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Sponsoring Party: Ameren Transmission Company  
of Illinois  
File No.: EA-2015-0146  
Date Testimony Prepared: November 16, 2015

**MISSOURI PUBLIC SERVICE COMMISSION**

**File No. EA-2015-0146**

**SURREBUTTAL TESTIMONY**

**OF**

**CHRISTOPHER J. WOOD**

**ON**

**BEHALF OF**

**AMEREN TRANSMISSION COMPANY OF ILLINOIS**

**Kansas City, Missouri  
November, 2015**

ATX1 Exhibit No. 16  
Date 1/25/16 Reporter JL  
File No. EA-2015-0146

**SURREBUTTAL TESTIMONY**

**OF**

**CHRISTOPHER J. WOOD**

**FILE NO. EA-2015-0146**

1           **Q.     Please state your name and business address.**

2           A.     My name is Christopher J. Wood. My business address is P.O. Box 419173,  
3     Kansas City, Missouri 64141, and my office headquarters is located at 9400 Ward Parkway in  
4     Kansas City, Missouri, 64114.

5           **Q.     By whom and in what capacity are you employed?**

6           A.     I am employed by Burns & McDonnell Engineering Company, Inc. (“Burns &  
7     McDonnell”) in the Environmental Studies and Permitting Global Practice as a Project Manager  
8     and Department Manager.

9           **Q.     Are you the same Christopher J. Wood who filed direct testimony in this**  
10    **case?**

11          A.     Yes, I am.

12          **Q.     What is the purpose of your surrebuttal testimony?**

13          A.     The purpose of my surrebuttal testimony is to respond to the rebuttal testimony of  
14     Jason Haxton regarding the outreach efforts of Ameren Transmission Company of Illinois  
15     (ATXI) to the Amish and Mennonite communities during the routing process and the selection of  
16     the proposed route in relation to these communities. In addition, I am responding to concerns  
17     raised by witnesses at the various local public hearings held on October 19, 26, and 27, 2015,  
18     who raised concerns about the routing of the proposed Mark Twain Transmission Project,  
19     including the routing of the transmission line across some properties in a diagonal manner, and

1 consideration of the Missouri Department of Conservation's comments regarding the proposed  
2 routes.

3 **Q. In his rebuttal testimony on page 4, Mr. Haxton states that a representative**  
4 **of ATXI was "surprised and completely unaware of any Amish or Mennonite populations"**  
5 **that would be impacted by the two remaining potential routes for the transmission line. At**  
6 **the time that ATXI had narrowed down the potential routes to two, had ATXI taken any**  
7 **efforts to determine the identity of the property owners impacted by the routes?**

8 **A. I was not present at the meeting Mr. Haxton references; therefore, I cannot**  
9 **comment on his assertion that the representative was "surprised and completely unaware of any**  
10 **Amish or Mennonite populations." However, I am aware that a number of activities were**  
11 **conducted throughout the routing of the Project that provided information on the identity of**  
12 **property owners within the study area and along the alternative routes.**

13 **When ATXI had developed the preliminary route network (discussed in my direct**  
14 **testimony at pages 7-10), it identified, through county records, all landowners within 2,500 feet**  
15 **of any alternative route and invited them to public open houses where they could learn about the**  
16 **Project and provide input. When the preliminary route network was narrowed to the reduced**  
17 **route network, all landowners who were mailed letters during the first round of public open**  
18 **houses were again mailed letters informing them of the reduced route network and inviting them**  
19 **to a second round of public open houses in October 2014, which is described in more detail in**  
20 **my direct testimony on pages 14 and 15.**

21 **The county parcel records we relied upon to identify landowners understandably do not**  
22 **contain information about the religious affiliation of any landowner, so it is not surprising that**  
23 **ATXI personnel at that time may not have had a complete understanding of the location of any**

1 particular Amish or Mennonite property unless the landowner expressly informed them of that  
2 fact. As I testified in my direct testimony, the routing process involved field verification of the  
3 preliminary route network along publicly-accessible roads in which those who worked with me  
4 drove the potential routes to physically observe the lands and adjacent resources that they would  
5 traverse.

6 **Q. Mr. Haxton states that the presence of Amish and Mennonite communities**  
7 **should have been obvious. Please respond.**

8 A. Although Mr. Haxton suggests that a physical drive of the routes would easily  
9 disclose the presence of these communities, this was not always the case. My team was able to  
10 determine particular Amish and Mennonite properties in some instances, but they were not  
11 readily obvious in every instance. As a result of the field work, however, those involved in the  
12 routing process were aware of the presence of Amish and Mennonite residents along the  
13 proposed routes.

14 **Q. Was ATXI able to identify with more particularity the location of Amish or**  
15 **Mennonite properties impacted by the preliminary routes?**

16 A. Yes. The public open houses served their purpose in this regard. At the first  
17 round of public open houses, members of the Amish community attending the Kirksville open  
18 house identified the locations of two Amish schools. As Mr. Haxton suggests in his rebuttal  
19 testimony, members of the Amish community also attended the second round of open houses in  
20 October 2014 and identified other properties owned by the Amish. It was at the October 30, 2014  
21 open house in Kirksville that Mr. Haxton and Bishop David Schwartz provided information to  
22 ATXI. A conservative estimate of the general boundaries of the Amish communities is identified  
23 in the diagram attached as **Schedule CJW-SR1**. Although Mr. Haxton refers to the Project as



1 running “over” a Mennonite church and school area and “over” Amish homes and an Amish  
2 school, the closest a route alternative was located in relation to the two schools that were  
3 identified was 1.85 miles, as shown in **Schedule CJW-SR2**.

4 **Q. Following this second round of public open houses, did ATXI take any other**  
5 **steps to identify the impact of the proposed routes on Amish and Mennonite communities?**

6 A. ATXI engaged in specific outreach efforts to members of the Amish and  
7 Mennonite communities, as described in my response to Staff’s Data Request No. 16, a copy of  
8 which is attached as **Schedule CJW-SR3**. In addition, we were provided with surnames  
9 common to Amish and Mennonite families; with those surnames, my team prepared maps in  
10 November 2014 of the reduced route network in relation to properties owned by persons with  
11 those surnames. I have attached those maps as **Schedule CJW-SR4** and **Schedule CJW-SR5**.  
12 This provided ATXI with additional information on the Amish and Mennonite community within  
13 the project area for consideration during the route selection process.

14 **Q. How was the information ATXI had regarding Amish and Mennonite**  
15 **communities considered when determining the final route?**

16 A. While it was not the only consideration, one of the results of selecting Route 4 for  
17 the Zachary to State Line portion of the Project<sup>1</sup> was the fact that it impacted far fewer of the  
18 potential Amish and Mennonite properties that ATXI had identified. Route 4 (the westernmost  
19 route on **Schedule CJW-SR4**, identified on the maps entitled “Reduced Routes-Zachary to State  
20 Line”), crossed only one property and ran along the boundary of one other property that we had  
21 identified as a potential Amish or Mennonite property. In contrast, the other reduced route for the

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<sup>1</sup> My direct testimony mistakenly refers to “Route 1” instead of “Route 4” in the question beginning on line 3 of page 27; however, the answer to the question and surrounding testimony clearly indicate that Route 4 was the final route selected by ATXI for the Zachary to State Line portion of the route.

*Surrebuttal Testimony of  
Christopher J. Wood*

1 Zachary to State Line section of the Project crossed four properties and ran along the boundary  
2 of one other property identified as potential Amish or Mennonite properties. In addition, the  
3 route that was not selected as the final route was near several other properties identified as  
4 potential Amish or Mennonite-owned properties and crossed a much broader area of an  
5 estimated Amish community boundary. It was also much closer to the schools that had been  
6 pointed out to us.

7 For the Maywood to Zachary portion of the Project, Route 1 was selected as the final  
8 route (the southernmost route on **Schedule CJW-SR5**, identified on the maps entitled “Reduced  
9 Routes-Maywood to Zachary”); Route 1 crossed two potential Amish- or Mennonite-owned  
10 properties and did not run along the boundary of any properties identified as potential Amish or  
11 Mennonite-owned properties. The route that was not selected crossed 11 properties and ran along  
12 the boundary of 6 other properties identified as potential Amish- or Mennonite-owned properties.

13 Additionally, contrary to Mr. Haxton’s testimony that ATXI’s final route runs “down the  
14 middle of the Amish community,” Cory Anderson, a geography professor who tracks the  
15 presence of Amish communities in Missouri and who testified at the Commission’s local public  
16 hearing held in Kirksville, is more accurate by concluding that the final route passes near or  
17 along, not through, Amish communities.

18 Based upon our current understanding, the proposed route crosses three potential Amish  
19 or Mennonite-owned properties and is adjacent to only one potential Amish or Mennonite-owned  
20 property, while the route that was not selected crosses 15 potential Amish or Mennonite-owned  
21 properties and is adjacent to 7 potential Amish or Mennonite-owned properties. In summary, the  
22 proposed route would likely have minimal impacts to potential existing Amish or Mennonite  
23 properties, and far less impact than other alternatives.

1           **Q.     Witnesses at the local public hearings suggested that the proposed**  
2 **transmission line would interfere with pivot irrigation. To your knowledge, does the**  
3 **proposed route interfere with any known pivot irrigation systems?**

4           A.     No. During the routing process, we sought to determine the existence and location  
5 of pivot irrigation systems in the proposed paths. When the final two preliminary routes were  
6 being selected, they were specifically routed to avoid known pivot irrigation systems. **Schedule**  
7 **CJW-SR5** identifies known pivot irrigation systems in pink that were located on the Maywood  
8 to Zachary portion of the Project and demonstrates that the route was designed so as to avoid  
9 known pivot irrigation systems. There were no known pivot irrigation systems on the Zachary to  
10 State Line portion of the Project.

11           **Q.     Several witnesses at the Commission's local public hearings complained that**  
12 **the proposed transmission line diagonally cuts through their properties. Why does the final**  
13 **route include segments that cut diagonally across tracts of land rather than running on the**  
14 **boundary of those tracts of land?**

15           A.     Because the end points of the proposed line are the Maywood substation near  
16 Palmyra, Missouri, and the Iowa State line near Lancaster, Missouri, the route generally has to  
17 follow a northwesterly (diagonal) direction as it traverses toward Iowa from Palmyra. During the  
18 development of route alternatives, attempts were made to follow property lines, field lines, fence  
19 lines, and other linear features, as appropriate, but parcels are often irregularly shaped and often  
20 use drainages and other irregular features. As a result, property lines don't necessarily line up  
21 from one parcel to the next. In addition, property lines take on all different shapes, sizes, and  
22 orientations, making it difficult to completely follow property lines without extra angles and  
23 additional length, which typically result in greater overall project impacts. Also, one landowner

1 may desire an easement in a location not conducive to following the property line on adjacent  
2 landowners or an obstruction on one property precludes following property lines on adjacent  
3 parcels.

4 Overall length is an indicator of potential impacts; a longer route generally has more  
5 impacts, whereas a shorter route has fewer impacts. To accommodate property boundaries for  
6 that entire distance would require a transmission line route that would likely be longer than 95  
7 miles, which would increase its costs. Completely following property boundaries would also  
8 increase the base cost because of the additional structures necessary to support the line as it  
9 follows property boundaries. This is the case because heavy angles (necessary for following  
10 boundary lines) generally require more detailed design and require larger structures and  
11 foundations. ATXI witness James Jontry discusses these issues in his surrebuttal testimony.

12 Following property boundaries would, in some instances, place the transmission line  
13 nearer to homes, as they are often located near the boundary of rural tracts. Finally, it is my  
14 understanding that when ATXI engages in negotiations with individual property owners, it will  
15 work with them to make minor adjustments to the line location when it is possible to place the  
16 lines in a manner that minimizes impacts on farming operations or other land uses under and  
17 adjacent to the line.

18 **Q. Related to the routing of transmission along boundary lines, some witnesses**  
19 **at the local public hearings asked why ATXI couldn't use existing transmission line right-**  
20 **of-way placement for the line. Are their reasons that an existing transmission line right-of-**  
21 **way could not be used?**

22 **A.** Although I am aware that there can be reasons—for example, the existing  
23 transmission line right-of-way is not large enough to accommodate a 345-kV line—that an

1 existing transmission line right-of-way cannot be used, ATXI witness Jeffrey Hackman is  
2 providing surrebuttal testimony as to why ATXI generally did not use existing transmission line  
3 right-of-way for the Mark Twain Transmission Project.

4 **Q. Some witnesses have suggested that ATXI should have placed the Mark**  
5 **Twain transmission line parallel to existing transmission lines. Was placing an extended**  
6 **portion of the Mark Twain transmission line parallel to existing transmission lines a viable**  
7 **option during the planning process?**

8 **A.** It is my understanding that it was not. As Mr. Hackman explains in his testimony,  
9 placing a new transmission line parallel to an existing transmission line over 100-kV for an  
10 extended distance presents reliability concerns, particularly where part of the benefit of the new  
11 line is to address reliability concerns and where the line that one might consider paralleling is  
12 also needed for reliability, which as I understand Mr. Hackman's testimony is the case here.  
13 Consequently, the routing team preliminarily examined whether placement of portions of the  
14 Mark Twain transmission line was appropriate along existing 69-kV lines which are part of the  
15 area's distribution system. **Schedule CJW-SR6**, for example, shows existing 69-kV lines  
16 (depicted in purple) for the Maywood to Zachary portion of the line in relation to possible  
17 preliminary routes under consideration (shown in yellow). Most of the existing 69-kV lines did  
18 not traverse a direction that would connect the substation endpoints. There was a section of  
19 existing 69-kV line located just south of the towns of Brashear and Hurdland that generally  
20 traveled the direction we needed to go, but there were various homes and structures near that  
21 line; in addition, following the existing line would have placed the Mark Twain transmission line  
22 near these two towns and near an airport location. Another existing 69-kV line is located north of  
23 Newark between Lewistown and the Novelty Substation. This existing line is located near

1 several homes and structures, is near an airport, crosses the Troublesome Creek watershed  
2 easement, and terminates at the location of several other existing transmission lines (Novelty  
3 Substation). Consequently, it was determined that there was no suitable 69-kV line that could be  
4 paralleled in the Maywood to Zachary portion of the route.

5 The routing team also evaluated existing 69-kV lines in the Zachary to State Line portion  
6 of the route. **Schedule CJW-SR7** shows the existing 69-kV line (in purple) and potential  
7 preliminary routes (in yellow) in this section of the Mark Twain Project area. This particular  
8 route was not suitable because it crossed the Big Creek Conservation Area and Thousand Hills  
9 State Park, had residences fairly close to both sides of the route—particularly at the south end,  
10 and crossed some difficult topography. Therefore, we determined that paralleling the 69-kV  
11 route here was simply not suitable.

12 I should note that the very northern portion of the final route (approximately 2.7 miles)  
13 parallels an existing 161-kV line. As I said earlier, ATXI advised that parallel placement of lines  
14 greater than 100-kV should generally be avoided and only considered on a case-by-case basis.  
15 Here, the parallel placement was necessary as the Mark Twain transmission line had to connect  
16 with the transmission line in Iowa at about the same location on the state line. Because of the  
17 fairly short distance of the parallel placement, this placement was acceptable to ATXI.

18 **Q. Margaret Wilson testified at a local public hearing that the proposed route**  
19 **will destroy over 50,000 acres of farmland in northeast Missouri; other witnesses testified**  
20 **similarly. Do the easements that are required for the Mark Twain Project total 50,000**  
21 **acres?**

1           A.     No. The Project requires a 150-foot wide right-of-way. For the entire line, which  
2 is about 95 miles long, a total of approximately 1,727 acres will be needed. I have no idea how  
3 Ms. Wilson calculated the 50,000 acres.

4           **Q.     Teri Page, a witness at the Commission's local public hearing in Kirksville,**  
5 **testified that she home schooled her children. Did ATXI take any measures to identify non-**  
6 **traditional education centers, such as home schools, during the routing process?**

7           A.     This would be information that we would only know from public comments or  
8 input at the open houses that ATXI held. I am not aware of another way to determine whether a  
9 particular home site is being used to home school children.

10          **Q.     Assuming that Ms. Page educates her children at her home, were you able to**  
11 **determine how far the proposed Mark Twain transmission line is from her home?**

12          A.     Attached as **Schedule CJW-SR8** is an aerial map showing the property owned by  
13 Ms. Page and Mr. Brian Thomas. The proximity of the closest structure that I can identify on  
14 their property to the proposed transmission line is approximately 1,660 feet. As the map  
15 demonstrates, the transmission line does not actually cross their property, but is on an adjacent  
16 property.

17          **Q.     Assuming that structure is used as a school, would you consider the location**  
18 **of the proposed transmission line in proximity to the structure an acceptable distance when**  
19 **routing a transmission line?**

20          A.     Yes. It is located outside the right-of-way, and the transmission line will be  
21 designed to meet or exceed the National Electrical Safety code. In addition, ATXI witness Bill  
22 Bailey is testifying that the presence of the transmission line would not be detected by  
23 measurements of EMF at a distance of 1,660 feet.

1           **Q.     Witnesses at the local public hearings questioned why ATXI did not select**  
2 **the route recommended by the Missouri Department of Conservation. Are you familiar**  
3 **with the Department's letters?**

4           A.     Yes. ATXI received two letters from the Department, one dated October 16, 2014,  
5 and a follow-up letter dated November 21, 2014 (both are attached as **Schedule CJW-SR9**).  
6 Neither of these letters recommended a particular route for this project. The October 16, 2014  
7 letter stated a modified segment of the northern route from Maywood to Zachary (identified as  
8 Segment A2) that avoided bisecting the Bringer Conservation Easement would be the least  
9 environmentally damaging route segment. The November 21, 2014 letter stated that the northern  
10 route between Maywood and Zachary (containing the Bringer easement) appeared to create "the  
11 fewest impacts" to forest, fish and wildlife resources, but segments of the other routes (including  
12 the proposed route which crosses the Bevill easement) could be modified to mitigate impacts to  
13 forest, fish and wildlife resources.

14           **Q.     Did ATXI consider the comments of the Department of Conservation in its**  
15 **final route selection?**

16           A.     Yes. ATXI considered the Department of Conservation's comments in its final  
17 route selection, including impacts to forest, fish, and wildlife resources and conservation  
18 easements as part of the route comparison and selection process. Forested lands, federal, state,  
19 and local conservation easements, protected species, wetlands, and streams were considered as  
20 part of the route selection process, as well as several other engineering and social criteria. In  
21 particular, the selected route (Route 1) crossed only 0.8 acre of a privately owned, State-operated  
22 Stream Stewardship Agreement Easement, while Route 2 crossed 3.95 acres of a privately  
23 owned, State-operated Stream Stewardship Agreement Easement.



*Surrebuttal Testimony of  
Christopher J. Wood*

1           The final route selected provided a route between the project connection points that  
2 avoided or minimized adverse impacts on natural and social resources and provided a cost-  
3 effective and technically-feasible alignment.

4           **Q.    Does this conclude your surrebuttal testimony?**

5           **A.    Yes, it does.**

**BEFORE THE PUBLIC SERVICE COMMISSION  
OF THE STATE OF MISSOURI**

In the Matter of the Application of Ameren Transmission )  
 Company of Illinois for Other Relief or, in the Alternative, )  
 a Certificate of Public Convenience and Necessity )  
 Authorizing it to Construct, Install, Own, Operate, ) File No. EA-2015-0146  
 Maintain and Otherwise Control and Manage a )  
 345,000-volt Electric Transmission Line from Palmyra, )  
 Missouri, to the Iowa Border and an Associated Substation )  
 Near Kirksville, Missouri. )

**AFFIDAVIT OF CHRISTOPHER J. WOOD**

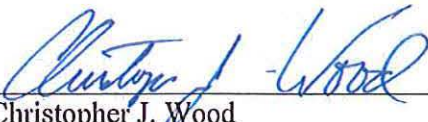
STATE OF MISSOURI )  
 ) ss  
 COUNTY OF JACKSON )

Christopher J. Wood, being first duly sworn on his oath, states:

1. My name is Christopher J. Wood. I work in Kansas City, Jackson County, Missouri, and I am employed by Burns & McDonnell Engineering Company, Inc.

2. Attached hereto and made a part hereof for all purposes is my Surrebuttal Testimony on behalf of Ameren Transmission Company of Illinois consisting of 12 pages, and Schedule(s) CJW-SR1 - CJW-SR9 all of which have been prepared in written form for introduction into evidence in the above-referenced docket.

3. I hereby swear and affirm that my answers contained in the attached testimony to the questions therein propounded are true and correct.

  
 \_\_\_\_\_  
 Christopher J. Wood

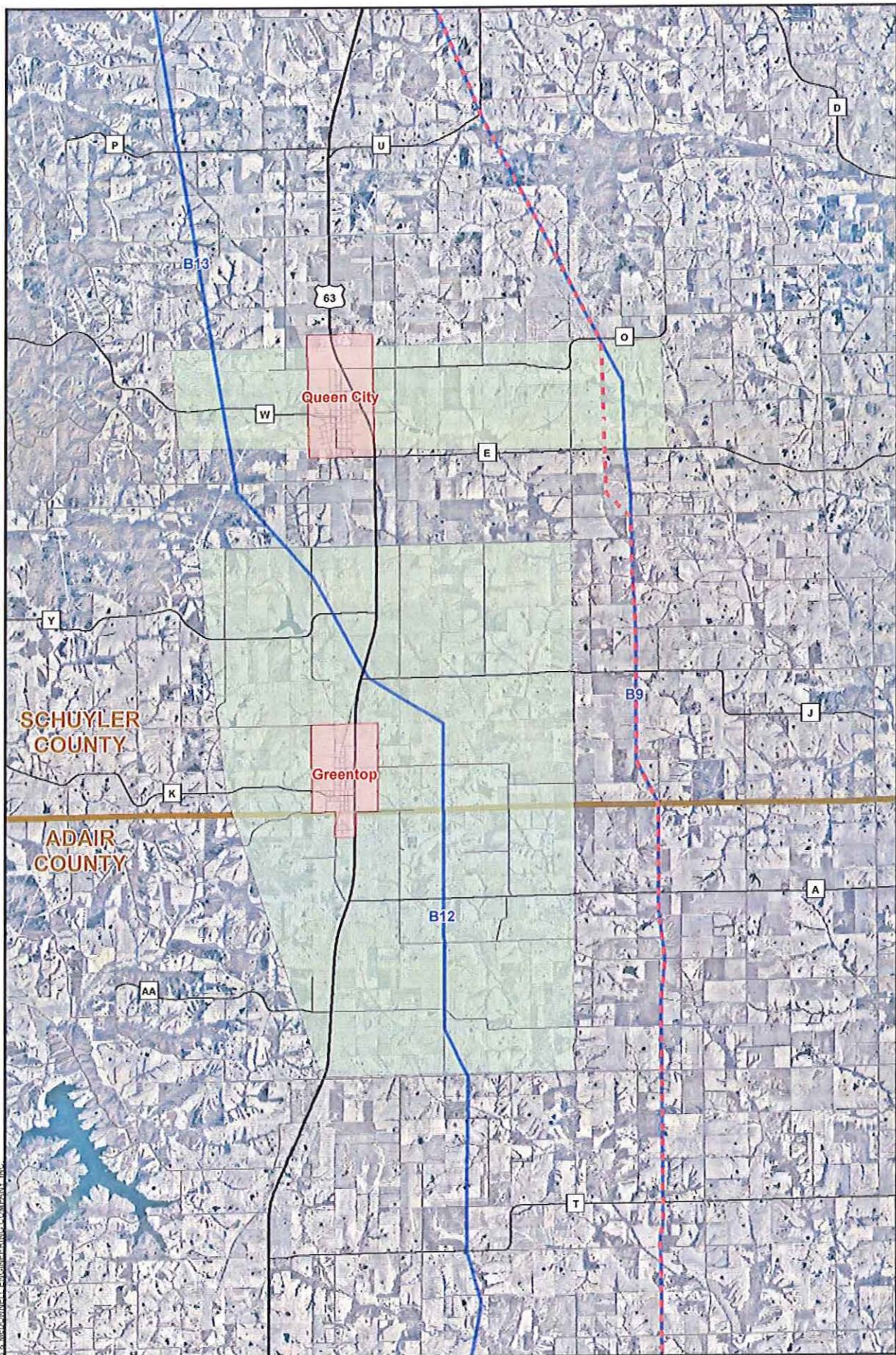
Subscribed and sworn to before me this 18<sup>th</sup> day of November, 2015.

  
 \_\_\_\_\_  
 Notary Public

My commission expires:

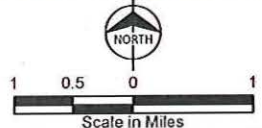
ELIZABETH J. WALKER  
 Notary Public - Notary Seal  
 STATE OF MISSOURI  
 Jackson County  
 My Commission Expires May 22, 2018  
 Commission # 14619609





Path: R:\maven\77183\_Mark\_Twain\GIS\DataFiles\AsstDeveloper\_CrossingPublic\_Comments\_Map1.mxd jdringman 11/5/2015  
 COPYRIGHT © 2015, BURNS & MCDONNELL ENGINEERING COMPANY, INC.

- Municipal Area
- County Boundary
- Amish Community Boundary Estimate (2nd Round Open House Comments)
- October 2014 Open House Routes
- Proposed Route



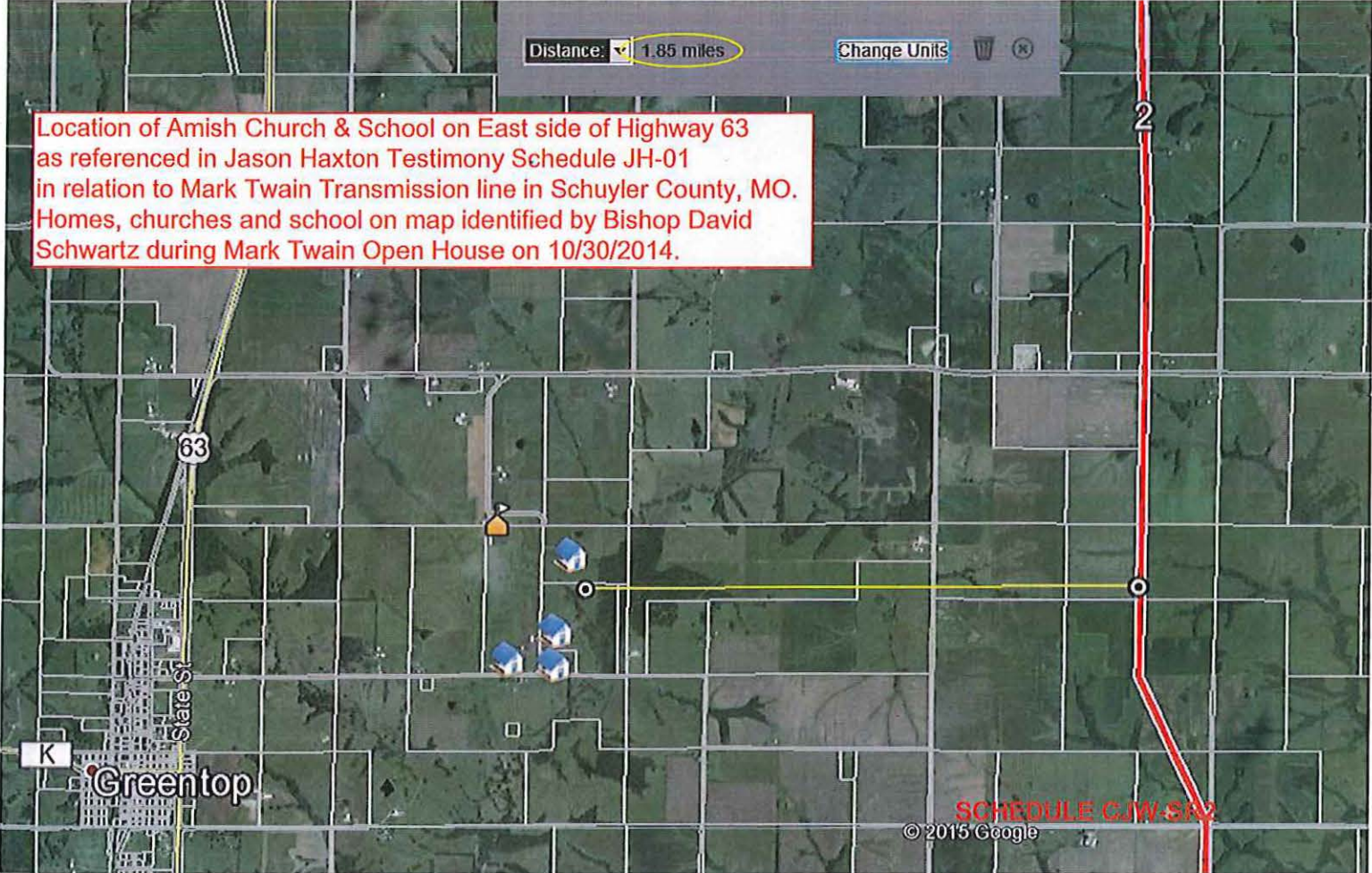
Ameren Transmission  
 Mark Twain Transmission Project  
 Amish Community  
 Boundary (Estimate)  
**SCHEDULE CJW-SR1**



Distance: 1.85 miles

Change Units

Location of Amish Church & School on East side of Highway 63 as referenced in Jason Haxton Testimony Schedule JH-01 in relation to Mark Twain Transmission line in Schuyler County, MO. Homes, churches and school on map identified by Bishop David Schwartz during Mark Twain Open House on 10/30/2014.



63

State St

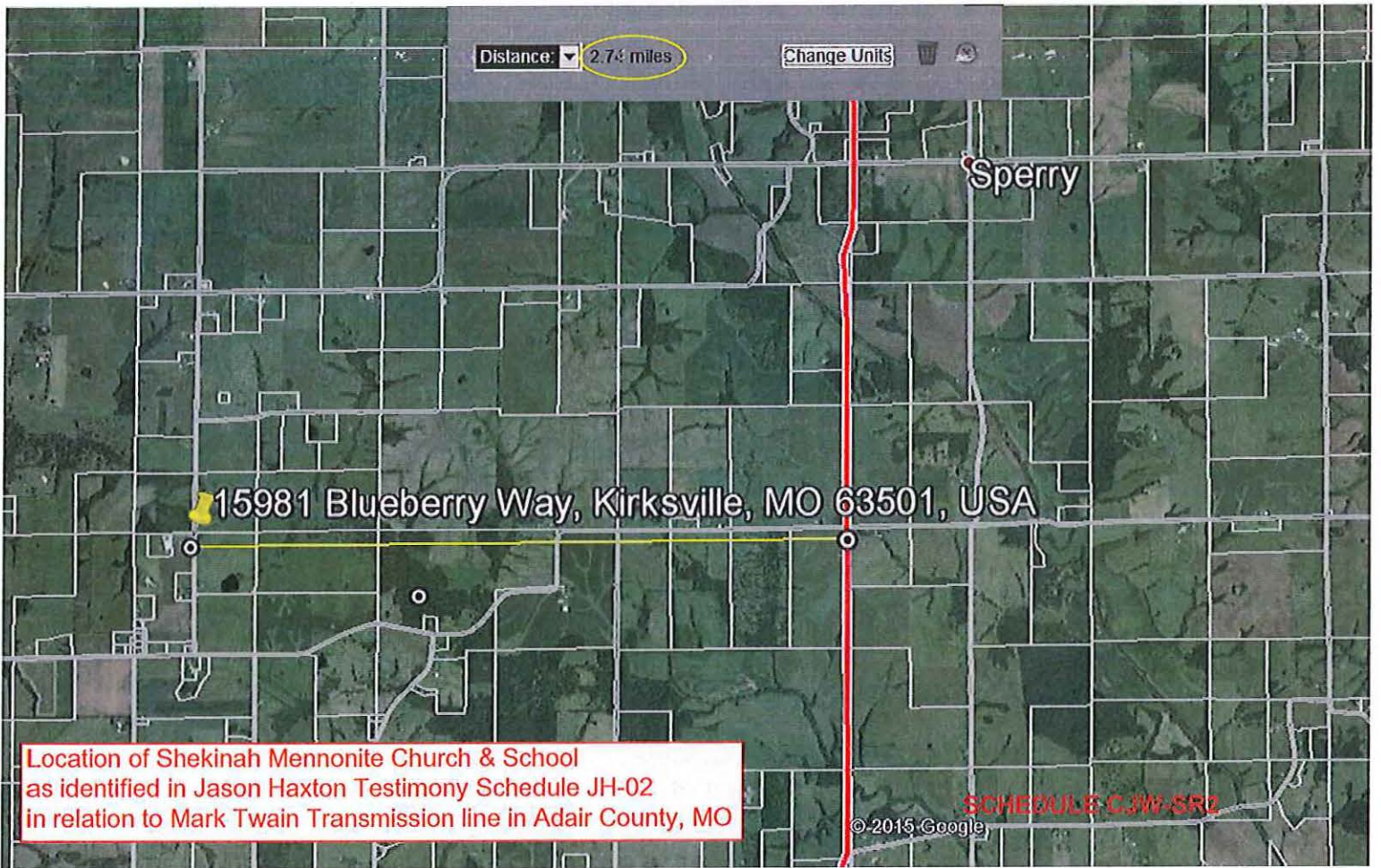
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SCHEDULE CJW-SF2

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Location of Shekinah Mennonite Church & School  
as identified in Jason Haxton Testimony Schedule JH-02  
in relation to Mark Twain Transmission line in Adair County, MO

SCHEDULE C, JW-SR2

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Ameren Transmission Company of Illinois's  
Response to MPSC Data Request

In the Matter of the Application of Ameren Transmission Company of Illinois for Other Relief or, in the Alternative, a Certificate of Public Convenience and Necessity Authorizing it to Construct, Install, Own, Operate, Maintain and Otherwise Control and Manage a 345,000-volt Electric Transmission Line from Palmyra, Missouri, to the Iowa Border and an Associated Substation Near Kirksville, Missouri.  
Data Request

Data Request No.: MPSC 0016 - Michael Stahlman

Please describe the work ATXI or any of its affiliates has performed to identify the location of Amish and Mennonite communities. Please describe the outreach of ATXI or any of its affiliates to the Amish and Mennonite communities. DR Michael Stahlman  
(Michael.Stahlman@psc.mo.gov).

**RESPONSE**

<b>Prepared By: Chris Wood</b>
<b>Title: Project Manager, Burns &amp; McDonnell Engineering Company</b>
<b>Date: July 20, 2015</b>

The work that ATXI and its affiliates performed to identify the location of Amish and Mennonite communities and the outreach performed by ATXI and its affiliates to the Amish and Mennonite communities focused on public open houses and community representative forums. These meetings are designed to encourage public participation in the process, provide opportunities for stakeholders to ask questions, as well as provide information on the resources in the project area and issues and concerns of stakeholders, unique communities, and special interest groups, such as Amish and Mennonite communities. These communities are just one type of resource that public open houses are designed to identify and engage in the process. For these public open houses, ATXI and its affiliates sent public open house invitation letters to all landowners within 2,500 feet of all initially proposed route options for the preliminary route network phase. These invitation letters were sent to 1,837 landowners on July 14, 2014. The public open houses were held throughout the project area in Kirksville, Newark, and Palmyra, Missouri on August 5, 6, and 7, 2014. Additional measures to invite stakeholders to participate in the public outreach process included notifying the general public of the public open houses through posters in public locations including city halls, town halls, post offices, chambers of commerce, banks, retail stores, restaurants, and libraries

throughout the project area and newspaper advertisements in local newspapers. Press releases and media kits were also delivered to local news media.

In addition to the public open houses, community representative forums were held for community leaders and representatives to learn about the project and participate by giving feedback on the route options, resources in the area, and potential issues and concerns of area citizens and landowners. This was also utilized as a time for participants to notify the Project Team of any constraints or opportunities regarding the study area and the proposed route options. Invitation letters were sent to invitees on July 3, 2014. These forums were held the morning of each of the public open houses at the same locations with the same materials provided at the public open houses.

Opportunities for landowners and other stakeholders to provide input were made available through computer stations at the public open houses, where an Amish community near Kirksville, Missouri was identified and captured within the GIS database. Additional opportunities for input included paper questionnaires, online questionnaires, project website, project hotline, project email address, and a mailing address for post mail in order to reach a variety of stakeholders with unique situations. For the reduced route network phase, ATXI and its affiliates once again sent invitation letters to all of the landowners within 2,500 feet of the originally proposed route options, as well as additional stakeholders who were not located within that distance but asked to be added to the mailing list. A total of 1,894 letter invitations were sent on October 6, 2014. Letter recipients were notified in the letter of the reduced route network and were invited to a second round of public open houses to get their feedback about the remaining route options. The public open houses were once again held within the project area in Palmyra, Newark, and Kirksville, Missouri on October 28, 29, and 30<sup>th</sup>, 2014. A second round of community representative forums were held over lunch, prior to each of public open houses. Additional measures to invite stakeholders to participate in the public outreach process included notifying the general public of the public open houses through posters in public locations including city halls, town halls, post offices, chambers of commerce, banks, retail stores, restaurants, and libraries throughout the remaining route network area, and newspaper advertisements in local newspapers. Press releases and media kits were also delivered to local news media. Public meeting materials were also available at local libraries for stakeholders that were unable to attend the public meetings or did not have internet access.

Opportunities for landowners and other stakeholders to provide input were made available through computer stations at the public open houses, where other Amish communities near Greentop and Queen City, Missouri were identified and captured within the GIS database. Additional opportunities for input included paper questionnaires, online questionnaires, project website, project hotline, project email address, and a mailing address for post mail in order to once again reach a variety of stakeholders understanding that some may have unique situations.

Additional specific outreach to the Amish and Mennonite communities is as follows:

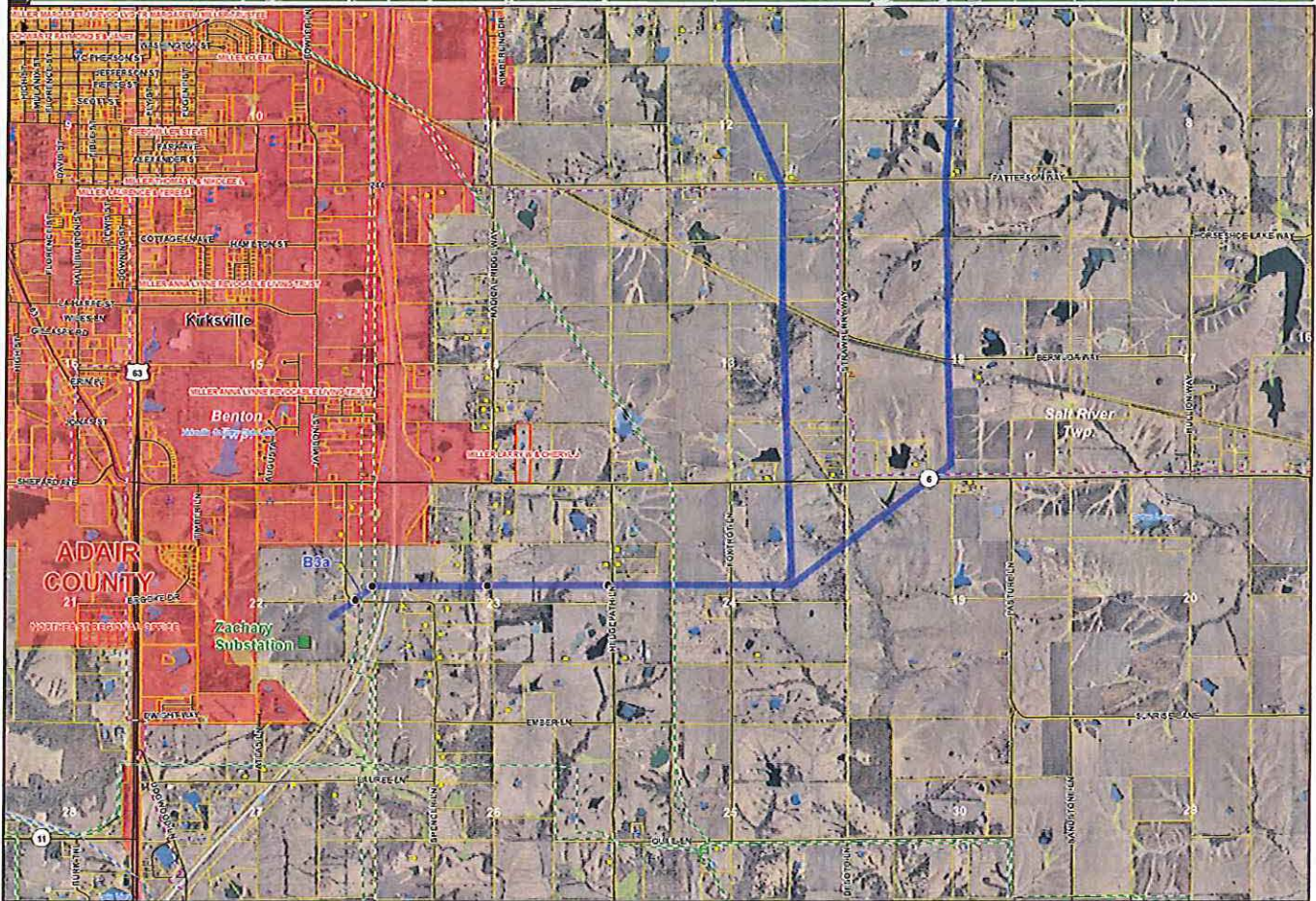
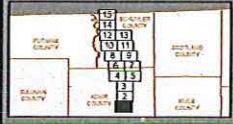
1. August 5, 2014- Clemens Borntrager attended the Kirksville public open house and marked an Amish school on his property in the GIS computer stations.

2. August 5, 2014- Menno Borntreger attended the Kirksville public open house and marked an Amish school on his property near the northern route.
3. October 30, 2014- Clemens Borntreger attended the Kirksville public open house and marked some additional barns and concerns on his property (part of the Amish community) in the GIS computer stations.
4. October 30, 2014- Jason Haxton attended and brought Bishop David Schwartz (a leader in the Amish community) to the public open house in Kirksville and sat down and spoke with Peggy Ladd. Jason referred to himself as the "Amish Helper". Ms. Ladd noted that we needed to determine the best way to have a conversation with the Amish and denote Amish lands.
5. November 11, 2014- Jason Hunsicker called Peggy Ladd of ATXI saying that he had been speaking with some Amish in the area and he had some questions about the project for her. Ms. Ladd returned Jason's call and talked about outreach to the Amish and Mennonite communities. She explained that we would continue outreach to those communities in the near future.
6. November 11, 2014- Peggy Ladd of ATXI visited the home of Bishop Laverne Schmucker (a leader in the Amish community), and met with the Bishop and his wife of the Amish community in Greentop, Missouri, to discuss the project. Ms. Ladd offered to speak to his congregation should they make a request. No request was received.
7. November 12, 2014- Peggy Ladd of ATXI spoke with Jason Haxton on the phone discussing the need to talk with the Amish/Mennonite community.
8. December 11, 2014- Peggy Ladd of ATXI called Josh Hurlbert, field representative of Congressman Sam Graves' office and asked if they have a way of identifying locations of Amish properties. Mr. Hurlbert said they have no way of tracking the Amish because they do not vote and the government does not maintain the religious affiliations of persons.
9. December 11, 2014- Peggy Ladd of ATXI met with Bishop David Schwartz of Queen City, Missouri to discuss the project and to answer any questions for the Amish community. Bishop Schwartz stated that the parishioners hadn't requested any meetings about the project. Ms. Ladd offered to meet with any member of his congregation if a member requested a meeting. No requests were received.
10. December 11, 2014- Peggy Ladd of ATXI met with Jonas Schwartz (a member of the Amish community) to discuss the project and to gather his concerns regarding the route nearest his property.
11. February 10, 2015- Peggy Ladd of ATXI met with Bishop David Schwartz (a leader in the Amish community) and his son, Jonas, about the project again and showed them the selected route. They had no additional questions.



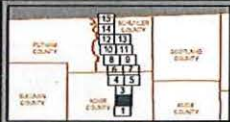
# Mark Twain Transmission Project

## Reduced Routes – Zachary to State Line



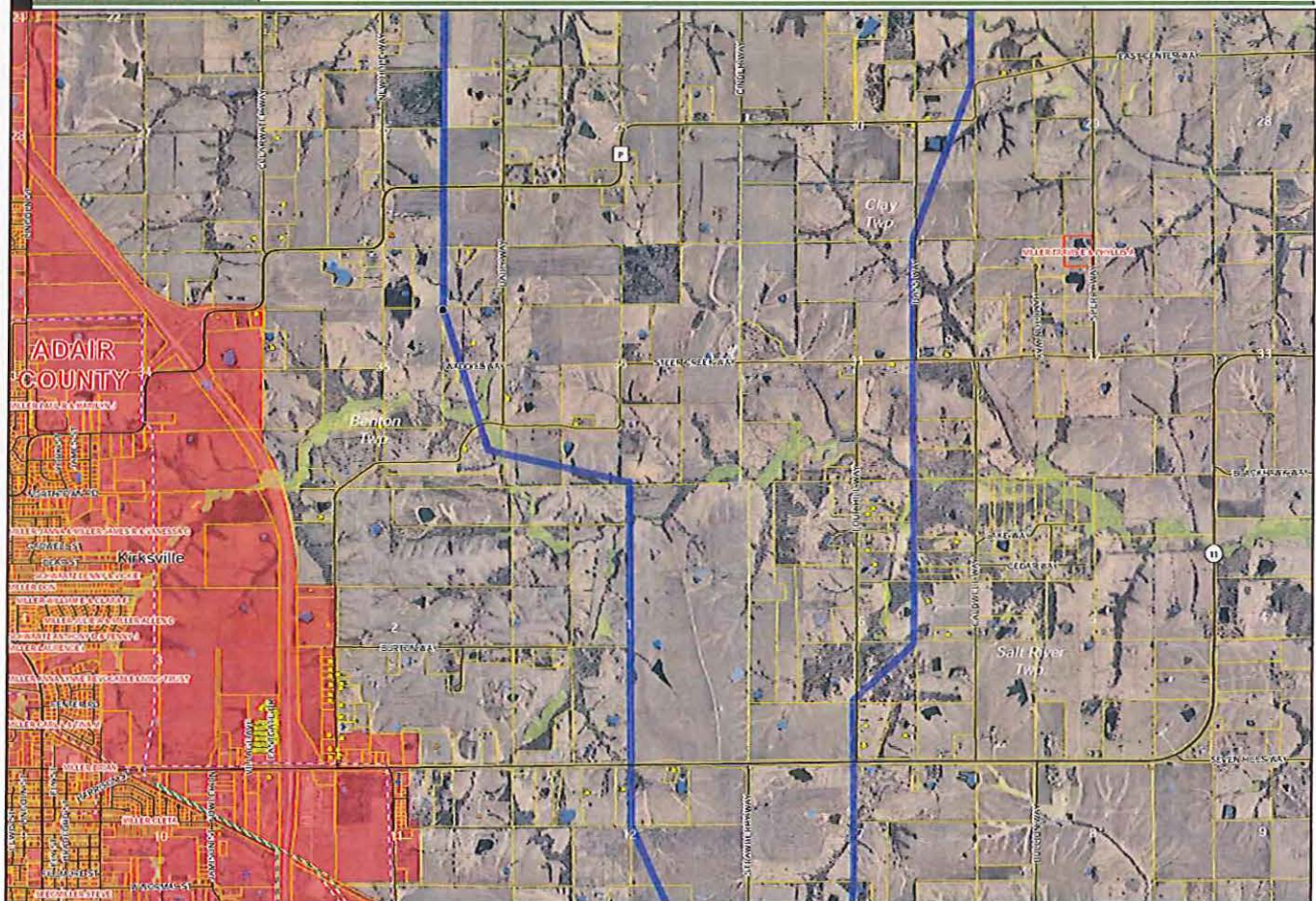
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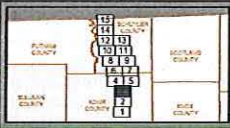
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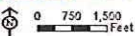
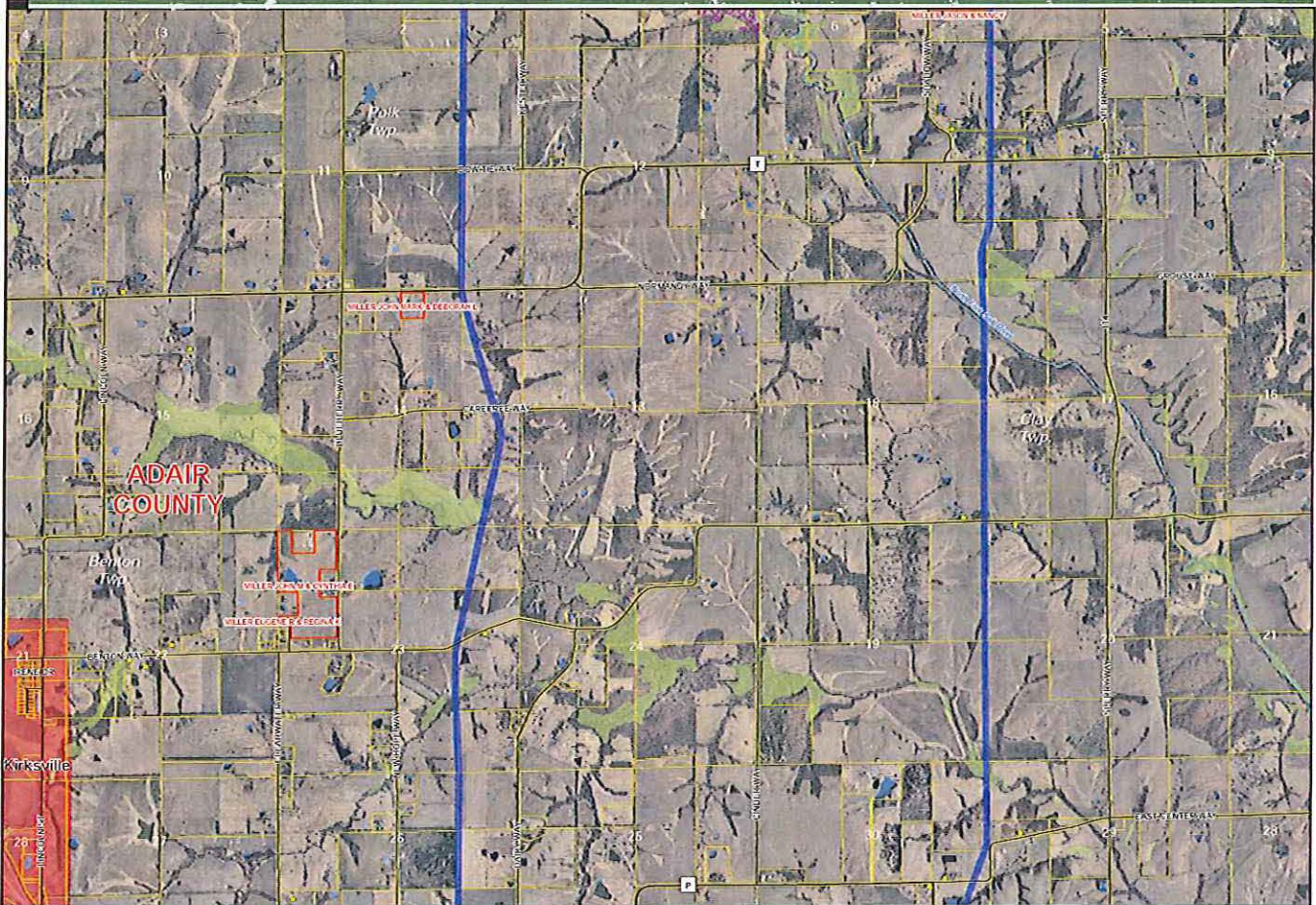
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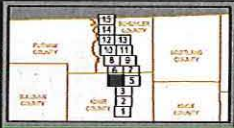
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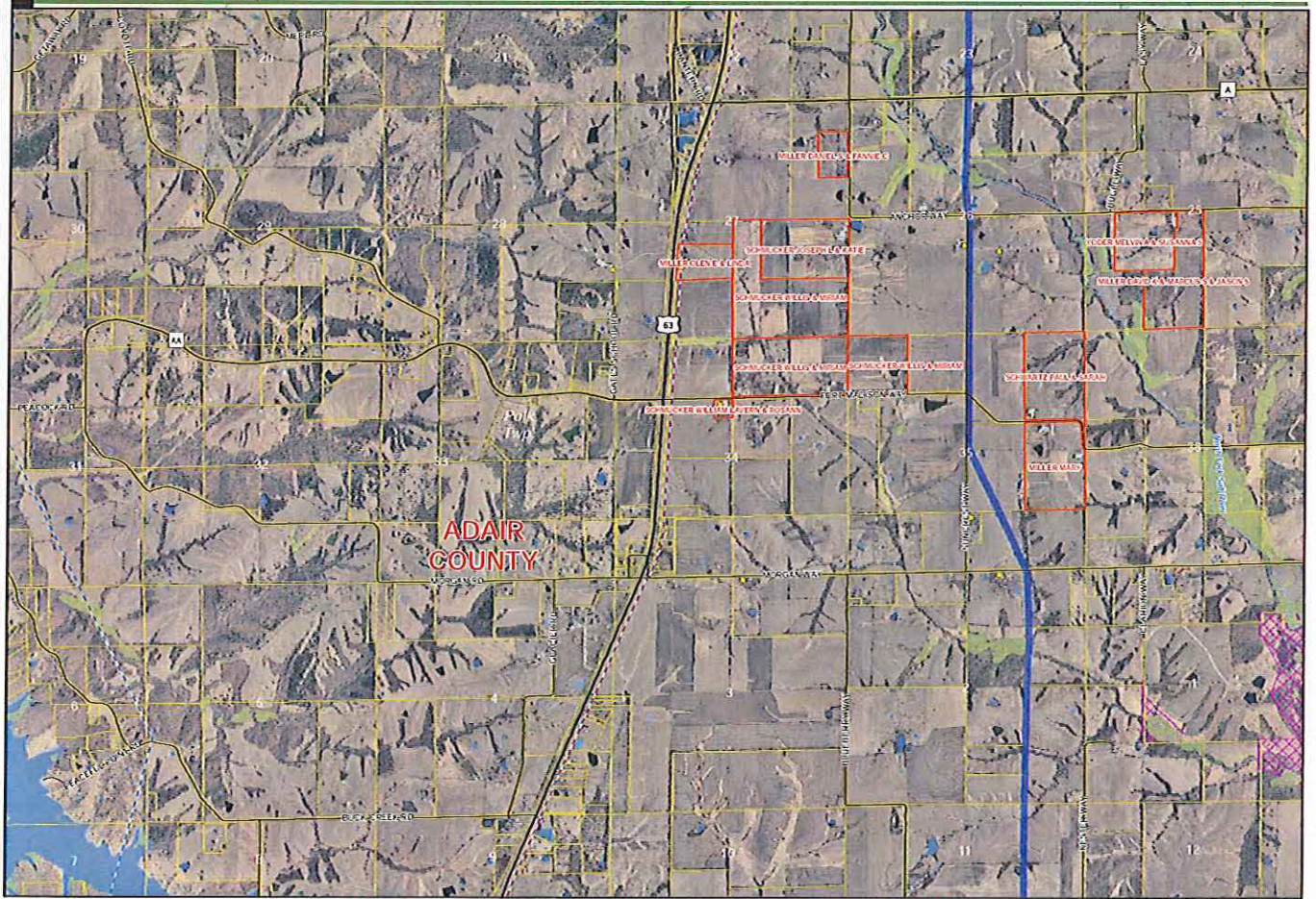
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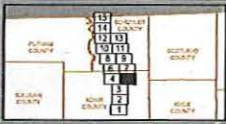
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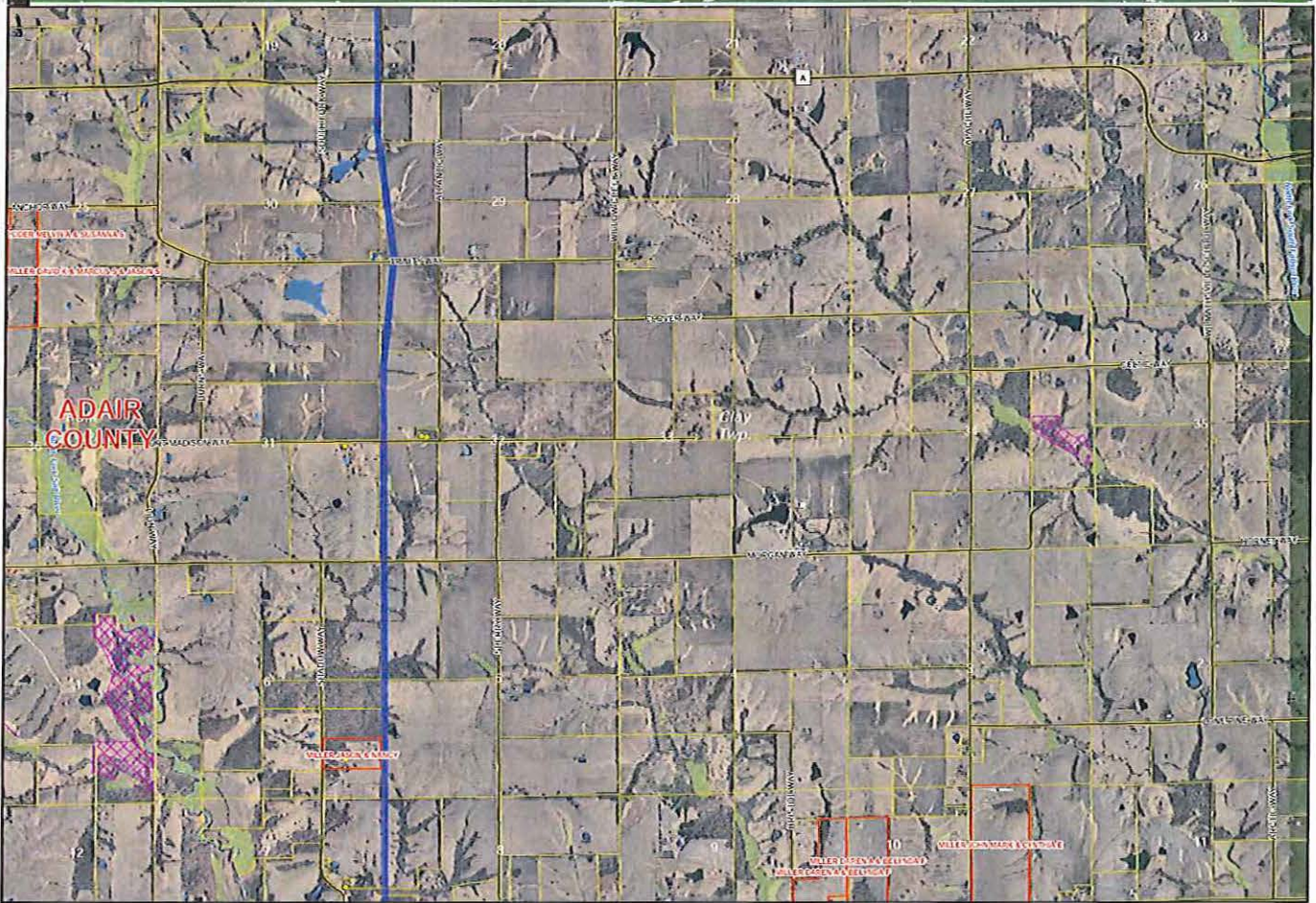
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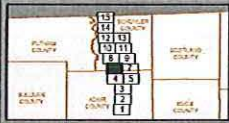
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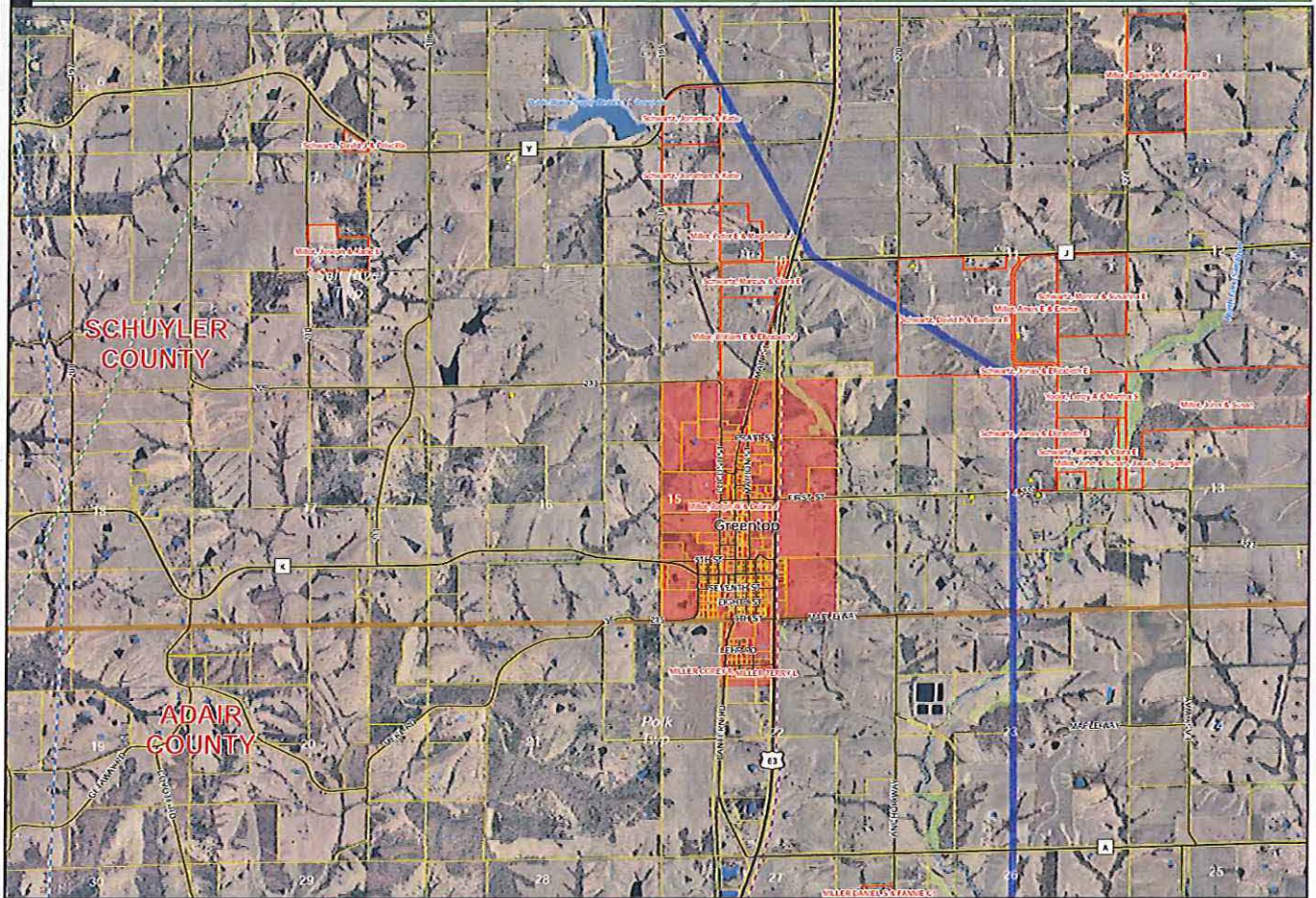
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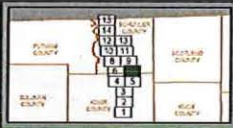
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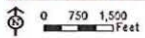
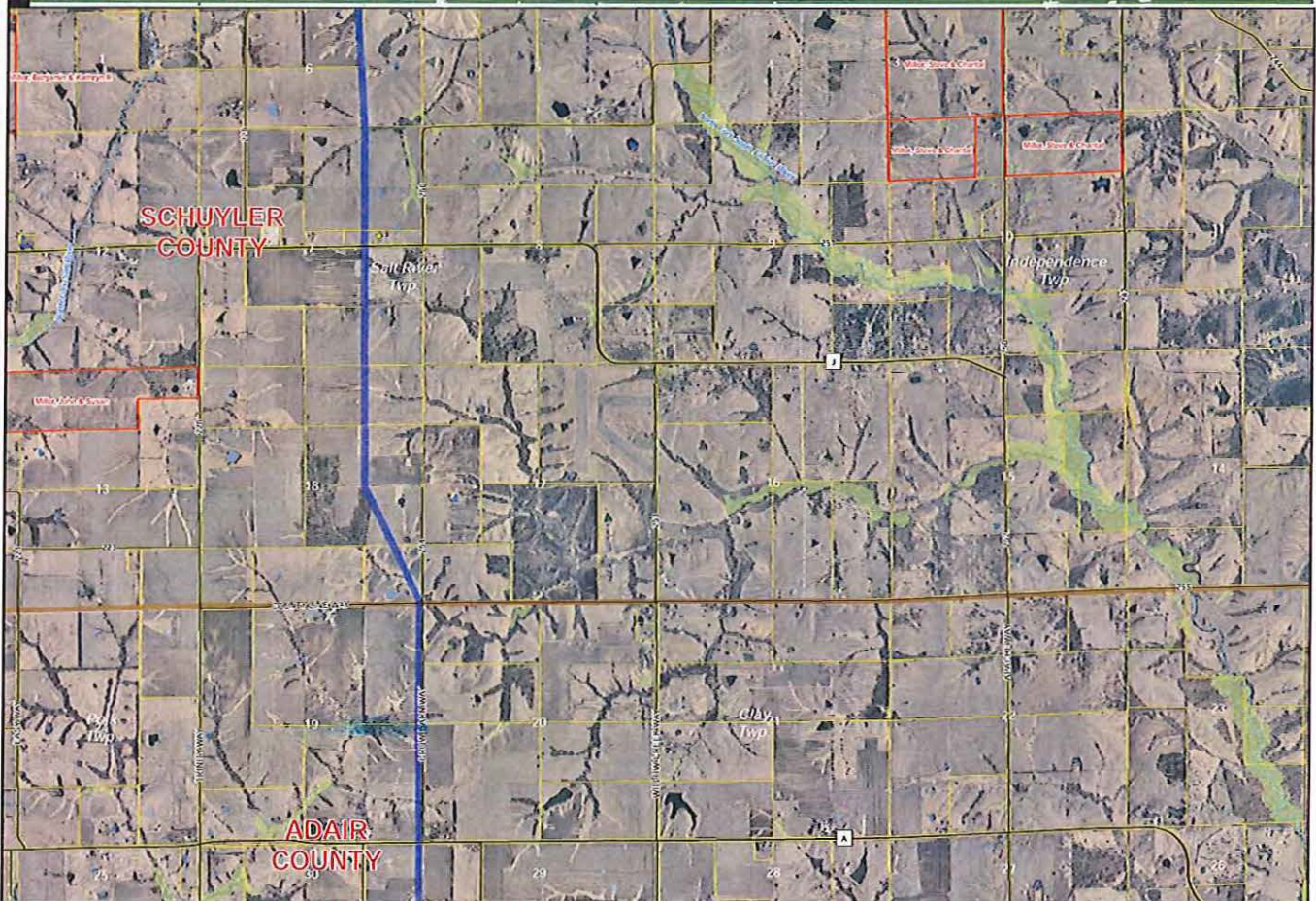
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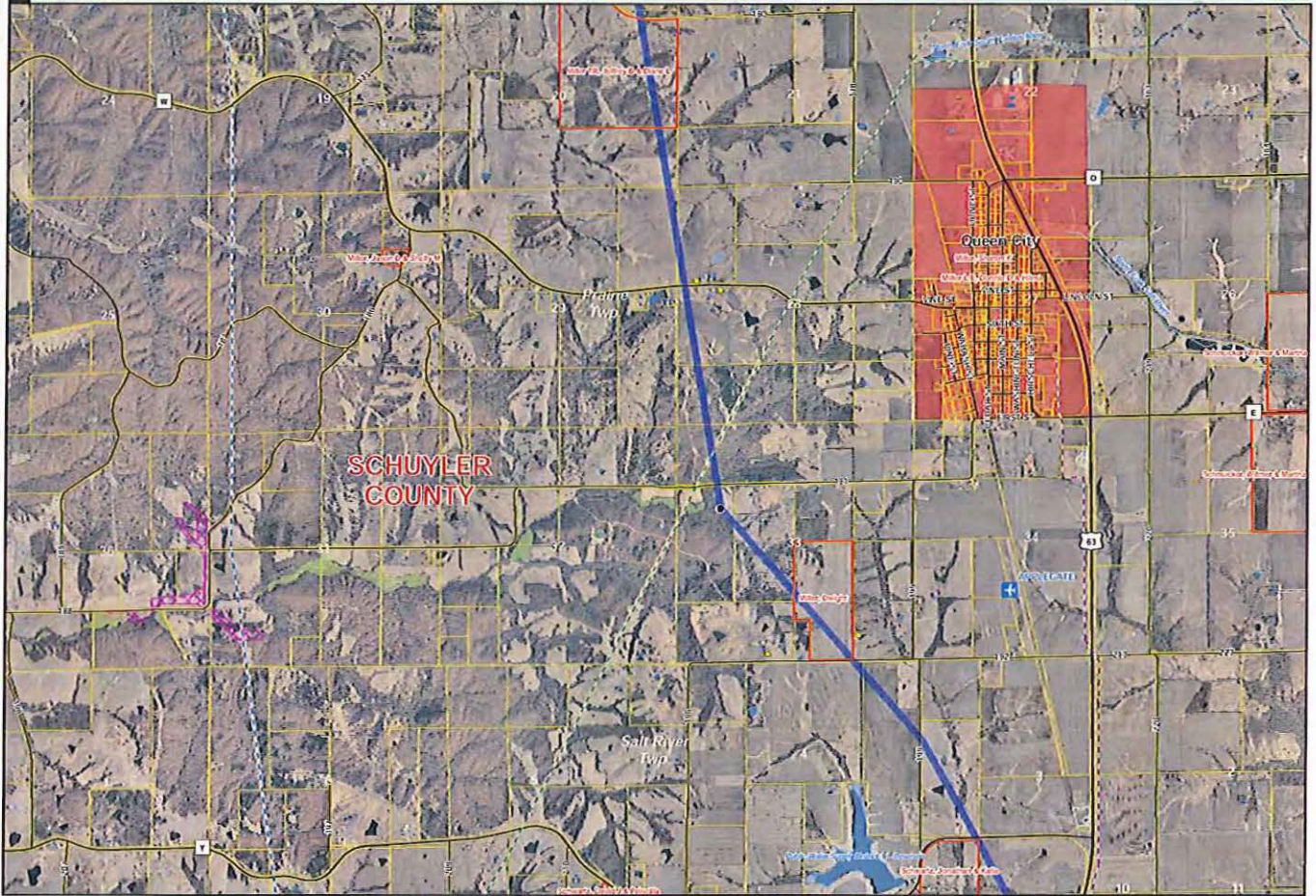
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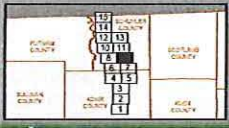
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0 750 1,500 Feet

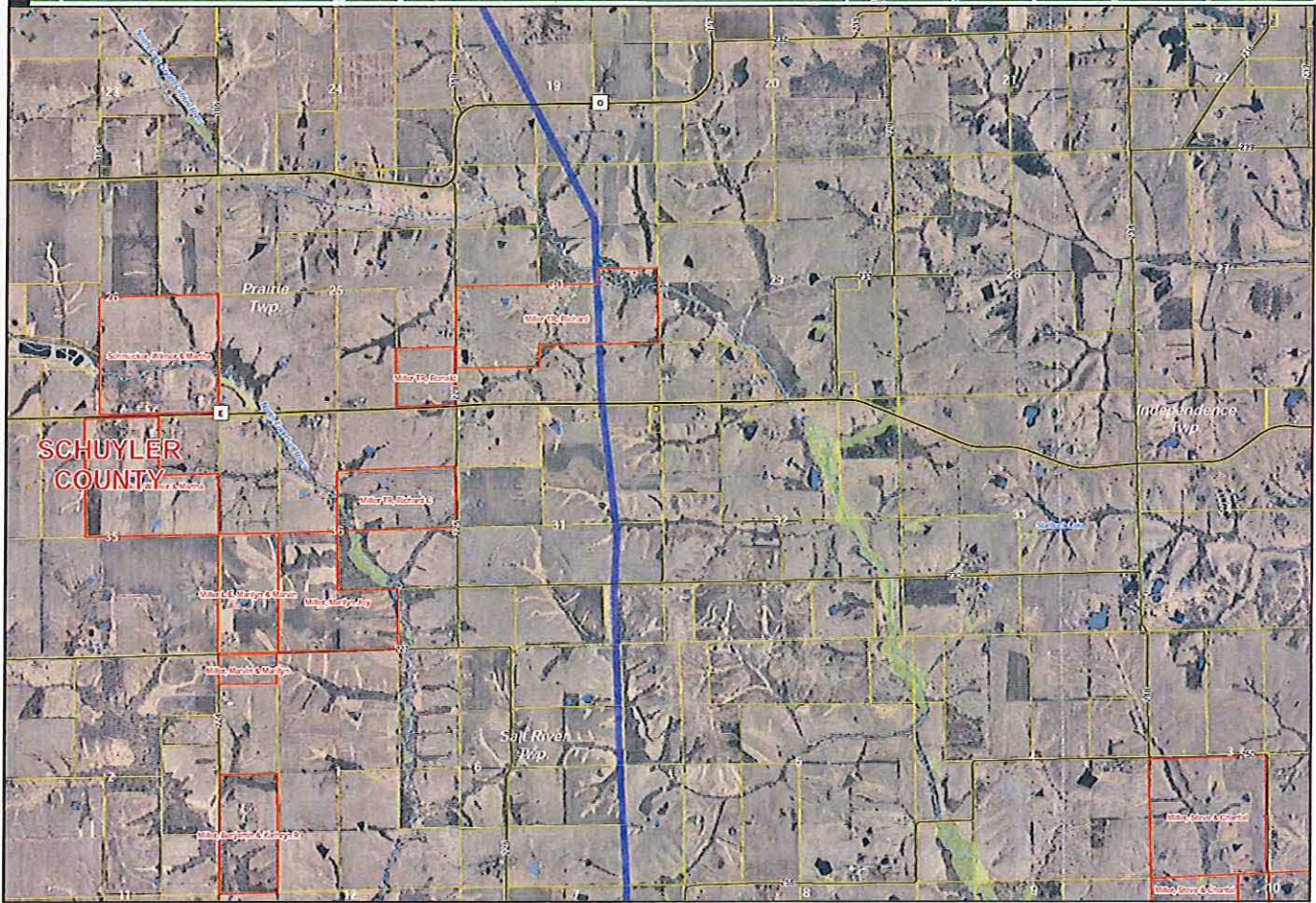
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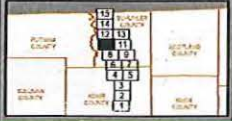
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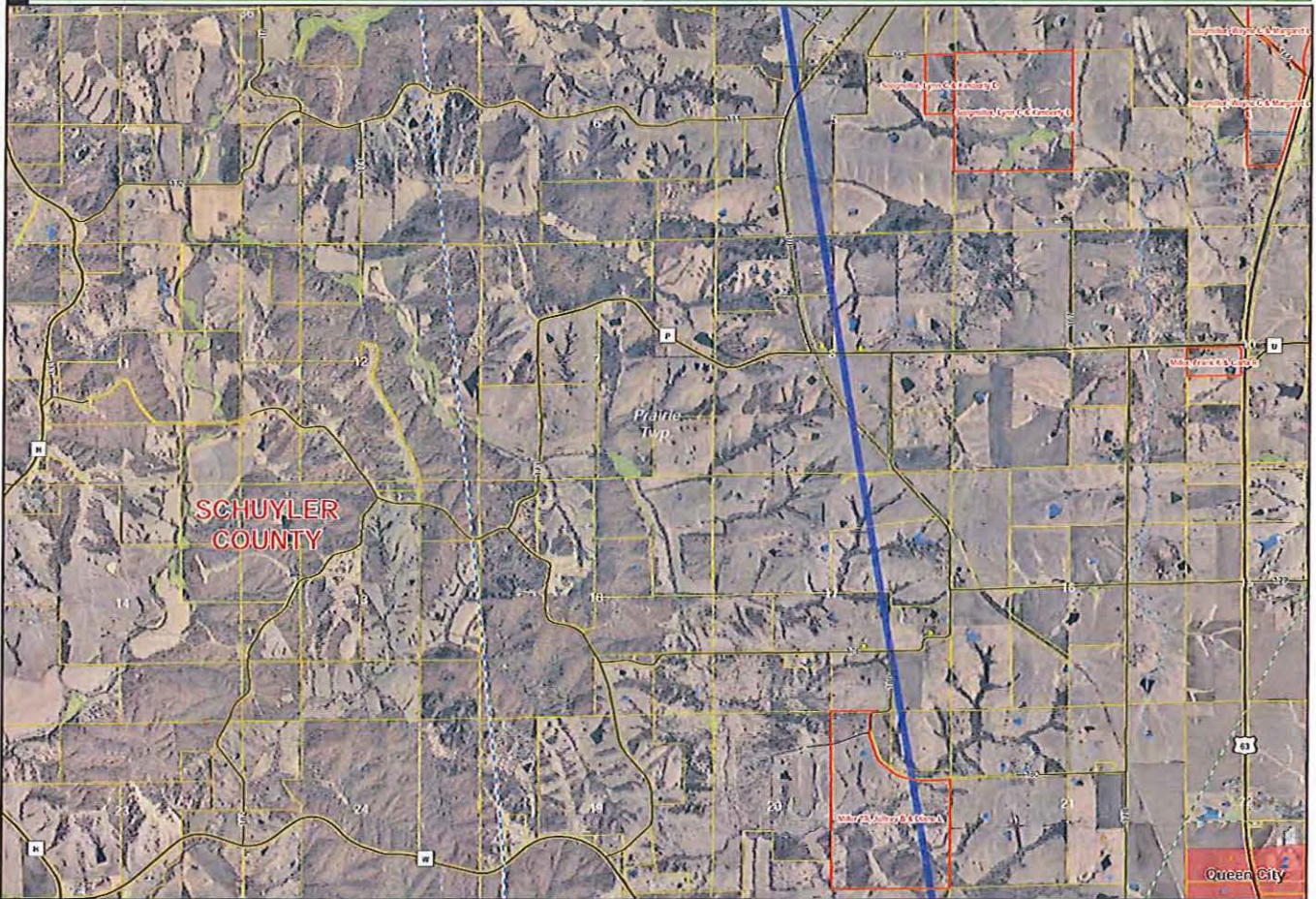
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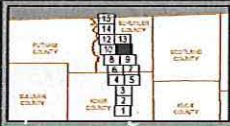
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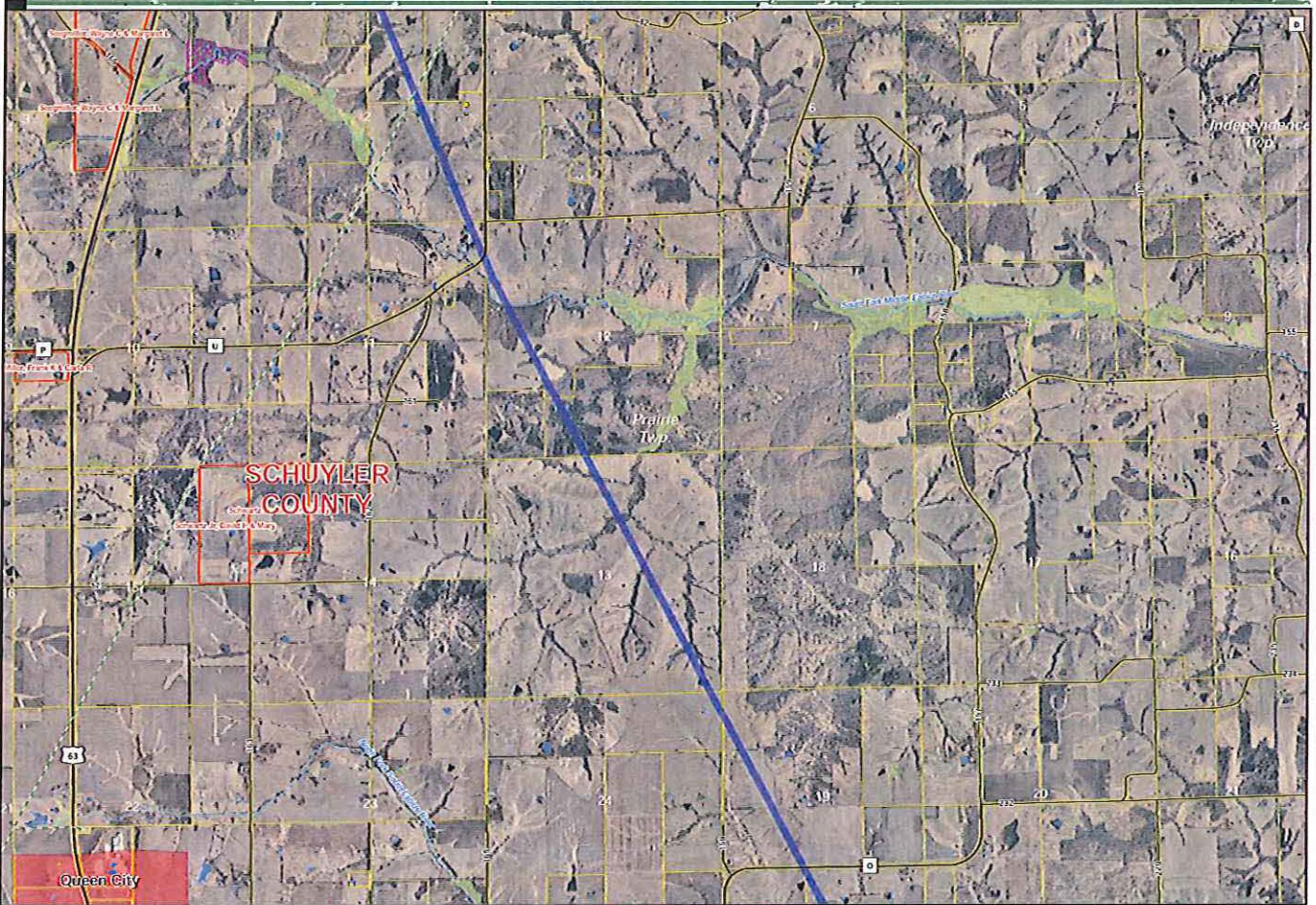
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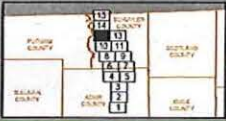
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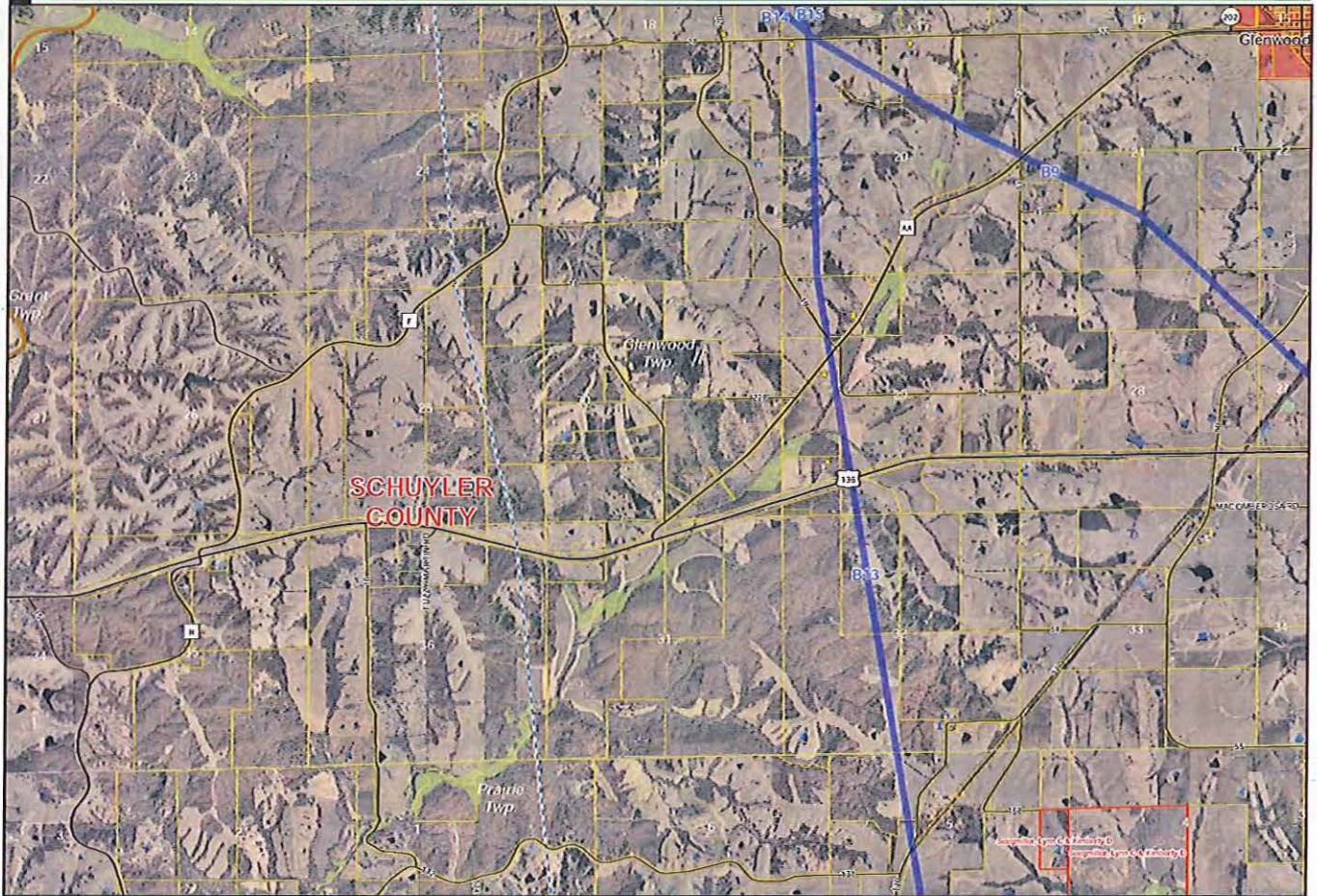
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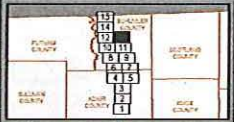


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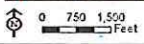






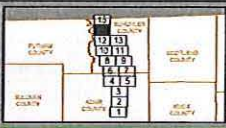
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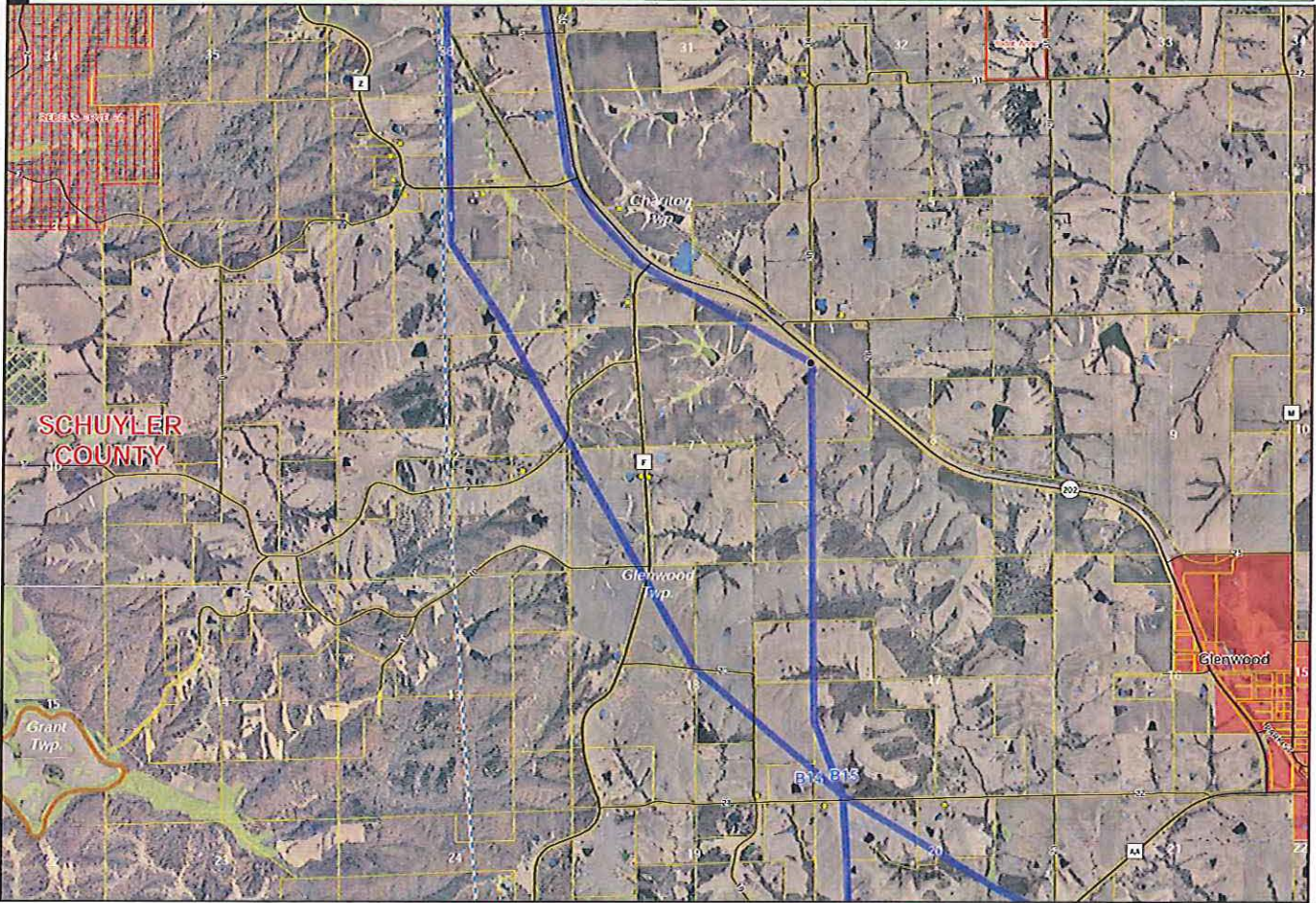
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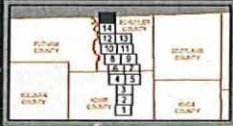
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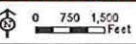
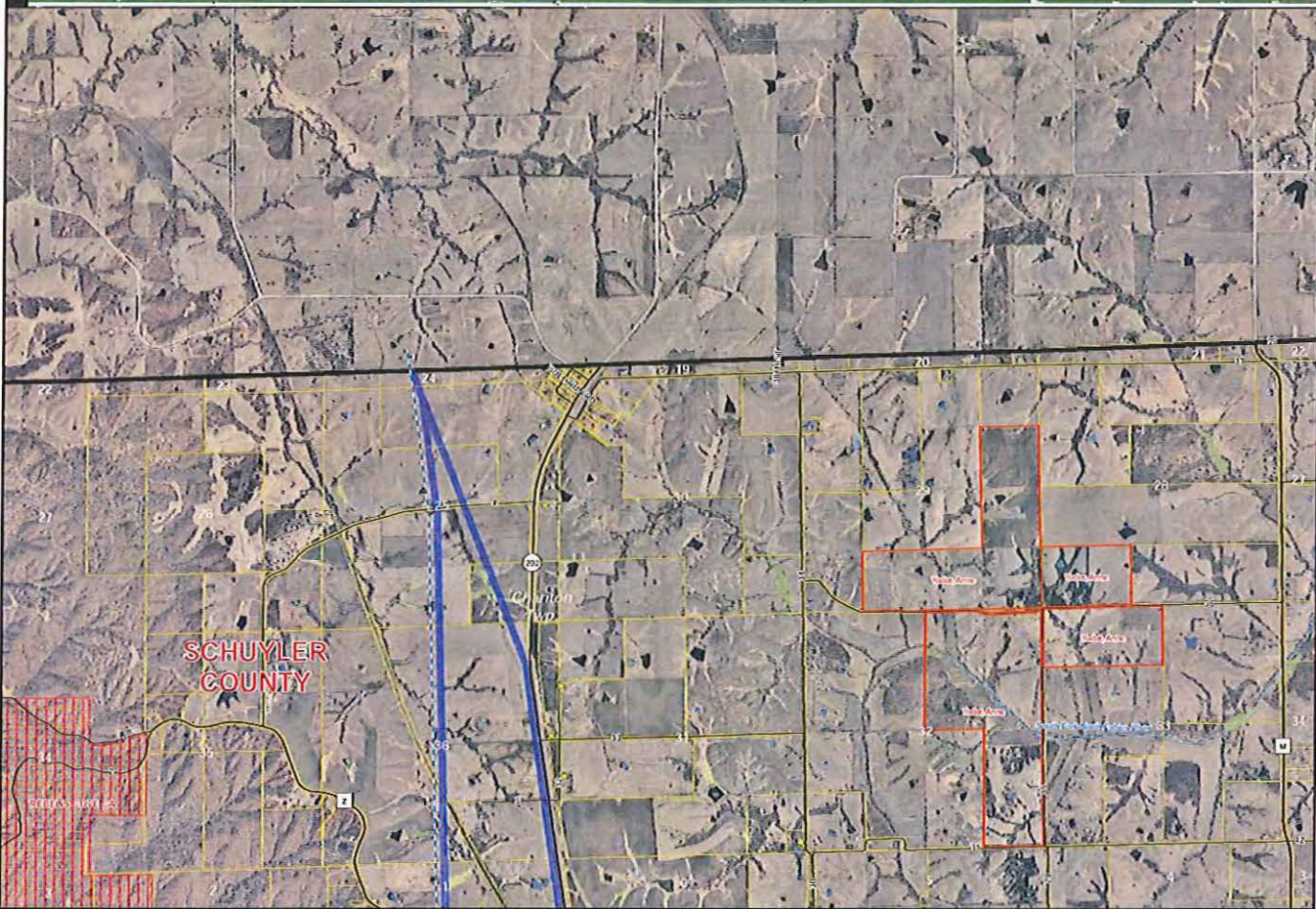
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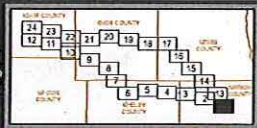
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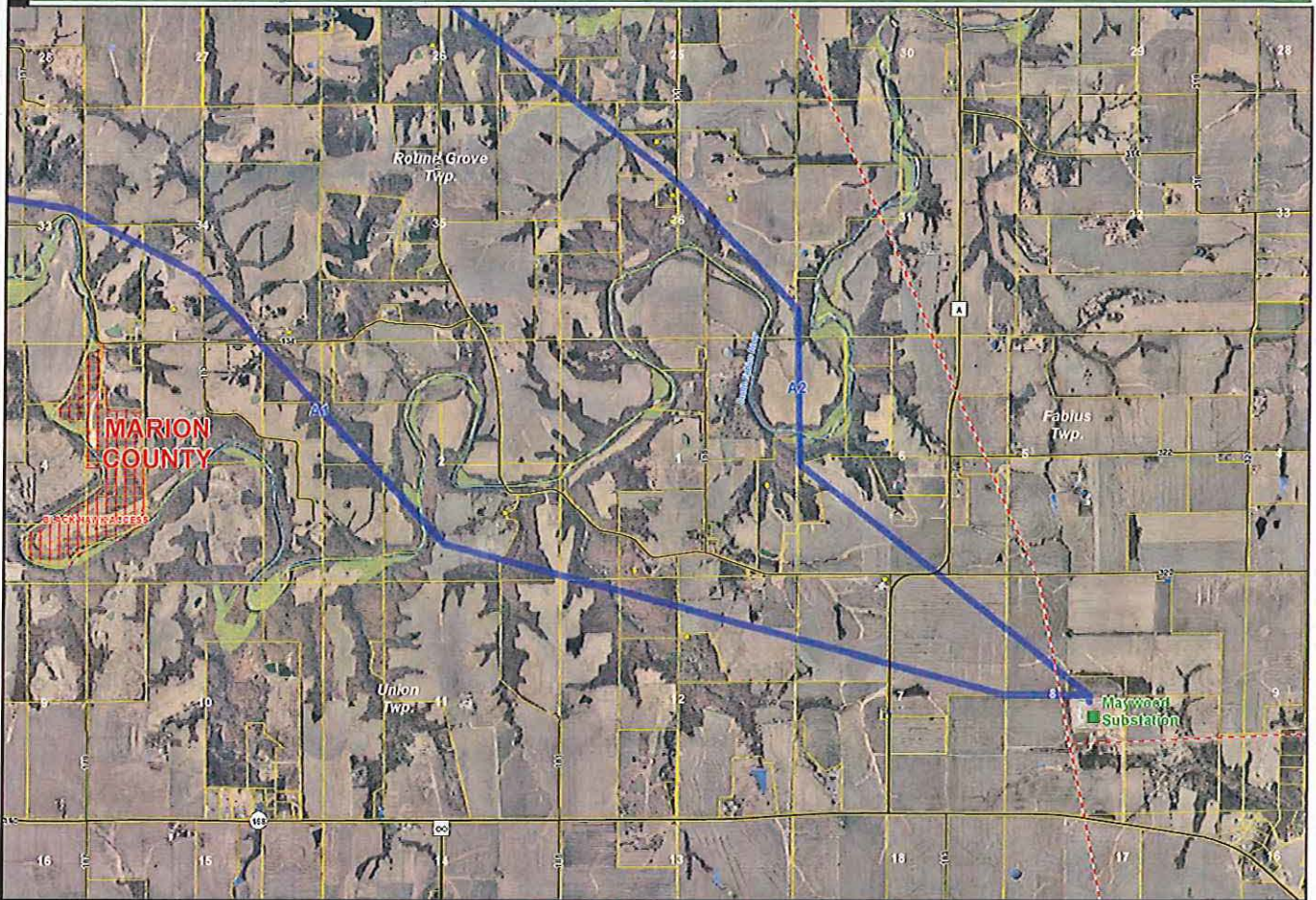
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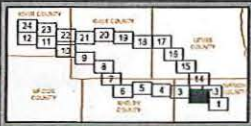
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## Reduced Routes – Maywood to Zachary



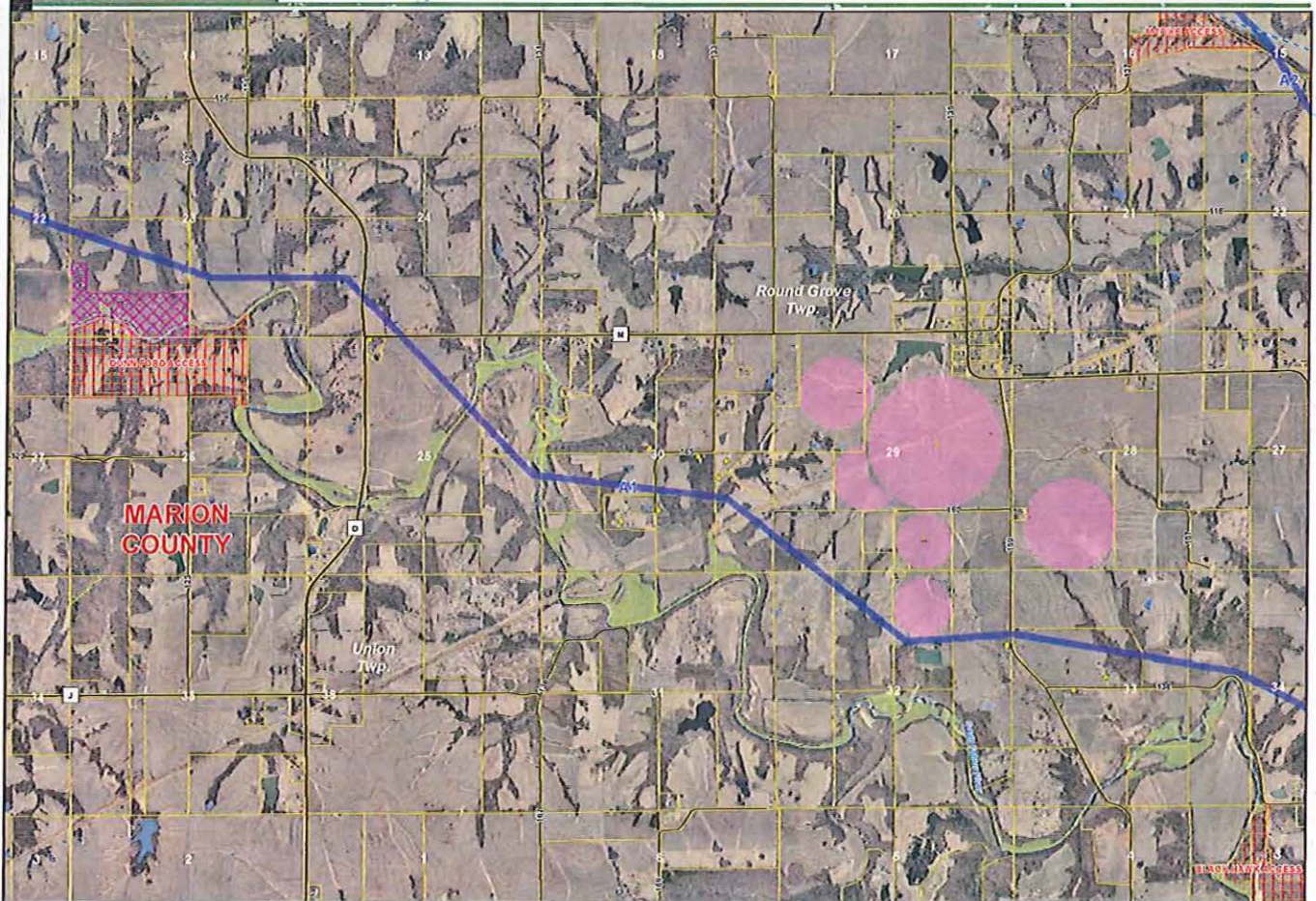
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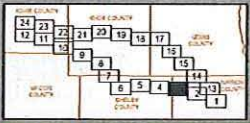
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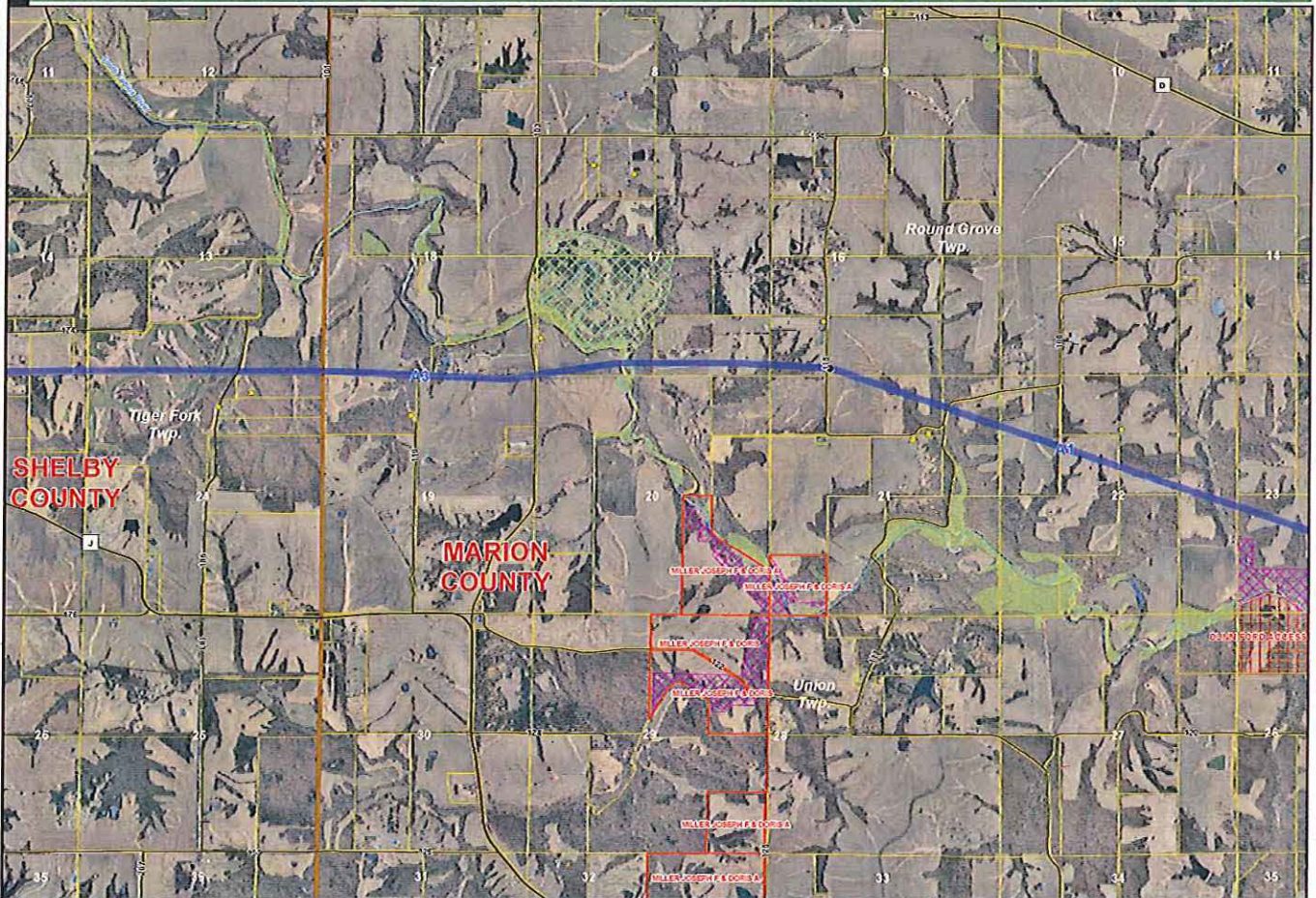
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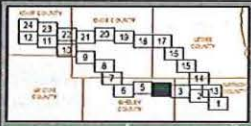
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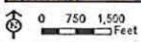
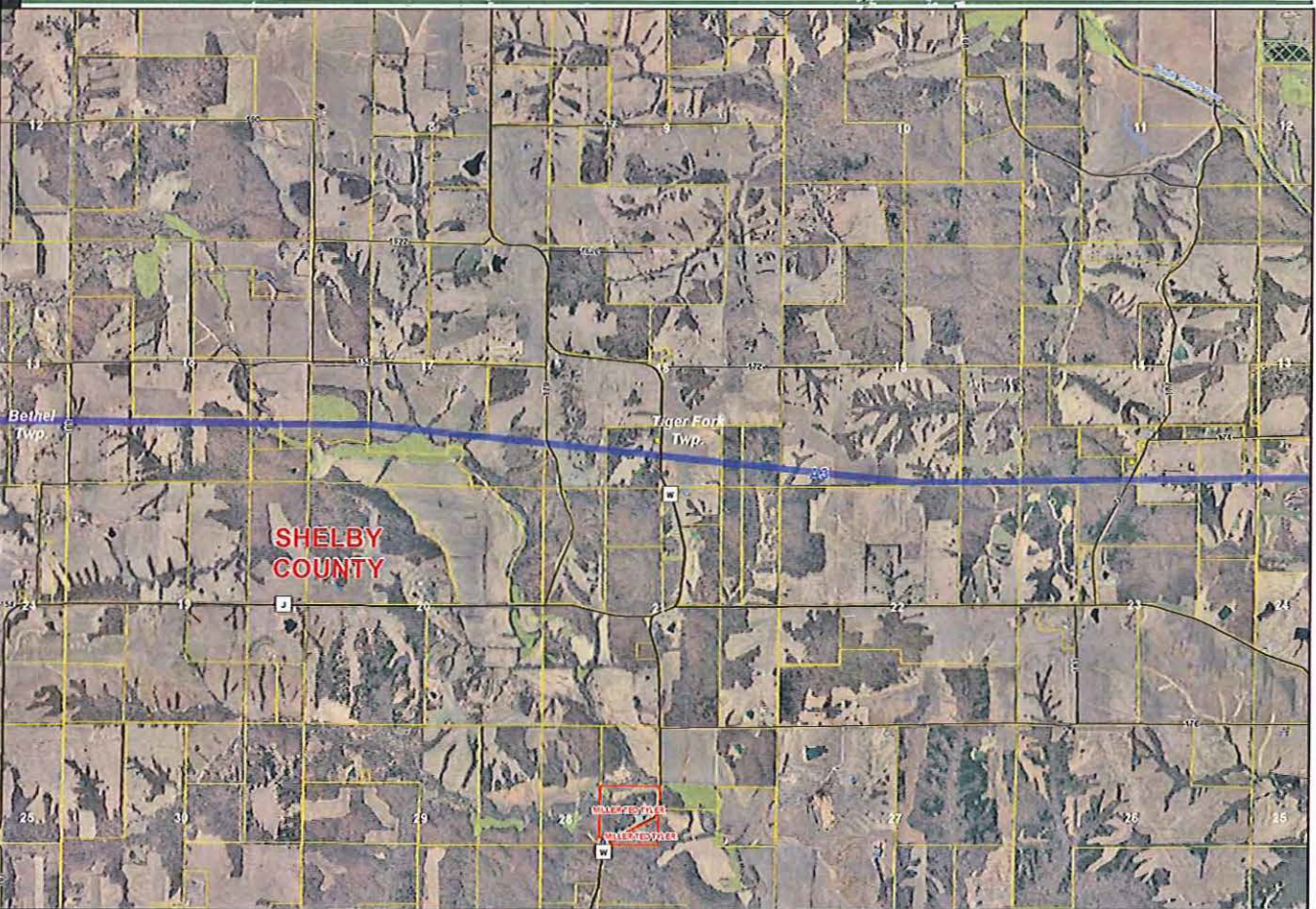
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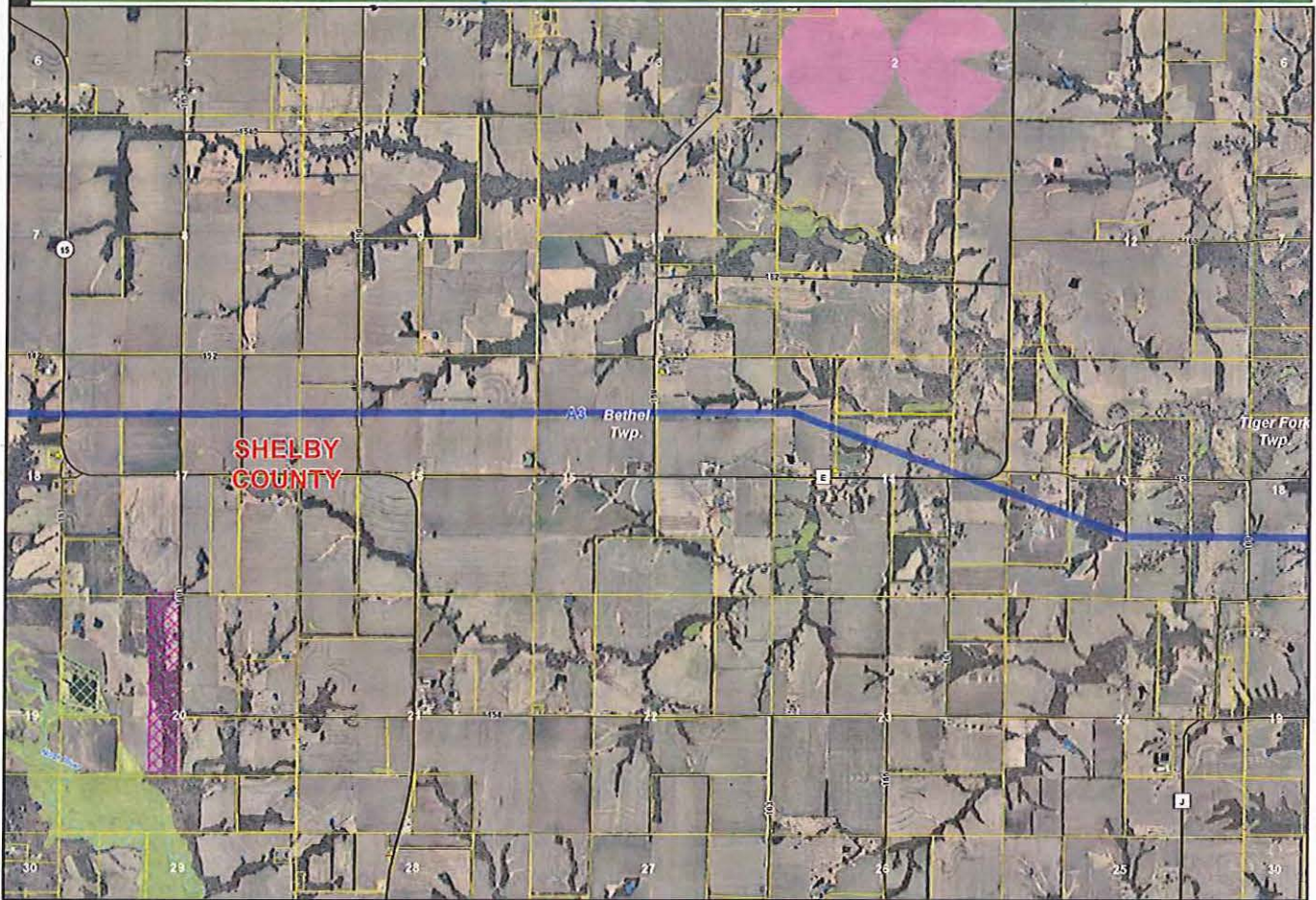
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## Reduced Routes – Maywood to Zachary



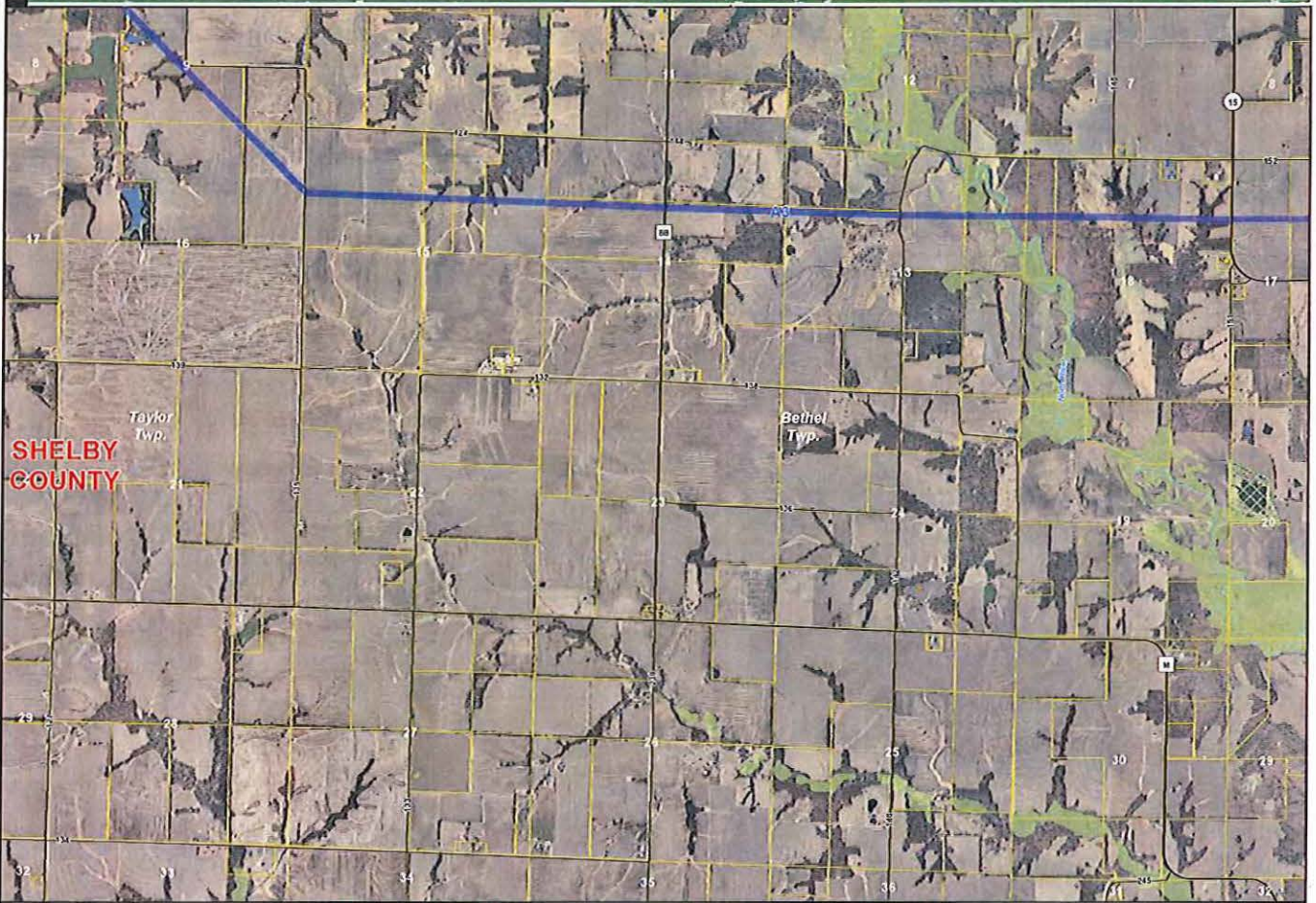
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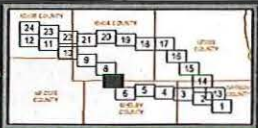
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## Reduced Routes – Maywood to Zachary



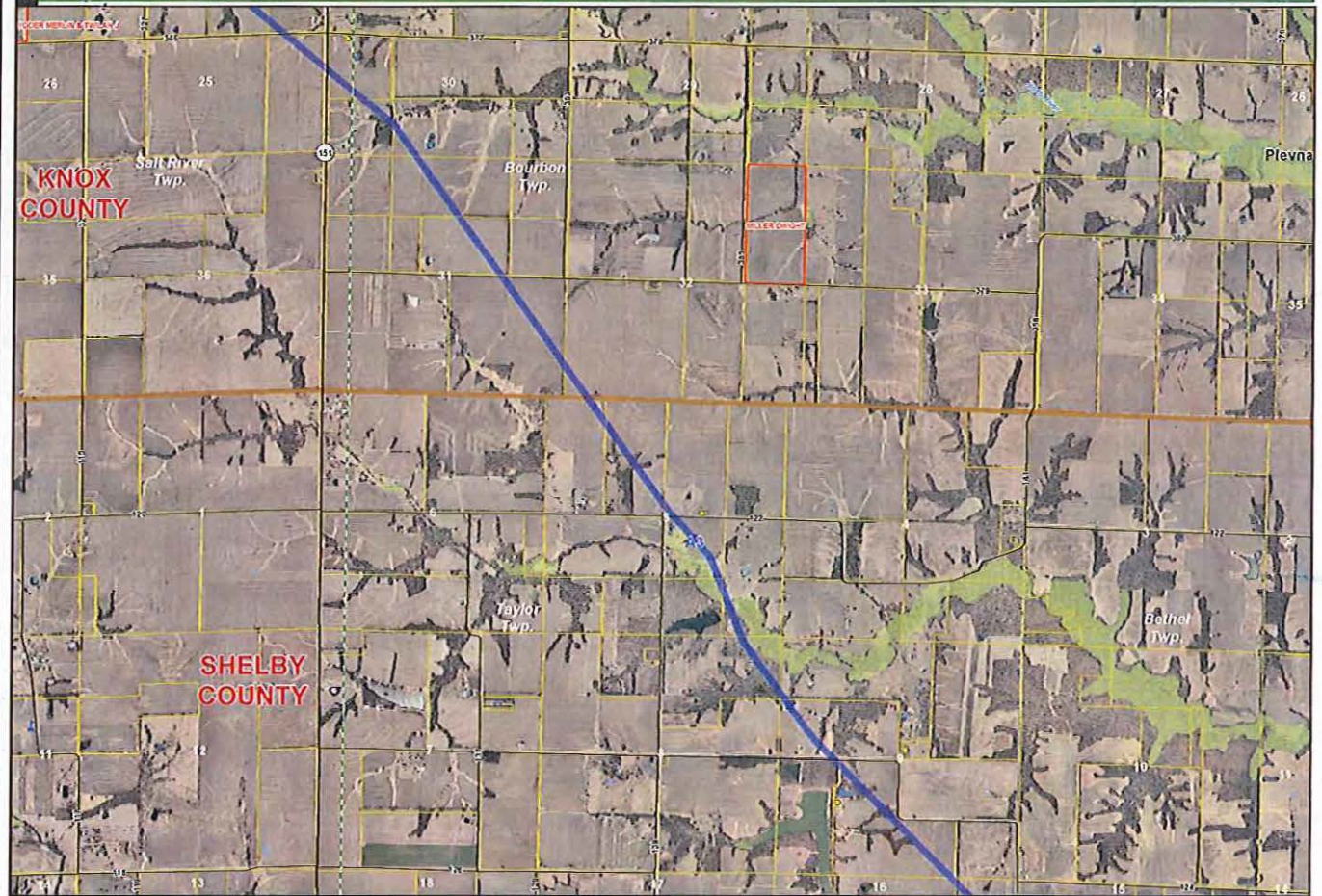
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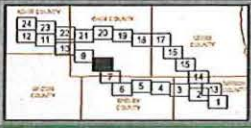
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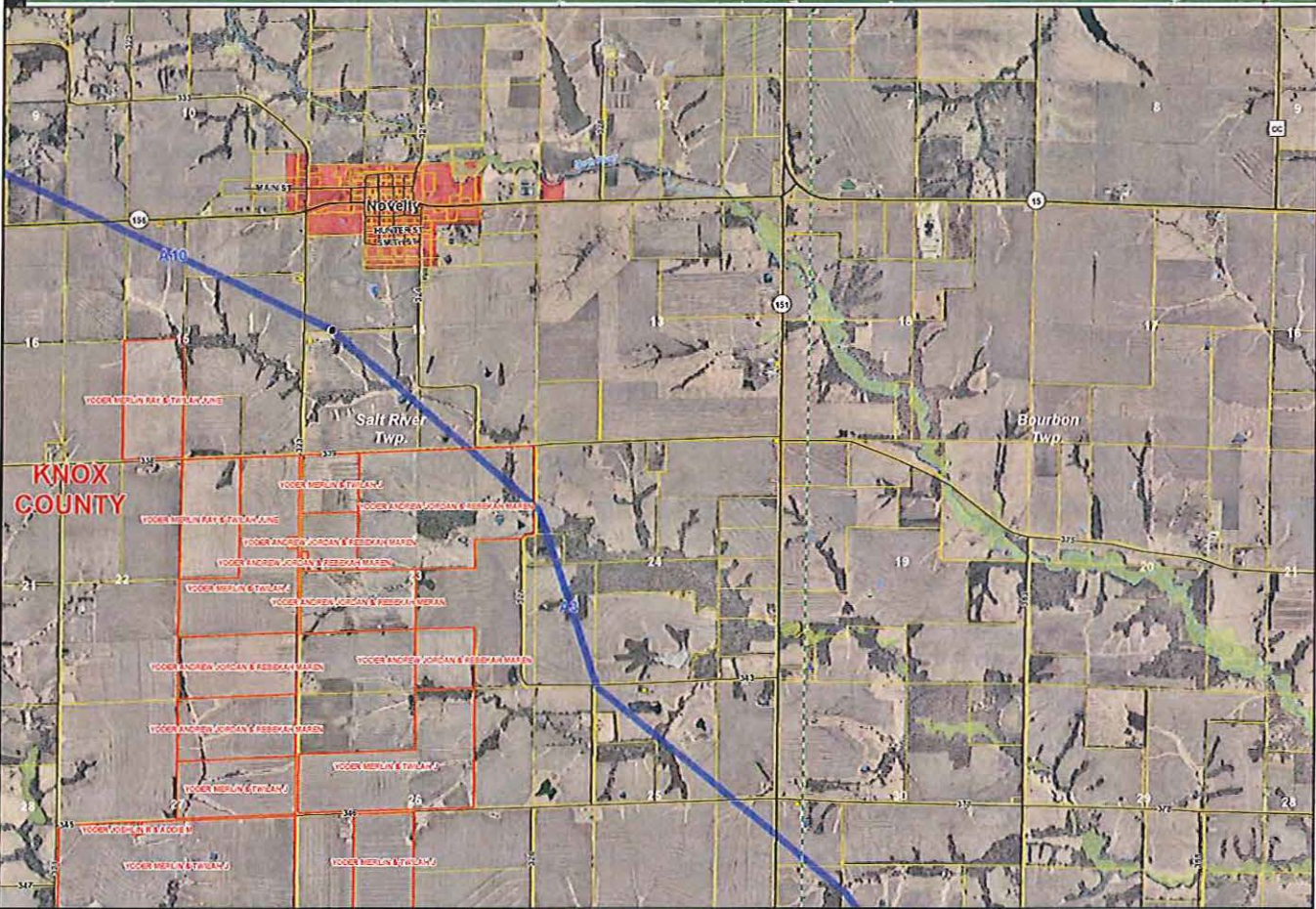
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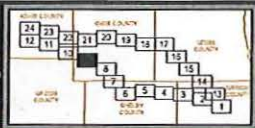
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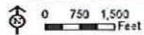
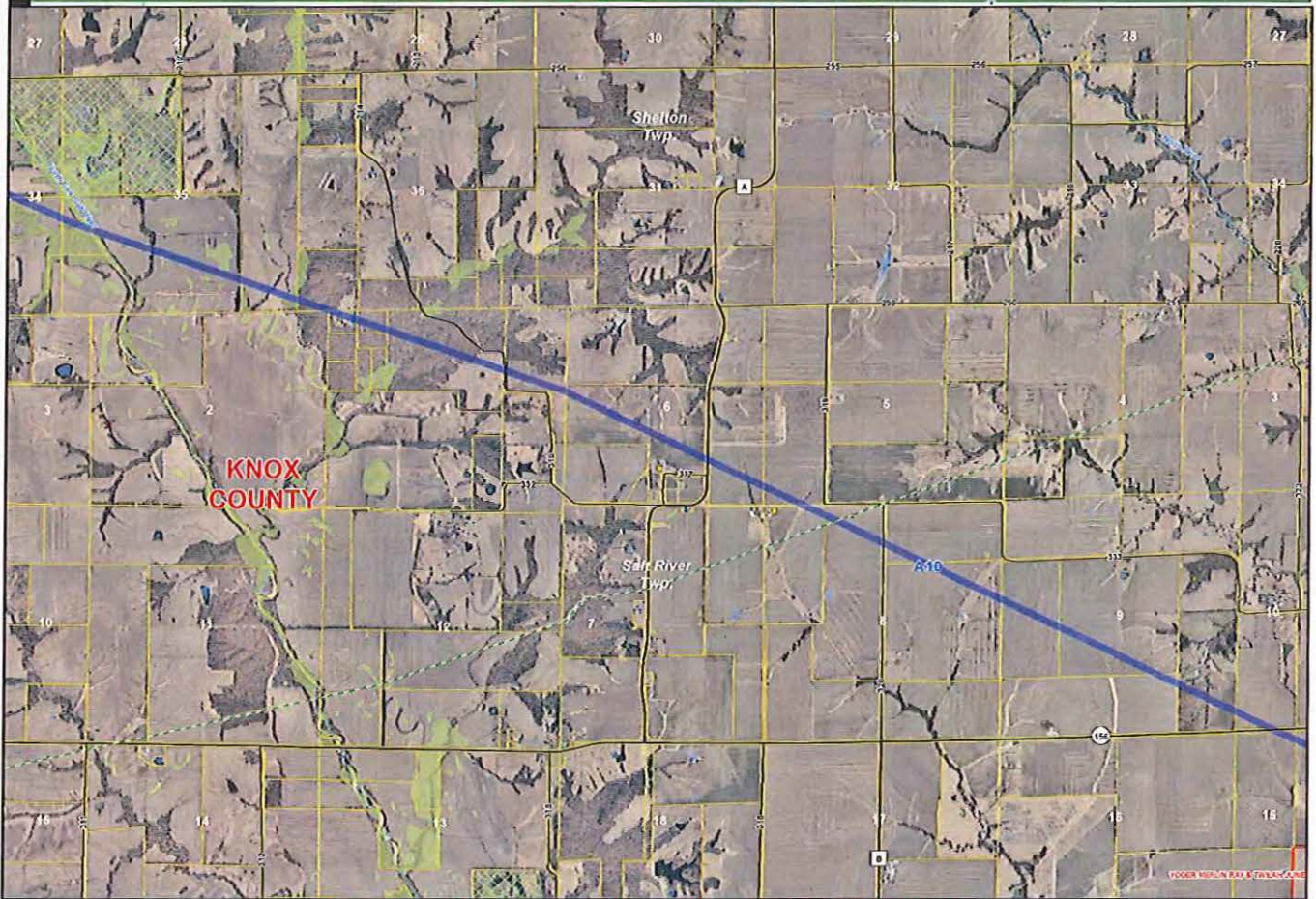
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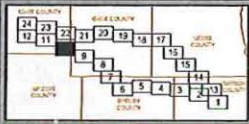
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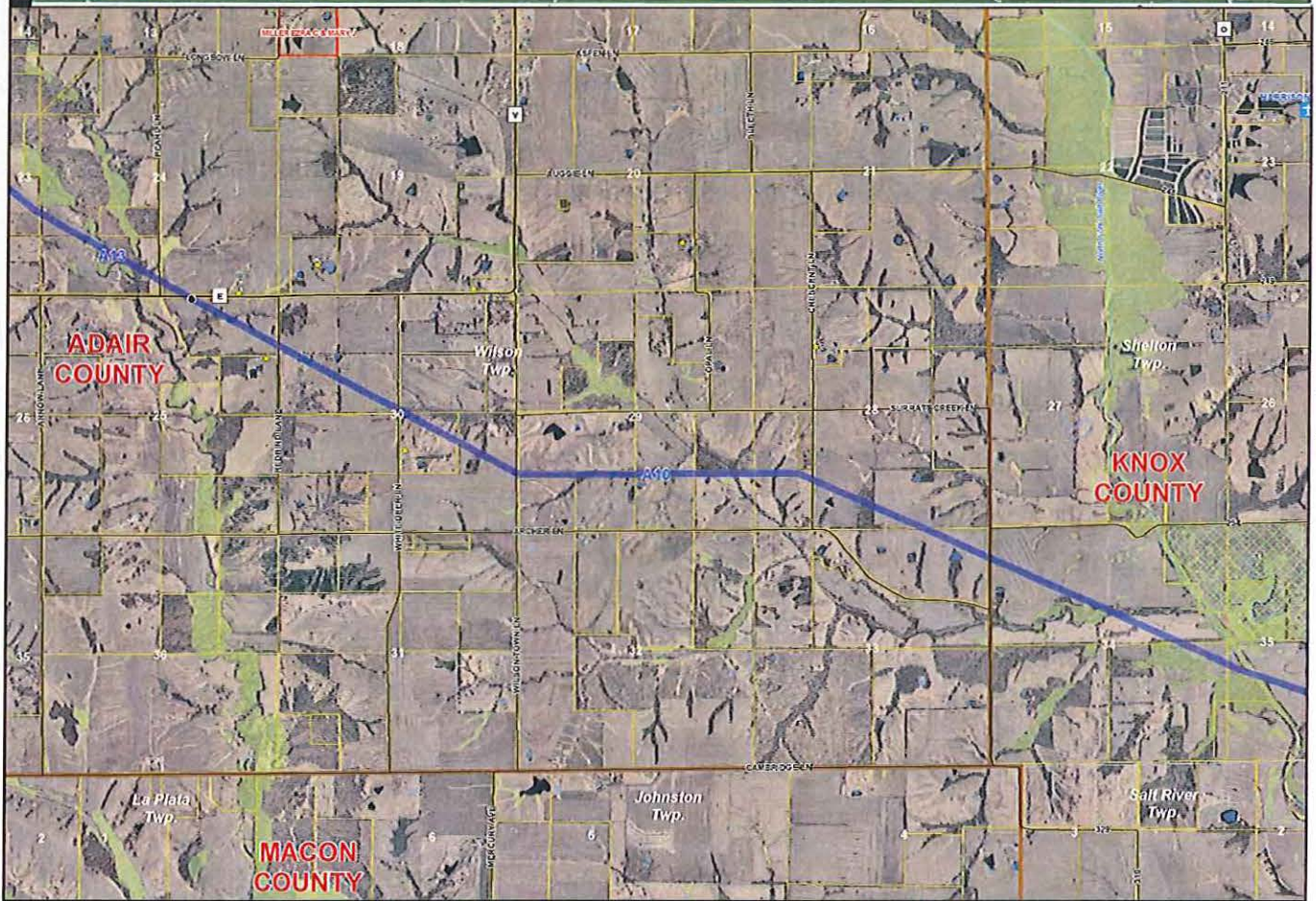
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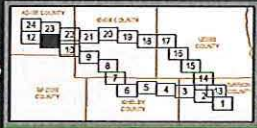
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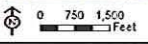
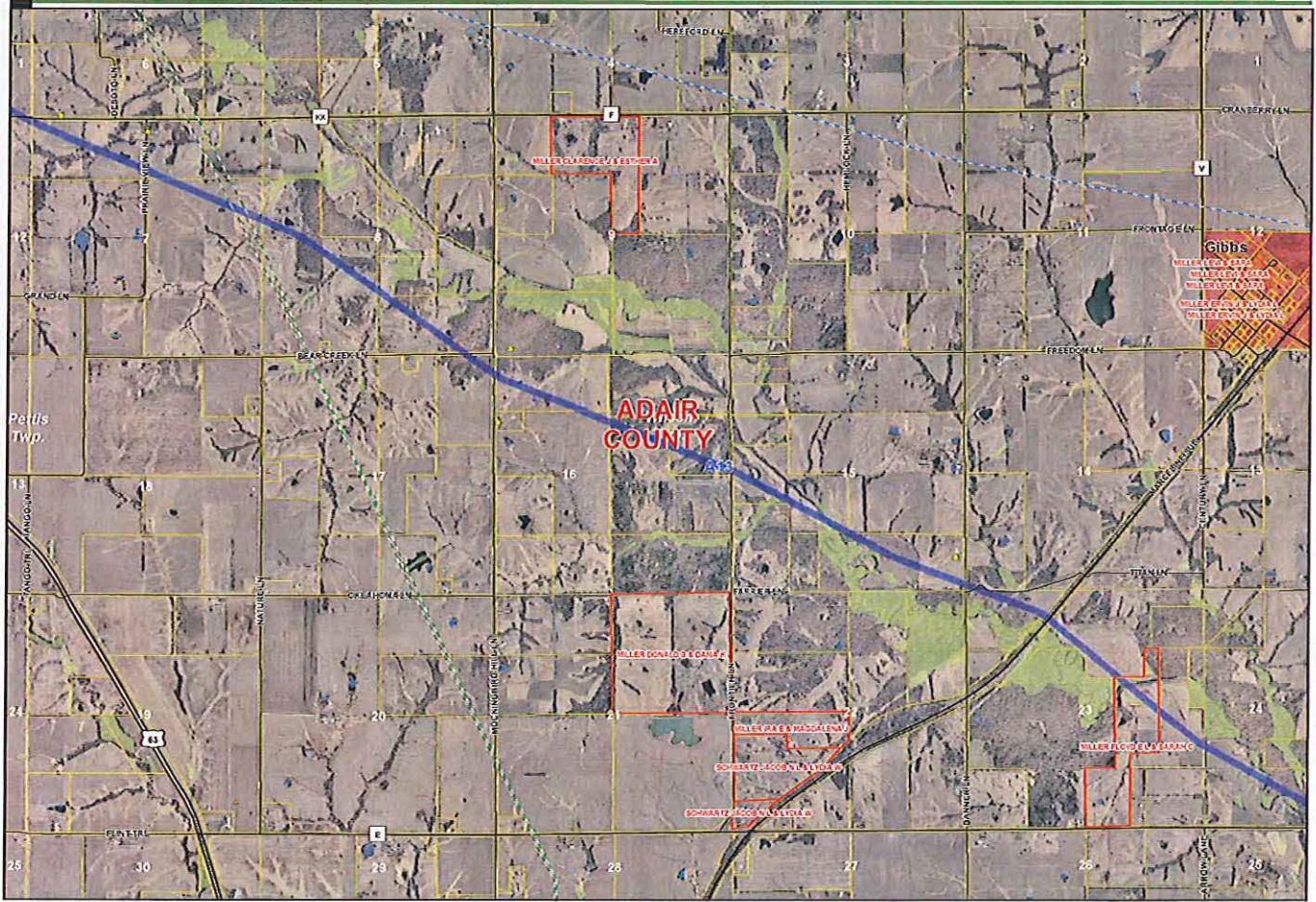
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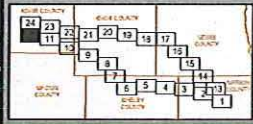
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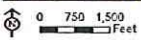
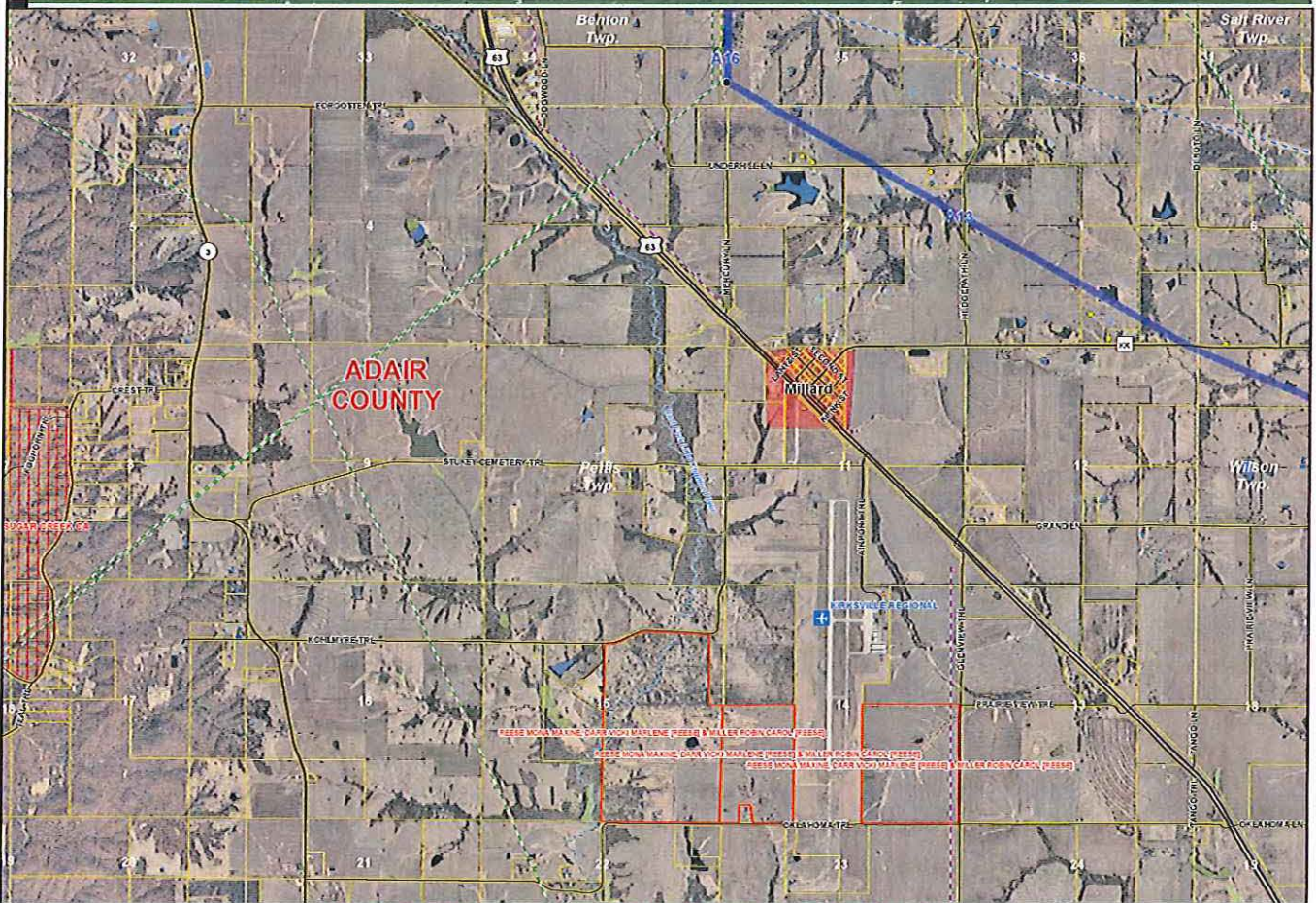
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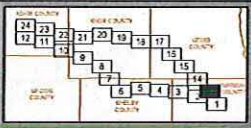
# Mark Twain Transmission Project

## Reduced Routes – Maywood to Zachary



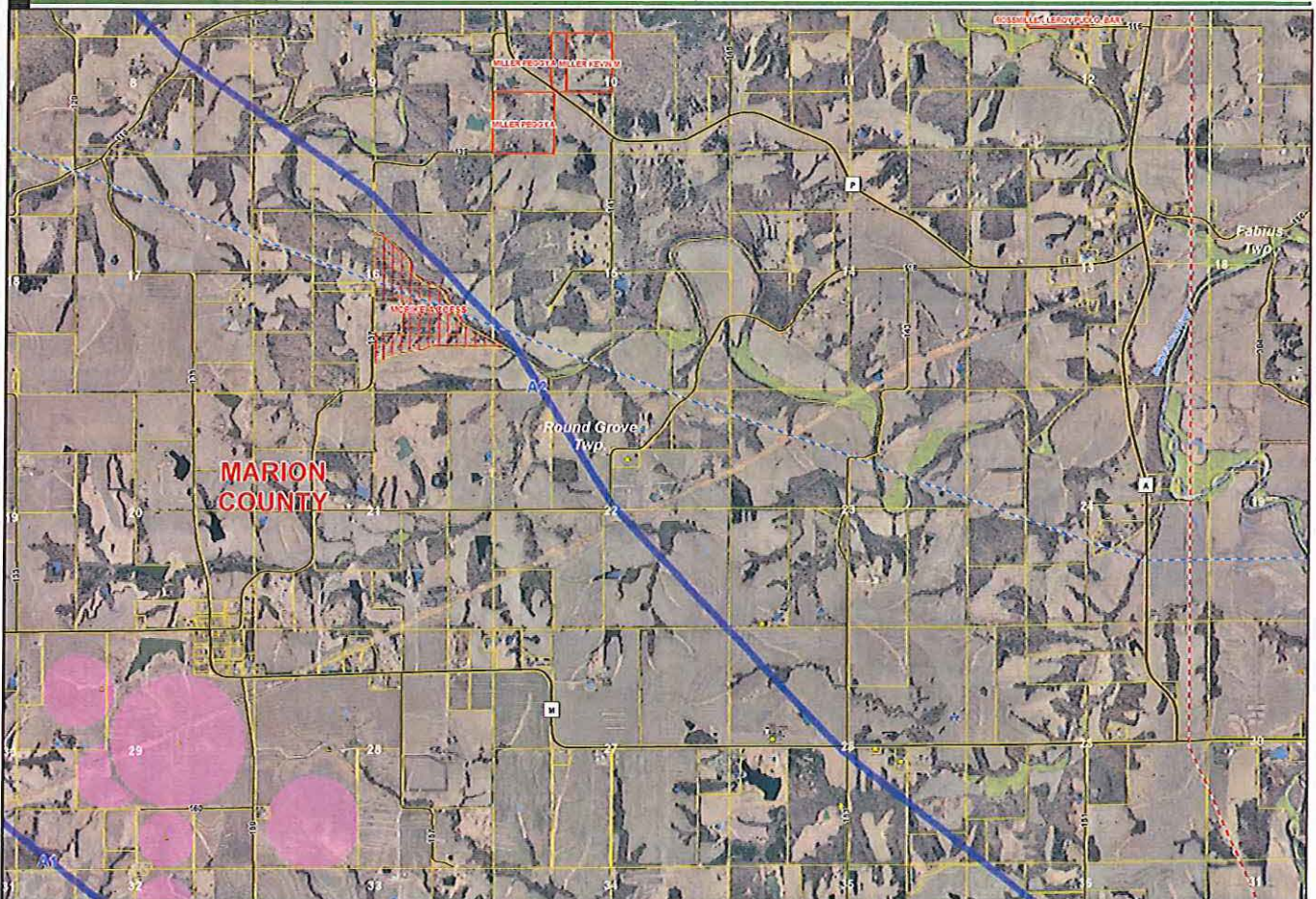
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# Mark Twain Transmission Project

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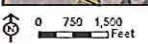
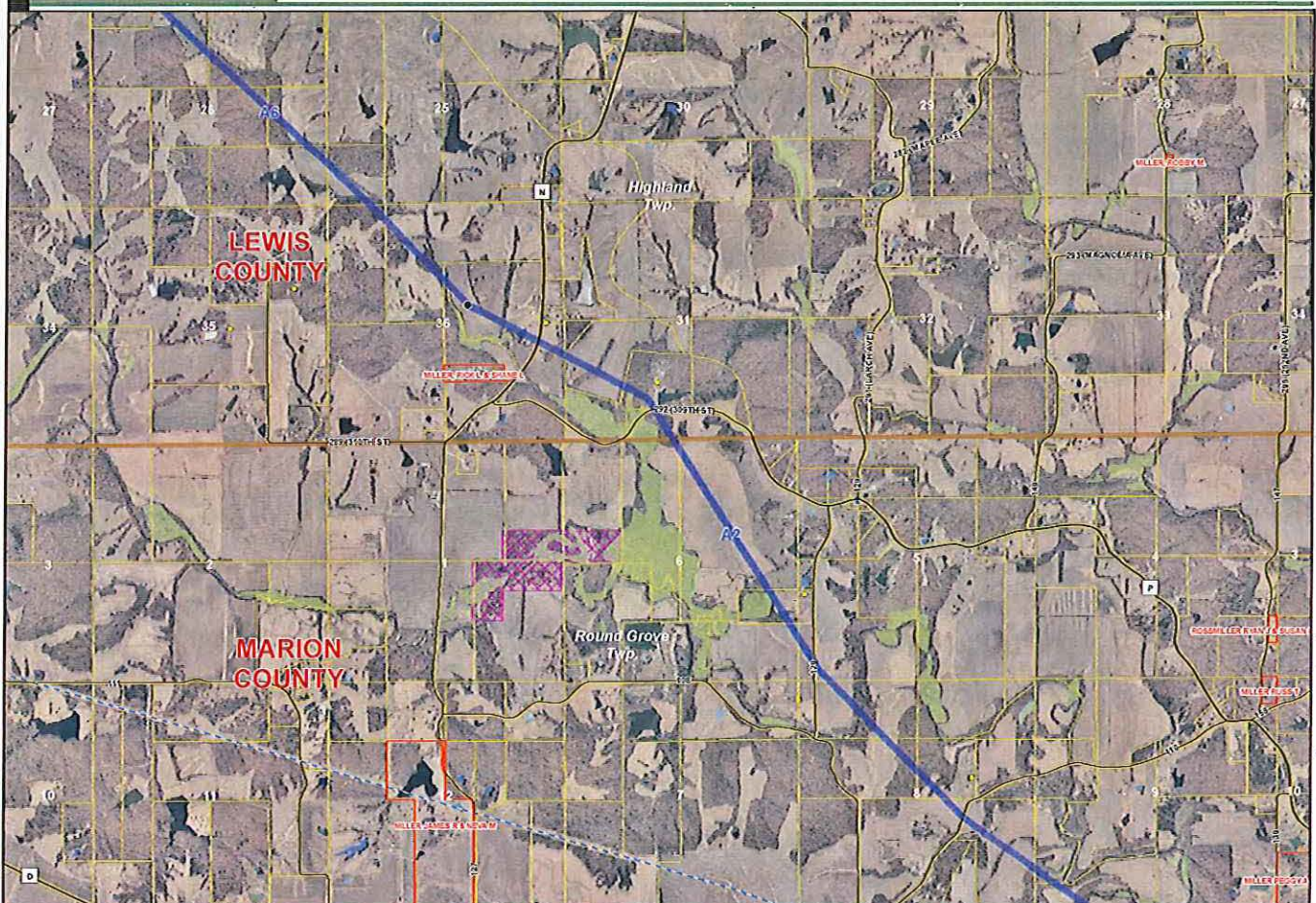


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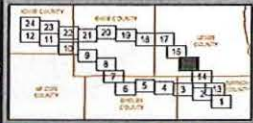


# Mark Twain Transmission Project Reduced Routes – Maywood to Zachary



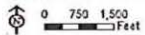
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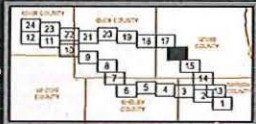
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## Reduced Routes – Maywood to Zachary



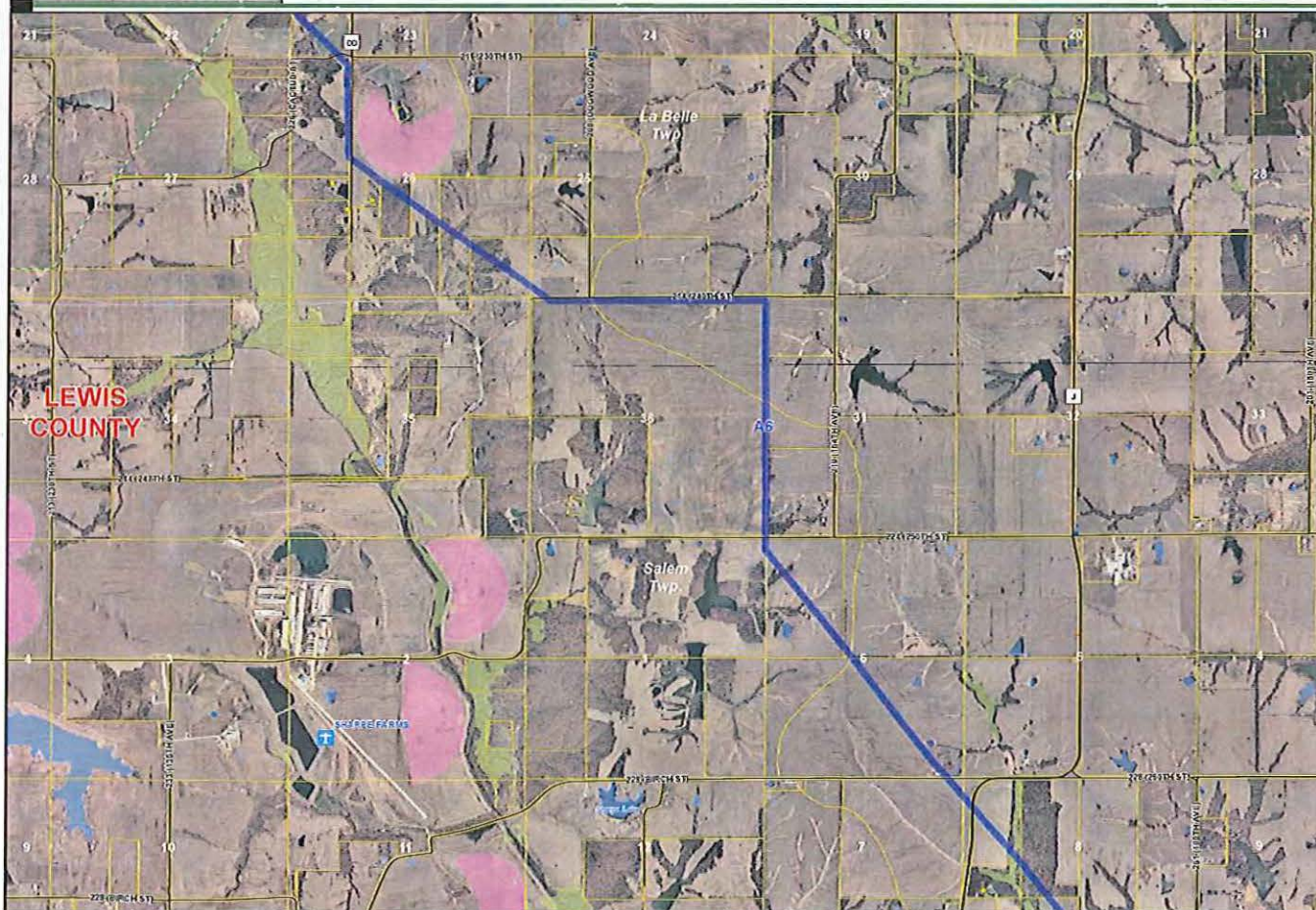
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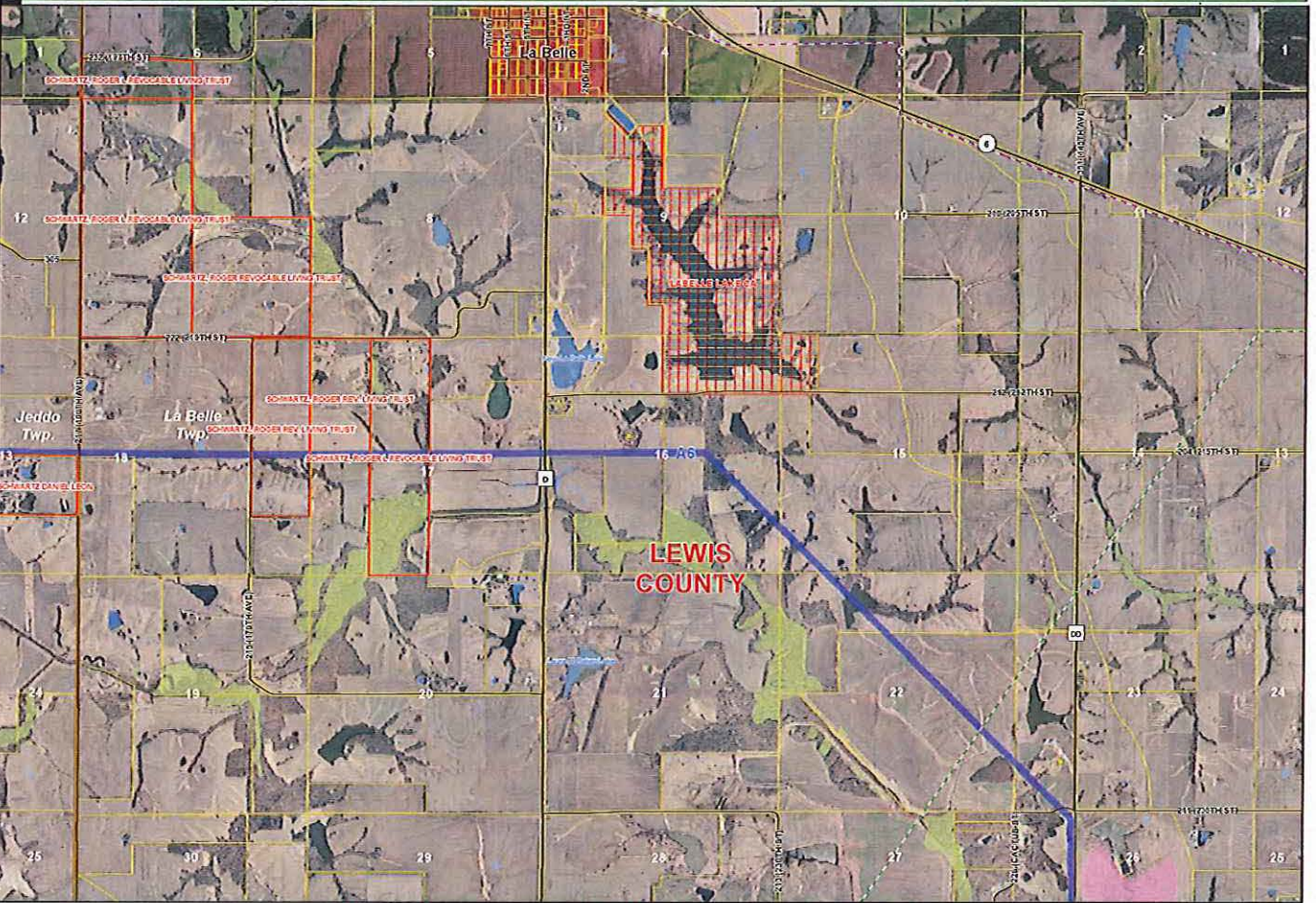
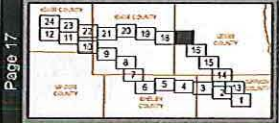


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# Mark Twain Transmission Project

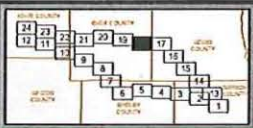
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0 750 1,500 Feet

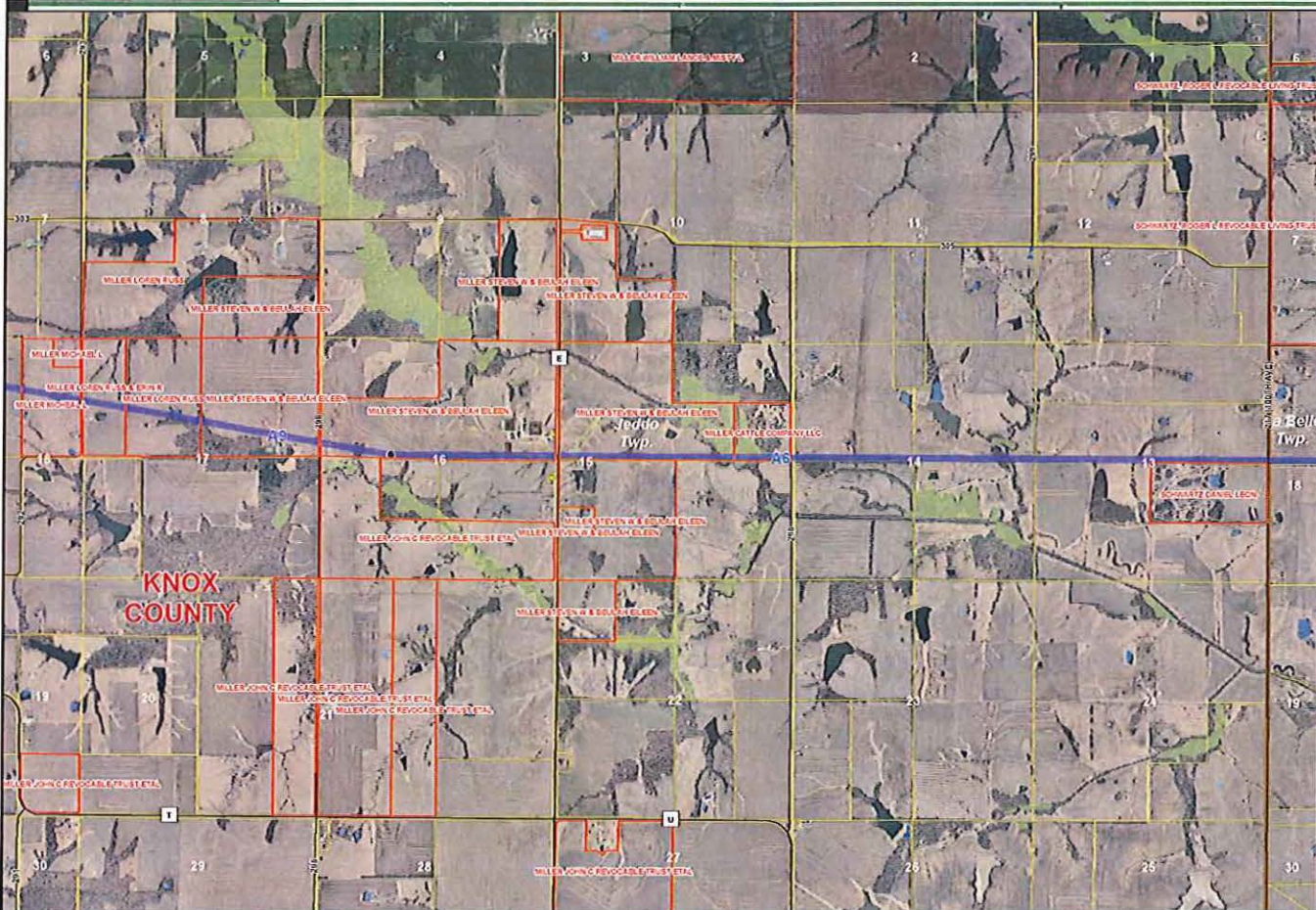
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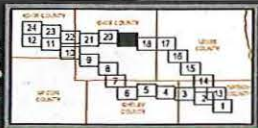
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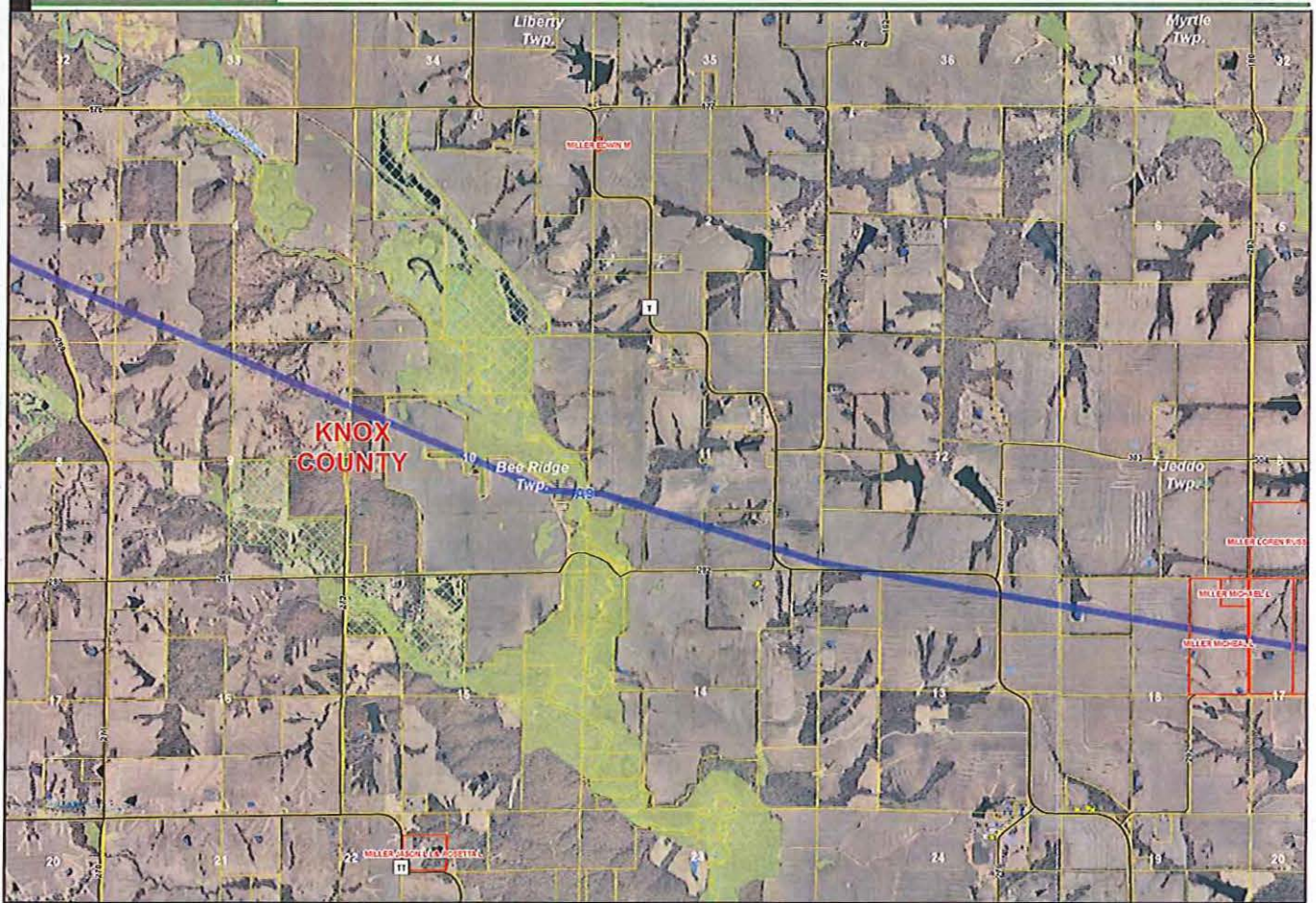
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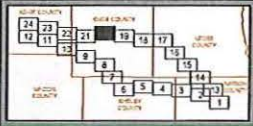
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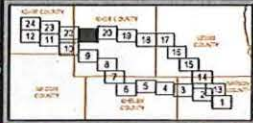
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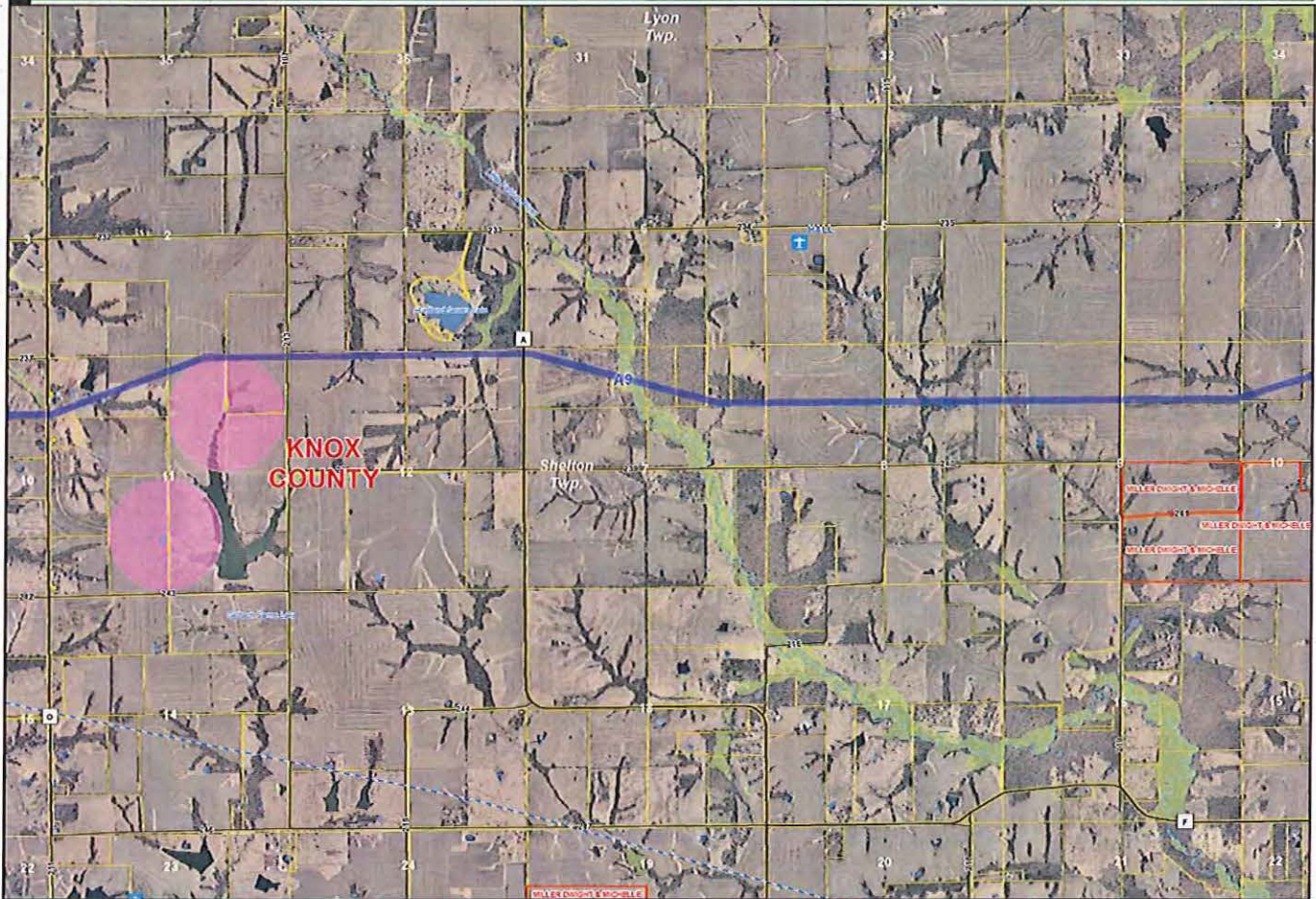
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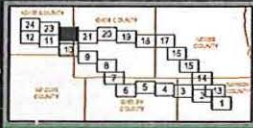
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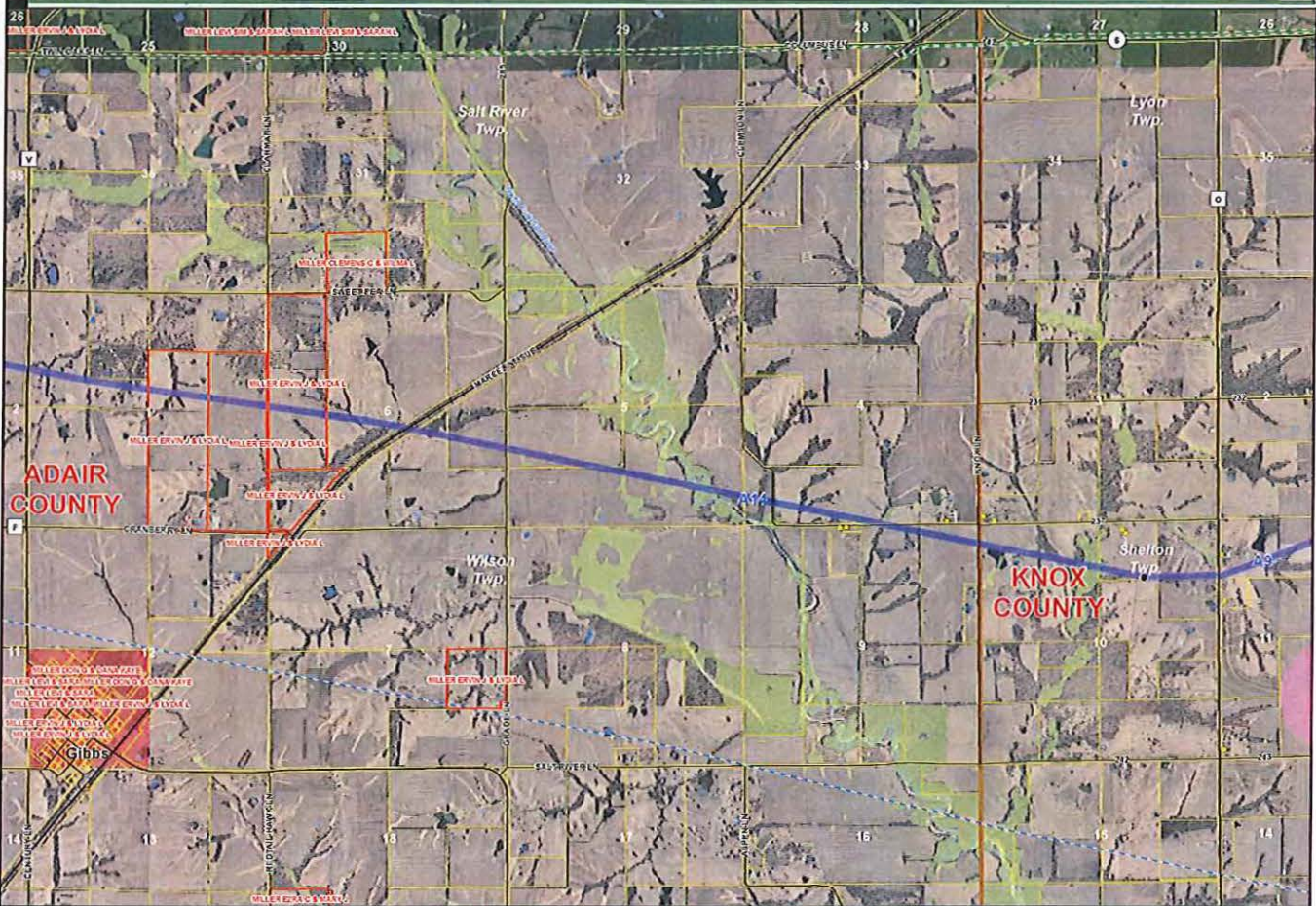
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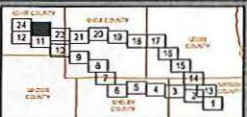
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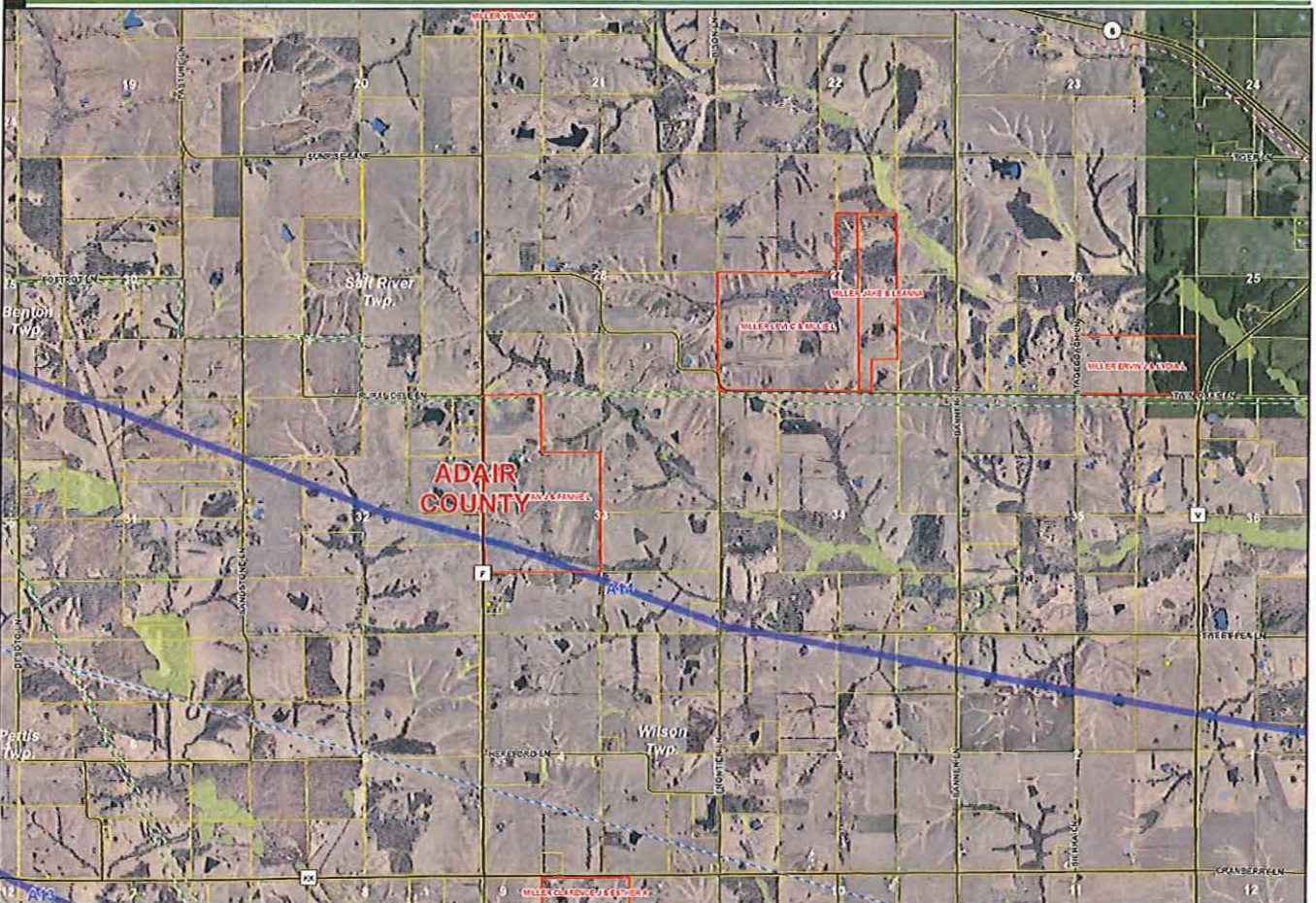
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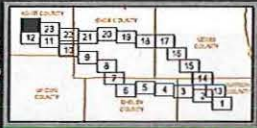
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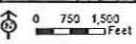
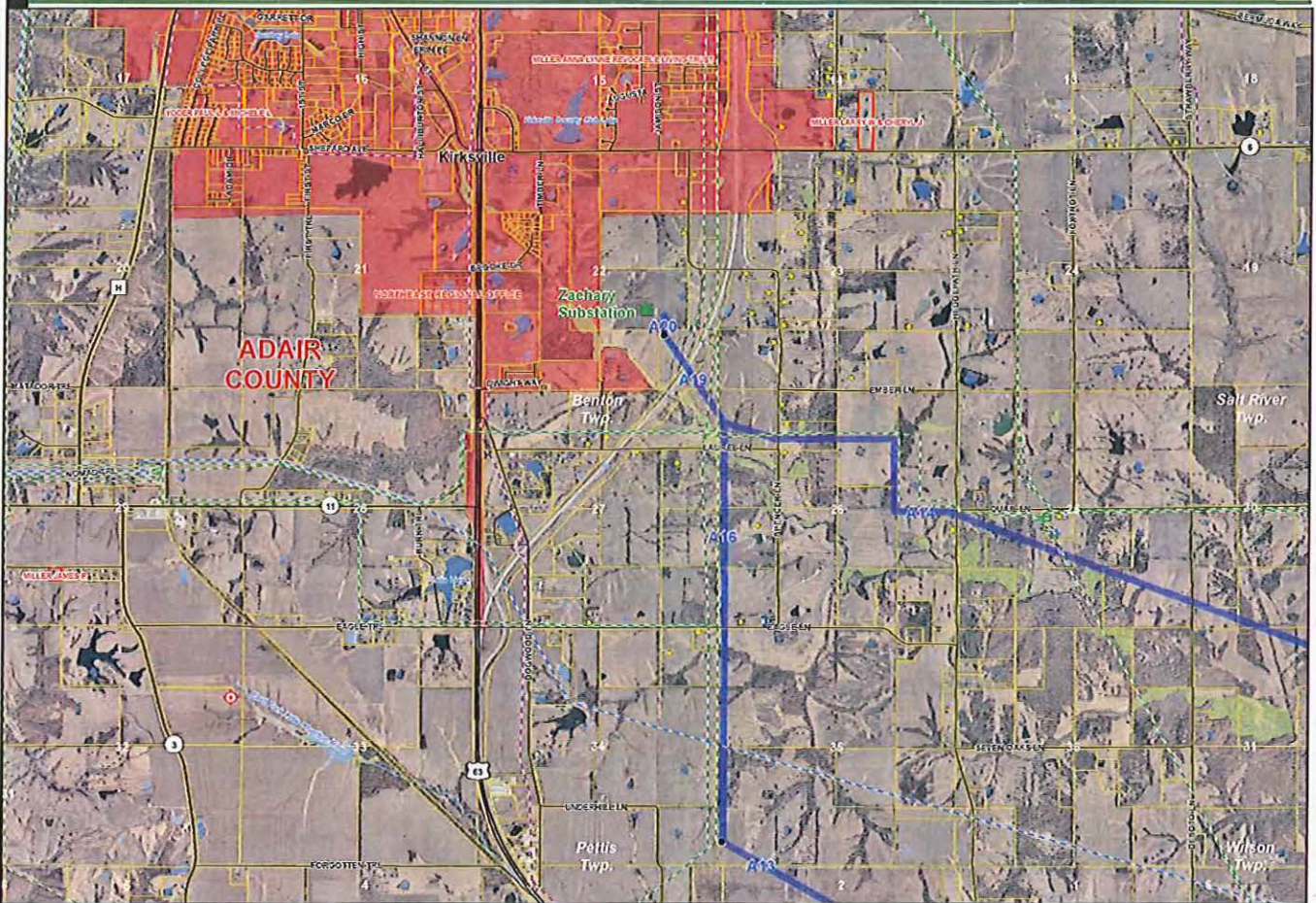
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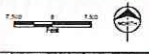
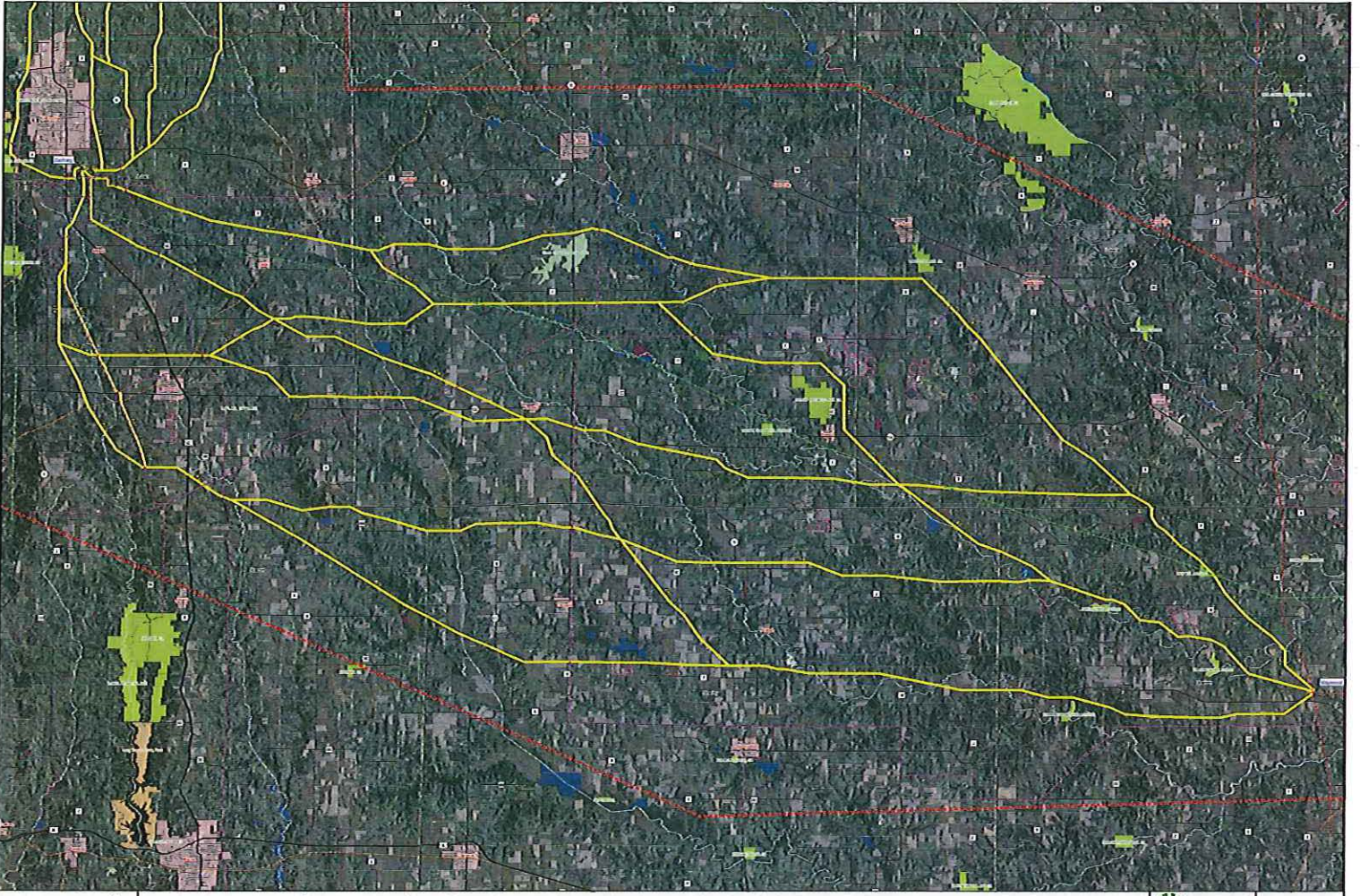
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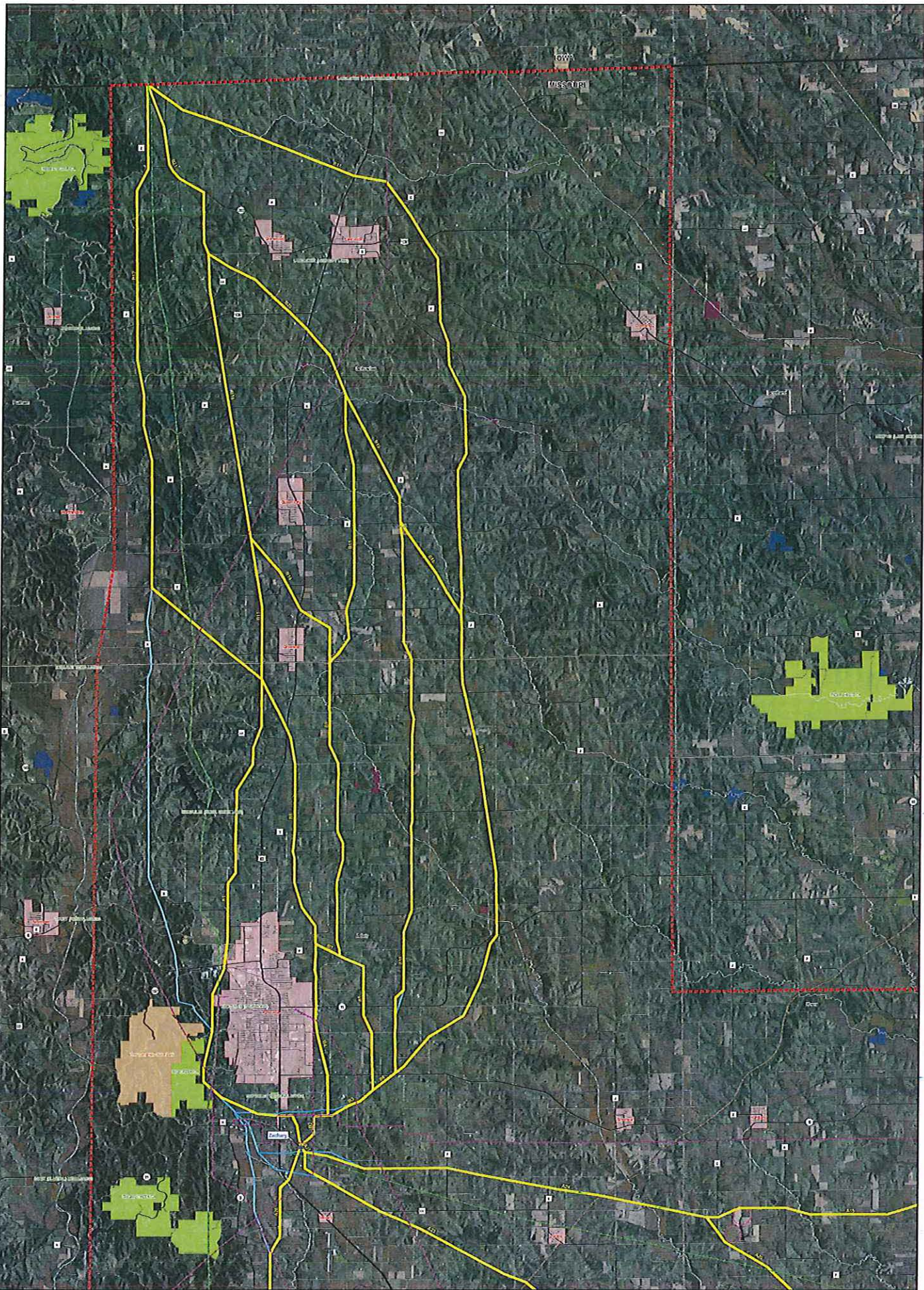
**LEGEND**

230 kV Line	Existing 500 kV Lines	Core Path Area	500 kV to 230 kV Area	Wetlands
Project Location	Existing 500 kV Lines	500 kV Corridor	Cultural Resources	Study Boundary
Primary/Secondary Routes	Existing 500 kV Lines	500 kV Corridor	Core Path	Access

Ameren Transmission  
 500 kV Transmission Project  
 Missouri Energy  
 Delivery Study

Map Date: 12/15/2014





**LEGEND**

Study Area	Existing 500kV Lines	Center Point Area	State Park or State Natural Site	County Boundary
Proposed Substation	Existing 138kV Lines	MUDs Equipment	Conservation Area	State Boundary
Preliminary Alternative Routes	Existing 69kV Lines	USFWS Easement	Municipal Area	Airport
Water 2 Routes				

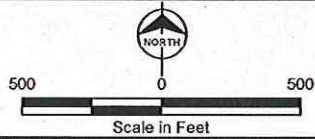
Ameren Transmission  
 Mark Twain  
 345kV Transmission Project  
 Zachary State Line  
 Preliminary Route

**AMEREN ENERGY**

Project No. 12-2-1



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COPYRIGHT © 2010 BURNS & McDONNELL ENGINEERING COMPANY, INC.



- Current Proposed Centerline
- Road
- ▭ Parcel Boundary
- ▭ Proposed ROW



Ameren Transmission  
Mark Twain Transmission Project  
Parcel ID: 19-05-0-22-000-00-  
03.003000  
Owner: HUGHES ETHAN & SARAH  
& THOMAS BRIAN E & PAGE

**SCHEDULE C, MRSA**

Source: MSDIS; Esri; Ameren; Burns & McDonnell Engineering.





# MISSOURI DEPARTMENT OF CONSERVATION

## Headquarters

2901 West Truman Boulevard, P.O. Box 180, Jefferson City, Missouri 65102-0180  
Telephone: 573-751-4115 ▲ [www.MissouriConservation.org](http://www.MissouriConservation.org)

ROBERT L. ZIEHMER, Director

October 16, 2014

Mark Twain Transmission Project  
C/O Burns and McDonnell  
Attention: Jennifer Berry  
9400 Ward Parkway  
Kansas City, MO 64114

**RE: MARK TWAIN TRANSMISSION PROJECT - ENVIRONMENTAL COMMENTS**

Ms. Berry:

The Missouri Department of Conservation (Department) is in receipt of your request for environmental concerns related to the Mark Twain Transmission Project.

The Department is the state agency responsible for forest, fish and wildlife resources in Missouri. As such, the Department participates in project review when a project might affect those resources. Department comments are for your consideration to avoid, minimize and mitigate project impacts in Missouri.

### PROJECT DESCRIPTION

The proposed transmission line would total approximately 100 miles from Palmyra to Kirksville to the Iowa border. Version 10 of the route network (provided by Ameren UE staff) includes the counties of Schuyler, Adair, Knox, Lewis, Shelby and Marion. Transmission line support towers would have dimensions of up to 130 feet in height with a cleared right-of-way of approximately 150 feet.

### LISTED AND PROTECTED SPECIES

Enclosed find a Natural Heritage Review Report for the proposed Mark Twain Transmission Line based on Alignment Version 10 provided by Ameren UE to the Department by email on August 15, 2014.

Multiple natural heritage records for Indiana bat (*Myotis sodalis*) exist adjacent to the proposed routes. You or your client may be required to consult with the U.S. Fish and Wildlife Service pursuant to the Endangered Species Act. The U.S. Fish and Wildlife Service may be contacted by phone at 573-234-2132 or by mail at U.S. Fish and Wildlife Service, Ecological Services, 101 Park Deville Drive, Suite A, Columbia, Missouri 65203-0007.

### COMMISSION

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Columbia

**SCHEDULE CJW-SR9**



October 16, 2014  
Ms. Berry  
Page 2

Bald eagles (*Haliaeetus leucocephalus*), a federally protected species under the Bald and Golden Eagle Protection Act, are known to nest near streams and rivers within the range of this project. Work managers should be alert for nesting areas within 1500 meters of project activities and follow federal guidelines at: <http://www.fws.gov/midwest/MidwestBird/EaglePermits/baeatakepermit.html>. In addition, you may wish to request assistance from the U.S. Fish and Wildlife Service as described above.

#### SPAWNING STREAM SEASONAL CONSTRUCTION RESTRICTIONS

The following waterways have seasonal restrictions that could impact construction timing, if work would occur below the ordinary high water mark: South Fabius River and Troublesome Creek (Marion County). The affected locations are described in the enclosed Natural Heritage Review Report and shown in the enclosed map. Any work conducted below the ordinary high water mark in these stream segments should be avoided between March 15 and June 15. Management recommendations for construction projects affecting Missouri streams and rivers are also enclosed for reference.

The South Fabius River watershed supports a diverse aquatic community. Surveys conducted from 1941 to 1999 in the watershed revealed the presence of 58 fish species, four crayfish species, and 19 freshwater mussel species. Three species have been collected in the watershed that are part of the Communities of Conservation Concern Checklist, namely American eel, ghost shiner, and Mississippi silvery minnow. Special designation has been given to the watershed because of these robust aquatic communities. A portion of the watershed was designated an Aquatic Conservation Opportunity Area in 2006, and a Priority Watershed in 2011. Sampling in 2008 showed robust aquatic communities in the South Fabius Aquatic Conservation Opportunity Area near the potential project sites. Many of the aquatic species found in the watershed rely on clean, cool and high-quality habitat. Forested riparian corridors are critical to maintaining these high-quality aquatic systems. Degradation of these high-quality habitats could result in losses of biological diversity.

#### EXISTING CONSERVATION EASEMENTS

The Department holds interest in two conservation easements that precede proposed route segments A1 and A2.

Proposed segment A2 crosses the Bringer Stream Stewardship Trust Fund Easement (Marion County, T59N, R07W, Section 15 and 16) as seen in Figure 1. This easement is part of an In-lieu-Fee Mitigation (ILF) instrument originally purchased by the Missouri Conservation Heritage Foundation in 2006. This perpetual easement compensated landowners to maintain the existing condition of a wooded riparian corridor along the



October 16, 2014

Ms. Berry

Page 3

watercourse for the purpose of sustaining fish, wildlife, forest and riparian values, as described in the enclosed Stream Stewardship Trust Fund Conservation Easement. A change of condition, such as removal of riparian vegetation, would violate the terms of the Bringer Conservation Easement and the In-lieu-Fee instrument. At a minimum, a change of condition of this parcel would require an amendment to the agreement and repayment of the purchase price plus interest to the Missouri Conservation Heritage Foundation for the affected portion of the easement parcel.

The proposed route A2 would impact two portions of the Bringer easement for an estimated total of 3.95 acres. The proposed route A2 would bisect the easement into two unconnected portions. Short term impacts of the proposed route segment A2 at the Bringer easement would likely include conversion of riparian corridor to shrubs and grasses, and possibly soil compaction. Long term impacts of this conversion would likely result in a diminished riparian function offered by existing trees along the watercourse. Shrubs and grasses provide a lesser level of stream bank protection from erosion than trees because their root networks are more shallow than those of trees. Unlike trees, shrubs and grasses provide no shade for the stream channel. Riparian trees offer stream shading which maintains lower water temperatures and increased dissolved oxygen levels during the warm seasons. Many aquatic wildlife have an upper thermal tolerance for survival, growth and reproduction that is better served by stream shading. In addition, aquatic wildlife require a minimum dissolved oxygen content in river water which cannot be sustained diurnally during the warm season without stream shading.

Pages 12 and 13 of the enclosed ILF mitigation instrument between the U.S. Army Corps of Engineers, Kansas City District and the Missouri Conservation Heritage Foundation Stream Stewardship Trust Fund describe allowed and restricted activities on the parcels for which the perpetual easement applies.

Proposed segment A1 crosses the Bevill Stream Stewardship Agreement Easement (Marion County, T59N, R08W, Section 25), as seen in Figure 2. This perpetual easement was purchased by the Department in 1996 as part of a Stream Stewardship Agreement. The agreement compensated landowners to maintain the existing condition of a wooded riparian corridor along the watercourse for the purpose of sustaining fish, wildlife, forest and riparian values, as described in the enclosed Stream Stewardship Agreement Easement. A change of condition, such as removal of riparian vegetation, would violate the restrictions contained in the easement. At a minimum, a change of condition of this parcel would require repayment of the purchase price plus interest for the affected portion of the easement parcel.

An estimated 0.80 acres of the Bevill easement would be impacted by proposed route segment A1. The proposed route A1 would bisect the easement into two unconnected



October 16, 2014  
Ms. Berry  
Page 4

portions. Short term impacts could include vegetation conversion from riparian corridor to shrubs and grasses, as well as soil compaction. Similar to the impacts on the Bringer Easement, long term impacts of this conversion on the Bevill easement would likely result in a diminished riparian function.

#### CONCLUSION

In consideration of the Department's responsibility to manage fish, wildlife, and forest resources held in the public trust, the least environmentally damaging route segment would be a modified form of route A2 that would completely avoid the Bringer Stream Stewardship Trust Fund Conservation Easement.

Thank you for the opportunity to provide comments. Note that this response does not preclude other comments the Department may provide under the Clean Water Act permitting process or the National Environmental Policy Act, if applicable. If you have any questions about these comments, please contact me at (573) 522-4115, Extension 3159 or by email at [jennifer.campbell-allison@mdc.mo.gov](mailto:jennifer.campbell-allison@mdc.mo.gov).

Sincerely,



JENNIFER CAMPBELL-ALLISON  
POLICY COORDINATOR

JCA/ak

Enclosures

c: Chris Wood, Burns & McDonnell  
Peggy Ladd, Ameren UE  
Kenny Lynn, Ameren UE  
Brian Holderness, Ameren UE  
Shauna Marquart, U.S. Fish and Wildlife Service  
Marvin and Loretta Bringer, Bringer Stream Stewardship Trust Fund landowner  
Edward and Betty Bevill, Bevill Stream Stewardship Agreement landowner  
Chris Vitello, Missouri Conservation Heritage Foundation

**SCHEDULE CJW-SR9**





# MISSOURI DEPARTMENT OF CONSERVATION

*Headquarters*

2901 West Truman Boulevard, P.O. Box 180, Jefferson City, Missouri 65102-0180

Telephone: 573-751-4115 ▲ [www.MissouriConservation.org](http://www.MissouriConservation.org)

ROBERT L. ZIEHMER, Director

November 21, 2014

Mark Twain Transmission Project  
C/O Burns and McDonnell  
Attention: Jennifer Berry  
9400 Ward Parkway  
Kansas City, MO 64114

**RE: MARK TWAIN TRANSMISSION PROJECT - ENVIRONMENTAL COMMENTS**

Ms. Berry:

This letter provides a supplemental response to Ameren's request for environmental concerns related to the Mark Twain Transmission Project and is a part of the Department of Conservation (Department) response provided in a letter to you dated October 16, 2014.

As indicated previously, the Department is the state agency responsible for forest, fish and wildlife resources in Missouri. As such, the Department participates in project review when a project might affect those resources. Department comments are for your consideration to avoid, minimize and mitigate project impacts in Missouri.

## PROJECT DESCRIPTION

The proposed transmission line would total approximately 100 miles from Palmyra to Kirksville to the Iowa border. Version 10 of the route network (provided by Ameren UE staff) includes the counties of Schuyler, Adair, Knox, Lewis, Shelby and Marion. Transmission line support towers would have dimensions of up to 130 feet in height with a cleared right-of-way of approximately 150 feet.

## CONTIGUOUS FOREST BLOCKS

A number of the alignments proposed as of the October 2014 Open House will result in fragmentation of woodland habitat, including forest blocks greater than 150 acres. The northerly route from Maywood to Zachary (comprised of segments A2, A6, A9, A14) fragments the fewest forest blocks.

COMMISSION

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Columbia

**SCHEDULE CJW-SR9**



November 21, 2014

Ms. Berry

Page 2

Large forest blocks provide important habitat for wildlife. These habitat types are rare in present day northern Missouri and are utilized by neotropical migrant birds, currently in decline, as well as both game and non-game wildlife. Some neotropical migrant bird species are forest interior species and fragmentation of timber blocks leaves them vulnerable to brood parasitism from the brown-headed cowbird and predation. While edge habitat benefits habitat generalist species of birds, specialized species that require forest/woodland interiors are vulnerable to fragmentation caused by forest/woodland disturbances and would likely decline from a transmission line transecting the forest/woodland block.

Large forest blocks are associated with diverse wildlife species. For example, Henry Sever Lake Conservation Area is approximately 300 acres of forest and woodland habitat that supports 29 neotropical migrant bird species. Large timber blocks on the proposed routes range from 173 to 1,222 acres and likely include the same bird species, as well as additional species.

Forest blocks that would be impacted by the remaining proposed route segments on the Maywood to Zachary route are as follows:

- A2 would fragment a forest block approximately 300 acres in size at T60N, R8W Section 36 and T60N, R7W, Sections 31 and 32.
  - Two *Myotis sodalis* (Indiana bat) records are located within six (6) miles of where the A2 route segment and the subject forest block intersect.
- A3 would fragment the following forest blocks:
  - Approximately 1,222 acres: T59N, R9W, Sections 9, 10, 11, 14, 15, 22, and 23;
    - One (1) *Myotis sodalis* record within five (5) miles.
  - Approximately 181 acres: T60N, R12W, Sections 23-24;
  - Approximately 206 acres: T59N, R11W, Section 13 and T59N, R10W, Section 18;
  - Approximately 440 acres: T60N, R13W, Sections 1 and 2; and T61N, R13W, Section 36; and T61N, R12W, Section 31.
- The eastern portion of A7 includes a large forest block. According to Department records, this area includes a known Blue Heron rookery. The landowner reports that this rookery is still active.
- A13 would fragment the following forest blocks:
  - Approximately 293 acres: T61N, R14W, Sections 22 and 23;
  - Approximately 223 acres: T61N, R14W, Section 24.

Forest blocks that would be impacted by the remaining proposed route segments on the Zachary to State Line route are as follows:

- B9 would fragment a forest block (approximately 652 acres) at T65N, 15W, Section 12 and T65N, 14W, Sections 7,8 and 18.
  - Eight (8) *Myotis sodalis* and one (1) *Lasionycteris noctivagans* (silver-haired bat) records are known within four (4) miles of this forest block.



November 21, 2014

Ms. Berry

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- B13 would fragment a forest block (approximately 270 acres) at T66N, R15W, Sections 31 and 32.
  - Five (5) *Myotis sodalis* and one (1) *Lasionycteris noctivagans* (silver-haired bat) records are known within 3 miles of this forest block.
  - Two known roosting sites are located 1.4 miles from this forest block, and are located within 0.17 miles of the proposed B13 route segment.
  - This block is adjacent to another 204 acre block at T66N, 15W, Section 31, separated by a farm road. These two blocks effectively form a 474 acre block, and it is located within four (4) miles of several other large timber blocks.

You or your client may need to consult with the U.S. Fish and Wildlife Service (573-234-2132) regarding Endangered Species Act and Migratory Bird Treaty Act compliance.

#### EXISTING EASEMENTS

Please refer to the earlier letter to you, dated October 16, 2014, regarding impacts to the Bringer and Bevill easements that would be impacted by route segments A2 and A1, respectively.

The South Fabius River is an important river in the northeastern portion of Missouri. Its ecological integrity and diverse aquatic community are reflective of the relatively wide and contiguous riparian woodlands and stable stream channels found in the watershed. As currently proposed, segment A2 would impact 3.95 acres of the Bringer easement, or segment A1 would impact 0.8 acres of the Bevill easement. Impacts of the proposed transmission line route segments on these easements will include riparian woodland fragmentation and an increased risk of stream channel instability.

An alternative to crossing one of these easements should include avoidance of the easement by routing around the parcel. Shapefiles of these easements were provided to Chris Wood by email on October 22, 2014.

If it is not possible to avoid the subject easement, impacts should be minimized by crossing perpendicular to the stream to reduce the area of land disturbed by right-of-way clearing.

As previously stated, a modified form of route segment A2 would appear to be the least environmentally damaging to forest, fish and wildlife resources and the Department's interest in these existing stream easements.

#### CONCLUSION

As presented in October 2014, the routes from Maywood to Zachary and the routes from Zachary to State Line appear to create potential impacts to forest, fish and wildlife resources in Missouri. The northerly route from Maywood to Zachary comprised of segments A2, A6, A9, A14 appears to create the fewest impacts to these resources. Alternatives and modifications to the remaining proposed route segments could focus on



November 21, 2014

Ms. Berry

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first avoiding, then minimizing, and finally mitigating impacts to forest, fish and wildlife resources.

Avoidance measures could include upgrade of existing transmission lines rather than clearing a new right of way.

Minimization measures could include paralleling the new line to existing transmission lines to avoid new fragmentation events and minimize the total number of cleared acres for the project. Another minimization measure could consider routing around forest and woodland blocks of greater than 150 acres, rather than bisecting these forest blocks.

Avoidance and minimization of impacts to the Bringer or Bevill easements are strongly encouraged. Avoidance could include routing around the easement. If avoidance were not possible, minimization could include crossing at a different location within the easement or crossing perpendicular to the waterway.

If it would be helpful, the Department would be willing to meet with Ameren, its consultant, and the U.S. Fish and Wildlife Service to discuss Department comments provided for this project.

Thank you for the opportunity to provide comments. Note that this response does not preclude other comments the Department may provide under the Clean Water Act permitting process or the National Environmental Policy Act, if applicable. If you have any questions about these comments, please contact me at (573) 522-4115, Extension 3159 or by email at [jennifer.campbell-allison@mdc.mo.gov](mailto:jennifer.campbell-allison@mdc.mo.gov).

Sincerely,



JENNIFER CAMPBELL-ALLISON  
POLICY COORDINATOR

JCA/pb

Enclosures

c: Chris Wood, Burns & McDonnell  
Peggy Ladd, Ameren UE  
Kenny Lynn, Ameren UE  
Brian Holderness, Ameren UE  
Shauna Marquart, U.S. Fish and Wildlife Service

**SCHEDULE CJW-SR9**