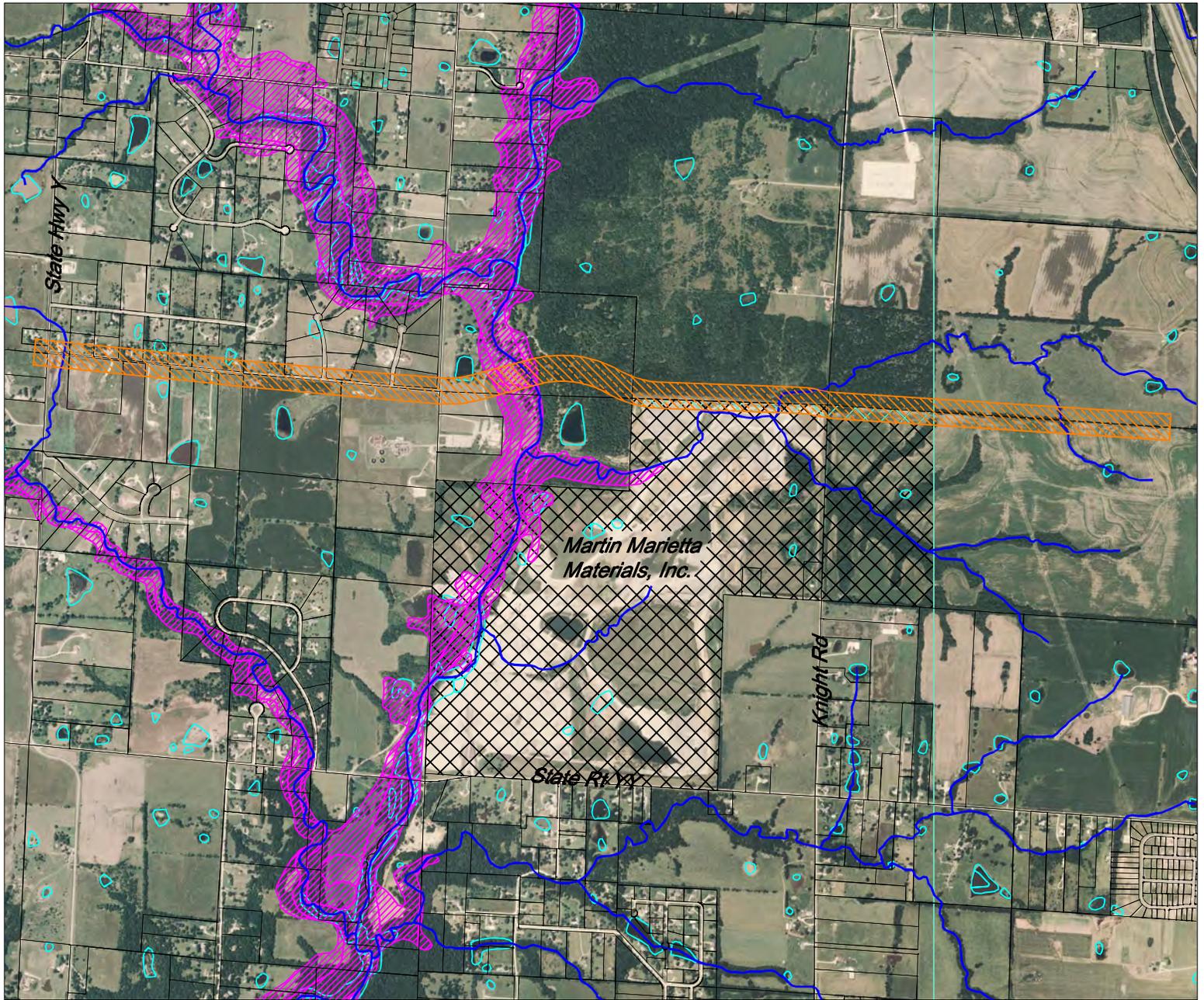
-  Segment B
-  FEMA 100yr Floodplain
-  School Property
-  NWI Pond / Wetland Area
-  USGS Streams
-  Property Lines



Source: 2010 Missouri CARES – cares.missouri.edu

Project Location:

Sections: S $\frac{1}{2}$ 4, SE $\frac{1}{4}$ 5, NE $\frac{1}{4}$ 8, and N $\frac{1}{2}$ 9, Township 45N,
Range 32W



SEGMENT C1

LEGEND

-  Segment C1
-  FEMA 100yr Floodplain
-  Quarry
-  NWI Pond / Wetland Area
-  USGS Streams
-  Property Lines

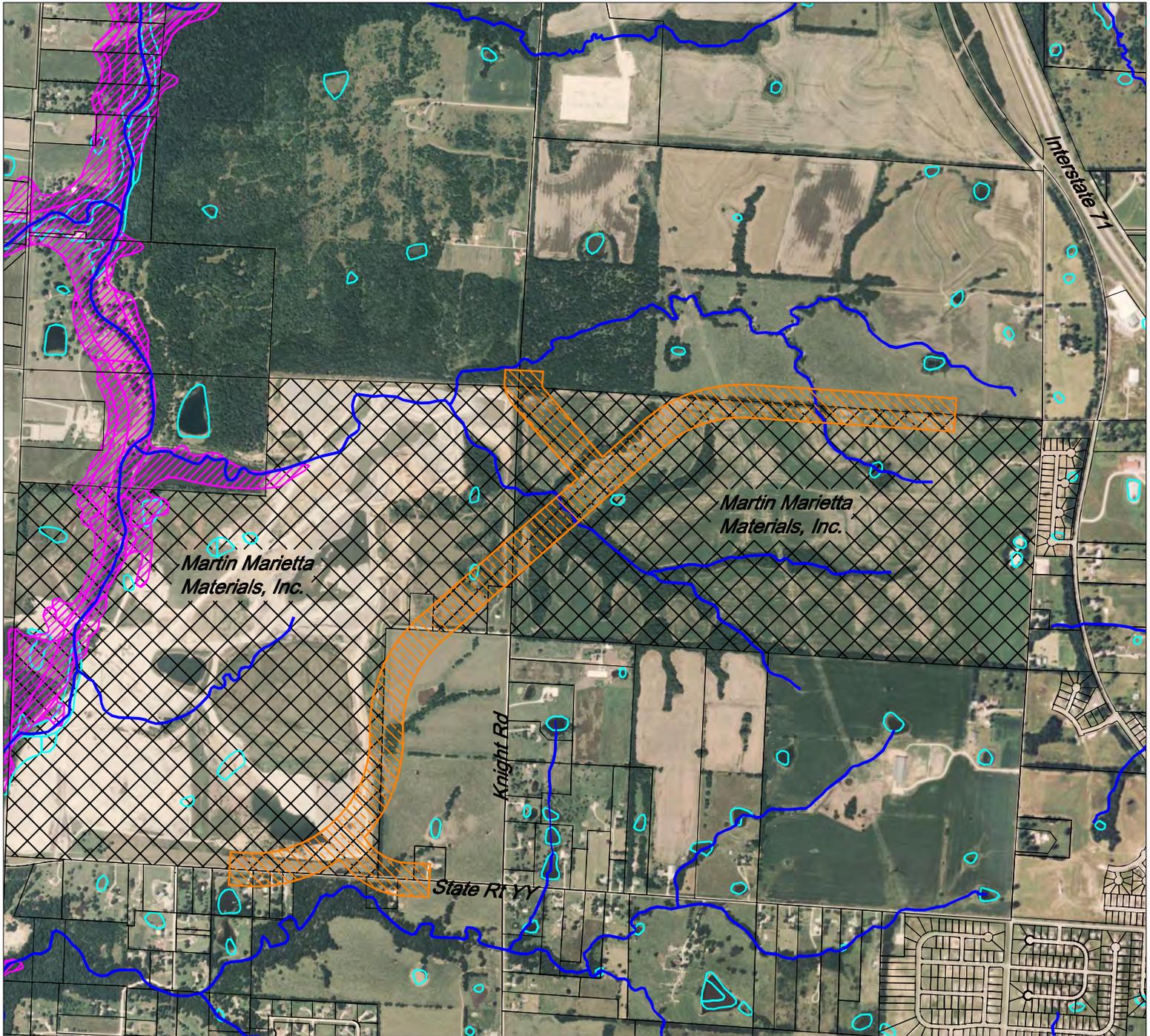


Source: 2010 Missouri CARES – cares.missouri.edu

Project Location:

Sections: S $\frac{1}{2}$ 5, S $\frac{1}{2}$ 6, N $\frac{1}{2}$ 7, and N $\frac{1}{2}$ 8, Township 45N, Range 32W

Sections: S $\frac{1}{2}$ 1, SE $\frac{1}{4}$ 2, NE $\frac{1}{4}$ 11, and N $\frac{1}{2}$ 12, Township 45N, Range 33W



SEGMENT C2

LEGEND

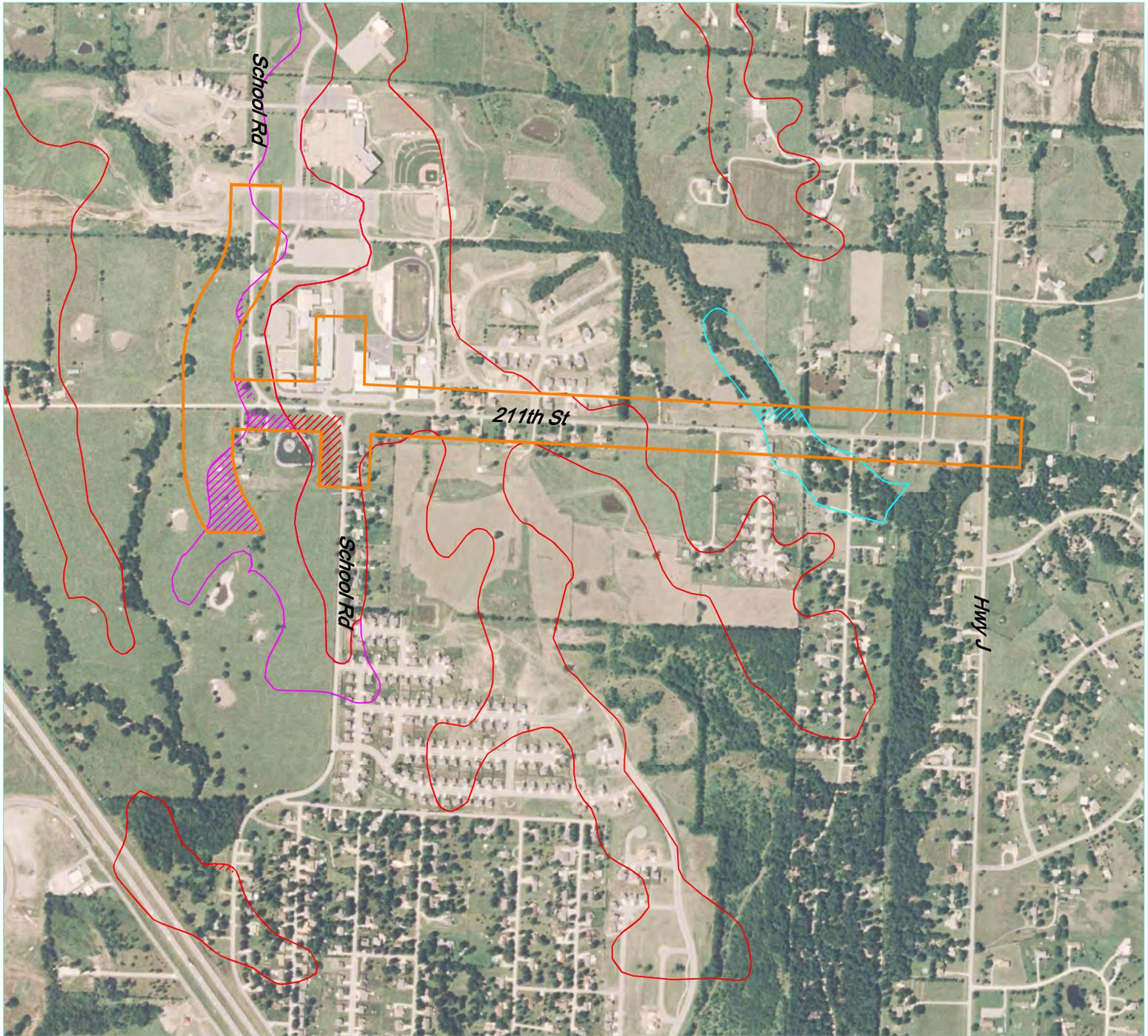
-  Segment C2
-  FEMA 100yr Floodplain
-  Quarry
-  NWI Ponds / Wetland Area
-  USGS Streams
-  Property Lines



Source: 2010 Missouri CARES – cares.missouri.edu

Project Location:

Sections: S $\frac{1}{2}$ 5, SE $\frac{1}{4}$ 6, E $\frac{1}{2}$ 7, and N $\frac{1}{2}$ 8, Township 45N, Range 32W



SEGMENT A

LEGEND

 Segment A

PRIME FARMLANDS

 Deepwater silt loam, 2-5% Slopes (40053)

 Arisburg silt loam, 1-5% Slopes (10000)

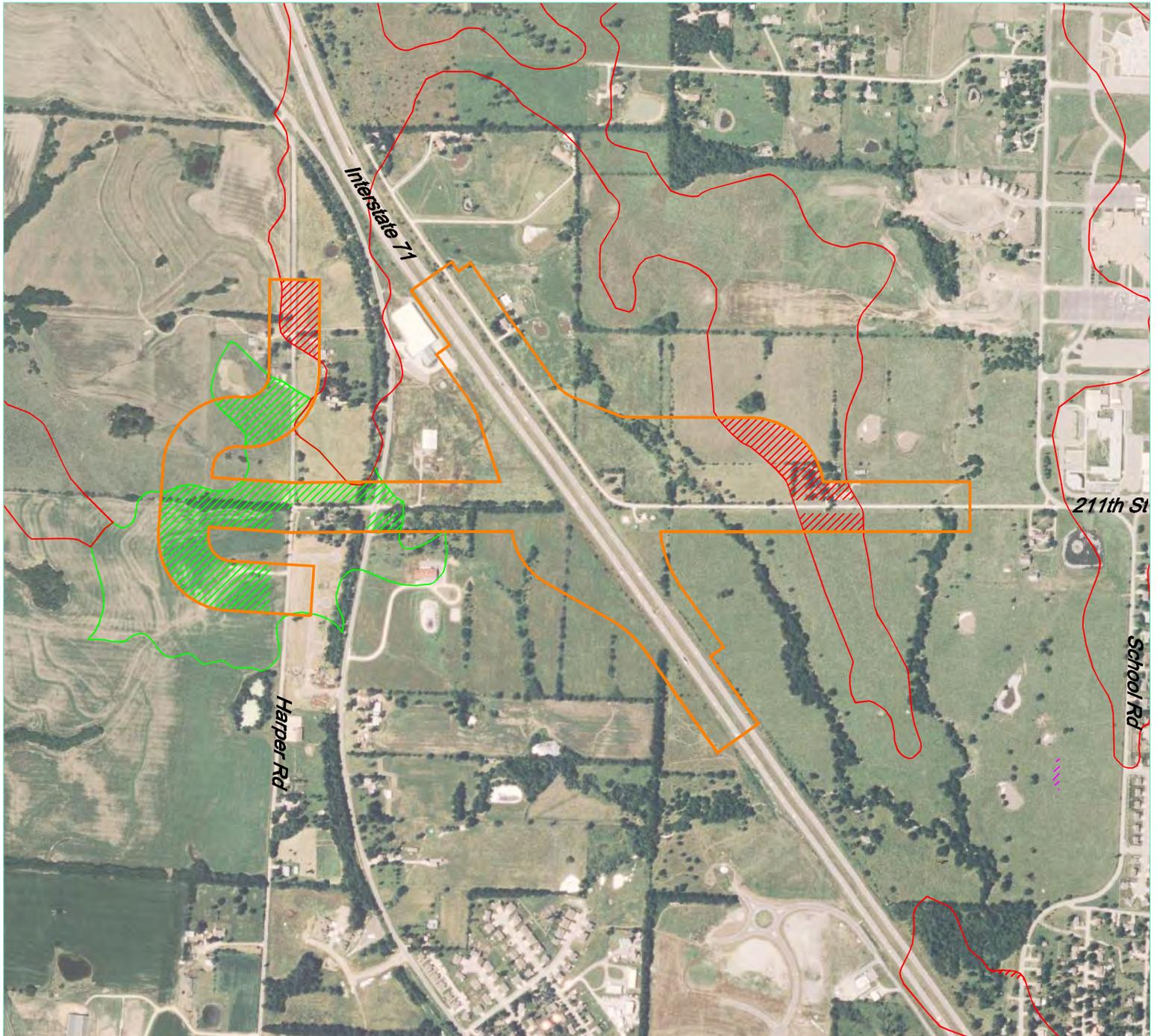
 Verdigris silt loam, 0-1% Slopes, Occasionally Flooded (46005)

Source: 2010 Missouri CARES — cares.missouri.edu

Project Location:

Sections: SW $\frac{1}{4}$ 2, S $\frac{1}{2}$ Section 3, SE $\frac{1}{4}$ 4, NE $\frac{1}{4}$ 9, N $\frac{1}{2}$ 10, and NW $\frac{1}{4}$ 11, Township 45N, Range 32W


1"=1000'



SEGMENT B

LEGEND

 Segment B

PRIME FARMLANDS

 Barco loam, 2–5% Slopes (40034)

 Arisburg silt loam, 1–5% Slopes (10000)

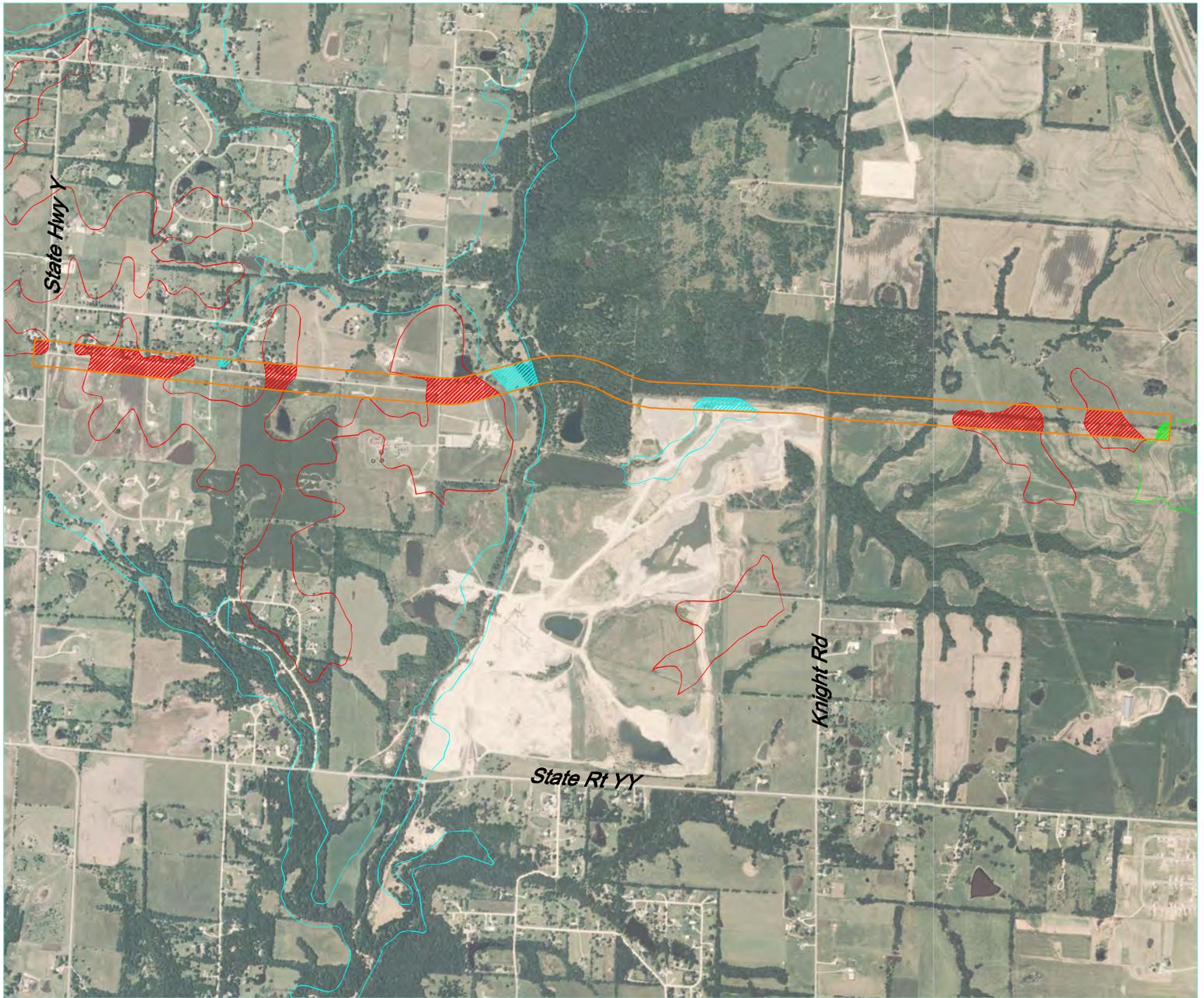
Source: 2010 Missouri CARES – cares.missouri.edu

Project Location:

Sections: S $\frac{1}{2}$ 4, SE $\frac{1}{4}$ 5, NE $\frac{1}{4}$ 8, and N $\frac{1}{2}$ 9, Township 45N,
Range 32W



1"=1000'



SEGMENT C1

LEGEND

 Segment C1

PRIME FARMLANDS

 Barco loam, 2-5% Slopes (40034)

 Arisburg silt loam, 1-5% Slopes (10000)

 Verdigris silt loam, 0-1% Slopes, Occasionally Flooded (46005)


1"=2000'

Source: 2010 Missouri CARES - cares.missouri.edu

Project Location:

Sections: S $\frac{1}{2}$ 5, S $\frac{1}{2}$ 6, N $\frac{1}{2}$ 7, and N $\frac{1}{2}$ 8, Township 45N, Range 32W

Sections: S $\frac{1}{2}$ 1, SE $\frac{1}{4}$ 2, NE $\frac{1}{4}$ 11, and N $\frac{1}{2}$ 12, Township 45N, Range 33W



SEGMENT C2

LEGEND

 Segment C2

PRIME FARMLANDS

 Barco loam, 2-5% Slopes (40034)

 Arisburg silt loam, 1-5% Slopes (10000)

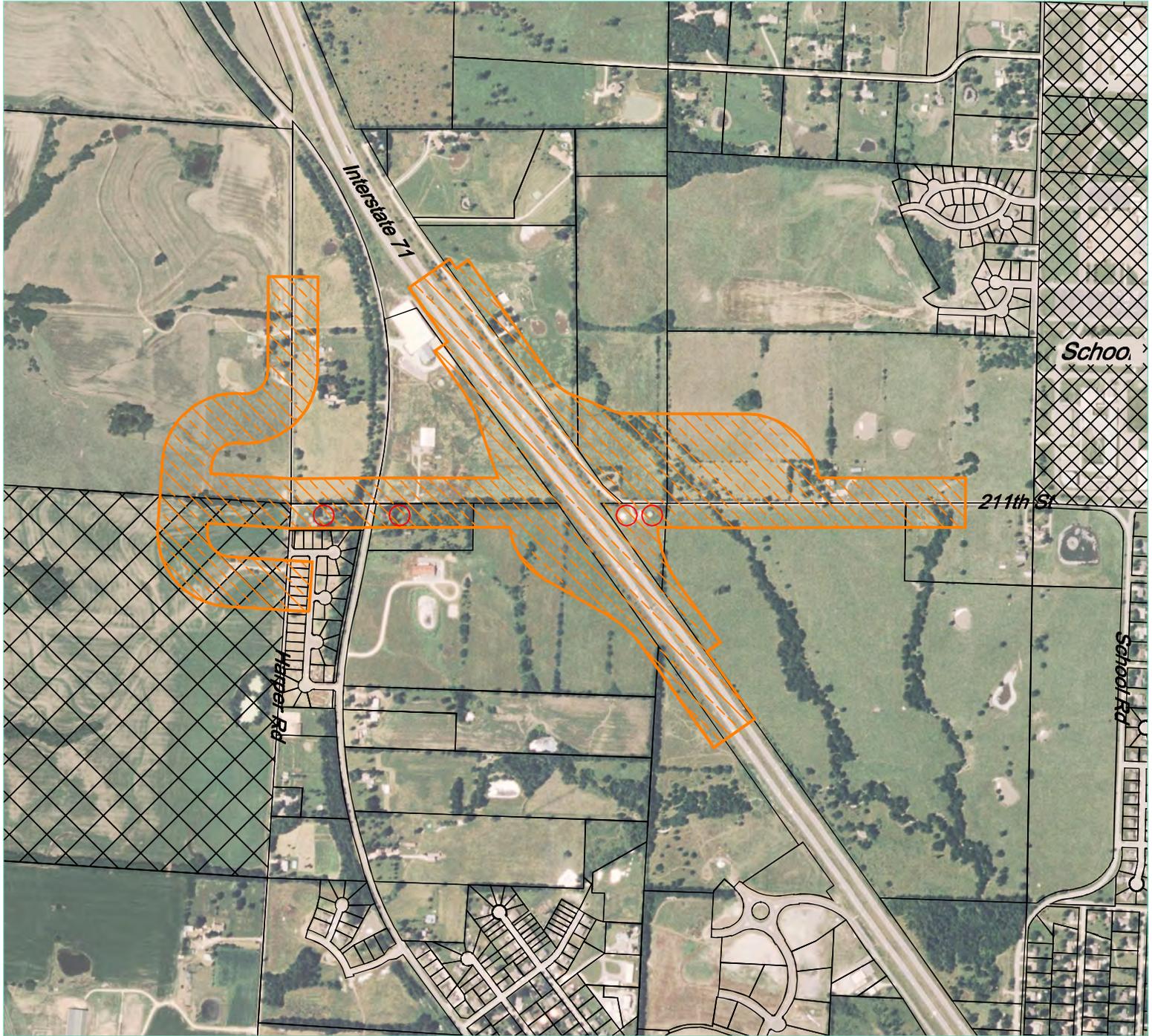
 Verdigris silt loam, 0-1% Slopes, Occasionally Flooded (46005)

Source: 2010 Missouri CARES - cares.missouri.edu

Project Location:

Sections: S $\frac{1}{2}$ 5, SE $\frac{1}{4}$ 6, E $\frac{1}{2}$ 7, and N $\frac{1}{2}$ 8, Township 45N, Range 32W


1"=1500'



SEGMENT B

LEGEND

-  Segment B
-  Displaced Property
-  Property Lines

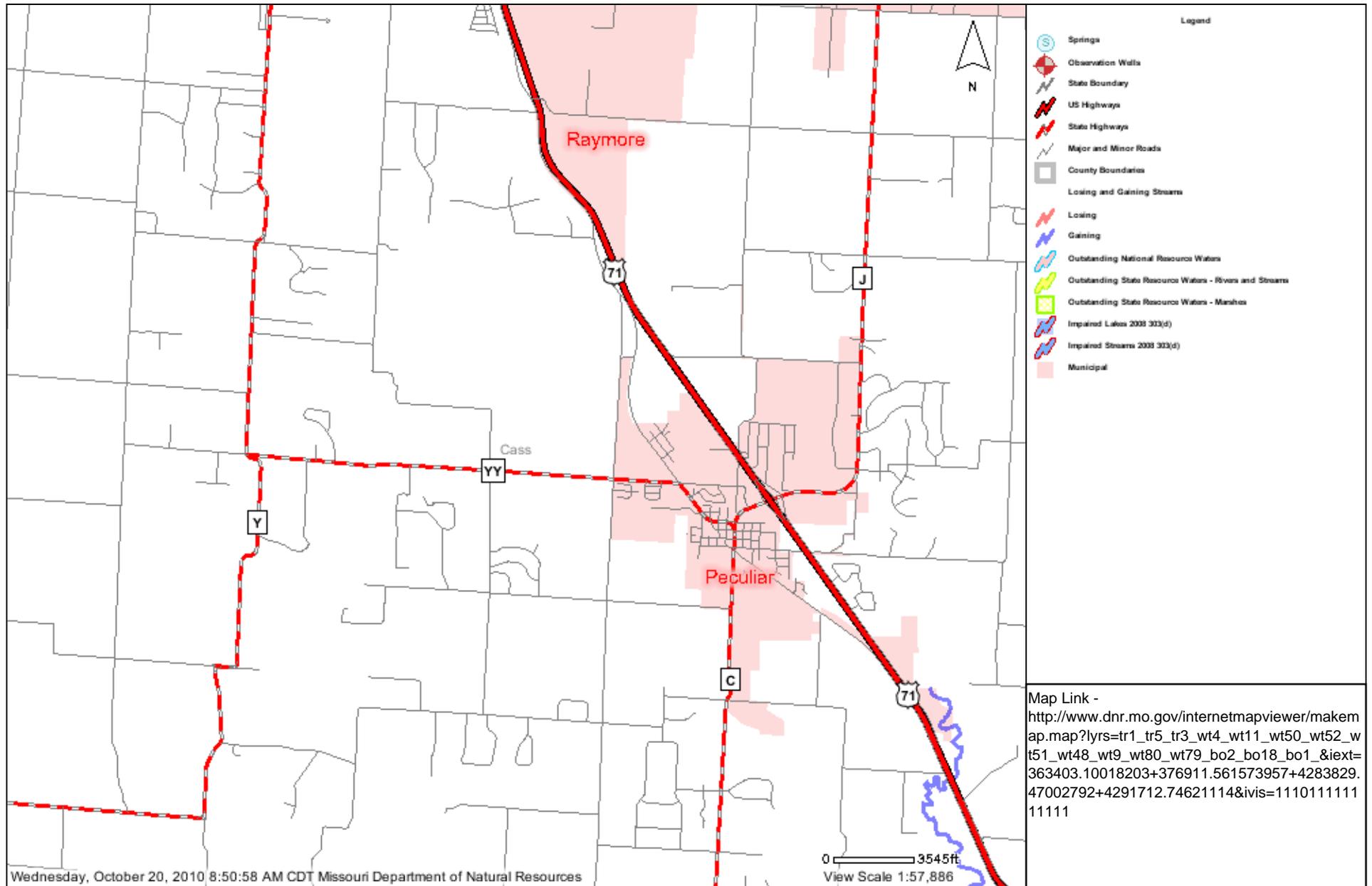
Source: 2010 Missouri CARES – cares.missouri.edu

Project Location:

Sections: S $\frac{1}{2}$ 4, SE $\frac{1}{4}$ 5, NE $\frac{1}{4}$ 8, and N $\frac{1}{2}$ 9, Township 45N,
Range 32W



211th St. Corridor Study - Water Quality Review



Heritage Program

Heritage Results for Cass County

Name	State Rank	Global Rank	State Status	Federal Status
Dry-mesic limestone/dolomite prairie	Imperiled Code: S2	Not Ranked Code: GNR		
Limestone glade	Imperiled Code: S2	Not Ranked Code: GNR		
Marsh	Imperiled Code: S2	Not Ranked Code: GNR		
Mesic bottomland forest	Imperiled Code: S2	Not Ranked Code: GNR		
Prairie swale	Imperiled Code: S2	Not Ranked Code: GNR		
Wet-mesic bottomland forest	Imperiled Code: S2	Not Ranked Code: GNR		
A Blazing Star <i>Liatris punctata</i> var. <i>punctata</i>	Vulnerable Code: S3	Secure Taxonomic Subdivision: Secure Code: G5T5		
A Liverwort <i>Riccia sullivantii</i>	Unrankable nranked Code: S?	Apparently Secure Questionable Taxonomy Code: G4Q		
A Panic Grass <i>Panicum leibergii</i>	Unrankable Code: SU	Secure Code: G5		
Barn Owl <i>Tyto alba</i> More information	Vulnerable Code: S3	Secure Code: G5		
Common Mudpuppy <i>Necturus maculosus maculosus</i> More information	Unrankable Code: SU	Secure Taxonomic Subdivision: Secure Code: G5T5		
Great Plains Skink <i>Plestiodon obsoletus</i> More information	Imperiled Code: S2	Secure Code: G5		
Hairy Parsley <i>Lomatium foeniculaceum</i> ssp. <i>foeniculaceu</i> More information	Critically Imperiled Vulnerable Code: S1S3	Secure Taxonomic Subdivision: Secure Code: G5T5		
Inland Bluegrass <i>Poa interior</i> More information	Critically Imperiled Code: S1	Secure Code: G5		

Name	State Rank	Global Rank	State Status	Federal Status
Least Bittern <i>Ixobrychus exilis</i> More information	Vulnerable Code: S3	Secure Code: G5		
Loggerhead Shrike <i>Lanius ludovicianus</i> More information	Imperiled Code: S2	Apparently Secure Code: G4		
Mead's Milkweed <i>Asclepias meadii</i> More information	Imperiled Code: S2	Imperiled Code: G2	Endangered Code: E	Threatened Code: T
Northern Crawfish Frog <i>Lithobates areolatus circulosus</i> More information	Vulnerable Code: S3	Apparently Secure Taxonomic Subdivision: Apparently Secure Code: G4T4		
Ozark Clubtail <i>Gomphus ozarkensis</i> More information	Vulnerable Code: S3	Apparently Secure Code: G4		
Regal Fritillary <i>Speyeria idalia</i> More information	Vulnerable Code: S3	Vulnerable Code: G3		
Silver Chub <i>Macrhybopsis storeriana</i> More information	Vulnerable Code: S3	Secure Code: G5		
Yellow False Mallow <i>Malvastrum hispidum</i> More information	Vulnerable Code: S3	Vulnerable Secure Code: G3G5		



211th St. Corridor Study - Natural Heritage Review Highway J to Highway Y



Zoom Into Your Area of Interest

Use the Zoom and Pan Tools Below to specify your query area

refresh map full extent zoom in zoom out pan set zoom factor

Zoom Factor

Once you have zoomed into and narrowed your query area.

You can determine if there are Species or Communities of Conservation Concern in that area.

To Find out, Use one of the following methods below.

[Clicking on the Map](#)

[Drawing a Line/Shape on the Map](#)

[Reset Map/Clear Interactive Query](#)

[Show Legend](#)

[Help Me Use This Application](#)

[Main Query Page](#)

[Home Page](#)

Search Criteria:	
	View Search Criteria
No Response	View Report Level1
View Management Practice	
Karst	View Best Practice for Karst



Natural Heritage Review
On-line LEVEL 1 REPORT

Print this page and use/attach as documentation that your project has consulted with the Missouri Department of Conservation and the U.S. Fish and Wildlife Service about species of conservation concern. No further consultation about this project is necessary.

October 20, 2010

Your login and project information below:

User ID: 1010
 First Name: Todd
 Last Name: Trotter
 Email Address: trotter@gbateam.com
 Business: GBA
 Project: Road or Highway

Your query information below:

User ID	Response Level	Township	Range	Section	Direction	Latitude	Longitude	Point	Line	UTM North	UTM East	Rectangle	Time Stamp
1010						0	0	point	line	0	0	e375517.136611053,365847.231797765,365790.01342608	10/20/2010 11:06:13 AM

Road or Highway

Road or highway construction – build, maintain, expand, relocate, resurface

Road projects typically change the plants and animals that live on the right-of-way or in the vicinity. That becomes a conservation issue if it impacts species or habitats of conservation concern, including streams. Road construction is otherwise a concern to local, state and federal regulatory agencies which may require permits or practices that protect public interests including fish and wildlife resources. The Conservation Department through its Private Land Services may be able to assist project planners in identifying problems, ways to minimize adverse impacts or opportunities to enhance habitat in the course of construction.

Fish and wildlife concerns are minimal if (a) the right-of-way includes no protected species or restricted habitat identified in this report, and (b) construction is managed to minimize erosion and sedimentation/runoff to nearby streams and lakes, including adherence to any "Clean Water Permit" conditions.

Revegetation of disturbed areas is recommended to minimize erosion, as is restoration of shoulder areas with native plant species compatible with the local landscape and wildlife needs. Annual ryegrass may be combined with native perennials for quicker green-up. Avoid aggressive exotic perennials such as crown vetch and sericea lespedeza.

Cautions related to species/habitats of concern or project type. Please reflect these concerns and recommendations in your plans :

- Even if records of species/habitats of concern do not exist, there is a possibility that your project will encounter a species of concern that is not on record. In Missouri, 93% of the land is in private ownership, and most of that has never been checked for endangered species. Animals move over varying ranges, and in time both animal and plant populations can move.

- If your project encounters and potentially affects a federally-listed species, immediately report it to the U.S. Fish and Wildlife Service or Missouri Department of Conservation.

No further consultation with the U.S. Fish and Wildlife Service or the Missouri Department of Conservation is necessary. Print this document to establish compliance with requirements to consult with U.S. Fish and Wildlife Service and the Missouri Department of Conservation about this project.

If you need additional information, please contact:

MDC Natural Heritage Review
Policy Coordination Unit
P.O. Box 180
Jefferson City , MO 65102-0180
(Phone 573-522-4115 ext. 3250)
www.mdc.mo.gov

or

U.S. Fish and Wildlife Service Ecological Services
101 Park Deville Drive , Suite A
Columbia , Missouri 65203-0007
(Phone 573-234-2132)

A HERITAGE REVIEW provides information about species and habitats of concern that could be affected by the project. Heritage records note things that were positively identified at some date and time, marked at a location that may be more or less precise. Animals move quickly but plant communities can move also. To say “there is a record” does not mean the species/habitat is still there. To say that “there is no record” does not mean the project may not encounter something. Because of this, reports include information about records near but not necessarily on the project site. Three different kinds of information are provided.

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- “Concerns & management recommendations” are things for which one might prudently look. There is no specific heritage record, but our knowledge of the surrounding landscape suggests consideration. 93% of Missouri 's land is in private ownership, so most sites have never been carefully inspected by conservation professionals

This report is not a site clearance letter. Rather, it provides an indication of whether or not public lands and sensitive resources are known to be (or are likely to be) located close to the proposed project. Incorporating information from our Heritage Database into project plans is an important step that can help reduce unnecessary impacts to Missouri's sensitive natural resources. However, the Heritage Database is only one reference that should be used to evaluate potential adverse impacts. Other types of information, such as wetland and soils maps and on-site inspections or surveys, should be considered. Reviewing current landscape and habitat information and species biological characteristics would additionally ensure that species of conservation concern are appropriately identified and addressed.

Additional information on rare, endangered and watched species may be found at <http://www.mdc.mo.gov/nathis/endangered/>. Detailed information about species mentioned may be accessed at http://mdc4.mdc.mo.gov/applications/mofwis/mofwis_search1.aspx. If you would like printed copies of best management practices cited as internet URLs, please contact us.



211th St. Corridor Study - Natural Heritage Review Highway J to Highway YY



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refresh map full extent zoom in zoom out pan set zoom factor

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[Help Me Use This Application](#)

[Main Query Page](#)

[Home Page](#)

Search Criteria:

[View Search Criteria](#)

No Response [View Report Level1](#)

View Management Practice

Karst [View Best Practice for Karst](#)



Natural Heritage Review
On-line LEVEL 1 REPORT

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1010						0	0	point	line	0	0	e375510.580339301,368298.68140927,368149.675233029	10/20/2010 11:17:12 AM

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(Phone 573-522-4115 ext. 3250)
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or

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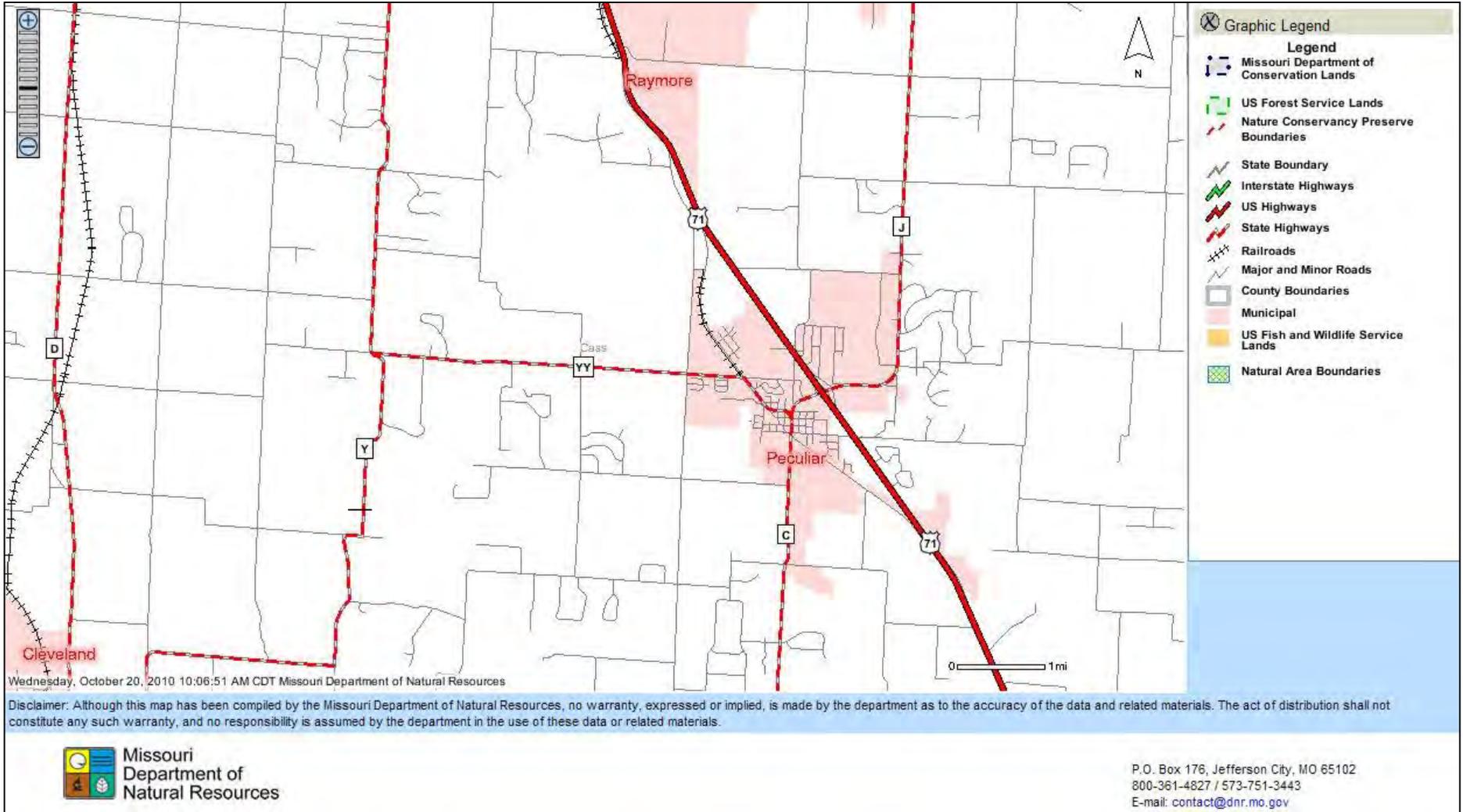
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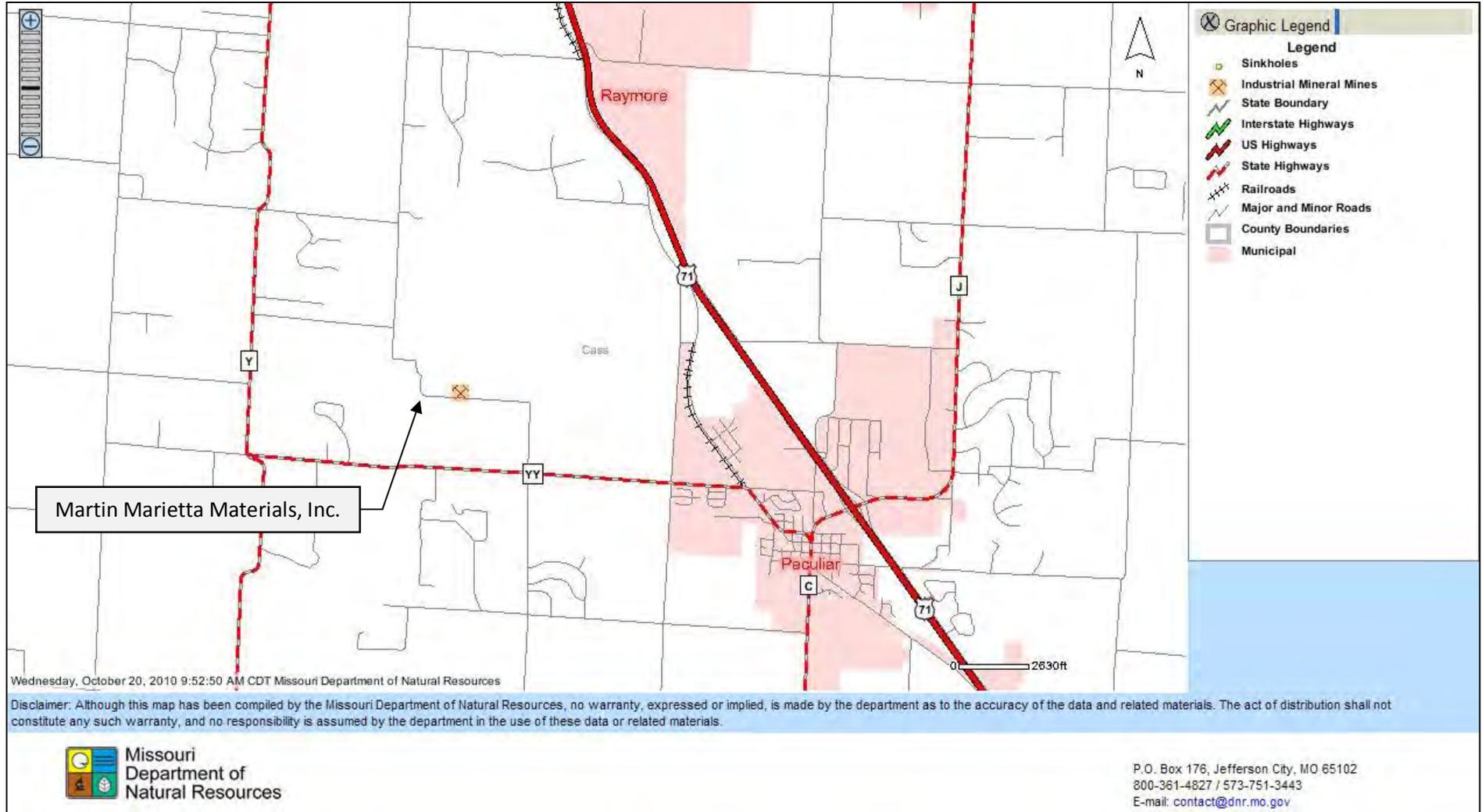
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211th St. Corridor Study – Public Lands Review



211th St. Corridor Study – Mineral Mines and Sink Areas Review



Identify Results

Records 1 through 1

Options	TBLIMHEADE	AMENDMENT_	STATUS	PERMITEENA	PHONE	FAX
 	0153		Active	Martin Marietta Materials, Inc.	9133908396	

Options	EMAIL	ADDRESS1	ADDRESS2	CITY	ZIP	PERMITTYPE
 		11900 West 87 Street Parkway		Lenexa	66215	Open Pit 5000 tons or more

Options	FEESPAID	APPLICATIO	ISSUANCEDA	EXPIRATION	OPERATORNA	INSPECTOR
 	3000	12/06/2007 06:00:00 PM	12/19/2007 06:00:00 PM	12/30/2008 06:00:00 PM	John Stafne	GF/CT

Options	AREANUMBER	PERMITYEAR	SITE_	SITENAME	TBLIMLOCAT	SECTION1
 	2	2007	254	Peculiar Qy #528	Cass	07 12

Options	TOWNSHIP1	RANGE1	LATITUDE	LONGITUDE	COMMODITY	STREAMNAME
 	45N	32W 33W	38.7343	-94.5068	Limestone	

Options	ONRW	OSRW	ACRESNEW	ACRESRENEW	ACRESRELEA	ACRESNET
 	No	No	0	346	0	346

Options	STATE_	#SHAPE#	OBJECTID	ST_Area(SHAPE)	SdeLength(SHAPE)
 	KS	[Geometry]	68	0	

211th St. Corridor Study - Hazardous Waste Review

