



Search Tags: Materials Investigation**Project Count:** 30



Seabrook Station Nuclear Power Plant

Seabrook, NH

Project Contacts: [Jesse Beaver](#), [Said Bolourchi](#), [Matthew Sherman](#)

The discovery of alkali-silica reaction (ASR) in concrete structures at the Seabrook Station Nuclear Power Plant (Seabrook) was first documented case of ASR at any U.S. nuclear facility. The...

Service: [Materials Investigation](#), [Structural Investigation](#)

Market: [Nuclear](#)

Keywords: [Concrete](#), [Cracking](#), [Field Testing](#), [Laboratory Testing and Analysis](#), [Nondestructive Testing](#), [Petrography](#)



New Hampshire State House

Concord, NH

Project Contacts: [Jeffry Ceruti](#)

The monumental dome on the New Hampshire State House is gilded in gold leaf. After regilding in the early 1990s, the gold leaf started discoloring. The state wanted to understand the cause of...

Service: [Building Enclosure Investigation](#), [Materials Investigation](#)

Market: [Office](#)

Keywords: [Deterioration](#), [Dome](#), [Materials Analysis](#), [Metal-Copper](#), [Roofing](#)



MassBiologics, Stormwater Retention System

Boston, MA

Project Contacts: Phillip Sharff

The stormwater retention system at the MassBiologics facility at the UMass Medical School comprises subsurface chambers constructed from modular, stackable thermoplastic units. Following partial...

Service: Materials Investigation, Structural Investigation

Market: Health Care

Keywords: Civil: On-Site Stormwater Management, Culverts and Storm Drains, Drainage, Failure Investigation, Laboratory Testing and Analysis, Plastic/Composite, Storm Drains



Sonoma County Water Agency, Transmission System Pipeline

Sonoma County, CA

Project Contacts: Jesse Beaver

The Sonoma County Water Agency manages a regional water supply to ensure its customers have access to clean water. Wanting to preserve their assets, the agency needed to understand the condition...

Service: Materials Investigation

Market: Water/Wastewater

Keywords: Metal-Steel, Metallurgy, Petrography, Pipe, Pipe, Steel, Pipeline



1001 Pennsylvania Avenue NW

Washington, DC

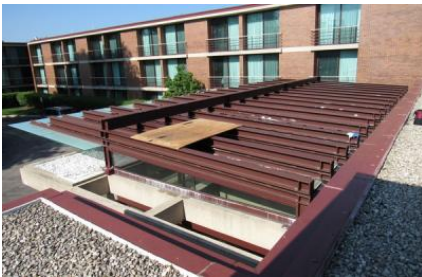
Project Contacts: Joseph Rogers

During tenant fitout renovations on the sixth floor, the carpet installer reported debonding of the leveling compound and difficulty bonding the roll carpeting to the applied leveling compound....

Service: Materials Investigation

Market: Office

Keywords: Concrete, Flooring, Flooring and Coatings, Material-Related



Hyatt Lodge at McDonald's Campus

Oak Brook, IL

Project Contacts: Peter Babaian

Hyatt Lodge at McDonald's Campus added a new entrance vestibule in 2012, enclosing the original open-air, concrete-framed structure with a new exposed galvanized steel canopy structure featuring...

Service: Building Enclosure Investigation, Materials Investigation

Market: Hospitality

Keywords: Metal-Steel, Water Leakage



Massachusetts State House Time Capsule

Boston, MA

Project Contacts: [Dominic Kelly](#), [Susan Knack-Brown](#)

On 4 July 1795, Samuel Adams, Paul Revere, and William Scollay led the procession from the old Massachusetts State House to the site of the new State House to lay the granite cornerstone. In the...

Service: [Building Enclosure Investigation](#), [Materials Investigation](#), [Structural Investigation](#)

Market: [Government](#)

Keywords: [Historic](#), [Monitoring](#), [Construction](#), [Preservation Technology](#), [Shoring/Temporary Structure](#), [Stone](#), [Stone-Granite](#)



Retaining Wall Failure Investigation

Prescott, AZ

Project Contacts: [Scott DiFiore](#), [Bryan Strohman](#)

Shortly after the site was developed, a terraced, mechanically stabilized earth (MSE) wall failed. The MSE wall, with heights up to 63 ft tall, consisted of precast concrete facing panels and soil...

Service: [Materials Investigation](#), [Structural Investigation](#)

Market: [Retail](#)

Keywords: [Failure Investigation](#), [Field Testing](#), [Geotechnical](#), [Laboratory Testing and Analysis](#), [Mechanically Stabilized Earth \(MSE\) Wall](#), [Pipeline](#), [Retaining Wall](#), [Slopes and Embankments](#)



The Cathedral of Saint Mary of the Assumption

San Francisco, CA

Project Contacts: [Carolyn Searls](#)

Completed in 1971, the cathedral is distinguished by its Expressionist design and ascending roof with its cross-shaped apex. Vertical and horizontal openings are filled with Dalle de Verre stained...

Service: [Building Enclosure Investigation](#), [Materials Investigation](#)

Market: [Religious](#)

Keywords: [Failure Investigation](#), [Glass and Glazing](#), [Laboratory Testing and Analysis](#), [Leaded and Stained Glass](#), [Preservation Technology](#) , [Windows](#)



Saint Leander Catholic Church

San Leandro, CA

Project Contacts: [Carolyn Searls](#)

The sixteen stained glass lancet windows at Saint Leander Church were installed in 1966. Local artist, Carl Huneke, constructed the vibrant panels in the Dalle de Verre technique with dalles (...)

Service: [Building Enclosure Investigation](#), [Materials Investigation](#)

Market: [Religious](#)

Keywords: [Failure Investigation](#), [Glass and Glazing](#), [Laboratory Testing and Analysis](#), [Leaded and Stained Glass](#), [Preservation Technology](#) , [Windows](#)



1000 Stone Place

Melrose, MA

Project Contacts: [Jeffry Ceruti](#), [Jeffrey Langlois](#)

Previously part of the Boston Rubber Shoe Company, the mill buildings at 1000 Stone Place date back to the late 1800s. Wood Partners wanted to redevelop the property as luxury apartments. The...

Service: [Materials Investigation](#), [Structural Rehabilitation](#)

Market: [Residential - Apartment](#)

Keywords: [Adaptive Reuse](#), [Heavy Timber](#), [Laboratory Testing and Analysis](#), [Materials Analysis](#), [Wood](#)



Washington Mills Lofts

Lawrence, MA

Project Contacts: [Jeffrey Langlois](#), [James Parker](#)

Formerly a textile mill, Washington Mills Lofts is now a trendy apartment building taking advantage of the mill's tall ceiling heights and large windows. With exposed brick and timber framing, the...

Service: [Materials Investigation](#), [Structural Rehabilitation](#)

Market: [Residential - Apartment](#)

Keywords: [Adaptive Reuse](#), [Award Winning](#), [Heavy Timber](#), [Laboratory Testing and Analysis](#), [Materials Analysis](#), [Residential](#), [Wood](#)



Greenway Carousel

Boston, MA

Project Contacts: [Matthew Johnson](#), [Paul Kassabian](#)

The Central Artery/Tunnel Project moved one of Boston's major elevated highways underground and created usable ground-level spaces, such as the Rose Kennedy Greenway. The Rose Kennedy Greenway...

Service: [Materials Design](#), [Materials Investigation](#), [Structural Design](#)

Market: [Sports & Entertainment](#)

Keywords: [Concrete](#), [Feasibility Study](#), [Laboratory Testing and Analysis](#), [Materials Testing for Design](#), [Railing](#), [Sport/Entertainment](#), [Tunnel](#)



Medford High School Pool

Medford, MA

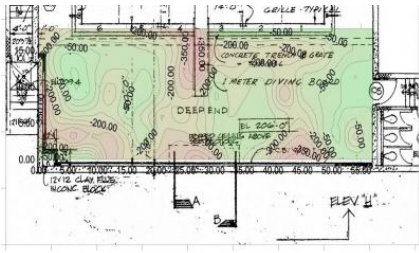
Project Contacts: [Paul Kelley](#), [Matthew Sherman](#)

The swimming pool at Medford High School was constructed in 1970 and exhibited spalling, staining, leakage, and exposed corroded reinforcing bars on the underside of the pool deck; corrosion of...

Service: [Materials Investigation](#), [Structural Investigation](#), [Structural Rehabilitation](#)

Market: [Education - K-12](#)

Keywords: [Concrete](#), [Concrete Rehabilitation](#), [Condition Assessment](#), [Construction Administration](#), [Corrosion](#), [Deterioration](#), [Laboratory Testing and Analysis](#), [Natatorium](#), [Nondestructive Testing](#), [Petrography](#)



Acton-Boxborough Regional High School Pool

Acton, MA

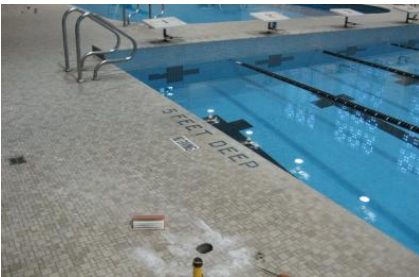
Project Contacts: Paul Kelley, Matthew Sherman

The natatorium was constructed in the early 1970s as an addition to the high school. The pool and deck are constructed of reinforced concrete and precast plank forms the ceiling. SGH evaluated the...

Service: Materials Investigation, Structural Investigation, Structural Rehabilitation

Market: Education - K-12

Keywords: Concrete Rehabilitation, Condition Assessment, Construction Administration, Corrosion, Field Testing, Laboratory Testing and Analysis, Natatorium, Nondestructive Testing, Petrography



War Memorial Pool Complex

Cambridge, MA

Project Contacts: Paul Kelley, Matthew Sherman

The pool complex at the War Memorial Recreation Center was designed and built around 1955. The complex comprises three separate pools (a 31 ft diameter circular beginner's pool, the 43 ft by 76 ft...

Service: Materials Investigation, Structural Investigation

Market: Sports & Entertainment

Keywords: Concrete Rehabilitation, Condition Assessment, Corrosion, Deterioration, Field Testing, Laboratory Testing and Analysis, Natatorium, Nondestructive Testing, Petrography



Philipsburg Elementary School

Philipsburg, PA

Project Contacts: [Peter Nelson](#)

Completed in 2004, Philipsburg Elementary School is a two-story structure with epoxy terrazzo flooring installed on the concrete floor slabs in corridors and other common areas. Shortly after...

Service: [Materials Investigation](#)

Market: [Education - K-12](#)

Keywords: [Deterioration](#), [Flooring](#), [Flooring and Coatings](#), [Material-Related](#), [Materials Analysis](#), [Petrography](#)



Lexus Service Center

Watertown, MA

Project Contacts: [Emily Hopps](#), [Peter Nelson](#)

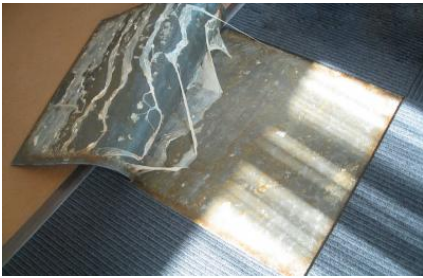
Shortly after construction of the dealership, workers observed delaminating epoxy coating in the service center. SGH investigated the causes of the failing flooring and designed repairs.

...

Service: [Materials Investigation](#)

Market: [Retail](#)

Keywords: [Concrete](#), [Flooring](#), [Flooring and Coatings](#), [Laboratory Testing and Analysis](#), [Mockup](#)



Pullman Regional Hospital

Pullman, WA

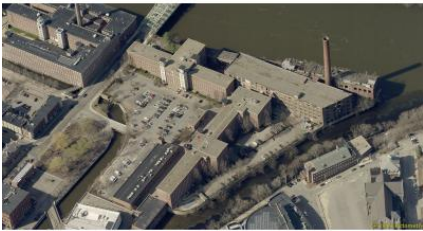
Project Contacts: [Emily Hopps](#), [Peter Nelson](#)

Shortly after construction, the hospital reported rutting and liquid emanating from joints in sheet vinyl flooring, wet and soft adhesive under carpet tile and sheet vinyl, and cracking and...

Service: [Materials Investigation](#)

Market: [Health Care](#)

Keywords: [Field Testing](#), [Flooring](#), [Flooring and Coatings](#), [Laboratory Testing and Analysis](#)



Massachusetts Mills

Lowell, MA

Project Contacts: [Greggory Cohen](#), [Jeffrey Langlois](#)

Embracing Lowell's manufacturing history, Massachusetts Mills repurposes one of the largest mill campuses in the United States as a new apartment complex. Phase III of the development includes the...

Service: [Materials Investigation](#), [Structural Rehabilitation](#)

Market: [Residential - Apartment](#)

Keywords: [Adaptive Reuse](#), [Heavy Timber](#), [Historic](#), [National Register of Historic Places](#), [Residential](#), [Wood](#)



de Young Museum, Golden Gate Park

San Francisco, CA

Project Contacts: [Kenneth Klein](#)

The original museum opened in Golden Gate Park in 1895. Damaged beyond repair by the 1989 Loma Prieta earthquake, the building was demolished in 2000 to make way for a new 292,000 sq ft building...

Service: [Building Enclosure Design](#), [Materials Investigation](#)

Market: [Cultural](#)

Keywords: [Award Winning](#), [Below-Grade](#), [Cladding / Recladding](#), [Field Testing](#), [Laboratory Testing and Analysis](#), [Metal](#), [Metal-Copper](#), [Museum](#), [Plaza](#), [Signature Project](#), [Walls](#), [Waterproofing](#)



Fluvanna County High School, Stormwater Detention System

Fluvanna, VA

Project Contacts: [Phillip Sharff](#), [Bryan Strohmman](#)

The new Fluvanna County High School included four buried, stackable crate-type, stormwater detention systems under deep cover. Shortly after installation in 2010, the contractor observed that the...

Service: [Materials Investigation](#), [Structural Investigation](#)

Market: [Education - K-12](#)

Keywords: [Civil](#), [Civil: On-Site Stormwater Management](#), [Culverts and Storm Drains](#), [Drainage](#), [Failure Investigation](#), [Geotechnical](#), [Laboratory Testing and Analysis](#), [Materials Analysis](#), [Plastic/Composite](#), [Storm Drains](#)



Brightman Street Bridge

Fall River, MA

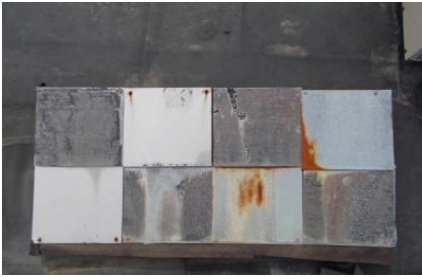
Project Contacts: [Paul Kelley](#), [William Konicki](#)

During the six-year rehabilitation of the Brightman Street Bridge, SGH provided investigation and concrete design services and performed testing, analysis, and thermal modeling of mass concrete...

Service: [Materials Design](#), [Materials Investigation](#)

Market: [Bridge](#)

Keywords: [Concrete Mix Design](#), [Failure Investigation](#), [Laboratory Testing and Analysis](#), [Marine Engineering](#), [Petrography](#)



Galvanic Testing of Materials

Waltham, MA

Project Contacts: [Jeffry Ceruti](#)

Contact between dissimilar metals can lead to accelerated deterioration due to galvanic corrosion. Standard sample Galvanic Series charts (e.g., ASTM G82) provide general guidelines for...

Service: [Materials Investigation](#)

Market: [Other](#)

Keywords: [Corrosion](#), [Laboratory Testing and Analysis](#), [Material-Related](#), [Materials Analysis](#), [Metal](#), [Research/Development](#), [Roofing](#)



Pipe Failures in Residential Plumbing and Heating Systems

United States and Canada

Project Contacts: Phillip Sharff

SGH investigated the cause of failures in pipes used in residential domestic hot water and hydronic heating systems in the United States and Canada. Occurring after less than 10 yrs in service,...

Service: Materials Investigation, Structural Investigation

Market: Water/Wastewater

Keywords: Laboratory Testing and Analysis, Materials Analysis, Pipe, Plastic/Composite, Residential



Huachipa Water Treatment Plant

Lima, Peru

Project Contacts: Jesse Beaver, Phillip Sharff

Ramal Norte Pipeline is a 27 km long subsurface pressure pipeline that provides drinking water from Huachipa Water Treatment Plant to several districts in Lima, Peru. The pipeline was in temporary...

Service: Materials Investigation, Structural Investigation

Market: Water/Wastewater

Keywords: Failure Investigation, Failure Risk Assessment, Finite Element Analysis, International, Metallurgy, Pipe, Pipeline, Soil-Structure Interaction



University of Massachusetts Memorial Medical Center

Worcester, MA

Project Contacts: [Dean Rutila](#)

The granite-clad Medical Center building, built in the 1970s, is nine stories tall. The building houses the university teaching hospital, the medical school, and clinical research laboratories.

...

Service: [Building Enclosure Rehabilitation](#), [Materials Investigation](#), [Structural Design](#)

Market: [Health Care](#)

Keywords: [Adhesives, Sealants, and Coatings](#), [Cladding / Recladding](#), [Construction Administration](#), [Fasteners and Connections](#), [Industrial Rope Access](#), [Masonry](#), [Signature Project](#), [Stone-Granite](#), [Walls](#)



Vanadium Technology Program, Blast-Resistant Walls

San Francisco, CA

Project Contacts: [Ronald Hamburger](#)

Over ten years, SGH researched innovative uses of High Strength Low Alloy Vanadium (HSLA-V) steels in a variety of structural applications under the Vanadium Technology Program, an initiative...

Service: [Materials Investigation](#), [Structural Investigation](#)

Market: [Science & Defense](#)

Keywords: [Blast Analysis & Resistance](#), [Metal-Steel](#), [Walls](#)



Vanadium Technology Program, Long-Span Trusses

San Francisco, CA

Project Contacts: [Ronald Hamburger](#)

Over ten years, SGH researched innovative uses of High Strength Low Alloy Vanadium (HSLA-V) steels in a variety of structural applications under the Vanadium Technology Program, an initiative...

Service: [Materials Investigation](#), [Structural Investigation](#)

Market: [Science & Defense](#)

Keywords: [Analytical Studies](#), [Collapse](#), [Fire](#), [Fire Engineering](#), [Fire Protection](#), [Long-Span Structure](#), [Metal](#), [Metal-Steel](#), [Research/Development](#)



Yale University, Beinecke Rare Book and Manuscript Library

New Haven, CT

Project Contacts: [Matthew Bronski](#), [Stephen Ruggiero](#)

Beinecke Library, designed by Gordon Bunshaft of Skidmore, Owings & Merrill and built in 1963, is a significant work of twentieth-century architecture. It serves as a principal repository for...

Service: [Building Enclosure Rehabilitation](#), [Materials Investigation](#)

Market: [Education - College & Prep](#)

Keywords: [Building Science](#), [Concrete](#), [Concrete-Precast](#), [Condition Assessment](#), [Curtain Wall](#), [Library](#), [Masonry](#), [Plaza](#), [Preservation Technology](#), [Stone](#), [Waterproofing](#), [Wood](#)

