INTRODUCTION TO JMT'S ENERGY SERVICES

JMT and Vaughn & Melton (subsidiary of JMT) understands that energy development is challenged with regulatory compliance, transportation logistics, and design and technology changes. Our strategic network of offices and ability to work remotely allows the team of professionals to collaborate and have availability to meet your energy growth and sustainability needs. Our team holds long-standing relationships with federal, state, and local government agencies, private developers, and energy companies, allowing us to deliver a variety of services for energy development and sustainability. Our team is committed to applying a practical approach that results in quality work on time and within budget.



Environmental Permitting and Cultural Resources

JMT has held Master Service Agreements (MSA's) with various energy clients to perform environmental permitting and inspection service tasks.

Project assignments have included M&R Station rebuilds, pipelines on new location, pipeline relocations and replacements, cathodic protection upgrades, corrosion mitigation, emergency/urgent digs, leak repairs, launcher/receiver upgrades, in-line inspection, subsurface utility engineering (S.U.E.) investigations and locations Levels A-D, tool modifications, and construction and post-construction environmental inspection, underground utility installations, and overhead utilities.

Environmental Permitting and Inspection Services include:

- Coordination: State and Local Stakeholders, State Historic Preservation Office (SHPO) & rare, threatened and endangered species
- Cultural Resource Surveys (above ground and archaeological)
- Delineation: wetland and waterways resources & forest stand
- Planning: forest conservation, environmental construction management, contingency & local \ reviews
- Permitting: Roadside Tree, Section 401/404 wetlands and waterway
- Bog Turtle Phase 1 Habitat Surveys and Bog Turtle construction monitoring
- Environmental inspection services
- Water turbidity monitoring
- Inadvertent returns
- NEPA documentation
- Hazardous material services

Survey

Survey is a service that JMT gets called upon often to serve our energy clients. JMT offers extensive experience in providing route surveys, topographic surveys and design map production using both conventional and GPS formats for electronic data collection. By utilizing various data collection programs, JMT generates design files in either Microstation or AutoCAD, with the appropriate digital terrain models. JMT uses Trimble TSC3, TDS Ranger, Carlson, and Allegro data collectors, as well as Trimble, Leica and Topcon dual frequency GPS receivers. JMT uses VRS Network GPS, which allows for all our GPS receivers to act as rovers and collect topographic information, saving both time and cost. Services include boundary surveys for the real estate services division of Duke Energy, formerly Progress, and Dominion Energy, for hundreds of linear miles of transmission and distribution lines and various sub-stations, and sites.



Water Resources

Water Resources Engineering is a primary JMT service in our Energy portfolio that works in collaboration with NCR & Environmental Permitting and the Surveying services. The water resouces team is responsible for the Erosion and Sediment Control (ESC) and Stormwater Management (SWM) design and permitting activities associated with the proposed construction activities, including National Pollutant Discharge Elimination System (NPDES) permitting for construction activities and hydrostatic test water discharge.

Survey services include:

- Surveys; GPS Control, Baseline Control, Boundary, Topographic, Alignnment (route)
- Stake-outs: pre/post construction, substation for new or existing expansion
- Locates & designation: Right-of-Way and staking, property boundaries, underground and overheard utilities (including catenary locations with time, temperature and windspeed), bridges and culverts, storm drainage, and other appurtenances
- Establishment of temporary benchmarks
- Deed and title research
- S.U.E. Levels A-D (Level A: test holes for distributing holes in underground utilities)

Water Resources services include:

- ESC design and permitting
- SWM design and permitting, waivers and/or variances
- NPDES permitting
- · SWPPP development, Grading Permit applications
- · Building permit applications
- Hydrologic & Hydraulic (H&H) modeling and floodplain studies for both new and replacement bridges, culverts, and stream restoration / relocation projects
- FEMA mapping revisions (LOMR/CLOMR)
- "No-Rise" certifications for floodway impacts
- Flood mitigation and resiliency projects

OUR NOTABLE ENERGY CLIENTS



TC Energy inspection services as well as securing all necessary ESC, SWM, Grading and Building Pormits for the control of the JMT performed natural & cultural resources, environmental permitting and ing and Building Permits for sites in Pennsylvania, Maryland, Virginia. Project assignments have included M&R Station rebuilds, pipeline reloca-

tions and replacements, cathodic protection upgrades, corrosion mitigation, emergency/urgent digs, leak repairs, launcher/receiver upgrades, in-line inspection tool modifications, and construction and post-construction environmental inspection.



We have been providing surveying and SUE services for Duke Energy services division for more trian one and site design.

and distribution lines and various sub-stations, and site design.

SUE specialists have provided location designation of utilities and available and evaluation with SUE equipment for utility pole replacement in a cripp evaluation. for 19 years. Services have included boundary surveys for the real estate services division for more than one hundred linear miles of transmission and distribution lines and various sub-stations, and site design. V&M's vacuum excavation with SUE equipment for utility pole replacements,

substation upgrades, conflict staking, security upgrades, and engineering evaluation.



We have been providing surveying, SUE and environmental services for Dominion Energy for 19 years. Services have included route surveys, property owner research and contacts, boundary surveys, S.U.E. designation and location, wetland and jurisdictional stream delineations, threatened & endangered species investigations and locations, route layout and design, sub-stations location studies and site design,

right-of-way staking, right-of-way acquisition, construction staking, line and appurtenance as-builting with all the photos and documentation tagged and indexed for incorporation to GIS, project closeout and final reporting.

Project Highlights

City of Greenville, South Carolina Utility Project | We were selected to provide surveying, SUE, utility coordination and construction plans and specifications services for a pilot project to bury all the overhead utilities in a 12-way duct bank to be operated by Duke Energy. The two corridors chosen for these projects were 6,200 linear feet of Haywood Road and 5,700 linear feet of Augusta Street.



Adelphia Gateway | JMT performed natural & cultural resources services, environmental permitting, and survey as outlined above for the repurposed 84-mile oil transfer pipeline to a natural gas pipeline, construction of five new miles of pipeline, two new compressor stations, and miscellaneous facilities and meter station upgrades.