



CAPABILITY STATEMENT – STRUCTURES

KEY STAFF

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

Structures Department Manager
Thomas Anthony, PE
tanthony@markosky.com

Assistant Department Manager - Structures
Francis 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

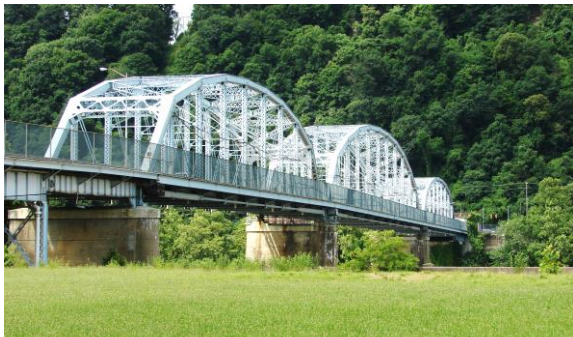
Services

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

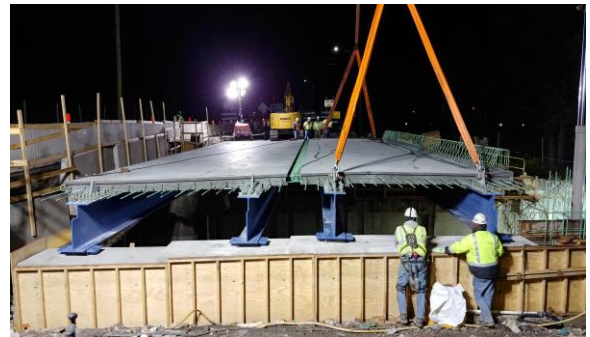
Reidsburg Bridge No. 1 Replacement
Slewed Single Span with Integral Abutments over Reids Run using Phased Construction
Client: PennDOT District 10-0

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