



Educational/Institutional Answers

Turnkey civil services including surveying, site civil design, environmental assessments, and geotechnical engineering.

Engineering services for educational and institutional facilities are delivered expeditiously, efficiently, and reliably by an experienced team of engineers and scientists, and include:

Site Civil Design

Veterans Administration, Altoona, PA. Sci-Tek provided site civil design for renovation of an addition to existing laboratory space, including a topographic survey, existing conditions plan, erosion and sedimentation pollution control plan, and site plans for landscaping, entrance signage, benches, paving, curbing, steps, retaining walls, sidewalks, site lighting, parking, patios, entry doors, ramps, and railings. Existing conditions were modified as required for Uniform Federal Accessibility Standards and other applicable code compliance. Sci-Tek assessed current conditions and prepared a final design incorporating modifications to the existing site layout necessary to meet project requirements.

Environmental Assessments

Environmental Assessment for Edinboro University, Cooper Hall Renovations. Working with a local Architect, Sci-Tek provided an asbestos survey, an abatement plan, a Phase I Environmental Site Assessment, and a Phase II subsurface investigation. The subsurface investigation included soil borings, groundwater sampling, monitoring well installation, and laboratory analysis to identify the presence of hazardous materials or petroleum products on the property. Written reports were provided which documented our findings and recommendations.

Hazardous Material Investigation for Carnegie Library, East Liberty Branch. Sci-Tek provided the Construction Manager with an asbestos and hazardous building materials survey. After meeting with the Architect to review the scope of work and identify areas of the building which would be impacted by the design, Sci-Tek environmental scientists then reviewed as built drawings and conducted a field survey to collect bulk samples of materials which were presumed to contain asbestos. An inspection to document quantities and locations of hazardous building components was also provided. A final report was prepared which contained sampling methodology; the type, location, quantities, and condition of asbestos materials; the list of hazardous building component materials; and recommended response actions.

VA Butler Medical Center IDIQ. Sci-Tek performed various environmental services for the Veterans Administration Medical Center located in Butler, PA, including an AHERA investigation of all 43 buildings on-site. The scope of work consisted of asbestos surveys of buildings, O&M plans, cost estimates, and design drawings. The buildings included the main hospital complex, living quarters, recreation facilities, administrative and medical care facilities, a swimming pool, and a fire station. Comprehensive inspections were provided in patient care locations to evaluate the potential for accessible asbestos behind walls and ceiling tiles; however the inspections were unobtrusive with regard to occupant comfort.





Environmental Remediation

Environmental Assessment and Remediation for Pittsburgh Public Schools. Sci-Tek provided Phase I and Phase II environmental site assessment services for the construction of a new elementary school for the Pittsburgh Public Schools. Preliminary studies evaluated the proposed location of the school on properties formerly used for a plating factory and an auto body shop. Follow up studies were conducted to delineate the extent and nature of subsurface contamination. The scope of work included soil borings, groundwater sampling, monitoring well installation, and laboratory analysis. A conceptual model of the environmental condition of the site was developed which detailed the lateral and vertical extent of subsurface contamination. A risk assessment and written report detailing conclusions, recommendations and suitable response actions were provided. Finally, PA Act 2 Clearances for release from further environmental liability were obtained for the site.

Geotechnical Investigations

Carnegie Library, East Liberty Branch. Sci-Tek performed a subsurface investigation to support the design of a 2-story, 9,400ft² addition. Sci-Tek reviewed available geotechnical, geological and existing foundation information and performance, and then conducted a subsurface investigation. Two test borings were drilled within the proposed building footprint to depths of 20 feet, and one test boring was drilled within the proposed building footprint to a depth of 26 feet, which included 5 feet of rock. Continuous split-spoon sampling was performed in the soil zone at each boring. Soil and rock drilling and sampling were generally performed according to Penn DOT Standards. Sci-Tek then provided a report which presented opinions on fill, soil, rock, and groundwater conditions, as well as the site class for seismic loading. The report also presented recommendations for foundation design based on visual observations, laboratory test results, analyses performed, and data obtained at the test boring locations.

Geotechnical and Geological Studies

Expert Witness Consulting for a Landslide. Sci-Tek was retained by an attorney representing a general contractor in a civil action associated with landslides which occurred after the construction of a baseball field embankment at South Fayette High School. Sci-Tek reviewed the case files, provided a report and rendered an informed opinion regarding the causes of the landslides that occurred in the fill slopes. The Sci-Tek consulting engineer then provided expert witness testimony during depositions. The case was settled prior to the trial.



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