

Direct Testimony of Larry L. Schedin
Attachment J

rating variables developed by the Committee to develop the following winter rating table.

The winter steady state thermal rating variables used for the following Xcel Energy – NSP Operating Territory/ CAPX2020 Member Utilities Transmission Line Standards Committee rating table are as follows:

- Conductor orientation relative to north: 90 degrees
- Atmosphere: Clear
- Air Temperature: 0 degrees C for Winter
- Wind Speed: 2 ft/sec
- Wind angle relative to conductor: 90 degrees
- Elevation above sea level: 1000 ft
- Latitude: 45 degrees N
- Date: April 30
- Solar time: 12 hours
- Coefficient of emissivity: 0.7
- Coefficient of absorption: 0.9
- 200 degrees C maximum operating temperature for ACSS
- 100 degrees C maximum operating temperature for ACSR

<u>Conductor</u>	<u>Winter (April 30) Thermal Ampacity Rating</u>	<u>Winter (April 30) Thermal MVA Rating</u>
Single 795 kcm 26/7 ACSR, 115 KV	1286 amps	256 MVA
Single 795 kcm 26/7 ACSS, 115 KV	1819 amps	362 MVA
Twin bundled 795 kcm 26/7 ACSR, 115 KV	2572 amps	512 MVA
Twin bundled 795 kcm 26/7 ACSS, 115 KV	3638 amps	725 MVA
Single 954 kcm 54/7 ACSS, 115 KV	2032 amps	405 MVA
Single 795 kcm 26/7 ACSS, 161 KV	1819 amps	507 MVA
Single 954 kcm 54/7 ACSS, 161 KV	2032 amps	567 MVA
Single 795 kcm 26/7 ACSR, 230 KV	1286 amps	512 MVA

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<u>Conductor</u>	<u>Winter (April 30) Thermal Ampacity Rating</u>	<u>Winter (April 30) Thermal MVA Rating</u>
Single 795 kcm 26/7 ACSS, 230 KV	1819 amps	725 MVA
Single 954 kcm 54/7 ACSS, 230 KV	2032 amps	809 MVA
Twin bundled 795 kcm 26/7 ACSR, 345 KV	2572 amps	1537 MVA
Twin bundled 954 kcm 54/7 ACSS, 345 KV	4064 amps	2428 MVA
Triple bundled 954 kcm 54/7 ACSS, 500 KV	6096 amps	5279 MVA
Triple bundled conductor as used on the Forbes – Chisago 500 KV line (Triple bundled 1192.5 kcm 45/7 ACSR)	4875 amps	4222 MVA

Surge Impedance

The following table shows typical ranges of surge impedances found on the CapX2020 member systems. Designs for the proposed CapX2020 transmission lines are not far enough along to provide more accurate surge impedances for these lines.

<u>Conductor Configuration</u>	<u>Surge Impedance</u>
Single Bundled Conductor – 115, 161 & 230 KV Configurations a, b, f & h	350 – 375 Ohms
Twin bundled Conductor - 115 KV Configurations c & d	250 - 300 Ohms
Twin bundled Conductor - 345 KV Configurations k & l	270 –285 Ohms
Triple bundled Conductor - 500 kV Configuration n	250 – 300 Ohms
Configurations e, g, i, j and m	Not Used

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Attachment J

Response By: Brad Hill/David K. Olson
Title: Principal Specialty Engineer
Department: Transmission Engineering/Substation Engineering
Company: Xcel Energy
Telephone: 612-330-6826/612-330-5909
Date: April 21, 2008

2157846v1

EXHIBIT C

Applicant Magnetic Field Calculations

Table 3.6-2: Calculated Magnetic Fields for Proposed 345kV Transmission Line Designs
Hampton-LaCrosse Project Routing Application p. 3-28 - 3-29

Table 3.6-2: Calculated Magnetic Fields (mG) for Proposed 345 kV Transmission Line Designs (3.28 Feet Aboveground)

Structure Type	Geographical Segment	System Condition	Current (amps)	-300	-200	-100	-75	-50	0	50	75	100	200	300
Single-Pole Davit Arm 345/345 kV Double-Circuit with one Circuit In Service	Preferred Route: Hampton to Cannon Falls; Non-US-52 segments Zumbrota area to North Rochester Alternate Route: Hampton to North Rochester	2015 Peak	140 A	0.38	0.79	2.35	3.41	5.24	13.58	9.64	5.88	3.77	1.04	0.46
		2015 Average	112 A	0.30	0.63	1.88	2.73	4.19	10.87	7.71	4.71	3.01	0.83	0.37
Single-Pole Davit Arm 345/345 kV with 69 kV Underbuild with 1 Active 345 kV Circuit	Preferred Route: US-52 segments Cannon Falls to Zumbrota area	2015 Peak	132 A	0.36	0.74	2.22	3.22	4.94	12.81	9.09	5.55	3.55	0.98	0.43
		2025 Average	106 A	0.29	0.60	1.78	2.58	3.97	10.29	7.30	4.45	2.85	0.79	0.35
		2015 Peak	140/325	0.74	1.65	6.20	10.42	20.73	70.89	8.50	3.77	2.51	1.01	0.52
Single-Pole Davit Arm 345/345 kV Double-Circuit with one Circuit In Service	N. Rochester to Alma	2015 Average	112/260	0.59	1.32	4.96	8.33	16.58	56.71	6.80	3.02	2.01	0.81	0.41
		2025 Peak	132/328	0.73	1.62	6.14	10.36	20.71	71.85	8.89	3.92	2.54	0.99	0.50
		2025 Average	106/262	0.58	1.30	4.91	8.28	16.55	57.37	7.09	3.12	2.03	0.79	0.40
		2015 Peak	403 A	1.12	2.33	6.97	10.11	15.54	40.27	28.58	17.44	11.17	3.09	1.35
Single-Pole Davit Arm 345/345 kV Double-Circuit with one Circuit In Service		2015 Average	322 A	0.87	1.81	5.41	7.85	12.06	31.24	22.17	13.53	8.67	2.40	1.05
		2025 Peak	415 A	1.12	2.33	6.97	10.11	15.54	40.27	28.58	17.44	11.17	3.09	1.35
		2025 Average	332 A	0.90	1.87	5.57	8.09	12.43	32.21	22.86	13.95	8.94	2.47	1.08

Hampton ▪ Rochester ▪ La Crosse 345 kV Transmission Project

Table 3.6-2: Calculated Magnetic Fields (mG) for Proposed 345 kV Transmission Line Designs (3.28 Feet Aboveground)

Structure Type	Geographical Segment	System Condition	Current (amps)	-300	-200	-100	-75	-50	0	50	75	100	200	300
Single-Pole Davit Arm 161 kV Single-Circuit	N. Rochester to Northern Hills	2015 Peak	95 A	0.20	0.43	1.50	2.42	4.39	14.29	5.41	2.79	1.65	0.42	0.18
		2015 Average	76 A	0.16	0.34	1.20	1.94	3.51	11.43	4.33	2.23	1.32	0.33	0.14
		2015 Peak	96 A	0.20	0.43	1.52	2.45	4.43	14.44	5.47	2.82	1.66	0.42	0.18
		2015 Average	77 A	0.16	0.34	1.22	1.96	3.66	11.56	4.38	2.26	1.33	0.34	0.15

Hampton ▪ Rochester ▪ La Crosse 345 kV Transmission Project

EXHIBIT D

McKay Magnetic Field Calculations

Calculated Magnetic Field Tables for Proposed 345 kV Transmission Line Designs

FILE: Exhibit D- CALCULATED MAGNETIC FIELD TABLES 110417 1129.xls

SHEET: milligauss TABLES

4/20/2011, 11:56 AM

STEP 1														
THIS TABLE CONTAINS THE COLUMN HEADINGS AND DATA FROM THE TOP ENTRY IN THE TABLE FROM EXHIBIT C														
TABLE 3.6-2: Calculated Magnetic Fields (mG) for Proposed 345 kV Transmission Line Designs (3.28 Feet Aboveground)														
STRUCTURE TYPE	GEOGRAPHICAL SEGMENT	SYSTEM CONDITION	CURRENT (AMPS)	-300'	-200'	-100'	-75'	-50'	0'	50'	75'	100'	200'	300'
SINGLE- POLE DAVIT ARM 345/345 kV DOUBLE- CIRCUIT WITH ONE CIRCUIT IN SERVICE	PREFERRED ROUTE:	2015 PEAK	140.00	0.38	0.79	2.35	3.41	5.24	13.58	9.64	5.88	3.77	1.04	0.46
	HAMPTON TO CANNON FALLS;	2015 AVERAGE	112.00	0.30	0.63	1.88	2.73	4.19	10.87	7.71	4.71	3.01	0.83	0.37
	NON-US-52 SEGMENTS ZUMBROTA AREA TO NORTH ROCHESTER ALTERNATE ROUTE: HAMPTON TO NORTH ROCHESTER													
STEP 2														
MVA CALCULATED FROM THE CURRENTS IN TABLE 3.6-2:														
345.00 kV														
140.00 Amps PEAK ESTIMATED														
1.73 3 Phase														
83.56 MVA PEAK CALCULATED														
345.00 kV														
112.00 Amps AVERAGE ESTIMATED														
1.73 3 Phase														
66.85 MVA AVERAGE CALCULATED														
STEP 3- SINGLE CIRCUIT														
CURRENT CALCULATED FROM SINGLE CIRCUIT MVA DESIGN CAPACITY:														
1105.50 **MVA PEAK DESIGN														
345.00 kV														
1.73 3 Phase														
1852.22 Amps PEAK CALCULATED														
884.40 **MVA AVERAGE DESIGN														
345.00 kV														
1.73 3 Phase														
1481.78 Amps AVERAGE CALCULATED														
STEP 3- DOUBLE CIRCUIT														
CURRENT CALCULATED FROM DOUBLE CIRCUIT MVA DESIGN CAPACITY:														
2211.00 **MVA PEAK DESIGN														
345.00 kV														
1.73 3 Phase														
3704.45 Amps PEAK CALCULATED														
1769.00 **MVA AVERAGE DESIGN														
345.00 kV														
1.73 3 Phase														
2963.89 Amps AVERAGE CALCULATED														
STEP 4- SINGLE CIRCUIT														
THIS TABLE CONTAINS DATA SCALED FROM THE TABLE IN STEP 1 USING CURRENTS CALCULATED IN STEP 3- SINGLE CIRCUIT														
TABLE 3.6-2 SCALED FOR SINGLE CIRCUIT DESIGN CAPACITY:														
Calculated Magnetic Fields (mG) for Proposed 345 kV Transmission Line Designs (3.28 Feet Aboveground)														
STRUCTURE TYPE	GEOGRAPHICAL SEGMENT	SYSTEM CONDITION	CURRENT (AMPS)	-300'	-200'	-100'	-75'	-50'	0'	50'	75'	100'	200'	300'
SINGLE- POLE DAVIT ARM 345/345 kV DOUBLE- CIRCUIT WITH ONE CIRCUIT IN SERVICE	PREFERRED ROUTE:	2015 PEAK	1852.22	5.03	10.45	31.09	45.11	69.33	179.67	127.54	77.79	49.88	13.76	6.09
	HAMPTON TO CANNON FALLS;	2015 AVERAGE	1481.78	3.97	8.34	24.87	36.12	55.43	143.81	102.00	62.31	39.82	10.98	4.90
	NON-US-52 SEGMENTS ZUMBROTA AREA TO NORTH ROCHESTER ALTERNATE ROUTE: HAMPTON TO NORTH ROCHESTER													
STEP 4- DOUBLE CIRCUIT														
THIS TABLE CONTAINS DATA SCALED FROM THE TABLE IN STEP 1 USING CURRENTS CALCULATED IN STEP 3- DOUBLE CIRCUIT														
TABLE 3.6-2 SCALED FOR DOUBLE CIRCUIT DESIGN CAPACITY:														
Calculated Magnetic Fields (mG) for Proposed 345 kV Transmission Line Designs (3.28 Feet Aboveground)														
STRUCTURE TYPE	GEOGRAPHICAL SEGMENT	SYSTEM CONDITION	CURRENT (AMPS)	-300'	-200'	-100'	-75'	-50'	0'	50'	75'	100'	200'	300'
SINGLE- POLE DAVIT ARM 345/345 kV DOUBLE- CIRCUIT WITH ONE CIRCUIT IN SERVICE	PREFERRED ROUTE:	2015 PEAK	3704.45	10.05	20.90	62.18	90.23	138.65	359.33	255.08	155.59	99.76	27.52	12.17
	HAMPTON TO CANNON FALLS;	2015 AVERAGE	2963.89	7.94	16.67	49.75	72.24	110.88	287.66	204.03	124.64	79.65	21.96	9.79
	NON-US-52 SEGMENTS ZUMBROTA AREA TO NORTH ROCHESTER ALTERNATE ROUTE: HAMPTON TO NORTH ROCHESTER													

- NOTES: 1. $MVA = (KV * Amps * 1.73) / 1000$
2. $Amps = (MVA * 1000) / (KV * 1.73)$
3. For a given physical and electrical configuration, milligauss at one location is proportional to current (Amps) (for example, double the current and the milligauss level also doubles).
4. For a given physical and electrical configuration and constant current, the milligauss level changes as the inverse square of the distance from away from the source (for example, move 2 times as far away and the milligauss level decreases to 1/4 of what it was).
- *. MVA PEAK DESIGN CAPACITY IS FROM A COMBINATION OF THE DATA PRESENTED IN EXHIBITS A, B, AND C.
**. MVA AVERAGE DESIGN CAPACITY WAS CHOSEN TO BE ABOUT 80% OF PEAK DESIGN CAPACITY

Exhibit 5

For construction sector, a long road back
December 5, 2010
Star Tribune

(noting use of fly ash in CapX 2020 foundations)

StarTribune



For construction sector, a long road back

Article by: , Star Tribune

Updated: December 5, 2010 - 7:35 PM

When ironworker Tim Boyd was laid off from his windmill construction job in Albert Lea earlier this year, the father of two poked around the union hall for weeks waiting for new work while collecting unemployment.

So he was thrilled when Xcel Energy called three months ago to say it needed construction crews for the CAPX2020 power-line project, the largest development of electric transmission capacity in the Upper Midwest in 30 years.

"Without this, I'd probably still be laid off," Boyd said while bending steel rebar into a giant hoop. "But now I probably got two years' worth of work now. I'm real happy."

After years of planning and opposition from power-line opponents, Xcel, Great River Energy and 10 other utility firms won regulatory approvals and are starting to build what will become 700 miles of high-voltage transmission lines and towers along

highways in Minnesota and the Dakotas.

The initial portion of the project, from Monticello to St. Cloud, is keeping Boyd and hundreds of other contractors off the unemployment lines as winter barrels in. The project promises about 23,500 manufacturing, transportation, restaurant and construction jobs over five years.

And, unlike many construction projects, CAPX2020 will continue building through the winter months.

But CAPX2020 is one of very few bright spots dotting Minnesota's construction landscape. With Minnesota's massive Twins and TCF stadiums in Minneapolis, an entertainment center in Duluth and several Xcel coal plant conversions largely put to bed, few big projects are on the horizon to power job growth or get workers through the winter, construction officials say.

"We are not out of the woods," said Steve Hine, director of the state's Labor Market Information Office. Residential construction remains slow, and commercial work isn't much better, Hine said.

Residential blues

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StarTribune



Rottlund Homes, one of the largest home builders in the Twin Cities, was badly hurt by the recession. It built 20,000 Twin Cities homes in 2006 but only about 4,000 in 2009 and roughly 5,000 in 2010, said Vice President Mike Swanson.

"With business being off 60 to 80 percent, there is 60 to 80 percent [fewer] people getting work right now," Swanson said. "A lot of them have left the industry and are not coming back."

Said Harry Melander, president of the Minnesota Building & Construction Trades Council: "There are so many families that have been unemployed for one to three years. It's had a devastating impact on our state."

In the future, construction of the light-rail line in St. Paul, a new Farmers Market in St. Paul and renovations at Union Depot in St. Paul could change the picture. But right now, it's flat.

Matt Anfang, president of St. Paul Building Owners and Managers Association (BOMA), noted that some drugstores and M&I Bank are putting up new branches and M&I Bank are putting up new branches on the edge of the city, "but I don't see anything commercial happening downtown in the near future."

Instead, some of BOMA's 300 members are investing in new building facades, lighting and energy improvements but "I don't think that they are making up for the loss of the bigger construction projects when you talk about man hours and putting people to work," Anfang said.

While other sectors of the economy are finally showing some signs of recovery, Minnesota's housing, commercial and industrial construction sectors continue to shed jobs -- 14,300 in 23 months, including 2,300 in October. Minnesota's November jobs report, due in later this month, could show more job losses as many of the highway, bridge, sewer and wastewater treatment projects that popped up this summer shut down for the winter -- or for good.

So for now CAPX2020 is powering construction jobs.

Ripple effects

On a recent Friday in Hasty, Minn., Boyd and seven others measured and cut rebar and trudged tools to the far end of a frosty roadside construction yard. With pecking pliers and frantic twists, they fastened giant hoops and long rods, forming a 4,600-

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pound cage in about an hour.

They dashed to a nearby trailer to thaw momentarily before returning to work.

Frostbite aside, the men insist they're lucky to be working in a unforgiving industry.

Even the much-celebrated CAPX2020 project will create just 571 construction jobs this year. It won't create significant job growth until much later -- 7,800 jobs in 2013 and 23,542 total jobs between this winter and 2015.

But ripple effects from the project already touch cement mixers in Monticello, rebar fabricators in Minneapolis, river barge operators cruising from Missouri to St. Paul, and a host of truckers, excavators and tree choppers.

Thanks to this project, construction workers will collect paychecks through Christmas, New Year's and into the spring, said Bob Schneider, an Xcel Energy general foreman overseeing the Hasty job site. "It's great. As long as we can keep everybody working, it just keeps getting better and better."

Xcel recently ordered several million dollars' worth of matting pallets, welding torches

and a new drill casing that will keep soil from caving during construction.

Ironworker Matthew Miller joined Xcel nine weeks ago. "Yep, without this, I'd probably be laid off with my other union [brothers]."

Chris Sutton agreed: "It would have been real slow."

But this winter, Boyd, Sutton and Miller, along with other crews, will begin to construct, bury and encase iron cages in concrete, creating anchor-footings for 190 new transmission towers that will stretch to St. Cloud from Monticello. The total project calls for more than 4,000 anchor-footings and towers by 2015.

Perfect timing

Josh Edwards, director of engineering for AME Ready Mix cement, said the project came along at the right time.

"We are only running half-time," said Edwards, who was visiting one of the company's plants in Monticello last month. "We have 10 plants and we only have five of them open. That's about as bad as I have ever seen it."

StarTribune



Business was so bad that AME officials considered shutting down three more plants. But four weeks ago, Xcel called. AME won the cement contract for the first leg of tower footings.

"I told the guys, 'Yahoo! We are going to keep going this winter,'" said Gary Dreier, the AME plant's cement mixing "batchman" who has two young kids hoping for a good Christmas.

Sitting in front of his Star Trek-like control booth, Dreier fired up the Monticello plant. Suddenly, suspended hoppers, a 70-foot conveyor belt and giant mixer sprang to life, dumping, shuttling and blending fly-ash, cement, aggregate, sand, water and additives. Soon, Dreier fed his 7 cubic yards of gray sludge down a chute to a mixing truck below, one of several shuttling deliveries that morning.

"A lot of our drivers have been laid off. It's been tough the last few years," said cement hauler Steve Ryan. "But this job we are picking up through Xcel is putting a lot of guys to work. Our sand and gravel haulers will be working through the season. It'll help."

Forty miles southeast of the cement plant,

six workers in northeast Minneapolis also praised their good fortune.

Ironworker Mike McCone lost his construction supervisor job in Colorado 24 months ago and struggled to feed and clothe his kids. He collected cans, took on stucco jobs and got food and clothing donations from his church and the Salvation Army.

"You peg yourself as a construction carpenter who is running crews," said McCone, 47. "Then you suddenly don't know where the next dollar is coming from. It's scary." McCone finally headed to Minneapolis, where Ambassador Steel hired him a year ago to bend rebar.

"How blessed it is to have a job," McCone said.

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168A.

The extent to which the various routes under consideration follow existing ROW is shown in the figures and maps in EIS Section 8.1.4.11, 8.2.4.11 and 8.3.4.11.

168B.

It is true that the EIS does not attempt to put a dollar value on impacts to natural resources like wetlands, trees, etc. The wide range of potential values we could use would generate more issues and questions on methodology than it would provide helpful information for the route decision. Also, the salvage value of transmission removed for underbuilt lines, etc. is minimal compared to cost of constructing the line so was not taken into account.

168C.

The Kellogg crossing and the La Crescent crossing could follow an existing HVTL through the bluffslands in Minnesota. Kellogg is one of two such corridors. The lines near Goodview and Winona are 69 kV lines, but they do not go through the bluffslands (see <http://www.gda.state.mn.us/maps/ElecTran07.pdf>). There is a 69 kV line near La Crescent which goes through the bluffslands, and it appears that the applicant's route to La Crescent would have used some of this corridor. (See Appendix K of the route permit application.) Kellogg may be the only route available to the applicant that follows an existing HVTL, but the applicant's La Crescent route could have, potentially, followed more of the La Crescent 69 kV; the applicant chose not to develop a route that did so.

168D.

Displacement of businesses is not a specifically listed criteria, but one that falls under general economic impacts and thus can be evaluated as one factor in the decision.

168E.

Multiple route crossing locations along the Mississippi River were evaluated by the applicant and federal regulators. See EIS Section 6.1. The crossing at Kellogg, Minn. was the preferred crossing of the U.S. Fish and Wildlife Service (USFWS). The USFWS opposed a crossing at Winona, Minn. and indicated that a crossing at La Crescent, Minn. would be inferior to the Kellogg crossing. Accordingly, the applicant presented the Kellogg crossing in its route permit application. Minnesota Department of Commerce, Energy Facility Permitting (EFP) staff reviewed and evaluated the route permit application. EFP staff recommended that the Minnesota Public Utilities Commission accept the application as complete. The Commission found the application complete, with one river crossing at Kellogg, on March 9, 2010. Following the scoping comment period for the draft EIS for the project, the director of the Minnesota Office of Energy Security (OES), based on public comments received and on evaluation by EFP staff, determined the scope of the draft EIS. This scope included one river crossing to be studied in the EIS, the Kellogg crossing. The scoping decision was appealed by NoCapX 2020 and United Citizens Action Network. This appeal was denied by the director of OES. Thus, consistent with the scope for the draft EIS, and consistent

with the guidance of the USFWS, the EIS considers and analyzes one river crossing, the crossing at Kellogg, Minn.

168F.

The mapping of karst in the project area is relevant to land use, geology, engineering and other topics. Moving or repeating the analysis in the EIS would not necessarily help the public or decision makers enough to justify the change.

168G.

See Section 7.4 of the EIS.

168H.

See Section 7.4.2 for a description of karst features. In the legend of Map 8.1-21, Map 8.2-19, and Map 8.3-34 all of the karst features are noted.

168I.

Please see updated text in Section 7.5.1 of the EIS. It should be noted the proposed Project does not involve the use of agricultural land for energy production.

168J.

As noted in Section 7.5.1.2 of the EIS, crop dusting within agricultural fields could be impacted if flying near the transmission line is necessary. Flying activities include takeoff and landing.

168K.

All airports listed in the DOT airport directory in addition to any airports identified during field review were included in the draft EIS. Any additional airports identified during the draft EIS comment period have been added to the analysis included in the EIS.

168L.

The issue of potential impacts on eagles, other raptors, and bird species in general is discussed as a major issue throughout the EIS. See, e.g., Section 7.7.2, 8.1, 8.3. Nearly all routes have known eagle nests or sitings within one mile, and many have nests within the route itself. See EIS Appendix F. A comparison of known eagle nests and habitat is included in EIS Section 8.3 and other sections with known locations.

168M.

See Section 7.11, 8.1.4.11, 8.2.4.11, 8.3.4.11, and Appendices I, J, and K of the EIS.

168N.

See Section 7.11, 8.1.4.11, 8.2.4.11, 8.3.4.11, and Appendices I, J, and K of the EIS.

168O.

See Section 7.11, 8.1.4.11, 8.2.4.11, 8.3.4.11, and Appendices I, J, and K of the EIS.

168P.

See Section 8.1.4.11, Section 8.2.4.11, and Section 8.3.4.11.

168Q.

See Section 7.11, 8.1.4.11, 8.2.4.11, 8.3.4.11, and Appendices I, J, and K of the EIS.

168R.

See Section 7.11, 8.1.4.11, 8.2.4.11 and/or 8.3.4.11 of the EIS.

168S.

The hazard discussed in the 1997 EPRI report is not related to fiber optic lines. The report describes a rare situation, that a fault or switching surge on the HVTL may raise the potential of the local ground (GPR). If a distribution line is also grounded at the fault location, the GPR can be transferred through the low-voltage neutral (Transferred Potential) into the distribution system and into residences. As stated in the report this is very rare. There are redundant safety systems that respond within 67 one thousandths of a second and deenergize the line when a fault or other interruption is detected.

168T.

The EIS evaluates only those route alternatives within the scope of the EIS. The only river crossing included in the EIS scope is the crossing at Kellogg, Minn. Accordingly, the only route alternatives included and evaluated in the EIS are route alternatives from the Hampton substation to the Kellogg river crossing. The determination that the Kellogg crossing be the only crossing included in the scope resulted from evaluation of transmission corridors and potential routes from the Hampton substation to the Mississippi River crossing alternatives.

168U.

The flyway isn't a line. It is an area. The map denotes the area using a dotted fill symbology.

168V.

The plans that were evaluated during the development of the EIS are those plans, such as land use plans, comprehensive plans, and Planned Unit Developments (PUDs) that have been published by the municipalities that created them and are publicly available. The portion of this comment that refers to a "recession/depression" is vague and no further response is provided here.

168W.

See updated text in Section 7.4, 8.1.4.4, 8.2.4.4, and 8.3.4.4 of the EIS.

168X.

The EIS generally describes where bluff areas may require extra construction work and how that would be completed. However, it is not possible to identify all areas where wider easements may be needed due to specific steep slopes until detailed design is completed. Since mitigation can be designed on routes with steep slopes, this does not appear to be a critical issue if the route is otherwise better than other potential routes.

168Y.

Alternatives rejected during scoping are listed in Appendix K of the EIS - item #6 under the title "Issues Outside the Scope of the EIS"

168Z.

See Section 4.5 of the EIS.

168AA.

The comment is part of the record in this matter by its inclusion in the EIS, and will be submitted to the OAH and Commission for consideration.

168BB.

See Section 7.2 of the EIS.

168CC.

Generally, as long as the residence is not located within the 150-foot ROW easement, the owner/purchaser would be able to get a mortgage through HUD. And residences cannot be located with the easement/ROW. The HUD appraisal may be affected if a residence is within the fall zone of a structure. However, the utilities can generally avoid placing the poles that close to residences during final design.

Also, regarding the "buy the farm comment" it is not clear what the economic implications are of landowners who may owe more than their property is worth. The Applicant's are obligated to pay only fair market value under "buy the farm" regardless of what the landowner may owe for the property. Possibly, the comment is suggesting this fact would inhibit anyone who would be otherwise interested in exercising their right under this provision. This could be true on an individual case by case basis, but a detailed analysis is outside the scope of the EIS because the cost of such a review would be high and provide no information that is essential to an evaluation of the various alternative routes.

168DD.

The issue raised by the comment is outside of the scope of the EIS.

168EE.

Based on Amanda King's direct testimony, the applicant considered potential flows on the 345 kV line facilities that could occur under the highest anticipated loading conditions at some point in the future. High line loading conditions could occur during off-peak demand periods if significant generation were to be located in the area and if there were an unplanned outage of a major Twin Cities 345 kV transmission source such as Byron—Prairie Island or King—Eau Claire. These off-peak demand periods generally occur for about six hours per day. Based on this scenario, planning engineers determined that the highest flow that could reasonably be expected to occur on the facilities would be on the North Rochester—Mississippi River segment of the line; flows on the Hampton—North Rochester segment would be lower. The North Rochester—Mississippi River segment could potentially experience approximately 600 MVA for short periods of time. Planning engineers also assessed whether there was a scenario could result in flows higher than 600 MVA. Planning engineers determined that assuming load levels above 600 MVA would not be a reasonable assumption given the limited local generation that may develop in the area.

Levels above 600 MVA were not considered in the Hampton – Rochester – La Crosse 345 kV Project as they were in the Fargo - St. Cloud 345kV Project because a key difference between the projects is the impact of generation connections on anticipated load flows. It is likely that smaller generator projects would interconnect with the electrical system in the Hampton – Rochester – La Crosse 345 kV Project area. In contrast, larger generators are expected to interconnect with the electrical system on the north end of the Fargo Project area. In the Fargo case, planning engineers estimated the highest loading levels that might occur on the line at some point in the future, considering a hypothetical high generation scenario where several thousands of megawatts (> 4,000 MW) of new generation is developed in North Dakota, South Dakota and Manitoba. Under this scenario, in any year, loading values of 600 MVA and 1,500 MVA would only potentially occur on the Fargo 345 kV line for up to six hours per day, for up to several days in a row.

It's also important to note that there is a network of bulk transmission lines in Minnesota that is set up like a hub and spoke where major facilities connect to the 345 kV ring around the Twin Cities. Generally, flows head from the west and the north toward the Twin Cities, the state's largest load center, and then move east and south. In the Twin Cities, power is drawn down from the lines to meet customer demand. Therefore, load flows "out" of the Twin Cities is lower than load flows headed "in" to the Twin Cities. Due to this general load flow and the lack of large generators in southeast Minnesota, load flows on the Hampton – Rochester – La Crosse line will be lower than those on the Fargo line.

168FF.

The commentor is correct, and Map NR1 in Appendix A has been corrected to reflect the permitted location of the Hampton Substation, per the Brookings County to Hampton 345kV Transmission Line Route Permit, to the area northwest of the intersection of Highway 52 and 215th St. E.

168GG.

Map NR1 in Appendix A has been corrected to reflect the permitted location of the Hampton Substation, per the Brookings County to Hampton 345kV Transmission Line Route Permit, to the area northwest of the intersection of Highway 52 and 215th St. E. Map NR1 also shows the transmission line's crossing of Highway 52 to the east, and then turning south.

168HH.

The comment is part of the record in this matter by its inclusion in the EIS, and will be submitted to the OAH and Commission for consideration.

168II.

The EIS discussion of CWD is sufficient and thorough. It addresses routes of transmission of the disease, notes the difficulty in destroying the prion infectious agent, and cites the WHO and CDC findings of no scientific evidence to support the transmission of CWD to humans. It is beyond the scope of the EIS to discuss the Elk Run development project's compliance with the DNR CWD mitigation plan. Moreover, the DNR plan is a response plan to monitor and react to detection of CWD in cervid populations. It is beyond the scope of the EIS and of the CapX project itself to monitor disease within deer populations.

168JJ.

See Section 4.3 of the EIS.

168KK.

See Section 7.3 of the EIS.

168LL.

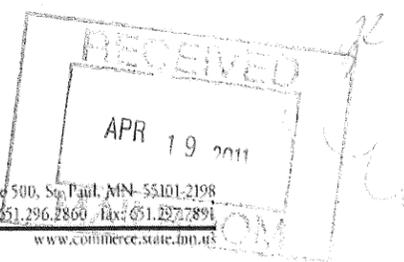
The comment is part of the record in this matter by its inclusion in the EIS, and will be submitted to the OAH and Commission for consideration.

168MM.

The requested information is not in a public database. The cost to independently develop this information for all of the routes outweighs its relevance to a reasoned choice among alternatives. Therefore, the additional data requested in this comment was not collected. See Minn. Rule 4410.2300, Subpart. H.



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PUBLIC COMMENT SHEET

CapX Hampton-Rochester-La Crosse Transmission Line Project

PUC Docket Number: E002/TL-09-1448

Name: Jon Page Representing: Myself
Address: 51136 230th Ave, Pine Island, MN 55963
Email: none

Comments: I am very certain that if they run the powerlines across my cattle pastures, the cows would not cross under them to graze on the other side. Cows are super sensitive to electricity. I have walked under ~~power~~ large powerlines myself and have noticed a tingling feeling (the powerlines at the Northern Hydraulics store in Burnsville). If the CapX guys can't ~~guarantee~~ guarantee that it will not screw up my cows and render my cows pastures useless forever, then it would be very stupid to put them there. It would be very expensive for everyone. Pasture land generates good money because

Please submit comments by 4:30pm, April 29, 2011 to:

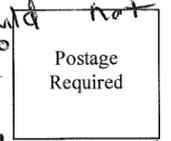
Matthew Langan
Minnesota Dept. of Commerce
85 7th Place East
Suite 500
St. Paul, MN 55101-2198
Email: matthew.langan@state.mn.us
Phone: 651-296-2096
Fax: 651-297-7891

169A

169B

169B (cont)

there is little input costs. If cows refuse to cross under the powerline to graze, it would be like dumping nuclear waste on the land, making it useless for eternity. I would run it where there are no existing dairy farms. If somebody decided they wanted to start milking cows there, they would see the powerlines and at least have a choice. I'm still sorta young as are my dairy farming neighbors (Kevin & Luke Klingporn) IF they just come in and put up these lines we will have no choice. It seems very silly and petty when people whine about the powerline messing up their "view". For ~~us~~ myself and neighbors (Kevin & Luke & Radtke) It could mess up our occupation. It ~~would~~ would be nice if they would send someone out to show exactly where the lines would run. It is hard to tell by the bold lines used on the maps. Perhaps with some minor changes it would not affect the dairy cows. I would have liked to attend your meetings, but is impossible to get away from the farm. Thank you for reading me, It seems like there is going through the only dairy farm in the area. It may be hard to understand and sounds like useless drabble.



Matthew Langan
Minnesota Dept. of Commerce
85 7th Place East
Suite 500
St. Paul, MN 55101-2198

FEIS ID #169

169A.

See Section 7.1 of the EIS.

169B.

See Section 7.5.1.1 of the EIS.

Langan, Matthew (COMM)

From: John Peterson [john.preston.peterson@gmail.com]
Sent: Friday, April 29, 2011 3:09 PM
To: Langan, Matthew (COMM)
Subject: CAPX 2020 Comments

Matthew,

I apologize for waiting until the last minute to submit a couple comments about the draft EIS for the CAPX 2020 line from Hampton-Rochester. I attended the meeting in Cannon Falls a couple weeks ago, and I thought you handled the forum well.

I am a resident and business owner along the proposed Hwy 52 route near Cannon Falls. My home and family turkey farm is located at the Northwest junction of 52 and Goodhue County 24 (31643/31659 County 24 Blvd).

170A

My first concern with the EIS is that our family farm is not noted as a historic farm, as we were named by MN DOT within the past few years. A MN DOT representative cataloged information about our farm, and subsequently we were named as a historic farm. This historic designation should be noted (it doesn't appear currently) on the EIS, given that two of the proposed routes would travel through our property and alter our farm forever. In particular, the route IP-001 would cut right through the heart of our farm.

170B

Secondly, as a resident along the proposed Hwy 52 line, I'd simply like to note my opinion that it seems illogical to run the CAPX line down the heavily-populated Hwy 52 corridor rather than the more sparsely populated MN 56 route. Where both cost and life-disruption are concerned, it seems that the MN 56 route would be better suited to minimize both. There are simply too many communities, businesses, and residences along Hwy 52 to make it well-suited for a line of this size. Given the population density and current business activity, the MN 56 route should be given priority standing.

Thank you for your efforts. Let me know if there is any additional information I can provide.

Take care,
 John Peterson

--
 John Peterson
 Ferndale Market
 Good Food. Sustainable Living.
 507.263.4556

170A.

The farm mentioned by the commenter is listed by SHPO as a historic structure. The list of historic sites in Appendix G has been updated to include this site. It is listed as Inventory Number GD-CFT-019.

170B.

Your objection/preference of the specified route is noted. The comment is part of the record in this matter by its inclusion in the EIS, and will be submitted to the Office of Administrative Hearings and Commission for consideration.

Langan, Matthew (COMM)

From: Etponcelet [etponcelet@aol.com]
Sent: Thursday, April 28, 2011 8:43 PM
To: Langan, Matthew (COMM)
Subject: Concerns about CapX Hampton-Rochester-LaCrosse Transmission Line PUC Docket # E002/TL-09-1448

Dear Mr. Langan,

171A

According to the map at the community meeting in Pine Island in early April outlining the CapX2020 project, the preferred route for the transmission line from Zumbrota to Pine Island runs on our north property line. Unfortunately, we have a very small acreage with limited access from the road. The 75-foot easement would obliterate our driveway and our 40'x80' shed and come within 50 feet of our house. The resulting electromagnetic field from a 345kV transmission line would make our home virtually unliveable. We realize that we are a small blip on the radar, but that blip is very important to us since we are now retirement age and this is our home. We have neither the desire nor the where-with-all to move.

171B

Thank you very much for your time and consideration,

Erwin & Theresa Poncelet
 49508 180th Ave
 Pine Island, MN 55963

E-mail: ETPoncelet@aol.com

171A.

See Section 7.3.3 of the EIS.

171B.

See Section 7.1 of the EIS.

Public Comment Sheet
CapX Hampton-Rochester-LaCrosse Transmission Line
Project

PUC Docket Number: E002/TL-09-1448



Roger Poole
 23637 510 st
 Pine Island, MN 55963

Phone 507 356 2923
 email: rbpoole@pitel.net

Goodhue County
 Section 25 Twp 109
 Range 15

1. Issues

172A

A. Aesthetic - Our home was designed to take advantage of a beautiful valley view which we thoroughly enjoy. The Southern Route of CapX2020 would take out a 140 ft wide swat of trees and replace this with a 345KV Power Line. This Power Line would be on two sides of our home. Therefore we would see it from every angle on our property.

172B

B. Forested Area – The valley that (we own) provides our view is in the Reinvest In Minnesota program. The RIM program protects the valley from development and use for crop land. Permits will be required to construct a Power Line through this area.

172C

C. Water Resources – The CapX2020 will have to cross a creek that is part of the Pine Island Water Shed that goes to Lake Zumbro. Construction and maintenance will damage the area around the creek bed. This will require more permits.

172D

D. Health – CapX2020 will be going through our property and with in several hundred feet of our home. I am concerned about the noise that my hearing aid will pick up from the power lines. Will this area be safe for a Heart Pacemaker?

172E

E. Stray Voltage – CapX2020 will cross over the power lines going to my home. Will the stray voltage interfere with electronic devices?

172F

F. Loss of Property Value –Turn off from other people buying the home, not just for health reasons but also of the noise and eye sore.

172G

G. Shelter Belt - CapX2020 is so close to our home that the shelter belt would be damaged.

172H

2. Solution

A. Use the Northern Route; it is further a way from Hy 52, The Elk Run Project and Rochester therefore the land values are less.

B. The Northern Route will affect only 18 land owners the Southern Route will affect over 23 land owners.

Thank you,

Roger Poole
 Land Owner

FEIS ID #172

172A.

See Section 7.3.1 of the EIS.

172B.

As the comment points out, although RIM land is privately owned, the conservation easement agreement covering the property often prohibits the installation of new structures. If this route were selected and a structure had to be placed within the RIM property the Applicants would be required to negotiate an agreement on a site by site basis with the land owner and the local or state government entity holding the easement. See EIS Section 9.4.

172C.

See Section 7.8 of the EIS.

172D.

See Section 7.1 of the EIS.

172E.

See Section 7.1 of the EIS.

172F.

See Section 7.2 of the EIS.

172G.

See Section 7.3.5 of the EIS.

172H.

Your objection/preference of the specified route is noted. The comment is part of the record in this matter by its inclusion in the EIS, and will be submitted to the Office of Administrative Hearings and Commission for consideration.

Langan, Matthew (COMM)

From: Mike Rasmussen [raz@us.ibm.com]
Sent: Friday, April 29, 2011 11:58 PM
To: Langan, Matthew (COMM)
Subject: DEIS comments Docket 09-1448

Dear Mathew Langen,

I am writing to you about the proposed route 3P-009.

173A

First of all I was not notified about this route and only found out through my neighbors a week and a half ago. This is not very good communication concerning the route of the power line.

Some of the issues and concerns of using the 3P-009 route.

173B

- Huge impact on residents close to the line vs other routes

173C

- High effect of environmental impact on the area wildlife.

173D

- The crossing of Lake Zumbro through Ferber residence, this bay is used for recreational purposes, very popular hunting, boating, fishing area.

173E

- It would be devastation to the Natural Habitat to erect a power line tis large in the vicinity of Lake Zumbro

173F

- There is a large number of eagles in this area that would be impacted. I seen 5 yesterday and there are 2 nest close to my residence.

Just concerned about the placement of this line vs other possible routes.

Sincerely,
 Michael Rasmussen
 40981 565th St.
 Mazeppa, MN 5956

•

Mike Rasmussen
 IBM Corp.
 Solutions Technology Center
 Phone (507) 253-2501 Tie 553-2501
 Internet: raz@us.ibm.com

"Live your life looking thru the windshield, not the rearview mirror"

173A.

Your comment is included and will be sent to ALJ and the Commission OES staff notified all persons on the project mailing list and all landowners along route alternatives of the scope of the EIS, the availability of the draft EIS, and the comment period for the draft EIS. It is possible that landowner lists, which are developed from county property records, contained inaccuracies or omissions.

173B.

Your objection/preference of the specified route is noted. The comment is part of the record in this matter by its inclusion in the EIS, and will be submitted to the Office of Administrative Hearings and Commission for consideration.

173C.

Your objection/preference of the specified route is noted. Your comment is now part of the record in this matter by its inclusion in this EIS, and will be submitted to the Office of Administrative Hearings (OAH) and Commission for consideration. See Section 7.7 of the EIS.

173D.

Your objection/preference of the specified route is noted. The comment is part of the record in this matter by its inclusion in the EIS, and will be submitted to the Office of Administrative Hearings and Commission for consideration.

173E.

Your objection/preference of the specified route is noted. Your comment is now part of the record in this matter by its inclusion in this EIS, and will be submitted to the Office of Administrative Hearings (OAH) and Commission for consideration. See Section 7.7 of the EIS.

173F.

See Section 7.6 of the EIS.

Dean & Barb Regnier
 59363 County Road 71, Mazeppa, MN 55956, Wabasha County
 Mazeppa Township, Section 16, Twp-109 Range 014

June 22, 2011

Subject: Draft EIS on proposed CAPX2020 high voltage transmission lines (Alternative 345 kV Route – ie: Route 3A North Route). PUC Docket # E002/TL-09-1448

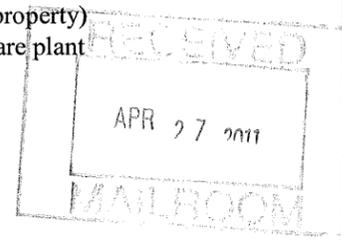
For the record, I would like to express our views on the proposed “ Route 3A - North alternative route 345 kV transmission line”, to be included in the Final EIS report.

I currently have a Certified Woodland Stewardship Plan that was not included in the Draft EIS. My property has been registered as an official Tree Farm in the past, and is currently in-process of recertification. (map & plan cover letter attached).

The route would split between two wetland pond areas, impacting nesting ducks, geese, and other waterfowl. One of the ponds has 3 established wood-duck nesting houses. (see ponds noted in the attached map to be added to the EIS)

Additionally, There Should be “NO POWER LINES ON NORTH ALTERNATE ROUTE 3A” due to :

- No existing Zumbro River crossing / infrastructure for this route
- There are no existing transmission corridors across our farmlands. (Property boundaries and field edges do not qualify).
- This route is a contradiction to the MN Non-Proliferation Policy, as there is NO existing corridor.
- Cutting across farmland and virgin woods, which are part of the RJ Dorer Memorial Hardwood State Forest.
- Irreversible damage to farmed land, livestock, wooded and bluff land, river & trout streams, and water quality associated with project construction.
- Significant cost of maintenance to the project due to heavily wooded and bluff-land property
- Fragmentation of properties. This route splits our property in half !
- Impact on wildlife including deer, turkeys, grouse, birds, pheasants, eagles. (we observed a Golden Eagle this winter wintering in the alternate route 3A on a daily basis, as well as many Bald eagles). The tree the Golden eagle was seen in, would be cut down as part of the route clearing !
- Impacts to our “never been pastured” woods, including impacts to virgin ferns, morel mushrooms, ginseng plants, and many more known and un-known plants that reside in our wooded acreage. In June of this year, Jaime Edwards of the Minnesota DNR will be doing an official property evaluation of the Flora on my property.
- Erosion & Buckthorn infestation (currently have NO buckthorn on property)
- Habitat currently exists on the property for the potential for a very rare plant “dwarf trout lily” that exists only in this part of the world.



174A

174B

174C

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- Aesthetics impact to heavily used recreation area on the Zumbro River, including hunting, fishing, canoeing, walking, biking, bird-watching, etc
- Future building on the property (50 acres), will NOT happen if this route is approved. There is potential for 3 to 4 additional building sites for our children.

We would propose that the transmission route should use existing power-line corridors, right of ways, and follow major roadways to avoid the harmful environmental impacts listed above.

Thanks for your review of our concerns.

Dean & Barb Regnier



WOODLAND STEWARDSHIP PLAN

Prepared for:

Dean Regnier
RR1 Box 167
Mazeppa, MN 55956

507-843-4381

*(Recertification update)
in-process with DNR
Katie Dudley*

Part of the west 1/2 of the NW 1/4 of Section 16 T109N R14W Wabasha County, Minnesota

50 Stewardship Acres
50.5 Total Parcel Acres

Prepared by:

Katie Dudley, Consultant
Wabasha County Soil
and Water Conservation District
Home Address: 925 1st St NW
Oronoco, MN 55960

Home: 507-367-2744
Cell phone: 507-951-1626

April 24, 2001

Keith Jacobson
DNR forester
1801 S Oak St
Lake City, MN 55041

651-345-3216

Landowner's forest stewardship goals for this property are:

- ◆ Maintain or improve forest health
- ◆ Improve turkey hunting opportunity
- ◆ Maintain the forest for his children in the future
- ◆ Provide periodic harvests for income
- ◆ Improve wildlife habitat

FEIS ID #174

Property Description
(see maps)

LANDSCAPE REGION: BLUFFLANDS

The enclosed Minnesota map shows our ecological landscape regions (or subsections). The actual boundaries are not as sharp as the lines might imply. In fact there can be islands of one landscape region inside another. However, there are basic ecological differences between the units.

Your land is primarily within the Bluffland region and is described in more detail on the following pages. The purpose of providing this “landscape region” and the “interaction with nearby properties” information is to help you assemble a picture of how your land and your activities fit into the larger landscape.

The conservation issues of concern are of particular note. It is likely that at least some of your activities will affect these larger scale issues.

INTERACTION WITH NEARBY PROPERTIES:

Your property is situated in the Zumbro River Watershed with rolling agricultural lands and woodland on steeper hillsides in the surrounding area.

GENERAL PROPERTY DESCRIPTION

Your property consists of woodland with a homestead and white pine plantation. Soils are silt loam and aspect of hillsides (direction that they face) is variable. In general, hillsides that face to the north and east are cooler, moister and more productive for plant growth than those that face to the south and west. Access is off of county highway 71 two and a half miles southeast from Mazeppa.

A search of the County Biological Survey did not reveal any known elements of any rare or endangered plants or animals on or near your property.

Page 2

174A.

The locations of known tree farms are shown in the detailed maps in Appendix A of the EIS. A route that crosses land that is part of a Forest Stewardship Plan may be incompatible with that Plan, but it would not to our knowledge necessarily mean that the route would be legally prohibited.

174B.

See Section 7.7 of the EIS.

174C.

Section 8.3.4.8 discusses the Zumbro River crossing for the north route. Text discussing the Zumbro River and potential impacts associated with the crossing of the river has been added to the FEIS in Sections 6.3.1, 8.2.4.8, 8.3.4.7 and 8.3.4.8. In addition, existing text in Section 8.4 includes the Zumbro River in the discussion of the Mississippi River crossing.

174D.

Your objection/preference of the specified route is noted. The comment is part of the record in this matter by its inclusion in the EIS, and will be submitted to the Office of Administrative Hearings and Commission for consideration.

174E.

See Section 7.12.3 of the EIS.

174F.

See Section 5.5 of the EIS.

174G.

Your concern is part of the record that will be available to the Administrative Law Judge for the final routing decision.

174H.

See Section 7.11 of the EIS.

174I.

See Section 7.7 of the EIS.

174J.

See Section 7.7.1.2 of the EIS.

174K.

See Section 7.6 of the EIS.

174L.

See Section 7.3.1 of the EIS.



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www.commerce.state.mn.us

PUBLIC COMMENT SHEET

CapX Hampton-Rochester-La Crosse Transmission Line Project

PUC Docket Number: E002/TL-09-1448

Name:

Representing:

MARLIN REARDY

CITY OF HAMPTON

Address:

Email:

23503 EAGLE CT. BOX 96 HAMPTON MN 55031 MRMR@EMBARGALIN.COM

Comments:

175A

The City of Hampton would prefer the 1P-008 variation route to P route through the City

Of Hampton for the following reasons:

175B

The P route would interfere with the planned future water tower identified in their 2007

CIP plan.

175C

The 1P-008 route would not affect the 25 identified residences within 500' on the P route.

Thank You.

Please submit comments by **4:30pm, April 29, 2011** to:

Matthew Langan
 Minnesota Dept. of Commerce
 85 7th Place East
 Suite 500
 St. Paul, MN 55101-2198

Email: matthew.langan@state.mn.us
 Phone: 651-296-2096
 Fax: 651-297-7891

175A.

Your objection/preference of the specified route is noted. The comment is part of the record in this matter by its inclusion in the EIS, and will be submitted to the OAH and Commission for consideration.

175B.

See Section 7.4.1 of the EIS.

175C.

See Section 7.3.3 of the EIS.

Penny E. Robinson

11820 14th Ave. NW

Oronoco, MN 55960

PUC Docket No. E002/TL-09-1448 April 13, 2011

CapX Hampton-Rochester-La Crosse 345kV & 161kV Transmission Line Project

I have a dream that I have been working on for over thirty years. That dream has been to retire on my small thirty acre farm with a few goats, chickens and gardens full of vegetables and flowers. To be able to walk through my woods and enjoy the quiet solitude of a rural setting occasionally disrupted by the calls of the pileated woodpeckers is one of my lifetime goals. I am looking forward to sitting by the pond and reading some good books. What I wasn't planning on was CAPX 2020 smashing my dream to bits and destroying the quality and safety of my existence.

My dream doesn't include 150 ft. metal poles with three to six lines run on them that I will not be able to miss seeing when I sit at the pond or walk out my door. I'm not going to have very much woodland left to walk through after the easement has been clear cut on my property line since Acorn Hill Farm has a long narrow shape. The quiet solitude will be gone as the "hum" of lines and sound of the wind in the poles will replace the rustle of leaves and the calls of the birds.

I am concerned that the health and production of my ^{show} dairy goats will be negatively affected by the line's close proximity to my metal livestock building. I also wonder what affect it will have on my health and well being.

I would also like to be able to sit and enjoy some quality PBS TV shows in retirement but the reception from my 60ft. tower will be scrambled and paying for TV service is not in my budget. How will the lines affect my cell phone and computer?

I am also worried that this project will have a negative impact on the wildlife that I enjoy seeing on a daily basis. I'm not sure that the eagle that comes screaming up the valley will be inclined to do so if it encounters multiple lines and electric and magnetic force fields. The deer and water birds that use the pond will also be affected by the close proximity of the poles and lines.

Water run-off and erosion control is another concern that I have about the placement of the preferred 345kV route. The proposed easement on my property is almost entirely a water run that drains a large area of land not only on my side of 14th Ave. NW but also, through a culvert, on the other side of the road as well. The pond that I speak of was created before I bought the property. A large earthen dam was built to control run off and prevent silt from going into Lake Zumbro. The clear cutting of the woods and disturbing the earth to build the construction access road

176A

176B

176C

176D

176E

176F

176F
(cont)

176G

176H

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176J

176K

176L

176M

will promote considerable soil erosion and compromise the effectiveness of the pond or silt it into oblivion in a few short seasons.

In conclusion, my objections and concerns about the proposed preferred 345kV route through Oronoco Township are as follows:

- Flora and Fauna: destruction and pollution of wildlife habitat from construction activities and equipment and displacement of species from the area
- Water Resources: increased soil erosion and disturbance of surface flows to a water run-off control system that affects the already impaired waters of Lake Zumbro
- Human Settlement: negative impacts on the quality of my rural existence through noise pollution, scenic vista destruction and clear cutting of trees that are a windbreak
- Public Health and Safety: negative health effects on livestock and humans by electric and magnetic fields in close proximity to structures
- Property Values: reduction in my property values in an already depressed market and lack of future development possibilities for retirement income
- Electronic Device Interference: TV reception from my tower and radio/cell phone interference

Sincerely,

Penny E. Robinson

Penny E. Robinson

• Accuracy of maps to include all homes as my house is within 300-500 ft of a route line and it is not on the map.

FEIS ID #176

176A.

See Section 7.3.1 of the EIS.

176B.

See Section 7.3.2 of the EIS.

176C.

See Section 7.1 of the EIS.

176D.

See Section 7.9 of the EIS.

176E.

See Section 7.7 of the EIS.

176F.

As noted in Section 7.8.7 of the EIS, the construction stormwater general permit (MN R 100001) was re-issued by the PCA on August 1, 2008. Under the re-issued permit an NPDES/State Disposal permit would be required for the construction of this transmission line. The types of activities associated with the construction of powerlines which trigger the need for a stormwater construction permit include ROW clearing, staging areas, access roads, landings for storage of equipment and timber, and other types of activities which disturb soil.

The construction stormwater permit requires the preparation of a project specific pollution prevention plan that identifies controls and practices that would be implemented during construction to prevent erosion. Specific strategies and requirements for controlling erosion will be developed during permitting and will be tailored to the unique erosion challenges that the permitted route presents.

176G.

See Section 7.7 of the EIS.

176H.

See Section 7.8 of the EIS.

176I.

See Section 7.3.3 of the EIS.

176J.

See Section 7.1 of the EIS.

176K.

See Section 7.2 of the EIS.

176L.

See Section 7.9 of the EIS.

176M.

The house is shown in Appendix A on Map MR10. It is also included in the house counts in Table 8.3.4.3-1 in the EIS.

April 20, 2011

Office of Energy Security, MN Dept. of Commerce

Matt Langan, State Permit Manager

85 7th Place East, Suite 500

St. Paul, MN 55101-2198

RE: CapX2020 Hampton-Rochester-La Crosse 345kV & 161kV Transmission Line Project (PUC /docket No. E002/TL-09-1448)

Draft Environmental Impact Statement Comments Regarding Segment 3

Dear Mr. Langan,

I have a dream that I have been working on for over thirty years. That dream has been to retire on my small thirty acre farm with a few goats, chickens and gardens full of vegetables and flowers. To be able to walk through my woods and enjoy the quiet solitude of a rural setting occasionally disrupted by the calls of the pileated woodpeckers is one of my lifetime goals. I am looking forward to sitting by the pond and reading some good books. What I wasn't planning on was CapX 2020 smashing my dream to bits and destroying the quality and safety of my existence.

My dream doesn't include 150-170 ft. metal poles with three to six lines strung on them that will destroy my scenic views. I live along CapX2020's proposed preferred route 3P and once constructed I'm not going to have very much woodland left to walk through after the easement has been clear cut on my property line (Acorn Hill Farm has a long narrow shape). The quiet solitude will be gone as the "hum" of lines and sound of the wind in the poles will replace the rustle of leaves and the calls of the birds.

I am concerned that the health and production of my show goats will be negatively affected by the line's close proximity to my metal livestock building. I also wonder what affect it will have on my health and well being.

I would also like to be able to sit and enjoy some quality PBS TV shows in retirement but the reception from my 60ft. tower will be scrambled and paying for TV service is not in my budget. How will the lines affect my cell phone and computer?

I am also worried that this project will have a negative impact on the wildlife that I enjoy seeing on a daily basis. I'm not sure that the eagle that comes screaming up the valley will be inclined to do so if it encounters multiple lines and electric and magnetic fields. The deer and water birds that use the pond will also be affected by the close proximity of the poles and lines.



177A

177B

177C

177D

177E

177F

Water run-off and erosion control is another concern that I have about the placement of the preferred 345kV route 3P. The proposed easement on my property is almost entirely a waterway that drains a large area of land not only on my side of 14th Ave. NW but also, through a culvert, on the other side of the road as well. The pond that I speak of was created before I bought the property. A large earthen dam was built to control run off and prevent silt from going into Lake Zumbro. The clear cutting of the woods and disturbing of the earth to build the construction/ access road (along a side hill and through the waterway) will promote considerable soil erosion and compromise the effectiveness of the pond resulting in sediment in-fill within a few short seasons. I spoke with the head technician at the Olmsted County Soil and Water Conservation District Office. He said that steps would need to be taken to mitigate erosion potential when the construction/access road and clear cutting for the easement was done. He suggested that someone needs to check and see if a Storm Water Plan with the MPCA would be needed for this part of the project. He said that ordinances state that areas like this need to be seeded down seven days after they are clear cut to control run off and erosion. If the proposed construction/access road blocks the drain way, then culverts would need to be put in. He said that if poles were placed too close to the side of the dam that the integrity of the dam could be compromised.

I am requesting that you provide me with specific information regarding the following and also address these questions in the Final EIS:

1. Will a Storm Water Plan with the MPCA be needed for the part of the 3P route project that crosses my property? How and who will decide this? Who will be responsible for the cost of implementing said plan?

2. What specific steps will be taken to mitigate the impacts of soil erosion on my property? What are the estimated costs? Who is responsible for the cost of this? If in the future the mitigation efforts are not a success, who is responsible for continuing upkeep and costs?

3. Who will be responsible for the planning and costs of reworking the dam and pond when it is filled by sediment and can no longer protect the impaired water of Lake Zumbro? If the dam is compromised during construction of access roads or poles, who is responsible? How will this issue be addressed beforehand?

4. I would like specific estimated costs for tree replacement where the 3P route would clear cut my woods. Again, who is responsible for this cost? Who makes the decisions as to types and numbers of trees used?

5. Since my pond is used by water birds and wildlife, I would like more detailed information regarding how this would impact the water birds and also how this problem could be mitigated for route 3P.

177G

177H

177I

6. I would like more information regarding the specific impacts of stray voltage and magnetic and electric fields on dairy goat production and possible negative impacts on their health.

177J

7. Since my homestead and outbuildings are within approximately 300ft. or less of the 345kV lines, what impact will this have on TV, radio, cell phone and computer reception? What will be done to mitigate electronic device interference? Who will pay for this and for what length of time?

177K

8. What state laws and regulations are there regarding the proximity of 345kV lines to residences and buildings?

177L

9. What is going to be done to ensure that the residence maps and population density data is correct for the 3P route?

In conclusion, my objections to and concerns about the proposed preferred 3P, 3P-010,3P-005 and3P-009 routes through Oronoco Township are as follows:

177M

- Flora and Fauna: destruction and pollution of wildlife habitat from construction activities and equipment and displacement of species from the area
- Water Resources: increased soil erosion and disturbance of surface flows to a water run-off control system that affects the already impaired waters of Lake Zumbro
- Human Settlement: negative impacts on the quality of my rural existence through noise pollution, scenic vista destruction and clear cutting of trees that are a windbreak, also close proximity of 345kV lines to residences
- Public Health and Safety: negative health effects on livestock and humans by electric and magnetic fields in close proximity to structures
- Property Values: reduction in my property value in an already depressed market and lack of future development possibilities for retirement income
- Electronic Device Interference: TV reception from my tower and radio/cell phone and computer interference .
- Inaccuracy of CapX2020 residence maps: I have informed CapX2020 in oral and written form at two different public meetings that my residence was not on their maps. They have had over a year to correct this and have not done so. At the April 13, 2011 public meeting in Pine Island I tried again to correct this error. I am including another map with this letter.

177N

177O

177P

177Q

177R

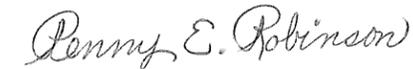
177S

177T

In my opinion, the 3A "alternate route", or 3P-Zumbro-N" alternate route will have less impact on human settlement, electronic device interference, and public health and safety due to the decreased population density of that area.

Sincerely,

Penny E. Robinson



11820 14th Ave. NW

Oronoco, MN 55960

Phone: 507-367-2161 (nine rings to activate voice mail)



- 177A.
See Section 7.3.1 of the EIS.
- 177B.
See Section 7.3.2 of the EIS.
- 177C.
See Section 7.1 of the EIS.
- 177D.
See Section 7.9 of the EIS.
- 177E.
See Section 7.7 of the EIS.
- 177F.
Erosion/runoff are discussed throughout the EIS including Sections 5.5, 7.5.1, 7.6, and 7.8. The construction stormwater permit requires a pollution prevention plan that identifies controls and practices that would be implemented during construction.
- 177G.
See Section 5.0 of the EIS.
- 177H.
For reasons of time and cost, we are not able go to the level of detail to be able to predict the impacts to the birds on specific small water bodies including those using your specific pond. Impacts to flora and fauna, including birds, are discussed in Section 7.7 of the EIS. The information included in the EIS targeted a level of detail relevant to a reasoned choice among alternatives. See Minn. Rule 4410.2300, Subpart. H.
- 177I.
See Section 7.5.1 of the EIS.
- 177J.
See Section 7.9 of the EIS.
- 177K.
See Section 7.3.3 of the EIS.

FEIS ID #177

177L.

See section on House Count Methodology in Section 7.3.3 of the EIS. Missing houses pointed out during the draft EIS comment period will be added in the EIS.

177M.

See Section 7.7 of the EIS.

177N.

See Section 7.8 of the EIS.

177O.

See Section 7.3.3 of the EIS.

177P.

See Section 7.1 of the EIS.

177Q.

See Section 7.2 of the EIS.

177R.

See Section 7.9 of the EIS.

177S.

The house is shown in Appendix A on Map MR10. It is also included in the house counts in Table 8.3.4.3-1 in the EIS.

177T.

Your objection/preference of the specified route is noted. The comment is part of the record in this matter by its inclusion in the EIS, and will be submitted to the OAH and Commission for consideration.

Penny E. Robinson

11820 14th Ave. NW

Oronoco, MN 55960

PUC Docket No. E002/TL-09-1448 April 13, 2011

CapX Hampton-Rochester-La Crosse 345kV & 161kV Transmission Line Project

I have a dream that I have been working on for over thirty years. That dream has been to retire on my small thirty acre farm with a few goats, chickens and gardens full of vegetables and flowers. To be able to walk through my woods and enjoy the quiet solitude of a rural setting occasionally disrupted by the calls of the pileated woodpeckers is one of my lifetime goals. I am looking forward to sitting by the pond and reading some good books. What I wasn't planning on was CAPX 2020 smashing my dream to bits and destroying the quality and safety of my existence.

My dream doesn't include 150 ft. metal poles with three to six lines run on them that I will not be able to miss seeing when I sit at the pond or walk out my door. I'm not going to have very much woodland left to walk through after the easement has been clear cut on my property line since Acorn Hill Farm has a long narrow shape. The quiet solitude will be gone as the "hum" of lines and sound of the wind in the poles will replace the rustle of leaves and the calls of the birds.

I am concerned that the health and production of my dairy goats will be negatively affected by the line's close proximity to my metal livestock building. I also wonder what affect it will have on my health and well being.

I would also like to be able to sit and enjoy some quality PBS TV shows in retirement but the reception from my 60ft. tower will be scrambled and paying for TV service is not in my budget. How will the lines affect my cell phone and computer?

I am also worried that this project will have a negative impact on the wildlife that I enjoy seeing on a daily basis. I'm not sure that the eagle that comes screaming up the valley will be inclined to do so if it encounters multiple lines and electric and magnetic force fields. The deer and water birds that use the pond will also be affected by the close proximity of the poles and lines.

Water run-off and erosion control is another concern that I have about the placement of the preferred 345kV route. The proposed easement on my property is almost entirely a water run that drains a large area of land not only on my side of 14th Ave. NW but also, through a culvert, on the other side of the road as well. The pond that I speak of was created before I bought the property. A large earthen dam was built to control run off and prevent silt from going into Lake Zumbro. The clear cutting of the woods and disturbing the earth to build the construction access road

178A

178B

178C

178D

178E

178F

178F
(cont)

178G

178H

178I

178J

178K

178L

will promote considerable soil erosion and compromise the effectiveness of the pond or silt it into oblivion in a few short seasons.

In conclusion, my objections and concerns about the proposed preferred 345kV route through Oronoco Township are as follows:

- Flora and Fauna: destruction and pollution of wildlife habitat from construction activities and equipment and displacement of species from the area
- Water Resources: increased soil erosion and disturbance of surface flows to a water run-off control system that affects the already impaired waters of Lake Zumbro
- Human Settlement: negative impacts on the quality of my rural existence through noise pollution, scenic vista destruction and clear cutting of trees that are a windbreak
- Public Health and Safety: negative health effects on livestock and humans by electric and magnetic fields in close proximity to structures
- Property Values: reduction in my property values in an already depressed market and lack of future development possibilities for retirement income
- Electronic Device Interference: TV reception from my tower and radio/cell phone interference

Sincerely,

Penny E. Robinson

Penny E. Robinson

178A.

See Section 7.3.1 of the EIS.

178B.

See Section 7.3.2 of the EIS.

178C.

See Section 7.1 of the EIS.

178D.

See Section 7.9 of the EIS.

178E.

See Section 8.3.4.7 of the EIS.

178F.

Erosion/runoff are discussed throughout the EIS including Sections 5.5, 7.5.1, 7.6, and 7.8. The construction stormwater permit requires a pollution prevention plan that identifies controls and practices that would be implemented during construction.

178G.

See Section 7.7 of the EIS.

178H.

See Section 7.8 of the EIS.

178I.

See Section 7.3.3 of the EIS.

178J.

See Section 7.1 of the EIS.

178K.

See Section 7.2 of the EIS.

178L.

See Section 7.9 of the EIS.

April 29, 2011

Matthew Langan
 EFP Project Manager/Dept of Commerce
 MN Office of Energy Security
 85 7th Place East, Suite 500
 St. Paul, MN 55101

Dale & Suzanne Rohlfing
 2310 15th Avenue NW
 Rochester, MN 55901

RE: Docket # TL-09-1448

Dear Matt,

We request that the following data be entered into the Final EIS for the Hampton-Rochester-LaCrosse CAPX2020 HVTL project.

179A

1) Please note the **biological addition** of a remnant sand prairie as noted on enclosed map on the SW corner of our tract adjacent to the Colleen Stacey property. It has been verified by Jaime Edwards of the MN DNR. It contains a minimum of 15 native plant species, and is particularly abundant with *Liatris*. We have witnessed a Monarch migratory phenomenon. After confirmation, we would like this added to the MCBS Biodiversity Significance and **map 8.3-35**. (Appendix 1)

179B

2) **With reference to Bluff land and slope:** Please include information referring to the ROWs and changes at various degrees of slope and elevation, including evidence of ROW changes necessary and increased number of pole structures anticipated with the grade variations. Wabasha County has a large number of elevation changes and slopes. This difference is evident and significant when comparing the 3A route to the Preferred and Modified Preferred routes. Perhaps a graph would assist with the visual.

179C

3) **Regarding Maintenance in section 2.9.1.** Please recognize that deforested areas and routes adjacent to biologically sensitive areas will need non chemical/alternative maintenance to ensure no infestation of non-natives or harm to flora/fauna. These areas would also need more intensive maintenance, more frequent than every 10 years. Please have that cost considered here.

179D

4) **Figure 8.3.4.11-1 "Comparison of shared ROW"**. This graph is confusing. Please clarify transmission lines with a darker contrast color. A trail should have its own color.

179E

5) The DNR manages the "Water Trails" of the Zumbro River. We suggest that in **Appendix J- Segment 3- Recreation Areas**, a "number of crossing" be added for every cross of the Zumbro River-any branch,

179E
 (cont)

and the length in River route width be noted. Please refer to the North Route Group submission letter, comment #4. (Appendix 2)

179F

6) **With reference to 7.5.1 in comparison to 7.5.2.** 7.5.1 States that "permanent impacts in agricultural fields would be 55 sq ft per pole". In 7.5.2, there are no statements or comparative figures to reflect permanent loss of tree harvest, inability to reforest within the entire route ROW. Also not noted are temporary impacts to soils and vegetation, and area approximating the ROW in forested areas, which can sometimes be more forest.

Thank you for the opportunity to respond to this Docket # TL-09-1448.

Respectfully yours,

Suzanne and Dale Rohlfing



3A Route Centerline parcels

North Route Group Sec(s) 15 T109N R14W

Registered Tree Farm Locations

Rohlfling Registered Tree Farm

● : Prairie Remnant
 ● : Sand Prairie Remnant
 ● : Tree Farm Plantings-1980s
 ● : Future Prairie Planting

Zumbro River and Whitewater River
 A Water Trail Guide

Whitewater WMA
 This information is available at the
 Grand View Center.

DNR Park and Trails
 1200 Water Road
 St. Paul, MN 55108
 (612) 725-7800

Whitewater WMA Area Office
 Room 2, Box 133
 Albert, MN 55108
 (612) 917-4133

Online water trail information and maps are found at:
<http://www.dnr.state.mn.us/whitewater/>

DNR Information Center
 400 Hennepin Avenue
 Minneapolis, MN 55401
 (612) 296-6300

The DNR Information Center
 400 Hennepin Avenue
 Minneapolis, MN 55401
 (612) 296-6300

THE DIVER
 Whitewater River is a popular spot for fishing. The river is known for its excellent fishing opportunities. The river is also a popular spot for canoeing and kayaking. The river is a beautiful scenic area with many beautiful views. The river is a great place to enjoy nature and the outdoors.

LAVOY OF THE LAND
 Southern Minnesota's landscape is an picturesque study in diversity. The land is a mix of rolling hills, prairie, and forest. The land is a beautiful scenic area with many beautiful views. The land is a great place to enjoy nature and the outdoors.

WHITESTREAM WMA
 This information is available at the Grand View Center.

Activities permitted on the WMA:
 Hunting or fishing in accordance with state regulations.
 Bicycling on designated trails.
 Snowmobiling on designated trails.
 Cross-country skiing on designated trails.
 Horseback riding on designated trails.
 Canoeing and kayaking on designated trails.
 Archery on designated trails.
 Target shooting on designated trails.
 Hunting on designated trails.
 Fishing on designated trails.
 Snowmobiling on designated trails.
 Cross-country skiing on designated trails.
 Horseback riding on designated trails.
 Canoeing and kayaking on designated trails.
 Archery on designated trails.
 Target shooting on designated trails.
 Hunting on designated trails.
 Fishing on designated trails.

Activities NOT permitted on the WMA:
 Off-road vehicle use.
 Motor vehicle use.
 Commercial logging.
 Commercial agriculture.
 Commercial fishing.
 Commercial hunting.
 Commercial trapping.
 Commercial fishing.
 Commercial hunting.
 Commercial trapping.

SUSTAINABLE ECOSYSTEMS
 Sustainable ecosystems are those that are able to maintain their productivity and ability to provide goods and services to humans. Sustainable ecosystems are those that are able to maintain their productivity and ability to provide goods and services to humans.

RAVINE TOBACCO
 General flow: The river flows from north to south. The river is a beautiful scenic area with many beautiful views. The river is a great place to enjoy nature and the outdoors.

THE PLANNING & USE
 The river is a beautiful scenic area with many beautiful views. The river is a great place to enjoy nature and the outdoors. The river is a great place to enjoy nature and the outdoors.

Glacial meander carved through hundreds of feet of limestone and sandstone.

COMMUNITIES
 The Zumbro River flows through several communities. The river is a beautiful scenic area with many beautiful views. The river is a great place to enjoy nature and the outdoors.

NATURAL
 The Zumbro River is a beautiful scenic area with many beautiful views. The river is a great place to enjoy nature and the outdoors. The river is a great place to enjoy nature and the outdoors.

ROUTE DESCRIPTION
 SOUTH FORK OF THE ZUMBRO RIVER
 NORTH FORK OF THE ZUMBRO RIVER
 MIDDLE FORK OF THE ZUMBRO RIVER
 SOUTH BRANCH OF THE MIDDLE FORK OF THE ZUMBRO RIVER

WHITESTREAM WMA
 This information is available at the Grand View Center.

WHITESTREAM WMA
 This information is available at the Grand View Center.

WHITESTREAM WMA
 This information is available at the Grand View Center.

ROUTE DESCRIPTION
 SOUTH FORK OF THE ZUMBRO RIVER
 NORTH FORK OF THE ZUMBRO RIVER
 MIDDLE FORK OF THE ZUMBRO RIVER
 SOUTH BRANCH OF THE MIDDLE FORK OF THE ZUMBRO RIVER

WHITESTREAM WMA
 This information is available at the Grand View Center.

WHITESTREAM WMA
 This information is available at the Grand View Center.

WHITESTREAM WMA
 This information is available at the Grand View Center.

179A.

MCBS Native Plant Communities, MCBS Biodiversity Sites and the Natural Heritage Information System data were reviewed as part the EIS. During that review the property identified by the commenter was noted as an area of moderate biodiversity and containing a Dry Bedrock Bluff Prairie native community. The same native prairie community was identified in the NHIS data along with on Zoological and Botanical feature.

179B.

See updated text in Section 7.4, 8.1.4.4, 8.2.4.4, and 8.3.4.4 of the EIS.

179C.

See Sections 5.6, 7.6, and 7.7.

179D.

The comment is part of the record in this matter by its inclusion in the EIS, and will be submitted to the OAH and Commission for consideration.

179E.

The number of Public Waters, Trout Streams, Impaired Waters, Wetlands, Floodplains, Wildlife Lakes and Shallow Lakes crossed are provided in the Water Resources Section of Appendices, H, I and J of the EIS.

179F.

Appendices I, J, and K of the EIS provide total acreages of forested land within the ROW that will need to be cleared and cannot be reforested.

180A

In addition, we ask that the Tree Farms and MN State Stewardship Programs be recognized in text and maps regarding Flora and Fauna, Water Resource Protection and Recreation.

180B

4- Pages 169-171. The section of the Zumbro River from the Zumbro Dam down river to the Mississippi includes the most popular routes of the Zumbro river Water Trail. "Two of the most popular trips are from the Zumbro Lake Power Dam to Zumbro Falls, or from Zumbro Falls to either Hammond or Millville" ("Zumbro River and Whitewater River: A Water Trail Guide"-MNDNR)(Appendix 6). The Wabasha County Comprehensive Plan (page 9) states "Recreation is a significant land use in Wabasha County. Recreational activities center on the Zumbro River, the Mississippi and the DNR managed lands". It also states that "Canoeing and fishing are the primary tourist activities in the Upper Valley Area". We ask for recognition of the recreational significance of the Zumbro down river from the Zumbro Dam.

180C

5) Section 8.3.4.10- Cultural resources, and Map 8.3-38 and figure 8.3.4.10-1. There is a suspect Indian burial site on the Paul Mulholland property (Appendix 7). His father spoke of it to him before his passing. Paul has contacted three state agencies: MN Historical Society, MN Indian Affairs and MN Office of Archeology. Although appointments are scheduled for May and the near future with the MNHS and MN Indian Affairs, our intent here is to advise regarding the probable archeological sites on the Mulholland tract. Paul will provide further information as it becomes available.

180D

An Old Stagecoach Trail runs along County 1 on the Wabasha/Goodhue county line (Alt. 2C3-004-3). The route is known to locals and ruts are visible to the naked eye. The Wabasha County Historical Society does not open for the season until May. We are making inquiries at the Goodhue Historical Society, and the MN Historical Society. Reference to routes between Rochester and Lake City and Zumbrota are referred to in "Roads and Trails in the Minnesota Triangle: 1849-60" by Arthur J. Larsen. We have enclosed a map (Appendix 8). We will continue to investigate. We suggest this alters your comment on **page 166-Mitigation, and figure 8.3.4.10-2.**

180E

6) We have identified a private airport not registered with the state. It is on the property of Tim and Caryl Bjork in T 109 R14 S20.

180F

7) We would like a section with graph and text referring to and comparing the Bluff land and slope of all routes. Considering SE MN karst geography, and Wabasha County Bluff land Area Protection-Article 4 (Appendix 9), this should be a significant factor in route determination.

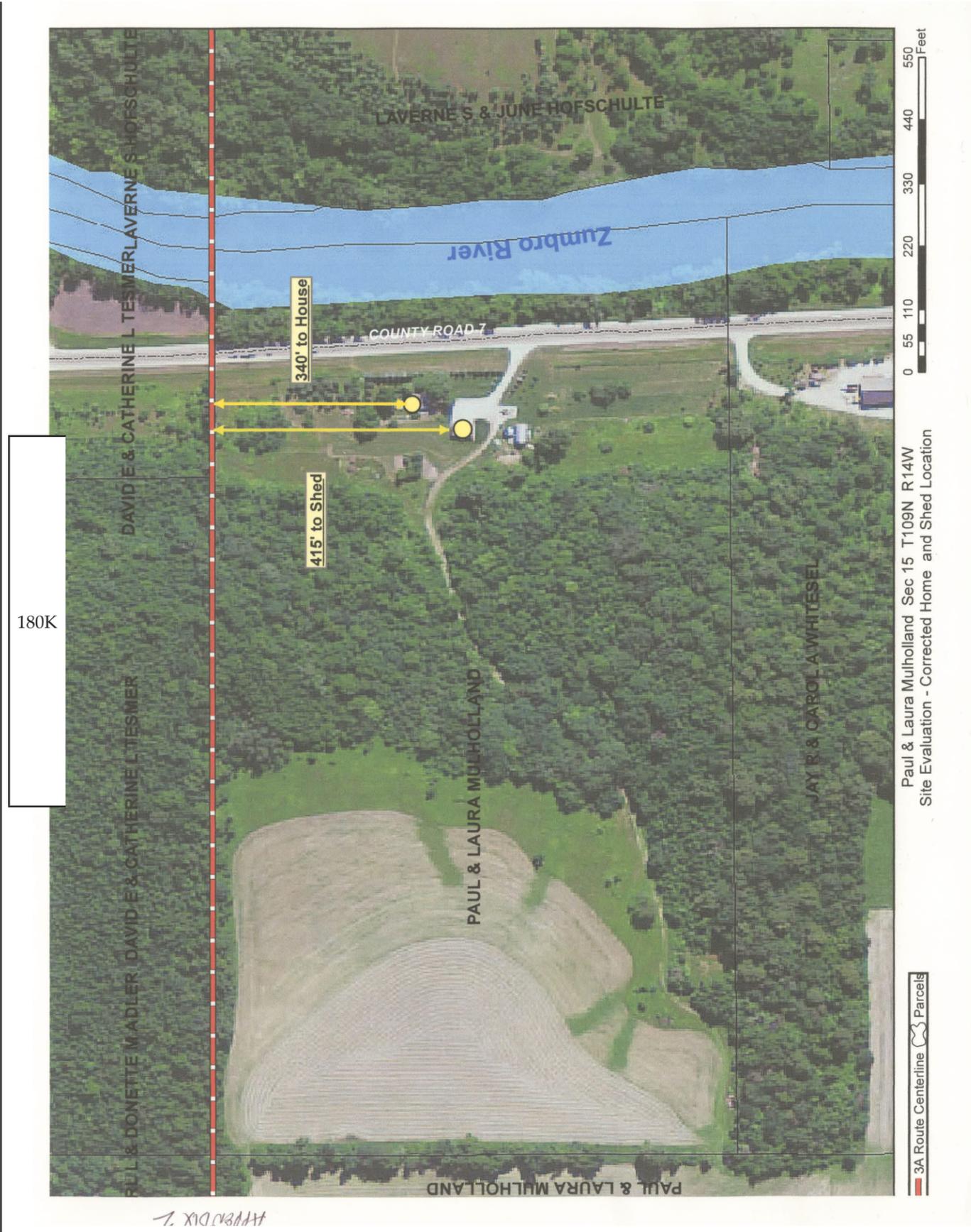
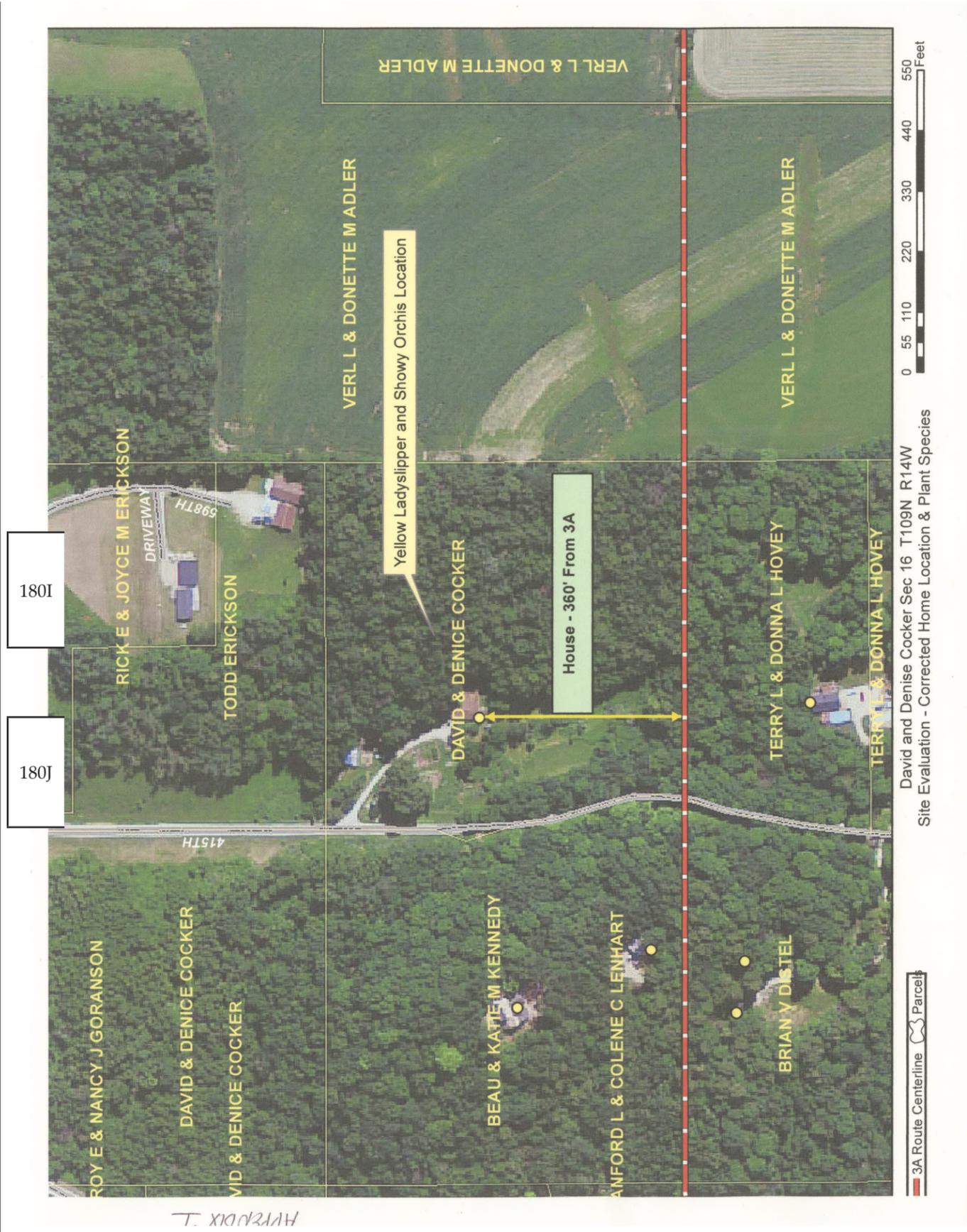
180G



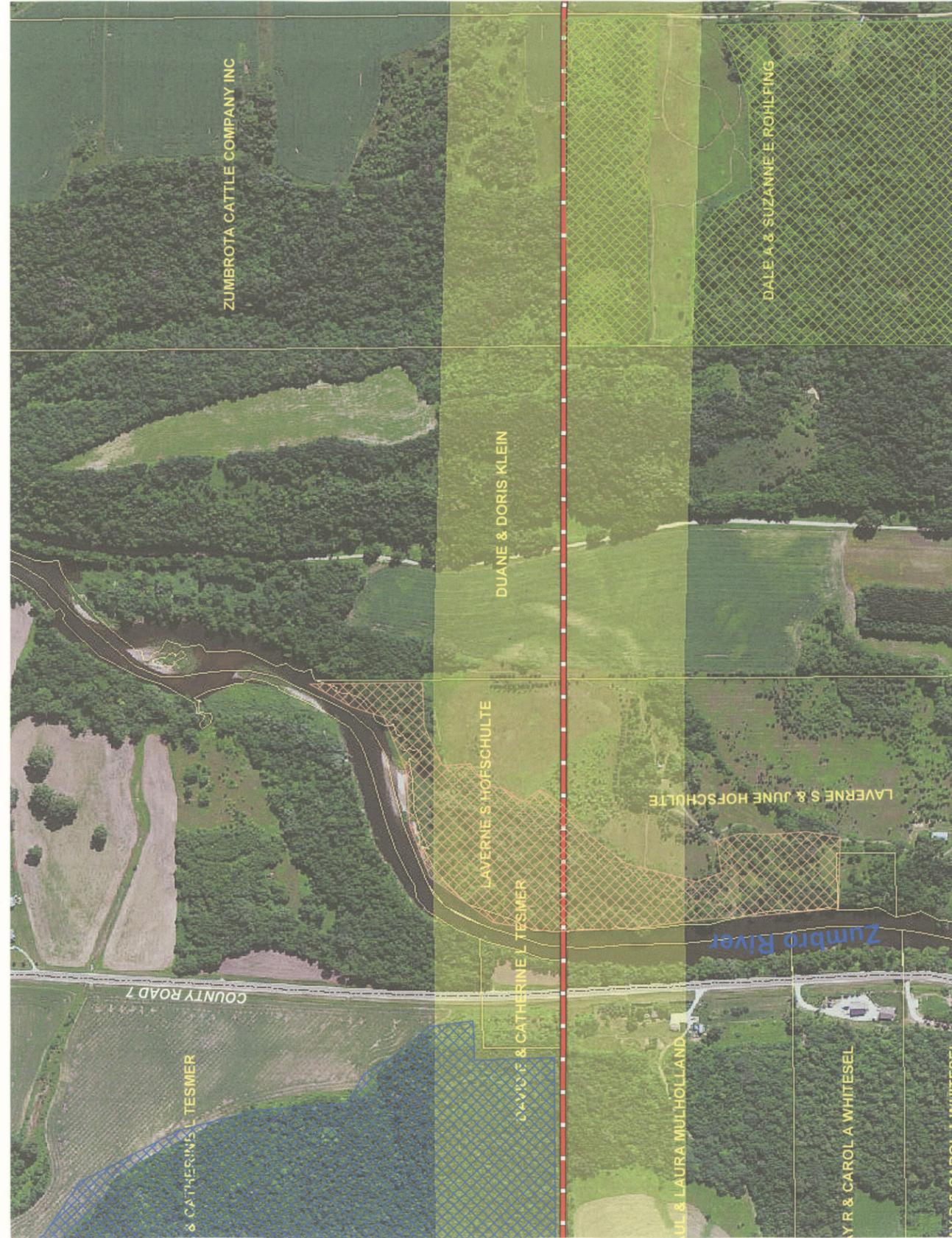
180H

APPENDIX 7

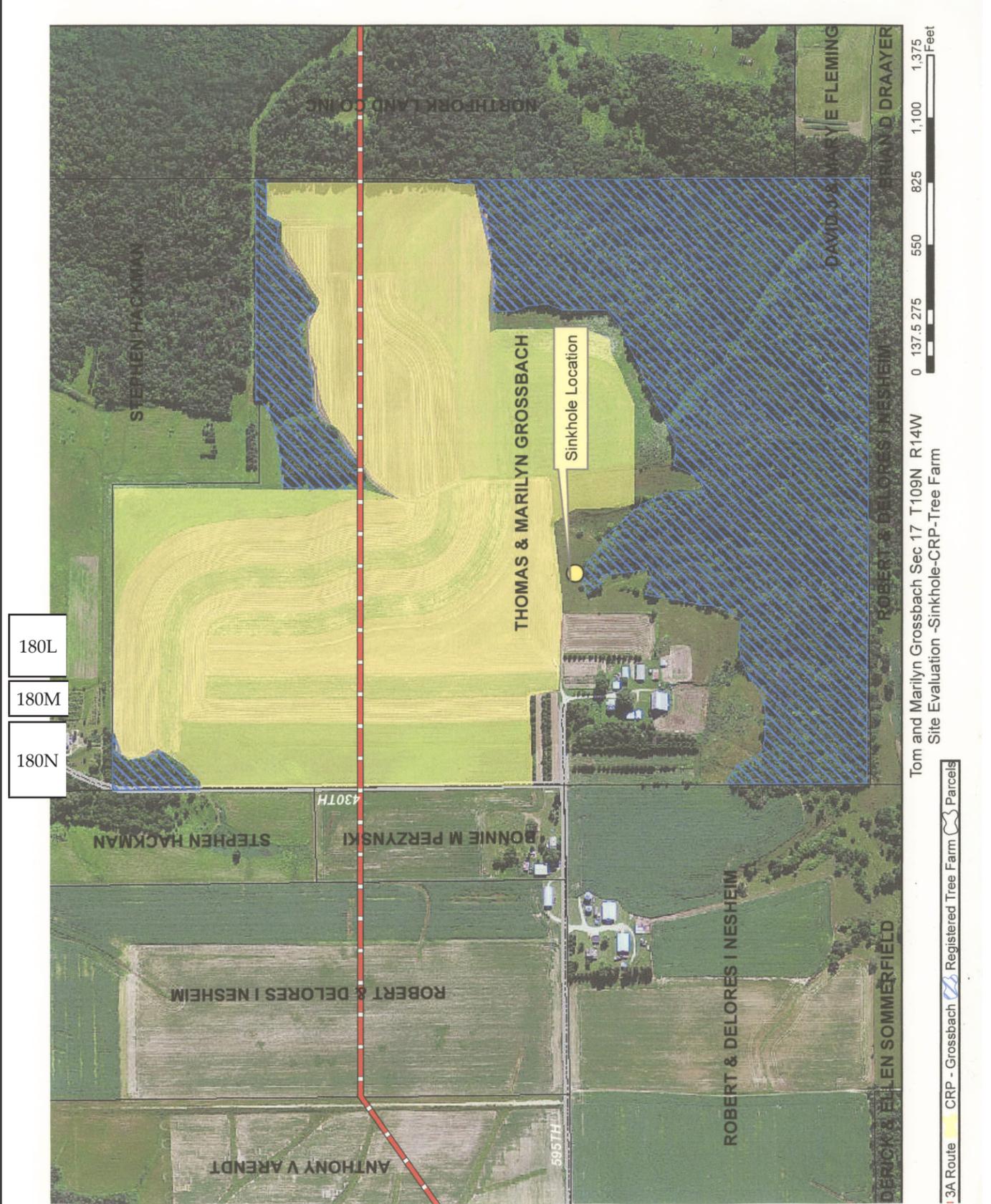
Red dot - Mulholland home
Red line - Burial Site



FEIS ID #180



APPENDIX O



- 180L
- 180M
- 180N

APPENDIX A