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Header @ 1

List View

General Information | Contact | Default Values | Discount | Document Information | Clarification Request

Procurement Folder: 1603639

Procurement Type: Central Purchase Order

Vendor ID: 000000206512

Legal Name: TERRADON CORPORATION

Alias/DBA:

Total Bid: \$0.00

Response Date: 05/19/2025

Response Time: 13:27

Responded By User ID: aasbury1

First Name: Ashley

Last Name: Asbury

Email: ashley.sodosky@terradon.co

Phone: 3047558291

SO Doc Code: CE01

SO Dept: 0310

SO Doc ID: DNR2500000003

Published Date: 5/2/25

Close Date: 5/20/25

Close Time: 13:30

Status: Closed

Solicitation Description: A&E - Sleepy Ck WMA New Shooting Range

Total of Header Attachments: 1

Total of All Attachments: 1



Department of Administration  
Purchasing Division  
2019 Washington Street East  
Post Office Box 50130  
Charleston, WV 25305-0130

State of West Virginia  
Solicitation Response

**Proc Folder:** 1603639  
**Solicitation Description:** A&E - Sleepy Ck WMA New Shooting Range  
**Proc Type:** Central Purchase Order

Solicitation Closes	Solicitation Response	Version
2025-05-20 13:30	SR 0310 ESR05192500000007116	1

**VENDOR**  
000000206512  
TERRADON CORPORATION

**Solicitation Number:** CEOI 0310 DNR2500000003  
**Total Bid:** 0  
**Response Date:** 2025-05-19  
**Response Time:** 13:27:58  
**Comments:** Qualifications based submittal

**FOR INFORMATION CONTACT THE BUYER**  
Joseph (Josh) E Hager III  
(304) 558-2306  
joseph.e.hageriii@wv.gov

**Vendor Signature X** **FEIN#** **DATE**

All offers subject to all terms and conditions contained in this solicitation

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
1	Civil engineering				0.00

Comm Code	Manufacturer	Specification	Model #
81100000			

**Commodity Line Comments:** Qualifications based submittal.

**Extended Description:**

Design and Contract Administration of Sleepy Creek WMA Shooting Range New Construction.

May 15, 2025

Subject: Statement of Qualifications - A&E - Sleepy Creek WMA New Shooting Range - CEOI  
0310 DNR2500000003

Attn: Joseph E. Hager III  
Joseph.e.hageriii@wv.gov  
Department of Administration, Purchasing Division  
2019 Washington Street, East  
Charleston, WV 25305

Mr. Hager & Selection Committee:

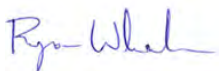
TERRADON Corporation is pleased to submit this Statement of Qualifications in response to the West Virginia Division of Natural Resources' solicitation for architectural and engineering services related to the proposed Sleepy Creek Wildlife Management Area (WMA) Shooting Range. With a distinguished history of delivering successful civil engineering and infrastructure projects across the state, TERRADON brings the expertise, experience, and commitment necessary to support the full lifecycle of this critical initiative—from evaluation and design through construction administration.

We understand the unique scope and significance of this project, including the design of a new 200-yard rifle range and all supporting infrastructure such as access roads, a Rangemaster building, restroom facilities, and utility extensions. TERRADON's multidisciplinary team is exceptionally equipped to meet these challenges. Our engineers, surveyors, and environmental professionals have successfully completed similar outdoor recreational and shooting range projects across West Virginia, including feasibility studies and full-scale designs for facilities in Fayette and Kanawha counties. Our familiarity with WVDNR design expectations, coupled with experience minimizing environmental impact and enhancing user safety, positions us as an ideal partner for the Sleepy Creek WMA.

TERRADON is committed to exceeding expectations through detailed site evaluations, proactive stakeholder coordination, and designs that align with both regulatory compliance and community goals. Our proven record of completing complex projects within scope, schedule, and budget demonstrates our reliability and technical acumen. We also emphasize transparent, responsive communication throughout every phase of our work—ensuring the WVDNR remains informed and confident as the project progresses.

We appreciate the opportunity to support the WVDNR in enhancing recreational access and safety at Sleepy Creek. TERRADON looks forward to the opportunity to further discuss our qualifications and collaborate in bringing this visionary project to life.

Sincerely,



Ryan Wheeler, Vice President of Business Development  
ryan.wheeler@terraddon.com | 304-729-9176



#### **SUBMITTED BY**

TERRADON Corporation  
101 West Maple Avenue  
Suite 300  
Fayetteville, WV 25840  
304-755-8291

#### **PROJECT MANAGER & POINT OF CONTACT**

Will Thornton, PE, PS  
VP Engineering  
will.thornton@terraddon.com  
304-541-7655

## **STATEMENT OF QUALIFICATIONS**

### **A&E Sleepy Creek WMA New Shooting Range**

VENDOR NAME: TERRADON Corporation  
BUYER: Josh Hager  
SOLICITATION NO.: CEOI 0310 DNR2500000003  
BID OPENING DATE: 05-20-2025  
BID OPENING TIME: 13:30  
FAX NUMBER: 304-558-3970

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# 1

## Professional Qualifications

TERRADON Services Overview





# TERRADON Corporation



**FOUNDED:** 1989

**EMPLOYEES:** 85

**LOCATIONS:**

Fayetteville, WV  
Poca, WV  
Lewisburg, WV  
Morgantown, WV  
Salem, VA

**SERVICES:**

Trail Planning & Design  
Transportation Engineering  
Civil Engineering  
Environmental Consulting  
Testing & Inspection  
Construction Monitoring  
Construction Administration  
Geotechnical Engineering  
Land Planning & Design  
Survey & Mapping

TERRADON is a premier provider of civil engineering, surveying, environmental, and geotechnical services with over three decades of experience serving public agencies throughout West Virginia and the Appalachian region. With deep roots in the Mountain State and a thorough understanding of its unique topography and regulatory environment, *TERRADON is exceptionally qualified to deliver the planning, design, and construction oversight services required for the proposed Sleepy Creek WMA Shooting Range.*

Our team brings a proven record of success on similar outdoor recreational and shooting range projects, including range feasibility studies, site evaluations, roadway and utility infrastructure, and environmental permitting. TERRADON's multidisciplinary professionals—licensed engineers, surveyors, environmental scientists, and construction inspectors—work collaboratively under one roof, enabling a seamless, integrated approach from initial concept through construction administration. This in-house structure ensures that access improvements, safety measures, range facilities, and supporting infrastructure are designed with both efficiency and durability in mind.

We have extensive experience navigating the requirements of federal and state agencies, including WVDNR, WVDEP, USACE, and SHPO. Our work complies with NEPA, Section 404/401 permitting, and other critical environmental and accessibility standards. This familiarity streamlines project delivery and ensures that public investments are protected and responsibly implemented.

TERRADON is proud to be recognized for our contributions to infrastructure and recreation in West Virginia. Our commitment to public safety, environmental stewardship, and community value makes us a strong partner for the Division of Natural Resources as it seeks to expand and enhance shooting opportunities at Sleepy Creek WMA.



*TERRADON is the largest, woman-owned engineering firm in West Virginia and is a certified Women's Business Enterprise.*

# 2

## Technical Expertise

TERRADON Service Offerings





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## Site Planning & Design

TERRADON Corporation offers a full suite of site development and engineering design services, built on more than 30 years of experience delivering complex, multi-faceted projects across West Virginia's diverse topography. From concept through construction, we bring a multidisciplinary approach that integrates civil engineering, environmental compliance, surveying, utility coordination, and geotechnical expertise—ensuring each project meets the highest standards of performance, safety, and stewardship.

### Proven Experience in Site Planning for Public and Recreational Facilities

TERRADON has successfully planned and designed numerous publicly funded projects in mountainous, environmentally sensitive areas—ranging from shooting ranges and park infrastructure to access roads, utility extensions, and ADA-compliant facilities. Our familiarity with WVDNR expectations, WVDEP permitting processes, and applicable building and accessibility codes positions us to deliver compliant and community-focused design solutions for recreational and conservation-focused developments.

The TERRADON Team has worked closely with agencies and municipalities to develop sites that balance function and environmental responsibility. Our portfolio includes range feasibility studies, site grading plans, stormwater management systems, structure placement, and infrastructure layout—ensuring durability, safety, and public accessibility.

### Site Development Services for Sleepy Creek WMA

For the proposed Sleepy Creek WMA Shooting Range, TERRADON will deliver:

- Site Layout & Grading Plans that incorporate range orientation, safety berms, parking, restroom facilities, and structures in a way that maximizes usability and minimizes environmental disturbance.
- Roadway & Access Design, including the evaluation and upgrade of the existing mile-long access road and entry gate to accommodate increased traffic and emergency vehicles.
- Utility Infrastructure Planning, including extending electric service from the Shockey Knob Trailhead, siting water supply elements, and locating cell service boosters to support range safety.
- Drainage & Stormwater Management Design, ensuring compliance with WVDEP and Clean Water Act regulations while protecting adjacent forest and watershed resources.
- ADA-Accessible Route Integration, ensuring parking and facility access meet the needs of all users.
- Structural design that meets the project needs.

TERRADON's team understands the importance of creating spaces that are functional, low-maintenance, and responsive to site-specific challenges like terrain constraints, soil conditions, and safety zones. Our thoughtful site design process supports the WVDNR's mission to enhance recreational access while preserving the natural integrity of the WMA.

With TERRADON, WVDNR will benefit from a trusted local partner who delivers smart, resilient design grounded in decades of Appalachian site development experience.



## Geotechnical Services



TERRADON Corporation brings unmatched regional geotechnical expertise to support the safe, efficient, and sustainable development of shooting ranges and outdoor recreational infrastructure across West Virginia. Our geotechnical team has extensive experience addressing the complex soil, rock, and groundwater conditions prevalent in the Appalachian terrain—ensuring that every element of the Sleepy Creek WMA Shooting Range is constructed on a stable, well-informed foundation.

For this project, TERRADON will provide targeted, site-specific geotechnical services designed to support key project components, including:

- Subsurface Investigations for the rifle range site, restroom facility, Rangemaster building, and access roadway improvements.
- Foundation Design Recommendations for structures and critical infrastructure, including support for buildings, retaining structures, and utility installations.
- Slope Stability Analyses along access roads and range embankments to mitigate the risk of slides and ensure safe grading in steep or variable terrain.
- Soil Classification & Compaction Guidance to ensure durable performance and prevent post-construction settlement or erosion issues.
- Groundwater Monitoring & Drainage Recommendations to address hydrological concerns and optimize stormwater management, particularly near the Shockey Knob Trailhead.

Our in-house field crew is equipped with specialized tools such as Ground Penetrating Radar (GPR), and cone penetration testing (CPT) equipment to conduct efficient, minimally invasive investigations—even in remote or sensitive environments like those found within Sleepy Creek WMA.

TERRADON has completed geotechnical evaluations for hundreds of infrastructure, recreation, and slope stabilization projects throughout West Virginia, including work on shooting ranges, state parks, and lands managed by the WVDNR. These projects often involve similar terrain and access challenges, providing us with invaluable insight into constructability and long-term performance.

By tightly integrating our geotechnical findings with the broader site design, structural layout, and environmental planning, TERRADON ensures that each component of the Sleepy Creek WMA Shooting Range is optimized for stability, safety, and resilience—from conceptual design through final construction.

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## Survey & Mapping Services



TERRADON Corporation has been a trusted provider of surveying and geospatial services throughout West Virginia and the Appalachian region since 1989. Our expertise spans a wide range of public infrastructure and outdoor recreation projects—including shooting ranges, access roads, park facilities, and conservation lands. This experience enables us to deliver precise, efficient, and context-sensitive survey solutions tailored to the topographic and regulatory challenges unique to the Sleepy Creek WMA.

For this project, TERRADON will provide full-service survey support from preliminary planning through construction documentation, including:

- Topographic and Boundary Surveys to inform the placement of the proposed 200-yard rifle range, buildings, utilities, and upgraded access road.
- Site Mapping and Control Surveys for structural layout of the Rangemaster office, restroom facilities, parking areas, and safety berms.
- Utility and Easement Locating, including potential impacts to existing WVDNR access roads and infrastructure, and recommendations for optimal routing of new electrical lines from the Shockley Knob Trailhead.
- Drainage and Slope Analysis Support, helping identify optimal grading approaches, stormwater paths, and natural barriers to minimize environmental impact.
- Emergency Access and Communication Infrastructure Mapping, including cellular booster placement and terrain analysis for signal optimization.

TERRADON's survey crews are led by Licensed Professional Surveyors and utilize advanced tools such as GNSS-enabled RTK GPS, robotic total stations, terrestrial LiDAR, and UAV-based photogrammetry where conditions allow. These technologies ensure accurate data collection, even in steep, forested, or otherwise inaccessible terrain such as that surrounding Sleepy Creek WMA.

Our integrated CAD and GIS teams deliver clean, adaptable mapping outputs that flow seamlessly into the engineering and permitting process. These deliverables can be used directly in grading plans, site layout, construction drawings, and environmental submittals—helping streamline reviews and reduce costly design revisions.

With deep familiarity in public lands management, WVDNR coordination, and boundary research, TERRADON is well positioned to support this project with proactive insights and dependable geospatial data. Our long-standing reputation for quality and responsiveness ensures that survey services will meet the needs of all project stakeholders while upholding the safety and conservation values of the Sleepy Creek WMA.



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## Environmental Compliance & Permitting Services

At TERRADON Corporation, environmental stewardship is integral to our mission—particularly when working in ecologically rich and culturally significant landscapes like Sleepy Creek Wildlife Management Area. As lifelong residents and outdoor users of Appalachia, we understand the importance of balancing recreational access with the preservation of natural resources and wildlife habitats. Our environmental services team is committed to ensuring that the proposed shooting range project is both fully compliant and environmentally responsible from planning through post-construction.

TERRADON's team of environmental scientists, geologists, engineers, and regulatory specialists brings extensive experience managing permitting and compliance for WVDNR, WVDEP, and USACE-regulated projects across West Virginia. We offer a multidisciplinary, in-house approach to efficiently address every phase of environmental review and permitting, tailored to the specific needs of this project.

Key services for the Sleepy Creek WMA Shooting Range will include:

- NEPA Documentation & Coordination, as required for federally supported projects within state-managed wildlife areas.
- Section 401/404 Permitting for stream crossings, drainage improvements, or minor wetland impacts associated with site development and road upgrades.
- SWPPP Development & Stormwater Permitting in compliance with WVDEP regulations, including erosion and sediment control plans for disturbed areas near Shockey Knob and the new facility footprint.
- Threatened & Endangered Species Coordination under the Endangered Species Act (ESA), in collaboration with the U.S. Fish and Wildlife Service.
- Cultural & Historic Resource Review per Section 106 guidelines, including coordination with the WV State Historic Preservation Office (SHPO) if archaeological or historic resources are present.
- Field Environmental Assessments & Phase I ESAs, as appropriate for utility installation, cell signal booster infrastructure, or any land disturbance in previously undisturbed areas.

TERRADON's specialists conduct early site walks and desktop reviews to flag sensitive areas—wetlands, streams, karst features, or wildlife corridors—ensuring potential conflicts are identified before final design. This proactive approach minimizes delays and helps preserve critical habitats while supporting safe, practical design.

We maintain strong working relationships with regulatory agencies and have successfully expedited approvals for a variety of outdoor recreation and infrastructure projects across the state. Our team works collaboratively with stakeholders and project sponsors to ensure that environmental obligations are met with clarity, precision, and transparency.

TERRADON is proud to support the WVDNR's mission to enhance public outdoor access while preserving West Virginia's natural beauty. Our environmental compliance services will ensure the Sleepy Creek WMA Shooting Range is developed with care, compliance, and conservation in mind.



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## Construction Testing & Inspection Services



TERRADON Corporation offers full-service construction testing, inspection, and oversight services that are critical to the successful delivery of safe, compliant, and high-performing outdoor recreation infrastructure. For the Sleepy Creek WMA Shooting Range, our field services team will ensure that all site improvements—from rifle range grading to restroom facilities and access roads—are constructed to specification and in full compliance with State and Federal standards.

TERRADON will provide continuous quality assurance throughout construction by delivering the following services:

- On-Site Construction Inspections during range grading, foundation pours, structure erection, utility trenching, and roadway improvements to ensure adherence to design plans, environmental measures, and safety standards.
- Materials Testing including:
  - Soils & Compaction: Verifying subgrade conditions for range surface, roadway upgrades, and structure foundations.
  - Concrete: Testing for mix design compliance and strength in footings, retaining walls, restrooms, and building slabs.
  - Aggregates & Base Materials: Ensuring appropriate gradation, density, and compaction for durable performance in heavy-use areas.
- Stormwater & Erosion Control Monitoring to confirm compliance with WVDEP standards and the approved SWPPP.
- Real-Time Reporting with daily inspection logs, photo documentation, deficiency tracking, and communication with project stakeholders.
- Construction Pay Estimate Verification to support accurate contractor billing and ensure auditable compliance for state-funded components.

Our field technicians and inspectors are certified by the:

- American Concrete Institute (ACI)
- West Virginia Department of Highways (WVDOH)
- APNGA (Portable Nuclear Gauge Safety & U.S. DOT Hazmat)

These certifications ensure that TERRADON provides the highest quality of oversight across concrete, soils, and environmental compliance—essential for safe, long-lasting performance at the Sleepy Creek site.

With in-house collaboration between engineering, geotechnical, environmental, and inspection teams, TERRADON offers a streamlined and responsive approach to construction oversight. Our inspectors have direct access to the original design and permitting teams, enabling quick resolution of field issues and minimizing construction delays.

This integrated model is especially beneficial in rugged or sensitive terrain such as Sleepy Creek WMA, where precision and coordination are critical to success.

# 3

## Management & Staffing Capabilities

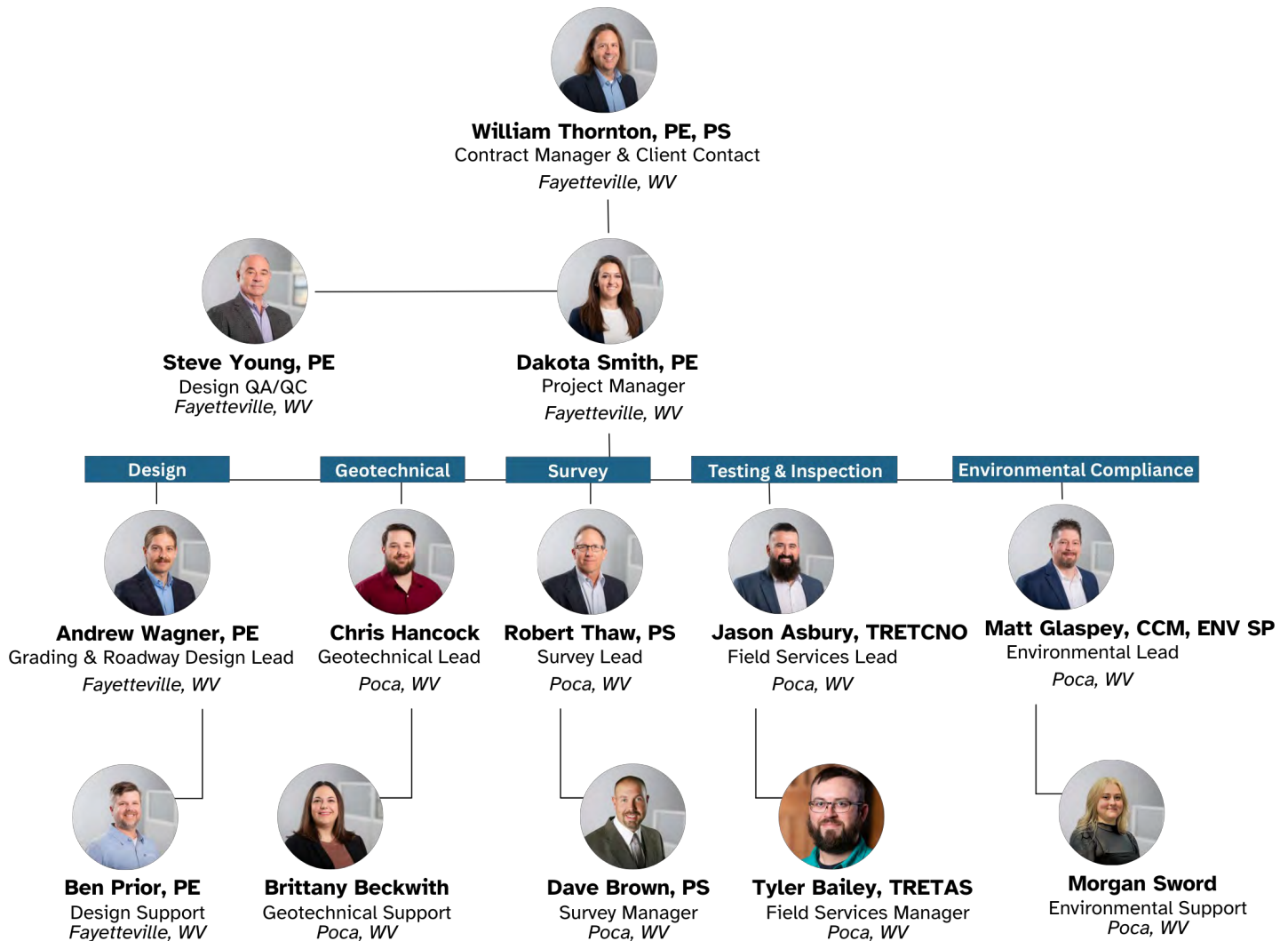
Key Staff Organization Chart & Resumes



# Project Organizational Chart



WV Department of Administration &  
WV Department of Natural Resources





## WILL THORNTON, PE, PS

Vice President Engineering

**Project Role |**  
Contract Manager &  
Client Contact

**Years Experience |** 35 Years (1989)

**Years With Firm |** 11 Years (2014)

### Education

B.S. Civil  
Engineering, West  
Virginia Institute of  
Technology, 1989

### Registrations

Registered  
Professional  
Engineer (PE):  
WV (1994), (#12364)  
VA (2000), (#65227)  
OH (1999), (#35591)

Professional  
Surveyor (PS):  
WV (1996), (#1642)

### Affiliations

American Society of  
Civil Engineers  
(ASCE)

Past President, WV  
Section ASCE

Past President,  
Charleston Branch  
ASCE

### Appointments

Fayette Institute of  
Technology,  
Engineering  
Program Advisory  
Board

Fayette Trail  
Coalition, Board of  
Directors

City of  
Montgomery, City  
Engineer and  
Member Sanitary  
Board

Thornton is an experienced Department Manager, project manager and design engineer for civil engineering design projects. Thornton has more than 35 years of experience with engineering firm in West Virginia, including three years with a construction firm performing major concrete paving projects in the region. Thornton also provided consultant review for the WVDOT, Division of Highways. The major design projects with which he has been involved included roadway design, bridge design and rehabilitation, drainage design, site design, trail design, permitting, property surveys, Right-of-Way Services, maintenance of traffic and construction administration and oversight. He provides analysis and design on the construction and rehabilitation of a variety of infrastructure utilities (Water, wastewater and storm water), including streets, drainage, sidewalks, buildings, and traffic and other safety improvements.

### Project Experience

#### Fayette County Shooting Range, Fayetteville, WV

Project Manager and client contact for a feasibility study for a proposed public shooting range located in the Sugar Creek area of Beckwith, within Fayette County, West Virginia. The study site—approximately 320 acres situated along Laurel Creek Road—lies within the Fayette County Park.

#### Babcock State Park (SP) Narrow Gauge Trail, Fayette County, WV, WVDOH Planning Division

Project manager for trail rehabilitation and pedestrian bridge located in Babcock State Park. Project includes 0.66 miles of trail rehabilitation and a prefabricated pedestrian bridge. TERRADON assisted in addressing WVDOH comments on previous design phase, performing research on prefabricated pedestrian bridges, crafting notes for contractor regarding prefabricated bridge and associated elements, quantity calculations, and cost estimate development.

#### Babcock State Park Sewell Trail, Fayette County, WV

Project Manager. TERRADON provided survey and mapping, master planning and final design for 4.5 miles of abandoned roadbed for an existing trail design in Babcock State Park. The project included conceptual master plan design of the entire length of the abandoned roadbed from the existing gate to the New River.

#### Pipestem Zipline Design, Pipestem, WV

Project manager for the design and construction inspection of a zipline at Pipestem State Park. TERRADON participated in pre-construction site meetings to inspect the site and discuss design alternatives and construction planning with the client. TERRADON prepared the bid document for zipline construction vendors to bid on the job.

#### Wolf Creek Park Trail System, Fayette County, WV

TERRADON participated in the construction phase by mapping the new trails using survey grade GPS system to track progress and to create the final trail map. Thornton was active in this project as a member of the FCURA and by actively obtaining GPS data of the completed trails.





## DAKOTA SMITH, PE

Project Engineer

**Project Role |**  
Project Manager

**Years Experience |** 8 Years (2016)

**Years With Firm |** 7 Years (2017)

### Education

B.S. Civil  
Engineering, Virginia  
Polytechnic Institute  
& State University,  
Blacksburg, VA,  
2016

### Certifications

Registered  
Professional  
Engineer (PE):  
WV (#24520) 2021;  
PA (#PE094473)  
2023; VA  
(#0402068677)  
2024

Dakota Smith is a project engineer for TERRADON Corporation. Smith provides engineering design services on various projects ranging from land slips, sidewalk design, & highway design to deck replacements. Smith has performed various tasks from drafting & roadway/site design in MicroStation, OpenRoads, & AutoCAD, to preparing calculations for different structural components & highway quantities using hydrologic & hydraulic modeling software. Smith also has experience in environmental permitting and bridge inspection coordination.

### Project Experience

#### **Babcock State Park (SP) Narrow Gauge Trail, Fayette County, WV, WVDOH Planning Division**

Project engineer for trail rehabilitation and pedestrian bridge located in Babcock State Park. Project includes 0.66 miles of trail rehabilitation and a prefabricated pedestrian bridge. Smith assisted in addressing WVDOH comments on previous design phase, performing research on prefabricated pedestrian bridges, crafting notes for contractor regarding prefabricated bridge and associated elements, quantity calculations, and cost estimate development.

**Hundred Sidewalk Replacement, Wetzel County, WV, Town of Hundred**  
Project engineer for sidewalk replacement project in Hundred, WV. Project involved demolition of existing sidewalk and replacing with new sidewalk that meets current design standards. Smith attended site visit review meetings with town council members and WVDOH, prepared construction drawings, prepared ROW certificate, utility status report, and NPDES Letter of Non-Registration for the town, calculated quantities, and developed a cost estimate and estimate of contract time.

#### **Mossy Interchange Bridge, Mossy, WV, WVDOH**

Project designer for the new bridge along WV 612 in Mossy, WV. Project included design for the replacement of the existing Mossy Interchange Bridge along WV 612 along with realignment of intersection between WV 612 and CR 15. Smith managed the roadway portion of plan set development, design of Maintenance of Traffic plans, reviewed load ratings generated via Bentley LARS software, performed quantity calculations, and attended review meetings with WVDOH.

#### **Twin Branch Culverts, McDowell County, WV, WVDOH**

Smith served as a staff designer for the Twin Branch Culverts design in Twin Branch, WV. The design included replacing the current culverts with improved, up to date culverts. Smith assisted in the preparation of drawings for the culverts.

#### **Mingo Logan Coal (Blair Slip), Logan County, WV, WVDOH**

Smith served as a staff designer for the Mingo Logan Coal (also referred to as the Blair Slip) project in Blair, WV. She performed quantity calculations for various materials on the job including pavement markings, excavation quantities, and guardrail quantities.



## ANDREW WAGNER, PE

Project Engineer

**Project Role |**  
Trail Design Lead

**Years Experience |** 7 Years (2018)

**Years With Firm |** 7 Years (2018)

### Education

B.S. Mining  
Engineering, Virginia  
Polytechnic Institute  
& State University,  
Blacksburg, VA,  
2013

### Registrations

Registered  
Professional  
Engineer:  
West Virginia  
#25661

### Certifications

Corrosion Mitigation  
for Reinforced  
Structures

Bentley Accredited  
MicroStation  
Professional

Bentley Accredited  
Road Designer

Andrew Wagner is a Project Engineer at TERRADON Corporation. Wagner is responsible for design on civil and highway projects. Wagner has a background in mine engineering as well as oil and gas drilling and completions operations management and has served as a drill site manager in the Gulf of Mexico while with another firm. Wagner has experience in highway design, PROWAG-compliant streetscape design, drainage design, site grading, and abandoned mine reclamation, and has provided relevant services on various projects throughout West Virginia. Wagner fulfills CAD management & administrative duties, implementing CAD Standards for MicroStation and OpenRoads projects and serving as the Engineering Group SME on OpenRoads Designer.

### Project Experience

#### Babcock State Park Narrow Gauge Recreational Trail, Fayette County, WV

Project Engineer. The project consisted of the design and preparation of construction plans and related documents for a new pedestrian bridge along with 2,500 linear feet of trail rehabilitation work along the Narrow Gauge Trail within Babcock State Park. Work consisted of pre-fabricated bridge design, layout, and abutment plans, geotechnical reports, and hydraulic reports. Wagner created the basemapping and plan set. Wagner designed three (3) span alternatives for a pedestrian bridge crossing Glade Creek. Wagner developed trail rehabilitation typical sections and proposed pedestrian bridge typical sections and specifications.

#### Pipestem Zipline Design, Pipestem, WV

Project Designer. The project consisted of design and construction inspection of a zipline at Pipestem State Park. Wagner participated in pre-construction site meetings to inspect the site and discuss design alternatives and construction planning with the client. Wagner prepared the bid document for zipline construction vendors to bid on the job. Wagner provided LiDAR mapping in the vendor's requested CAD format for zipline layout and modeling, and reviewed the vendor's plans for construction.

#### Mount Hope Sidewalk Improvements, Mount Hope, WV

Project Designer. Project engineer for the improvement of sidewalks throughout the town. The project included one block of sidewalk repairs, rehabilitation, ADA compliance upgrades, driveway openings, and minor drainage repairs. The design included the addition of two ADA parking spaces and period street lighting. Wagner performed quality control on quantity take-offs.

#### City of Huntington – Kinetic Park Landslide, Huntington, WV

Project Designer. The project involved an emergency landslide at Kinetic Park in Huntington, WV. The large landslide impacted houses below and threatened to close an unnamed tributary. Wagner performed a drainage area delineation and peak discharge calculation at the site for NPDES permitting purposes. Wagner performed estimates for material haulage for the landslide repair.





## BEN PRIOR, PE

Project Engineer

**Project Role |**  
Trail Design Support

**Years Experience |** 21 Years (2004)

**Years With Firm |** 7 Years (2018)

### Education

B.S. Civil  
Engineering, West  
Virginia Institute of  
Technology, 2011

### Registrations

Registered  
Professional  
Engineer (PE): WV,  
2018, (#23358)

### Certifications

NHI Safety  
Inspection of In-  
Service Bridges for  
Professional  
Engineers

NHI Fracture Critical  
Inspection  
Techniques for Steel  
Bridges,

OSHA 10

Adult and Child First  
Aid/CPR CertID –  
01FBIES

Confined Space  
Trained

Fall Protection  
Trained

Ben Prior is a structural engineer at TERRADON Corporation. Mr. Prior is responsible for a variety of tasks for civil engineering projects. He inspects, evaluates, designs and coordinates installation of structural systems. Additionally, he is a Team Leader on bridge inspections.

### Project Experience

#### 311 Bridge Rehabilitation, WVDOH, Greenbrier County, WV

311 Bridge Rehabilitation consisted of the following; concrete deck replacement with lightweight concrete to achieve desired load rating using "Traditional" deck design, converting the abutments to semi-integral, and an adjustment to the normal cross-slope. Prior was part of the structural design team assisting with deck design and designing connection dowels for seismic loading per AASHTO.

#### Health Care Facility Renovation Inspection, New River Health, Fayette County, WV

Health Care Facility Renovation Inspection consisted of weld inspections 'special inspection' of welds used in the attachment of steel rods and angles used to modify open web steel joists' and joist girders' webs and chords.

#### Industrial Plant Louvre Installation Design, Industrial Plant, Kanawha County, WV

Industrial Plant Louvre Installation Design consisted of the design of a frame that attached to the existing roof and would house louvres for ventilation. Due to contractor's preference for no welding, the connections were all bolted and required blind bolts in some instances.

#### Coal Mine Element Inspection, Coal Mine, Raleigh County, WV

Coal Mine Infrastructure Inspection consisted of the inspection of ladders, structural elements of a surge bin, and the tower of a mine shaft elevator.

#### Anchors for Solar Canopy, Danhill Construction, Charleston, WV

The design of a post-installed anchoring system for 40,000 sf and 600 kW solar canopy consisted of coordinating with the solar canopy frame designer to achieve a desirable system. The design considered local effects from wind, seismic, and gravity. It also considered global effects to the structure as a whole. Before construction could begin, Mr. Prior evaluated the parking garage for various construction equipment loadings. Additionally, Mr. Prior worked with contractor to amend anchor locations due to construction issues.

#### Route 60 Roadway Design Study Chelyan to Montgomery, WVDOH, Kanawha County, WV

The Route 60 Design Study, following WVDOH guidance, divided approximately 12 miles of highway into 3 sections, with each section containing multiple study sites. A total of twelve sites were studied. Improvements studied included a roadway realignment, adding turning lanes, and slope stabilization. For each alternate at each site, roadway geometry, right-of-way impacts, environmental impacts, earthwork volumes, construction cost, etc. were assessed in order to recommend a preferred alternate.



## STEVE YOUNG, PE

Senior Project Engineer

**Project Role |**  
Trail Design QA/QC

**Years Experience |** 35 Years (1990)

**Years With Firm |** 4 Years (2021)

### Education

Bachelor of Science  
Civil Engineering,  
West Virginia  
Institute of  
Technology, 1990

Associate of Science  
Surveying  
Technology,  
Glenville State  
College, 1982

Associate of Science  
Forest Technology,  
Glenville State  
College, 1978

### Registrations

Registered  
Professional  
Engineer:  
West Virginia  
#16017, 2004  
Kentucky #28228,  
2011  
Pennsylvania  
#79558, 2012  
Virginia #65350,  
2022

Steve is an experienced project manager, design and maintenance engineer for civil engineering projects. Young had more than 30 years of experience working with the WVDOT Division of Highways in the Roadway Design Section and in District One serving as the Design and Maintenance Engineers. The major design projects with which he has been involved included roadway design, drainage design, safety improvements, maintenance of traffic, resurfacing and landslide analysis and repair. He provided review and analysis of streetscape projects in Charleston, Clay, Mason and St. Albans and review of the renovation and new construction of the District One Campus as well as site development in the construction of new headquarters in Clay, Mason and Putnam Counties.

### Project Experience

#### WV 16 Drainage, Clay County, Clay, WV

Design and management of improvements to existing drainage structures and installation of additional drainage structures in the Town of Clay. Street and business flooding was greatly alleviated with the improved drainage system that allowed storm water to flow from WV 16 to Elk River through Permanent Drainage Easements.

#### WV 622 Drainage Martins Branch, Kanawha County, WV

Design and management of a drainage structure replacement along Martins Branch. A 12' X 12' concrete box culvert was used to replace a collapsing corrugated metal pipe.

#### WVDOH Local Public Agency Manual, 2022 - 2024

Co-authored a Local Public Agency Manual for the WVDOH Planning Section to aid state towns and cities in the process of how to develop public projects such as streetscapes, sidewalk improvements and trails within their municipalities.

#### City Of Winfield Sidewalk System, Winfield, WV, 2022 - 2024

Phase 1 design, development of construction plans, and estimate for a sidewalk system approximately 2830 in feet in length along the northern portion of WV 817 in Putnam County. In addition, the sidewalk as designed to meet current ADA standards.

#### USACE Delafield Avenue, Aspinwall, PA, 2023 - 2025

Designed a HDPE liner storm water system to separate combined sanitary and stream waters from the current brick lined system that flows into the Ohio River. The length of the liner system is approximately 3800' and flows through the boroughs of Aspinwall, O'Hara, and Fox Chapel. In addition, two new sanitary lines, totaling 3000' in length, were designed to accommodate the separated combined system waters.

#### Landslide Repair, Boone, Clay, Kanawha, Putnam and Mason Counties

Management of district wide slide program with District Forces, Inmate Work Crews and crews from Geostabilization International (GSI) utilizing soil nails as a corrective measure.



## CHRIS HANCOCK

Geotechnical Engineering Lead

**Project Role |**  
Geotechnical Lead

**Years Experience |** 10 Years (2015)

**Years With Firm |** 10 Years (2015)

### Education

B.S. Civil  
Engineering –  
Geotechnical  
Emphasis, West  
Virginia Institute of  
Technology, 2015

### Certifications

OSHA 10 Hour  
Construction

Christopher Hancock is a Geotechnical Engineering Lead at TERRADON. This role involves cost proposal preparation, client coordination, project management, and staff management / training. Chris's skills and abilities include AutoCAD, foundation design, designs using Geosynthetic Materials, MSE wall design, and groundwater and seepage control. Additionally, the geotechnical services provided by TERRADON involve working with large project teams to deliver a successful project. Chris is proficient in various software programs related to scientific study, including Civil3D.

### Project Experience

#### Barboursville Pedestrian Bike Path, Barboursville, WV

The project consisted of the construction of a new retaining wall to provide space for a walking/biking trail along Park Drive. The wall was approximately 338-feet-long and included two (2) horizontal curves and changes in the vertical profile as it followed the roadway. The geotechnical aspect of this project was to determine the general subsurface conditions at the site through a field investigation, engineering evaluation relative to the proposed project, design of foundations, and construction documents. Brittany Beckwith provided engineering services including evaluation of field data and laboratory analyses, assisted with the development of recommendations, documentation of the investigation, conclusions, and recommendations, AutoCAD design, and construction documents.

#### Hawks Nest Power Station, Brookfield Drainage Design Project, Fayette County, WV

Responsible for designing a multiple-culvert drainage system for a 146-acre drainage area based on the hydrologic and hydraulic constraints for the system.

#### Mossy Bridge, Mossy, WV

The project involved designing and preparing plans for replacing the Mossy Interchange Bridge carrying WV 612 over Paint Creek in Fayette County. Hancock acted as the Geotechnical Project Manager, performing laboratory tests on soil and rock samples to identify strength parameters essential for the bridge's foundation design. Geotechnical software helped determine the necessary foundation dimensions and reinforcement under various loading conditions, and stability analyses were conducted for different water-level scenarios. The project also included preparing comprehensive design documentation and a geotechnical investigation report.

#### Earl M. Vickers Memorial Bridge, Fayette County, WV

Served as a qualified individual to perform bridge inspection. This entailed: super & sub structure inspection of steel and concrete. Visual inspection of steel components included: girders, stringers, floor beams, joints, and bearings. Concrete components were sounded then spalls and delamination's were sketched. A final report was created to show all defects and rehabilitation strategies.



## BRITTANY BECKWITH

Geotechnical Project Manager

**Years Experience** | 7 Years (2018)

**Years With Firm** | 7 Years (2018)

### Education

B.S. Civil  
Engineering, West  
Virginia Institute of  
Technology, 2018

### Certifications

OSHA 10 Hour  
Construction

OSHA 30 Hour  
Construction

Brittany Beckwith is an experienced Geotechnical Project Manager with many years of experience in planning, implementing, and executing Geotechnical Investigations, generating, researching, and editing Geotechnical Reports, and analyzing complex and challenging Geotechnical cases. Beckwith excels at analyzing earth materials, assessing risks, and addressing challenges regarding major construction projects. She is also proficient in CAD software and various diagnostic tools. Beckwith's strong analytical skills and attention to detail ensure the highest standards of quality and efficiency in every project she undertakes. She is also adept at collaborating with engineering teams to streamline processes and enhance overall project outcomes.

### Project Experience

#### Barboursville Pedestrian Bike Path, Barboursville, WV

The project consisted of the construction of a new retaining wall to provide space for a walking/biking trail along Park Drive. The wall was approximately 338-feet-long and included two (2) horizontal curves and changes in the vertical profile as it followed the roadway. The geotechnical aspect of this project was to determine the general subsurface conditions at the site through a field investigation, engineering evaluation relative to the proposed project, design of foundations, and construction documents. Brittany Beckwith provided engineering services including evaluation of field data and laboratory analyses, assisted with the development of recommendations, documentation of the investigation, conclusions, and recommendations, AutoCAD design, and construction documents.

#### Fayette County Board of Education – Midland Trail Elementary New Facility

The project consisted of constructing a new elementary school that is both a single-story structure as well as a two-story structure with an approximate 50,000 S.F footprint. The geotechnical aspect of this project was to determine the general subsurface conditions at the site through a field investigation and engineering evaluation relative to the proposed project. Both a preliminary geotechnical investigation and a final geotechnical investigation occurred. The preliminary and final investigation encountered areas containing deep fill consisting of deleterious materials. Brittany Beckwith provided engineering services including on-site supervision of the geotechnical subsurface investigation which included managing and observing the test pit operation, the visual classification of soil and bedrock encountered, collection of the subsurface samples, and the selection of laboratory analyses. Additionally, she provided evaluation of field data and laboratory analyses, development of recommendations, and documentation of the investigation, conclusions, and recommendations.





## ROBERT THAW, PS

Vice President of Survey & Mapping

**Project Role |**  
Survey Lead

**Years Experience |** 45 Years (1976)

**Years With Firm |** 31 Years (1994)

### Education

A.S. Survey  
Technology, West  
Virginia Institute of  
Technology, 1982

B.S. Civil  
Engineering  
Technology, West  
Virginia Institute of  
Technology, 1985

### Registrations

Professional Land  
Surveyor (PLS):  
West Virginia, 1991,  
#965

Robert Thaw serves as head of TERRADON's Survey and Mapping department. He organizes and supervises survey crews, reviews project plans, and creates base mapping for various projects including noise barriers, interchanges, connectors, bypasses, sidewalks, bike paths, and bridges. Thaw oversees all TERRADON survey activities, including preparation of Right-Of-Way plans; the development of GPS static networks for aerial mapping in the design of roadways; identification of existing utilities and property lines; base image development and control placement for construction projects; and drafting of legal descriptions for ROW parcels. He provides strategic guidance and maintains rigorous quality assurance standards across a comprehensive range of surveying services, including Base Mapping for design, Boundary/Cadastral Surveys, ALTA/NSPS Surveys, and land-based LiDAR surveys, Hydrographic, Photogrammetric, and Route Surveys, along with GPS/GIS integration, instrumentation surveys, and construction surveys, Utility, and Quantity Surveys while ensuring all operations adhere to industry standards and regulatory requirements. His role encompasses strategic planning and maintaining technical excellence across all surveying operations.

### Project Experience

**The Summit Bechtel Family National Scout Reserve, Fayette County, WV**  
TERRADON conducted a LiDAR survey covering more than 14,000 acres, flown during full summer canopy, to support site development. The project included establishing horizontal and vertical control using GNSS receivers and least squares static network adjustment, followed by a secondary control network for construction staking. Concrete monuments and aluminum disks were used for control points, and the entire area was mapped at a 2' contour interval with accuracy exceeding 1' contour specifications. Thaw coordinated the project and ensured quality control throughout the survey process.

**USACE Huntington District, Grayson Lake Boundary Survey, Grayson, KY,**  
Survey Task Manager. Tasks included boundary survey at USACE Grayson Lake property to recover over 150 boundary monuments. Responsibilities include performing land surveys including property surveys, documenting monuments and boundary lines, describing and documenting fixed improvements, and establishing and re-establishing boundary corners, staking corners and sketching monuments and structure encroachments. Thaw oversaw quality control and quality assurance for the project while managing the budget to ensure efficiency and accuracy.

### Hawks Nest Power Station, West Virginia

TERRADON conducted comprehensive terrestrial LiDAR scanning of the entire historic Hawk Nest Power Station, capturing 5 floors and 56,000 square feet through 275 individual scans to create a detailed digital model of the facility. Thaw managed client relations, scan strategy, scheduling, budgeting, and QA/QC for the final deliverable.



## DAVE BROWN, PS

Survey Project Manager

**Project Role |**  
Survey Manager

**Years Experience |** 33 Years (1992)

**Years With Firm |** 25 Years (2000)

### Education

B.S. Civil  
Engineering  
Technology /  
Surveying (West  
Virginia Institute of  
Technology (1996)

### Registrations

Professional Land  
Surveyor (PLS):  
WV, 2003 (#2066)  
TN, 2008 (#2685)  
KY, 2020 (#4344)

### Certifications

NOAA's National  
Geodetic Survey  
OPUS Projects  
Manager's Training  
(2021)

Dave Brown is a Professional Land Surveyor and Survey Project Manager, experienced in various survey and mapping projects throughout the region. Dave is a member of West Virginia Society of Professional Surveyors. Brown's responsibilities include survey project management, GPS networks, control surveys, subdivision design, development of highway Right-of-Way Plans, boundary solutions, reporting and documenting, courthouse research, drafting, construction staking, survey data reduction, survey reports, and preparation of surveying cost estimates and proposals.

### Project Experience

**AMTRAK ADA Stations Program (ADASP) Alderson and Hinton, WV**  
TERRADON provided survey support for ADA upgrades at existing train stations located at Alderson and Hinton, WV. Project included verification of existing control and construction staking. Dave Brown, as Professional Surveyor Lead developed and reviewed stakeout for ADA improvements for this project.

**New River National Park ALTA/NSPS Surveys, Fayette County, WV**  
TERRADON deployed four dedicated survey crews and managed two subcontractors to complete comprehensive ALTA/NSPS surveys for 44 parcels (totaling 394 acres with properties ranging from 0.22 to 105 acres) within and adjacent to the New River National Park in an expedited 90-day timeframe for a nationally recognized operator of vacation adventure properties. Dave Brown, as Professional Surveyor Lead managed field crews, coordinated courthouse research, reviewed title commitments and created survey plats and legal descriptions.

**The Summit Bechtel Family National Scout Reserve, Glen Jean, WV**  
Professional Land Surveyor Lead. Delivered more than 14,000 acres of LiDAR, which was flown during full summer canopy at the project site. TERRADON, provided the horizontal and vertical control utilizing GNSS receivers, and least square network adjustments. A subsequent control network, utilizing GNSS receivers and least square network adjustments was established by TERRADON for construction staking. Concrete monuments, and aluminum disks were used for the control points. The entire 14,000 acres was mapped at 2' contour interval, with accuracy's better than 1' contour specifications.

**USACE Huntington District, Bluestone Lake Boundary Survey, Hinton, WV**  
Professional Land Surveyor Lead. Project included the boundary survey project at USACE Bluestone Lake property to recover 52 boundary monuments spanning approximately 11,765 feet from corner 200-8 to 205A-4.





## JASON ASBURY, TRECNO

Vice President of Field Services

**Project Role |**  
Field Services Lead

**Years Experience |** 21 Years (2004)

**Years With Firm |** 15 Years (2010)

### Education

B.S. Landscape  
Architecture, West  
Virginia University,  
2004

### Certifications

ACI Concrete Field-  
Testing Technician –  
Grade I

WVDOH Level V  
Transportation  
Engineering  
Technician  
TRECNO

WVDOH Asphalt  
Field & Compaction  
Technician

WVDOH Aggregate  
Sampler Technician

WVDOH Portland  
Cement Concrete  
Inspector

APNGA Nuclear  
Gauge Safety &  
USDOT Hazmat

Certified Erosion  
Sediment Storm  
Water Inspector

38 Hour USACE  
Wetland Delineation

30 Hour OSHA

40 Hour OSHA

HAZWOPER

OSHA Confined  
Space Entry Trained

OPEC SafeLandUSA

Tyler Bailey is a Field Services Project Manager, Construction Manager, Laboratory Supervisor, and Construction Inspector for TERRADON Corporation. Bailey is responsible for scheduling over 25 field service technicians and inspection personnel to projects, monitoring, and review of reports, and overall client management throughout West Virginia and Virginia Region. He also provides quality control testing and inspection for oil & gas, environmental, commercial, and residential construction projects throughout the Appalachian Region. He interfaces with site owners (public and private) and contractors through onsite meetings and offsite meetings to complete construction testing and inspection projects. Bailey is responsible for monitoring contractor's work for conformance to the design plans, specifications and general permit requirements; experience tracking daily quantities, completing daily inspection reports, reviewing payment requisitions and maintaining field sketchbooks and as-built drawings.

### Project Experience

#### Nicholas County Schools-High School, Middle School, and Vo Tech, Summersville, WV

Served as Quality Assurance/Quality Control Manager for the site construction of a new High School, Middle School, and Vocational Technical School in Summersville, West Virginia. Oversaw all quality assurance and quality control operations throughout the project lifecycle, ensuring strict compliance with design specifications, regulatory standards, and construction best practices. The project encompassed approximately 71 acres and included mass earthwork, on-site rock blasting, grading, stormwater infrastructure, water and sanitary sewer installations, and structural foundation work.

#### Indian Creek ATV Resort, Bone County, West Virginia

Served as Regulatory Coordinator and Project Manager, responsible for regulatory compliance and environmental coordination for a 34-acre commercial development project in Boone County, West Virginia. Oversaw field survey teams conducting wetland delineations in accordance with U.S. Army Corps of Engineers (USACE) methodology, including the identification of soil, vegetation, and hydrologic indicators, and the flagging of wetland boundaries for survey and reporting. Prepared detailed reports of field findings for submission to USACE. Responsible for securing applicable Nationwide Permits, Office of Land and Stream Permits, and coordinating Phase I Environmental Site Assessments. Facilitated Section 7 (Endangered Species Act) and Section 106 (National Historic Preservation Act) consultations. Coordinated with the West Virginia Department of Environmental Protection's Office of Abandoned Mine Lands to ensure full compliance with National Environmental Policy Act (NEPA) requirements for the property evaluation.



## TYLER BAILEY, TRET SR

Field Services Division Lead – Southern Region

**Project Role |**  
Field Services Manager

**Years Experience |** 6 Years (2019)

**Years With Firm |** 6 Years (2019)

### Education

B.S. Landscape  
Architecture, West  
Virginia University,  
2018

### Certifications

WVDOH Level IV  
Transportation  
Engineering  
Technician – Senior  
(TRET SR) (#3198)

OSHA 10 Hour  
Construction  
First Aid, CPR & AED  
Certified

ACI Concrete Field-  
Testing Technician-  
Grade 1

WVDOH PCC  
Inspector (#21001)

WVDOH Soil and  
Aggregate  
Compaction  
Technician (#21001)

WVDOH Asphalt  
Field and  
Compaction  
Technician (#21001)

WVDOH Aggregate  
Technician (#21001)

WVDOH Aggregate  
Sampling (#21001)

APNGA RSO  
Certification

APNGA Nuclear  
Gauge Safety &  
USDOT Hazmat

Tyler Bailey is a Field Services Project Manager, Construction Manager, Laboratory Supervisor, and Construction Inspector for TERRADON Corporation. Bailey is responsible for scheduling over 25 field service technicians and inspection personnel to projects, monitoring, and review of reports, and overall client management throughout West Virginia and Virginia Region. He also provides quality control testing and inspection for oil & gas, environmental, commercial, and residential construction projects throughout the Appalachian Region. He interfaces with site owners (public and private) and contractors through onsite meetings and offsite meetings to complete construction testing and inspection projects. Bailey is responsible for monitoring contractor's work for conformance to the design plans, specifications and general permit requirements; experience tracking daily quantities, completing daily inspection reports, reviewing payment requisitions and maintaining field sketchbooks and as-built drawings.

### Project Experience

#### Nicholas County Schools-High School, Middle School, and Vo Tech, Summersville, WV

Field Services Project Manager and Construction QA/QC technician responsible for observing and documenting any and all progress on the site. Scheduling field services and inspection personnel to the project, monitoring, and review of reports, and overall client management throughout. The project consisted a newly constructed High School, Middle School, and Vo Tech School approximately 71-acre site of mass earthwork, onsite blasting, grading, storm drain installation, water line and sanitary sewer line installation, building foundations and masonry walls verifying bearing capacity and rebar inspections. Construction QA/QC was on-site observing the new construction of a brand-new school.

#### Pollard Mills City Sidewalks, Ashland, KY

Field Services Project Manager and Construction QA/QC technician responsible for observing and documenting any and all progress on the site. Scheduling field services and inspection personnel to the project, monitoring, and review of reports, and overall client management throughout. The project involved working with contractor to construct newly installed sidewalks throughout the city. Testing performed onsite was concrete testing, rebar inspections, laboratory specimen breaks for compressive strength, etc. Along with job coordination with project managers, superintendent, contractors, and site engineers.

#### Multiple Mine Reclamation Sites, West Virginia

Field Services Project Manager and Construction QA/QC technician responsible for observing and documenting any and all progress on the site. Scheduling field services and inspection personnel to the project, monitoring, and review of reports, and overall client management throughout. The projects involves working with environmental staff from WV and going on mine reclamation sites to observe/ analyze material. Testing performed onsite was compaction and soil analysis in the laboratory etc. Along with job coordination with project managers, superintendent, contractors, and site engineers.



## MATT GLASPEY, CCM, ENV. SP.

Vice President of Environmental & Construction Management

**Years Experience** | 22 Years (2003)

**Years With Firm** | 14 Years (2011)

### Education

B.S. Landscape Architecture, West Virginia University, 2002

### Certifications

Certified Construction Manager, CCM #13701, obtained in 2019

Envision Sustainability Professional, ENV SP #29234, obtained in 2019

OSHA 30 Hour Certification

OSHA 10 Hour Certification

American Red Cross Adult First Aid/CPR/AED

### Affiliations

Construction Management Associate of America, National Capital Chapter, 2018-Current

Matt Glaspey is the Vice President of Environmental Services and Construction Management at TERRADON Corporation. Glaspey serves as an Environmental Agency Coordinator, acting as regulatory liaison/coordinator, he provides critical project support for specialized permitting and erosion and sediment control planning, as well as wetland assessment/delineation projects and Section 404/401 permitting. Additionally, Glaspey is experienced in conducting, supervising and evaluating construction monitoring, testing and reporting activities including scheduling, oversight, and deficiency reporting. Glaspey is well-versed in creating and reading engineering drawing, CAD files, and GIS information. He offers nearly more than 20 years of project design and management experience. In prior roles at TERRADON, Glaspey was responsible for developing site plans, grading plans, landscape plans, utility plans, site detailing, permitting and specifications.

### Project Experience

#### Indian Creek ATV Resort, Boone County, WV

Served as Project Manager for permitting and environmental services for approximately 34-acre commercial development located in Boone County, West Virginia. Task included overseeing field survey teams assessing the subject property for wetland indicators (soil, plants, and hydrology) in accordance with US Army Corps of Engineers methodology, flagging wetland boundaries for survey and preparation of reports with detailed field activities and findings for USACE. Also was responsible for determining and obtaining appropriate Nationwide permits as well as obtaining Office of Land and Stream permit, Phase 1 Environmental Site Assessment, as well as section 7 and 106 consultation, in addition to coordinating with West Virginia Department of Environmental Protection Office of Abandoned Mine Lands to ensure the successful completion of all required environmental site assessments necessary to fulfill the requirements of the National Environmental Policy Act for the evaluation of the subject property.

#### NPS Gauley River NRA and New River Gorge NRA, Fayetteville, West Virginia

Glaspey served as the Project Manager for this project. The project consisted of pavement rehabilitation work for the Tailwater Access Road at Gauley River NRA, which included asphalt paving, minor drainage repair, new pavement striping and shouldering. Additionally, rehabilitation work was performed at the Glade Creek Bridge at New River Gorge NRA which included dewatering and scour protection, removal of vegetation, removal of the accumulation of debris, removal of bridge railings, and re-bedding and repointing of joints at the stone masonry abutments. Glaspey was responsible for project oversight, coordination and management for the full-time on-site Construction Management Representative.

#### West Virginia Department of Environmental Protection (WVDEP) Permitting, Statewide, WV

Glaspey has guided over 100 projects through the West Virginia Department of Environmental Protection permit process. Projects include K-12 schools, higher education, parks, athletic facilities, recreation facilities, municipal



## MORGAN SWORD

Senior Environmental Consultant

**Years Experience** | 6 Years (2019)

**Years With Firm** | 6 Years (2019)

### Education

B.S. Environmental Science, Marshall University, 2018

B.S. Natural Resources & Recreation Management, Marshall University, 2018

### Certifications

OSHA 10 Hour

OSHA HAZWOPER 40 Hour

West Virginia Asbestos Inspector

West Virginia Asbestos Management Planner

Kentucky Asbestos Management Planner

Ohio Asbestos Hazard Evaluation Specialist

Morgan Sword is a Senior Environmental Consultant at TERRADON Corporation with a background in watershed assessments and environmental monitoring. Sword is experienced in: Writing & conducting full NEPA Environmental Assessments, NEPA Compliance, WVVRP Consultation, QAPP, HASP, Site Characterizations, Site Assessment Work Plans, Remedial Action Work Plans, Phase I (100+), Phase II, and Phase III ESAs, Environmental Due Diligence, SWPPP, Groundwater Monitoring-Sampling/Modeling, AST Closures, UST Removal, Remediation, Environmental Soil Sampling, GIS Analysis & Survey, Stream and Wetland Delineations, USACE Section 404 and WVDEP 401 permitting with associated Compensatory Mitigation Concepts and Alternative Analysis, Spill Prevention/Best Management Practices, Asbestos Inspection and Management Planning, Environmental Auditing, and project oversight.

### Project Experience

#### Smooth Ambler Stream and Wetland Delineation, Lewisburg, WV

Completed a stream and wetland delineation on the property and coordinated necessary jurisdictional determinations and permitting documents with the US Army Corps of Engineers.

#### Indian Creek ATV Resort, Boone County, WV

Responsibilities included completing fieldwork and reports for an approximately 34-acre commercial development located in Boone County, West Virginia. Tasks included completing site reconnaissance of the subject property for wetland indicators (soil, plants, and hydrology) in accordance with US Army Corps of Engineers methodology, flagging wetland boundaries for survey and preparation of reports with detailed field activities and findings for USACE. Also was responsible for determining and obtaining appropriate Nationwide permits as well as obtaining Office of Land and Stream permit, Phase 1 Environmental Site Assessment, as well as section 7 and 106 consultations, in addition to a National Environmental Policy Act Environmental Assessment.

#### Mercer County Waste Sites, Mercer County, WV

Responsibilities included completing site reconnaissance of the subject property for wetland indicators (soil, plants, and hydrology) in accordance with US Army Corps of Engineers methodology, flagging wetland boundaries for survey and preparation of reports with detailed field activities and findings for USACE. Responsibilities also included determining and obtaining appropriate section 404 and 401 permits, Right of Entry permission, and section 7 and 106 consultations.

#### Summersville Middle School, Summersville, WV

Responsibilities included working in conjunction with FEMA to complete a NEPA EA, completing site reconnaissance of the subject property for wetland indicators (soil, plants, and hydrology) in accordance with US Army Corps of Engineers methodology, flagging wetland boundaries for survey and preparation of reports with detailed field activities and findings for USACE, determining and obtaining appropriate section 404 and 401 permits, Right of Entry permission, section 7 and 106 consultations, and facilitating the purchase of mitigation credits from an approved mitigation bank.



# 4

## Related Prior Experience

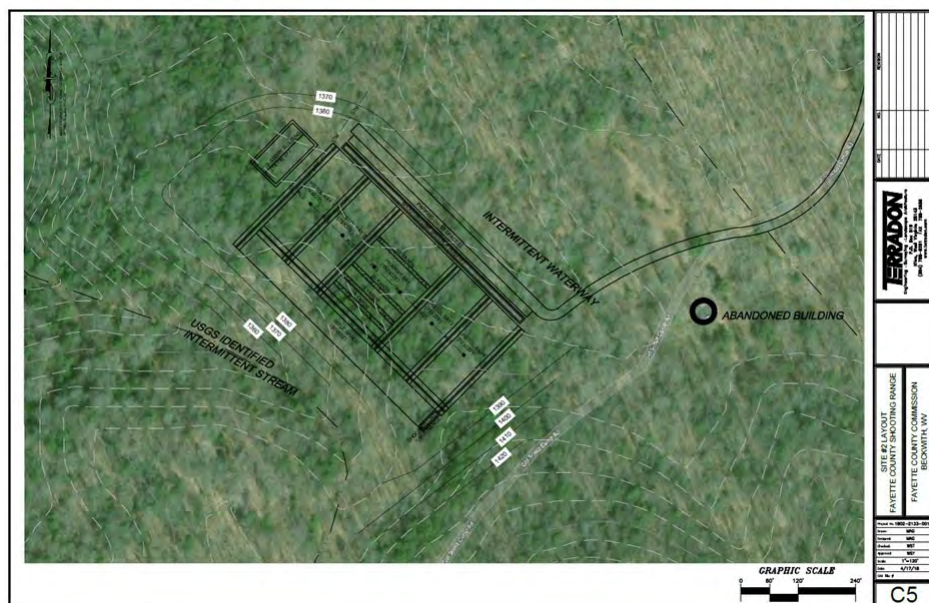
Similar Project Experience



# Fayette County Shooting Range Feasibility Study

## Beckwith, Fayette County, WV

Project Owner  
Fayette County Commission



TERRADON Corporation was selected by the Fayette County Commission to perform a feasibility study for a proposed public shooting range located in the Sugar Creek area of Beckwith, within Fayette County, West Virginia. The study site—approximately 320 acres situated along Laurel Creek Road—lies within the Fayette County Park.

The scope of services included an in-depth site analysis, assessment of potential noise impacts on nearby residential areas, development of a conceptual master plan, and generation of a preliminary construction cost estimate. TERRADON delivered the draft feasibility report within 30 days of receiving the Notice to Proceed and finalized the document following review and feedback from the County Commission.



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## The Summit Bechtel Family National Scout Reserve

### Fayette County, WV



TERRADON provided comprehensive site development and engineering services for the Summit Bechtel Reserve, one of the most expansive and innovative outdoor recreation facilities in the nation. Our work encompassed grading, drainage, utility infrastructure, and stormwater management across hundreds of rugged acres in Fayette County.

**Project Owner**  
The Boy Scouts of America

A centerpiece of this work was The Barrels, a 60-acre, world-class shooting range complex that ranks as the third-largest outdoor shooting facility in the United States. TERRADON's site design and layout supported nearly 400 stations dedicated to shotgun, rifle, pistol, archery, and hatchet throwing—ensuring safe, efficient, and accessible operations for one of the most diverse marksmanship programs in the country. The project included Jack Link's Scout Upper & Lower Sporting Clays Trail, featuring 78 sporting clay stations over 120 acres, and specialized range facilities including a 30-position pistol range and a covered 50-foot rifle range, all designed with terrain-sensitive planning and strict adherence to safety protocols.

TERRADON's contributions helped make The Barrels a nationally recognized destination for shooting sports, demonstrating our ability to design safe, functional, and environmentally responsible range infrastructure.

The Summit Bechtel Reserve sits within a 11,000 acre developed site. TERRADON provided design for roughly 64 miles of underground utilities, an 80,000-seat amphitheater, 14 miles of new roads, 28 miles of drainage swales, and four earthen dams totaling 7,000 cubic yards. The monumental project has hiking trails, archery, rock climbing, zip lining, and more features.

TERRADON's integrated approach to engineering and site development played a vital role in shaping one of the most ambitious outdoor recreation campuses in the United States—demonstrating our ability to execute high-profile, multi-use infrastructure that balances function, safety, and environmental care.

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## Grand Vue Park Master Plan Development Moundsville, WV



TERRADON Corporation was selected as the lead engineer and site designer for upgrades at Grand Vue Park in Moundsville, WV. TERRADON was selected to assist the park with upgrades to boost the parks relativity and attractiveness to a more upscale audience. TERRADON helped lead the vision with the design and implementation of modern treehouses and a high adventure park. The treehouses are nestled along ridge lines and provide a unique experience for guests with all the modern features of an upscale hotel.

**Project Owner**  
City of Moundsville, WV

Over the duration of the project, TERRADON was responsible for, initial site design, site planning, survey and mapping, utility design, construction inspection and other ancillary engineering services.

The project included the addition of the Grand Vue Aerial Adventure Park. The park provides a variety of aerial courses including a Canopy Tour of 8 dual zip lines ranging in distance from 310 to 2,100 feet throughout the Moundsville treetops.

The park encompasses more than 650 acres and offers lodging, zip lining, an aerial adventure park, paintball, geocaching, an outdoor amphitheater, a banquet hall, picnic shelters, an aquatic center, and walking and biking trails.

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## Montgomery Tech Trails

### Montgomery, Fayette County, WV

The Montgomery Tech Trail Project centers around the rehabilitation and enhancement of approximately 1.75 miles of an existing 5-foot-wide, non-motorized recreational trail that connects Golden Bear Drive to the area behind the former WV Tech football field in Montgomery, West Virginia. This initiative supports the City of Montgomery's goal to revitalize local recreation assets and provide accessible outdoor infrastructure that complements the community's growing emphasis on health, connectivity, and tourism.

As the selected engineering consultant, TERRADON Corporation was tasked with designing the rehabilitation plans, which involve sustainable upgrades to the natural surface trail, integration of proper drainage systems, gentle grading to meet accessibility standards, and enhancement of the overall user experience. A major component includes the design of a new trailhead with amenities such as signage, picnic tables, benches, and trash receptacles. Although construction of a stairwell and switchback parking area along Golden Bear Drive is planned for a future phase, TERRADON has laid out the engineering framework in the current design documents.

TERRADON's services included surveying and mapping, trail design engineering, and preliminary and final construction documentation, following standards from AASHTO, ADA, and the WVDOH. Environmental compliance and stormwater permit support were also addressed in accordance with NPDES regulations. Mapping incorporated available utility data, and while no property acquisition or legal easement work was included, existing boundaries and field survey data were referenced thoroughly.

The project's execution presented unique challenges, including steep terrain, limited access points, and the preservation of wooded habitat possibly housing protected species like bats. Nevertheless, through field reviews and collaboration with stakeholders, TERRADON's design approach balanced environmental sensitivity with functionality and recreational value. The use of natural surface materials and minimal grading ensured the trail would remain both inviting and sustainable. Upon completion, the Montgomery Tech Trail will significantly benefit the residents and visitors of Montgomery by improving access to recreational opportunities and strengthening the link between natural assets and urban amenities. The revitalized trail aligns with regional tourism efforts and the city's broader revitalization initiatives, making it a key investment in community development and outdoor infrastructure.



**Project Owner**  
City of Montgomery, WV



# Babcock State Park Sewell Trail Master Plan Design

## Fayette County, WV



TERRADON provided survey and mapping, master planning and final design for 4.5 miles of abandoned roadbed for an existing trail design in Babcock State Park. The project included conceptual master plan design of the entire length of the abandoned roadbed from the existing gate to the New River. There is a major slide at the intersection with the Narrow Gauge Trail which has forced the closure of the Sewell Road Trail at that point.

**Project Owner**  
WV Department of Natural  
Resources - Babcock State  
Park

TERRADON was asked to design remediation of the slide and also to provide a design for the remaining 4.5 miles to the New River. The Master Plan of the entire 4.5 miles section of trail is being used by the Park to fiscally plan for the rehabilitation of the entire trail.

Available funds have allowed the final design of approximately one mile of trail and the remediation of the slide. The construction of 1 mile of trail and retaining wall was completed in Fall of 2021. The remaining 3.5 miles of trail rehabilitation was performed by WVDOH forces and completed in summer of 2022. This project received an Engineering Excellence Award from the WVDOH in fall of 2022.





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## Babcock State Park Narrow Gauge Trail Rehabilitation

Fayette County, WV



**Project Owner**  
WV Department of Natural  
Resources - Babcock State  
Park

This project involves the design, and preparation of construction contract plans and related documents for a new pedestrian bridge along with trail rehabilitation work along the Narrow Gauge Trail within Babcock State Park.

The project begins at the start of Narrow Gauge Trail at the Old Sewell Road. The trail rehabilitation work was approximately 2500 LF along the existing trail to the existing Glade Creek crossing. A new prefabricated pedestrian bridge with new abutments was designed to replace the existing swinging bridge. The new bridge has a 8-10 ft clear width and is an approximately 150 linear span single span. The design was based on a John Deere side by side utility vehicle.

Design tasks included survey and mapping, minor grading, culverts along trail, prefabricated bridge specification, abutments, hydraulic report and geotechnical report.

## Fayetteville Recreational Trail Design – FLAP Grant

### Fayette County, WV



**Project Owner**  
WV Department of  
Transportation, Division of  
Highways  
& The Town of Fayetteville

TERRADON was selected to provide design services for a new trail connecting downtown Fayetteville to the National Park Service Trails near Fayetteville Town Park.

The multi-use trail traverses through several private properties including WV American Water Company before tying into the Park Loop Trail near the NPS Town Park Trail Head.

This project was funded by a Federal Lands Access Program (FLAP) Grant from the National Park Service Administered by the WV Division of Highways.

Services included analyzing several options for the trail route to provide the best use and least impact, coordinating with National Park Service, wetland delineation, archeology investigation, trail construction specifications and construction oversight.

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## Midland Trail River Access Roadway Design Montgomery, WV

Project Owner  
City of Montgomery, WV



This project consisted of the renovation of the deteriorated parking area at the Midland Trail River Access in the City of Montgomery, WV. Financed largely by a grant from the West Virginia Division of Highways, this project replaced approximately 1,000 square yards of gravel parking area with asphalt pavement.

TERRADON services provided included survey, design development, preparation of contract bid documents, participation in the bidding and award processes, construction phase services including oversight and administration, processing of WVDOH compliance/reporting documentation, and project closeout.

The project included sub grade preparation, placement of aggregate base course, asphalt base course, asphalt wearing course, and drainage improvements.



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## Wolf Creek Park Trail System

### Fayette County, WV



Project Owner  
Fayette County Commission

The Wolf Creek Trail System is a community led effort to develop a trail system within Wolf Creek Park. Wolf Creek Park is a multi purpose business and residential park owned by Fayette County and overseen by the Fayette County Urban Renewal Authority.

This system has been envisioned, and partially constructed with volunteer efforts led by volunteer groups and the Fayette County Urban Renewal Authority (FCURA). The FCURA committed \$150,000 to the construction of approximately 15 miles of trails.

The construction project was competitively bid by the FCURA in the spring of 2020 and awarded to SC Resources.

TERRADON participated in the construction phase by mapping the new trails using survey grade GPS system to track progress and to create the final trail map. TERRADON Project Manager Will Thornton was active in this project as a member of the FCURA and by actively obtaining GPS data of the completed trails. TERRADON also obtained GPS data of the completed trails and developed the final trail map along with other maps for the park. The initial 17 miles of the Wolf Creek Park Trail System were officially opened to the public in the fall 2020.

The trail system is a joint use hiking and biking trail system tailored from beginner through expert with loops that provide incredible hikes and trail runs through an actively restored forest. The Wolf Creek Park Trail System has direct community connections to Fayetteville and Oak Hill, WV.



## Valley Park Master Plan Development

Hurricane, WV



**Project Owner**  
Putnam County Commission

TERRADON Corporation provided Master Planning and site design services for the expanding Valley Park in Hurricane, Putnam County, WV. This work is part of a nearly \$2 million expansion, adds an additional six acres to the park.

The project included planning for athletic fields, multiple parking lots, access roads and greenspace, but also incorporated a walking trail that ties into existing park trails. The plan was produced in coordination with the WVDOT to determine roadway/walkway ingress/egress and designed in accordance with local, state and federal regulations.

# 5

## References

TERRADON References



## References

Reference Company	Address	Reference Contact	Number	Projects / Contracts
City of Huntington, WV	800 5th Avenue, Huntington, WV 25701	Mark Bates, Director of Public Works	304-696-5540	Various Roadway Repair & Replacement Contracts & Geotechnical Designs
WV Department of Transportation, Division of Highways, Planning Division	1900 Kanawha Boulevard, East Building 5, Room 740 Charleston, WV 25305	Tim Sedosky, Acting Planning Division Director	304-414-6938	Various Contracts (Pedestrian Bridges, Sidewalks, Trails, Etc.)
US Army Corps of Engineers, Huntington District	502 8th Street Huntington, WV 25701	Christopher L. Chandler, Structural Engineer	304-399-5735	Various Contracts (Bridge Inspections, Bridge Rehabilitation Designs)



# 5

## Project Approach

Plan to Meet Goals & Objectives





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## Project Approach to Meet Goals & Objectives



TERRADON Corporation is committed to a thoughtful, collaborative, and results-driven approach to the development of the Sleepy Creek WMA Shooting Range. Our methodology prioritizes close coordination with the West Virginia Division of Natural Resources (WVDNR), alignment with regulatory requirements, and efficient execution from site evaluation through construction closeout.

### Goal 2.1 – Site Evaluation and Communication

TERRADON will begin with a thorough review of existing site conditions, incorporating field reconnaissance, topographic surveying, geotechnical investigations, and environmental assessments. Our team will identify potential conflicts such as access constraints, drainage issues, or environmentally sensitive areas early in the process. Recognizing that portions of Sleepy Creek WMA remain in active use by the public, we will work closely with WVDNR to schedule fieldwork and design activities in a manner that minimizes disruption to ongoing operations. Regular meetings, progress updates, and decision-point reviews will ensure transparent communication and shared decision-making throughout.

### Goal 2.2 – Design Within Scope, Budget, and Code

Building upon the initial evaluation, TERRADON will provide comprehensive design services for the rifle range, Rangemaster building, restroom facilities, electrical service, road upgrades, and safety elements. Our multidisciplinary team—including civil engineers, environmental scientists, surveyors, and permitting specialists—will develop solutions that adhere to all applicable state and federal regulations (including NEPA, ADA, and WVDEP requirements) while maintaining cost control through early constructability reviews and value engineering. We will produce clear, code-compliant construction documents that align with WVDNR's operational needs, recreational goals, and aesthetic values for public-facing facilities.

### Goal 2.3 – Competent Construction Oversight

TERRADON's certified construction inspection and materials testing team will deliver on-site contract administration services to ensure the project is built as designed. This includes verifying contractor compliance with specifications, managing submittal and RFI processes, monitoring erosion control measures, and maintaining daily field logs with photographic documentation. We will act as a responsive liaison between WVDNR and the construction team—addressing issues promptly, safeguarding public safety, and ensuring quality control. Our integrated team approach ensures continuity and accountability from design through project completion.

Through this comprehensive strategy, TERRADON will deliver a safe, high-quality shooting range that serves both the WVDNR's mission and the outdoor public of West Virginia.