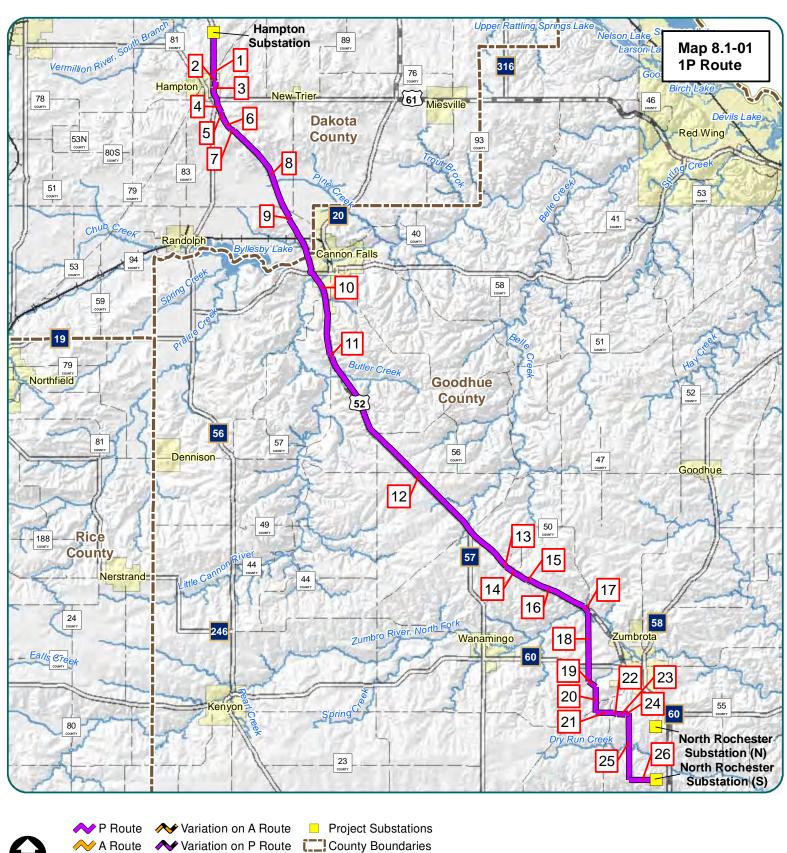
Appendix D – Detailed Descriptions of Route Alternatives - Minnesota Final EIS

## 8.1.1 Description of Route Alternatives – Hampton to North Rochester Substation

	Hampton to North Rochester (1P)			
	Turn by Turn	Distance (miles)	Comments/ROW Type	
1	From the Hampton Substation go south following US Hwy 52	1.77	Major Hwy	
2	Turn southeast cross-country	0.11	Cross-country	
3	Turn south then southwest following field line/cross country to US Hwy 52	0.26	Field Line/Cross-country	
4	Turn south/southeast following US Hwy 52	0.96	Major Hwy	
5	Turn south crossing US Hwy 52	0.12	Major Hwy	
6	Turn southeast following US Hwy 52	0.63	Major Hwy	
7	Turn east/southeast crossing US Hwy 52	0.13	Major Hwy	
8	Turn southeast following US Hwy 52	3.91	Major Hwy	
9	Turn south crossing US Hwy 52	0.11	Major Hwy	
10	Turn southeast following US Hwy 52	5.44	Major Hwy	
11	Continue southeast crossing US Hwy 52	0.12	Major Hwy	
12	Turn south/southeast following US Hwy 52/transmission line	10.23	Major Hwy/Transmission Line	
13	Continue south/southeast crossing US Hwy 52	0.12	Major Hwy	
14	Turn southeast following US Hwy 52	0.90	Major Hwy	
15	Turn east crossing US Hwy 52	0.13	Major Hwy	
16	Turn southeast following US Hwy 52/transmission line	2.25	Major Hwy/Transmission Line	
17	Turn south/southeast crossing US Hwy 52 then cross-country	0.28	Major Hwy/Cross-country	
18	Turn south following field line/cross country	2.58	Field Line/Cross-country	
19	Turn south/southeast cross-country	0.32	Cross-country	
20	Turn south following field line	0.98	Field Line	
21	Turn east following field line	0.66	Field Line	
22	Turn east/southeast cross-country	0.15	Cross-country	
23	Turn east following field line	0.29	Field Line	
24	Turn east/northeast cross-country	0.15	Cross-country	
25	Turn south following transmission line	2.51	Transmission Line	
26	Turn east following field line/cross-country and enters the proposed North Rochester Substation (S) area	1.01	Field Line/Cross-country	

Total Length

36.11

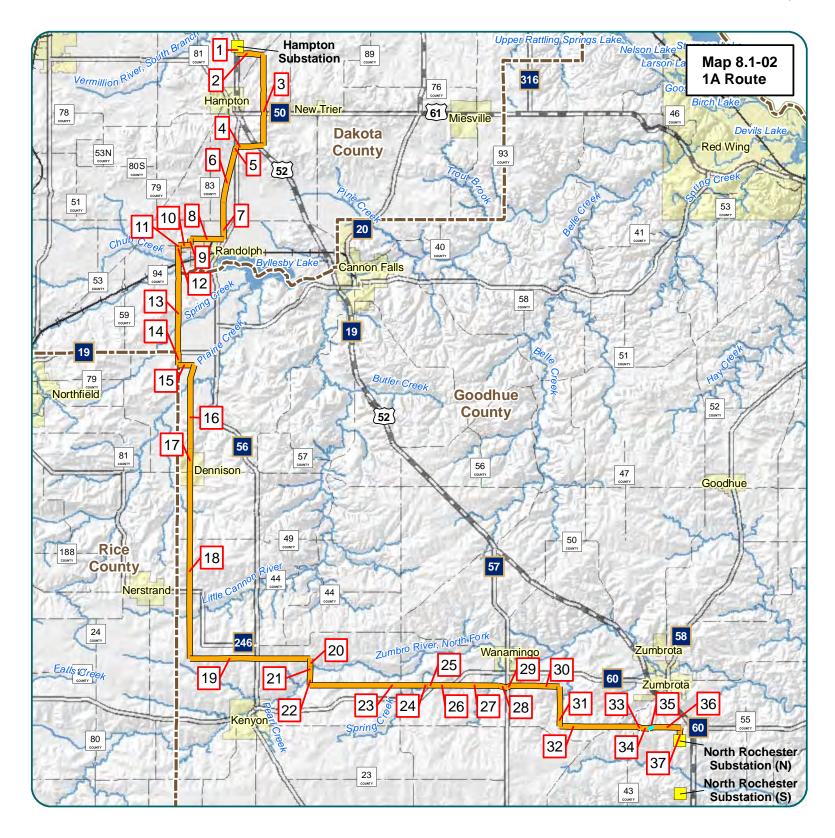




Variation on Both

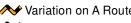
	Hampton to North Rochester (1A)			
	-			
	Turn by Turn	Distance (miles)	Comments/ROW Type	
1	From the Hampton Substation go south following US Hwy 52	0.27	Major Hwy	
2	Turn east following field line/cross-country	0.97	Field Line/Cross-country	
3	Turn south following field line/cross-country	3.40	Field Line/Cross-country	
4	Turn west following field line/cross-country	1.03	Field Line/Cross-country	
5	Turn southwest cross-country to Douglas State Trail	0.18	Cross-country	
6	Continue southwest then south following Douglas State Trail	1.98	Trail	
7	Continue south following field line	1.36	Field Line	
8	Turn west following field line	1.24	Field Line	
9	Turn south following field line	0.23	Field Line	
10	Turn west following field line	0.45	Field Line	
11	Turn south following field line	0.06	Field Line	
	Continue south following 290th St. SE	0.14	Cty or Twp Road	
13	Continue south following field line/cross-country to Goodhue Ave.	3.79	Field Line/Cross-country	
14	Continue south following Goodhue Ave.	0.50	Cty or Twp Road	
	Turn east following field line	0.61	Field Line	
16	Turn southwest then south following field line/cross- country to 5th Ave. Way	3.17	Field Line/Cross-country	
17	Continue south following 5th Ave. Way	0.84	Cty or Twp Road	
	Continue south following field line/cross-country	7.00	Field Line/Cross-country	
19	Turn east following field line/cross-country to 50th Ave.	4.49	Field Line/Cross-country	
20	Turn south following 50th Ave.	0.28	Cty or Twp Road	
21	Continue south cross-country	0.22	Cross-country	
22	Continue south following 50th Ave.	0.51	Cty or Twp Road	
23	Turn east following field line/cross-country to local road	4.27	Field Line/Cross-country	
24	Continue east following local road	0.12	Local Road	
	Continue east following transmission line	0.25	Transmission Line	
26	Continue east following MNTH 60/transmission line	0.62	Major Hwy/transmission line	
27	Continue east following field line/cross-country	1.80	Field Line/Cross-country	
	Turn east/southeast cross-country	0.32	Cross-country	
	Turn northeast cross-country	0.16	Cross-country	
30	Turn east following field line/cross-country	1.83	Field Line/Cross-country	
31	Turn south following field line/cross-country	1.50	Field Line/Cross-country	
	Turn east following field line/cross-country	2.91	Field Line/Cross-country	
	Turn east/southeast cross-country	0.15	Cross-country	
	Turn east following field line	0.29	Field Line	
	Turn east/northeast cross-country	0.15	Cross-country	
	Turn east following field line	1.05	Field Line	
	Turn southwest then south following transmission line and enters the Proposed North Rochester Substation (N)	0.49	Transmission Line	

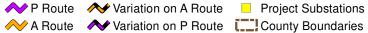
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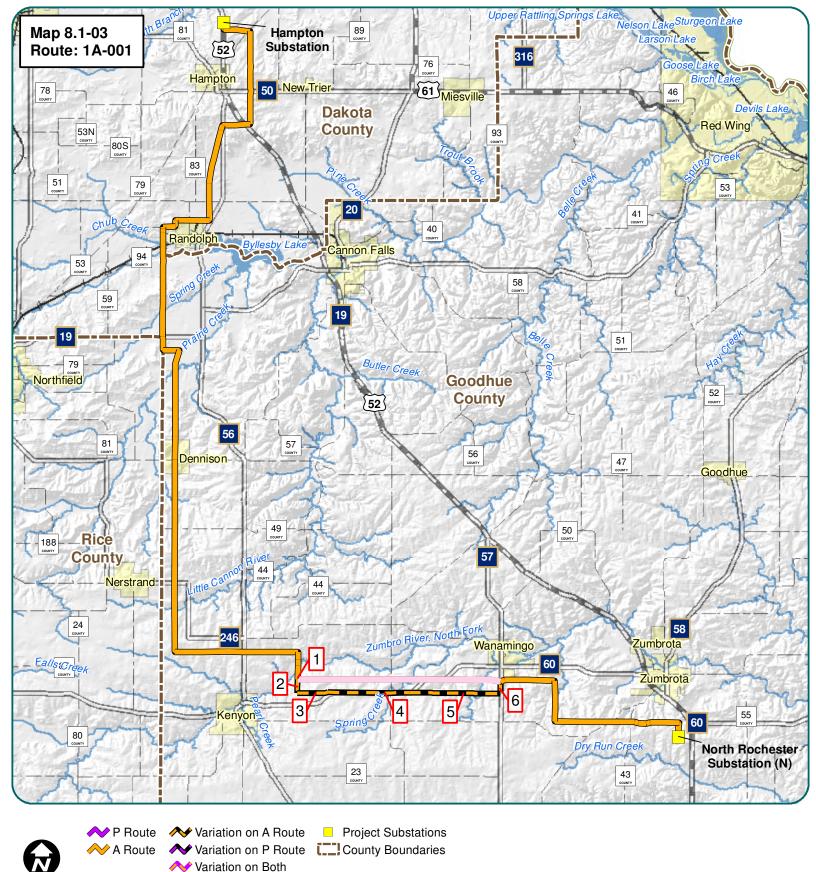




✓ Variation on Both

	Hampton to North Rochester (1A-001)				
	Turn by Turn	Distance (miles)	Comments/ROW Type		
1	Follow the applicant's alternate route until 50th Ave.				
2	Continue south following 50th Ave.	0.50	Cty or Twp Road		
3	Turn east following field lines to MN Hwy 60	1.10	Field Line		
4	Continue east following MN Hwy 60 along existing transmission line	2.97	Major Hwy/Transmission Line		
5	Continue east following 460th Street	3.31	Cty or Twp Road		
6	Turn north following TH 57	0.44	Returns to applicant's alternate route - Major Hwy/Transmission Line		

Total Length 49.58

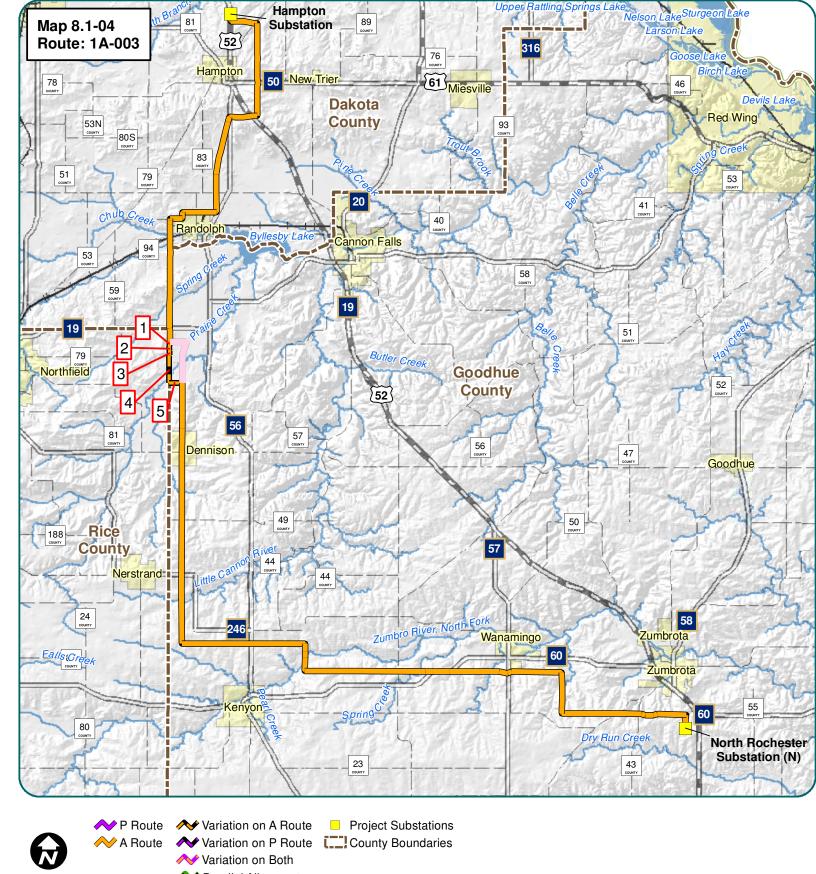




- Parallel Alignment

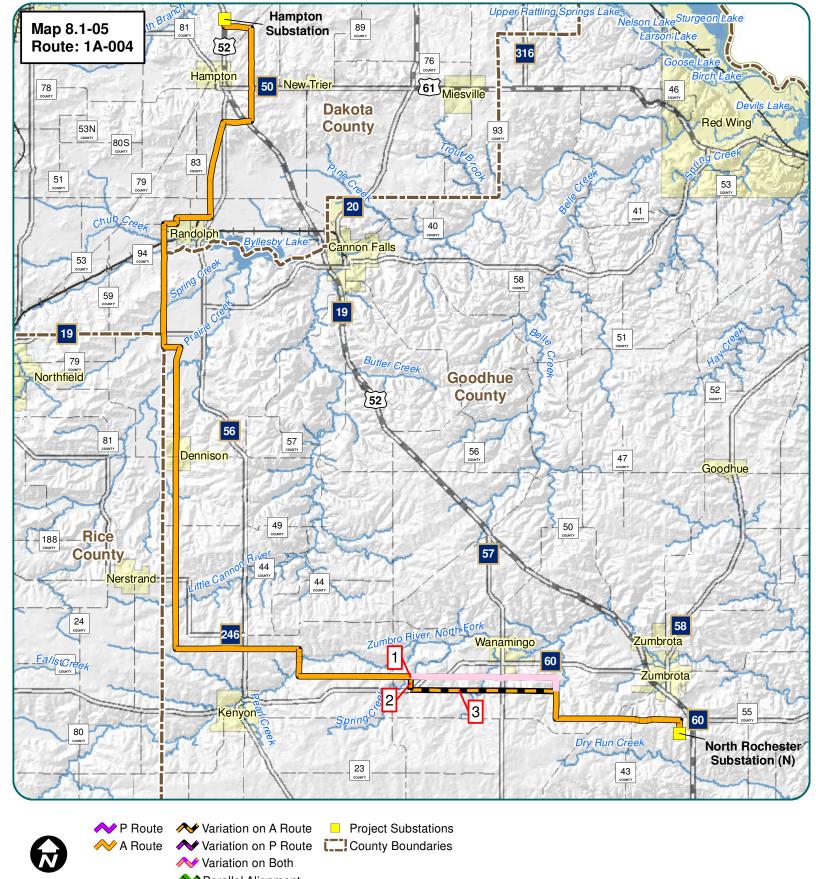
	Hampton to North Rochester (1A-003)		
	Turn by Turn	Distance (miles)	Comments/ROW Type
1	Follow the applicant's alternate route until Goodhue Ave.		
2	Continue south following Goodhue Ave. to 350th St.	0.33	Cty or Twp Road
3	Continue south X-Country	0.17	X-Country
4	Continue south following Goodhue Ave. to 350th St.	1.01	Cty or Twp Road
5	Turn east following 350th St.	0.49	Returns to applicant's alternate route - Cty or Twp Road

Total Length 48.48

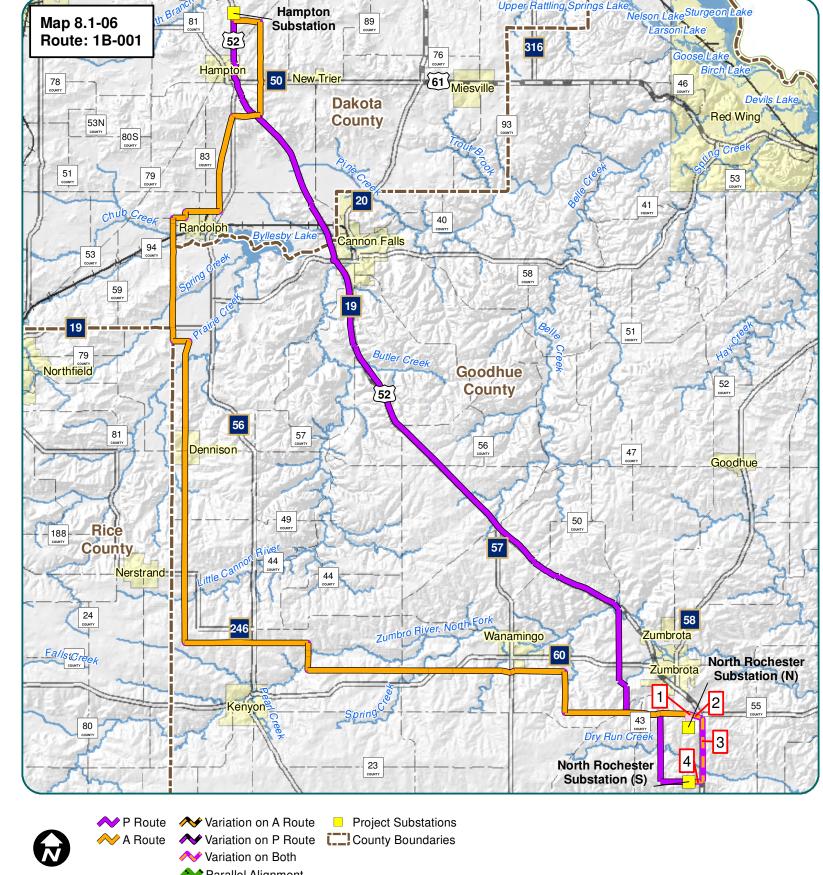


	Hampton to North Rochester (1A-004)				
Turn by Turn		Distance (miles)	Comments/ROW Type		
1	Follow the applicant's alternate route until 0.5 miles north of intersection MN Hwy 60 and 460th St.				
2	Turn south following existing transmission line	0.50	Transmission Line		
3	Turn east following 460th St.	5.30	Returns to applicant's alternate route - Cty or Twp Road		

Total Length 48.63

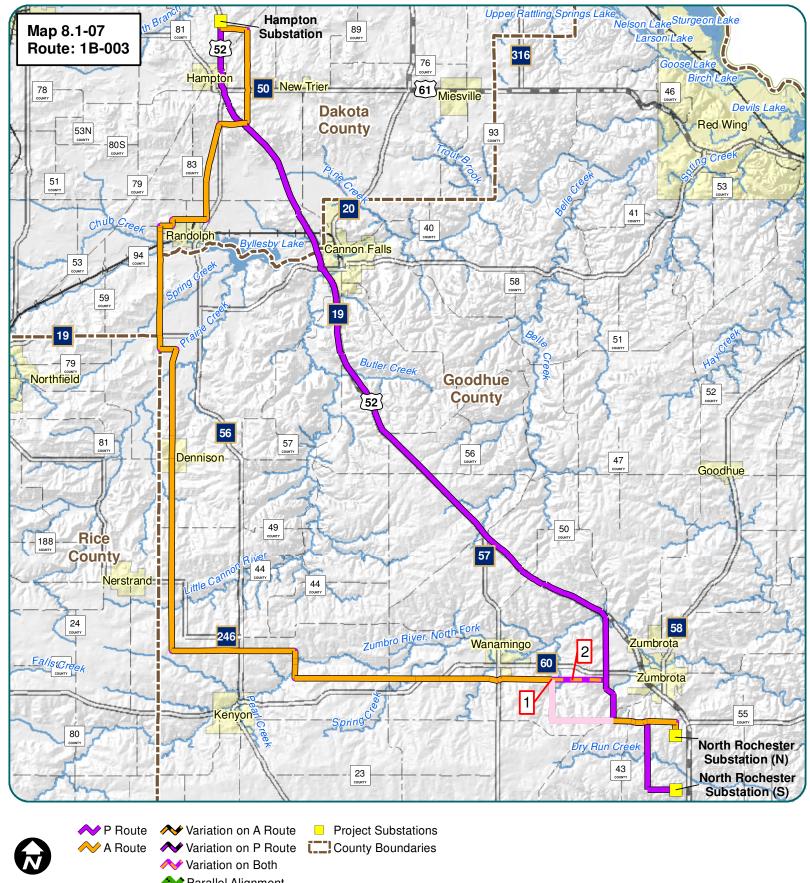


	Hampton to North Rochester (1B-001)			
Turn by Turn		Distance (miles)	Comments/ROW Type	
1	Follow the applicant's alternate route until 0.5 miles west of intersection MN Hwy 60 and US Hwy 52			
2	Continue east cross-country to US Hwy 52	0.50	Cross-country	
3	Turn south following US Hwy 52	2.32	Major Hwy	
4	Turn west following field line	0.52	Connects to North Rochester Substation (S) - Field Line	



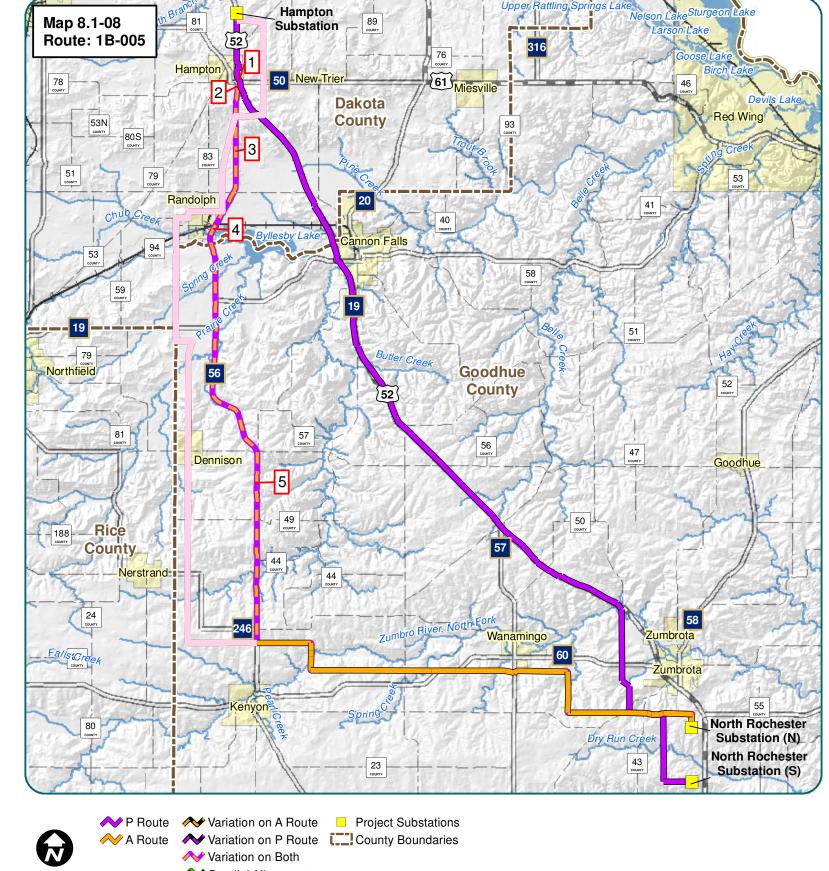
		Hampton to North Rochester (1B-003)			
Turn by Turn		Turn by Turn	Distance (miles)	Comments/ROW Type	
	1	Follow the applicant's alternate route until 0.5 miles south of intersection 140th Ave Way and MNTH 60			
	2	Continue east cross-country and following field lines	1.99	Returns to applicant's preferred route - Cross-country/field lines	

Total Length 48.53



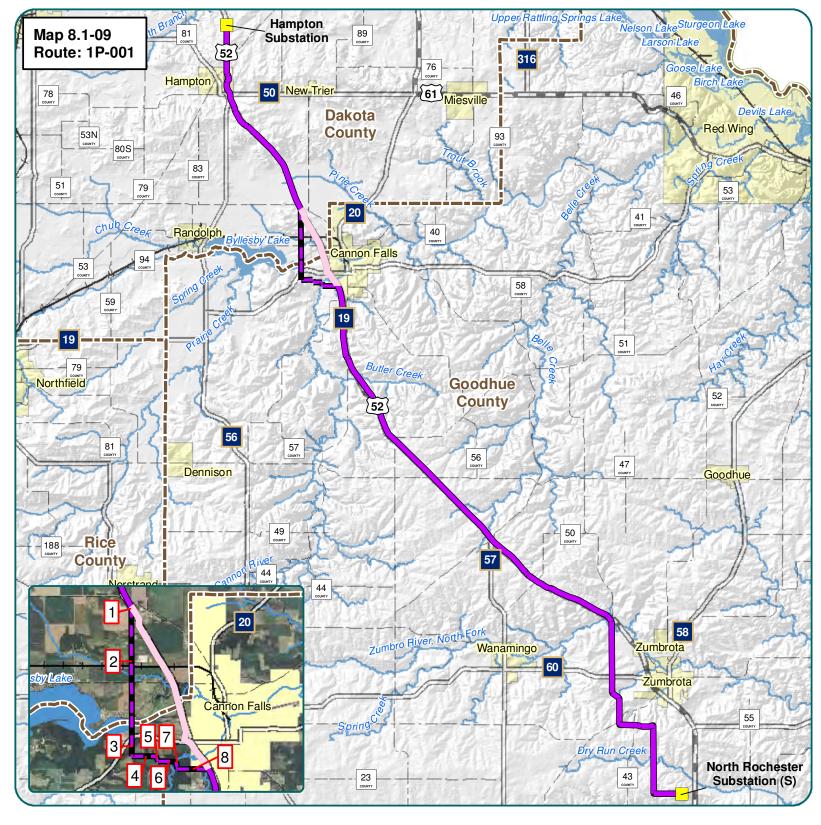
	Hampton to North Rochester (1B-005)				
	Turn by Turn	Distance (miles)	Comments/ROW Type		
1	Follow the applicant's preferred route until the intersection of Emery Ave. and Rochester Blvd.				
2	Turn west cross-country to Emery Ave.	0.14	Cross-country		
3	Turn south following Emery Ave. (MNTH 56)	3.75	Major Hwy		
4	Continue southwest following Randolph Blvd.(MNTH 56)	2.14	Major Hwy		
5	Continue south following MN Hwy 56	15.29	Returns to applicant's alternate route - Major Hwy		

Total Length 43.04



	Hampton to North Rochester (1P-001)				
	Turn by Turn	Distance (miles)	Comments/ROW Type		
1	Follow the applicant's preferred route until the intersection of US Hwy 52 and Harry Ave.				
2	Turn south following Harry Ave.	1.90	Cnty or Twp Road		
3	Continue south cross-country	0.69	Cross-country		
4	Turn east following field line	0.41	Field Line		
5	Turn southeast cross-country	0.10	Cross-country		
6	Turn east cross-country	0.31	Cross-country		
7	Turn southeast cross-country	0.13	Cross-country		
8	Turn east cross-country/field lines	0.53	Returns to applicant's preferred route - Cross-country/field lines		

Total Length 36.97

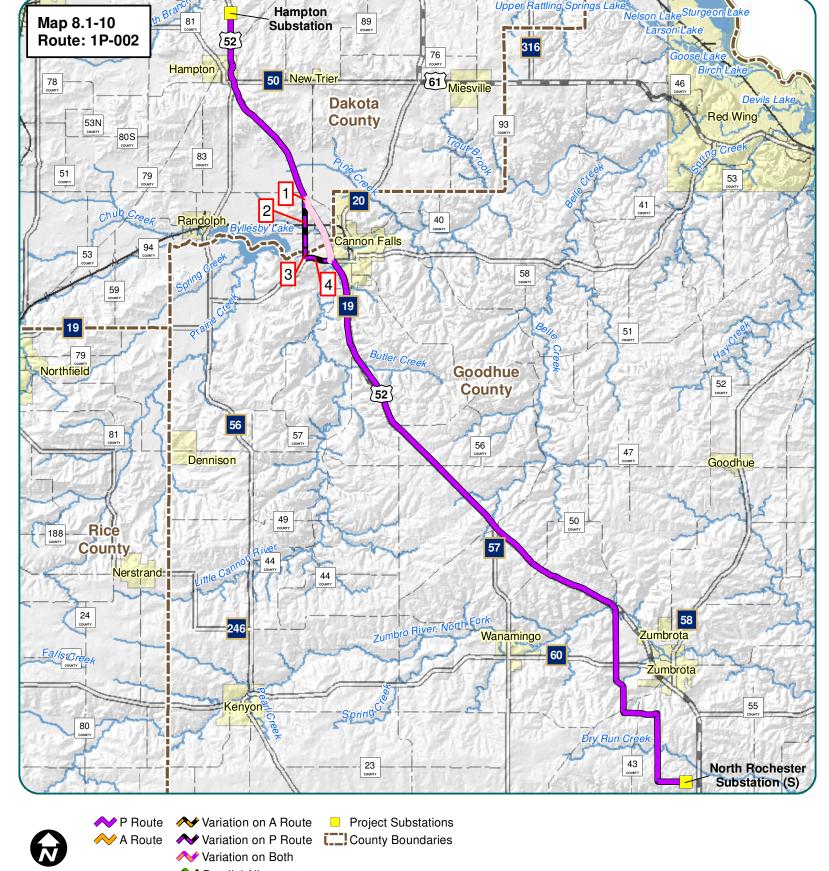




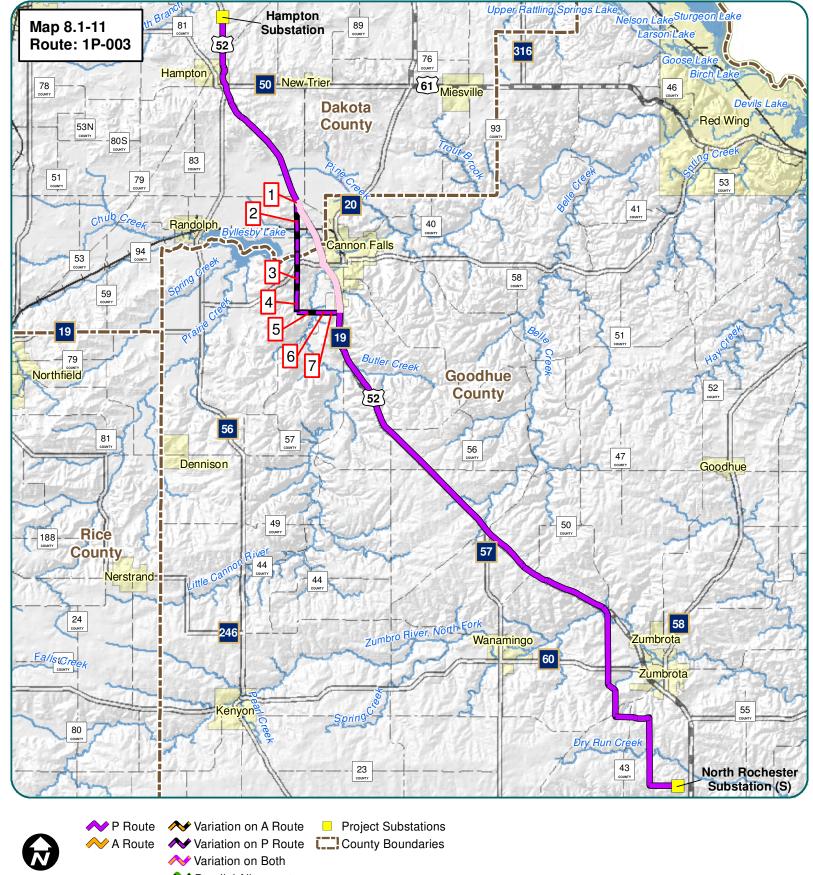
- P Route Variation on A Route Project Substations
- - Variation on Both
  - Parallel Alignment

	Hampton to North Rochester (1P-002)				
	Turn by Turn	Distance (miles)	Comments/ROW Type		
1	Follow the applicant's preferred route until the intersection of US Hwy 52 and Harry Ave.				
	Turn south following Harry Ave.	1.90	Cnty or Twp Road		
3	Continue south following existing transmission line/cross-country to MN Hwy 19	0.37	Transmission Line		
	Turn east following MN Hwy 19	0.98	Returns to preferred route - Major Hwy		

Total Length 36.77

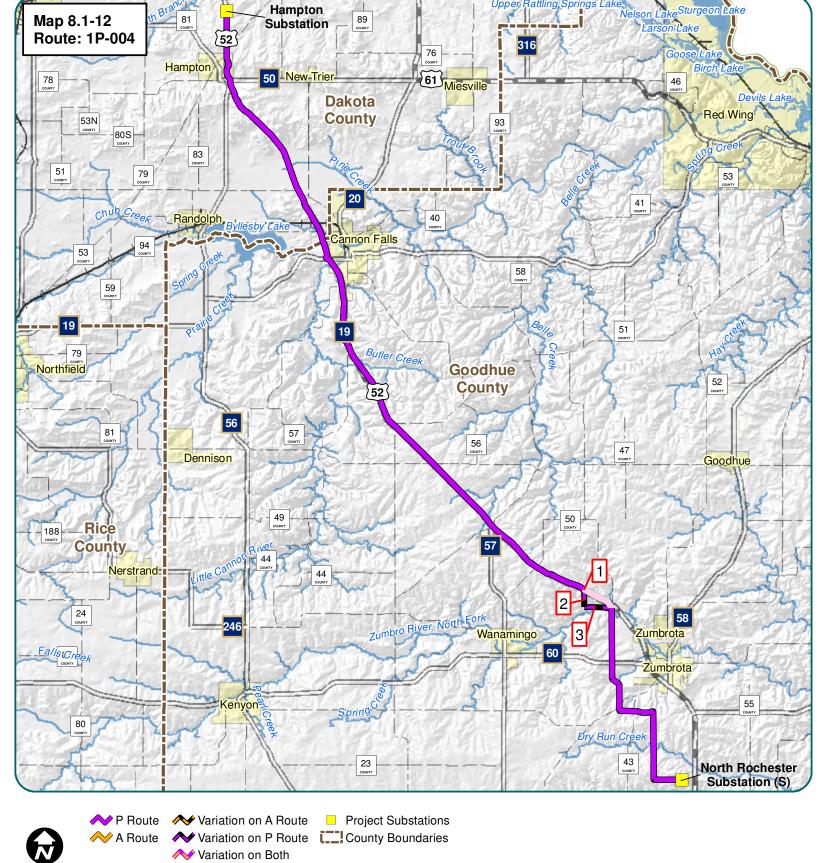


	Hampton to North Rochester (1P-003)				
	Turn by Turn	Distance (miles)	Comments/ROW Type		
1	Follow the applicant's preferred route until the intersection of US Hwy 52 and Harry Ave.				
2	Turn south following Harry Ave.	1.90	Cnty or Twp Road		
3	Continue south cross-country to Stanton Trail	1.66	Cross-country		
4	Continue south following Stanton Trail	0.50	Cnty or Twp Road		
5	Turn east cross-country/field lines	0.92	Cross-country/field lines		
6	Continue east on 323rd St.	0.11	Cnty or Twp Road		
7	Continue east cross-country/field lines	0.53	Returns to applicant's preferred route - Cross-country/field lines		



	Hampton to North Rochester (1P-004)				
	Turn by Turn	Distance (miles)	Comments/ROW Type		
1	Follow the applicant's preferred route until 0.5 miles east of intersection US Hwy 52 and 145th Ave. Way				
2	Turn south following field line	0.68	Field Line		
3	Turn east cross-country	1.00	Returns to applicant's preferred route - Cross-country		

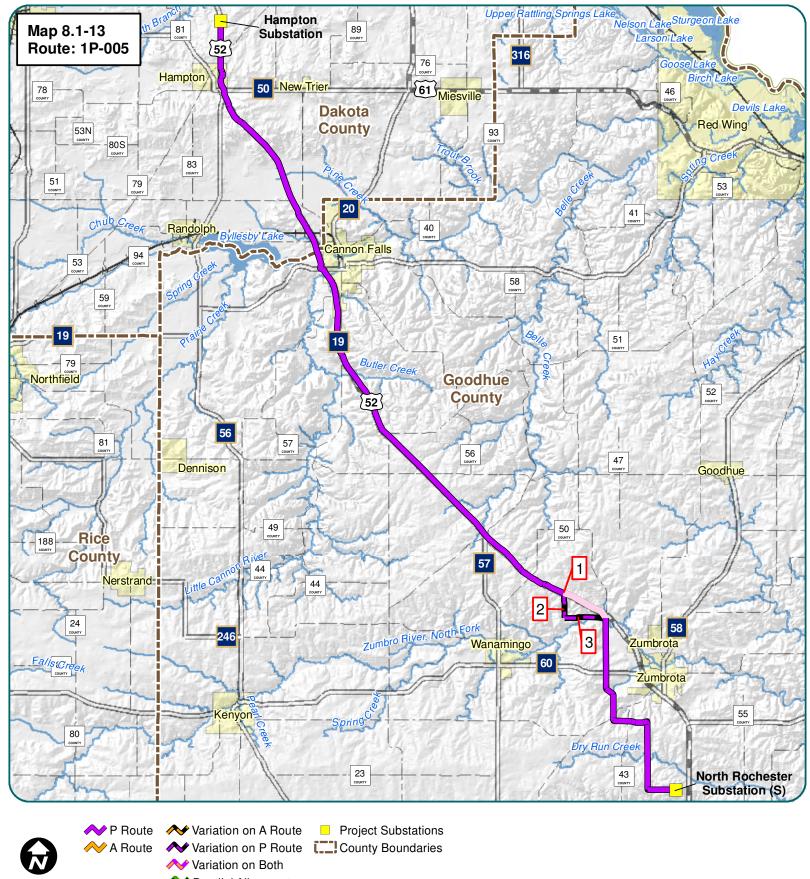
36.52 Total Length



- Parallel Alignment

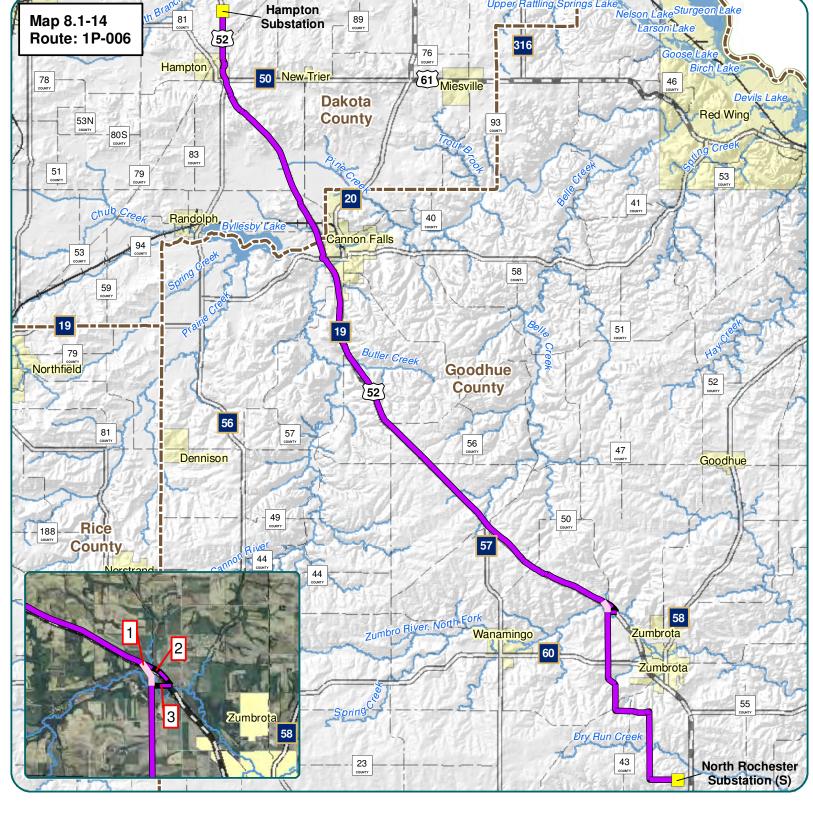
	Hampton to North Rochester (1P-005)				
Turn by Turn		Distance (miles)	Comments/ROW Type		
1	Follow the applicant's preferred route until the intersection of US Hwy 52 and 145th Ave. Way				
	Turn south following 145th Ave. Way	0.92	Cnty or Twp Road		
3	Turn east cross-country/field lines	1.51	Returns to applicant's preferred route - Cross-country/field lines		

Total Length 36.71



	Hampton to North Rochester (1P-006)				
	Turn by Turn	Distance (miles)	Comments/ROW Type		
	Follow the applicant's preferred route until 0.2 miles west of intersection US Hwy 52 and Cty Hwy 7				
2	Continue southeast following US Hwy 52	0.65	Major Hwy/Transmission Line		
3	Turn west cross-country	0.33	Returns to applicant's preferred route - Cross-country		

Total Length 36.65

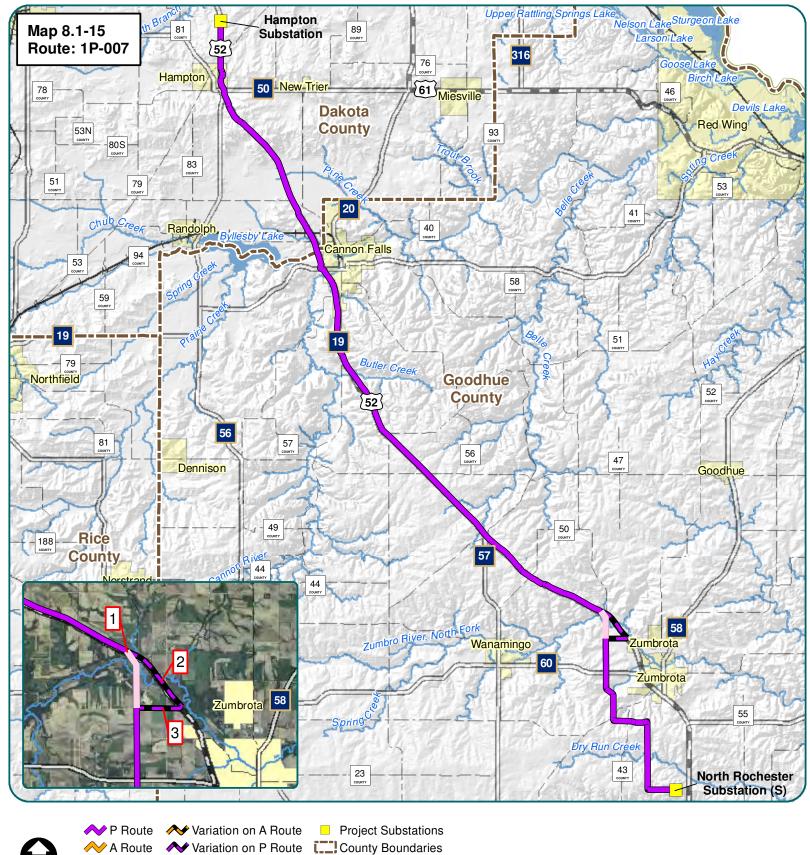




- P Route Variation on A Route Project Substations
- - Variation on Both
  - Parallel Alignment

Hampton to North Rochester (1P-007)				
	Turn by Turn	Distance (miles)	Comments/ROW Type	
	Follow the applicant's preferred route until 0.2 miles west of intersection US Hwy 52 and Cty Hwy 7			
2	Continue southeast following US Hwy 52	1.37	Major Hwy/Transmission Line	
3	Turn west following 440th St.	0.79	Returns to applicant's preferred route - Cty or Twp Road	

37.23 Total Length

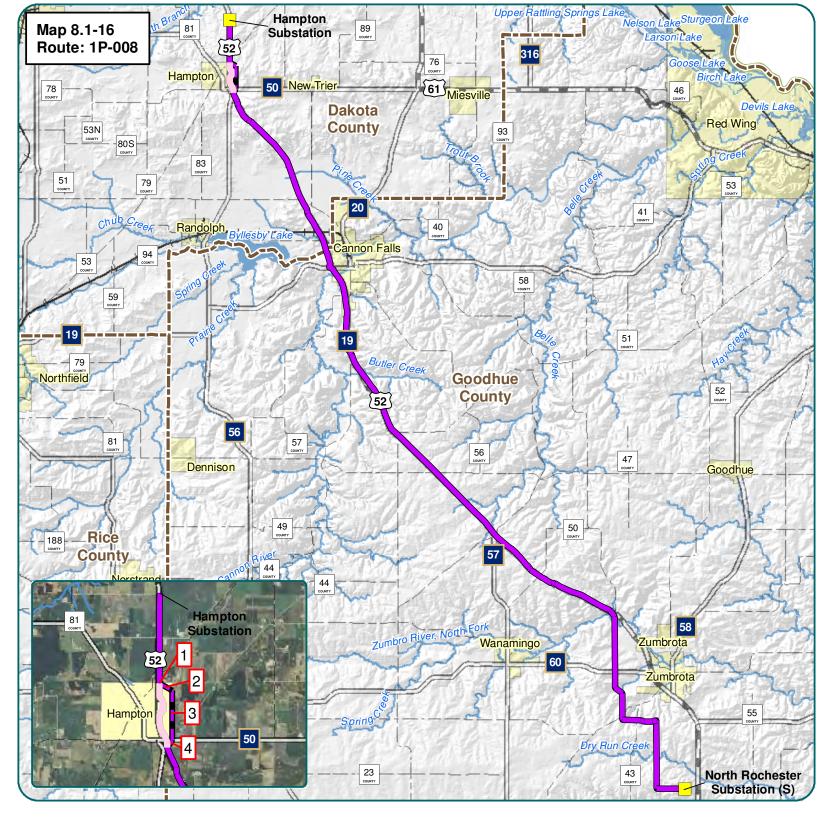




- Variation on Both
- Parallel Alignment

	Hampton to North Rochester (1P-008)				
	Turn by Turn	Distance (miles)	Comments/ROW Type		
1	Follow the applicant's preferred route until 0.2 miles south of the intersection US Hwy 52 and CSAH 47				
2	Turn southeast cross-country	0.25	Cross-country		
3	Turn south field lines/cross-country	0.84	Cross-country		
4	Turn southwest cross-country	0.17	Returns to applicant's preferred route - Cross-country		

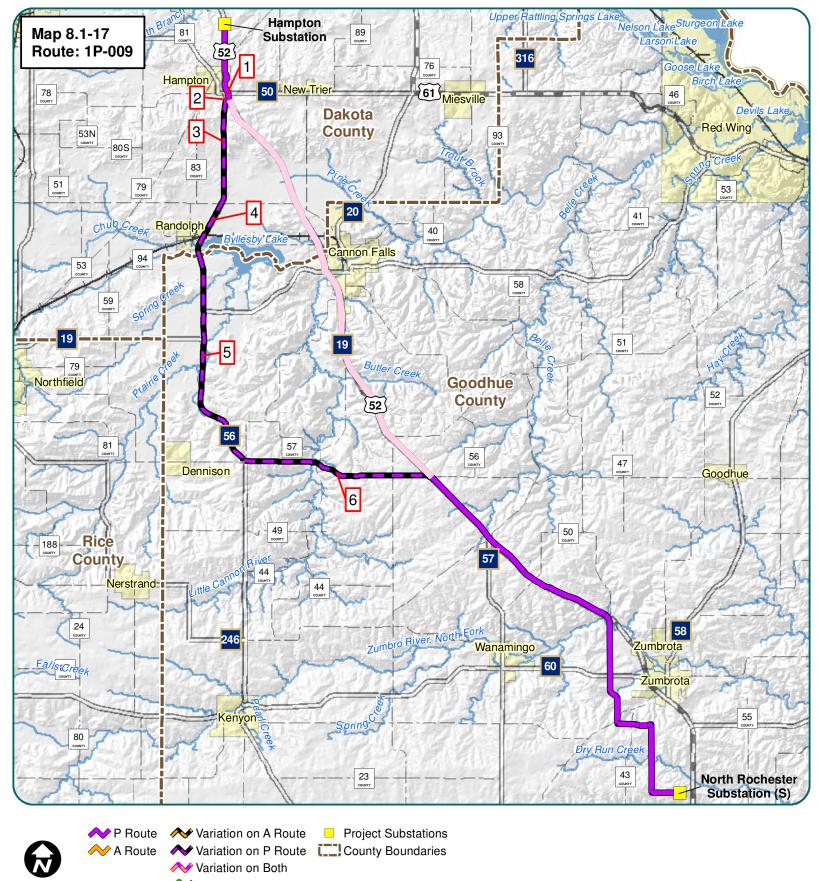
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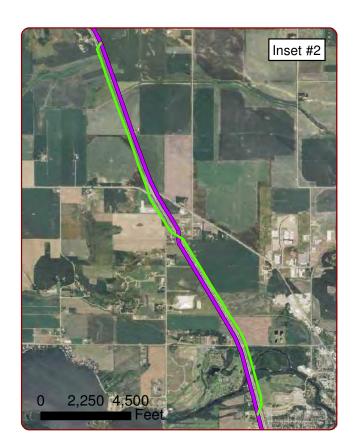


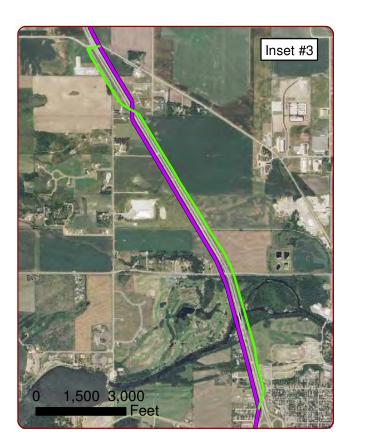
- P Route Variation on A Route Project Substations
- - Variation on Both
  - Parallel Alignment

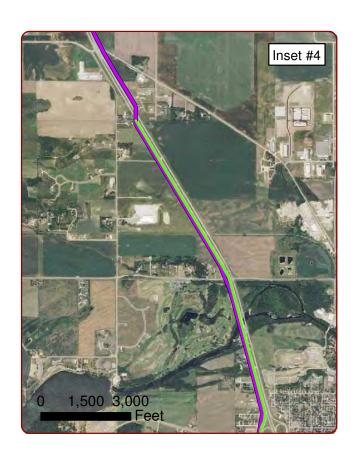
	Hampton to North Rochester (1P-009)				
	Turn by Turn	Distance (miles)	Comments/ROW Type		
1	Follow the applicant's preferred route until 0.1 miles south of the intersection of Emery Ave. and Rochester Blvd.				
2	Turn west cross-country to Emery Ave.	0.14	Cross-country		
3	Turn south following Emery Ave.	3.66	Major Hwy		
4	Continue south following Randolph Blvd.	2.29	Major Hwy		
5	Continue south/southeast following MN Hwy 56	8.20	Major Hwy		
6	Turn east following CSAH 9	7.04	Returns to applicant's preferred route - Cty or Twp Road		

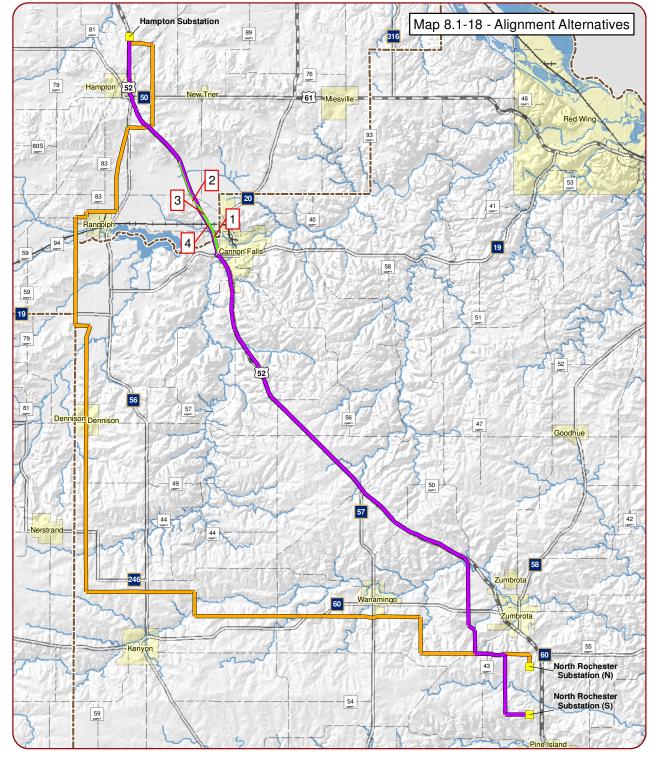














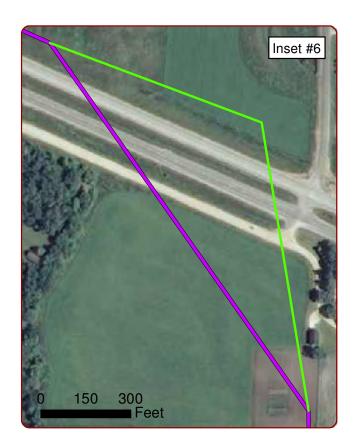


✓ Variation on P Route Variation on A Route

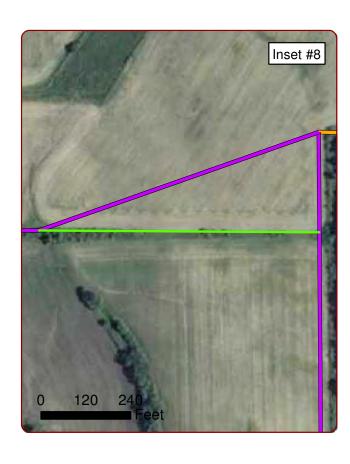
**Project Substations** 

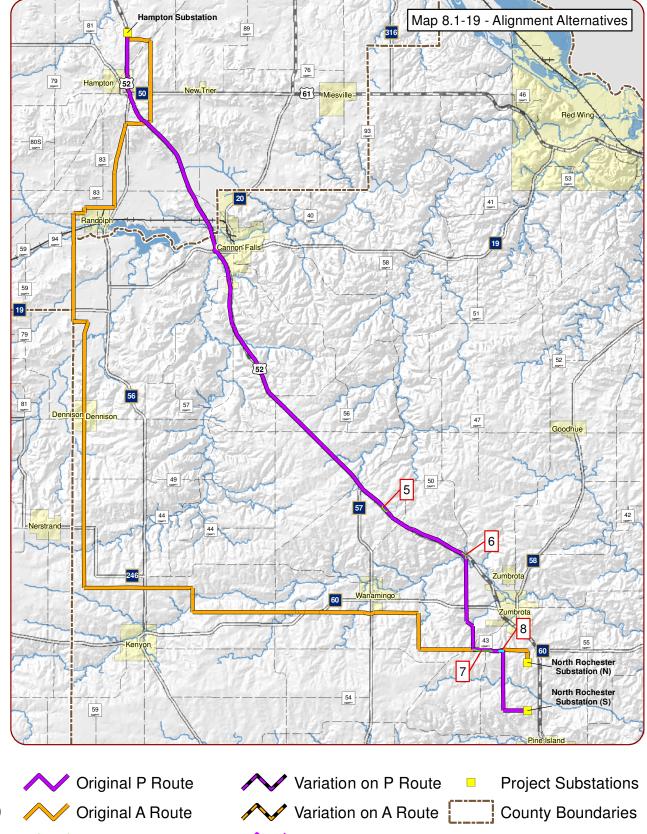
County Boundaries







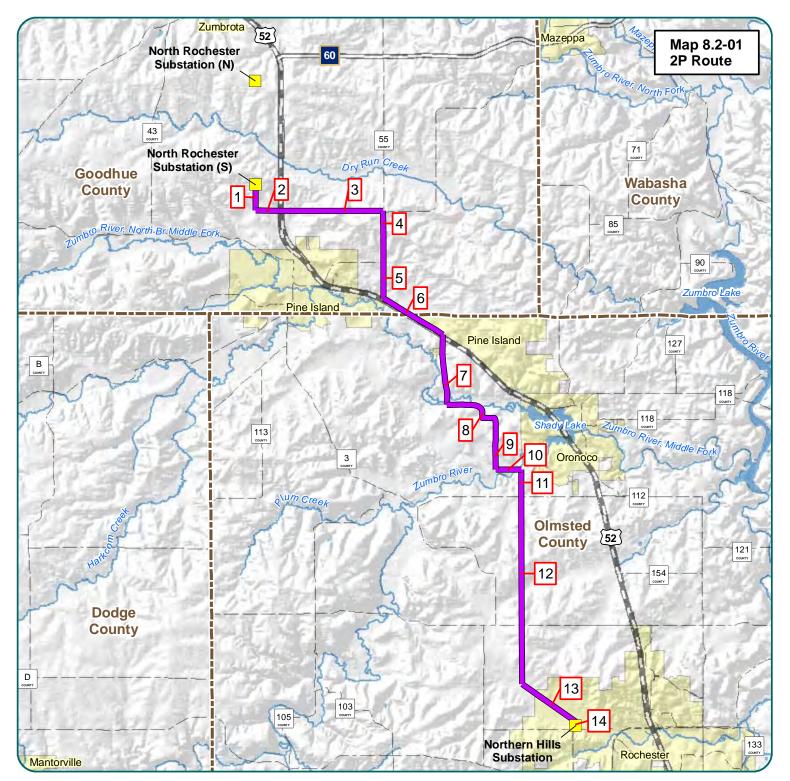






## 8.2.1 Description of Route Alternatives – North Rochester Substation to Northern Hills Substation

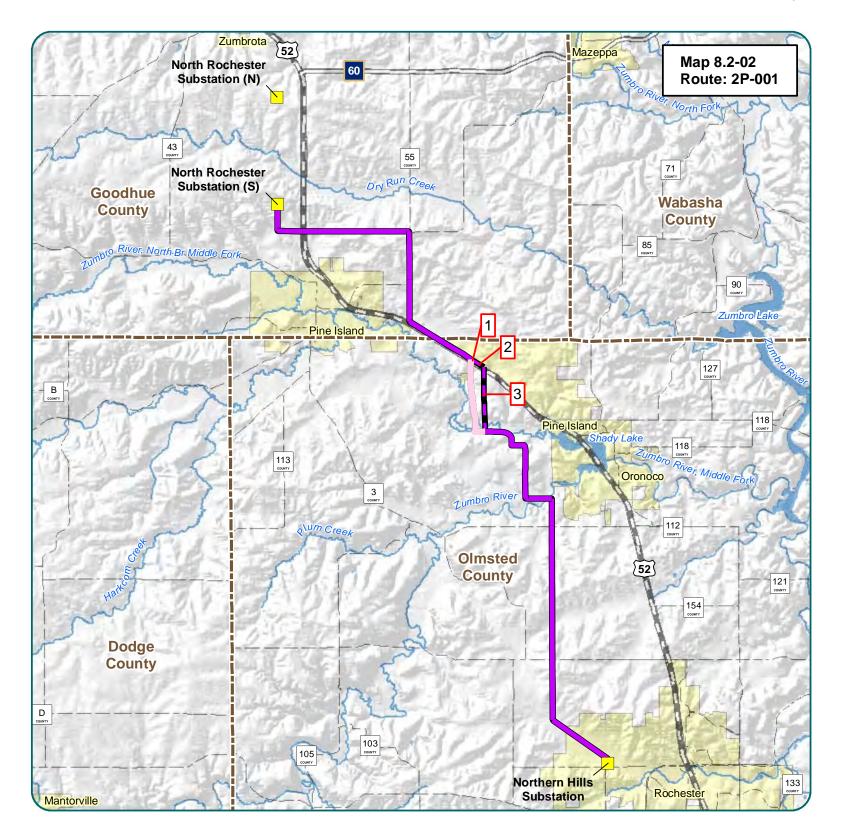
	North Rochester to Northern Hills (2P)				
	Turn by Turn	Distance (miles)	Comments/ROW Type		
1	From the proposed North Rochester Substation (S) go south following transmission line	0.51	Transmission Line		
2	Turn east following field line	0.46	Field Line		
3	Continue east following 500th St.	2.00	Cty or Twp Road		
4	Turn south following CSAH 11	0.90	Cty or Twp Road		
5	Continue south following 210th Ave	0.78	Cty or Twp Road		
6	Turn southeast following MN Hwy 52	1.34	Major Hwy		
7	Turn south following CSAH 31	1.36	Cty or Twp Road		
8	Turn east then south following 117th St. NW	1.35	Cty or Twp Road		
9	Continue south following 65th Ave NW	0.74	Cty or Twp Road		
10	Turn east following field line/cross-country	0.49	Field Line/Cross-country		
11	Turn south cross-country to 60th Ave NW	0.50	Cross-country		
12	Continue south following 60th Ave NW	3.62	Cty or Twp Road		
13	Turn southeast following Douglas State Trail/Transmission line	1.26	Trail/Transmission Line		
14	Turn south following transmission line and enters the Northern Hills Substation Area	0.08	Transmission Line		





- P Route Variation on A Route Project Substations
- A Route 
   ✓ Variation on P Route 
   County Boundaries
  - Variation on Both
  - Parallel Alignment

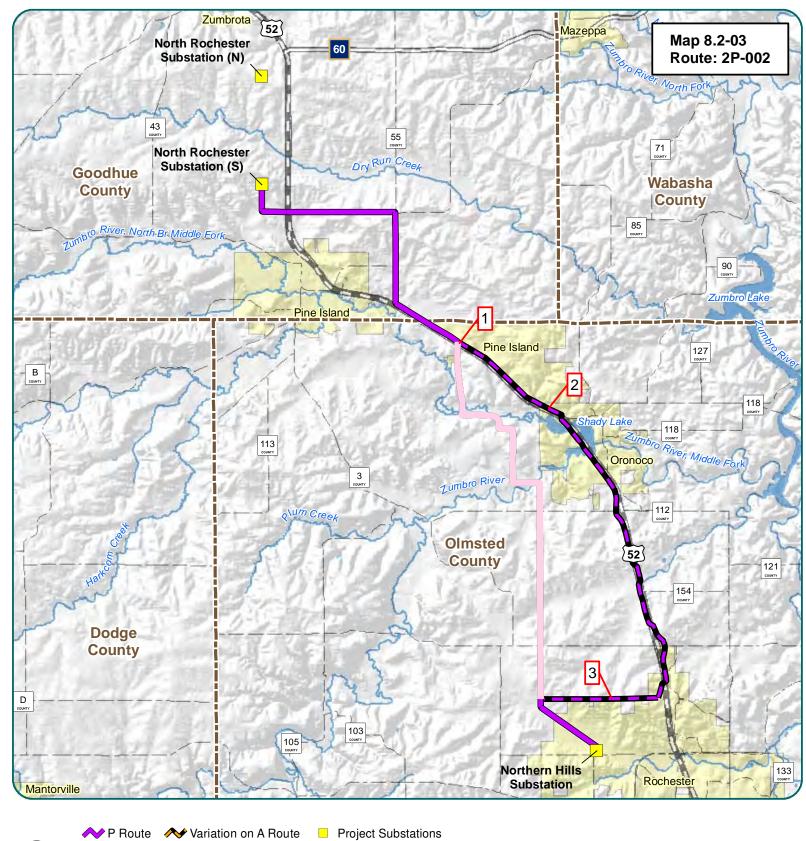
	North Rochester to Northern Hills (2P-001)				
	Turn by Turn	Distance (miles)	Comments/ROW Type		
1	Follow the applicant's preferred route until the intersection of US Hwy 52 and CSAH 31				
2	Continue southwest following US Hwy 52	0.28	Major Hwy		
3	Turn south cross-country	1.21	Returns to preferred route - Cross-country		





- P Route Variation on A Route Project Substations
- A Route 
   ✓ Variation on P Route 
   County Boundaries
  - Variation on Both
  - Parallel Alignment

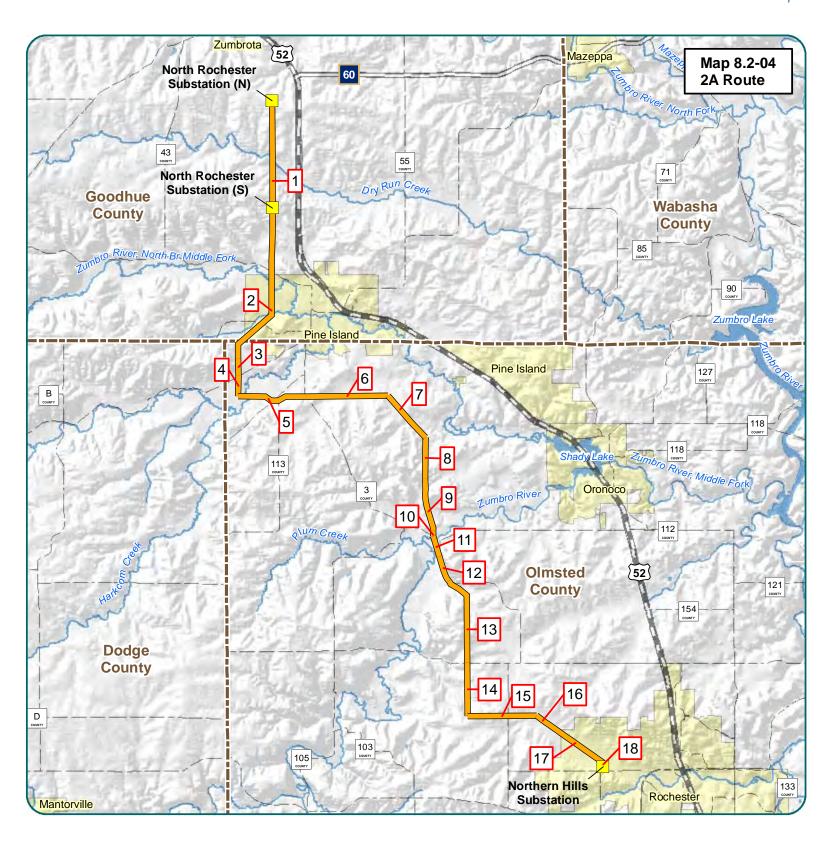
	North Rochester to Northern Hills (2P-002)				
Turn by Turn		Distance (miles)	Comments/ROW Type		
	Follow the applicant's preferred route until the intersection of US Hwy 52 and CSAH 31				
	Continue southwest following US Hwy 52 to 65th St. NW	8.20	Major Hwy		
3	Turn west following 65th St. NW	2.15	Returns to preferred route - Cnty or Twp Road		





- A Route Variation on P Route County Boundaries
  - Variation on Both
  - Parallel Alignment

	N. 41 B. 1. 4. 4.	N	
	North Rochester to	Northern Hills (2A	)
	Turn by Turn	Distance (miles)	Comments/ROW Type
1	From the North Rochester Substation (N) go south following transmission line to North Rochester Substation (S)	1.99	Transmission Line
2	From the North Rochester Substation (S) go south/southwest following transmission line	3.09	Transmission Line
3	Continue south following T-1382 and transmission line	0.32	Cty or Twp Road/Transmission Line
4	Continue south following transmission line	0.38	Cty or Twp Road/Transmission Line
5	Turn east following field line/cross-country to 125th St. NW	1.32	Field Line/Cross-country
6	Continue east following 125th St. NW	1.52	Cty or Twp Road
7	Turn southeast following Douglas State Trail	1.04	Trail
8	Turn south following field line/cross-country to New Haven Road NW	0.77	Field Line/Cross-country
9	Continue south following New Haven Road NW	0.98	Cty or Twp Road
10	Trail	0.11	Cross-country
	Turn southeast following Douglas State Trail	0.40	Trail
12	Continue southeast following CSAH 3	0.49	Cty or Twp Road
13	Continue southeast then south following 75th Ave. NW	1.69	Cty or Twp Road
14	Continue south following field line	0.99	Field Line
15	Turn east following 65th St. NW	1.29	Cty or Twp Road
16	Turn southeast following Douglas State Trail	0.15	Trail
17	Continue southeast following Douglas State Trail/Transmission line	1.36	Trail/Transmission Line
18	Turn south following transmission line and enters the Northern Hills Substation Area	0.08	Transmission Line





- P Route Variation on A Route Project Substations
- A Route 
   ✓ Variation on P Route 
   County Boundaries
  - Variation on Both
  - Parallel Alignment

	North Rochester to Northern Hills (2A-001)				
Turn by Turn		Distance (miles)	Comments/ROW Type		
1	Follow the applicant's alternate route just north of intersection 90th Street and 75th Ave. NW				
2	Turn southeast following 75th Ave. NW	0.41	Cty or Twp Road		
3	Continue southeast following Douglas Trail	2.66	Returns to applicant's alternate route - Trail		

17.07 Total Length

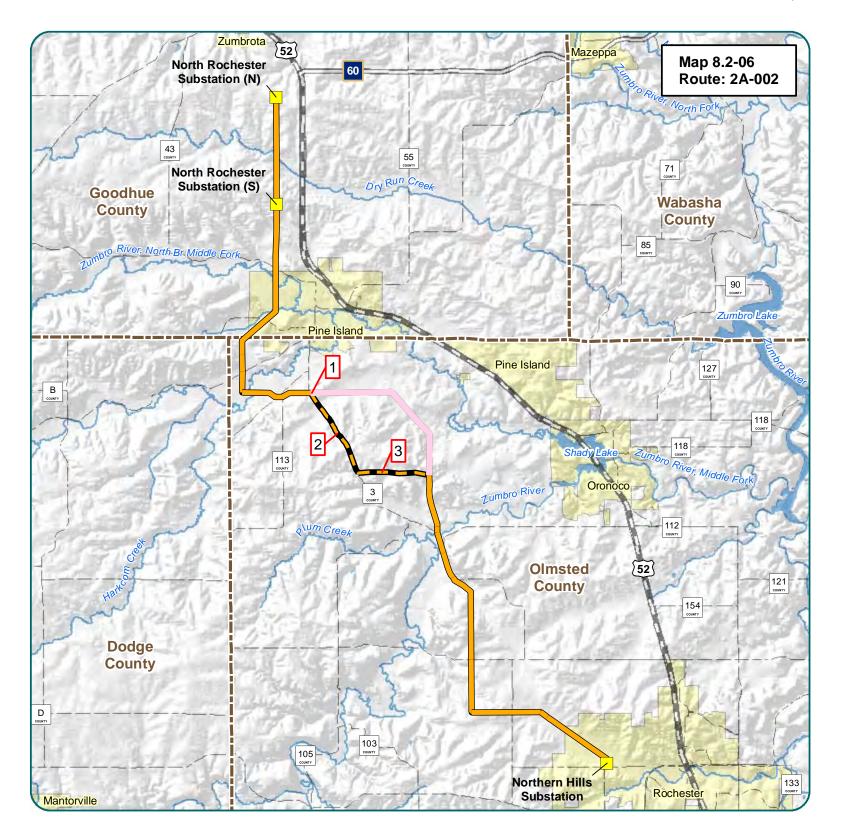
Zumbrota 52 Mazeppa Map 8.2-05 North Rochester Substation (N) Route: 2A-001 North Rochester Substation (S) Goodhue Wabasha County County Pine Island Olmsted 52 County 154 county Dodge County Northern Hills Rochester Substation



Mantorville

- P Route Variation on A Route Project Substations
- A Route 
   ✓ Variation on P Route 
   County Boundaries
  - Variation on Both
  - Parallel Alignment

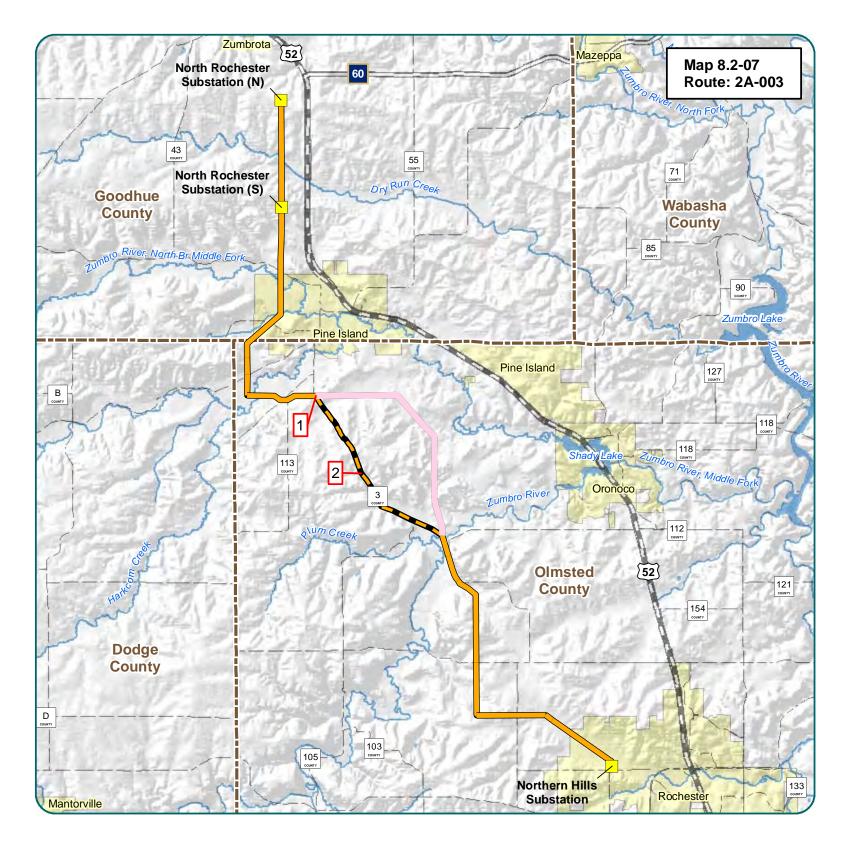
	North Rochester to Northern Hills (2A-002)				
	Turn by Turn	Distance (miles)	Comments/ROW Type		
1	Follow the applicant's alternate route until the intersection of 125th St. and CSAH 3				
2	Turn southeast following CSAH 3	1.76	Cty or Twp Road		
3	Turn east cross-country/field lines	1.33	Returns to applicant's alternate route - Cross-country/field lines		





- P Route Variation on A Route Project Substations
- A Route 
   ✓ Variation on P Route 
   County Boundaries
  - Variation on Both
  - Parallel Alignment

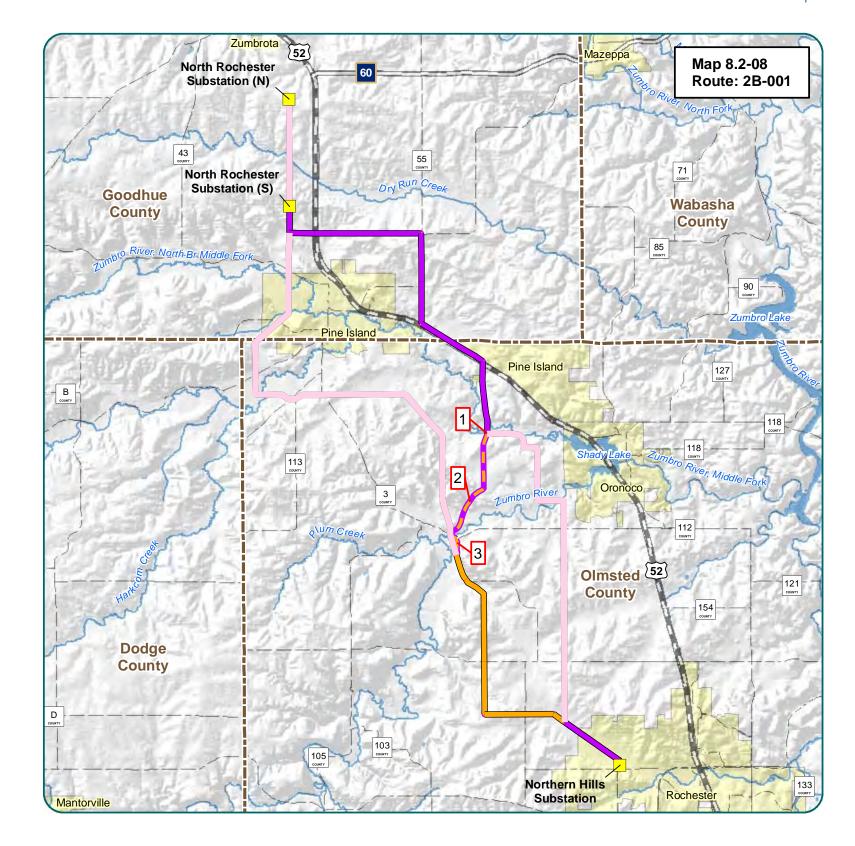
	North Rochester to Northern Hills (2A-003)		
	Turn by Turn	Distance (miles)	Comments/ROW Type
1	Follow the applicant's alternate route until the intersection of 125th St. and CSAH 3		
2	Turn southeast following CSAH 3	3.68	Returns to applicant's alternate route - Cty or Twp Road





- P Route Variation on A Route Project Substations
- A Route 
   ✓ Variation on P Route 
   County Boundaries
  - Variation on Both
  - Parallel Alignment

	North Rochester to Northern Hills (2B-001)			
	Turn by Turn	Distance (miles)	Comments/ROW Type	
1	Follow the applicant's preferred route until the intersection of 117th St. NW and CSAH 31			
2	Continue south following CSAH 31	77.75	Returns to applicant's alternate route - Cty or Twp Road	
3	Turn southeast following CSAH 3		Returns to applicant's alternate route - Cty or Twp Road	



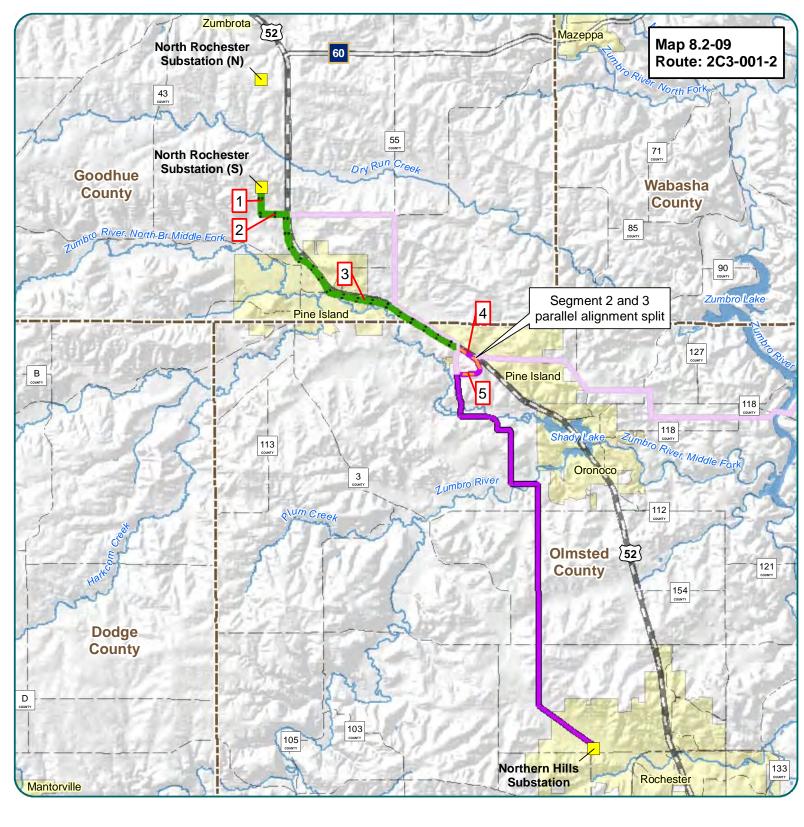


- P Route Variation on A Route Project Substations
- A Route 
   ✓ Variation on P Route 
   County Boundaries
  - Variation on Both
  - Parallel Alignment

	North Rochester to Nor	01-2)	
	Turn by Turn	Distance (miles)	Comments/ROW Type
1	From the North Rochester Substation (S), go south following transmission line	0.51	Transmission Line (Parallel alignment)
2	Turn east following field line	0.46	Field Line (Parallel alignment)
3	Turn south/southeast following US Hwy 52	4.33	Major Hwy (Parallel alignment)
4	Continue southeast cross-country	0.42	Cross-country
5	Turn west cross-country	0.69	Returns to applicant's preferred route - Cross-country

Total Length

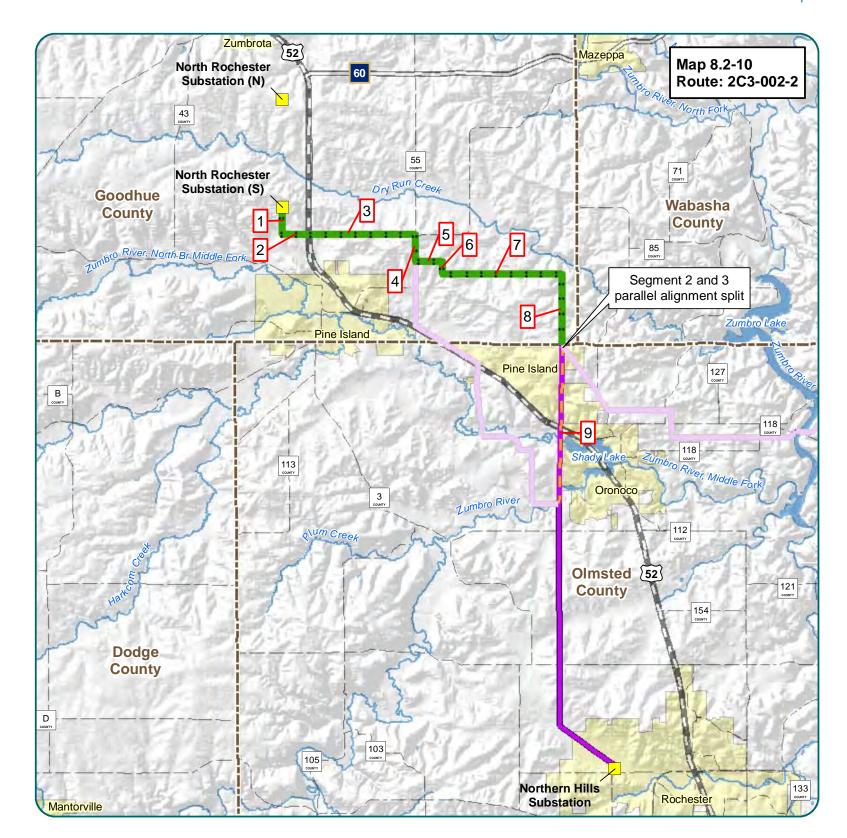
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- P Route Variation on A Route Project Substations
- A Route 
   ✓ Variation on P Route 
   County Boundaries
  - Variation on Both
  - Parallel Alignment

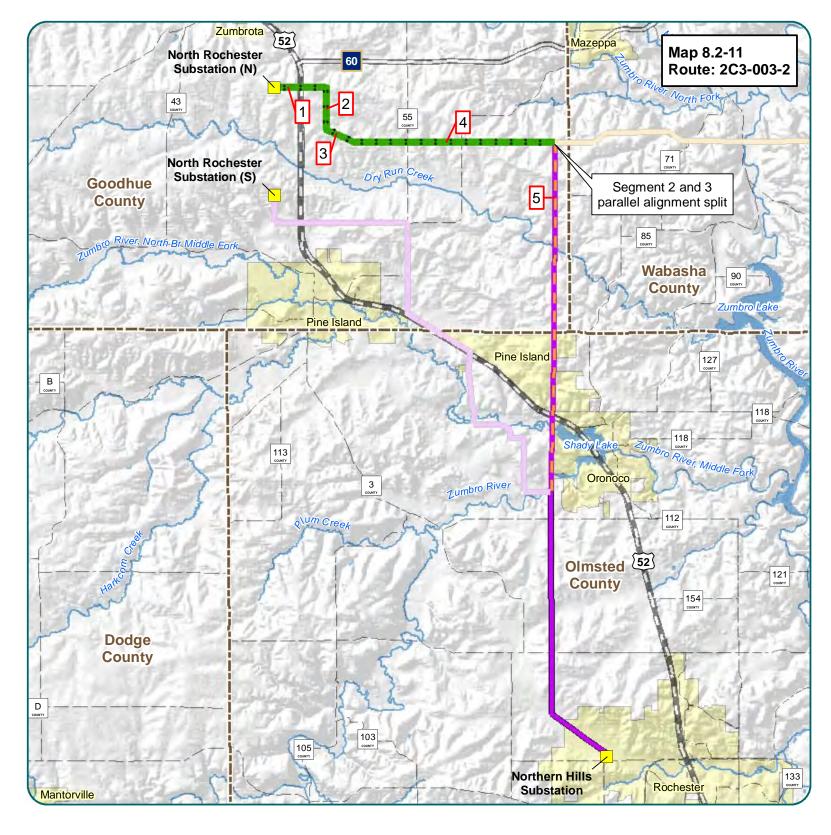
	North Rochester to Northern Hills (2C3-002-2)			
	Turn by Turn	Distance (miles)	Comments/ROW Type	
1	From the North Rochester Substation (S), go south following transmission line	0.50	Transmission Line (Parallel alignment)	
2	Turn east following field line	0.46	Field line (Parallel alignment)	
3	Continue east following 500th St.	2.00	Cty or Twp Road (Parallel alignment)	
4	Turn south following CSAH 11	0.50	Cty or Twp Road (Parallel alignment)	
5	Turn east following field line	0.50	Field line (Parallel alignment)	
6	Turn south following field line	0.23	Field line (Parallel alignment)	
7	Turn east cross-country	2.23	Cross-country (Parallel alignment)	
8	Turn south cross-country/field lines	1.31	Cross-country (Parallel alignment)	
9	Continue south cross-country/field lines	2.93	Returns to applicant's preferred route - cross-country	





- P Route Variation on A Route Project Substations
- A Route 
   ✓ Variation on P Route 
   County Boundaries
  - Variation on Both
  - Parallel Alignment

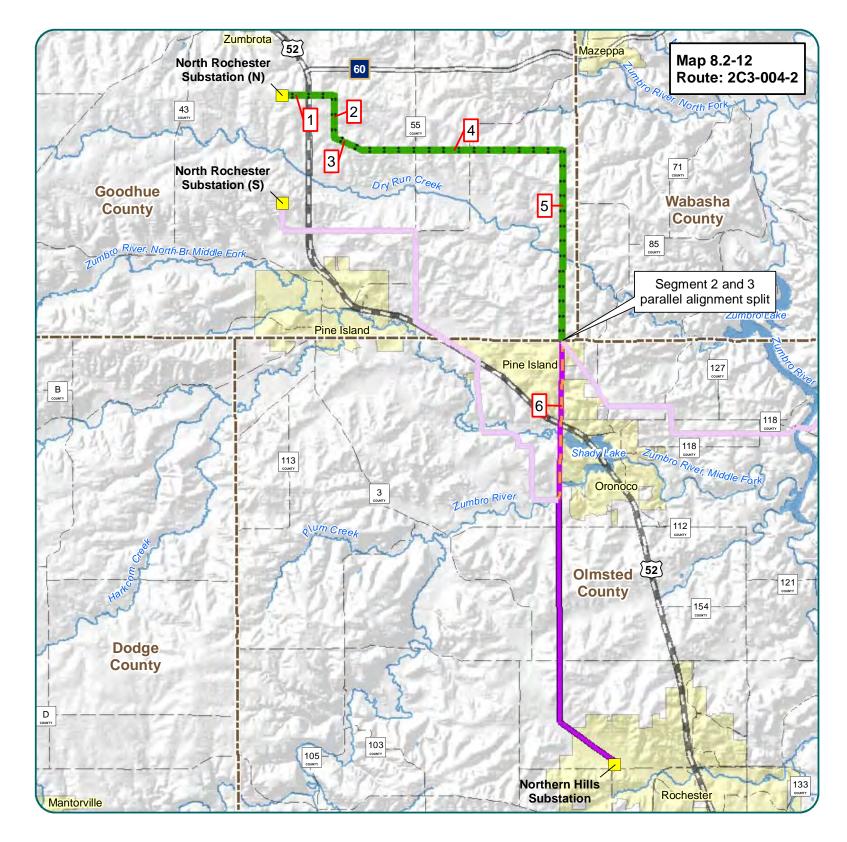
	North Rochester to Northern Hills (2C3-003-2)			
Turn by Turn		Distance (miles)	Comments/ROW Type	
1	From the North Rochester Substation (N), go east following field line to 195th Ave.	0.97	Field Line (Parallel alignment)	
2	Turn south following 195th Ave.	0.78	Cty or Twp Road (Parallel alignment)	
3	Turn southeast cross-country	0.52	Cross-country (Parallel alignment)	
4	Turn east following field line	3.75	Field Line (Parallel alignment)	
5	Turn south cross-country/field line	6.46	Returns to applicant's preferred route - Cross-country	





- P Route Variation on A Route Project Substations
- A Route 
   ✓ Variation on P Route 
   County Boundaries
  - Variation on Both
  - Parallel Alignment

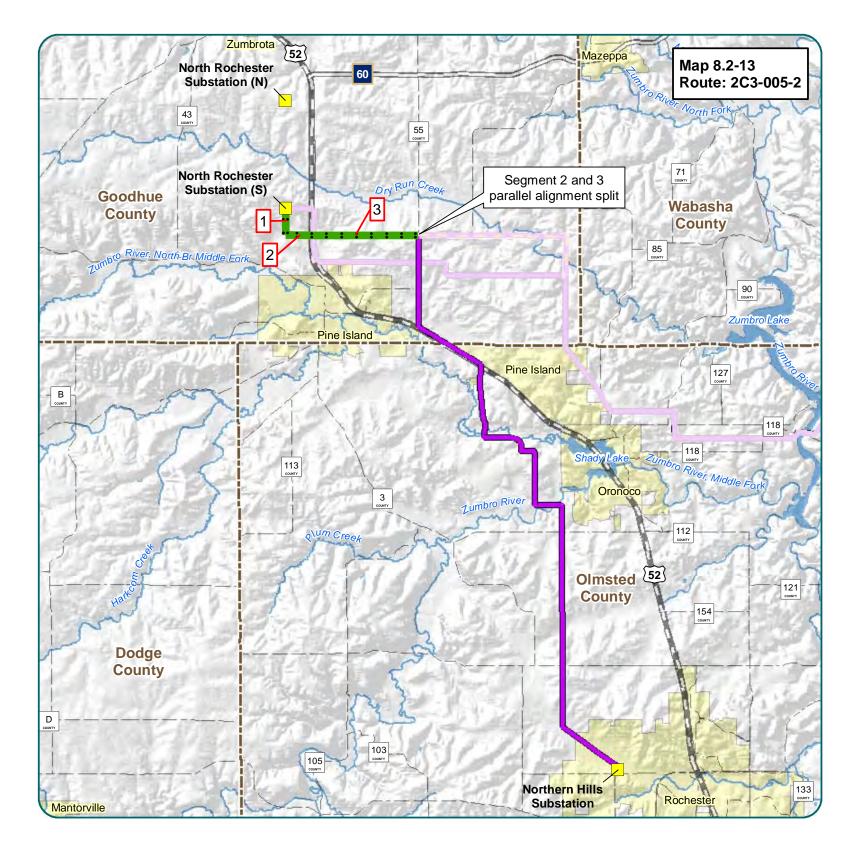
	North Rochester to Northern Hills (2C3-004-2)			
	Turn by Turn	Distance (miles)	Comments/ROW Type	
1	From the North Rochester Substation (N), go east following field line to 195th Ave.	0.97	Field Line (Parallel alignment)	
2	Turn south following 195th Ave.	0.78	Cty or Twp Road (Parallel alignment)	
3	Turn southeast cross-country	0.52	Cross-country (Parallel alignment)	
4	Turn east following field line/cross-country	3.75	Field Line (Parallel alignment)	
5	Turn south cross-country	3.53	Cross-country (Parallel alignment)	
6	Continue south cross-country	2.93	Returns to applicant's preferred route - Cross-country	





- P Route Variation on A Route Project Substations
- A Route 
   ✓ Variation on P Route 
   County Boundaries
  - Variation on Both
  - Parallel Alignment

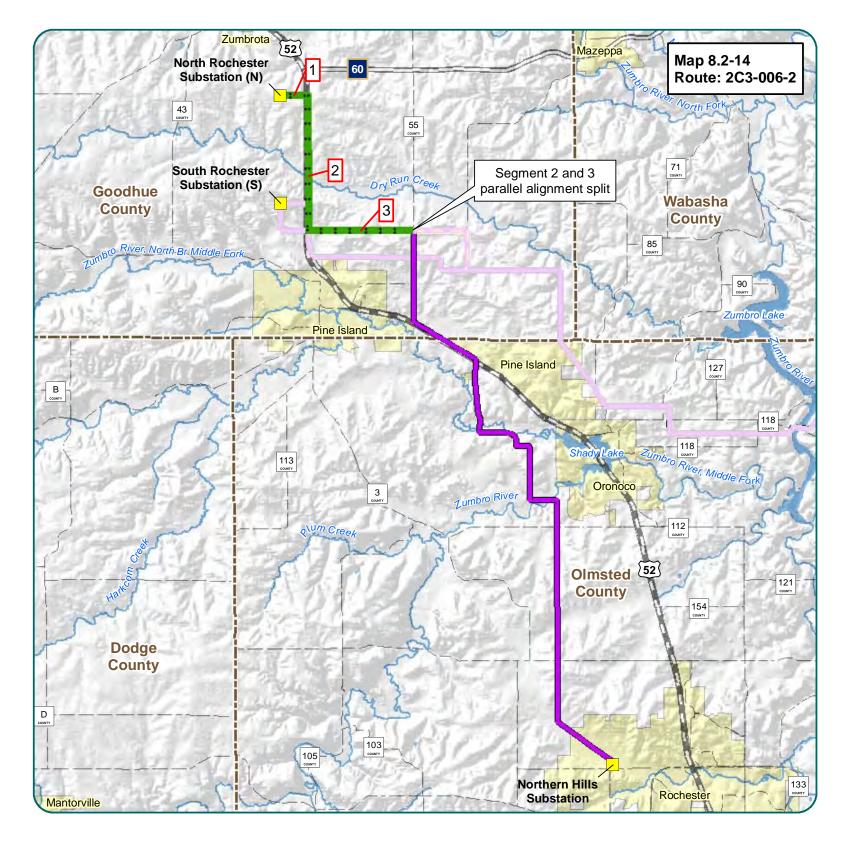
	North Rochester to Northern Hills (2C3-005-2)				
Turn by Turn		Distance (miles)	Comments/ROW Type		
1	From the North Rochester Substation (S), go south following transmission line	0.51	Transmission Line (Parallel alignment)		
2	Turn east following field line	0.46	Field Line (Double-circuit)		
3	Continue east following 500th St.	2.00	Returns to applicant's preferred route - Cty or Twp Road (Parallel alignment)		





- P Route Variation on A Route Project Substations
- A Route 
   ✓ Variation on P Route 
   County Boundaries
  - Variation on Both
  - Parallel Alignment

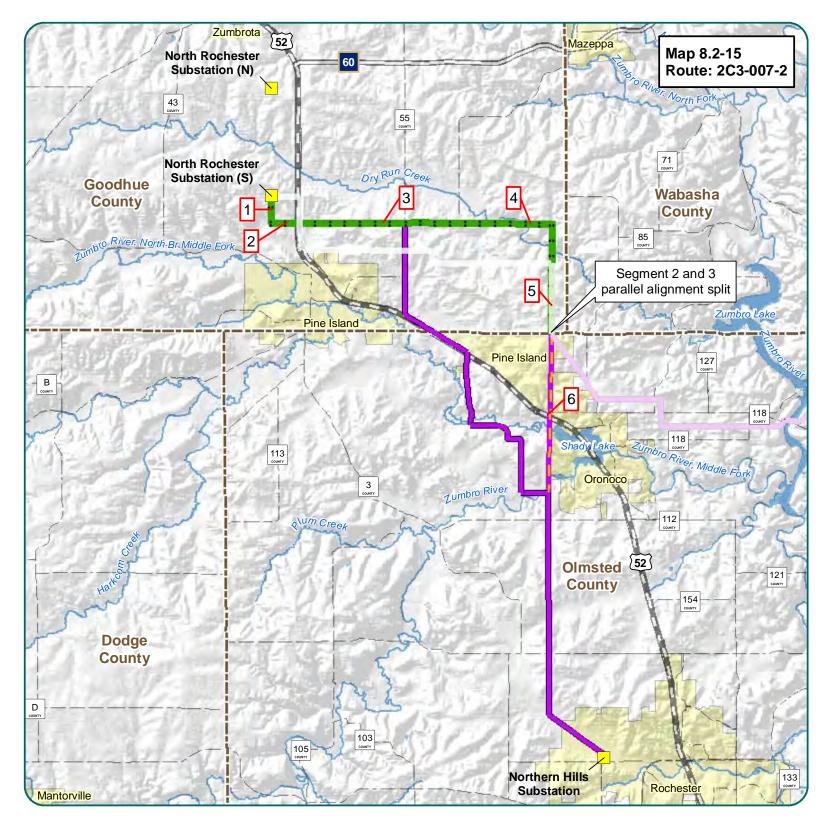
	North Rochester to Northern Hills (2C3-006-2)				
	Turn by Turn	Distance (miles)	Comments/ROW Type		
1	From the North Rochester Substation (N), go east following field line to US Hwy 52	0.51	Field line (Parallel alignment)		
2	Turn south following US Hwy 52	2.50	Major Hwy (Parallel alignment)		
3	Turn east following 500th St.	1.94	Returns to applicant's preferred route - Cty or Twp Road (Parallel alignment)		





- P Route Variation on A Route Project Substations
- A Route 
   ✓ Variation on P Route 
   County Boundaries
  - Variation on Both
  - Parallel Alignment

	North Rochester to Northern Hills (2C3-007-2)			
	Turn by Turn	Distance (miles)	Comments/ROW Type	
1	From the North Rochester Substation (S), go south following transmission line	0.51	Transmission line (Parallel alignment)	
2	Turn east following field line	0.52	Field Line (Parallel alignment)	
3	Continue east on 500th St.	3.95	Cty or Twp Road (Parallel alignment)	
4	Continue east cross-country	0.71	Cross-country (Parallel alignment)	
5	Continue south cross-country	2.04	Cross-country (Parallel alignment)	
6	Continue south cross-country/field line	2.93	Returns to applicant's preferred route - Cross-country/field line	

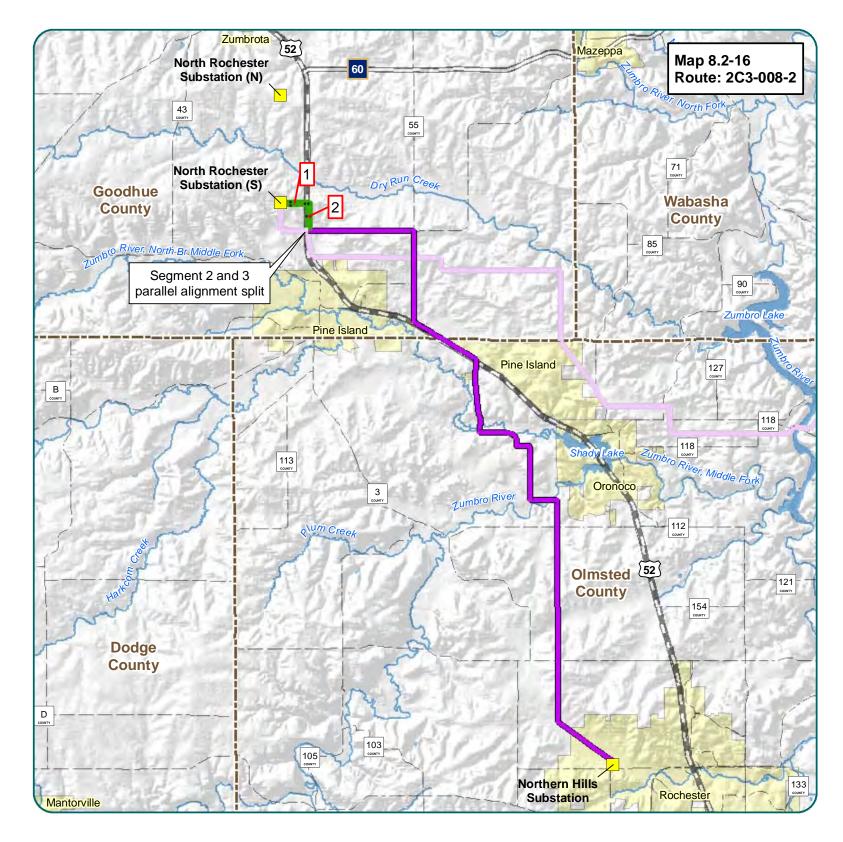




- A Route 
   ✓ Variation on P Route 
   County Boundaries
- P Route Variation on A Route Project Substations

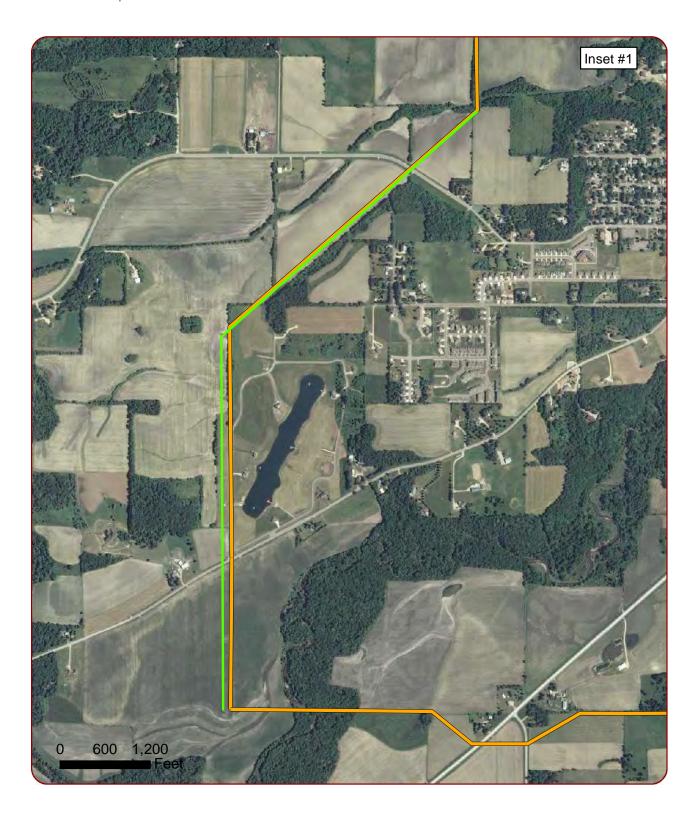
  - Variation on Both
  - Parallel Alignment

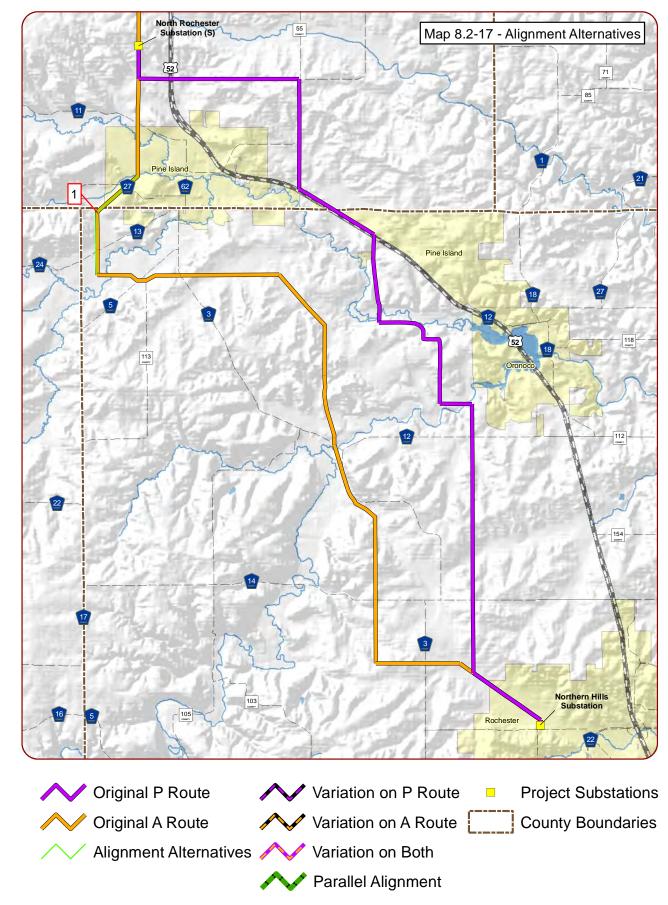
	North Rochester to Northern Hills (2C3-008-2)				
Turn by Turn		Turn by Turn	Distance (miles)	Comments/ROW Type	
1	1 Fr fol	rom the North Rochester Substation (S), go east ollowing applicant's preferred route to US Hwy 52	0.52	Field Line (Parallel alignment)	
2		urn south following US Hwy 52 and applicant's referred route		Returns to preferred route - Major Hwy (Parallel alignment)	



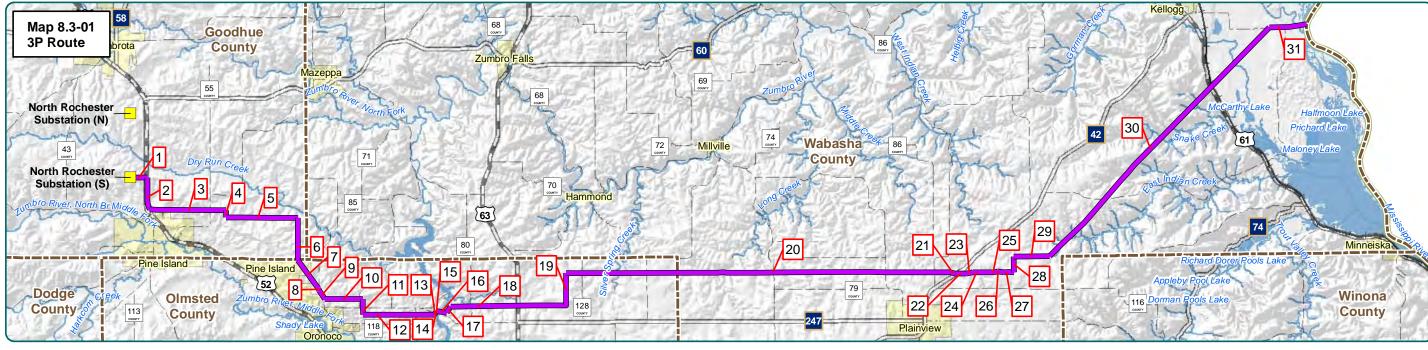


- P Route Variation on A Route Project Substations
- A Route 
   ✓ Variation on P Route 
   County Boundaries
  - Variation on Both
  - Parallel Alignment





## 8.3.1 Description of Route Alternatives – North Rochester Substation to Mississippi River

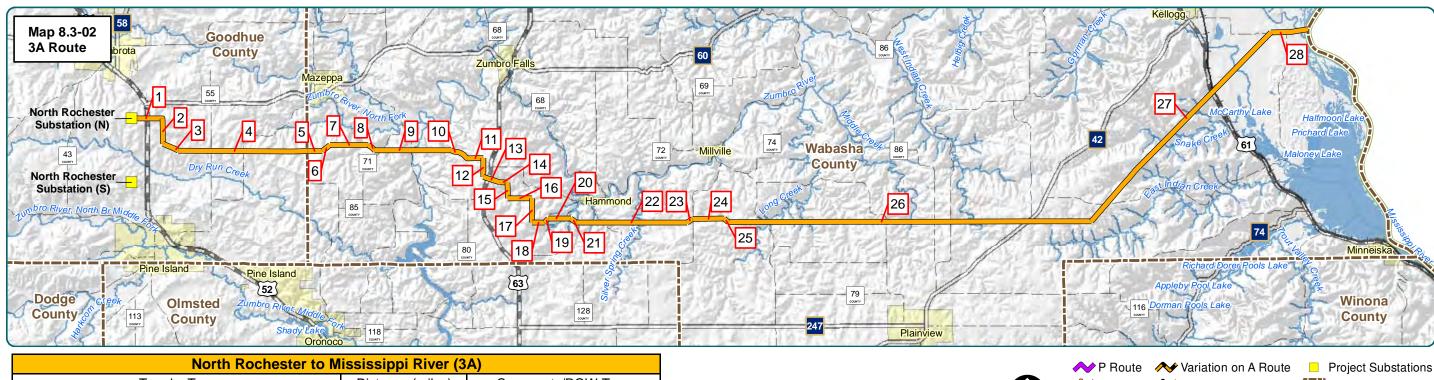


	North Rochester to Mississippi River (3P)				
	Turn by Turn Distance (miles) Comments/ROW Type				
1	From the Proposed North Rochester Substation (S) go east following field line	0.52	Field Line		
2	Turn south following US Hwy 52	1.00	Major Hwy		
3	Turn east following field line/cross-country	2.36	Field Line/Cross-country		
4	Turn south following field line	0.23	Field Line		
5	Turn east following field line/cross-country	2.23	Field Line/Cross-country		
6	Turn south following field line/cross-country to Ash Road NW	1.31	Field Line/Cross-country		
7	Turn southeast following Ash Road NW	1.08	Cty or Twp Road		
8	Turn south/southeast crossing Ash Road NW	0.07	Cty or Twp Road		
9	Turn southeast following CSAH 18	0.31	Cty or Twp Road		
10	Turn east cross-country	1.17	Cross-country		
11	Turn south cross-country	0.50	Cross-country		
12	Turn east following field line/cross-country	2.20	Field Line/Cross-country		
13	Turn northeast cross-country to White Bridge Road NE	0.09	Cross-country		
14	Continue northeast crossing White Bridge Road NE	0.03	Cty or Twp Road		
15	Continue northeast cross-country	0.02	Cross-country		
16	Turn east/southeast cross-country (cross the Zumbro River)	0.32	Cross-country		

✓ Variation on P Route ✓ Variation on Both	•
rafallel Allyfilllelli	
	P Route Variation on A Route Variation on P Route Variation on Both Parallel Alignment

		1	
17	Turn northeast cross-country	0.22	Cross-country
18	Turn east following field line/cross-country	3.57	Field Line/Cross-country
19	Turn north following field line	0.99	Field Line
20	Turn east following field line/cross-country	11.94	Field Line/Cross-country
21	Turn east/southeast cross-country	0.14	Cross-country
22	Turn east cross-country	0.34	Cross-country
23	Turn east/northeast following cross-country	0.21	Cross-country
24	Turn east following field line	0.62	Field Line
25	Turn east/northeast cross-country	0.17	Cross-country
26	Turn east/southeast cross-country	0.19	Cross-country
27	Turn east cross-country	0.31	Cross-country
28	Turn north following field line	0.49	Field Line
29	Turn east following field line	1.12	Field Line
30	Turn northeast following transmission line	9.83	Transmission Line
31	Turn east/northeast following transmission line to Mississippi River	1.16	Transmission Line

44.74



	North Rochester to Mississippi River (3A)				
	Turn by Turn Distance (miles) Comments/ROW Type				
1	From the Proposed North Rochester Substation (N) go east following field line	0.97	Field Line		
2	Turn south following 195th Ave.	0.78	Cty or Twp Road		
3	Turn southeast cross-country	0.52	Cross-country		
4	Turn east following field line/cross-country to T-156	4.00	Field Line/Cross-country		
5	Continue east following T-156	0.47	Cty or Twp Road		
6	Turn northeast cross-country	0.30	Cross-country		
7	Turn east cross-country	1.19	Cross-country		
8	Turn southeast cross-country	0.26	Cross-country		
9	Turn east following field line/cross-country	2.35	Field Line/Cross-country		
10	Turn east/southeast cross-country	0.58	Cross-country		
11	Turn east following field line	0.49	Field Line		
12	Turn south following field line/cross-country	0.59	Field Line/Cross-country		
13	Turn east/southeast cross-country	0.53	Cross-country		
14	Turn east following field line	0.25	Field Line		
15	Turn south following field line	0.50	Field Line		
16	Turn east cross-country	0.75	Cross-country		

	 <ul><li>✓ Variation on A Route</li><li>✓ Variation on P Route</li><li>✓ Variation on Both</li></ul>	,
<b>W</b>	Parallel Alignment	

17	Turn south following field line/cross-country to T-196	0.75	Field Line/Cross-country
18	Turn east following T-196	0.40	Cty or Twp Road
19	Turn northeast cross-country	0.17	Cross-country
20	Turn east cross-country	0.71	Cross-country
21	Turn southeast cross-country	0.20	Cross-country
22	Turn east following field line/cross-country	3.43	Field Line/Cross-country
23	Turn northeast cross-country	0.21	Cross-country
24	Turn east cross-country	0.98	Cross-country
25	Turn southeast cross-country	0.16	Cross-country
26	Turn east following field line/cross-country	11.25	Field Line/Cross-country
27	Turn northeast following transmission line	8.07	Transmission Line
28	Turn east/northeast following transmission line to Mississippi River	1.16	Transmission Line

Total Length 42.02

	North Rochester to Mississippi River (3A-001)			
	Turn by Turn	Distance (miles)	Comments/ROW Type	
1	Follow the applicant's alternate route until 0.1 miles south of intersection MN Hwy 42 and CSAH 14			
2	Turn south following CSAH 14	0.25	Cty or Twp Road	
3	Turn east cross-country/field lines	1.64	Cross-country/field lines	
4	Turn northeast following transmission line	0.33	Returns to the applicant's alternate route - Transmission Line	

Total Length 42.37

Map 8.3-08 Route: 3A-001 pia  Goodhue County	Kellogy B4
North Rochester	66 Zumpi Co
North Rochester Substation (N)	Halmoon Lake Prichar Lake  Prichar Lake  All Wabasha  Strate if the strate is a second of the strategy of the
North Rochester Substation (S)  pure to Bruer, North Br. Magne	Hammond Land Market Company of the C
Pine Island Pine Island Zumbo Lake	Bichard Dozer Roots Lake 16
Dodge County S 133 Olmsted County Snew Cou	Appleby Rog Lake  Winona  Tologous Planyew  Planyew

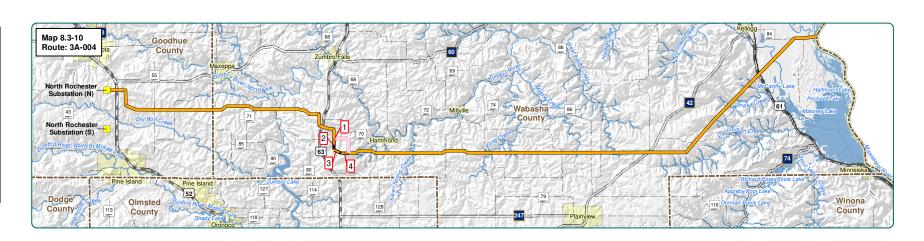
	North Rochester to Mississippi River (3A-003)				
	Turn by Turn	Distance (miles)	Comments/ROW Type		
1	Follow the applicant's alternate route until 1 mile east of intersection CSAH 7 and US Hwy 63				
2	Turn south following field line	0.69	Field Line		
3	Turn southeast cross-country	0.14	Cross-contry		
4	Turn east following T-196	0.37	Returns to applicant's alternate route - Cnty or Twp Road		
	T. (.11d.	44.00	•		

Total Length 41.96

Map 8.3-09 Route: 3A-003 Table County  County  Lumbo Falls	Kellogg- B4
North Rochester Substation (N)	Milyile 74 Wabasha 88 42 Snike Cleb 61 Majoring Lake
North Rochester Substation (S)  North Rochester Substation (S)  Public River, North Be Miscone Sea	County Magin Character 1
Pine Island  Pine Island  Pine Island  Say  County  County  Shady Late 1 118	Richard Dorey Rook Lake Appleby Rook Lake Appleby Rook Lake Winona County

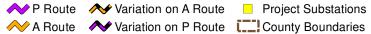
	North Rochester to Mississippi River (3A-004)				
	Turn by Turn	Distance (miles)	Comments/ROW Type		
1	Follow the applicant's preferred route until 0.75 miles east of intersection CSAH 7 and US Hwy 63				
2	Turn south cross-country	0.58	Cross-country		
3	Turn southeast cross-country	0.42	Cross-country		
4	Turn east following T-196	0.37	Returns to applicant's alternate route - Cnty or Twp Road		

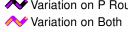
Total Length 41.88

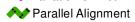




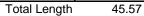








	North Rochester to Mississippi River (3B-003)			
	Turn by Turn	Distance (miles)	Comments/ROW Type	
1	Follow the applicant's preferred route until 0.45 miles north of CSAH 27 and 0.65 miles east of CSAH 4			
2	Turn northeast following MN Hwy 42	11.06	Major Hwy	
3	Continue northeast following CSAH 18	0.16	Cty or Twp Road	
4	Turn east cross-country to Cty Road 84	0.11	Cross-country	
5	Continue east following Cty Road 84	1.00	Cty or Twp Road	
6	Turn south following Cty Road 84	0.50	Cty or Twp Road	
7	Turn east following Cty Road 84	1.26	Returns to applicant's alternate route - Cty or Twp Road	



Map 8.3-11 Route: 3B-003 Ta  Goodhue County Zumbo Falls	88	43 567
North Rochester Substation (N)	zump <sup>Q</sup> (See	McCarthy Lake Hallmoon Clake Prichard Lake
North Rochester Substation (S)  North Rochester Substation (S)  Hammo	72 Milivile 4 Wabasha 85 County	Sng kit (Maloney Lake)
Pine Island Pine Island Pine Island		Fichaul Poss Rook Lake 17
Dodge County Olmsted County Sad C	Planylew Planylew	Appleby Rool Eake Winona County  Winona County

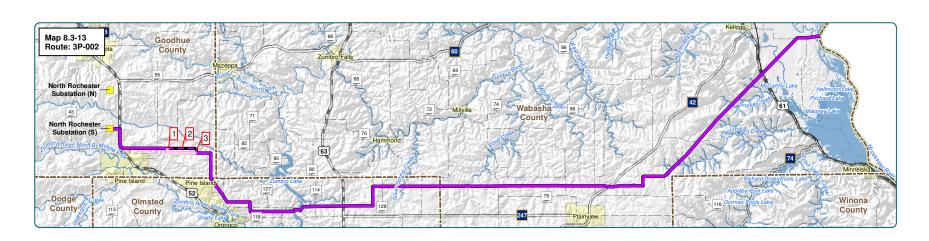
	North Rochester to Mississippi River (3P-001)				
	Turn by Turn	Distance (miles)	Comments/ROW Type		
1	Follow the applicant's preferred route until the intersection of US Hwy 52 and 500th St.				
2	Turn east following 500th St.	1.96	Cty or Twp Road		
3	Continue east following CSAH 11	1.00	Cty or Twp Road		
4	Continue east following 500th St.	1.72	Cty or Twp Road		
5	Continue south cross-country	0.73	Returns to applicant's preferred route - Cross-country		

Total Length 44.83

Map 8.3-12 Route: 3P-001 pta County	
North Rochester	McCarthy Lake
Substation (N)    Substation (N)   Wabasha   Solution   Wabasha   Wabasha   Solution   Wabasha   W	Snake Clack  Snake Clack  Maloney Lake
North Rochester Substation (s)  1   2   3   4   5   85   70    Hammond	nden crack
Pine Island. Pine Island. Pine Island.	74 Minneiska
	poleby Roof Lake  Winona  County

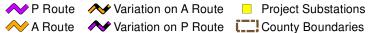
	North Rochester to Mississippi River (3P-002)				
Turn by Turn		Turn by Turn	Distance (miles)	Comments/ROW Type	
	1	Follow the applicant's preferred route until 0.5 miles west of 220th Ave. and 0.5 miles north of 510			
	2	Turn east cross-country to 230th Ave.	1.49	Cty or Twp Road	
	3	Turn south following 230th Ave.	0.24	Returns to applicant's preferred route - Cty or Twp Road	

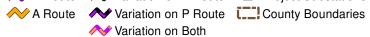
Total Length 44.75













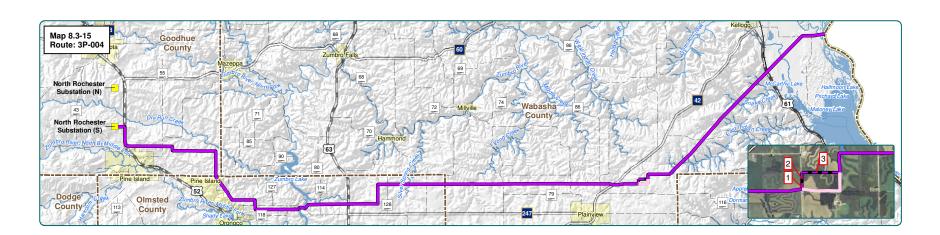
	North Rochester to Mississippi River (3P-003)			
Turn by Turn		Distance (miles)	Comments/ROW Type	
1	Follow the applicant's preferred route until the intersection of US Hwy 52 and 500th St.			
2	Turn east following 500th St.	2.95	Cty or Twp Road	
3	Turn south following 200th Ave.	0.74	Returns to applicant's preferred route - Cty or Twp Road	

Total Length 44.84

Map 8.3-14 Route: 3P-003 Ra  Goodhue County	Kellogg.
Mazeppa  North Rochester  55	Zumbra Zu
Substation (N)	Milivile Wabasha ss County  Wabasha Snove Clear 81  Malonay Lake Malonay Lake
North Rochester Substation (S)  North Rochester Substation (S)  North Rochester Substation (S)  North Rochester Substation (S)  Reput North Br. Market State	
Pine Island Pine Island Pine Island	Richard Borry Pools Lake
Dodge County Olmsted County Shark Line 118	Appleby Proc Lake  Winona  Tel Plainview  Plainview

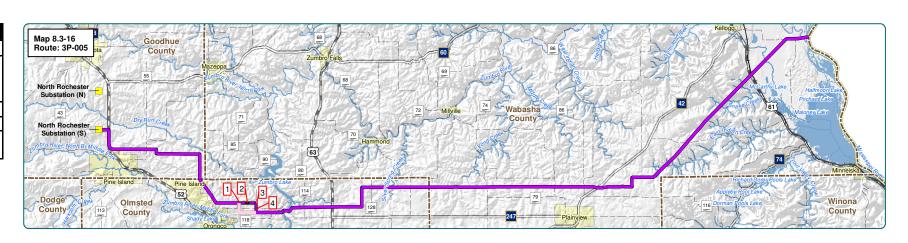
	North Rochester to Mississippi River (3P-004)		
Turn by Turn		Distance (miles)	Comments/ROW Type
1	Follow the applicant's preferred route until 0.45 miles south of T-307 and T-203		
2	Turn north following T-203	0.21	Cty or Twp Road
3	Turn east following field line	0.49	Returns to applicant's preferred route - Field Line

Total Length 44.72



	North Rochester to Mississippi River (3P-005)				
	Turn by Turn	Distance (miles)	Comments/ROW Type		
1	Follow the applicant's preferred route until 0.1 miles east of Power Dam Road and 0.25 miles north of White Bridge Road NW				
2	Continue east cross-country to 25th Ave NW	0.88	Cross-country		
3	Turn south following 25th Ave.	0.25	Cty or Twp Road		
4	Continue south following field line	0.24	Returns to applicant's preferred route - Field Line		

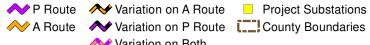
Total Length 44.75



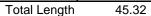


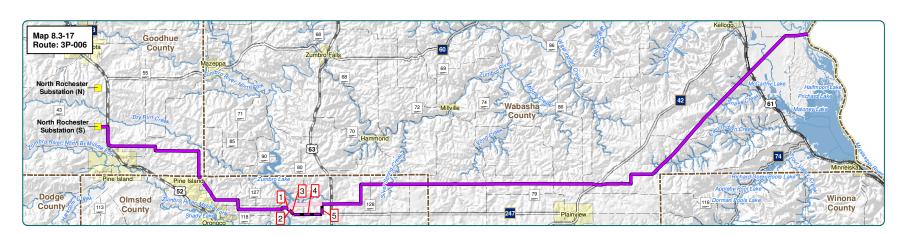






	North Rochester to Mississippi River (3P-006)				
Turn by Turn		Distance (miles)	Comments/ROW Type		
1	Follow the applicant's preferred route until 0.1 miles north of White Bridge Road NE and 0.1 miles east of Zumbro River				
2	Turn southeast cross country to White Bridge Road NE	0.08	Cross-country		
3	Continue southeast following White Bridge Road NE	0.37	Cty or Twp Road		
4	Turn east following White Bridge Road NE	1.45	Cty or Twp Road		
5	Turn north following field line	0.52	Returns to applicant's preferred route - Field Line		





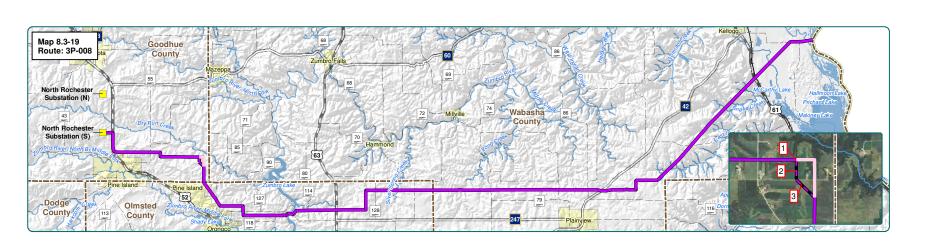
	North Rochester to Mississippi River (3P-007)				
	Turn by Turn	Distance (miles)	Comments/ROW Type		
1	Follow the applicant's preferred route until 0.08 miles north of White Bridge Road NE and 0.11 miles east of Zumbro River				
2	Turn southeast cross country to White Bridge Road NE	0.08	Cross-country		
3	Continue southeast following White Bridge Road NE	0.44	Cty or Twp Road		
4	Turn southeast cross country	0.28	Cross-country		
5	Turn east cross country	1.23	Cross-country		
6	Turn north following field line	0.78	Returns to applicant's preferred route - Field Line		

Total Length 45.74

Map 8.3-18 Route: 3P-007 pia Goodhue County Zumbro Falls	86	Kellogg
North Rochester Substation (N)  By Run C.	59 Zumb <sup>2</sup> Zumb <sup>2</sup> Milville <sup>74</sup> Wabasha 88 County	Juccarriny Lake Halmoon Lake Prichard Lake  Sing & Cife®  61  Maloney Leke
North Rochester Substation (S)  To Hammond  To Hammond  To Hammond  To Hammond  To Hammond  To Hammond		Alta In critical Authorities and Authorities a
Pine Island Pine I	247 Planylew	Appleby Rool Lake Appleby Rool Lake Appleby Rool Lake Winona County

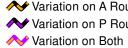
	North Rochester to Mississippi River (3P-008)				
Turn by Turn		Distance (miles)	Comments/ROW Type		
1	Follow the applicant's preferred route until 0.5 miles east of 230th Ave. and 0.25 miles north of 510 St.				
2	Turn south following field line	0.26	Field Line		
3	Turn southeast cross country	0.33	Returns to applicant's preferred route - Cross-country		

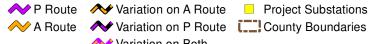
Total Length 44.61











	North Rochester to Mississippi River (3P-009)				
	Turn by Turn	Distance (miles)	Comments/ROW Type		
1	Follow the applicant's preferred route until 0.7 miles east of of 230th Ave.				
2	Continue east cross-country/field lines	2.96	Cross-country/field lines		
3	Turn south following CSAH 21	0.75	Cty or Twp Road/Transmission Line		
4	Continue south cross-country	0.24	Cross-country/Transmission Line		
5	Turn southeast cross-country to 25th Ave NW	0.30	Cross-country/Transmission Line		
6	Turn east following 25th Ave	0.12	Cty or Twp Road/Transmission Line		
7	Turn southeast cross-country	0.20	Cross-country/Transmission Line		
8	Turn east cross-country to Postier Dr. NW	0.11	Cross-country/Transmission Line		
9	Turn south following Postier Dr. NW	1.24	Cty or Twp Road/Transmission Line		
10	Continue south following transmission line	0.25	Returns to applicant's preferred route - Transmission Line		
Total Length 45.08					

Map 8.3-20 Route: 3P-009 pia  County  Mazeppa  Mazeppa  North Rochester Substation (N)  North Rochester Substation (S)  North Rochester Substation (S)  11  55  22  33-44	Zumbro Falls  50  86  Zumbro Hammond  60  Wabasha County  88  88  88  88  88  88  88  88  88	Malmonitak  Albidan cress  Mannestax  Minnestax  Minnes
Dodge County Cou	9 114 79 79 Planyew	Appleby Roo Lake  Appleby Roo Lake  Winona  County

	North Rochester to Mis	sissippi River (3P-	·010)
	Turn by Turn	Distance (miles)	Comments/ROW Type
1	Follow the applicant's preferred route until White		

	Bridge Road		
2	Turn east following White Bridge Road	1.72	Cty or Twp Road
3	Turn southeast following White Bridge Road	0.56	Returns to applicant's preferred route - Cty or Twp Road

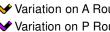
Tota

tal Length	44.50	

Map 8.3-21 Goodhue County	Zumbro Falls		88	Kellogg	
North Rochester Substation (N)	Silio Normigot	2 milvile 4 Wabasha County	G 42	McCanfrictaka H. Snake Ciae <sup>c</sup> Snake Ciae <sup>c</sup> Malon	alimoon Lake hard Lake cy Lake
North Rochester Substation (S)	83 Hammond			a lindan cheek saara	Minneiska
Pine Island Pine I	1 2 3 114	247	Planyew	Richard Doge Roots Lake Appleby Root Lake Appleby Root Lake IIB Dorman Roots Lake	Winona County

	North Rochester to Mississippi River (3P-Kellogg)			
Turn by Turn Distance (miles) Comments/ROW Type				
1	Follow the applicant's preferred route until the RR tracks just east of US Hwy 61			
2	Turn north following RR line	2.20	RR Line	
3	Turn northeast cross-country	0.14	Cross-country	
4	Turn east along CR-84	0.66	Cty or Twp Road	
5	Turn south following CR-84	0.51	Cty or Twp Road	
6	Turn east following CR-84	1.26	Returns to applicant's preferred route - Cty or Twp Road	
	Total Length	46.98		





	North Rochester to Mississippi River (3A-Kellogg)			
Turn by Turn		Distance (miles)	Comments/ROW Type	
1	Follow the applicant's alterante route until the RR tracks rust east of US Hwy 61			
2	Turn north following RR line	2.20	RR Line	
3	Turn northeast cross-country	0.14	Cross-country	
4	Turn east along CR-84	0.66	Cty or Twp Road	
5	Turn south following CR-84	0.51	Cty or Twp Road	
6	Turn east following CR-84	1.26	Returns to applicant's alternate route -Cty or Twp Road	

Total Length 44.26

Map 8.3-03 Route: 3A-Kellogg	3000 4 5
Goodhue County	
Mazeppa Zumbro Falls	2 6
North Rochester	McCartin/Lake
Substation (N)	42 Sprike Class St. Sprike Class Sprike Clas
North Rochester Dry Rub Cross	MaloneyLako
Substation (S)	Jos Ingancreek
90 Stude North Br. Milden	74
	Minneiska Spirit Pores Roots Lake T
Pine Island Prine Island 127 114 114 114 114 114 114 114 114 114 11	Appleby Pool Lake
Dodge County 113 Count	116 Dorman Fools Lake Winona County

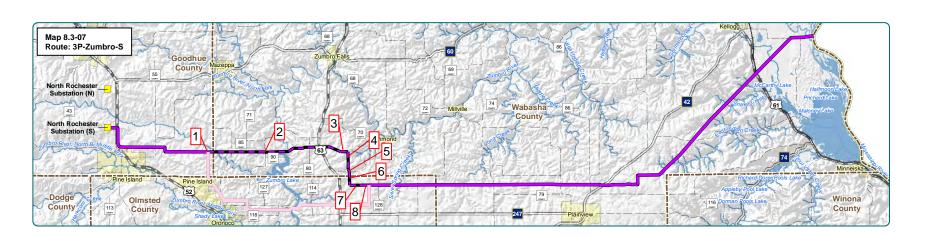
	North Rochester to Mississippi River (3P-Zumbro-N)		
	Turn by Turn	Distance (miles)	Comments/ROW Type
1	Follow the applicant's preferred route until 0.7 miles east of 230th Ave		
2	Continue east cross-country/field line	6.97	Cross-country/field line
3	Continue east on T-196		Returns to applicant's alternate route - Cty or Twp Road

Total Length 40.42

Map 8.3-06 Route: 3P-Zumbro-N	- Vy
Goodhue County Mazespa 55	ny Lake Hallmoon Lake
Substation (N)  Wabasha  County  Wabasha  County  Single Copt  Single	Prichard Lake Malongy Lake
Substation (s)  1	74 Minnelska
Pine Island  Pine Island  Appleby Pio Lake  County  Shady Lake  Shady Lake  Plainview  Plainview  Plainview	Rools Lake Winona County

	North Rochester to Mississippi River (3P-Zumbro-S)			
	Turn by Turn	Distance (miles)	Comments/ROW Type	
1	Follow the applicant's preferred route until 0.7 miles east of 230th Ave			
2	Continue east cross-country/field line	6.97	Cross-country/field line	
3	Continue east on T-196	0.37	Cty or Twp Road	
4	Turn south cross-country/field line	0.92	Cross-country/field line	
5	Turn southeast cross-country	0.13	Cross-country	
6	Turn south cross-country/field line	0.70	Cross-country/field line	
7	Turn east along field line	0.74	Field line	
8	Continue east cross-country	0.25	Returns to applicant's preferred route - Cross-country	

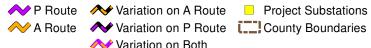
Total Length 42.92







Variation on Both



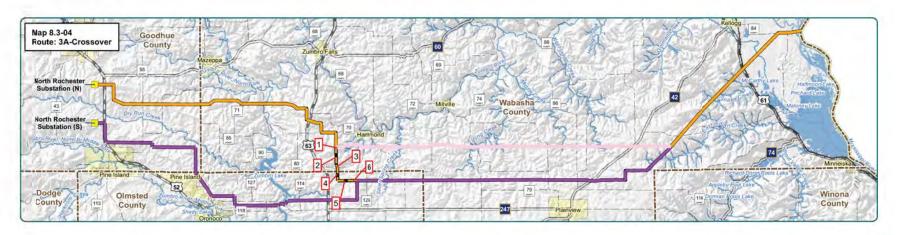
	Turn by Turn	Distance (miles)	Comments/ROW Type
1	Follow the applicant's alternate route to T-196		
2	Continue south cross-country/field line	0.92	Cross-country/field line
3	Turn southeast cross-country	0.13	Cross-country
4	Turn south cross-country/field line	0.70	Cross-country/field line
5	Turn east along field line	0.74	Field line
6	Continue east cross-country	0.25	Returns to applicant's preferred route - Cross-country

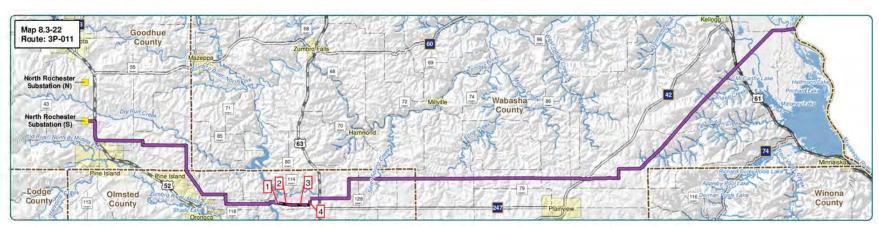
Total	Length	44.52
Ottai	LOTIGITI	11.0

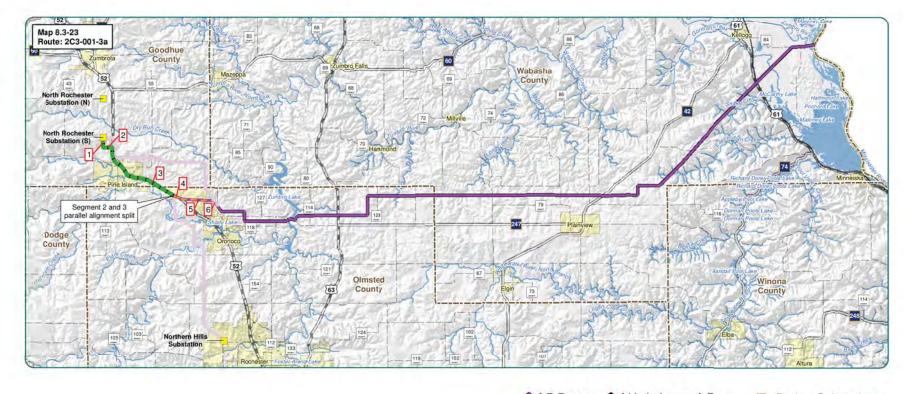
	North Rochester to Miss	sissippi Kiver (ar	-011)
	Turn by Turn	Distance (miles)	Comments/ROW Type
1	Follow the applicant's preferred route until 0.11 miles east of Zumbro River and 0.08 miles north of White Bridge Road NE		
2	Continue southeast cross-country	0.76	Cross-country
3	Turn east cross-country	0.95	Cross-country
4	Turn north cross-country	0.32	Returns to applicant's preferred route - Cross-country

Total Length 44.97

	North Rochester to Mississippi River (2C3-001-3a)					
	Turn by Turn	Distance (miles)	Comments/ROW Type			
1	From the North Rochester Substation (S), go south following transmission line	0.51	Transmission Line (Parallel alignment)			
2	Turn east following field line	0.46	Field Line (Parallel alignment)			
3	Turn south following US Hwy 52	4.33	Major Hwy (Parallel alignment)			
4	Continue southeast following US Hwy 52	0.38	Major Hwy			
5	Turn east cross-country to Ash Road NW	1.67	Cross-country			
6	Turn southeast following Ash Road NW	0.37	Returns to applicant's preferred route - Cty or Twp Road			







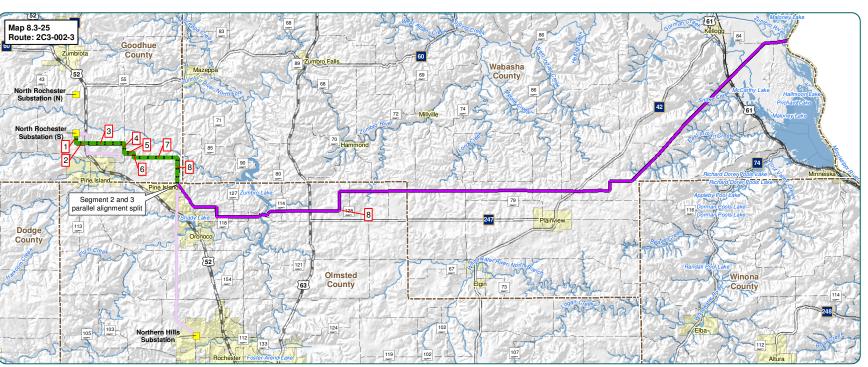
	North Rochester to Mississippi River (2C3-001-3b)					
	Turn by Turn	Distance (miles)	Comments/ROW Type			
1	From the North Rochester Substation (S), go south following transmission line	0.51	Transmission Line (Parallel alignment)			
2	Turn east following field line	0.46	Field Line (Parallel alignment)			
3	Turn south following US Hwy 52	4.33	Major Hwy (Parallel alignment)			
4	Continue southeast following US Hwy 52	0.38	Major Hwy			
5	Turn east cross-country to Ash Road NW	1.67	Cross-country			
6	Turn southeast following Ash Road NW	0.37	Cty or Twp Road			
7	Continue southeast following CSAH 18	0.31	Cty or Twp Road			
8	Continue southeast cross-country	0.14	Cross-country			
9	Continue east/southeast cross-country	0.41	Cross-country			
10	Turn east following White Bridge Road NW	0.70	Returns to applicant's preferred route - Cty or Twp Road			

Total Length	43.47
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Route: 2C3-001-3b Goodhue		Creek	86	Kellogg	84
Zumbrota County	Mazeppa 89 Zumbro Fa		Wabasha County		3/4/1
North Rochester Substation (N)	tumbe the North Folk		County		McCarthy Lake Hallmoon Lake
5 PARILO DE PROBUEDO	$\overline{n}$	Milville 74		42	Prichard Lake Maloney Lake
North Rochester Substation (S)	85	Zonbo Hammond	行人。	ndián crao	
3	90			. Richard Do	74  orery Roois Lake  Minneiska
Pine Island Pine Island Pine Island	7 10 127 Zumbro Lake	770	79	Richard Appleby Pool	Dorer Rools Lake
Segment 2 and 3 parallel alignment split  Dodge 113	8 9 118	128	Plainview Plainview	116 Doman Pool	s Lake s Lake
Dodge County	Oroncco Santa			Beaveroreak.	
	52) — 121 OI	msted	aler River, North Sancy	Randall Pobl Lake	Winona
	154 633 C	ounty	73 500 000		Winona County
		24-			248
103 Northern Hi Substation	112		107	Elba	112 Beautre
	Rochester Foster Arend Lake	119 102			Altura

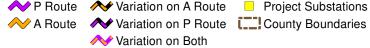
	North Rochester to Mississippi River (2C3-002-3)					
	Turn by Turn	Distance (miles)	Comments/ROW Type			
1	From the North Rochester Substation (S), go south following transmission line	0.50	Transmission Line (Parallel alignment)			
2	Turn east following field line	0.46	Field line (Parallel alignment)			
3	Continue east following 500th St.	2.00	Cty or Twp Road (Parallel alignment)			
4	Turn south following CSAH 11	0.50	Cty or Twp Road (Parallel alignment)			
5	Turn east following field line	0.50	Field line (Parallel alignment)			
6	Turn south following field line	0.23	Field line (Parallel alignment)			
7	Turn east cross-country/field lines	2.23	Cross-country (Parallel alignment)			
8	Turn south cross-country	1.31	Returns to applicant's preferred route - Cross-country (Parallel alignment)			

Total Length 44.81









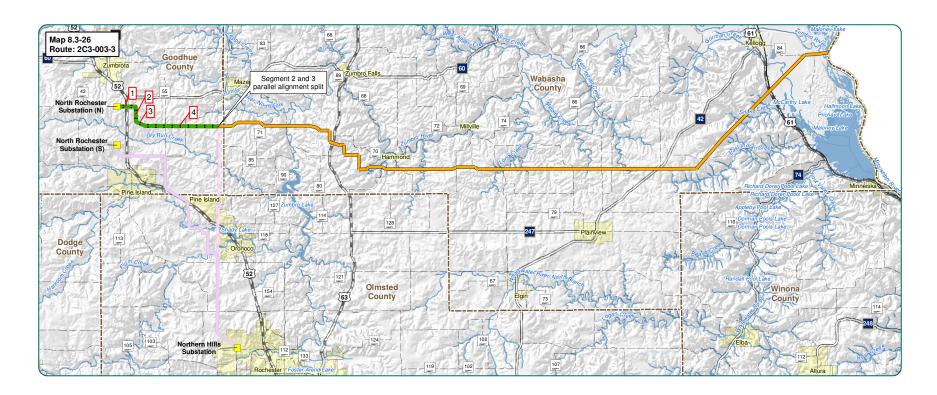
P Route Variation on A Route Project Substations

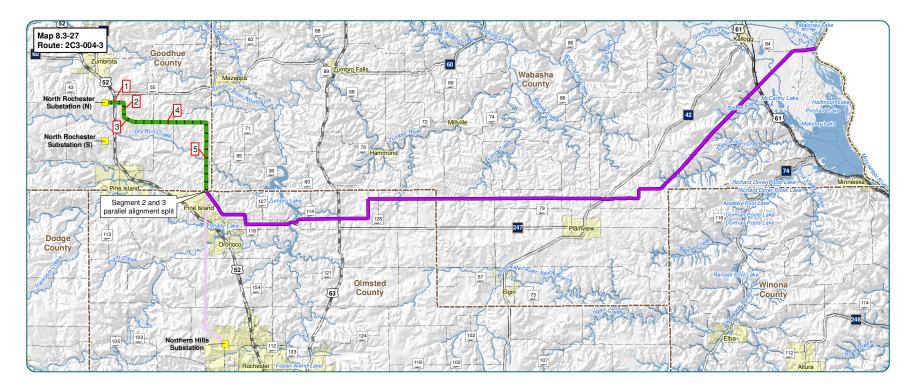
	North Rochester to Mississippi River (2C3-002-3)				
	Turn by Turn	Distance (miles)	Comments/ROW Type		
1	From the North Rochester Substation (S), go south following transmission line	0.50	Transmission Line (Parallel alignment)		
2	Turn east following field line	0.46	Field line (Parallel alignment)		
3	Continue east following 500th St.	2.00	Cty or Twp Road (Parallel alignment)		
4	Turn south following CSAH 11	0.50	Cty or Twp Road (Parallel alignment)		
5	Turn east following field line	0.50	Field line (Parallel alignment)		
6	Turn south following field line	0.23	Field line (Parallel alignment)		
7	Turn east cross-country/field lines	2.23	Cross-country (Parallel alignment)		
8	Turn south cross-country	1.31	Returns to applicant's preferred route - Cross-country (Parallel alignment)		

Total Length	44.81
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	North Rochester to Mississippi River (2C3-004-3)					
	Turn by Turn Distance (miles) Comments/ROW Type					
1	From the North Rochester Substation (N), go east following field line to 195th Ave.	0.97	Field Line (Parallel alignment)			
2	Turn south following 195th Ave.	0.78	Cty or Twp Road (Parallel alignment)			
3	Turn southeast cross-country	0.52	Cross-country (Parallel alignment)			
4	Turn east following field line/cross-country	3.75	Field Line (Parallel alignment)			
5	Turn south cross-country	3.53	Returns to applicant's preferred route - Cross-country (Parallel alignment)			

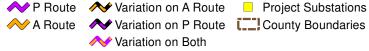
Total Length 46.63

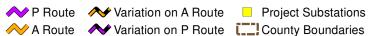












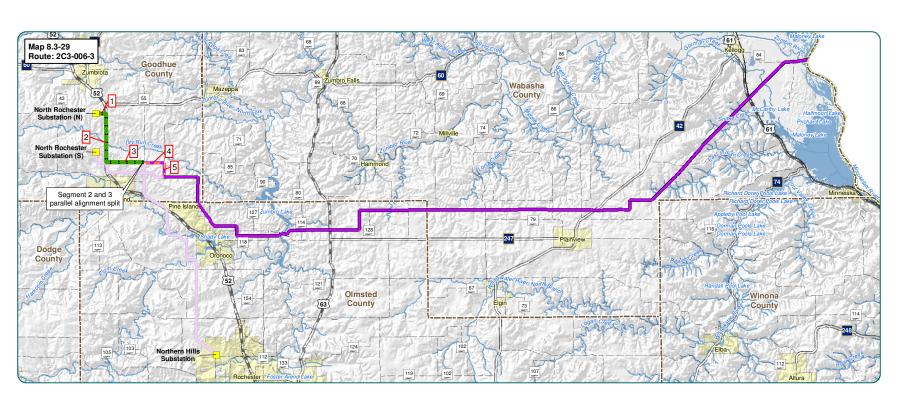
	North Rochester to Mississippi River (2C3-005-3)					
	Turn by Turn	Distance (miles)	Comments/ROW Type			
1	From the North Rochester Substation (S), go south following transmission line	0.51	Transmission Line (Parallel alignment)			
2	Turn east following field line	0.46	Field Line (Parallel alignment)			
3	Continue east following 500th St.	2.00	Cty or Twp Road (Parallel alignment)			
4	Continue east following 500th St.	2.01	Cty or Twp Road			
5	Continue east cross-country/field lines	0.72	Cross-country/field lines			
6	Turn south cross-country	0.73	Returns to applicant's preferred route - Cross-country			

Total Length	44.8
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North Rochester Substation (N)  Segment 2 and 3 parallel alignment split  Substation (S)  Substation (S)  Principland  Pri	Map 8.3-28 Route: 2C3-005-3 Goodhue Zumbrota County	so Zumbro Falls	West Total Cook Be Be Wabasha	leormans.	Nasony five
Substation (S)  Pine Island  Pi	North Rochester Substation (N)  Segment 2 and 3 parallel alignment split	EON ST.	County	42	761
Pine Island  127 Zumbro Lake  Appleby Pool Lake  Plianview  Dodge County  O'crocco  Statistics  O'crocco  Stat	Substation (S)				The state of the s
County  SE  Olmsted County  Frandal RoyLake Winona County  Oscillation Northern Hills  Northern Hills  Northern Hills  Frandal RoyLake  Franda	Pine Island	114			The Year of the last of the la
05 <sup>87</sup> C Celi 3	County	Olmsted	7 2		Winona
Substation 112 133	105 Northern Hills Substation	112	102	A PARAMATER AND A PARAMATER AN	218 218 218 218 218 218 218 218 218 218

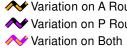
	North Rochester to Mississippi River (2C3-006-3)			
	Turn by Turn Distance (miles) Comments/ROW T		Comments/ROW Type	
1	From the North Rochester Substation (N), go east following field line to US Hwy 52	0.51	Field line (Parallel alignment)	
2	Turn south following US Hwy 52	2.50	Major Hwy (Parallel alignment)	
3	Turn east following 500th St.	1.94	Cty or Twp Road (Parallel alignment)	
4	Continue east following 500th St.	1.01	Cty or Twp Road	
5	Turn south following 220th Ave.	0.73	Returns to applicant's preferred route - Cty or Twp Road	

Total Length 46.80









P Route Variation on A Route Project Substations 

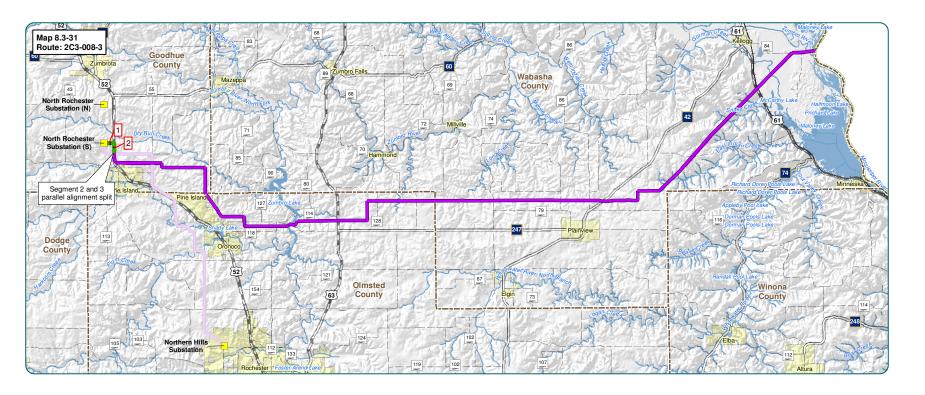
	North Rochester to Mississippi River (2C3-007-3)			
	Turn by Turn	Distance (miles)	Comments/ROW Type	
1	From the North Rochester Substation (S), go south following transmission line	0.51	Transmission line (Parallel alignment)	
2	Turn east following field line	0.52	Field Line (Parallel alignment)	
3	Continue east following 500th St.	3.95	Cty or Twp Road (Parallel alignment)	
4	Continue east cross-country	0.71	Cross-country (Parallel alignment)	
5	Turn south cross-country	2.04	Returns to the applicant's preferred route - Cross-country (Parallel alignment)	

Total Length 44.82

Map 8.3-30 Route: 2C3-007-3 Goodhue County  As North Rochester Substation (N)	Mazeppa  Separation of the sep	Maloney Lake  McCarry Lake  Halmoon Lake  Prichard Lake  Maloney Lake
North Rochester 3 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	5 Page River  Appleby Page Page Page Page Page Page Page Page	ro Dorey 250% Lake Minneiska
Dodge County	April 188 Planvew Planvew Bank State	Poole Lake Poole Lake Winona County
Northern Hills Substation	112 133 139 107 119 102 107	248 112 Bull feath

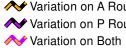
	North Rochester to Mississippi River (2C3-008-3)			
	Turn by Turn	Distance (miles)	Comments/ROW Type	
1	From the North Rochester Substation (S), go east following applicant's preferred route to US Hwy 52	0.52	Field Line (Parallel alignment)	
2	Turn south following US Hwy 52 and the applicant's preferred route	0.51	Returns to applicant's preferred route - Major Hwy (Parallel alignment)	

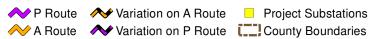
Total Length 44.74

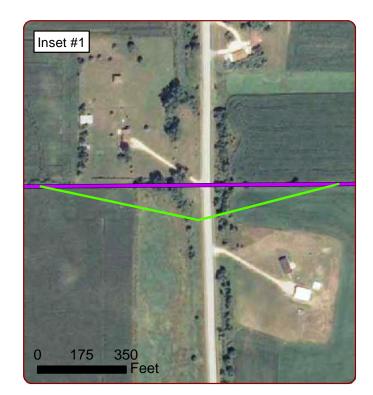


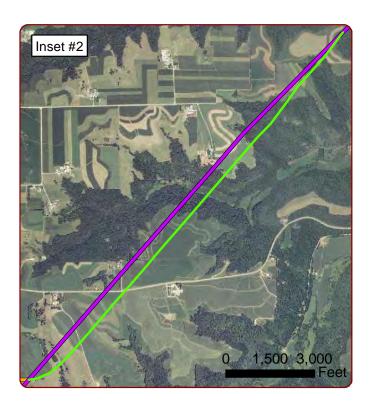




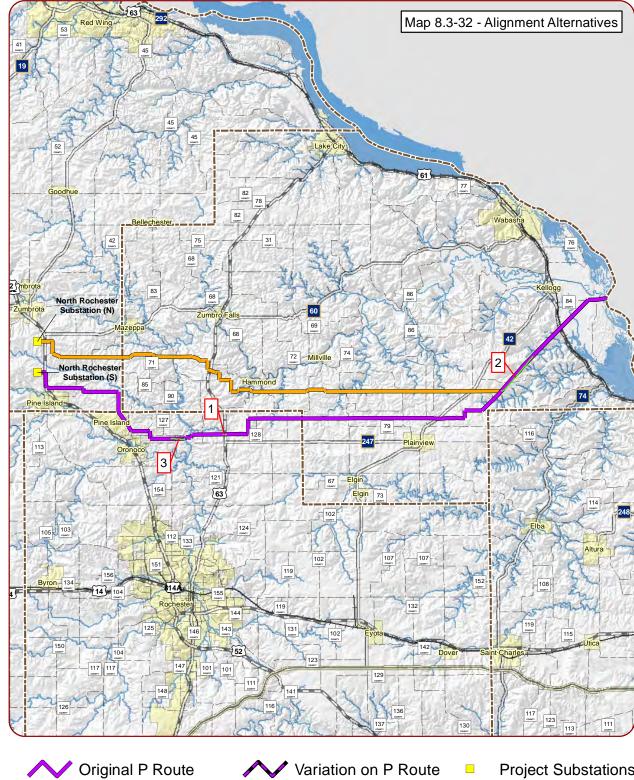














Original A Route Alignment Alternatives Variation on Both

✓ Variation on P Route ✓ Variation on A Route

**Project Substations County Boundaries**