

10-Year Assessment



ROUTING & SITING > Public outreach

We believe it is beneficial to solicit input from individuals who may be impacted by transmission system improvements and additions. As a natural extension of the involvement of transmission system customers in the planning process, we also involve the broader public in our planning process.

Public examination and discussion of transmission plans in advance of the commencement of work enhances awareness of the needs for transmission system improvements, helps eliminate surprises and can improve projects by involving the perspectives of those most familiar with impacted areas. Even for projects subject to public discussion and review as part of a state's formal regulatory process, opportunities for the public to help shape decisions prior to the official start of the regulatory process can be helpful.

By increasing the level of public understanding of the need for a project and by vetting specific solutions to be proposed, time spent in early discussions also can save project time overall.

Our public outreach efforts may involve sharing and exchanging information about specific planned transmission line work with those who may be impacted. Depending on the work to be done, potentially impacted parties may include landowners or other community residents in the vicinity of an existing or a proposed new transmission line, local public officials, utility regulators and natural resource agencies, environmental or conservation groups, customers and other interested members of the public.

Our public outreach efforts with various stakeholders can include a variety of interactions such as one-on-one or small group meetings, public open houses, newsletters and other communication activities. The overall goal is to maintain communication with those who may benefit or be impacted by transmission system plans – with respect to needs, possible alternative solutions, or the tailoring of specific project initiatives as they proceed through the planning, siting and regulatory approval stages leading to construction.



10-Year Assessment

An annual report summarizing proposed additions and expansions to the transmission system to ensure electric system reliability.

www.atc10yearplan.com

ROUTING & SITING > Siting process

When transmission infrastructure improvements or additions require new right-of-way, the job of siting the facilities is a sensitive one. We follow a careful and deliberate process that provides guidance for identifying and analyzing potential options for siting and routing of transmission facilities. Through input received from agencies, the public and other stakeholders, siting criteria are developed that are applicable and appropriate for the location and issues associated with a particular project.

Legislation passed in 2003 (Wisconsin Act 89) outlined priorities for selecting locations for new transmission lines. As outlined in Act 89, Section 1.12 (6), we and the regulatory agencies are required to "evaluate, to the greatest extent feasible consistent with economic and engineering considerations, reliability of the electric system and protection of the environment, the following corridors in the following order of priority:"

1.	Primary opportunities ☐ Existing utility corridors, such as those for transmission lines, distributions lines and pipelines
2.	Secondary opportunities Highway corridors Railroad corridors
3.	Tertiary opportunities ☐ Recreational trails where rights-of-way, environmental considerations and engineering/cost feasibility warrant
4.	New corridors ☐ Establish new corridors using section lines and/or property boundaries
	copy of Act 89 is available at the state legislature's Web site: p://www.legis.state.wi.us/2003/data/acts/03Act89.pdf

Sept. 2005 ROUTING & SITING > Siting process



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ROUTING & SITING > New right-of-way

In addition, in siting and evaluating potential routes for transmission lines, consideration must be given to sensitive areas, which generally involve public or environmental issues. Information about sensitive areas can be found in Table RS-2.

<u>Figure RS-1</u> provides an overview of our siting process for identifying new electric transmission corridors and indicates the opportunities for public input.

When new transmission line projects involve new rights-of-way, we gather environmental screening information. The environmental assessments provided in this section are high-level and not nearly the level of investigation that will accompany a permit application to construct transmission facilities.

<u>Table RS-1</u> lists the new transmission lines requiring new right-of-way and whether high-level environmental screening information is provided in this report or can be found in application materials already filed with the Public Service Commission.

<u>Table RS-2</u> provides environmental screening information for the lines listed in <u>Table RS-1</u>. <u>Exhibits RS-1 through RS-34</u> identify the approximate end-points and study areas for each project for which high-level environmental screening information is provided. Table RS-1
Identified Needs and Transmission Lines Requiring New Right-of-Way

		Approx. li	ne mileage	Projected		Environmental	
Identified need	Planned, Proposed or Provisional solution	Total	New ROW	in-service year	Planning zone	screening provided?	Comments and/or corresponding exhibit number
Reduce service limitations, relieve overloads or low voltages under contingency, improve transfer capability & Weston stability	Construct Gardner Park-Stone Lake 345-kV line	140	73.4	2006	1	No	Environmental information included with filing at PSCW - CPCN approved; Exhibit RS-1
Relieve overloads or low voltages under contingency, replace aging facilities	Rebuild from Nordic to Randville substation (5 miles) of single circuit 69-kV line to double- circuit 69 kV	5	1	2006	2	Yes	Exhibit RS-19
T-D interconnection request, relieve overloads or low voltages under contingency	Construct new 69-kV line from Columbia to Rio to feed the proposed Wyocena substation	8.16	8.16	2006	3	Yes	Exhibit RS-4
T-D interconnection request	Construct Venus-Metonga 115-kV line	12.5	11.5	2007	1	Yes	Exhibit RS-31
T-D interconnection request	Construct Brandon-Fairwater 69-kV line	4	4	2007	1	Yes	Exhibit RS-2
T-D interconnection request	Construct new line from West Darien to Southwest Delavan at 138 kV, operate at 69 kV	3	3	2007	3	Yes	Exhibit RS-32
Relieve overloads or low voltages under contingency, T-D interconnection request	Construct a Jefferson-Lake Mills-Stony Brook 138-kV line	12	12	2007	3	Yes	Exhibit RS-15
Relieve overloads or low voltages under contingency, accommodate new generation	Construct Sprecher-Femrite 138-kV line	2	2	2007	3	Yes	Detailed environmental information included with filing at PSCW; Exhibit RS-28
T-D interconnection request	Construct double circuit 138-kV line from Forest Junction/Howards Grove/Charter Steel to Plymouth #4	1.25	1.25	2007	4	Yes	Exhibit RS-13
T-D interconnection request	Construct a 69-kV line from SW Ripon to the Ripon-Metomen 69-kV line	1.5	1.5	2008	1	Yes	Exhibit RS-29
Reduce service limitations, relieve overloads or low voltages under contingency, improve transfer capability & Weston stability	Construct Stone Lake-Arrowhead 345-kV line	70	36.6	2008	1	No	Environmental information included with filing at PSCW - CPCN approved; Exhibit RS-1
T-D interconnection request	Construct new line from Southwest Delavan to Delavan or Bristol at 138 kV, operate at 69 kV	3.5	3.5	2008	3	Yes	Detailed environmental information included with filing at PSCW; Exhibit RS-24
Relieve overloads or low voltages under contingency	Construct a Rubicon-Hustisford 138-kV line	5	5	2008	3	Yes	Exhibit RS-25
Relieve overloads or low voltages under contingency	Construct a new 138-kV line from North Madison to Waunakee	5	5	2008	3	Yes	Exhibit RS-20
Relieve overloads or low voltages under contingency, transfer capability	Construct Cranberry-Conover 115-kV line	14	14	2008	1 & 2	Yes	Exhibit RS-6
Relieve overloads or low voltages under contingency, T-D interconnection request	Construct new 138-kV line from South Lake Geneva to White River	3	3	2009	3	Yes	Exhibit RS-34
Relieve overloads or low voltages under contingency	Construct new Montrose-Sun Valley-Oak Ridge 138-kV line	9	3	2009	3	Yes	Exhibit RS-18
Relieve overloads or low voltages under contingency, reduce service limitations	String a new 138-kV line from Clintonville- Werner West primarily on Morgan-Werner West 345-kV line structures	16	2	2009	4	Yes	Detailed environmental information included with filing at PSCW; Exhibit RS-17

Table RS-1
Identified Needs and Transmission Lines Requiring New Right-of-Way

		Approx. li	ne mileage	Projected		Environmental	
Identified need	Planned, Proposed or Provisional solution	Total	New ROW	in-service year	Planning zone	screening provided?	Comments and/or corresponding exhibit number
Relieve overloads or low voltages under contingency, reduce service limitations	Construct Morgan-Werner West 345-kV line	47	47	2009	4	Yes	Detailed environmental information included with filing at PSCW; Exhibit RS-17
Relieve overloads or low voltages under contingency	Reroute Paddock to Shirland Avenue 69-kV line into and out of Northwest Beloit	1	0.5	2010	3	Yes	Exhibit RS-22
Relieve overloads or low voltages under contingency	Loop the Femrite to Royster 69-kV line into AGA Gas	0.3	0.3	2010	3	Yes	Exhibit RS-11
Relieve overloads or low voltages under contingency, accommodate new generation	Construct a Concord-Bark River 345-kV line	19	10	2010	3 & 5	Yes	Exhibit RS-5
Relieve overloads or low voltages under contingency	Construct Evansville-Brooklyn 69-kV line	8	8	2011	3	Yes	Exhibit RS-10
Relieve overloads or low voltages under contingency	Construct 345-kV line from Rockdale to West Middleton	35	35	2011	3	Yes	Exhibit RS-23
Relieve overloads or low voltages under contingency	Loop the Deforest to Token Creek 69-kV line into the Yahara River substation	1	1	2011	3	Yes	Exhibit RS-7
Relieve overloads or low voltages under contingency	Constuct a Lake Delton-Birchwood 138-kV line	5	5	2011	3	Yes	Exhibit RS-16
Relieve overloads or low voltages under contingency	Construct a second Dunn Road-Egg Harbor 69-kV line	12.66	12.66	2011	4	Yes	Exhibit RS-8
Relieve overloads or low voltages under contingency	Construct 69-kV line from Eden through Muscoda to Richland Center	35	35	2012	3	Yes	Exhibit RS-9
Access initiative	Salem-Spring Green-West Middleton 345-kV proxy for Large Access Project, includes rebuild Nelson Dewey-Spring Green-West Middleton 138/69 kV to double-circuit 345/138 kV		114	2013	3	Yes	Exhibit RS-26
Relieve overloads or low voltages under contingency	Rebuild/convert Chalk Hills-Chandler 69 kV to 138 kV operation	54	14	2013	2	Yes	Exhibit RS-3
T-D interconnection request	Construct new 69-kV line from South Lake Geneva to Lake Shore substation	3.2	3.2	2013	3	Yes	Exhibit RS-27
contingency	Construct new 138-kV line from Twin Lakes to Spring Valley	9	9	2013	3	Yes	Exhibit RS-30
Relieve overloads or low voltages under contingency	kV line	9	9	2013	3	Yes	Exhibit RS-14
Accommodate new generation	Construct an Oak Creek-Hale (Brookdale) 345-kV line installing 4 mi. new structures, converting 16.2 mi. of non-operative 230 kV and 5 mi. 138 kV	25.2	4	2013	5	Yes	Exhibit RS-21
contingency, access initiative	Construct West Middleton-North Madison 345 kV line	20	46.7	2014	3	Yes	Exhibit RS-33
Relieve overloads or low voltages under contingency, access initiative	Construct Fitzgerald-Omro Industrial 69-kV line	7	7	2015	1	Yes	Exhibit RS-12

Table RS-2 Environmental Screening Information - Lines Requiring New Right-of-Way

Nordic-	Randville 69-kV line rebuild	Exhibit RS-19
	General Description	New line
	Length (miles)	approximately 5 with 1 mile of rerouting
#1	Screening Area (Sq. mi length X width)	approximately 40
#2	Corridor Sharing Opportunities	Existing town roads and railroad corridor offer the best opportunities for corridor sharing.
#3	Public Lands	Copper Country State Forest
#4	Sensitive Resources	None identified
#5	Cultural Resources	None identified
	Miscellaneous	

Colum	bia-Rio 69-kV line	Exhibit RS-4
	General Description	New line
	Length (miles)	approximately 9
#1	Screening Area (Sq. mi length X width)	approximately 65
#2	Corridor Sharing Opportunities	State highways, railroads, and existing transmission line rights-of-way offer opportunities for corridor sharing.
#3	Public Lands	Wyona County Park, Middle Branch Duck Creek, Duck Creek Campground, local parks associated with Duck Creek, Lake Columbia, Wyona Lake, Jennings Creek, and boat launches associated with area lakes are found in the screening area.
#4	Sensitive Resources	Rock Run Oak Savanna State Natural Area, Jennings Creek State Wildlife Area, Rocky Run Creek State Fishery Area, Duck Creek, Wyona Lake, and Lake Columbia are located in the screening area.
#5	Cultural Resources	The Cultural Map of Wisconsin does not identify any sites within the screening area, however there are several cemeteries known in the screening area.
	Miscellaneous	Several airfields and landing strips are found in the screening area.

Table RS-2 Environmental Screening Information - Lines Requiring New Right-of-Way

Venus	-Metonga 115-kV line	Exhibit RS-31
***********************	General Description	New line - Interconnection with proposed Metonga distribution substation
	Length (miles)	approximately 10
#1	Screening Area (Sq. mi length X width)	approximately 69
#2		Highways 45, 8, and 32 are located in the screening area. Existing 115-kV transmission line in western 1/4 of screening area. Possible sharing with local electrical distribution lines and railroads.
#3		Nicolet National Forest, Veterans Memorial Park, Little Rice wildlife area, Wolf River tower site, Statewide natural areas, statewide spring ponds, and scattered forestlands.
#4		Numerous lakes, headwaters of the Wolf River, streams, wetlands, forestlands, are located in the screening area.
#5		Potawotomi Indian reservation and high potential for other historical and cultural resources in the screening area. Cultural Map of Wisconsin does not identify any sites within the screening area.
	Miscellaneous	

Brandon-Fairwater 69-kV line		Exhibit RS-2		
	General Description	New line		
	Length (miles)	4		
#1	Screening Area (Sq. mi.)	17.78		
#2	Corridor Sharing Opportunities	Existing road and railroad corridors offer the best corridor sharing opportunities.		
#3	Public Lands	Community Park, and WDNR Glacial Habitat Restoration Areas are located within the screening area.		
#4	Sensitive Resources	Grand River, West Branch Rock River, and unnamed streams are located within the screening area.		
#5	Cultural Resources	The WHS database identifies a number of architectural and historic sites, particularly within the Village of Brandon. Archaeological sites are identified in proximity to the waterways.		
	Miscellaneous	There is a low probability of encountering endangered resources.		

Table RS-2 Environmental Screening Information - Lines Requiring New Right-of-Way

West I	Darien-Southwest Delavan 138/69-kV line	Exhibit RS-32
		
	General Description	New line
	Length (miles)	approximately 3.0
#1	Screening Area (Sq. mi length X width)	approximately 16
#2	Corridor Sharing Opportunities	Federal highway, State and County roads, railroad corridor, and existing electrical distribution lines routes located within the screening corridor offer the best potential for corridor sharing.
#3	Public Lands	Turtle Creek Hunting Grounds
#4	Sensitive Resources	Turtle Creek Wildlife Area, streams, small lakes and wetlands.
#5	Cultural Resources	Clown Hall of Fame, Circus Colony, Wisconsin's First School for the Deaf Marker.
	Miscellaneous	

Jeffers	son-Lake Mills-Stony Brook 138-kV line	Exhibit RS-15
	General Description	New line
	Length (miles)	approximately 12
#1	Screening Area (Sq. mi length X width)	approximately. 78
#2	Corridor Sharing Opportunities	Several state and county highways, and portions of existing transmission rights of-way, pipelines, and active and abandoned railroad corridors are within the screening zone.
#3	Public Lands	Aztalan State Park, Lake Mills state wildlife area, Waterloo state wildlife area, Rock Lake County park, the Jefferson County Fairgrounds, and several local parks are located in the screening area.
#4	Sensitive Resources	Several Lakes (Rock, Bean, Marsh, and Mud), the Crawfish and Rock Rivers and their tributaries are located in the screening area. Bean Lake and Waterloo Prairie State, Snapper and Falville Prairie State Natural Areas are located near the screening area.
#5	Cultural Resources	Aztalan Museum and Aztalan State Park are identified on the Cultural Map of Wisconsin within the screening area.
	Miscellaneous	The Muck Farms Airport, Tesmer Field, and Ha-Rail Field are located in the screening area.

Table RS-2 Environmental Screening Information - Lines Requiring New Right-of-Way

Sprech	ner-Femrite 138-kV line	Exhibit RS-28
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	General Description	New line
	Length (miles)	approximately 2.6
#1	Screening Area (Sq. mi length X width)	approximately 8
#2	Corridor Sharing Opportunities	Existing transmission lines, railroad corridors, federal highways, and town roads offer the best opportunities for corridor sharing.
#3	Public Lands	None listed.
#4	Sensitive Resources	Legacy places lists the upper Yahara River Streams and Lakes, other streams and wetlands within screening area.
#5	Cultural Resources	Cultural Map of Wisconsin does not identify any sites within the screening area.
	Miscellaneous	

	Junction-Howards Grove-Charter Steel to uth #4 138-kV line	Exhibit RS-13
	General Description Length (miles)	New double circuit line to connect Plymouth # 4 Substation approximately 1.2
#1	Screening Area (Sq. mi length X width)	approximately 2.5
#2	Corridor Sharing Opportunities	State Highways 23 and 57 are located within the screening area as well as several county highways.
#3	Public Lands	None shown.
#4	Sensitive Resources	Sheboygan River, Mullet River, Otter Creek, scattered wetlands, some forested lands, and extensive agricultural lands are present in the screening area.
#5	Cultural Resources Miscellaneous	None shown.

Table RS-2 Environmental Screening Information - Lines Requiring New Right-of-Way

Southw	vest Ripon to the Ripon-Metomen 69-kV line	Exhibit RS-29
	General Description	New line
	Length (miles)	1.5
#1	Screening Area (Sq. mi.)	4
#2	Corridor Sharing Opportunities	County and local roads provide opportunities for corridor sharing.
#3	Public Lands	Barlow Park and Kiwanis Park are within the screening area.
#4	Sensitive Resources	Two unnamed streams and associated wetlands are located within the screening area.
#5	Cultural Resources	The WHS database identifies numerous architectural and historic sites within the City of Ripon.
	Miscellaneous	There is a low probability of encountering endangered resources.

	New line approximately 3.5
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ngth (miles)	approximately 3.5
	errin et al. et et al. et et al. e
reening Area (Sq. mi length X width)	approximately 22
	Federal highway, state and county roads, railroad corridor, and existing electrical distribution lines routes located within the screening area offer the best potential for corridor sharing.
blic Lands	Turtle Creek Hunting Grounds
nsitive Resources	Turtle Creek Wildlife Area, streams, small lakes and wetlands.
	Clown Hall of Fame, Circus Colony, Wisconsin's First School for the Deaf Marker.
scellaneous	
n It	lic Lands sitive Resources ural Resources

Table RS-2 Environmental Screening Information - Lines Requiring New Right-of-Way

Rubico	on-Hustisford 138-kV line	Exhibit RS-25
	General Description	New line
	Length (miles)	approximately 5
#1	Screening Area (Sq. mi length X width)	approximately 45
#2	Corridor Sharing Opportunities	State Highways 60 and 67 and County Highways EE and N are located within
#3	Public Lands	the screening area. No DNR managed lands or state natural areas are located in the screening area
#4	Sensitive Resources	Lake Sinissippi, Neosho Millpond, Rubicon River, Hepp Creek, and scattered wetlands and woodlots are found within the screening zone. Extensive agricultural lands are located in the screening area.
#5	Cultural Resources	Cultural Map of Wisconsin does not identify any sites within the screening area.
	Miscellaneous	

North	Madison-Waunakee 138-kV line	Exhibit RS-20
	General Description	New line
	Length (miles)	approximately 5
#1	Screening Area (Sq. mi length X width)	approximately 47
#2	Corridor Sharing Opportunities	Highway 113 and several county highways and local roads are located within the screening area.
#3	Public Lands	No DNR managed lands or state natural areas are located in the screening area
#4	Sensitive Resources	Sixmile Creek and various tributaries, isolated wetlands and woodlots are found within the screening area. Empire Prairie state natural area is located near the screening area.
#5	Cultural Resources	Cultural Map of Wisconsin does not identify any sites within the screening area.
	Miscellaneous	Extensive agricultural lands and rolling terrain.

Table RS-2 Environmental Screening Information - Lines Requiring New Right-of-Way

Cranb	erry-Conover 115-kV line	Exhibit RS-6
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	General Description	New line
	Length (miles)	approximately 11
#1	Screening Area (Sq. mi length X width)	approximately 74
#2	Corridor Sharing Opportunities	State Highways 32/45 and 17, county highways, local roads, existing electrical transmission and distribution lines and railroad corridors are present in the screening area.
#3	Public Lands	Chequamegon/ Nicolet National Forest, Northern Highland - American Legion State Forest, Eagle Lake Park.
#4	Sensitive Resources	Numerous lakes, streams, wetlands, and forested lands are found in the screening area.
#5	Cultural Resources	There is a high potential for historic and cultural resources within the screening area.
	Miscellaneous	Eagle River Union airport is located within the screening area.

South	Lake Geneva-White River 138-kV line	Exhibit RS-34
	General Description	New line
	Length (miles)	3
#1	Screening Area (Sq. mi.)	25.94
#2	Corridor Sharing Opportunities	United States Highway 12 and State Highway 120, along with other roads offer opportunities for corridor sharing, along with the existing transmission line Y-152.
#3	Public Lands	Big Foot Beach State Park and other WDNR owned lands are located within the screening area.
#4	Sensitive Resources	Lake Geneva, Lake Como, and a number of large wetland complexes are located within the screening area.
#5	Cultural Resources	The WHS database identifies archaeological and historic resources in the screening area, particularly located near Lake Geneva.
	Miscellaneous	There is a moderate probability on encountering endangered resources.

Table RS-2 Environmental Screening Information - Lines Requiring New Right-of-Way

Montro	se-Sun Valley-Oak Ridge 138-kV line	Exhibit RS-18
	General Description	New line
	Length (miles)	9
#1	Screening Area (Sq. mi.)	63.49
#2	Corridor Sharing Opportunities	Numerous county and local roads, and a recreational trail offer opportunities for corridor sharing.
#3	Public Lands	Nevin Hatchery, Brooklyn Wildlife Area, and a WDNR recreational trail are located within the screening area.
#4	Sensitive Resources	The Sugar River and associated wetlands, Story Creek, and other unnamed streams and wetlands are located within the screening area.
#5	Cultural Resources	The WHS database has identified architectural and historic sites within the screening area.
	Miscellaneous	There is a moderate probability on encountering endangered resources.

Clinto	nville-Werner West 138-kV line	Exhibit RS-17
	General Description	New line primarily on Morgan-Werner West structures
	Length (miles)	approximately 16
#1	Screening Area (Sq. mi length X width)	approximately 555
#2	Corridor Sharing Opportunities	Several state highways, county highways, existing transmission rights-of-way, pipelines, and railroads within the screening zone.
#3	Public Lands	Several state wildlife areas (Mukwa, Navarino, Hortonville Bog, Deer Creek), Wiouwash State Trail, and parks including Cedar County Park, Walter A. Olen, Shiocton Lake, Lindsay, Pfeifer, Hatten, Abrahams Parks, as well as numerous fish, wildlife, habitat and natural areas along the Wolf River throughout screening zone.
#4	Sensitive Resources	The Wolf River, Embarrass River, Bear Creek, Maple Creek, Cedar Creek, Pigeon lake and wetlands along with forested lands and agricultural land are in the screening area.
#5	Cultural Resources	High potential for historic and cultural resources within screening zone. Numerous cemeteries.
	Miscellaneous	Clintonville Municipal Airport.

Table RS-2 Environmental Screening Information - Lines Requiring New Right-of-Way

Morgan	n-Werner West 345-kV line	Exhibit RS-17
	General Description	New line
	Length (miles)	approximately 47
#1	Screening Area (Sq. mi length X width)	approximately 555
#2	Corridor Sharing Opportunities	Several state highways, county highways, existing transmission rights-of-way,
		pipelines, and railroads within the screening zone.
#3	Public Lands	Several State Wildlife areas (Mukwa, Navarino, Hortonville Bog, Deer Creek),
		Shawano Lake Fishery Area, the Wiouwash, Nicolet, and Mountain Bay State
		Trails, and parks including Cedar County Park, Walter A. Olen, Shiocton Lake,
		Lindsay, Pfeifer, Hatten, Abrahams Parks, as well as numerous fish, wildlife,
		habitat and natural areas along the Wolf River throughout screening zone.
#4	Sensitive Resources	The Wolf River, Embarrass River, Oconto River, Bear Creek, Maple Creek,
		Cedar Creek, several lakes, including Pigeon lake, Grass Lake, Pine Lake,
		Shawano Lake, Jung Hemlock-Beech Forest State Natural Area, and wetlands
		along with forested lands and agricultural land are in the screening area.
#5	Cultural Resources	High potential for historic and cultural resources within screening zone.
		Numerous cemeteries.
	Miscellaneous	Clintonville Municipal Airport.

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	General Description	Connect existing line to Northwest Beloit Substation
	Length (miles)	approximately 1.0
#1	Screening Area (Sq. mi length X width)	approximately 1.5
#2	Corridor Sharing Opportunities	Existing road and railroad corridors. Possible sharing with local electrical distribution lines.
#3	Public Lands	None shown.
#4	Sensitive Resources	Unnamed tributary to Raccoon Creek
#5	Cultural Resources	Cultural Map of Wisconsin does not identify any sites within the screening area
	Miscellaneous	

Table RS-2 Environmental Screening Information - Lines Requiring New Right-of-Way

Femrit	e/Royster-AGA 69-kV line	Exhibit RS-11
	General Description	New line
	Length (miles)	approximately 0.3
#1	Screening Area (Sq. mi length X width)	approximately 0.2
#2	Corridor Sharing Opportunities	Local roads offer some opportunities for corridor sharing.
#3	Public Lands	The Femrite-Royster line is adjacent to the Glacial Drumlin Trail.
#4	Sensitive Resources	Woodlot located in industrial park.
#5	Cultural Resources	Cultural Map of Wisconsin does not identify any sites within the screening area.
	Miscellaneous	Primarily commercial/industrial park land uses.

Conco	rd-Bark River 345-kV line	Exhibit RS-5
	General Description Length (miles)	New line approximately 17 total, 10 of new right-of-way
#1	Screening Area (Sq. mi length X width)	approximately 107
#2	Corridor Sharing Opportunities	Several state and county highways, existing transmission rights-of-way, pipelines, and railroad corridors are within the screening zone.
#3	Public Lands	State public hunting grounds, Monches County Park and other undeveloped county parklands, and several community parks are located within the screening area.
#4	Sensitive Resources	Keesus Lake Marshland Preservation area, Ashippun Lake access and wildlife area, Keesus Lake, North Lake, Beaver Lake, Pine Lake, Cornell Lake, Moose Lake, Okauchee Tamarack Lake, Ashippun Lake, Lac La Belle, and several streams including Bark River, Oconomowoc River, Mason Creek, Ashippun River, Rock River and tributaries are all located in the screening area.
#5	Cultural Resources	The Marantha Baptist Bible College, the Octagon House, Northwestern College and the Main Street Commercial District in Watertown and the East Capitol Drive Historic District in Hartland are identified on the Cultural Map of Wisconsin within the screening area.
	Miscellaneous	The Watertown Municipal Airport and the Oconomowoc Landing Strip are located in the screening area.

Table RS-2 Environmental Screening Information - Lines Requiring New Right-of-Way

Evans	ville-Brooklyn 69-kV line	Exhibit RS-10
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	General Description	New line
	Length (miles)	8
#1	Screening Area (Sq. mi.)	55.08
#2	Corridor Sharing Opportunities	United States Highway 14, numerous county and local roads, along with a railroad corridor, offer opportunities for corridor sharing.
#3	Public Lands	Evansville Wildlife Area
#4	Sensitive Resources	Allen Creek and Tributaries, and a tributary of Badfish Creek are located within the screening area.
#5	Cultural Resources	The WHS database identifies architectural and historic sites, particularly concentrated within the Village of Brooklyn and the City of Evansville. Two archaeological sites are identified within the screening area.
	Miscellaneous	There is a moderate probability of encountering endangered resources.

Rockda	ale-West Middleton 345-kV line	Exhibit RS-23
	General Description Length (miles)	345-kV System Tie approximately 28
#1	Screening Area (Sq. mi length X width)	approximately 290
#2	Corridor Sharing Opportunities	New tie from the 345-kV system to relieve system overloads in the Madison area. Additional rights-of-way will be required. State/county roads and existing transmission lines located within the screening area offer the best possibility of corridor sharing.
#3	Public Lands	Numerous city, county, and state parks including Indian Lake, LaFollette, and Festbe County Parks, Governor Nelson and Lake Kegonsa State Parks, portions of the Glacial Drumlin State Trail, and several state fishery and wildlife areas are located within the screening area.
#4	Sensitive Resources	Bean Lake, Red Cedar Lake, and the Hook Lake/Grass Lake state natural areas, and much of the Yahara River drainage basin are found within the screening area
#5	Cultural Resources	The Koshkonong Norwegian Settlement, Bernard-Hoover Boar House, Robert M. LaFollyette House, Gilmore House, Olin House, the State Capital, several effigy mound sites, numerous museums, and the Langdon Street, Sherman Avenue, Third Lake Ridge, and University Heights Historic Districts are located within the screening area.
	Miscellaneous	

Table RS-2 Environmental Screening Information - Lines Requiring New Right-of-Way

Defore	st/Token Creek-Yahara 69-kV line	Exhibit RS-7
	General Description	New line
	Length (miles)	approximately 1.0
#1	Screening Area (Sq. mi length X width)	approximately 1.7
#2	Corridor Sharing Opportunities	Highways 19 and 51 are located in the screening area.
#3	Public Lands	Cherokee Marsh fishery area is located near the screening area.
#4	Sensitive Resources	Cherokee Marsh and Yahara River are located near the screening area.
#5	Cultural Resources	Cultural Map of Wisconsin does not identify any sites within the screening area.
	Miscellaneous	Commercial and industrial land uses are common.

Lake D	elton-Birchwood 138-kV line	Exhibit RS-16
	General Description	New line
#1	• ,	approximately 5
	, ,	approximately 41
#2	9 1,	Interstate Highway 90/94, United States Highway 12, State Highway 23, several county highways and local electrical distribution lines.
#3		Mirror Lake State Park, Dell Creek wildlife area, Hulburt Creek Woods State Natural Area and Hulburt Creek fishery area.
#4	Sensitive Resources	State Natural Areas and State Parks, Dell Creek, Harrison Creek, Lake Delton, Mirror Lake, Lake Blass, International Crane Foundation are located within the screening area.
#5		Cultural Map of Wisconsin identifies Dawn Manor, Seth Peterson cottage, International Crane Foundation, and the H.H. Bennett Studio within the screening area.
		Ho Chunk tribal lands and the Baraboo Dells Airport are located in the screening area.

Table RS-2 Environmental Screening Information - Lines Requiring New Right-of-Way

Dunn F	Road-Egg Harbor 69-kV line	Exhibit RS-8
	General Description	Construct a second 69-kV line
	Length (miles)	12.66
#1	Screening Area (Sq. mi.)	82.7
#2	Corridor Sharing Opportunities	State Highway 42 and existing transmission line X-24A provide the best opportunities for corridor sharing, along with county and local roads.
#3	Public Lands	None identified
#4	Sensitive Resources	The screening area is adjacent to Lake Michigan.
#5	Cultural Resources	The WHS database identifies several architectural and historic sites within the screening area, many are located near State Highway 42.
	Miscellaneous	There is a high probability of encountering endangered resources.

Eden-M	/luscoda-Richland Center 69-kV line	Exhibit RS-9
	General Description	New line
	Length (miles)	approximately 25
#1	Screening Area (Sq. mi length X width)	approximately 234
#2	Corridor Sharing Opportunities	Railroads, existing transmission lines, and State/United States Highways offer corridor sharing potential.
#3	Public Lands	Blackhawk Lake Recreation area, Pine River public hunting grounds, and Big Spring Fishery area, and other public lands along the Wisconsin River are located in the screening area.
#4	Sensitive Resources	Wisconsin River, Lower Wisconsin State Riverway, Southwest Wisconsin Driftless area topography, Big Spring Fishery area, Pine River Public Hunting Grounds, Blackhawk Lake Recreation area, Lower Wisconsin State Wildlife Area, Blue River Sand Barrens State Natural Area, Avoca Prairie Savanna State Natural Area, and Orion Mussel Bed State Natural Area are located in the screening area.
#5	Cultural Resources	Court Street Commercial Historic District, Birthplace of GTE, Krouskop Park, AD German Warehouse, Eagle Effigy Mounds, proposed Ho-Chunk Cultural Park, Dr. Bertha E. Reynolds Memorial, Rural Electrification Marker are shown on the Cultural map of Wisconsin.
	Miscellaneous	Pierick Landing Strip

Table RS-2 Environmental Screening Information - Lines Requiring New Right-of-Way

Salem-	Spring Green-West Middleton 345-kV line	Exhibit RS-26
	, ,	
	General Description	New line - Large Access Project
	Length (miles)	approximately 114
#1	Screening Area (Sq. mi length X width)	approximately 2480
#2	Corridor Sharing Opportunities	Numerous federal, state, and county highways, existing transmission lines,
		railroad corridors, and town roads offer the best opportunities for corridor
		sharing.
#3	Public Lands	Nelson Dewey State Park, Governor Dodge State Park, Tower Hill State Park,
		Bluemounds State Park, Blackhawk Lake Recreational Area, Turkey River
		Mounds State Park (IA), White Pine Hollow State Forest Preserve (IA), Lower
		Wisconsin State Riverway, numerous county parks and other public lands are scattered throughout the screening area.
#4	Sensitive Resources	Upper Mississippi River National Wildlife and Fish Refuge, Lower Wisconsin
#4	Sensitive resources	State Riverway, numerous Wisconsin State Natural Areas, several State
		Preserves and recreational areas, The Mississippi and Wisconsin Rivers and
		their tributaries, and various other wetlands, lakes and streams are located
		within the screening area.
#5	Cultural Resources	The Cultural Map of Wisconsin identifies numerous cultural resources in the
		screening area. The potential for encountering cultural and historic resources
		is high in the screening area.
	Miscellaneous	Principal ecological landscapes include the Southwest Savanna, Western
		Coulee and Ridges, Central Sand Plains, and Central Sand Hills. The western
		portions of the screening area are generally located in Wisconsin's Driftless
		area.

Table RS-2 Environmental Screening Information - Lines Requiring New Right-of-Way

Chalk	Hills-Chandler 69 kV conversion to 138 kV	Exhibit RS-3
	General Description	Rebuild/convert to 138-kV operation
	Length (miles)	54
#1	Screening Area (Sq. mi.)	87.54
#2	Corridor Sharing Opportunities	United States Highway 2, numerous county and local roads, and railroad corridors provide opportunities for corridor sharing.
#3	Public Lands	Escanaba River State Forest, and other state owned land along RR corridor.
#4	Sensitive Resources	Numerous wetlands
#5	Cultural Resources	None identified
	Miscellaneous	There is a moderate probability of encountering endangered resources.

South	Lake Geneva-Lake Shore 69-kV line	Exhibit RS-27
		_
**********************	General Description	New line
	Length (miles)	3.2
#1	Screening Area (Sq. mi.)	13.76
#2	Corridor Sharing Opportunities	Existing roadways offer the best opportunities for corridor sharing.
#3	Public Lands	Big Foot Beach State Park is located in the screening area.
#4	Sensitive Resources	Lake Geneva, and a few large wetland complexes.
#5	Cultural Resources	The WHS database identifies a few archaeological and historic sites near Lake
		Geneva.
	Miscellaneous	There is a moderate probability of encountering endangered resources.

Table RS-2 Environmental Screening Information - Lines Requiring New Right-of-Way

Twin L	akes-Spring Valley 138-kV line	Exhibit RS-30
	General Description	New line
	Length (miles)	approximately 9
#1	Screening Area (Sq. mi length X width)	approximately 64
#2	Corridor Sharing Opportunities	Several Kenosha County highways and a railroad corridor are located within the screening area.
#3	Public Lands	Silver Lake and Fox River Parks and New Munster State Wildlife area are located in the screening area.
#4	Sensitive Resources	The Fox River and tributaries and several lakes are located within the screening area. Peat Lake, Silver Lake Bog, and New Munster Bog Island State Natural Areas are located in the screening area. The Elizabeth Lake wetlands and Southeast Prairie Pothole areas are located in or near the screening area.
#5	Cultural Resources	No locations of cultural interest are identified on the Cultural Map of Wisconsin within the screening area.
	Miscellaneous	Westosha and Camp Lake Landing Strips

Horico	n-East Beaver Dam 138-kV line	Exhibit RS-14
	General Description	New line
	Length (miles)	approximately 9
#1	Screening Area (Sq. mi length X width)	approximately 65
#2	Corridor Sharing Opportunities	Highway 33, County highways, and a railroad right-of-way offer possible
		sharing opportunities.
#3	Public Lands	Portions of Horicon Marsh and Shaw Marsh wildlife areas and the Wild Goose
		Trail are within the screening area.
#4	Sensitive Resources	Horicon and Shaw Marsh, Rock River, Pratt Creek, Schulz Creek, Crystal
		Creek, Park Creek and Beaver Dam River are located in the screening area.
#5	Cultural Resources	Cultural Map of Wisconsin does not identify any sites within the screening area.
	Miscellaneous	

Table RS-2 Environmental Screening Information - Lines Requiring New Right-of-Way

Oak Cr	reek-Hale (Brookdale) 345-kV line	Exhibit RS-21
	•	New transmission line segments along with conversion of 16 mile 138-kV segment to 345 kV.
	Length (miles)	approximately 24 total, 4 of new right-of-way
#1	Screening Area (Sq. mi length X width)	approximately 200
#2	9 11	Several state and county roads and existing 138, 230, and 345-kV line routes exist in the screening area.
#3	Public Lands	Racine and Milwaukee County Parkland, Root River Parkway, Whitnall Park.
#4		Root River and tributaries, Big Muskego Lake, State Natural Areas (Gravel Pit Woods, Caddy Vista Woods, Stone Woods, County Line Lowland Woods, and a few locally significant areas identified in a SEWRPC report.
#5	Cultural Resources	The Ben Hunt Cabin is identified in the screening area on the Cultural Map of Wisconsin.
	Miscellaneous	Some additional right-of-way needed, Hales Corners Airport.

West N	Middleton-North Madison 345-kV line	Exhibit RS-33
	General Description	New line
	Length (miles)	approximately 20
#1	Screening Area (Sq. mi length X width)	approximately 42
#2	Corridor Sharing Opportunities	United States Highways 12 and 14, State Highways 113 and 19, several county highways and local electrical distribution lines offer possible sharing opportunities.
#3	Public Lands	Lodi Marsh wildlife area, county and local parks.
#4	Sensitive Resources	Pheasant Branch, Black Earth Creek, Halfway Prairie Creek, Sixmile Creek, tributaries to the Yahara River, Brandenburg Lake, Lodi Marsh State Natural Area.
#5	Cultural Resources	Cultural Map of Wisconsin does not identify any sites within the screening area.
	Miscellaneous	Morey Airport

Table RS-2 Environmental Screening Information - Lines Requiring New Right-of-Way

Fitzgerald-Omro Industrial 69-kV line		Exhibit RS-12
**********************	General Description	New line
	Length (miles)	approximately 6
#1	Screening Area (Sq. mi length X width)	approximately 49
#2	Corridor Sharing Opportunities	State highways and existing transmission lines offer corridor sharing opportunities.
#3	Public Lands	Lake Butte des Morts boat landings, Tower Park, Stearn's Park, Omro Ball Park, and Waukau Creek Nature Preserve are located in the screening area.
#4	Sensitive Resources	Fox River, Waukau Creek Nature Preserve, Spring Brook.
#5	Cultural Resources	The Cultural Map of Wisconsin does not identify any sites within the screening area, however there are several cemeteries known in the screening area.
	Miscellaneous	Skydive Adventure Airport

NOTES:

#1	Screening Area Width:	For lines 0-5 miles long, screening area width equals length of segment: for lines 5-15 miles long, screening area width equals 5 miles; for lines > 15 miles
		long, screening area width equals 30% of line length.
#2	Corridor Sharing Opportunities:	Identify dominant corridor types.
#3	Public Lands:	Identify properties by name.
#4	Sensitive Resources:	List major stream crossings, significant topographic features, designated
		natural areas, etc.
#5	Cultural Resources:	List resources shown on the statewide cultural resources map.

Figure RS-1

Siting Process for Identifying New Electric Transmission Corridors

Define Project Study Area

ATC first round of open houses

Define opportunities within project study area

Define and map sensitivities within project study area

Develop composite map of opportunities and sensitivities

Define potential siting corridors based on opportunities and sensitivities

ATC second round of open houses

Analyze and refine corridors

Select preliminary routes

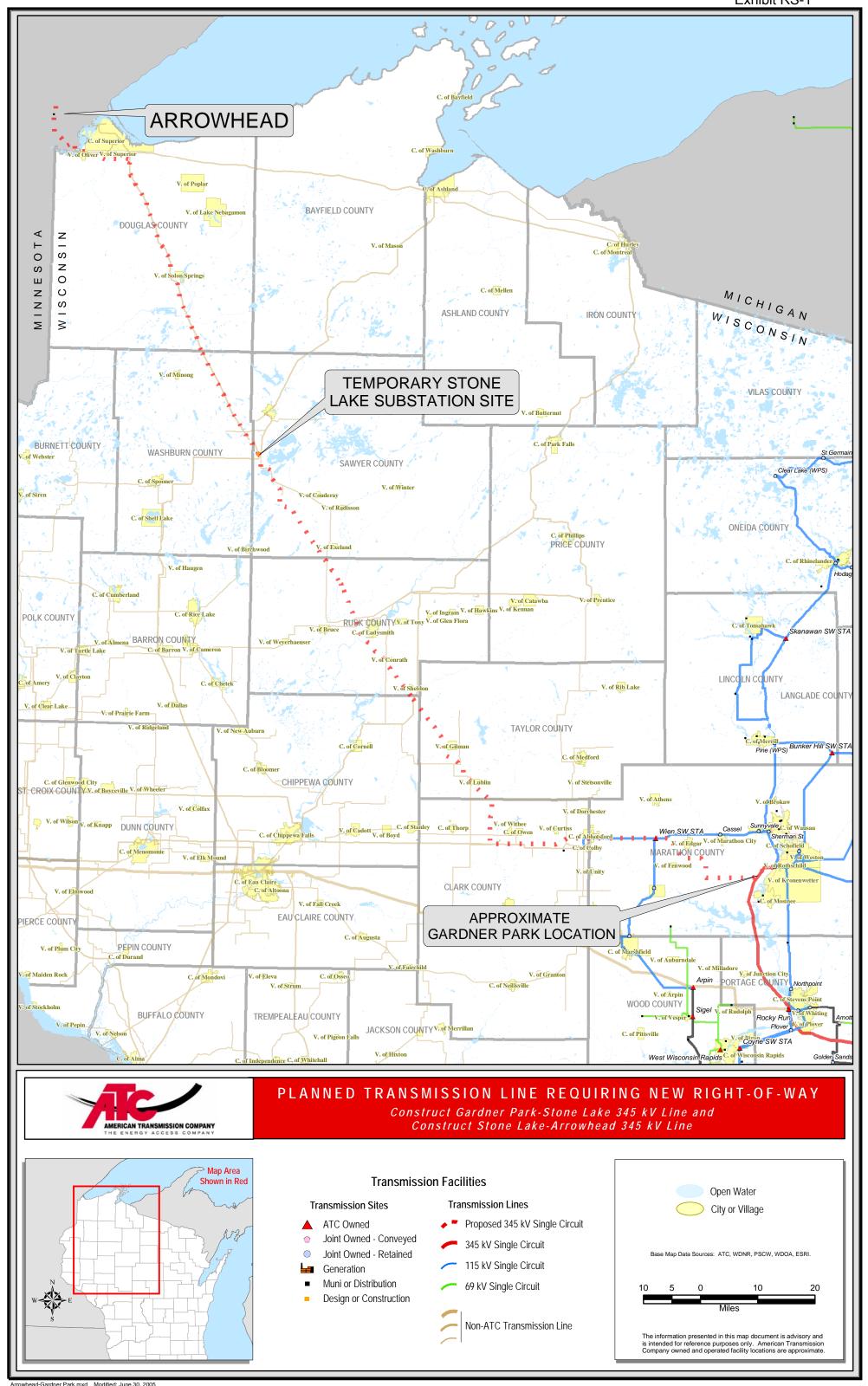
ATC third round of open houses

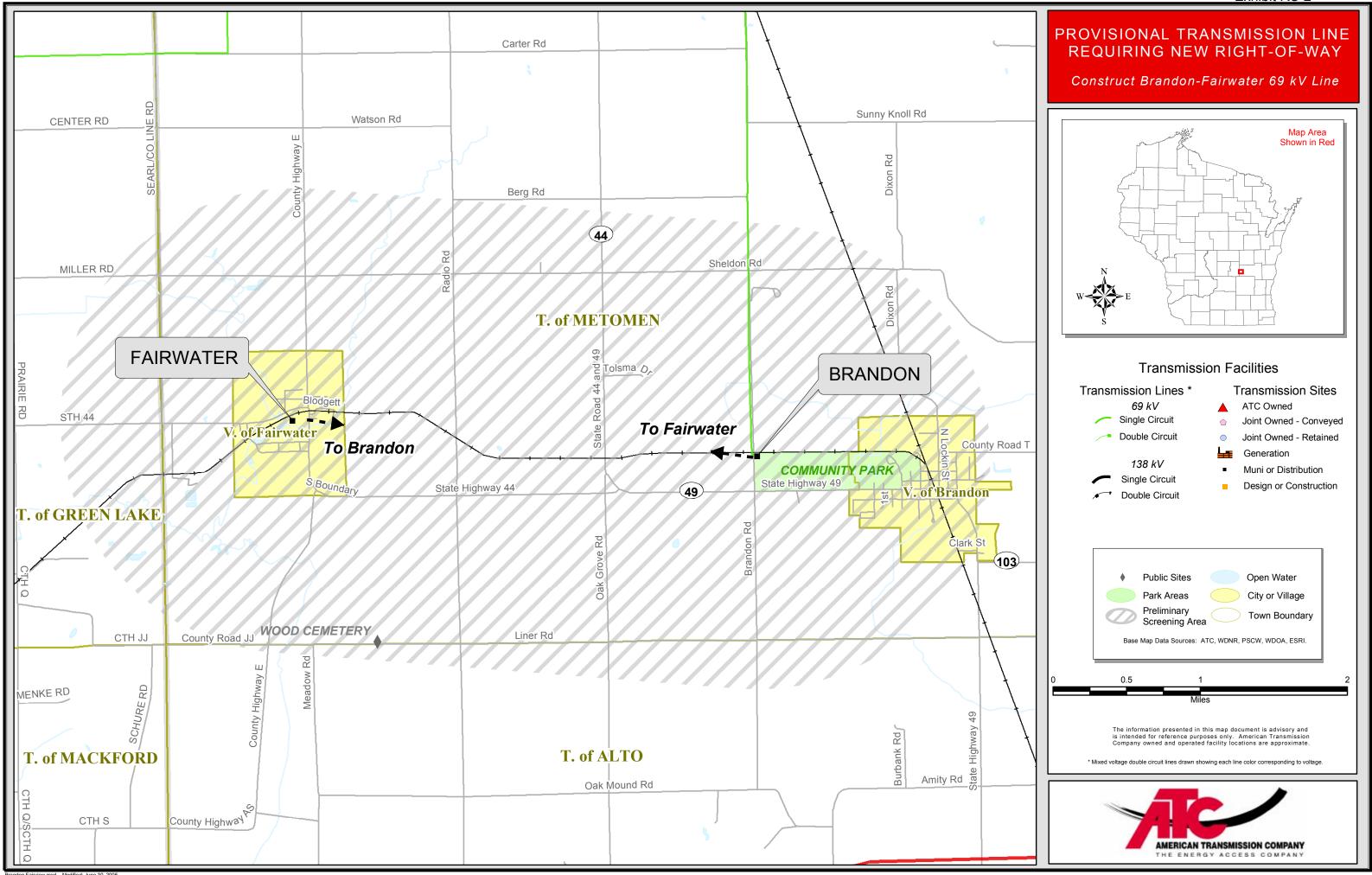
Evaluate preliminary routes

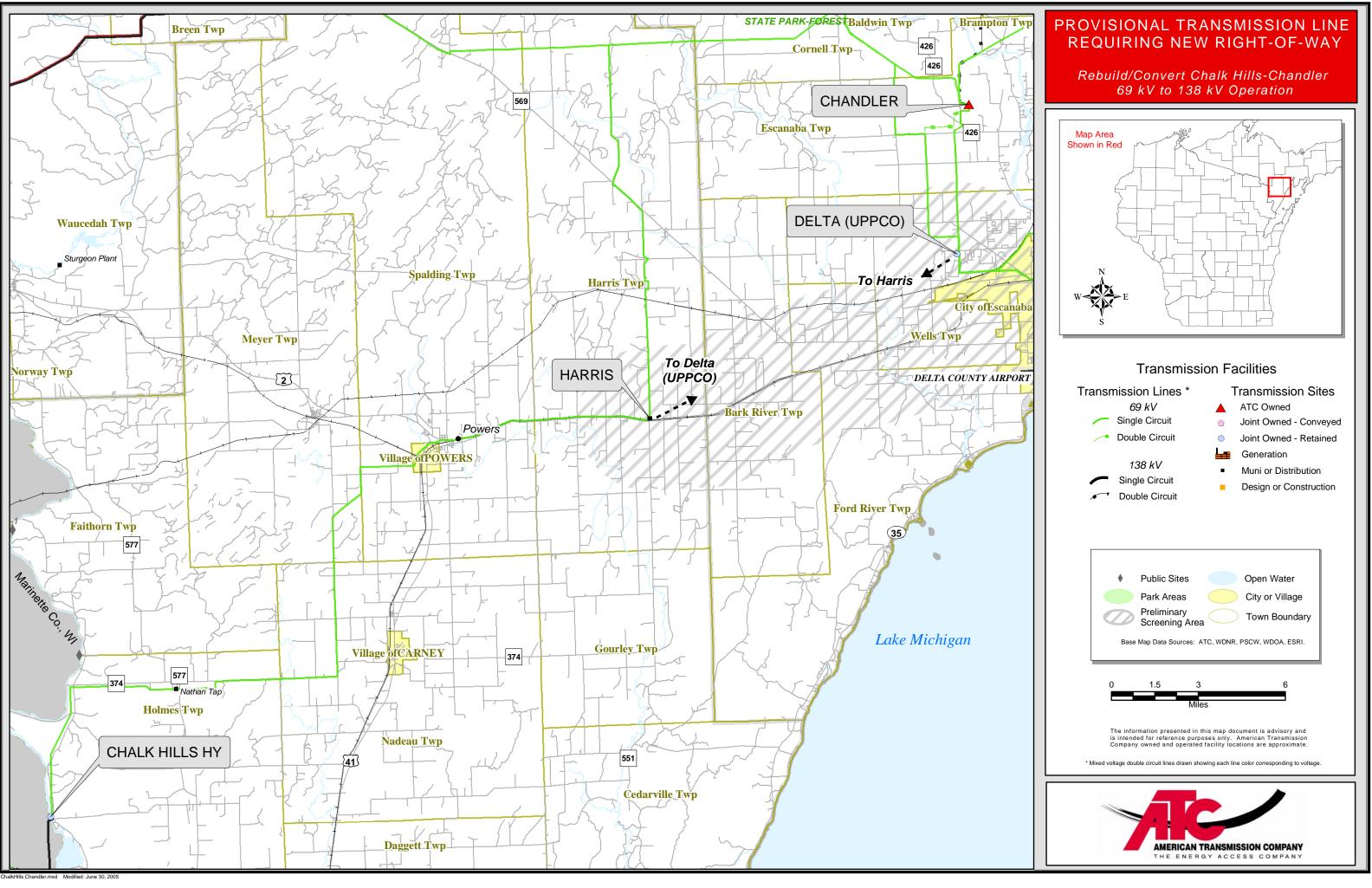
Select and map preferred and alternate routes

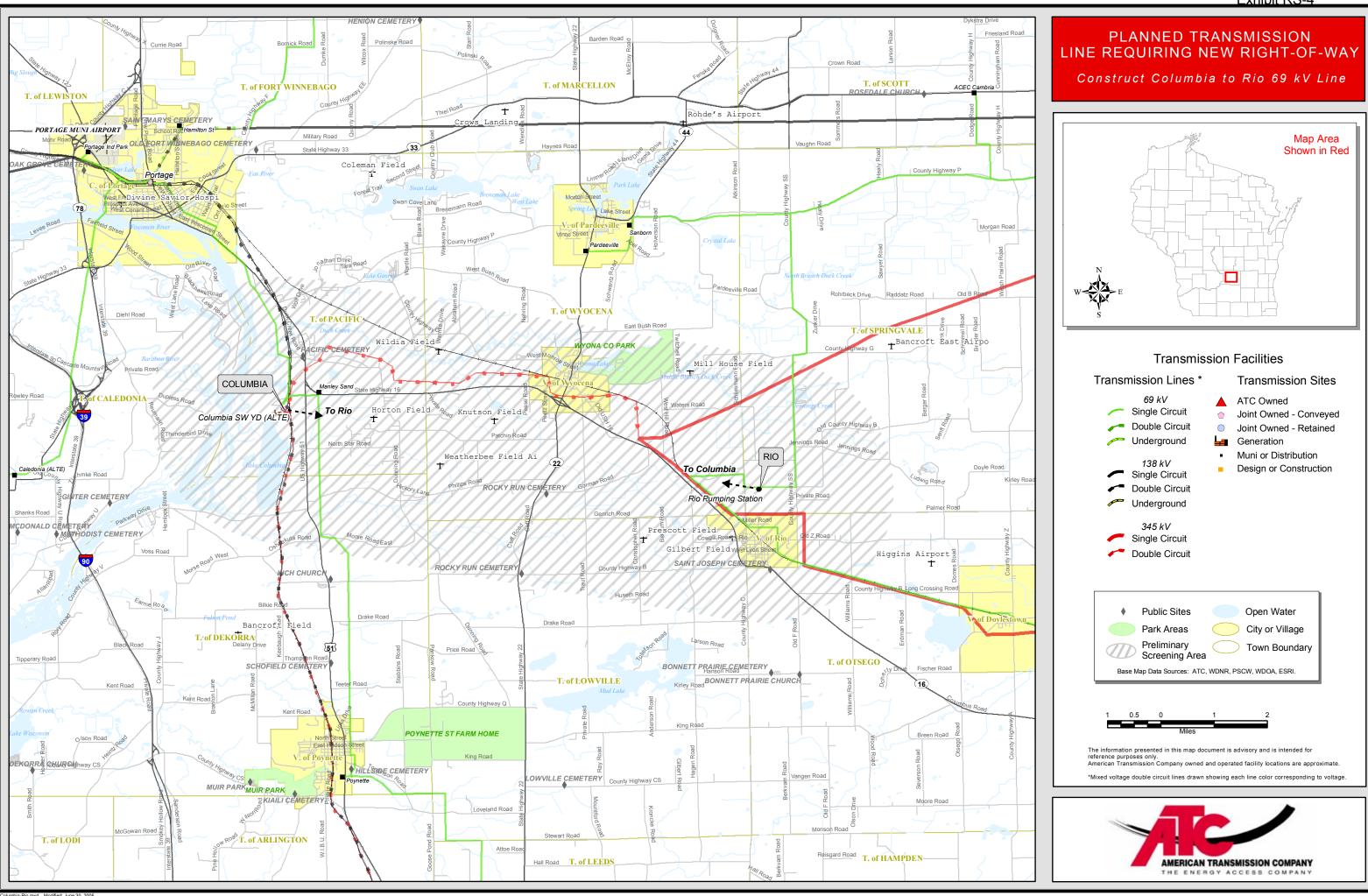
Conduct environmental characterization of routes

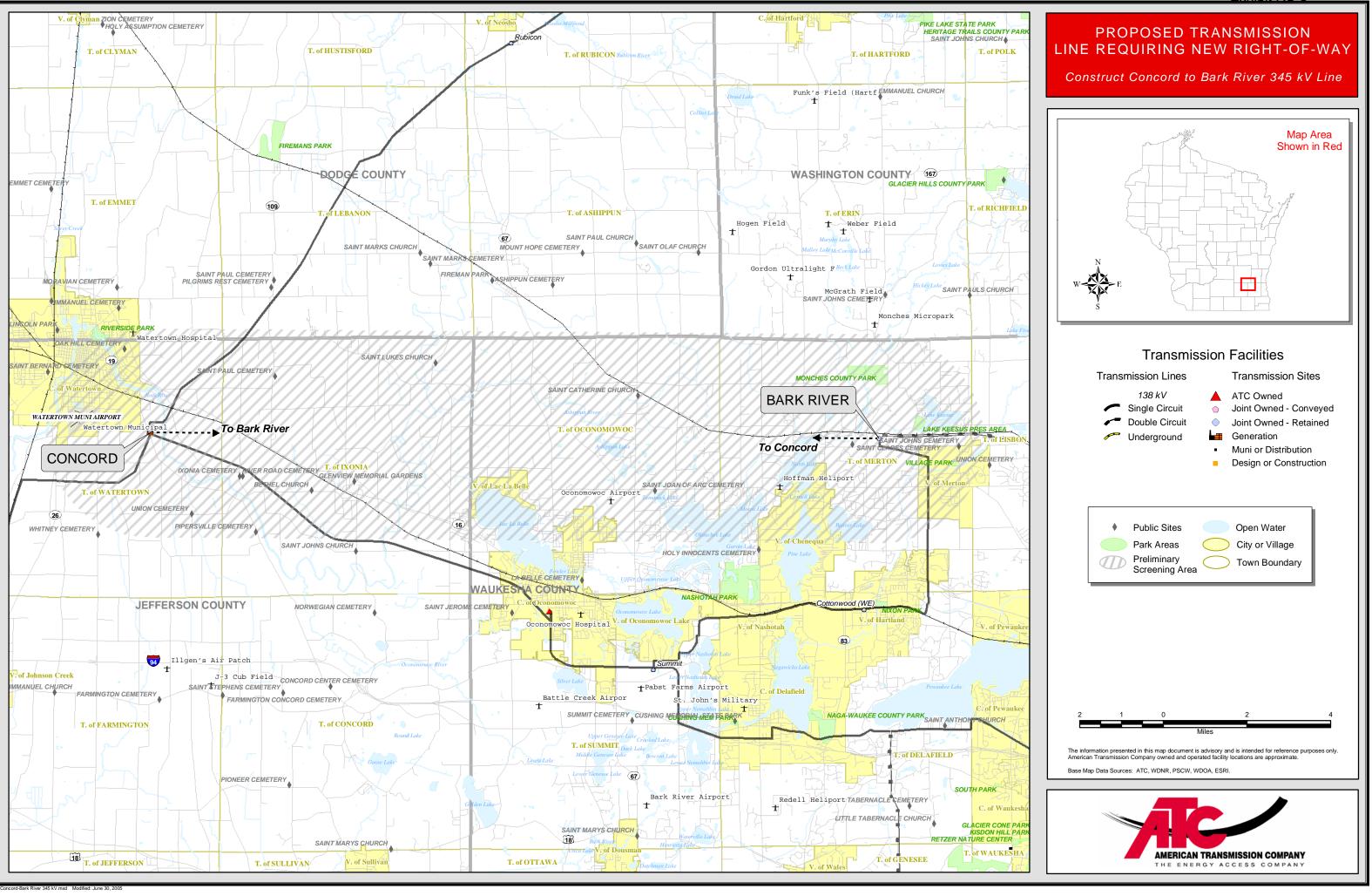


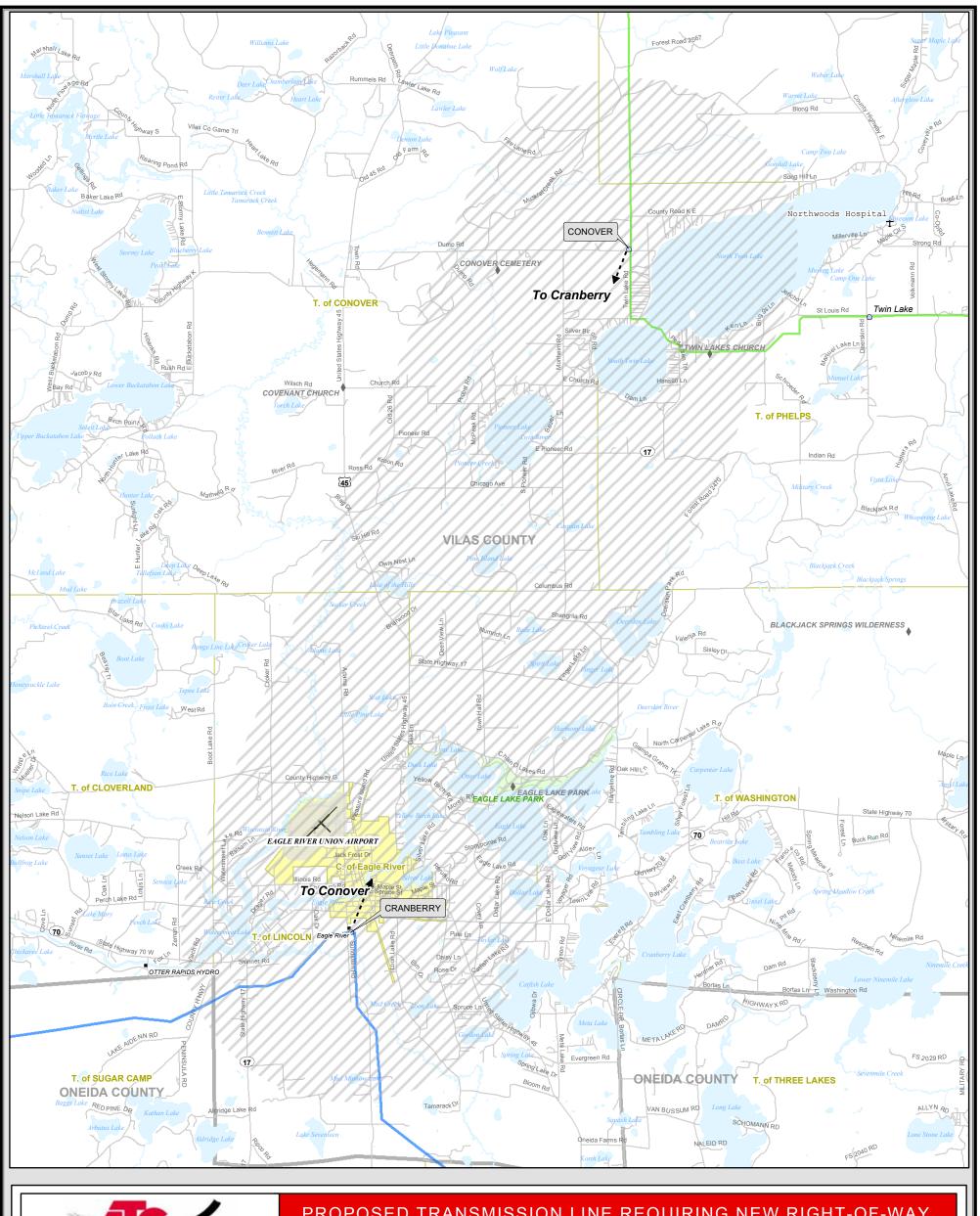


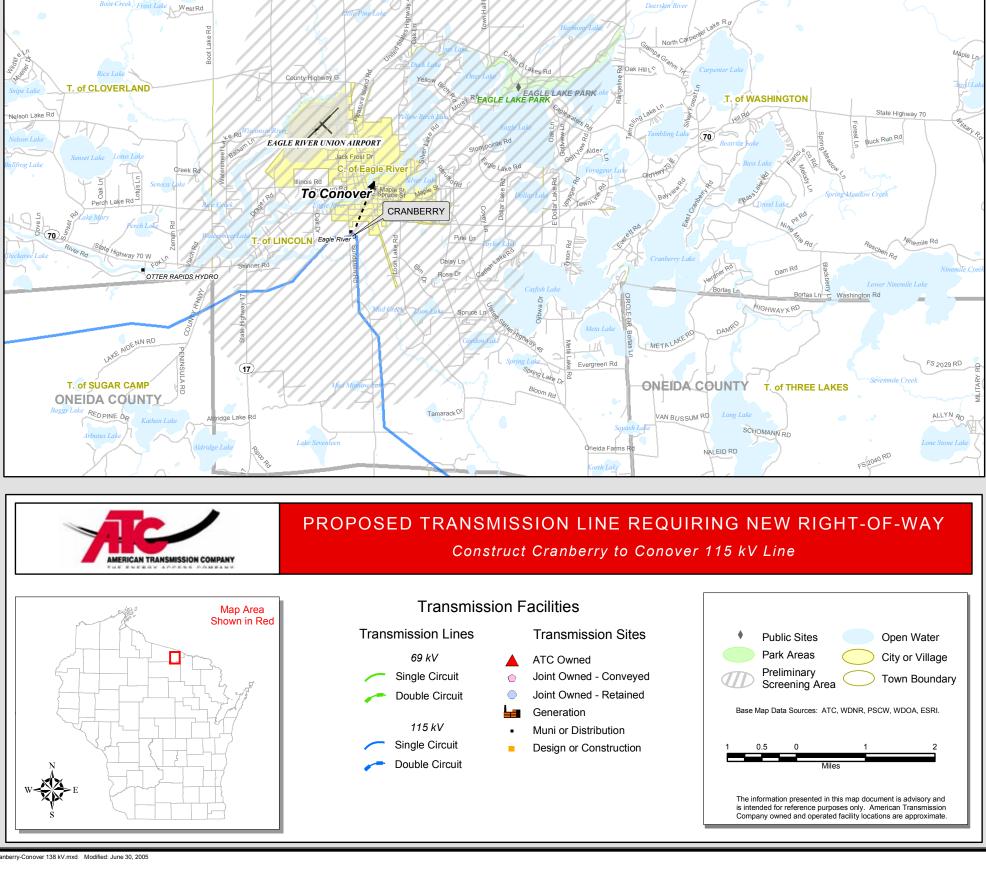


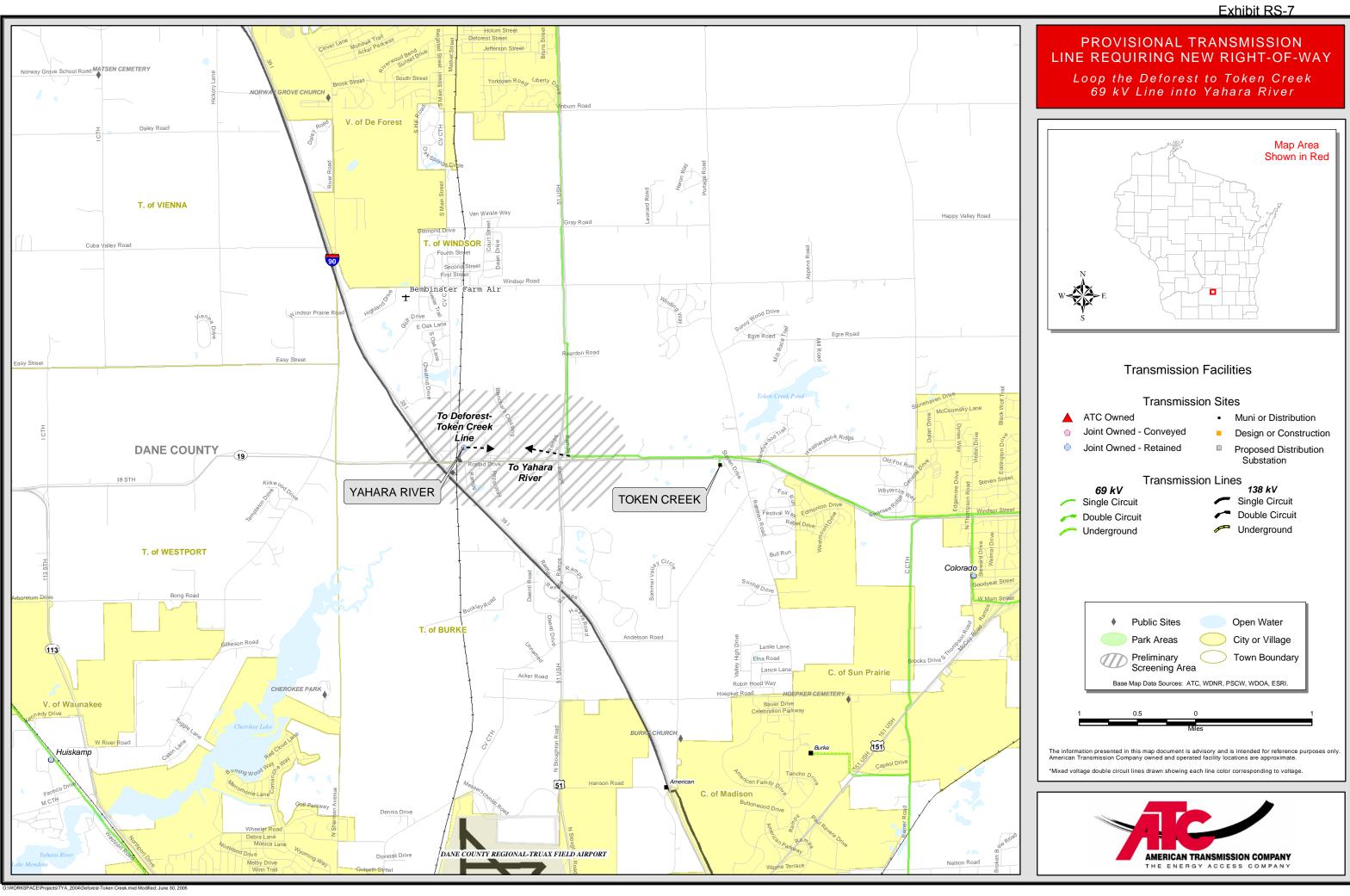


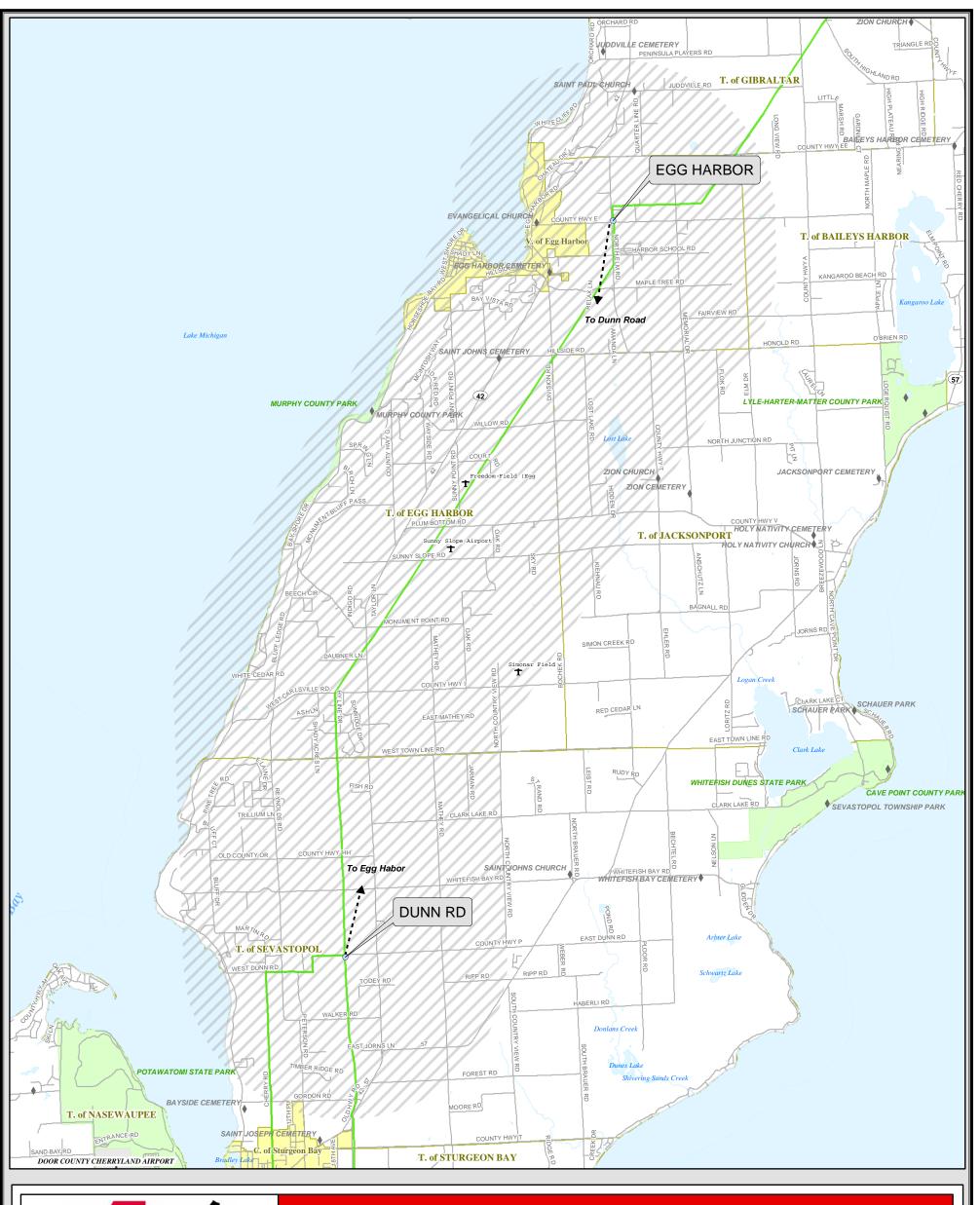


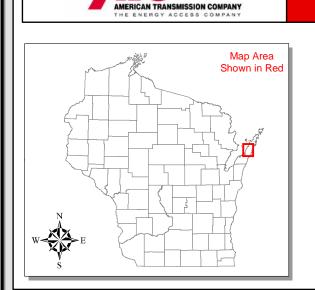












PROPOSED TRANSMISSION LINE REQUIRING NEW RIGHT-OF-WAY

Construct a Second Dunn Rd-Egg Harbor 69 kV Line

Transmission Facilities

Transmission Lines *

69 kV

Single Circuit

Double Circuit

138 kV
Single Circuit

Double Circuit

Transmission Sites

ATC Owned

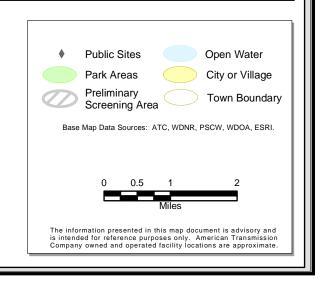
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Joint Owned - Retained

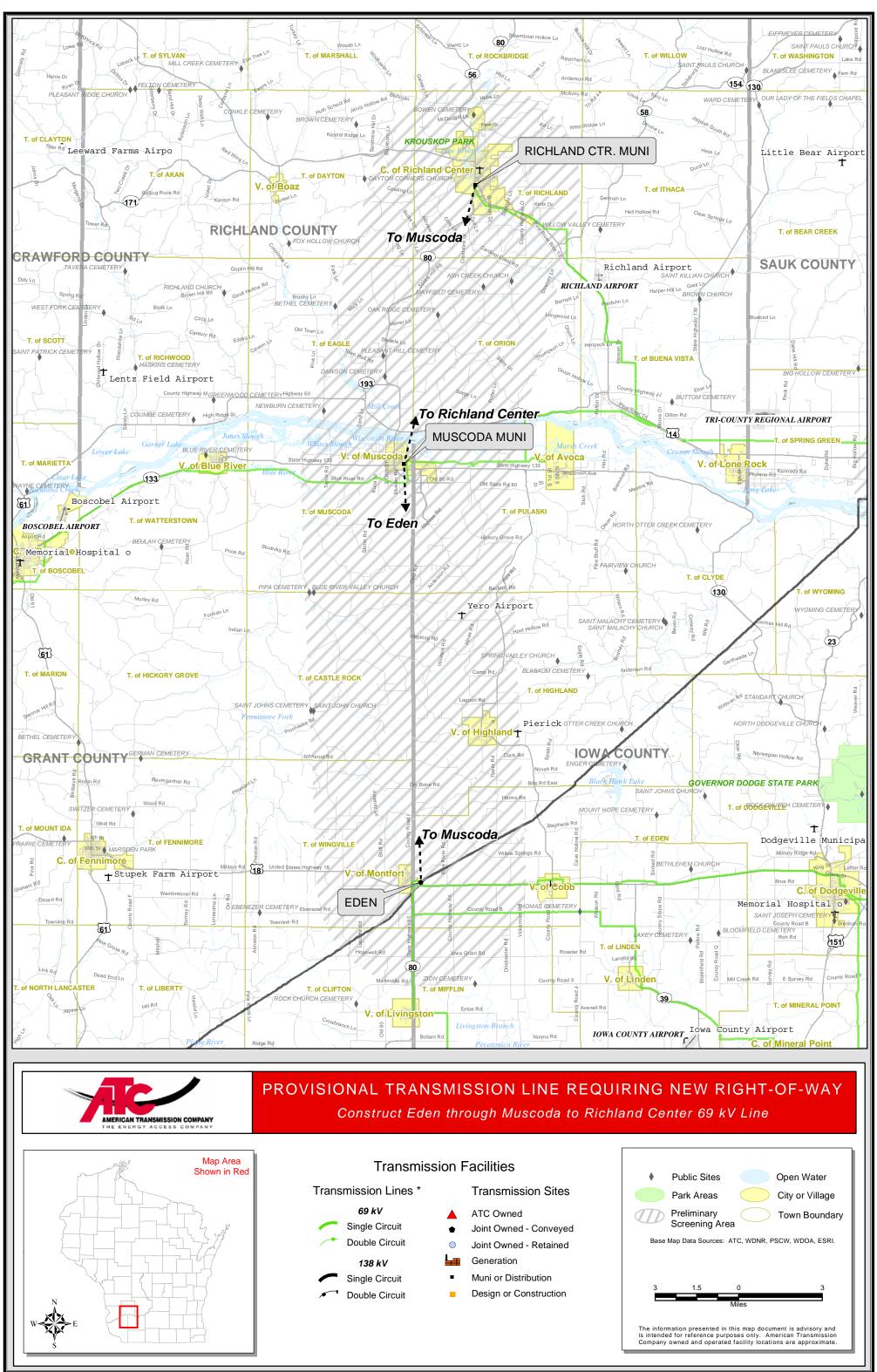
Generation

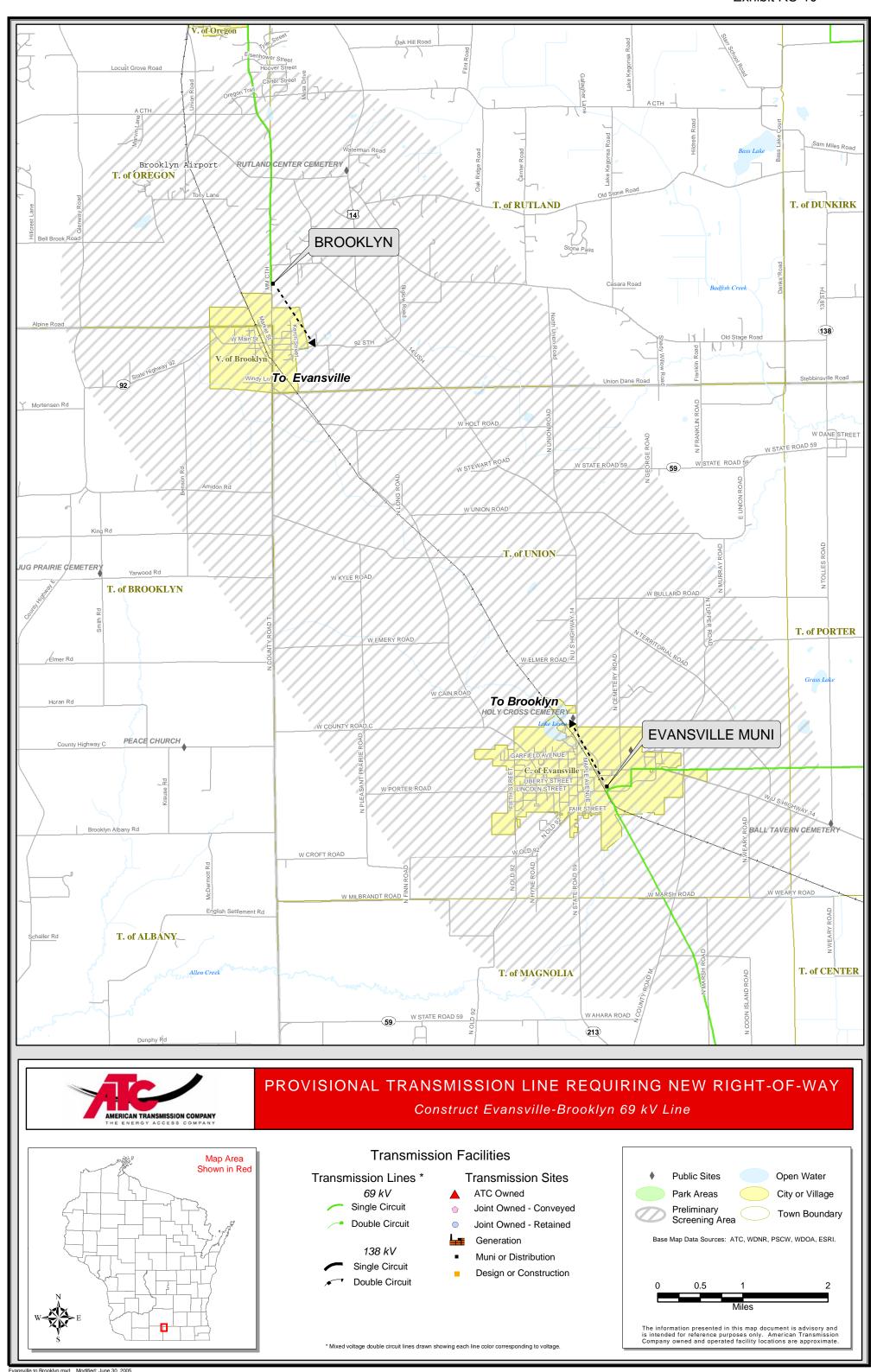
Muni or Distribution

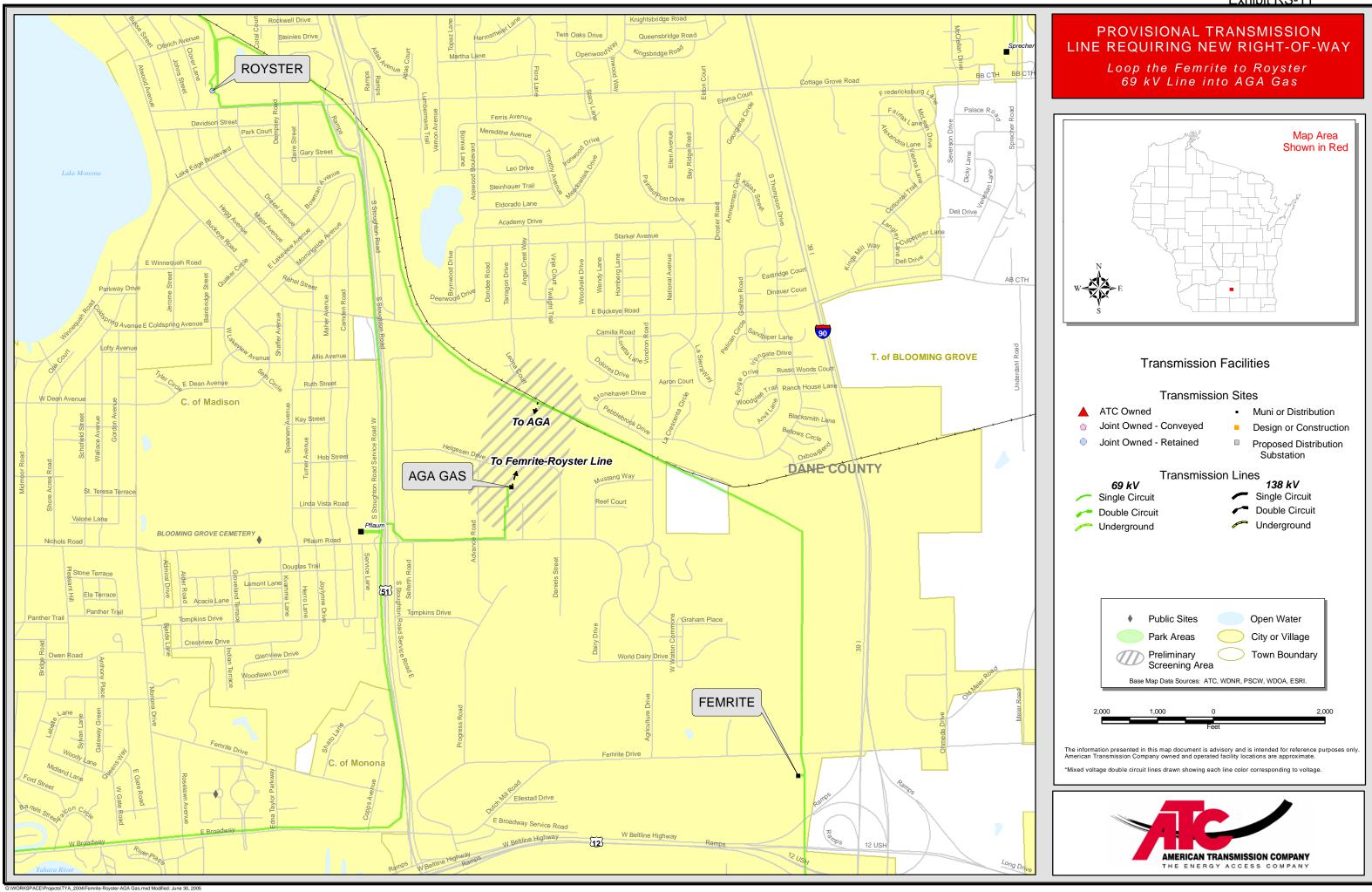
Design or Construction

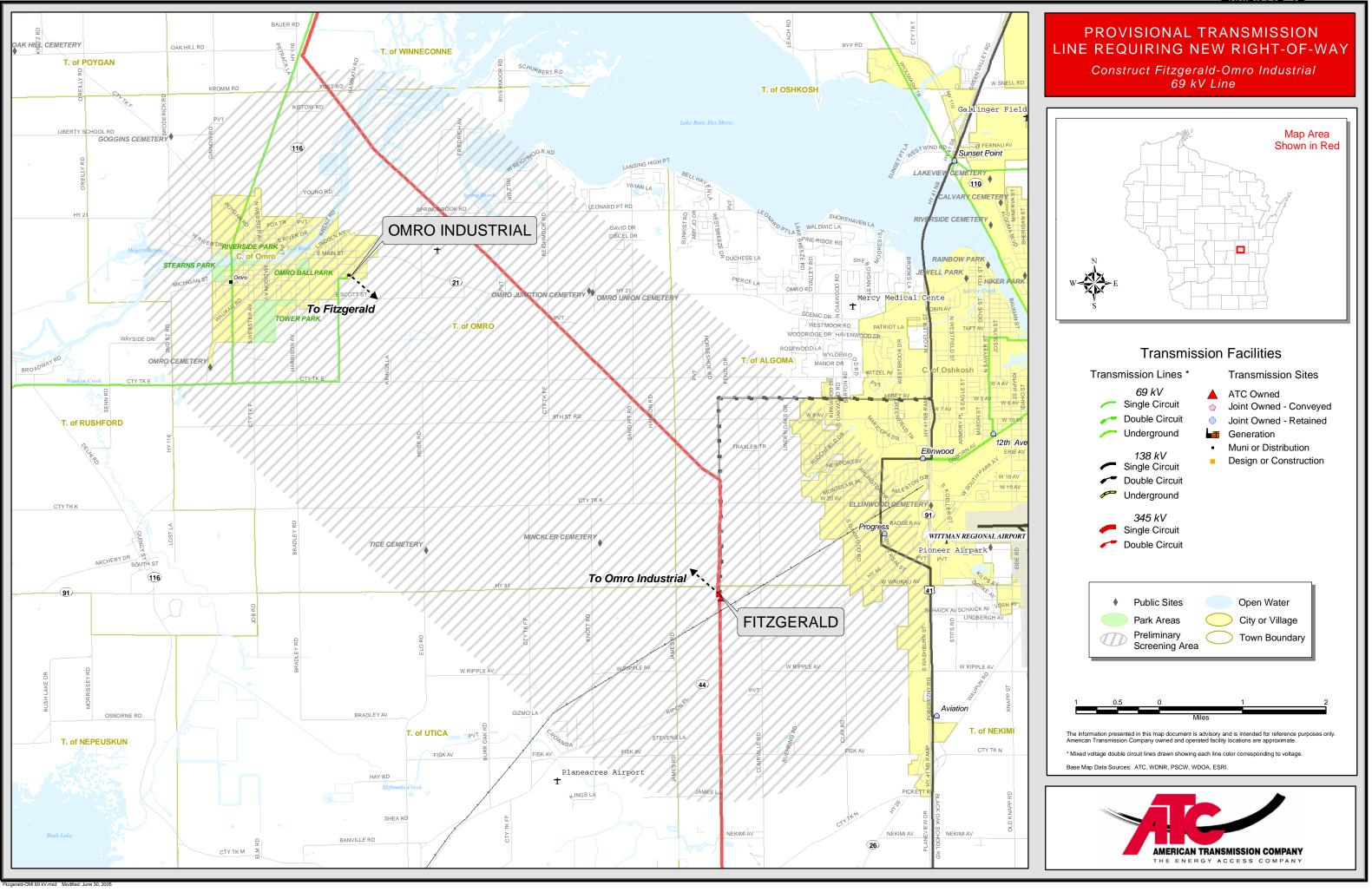


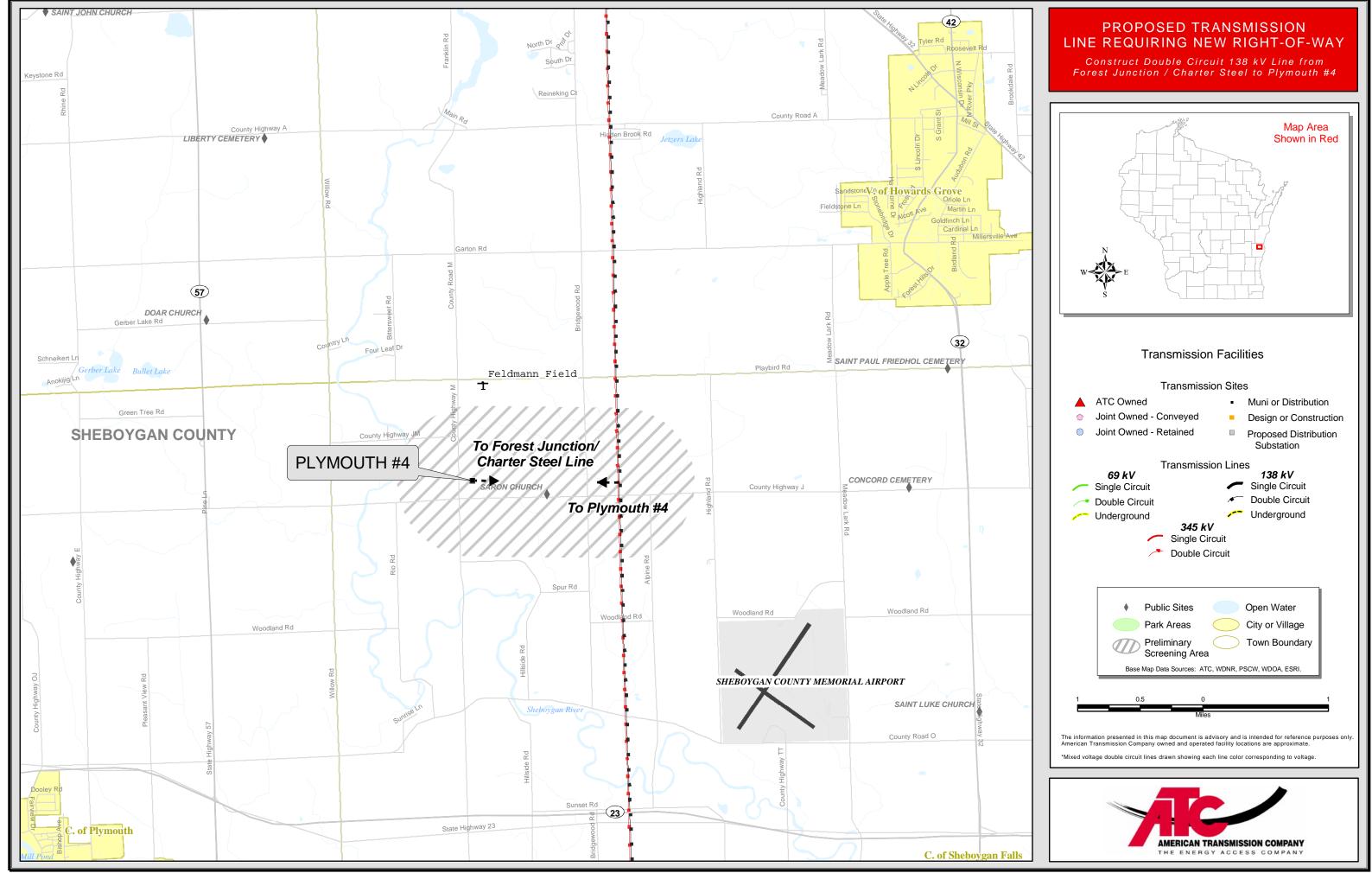
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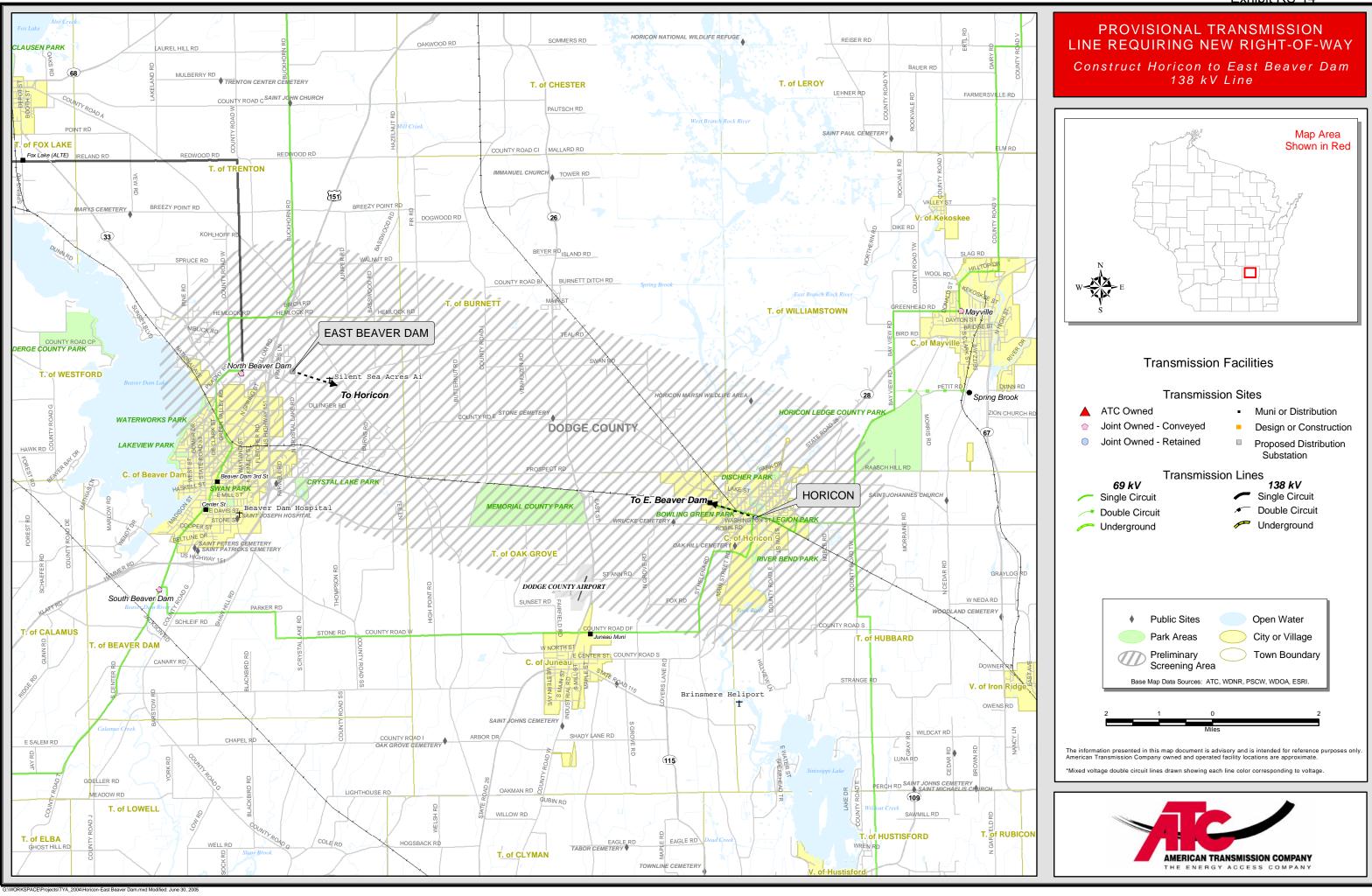


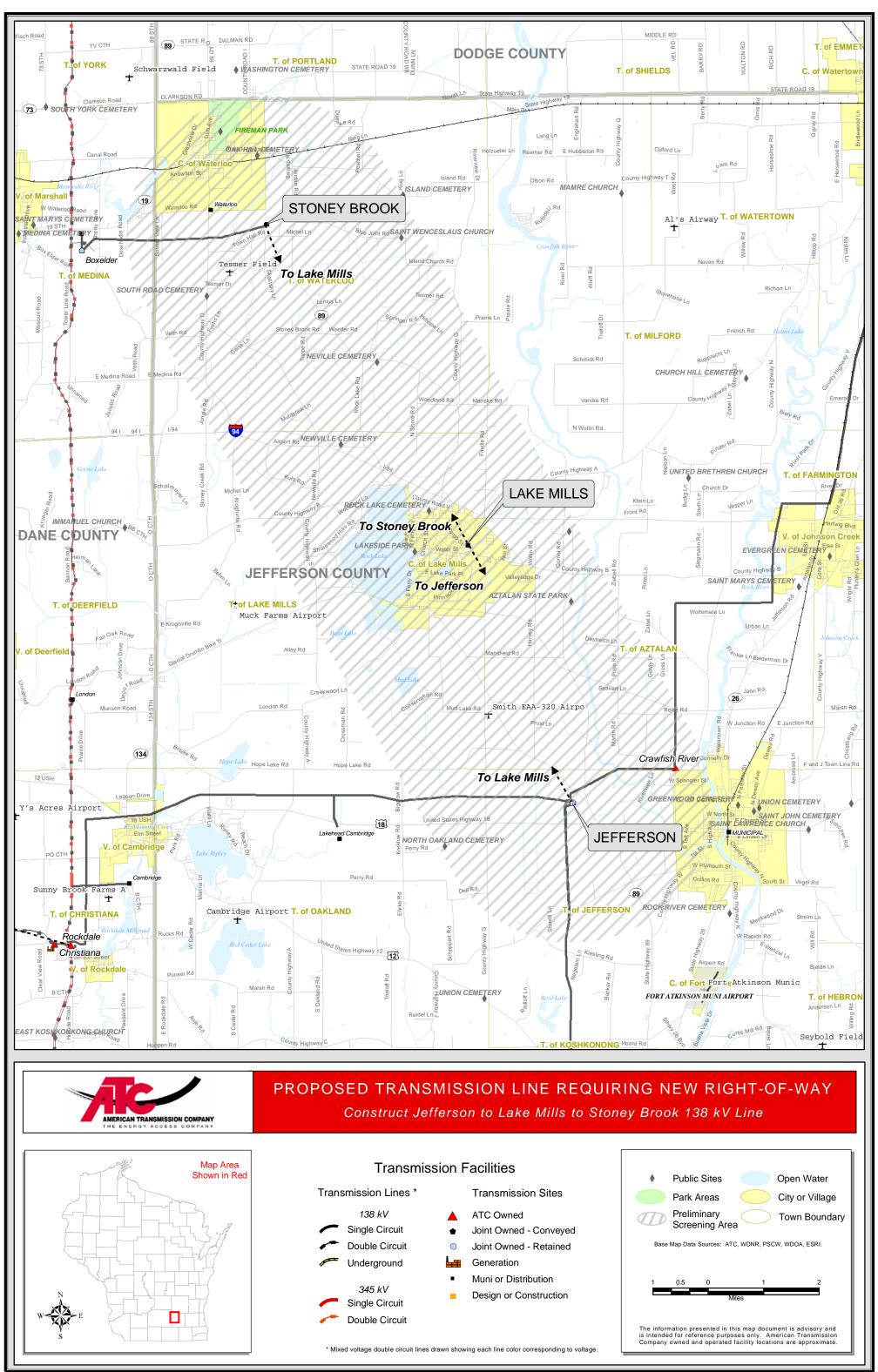


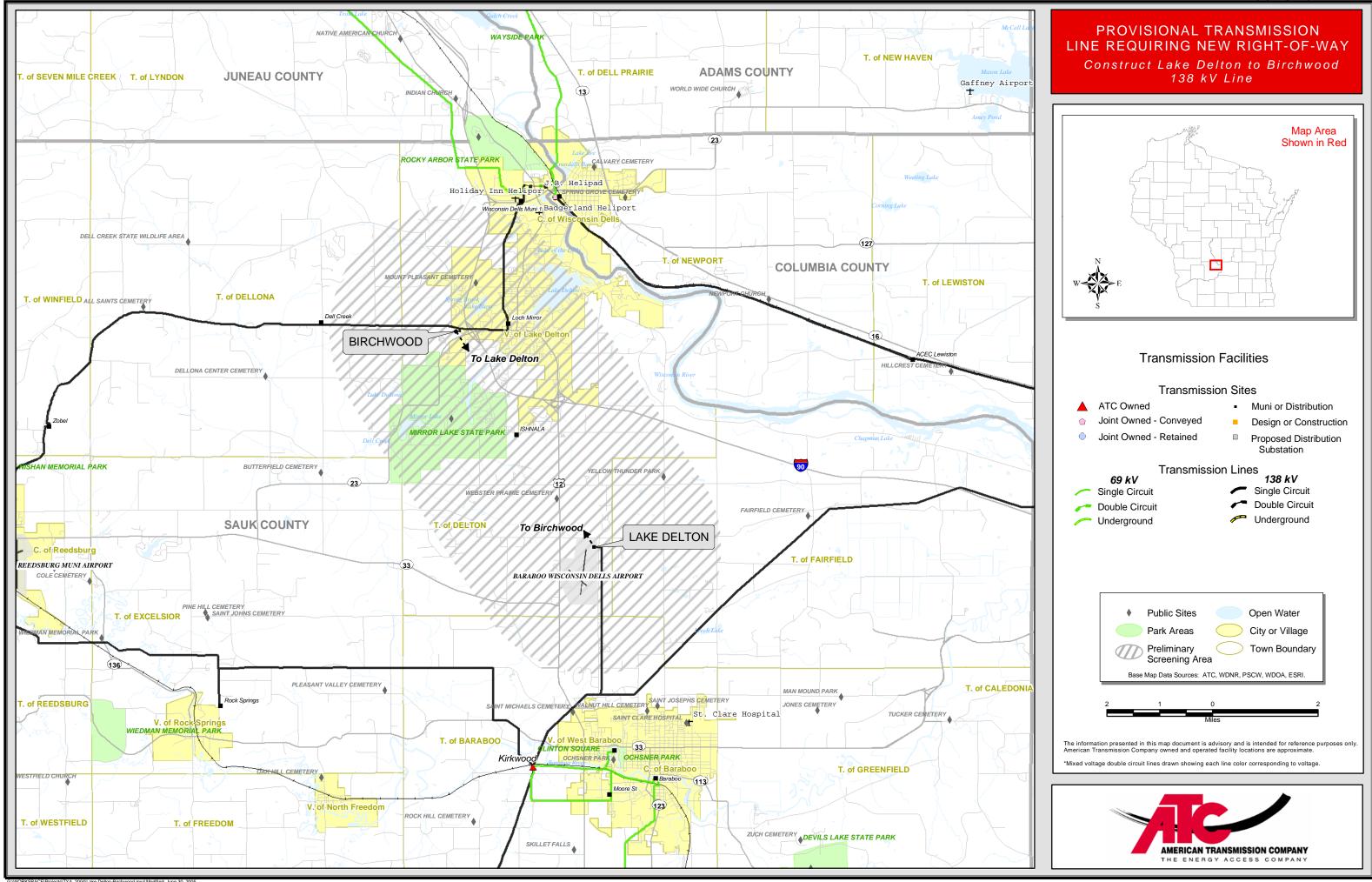


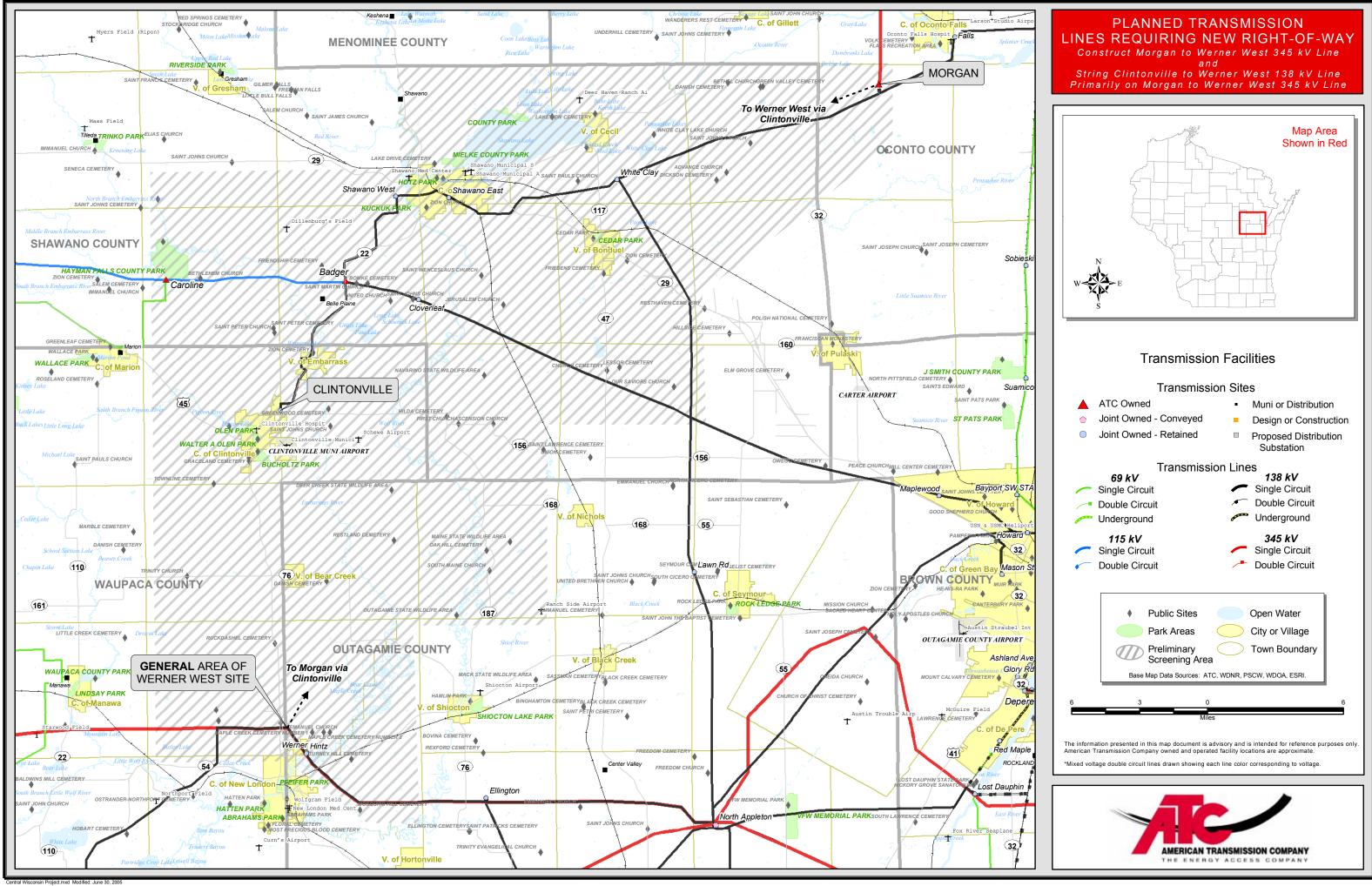


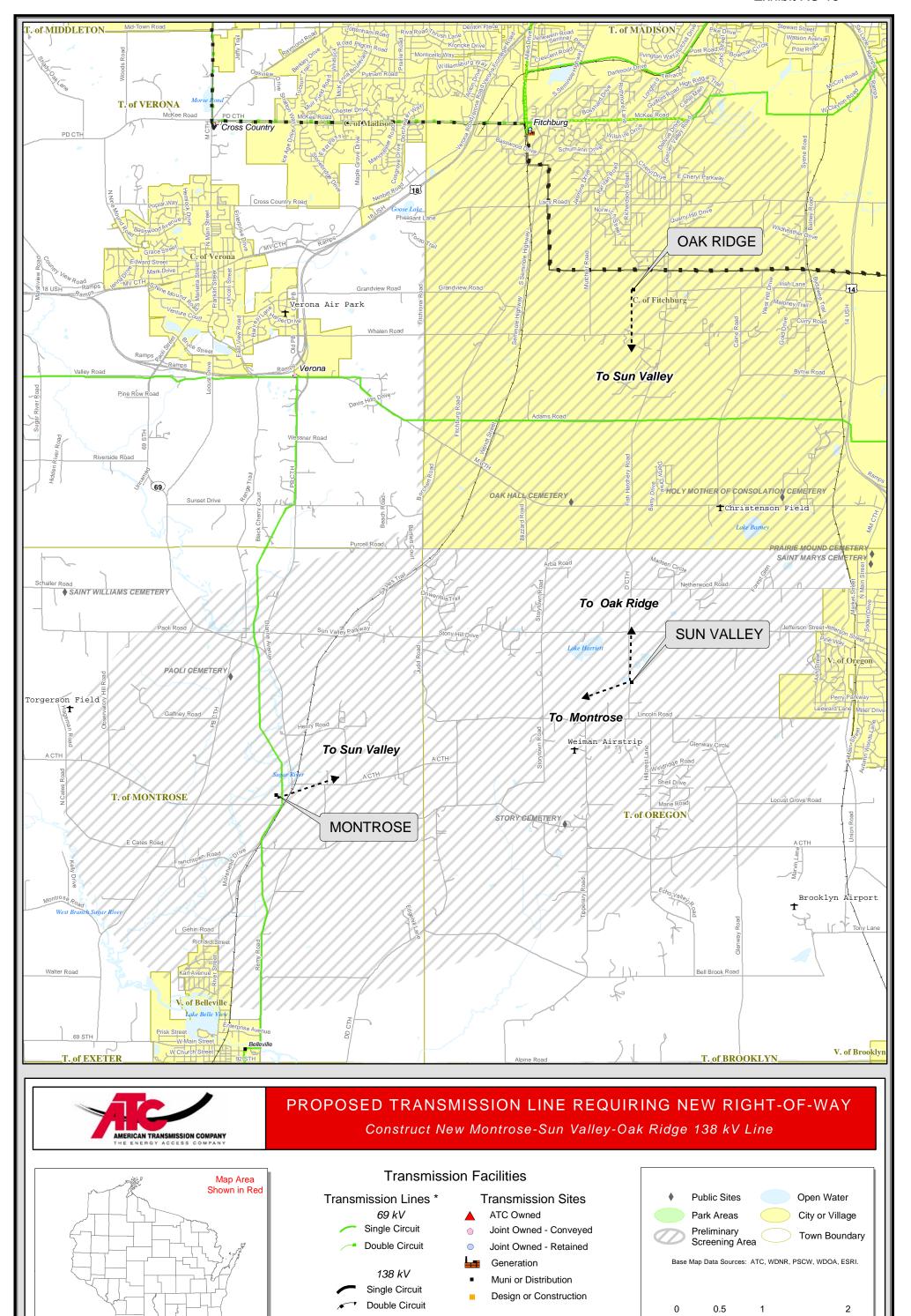


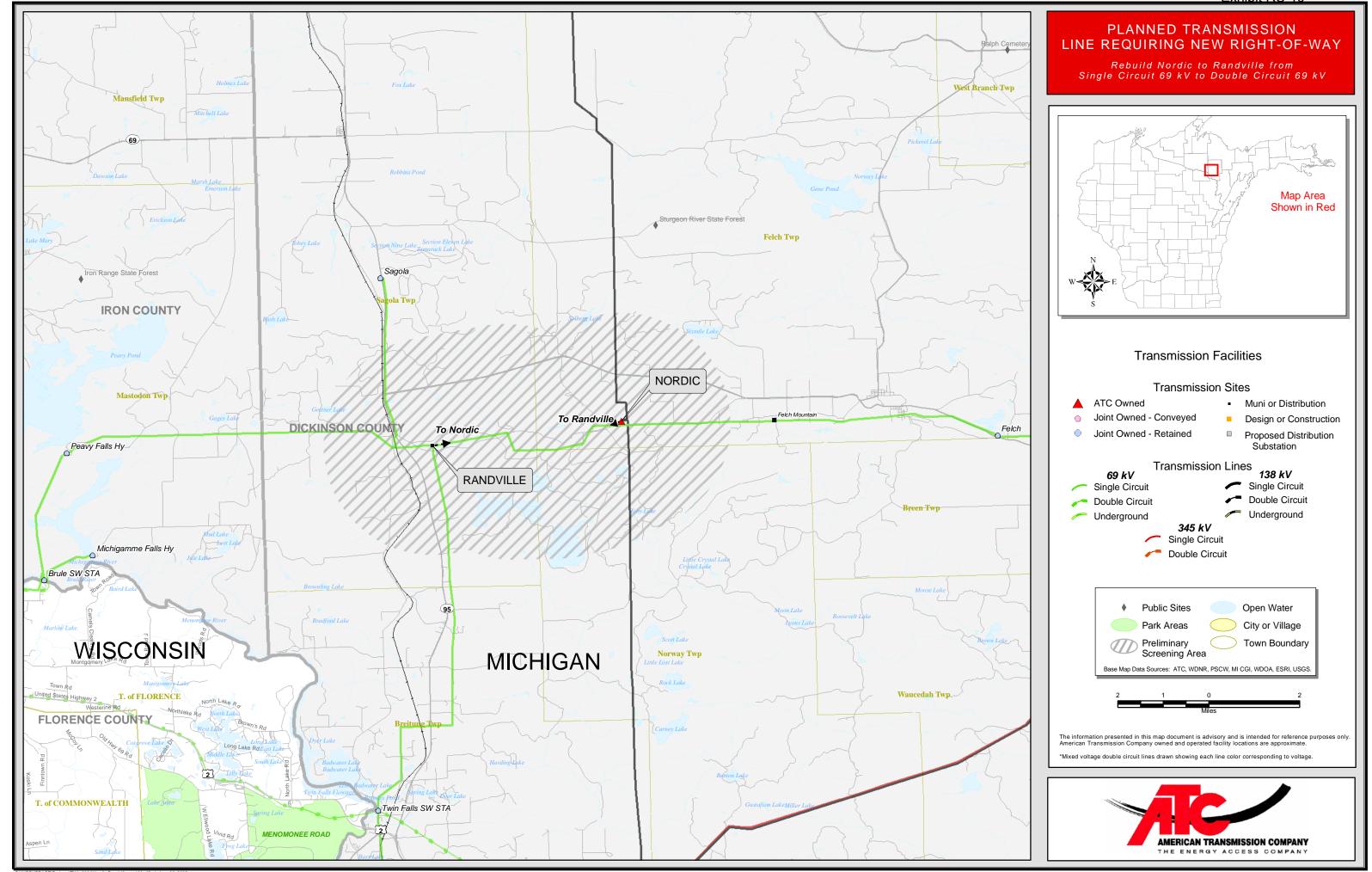


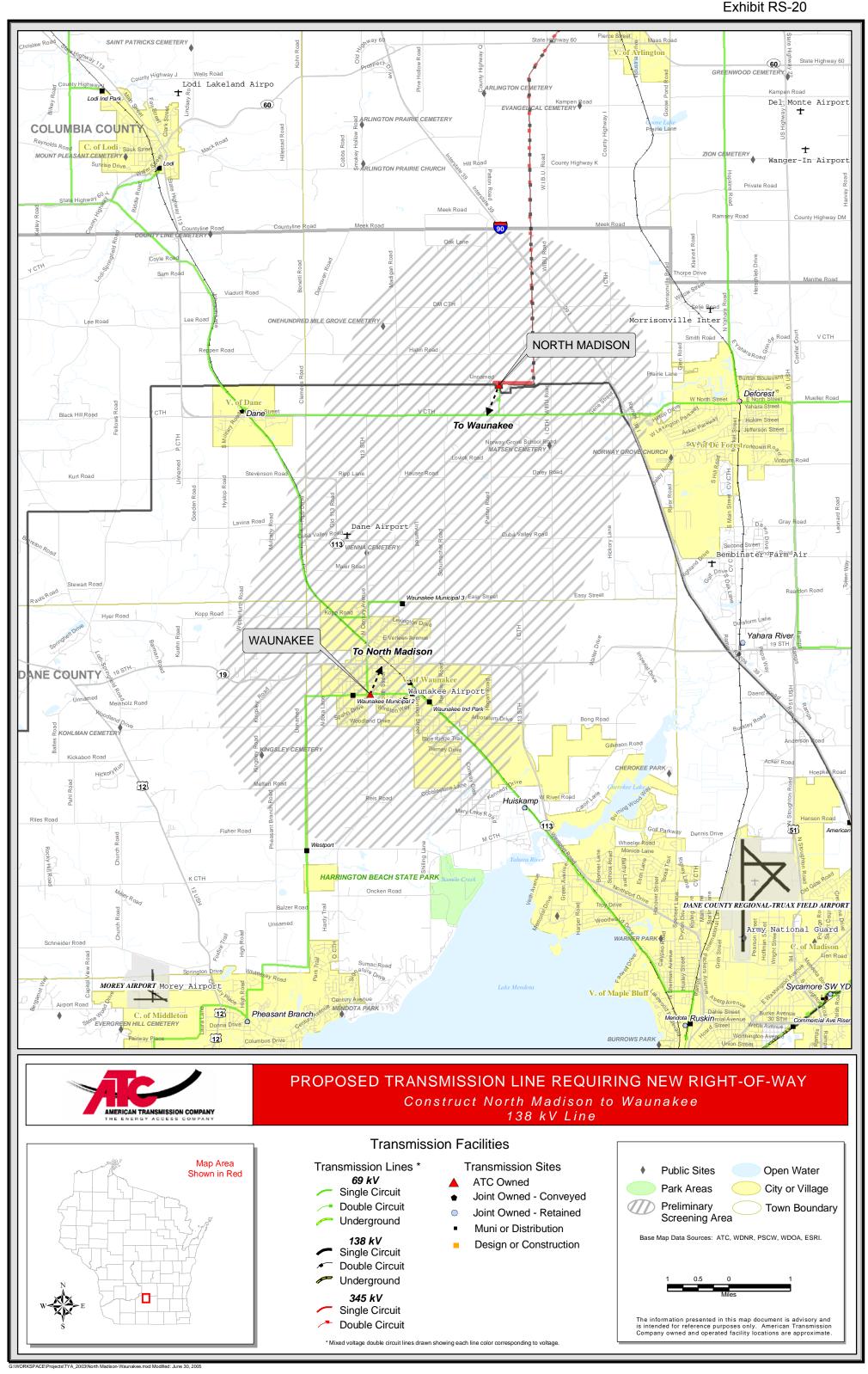


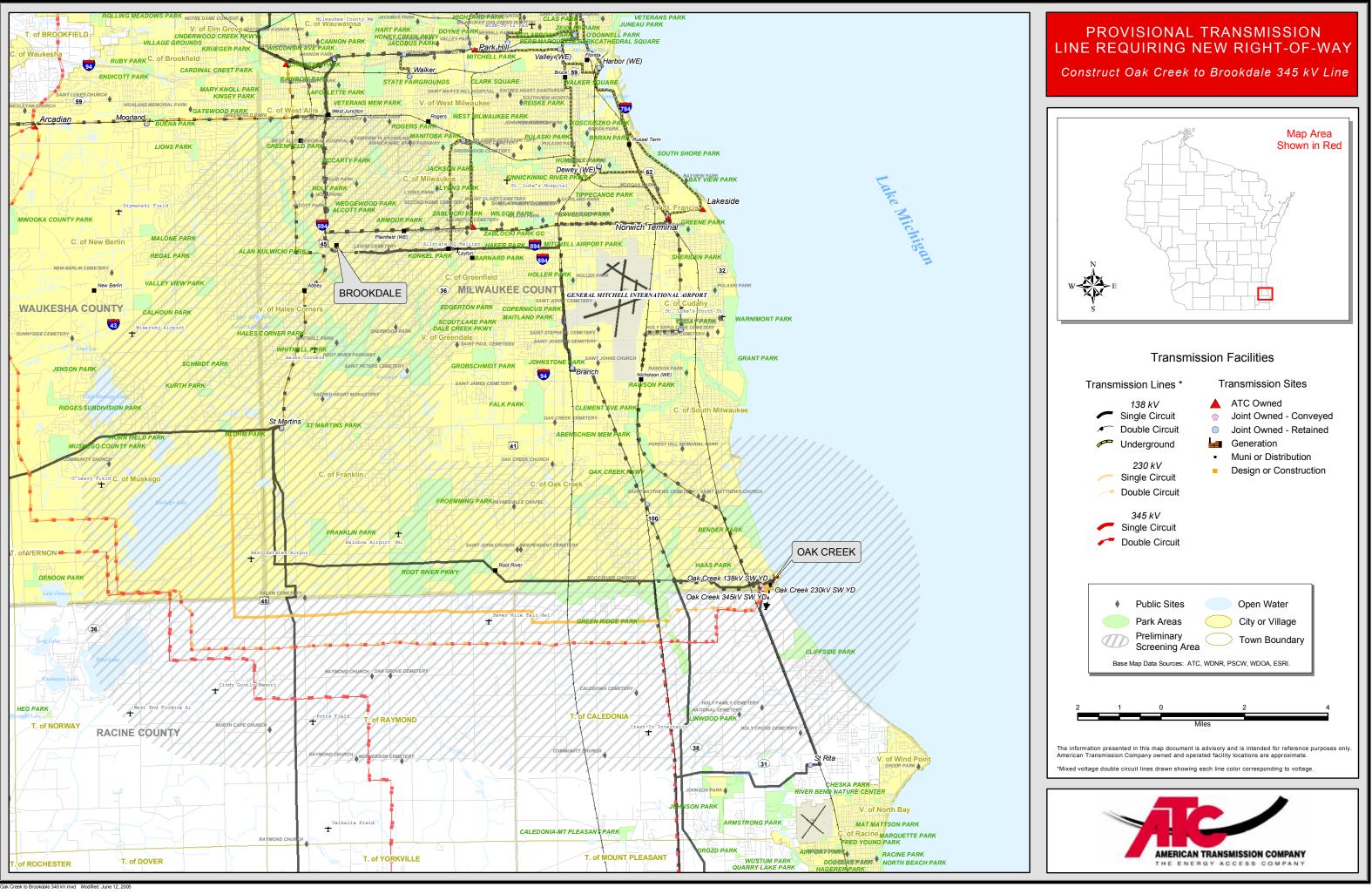


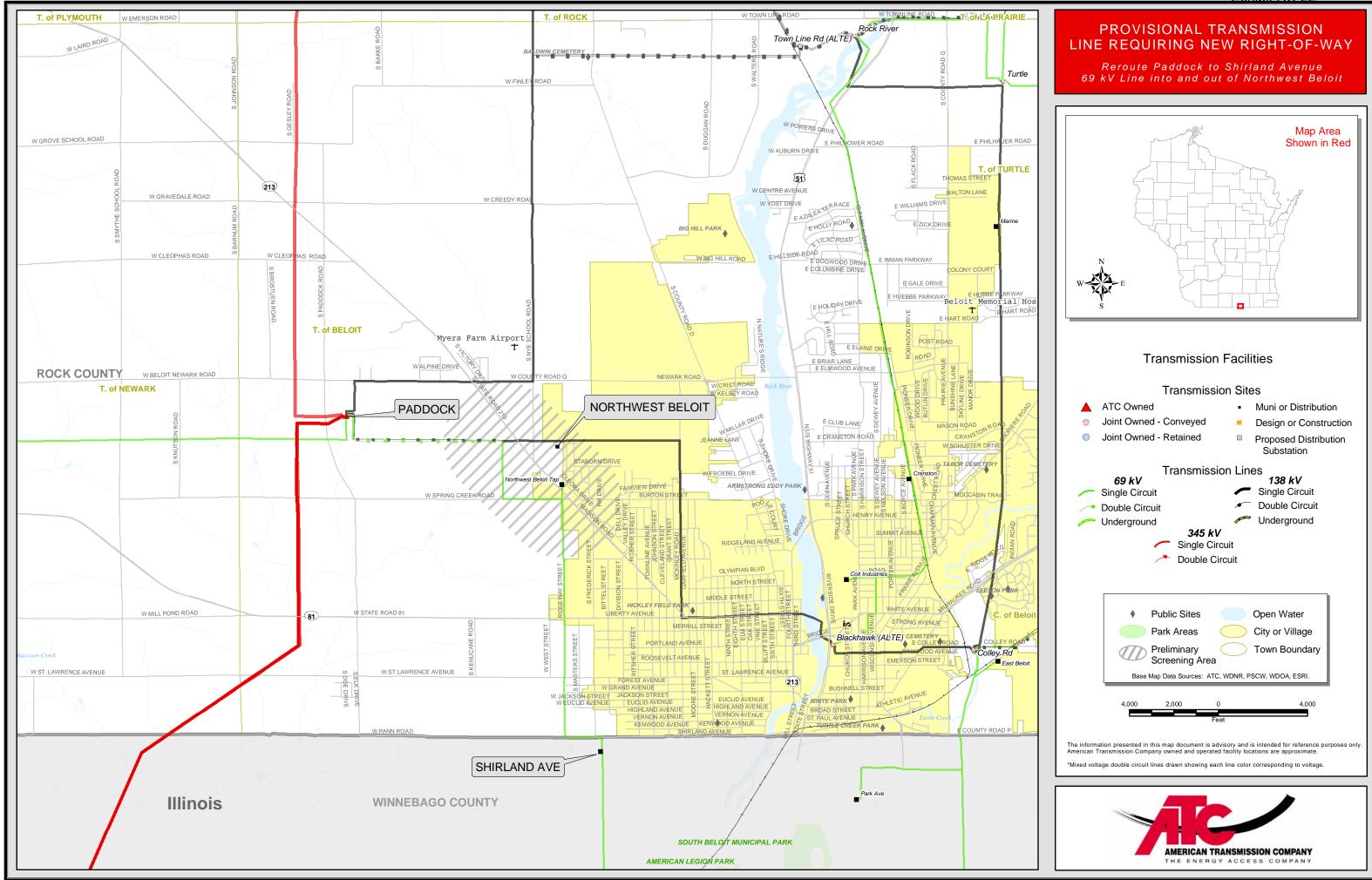


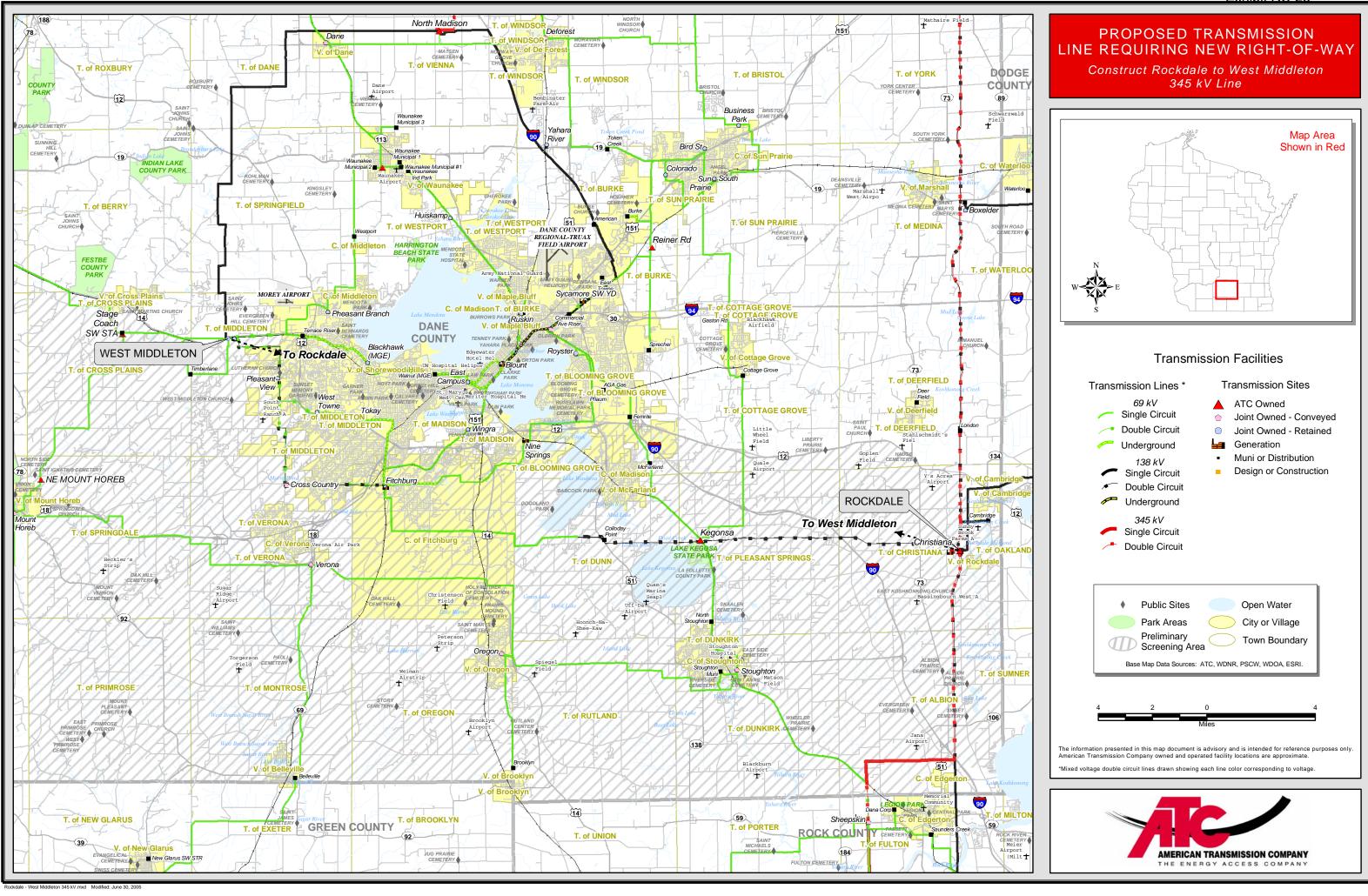


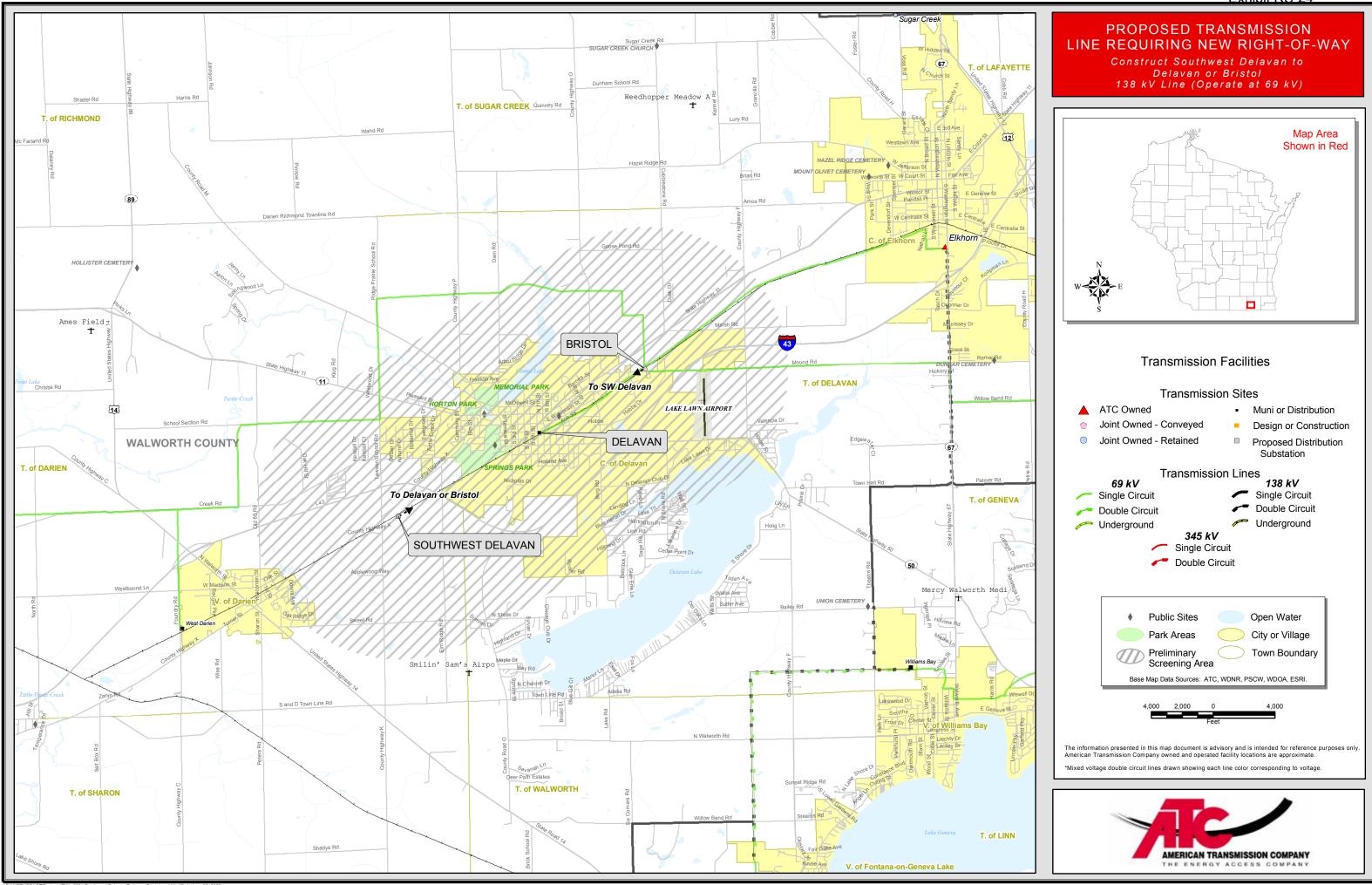


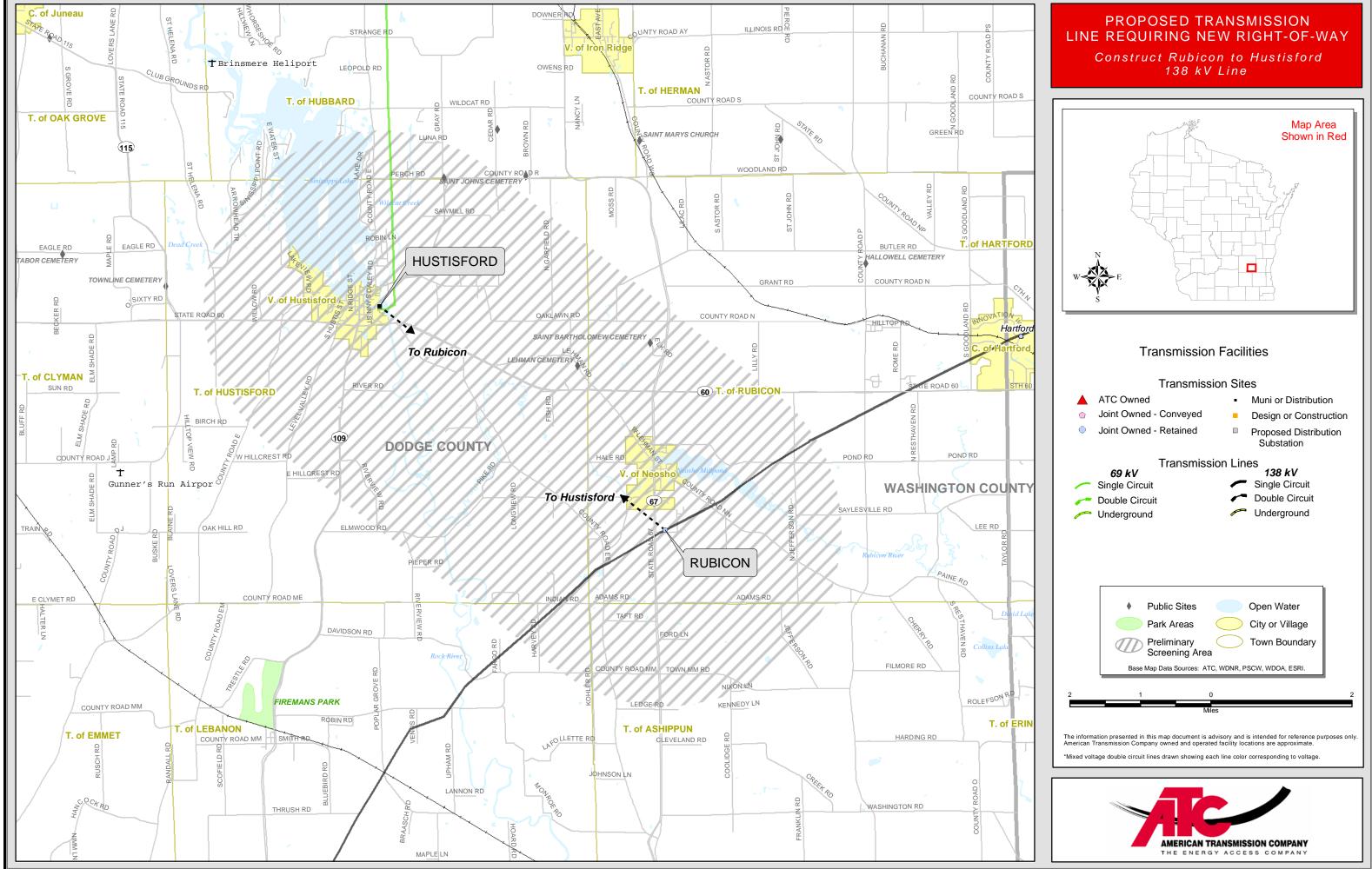


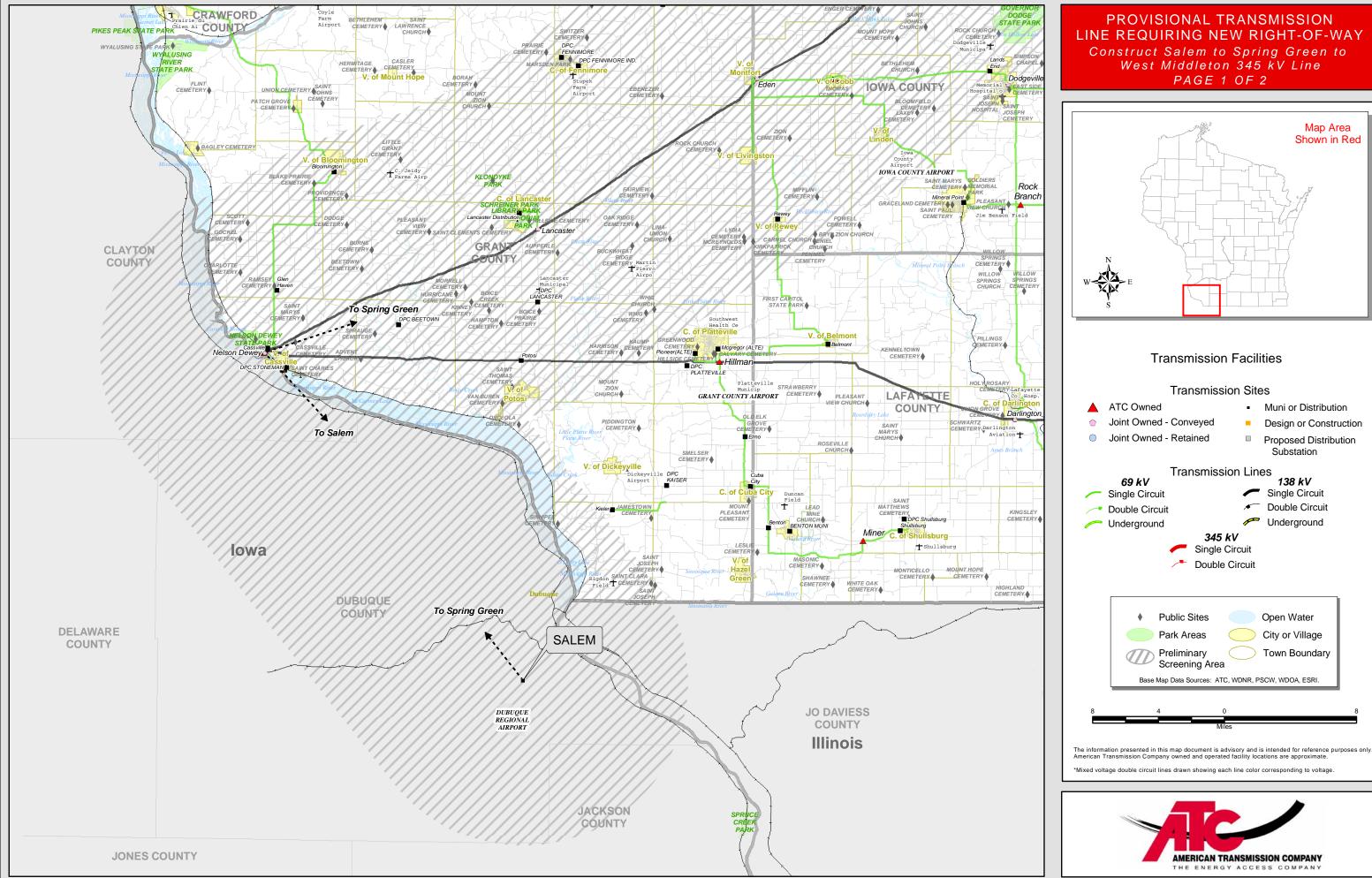




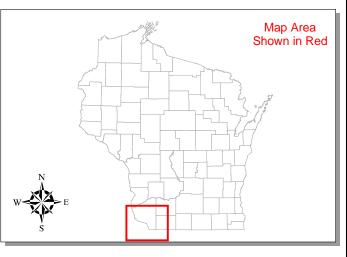








PROVISIONAL TRANSMISSION LINE REQUIRING NEW RIGHT-OF-WAY Construct Salem to Spring Green to West Middleton 345 kV Line



- Muni or Distribution
- Proposed Distribution Substation

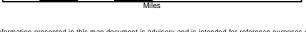
138 kV Single Circuit

Double Circuit Underground

Open Water

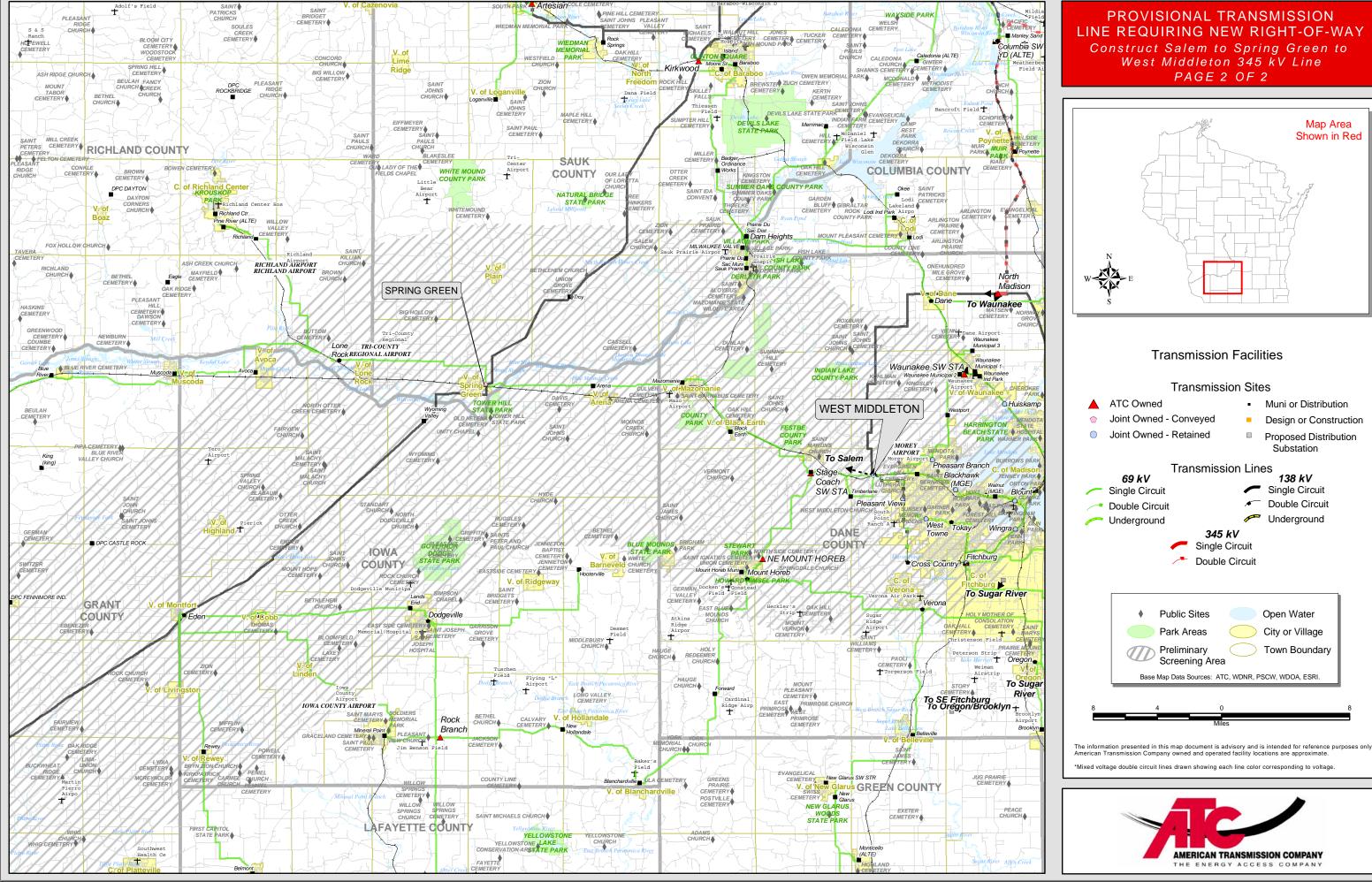
City or Village Town Boundary

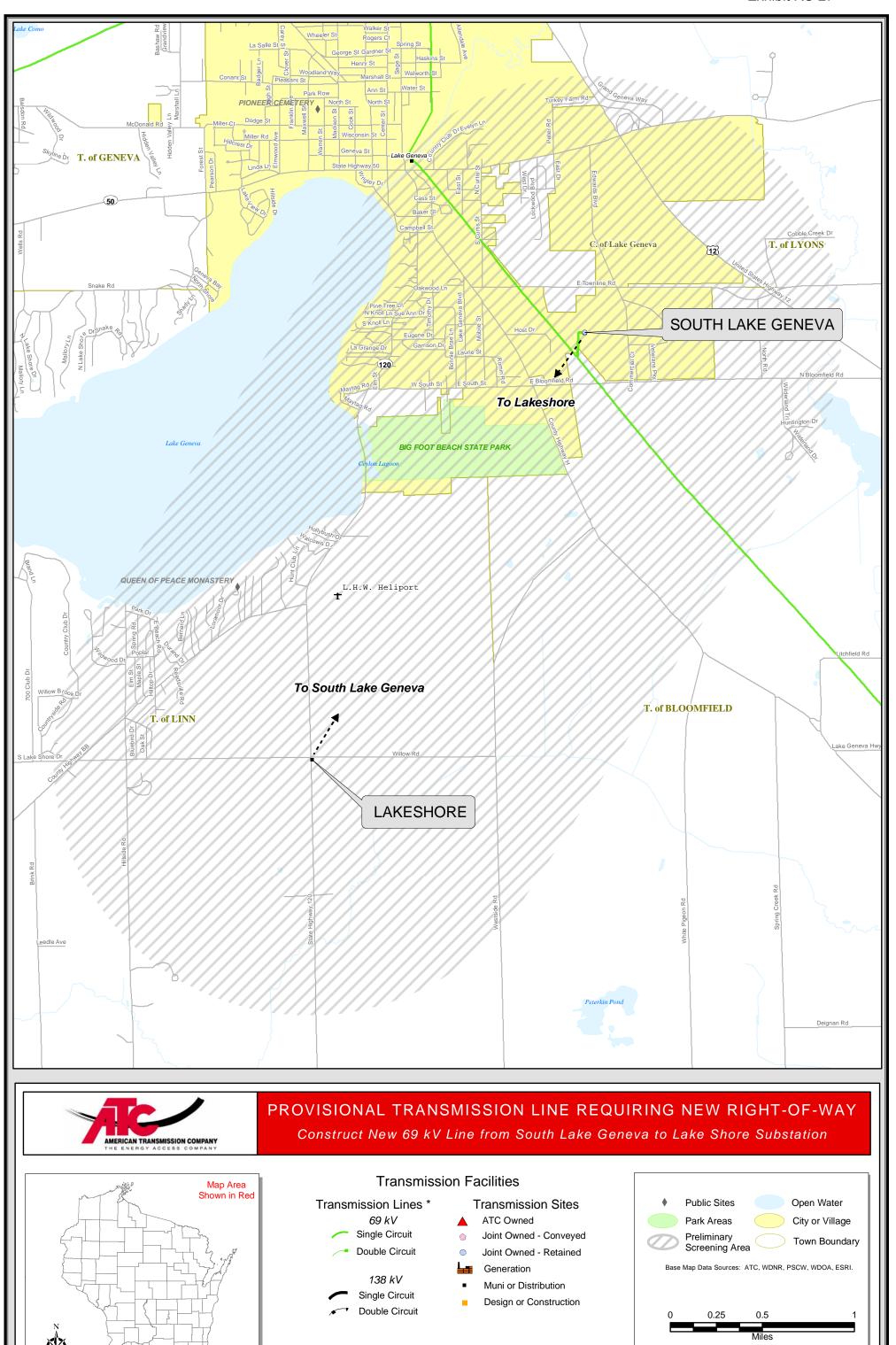
Base Map Data Sources: ATC, WDNR, PSCW, WDOA, ESRI



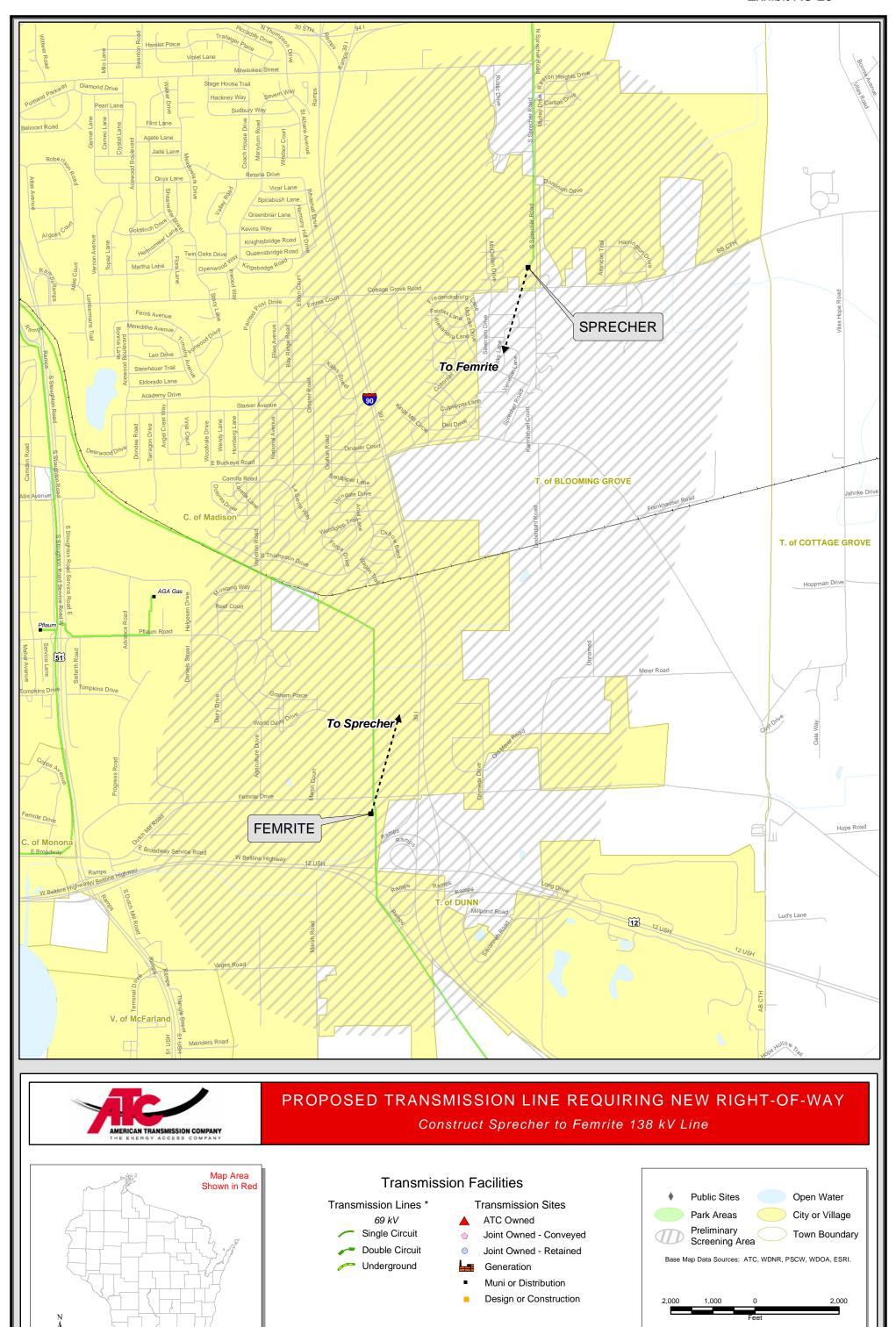
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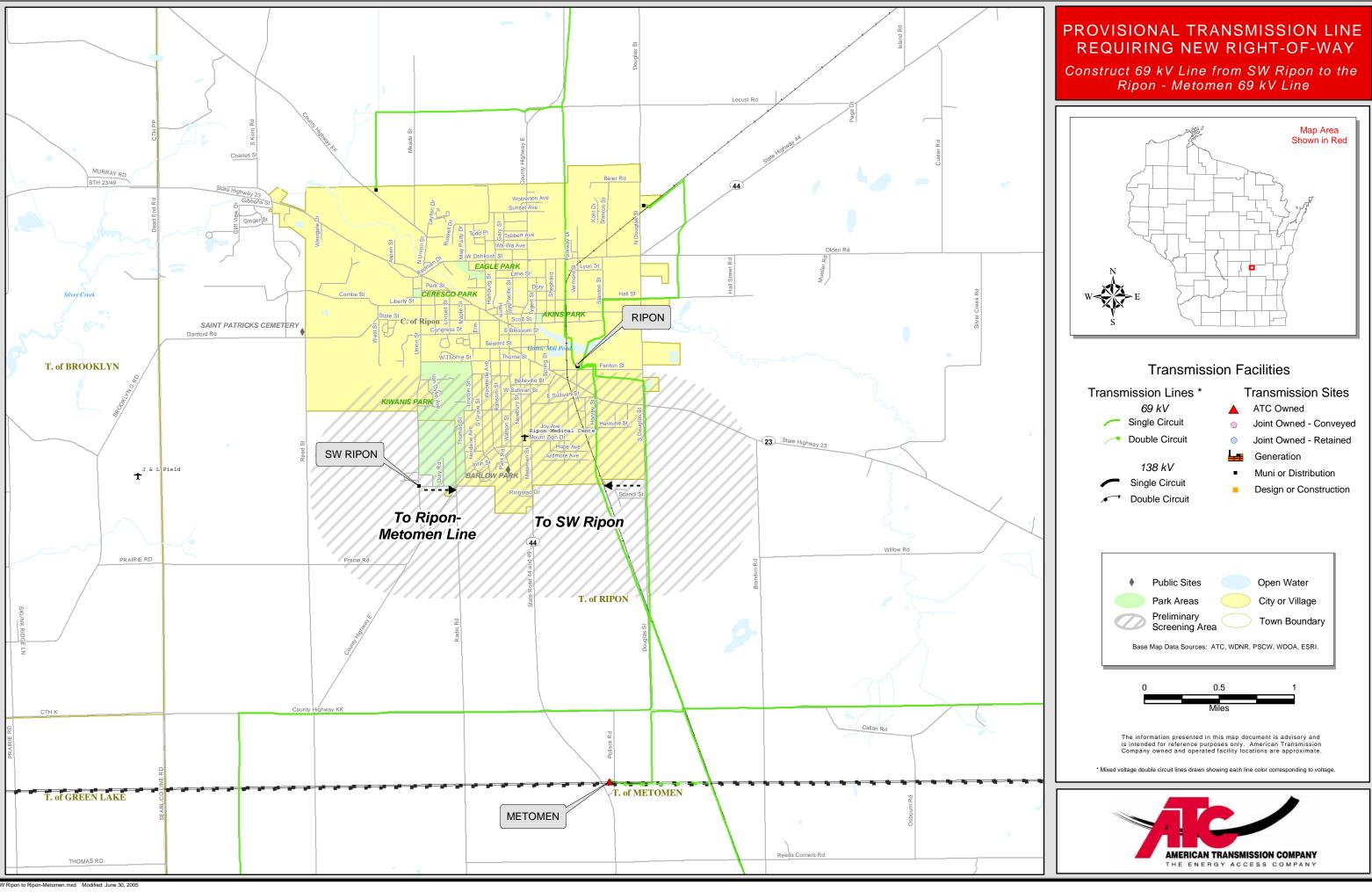


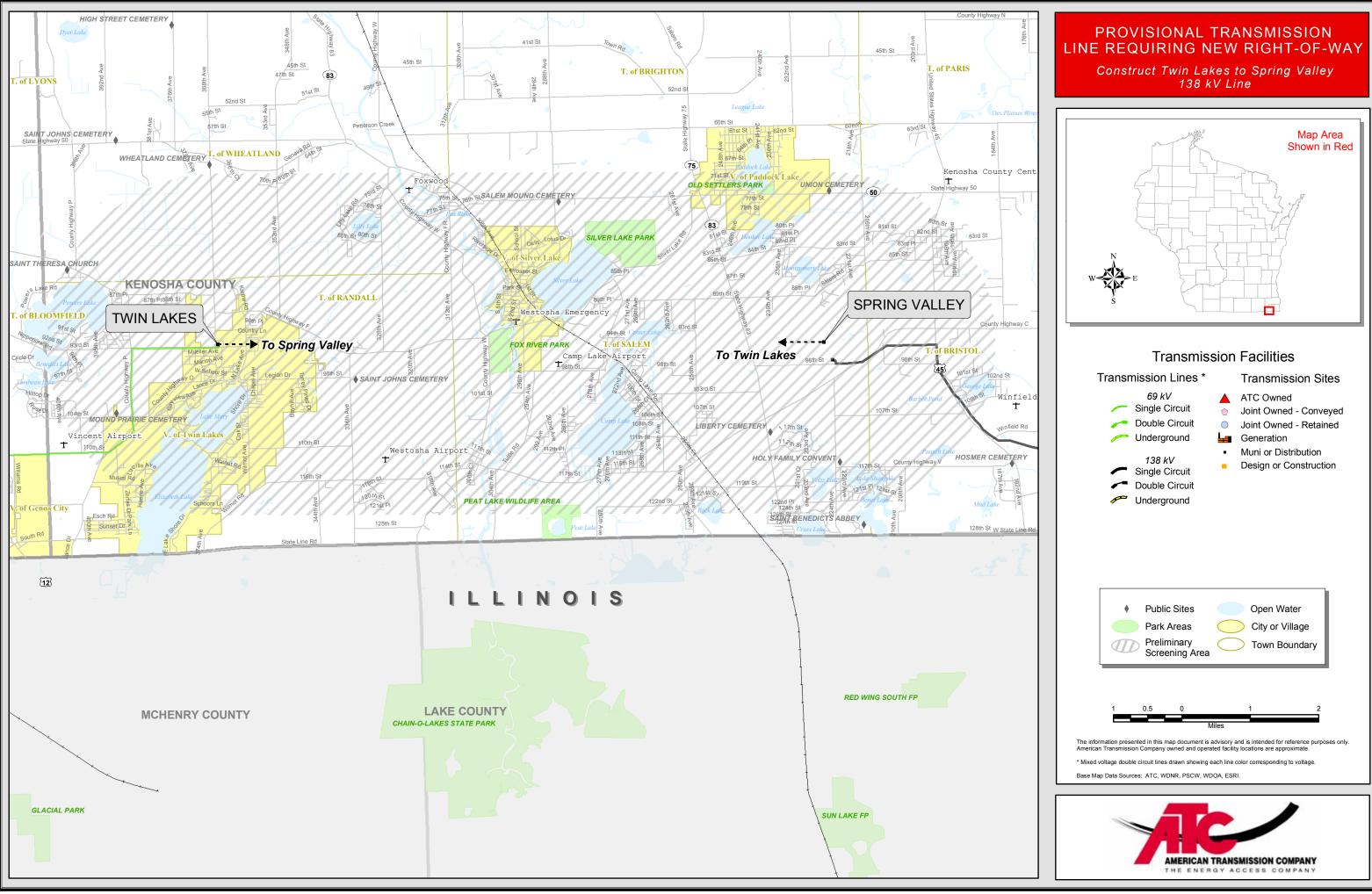


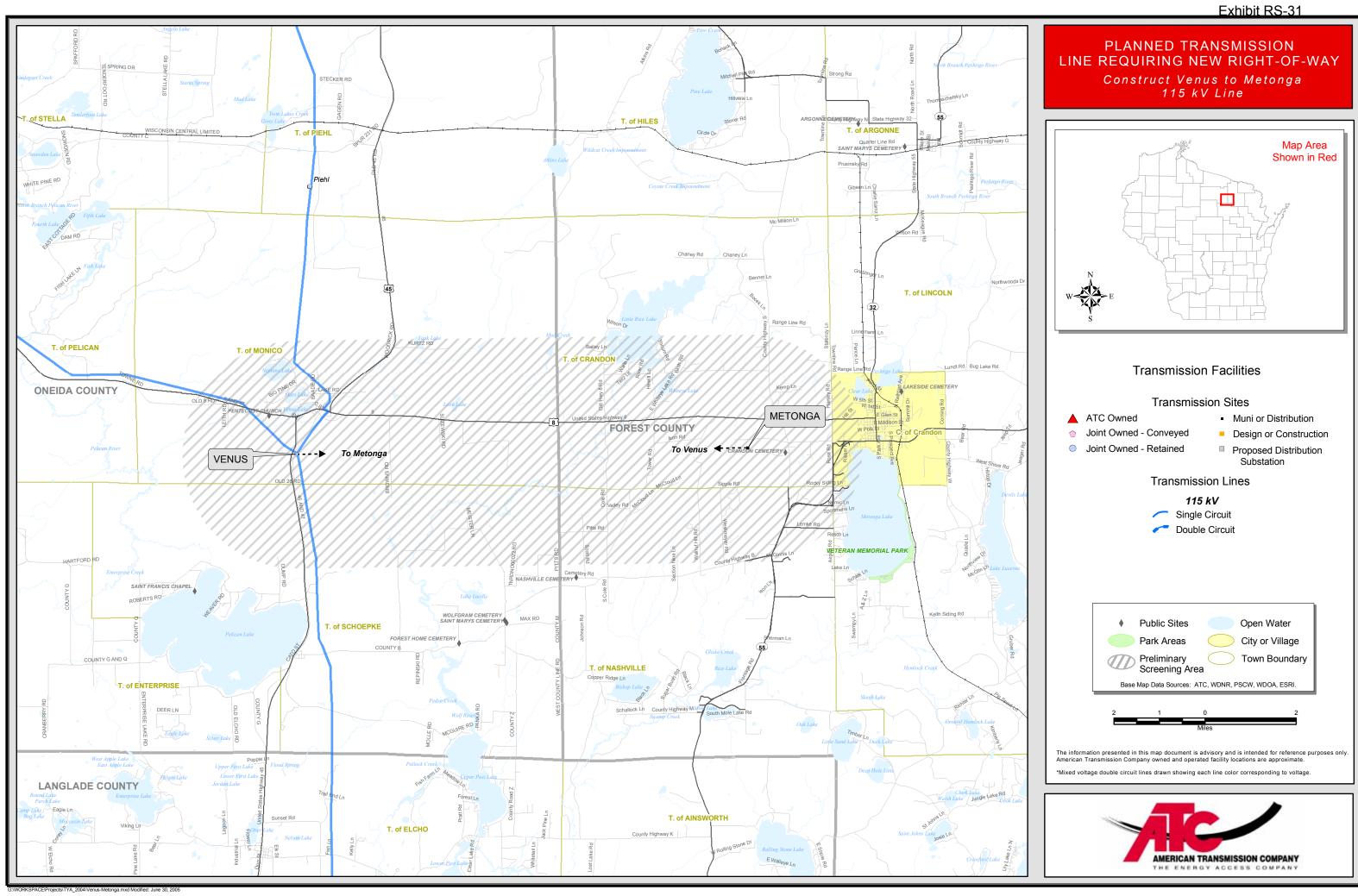
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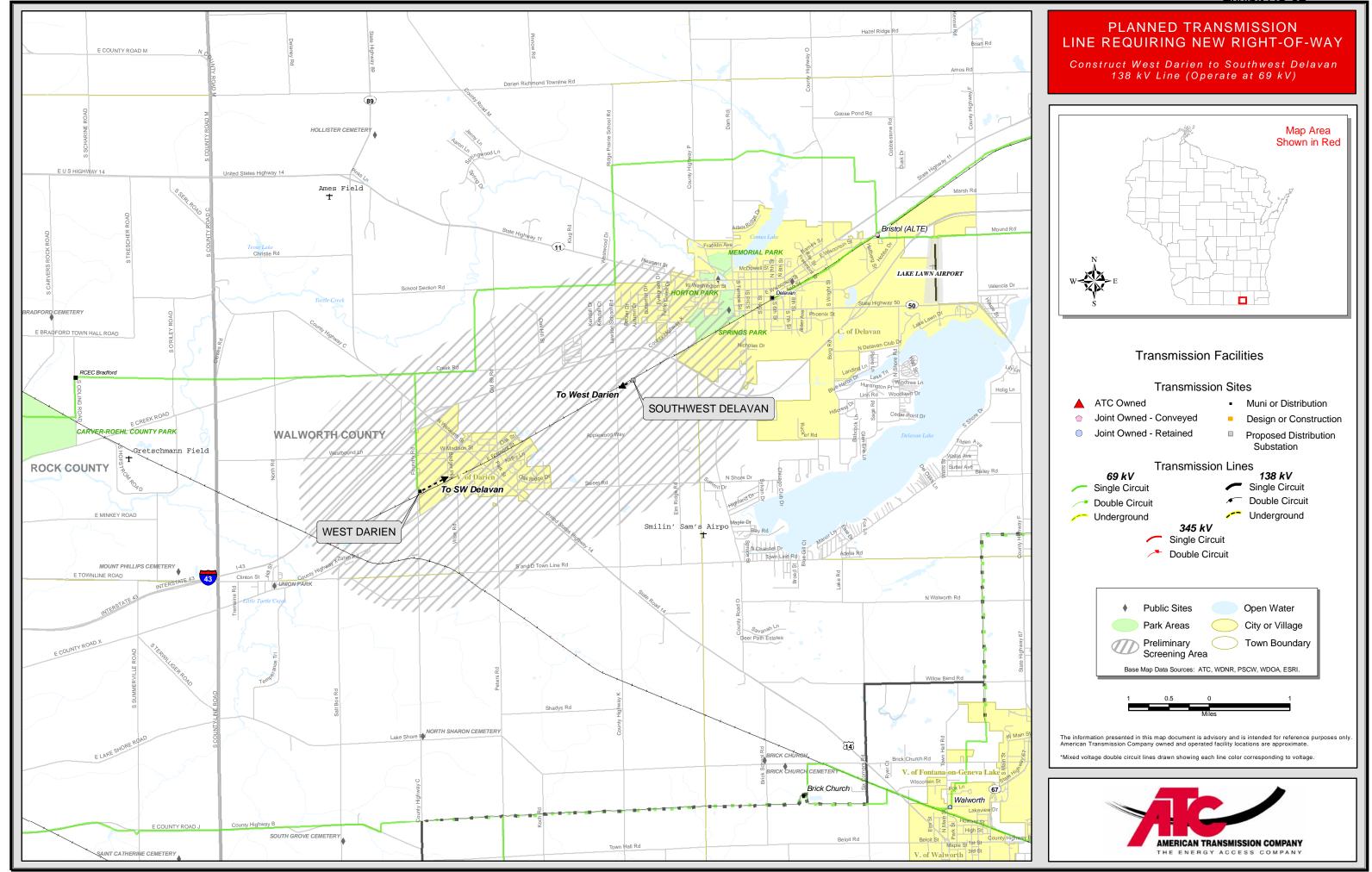


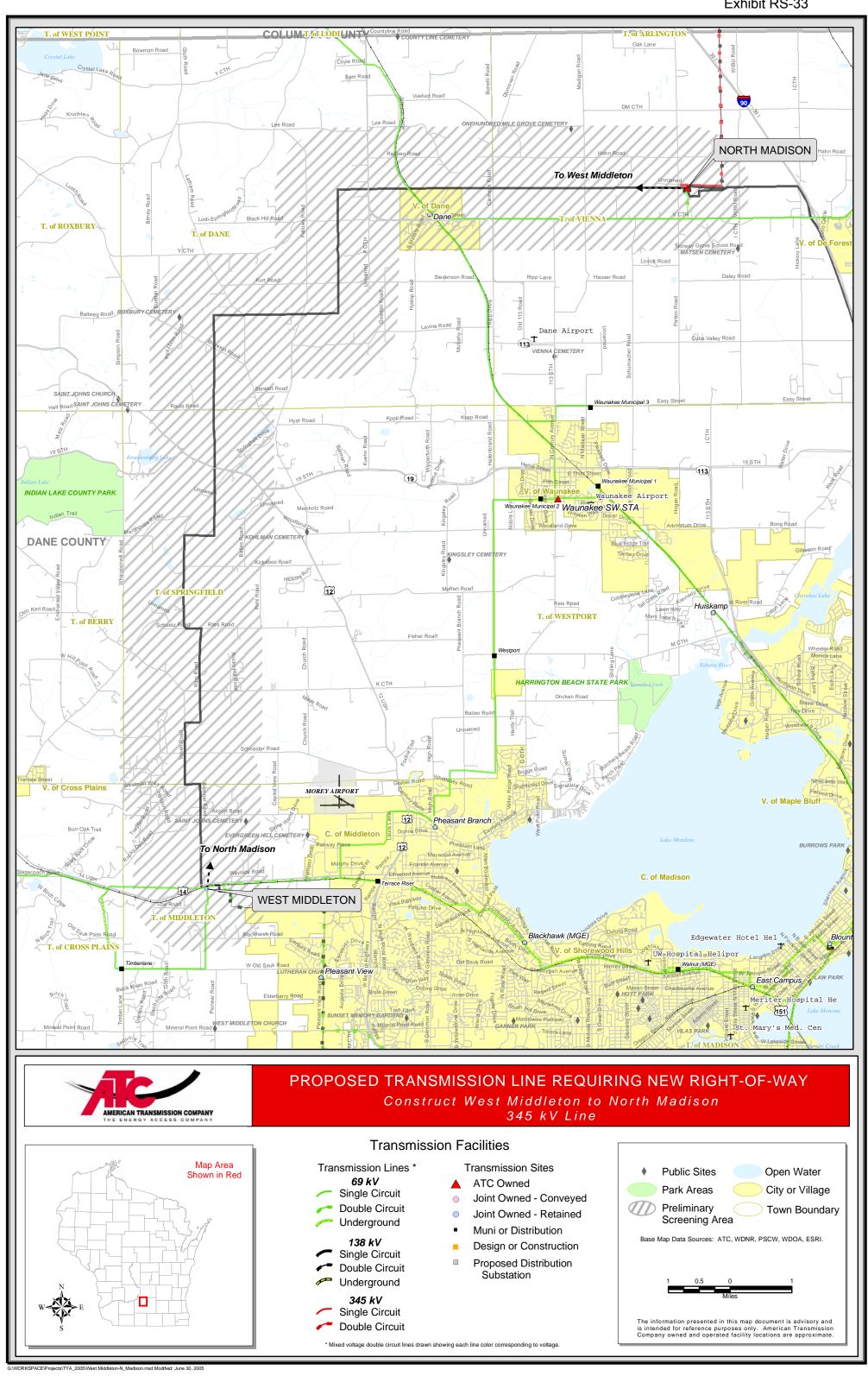
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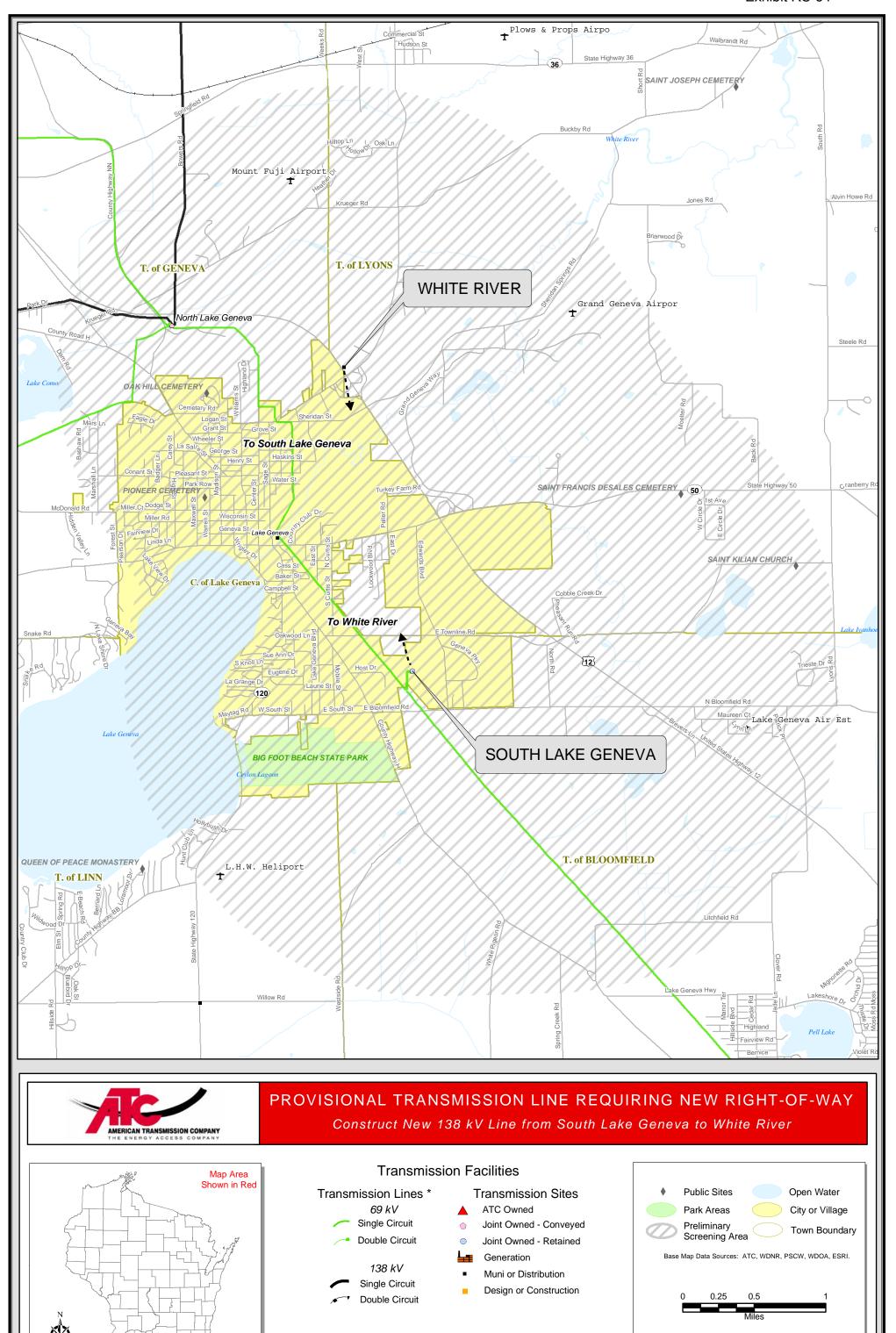












* Mixed voltage double circuit lines drawn showing each line color corresponding to voltage.



10-Year Assessment

An annual report summarizing proposed additions and expansions to the transmission system to ensure electric system reliability.

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ROUTING & SITING > Existing right-of-way

<u>Table RS-3</u> lists the new, rebuilt or reconductored transmission lines requiring no new right-of-way and whether high-level environmental screening information is provided in this report or can be found in application materials already filed with the Public Service Commission. <u>Table RS-4</u> provides environmental screening information for the lines listed in Table RS-3.

The projects listed in <u>Tables RS-1 through Table RS-4</u> do not reflect the entire number of projects included in this assessment that will require some level of environmental assessment. Rather, these projects will require selection of new rights-of-way and are likely to result in new environmental impacts. The environmental screening information highlights some of the environmental concerns that will need to be considered during any route identification process for these projects. Other projects will require environmental assessment, and those assessments will be conducted in the course of finalizing the scope for each of those projects.

Table RS-1
Identified Needs and Transmission Lines Requiring New Right-of-Way

		Approx. li	ne mileage	Projected		Environmental	
Identified need	Planned, Proposed or Provisional solution	Total	New ROW	in-service year	Planning zone	screening provided?	Comments and/or corresponding exhibit number
Reduce service limitations, relieve overloads or low voltages under contingency, improve transfer capability & Weston stability	Construct Gardner Park-Stone Lake 345-kV line	140	73.4	2006	1	No	Environmental information included with filing at PSCW - CPCN approved; Exhibit RS-1
Relieve overloads or low voltages under contingency, replace aging facilities	Rebuild from Nordic to Randville substation (5 miles) of single circuit 69-kV line to double- circuit 69 kV	5	1	2006	2	Yes	Exhibit RS-19
T-D interconnection request, relieve overloads or low voltages under contingency	Construct new 69-kV line from Columbia to Rio to feed the proposed Wyocena substation	8.16	8.16	2006	3	Yes	Exhibit RS-4
T-D interconnection request	Construct Venus-Metonga 115-kV line	12.5	11.5	2007	1	Yes	Exhibit RS-31
T-D interconnection request	Construct Brandon-Fairwater 69-kV line	4	4	2007	1	Yes	Exhibit RS-2
T-D interconnection request	Construct new line from West Darien to Southwest Delavan at 138 kV, operate at 69 kV	3	3	2007	3	Yes	Exhibit RS-32
Relieve overloads or low voltages under contingency, T-D interconnection request	Construct a Jefferson-Lake Mills-Stony Brook 138-kV line	12	12	2007	3	Yes	Exhibit RS-15
Relieve overloads or low voltages under contingency, accommodate new generation	Construct Sprecher-Femrite 138-kV line	2	2	2007	3	Yes	Detailed environmental information included with filing at PSCW; Exhibit RS-28
T-D interconnection request	Construct double circuit 138-kV line from Forest Junction/Howards Grove/Charter Steel to Plymouth #4	1.25	1.25	2007	4	Yes	Exhibit RS-13
T-D interconnection request	Construct a 69-kV line from SW Ripon to the Ripon-Metomen 69-kV line	1.5	1.5	2008	1	Yes	Exhibit RS-29
Reduce service limitations, relieve overloads or low voltages under contingency, improve transfer capability & Weston stability	Construct Stone Lake-Arrowhead 345-kV line	70	36.6	2008	1	No	Environmental information included with filing at PSCW - CPCN approved; Exhibit RS-1
T-D interconnection request	Construct new line from Southwest Delavan to Delavan or Bristol at 138 kV, operate at 69 kV	3.5	3.5	2008	3	Yes	Detailed environmental information included with filing at PSCW; Exhibit RS-24
Relieve overloads or low voltages under contingency	Construct a Rubicon-Hustisford 138-kV line	5	5	2008	3	Yes	Exhibit RS-25
Relieve overloads or low voltages under contingency	Construct a new 138-kV line from North Madison to Waunakee	5	5	2008	3	Yes	Exhibit RS-20
Relieve overloads or low voltages under contingency, transfer capability	Construct Cranberry-Conover 115-kV line	14	14	2008	1 & 2	Yes	Exhibit RS-6
Relieve overloads or low voltages under contingency, T-D interconnection request	Construct new 138-kV line from South Lake Geneva to White River	3	3	2009	3	Yes	Exhibit RS-34
Relieve overloads or low voltages under contingency	Construct new Montrose-Sun Valley-Oak Ridge 138-kV line	9	3	2009	3	Yes	Exhibit RS-18
Relieve overloads or low voltages under contingency, reduce service limitations	String a new 138-kV line from Clintonville- Werner West primarily on Morgan-Werner West 345-kV line structures	16	2	2009	4	Yes	Detailed environmental information included with filing at PSCW; Exhibit RS-17

Table RS-1
Identified Needs and Transmission Lines Requiring New Right-of-Way

		Approx. li	ne mileage	Projected		Environmental	
Identified need	Planned, Proposed or Provisional solution	Total	New ROW	in-service year	Planning zone	screening provided?	Comments and/or corresponding exhibit number
Relieve overloads or low voltages under contingency, reduce service limitations	Construct Morgan-Werner West 345-kV line	47	47	2009	4	Yes	Detailed environmental information included with filing at PSCW; Exhibit RS-17
Relieve overloads or low voltages under contingency	Reroute Paddock to Shirland Avenue 69-kV line into and out of Northwest Beloit	1	0.5	2010	3	Yes	Exhibit RS-22
Relieve overloads or low voltages under contingency	Loop the Femrite to Royster 69-kV line into AGA Gas	0.3	0.3	2010	3	Yes	Exhibit RS-11
Relieve overloads or low voltages under contingency, accommodate new generation	Construct a Concord-Bark River 345-kV line	19	10	2010	3 & 5	Yes	Exhibit RS-5
Relieve overloads or low voltages under contingency	Construct Evansville-Brooklyn 69-kV line	8	8	2011	3	Yes	Exhibit RS-10
Relieve overloads or low voltages under contingency	Construct 345-kV line from Rockdale to West Middleton	35	35	2011	3	Yes	Exhibit RS-23
Relieve overloads or low voltages under contingency	Loop the Deforest to Token Creek 69-kV line into the Yahara River substation	1	1	2011	3	Yes	Exhibit RS-7
Relieve overloads or low voltages under contingency	Constuct a Lake Delton-Birchwood 138-kV line	5	5	2011	3	Yes	Exhibit RS-16
Relieve overloads or low voltages under contingency	Construct a second Dunn Road-Egg Harbor 69-kV line	12.66	12.66	2011	4	Yes	Exhibit RS-8
Relieve overloads or low voltages under contingency	Construct 69-kV line from Eden through Muscoda to Richland Center	35	35	2012	3	Yes	Exhibit RS-9
Access initiative	Salem-Spring Green-West Middleton 345-kV proxy for Large Access Project, includes rebuild Nelson Dewey-Spring Green-West Middleton 138/69 kV to double-circuit 345/138 kV		114	2013	3	Yes	Exhibit RS-26
Relieve overloads or low voltages under contingency	Rebuild/convert Chalk Hills-Chandler 69 kV to 138 kV operation	54	14	2013	2	Yes	Exhibit RS-3
T-D interconnection request	Construct new 69-kV line from South Lake Geneva to Lake Shore substation	3.2	3.2	2013	3	Yes	Exhibit RS-27
contingency	Construct new 138-kV line from Twin Lakes to Spring Valley	9	9	2013	3	Yes	Exhibit RS-30
Relieve overloads or low voltages under contingency	kV line	9	9	2013	3	Yes	Exhibit RS-14
Accommodate new generation	Construct an Oak Creek-Hale (Brookdale) 345-kV line installing 4 mi. new structures, converting 16.2 mi. of non-operative 230 kV and 5 mi. 138 kV	25.2	4	2013	5	Yes	Exhibit RS-21
contingency, access initiative	Construct West Middleton-North Madison 345 kV line	20	46.7	2014	3	Yes	Exhibit RS-33
Relieve overloads or low voltages under contingency, access initiative	Construct Fitzgerald-Omro Industrial 69-kV line	7	7	2015	1	Yes	Exhibit RS-12

Table RS-2 Environmental Screening Information - Lines Requiring New Right-of-Way

Nordic-	Randville 69-kV line rebuild	Exhibit RS-19
	General Description	New line
	Length (miles)	approximately 5 with 1 mile of rerouting
#1	Screening Area (Sq. mi length X width)	approximately 40
#2	Corridor Sharing Opportunities	Existing town roads and railroad corridor offer the best opportunities for corridor sharing.
#3	Public Lands	Copper Country State Forest
#4	Sensitive Resources	None identified
#5	Cultural Resources	None identified
	Miscellaneous	

Colum	bia-Rio 69-kV line	Exhibit RS-4
	General Description	New line
	Length (miles)	approximately 9
#1	Screening Area (Sq. mi length X width)	approximately 65
#2	Corridor Sharing Opportunities	State highways, railroads, and existing transmission line rights-of-way offer opportunities for corridor sharing.
#3	Public Lands	Wyona County Park, Middle Branch Duck Creek, Duck Creek Campground, local parks associated with Duck Creek, Lake Columbia, Wyona Lake, Jennings Creek, and boat launches associated with area lakes are found in the screening area.
#4	Sensitive Resources	Rock Run Oak Savanna State Natural Area, Jennings Creek State Wildlife Area, Rocky Run Creek State Fishery Area, Duck Creek, Wyona Lake, and Lake Columbia are located in the screening area.
#5	Cultural Resources	The Cultural Map of Wisconsin does not identify any sites within the screening area, however there are several cemeteries known in the screening area.
	Miscellaneous	Several airfields and landing strips are found in the screening area.

Table RS-2 Environmental Screening Information - Lines Requiring New Right-of-Way

Venus	-Metonga 115-kV line	Exhibit RS-31
***********************	General Description	New line - Interconnection with proposed Metonga distribution substation
	Length (miles)	approximately 10
#1	Screening Area (Sq. mi length X width)	approximately 69
#2		Highways 45, 8, and 32 are located in the screening area. Existing 115-kV transmission line in western 1/4 of screening area. Possible sharing with local electrical distribution lines and railroads.
#3		Nicolet National Forest, Veterans Memorial Park, Little Rice wildlife area, Wolf River tower site, Statewide natural areas, statewide spring ponds, and scattered forestlands.
#4		Numerous lakes, headwaters of the Wolf River, streams, wetlands, forestlands, are located in the screening area.
#5		Potawotomi Indian reservation and high potential for other historical and cultural resources in the screening area. Cultural Map of Wisconsin does not identify any sites within the screening area.
	Miscellaneous	

Brand	on-Fairwater 69-kV line	Exhibit RS-2
	General Description	New line
	Length (miles)	4
#1	Screening Area (Sq. mi.)	17.78
#2	Corridor Sharing Opportunities	Existing road and railroad corridors offer the best corridor sharing opportunities.
#3	Public Lands	Community Park, and WDNR Glacial Habitat Restoration Areas are located within the screening area.
#4	Sensitive Resources	Grand River, West Branch Rock River, and unnamed streams are located within the screening area.
#5	Cultural Resources	The WHS database identifies a number of architectural and historic sites, particularly within the Village of Brandon. Archaeological sites are identified in proximity to the waterways.
	Miscellaneous	There is a low probability of encountering endangered resources.

Table RS-2 Environmental Screening Information - Lines Requiring New Right-of-Way

West I	Darien-Southwest Delavan 138/69-kV line	Exhibit RS-32
		
	General Description	New line
	Length (miles)	approximately 3.0
#1	Screening Area (Sq. mi length X width)	approximately 16
#2	Corridor Sharing Opportunities	Federal highway, State and County roads, railroad corridor, and existing electrical distribution lines routes located within the screening corridor offer the best potential for corridor sharing.
#3	Public Lands	Turtle Creek Hunting Grounds
#4	Sensitive Resources	Turtle Creek Wildlife Area, streams, small lakes and wetlands.
#5	Cultural Resources	Clown Hall of Fame, Circus Colony, Wisconsin's First School for the Deaf Marker.
	Miscellaneous	

Jeffers	son-Lake Mills-Stony Brook 138-kV line	Exhibit RS-15
	General Description	New line
	Length (miles)	approximately 12
#1	Screening Area (Sq. mi length X width)	approximately. 78
#2	Corridor Sharing Opportunities	Several state and county highways, and portions of existing transmission rights of-way, pipelines, and active and abandoned railroad corridors are within the screening zone.
#3	Public Lands	Aztalan State Park, Lake Mills state wildlife area, Waterloo state wildlife area, Rock Lake County park, the Jefferson County Fairgrounds, and several local parks are located in the screening area.
#4	Sensitive Resources	Several Lakes (Rock, Bean, Marsh, and Mud), the Crawfish and Rock Rivers and their tributaries are located in the screening area. Bean Lake and Waterloo Prairie State, Snapper and Falville Prairie State Natural Areas are located near the screening area.
#5	Cultural Resources	Aztalan Museum and Aztalan State Park are identified on the Cultural Map of Wisconsin within the screening area.
	Miscellaneous	The Muck Farms Airport, Tesmer Field, and Ha-Rail Field are located in the screening area.

Table RS-2 Environmental Screening Information - Lines Requiring New Right-of-Way

Sprech	ner-Femrite 138-kV line	Exhibit RS-28
		_
	General Description	New line
	Length (miles)	approximately 2.6
#1	Screening Area (Sq. mi length X width)	approximately 8
#2	Corridor Sharing Opportunities	Existing transmission lines, railroad corridors, federal highways, and town roads offer the best opportunities for corridor sharing.
#3	Public Lands	None listed.
#4	Sensitive Resources	Legacy places lists the upper Yahara River Streams and Lakes, other streams and wetlands within screening area.
#5	Cultural Resources	Cultural Map of Wisconsin does not identify any sites within the screening area.
	Miscellaneous	

	Junction-Howards Grove-Charter Steel to uth #4 138-kV line	Exhibit RS-13
	General Description Length (miles)	New double circuit line to connect Plymouth # 4 Substation approximately 1.2
#1	Screening Area (Sq. mi length X width)	approximately 2.5
#2	Corridor Sharing Opportunities	State Highways 23 and 57 are located within the screening area as well as several county highways.
#3	Public Lands	None shown.
#4	Sensitive Resources	Sheboygan River, Mullet River, Otter Creek, scattered wetlands, some forested lands, and extensive agricultural lands are present in the screening area.
#5	Cultural Resources Miscellaneous	None shown.

Table RS-2 Environmental Screening Information - Lines Requiring New Right-of-Way

Southw	vest Ripon to the Ripon-Metomen 69-kV line	Exhibit RS-29
	,	
	General Description	New line
	Length (miles)	1.5
#1	Screening Area (Sq. mi.)	4
#2	Corridor Sharing Opportunities	County and local roads provide opportunities for corridor sharing.
#3	Public Lands	Barlow Park and Kiwanis Park are within the screening area.
#4	Sensitive Resources	Two unnamed streams and associated wetlands are located within the screening area.
#5	Cultural Resources	The WHS database identifies numerous architectural and historic sites within the City of Ripon.
	Miscellaneous	There is a low probability of encountering endangered resources.

	New line approximately 3.5
•	
ngth (miles)	approximately 3.5
	errin en en entre 🗸 en en
reening Area (Sq. mi length X width)	approximately 22
	Federal highway, state and county roads, railroad corridor, and existing electrical distribution lines routes located within the screening area offer the best potential for corridor sharing.
blic Lands	Turtle Creek Hunting Grounds
nsitive Resources	Turtle Creek Wildlife Area, streams, small lakes and wetlands.
	Clown Hall of Fame, Circus Colony, Wisconsin's First School for the Deaf Marker.
scellaneous	
n It	lic Lands sitive Resources ural Resources

Table RS-2 Environmental Screening Information - Lines Requiring New Right-of-Way

Rubico	on-Hustisford 138-kV line	Exhibit RS-25
	General Description	New line
	Length (miles)	approximately 5
#1	Screening Area (Sq. mi length X width)	approximately 45
#2	Corridor Sharing Opportunities	State Highways 60 and 67 and County Highways EE and N are located within
#3	Public Lands	the screening area. No DNR managed lands or state natural areas are located in the screening area
#4	Sensitive Resources	Lake Sinissippi, Neosho Millpond, Rubicon River, Hepp Creek, and scattered wetlands and woodlots are found within the screening zone. Extensive agricultural lands are located in the screening area.
#5	Cultural Resources	Cultural Map of Wisconsin does not identify any sites within the screening area.
	Miscellaneous	

North	Madison-Waunakee 138-kV line	Exhibit RS-20
	General Description	New line
	Length (miles)	approximately 5
#1	Screening Area (Sq. mi length X width)	approximately 47
#2	Corridor Sharing Opportunities	Highway 113 and several county highways and local roads are located within the screening area.
#3	Public Lands	No DNR managed lands or state natural areas are located in the screening area
#4	Sensitive Resources	Sixmile Creek and various tributaries, isolated wetlands and woodlots are found within the screening area. Empire Prairie state natural area is located near the screening area.
#5	Cultural Resources	Cultural Map of Wisconsin does not identify any sites within the screening area.
	Miscellaneous	Extensive agricultural lands and rolling terrain.

Table RS-2 Environmental Screening Information - Lines Requiring New Right-of-Way

Cranberry-Conover 115-kV line		Exhibit RS-6
	,	
	General Description	New line
	Length (miles)	approximately 11
#1	Screening Area (Sq. mi length X width)	approximately 74
#2	Corridor Sharing Opportunities	State Highways 32/45 and 17, county highways, local roads, existing electrical transmission and distribution lines and railroad corridors are present in the screening area.
#3	Public Lands	Chequamegon/ Nicolet National Forest, Northern Highland - American Legion State Forest, Eagle Lake Park.
#4	Sensitive Resources	Numerous lakes, streams, wetlands, and forested lands are found in the screening area.
#5	Cultural Resources	There is a high potential for historic and cultural resources within the screening area.
	Miscellaneous	Eagle River Union airport is located within the screening area.

South	Lake Geneva-White River 138-kV line	Exhibit RS-34
	General Description	New line
	Length (miles)	3
#1	Screening Area (Sq. mi.)	25.94
#2	Corridor Sharing Opportunities	United States Highway 12 and State Highway 120, along with other roads offer opportunities for corridor sharing, along with the existing transmission line Y-152.
#3	Public Lands	Big Foot Beach State Park and other WDNR owned lands are located within the screening area.
#4	Sensitive Resources	Lake Geneva, Lake Como, and a number of large wetland complexes are located within the screening area.
#5	Cultural Resources	The WHS database identifies archaeological and historic resources in the screening area, particularly located near Lake Geneva.
	Miscellaneous	There is a moderate probability on encountering endangered resources.

Table RS-2 Environmental Screening Information - Lines Requiring New Right-of-Way

Montrose-Sun Valley-Oak Ridge 138-kV line		Exhibit RS-18
	General Description	New line
	Length (miles)	9
#1	Screening Area (Sq. mi.)	63.49
#2	Corridor Sharing Opportunities	Numerous county and local roads, and a recreational trail offer opportunities
		for corridor sharing.
#3	Public Lands	Nevin Hatchery, Brooklyn Wildlife Area, and a WDNR recreational trail are
		located within the screening area.
#4	Sensitive Resources	The Sugar River and associated wetlands, Story Creek, and other unnamed
		streams and wetlands are located within the screening area.
#5	Cultural Resources	The WHS database has identified architectural and historic sites within the
		screening area.
	Miscellaneous	There is a moderate probability on encountering endangered resources.

Clinto	nville-Werner West 138-kV line	Exhibit RS-17
	General Description	New line primarily on Morgan-Werner West structures
	Length (miles)	approximately 16
#1	Screening Area (Sq. mi length X width)	approximately 555
#2	Corridor Sharing Opportunities	Several state highways, county highways, existing transmission rights-of-way, pipelines, and railroads within the screening zone.
#3	Public Lands	Several state wildlife areas (Mukwa, Navarino, Hortonville Bog, Deer Creek), Wiouwash State Trail, and parks including Cedar County Park, Walter A. Olen, Shiocton Lake, Lindsay, Pfeifer, Hatten, Abrahams Parks, as well as numerous fish, wildlife, habitat and natural areas along the Wolf River throughout screening zone.
#4	Sensitive Resources	The Wolf River, Embarrass River, Bear Creek, Maple Creek, Cedar Creek, Pigeon lake and wetlands along with forested lands and agricultural land are in the screening area.
#5	Cultural Resources	High potential for historic and cultural resources within screening zone. Numerous cemeteries.
	Miscellaneous	Clintonville Municipal Airport.

Table RS-2 Environmental Screening Information - Lines Requiring New Right-of-Way

Morgan	n-Werner West 345-kV line	Exhibit RS-17
	General Description	New line
	Length (miles)	approximately 47
#1	Screening Area (Sq. mi length X width)	approximately 555
#2	Corridor Sharing Opportunities	Several state highways, county highways, existing transmission rights-of-way,
		pipelines, and railroads within the screening zone.
#3	Public Lands	Several State Wildlife areas (Mukwa, Navarino, Hortonville Bog, Deer Creek),
		Shawano Lake Fishery Area, the Wiouwash, Nicolet, and Mountain Bay State
		Trails, and parks including Cedar County Park, Walter A. Olen, Shiocton Lake,
		Lindsay, Pfeifer, Hatten, Abrahams Parks, as well as numerous fish, wildlife,
		habitat and natural areas along the Wolf River throughout screening zone.
#4	Sensitive Resources	The Wolf River, Embarrass River, Oconto River, Bear Creek, Maple Creek,
		Cedar Creek, several lakes, including Pigeon lake, Grass Lake, Pine Lake,
		Shawano Lake, Jung Hemlock-Beech Forest State Natural Area, and wetlands
		along with forested lands and agricultural land are in the screening area.
#5	Cultural Resources	High potential for historic and cultural resources within screening zone.
		Numerous cemeteries.
	Miscellaneous	Clintonville Municipal Airport.

i voi ti ivi	vest Beloit	
	General Description	Connect existing line to Northwest Beloit Substation
	Length (miles)	approximately 1.0
#1	Screening Area (Sq. mi length X width)	approximately 1.5
#2	Corridor Sharing Opportunities	Existing road and railroad corridors. Possible sharing with local electrical distribution lines.
#3	Public Lands	None shown.
#4	Sensitive Resources	Unnamed tributary to Raccoon Creek
#5	Cultural Resources	Cultural Map of Wisconsin does not identify any sites within the screening area
	Miscellaneous	

Table RS-2 Environmental Screening Information - Lines Requiring New Right-of-Way

Femrit	e/Royster-AGA 69-kV line	Exhibit RS-11
	General Description	New line
	Length (miles)	approximately 0.3
#1	Screening Area (Sq. mi length X width)	approximately 0.2
#2	Corridor Sharing Opportunities	Local roads offer some opportunities for corridor sharing.
#3	Public Lands	The Femrite-Royster line is adjacent to the Glacial Drumlin Trail.
#4	Sensitive Resources	Woodlot located in industrial park.
#5	Cultural Resources	Cultural Map of Wisconsin does not identify any sites within the screening area.
	Miscellaneous	Primarily commercial/industrial park land uses.

Concord-Bark River 345-kV line		Exhibit RS-5
	General Description Length (miles)	New line approximately 17 total, 10 of new right-of-way
#1	Screening Area (Sq. mi length X width)	approximately 107
#2	Corridor Sharing Opportunities	Several state and county highways, existing transmission rights-of-way, pipelines, and railroad corridors are within the screening zone.
#3	Public Lands	State public hunting grounds, Monches County Park and other undeveloped county parklands, and several community parks are located within the screening area.
#4	Sensitive Resources	Keesus Lake Marshland Preservation area, Ashippun Lake access and wildlife area, Keesus Lake, North Lake, Beaver Lake, Pine Lake, Cornell Lake, Moose Lake, Okauchee Tamarack Lake, Ashippun Lake, Lac La Belle, and several streams including Bark River, Oconomowoc River, Mason Creek, Ashippun River, Rock River and tributaries are all located in the screening area.
#5	Cultural Resources	The Marantha Baptist Bible College, the Octagon House, Northwestern College and the Main Street Commercial District in Watertown and the East Capitol Drive Historic District in Hartland are identified on the Cultural Map of Wisconsin within the screening area.
	Miscellaneous	The Watertown Municipal Airport and the Oconomowoc Landing Strip are located in the screening area.

Table RS-2 Environmental Screening Information - Lines Requiring New Right-of-Way

Evans	ville-Brooklyn 69-kV line	Exhibit RS-10
	General Description	New line
	Length (miles)	8
#1	Screening Area (Sq. mi.)	55.08
#2	Corridor Sharing Opportunities	United States Highway 14, numerous county and local roads, along with a railroad corridor, offer opportunities for corridor sharing.
#3	Public Lands	Evansville Wildlife Area
#4	Sensitive Resources	Allen Creek and Tributaries, and a tributary of Badfish Creek are located within the screening area.
#5	Cultural Resources	The WHS database identifies architectural and historic sites, particularly concentrated within the Village of Brooklyn and the City of Evansville. Two archaeological sites are identified within the screening area.
	Miscellaneous	There is a moderate probability of encountering endangered resources.

Rockd	ale-West Middleton 345-kV line	Exhibit RS-23
	General Description	345-kV System Tie
	Length (miles)	approximately 28
#1	Screening Area (Sq. mi length X width)	approximately 290
#2	Corridor Sharing Opportunities	New tie from the 345-kV system to relieve system overloads in the Madison area. Additional rights-of-way will be required. State/county roads and existing transmission lines located within the screening area offer the best possibility of corridor sharing.
#3	Public Lands	Numerous city, county, and state parks including Indian Lake, LaFollette, and Festbe County Parks, Governor Nelson and Lake Kegonsa State Parks, portions of the Glacial Drumlin State Trail, and several state fishery and wildlife areas are located within the screening area.
#4	Sensitive Resources	Bean Lake, Red Cedar Lake, and the Hook Lake/Grass Lake state natural areas, and much of the Yahara River drainage basin are found within the screening area
#5	Cultural Resources	The Koshkonong Norwegian Settlement, Bernard-Hoover Boar House, Robert M. LaFollyette House, Gilmore House, Olin House, the State Capital, several effigy mound sites, numerous museums, and the Langdon Street, Sherman Avenue, Third Lake Ridge, and University Heights Historic Districts are located within the screening area.
	Miscellaneous	

Table RS-2 Environmental Screening Information - Lines Requiring New Right-of-Way

Defore	st/Token Creek-Yahara 69-kV line	Exhibit RS-7
	General Description	New line
	Length (miles)	approximately 1.0
#1	Screening Area (Sq. mi length X width)	approximately 1.7
#2	Corridor Sharing Opportunities	Highways 19 and 51 are located in the screening area.
#3	Public Lands	Cherokee Marsh fishery area is located near the screening area.
#4	Sensitive Resources	Cherokee Marsh and Yahara River are located near the screening area.
#5	Cultural Resources	Cultural Map of Wisconsin does not identify any sites within the screening area.
	Miscellaneous	Commercial and industrial land uses are common.

Lake Delton-Birchwood 138-kV line		Exhibit RS-16
	General Description	New line
#1	• ,	approximately 5
	, ,	approximately 41
#2	9 1,	Interstate Highway 90/94, United States Highway 12, State Highway 23, several county highways and local electrical distribution lines.
#3		Mirror Lake State Park, Dell Creek wildlife area, Hulburt Creek Woods State Natural Area and Hulburt Creek fishery area.
#4	Sensitive Resources	State Natural Areas and State Parks, Dell Creek, Harrison Creek, Lake Delton, Mirror Lake, Lake Blass, International Crane Foundation are located within the screening area.
#5		Cultural Map of Wisconsin identifies Dawn Manor, Seth Peterson cottage, International Crane Foundation, and the H.H. Bennett Studio within the screening area.
		Ho Chunk tribal lands and the Baraboo Dells Airport are located in the screening area.

Table RS-2 Environmental Screening Information - Lines Requiring New Right-of-Way

Dunn F	Road-Egg Harbor 69-kV line	Exhibit RS-8
	General Description	Construct a second 69-kV line
	Length (miles)	12.66
#1	Screening Area (Sq. mi.)	82.7
#2	Corridor Sharing Opportunities	State Highway 42 and existing transmission line X-24A provide the best opportunities for corridor sharing, along with county and local roads.
#3	Public Lands	None identified
#4	Sensitive Resources	The screening area is adjacent to Lake Michigan.
#5	Cultural Resources	The WHS database identifies several architectural and historic sites within the screening area, many are located near State Highway 42.
	Miscellaneous	There is a high probability of encountering endangered resources.

Eden-M	/luscoda-Richland Center 69-kV line	Exhibit RS-9
	General Description	New line
	Length (miles)	approximately 25
#1	Screening Area (Sq. mi length X width)	approximately 234
#2	Corridor Sharing Opportunities	Railroads, existing transmission lines, and State/United States Highways offer corridor sharing potential.
#3	Public Lands	Blackhawk Lake Recreation area, Pine River public hunting grounds, and Big Spring Fishery area, and other public lands along the Wisconsin River are located in the screening area.
#4	Sensitive Resources	Wisconsin River, Lower Wisconsin State Riverway, Southwest Wisconsin Driftless area topography, Big Spring Fishery area, Pine River Public Hunting Grounds, Blackhawk Lake Recreation area, Lower Wisconsin State Wildlife Area, Blue River Sand Barrens State Natural Area, Avoca Prairie Savanna State Natural Area, and Orion Mussel Bed State Natural Area are located in the screening area.
#5	Cultural Resources	Court Street Commercial Historic District, Birthplace of GTE, Krouskop Park, AD German Warehouse, Eagle Effigy Mounds, proposed Ho-Chunk Cultural Park, Dr. Bertha E. Reynolds Memorial, Rural Electrification Marker are shown on the Cultural map of Wisconsin.
	Miscellaneous	Pierick Landing Strip

Table RS-2 Environmental Screening Information - Lines Requiring New Right-of-Way

Salem-	Spring Green-West Middleton 345-kV line	Exhibit RS-26
	, ,	
	General Description	New line - Large Access Project
	Length (miles)	approximately 114
#1	Screening Area (Sq. mi length X width)	approximately 2480
#2	Corridor Sharing Opportunities	Numerous federal, state, and county highways, existing transmission lines,
		railroad corridors, and town roads offer the best opportunities for corridor
		sharing.
#3	Public Lands	Nelson Dewey State Park, Governor Dodge State Park, Tower Hill State Park,
		Bluemounds State Park, Blackhawk Lake Recreational Area, Turkey River
		Mounds State Park (IA), White Pine Hollow State Forest Preserve (IA), Lower
		Wisconsin State Riverway, numerous county parks and other public lands are scattered throughout the screening area.
#4	Sensitive Resources	Upper Mississippi River National Wildlife and Fish Refuge, Lower Wisconsin
#4	Sensitive resources	State Riverway, numerous Wisconsin State Natural Areas, several State
		Preserves and recreational areas, The Mississippi and Wisconsin Rivers and
		their tributaries, and various other wetlands, lakes and streams are located
		within the screening area.
#5	Cultural Resources	The Cultural Map of Wisconsin identifies numerous cultural resources in the
		screening area. The potential for encountering cultural and historic resources
		is high in the screening area.
	Miscellaneous	Principal ecological landscapes include the Southwest Savanna, Western
		Coulee and Ridges, Central Sand Plains, and Central Sand Hills. The western
		portions of the screening area are generally located in Wisconsin's Driftless
		area.

Table RS-2 Environmental Screening Information - Lines Requiring New Right-of-Way

Chalk	Hills-Chandler 69 kV conversion to 138 kV	Exhibit RS-3
	General Description	Rebuild/convert to 138-kV operation
	Length (miles)	54
#1	Screening Area (Sq. mi.)	87.54
#2	Corridor Sharing Opportunities	United States Highway 2, numerous county and local roads, and railroad corridors provide opportunities for corridor sharing.
#3	Public Lands	Escanaba River State Forest, and other state owned land along RR corridor.
#4	Sensitive Resources	Numerous wetlands
#5	Cultural Resources	None identified
	Miscellaneous	There is a moderate probability of encountering endangered resources.

South	Lake Geneva-Lake Shore 69-kV line	Exhibit RS-27
		_
**********************	General Description	New line
	Length (miles)	3.2
#1	Screening Area (Sq. mi.)	13.76
#2	Corridor Sharing Opportunities	Existing roadways offer the best opportunities for corridor sharing.
#3	Public Lands	Big Foot Beach State Park is located in the screening area.
#4	Sensitive Resources	Lake Geneva, and a few large wetland complexes.
#5	Cultural Resources	The WHS database identifies a few archaeological and historic sites near Lake
		Geneva.
	Miscellaneous	There is a moderate probability of encountering endangered resources.

Table RS-2 Environmental Screening Information - Lines Requiring New Right-of-Way

Twin L	akes-Spring Valley 138-kV line	Exhibit RS-30
	General Description	New line
	Length (miles)	approximately 9
#1	Screening Area (Sq. mi length X width)	approximately 64
#2	Corridor Sharing Opportunities	Several Kenosha County highways and a railroad corridor are located within the screening area.
#3	Public Lands	Silver Lake and Fox River Parks and New Munster State Wildlife area are located in the screening area.
#4	Sensitive Resources	The Fox River and tributaries and several lakes are located within the screening area. Peat Lake, Silver Lake Bog, and New Munster Bog Island State Natural Areas are located in the screening area. The Elizabeth Lake wetlands and Southeast Prairie Pothole areas are located in or near the screening area.
#5	Cultural Resources	No locations of cultural interest are identified on the Cultural Map of Wisconsin within the screening area.
	Miscellaneous	Westosha and Camp Lake Landing Strips

Horico	n-East Beaver Dam 138-kV line	Exhibit RS-14
	General Description	New line
	Length (miles)	approximately 9
#1	Screening Area (Sq. mi length X width)	approximately 65
#2	Corridor Sharing Opportunities	Highway 33, County highways, and a railroad right-of-way offer possible
		sharing opportunities.
#3	Public Lands	Portions of Horicon Marsh and Shaw Marsh wildlife areas and the Wild Goose
		Trail are within the screening area.
#4	Sensitive Resources	Horicon and Shaw Marsh, Rock River, Pratt Creek, Schulz Creek, Crystal
		Creek, Park Creek and Beaver Dam River are located in the screening area.
#5	Cultural Resources	Cultural Map of Wisconsin does not identify any sites within the screening area.
	Miscellaneous	

Table RS-2 Environmental Screening Information - Lines Requiring New Right-of-Way

Oak C	reek-Hale (Brookdale) 345-kV line	Exhibit RS-21
	General Description	New transmission line segments along with conversion of 16 mile 138-kV segment to 345 kV.
	Length (miles)	approximately 24 total, 4 of new right-of-way
#1	Screening Area (Sq. mi length X width)	approximately 200
#2	Corridor Sharing Opportunities	Several state and county roads and existing 138, 230, and 345-kV line routes exist in the screening area.
#3	Public Lands	Racine and Milwaukee County Parkland, Root River Parkway, Whitnall Park.
#4	Sensitive Resources	Root River and tributaries, Big Muskego Lake, State Natural Areas (Gravel Pit Woods, Caddy Vista Woods, Stone Woods, County Line Lowland Woods, and a few locally significant areas identified in a SEWRPC report.
#5	Cultural Resources	The Ben Hunt Cabin is identified in the screening area on the Cultural Map of Wisconsin.
	Miscellaneous	Some additional right-of-way needed, Hales Corners Airport.

West I	Middleton-North Madison 345-kV line	Exhibit RS-33
		-
	General Description	New line
	Length (miles)	approximately 20
#1	Screening Area (Sq. mi length X width)	approximately 42
#2	Corridor Sharing Opportunities	United States Highways 12 and 14, State Highways 113 and 19, several county
		highways and local electrical distribution lines offer possible sharing opportunities.
#3	Public Lands	Lodi Marsh wildlife area, county and local parks.
#4	Sensitive Resources	Pheasant Branch, Black Earth Creek, Halfway Prairie Creek, Sixmile Creek,
		tributaries to the Yahara River, Brandenburg Lake, Lodi Marsh State Natural
		Area.
#5	Cultural Resources	Cultural Map of Wisconsin does not identify any sites within the screening area.
	Miscellaneous	Morey Airport

Table RS-2 Environmental Screening Information - Lines Requiring New Right-of-Way

Fitzgei	ald-Omro Industrial 69-kV line	Exhibit RS-12
**********************	General Description	New line
	Length (miles)	approximately 6
#1	Screening Area (Sq. mi length X width)	approximately 49
#2	Corridor Sharing Opportunities	State highways and existing transmission lines offer corridor sharing opportunities.
#3	Public Lands	Lake Butte des Morts boat landings, Tower Park, Stearn's Park, Omro Ball Park, and Waukau Creek Nature Preserve are located in the screening area.
#4	Sensitive Resources	Fox River, Waukau Creek Nature Preserve, Spring Brook.
#5	Cultural Resources	The Cultural Map of Wisconsin does not identify any sites within the screening area, however there are several cemeteries known in the screening area.
	Miscellaneous	Skydive Adventure Airport

NOTES:

#1	Screening Area Width:	For lines 0-5 miles long, screening area width equals length of segment: for lines 5-15 miles long, screening area width equals 5 miles; for lines > 15 miles
		long, screening area width equals 30% of line length.
#2	Corridor Sharing Opportunities:	Identify dominant corridor types.
#3	Public Lands:	Identify properties by name.
#4	Sensitive Resources:	List major stream crossings, significant topographic features, designated
		natural areas, etc.
#5	Cultural Resources:	List resources shown on the statewide cultural resources map.

Table RS-3
Transmission Line Rebuilds/Reconductors, New Circuits and Voltage Conversions on Existing Right-of-Way

Identified need	Lines to be rebuilt/reconductored on existing ROW	Approx. mileage of rebuilt, reconductored or uprated lines	Projected in-service year	Planning zone	Environmental screening provided?	Comments
Relieve overloads or low voltages under contingency	Reconductor Wien-McMillan 115-kV line (ATC,MEWD)	20	2006	1	No	Uprate/Reconductor
Achieve transfer capability associated with Arrowhead-Gardner Park, relieve overloads or low voltages under contingency, accommodate new generation	Reconductor Weston-Northpoint 115-kV line	24	2006	1	No	Uprate/Reconductor
Relieve overloads or low voltages under contingency	Construct Hiawatha-Engadine 69-kV line	0.2	2006	2	No	0.2 mile - minimal work required
Relieve overloads or low voltages under contingency, reduce service limitations	Rebuild and convert one Hiawatha-Indian Lake 69-kV circuit to double circuit 138 kV standards, string two circuits initially and operate one at 69 kV	40	2006	2	No	under construction
Replace aging facilities, relieve overloads or low voltages under contingency, accommodate new generation	Rebuild Turtle-Bristol 69-kV line to 138 kV and operate at 69 kV	29	2006	3	No	under construction
Relieve overloads or low voltages under contingency, accommodate new generation	Convert Columbia-North Madison 138-kV line to 345 kV	17.41	2006	3	No	under construction
T-D interconnection request	Construct a Martin Road-South Fond du Lac/Ohmstead 138-kV line	0.5	2006	4	No	0.5 mile - minimal impacts
Relieve overloads or low voltages under contingency, reduce service limitations, replace aging facilities	Rebuild Stiles-Amberg double circuit 138-kV line	45	2006	2 & 4	No	Detailed environmental screening information contained in filing at PSCW
Accommodate new generation, relieve overloads or low voltages under contingency	Rebuild Weston-Sherman St. and Sherman St-Hilltop 115-kV lines as double circuits with a new Gardner Park-Hilltop 115-kV line	9.5	2007	1	No	Detailed environmental screening information contained in filing at PSCW
Relieve overloads or low voltages under contingency, replace aging facilities	Rebuild Atlantic-Osceola 69-kV line (Laurium #1)	13.7	2007	2	Yes	
Relieve overloads or low voltages under contingency	Rebuild the Verona to Oregon 69-kV line Y119	11	2007	3	Yes	
Relieve overloads or low voltages under contingency, accommodate new generation	Convert Kegonsa-McFarland-Femrite 69-kV line to 138 kV	5.9	2007	3	No	Uprate/Reconductor
Relieve overloads or low voltages under contingency	Convert Sycamore-Reiner-Sprecher from 69- kV to 138 kV	6.5	2007	3	No	Uprate/Reconductor
Relieve overloads or low voltages under contingency	String a new Ellinwood-Sunset Point 138-kV line on existing structures	3.58	2007	4	Yes	
Relieve overloads or low voltages under contingency	Uprate North Appleton-Lawn Road-White Clay 138-kV line	29.8	2007	4	No	Uprate/Reconductor
Achieve transfer capability associated with Arrowhead-Gardner Park	Upgrade Kelly-Whitcomb 115-kV line conductor clearances to 300F	24	2008	1	No	Uprate/Reconductor

Table RS-3
Transmission Line Rebuilds/Reconductors, New Circuits and Voltage Conversions on Existing Right-of-Way

Identified need	Lines to be rebuilt/reconductored on existing ROW	Approx. mileage of rebuilt, reconductored or uprated lines	Projected in-service year	Planning zone	Environmental screening provided?	Comments
Relieve overloads or low voltages under contingency	Rebuild Hustisford-Horicon 69-kV to 138 kV	8	2008	3	Yes	
Relieve overloads or low voltages under contingency	Convert Rock River-Bristol-Elkhorn to 138 kV operation; rebuild Bristol with a new 138-kV bus	27.74	2008	3	No	Uprate/Reconductor
Relieve overloads or low voltages under contingency	Construct 138-kV line from Canal to Dunn Road	7.64	2008	4	Yes	
Relieve overloads or low voltages under contingency, replace aging facilities	Rebuild/Convert Pulliam-New Suamico 69-kV line to 138 kV	10.2	2008	4	Yes	
Relieve overloads or low voltages under contingency, reduce service limitations	Uprate North Appleton-Mason Street 138-kV line	21	2008	4	No	Uprate/Reconductor
Relieve overloads or low voltages under contingency, reduce service limitations	Uprate North Appleton-Lost Dauphin 138-kV line	12	2008	4	No	Uprate/Reconductor
Relieve overloads or low voltages under contingency	Rebuild Crivitz-High Falls 69-kV double circuit line	14.5	2008	4	Yes	
Accommodate new generation	Reconductor Pleasant Valley-Saukville 138- kV line	12	2008	5	No	Uprate/Reconductor
Accommodate new generation	Reconductor Pleasant Valley-St Lawrence 138-kV line	7	2008	5	No	Uprate/Reconductor
Accommodate new generation	Reconductor Cornell-Range Line 138-kV line	2.43	2008	5	No	Uprate/Reconductor
Relieve overloads or low voltages under contingency, transfer capability	Rebuild/convert Conover-Plains 69-kV line to 138 kV	73	2008	1 & 2	Yes	
Reduce service limitations, relieve overloads or low voltages under contingency, improve transfer capability and Weston stability	Construct Gardner Park-Central Wisconsin 345-kV line	47	2009	1	No	Detailed environmental screening information contained in filing at PSCW
Replace aging facilities	Relocate 69-kV Rexton tap to 69-kV Hiawatha Pine River line (6909)	0	2009	2	No	0 miles
Replace aging facilities	Relocate 69-kV Trout Lake tap to 69-kV Hiawatha-Pine River line (6909)	0	2009	2	No	0 miles
Relieve overloads or low voltages under contingency, replace aging facilities	Rebuild Hiawatha-Pine River-Mackinac 69-kV to 138 kV	75	2009	2	Yes	
Relieve overloads or low voltages under contingency, reduce service limitations	Convert rebuilt Hiawatha-Indian Lake circuit (operated at 69 kV) to 138 kV	40	2009	2	No	Conversion only - no construction
Relieve overloads or low voltages under contingency	Rebuild 2.37 miles of 69-kV line from Sunset Point to Pearl Avenue	2.37	2009	4	Yes	
Accommodate new generation	Reconductor Oak Creek-Ramsey 138-kV line	8.5	2009	5	No	Uprate/Reconductor

Table RS-3
Transmission Line Rebuilds/Reconductors, New Circuits and Voltage Conversions on Existing Right-of-Way

Identified need	Lines to be rebuilt/reconductored on existing ROW	Approx. mileage of rebuilt, reconductored or uprated lines	Projected in-service year	Planning zone	Environmental screening provided?	Comments
Accommodate new generation	Reconductor Oak Creek-Allerton 138-kV line	5.41	2009	5	No	Uprate/Reconductor
Relieve overloads or low voltages under contingency, reduce service limitations	Construct Rockdale-Concord 345-kV line in parallel with existing 138 kV on existing double-width right-of-way	22.6	2009	3 & 5	Yes	
Access initiative, relieve overloads or low voltages under contingency	Construct Monroe County-Council Creek 161-kV line	20	2010	1	Yes	
Access initiative, relieve overloads or low voltages under contingency	Uprate Council Creek-Petenwell 138-kV line	32	2010	1	No	Uprate/Reconductor
Access initiative, relieve overloads or low voltages under contingency	Rebuild/reconductor Petenwell-Saratoga 138-kV line	23	2010	1	Yes	
Relieve overloads or low voltages under contingency	Convert Hillman to Eden 69-kV line to 138 kV	28.13	2010	3	No	Conversion - minimal site work
contingency	Rebuild Brodhead to South Monroe 69-kV line using 477 ACSR	18	2010	3	Yes	
Relieve overloads or low voltages under contingency	Convert Waunakee-Blount 69-kV line to 138 kV	5	2010	3	No	Conversion - minimal site work
Access initiative	Rebuild/convert New Holstein-St Nazianz- Custer-Lakefront 69-kV line to 138 kV (1225 Amps minimum)	20	2010	4	Yes	
Access initiative	Rebuild Tecumseh Road-New Holstein to double circuit 138/69 kV, where 69 kV will serve Gravesville via New Holstein	2.5	2010	4	Yes	
Accommodate new generation	Loop Ramsey5-Harbor 138-kV line into Norwich and Kansas to form a new line from Ramsey-Norwich and Harbor-Kansas 138-kV lines	5.72	2009	5		
Accommodate new generation	Uprate Kansas-Ramsey6 138-kV line	5.72	2010	5	No	Uprate/Reconductor
Accommodate new generation	Uprate Oak Creek-Nicholson 138-kV line	6.8	2010	5	No	Uprate/Reconductor
Relieve overloads or low voltages under contingency, accommodate new generation	Convert Bark River-Mill Road 138-kV line to 345 kV	11	2010	3 & 5	No	Conversion only - no construction
Relieve overloads or low voltages under contingency, replace aging facilities	Rebuild Blaney Park-Munising 69-kV line to 138 kV	50	2012	2	Yes	
Relieve overloads or low voltages under contingency	Rebuild and convert West Middleton-Spring Green 69-kV line to 138 kV	5.71	2012	3	Yes	
Relieve overloads or low voltages under contingency	Construct West Middleton-Stagecoach double circuit 138/69-kV line	6	2012	3	Yes	
Access initiative	Rebuild Paddock-Town Line Road 138-kV line to double-circuit 1600 Amps minimum summer emergency each	7	2013	3	Yes	
Access initiative	Reconductor Town Line Road-Russell 138-kV line to 1600 Amps minimum summer emergency	8.3	2013	3	Yes	

Table RS-3
Transmission Line Rebuilds/Reconductors, New Circuits and Voltage Conversions on Existing Right-of-Way

		Approx. mileage of				
	Lines to be rebuilt/reconductored on existing	rebuilt,	Projected		Environmental	
Identified need	ROW	reconductored or	in-service	Planning	screening	
		uprated lines	year	zone	provided?	Comments
Relieve overloads or low voltages under	Convert South Lake Geneva to Twin Lakes	11.5	2013	3	No	Conversion - minimal site work
contingency	69-kV line to 138 kV	11.5	2013	3	INO	Conversion - minimal site work
	Construct Oak Creek-St Martins 138-kV					
Accommodate new generation	circuit #2 installing 16.6 mi. conductor on	16.6	2013	5	Yes	
	existing towers					
	Construct a Hale (Brookdale)-Granville 345-					
	kV line converting/reconductoring 5.6 mi. 138					
Accommodate new generation	kV, rebuilding 7 mi. 138-kV double-circuit	15.6	2013	5	Yes	
	tower line and converting/reconductoring 3					
	mi. 138 kV on existing 345-kV structures					
	D (
A	Restring Bluemound-Butler 138-kV line	5.41	2013	5	No	Included in Brookdale-Granville
Accommodate new generation	(KK5051) on new 345-kV structures installed with Hale (Brookdale)-Granville line	5.41	2013	Э	INO	included in Brookdale-Granville
	,					
	String Butler-Tamarack (Carmen) 138-kV line					
Accommodate new generation	on new 345-kV structures installed with Hale	4.12	2013	5	No	Included in Brookdale-Granville
	(Brookdale)-Granville line					
Relieve overloads or low voltages under	Construct West Middleton-Blount 138-kV line	5	2014	3	Yes	
contingency		-				
Relieve overloads or low voltages under	Construct a Northside-City Limits 138-kV line	3.16	2015	4	Yes	
contingency						
Relieve overloads or low voltages under contingency	Reconductor Pulliam-Danz 69-kV line	3	2015	4	Yes	
Relieve overloads or low voltages under						
contingency	Reconductor Danz-Henry Street 69-kV line	1.5	2015	4	Yes	
Relieve overloads or low voltages under						
contingency	Reconductor Pulliam-Van Buren 69-kV line	2	2015	4	Yes	
g ,	Dahuild/Canuart Nam Cuarrian Dia CO 137					
_	Rebuild/Convert New Suamico-Pioneer 69-kV	13.1	2015	4	Yes	
contingency, replace aging facilities	line to 138 kV					

Table RS-4
Environmental Screening Information - Lines on Existing Right-of-Way

Atla	ntic-Osceola 69-kV line (Laurium #1) rebuild	
	General Description	Rebuild
	Length (miles)	13.7
#1	Screening Area (Sq. mi length X width)	Existing Corridor
#2	Corridor Sharing Opportunities	N/A – existing transmission line corridor.
#3	Public Lands	None identified
#4	Sensitive Resources	Extensive wetlands and forested lands are located along the route.
#5	Cultural Resources	
		Cultural resources may be found in the area due to the proximity to
		the shore of Lake Superior and the Portage River and Ship Canal.
	Miscellaneous	Much of the route follows existing road and railroad corridors.

Verd	na-Oregon 69-kV line rebuild	
	General Description	Rebuild
	Length (miles)	11
#1	Screening Area (Sq. mi length X width)	Existing Corridor
#2	Corridor Sharing Opportunities	N/A - Existing transmission line corridor.
#3	Public Lands	Hook Lake and Grass Lake Wildlife Area and Natural Area, USFWS land.
#4	Sensitive Resources	Potential crossing of a few unnamed streams, limited wetlands, low potential to encounter threatened and endangered species.
#5	Cultural Resources	The Cultural Map of Wisconsin identifies no historic resources in the vicinity of the existing line
	Miscellaneous	The Muck Farms Airport, Tesmer Field, and Ha-Rail Field are located in the screening area.

Table RS-4
Environmental Screening Information - Lines on Existing Right-of-Way

Elliny	vood-Sunset Point 138-kV line	
	General Description Length (miles)	String a new line on existing structures 3.58
#1	Screening Area (Sq. mi length X width)	Existing corridor
	Corridor Sharing Opportunities	N/A – existing transmission line corridor.
#3	Public Lands	None identified
#4	Sensitive Resources	Fox River Crossing
#5	Cultural Resources	The Cultural Map of Wisconsin identifies no historic resources in the vicinity of the existing line.
	Miscellaneous	

Hust	isford-Horicon 69 kV to 138 kV conversion	
	General Description	Rebuild to 138 kV
	Length (miles)	8
#1	Screening Area (Sq. mi length X width)	Existing corridor
#2	Corridor Sharing Opportunities	N/A – existing transmission line corridor.
#3	Public Lands	Existing line is adjacent to 40 acres of Wisconsin DNR public hunting grounds.
#4	Sensitive Resources	The existing line crosses extensive wetland areas and requires crossing Wildcat Creek and the Rock River.
#5	Cultural Resources	The Cultural Map of Wisconsin identifies no historic resources in the vicinity of the existing line
	Miscellaneous	CPCN application to be filed 11/05.

Table RS-4
Environmental Screening Information - Lines on Existing Right-of-Way

Can	al-Dunn Road 69-kV line	
#1 #2 #3 #4	General Description Length (miles) Screening Area (Sq. mi length X width) Corridor Sharing Opportunities Public Lands Sensitive Resources	Construct line 7.64 Existing corridor N/A – existing transmission line corridor. None identified The existing line crosses Sturgeon Bay and one unnamed stream. There is low probability of encountering endangered resources
#5	Cultural Resources Miscellaneous	There is low probability of encountering endangered resources.

Pulli	am - New Suamico 69 kV to 138 kV conversion	
	General Description	Rebuild 69-kV line to 138 kV
	Length (miles)	10.2
#1	Screening Area (Sq. mi length X width)	Existing corridor
#2	Corridor Sharing Opportunities	N/A – existing transmission line corridor.
#3	Public Lands	No state-owned lands were identified along the route.
#4	Sensitive Resources	Green Bay, Duck Creek, Fox and Suamico Rivers, Duck and Haller
		Creeks, and associated wetland areas are found along this route.
#5	Cultural Resources	Due to the proximity of this route to Green Bay near the mouth of the
		Fox River, there is a moderate to high likelihood of encountering
		archaeological resources on this route.
	Miscellaneous	Due to the proximity of this route to Green Bay and the Fox River,
		there is a moderate to high likelihood of encountering rare species
		on this route.

Table RS-4
Environmental Screening Information - Lines on Existing Right-of-Way

Crivi	tz-High Falls 69-kV line rebuild	
	General Description	Rebuild double circuit line
	Length (miles)	14.5
#1	Screening Area (Sq. mi length X width)	Existing corridor
#2	Corridor Sharing Opportunities	N/A – existing transmission line corridor.
#3	Public Lands	Line passes through more than 1 mile of DNR land.
#4	Sensitive Resources	The existing line nears and crosses the Peshtigo River (designated as an Outstanding Resource Water) multiple times, crosses approximately 4 other streams, and passes through several wetland areas.
#5	Cultural Resources	The Cultural Map of Wisconsin identifies the High Falls Hydroelectric
		Plant as a historic resource.
	Miscellaneous	This route passes primarily through undeveloped forested areas.

Conc	over-Plains 69 kV to 138 kV conversion	
	General Description	Rebuild existing 69-kV line to 138 kV
	Length (miles)	73
#1	Screening Area (Sq. mi length X width)	Existing corridor
#2	Corridor Sharing Opportunities	N/A – existing transmission line corridor.
#3	Public Lands	Significant portions of this route are located on lands owned by the United States, States of Wisconsin and Michigan, and counties along the route.
#4	Sensitive Resources	The line route crosses lands in national, state, and county forests and parks, numerous rivers, streams and wetland areas. The line route also crosses Spread Eagle barrens State Natural Area.
#5	Cultural Resources	
		The Cultural Map of Wisconsin identifies historic resources in Florence. Due to the proximity to the Menomonee River and numerous other rivers and lakes, there is a good likelihood that archaeological and historic resources are located along this route.
	Miscellaneous	There is a high probability of encountering rare species. Much of this line passes through undeveloped and forested areas.

Table RS-4
Environmental Screening Information - Lines on Existing Right-of-Way

Hiav	vatha-Pine River-Mackinac 69 kV to 138 kV	
conv	rersion	
	General Description	Rebuild to 138 kV
	Length (miles)	75
#1	Screening Area (Sq. mi length X width)	Existing corridor
#2	Corridor Sharing Opportunities	N/A – existing transmission line corridor.
#3	Public Lands	The majority of the existing line passes through the Hiawatha
		National Forest and the Lake Superior State Forest.
#4	Sensitive Resources	Numerous wetlands and streams.
#5	Cultural Resources	Cultural resources may be found in the area due to the proximity to
		the shore of Lake Michigan.
	Miscellaneous	There is a high probability of encountering rare species. This line
		passes through primarily undeveloped forested areas.

Suns	set Point-Pearl Avenue 69-kV line rebuild	
	General Description	Rebuild a portion of the line
	Length (miles)	2.37
#1	Screening Area (Sq. mi length X width)	Existing corridor
#2	Corridor Sharing Opportunities	N/A – existing transmission line corridor.
#3	Public Lands	Riverside Cemetery
#4	Sensitive Resources	The existing line is adjacent to the Fox River, and passes through a few wetland areas.
#5	Cultural Resources	The Cultural Map of Wisconsin identifies several historic sites located in the vicinity of the existing corridor along the Fox River.
	Miscellaneous	The existing line passes through primarily urbanized areas.

Table RS-4
Environmental Screening Information - Lines on Existing Right-of-Way

Roc	kdale-Concord 345-kV line	
	General Description	Construct 345-kV line parallel to existing 138-kV line in existing double-width right-of-way
	Length (miles)	73
#1	Screening Area (Sq. mi length X width)	Existing double-width corridor
#2	Corridor Sharing Opportunities	N/A – existing transmission line corridor.
#3	Public Lands	The route crosses the Glacial Drumlin Trail, but no other state owned lands or large parks were identified.
#4	Sensitive Resources	The route crosses the Rock and Crawfish River, Johnson Creek, and several wetland areas.
#5	Cultural Resources	The Cultural Map of Wisconsin identifies historic sites within the cities of Tcambridge, Lake Mills, and Watertown along the route. There is a moderately high likelihood of archaeological resources along this line route.
	Miscellaneous	There is a low to moderate probability of encountering endangered resources.

Mon	roe County-Council Creek 161-kV line	
	-	
	General Description	Construct line
	Length (miles)	20
#1	Screening Area (Sq. mi length X width)	Existing corridor
#2	Corridor Sharing Opportunities	N/A – existing transmission line corridor.
#3	Public Lands	Elroy-Sparta State Trail, Fort McCoy Barrens State Natural Area
#4	Sensitive Resources	The existing line crosses a number of waterways and associated wetland areas, including: Farmers Valley Creek, Silver Creek, Chub Creek, Council Creek, South Fork Lemon weir River, and some unnamed streams.
#5	Cultural Resources	
		The Cultural Map of Wisconsin identifies historic sites within the
		cities of Tomah and Sparta, along with the Elroy-Sparta state trail.
	Miscellaneous	There is a moderate probability of encountering endangered
		resources.

Table RS-4
Environmental Screening Information - Lines on Existing Right-of-Way

Pete	nwell-Saratoga 138-kV line rebuild	
#1 #2 #3	General Description Length (miles) Screening Area (Sq. mi length X width) Corridor Sharing Opportunities Public Lands	Rebuild 23 Existing corridor N/A – existing transmission line corridor. None identified
#4	Sensitive Resources	Portions of the existing line are adjacent to Petenwell Lake, and cross the Wisconsin River at the base of the lake. The line also crosses numerous wetlands associated with Petenwell Lake and the Wisconsin River. Sevenmile Creek, Tenmile Creek, Fourteenmile Creek, and their associated wetlands also must be crossed.
#5	Cultural Resources	The Cultural Map of Wisconsin identifies no historic resources along the existing corridor.
	Miscellaneous	

Broo	head-South Monroe 69-kV line rebuild	
	General Description	Rebuild
	Length (miles)	18
#1	Screening Area (Sq. mi length X width)	Existing corridor
#2	Corridor Sharing Opportunities	N/A – existing transmission line corridor.
#3	Public Lands	None identified
#4	Sensitive Resources	The existing line crosses a number of streams.
#5	Cultural Resources	The Cultural Map of Wisconsin identifies a number of historic sites in and around the City of Monroe.
	Miscellaneous	There is a low potential for encountering endangered resources.

Table RS-4
Environmental Screening Information - Lines on Existing Right-of-Way

	Holstein-St. Nazianz-Custer-Lakefront 69 kV to 138 onversion	
	General Description	Rebuild to 138 kV
	Length (miles)	20
#1	Screening Area (Sq. mi length X width)	Existing corridor
#2	Corridor Sharing Opportunities	N/A – existing transmission line corridor.
#3	Public Lands	No state-owned lands were identified. The route may cross local and county owned parklands
#4	Sensitive Resources	The route crosses Pine, Cedar, Mud, and Silver creeks and several wetland areas.
#5	Cultural Resources	The Cultural Map of Wisconsin identifies St. Nazianz as a historic resource. Several historic properties and archaeological sites are known on or near the route.

There is a low-moderate probability of encountering rare species.

Miscellaneous

	ımseh Road-New Holstein rebuild as double-circuit 69-kV line	
	General Description	Rebuild as double-circuit 138/69-kV
	Length (miles)	2.5
#1	Screening Area (Sq. mi length X width)	Existing corridor
#2	Corridor Sharing Opportunities	N/A – existing transmission line corridor.
#3	Public Lands	None identified
#4	Sensitive Resources	Route crosses one unnamed tributary of Pine Creek and very few wetland areas
#5	Cultural Resources	The Cultural Map of Wisconsin identifies no historic resources in the vicinity of the project.
	Miscellaneous	There is a low potential for encountering endangered resources.

Table RS-4
Environmental Screening Information - Lines on Existing Right-of-Way

Loop Ramsey5-Harbor	138-kV	line	into	Norwich	and
Kansas					

General Description New 138-kV circuit in existing right-of-way

Length (miles) 5.7

#1 Screening Area (Sq. mi.- length X width) Existing corridor

#2 Corridor Sharing Opportunities N/A – existing transmission line corridor.

#3 Public Lands None identified
#4 Sensitive Resources None identified

5 Cultural Resources None identified

Miscellaneous The existing line is located in an urbanized area. There is a low

probability of rare species.

Blaney Park-Munising 69 kV to 138 kV conversion

General Description Rebuild to 138 kV

Length (miles) 50

#1 Screening Area (Sq. mi.- length X width) Existing corridor

#2 Corridor Sharing Opportunities N/A – existing transmission line corridor.

#3 Public Lands Hiawatha National Forest, Escanaba River State Forest, Lake

Superior State Forest, and Seney National Wildlife Refuge.

#4 Sensitive Resources The existing line passes through numerous wetlands.

Cultural Resources None identified

Miscellaneous There is high potential for encountering rare species.

Table RS-4
Environmental Screening Information - Lines on Existing Right-of-Way

	t Middleton-Spring Green 69 kV to 138 kV version	
	Ganaral Description	Rebuild and convert to 138 kV
	General Description Length (miles)	5.71
#1	Screening Area (Sq. mi length X width)	Existing corridor
#2	Corridor Sharing Opportunities	N/A – existing transmission line corridor.
#3	Public Lands	Lower Wisconsin State Riverway, Black Earth Fishery Area, Arena Pines Sand Barrens – State Natural Area.
#4	Sensitive Resources	The existing line crosses the Wisconsin River and associated wetlands and tributaries. Portions of the line run parallel to Black Earth Creek, and crosses associated wetlands and tributaries.
#5	Cultural Resources	The Cultural Map of Wisconsin identifies downtown Mazomanie as a historic district.
	Miscellaneous	There is a high potential to encounter endangered resources.

	t Middleton - Stagecoach double-circuit	
138/	69-kV line	
	General Description	Construct double-circuit
	Length (miles)	6
#1	Screening Area (Sq. mi length X width)	Existing line
#2	Corridor Sharing Opportunities	N/A – existing transmission line corridor.
#3	Public Lands	None identified
#4	Sensitive Resources	The existing line crosses a few streams and a few wetlands
#5	Cultural Resources	The Cultural Map of Wisconsin identifies no historic resources in the vicinity of the project.
	Miscellaneous	There is a moderate potential of encountering endangered resources.

Table RS-4
Environmental Screening Information - Lines on Existing Right-of-Way

Paddock-Town Line Road 138-kV line rebuild		
	General Description	Rebuild to double circuit
	Length (miles)	7
#1	Screening Area (Sq. mi length X width)	Existing corridor
#2	Corridor Sharing Opportunities	N/A – existing transmission line corridor.
#3	Public Lands	None identified
#4	Sensitive Resources	
		The existing line crosses a few streams and associated wetlands.
#5	Cultural Resources	The Cultural Map of Wisconsin identifies no resources in the vicinity
		of the project.
	Miscellaneous	There is low probability of encountering rare species.

I OWI	nline Road-Russell 138-kV line reconductor	
	General Description	Reconductor
	Length (miles)	8.3
#1	Screening Area (Sq. mi length X width)	Existing corridor
#2	Corridor Sharing Opportunities	N/A – existing transmission line corridor.
#3	Public Lands	The existing line is adjacent to DNR owned land along the Rock
		River
#4	Sensitive Resources	
		The existing line crosses Bass Creek, and a few streams and limited wetlands. Much of the existing line is adjacent to the Rock River.
#5	Cultural Resources	The Cultural Map of Wisconsin identifies no cultural resources in the project area.
	Miscellaneous	Much of the existing line runs through urbanized areas.

Table RS-4
Environmental Screening Information - Lines on Existing Right-of-Way

Oak	Creek-St. Martins 138-kV line	
	General Description	Add new conductor to existing structures
	Length (miles)	16.6
#1	Screening Area (Sq. mi length X width)	Existing corridor
#2	Corridor Sharing Opportunities	N/A – existing transmission line corridor.
#3	Public Lands	No state-owned lands or major parklands are crossed on this route.
#4	Sensitive Resources	The Root River , Ryan Creek and associated wetland areas are crossed on this route.
#5	Cultural Resources	The Cultural Map of Wisconsin identifies no cultural resources in the project area. The route does pass near several known archaeological sites.
	Miscellaneous	There is a moderate potential of encountering endangered resources.

Hale	(Brookdale)-Granville convert 138 kV to 345 kV	
	General Description	Convert/reconductor on existing structures
	Length (miles)	15.6
#1	Screening Area (Sq. mi length X width)	Existing corridor
#2	Corridor Sharing Opportunities	N/A – existing transmission line corridor.
#3	Public Lands	No state owned lands identified, route crosses several local and county owned parks and parkways.
#4	Sensitive Resources	Route crosses the Root River, Underwood Creek, and the Little Menomonee Rivers.
#5	Cultural Resources	Route passes through or adjacent to 3 archaeological sites
	Miscellaneous	Much of the existing line runs through urbanized areas. There is a low-moderate probability of encountering rare species.

Table RS-4
Environmental Screening Information - Lines on Existing Right-of-Way

West	: Middleton-Blount 138-kV line	
		O TO MODELLA INCIDENCE OF THE PROPERTY OF THE
	General Description	Construct 138-kV line
	Length (miles)	5
#1	Screening Area (Sq. mi length X width)	Existing corridor
#2	Corridor Sharing Opportunities	N/A – existing transmission line corridor.
#3	Public Lands	The existing line parallels a recreational trail and golf course.
#4	Sensitive Resources	This line is primarily through a highly urbanized area, much of the existing line is underground. There are a few small wetlands and unnamed streams near the existing overhead portions east of West Middleton.
#5	Cultural Resources	The Cultural Map of Wisconsin identifies a number of historic resources in the vicinity of the existing corridor.
	Miscellaneous	

Northside-City Limits 138-kV line			
	General Description	Construct 138-kV line	
	Length (miles)	3.16	
#1	Screening Area (Sq. mi length X width)	Existing corridor	
#2	Corridor Sharing Opportunities	N/A – existing transmission line corridor.	
#3	Public Lands	None identified	
#4	Sensitive Resources	The existing line crosses two streams and one wetland.	
#5	Cultural Resources	The Cultural Map of Wisconsin identifies no resources in the project	
		area.	
	Miscellaneous	There is low potential for encountering rare species. The existing line	
		passes through a highly urbanized area.	

Table RS-4
Environmental Screening Information - Lines on Existing Right-of-Way

Pulliam-Danz-Henry Street 69-kV line reconductor		
	General Description	Reconductor
	Length (miles)	4.5
#1	Screening Area (Sq. mi length X width)	Existing corridor
#2	Corridor Sharing Opportunities	N/A – existing transmission line corridor.
#3	Public Lands	None identified
#4	Sensitive Resources	The existing line crosses the Fox River and a large expanse of wetlands.
#5	Cultural Resources	The Cultural Map of Wisconsin identifies the Beach Bay Wildlife
		Sanctuary near the project area.
	Miscellaneous	This route passes through primarily urbanized areas.

Pullia	am - Van Buren 69-kV line reconductor	
	General Description	Reconductor
	Length (miles)	2
#1	Screening Area (Sq. mi length X width)	Existing corridor
#2	Corridor Sharing Opportunities	N/A – existing transmission line corridor.
#3	Public Lands	None identified
#4	Sensitive Resources	The existing line crosses the Fox River.
#5	Cultural Resources	The Cultural Map of Wisconsin identifies no cultural resources in the vicinity of the project.
	Miscellaneous	This route passes through primarily urbanized areas.

Table RS-4
Environmental Screening Information - Lines on Existing Right-of-Way

New	Suamico-Pioneer 69 kV to 138 kV conversion	
	General Description	Rebuild/Convert to 138 kV
	Length (miles)	13.1
#1	Screening Area (Sq. mi length X width)	Existing corridor
#2	Corridor Sharing Opportunities	N/A – existing transmission line corridor.
#3	Public Lands	None identified
#4	Sensitive Resources	
		The existing line crosses numerous wetlands and streams, including the Oconto, Pensaukee, and Little Suamico Rivers; Spring Creek, Brookside Creek, Kirchner Creek, and several unnamed streams.
#5	Cultural Resources	The Cultural Resources Map of Wisconsin identifies one historic site within the Town of Suamico.
	Miscellaneous	

NOTES:

#1	Screening Area Width:	For projects on existing rights-of-way the screening area consists of the current location and lands immediately adjacent.
#2	Corridor Sharing Opportunities:	Identify dominant corridor types.
#3	Public Lands:	Identify properties by name.
#4	Sensitive Resources:	List major stream crossings, significant topographic features,
		designated natural areas, etc.
#5	Cultural Resources:	List resources shown on the statewide cultural resources map.