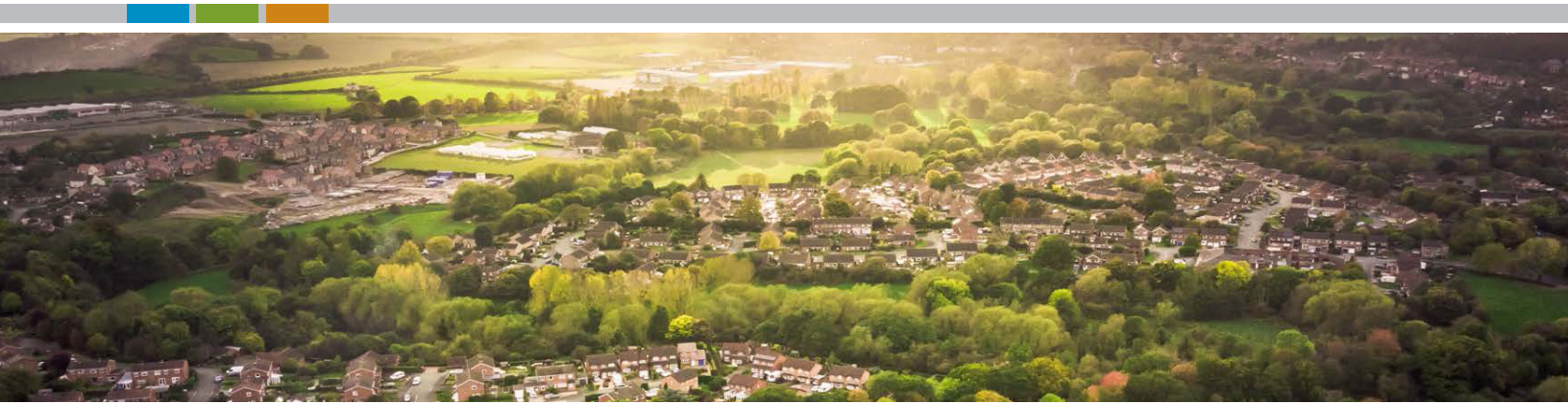


Land Development Services



In today's world, land development is a complex undertaking requiring knowledge of municipal zoning, environmental permitting, hydrologic modeling, storm water management, regulatory approvals, and much more.

We Share Your Vision

At Apex, we share your vision for an affordable and efficient development cycle, where difficulties are anticipated and overcome proactively.

Our comprehensive services and experienced team allow us to provide a single point of responsibility for everything from site investigation and design to permitting, construction cost estimating, and construction oversight and administration.

Civil Engineering and Design

Apex's staff of site civil engineers are adept at working with unique site configurations and restraints to optimize grading and drainage, stormwater controls and detention system design, utility coordination, and parking and site traffic management, and has the experience needed to assess the implication of site design early in the process. We provide the following services:

- Site investigation, evaluation, and land planning
- Site design and development
- Stormwater management
- Design of erosion and sedimentation control
- Environmental permitting
- Topographic and boundary surveys
- Global Positioning System (GPS) surveying and unmanned aerial vehicle (UAV) surveying
- Utility design and coordination
- Water and sewer system design
- Roadway design

- Hydrologic and hydraulic modeling
- Construction layout and cost estimating
- Landscape planning and conservation design
- Structural concrete design
- Retaining wall design
- Building structure design
- Management of regulatory approvals
- Municipal zoning and subdivision
- Liaison for regulatory officials and agencies

Environmental Engineering

Apex offers a full range of environmental solutions—from due diligence and permitting to remediation and natural resources—that speak to environmental concerns both holistically and proactively, ensuring that all stakeholders are addressed, and solutions are aligned with the best interests of both your organization and the natural environment. We provide the following services:

- Phase I, II, and III environmental site assessment (ESA)
- Stormwater management
- Wetland delineation
- Groundwater pollution
- Threatened and endangered species identification
- Environmental sampling

Surveying and Mapping

Apex provides land surveys for residential, commercial, and industrial developments. Our expertise ranges from cutting-edge UAV (drone) surveying and 3D modeling to traditional property boundary, construction stake-out, and general location surveys. We provide the following services:

- UAV/drone surveying and inspection
- 3D modeling and mapping
- American Land Title Association (ALTA)/National Society of Professional Surveyors (NSPS) land title surveys
- As-built surveys
- Construction stake-out and volumetric surveys
- Ground control surveys
- Topographic and property boundary surveys
- General location surveying
- Stockpile surveys and volume computations
- Subdivision plans for residential, commercial, and industrial land development
- Base mapping for land development
- Flight control surveys
- Bathymetric surveys

Construction Inspection and Administration

Assuring a quality result for any construction project requires not only experienced evaluation and assessment, but critical skills and knowledge. This includes an understanding of materials and procedures, solid decision making, and an exceptional ability to communicate. We provide the following services:

- Construction design and technical specifications
- Construction estimating
- Construction administration
- Construction quality assurance/quality control (QA/QC) services for general construction and liner installations
- Construction certifications
- Liaison on behalf of the owner for governing agency reporting and site inspections
- Nuclear soils and aggregates compaction testing
- Bituminous concrete inspection and testing services

- Geosynthetic liner and caps inspections
- Construction stakeout through complete construction monitoring services
- Utility locate and coordination
- Concrete field and laboratory testing
 - American Concrete Institute (ACI) certified field-testing technicians
 - American Association of State Highway and Transportation Officials (AASHTO) R18 accredited
 - Participation in the Cement and Concrete Reference Laboratory (CCRL) Proficiency Sample Program

Permitting

Apex's team is fully versed in environmental and regulatory impacts and permitting requirements. We effectively communicate any site issues to clients to be addressed early in the process, saving time and resources. We provide the following services:

- Municipal land development
- Public water supply permitting
- Sewage treatment, conveyance, and disposal
- Stream and wetland identification and permitting
- Highway occupancy permitting
- Earth disturbance and erosion and sediment (E&S) design
- Building permits
- National Pollutant Discharge Elimination System (NPDES)

Memberships

Staying current with the latest industry trends and business developments is vitally important to Apex. Connecting with our clients and working with policymakers, regulators, and other professionals in the industry is a key component in staying up-to-date with the ever changing landscape. We value the opportunities offered by professional organizations as exemplified by our active involvement in the following associations:

- American Society of Civil Engineers
- National Society of Professional Surveyors
- American Land Title Association