



CAPABILITY STATEMENT – ENVIRONMENTAL SERVICES

KEY STAFF

**Vice President –
Environmental Services**

David Cutlip

dcutlip@markosky.com

**Environmental Services
Division Manager**

Jason Harkcom

jharkcom@markosky.com

**Environmental Engineering
Department Manager**

Amanda Brown, PE

abrown@markosky.com

**Environmental Sciences
Department Manager**

Ashley Brehm

abrehm@markosky.com

CORE COMPETENCIES & SERVICES

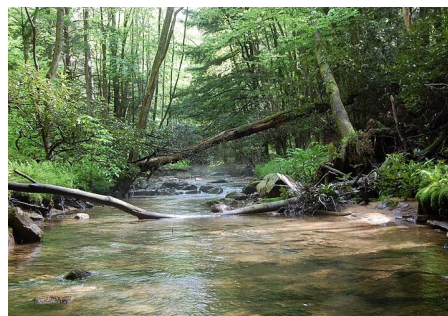
THE MARKOSKY ENGINEERING GROUP, INC. provides environmental planning, permitting, design and construction monitoring services for PennDOT, the PA Turnpike Commission, private clients, and municipalities. We have developed excellent working relationships with federal, state, and local environmental agencies, which results in efficient and consistent agency reviews.

Our Cultural Resource services include geomorphological surveys, phased archaeological investigations, above ground historic structures evaluations, findings of eligibility and effect, and any other associated Section 106 work.

Our core Environmental services include the following:

- ❖ Surface Water Identification / Assessments and Reports
- ❖ Benthic Macroinvertebrate Surveys
- ❖ Agricultural Identifications and Reports (ALCAB Experience)
- ❖ Section 4(f) Identification, Reports, Coordination and Approvals
- ❖ Wetland & Stream Mitigation, Design and Construction Inspection, Post Construction Monitoring
- ❖ Site Assessments / Hazardous Waste Investigations
- ❖ Prepare E&S and PCSM Plans and Permit Packages
- ❖ Chapter 105 Stream and Wetland Permits
- ❖ Noise Modeling and Monitoring
- ❖ Asbestos Services
- ❖ Lead Based Paint Sampling
- ❖ Air Permitting
- ❖ NPDES Permits
- ❖ T&E Species Coordination
- ❖ Botanical Surveys

Markosky provides a “one-stop-shop” for all aspects of environmental planning, permitting, design, construction and evaluation of environmental impacts and mitigation.



ECMS: PAUCP DBE (WBE)
000243 2182

NAICS Codes:
541620, 541330, 541990, 237110, 541720

UEI:
EEMAGUCMLYG1

CAGE:
50GY5

WWW.MARKOSKY.COM 724.238.4138



PAST PERFORMANCE

SR 3015, Section 254 Watters and Washington Culverts

Client: PennDOT District 10-0

Services

- ❖ Wetland Delineations and Stream Survey
- ❖ Aquatics Report
- ❖ Agency / District Coordination

Natural Gas Pipeline Routing

Client: Energy Client

Services

- ❖ Wetland Delineation
- ❖ Aquatic Resources Report
- ❖ PA DEP and NPDES Permitting
- ❖ E&S Control

SR 0422, Section 19B Margaret Road Intersection

Client: PennDOT District 10-0

Services

- ❖ Identified Environmental Features for 7 Alternative Alignments
- ❖ Environmental Impact Comparison Summary
- ❖ Environmental Resource Mapping



Watters Street Culvert

Butler County, PA



Washington Street

Butler County, PA



Margaret Road Intersection

Armstrong County, PA



Natural Gas Pipeline Routing

Franklin County, PA



CAPABILITY STATEMENT – ENVIRONMENTAL MONITORING

KEY STAFF

**Vice President –
Environmental Services**

David Cutlip
dcutlip@markosky.com

**Environmental Engineering
Department Manager**

Amanda Brown, PE
abrown@markosky.com

**Environmental Services
Division Manager**

Jason Harkcom
jharkcom@markosky.com

**Senior Environmental
Monitor / Qualified
Compliance Inspector of
Stormwater (QCIS)**

Kelly McLaughlin
kmclaughlin@markosky.com

**Environmental Construction
Monitor II**

Diane Thomas
dthomas@markosky.com

CORE COMPETENCIES & SERVICES

MARKOSKY provides environmental construction monitoring services throughout the Mid-Atlantic Region for a variety of public and private clients. Our Team is proficient in erosion and sediment pollution control and stream encroachment requirements (Sections 402 and 404 of the Clean Water Act, and Pennsylvania Chapters 102 and 105). They work with, and advocate for, clients to ensure compliance with environmental regulations.

The Environmental Monitors share the following qualifications:

- PennDOT - SCM Visual Screening Inspection and Condition Assessment Inspection, TA/TCI modules, CMP-CSI, VSIR App
- PA Turnpike Commission – DIRT App, MS4 modules
- EPA - EPA Construction General Permit (CGP)
- PA DEP – Clean Water Academy E&S, PCSM modules
- Other – Safety Training, First Aid Training

Our full-time environmental group supports a variety of disciplines should other environmental issues create concerns. Our management team is available to advise Environmental Monitors and Markosky clients.

Core Environmental Monitoring services:

- NPDES for Construction/Erosion and Sediment Control inspections using DIRT and VISR apps, DEP Visual Site Inspection Report and prepare reports
- Guidance and oversight for stream and wetland mitigation
- Critical Stage Inspections of Post-Construction Stormwater Management (PCSM) controls
- Project progress meetings
- Coordinate and lead pre-construction meetings
- Meet with regulatory agency representatives
- Permit amendments for NPDES Construction Permits
- Respond to unexpected environmental incidents
- Locate, plan and permit waste areas
- Constructability reviews (E&S, PCSM plans)



ECMS: PAUCP DBE (WBE)
000243 2182

NAICS Codes:
541620, 541330, 541990, 237110, 541720

UEI:
EEMAGUCMLYG1

CAGE:
50GY5

WWW.MARKOSKY.COM 724.238.4138



PAST PERFORMANCE

LVTIP PA 819 to Norvelt (PA 981-Q20)

Client: PennDOT District 12-0

Services

- ❖ Environmental Monitoring
- ❖ Attend PA DEP, Conservation District inspections

Sideling Hill Service Plaza Expansion Fulton County

Client: Pennsylvania Turnpike Commission

Services

- ❖ Environmental Monitoring
- ❖ PCSM Critical Stage inspections
- ❖ Attend Conservation District inspections

Roadway and Bridge Reconstruction Milepost 312 – 316

Client: Pennsylvania Turnpike Commission

Services

- ❖ Environmental Construction Management
- ❖ Permit amendment assistance
- ❖ Attend Conservation District inspections



PA 19 to Norvelt

Westmoreland County, PA



Sideling Hill Service Plaza

Fulton County, PA



Sideling Hill Service Plaza

Fulton County, PA



Milepost 312-316

Chester County, PA



CAPABILITY STATEMENT – ENVIRONMENTAL SITE ASSESSMENTS

KEY STAFF

Vice President – Environmental Services
David Cutlip
dcutlip@markosky.com

Environmental Services Division Manager
Jason Harkcom
jharkcom@markosky.com

Environmental Sciences Department Manager
Ashley Brehm
abrehm@markosky.com

Environmental Scientist
Elliott Mazur
emazur@markosky.com

CORE COMPETENCIES & SERVICES

THE MARKOSKY ENGINEERING GROUP, INC. is qualified to provide Phase I ESAs (ASTM E1527-21), Phase II ESAs (ASTM E1903-19), and Transaction Screens (ASTM E1528-14) for commercial real estate acquisitions. Additional services include waste site evaluations for government entities including DOT's.

We hold the following professional Registrations:

- ❖ Professional Geologist – PA, NC, KY
- ❖ Asbestos Building Inspector – PA, WV, NC
- ❖ Lead Paint Inspector – PA, WV, OH

Our core Environmental Site Assessment services include the following:

- ❖ Environmental Site Assessment (ESA) Phase I & II
- ❖ Environmental Investigation Drilling
- ❖ Long Term Monitoring & Sampling of Sites
- ❖ Asbestos Inspections
- ❖ Water Well Abandonment
- ❖ Groundwater Monitoring
- ❖ Lead Based Paint Sampling

Related Services

- ❖ Wetland Evaluations
- ❖ Threatened & Endangered Species Coordination
- ❖ Stream and Surface Water Surveys

Markosky is qualified to perform DOT Waste Site Evaluations, Phase I ESAs (ASTM E1527-13), Transaction Screens (ASTM E1528-14) for commercial real estate acquisitions, and Phase II ESAs (ASTM E1903-11).



ECMS: PAUCP DBE (WBE)
000243 2182

NAICS Codes:
541620, 541330, 541990, 237110, 541720

UEI:
EEMAGUCMLYG1

CAGE:
50GY5

WWW.MARKOSKY.COM 724.238.4138



PAST PERFORMANCE

US 119 Youngwood Reconstruction

Client: PennDOT District 12-0

Services

- ❖ Phase II Environmental Investigation
- ❖ Soil & Groundwater Sampling
- ❖ District / utility Coordination

Chartiers Bridge #53

Client: Washington County Planning Commission

Services

- ❖ Asbestos Inspection
- ❖ Lead Based paint Survey
- ❖ Phase I Environmental Site Assessment

Former Plastics Warehouse

Client: Energy Client

Services

- ❖ Phase I Environmental Site Assessment



US 119 Youngwood Reconstruction

Westmoreland County, PA



US 119 Youngwood Reconstruction

Westmoreland County, PA



Chartiers Bridge #53

Washington County, PA



Former Plastics Warehouse

Little Hocking, OH

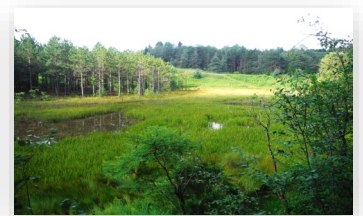
LIGONIER, PA

YORK, PA

STEUBENVILLE, OH

CHARLESTON, WV





PENNSYLVANIA CAPABILITY STATEMENT – OIL & GAS

KEY STAFF

**Vice President –
Environmental Services**
David Cutlip
dcutlip@markosky.com

**Environmental Services
Division Manager**
Jason Harkcom
jharkcom@markosky.com

**Energy Services
Department Manager**
Joseph Vasinko, PE
jvasinko@markosky.com



CORE COMPETENCIES & SERVICES

THE MARKOSKY ENGINEERING GROUP, INC. provides pipeline and well pad design and permitting for the oil & gas industry. We specialize in environmental and roadway permitting, site design, and construction/environmental compliance inspection. Our environmental scientists, engineers, and inspectors collaborate throughout the process to develop designs that receive quick approvals while minimizing client costs and environmental impacts.

We have developed excellent working relationships with the Federal, State, and Local environmental agencies, which have resulted in a proven track record of minimal agency comments and more efficient review times. These relationships keep us abreast of ever-changing environmental regulations, and create reliable, cost-effective designs for our clients.

Our core Oil & Gas services include the following:

- ❖ ESCGP: Permitting & Compliance Inspections
- ❖ Chapter 105 Permitting
- ❖ USACE Permitting
- ❖ Site and Access Road Design
- ❖ Wetland & Stream Delineation
- ❖ Roadway Permitting & Inspections, Driveway Permits (HOP)
- ❖ T&E Species Coordination
- ❖ Wetland & Stream Mitigation
- ❖ Rare Plant Botanical Surveys
- ❖ SPCC/PPC Plans
- ❖ Phase 1 ESAs
- ❖ Cultural Resource Investigations
- ❖ Air Permitting
- ❖ GIS Remote Sensing & Mapping Development
- ❖ Pre/Post Construction Water Sampling

Markosky's Energy Services Department is ready to assist!



ECMS: PAUCP DBE (WBE)
000243 2182

NAICS Codes:
541620, 541330, 541990, 237110, 541720

UEI:
EEMAGUCMLYG1

CAGE:
50GY5

WWW.MARKOSKY.COM

724.238.4138



PAST PERFORMANCE

Pipeline Relocation at Hammer Creek

Client: Energy Client

Services

- ❖ Wetland & Stream Delineations
- ❖ Prepared and obtained GP 8/11
- ❖ Coordinated subcontractors

Bethel Ridge to Muskovich Pipeline

Client: Energy Client

Services

- ❖ Prepared & obtained ESCGP-2 and GP 5/8
- ❖ E&S Control Plan & Site Restoration Plan
- ❖ Pre & post construction water sampling

Temporary Waterline Environmental & Roadway Permitting

Client: Energy Client

Services

- ❖ Wetland & Stream Delineation
- ❖ Prepared & obtained ESCGP-2 and GP 5/8
- ❖ Obtained PennDOT HOPs and township excess maintenance use agreements
- ❖ Construction Inspections

Well Pad Environmental Permitting & Construction Inspection

Client: Energy Client

Services

- ❖ Wetland & Stream Delineations
- ❖ Prepared and obtained ESCGP-2
- ❖ Construction Inspections



Hammer Creek

Lebanon County, PA



Bethel Ridge to Muskovich Pipeline

Washington County, PA



Temporary Waterline Permitting

Butler County, PA



Well Pad Permitting & Inspection

Butler County, PA



CAPABILITY STATEMENT – ARCHAEOLOGY

KEY STAFF

Cultural Resources Department Manager

Ryan Rowles, MA, RPA
rrowles@markosky.com

Senior Archaeologist / Group Leader

Jessica Schumer-Rowles, MA, RPA
jschumerrowles@markosky.com

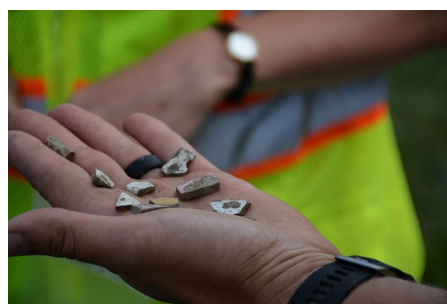
CORE COMPETENCIES & SERVICES

THE MARKOSKY ENGINEERING GROUP, INC. archaeologists meet and exceed the Secretary of the Interior (SOI) Standards (36CFR§61) for their positions. We are skilled at multidisciplinary research, sound and reflexive fieldwork methodologies, and quality data analysis. Our clients can rely on our communicative management, as well as our clear and thorough reports, to streamline the Section 106 Concurrence process and accomplish any project specific goals.

Our core Archaeology services include the following:

- ❖ Phase I, II, and III Archaeological Investigations
- ❖ Resource Identification and Planning
- ❖ Determinations of Eligibility and Effect
- ❖ Archaeological Monitoring
- ❖ Geomorphological Investigations
- ❖ Geophysical Investigations (GPR, Resistivity, Magnetometer)
- ❖ Historic Grave Identification
- ❖ Curation Standards and Methods
- ❖ Consulting Party Coordination
- ❖ Avoidance Alternatives
- ❖ Agreement Documents
- ❖ Alternative Mitigation
- ❖ Historic Research
- ❖ Section 106 Training/ Seminars

Markosky’s Archaeology Group is a reliable and hardworking team of professionals dedicated to streamlining our clients’ Section 106 or other compliance needs, no matter the size or complexity of your project.



ECMS: PAUCP DBE (WBE)
000243 2182

NAICS Codes:
541620, 541330, 541990, 237110, 541720

UEI:
EEMAGUCMLYG1

CAGE:
50GY5

WWW.MARKOSKY.COM

724.238.4138



PAST PERFORMANCE

Home Bridge #3 Bridge Replacement

Client: PennDOT District 10-0

Services

- ❖ Phase I Survey
- ❖ Phase II Testing of McQuilken Blacksmith Shop Site
- ❖ Phase III Data Recovery of former blacksmith shop
- ❖ Producing a Byways to the Past Publication

Compass Inn Museum Long-Term Planning

Client: Ligonier Valley Historical Society

Services

- ❖ Historic Archives and Public Records Research
- ❖ Geophysical Survey (GPR, Resistivity, Conductivity)
- ❖ Archaeological Ground-Truthing of Geophysical Anomalies and Previously Recorded Features
- ❖ Media Interviews / Assisted with Tours
- ❖ Assisted with Grant Writing

Tuscarora Bridge Replacement

Client: PennDOT District 9-0

Services

- ❖ Geomorphological Investigations
 - Identified Historic Landscape Alterations
- ❖ Phase I Archaeological Investigations
 - Recorded ca. 1863 Cisney Sawmill site
 - Cleared the project for Section 106



Home Bridge #3

Indiana County, PA



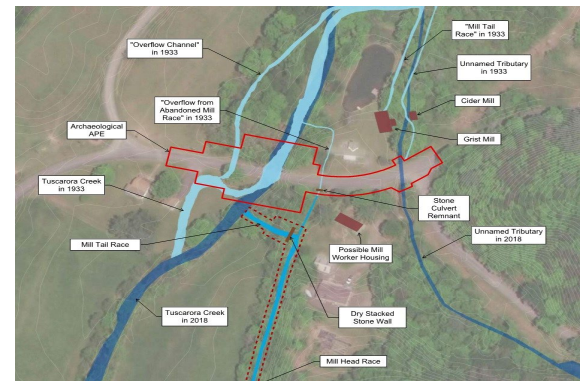
Compass Inn Museum

Westmoreland County, PA



Tuscarora Bridge

Juniata County, PA



Tuscarora Bridge

Juniata County, PA



CAPABILITY STATEMENT – HISTORIC STRUCTURES

KEY STAFF

**Cultural Resources
Department Manager**
Ryan Rowles, MA, RPA
rrowles@markosky.com

**Senior Architectural
Historian / Group Leader**
Laura Ricketts, MA
lricketts@markosky.com

CORE COMPETENCIES & SERVICES

THE MARKOSKY ENGINEERING GROUP, INC. architectural historians are skilled at identifying, documenting, and evaluating above ground resources. We conduct historic structures investigations on scales that range from a single resource to long corridors or county-wide surveys that entail hundreds of historic structures. We understand the policies and missions of our agency clients and ensure compliance with regulations that govern the consideration of historic properties like Section 106. We work closely with the representatives of many State Historic Preservation Offices and are fluent in the standards of the National Register of Historic Places. We provide public outreach and coordination with interested parties, and we can see a project from its initial scoping through determinations of eligibility and effect to, if necessary, the successful resolution of adverse effects.

Our core Historic Structures services include the following:

- ❖ Resource Identification
- ❖ Reconnaissance Surveys
- ❖ Constraints Mapping
- ❖ Historic Contexts/Background Research
- ❖ Eligibility Studies for Individual Resources & Historic Districts
- ❖ Historic Bridge Rehabilitation (Feasibility) Analysis
- ❖ Determination of Effects
- ❖ Resolution of Adverse Effects
- ❖ Agreement Documents
- ❖ Consulting Party Coordination
- ❖ Public Outreach
- ❖ National Register Nominations
- ❖ Historic Structures Inventories
- ❖ Section 4(f) Documentation for Historic Properties
- ❖ FHWA-delegated Cultural Resource Professional in Historic Structures
- ❖ Creative Mitigation Measures

Markosky’s historic structures group provides cultural resources compliance for federal, state, and local projects, as well as historic preservation work for private and municipal clients.



ECMS: PAUCP DBE (WBE)
000243 2182

NAICS Codes:
541620, 541330, 541990, 237110, 541720

UEI:
EEMAGUCMLYG1

CAGE:
50GY5

WWW.MARKOSKY.COM

724.238.4138



PAST PERFORMANCE

Impact Corry PHMC Historic District & Mead Park Evaluations

Client: City of Corry

Services

- ❖ 300-recourse inventory of Historic District and City Park
- ❖ Public Outreach
- ❖ Grant Support for National Register Nominations

East Washington Street Bridge

Client: PennDOT District 11-0

Services

- ❖ Eligibility re-evaluations for New Castly Dry Goods & Historic Bridge
- ❖ Historic Bridge Rehabilitation Analysis
- ❖ Understanding of PennDOT Internal Policies About Historic Concrete Arch Bridges

Cast Iron Bridge Rehabilitation

Client: PennDOT District 12-0

Services

- ❖ Nation's First Cast Iron Arch Bridge (1839)
- ❖ Individual Section 4(f) Evaluation
- ❖ 5 Section 4(f) Resources Including Brownsville Commercial Historic District



Impact Corry PHMC

Erie County, PA



Impact Corry PHMC

Erie County, PA



East Washington Street Bridge

Lawrence County, PA



Cast Iron Bridge Rehabilitation

Fayette County, PA

LIGONIER, PA

YORK, PA

STEUBENVILLE, OH

CHARLESTON, WV





CAPABILITY STATEMENT – CONSTRUCTION INSPECTION / MANAGEMENT

KEY STAFF

**Vice President –
Construction Services**

Michael S. Houser
mhouser@markosky.com

**Construction Services
Division Manager**

Clyde E. Naugle, PMP
cnaugle@markosky.com

**Construction Services
Department Manager**

Curtis Markosky, EIT
cmarkosky@markosky.com

CORE COMPETENCIES & SERVICES

THE MARKOSKY ENGINEERING GROUP, INC. provides transportation inspection services throughout the Commonwealth of Pennsylvania. We have provided Construction Inspection services to PennDOT, PA Turnpike Commission, and other public, private and municipal clients. Our inspection staff has extensive understanding of PennDOT's policies, regulations and procedures. They perform their duties in accordance with all applicable FHWA regulations, DOT publications and manuals, procedures, regulations and safety policies.

Our management TEAM has previous inspection experience which gives them extensive knowledge of what occurs during every project. This experience is why collaboration between management and inspectors is so important at Markosky. A constant stream of communication leads to successful projects.

Our core Construction Inspection / Management services include the following:

- ❖ Conduct Progress Meetings
- ❖ Attend Pre-Bid & Pre-Construction Meetings
- ❖ False Work Review Submittals
- ❖ Verify Project Records in Accordance with DOT Regulations
- ❖ Safety / Accident Prevention
- ❖ Monitor Noise Complaints
- ❖ Borrow Waste / Site Locations
- ❖ Air / Water Quality & Vibration Complaints
- ❖ Archaeological Monitoring During Construction
- ❖ Soils Engineering
- ❖ Sampling / Testing
- ❖ Hazardous Material Monitoring / Testing

Markosky provides Construction Services expertise in Construction Inspection and Construction Management.



ECMS: PAUCP DBE (WBE)
000243 2182

NAICS Codes:
541620, 541330, 541990, 237110, 541720

UEI:
EEMAGUCMLYG1

CAGE:
50GY5

WWW.MARKOSKY.COM

724.238.4138



PAST PERFORMANCE

5 Part Construction Inspection Armstrong & Indiana Counties

Client: PennDOT District 10-0

Services

- ❖ Construction Inspection
 - Bridge Replacements
 - Roadway Realignments
 - Earth Moving, Drainage, Paving

Allegheny County Airport Authority Construction Inspection

Client: Energy Client

Services

- ❖ Pipeline Inspection
 - Construction Quality Assurance
 - Installation Inspection
 - 6 Well Pads

2 Bridges in Allegheny County

Client: PennDOT District 11-0

Services

- ❖ Construction Inspection
 - Deck Replacement
 - Replacement of Expansion Bearings
 - Approach Roadway Work / Drainage



PA 819 To Norvelt
Westmoreland County, PA



2 Bridges CI – SR 1014 over SR 28 Bridge
Allegheny County, PA



Allegheny County Airport
Allegheny County, PA



2 Bridges CI – Days Run Road Bridge
Allegheny County, PA



CAPABILITY STATEMENT – ROADWAY

KEY STAFF

Vice President – Civil Engineering Services
Matthew Walerysiak, PE, CBSI
mwalerysiak@markosky.com

Civil Engineering Division Manager
Brian Watkins, PE
bwatkins@markosky.com

Roadway Department Manager
Shane Ritenour, PMP
sritenour@markosky.com

Traffic Department Manager
Jonathon Balko, PE
jbalko@markosky.com

CORE COMPETENCIES & SERVICES

THE MARKOSKY ENGINEERING GROUP, INC. consistently meets design challenges on roadway projects by taking a collaborative approach to finding design solutions. Our engineering professionals incorporate the expertise of our environmental, structures, and construction departments to deliver comprehensive solutions to roadway designs.

Markosky provides design expertise for roadway reconstruction and realignments, traffic signal and intersection improvements, toll facilities, limited access highways, and major interstate highways. Our team approach allows us to place importance on public safety, functionality of design, scheduling constraints, and service out clients' needs.

Our core Roadway services include the following:

- ❖ Roadway Design
- ❖ Pavement Design & Restoration
- ❖ Traffic Control Development Including Signal Design
- ❖ Hydrologic & Hydraulic Studies
- ❖ Erosion & Sedimentation Control/Permitting
- ❖ Highway Lighting Design
- ❖ Utility Coordination
- ❖ Public Involvement
- ❖ Drainage Design
- ❖ Stormwater Management
- ❖ Right of Way Development
- ❖ Design Management
- ❖ Highway Occupancy Permits
- ❖ Signing, Pavement Marking & Delineation

Markosky has a diverse team of engineers, designers and technicians committed to designing roadways with improved functionality and safety for the traveling public.



ECMS: PAUCP DBE (WBE)
000243 2182

NAICS Codes:
541620, 541330, 541990, 237110, 541720

UEI: EEMAGUCMLYG1
CAGE: 50GY5

WWW.MARKOSKY.COM

724.238.4138



PAST PERFORMANCE

PA Route 980 Realignment & Pedestrian Bridge

Client: PennDOT District 12-0

Services

- ❖ Roadway & Structure Design
- ❖ Traffic Analysis
- ❖ Utility Coordination, H&H, E&S, Permitting
- ❖ Final Contract Documents
- ❖ Construction Consultation & Public Involvement

Home and Pollock Bridge Replacements

Client: PennDOT District 10-0

Services

- ❖ Roadway & Structure Design
- ❖ Phased Traffic Control
- ❖ E&S, Waterway permitting, Utility Coordination
- ❖ Final Contract Documents / Specifications
- ❖ Construction Consultation

Interchange Road Widening

Client: PennDOT District 1-0

Services

- ❖ E&S, NPDES Permitting
- ❖ Signing, Pavement Marking & Delineation
- ❖ Utility Coordination
- ❖ Final Contract Documents / Specifications
- ❖ Construction Consultation



PA 980 Realignment & Pedestrian Bridge

Washington County, PA



Home Bridge

Indiana County, PA



Pollock Bridge

Indiana County, PA



Interchange Road

Erie County, PA



CAPABILITY STATEMENT – TRAFFIC ENGINEERING

KEY STAFF

Civil Engineering Services

Division Manager

Brian Watkins, PE

bwatkins@markosky.com

Traffic Department Manager

Jonathon Balko, PE

jbalko@markosky.com

Senior Project Manager

Dorothy Boring, PE, PTOE

dboring@markosky.com

CORE COMPETENCIES & SERVICES

THE MARKOSKY ENGINEERING GROUP, INC. Traffic Department has experience leading traffic-focused projects from inception through design and construction as well as providing support on transportation projects. We also have experience with engineering and planning studies encompassing site-specific, corridor, and regional locations.

Our dedicated professionals provide design solutions that focus on safe and efficient operations for all methods of transportation including bicycles and pedestrians. We have partnered with state, municipal, and local governments as well as private entities and other engineering consulting firms to deliver successful projects while meeting budgetary constraints.

Our core Traffic Engineering services include the following:

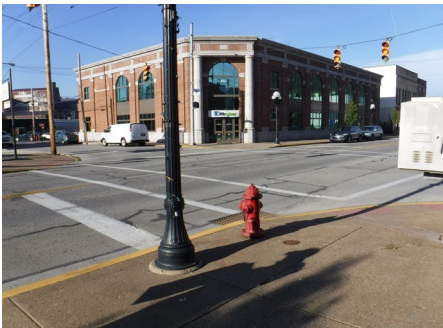
Traffic Study & Analysis

- ❖ Traffic Data Collection
- ❖ Speed, Safety & Pedestrian Studies
- ❖ Traffic Impact Assessments & Studies
- ❖ Traffic Signal Warrant Analysis
- ❖ Capacity, Queuing & Workzone Analysis
- ❖ Evaluation of Corridors

Traffic Engineering Design

- ❖ Traffic Signal
- ❖ Signing
- ❖ Pavement Marking & Delineation
- ❖ Traffic Control During Construction
- ❖ Pedestrian Facilities
- ❖ Flashing Warning Devices

Markosky's traffic engineering project experience ranges from engineering studies to low-cost operational/safety improvements to full design.



ECMS: 000243 PAUCP DBE (WBE) 2182

NAICS Codes: 541620, 541330, 541990, 237110, 541720

UEI: EEMAGUCMLYG1

CAGE: 50GY5

WWW.MARKOSKY.COM

724.238.4138



PAST PERFORMANCE

Greensburg Signal Upgrades - CMAQ

Client: PennDOT District 12-0

Services

- ❖ Coordination Plans
- ❖ Traffic Analysis & Design
- ❖ Signal Replacements & Modifications
- ❖ ADA Pedestrian Facilities
- ❖ Utility Coordination

Route 58 Corridor Safety Study

Client: PennDOT District 1-0

Services

- ❖ Crash Data Evaluation
- ❖ Traffic Data Collection & Analysis
- ❖ Roadway Geometry Evaluation
- ❖ Environmental Constraints Identification
- ❖ Conceptual Improvement Plans

Route 756 Roadway Safety Study

Client: PennDOT District 9-0

Services

- ❖ Crash Data Evaluation
- ❖ Traffic Data Collection & Analysis
- ❖ Roadway Geometry Evaluation
- ❖ Environmental Constraints Identification
- ❖ Conceptual Improvement Plans



Greensburg Signal Upgrades - CMAQ

Westmoreland County, PA



Route 58 Corridor Safety Study

Mercer County, PA



Route 756 Roadway Safety Study

Cambria County, PA



Route 756 Roadway Safety Study

Cambria County, PA

LIGONIER, PA

YORK, PA

STEUBENVILLE, OH

CHARLESTON, WV





CAPABILITY STATEMENT – STRUCTURES

KEY STAFF

Vice President – Civil Engineering Services
Matthew Walerysiak, PE, CBSI
mwalerysiak@markosky.com

Structures Department Manager
Frank Strittmatter, PE
fstrittmatter@markosky.com

Senior Project Manager
Peter Molnar, PE, CBSI
pmolnar@markosky.com

CORE COMPETENCIES & SERVICES

THE MARKOSKY ENGINEERING GROUP, INC. provides bridge rehabilitation, bridge replacements, culvert designs, sign structures, and retaining wall designs on large-scale highway projects to local municipal stream crossings. We understand that each project or client may require a different approach and we are agile and experienced enough to provide the appropriate level of detail required for each bridge.

Markosky's engineering professionals have the expertise to provide innovative, cost-effective, sustainable engineering solutions specifically tailored to meet the needs of our clients. Early identification of the optimum structure arrangement and type make the design process more efficient. We have completed projects using conventional design methods, ABC techniques, design-bid-build, and design-build methods.

Our core Structures services include the following:

- ❖ Conventional & Accelerated Designs
- ❖ Composite Steel Rolled Beam & Plate Girder Bridges
- ❖ Prestressed Concrete Bridges
- ❖ Integral Abutment Designs
- ❖ Shallow & Deep Foundation Systems
- ❖ Reinforced Concrete Retaining Walls
- ❖ Hydraulic Analysis of Structures
- ❖ MSE Retaining Walls & Abutments
- ❖ Soldier Pile & Lagging Walls
- ❖ Precast & Cast-in-Place Concrete Culverts
- ❖ Pedestrian & Timber Bridges
- ❖ Load Rating & Structural Analysis Including APRAS Loading & 3D Modeling

Markosky's Structural designs range from simple to complex structures requiring 2D grid analysis and 3D finite element analysis.



ECMS: PAUCP DBE (WBE)
000243 2182

NAICS Codes:
541620, 541330, 541990, 237110, 541720

UEI:
EEMAGUCMLYG1

CAGE:
50GY5

WWW.MARKOSKY.COM

724.238.4138



PAST PERFORMANCE

New Kensington Bridge Preservation
14 Span Bridge over Allegheny River & Norfolk Southern
Client: PennDOT District 11-0

Services

- ❖ Inspection Services
- ❖ Traffic Control, Utility Coordination
- ❖ Public & Railroad Coordination
- ❖ Final Plans & Specifications
- ❖ Load Rating Updates / 3D Analysis
- ❖ Final Bid-Package Submission

East Busway over North Braddock Avenue
Superstructure Replacement & Substructure Rehabilitation using ABC
Client: Port Authority of Allegheny County

Services

- ❖ Developed Accelerated Bridge Construction Cost Study
- ❖ Reviewed Constructability Issues & Developed Preliminary Design
- ❖ Structure Design for ABC Construction
- ❖ Technical Provisions / Reviewed RFI's

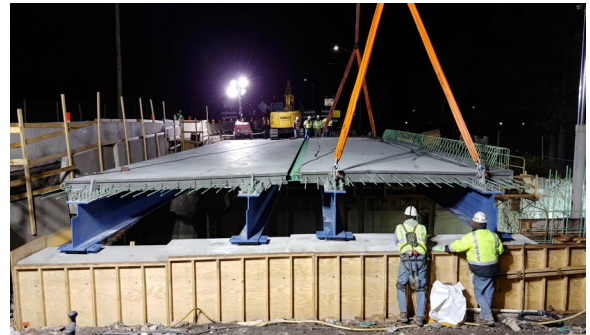
Reidsburg Bridge No. 1 Replacement
Skewed Single Span with Integral Abutments over Reids Run using Phased Construction
Client: PennDOT District 10-0

Services

- ❖ TS&L Development
- ❖ Evaluation of Crane Placement
- ❖ Foundation Submission Report & Final Plans
- ❖ Coordination with Utility Relocations, Hydraulics & Traffic Control



New Kensington Bridge
Allegheny County, PA



East Busway over North Braddock
Allegheny County, PA



Reidsburg Bridge
Clarion County, PA



Reidsburg Bridge
Clarion County, PA



CAPABILITY STATEMENT – BRIDGE INSPECTION

KEY STAFF

Structures Department Manager

Frank Strittmatter, PE

fstrittmatter@markosky.com

Project Engineer / Team Leader

Edward Kapelewski, PE, CBSI, NCTI

ekapelewski@markosky.com

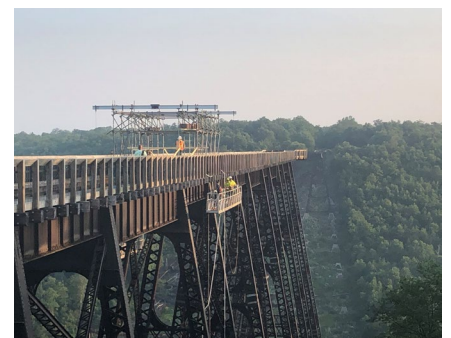
CORE COMPETENCIES & SERVICES

THE MARKOSKY ENGINEERING GROUP, INC. provides the highest quality of inspection services from an elite staff. Our team was formed around the best and most experienced inspectors. We have certified inspectors who have completed bridge safety inspections in accordance with NBIS, AASHTO, and FHWA standards. Our inspectors are certified in accordance with NBIS requirements. All are experienced with structure design and rehabilitation, and several are licensed Professional Engineers or Engineers in Training. This experience gives our staff a wealth of expertise on each assignment, and gives us the flexibility to assign inspection duties as needed to meet the demands of any inspection project.

Markosky is a competent, consistent, and reliable consultant that delivers quality inspections 100% of the time. We place great emphasis on safety procedures, the quality of our services, and the satisfaction of our clients.

- ❖ Initial Inventory & Inspections
- ❖ Routine NBIS Inspections
- ❖ Interim (Special) Inspections
- ❖ Damage Inspections
- ❖ In – Depth Inspections
- ❖ Fatigue & Fracture Critical Inspections
- ❖ Highway / Rail Transit Structures
- ❖ Culverts
- ❖ Sign Structures
- ❖ Retaining Walls
- ❖ Tunnels
- ❖ Bridge Load Rating
- ❖ Critical Deficiency Meeting

Markosky’s inspection team cannot be matched when it comes to quality of work or experience. We have completed over 1,000 bridge inspections as a firm.



ECMS: PAUCP DBE (WBE)
000243 2182

NAICS Codes:
541620, 541330, 541990, 237110, 541720

UEI: EEMAGUCMLYG1
CAGE: 50GY5

WWW.MARKOSKY.COM

724.238.4138



PAST PERFORMANCE

Statewide Biennial Bridge Inspection Contract

Client: Pennsylvania Turnpike Commission

Notable Structures and Services

- ❖ 100 Mainline & Overhead Bridges; Culverts; Retaining Walls
- ❖ 78 High Mast Light Poles
- ❖ Emergency Inspections of Bridges & Toll Plazas

NBIS Bridge Inspections 2017-2021 – Groups 1,2, and 3

Client: PennDOT District 11-0

Notable Structures and Services

- ❖ Inspection & Report Preparation
- ❖ NBIS and Rehab Inspections
- ❖ New Kensington Bridge; Clairton-Glassport Bridge; & Veterans Bridge and Approaches

NBIS Bridge Inspection of FCB and non-FCB for approximately 48 State Bridges – E02380

Client: PennDOT District 11-0

Notable Structures and Services

- ❖ 5 year NBIS and Fracture Critical Inspections
- ❖ Highland Park Bridge & Ramps; Beaver Rochester Bridge; and Mon City Bridge

NBIS Bridge Inspections for Allegheny County Owned Bridges – E04563

Client: PennDOT District 11-0

Notable Structures and Services

- ❖ South 10th Street Suspension Bridge, including updates to Complex Bridge Inspection Plans
- ❖ Homeville Viaduct



SR 65 Over Spruce Run

Allegheny County, PA



Clairton-Glassport Bridge

Allegheny County, PA



Highland Park Bridge

Allegheny County, PA



South 10th Street Bridge

Allegheny County, PA



CAPABILITY STATEMENT – LOCAL BRIDGES

KEY STAFF

Structures Department Manager

Frank Strittmatter, PE

fstrittmatter@markosky.com

Senior Project Manager

Peter Molnar, PE, CBSI

pmolnar@markosky.com

CORE COMPETENCIES & SERVICES

THE MARKOSKY ENGINEERING GROUP, INC. offers a variety of methods that can be used for rehabilitation of the deck, superstructure and substructure. These methods include pre-manufactured superstructures, Geosynthetic Reinforced Soil (GRS) Bridge Abutments, and a host of proprietary culvert structure designs.

Markosky can develop the right solution for any bridge problem. The solution can be a complete replacement of a bridge or something less expensive, such as a bridge rehabilitation or a precast culvert. Our structural engineers collaborate with our bridge detailers and bridge inspection teams to deliver any local bridge project on time and within budget.

Our core Local Bridge services include the following:

- ❖ Quick Mobilization
- ❖ Structure Analysis
- ❖ Bridge Replacement Alternative Recommendations

Markosky knows that bridge closures and weight limits can lead to high costs for Townships. We have the expertise and technology to offer unique solutions to local bridge problems.



ECMS: PAUCP DBE (WBE)
000243 2182

NAICS Codes:
541620, 541330, 541990, 237110, 541720

UEI:
EEMAGUCMLYG1

CAGE:
50GY5

WWW.MARKOSKY.COM

724.238.4138



PAST PERFORMANCE

Prefabricated Superstructures

Client: Ligonier Township

Services

- ❖ Installation of Prefabricated Superstructures
- ❖ Design Sketches/Calculations for Span Arrangements and Substructure Details
- ❖ Demolition Limit Recommendations

Harvey Road Rhoades Farm Bridge

Client: Ligonier Township

Services

- ❖ Emergency Waterway Permit
- ❖ Emergency Structural Repair
- ❖ Design and Consultation

Hills Church Road Bridge

Client: Municipality of Murrysville

Services

- ❖ Preliminary and Final Design
- ❖ Roadway and Structures Design
- ❖ H&H, E&S, GP-11 Permit, MPT, Utility Coordination, Final Right-Of-Way



Prefabricated Superstructures – Mill Creek Bridge

Westmoreland County, PA



Prefabricated Superstructures

Westmoreland County, PA



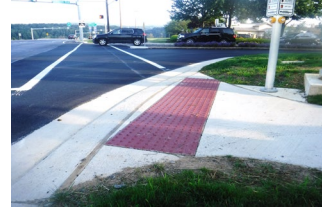
Harvey Road Rhoades Farm Bridge

Westmoreland County, PA



Hills Church Road Bridge

Westmoreland County, PA



CAPABILITY STATEMENT – MUNICIPAL

KEY STAFF

Environmental Engineering Department Manager

Amanda Brown, PE
abrown@markosky.com

Senior Project Manager Traffic Department

Dorothy Boring, PE, PTOE
dboring@markosky.com

Senior Project Manager Roadway Department

Douglas Coffman, PE, CBSI
dcoffman@markosky.com

CORE COMPETENCIES & SERVICES

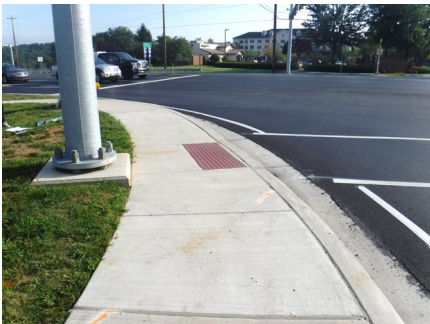
THE MARKOSKY ENGINEERING GROUP, INC. provides MS4 (Municipal Separate Storm Sewer Systems) permitting assistance for state, city, and local governments. Our professional engineers specialize in development and implementation of a Stormwater Management Program of Best Management Practices by assisting MS4 approved public entities in meeting the six minimum control measures required for permitting as designated by the EPA or DEP.

Markosky ensures quality designs and consistent agency reviews resulting in cost effective permitting efforts on behalf of our clients.

Our core Municipal services include the following:

- ❖ Subdivision / Site Plan Reviews
- ❖ Paving & Street Maintenance Programs
- ❖ Preparation of Construction Drawings & Specifications
- ❖ Construction Inspection / Management
- ❖ Street Inspections
- ❖ CDBG & WCD Program Projects
- ❖ NBIS Bridge Inspection
- ❖ MS4 Program Compliance
- ❖ Budget Preparation
- ❖ Coordination with PennDOT & DEP
- ❖ Traffic Plan Review, Analysis & Design
- ❖ Waterline & Sanitary Sewer Design

Markosky provides municipal engineering services to public works professionals, public agencies, institutions and businesses to foster continued improvement in the quality of public works, municipal infrastructure.



ECMS: PAUCP DBE (WBE)
000243 2182

NAICS Codes:
541620, 541330, 541990, 237110, 541720

UEI: EEMAGUCMLYG1
CAGE: 50GY5

WWW.MARKOSKY.COM

724.238.4138



PAST PERFORMANCE

Waddle Road Bridge Interchange

Client: Patton Township

Services

- ❖ Design Management
- ❖ Final Plan Reviews
- ❖ Utility Relocation
- ❖ Reimbursement Reviews

Jacobs Creek Watershed Association DEP 319 Nonprofit Sources Pollution Grant Program

Client: Jacobs Creek Watershed

Services

- ❖ Innovative Stormwater Retrofit
- ❖ Construction Drawings & Documents
- ❖ Municipal Coordination
- ❖ Construction Inspection

Lincoln Avenue Sidewalk Improvements

Client: Waynesburg Borough

Services

- ❖ Municipal Design Services
- ❖ Prepared Construction Drawings and Contract Documents
- ❖ Sidewalk and ADA Improvements



Waddle Road Bridge Interchange

Centre County, PA



Jacobs Creek Watershed

Westmoreland County, PA



Jacobs Creek - Scottdale Firemen Parking

Westmoreland County, PA



Lincoln Avenue Sidewalk

Greene County, PA



CAPABILITY STATEMENT – SITE DEVELOPMENT

KEY STAFF

Civil Engineering Division Manager

Brian Watkins, PE

bwatkins@markosky.com

Senior Project Manager

Douglas Coffman, PE, CBSI

dcoffman@markosky.com

Traffic Department Manager

Jonathon Balko, PE

jbalko@markosky.com

CORE COMPETENCIES & SERVICES

THE MARKOSKY ENGINEERING GROUP, INC. engineers can deliver a project from conceptual design through construction. We provide civil engineering services, permit preparation, utility coordination, water main, sanitary sewer, and stormwater plans. We also provide environmental and cultural resources including wetland delineations based on survey data. We will prepare the permit drawings, calculations, and permit applications. Construction phase services include; construction observation, review of submittals and shop drawings, responses to contractor requests for information, and project closeout assistance.

Our professionals have a reputation for building strong relationships with our clients and we work closely with them to provide designs that meet their schedule, budget and design requirements.

Our core Site Development services include the following:

- ❖ Site Design
- ❖ Grading & Landscape Plans
- ❖ Stormwater Management
- ❖ Innovative Stormwater BMP Design
- ❖ E&S Control
- ❖ Site Drainage Design
- ❖ Maintenance & protection of Traffic
- ❖ Right-of-Way & Utility Coordination
- ❖ Signing & Pavement Marking
- ❖ Traffic Analysis & Design
- ❖ Highway Occupancy Permitting
- ❖ Safety Analysis

Markosky provides engineering and design services to meet the needs of all types of site development projects.



ECMS: PAUCP DBE (WBE)
000243 2182

NAICS Codes:
541620, 541330, 541990, 237110, 541720

UEI:
EEMAGUCMLYG1

CAGE:
50GY5

WWW.MARKOSKY.COM

724.238.4138



PAST PERFORMANCE

Rostraver Township District Justice Office

Client: Westmoreland County IDC

Services

- ❖ Subdivision & Land Development Plans
- ❖ Grading & Utility Design, E&S, Permitting
- ❖ Parking & Access Design
- ❖ Stormwater Management
- ❖ Landscaping

Robb Farm, LLC Office Building

Client: Robb Farm, LLC

Services

- ❖ Site Design
- ❖ Parking Lot Layout
- ❖ Landscaping Design
- ❖ Stormwater Management
- ❖ HOP Permit from PennDOT

Chuck Noll Field

Client: St. Vincent College

Services

- ❖ Site Development Plans
- ❖ Permitting and E&S
- ❖ Stormwater Management
- ❖ Utility Coordination



Rostraver Township District Justice Office

Westmoreland County, PA



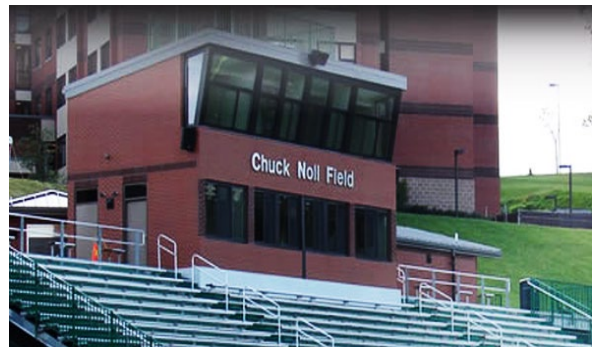
Robb Farm, LLC Office Building

Westmoreland County, PA



Robb Farm, LLC Office Building

Westmoreland County, PA



Chuck Noll Field

Westmoreland County, PA