GRAIN BELT EXPRESS CLEAN LINE

MISSOURI

ROUTE SELECTION STUDY

ADDENDUM

Prepared For Clean Line Energy Partners LLC

CLEAN LINE
ENERGY PARTNERS

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Acronyms and Abbreviations

GIS	Geographic Information System
Grain Belt Express	Grain Belt Express Clean Line LLC
Grain Belt Project	Grain Belt Express Clean Line Project
kV	kilovolt
Project	Grain Belt Express Clean Line Project
PSC	Missouri Public Service Commission
ROW	right-of-way

Glossary

Alternative Routes—routes assembled from links that were refined after the Open Houses. One Alternative Route is ultimately selected as the Proposed Route.

constraint—areas that should be avoided to the extent feasible and reasonable during the route selection study process. The constraints were divided into two groups based on the size of the geographic area encompassed by the constraint. The first group includes constraints covering large areas of land in the Study Area. The second group of constraints encompasses other features covering smaller geographic areas or point-specific locations.

general routing guidelines—a set of principles that guide the development of alignments with respect to area land uses, sensitive features, and considerations of economic reasonableness.

Modified Proposed Route—route studied in the 2016 Missouri Route Selection Study Addendum that consists of the 2014 Original Proposed Route with the incorporation of several route modifications or reroutes.

Original Proposed Route—route identified by the Missouri Route Selection Study that was ultimately filed with the Missouri Public Service Commission in 2014.

Potential Routes—Conceptual Routes are refined into Potential Routes as additional information from agency coordination, public outreach, and ongoing route revisions are considered. Potential Routes ultimately become Alternative Routes after further refinement following Open Houses.

Potential Route Network—all Potential Routes and their interconnection points (nodes).

Proposed Route—route proposed by Grain Belt Express to be constructed in Missouri.

Public Landowner Meetings—June 2016 public meetings held in the eight Missouri counties where the Proposed Route is located.

Routing Team—the multi-disciplinary team that developed the conceptual route network, refined the Potential Routes, analyzed and compared Alternative Routes, and selected the Proposed Route. The Routing Team's experience includes transmission line route planning and selection, impact assessment for natural resources, land use assessment and planning, cultural resource identification and assessment, impact mitigation, transmission engineering and design, and construction. A list of the Routing Team members, along with a description of their individual roles, is provided in **Appendix A** of the Missouri Route Selection Study Addendum.

Study Area—portions of Kansas, Missouri, Illinois, and Indiana. The Study Area includes the converter station locations in Ford County, Kansas; a converter station in eastern Missouri; and a converter station near Sullivan County, Indiana.

1. Introduction

1.1 Overview of the Routing Process

The purpose of this Missouri Route Selection Study Addendum is to provide an overview of siting-related activities that have occurred since completion of the Missouri Route Selection Study in March 2014. This addendum describes the process of reviewing updated datasets within the Study Area, micro-siting discussions with landowners along the Proposed Route, and public and agency outreach efforts that have collectively resulted in an update to the Proposed Route.

The Missouri Route Selection Study was conducted to identify the route for the Grain Belt Express Clean Line in Missouri. The overall goal of the Missouri Route Selection Study was to gain an understanding of the opportunities and constraints in the Study Area, develop feasible Alternative Routes, evaluate potential impacts, and identify a Proposed Route for the Project. The study describes the route selection methodology, public and agency outreach processes, and the Proposed Route identification process for the Missouri portion of the Grain Belt Express Project that extends from the Missouri River to the Mississippi River.

The process of revising the Proposed Route relied on the general and technical Routing Guidelines set forth in the Missouri Route Selection Study. The resulting modified Proposed Route is depicted in **Figure 1**.

1.2 Routing Process and Timeline

Grain Belt Express Clean Line LLC (Grain Belt Express) submitted an application for a Certificate of Convenience and Necessity for the Grain Belt Express Clean Line Project (Grain Belt Project or Project) to the Missouri Public Service Commission (PSC) in March 2014. The application included the Missouri Route Selection Study that presented the process, activities, analysis, and decision rationale for selection of the Proposed Route. Following identification of the Proposed Route in Missouri, the Routing Team conducted an extensive routing effort in Illinois and selected a Proposed Route. The Illinois Commerce Commission ultimately granted a Certificate of Public Convenience and Necessity in November 2015.

1.2.1 Missouri Routing

Beginning in March 2016, the Routing Team began the process of collecting and reviewing updated datasets in the vicinity of the Proposed Route in Missouri. The process included collecting feedback from state and federal regulatory agencies (Section 2.1) and non-governmental groups (Section 2.2) and having discussions with landowners along the route (Section 2.3). Grain Belt Express hosted eight Public Landowner Meetings in counties crossed by the Proposed Route in June 2016. More than 150 members of the public attended the Public Landowner Meetings in Missouri to review the Proposed Route and receive information regarding the Project.

Revisions to the Proposed Route are described in this addendum to the Route Selection Study, along with the data collection and results of data analysis, landowner discussions, and public and agency outreach efforts that have occurred since the 2014 application to the PSC.

1.3 Data Collection and Update

This section describes the sources of information used in evaluating proposed modifications to the Proposed Route and preparation of this addendum. **Appendix B** includes an overview of the datasets reviewed and updated during the preparation of this addendum.

1.3.1 Digital Aerial Photography

Aerial photography from the sources listed below were viewed using Geographic Information System (GIS) software (ArcMap v10.4). Updated information, such as the location of residences and other constraints, was digitized by using either paper maps (at the public meetings) and transferred into the GIS or by digitizing the data directly into the GIS during field inspections and desktop reviews. The primary sources of aerial imagery used in the identification, analysis, and review effort for the Project include:

- National Agricultural Inventory Program 2014 color aerial photography;
- Environmental Systems Research Institute imagery, which ranges in date depending on location; and
- Microsoft's Bing Aerial imagery, which ranges in date depending on location.

1.3.2 GIS Data Sources

The Missouri Route Selection Study made extensive use of information from existing GIS data sets from many sources, including federal, state, and local governments. Much of that information was obtained from official agency GIS data access websites and government agencies. The Routing Team digitized information from paper maps, completed aerial photo interpretation, conducted interviews with stakeholders, and completed field reconnaissance.

Beginning in March 2016, the Routing Team refreshed these datasets and reviewed new datasets that were created since completion of the Missouri Route Selection Study.

1.3.3 Route Reconnaissance

Routing Team members conducted a helicopter review of the Proposed Route in May 2016. Prior to the helicopter reconnaissance, key features identified for the Missouri Route Selection Study, such as residences, outbuildings, recognized places of worship, cemeteries, and commercial and industrial areas, were reviewed using the updated aerial photography sources referenced in Section 1.3.1. These features were then verified in the field and added to the GIS database using laptops running GIS software supported by real-time Global Positioning System during the helicopter review.

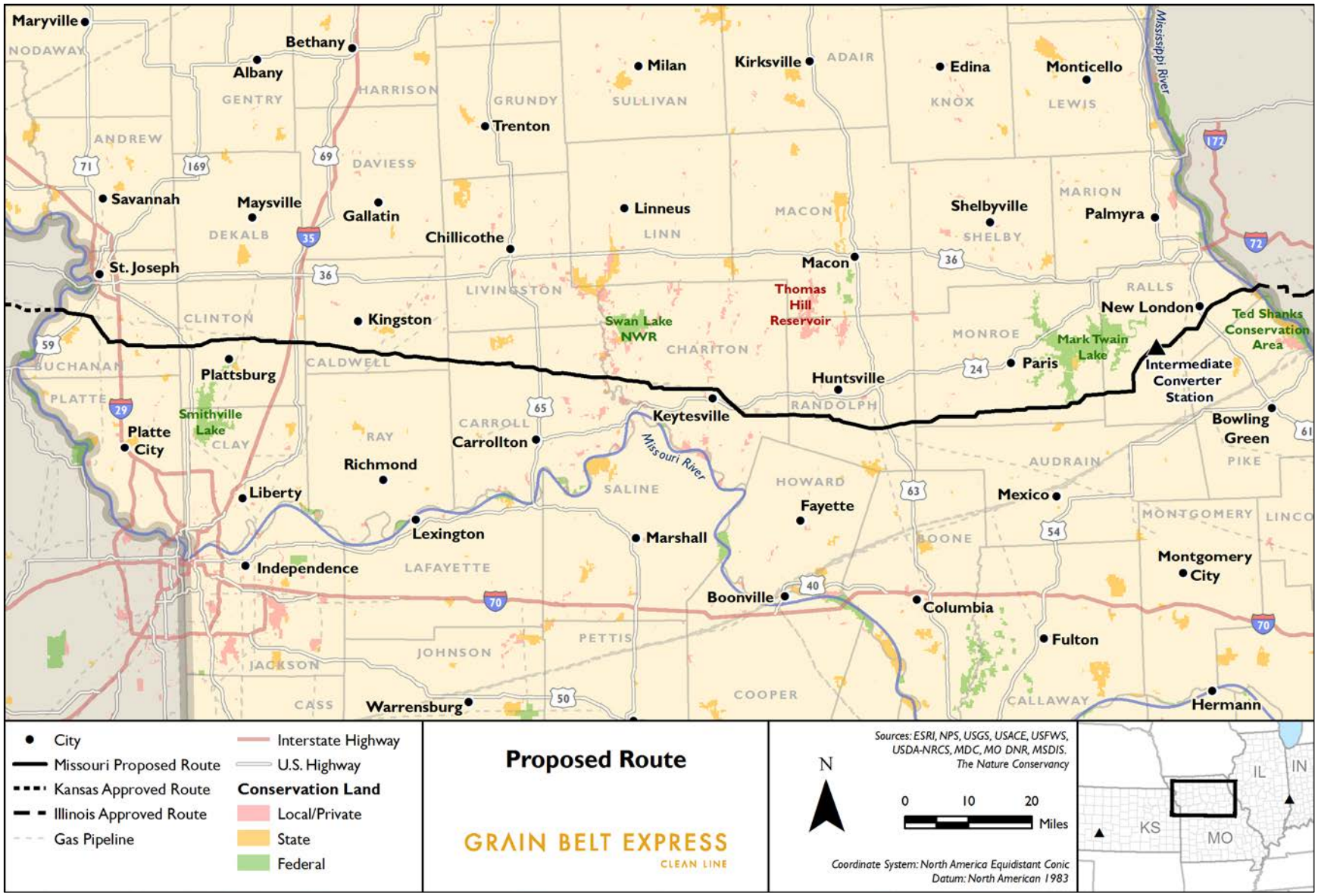


Figure 1. Proposed Route

2. Agency and Public Outreach

2.1 Regulatory Agency Coordination

The Routing Team contacted numerous federal, state, and local agencies to continue dialogue that began during the route planning process. Discussions focused on providing project status updates and identifying new resources managed by those agencies within the Study Area. A list of agencies contacted and dates of the meetings is provided in **Table 1**, and copies of correspondence with federal and state agencies are provided in **Appendix C.**

Table 1. Regulatory Agency Meetings

Agency	Attendees	Meeting Type	Meeting Date
U.S. Army Corps of Engineers, Kansas City District	Lucius Duerksen	Webinar	5/18/16
U.S. Army Corps of Engineers, St. Louis District	Jennifer Skiles	Webinar	5/17/16
U.S. Fish and Wildlife Service, Columbia Field Office	Trisha Crabill, Shauna Marquardt, Jane Ledwin	Webinar	5/16/16
Missouri Department of Conservation	Janet Sternberg	Webinar	5/16/16
Missouri Department of Natural Resources	Robert Stout, Stacia Bax	Webinar	5/12/16, 5/15/16
Missouri Department of Natural Resources, State Historic Preservation Office	Judith Deel	Webinar	5/12/16

2.2 Non-Government Organizations

In addition to state and federal agencies, the Routing Team continued discussions with members of several natural and historic conservation groups. These contacts provided valuable information sources for identifying sensitive natural resource habitats and historic resources during development of the Proposed Route, and the Routing Team sought to continue this coordination and further discuss new information in 2016. These groups included:

- The Nature Conservancy, Missouri Chapter
- Sierra Club, Missouri Chapter
- Missouri Prairie Foundation
- Ducks Unlimited
- Renew Missouri

2.3 Community Outreach Activities

The Routing Team led a community outreach program designed to educate the public about the purpose and benefits of the Project, inform community leaders and the public about the regulatory process and Project timeline, and gather general comments on the Project and specific information that would inform the siting effort.

Two rounds of public outreach meetings were conducted to gather information and provide landowners an opportunity to see and comment on the Proposed Route: One-on-One Meetings and Public Landowner Meetings. The Routing Team planned the Public Landowner Meeting locations to occur in each county within the Study Area and so that potential attendees would be within a 30-mile radius of at least one meeting location.

2.3.1 Landowner One-on-One Meetings

Grain Belt Express held One-on-One Meetings with landowners affected by route revisions that have occurred since the 2014 application filing. At each meeting, members of the Routing Team reviewed route modifications with landowners and answered questions about the Project, while collecting feedback on the revised routes. Outcomes from these meetings are described in Section 3 below.

2.3.2 Public Landowner Meetings

In June 2016, Grain Belt Express hosted eight Public Landowner Meetings in Missouri along the Proposed Route. At the Public Landowner Meetings, Grain Belt Express representatives provided information about the Project and collected feedback on the Proposed Route.

Meeting notifications for the Public Landowner Meetings included mailings sent to landowners and posted on the Project website. Invitations to these meetings were mailed to property owners (as identified in the local county tax and parcel information received from each county) who have property crossed by the Proposed Route or any potential reroute. Copies of the invitations can be found in **Schedule MOL-4 attached to Mark Lawlor's testimony**. Three-hour meetings were held in all eight counties where the Proposed Route is located. A list of the towns where Public Landowner Meetings were held is provided in **Table 2**.

At each Public Landowner Meeting, members of the Routing Team greeted meeting attendees at a welcome table and provided attendees with an optional comment card. The top of each comment card contained space for the attendees to fill in their address and contact information with the lower portion of the comment card containing several questions for attendees to answer and a space to write general comments about the Project. In addition to receiving a comment card, meeting attendees were provided with county-specific fact sheets providing detailed information about the Project.

Table 2. Public Landowner Meeting Locations	
Location	**Date**
St. Joseph	June 13, 2016 (PM)
Plattsburg	June 14, 2016 (AM)
Polo	June 14, 2016 (PM)
Carrollton	June 15, 2016 (AM)
Brunswick	June 15, 2016 (PM)
Moberly	June 16, 2016 (AM)
Paris	June 16, 2016 (PM)
Center	June 17, 2017 (AM)

After attendees were greeted at the welcome table, they were offered a guided tour of the Project on poster boards set up on easels. During the tour, Routing Team members provided attendees with information regarding the purpose of the Project, Project benefits, physical characteristics of the transmission line, and easement and compensation information. These guided tours typically lasted 10 to 15 minutes and allowed attendees the opportunity to ask questions and receive immediate answers from members of the Routing Team.

At the end of the tour, Routing Team members assisted attendees in locating their properties or other features of concern on aerial photography maps displaying the Proposed Route. Each map presented a specific portion of the line with information on identified constraints, land areas, and existing infrastructure presented at a scale of 1 inch = 1,000 feet. Participants were provided the opportunity and encouraged to document the locations of their houses, places of business, properties of concern, or other sensitive resources on the printed maps. Routing Team members worked with landowners and ensured that each comment or group of comments provided by an attendee was documented appropriately.

A digital mapping station was also provided at each Public Landowner Meeting to allow attendees the opportunity to find their land and document their comments directly in the GIS database. The digital mapping station was run by a GIS technician and contained all of the data presented on the printed maps and a full parcel database to help search for parcels that owners could not locate on the printed maps. The GIS station was most often used and most efficient for those attendees who were not familiar with their properties from an aerial map perspective, owned multiple properties in the area, or had brought a list of properties by either parcel identification number or section/township/range.

After the Public Landowner Meetings, all of the maps used to collect comments were scanned, geo-referenced, and integrated into the GIS database. The locations of specific comments provided by attendees were digitized so they could be reviewed using the GIS database. All

comments received via the comment cards were recorded and categorized in a database for review and correlation with mapped comment locations.

3. Route Revisions

This section details 16 new route revisions to the Original Proposed Route identified in the 2014 Missouri Route Selection Study. The incorporation of these revisions results in the Modified Proposed Route described in Section 4.

3.1 Route Revision Process

Two sources of information were utilized in identifying potential revisions to the Original Proposed Route. The first source came from the updated datasets used for the Project. Some of the datasets that were used in the routing process are updated regularly (such as aerial imagery) and others are updated as the features they represent change (such as new state-owned conservation lands). The latest available copies of these datasets were acquired for the route review process. Additional updates resulted from analysis of these datasets such as identifying new buildings on the updated aerial imagery.

The second source for route revisions came from ongoing discussions with individual landowners along the Original Proposed Route. Routing discussions with landowners during the application process in 2014 and during the community outreach efforts described in Section 2.3 provided valuable feedback that resulted in revisions to the Original Proposed Route. The majority of these revisions were minor and involved a small number of landowners, but they reduced potential impacts from routing the transmission line on individual properties. The Routing Team evaluated each suggested revision to ensure that it complied with routing guidelines and did not introduce new, significant impacts.

Figure 2 highlights the reroutes described above and discussed in detail below.

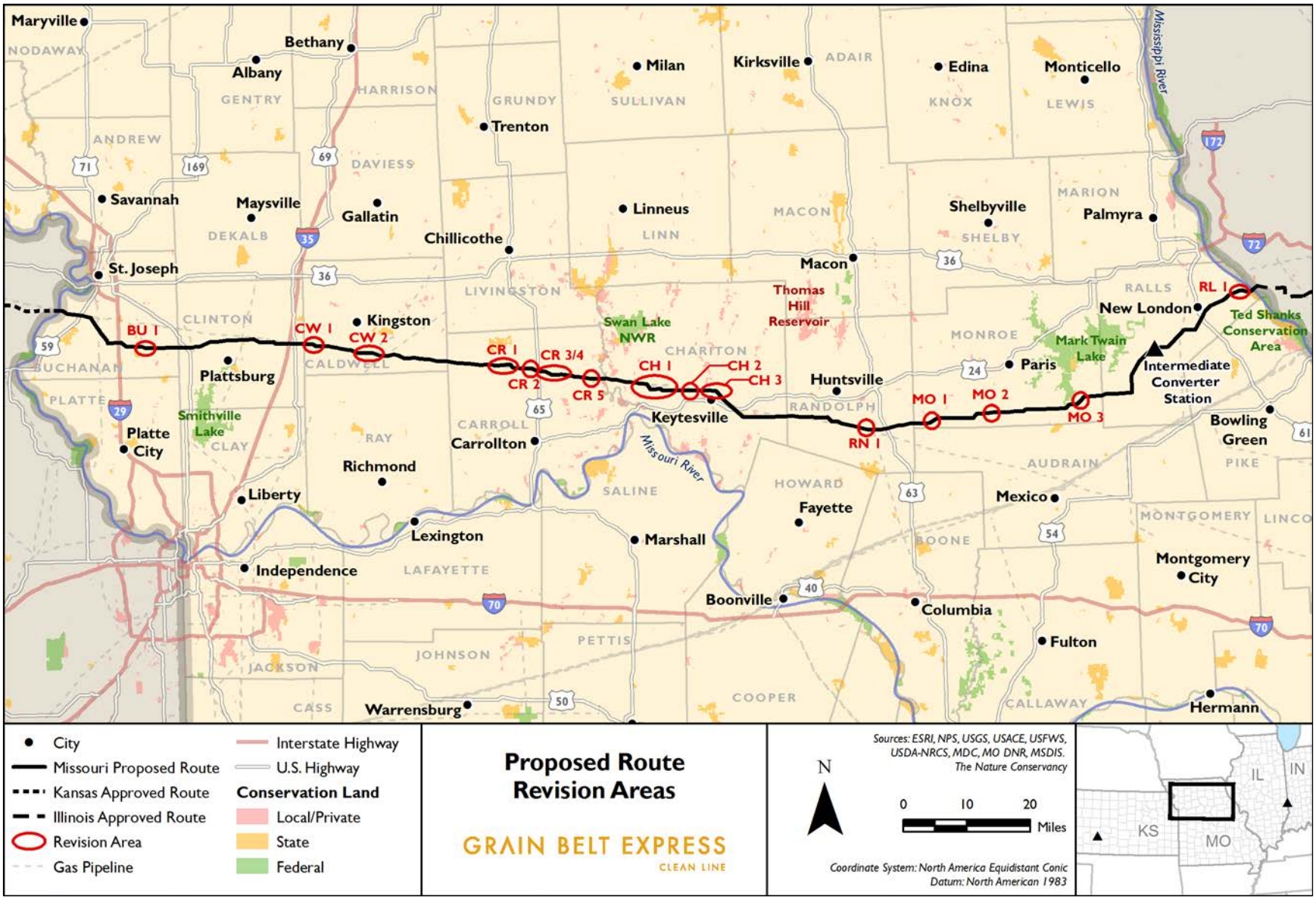


Figure 2. Proposed Reroute Areas

3.2 Data Driven Reroutes

The table in **Appendix B** lists the datasets updated and reviewed during the route revision process. The updated datasets resulted in the route revision described below.

Reroute Monroe-2

In Monroe County, the Original Proposed Route parallels the Thomas Hill 115 kilovolt (kV) transmission line, heading in a due east-west direction (**Figure 3**). In section 18, township 53 north, range 10 west, the existing transmission line angles to the northeast for 2,800 feet before resuming its east-west trajectory. The line was rebuilt in 2014, and the angle of the turn to the northeast was reduced. As a result, the northeast segment is in a different location than the previous line. The Original Proposed Route crossed from the north side of the existing line to the south side at this location. The Proposed Route was revised to remain parallel to the new alignment of the 115 kV transmission line.

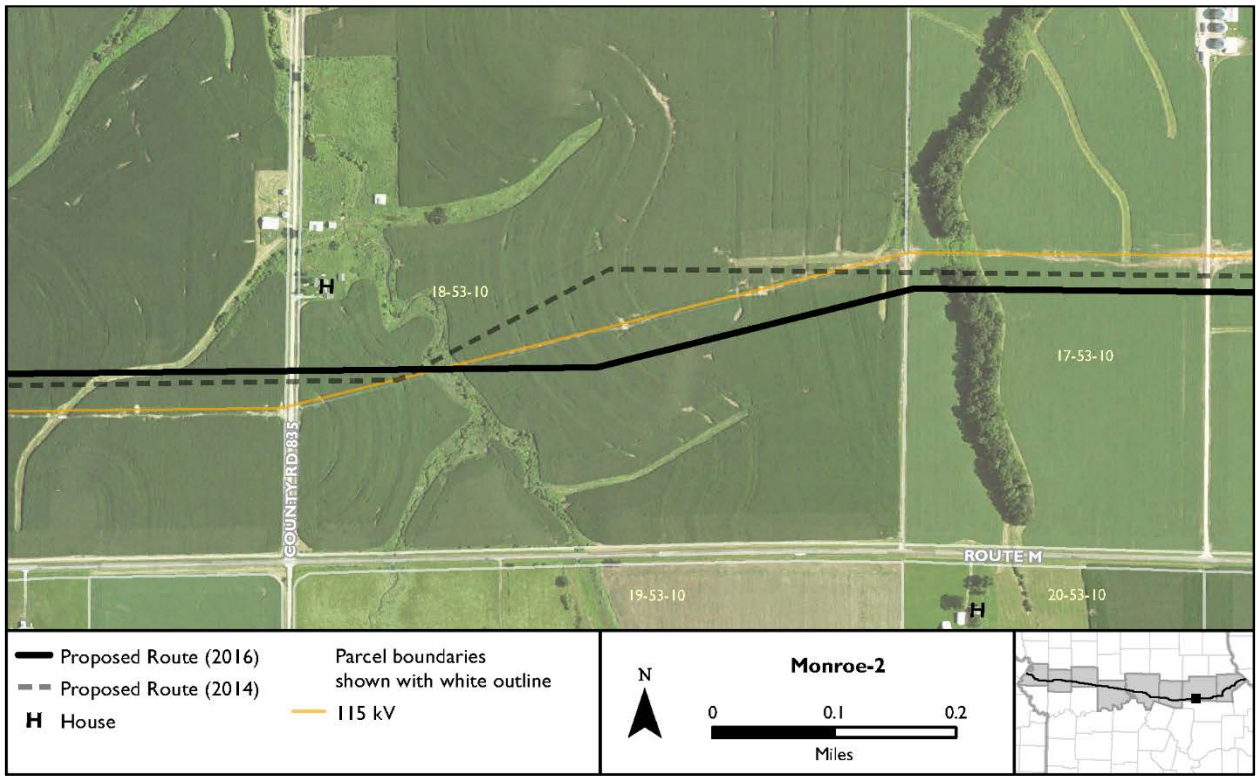


Figure 3. Reroute Monroe-2

3.3 Landowner Reroutes

The reroutes discussed below resulted from discussions with individual landowners regarding specific alignments or structure placements on their properties. Each suggestion was reviewed by members of the Routing Team and evaluated under the routing criteria described in Section 2.4 of the Missouri Route Selection Study. In many cases the suggested revisions minimized impacts to features on the landscape that were at a finer scale than other available datasets could provide, such as the location of a prime agricultural field in comparison to a landowner's other fields. The Routing Team approved revisions that complied with the routing criteria, did not introduce significant differences in the potential impacts on the natural or human environment, and did not result in unreasonable or circuitous routes. Approved reroutes were selected over corresponding portions of the Original Proposed Route and incorporated into the Modified Proposed Route. In some cases, a suggested reroute was further modified as additional information was gathered in the vicinity of the new alignment, as long as the additional modifications still met the requests set forth by the landowner.

Route modifications analyzed in this section represent changes that, based on the available data, best reduce impacts to the resources identified by the landowners. Field surveys, engineering design, and additional landowner input or landowner-identified features may result in future changes to the revision areas or other segments of the Proposed Route.

A description of each reroute, including a map of the location and discussion of analysis results, is provided below.

Reroute Buchanan-1

The Original Proposed Route crosses the Platte River on a due east to west trajectory (**Figure 4**). It angles to the southeast approximately 2,000 feet east of the river, heading in that direction for 5,100 feet before turning back to resume an east to west alignment. The landowner crossed by the diagonal portion of the line requested that the location of the route on their property be shifted to the south, allowing structures to be placed along the edges of their most productive agricultural areas.

The Modified Proposed Route was shifted to the south on these parcels by moving both of the angle structure locations to the west. The northern angle structure was moved 750 feet to the west, from an area in the middle of the agricultural field to the edge of the field, while the southern turning structure was moved 2,100 feet to the west. The northern angle was not located even further west due to the likely presence of forested wetlands in the areas nearer to the Platte River. The resulting alignment reduces the number of landowner parcels crossed and has a greater length of line crossing the landowners who suggested the reroute. They indicated that the Modified Proposed Route would have a lower overall impact to their farming operations due to the specific alignment on their property.

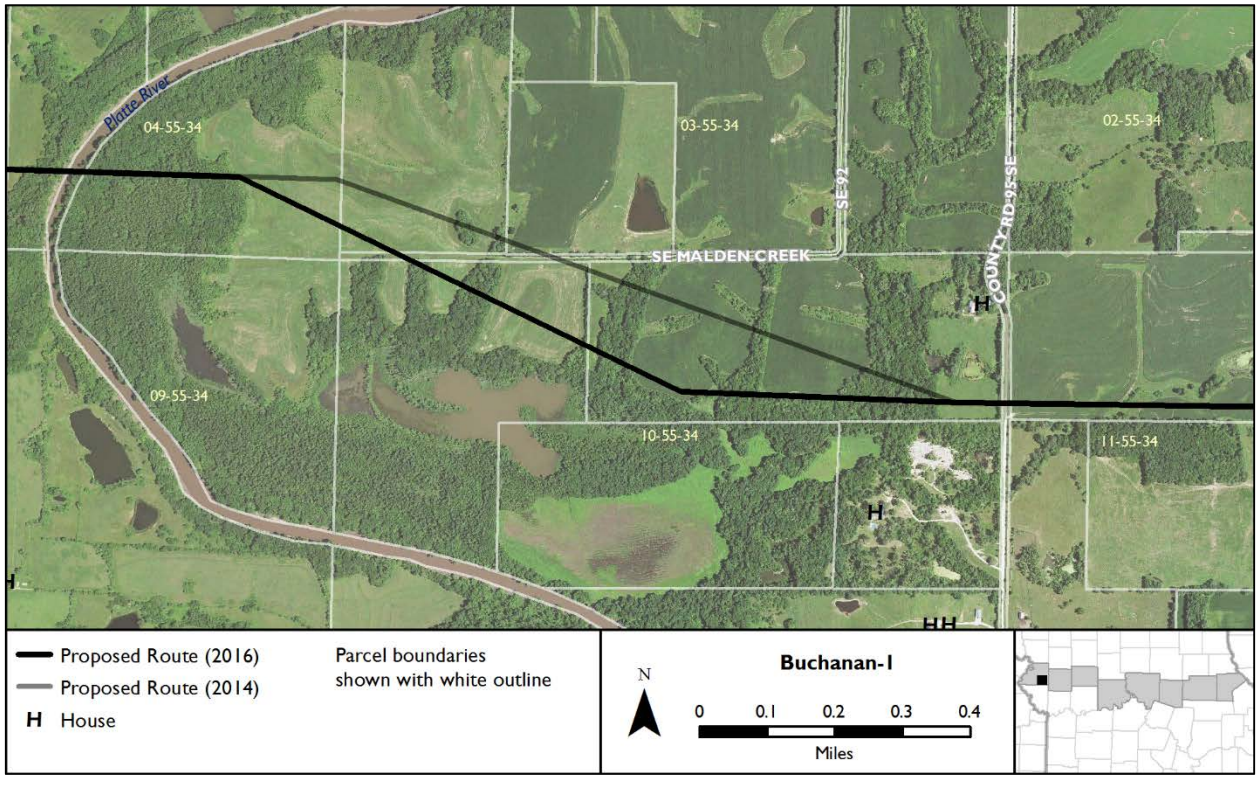


Figure 4. Reroute Buchanan-1

Reroute Caldwell-1

A landowner at the intersection of Missouri Route Z and Texas Road requested a slight modification of the Original Proposed Route across their property (**Figure 5**). The realignment would involve moving an angle structure 660 feet to the east, off a cultivated agricultural area and onto pasture land owned by the requesting landowner. The Modified Proposed Route would have an additional 660 feet of alignment parallel to the gas pipeline corridor. The Routing Team identified no negative impacts associated with this proposed change.

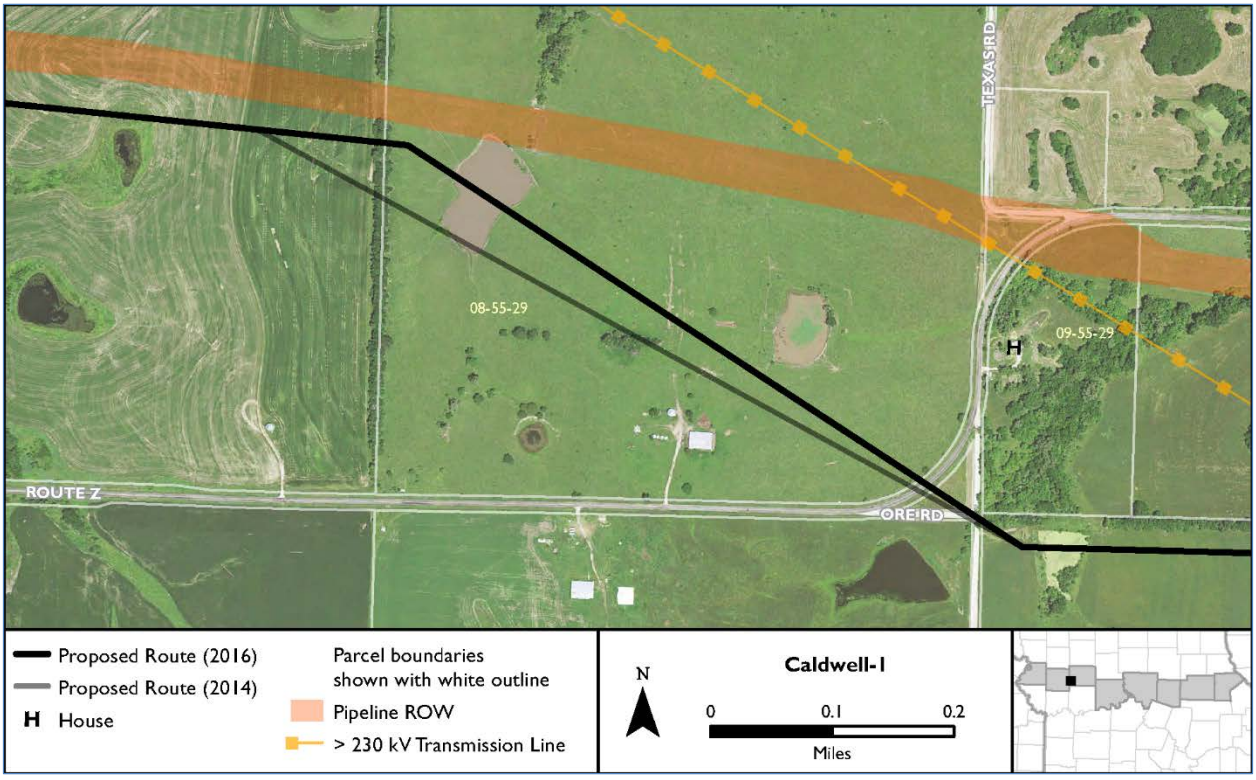


Figure 5. Reroute Caldwell-1

Reroute Caldwell-2

Through this section of Caldwell County, the Original Proposed Route diverts to the south of the gas pipeline corridor to increase distance from six residences directly adjacent to the pipeline ROW (**Figure 6**). A portion of that diversion is located parallel to parcel boundaries a quarter of a mile north of State Highway 116. During the routing process, the Routing Team identified a structure near the Original Proposed Route as a large farm building approximately 240 feet from the route. During the 2016 Public Landowner Meetings, a neighbor identified the building as a residence.

In order to increase the distance from the newly identified residence, the Modified Proposed Route was shifted to the north, paralleling the north side of the parcel boundaries rather than following an alignment coincident with the parcel boundaries. The modified alignment crosses four fewer parcels, is farther from the newly identified residence, and would likely be far enough from the parcel boundary to avoid the need to clear the small tree line along the northern edge of the property.

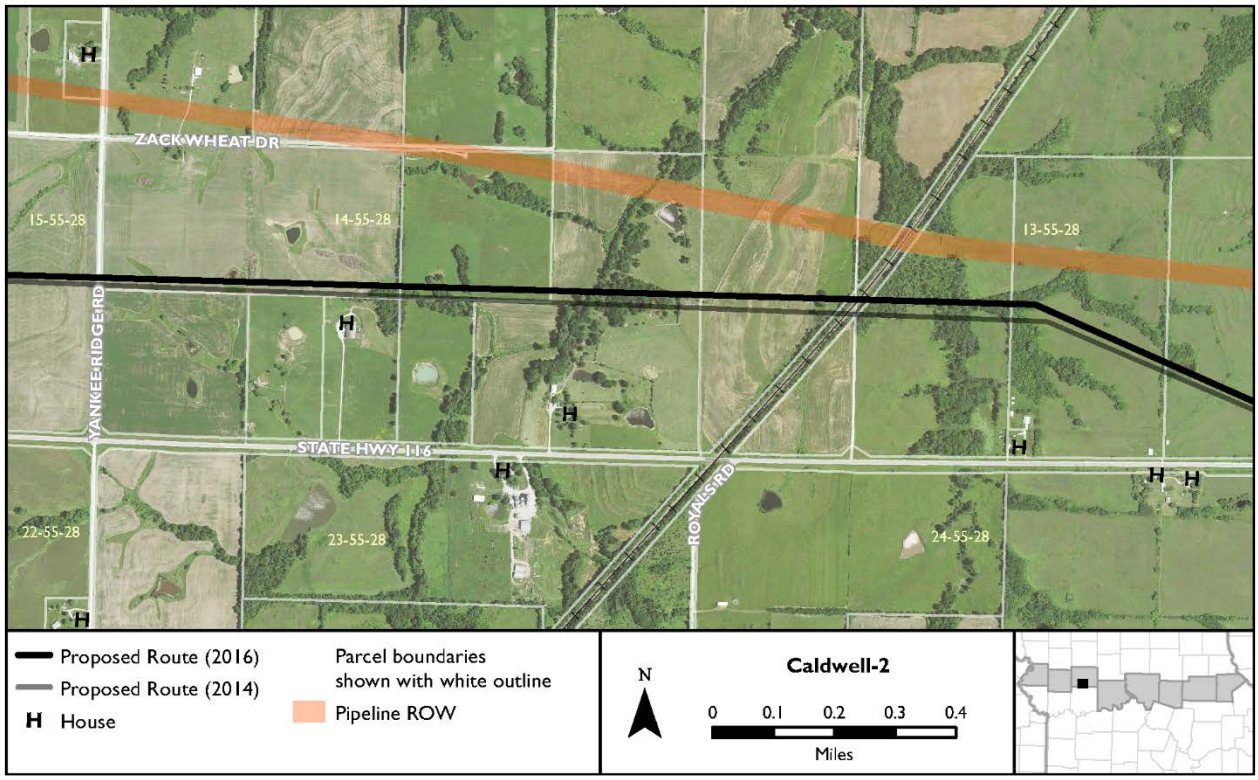


Figure 6. Reroute Caldwell-2

Reroute Carroll-1

Through this section of Carroll County, the Original Proposed Route parallels the gas pipeline corridor (**Figure 7**). The gas pipeline crosses several parcels along this stretch of the Original Proposed Route. Landowners requested moving the route to the north side of their parcels rather than remaining parallel to the gas pipeline to avoid potential impacts on their agricultural operations.

A preliminary modification to the route was presented at the Public Landowner Meetings in June 2016. Although this modification would be 500 feet longer, it would have less potential impact on the existing agricultural land use because the route would be located along the north edge of the five parcels. Additionally, the north side of these parcels has some ground that is not currently cultivated and could allow for the opportunity to strategically place structures out of or on the edge of cultivated fields. An adjacent landowner to the east of the preliminary modification expressed concern with the proximity of the route to a residence on their property and requested extending the revision an additional 4,800 feet to the east, following the same trajectory along the northern edge of the parcels. Extending the preliminary modification would move the route farther from that residence and a neighboring residence and place it in a location on that property that would ensure significant tree coverage between the residence and the line.

The Modified Proposed Route would cross less agricultural land and avoid bisecting several parcels in the area. It is located further from residences on those parcels and would have a greater length of alignment parallel to parcel boundaries.

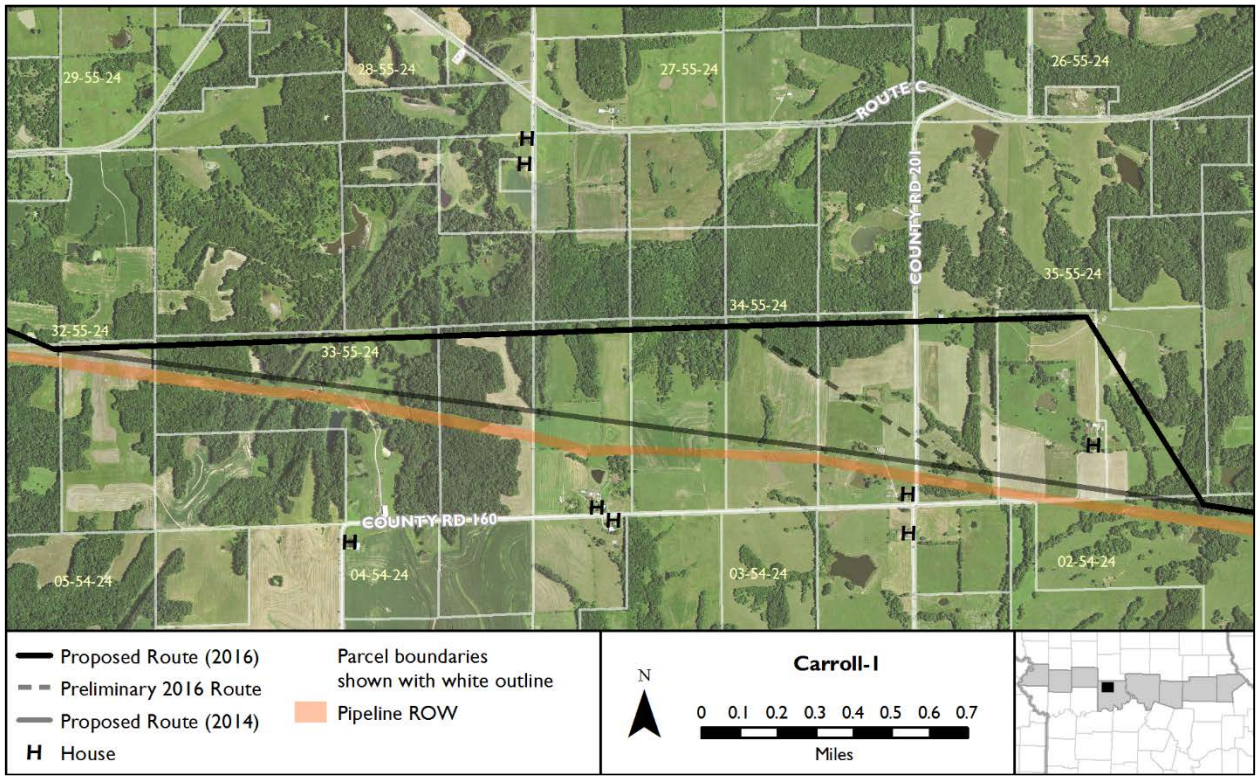


Figure 7. Reroute Carroll-1

Reroute Carroll-2

The Original Proposed Route parallels the gas pipeline corridor through this stretch of Carroll County, between Missouri Route T and U.S. Highway 65 (**Figure 8**). During the Public Landowner Meetings in June 2016, a landowner indicated that a new residence is currently being built on a parcel crossed by the route. The Routing Team verified the location of the new residence in the field and identified that it will be approximately 420 feet from the Original Proposed Route.

The landowner suggested a revision which would locate the route north of the new residence. The revision would place more of the route through agricultural lands on their property, however the route would be approximately 800 feet from the new residence. The alignment also shifts the route further from another residence located at the end of County Road 231. The Modified Proposed Route angles away from the gas pipeline corridor to the east of Missouri Route T, heads due east for 7,900 feet, and then angles to the southeast for 4,300 feet before rejoining the Original Proposed Route alignment.

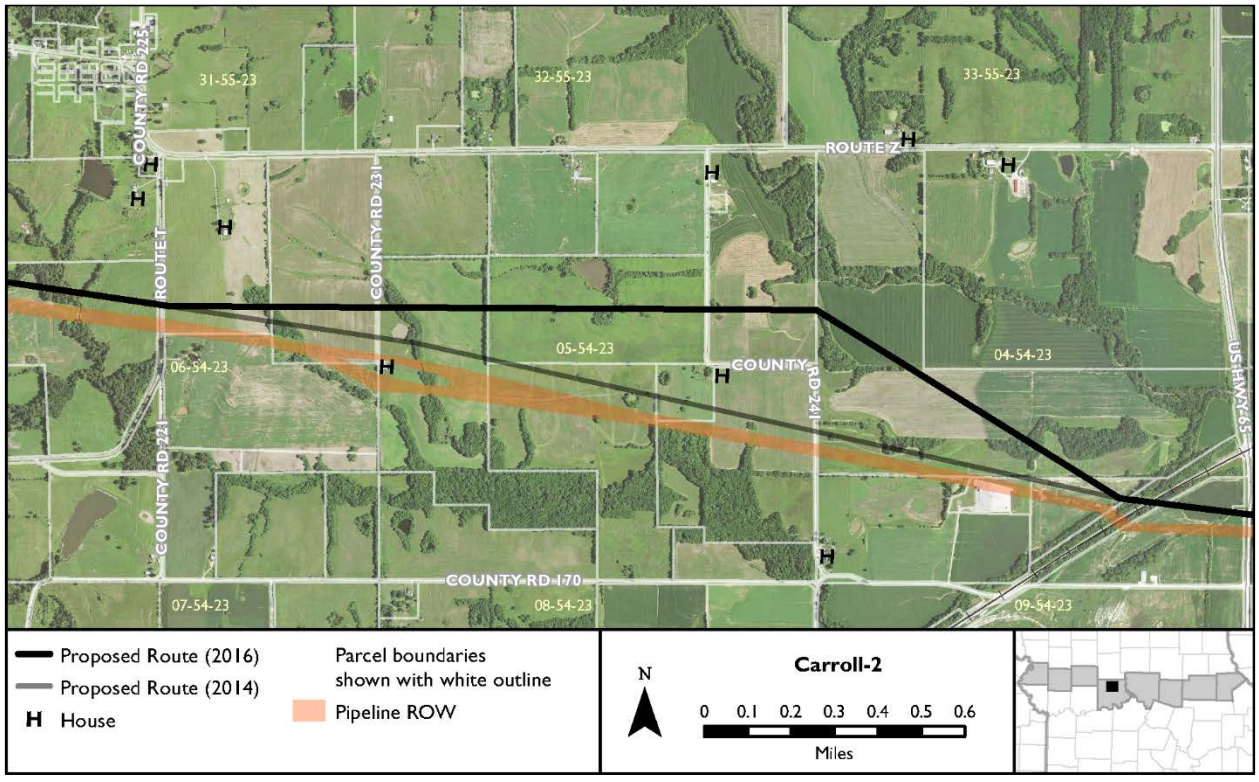


Figure 8. Reroute Carroll-2

Reroute Carroll-3

Two adjacent landowners requested modifications to the Original Proposed Route (**Figure 9**). The Original Proposed Route in this area parallels the north side of the gas pipeline before crossing to the south side and diverting from the parallel alignment to avoid a large cattle operation that the gas pipeline crosses. The route avoids crossing an area where the gas pipeline ROW widens at the western end of County Road 174. On the western end of this reroute, the landowner requested moving the Original Proposed Route to the south to accommodate new buildings associated with the cattle operation expansion that has occurred since development of the Original Proposed Route. During the Public Landowner Meetings in June 2016, the landowner reviewed the suggested reroute and requested that the new angle structure be moved further east, from a more agriculturally-productive area in the western field to a location on the edge of an adjacent field. The shift locates the angle structure 370 feet to the east and results in a minor change in alignment of the route to the east and west of that structure.

On the eastern end, between County Roads 281 and 291, a different landowner requested that the alignment move closer to the gas pipeline to consolidate easements on their property. Together, these reroutes would be approximately 250 feet longer, would have one fewer angle structure, and would have a greater length of alignment directly parallel to the gas pipeline corridor. They would avoid impacts on new buildings, which were located within the ROW of the Original Proposed Route at the southern end of the cattle operation.

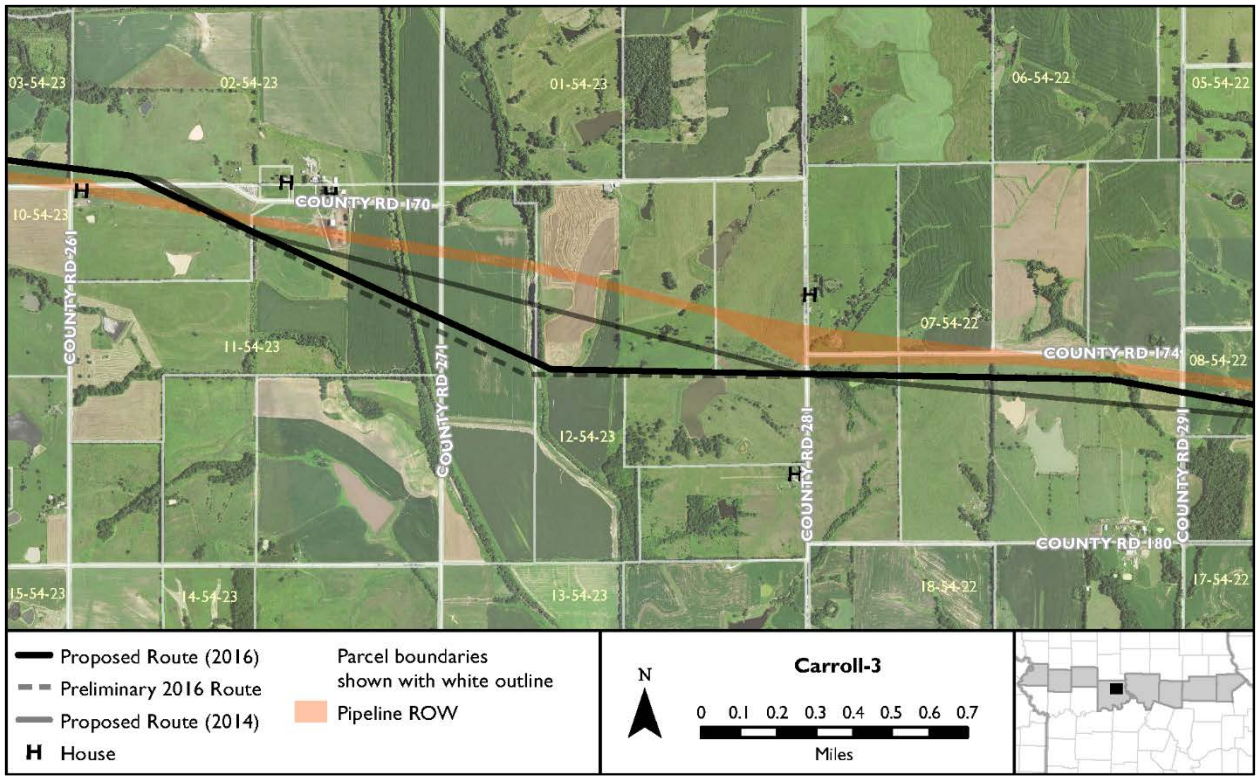


Figure 9. Reroute Carroll-3

Reroute Carroll-4

The Original Proposed Route in this section of Carroll County is roughly parallel to the southern side of the pipeline corridor (**Figure 10**). As described in the Missouri Route Selection Study, this pipeline corridor contains multiple individual pipelines. One of the pipelines in this area veers to the south of County Road 174, away from the main corridor, causing the Original Proposed Route to also redirect south to avoid a lengthy crossing of the pipeline right-of-way (ROW). Reroute Carroll-4 is directly east of Reroute Carroll-3, and in coordination with their neighbor, this landowner also suggested a potential reroute that would better align the route with the gas pipeline corridor as it crosses their property.

The landowner indicated several areas on the property that could be more greatly affected by the presence of new structures. The Original Potential Route was modified to avoid these areas and to consolidate ROW clearing along an unnamed wooded stream that runs through the property. The potential reroute was further modified to straighten its trajectory to the east and eliminate small angles in the route, which would have limited the flexibility of the engineering and construction teams to place structures outside the structure avoidance areas defined by the landowner.

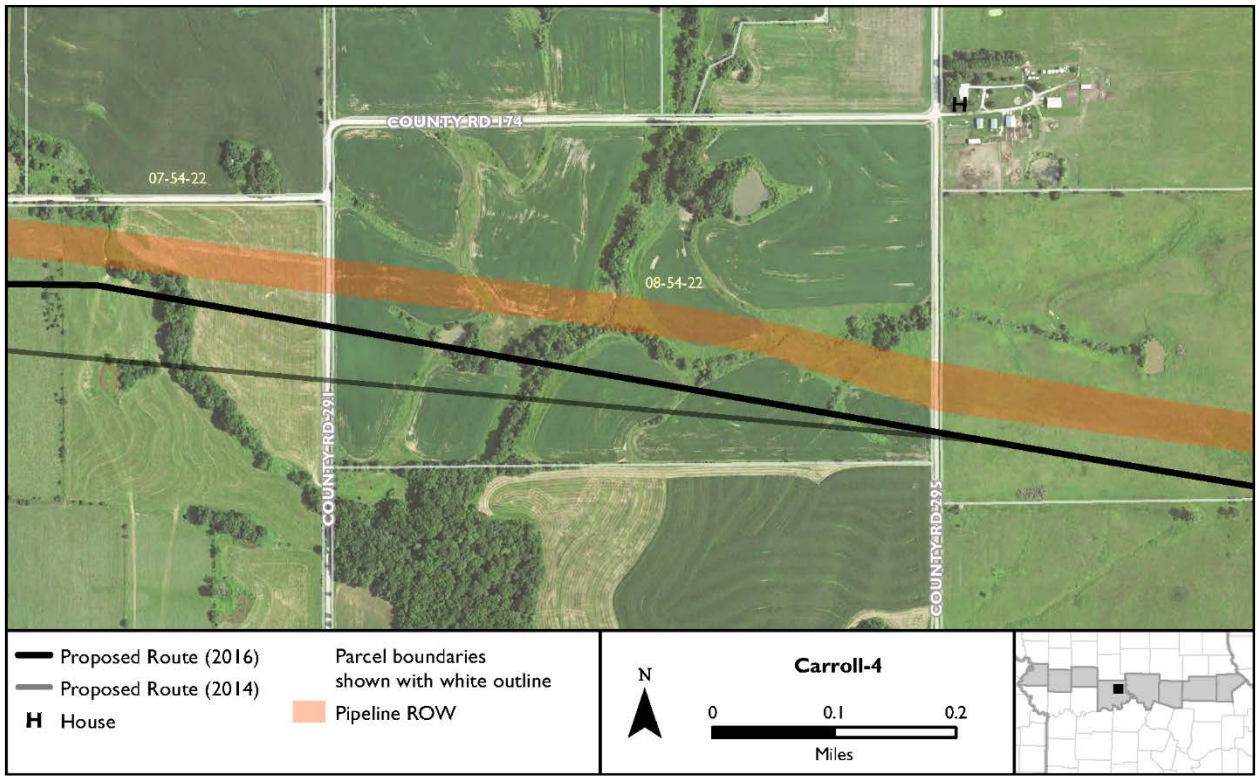


Figure 10. Reroute Carroll-4

Reroute Carroll-5

Two landowners on opposite sides of County Road 221 suggested a potential reroute that would relocate an angle structure from the east side of County Road 221 to the west side, a shift of approximately 260 feet (**Figure 11**). The revision would relocate the angle structure from an area of cultivated crops to pasture land. The Routing Team confirmed that this route change would reduce permanent impacts to agricultural lands, and it would not result in any additional impacts in comparison to the Original Proposed Route.

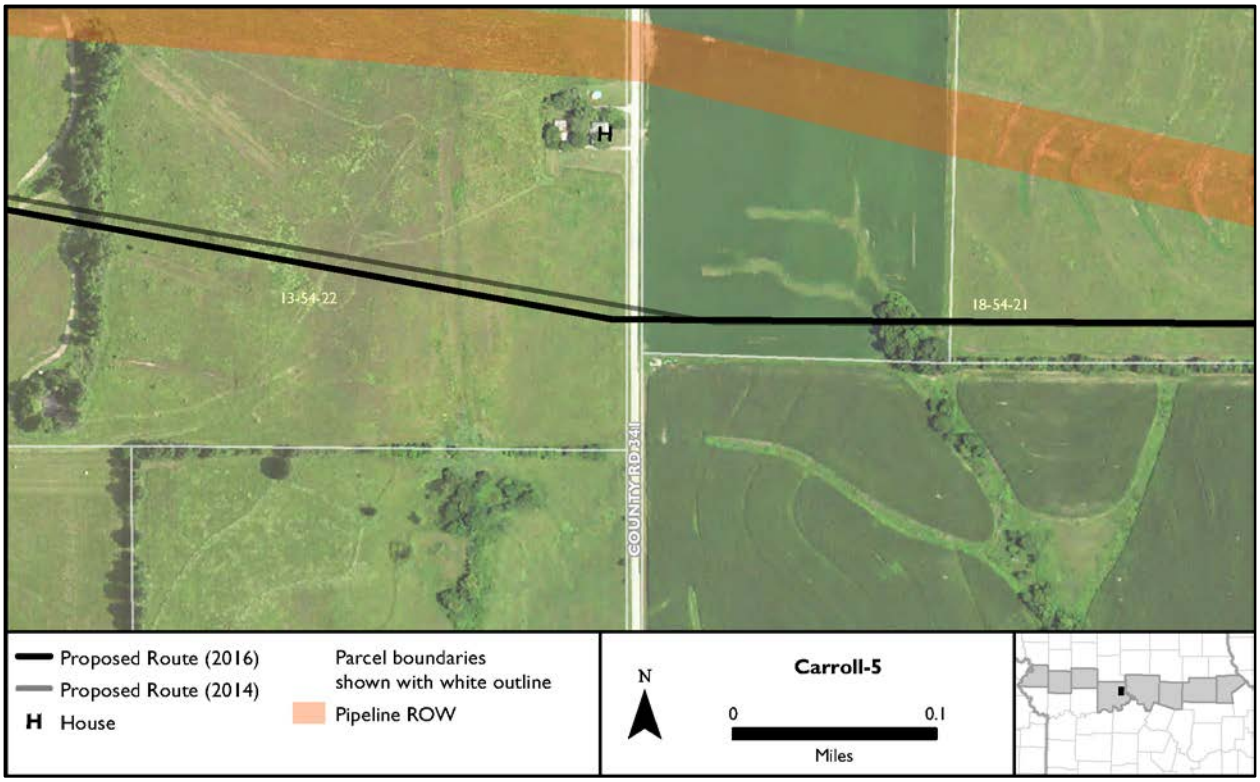


Figure 11. Reroute Carroll-5

Reroute Chariton-1

During the Missouri Public Service Commission's proceedings on the Grain Belt Express Project in 2014 (Docket NO. EA-2014-0207), two landscape features were identified in Chariton County, north of Brunswick (**Figure 12**). The first was Sycamore Valley Farms Bed and Breakfast located along County Road 205, approximately 450 feet north of the Original Proposed Route. The second was the potential for a home site near the Original Proposed Route, in the southeastern corner of a parcel at the intersection of Missouri Highway Y and Iowas Road. The Routing Team studied modifications to the alignment that addressed these concerns. Ultimately, the route on the western portion was selected that increased distance from the Bed and Breakfast, as well as avoided additional sensitivities. The alignment was maintained on the eastern portion due to impacts identified during the public outreach process.

Through this area, the Original Proposed Route diverted from an alignment parallel to the gas pipeline corridor to avoid several residences and a private airstrip (Shiloh Airpark) directly adjacent to the existing gas pipeline ROW. A revised preliminary route was presented at One-On-One Landowner meetings to landowners in the area and at the Public Landowner Meetings in June 2016. This revised preliminary route would have diverted to the south approximately 2 miles farther west from where the Original Proposed Route diverts from the gas pipeline corridor. The reroute would head due south for 0.4 mile along parcel boundaries and then angle to the southeast across a mix of primarily pastures, forests, and shrub land. The route would then continue in a mostly due east direction for 3.6 miles, before rejoining the Original Proposed Route alignment near the intersection of Marquette Avenue (County Highway 211) and Iowas Road.

During the 2016 Public Landowner Meetings, additional landscape features were identified which led to a further revision of the potential reroute. Two small potentially historic cemeteries were identified close to the preliminary revised route. Additional information was provided indicating that part of the area crossed by the revised route is a large wooded wetland complex. Following these discussions with landowners and the field review by members of the Routing Team, the route was further revised to remain on the original alignment along the pipeline corridor for an additional 2,700 feet before angling to the southeast for a little over a mile. It crosses Fort Orleans Avenue, then angles due east for 3,500 feet, at which point it angles to the northeast and begins paralleling parcel boundaries to the east. It rejoins the Original Proposed Route alignment 1,500 feet west of Missouri Route Y. During the initial routing in 2014 and early 2016, two residences were identified along Fort Orleans Avenue (County Road 205). At the Public Landowner Meetings and in the subsequent field review, it was determined that both residences are vacant. The Modified Proposed Route is approximately 200 feet from each of these vacant structures.

From the point where the Modified Proposed Route rejoins the Original Proposed Route in the northeast quarter of section 25, a further route revision was presented at the Public Landowner Meetings. The west-to-east alignment of the Modified Proposed Route would have continued for an additional 4,100 feet before angling back to the southeast crossing Iowas Road and rejoining the Original Proposed Route alignment. This potential revision was in response to the potential new home site identified during the 2014 proceedings. Grain Belt attempted to review and discuss this reroute with the landowners associated with the future home site; however, the Landowners did not provide feedback on the proposed revision other than to say they remain opposed to the project regardless of the alignment.

During the 2016 Public Landowner Meetings, the routing team spoke with several landowners to the east who would be crossed by the new alignment. These landowners identified potential negative impacts to their farming operations, specifically across terraced fields and topography that would make siting less desirable. They also suggested paralleling Iowas Road (as originally proposed) as having less impact to the existing resources and land use in the area, as structures could be placed along the edge of the property line near the road. Additionally, the proposed reroute in this area would move the west-to-east alignment further north, and in closer proximity to the Shiloh Airpark. Therefore, the Routing Team decided to maintain the original alignment on the eastern portion of this reroute.

Although Reroute Chariton-1 is 0.3 mile longer, it provides several benefits over the Original Proposed Route. **Table 3** includes a comparison of key factors between the two routes as measured between their common beginning and ending points in this area. The new alignment is approximately 1,600 feet from Sycamore Valley Farms Bed and Breakfast, whereas the Original Proposed Route is approximately 450 feet away. No residences are located within 500 feet of the Modified Proposed Route, as opposed to three within 500 feet of the Original Proposed Route.

The Modified Proposed Route has one crossing of a gas pipeline ROW, which contains a single pipeline, whereas the Original Proposed Route has two crossings of pipeline ROWs, both of which contain multiple pipelines. Additionally, the single pipeline ROW crossing by the Modified Proposed Route is closer to a perpendicular angle, which is preferable from a construction perspective and for the operation and maintenance of the gas pipeline.

The Original Proposed Route crosses a relatively large forested area to either side of Newcomers Avenue (County Highway 207). The gas pipeline corridor, which the Original Proposed Route parallels, does not remain straight through the forested area but, instead, dips closer to two residences along the highway. The two residences were already within 500 feet of the route and would end up even closer if the route maintained a strict parallel to the gas pipeline corridor to ensure the ROW directly abutted the gas pipeline ROW to reduce forest fragmentation. Total forest clearing is 4.6 acres lower for the Modified Proposed Route.

Table 3. Reroute Chariton-1 Summary		
	Original Proposed Route	**Modified Proposed Route**
Length	2.3 miles	2.6 miles
Forest Clearing within ROW	16.8 acres	11.2 acres
Residences within 250 feet	0	0
Residences within 500 feet	3	0
Total Parcels Crossed	10	12
Total Landowners Crossed	7	10
Parallel to Parcel Boundaries	0 miles	0.4 miles
Gas Pipeline ROW Crossings	2	1

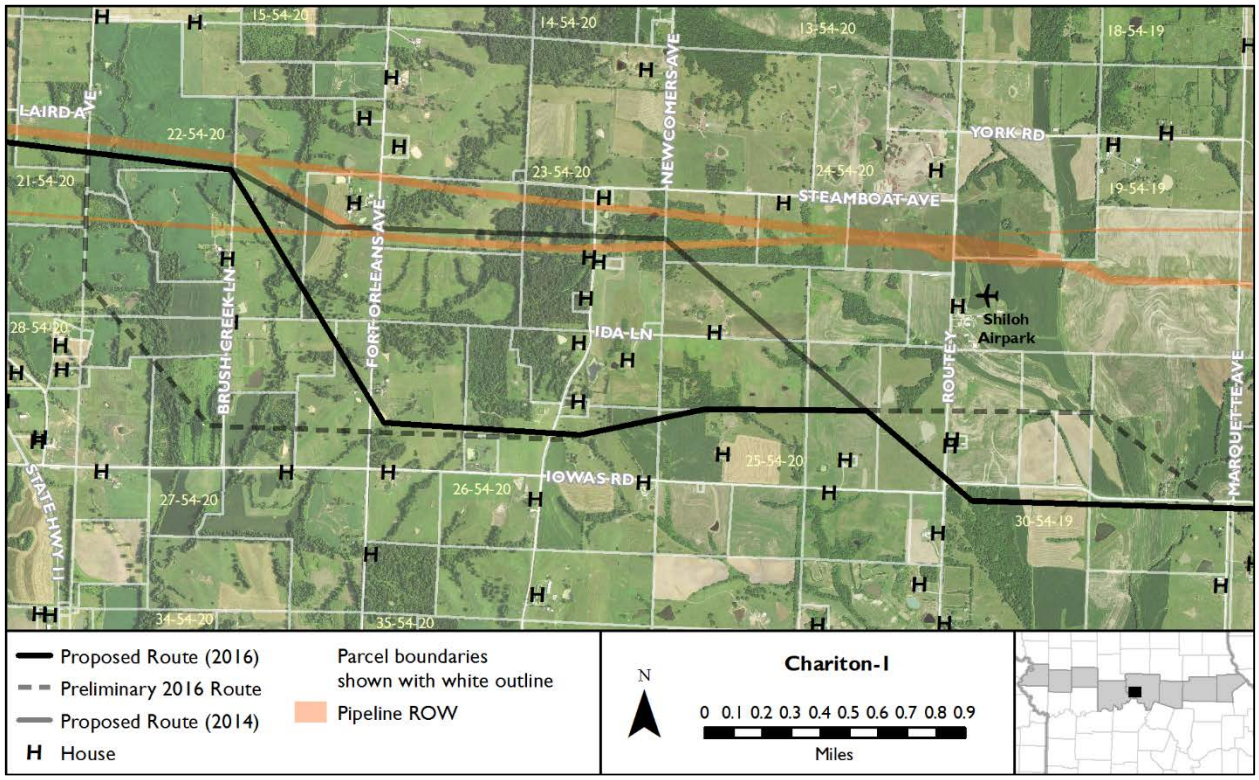


Figure 12. Reroute Chariton-1

Reroute Chariton-2

In this section of the Original Proposed Route in Chariton County, the alignment is on a generally east-west trajectory with a short diagonal segment that crossed to the south of Allen Road (**Figure 13**). A landowner at the north end of Grange Avenue proposed a potential reroute that would shift the Allen Road crossing approximately one mile to the west, thus avoiding a potential impact on their cattle operations.

While avoiding impacts to the cattle operation, the resulting alignment would angle to the north before angling back to the south across Allen Road, and then continuing east parallel to the south side of the road. The Routing Team further revised the landowner reroute, extending it to the west in order to create a less circuitous alignment. The Modified Proposed Route continues on a straight alignment from east of Missouri Route Y to Settlers Avenue; a distance of over eight miles.

In addition to avoiding the cattle operations, the Modified Proposed Route would have a greater length of transmission line that runs parallel to parcel boundaries and roadways than the Original Proposed Route. The reroute also would have a greater length across pasture land instead of cultivated crops, which would have a lesser potential impact on current land use.

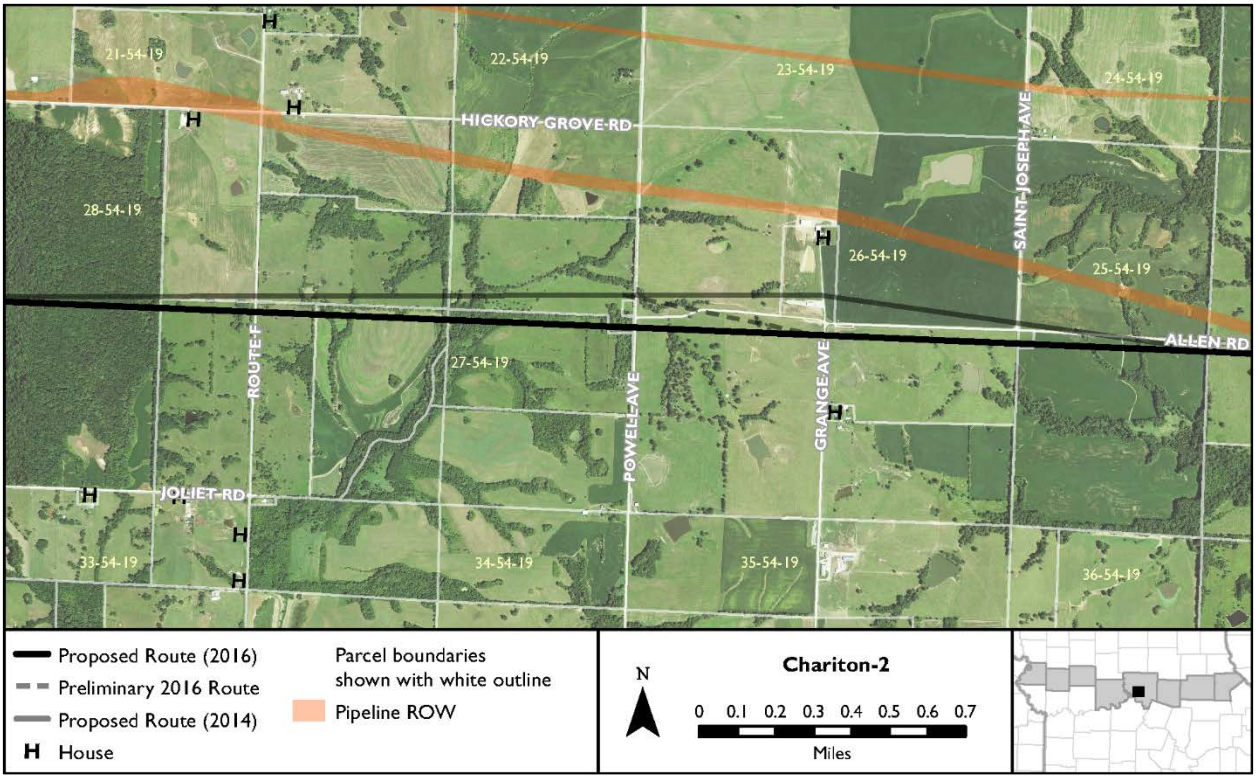


Figure 13. Reroute Chariton-2

Reroute Chariton-3

Landowners in the vicinity of the angle structure shown in **Figure 14** presented to members of the Routing Team a potential reroute that would shift the angle structure approximately 200 feet to the south, moving it from one property to another. Both landowners were in agreement with this new alignment. The alignment proposed by the landowners was further modified to lessen the angle of the route as it approached from the west and to allow for greater flexibility for detailed structure placement during the engineering phase of the project. The modification replaces two light angle structures with tangent structures, which tend to be shorter and have a smaller footprint on the landscape.

In addition to satisfying the interests of both landowners and not introducing any new quantifiable impacts, the Modified Proposed Route would be slightly shorter and would cross a greater proportion of pasture land (as opposed to cultivated crops) than the Original Proposed Route.

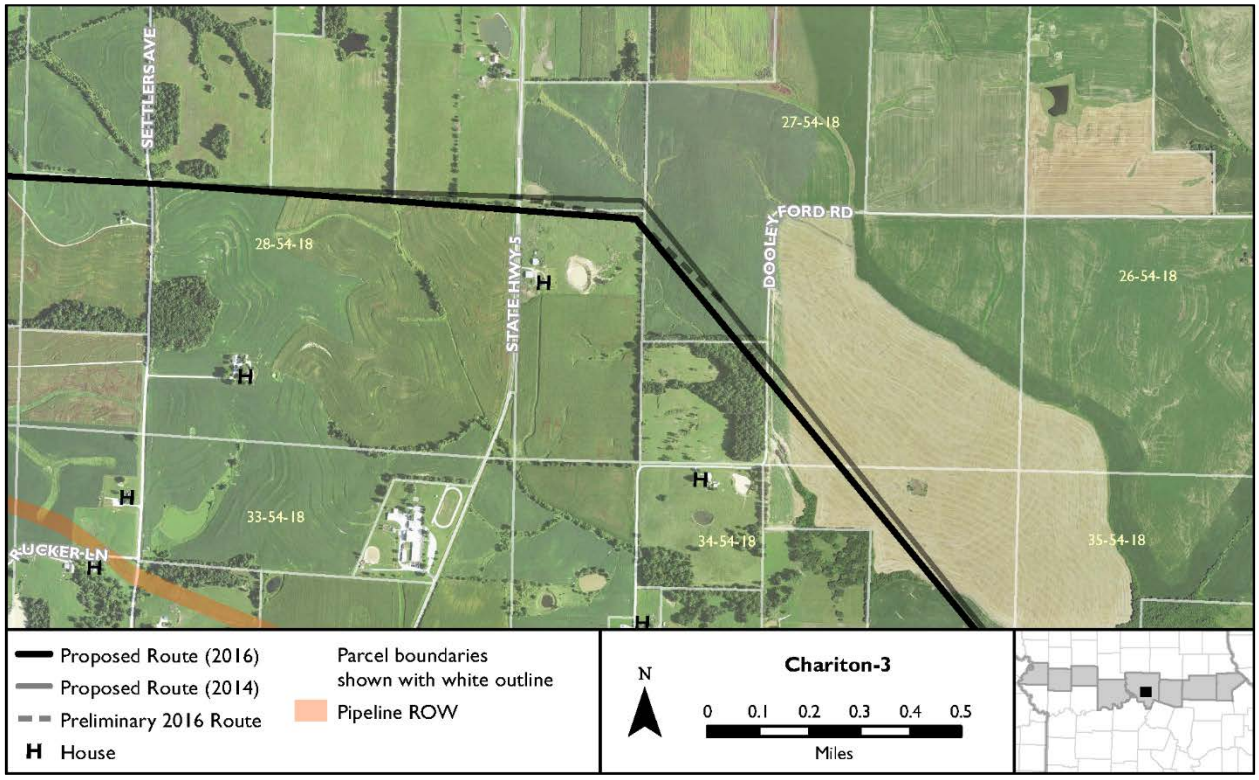


Figure 14. Reroute Chariton-3

Reroute Randolph-1

The Original Proposed Route crosses an existing 345 kV transmission line approximately 3,300 feet west of Missouri Route AA (**Figure 15**). A landowner in the vicinity of the crossing suggested moving the angle structure located just to the west of the existing transmission line further north, to increase distance from a structure on the existing line. This shifts the angle structure out of a cultivated field, towards the edge of the parcel. Additionally, crossing the existing line at a location that is further from the existing structures provides flexibility during the engineering phase of the project and possibly allows for shorter structures than would otherwise be necessary for maintaining appropriate vertical clearance between the two lines.

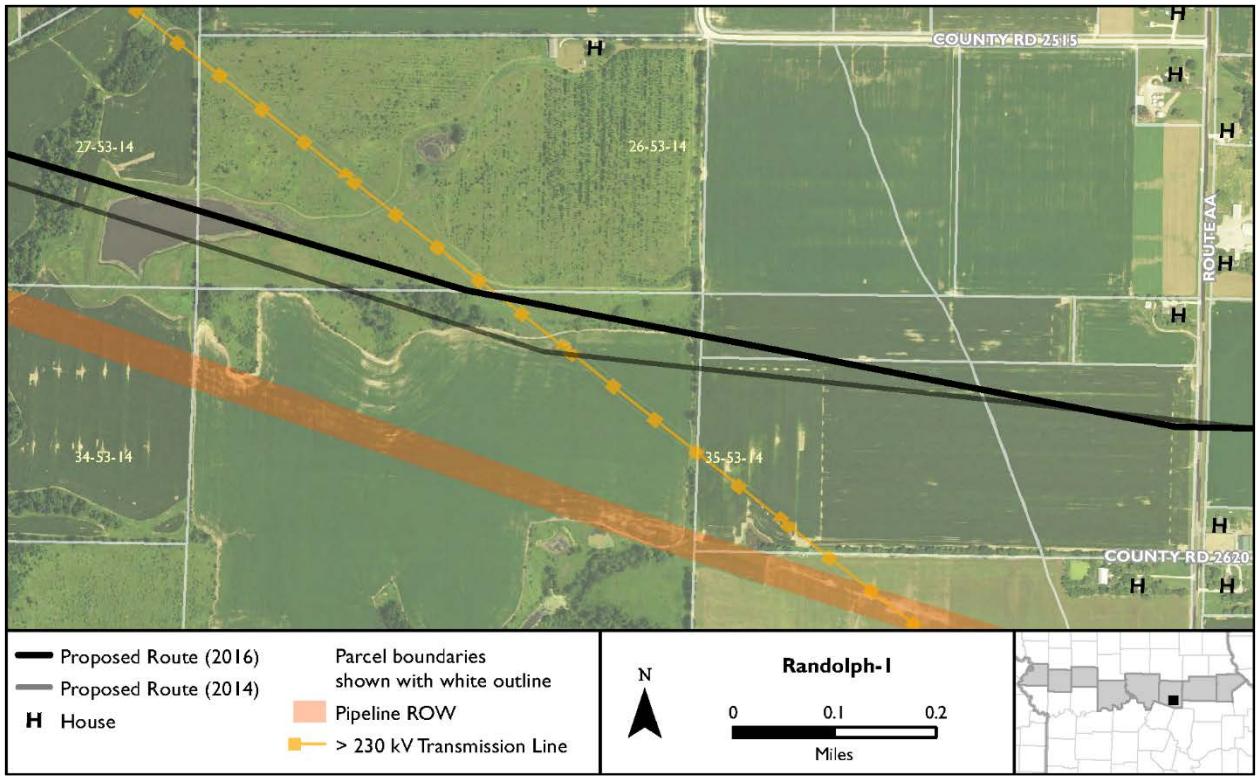


Figure 15. Reroute Randolph-1

Reroute Monroe-1

The Original Proposed Route has a segment that angles to the northeast as it crosses County Road 1061 (County Road 111) in Monroe County (**Figure 16**). The 8,000 foot-long segment crosses near a sensitive area containing two large trees identified during the Public Landowner Meetings in June 2016. A minor shift in the placement of the angle structures at the beginning and end of the diagonal segment results in moving the line far enough to avoid impacting the identified area.

Shifting the southwestern angle 220 feet to the east and the northeastern angle 180 feet to the west allows the Modified Proposed Route to minimize impacting those sensitive features identified by the landowner, while not introducing any additional impacts to the human or natural environment.

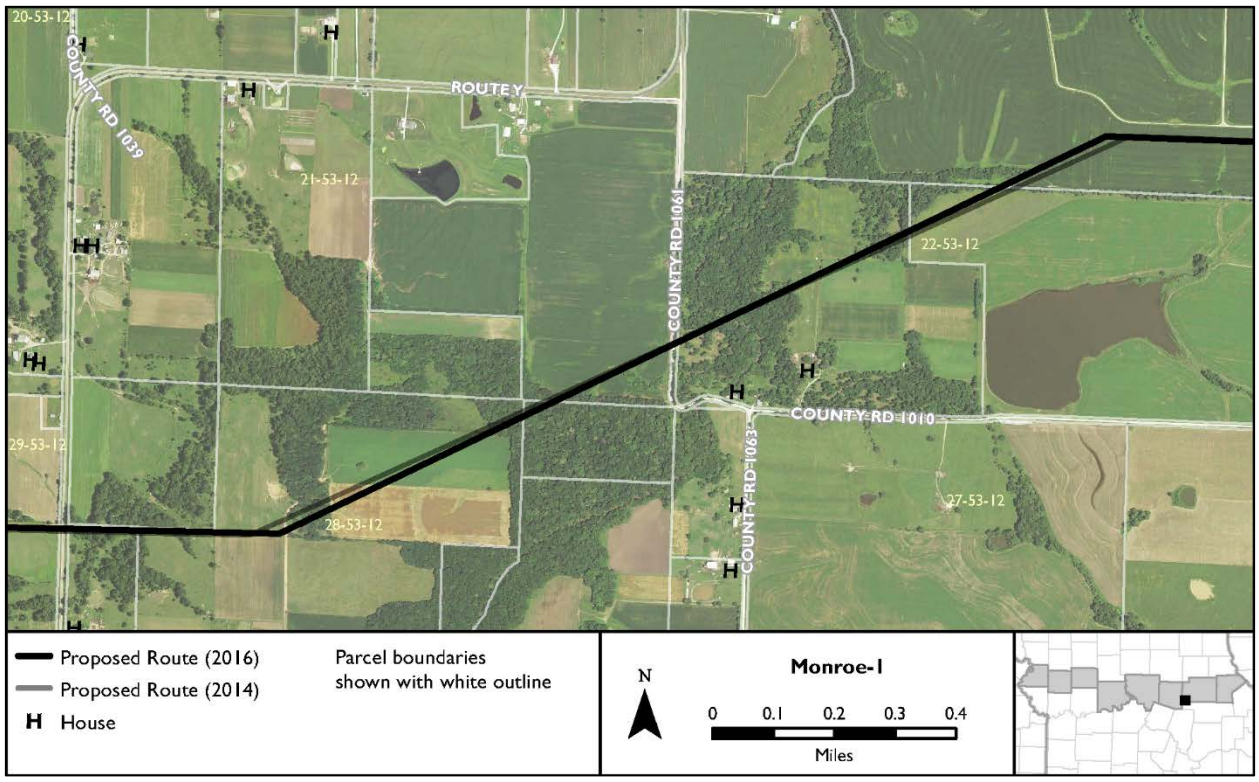


Figure 16. Reroute Monroe-1

Reroute Monroe-3

A landowner in Monroe County proposed Reroute Monroe-3, which would be located just to the east of land administered by the U.S. Army Corps of Engineers along Mark Twain Lake (**Figure 17**). Along this stretch, the Original Proposed Route traveled on a diagonal trajectory between two east-west segments that parallel parcel boundaries. The landowner requested the addition of an angle structure to the diagonal segment, modifying the alignment to avoid crossing a forested stream and the landowner's access point onto the property.

Although the Modified Proposed Route would be slightly longer (less than 100 feet), it would move farther from the South Fork Church and Cemetery along Missouri Highway E and would result in less total forest clearing than the Original Proposed Route.

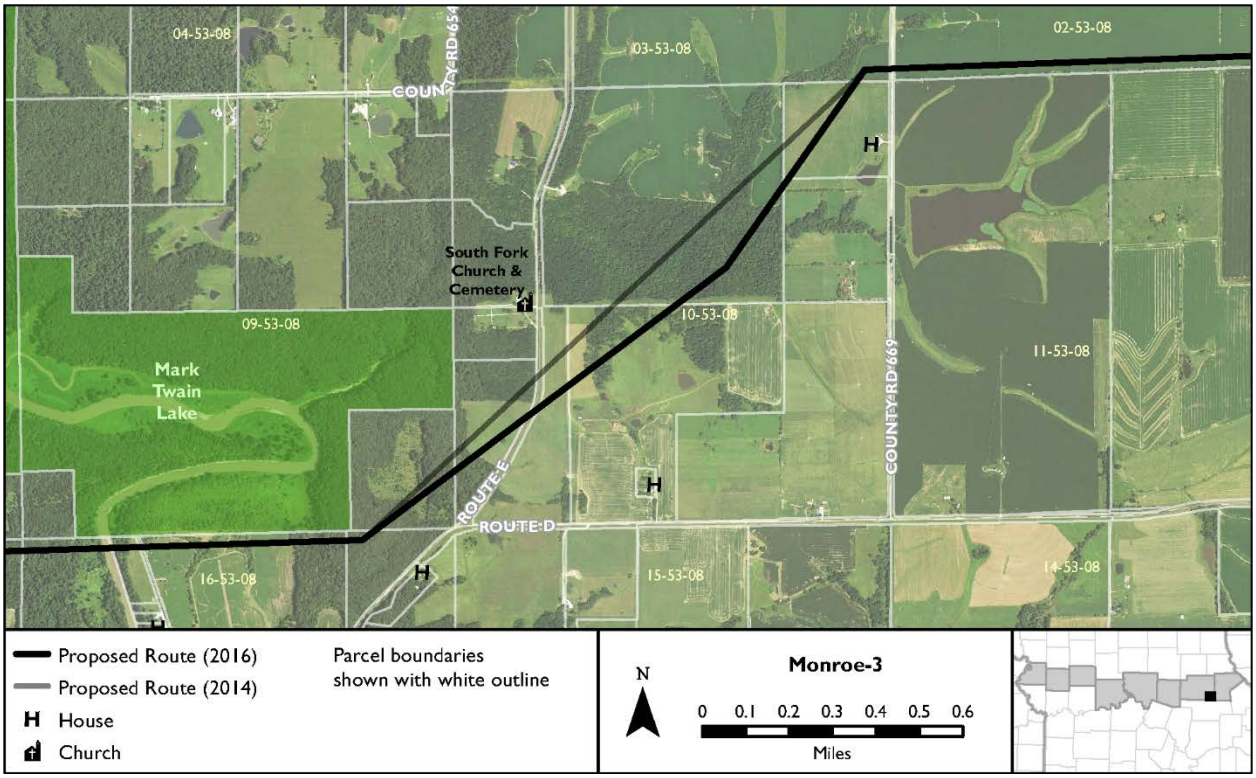


Figure 17. Reroute Monroe-3

Reroute Ralls-1

The Original Proposed Route crosses Malaruni Road on an east to west trajectory and roughly parallels the southern edge of several parcels until it crosses Missouri Highway 79 (**Figure 18**). Along this alignment, the route angles south of the parcel boundaries to avoid impacts to a residence and several outbuildings, then angles back to the north of the parcel boundaries to increase distance from another residence. Despite these diversions, this section of the Original Proposed Route passes within 500 feet of four residences.

During the Public Landowner Meetings in June 2016, a landowner in the vicinity suggested realigning the route to parallel parcel boundaries approximately 1,250 feet to the north. Although the Modified Proposed Route is slightly longer (420 feet), necessitates heavier angle structures than the Original Proposed Route, and diagonally crosses two parcels where the route was previously aligned to parcel boundaries, it significantly increases the distance between the route and the residences, maintains a greater buffer of trees to reduce visual concerns, and avoids crossing a driveway used to access two of the residences.

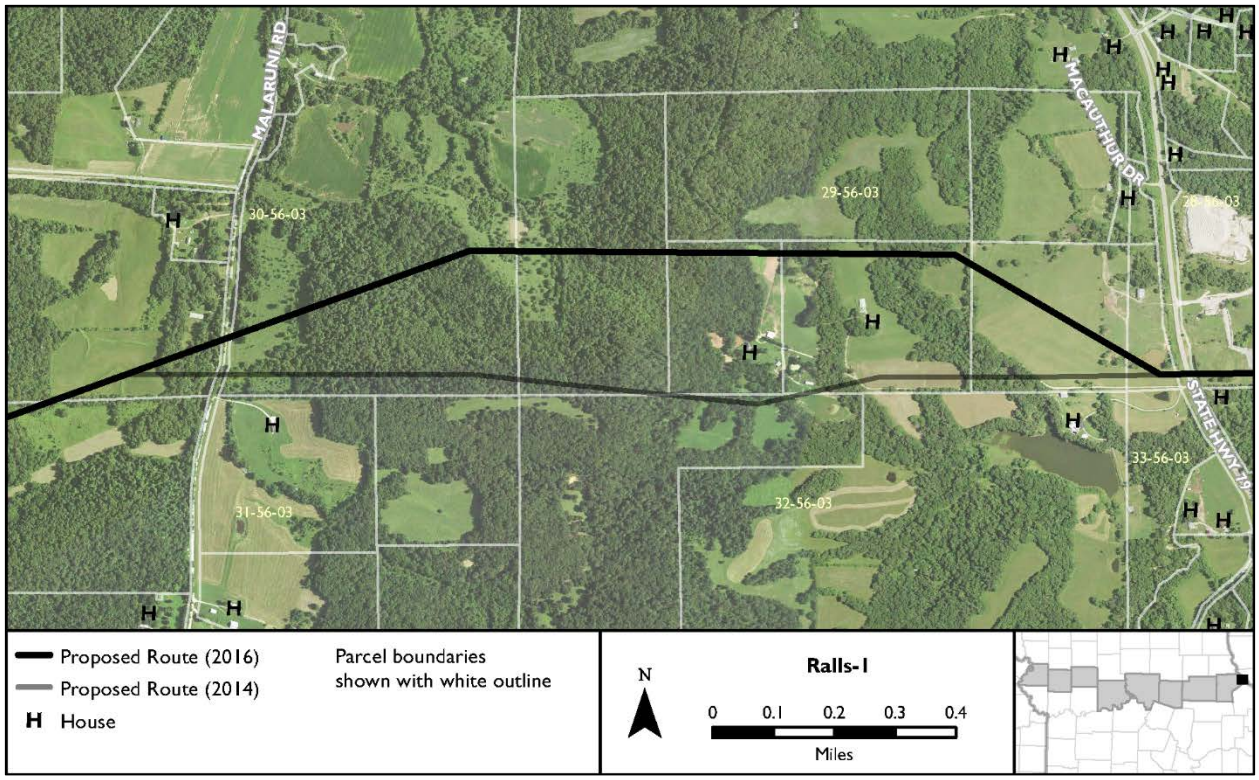


Figure 18. Reroute Ralls-1

4. Proposed Route

4.1 Proposed Route Description

The Routing Team recommends the adjustments to the Proposed Route described in Section 3. The incorporation of these reroutes into the Proposed Route addresses various landowner concerns and presents improvements to the route. The majority of route revisions were prompted by specific landowner requests and represent small modifications to improve siting of the project on their properties.

Table 4 presents a comparison of the Original Proposed Route and the Modified Proposed Route and includes the route revisions described in Section 3. Given the minor scale of revisions to the route, most measures of the impact of the route are similar or identical. A few sizeable differences between the Modified Proposed Route and the Original Proposed Route include: 10 fewer residences within 500 feet, fewer churches and cemeteries within 1000 feet, fewer total parcels crossed, and 8 fewer known archaeological sites within 1000 feet.

Table 4. Proposed Route Comparison

	Original Proposed Route	Modified Proposed Route
Length	205.1	205.7
Hydrology		
Total Stream Crossings (count)	286	288
Waterbody Crossings (count)	30	32
NWI Wetlands		
Wetlands within ROW (acres)	140	142
Forested Wetlands within ROW (acres)	73	75
Wildlife Habitat		
Forest (acres)	883	903
Wetland (acres)	140	142
Pasture/Grassland (acres)	1,317	1,314
Parallel with Existing Linear Features		
Parallel Transmission ROW (miles)	14.7	14.7
Parallel Pipeline ROW (miles)	45.3	37.6
Topography		
Karst (miles crossed)	48.0	48.0
Parallel Alignments		
Transmission Line (miles)	14.7	14.7
Pipeline (miles)	45.3	37.6

Table 4. Proposed Route Comparison		
	Original Proposed Route	**Modified Proposed Route**
Parcel Boundary (miles)	49.9	52.5
Total ROW Parallel (miles)	109.9	104.8
Parallel Alignments		
Transmission Line (percent)	7%	7%
Pipeline (percent)	22%	18%
Parcel Boundary (percent)	24%	26%
Total Percent ROW Parallel	54%	51%
Agricultural Land Use		
Agriculture/Cropland (miles crossed)	111.5	111.1
Pasture/Grassland (miles crossed)	54.1	54.0
Proximity to Buildings		
Residences within 250 feet	5	5
Residences within 500 feet	61	51
Churches within 1000 feet	1	0
Cemeteries within 1,000 Feet	6	4
Schools within 1,000 Feet	0	0
Parcels less than 10 Acres	18	17
Parcels between 10 Acres and 30 Acres	72	71
Parcels between 30 Acres and 80 Acres	227	228
Parcels Larger than 80 Acres	354	349
Total Parcels Crossed	671	665
Historic Resources		
Archaeological Sites (Sites within ROW)	13	12
Archaeological Sites (Sites within 1,000 Feet)	49	41
National Register of Historic Places Points within 0.25 Mile	0	0
National Register of Historic Places Points within 0.5 Mile	0	0
National Register of Historic Places points within 1 Mile	0	0
Federal Aviation Administration Obstruction Zone Crossings		
Public Airfields (miles)	0	0
Private Airfields (miles)	16.3	16.0
Transportation		

Table 4. Proposed Route Comparison		
	Original Proposed Route	**Modified Proposed Route**
Railroads Crossed	9	9
Interstates Crossed	2	2
U.S. Highways Crossed	8	8
State Highways Crossed	14	14
Infrastructure Crossings		
Cell Towers within 500 Feet	4	5
<115kV Transmission lines	14	14
161kV Transmission lines	8	8
345kV Transmission lines	5	5
Pipeline ROW Crossings (approximate)	27	26
Pipelines Crossed (approximate)	54	51

4.2 Rationale for Selection of the Modified Proposed Route

Based on a comparison of the Modified Proposed Route with the Original Proposed Route, the Routing Study Addendum did not identify any significant differences in the potential impacts to sensitivities analyzed in the 2014 Missouri Route Selection Study. Therefore, the rationale presented in the Missouri Route Selection Study for choosing the Proposed Route remains applicable and the general level of impacts described in that report still apply. Based on this review, the Modified Proposed Route best minimizes the overall effect of the Grain Belt Express transmission line on the natural and human environment while avoiding unreasonable and circuitous routes, unreasonable costs, and special design requirements. The Modified Proposed Route is therefore adopted as the Proposed Route for the Grain Belt Express Transmission Line to be constructed in Missouri.

APPENDIX A: ROUTING TEAM

ROUTING TEAM			
Member	**Affiliation**	**Title**	**Specific Role**
Mike Skelly	CLE	President	Project oversight
Jason Thomas	CLE	Vice President – Environmental Affairs	Environmental oversight
Wayne Galli	CLE	Executive Vice President – Transmission and Technical Services	Engineering support and oversight
Mark Lawlor	CLE	Director of Development	Siting support, public outreach, agency consultation
Ally Copple	CLE	Manager	Siting support, Public outreach
John Kuba	CLE	Director – Environmental Affairs	Siting support, agency consultation, environmental and sensitive species
Daniel Hodges Copple	CLE	Associate	Public outreach support
Amy Kurt	CLE	Manager	Siting support, Public outreach
Paula Priest	CLE	Manger – Land	Landowner relations
Ty White	CLE	Manager – Geospatial	GIS support
James Puckett	LBG	Practice Lead – Geospatial Analysis & Cartography	Siting support, GIS Analysis and Mapping
Brad Fine	LBG	Environmental Planner	Siting support, public outreach support and logistics, Engineering
Linda Green	LBG	GIS Specialist	GIS Analysis and Mapping, public outreach
Chris Flannagan	LBG	Environmental Scientist	Soils and Geology
Josh Schanbel	LBG	Environmental Planner	Visual and Recreational Resources
Camilla Deiber	LBG	Cultural Resource Specialist	Architectural resources
Tina Fortugno	LBG	Cultural Resource Specialist	Archaeological resources
Laura Totten	LBG	Environmental Scientist	Wildlife and habitat and sensitive species
Mike Snyder	LBG	Environmental Scientist	Water resources
Neeli Landon	LBG	Communications Specialist	Public outreach

ROUTING TEAM			
Member	**Affiliation**	**Title**	**Specific Role**
Phil Robertson	POWER Engineers	Engineer	Siting support and engineering

APPENDIX B:
GIS DATA SOURCES

Category	Definition	Data Source	Last Updated
Aerial Photography			
National Agricultural Imagery	Missouri NAIP 2014	The National Agricultural Imagery Program (NAIP) obtains aerial imagery during agricultural growing seasons. The most current imagery for the state of Missouri when the project began was taken in 2008. Imagery flown in 2010, 2012, and 2014 was used once it became available. Imagery is collected at the spatial resolution of one square meter and with the spectral resolution as natural color.	Summer 2014
Hydrology			
Streams	National Hydrography Dataset flowlines	A statewide subset of the 2015 National Hydrography Dataset (NHD) was downloaded from the U.S. Department of Agriculture's Natural Resources Conservation Service geospatial data gateway. Feature classes used for calculations included canal/ditch, stream/river (intermittent and perennial), artificial path, and any named features. A member of the routing team verified each stream/river crossing point using 2014 NAIP imagery.	May 2015
Water bodies	National Hydrography Dataset waterbodies	A statewide subset of the 2015 National Hydrography Dataset (NHD) was downloaded from the U.S. Department of Agriculture's Natural Resources Conservation Service geospatial data gateway.	May 2015
Wetlands	National Wetlands Inventory	National Wetland Inventory (NWI) data was downloaded from the U.S. Fish and Wildlife Service's (USFWS) website.	October 13, 2015
Floodplains	100 and 500-year floodplains	The Federal Emergency Management Agency (FEMA) provides digital geospatial data in their Flood Map Service Center. Floodplain data for Missouri was downloaded March 15, 2016. Where possible, unmapped flood areas near the Missouri River crossing were digitized from georeferenced FIRMettes. Floodplain data provided by the Illinois Geospatial Data Clearinghouse was used to approximate the length of floodplains crossed by potential routes on the Illinois side of the Mississippi River.	March 15, 2016

Protected and Public Lands			
Public and Conservation Lands	Local, private, state, and federally owned lands	This data layer represents features from a wide variety of sources, including the U.S. Geological Survey's Protected Areas Database (PADUS v1.3); U.S. Army Corps of Engineers; National Resource Conservation Service; U.S. Fish and Wildlife Service; U.S. Forest Service; The Nature Conservancy; National Conservation Easement Database; Illinois Department of Natural Resources; Illinois Parks and Recreation; Illinois Nature Preserve Commission; Illinois State Geological Survey; Missouri Department of Natural Resources; Missouri Department of Conservation; Missouri Spatial Data Information Service, Indiana Department of Natural Resources; Kansas Department of Wildlife, Parks, and Tourism; Kansas Data Access and Support Center; Kansas Parks and Recreation Association; and many counties and municipalities. Where possible, the boundaries of these protected areas have been edited to match parcel boundaries provided by the counties in the study area.	March - May 2016
Sensitive Species and Habitat			
Indiana Bat and Long-Eared Bat Habitat	Potential habitat crossed by route	The United States Fish and Wildlife Service (USFWS) publishes a list of Federally-Listed Threatened, Endangered, Proposed, and Candidate species by county for Missouri. Because all study area counties are listed as potential habitat for the Indiana Bat and the Long-Eared Bat, and all study area counties except Buchanan are listed as potential habitat for the Gray Bat, habitat for these species was calculated using Forest and Forested Riparian areas as determined by the Photo-Interpreted Land Cover dataset.	May 2016
Heritage Hotspot	Hotspot length crossed	Heritage Hotspot data was provided by the Missouri Department of Conservation and is part of the Comprehensive Wildlife Strategy (CWS) project data. The CWS data description says that hotspots "represent areas with a concentration of species of conservation concern."	April 2006
Illinois Natural Areas Inventory, Threatened and Endangered Species, Illinois Nature Preserves Commission sites		The Illinois Department of Natural Resources (IDNR) provided shapefiles of threatened/endangered species, Illinois Natural Areas Inventory sites, and Illinois Nature Preserves Commission sites. This data was used to analyze potential impacts to protected species and protected areas at the Mississippi River crossing locations.	September 25, 2014
Important Bird Areas (IBA)		The MDC Comprehensive Wildlife Strategy project provided data showing areas identified as Important Bird Areas by the Missouri Audubon society. Important Bird areas provide crucial habitat for species of conservation concern and avian species vulnerable due to their limited range or high congregation density.	May 5, 2016

Soils and Land Use			
Karst		Data depicting regions of karst topography were acquired from the USGS (via the National Atlas Map).	2004
NLCD Land Cover		The National Land Cover Database 2011 (NLCD 2011) compiled by the Multi-Resolution Land Characteristics (MRLC) Consortium (including the U.S. Geological Survey, Environmental Protection Agency, U.S. Forest Service, National Oceanographic and Atmospheric Association, National Aeronautics and Space Administration, Bureau of Land Management, National Park Service, Natural Resource Conservation Service, and the U.S. Fish and Wildlife Service). NLCD 2011 products include 16 classes of land cover from Landsat satellite imagery.	2011
Steep Slopes	Slopes > 20%	Slopes (in percent) were derived from a digital elevation model (DEM) consisting of terrain elevations for ground positions at regularly spaced horizontal intervals (10 meters). The data used for this analysis was derived from the National Elevation Dataset (NED) prepared by the USGS.	2009
Human Environment			
Residences	Residences within 250, 500, and 1000'	Residences were digitized using high resolution aerial image interpretation and verified through field reconnaissance. Aerial imagery provided by the National Agricultural Imagery Program (2014).	May 4, 2016
Schools, Churches, Cemeteries	Features within 1000 feet of route	The locations of churches, schools, and cemeteries were derived from the United States Geological Survey's Geographic Names Information System (GNIS) and augmented through high resolution aerial photo interpretation, field reconnaissance and public outreach efforts. The GNIS database serves as the Federal Government's repository of information regarding feature name spellings and applications for features in United States and its Territories. The names listed in the inventory are often published on Federal maps, charts, and in other documents and have been used in emergency preparedness planning, site-selection and analysis, genealogical and historical research, and transportation routing. Through field reconnaissance, the Routing Team recorded local schools, churches, and cemeteries to augment and verify this data layer.	February 1, 2016
Parcels	Tax parcel boundaries	The routing team contacted counties in the study area (Buchanan, Clinton, Caldwell, Livingston, Carroll, Chariton, Macon, Randolph, Audrain, Shelby, Monroe, Marion, Ralls, Pike) and purchased parcel data during April, May, and June 2013. All counties except for Ralls County provided digital GIS parcel boundary data and associated ownership information. Ralls County provided scans of parcel maps and a spreadsheet with property owner name and address information.	April - June 2013

Household Density		Household density was derived at the census block level from census population data obtained from the US Census Bureau (2010).	2010
Pivot Irrigation Systems	Pivots impacted	Pivot irrigation systems were digitized using high resolution aerial image interpretation. Members of the public were also encouraged to provide information about existing or planned pivot irrigation systems on their land, and this data aided in digitizing and verifying pivot locations. A pivot is considered potentially impacted when a potential route crosses more than 1,500 feet of irrigated area in a single span.	May 4, 2016
Energy Infrastructure			
Transmission Lines		Information on existing transmission lines was collected from Platts Transmission Lines geospatial data layer. The information was augmented through aerial photo interpretation and field review.	May 4, 2016
Oil and Gas Pipelines		Major natural gas and oil pipeline in formation was obtained through the EV Energy Map of North America. Spatial accuracy of the data was augmented through field review of pipeline line corridors, and pipeline ownership information was improved by comparison with the National Pipeline Mapping System online viewer.	May 4, 2016
Oil and Gas Wells		The Missouri Department of Natural Resources, Division of Geology and Land Survey, and Geological Survey Program maintain a list of permitted oils and gas well information within the State of Missouri.	December 17, 2014
Transportation			
Major Roads	Interstates, U.S. Highways, State Highways	Major roads data was prepared by the Environmental Systems Research Institute (ESRI), (2013) Redlands, California, USA.	2013
Airport and Heliport Notification Zones	Airport points and FAA Notification Zone	The location of airports and heliports was gathered from FAA databases, aerial imagery interpretation, field reconnaissance, public input, and navigational charts. An approximation of the air navigation obstruction zone was developed based on the Code of Federal Regulations (CFR) Title 14 Part 77, (Aeronautics and Space, Objects affecting navigable airspace). This approximation was calculated based on aerial interpretation of runway length, the average height of the proposed transmission towers, and approach zone formulas for airports and heliports in the CFR. Note: this is a rough approximation performed based on aerial imagery interpretation without the inclusion of topographic effects or precise knowledge of runway length.	March 21, 2016
Recreation			
Recreation Trails		The Missouri Department of Conservation publishes data showing recreational trails in the state.	October 2010

Scenic Byways		Information and driving directions from the National Scenic Byways Program enabled mapping of scenic and historic byways in Missouri, Illinois, and Indiana.	March 2016
Historic Resources			
Historic and Archaeological Sites		The Missouri State Historic Preservation Office provided shapefiles showing locations of sites and districts listed on the National Register of Historic Places and a geodatabase with spatial and tabular data for archaeological sites across the state.	August 2013

APPENDIX C:

FEDERAL AND STATE AGENCY COORDINATION

April 14, 2016

Robert Stout
Department of Natural Resources
Chief of Policy
P.O. Box 176
Jefferson City, MO 65012

RE: Proposed Grain Belt Express Clean Line Transmission Project

Dear Robert Stout:

Clean Line Energy Partners LLC (Clean Line) is actively developing and planning construction of a +/- 600kV high-voltage direct current (HVDC) transmission line project known as the Grain Belt Express Clean Line (Project). The proposed Project is designed to deliver up to 4,000 megawatts (MW) of wind-generated electricity from the wind-rich region of southwestern Kansas to Missouri, Illinois, Indiana, and markets farther east.

Since we last discussed the project, Illinois has joined Kansas and Indiana in approving the Grain Belt Express Clean Line. We respectfully would like to request a web meeting with you to provide an update on the status of the Project and the next steps involved in seeking approval from the Missouri Public Service Commission. Tentatively, we would like to host this webinar during the last week of April, but we are flexible based on your availability. A member of the routing team will contact you soon to schedule the meeting and provide additional information.

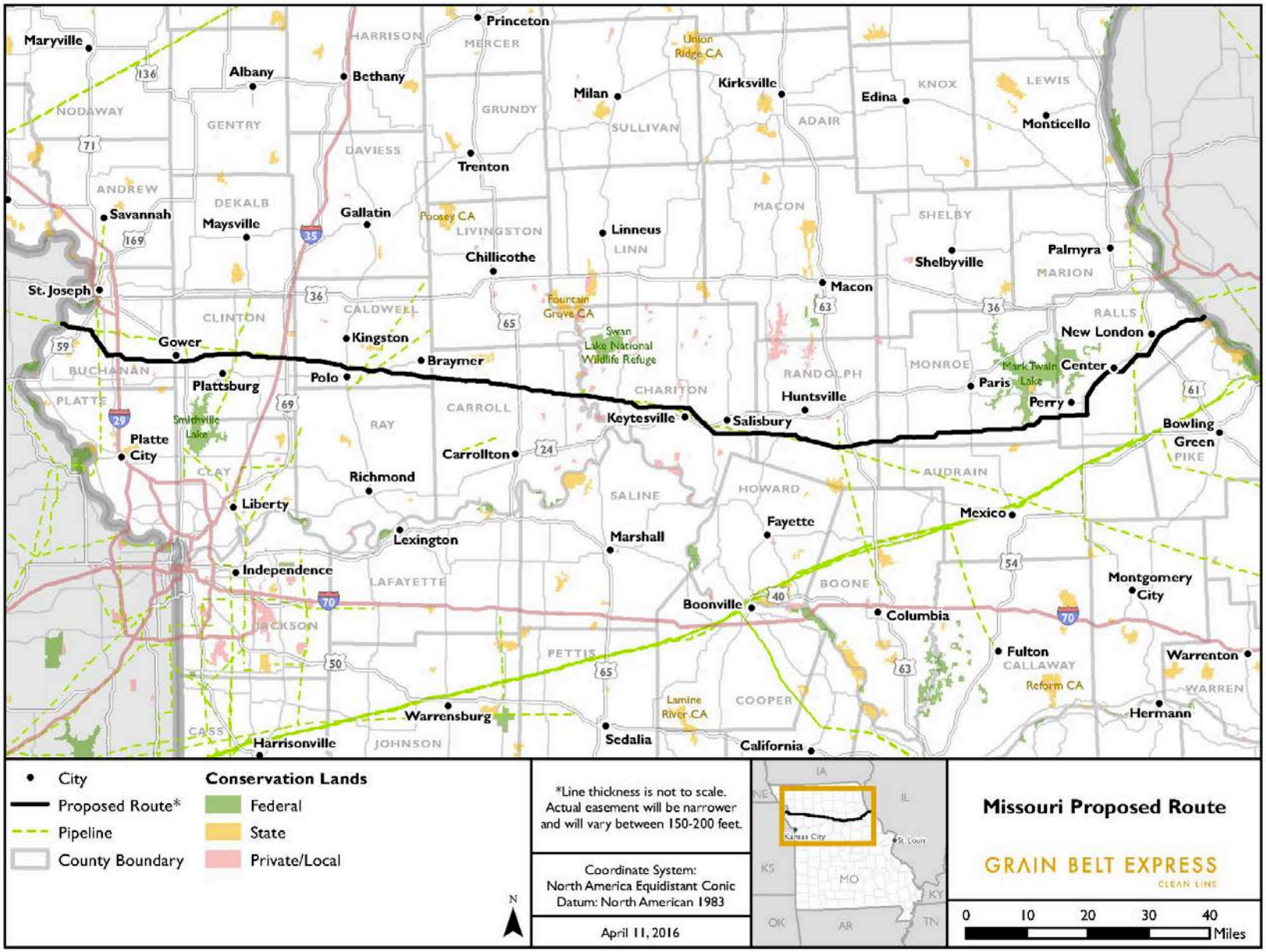
The currently proposed Project will begin with a converter station in Ford County, Kansas, and end in western Indiana near the Sullivan substation in Sullivan County, Indiana. A mid-point converter station will be located in Ralls County, Missouri. The estimated length of the transmission line is roughly 780 miles, and would include approximately 200 miles of route in MO. An overview of the project route in Missouri is provided as an attachment.

We look forward to discussing the project updates with you. If you require further information or have questions regarding this matter, please feel free to contact Jay Puckett at jpuckett@louisberger.com or 202-303-2789. For general project information, please visit the project website at www.grainbeltexpresscleanline.com or www.cleanlineenergy.com.

Sincerely,

John Kuba
Director, Environment Affairs
Clean Line Energy Partners
Work: 832-319-6361
Cell: 713-805-4829
jkuba@cleanlineenergy.com

Cc: Mark Lawlor, Clean Line Energy Partners
Jason Thomas, Clean Line Energy Partners
Jay Puckett, Louis Berger


Princeton
Maryville
Albany
Bethany
Milan
Kirksville
Edina
Monticello
Trenton
Savannah
Maysville
Gallatin
Linneus
Chillicothe
Shelbyville
Palmyra
St. Joseph
Macon
Gower
Kingston
Braymer
Polo
Plattsburg
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Coordinate System: North America Equidistant Conic Datum: North American 1983
April 11, 2016
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Missouri Proposed Route
GRAIN BELT EXPRESS
CLEAN LINE
0 10 20 30 40
Miles

April 14, 2016

Brandi Baldwin, P.E.
Missouri Department of Transportation
Northeast District
1711 Highway 61 South
Hannibal, MO, 63401

RE: Proposed Grain Belt Express Clean Line Transmission Project

Dear Brandi Baldwin, P.E.:

Clean Line Energy Partners LLC (Clean Line) is actively developing and planning construction of a +/- 600kV high-voltage direct current (HVDC) transmission line project known as the Grain Belt Express Clean Line (Project). The proposed Project is designed to deliver up to 4,000 megawatts (MW) of wind-generated electricity from the wind-rich region of southwestern Kansas to Missouri, Illinois, Indiana, and markets farther east.

Since we last discussed the project, Illinois has joined Kansas and Indiana in approving the Grain Belt Express Clean Line. We respectfully would like to request a web meeting with you to provide an update on the status of the Project and the next steps involved in seeking approval from the Missouri Public Service Commission. Tentatively, we would like to host this webinar during the last week of April, but we are flexible based on your availability. A member of the routing team will contact you soon to schedule the meeting and provide additional information.

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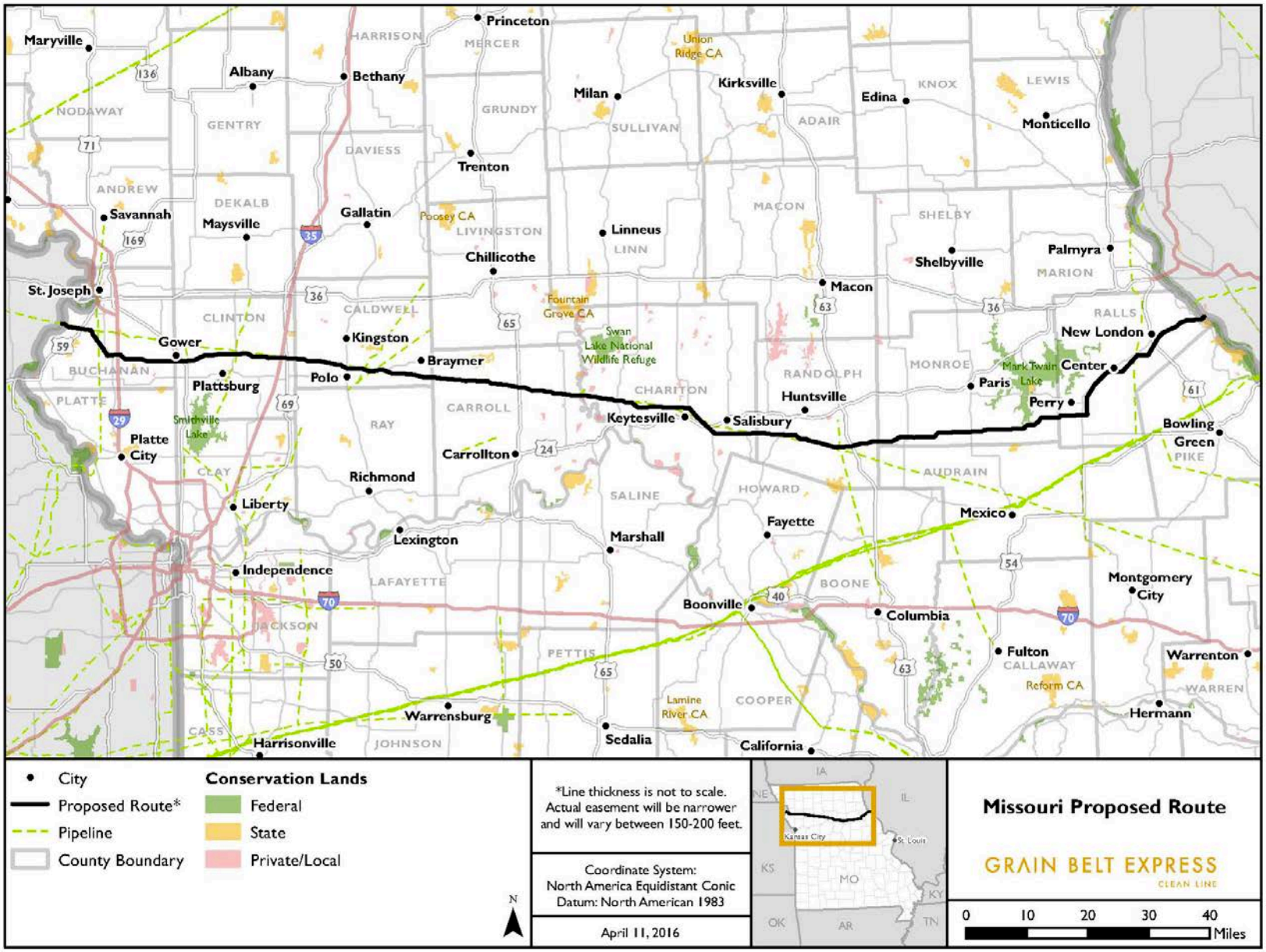
Sincerely,

John Kuba
Director, Environment Affairs
Clean Line Energy Partners
Work: 832-319-6361
Cell: 713-805-4829
jkuba@cleanlineenergy.com

Cc: Mark Lawlor, Clean Line Energy Partners
Jason Thomas, Clean Line Energy Partners
Jay Puckett, Louis Berger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April 14, 2016

Adam Watson, P.E.
Missouri Department of Transportation
NW District
3602 North Belt Highway
St. Joseph, MO 65012

RE: Proposed Grain Belt Express Clean Line Transmission Project

Dear Adam Watson, P.E.:

Clean Line Energy Partners LLC (Clean Line) is actively developing and planning construction of a +/- 600kV high-voltage direct current (HVDC) transmission line project known as the Grain Belt Express Clean Line (Project). The proposed Project is designed to deliver up to 4,000 megawatts (MW) of wind-generated electricity from the wind-rich region of southwestern Kansas to Missouri, Illinois, Indiana, and markets farther east.

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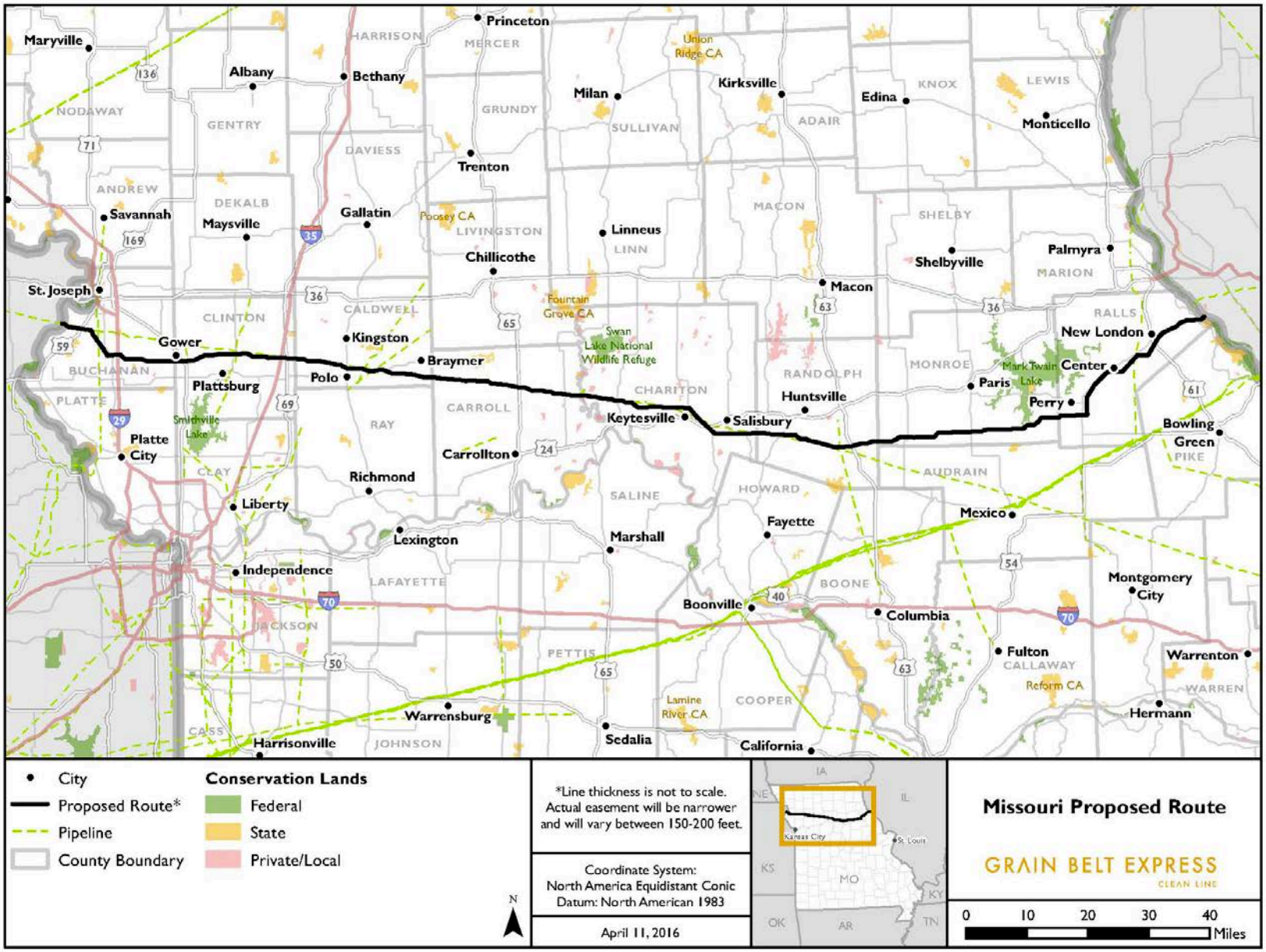
Sincerely,

John Kuba
Director, Environment Affairs
Clean Line Energy Partners
Work: 832-319-6361
Cell: 713-805-4829
jkuba@cleanlineenergy.com

Cc: Mark Lawlor, Clean Line Energy Partners
Jason Thomas, Clean Line Energy Partners
Jay Puckett, Louis Berger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April 14, 2016

Janet Sternburg
Missouri Department of Conservation
Policy Coordinator
P.O. Box 176
Jefferson City, MO 65012

RE: Proposed Grain Belt Express Clean Line Transmission Project

Dear Janet Sternburg:

Clean Line Energy Partners LLC (Clean Line) is actively developing and planning construction of a +/- 600kV high-voltage direct current (HVDC) transmission line project known as the Grain Belt Express Clean Line (Project). The proposed Project is designed to deliver up to 4,000 megawatts (MW) of wind-generated electricity from the wind-rich region of southwestern Kansas to Missouri, Illinois, Indiana, and markets farther east.

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John Kuba
Director, Environment Affairs
Clean Line Energy Partners
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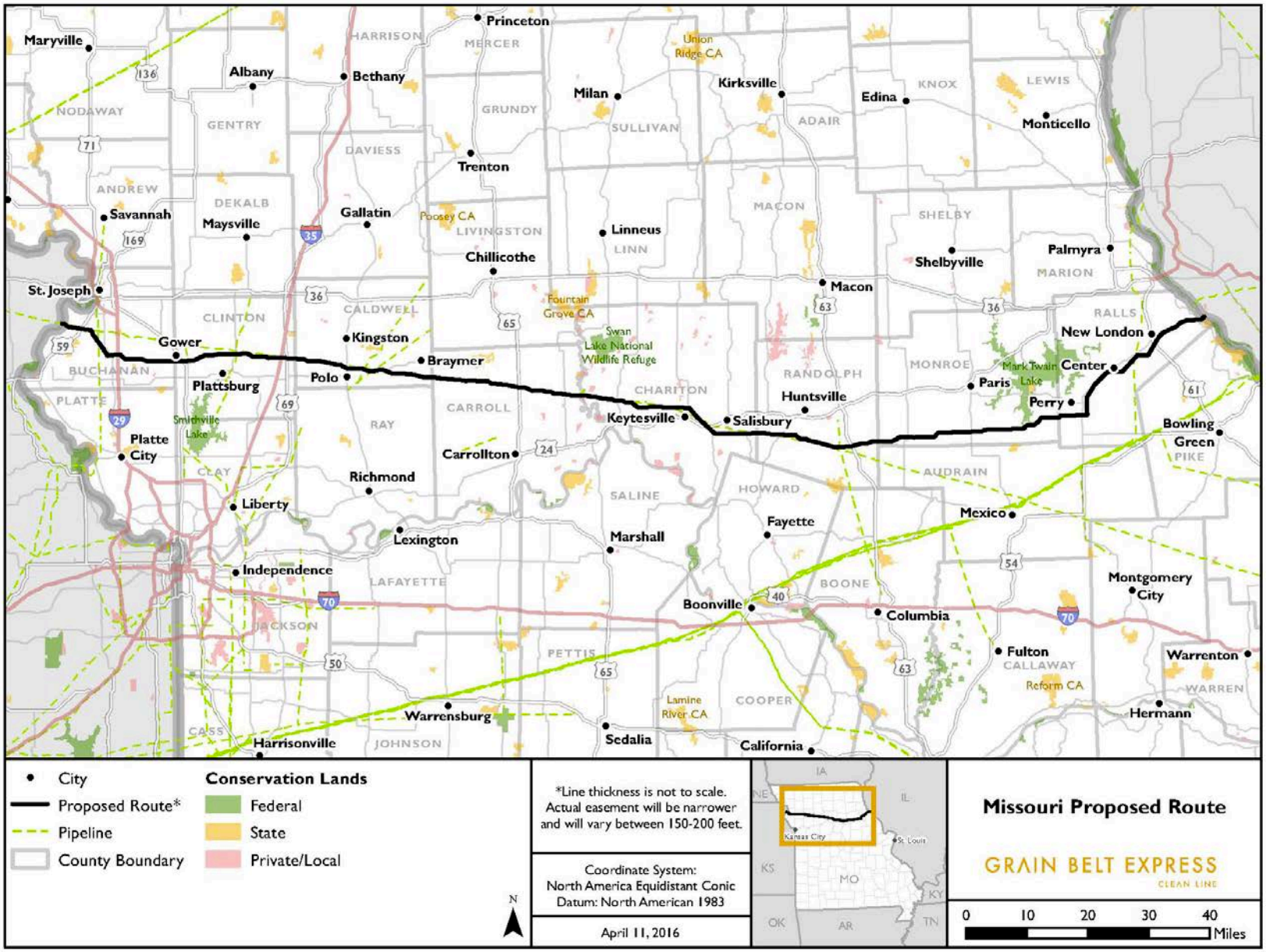
Cell: 713-805-4829
jkuba@cleanlineenergy.com

Cc: Mark Lawlor, Clean Line Energy Partners
Jason Thomas, Clean Line Energy Partners
Jay Puckett, Louis Berger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April 14, 2016

Judith Deel
Missouri Historic Preservation Office
P.O. Box 176
Jefferson City, MO 65012

RE: Proposed Grain Belt Express Clean Line Transmission Project

Dear Judith Deel:

Clean Line Energy Partners LLC (Clean Line) is actively developing and planning construction of a +/- 600kV high-voltage direct current (HVDC) transmission line project known as the Grain Belt Express Clean Line (Project). The proposed Project is designed to deliver up to 4,000 megawatts (MW) of wind-generated electricity from the wind-rich region of southwestern Kansas to Missouri, Illinois, Indiana, and markets farther east.

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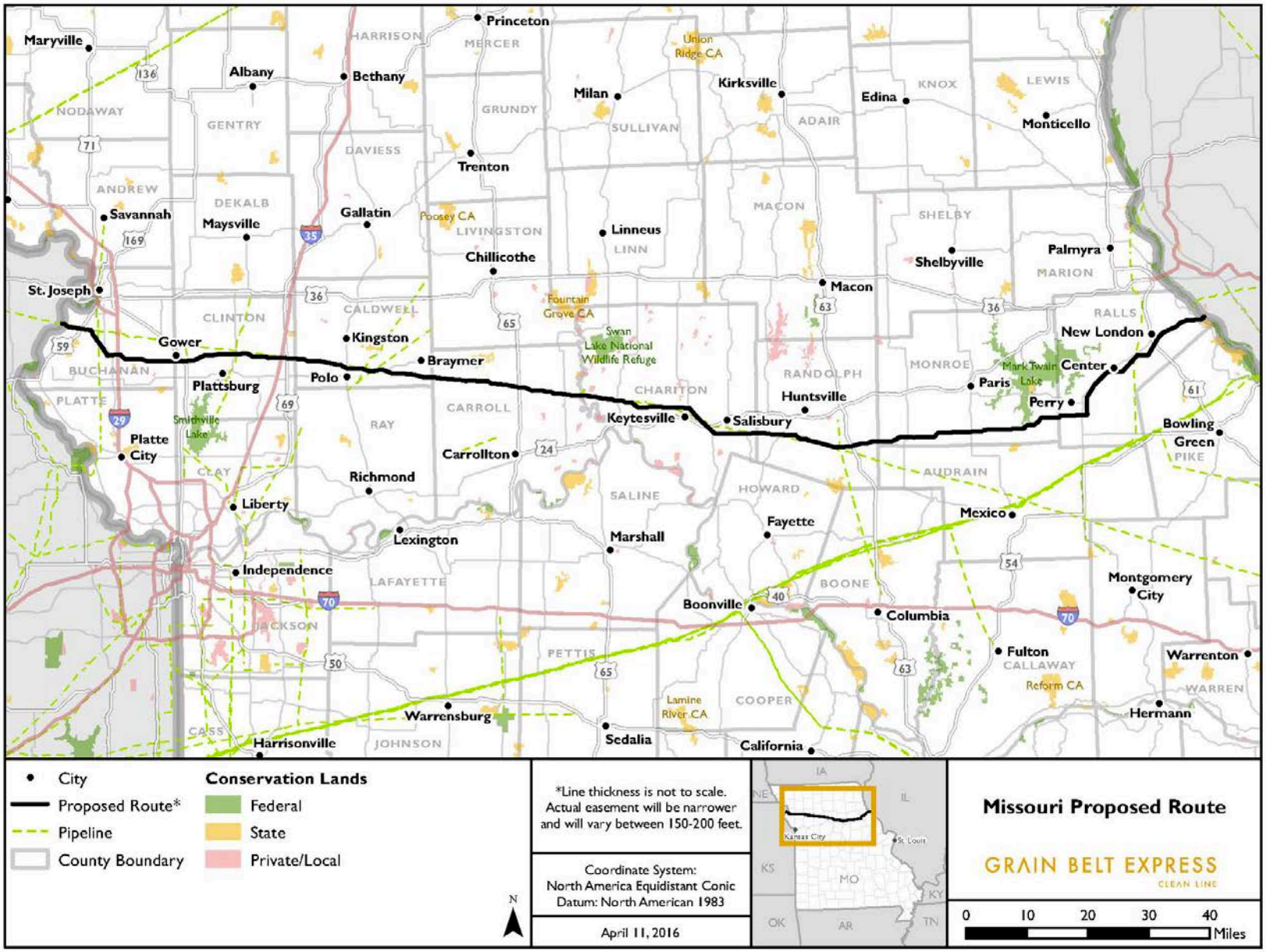
John Kuba
Director, Environment Affairs
Clean Line Energy Partners
Work: 832-319-6361
Cell: 713-805-4829
jkuba@cleanlineenergy.com

Cc: Mark Lawlor, Clean Line Energy Partners
Jason Thomas, Clean Line Energy Partners
Jay Puckett, Louis Berger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April 14, 2016

Kailey Rippen,
U.S. Army Corps of Engineers, Kansas City District
Regulatory Division
Attn: OD-R, Rm 706
601 E. 12th Street
Kansas City, MO 64106

RE: Proposed Grain Belt Express Clean Line Transmission Project

Dear Kailey Rippen:

Clean Line Energy Partners LLC (Clean Line) is actively developing and planning construction of a +/- 600kV high-voltage direct current (HVDC) transmission line project known as the Grain Belt Express Clean Line (Project). The proposed Project is designed to deliver up to 4,000 megawatts (MW) of wind-generated electricity from the wind-rich region of southwestern Kansas to Missouri, Illinois, Indiana, and markets farther east.

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John Kuba
Director, Environment Affairs
Clean Line Energy Partners
Work: 832-319-6361
Cell: 713-805-4829
jkuba@cleanlineenergy.com

Cc: Mark Lawlor, Clean Line Energy Partners
Jason Thomas, Clean Line Energy Partners
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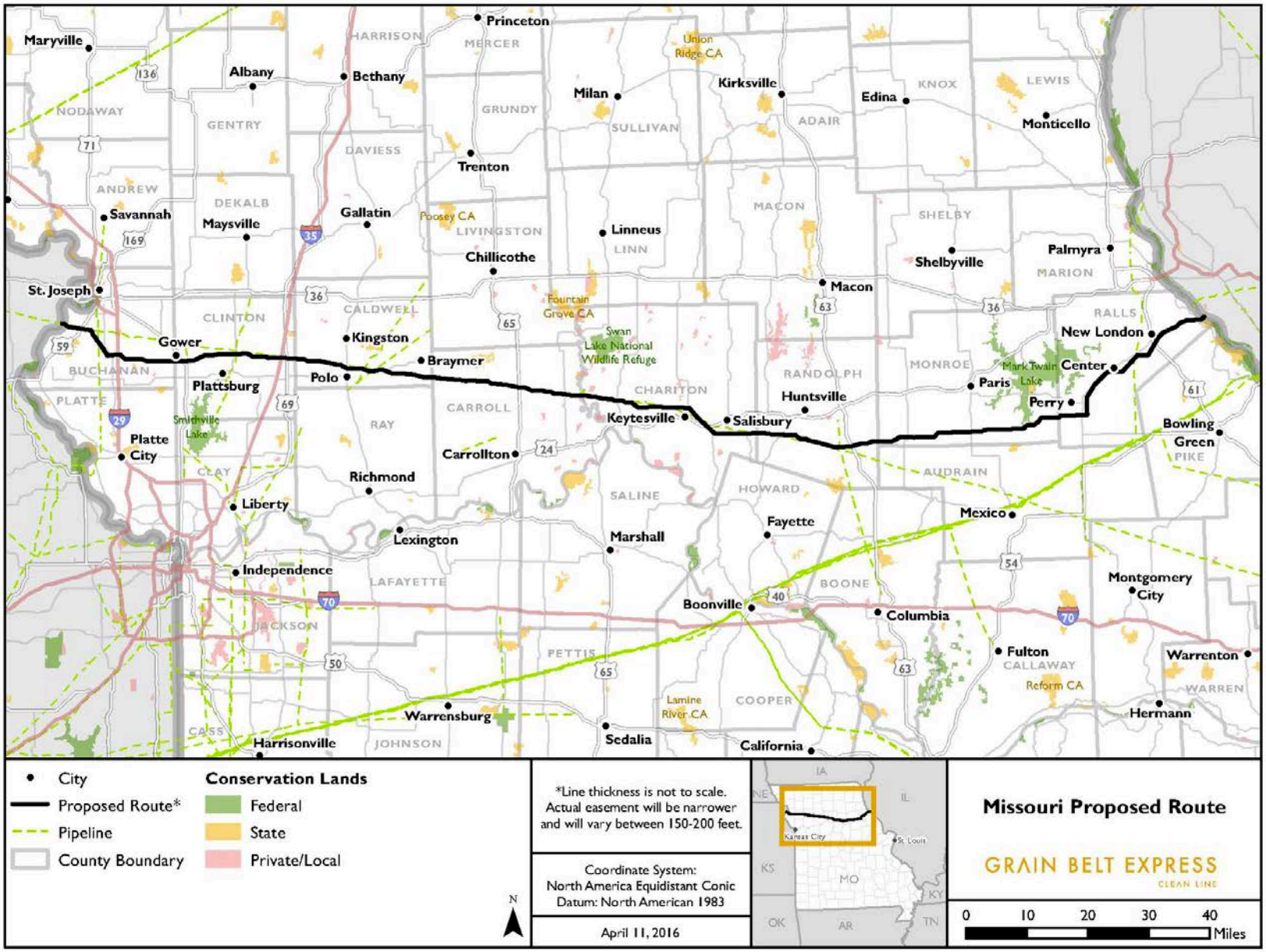
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Jennifer Brown
U.S. Army Corps of Engineers, St. Louis District
1222 Spruce Street
St. Louis, MO 63103

RE: Proposed Grain Belt Express Clean Line Transmission Project

Dear Jennifer Brown:

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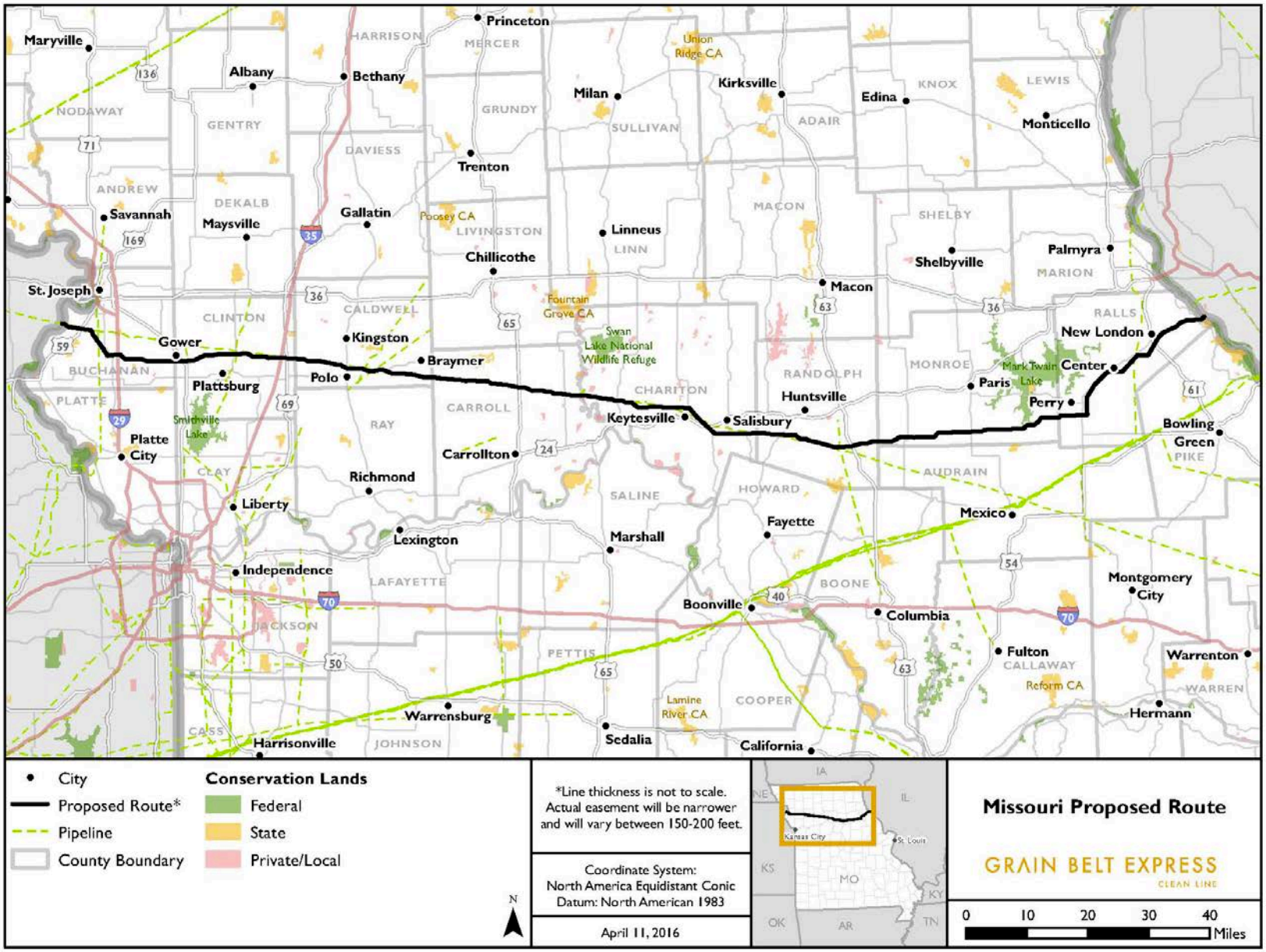
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Amy Salveter
Columbia Ecological Services Field Office
U.S. Fish and Wildlife Service
101 Park DeVille Dr., Suite A
Columbia, MO 65203-0057

RE: Proposed Grain Belt Express Clean Line Transmission Project

Dear Amy Salveter:

Clean Line Energy Partners LLC (Clean Line) is actively developing and planning construction of a +/- 600kV high-voltage direct current (HVDC) transmission line project known as the Grain Belt Express Clean Line (Project). The proposed Project is designed to deliver up to 4,000 megawatts (MW) of wind-generated electricity from the wind-rich region of southwestern Kansas to Missouri, Illinois, Indiana, and markets farther east.

Since we last discussed the project, Illinois has joined Kansas and Indiana in approving the Grain Belt Express Clean Line. We respectfully would like to request a web meeting with you to provide an update on the status of the Project and the next steps involved in seeking approval from the Missouri Public Service Commission. Tentatively, we would like to host this webinar during the last week of April, but we are flexible based on your availability. A member of the routing team will contact you soon to schedule the meeting and provide additional information.

The currently proposed Project will begin with a converter station in Ford County, Kansas, and end in western Indiana near the Sullivan substation in Sullivan County, Indiana. A mid-point converter station will be located in Ralls County, Missouri. The estimated length of the transmission line is roughly 780 miles, and would include approximately 200 miles of route in MO. An overview of the project route in Missouri is provided as an attachment.

We look forward to discussing the project updates with you. If you require further information or have questions regarding this matter, please feel free to contact Jay Puckett at jpuckett@louisberger.com or 202-303-2789. For general project information, please visit the project website at www.grainbeltexpresscleanline.com or www.cleanlineenergy.com.

Sincerely,

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Clean Line Energy Partners
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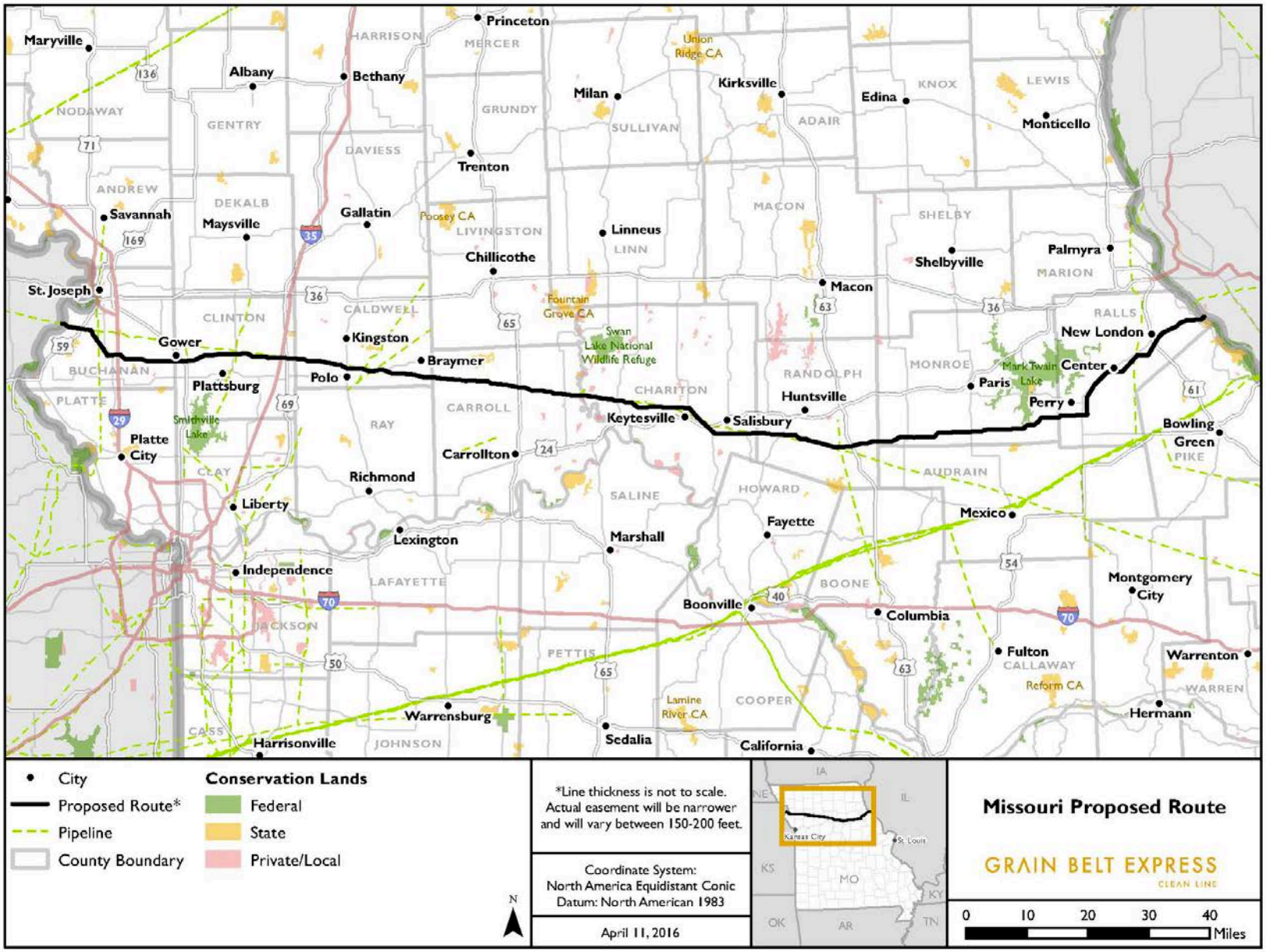
jkuba@cleanlineenergy.com

Cc: Mark Lawlor, Clean Line Energy Partners
Jason Thomas, Clean Line Energy Partners
Jay Puckett, Louis Berger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LAFAYETTE
BOONE
JACKSON
PETTIS
CALLAWAY
COOPER
WARREN
CASS
JOHNSON
Union Ridge CA
Poosey CA
Fountain Grove CA
Swan Lake National Wildlife Refuge
Mark Twain Lake
Smithville Lake
Lamine River CA
Reform CA
City
Proposed Route*
Pipeline
County Boundary
Conservation Lands
Federal
State
Private/Local
*Line thickness is not to scale. Actual easement will be narrower and will vary between 150-200 feet.
Coordinate System: North America Equidistant Conic Datum: North American 1983
April 11, 2016
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St. Louis
Missouri Proposed Route
GRAIN BELT EXPRESS
CLEAN LINE
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