GEOTECHNICAL ENGINEERING

Part of a diversified family of solutions

jmt.com

Services

Site Investigations

Foundations

Dams

Retaining Systems

Slopes

Dewatering & Subdrainage Design

Ground Modifications Systems

Pavement Engineering

About Us

JMT's experienced staff in design and construction testing services allows us to anticipate subsurface soil, rock, and groundwater conditions. This experience aids in the development of site-specific subsurface investigations, innovative yet economical engineering design solutions, and incorporation of recommendations and warnings into the design documents regarding conditions that should be expected during construction that could affect the overall cost and duration of projects.

Site Investigations

JMT offers economical subsurface investigation programs that are appropriate for the expected geologic conditions and project type to be constructed.

- Test Borings, Pavement Coring, Rock Coring & Test Pits
- Pressuremeter, Cone Penetrometer, Dilatometer & Permeability
- Geophysical Studies including Seismic Refraction, Electrical Resistivity, & Refraction Micrometer Seismic Studies
- IBC Seismic Site Classification
- In-Situ Monitoring including Slope Inclinometers, Vibrating Wire Piezometers & Groundwater Monitoring Wells
- Falling Weight Deflectometer (FWD)
- Dynamic Cone Penetrometer (DCP)
- Ground Penetrating Radar (GPR)
- Pavement Condition Index (PCI) Survey

Foundations

JMT's geotechnical engineering specialists design foundations for bridges, low-to-high rise buildings, and retaining wall systems. The following are various foundation types:

Shallow Foundations

Spread Footings, Strip Footings, Mats Foundations

Deep Foundations

Drilled Straight Shaft & Belled Caissons, Driven Steel, Concrete & Timber Piles, Cast-in-Place Piles including Auger Cast & Auger Cast Displacement Piles

Specialty Foundations

Mini/Micro Piles, Helical Piers, Jacked Piles, Drilled Steel Displacements

Dams

JMT's design experience consists of a variety of dam types with important components, including foundations, seepage control features, and internal filters, drains, and cut-offs.

New Embankment Dams

Rehabilitation of Existing & Failed Embankment Dams

Dam Safety Inspections

Cofferdams

Retaining Systems

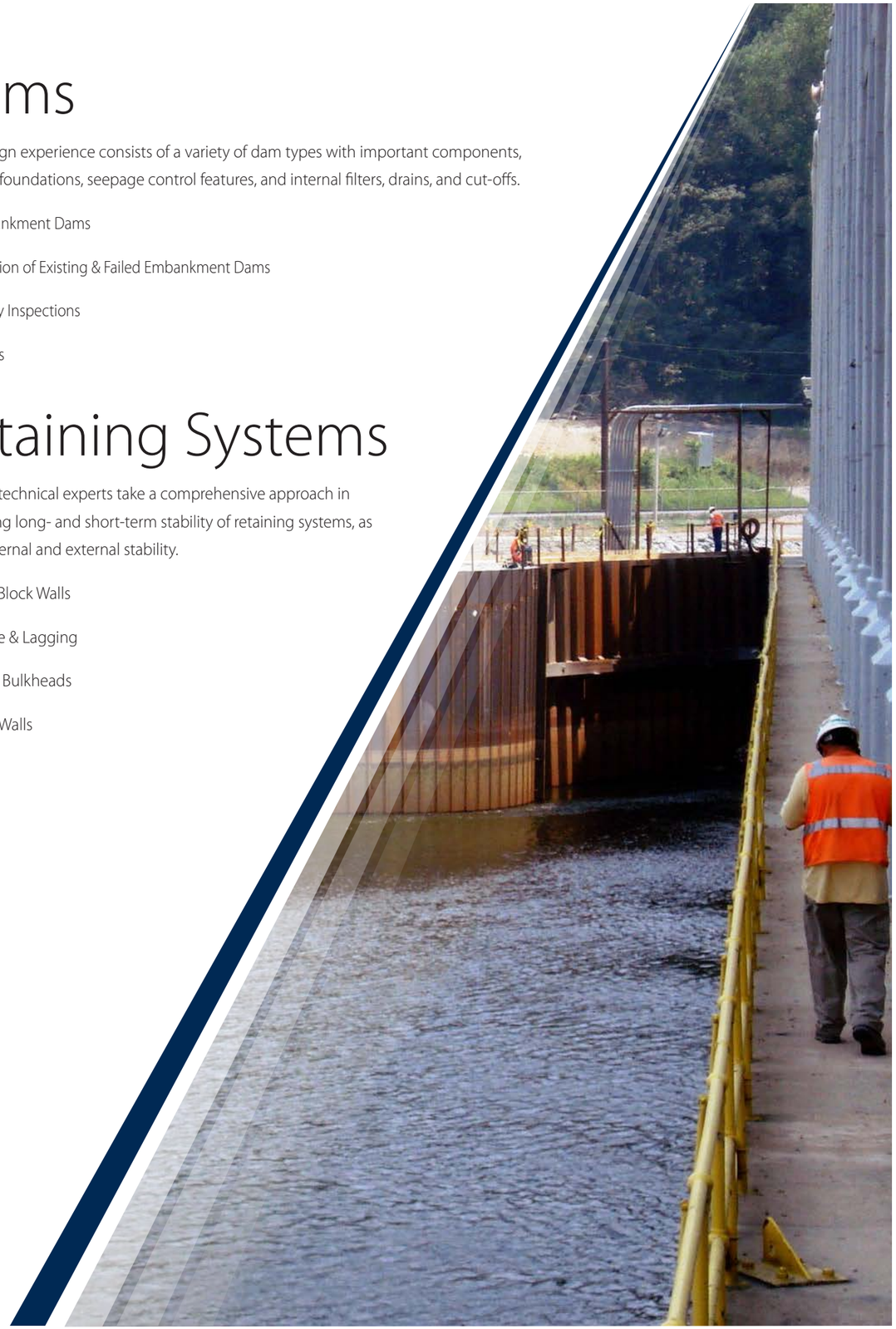
JMT's geotechnical experts take a comprehensive approach in considering long- and short-term stability of retaining systems, as well as internal and external stability.

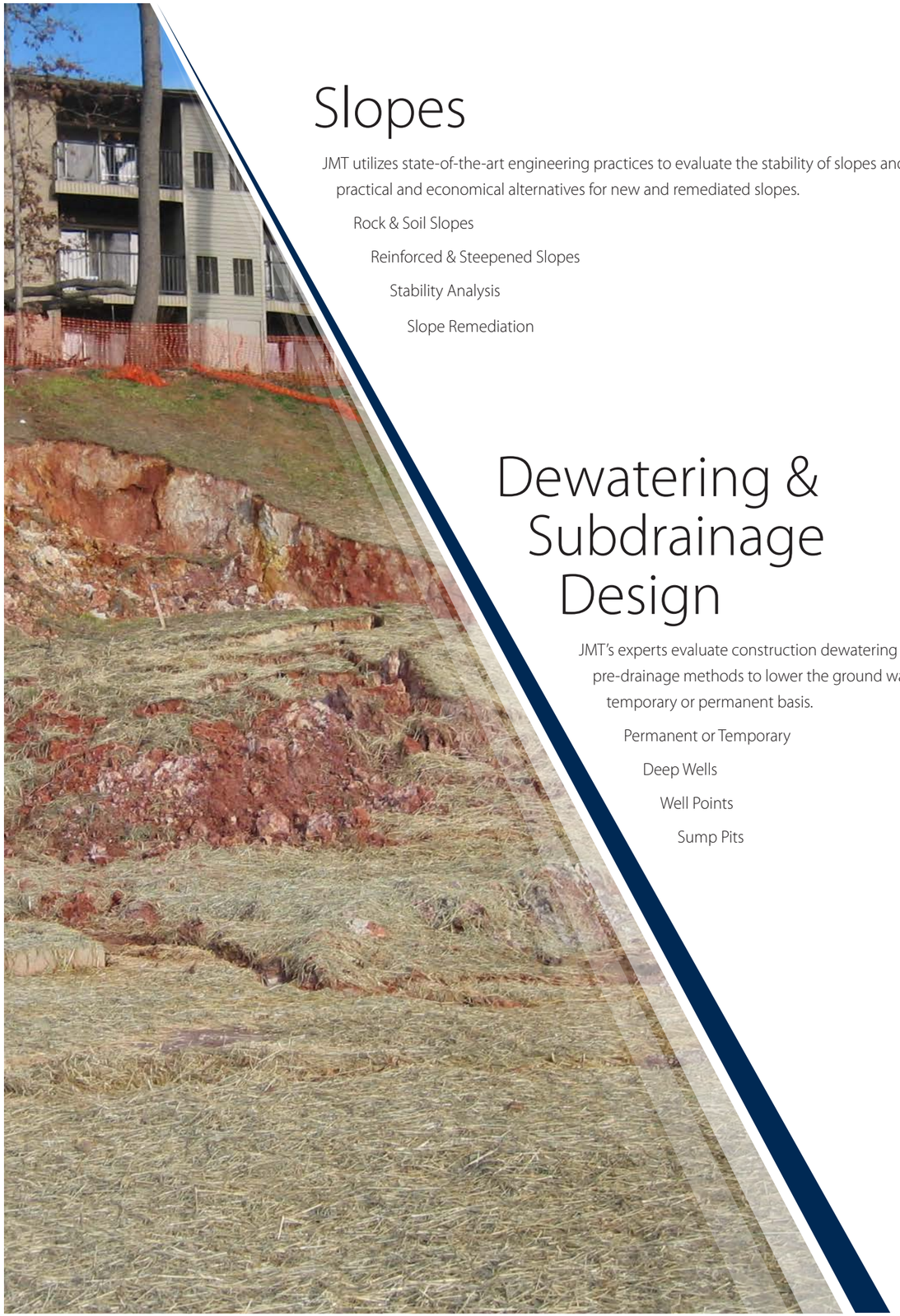
Segment Block Walls

Soldier Pile & Lagging

Sheet-Pile Bulkheads

Concrete Walls





Slopes

JMT utilizes state-of-the-art engineering practices to evaluate the stability of slopes and develop practical and economical alternatives for new and remediated slopes.

Rock & Soil Slopes

Reinforced & Steepened Slopes

Stability Analysis

Slope Remediation

Dewatering & Subdrainage Design

JMT's experts evaluate construction dewatering and pre-drainage methods to lower the ground water on a temporary or permanent basis.

Permanent or Temporary

Deep Wells

Well Points

Sump Pits

Ground Modifications Systems

JMT's specialists utilize state-of-the-art techniques to mitigate problems associated with soft ground conditions including:

Wick Drains & Surcharge

Geo Foam Block

Dynamic Deep Compaction

Compaction, Pressure & Jet Grouting

Stone Columns & Geopiers

Rigid Inclusions - Geo-concrete Columns

Pavement Engineering

JMT's pavement engineers are proficient in paving materials, condition evaluations, and design for roadways, airports, parking lots, and marine terminals.

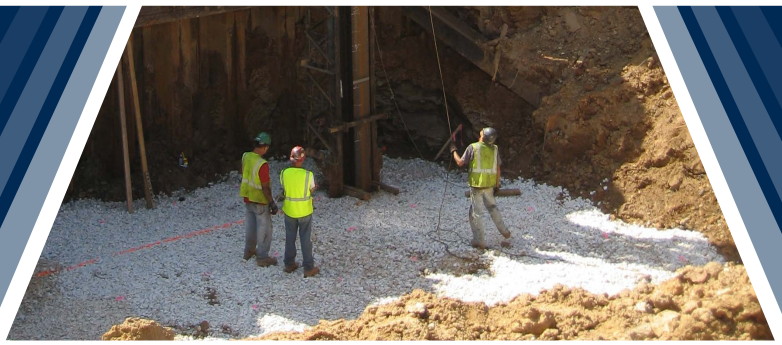
New & Overlay Pavement Design

Mix Design

Life Cycle Cost Analysis

Pavement Management

Subgrade Stabilization



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