

INTEGRATED ENGINEERING & ENVIRONMENTAL SERVICES

Technical Excellence Practical Experience Client Responsiveness



HUDSON YARDS REDEVELOPMENT

- Location:** New York, NY
- Client:** Hudson Yards, a Related Oxford Venture
- Architect:** Kohn Pedersen Fox, Skidmore, Owings & Merrill, Diller
Scofidio + Renfro, Ismael Leyva Architects, Rockwell Group
- Partner:** Thornton Tomasetti, WSP
- Services:** Geotechnical, Environmental, Site/Civil, Traffic &
Transportation, Traditional Surveying, Terrestrial
Scanning/BIM

OVERVIEW

This major New York City rezoning and redevelopment, led by Related/Oxford, under the joint guidance of New York City, the Metropolitan Transportation Authority, Hudson Yards Development Corporation, and New York State, is reinventing the once barren west side of Midtown Manhattan. Upon full completion, the site will include more than 18 million square feet of commercial, retail, and residential towers, 14 acres of open park space, a cultural venue, a public school, and a luxury hotel all built over active rail yards.

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AMERICAN DREAM MEADOWLANDS

Location: East Rutherford, NJ
Client: Triple Five Development
Services: Geotechnical, Site/Civil, Traditional Surveying, Natural Resources & Permitting, Land Use Planning, Environmental

OVERVIEW

American Dream is a \$5-billion unique and visually compelling mixed-use development located on the Meadowlands Sports Complex in East Rutherford, New Jersey. The project incorporates exciting and participatory sports and entertainment venues, such as an indoor ski slope and skate park for the entire family. Langan provided site/civil engineering, geotechnical engineering, surveying, environmental engineering, and permitting services for the new indoor amusement park and water park component of the project.

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NEW JERSEY NEW YORK CONNECTICUT MASSACHUSETTS PENNSYLVANIA OHIO VIRGINIA FLORIDA TEXAS ARIZONA COLORADO
WASHINGTON CALIFORNIA ATHENS CALGARY DUBAI LONDON PANAMA



BLUE BACK SQUARE

Location: West Hartford, CT
Client: Blue Back Square Development
Services: Site/Civil, Traffic & Transportation, Environmental,
Geotechnical, Landscape Architecture, Traditional Surveying

OVERVIEW

This urban mixed-use redevelopment is the centerpiece of two large city blocks, providing retail, office, residential and municipal space within the existing town center. It includes the regeneration of a brownfield site, expansion of civic facilities and public open-space, a mix of large and small format retail shops, two municipal parking garages, restaurants, professional and medical offices, a health club, and residential condominiums and apartments.

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SOL' MIA

Location: North Miami, FL
Client: Oleta Partners, LLC
Architect: EDSA
Services: Site/Civil, Geotechnical, Environmental

OVERVIEW

Sol' Mia is a joint venture between long-time Langan clients Turnberry Associates and LeFrak. This 183-acre master-planned, mixed-use community is set on one of the largest remaining parcels of undeveloped land in South Florida.

The key challenging component of the project is that it is a former municipal waste landfill, which was closed in the 1980s. Langan's team of civil, environmental and geotechnical engineers are drawing upon local and national experience and expertise related to land development on former landfills.

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THE PAVILION - PENN MEDICINE

Location: Philadelphia, PA
Client: University of Pennsylvania Health System
Architect: HDR Architecture, Foster+Partners
Partner: L.F. Driscoll, Balfour Beatty, BR+A
Services: Site/Civil, Geotechnical, Environmental, Surveying/Geospatial,
Traffic & Transportation

OVERVIEW

As part of the project team, known as PennFIRST, Langan is providing a multitude of services including site/civil, geotechnical, and traffic engineering; environmental consulting; permitting; and survey. In an effort to expand their rapidly growing network, Penn Medicine has assembled one of the first integrated project delivery (IPD) teams on the East Coast for the design and development of a new patient pavilion, located in Philadelphia's University City area. The new clinical facility will include approximately 500 new patient beds, 50 operating and procedure rooms, a relocated and expanded Emergency Department, 700 space substructure parking lot, and expanded healthcare delivery programs within the network.

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CITY PLACE SANTA CLARA

Location: Santa Clara, CA
Client: Related Urban, City of Santa Clara
Services: Environmental, Site/Civil, Geotechnical

OVERVIEW

The \$2 billion-plus City Place Santa Clara Landfill post-closure development is an example of how complex projects benefit from our multi-discipline collaboration to manage engineering and regulatory challenges. The 240-acre site is a former all-purpose landfill. Plans are for mixed use: office, hotel, retail, restaurant, entertainment, residential, and parking. Langan provides services for all project phases. We integrated the design and coordination process, and applied our site knowledge and understanding of site/civil, environmental, and geotechnical conditions to ensure compliance within the regulatory environment.

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MERCEDES-BENZ STADIUM

Location: Atlanta, GA
Client: Darden & Company
Architect: HOK (360 Architecture), Goode Van Slyke Architecture,
Stanley Beaman & Sears, tvsdesign
Partner: ICON Venue Group
Services: Geotechnical, Environmental

OVERVIEW

Langan was retained as the environmental and geotechnical engineer of record for Mercedes-Benz Stadium, home of the Atlanta Falcons. The 1.8-million-SF multi-purpose, 71,000-seat retractable roof stadium opened for the 2017 NFL Season. As the geotechnical and environmental consultant on the project, Langan continued its role throughout construction by providing asbestos abatement oversight, monitoring and testing of excavated soils to comply with the environmental soils management plan, underground storage tank closure management, storage tank closure assessments, vibration monitoring within the Marta Tunnel structure and geotechnical oversight of various foundation and ground improvement systems.

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AMERICAN STANDARD FORMER TRENTON POTTERY

Location: Hamilton Township, NJ
Client: American Standard
Services: Environmental, Natural Resources & Permitting

OVERVIEW

Langan provided comprehensive environmental services to American Standard at the former pottery facility, culminating with the successful completion and NJDEP and USEPA Approval of a RCRA Closure Plan for lagoons, waste spoils areas and an on-site RCRA Landfill in 1993. We also conducted a series of comprehensive Remedial Investigations to support the closure and sale of the former pottery, and worked with American Standard to accomplish the cleanup and reuse of this strategically located facility by integrating practical solutions to integrate required remediation activities with site engineering plans.

AWARDS

American Council of Engineering Companies New Jersey, Engineering Excellence Award

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FORMER GAS PLANT REMEDIATION & ECOLOGICAL RESTORATION

Location: Santa Barbara, CA
Client: Confidential
Services: Environmental

OVERVIEW

Langan developed and gained regulator agreement on a final remedy for a former major oil corporation gas plant site located in Southern California. The agreed upon path to closure utilized a background analysis and risk assessment to identify attainable remedial cleanup standards for constituents of potential concern. By taking a face-to-face approach with regulators (DTSC, Region 9 EPA, Central Coast RWQCB, County of Santa Barbara) and presenting a strong argument for a risk-based strategy to closure, Langan was able to achieve an agreed upon 1 to 2 year path to closure that was 27 years (case opened in 1988) in the making with two previous consultants.

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MARATHON OIL HEADQUARTERS

Location: Houston, TX
Client: Hines
Architect: Munoz + Albin (Design Architect), Kendall/Heaton Associates
(Architect of Record)
Services: Environmental, Geotechnical

OVERVIEW

A 16-story building and 7-story parking garage were constructed to support the relocation of Marathon Oil's headquarters. Located on a 3.4-acre site, the new headquarters is in a more central location for employees. Langan completed a Phase I Environmental Site Assessment, performed a geotechnical field investigation to explore subsurface conditions, evaluated foundation support alternatives, and provided recommendations for foundations and other geotechnical-related aspects. We also performed a finite element method analysis to estimate settlements and equivalent springs used in the structural analysis of the office building, which is supported on a shallow foundation system consisting of a core mat and spread footings.

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LINCOLN CENTRE LIFE SCIENCES RESEARCH CAMPUS

Location: Foster City, CA
Client: BioMed Realty
Architect: HOK
Services: Geotechnical, Environmental, Earthquake/Seismic

OVERVIEW

Located on the Peninsula, Lincoln Centre is a 595,000-SF biomedical and life sciences research campus redevelopment. The buildings of the former industrial park were demolished. The development now includes three office/laboratory buildings, three parking structures, and an amenities building. Langan performed a geotechnical investigation and site-specific seismic studies, updated the Phase I Environmental Site Assessment, conducted a Limited Environmental Site Characterization, and provided construction observation and analytical testing services.

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FULFILLMENT CENTER - CLAY

Location: Clay, NY
Client: Trammell Crow Company
Architect: BL Companies
Partner: Ostergaard Acoustical Associates
Services: Geotechnical, Environmental, Surveying/Geospatial, Traffic & Transportation, Land Use Planning, Natural Resources & Permitting, Demolition

OVERVIEW

The former site of the 111-acre Liverpool Public Golf and Country Club is being redeveloped into a 3,800,000 SF, five-story distribution center that will operate 24 hours a day. Langan is providing multidisciplinary services for the project, including site/civil, geotechnical, environmental, and traffic engineering, natural resources, and survey. We also followed agency guidelines for our designs, including a stormwater basin in accordance with the New York State Department of Environmental Conservation Stormwater Pollution Discharge Elimination System and lighting plans in compliance with the Town of Clay's lighting standards.

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THE GLASSHOUSE

Location: Pittsburgh, PA
Client: Trammell Crow Company
Architect: Hord Coplan Macht
Partner: Rycon Construction
Services: Site/Civil, Geotechnical, Environmental

OVERVIEW

The Glasshouse is a five-story, residential mixed-use building with over 300 apartment units, ground floor restaurant and retail space, and indoor parking. The project is extremely environmentally sensitive because of the location within the floodplain, site contaminants, and the ACT II process. Langan's environmental team facilitated the ACT II process that helped to procure funding; addressed site contaminants and underground storage tanks; and developed a soil characterization and management plan to optimize re-use and disposal. Our site/civil engineers coordinated with the DEP, Allegheny County Conservation District, and City of Pittsburgh to develop a stormwater management plan that met City and DEP requirements while working with the site constraints.

AWARDS

2021 ASCE Pittsburgh Sustainability Award

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UCHC OUTPATIENT PAVILION AND PARKING GARAGE

Location: Farmington, CT
Client: Fusco/Clark - a Joint Venture
Services: Site/Civil, Environmental, Traditional Surveying

OVERVIEW

The UCHC Ambulatory Care Complex is a design-build project with an aggressive delivery schedule. The project includes a 300,000 square-foot medical building and six-story parking garage. Langan is providing engineering, environmental permitting and surveying services. Site challenges include existing wetlands that require filling, a mass excavation over more than 70 feet in some areas, a need for flood management verification, and significant utility upgrades and reconfigurations on an active health care campus. The site design will incorporate environmentally sensitive stormwater techniques and the team is seeking LEED Silver certification for the project.

AWARDS

2016 Connecticut Building Congress Project Team Award - First Place for New Construction

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WMATA DULLES RAIL YARD AND MAINTENANCE FACILITY

Location: Sterling, VA
Client: Washington Metropolitan Area Transit Authority (WMATA),
Metropolitan Washington Airports Authority (MWAA)
Architect: Giuliani Associates Architects, Inc., SYSTRA
Partner: Hensel Phelps Construction, SYSTRA
Services: Geotechnical, Environmental

OVERVIEW

Langan provided geotechnical engineering services for the design-build of Dulles Rail Yard and Maintenance Facility. This 71-acre site consists of a service and inspection building, warehouse, maintenance of way building, transportation and police building, and train wash building. The site also includes a rail and train layup yard, ancillary structures, employee parking lots, stormwater management facilities, and a network of roadways. Langan's extensive subsurface investigation consisted of borings with rock coring, temporary groundwater level observation wells, test pits, infiltration tests, seismic refraction surveys, and specialty laboratory testing. Additionally, during the subsurface investigation, Langan provided environmental soil screening services.

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ONE57

Location: New York, NY
Client: Extell Development Company
Architect: Christian de Portzamparc, SLCE Architects
Services: Geotechnical, Site/Civil, Environmental

OVERVIEW

One57 stands at 1,005 feet (306 meters) tall, and consists of a 5-star, 210 room Park Hyatt Hotel and 95 premium condominiums and residences. Langan performed geotechnical and environmental engineering investigations, and provided foundation recommendations to support the proposed tower on spread footings supported on rock.

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COLGATE-PALMOLIVE WATERFRONT

Location: Jersey City, NJ
Client: Colgate-Palmolive Company
Services: Waterfront & Marine, Geotechnical, Site/Civil, Environmental,
Traffic & Transportation, Landscape Architecture

OVERVIEW

Langan provided waterfront, geotechnical, site/civil, traffic, and environmental engineering, and landscape architecture services for the redevelopment of Colgate Center, which formerly served as the main Colgate-Palmolive production facility for more than 150 years. The project involved the construction of 1,100 LF of anchored sheet pile bulkhead, a box culvert manifold, new relieving platform, and a world class promenade with sweeping views of Lower Manhattan.

AWARDS

2000 ACEC NJ Engineering Excellence Award

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CRANBURY LOGISTICS CENTER

Location: Cranbury, NJ
Client: Cranbury Brickyard, LLC
Services: Site/Civil, Geotechnical, Environmental, Natural Resources & Permitting, Landscape Architecture, Traffic & Transportation

OVERVIEW

Langan prepared a general development plan submission for this 395-acre parcel adjacent to the New Jersey Turnpike. Langan's integrated team of site/civil, geotechnical and environmental engineers and scientists prepared a design to construct 2.8 million SF of warehouse distribution on approximately 150 acres of the site. The full build-out of the business park includes three cross-dock warehouse buildings and is one of the largest wetland mitigation projects in state history. Proper remediation of the site required impact to nearly 50 acres of contaminated wetlands. In order to minimize impacts to forested areas, sparsely vegetated uplands were excavated to form shallow concave grades to allow water to accumulate in these areas, creating an amphibian habitat. An extended 10-acre stormwater basin was also used to create additional wetlands mitigation by designing planting shelves and islands within the basins to allow for wetland plantings to grow.

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BRONX POINT

- Location: Bronx, NY
- Client: Bronx Point Owner, LLC (A Joint Venture of L+M Development Partners and Type A Projects)
- Architect: S9 Architecture, Marvel Architects
- Partner: Abel Bainnson Butz, Cosentini Associates , WSP
- Services: Site/Civil, Environmental, Surveying/Geospatial, Traffic & Transportation

OVERVIEW

Bronx Point is a 585,000-SF, mixed-use waterfront site comprised of 540 units of affordable housing, educational community facilities, commercial/retail spaces and open space adjoining the Harlem River waterfront in the Lower Concourse North area of the South Bronx. The site was previously a paved asphalt lot used for temporary storage by city and state agencies and recently underwent a rezoning to add the parcel to the Special Harlem River Waterfront District. Langan provided waterfront engineering services to create a resilient shoreline edge, by removing an existing relieving platform and creating a more natural shoreline slope to reduce tidal energy as sea levels rise. Site/civil engineering services included the design and permitting of underground utilities, permitting of two new stormwater outfalls to the Harlem River and onsite layout and circulation including a new private roadway. Environmental engineering services included completion of a Brownfield Cleanup Program (BCP) application, Remedial Investigation Program and Citizen Participation Plan.

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MEMORIAL SLOAN-KETTERING CANCER & DATA CENTER

Location: Middletown, NJ
Client: Memorial Sloan-Kettering
Architect: Perkins + Will
Services: Landscape Architecture, Site/Civil, Geotechnical,
Environmental, Natural Resources & Permitting,
Surveying/Geospatial

OVERVIEW

Langan provided engineering, site design, and land development services to convert an existing multi-story office building into a state-of-the-art cancer care center. The overall site design allows patients to enter the building at the upper and lower levels while providing improved vehicle and pedestrian circulation patterns. Landscaped walkways provide patient access to the surrounding woodlands and expand recreational opportunities. Lush entry gardens and courtyards help create a soothing and therapeutic environment. This project is LEED Gold certified.

AWARDS

2018 ACEC New York Engineering Excellence: Platinum Award

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