



# LAND SURVEYING

## CAPABILITIES

- Boundary Surveys
- ALTA/ACSM Title Surveys
- Topographic & Hydrographic Surveys
- Planimetric Surveys
- Pipeline & Electric Transmission Corridor Surveys
- Rail Surveying
- Land Division/ Subdivision Plats
- Condominium Documentation Drawings
- Easement Exhibits for Acquisition or Dedication
- Lot-Fit Studies, Plot Plans & House Staking
- FEMA/Flood Plain Elevation Certificates
- 3D Machine Control
- Control Surveys & Control Networks
- High-Resolution Laser Scanning
- Monitoring Well Surveys, Landfill Capping, Volumetric Surveying & Closure As-Builts
- Industrial Plant Surveying, Control, Baseline Establishment
- Construction & Underground Utility Layout
- Construction As-Builts/ Record Drawings

## WHERE SCIENCE MEETS STRATEGY

The tools and technology continue to evolve, but the science of land surveying remains a consistent feature of development, construction and maintenance. And the equipment is only as effective and reliable as the professionals operating it. That's why Atwell is proud to provide clients with experienced, proven land surveyors, project managers and technical teams that take a practical, functional approach to solving client needs through accurate and timely research, data and documentation.

## SOLUTIONS THAT SURPASS

### A Productive Partnership

Over the past decade, Atwell has contributed to more than 650 power transmission, substation and distribution system projects for one of the nation's largest electric utility providers. As the primary land surveying consultant, Atwell provided construction project planning, technical oversight and field operations for new transmission lines, generation facility interconnectivity, infrastructure repair and expansion projects, real estate transactions, emergency response surveys and other special projects.

Services included control networks, centerline surveys, topographic surveys, boundary surveys, right-of-way exhibits, ALTA/ACSM land title surveys, plats of subdivisions, planimetric surveys, 3D laser scanning, facilities monitoring, construction staking and as-built surveys.

### Surveying Supports Improved Stormwater Management

Storm flows were overloading a regional sewer system, sending untreated wastewater into a major river's tributary. Atwell's surveying team was engaged to support the layout, development and construction of a 50-million-gallon stormwater overflow facility, the largest in the state of Michigan.

Designed to screen, settle and disinfect all flow up to the 10-year, one-hour event, the project involved the installation of ground surface and structure monitoring points for detection of ground movements.