

MARYLAND ENGINEERING



McLaren
ENGINEERING GROUP

Live! Maryland Hotel and Casino Complex

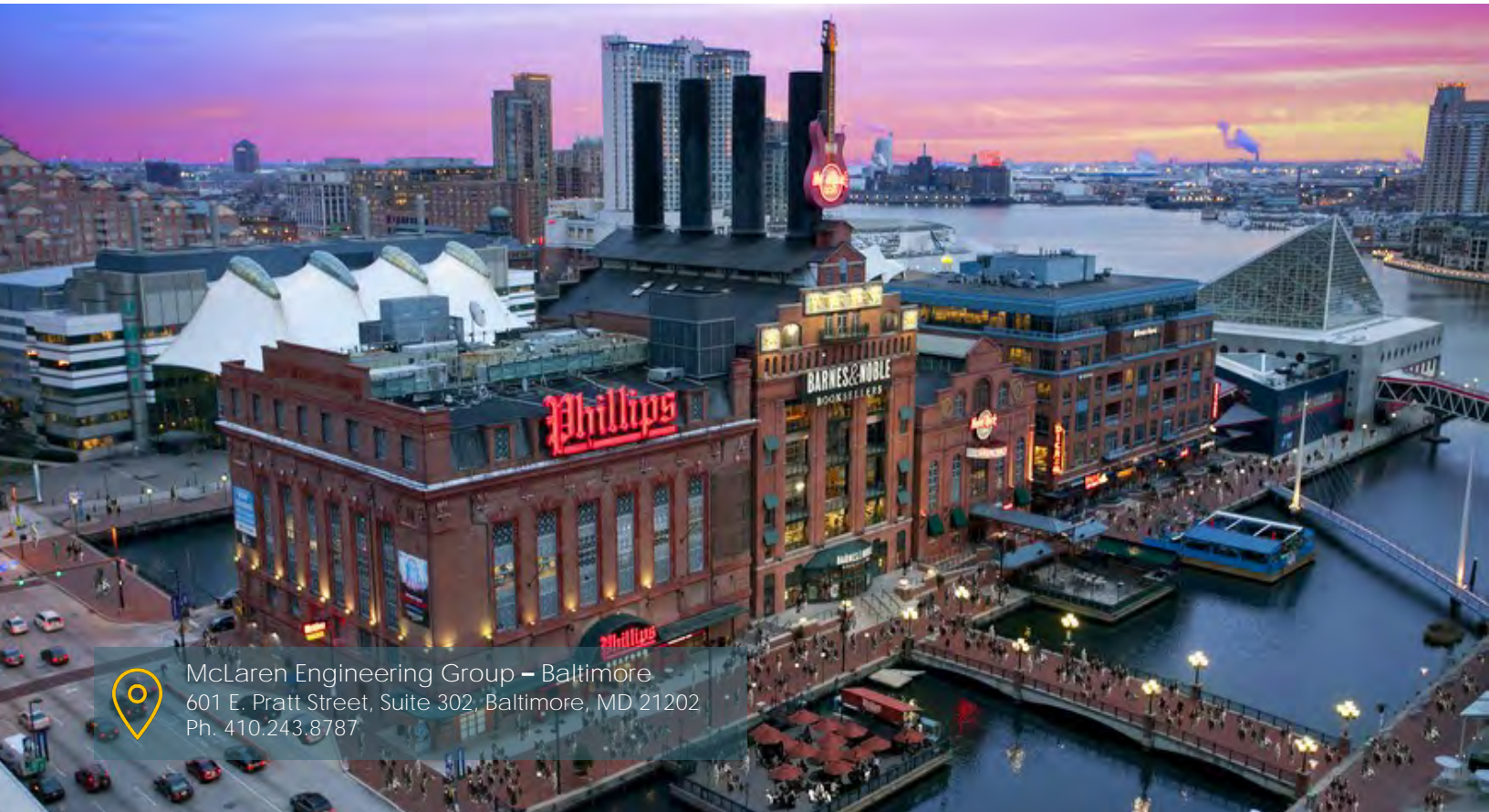


About Us

McLaren Engineering Group is a leading full-service engineering firm renowned for its trusted, high quality and innovative approach to solving complex challenges. With industry experts in multiple technical disciplines, our team has provided customized solutions for over 15,000 projects through consultation, design, inspection and construction management. With over four decades of experience, a staff of 250+, and 11 offices worldwide, McLaren addresses every project's specific needs with technical excellence and creative innovation.



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Core Technical Divisions

STRUCTURAL | CIVIL + SITE | MARINE + COASTAL | BRIDGE, HIGHWAY + RAIL
ENTERTAINMENT | GEOTECHNICAL | FACADE + BUILDING ENVELOPE
CONSTRUCTION ENGINEERING | FORENSICS | SURVEY + MAPPING



Diverging Diamond Intersection



FULL SERVICE ENGINEERING

McLaren is a top engineering firm that provides custom, full-service building solutions throughout Baltimore, the greater Maryland area, and around the nation.

Our iconic work in infrastructure, transportation, marine, and real estate development supports both private and public projects of nearly every size, shape and scope. With a diverse portfolio, high-quality services and state-of-the-art capabilities, McLaren is a trusted leader in Maryland's built environment.

We offer comprehensive engineering services and solutions that take any project from concept to completion with expert consultation, planning, permitting, design, construction support, inspection, and project management.

STRUCTURAL ENGINEERING

FACADE + ENVELOPE

CIVIL/SITE ENGINEERING

GEOTECHNICAL ENGINEERING

MARINE + COASTAL

BRIDGE, HIGHWAY + RAIL

SIGNAGE + DISPLAYS

ENTERTAINMENT ENGINEERING

SURVEYING + INSPECTION

CONSTRUCTION ENGINEERING

FORENSIC INVESTIGATIONS

www.mgmclaren.com



Live! Maryland Hotel and Casino Complex



McCormick Distribution
Center Solar Panels



400 Park Avenue
Redevelopment



Pier 5 Parking Garage

STRUCTURAL ENGINEERING

With a wide range of services spanning from concept to completion, McLaren's structural engineering group is built on a foundation of technical excellence, cutting-edge capabilities, pragmatic solutions, and a sensitivity for aesthetics.

Offering multidisciplinary consulting, analysis, design, project management, and construction phase support, our expert structural engineers enable clients to best meet all project goals while building more efficiently and cost-effectively.

Structural Services

- Consultation & Design Support
- New Facility Construction
- Retrofits & Tennant Improvements
- Structured Parking Development
- Renovations, Additions & Restoration
- Building Envelope & Façade Engineering
- Structural Analysis & Inspections



National Aquarium Glass Facade Replacement

FACADE + ENVELOPE ENGINEERING

McLaren's facade engineering services put focus on the entire building envelope – the largest, most important factor in the technical performance and overall aesthetic of any structure.

Built on a foundation of construction engineering knowledge and structural expertise, our firm uniquely understands the interdependence of envelope elements throughout the project life-cycle. This custom approach helps our facade and envelope engineers to best improve constructability, maximize energy efficiency, strengthen security and enhance architectural vision.

Envelope Services

Envelope Consultation

Delegated Design

Glass & Glazing

Metal Panels & Specialty Structures

Stone & Brick

Inspection, Investigation &
Remediation



LaGuardia Airport
Concourse B



Zaha Hadid Building



TWA Hotel Lobby



Underground Stormwater Detention Facility



Diverging Diamond
Interchange



City of Frederick Shared-
Use Path Connection



Mechanicsville Volunteer
Fire Department

CIVIL ENGINEERING

Site and Civil engineering play an integral role in bringing public and private developments to life. From pre-development and due diligence studies, to construction phase and remediation, McLaren delivers innovative land solutions throughout the building process.

Our civil engineers, environmental professionals, and permitting specialists work to develop site plans, land use designs, engineering support, and proper inspections.

In addition to technical expertise, we understand complex regulatory and environmental requirements to ensure that project goals are met on time and within budget.

Site/Civil Services

Consultation, Design &
Investigation Support

Site Planning & Development

Geotechnical Engineering

Environmental & Soils Analysis

Foundation Engineering

Roadway Engineering

Above & Underground
Utilities Support

Permit Acquisition



Inmar Headquarters
Historic Adaptive Reuse Renovation

GEOTECHNICAL ENGINEERING

McLaren's Geotechnical Engineering team specializes in analyzing the behavior of earthen materials and how they interact with man-made elements such as foundations, flatwork and pipelines. Our geotechnical engineers use principles of soil mechanics and rock mechanics to investigate subsurface conditions and materials, determine the relevant physical/mechanical and chemical properties of these materials, evaluate stability of natural slopes and man-made soil deposits, assess risks posed by site conditions, design earthworks and structure foundations and monitor site conditions, earthwork and foundation construction.

Geotechnical Services

Environmental & Soils Analysis

Foundation Engineering

Site Planning & Development

Roadway Engineering

Above & Underground
Utilities Support

Permit Acquisition

Consultation, Design &
Investigation Support



Ground Improvements



Pile Testing



Foundation Engineering



Maryland Sound International Bridge Replacement



National Aquarium Cable-Stayed Bridge Inspection



Montgomery County Parks Pedestrian Bridges



Vehicular Bridge over Little Elk Creek Replacement

BRIDGE + ROADWAY ENGINEERING

McLaren's Bridge/Roadway Division has engineered bridges and roadways of all shapes, scopes and sizes nationwide. Our team is routinely called upon to complete design builds, specialty inspections, assessments and investigations.

We are known throughout the industry for our innovative designs of bridges and roadway structures; as well as providing bridge condition and roadway structure assessments, inspection and maintenance; and rehabilitative designs for bridges, culverts, retaining walls and overhead sign structures.

Bridge + Roadway Services

Design-Build

Pedestrian Bridges

Truss, Arch, Beam, Cantilever & Suspension Bridges

Repair & Rehabilitation Design

Seismic Evaluation & Retrofit Design

Structural Evaluation

Sound Barriers

Load Rating

Inspections & Studies

Safety Inspection



USCG Curtis Bay Bulkhead Replacement

MARINE ENGINEERING

The design of marine facilities requires effective integration of coastal, structural and geotechnical engineering principles. This combination of skills allows us to offer in-depth waterfront engineering services spanning inspection, design and rehabilitation of marine facilities, ports, terminals, piers, bulkheads, and landings in any environment.

We provide industry leading solutions for any type of project – the design-build of a new facility, renovation and expansion of an existing site, creation of living shorelines, or an underwater inspection and rehabilitation.

Marine Services

Waterfront Consultation & Design

Above & Underwater Inspections

Bulkhead, Dock & Wharf Design

Berthing/Mooring Analysis

Regulatory Permitting

Flood Risk Management

Living Shorelines

Coastal Analysis & Regulatory
Coordination



National Aquarium
Floating Wetlands



The Pennant Bulkhead
Replacement



Dive Inspection Services



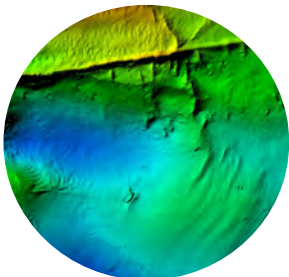
Topographic Surveys (Boundary + Utility)



Construction Surveys



Boundary Surveys



Hydrographic Surveys

SURVEYING SERVICES

Our cutting edge in-house team of geomatic professionals have the ability to provide full-service surveying, mapping and scanning services from the land, sea or air. McLaren can efficiently and effectively survey existing site conditions, stake out reference points and markers, verify the location and boundaries, perform hydrographic surveys via boat or remote vessel, conduct as-built surveys, perform 3D scans, aerial drone surveys and specialty quality control.

Survey Types

- Topographic Survey
- Boundary Survey
- Construction Surveys
- Geophysical Surveys
- Lidar Scanning
- Hydrographic/Bathymetric Surveys



ABC LED Sign, Times Square

SIGNAGE ENGINEERING

From roadway and ground mounted signage to architectural and LED displays, we provide clients with cutting-edge design, engineering, and expertise.

Our team offers structural engineering and construction support for new sign design, installation, upgrade, rehabilitation, and removal for both public and private clients.

Signage Types

- Roadway Signage
- Billboards & Overpass Signage
- Ground Mounted Signage
- Wayfinding
- Video Signage & Billboards
- Storefront & Architectural Signage
- Video Walls
- Custom Exhibits & Displays
- Temporary Structures
- Mechanized Displays



Monopole Signage



Wayfinding National Aquarium



I-95 Highway Signage Improvements



I 40 Bridge Collapse



Boardwalk Super Grid
Collapse



Harborview Pier Collapse



Queen Isabella Causeway
Collapse

FORENSIC INVESTIGATION

Founded on our diverse multi-discipline technical engineering capabilities, McLaren's forensic experts are renowned for investigating, analyzing, simulating and presenting the evidence for some of the nation's most well-known collapses, failures, accidents, disputes and deficiencies.

Our team is focused on investigating the cause of an incident, analyzing who/what is responsible and identifying what can be done to mitigate reoccurrence. McLaren offers full litigation support, offering high tech investigation capabilities to develop detailed analyses, narrative reports, demonstrative evidence and expert witness testimony.

Forensic Services

Investigative Engineering

Litigation Support

Narrative Reports

Demonstrative Evidence

Expert Witness Testimony

Accident Reconstruction

In-House Graphic Modeling

Investigation and Analysis

Forensic Metallurgy

Condition Surveys

State-of-the-Art Geomatic Investigation



Temporary Shoring St. Pete Pier



Rigging Solutions



Truss Erection Live! MD



Crane Engineering

CONSTRUCTION ENGINEERING

From large infrastructure projects to buildings to specialty structures, our engineers can best determine optimal and cost-effective means and methods of design, planning, construction, and project management.

Our expert staff provide a diverse line of custom services including crane plans, permitting, rigging solutions, designs of temporary supports, bracing, and construction sequencing for both new and renovation projects. Our company also provides conventional design of steel structures and connections in addition to providing specialty structural engineering services (SSE) for delegated design elements.

Construction Services

- Connection Design
- Miscellaneous Metals
- Support of Excavation (SOE)
- Demo/Erection Sequencing
- Cranes Plans
- Rigging Solutions
- Structural Lifting
- Temporary Shoring
- Jacking



MECU Pavilion

ENTERTAINMENT ENGINEERING

With a reputation for visionary entertainment engineering and design, McLaren offers a unique blend of imaginative artistry and cutting-edge technical capabilities. For over 40 years, our firm has been leading the entertainment industry with expert structural engineers, mechanical engineers and entertainment specialists.

We have helped create some of the best productions, events, concerts, displays, staging and entertainment facilities worldwide. Working with the biggest names in the business, our iconic work has revolutionized the audience experience with never-before-seen feats of engineering.

Entertainment Services

Live Entertainment Engineering

Entertainment Facility Structural
Engineering

Rigging, Staging, & Show Action
Machinery

Architectural Theming

Theme Park Engineering

Signage & Displays



Lady Gaga—Joanne
World Tour



Cirque du Soleil's KA
Theatrical Machinery



Fast & Furious 8
Movie Stunt



McLaren

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APPLIED INGENUITY

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