

Whether You Need a Fully Integrated Solution or Choose the Level of Involvement and Delegation that Meets Your Needs

Efficiency and accountability to achieve success motivate us. That's why we use an integrated service model. The complexity associated with electric transmission and renewable energy projects is simplified by our integrated approach because we have the subject matter experts available to excel in each of those critical areas, such as: concept development, non-environmental permitting, environmental permitting, land negotiations/acquisitions and leasing, survey, routing, and site design.



Engineering

- Project Management
- Due Diligence Studies and Regulatory Compliance
- Route Selection/Evaluation, Constructibility Review and Micro-Routing
- Concept and Project Scope Development and Total Installed Cost (TIC) Cost Estimates
- Pipeline & Facility Design
 - Transmission / Gathering Pipelines (Urban and Rural)
 - Meter Stations
 - > Pump Stations
- → Storage Facilities
- Balance of Plant Design
- Transmission System Design
- Distribution System Design
- Solar Panel and Wind Turbine Layouts
- Energy Storage Layouts
- Construction Specifications
- Hydrostatic Test Procedures
- Horizontal Directional Drill (HDD) Design including Drilling Fluid Management and Hydraulic Fracture Analysis
- Purging and Commissioning Procedures

Environmental

- Federal Energy Regulatory Commission Filings
- US Army Corps of Engineers
 Permitting
- US Fish & Wildlife Service
- Water Quality Certifications
- Wetland & Habitat Conservation/ Mitigation
- Conservation Banking
- Threatened & Endangered Species
 Consultation
- National Historic Preservation Act Consultation
- National Environmental Policy Act (NEPA)
- Application for Permit To Drill
- Scenic River Permits
- Environmental Compliance
- Pre & Post Construction Assessments
- Constraint Mapping
- Public Outreach
- Expert Testimony

Title

- Lease Checks
- Mineral Title Research
- Runsheet/Certified Title Preparation
- Surface Title Research
- Limited Title Certificates
- Chain of Title Preparation
- Production Research
- Document Management
 File Deview (Assimilat)
- File Review/Assimilation & Data Entry
 Project Management
- Tax Research
- Due Diligence

- Survey
- Boundary Surveying ALTA/NSPS Land Title
- Topographic/Design Surveys
- Corridor Route Surveys
- Geodetic Control Surveys
- Utility Designating and Locating Surveys
- Hydrographic/Bathymetric Services
- **Professional Mapping Services**
- > Boundary and Easement Plats
- > Plan and Profile Sheet Production
- > Site Planning and Layout
- > Grading and Drainage Plans
- > Construction Alignment Sheets
- > As-Built Alignment Sheets
- > Construction Site Specific Exhibits
- Environmental and Non-Environmental Permits
- 3D Laser Scanning/ High-Definition Surveying
 - > BIM/Digital Twin Modeling
 - > Detailed Plant/Facility Surveys
 - Construction Progress Asset Management
- Construction Staking and Support
- As-Built Surveys
- Settlement and Monitoring Surveys
- Operations and Maintenance Survey Support
- Regulatory and Compliance Surveys

UAS

- Traditional Photogrammetry
- Airborne LiDAR

GIS Analysis

Reports

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- Airborne Topographic Surveys
- Terrestrial LiDAR/Laser Scanning
- Mobile Mapping/LiDAR Surveys
- Large- and Small-Scale Volumetric Surveys
- Route Selection Assistance
- PHMSA/Regulatory Surveys
- Tank/Facility Documentation Surveys
- Aerial Reclamation Investigation and Survey Support
- UAS Equipment Feasibility and Case Studies

> Siting Studies for Suitability

GRID Webmap Application

> Project Reporting Dashboards

> Impact identification

> HCA Identification

Webmap Applications

> Esri Field Maps

> GRID Database

> Enterprise SDE

> Feature Services

> Task Automation

> QA/QC Measures

Data Management

> Google Earth Pro

Routing Analysis and Selection

Routing Summary & Detailed

UAS BVLOS and Sensitive COA Projects

GIS

- Cartography
 - Mapbooks (Map Series)
 - Engineering Route Maps
 - > Plotter Maps
 - > Site Maps (Siting Analysis)
 - > Preliminary Exhibits
 - Permit Maps
 - > Environmental (NR/CR) Figures



- Project Management
 - Feasibility Studies
- Route and Site Selection

Oil & Gas Lease Acquisition/

Non-environmental Permitting

Lease Records/Asset Management

File Review/Assimilation & Data Entry

Construction Monitoring & Damage

Operations Support & Maintenance

Surface Site Acquisition & Settlement

Land Administration Support/

Fee/Mineral Acquisition

Document Recording

of Surface Damages

Relocation Assistance

Survey Permissions

Survey Support

collection available

Documentation

Construction Monitoring

Environmental Conditions

Leak and Failure Detection

Asset Documentation

Thermal Inspection

Representation

Settlement

State & Federal Lease Sale

Eminent Domain Support

Blue/Green/NDAA compliant data

Aerial Photo/Video Documentation

Emergency and Disaster Response

Civil Infrastructure Documentation

Wireless Infrastructure Inspection

Pre- and Post-Construction Assessments

Multi and Hyperspectral Data Acquisition

Linear Corridor/ROW/Site Inspection

Geophysical Testing Permit

Right-of-Way Acquisition/Amendment

Land

Due Diligence

Amendment

Acquisition

GIS/Mapping