

ENHANCED DATA FACILITATES NORTH AMERICAN COMPANY'S OPERATIONS EFFICIENCY VIA ROW CONDITION ASSESSMENT



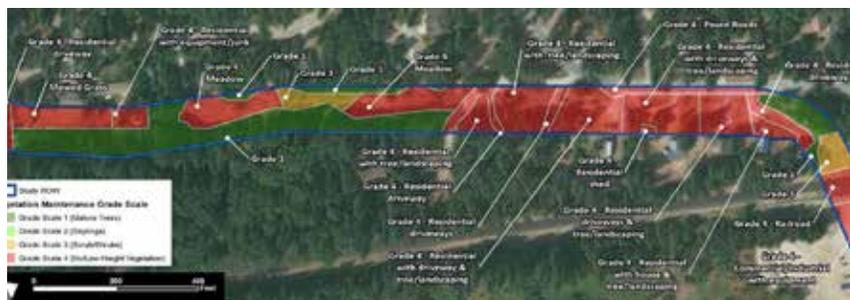
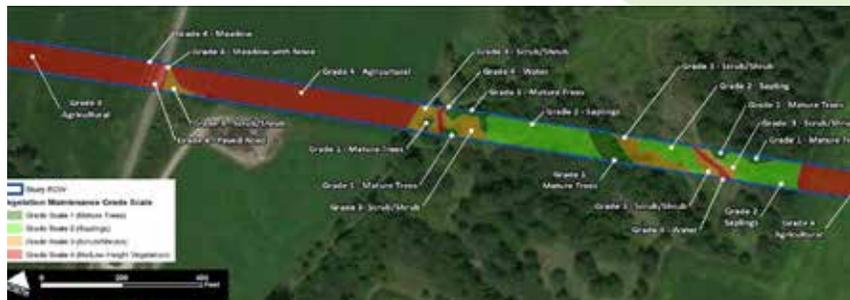
NORTH AMERICAN ENERGY COMPANY

When the lack of adequate vegetation and encroachment data creates operational efficiency and compliance challenges for a major North American energy company after a large infrastructure acquisition, a Davey company steps in with timely and highly targeted solutions.

THE CHALLENGE

In 2016, a North American energy company acquired natural gas assets in the northeastern and southern U.S., including tens of thousands of miles of pipeline and thousands of natural gas storage wells. A large infrastructure acquisition such as this can present challenges.

Lack of reliable data in these areas was making it difficult to budget, plan, forecast, and execute the maintenance work necessary for the North American company's own operational needs and to ensure regulatory compliance. The company also believed that better data would facilitate actions leading to improved relations with stakeholders and landowners.



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THE SOLUTION

The North American company engaged Wetland Studies and Solutions, Inc. (WSSI), a Davey company, to identify, capture and analyze vegetation in the natural gas pipeline right-of-way (ROW) in select locations using GIS technologies. WSSI developed the project approach around the energy company's highest priority needs. Key to success was partnering with the company to develop a methodology and reporting structure that delivers consistent high-quality data across a wide range of ROW landscapes presented in a form most effective for use by decision makers. Out of this process, additional high priority needs were identified that could be addressed as part of the same effort. WSSI engaged its GIS and Compliance & Energy teams, as well as personnel and technology experts from Davey Resource Group, Inc. (DRG) to provide the company with access to the deep resource and footprint of Davey for these, and future, challenges.

The condition assessment covered the entire ROW width, focused on identifying the extent and type of vegetation to be managed for operations and regulatory compliance. In GIS, WSSI designated four grade categories based on the company's height and trimming/maintenance needs and graded each area within the ROW based on the protocol established to facilitate operations planning and budgeting. Other observable and relevant ROW conditions deemed

would be captured, including field observations of erosion, stream scour over pipes and damaged pipeline markers.

Through discussions with the client and careful listening to their needs, WSSI staff targeted two additional high priority factors impacting cost and scheduling which could be addressed during assessment:

- **LAND USE:** land use on and adjacent to the ROW affects decisions on timing and extent of herbicide and /or mechanical maintenance, and influences ROW groundcover and habitat improvement decisions. Each area was further assigned land use data types, including Residential, Commercial, Agricultural, Water, Roads, and Railroads.
- **ROW ENCROACHMENTS:** encroachments impede routine maintenance and can create hazards to the pipeline and the public. Accurate encroachment information facilitates prioritizing issues and expediting the often lengthy and sensitive process of engaging landowners to remove those encroachments. Specific encroachment types were identified in ROW, including fences, gates, houses, sheds, landscaping/yard trees, swimming pools, cemeteries, equipment/junk, and driveways.

THE RESULTS

BETTER DATA: The WSSI / DRG team has conducted vegetation and encroachment assessments for over 10,000 linear miles of natural gas pipeline easement corridors.

BETTER DECISIONS: The consistent, high quality data across a wide range of ROW landscapes presented in a form most effective for use by decision makers is helping the client to:

- allocate work orders and budgets with pinpoint accuracy
- more easily and effectively designate priority areas for vegetation management, and

- improve communication with the public and with vegetation management contractors.

In all cases, the work was delivered on time and within budget. The energy company expressed satisfaction with WSSI's conscientious and consistent communication and delivery. The company was also pleased with WSSI's ability to surge to meet accelerated deadlines. Through listening, communicating and providing better data, WSSI and DRG have earned a good relationship and additional, ongoing opportunities to serve the North American energy company.

CONTACT US FOR MORE INFORMATION

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