Improving quality of life in New York City
NEW YORK CITY - THE WORLD’S MOST ECONOMICALLY POWERFUL CITY WITH TOTAL ECONOMIC OUTPUT OF OVER $1 TRILLION. AS ONE OF THE WORLD’S MOST ICONIC CITIES, IT IS ALSO A GLOBAL HUB OF INTERNATIONAL BUSINESS AND COMMERCE. NEW YORK CITY HAS A CLEAR VISION AND AMBITIOUS GOALS FOCUSED ON GROWTH, EQUITY, SUSTAINABILITY AND RESILIENCY.
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PASSION. COMMITMENT. EXPERTISE.

27,000 STAFF WORLDWIDE
Arcadis.
Improving quality of life.
SERVING YOU
Addressing your full life-cycle needs to bring the desired outcomes.

BROAD AND INTEGRATED SERVICES

Architecture Design | Asset Consulting | Business Advisory
Construction Management | Cost Consulting | Design & Engineering
Master Planning/Urban Design | Program Management
Project Management | Risk Management Consulting
Sustainability Consulting
As New York City enters its fifth century, it continues to focus on international success but also faces a number of key challenges. *One New York: The Plan for a Strong and Just City* (OneNYC) sets out to address New York City’s long-term challenges: meeting the needs of more residents, changing climate conditions, an evolving economy and aging infrastructure. Working with city leaders, Arcadis is delivering solutions that respond to these complex challenges in order to maintain and enhance New York City’s position as a leading global city.
Arcadis has contributed to the success of New York for over 100 years with more than 500 Arcadians currently applying design and consultancy expertise to deliver exceptional outcomes.

**MAKING HEALTHIER NEIGHBORHOODS**

By delivering, upgrading and protecting the housing and healthcare facilities that support healthy neighborhoods and enhance quality of life.

**FOSTERING RESILIENCY**

Through shaping the future of New York City with innovative, multifunctional solutions that enable the neighborhoods, economy and infrastructure of the city to adapt to the impacts of climate change and other threats.

**DELIVERING INFRASTRUCTURE FOR THE FUTURE**

By upgrading aging infrastructure and constructing new infrastructure to deliver economic, social and environmental benefits and prepare the city for the demands of the future.
These and other instances of our contributions to New York’s housing, transportation, land, air, water and more are illustrated on the following pages.

REGENERATING THE CITY

By facilitating asset-led transformation through the regeneration of buildings and neighborhoods and the remediation of impaired land.

MAXIMIZING MOBILITY TO SUPPORT A GROWING ECONOMY

By delivering transformative and resilient transport infrastructure that enhances connectivity and supports a competitive economy.

DESIGNING FLAGSHIPS FOR AN ICONIC CITY

Through the design and delivery of remarkable buildings and interior fit-outs that support successful businesses and a thriving city.
Supporting New York City Housing Authority (NYCHA) to preserve and protect public housing.

NYCHA owns and operates Ocean Bay Apartments (Bayside) in Queens, consisting of 24 residential buildings with 1,395 apartment. As a part of the NYCHA Sandy Recovery Program, Arcadis is providing construction management services to oversee extensive capital repair works. This includes flood proofing to protect the building envelope, installation of backup generators, replacement of boilers, mechanical and electrical systems, roof replacements and the restoration of the site to pre-disaster condition.

MODERNIZATION TO IMPROVE QUALITY OF LIFE AND SUSTAIN NEW YORK CITY PUBLIC HOUSING FOR THE LONG-TERM

PROTECTING 1,395 APARTMENTS FROM FUTURE DISASTERS

IMPROVING QUALITY OF LIFE FOR 3,729 RESIDENTS
NEW YORK CITY HEALTH AND HOSPITALS (H+H)

Ensuring the rehabilitation and protection of critical healthcare facilities severely damaged by Superstorm Sandy.

Superstorm Sandy caused extensive flood damage to numerous H+H facilities with two hospitals requiring full evacuations. Arcadis developed comprehensive mitigation designs to protect Bellevue, Coney Island, Metropolitan and Coler Hospitals from future flood risk. Innovative solutions protect each facility at both a masterplan and critical asset level and incorporate multiple lines of defense. Conducting damage assessments led to securing funds for H+H through the FEMA public assistance and hazard mitigation grants process.

SECURING OVER $1.7 BILLION OF FUNDING

PROTECTING FOUR HOSPITALS WITH A TOTAL CAPACITY OF 2,355 PATIENTS & ONE LEVEL 1 TRAUMA CENTER FROM FUTURE FLOOD RISK
FOSTERING RESILIENCY

EAST SIDE COASTAL RESILIENCY

A visionary multifunctional design to protect southern Manhattan from flooding and creating landscapes and amenity spaces.

In the wake of Superstorm Sandy, the U.S. Department of Housing and Urban Development launched the Rebuild by Design competition to generate proposals to improve the resiliency of waterfront communities through locally-responsive, innovative design. Along with the Bjarke Ingels Group, Arcadis and partners were selected to design resilient infrastructure in New York City. The East Side Coastal Resiliency Project is the first compartment of the design. In close consultation with local communities, the designs include a series of green floodwalls, bridging berms and embankment designs all integrated with East River Park to enhance recreational facilities and community access.

RESHAPING THE PHILOSOPHY OF RESILIENT DESIGN FOR 200,000 RESIDENTS & 21,000 BUSINESSES

PROTECTING 2.4 MILES OF VALUABLE, DENSELY POPULATED, LOW- LYING URBAN AREA FROM FLOODING WHILE PROVIDING SOCIAL AND ENVIRONMENTAL BENEFITS TO ITS COMMUNITIES

Bjarke Ingels Group
JAMAICA BAY

Responding to subsidence and rising sea levels with solutions that protect communities from flooding.

The communities of Jamaica Bay on the southwestern edge of Long Island have been damaged by major storms over time. Alongside the U.S. Army Corps of Engineers, Arcadis is evaluating and recommending opportunities to implement cost-effective measures of providing coastal storm risk management within Jamaica Bay. The goal of the Reformulation Study is to reduce vulnerability of the critical infrastructure, communities and ecosystems to major storms, in a sustainable way.

This approach evaluates each option from an engineering, economic and ecological standpoint and examines the structural and geotechnical feasibility, and cost and ecological consequences.

PROTECTING COMMUNITIES THROUGH
HOLISTIC
COASTAL STRENGTHENING
& ECOSYSTEM RESTORATION

PROTECTION FOR:
- MORE THAN 850,000 RESIDENTS
- 48,000 RESIDENTIAL AND COMMERCIAL STRUCTURES
- 35,000 DAILY RIDERS OF THE MTA SUBWAY “A” TRAIN
- MORE THAN $450,000,000 TOTAL DAMAGES AVOIDED
FOSTERING RESILIENCY

CONEY ISLAND CREEK

Identifying hydrological management strategies that can increase resilience to flooding and enhance the ecology and economy of the Coney Island region.

DEVELOPING A LONG-TERM STRATEGY TO PROTECT CONEY ISLAND AND GRAVESEND FROM SEA-LEVEL RISE AND STORM SURGE

PROTECTION FOR:
- 45,800 RESIDENTS, INCLUDING 9,100 SENIORS
- 500,000 SF OF CULTURAL AND COMMUNITY FACILITIES
- 960 BUSINESSES
- 1.2 MILLION SF OF SCHOOLS
- 260,000 SF OF HEALTHCARE FACILITIES
- 74 ACRES OF PARKS AND OPEN SPACE
- 5,900 BUILDINGS

During Superstorm Sandy, Coney Island Creek was the main source of inundation for much of the Gravesend and Coney Island neighborhoods. Local homes, businesses, and public facilities were inundated or destroyed and Coney Island Hospital was evacuated. In response, Arcadis was appointed to lead the Coney Island Creek Tidal Barrier and Wetlands Feasibility Study. This incorporates a study of integrated hydrological management strategies that would prevent and mitigate upland flooding around Coney Island Creek, while also improving water quality and ecology, enhancing waterfront open space, strengthening connections between neighborhoods, and supporting economic development in surrounding areas.
Delivering Green Infrastructure (GI) solutions to reduce combined sewer overflows, improve water quality in New York City’s waterways and enhance streetscapes.

Periods of heavy rainfall or snowmelt can result in combined sewer overflow into nearby waterways, and GI provides multi-benefit solutions to such overflow. By performing research and development of GI installations, Arcadis is developing protocols, conducting a pilot study and developing recommendations for design improvements for future generations.

IMPROVING GREEN INFRASTRUCTURE IN NEW YORK CITY TO REDUCE COMBINED SEWER OVERFLOWS

EVALUATING GI PERFORMANCE ON CAPTURING STORMWATER RUNOFF TO REDUCE POLLUTION IN NEW YORK WATERBODIES AND PROVIDE OTHER BENEFITS
BAY PARK
SEWAGE TREATMENT PLANT

Leading the recovery of the essential infrastructure of the sewage treatment plant and associated facilities.

Superstorm Sandy severely damaged the Bay Park Sewage Treatment Plant, which serves over half a million residents in Nassau County. Arcadis is part of a joint venture to lead the recovery and evaluate flood protection options, design a multi-purpose flood barrier and fully repair the plant to make it resilient to future storms.
NEWTOWN CREEK

Complex and unique design delivered on a $4 billion upgrade of New York City’s largest wastewater treatment plant.

The Newtown Creek Plant treats wastewater from a service area of approximately 25.4 square miles of New York City. The upgrade, managed by Arcadis, with world-renowned egg-shaped digesters, modification of a sewage pipeline, and design of new and reconstructed treatment batteries, were all placed into operation in less than 40 months. The effluent now exceeds standards set by the Clean Water Act and nearby residents report no odors or disruptions. Additionally, a nature walk, plants, sculptures and a visitor’s center on site transform the plant into a desirable community space.

SAVINGS OF $100 MILLION

2,500 HOMES HEATED WITH RENEWABLE GAS
Retrofitting a 32-story building to deliver a purpose-built data center and mission critical infrastructure for the 21st century.

Intergate.Manhattan at the base of the Brooklyn Bridge provides a New York centric data center hub for many businesses. CallisonRTKL provided architectural design, interior design, feasibility studies, master planning, site planning, programming and space planning to successfully retrofit the building within the existing shell.

1,005,000 SF OF HIGH-RISE URBAN DATA CENTER

RETHINKING DATA CENTER OPERATIONS IN A VERTICAL LAYOUT
Transforming a 126-year-old landmark building into a modern flagship retail environment while retaining the building’s unique historic features.

REI (Recreational Equipment, Inc.), a national retailer providing quality outdoor gear and clothing, opened a flagship store in Manhattan to launch the brand onto the international stage and provide a resource to serve New Yorkers, visitors and community groups eager to enjoy the great outdoors. REI chose Soho’s Puck Building, built in 1885 and registered as a historic landmark, as the location for their first store in Manhattan. CallisonRTKL worked with REI to provide historic renovation, architectural design, interior design and store planning services to deliver a multi-level, 39,000sf flagship store. The store provides an open and interconnected retail environment while restoring the building and reusing original materials to celebrate its history.

2012 A.R.E. DESIGN AWARDS:
OUTSTANDING MERIT SPECIALTY STORE OVER 25,000 SF

CHAIN STORE AGE:
FIRST PLACE, 2012
SOFTLINES
(GREATER THAN 15,000 SF)
Delivering transformative transport infrastructure on a grand scale to improve mobility between Long Island and Manhattan.

The East Side Access project is a $10 billion program to expand the Long Island Rail Road commuter rail service into the historic Grand Central Station, the largest train station in the world. The new route includes more than eight miles of tunneling. Arcadis provided construction management for the program, including tunnels, caverns, stations and systems. The work was conducted beneath the most active rail terminal in the Americas and had a successfully managed controlled drill-and-blast of eight station tunnels without disruption to business, commuter traffic or the surrounding infrastructure.

SUCCESSFULLY DELIVERING
TRANSPORT INFRASTRUCTURE
CRITICAL TO NEW YORK CITY’S GLOBAL COMPETITIVENESS

WILL TRANSPORT 162,000 PEOPLE A DAY TO AND FROM GRAND CENTRAL TERMINAL

THE FIRST NEW RAIL ACCESS INTO NEW YORK CITY FROM THE EAST OR WEST IN 100 YEARS
MTA RESILIENCY

Creating a safer, more reliable subway system capable of adapting to future flooding.

Superstorm Sandy resulted in the prolonged shut down of New York City’s subway system, causing $4.755 billion worth of damage and leaving 47 miles of subway track under water. The city appointed Arcadis to restore its subway system to pre-Sandy conditions and protect it against future storms, improving the resiliency of the city and quality of life for millions of people. Upon completion of the project, the commuters, communities and families who make up the 15 million people served will have a safer, more reliable subway system.

IMPLEMENTING INNOVATIVE FLOOD RESILIENT DESIGNS FOR SUBWAY STATIONS, TUNNELS, BUS DEPOTS AND OTHER PUBLIC AREAS FOR NORTH AMERICA’S LARGEST TRANSPORTATION NETWORK

SAFEGUARDING CRITICAL TRANSPORT INFRASTRUCTURE ESSENTIAL TO THE SUCCESS OF NEW YORK CITY
TOMMY HILFIGER’S FIFTH AVENUE STORE

Designing a flagship store for an iconic brand in a world-renowned shopping destination.

Tommy Hilfiger’s global flagship store on Fifth Avenue positions the brand on one of the most prestigious shopping avenues in the world. CallisonRTKL provided both architectural design and interior design services to create a store that blends effortlessly with neighboring elite retailers and showcases the brand’s signature style and classic detailing. The interior design mixes contemporary architectural elements with traditional furnishings and finishes to create a sense of discovery and an unforgettable retail experience.

22,000SF OF PREMIUM RETAIL SPACE

GLOBAL ANCHOR IN THE BRAND’S HOMETOWN

ELEVATING THE BRAND AT A NATIONAL AND INTERNATIONAL LEVEL
VODAFONE NYC OFFICE

Successfully managing the expansion of Vodafone.

Vodafone required significant expansion in headcount, IT capacity as well as customized sales space to meet their North American growth plans. Arcadis managed the design and pre-project budgeting for the expansion of the Vodafone NYC office and took the lead in managing the process to appoint a general contractor. From concept through to completion, Arcadis was on site regularly, managing the phased construction to ensure the project was delivered within schedule and budget.

DOUBLING OF SPACE TO 21,200 SF WITH FLOORS CONNECTED BY A CUSTOM FLOATING STAIRCASE

BUSINESS CONTINUITY ENSURED DURING TWO 4-MONTH CONSTRUCTION PHASES, ALLOWING SMOOTH STAFF TRANSFERS
Arcadis is the leading global natural and built asset design and consultancy firm working in partnership with our clients to deliver exceptional and sustainable outcomes through the application of design, consultancy, engineering, project and management services. Arcadis differentiates through its talented and passionate people and its unique combination of capabilities covering the whole asset life cycle, its deep market sector insights, and its ability to integrate health and safety and sustainability into the design and delivery of solutions across the globe. We are 27,000 people who generate $3.8 billion in revenues. We support UN-Habitat with knowledge and expertise to improve the quality of life in rapidly growing cities around the world.

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