North Appleton-Morgan Project at a glance

RIGHT-OF-WAY CLEARING..... February 2017 through February 2018
All trees and incompatible vegetation will be cleared to the full right-of-way width.

GRADING, PLACEMENT AND REMOVAL OF MATS: ..... February 2017 through December 2018
Contractors will grade for construction access and place protective mats along the right-of-way.

FOUNDATIONS..... April 2017 through May 2018
Contractors will drill holes and install foundations.

POLE SETTING ..... May 2017 through July 2018
Contractors will set weathering steel, single-pole structures in place.

WIRE STRINGING ..... July 2017 through November 2018
Contractors will string wires on poles. Depending on location, light-duty helicopters may be used.

RESTORATION..... August 2017 through October 2019
Contractors will conclude all right-of-way restoration, including any remaining grading work and reseeding.

AMERICAN TRANSMISSION COMPANY®
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Who is ATC?

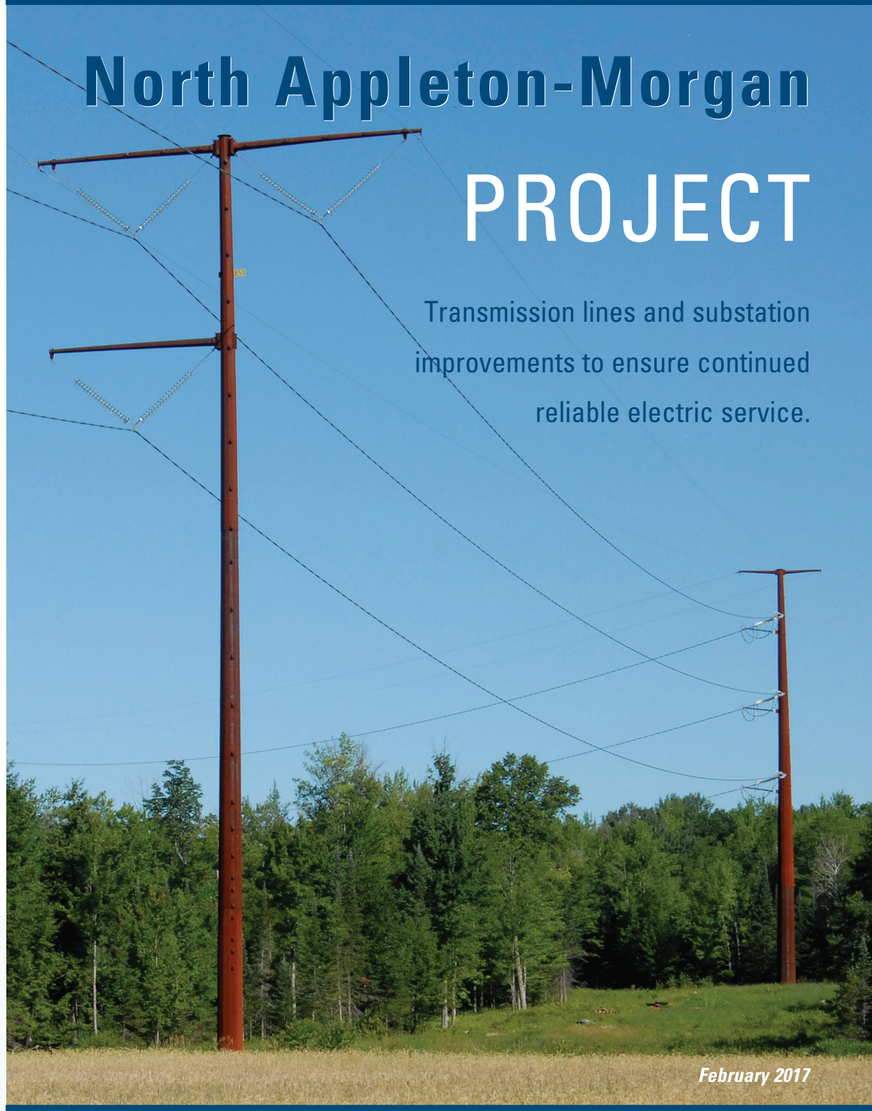
ATC is a transmission-only utility that owns, operates, builds and maintains transmission facilities in portions of the Upper Midwest. Everything ATC does is focused on ensuring the reliable operation of the electric transmission system. For more information about ATC and the North Appleton-Morgan Project, please visit **www.BayLakeProject.com.**

Green Masters Program
ATC is a proud participant of Wisconsin's Green Masters program.

ELECTRIC SYSTEM RELIABILITY

North Appleton-Morgan PROJECT

Transmission lines and substation improvements to ensure continued reliable electric service.



February 2017

Helping to **keep the lights on,** businesses running and communities strong®

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Transmission line construction underway in Oconto County

Work will continue in southern counties in 2018

Construction of two high-voltage electric transmission lines has started in northern Wisconsin. The 138,000- and 345,000-volt lines are part of the larger Bay Lake Project, designed to increase electric reliability in the region. The project was first announced in 2012 and approved by the Public Service Commission of Wisconsin in 2015.

"While significant work has occurred at several substations, the beginning of the transmission line construction represents a major milestone in our efforts to improve electric service in the area," said David Hovde, local relations consultant for American Transmission Co.

"Essentially, we will be building a wood highway in the right-of-way for the equipment to travel as construction proceeds in a northerly direction to the Morgan Substation."

– David Hovde, local relations consultant

ATC's contractor, MJ Electric, began construction of the transmission lines in early February on Construction Segments C and B in Oconto County (see map). Wood mats are used to prevent soil compaction and or rutting during construction; the mats will be delivered along the right-of-way for staging near highway crossroads. "Essentially, we will be building a wood highway in the right-of-way for the equipment to travel as construction proceeds in a northerly direction to the Morgan Substation," said Hovde.

Transmission line construction generally follows six sequential steps:

1. Corridor clearing and access plans: Generally, the corridor for both 138- and 345-kV lines will be 180 feet wide. The right-of-way will be surveyed and edges staked, and environmental crews will mark sensitive features before clearing begins. Both access lanes and the corridor will be cleared of vegetation to allow for the safe movement of large construction equipment, which will include drilling rigs, concrete trucks, cranes, pickups and other vehicles.

2. Equipment mobilization and materials delivery: Steel poles, casing, rebar cages and other materials will be delivered to structure sites. Some vehicles may be parked at structure sites during construction.

3. Foundation construction: Most structures will have steel or concrete foundations, although some will be directly embedded.

4. Structure setting: The lines will primarily use weathering steel monopoles and will be assembled on site, raised and set in place with cranes and other heavy equipment.

5. Stringing wires: Once the poles are set, wires are strung using a pulley system, after which the wires are attached to insulators on the structures. Helicopters may be used in some locations.

6. Corridor restoration: After construction and when weather conditions permit, the corridor is cleaned up and restored. If damage occurs to crops or other non-restorable property, ATC will fairly compensate landowners for repairs.

Landowners who have questions about construction work on their property should contact Jim Schroeder of MJ Electric at 920-740-7619.

Rob Schuh is ATC's construction coordinator for the project; he can be reached at 920-841-2656.

ABOVE: *Expansion of the North Appleton Substation (foreground) began in early 2016 as part of the Bay Lake Project.*

RIGHT: *A pneumatic drill was used to make holes in black granite at the Benson Lake Substation site in Marinette County to blast rock during site preparation summer 2016. Crews drilled each morning, then filled the two-inch holes with explosives in the afternoon for blasting, so no holes were left open overnight. The work took about six weeks for blasting and another six weeks to haul rock and backfill the site.*

North Appleton-Morgan Project contractors

Construction: MJ Electric

Right-of-way clearing: Asplundh

Surveying and staking: Ayres Associates

Foundation installation: MJ Electric

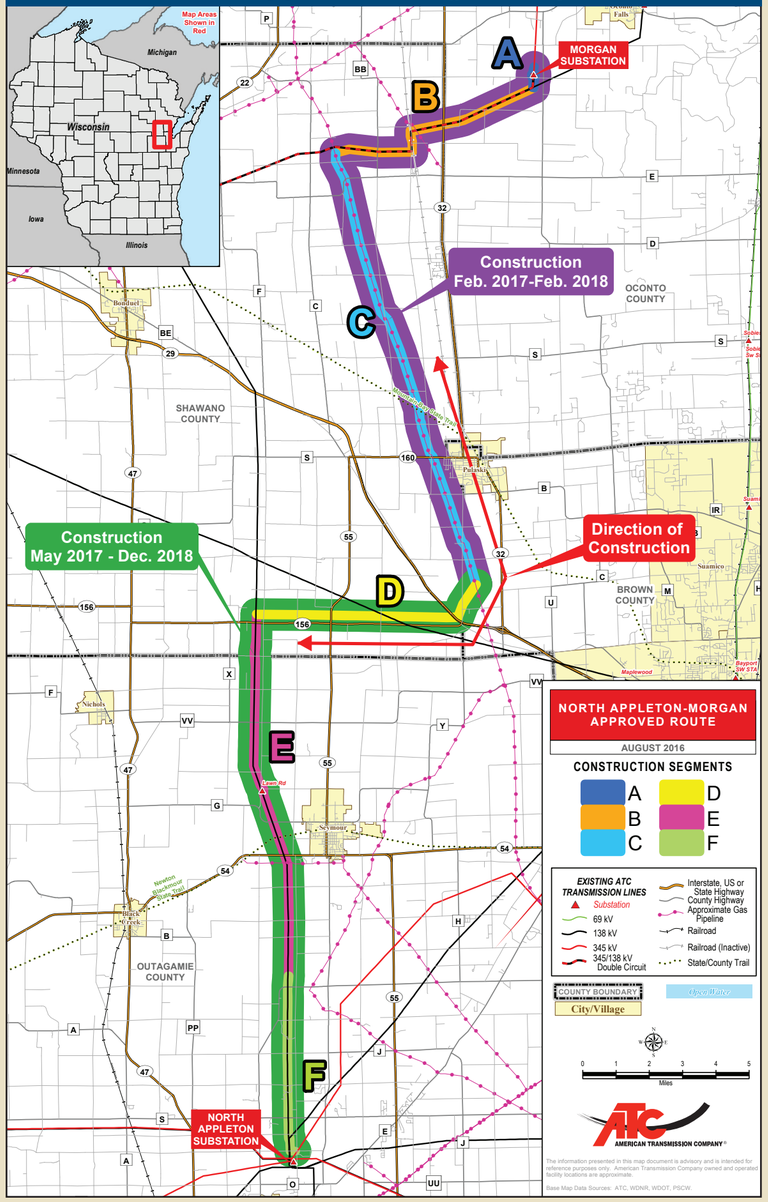
Helicopter wire stringing: To be determined based on availability

Restoration: MJ Electric or JZ Environmental

Traffic Control and signage: Q3 Contractor and MJ Electric

Environmental monitoring: GEI Consultants

Independent Environmental Monitor for the Public Service Commission of Wisconsin: Stantec

Agricultural consultant: Mary Lou Kugel

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