

# 2016

## M&J Statement of Qualifications



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# Agenda

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- Introduction
- Construction Management Division
- Technology Division
- Engineering Division
- Q/A

# Introduction

# CH2M and M&J MPA

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CH2M Hill, Inc. and M&J Engineering, P.C. have entered into a Mentor-Protégé Agreement (MPA), which was approved by SBA on July 20<sup>th</sup>, 2016.

Under this MPA, M&J aspires to grow its personnel from 100 to 500, and to diversity, both technically and geographically, its professional services.



# About M&J Engineering, P.C.

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2004

inception

90

employees

150+

projects completed

1 M +

safe work hours recorded  
with no accidents

\$2.175B

projects managed

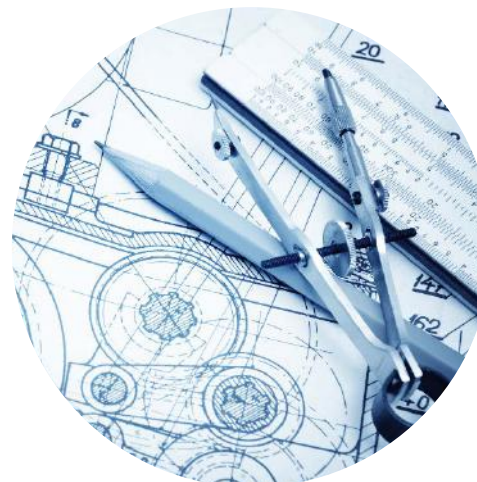


# Services

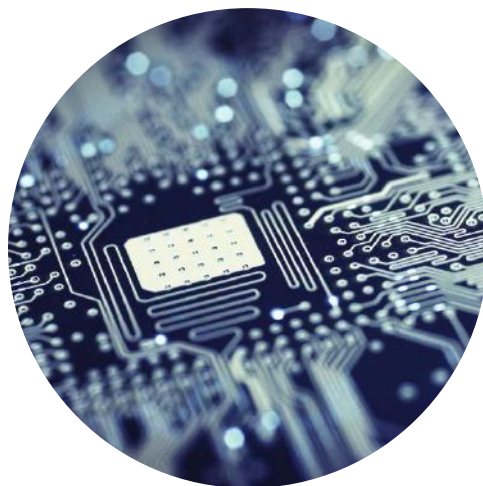
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Construction Management



Engineering Design



Technology



Environmental



# Services

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Electrical Engineering



Civil Engineering



Mechanical Engineering



Structural Engineering



Technology -- Smart Cities,  
Cyber Security



Transportation, Intelligent  
Transportation Systems



Construction Engineering and  
Management -- Supervision,  
Management, and Inspection



Environmental Engineering



Condition Evaluations



Water Resources Engineering



Program Management, Project  
Controls, CPM Scheduling and  
Construction Cost Estimating



Industrial/Occupational Hygiene





# Office Locations

## Headquarter

2003 Jericho Turnpike

New Hyde Park, NY 11040

## New Jersey

100 Challenger Road, Suite 309

Ridgefield Park, NJ 07660

## Connecticut (Satellite Office)

1224 Mill Street, Building B, Suite 224

East Berlin, CT 06023

## New York

495 Freedom Plains Road

Poughkeepsie, NY 12603

## Pennsylvania

705 Thompson Park Drive

Cranberry, PA 16066

## Washington DC (Satellite Office)

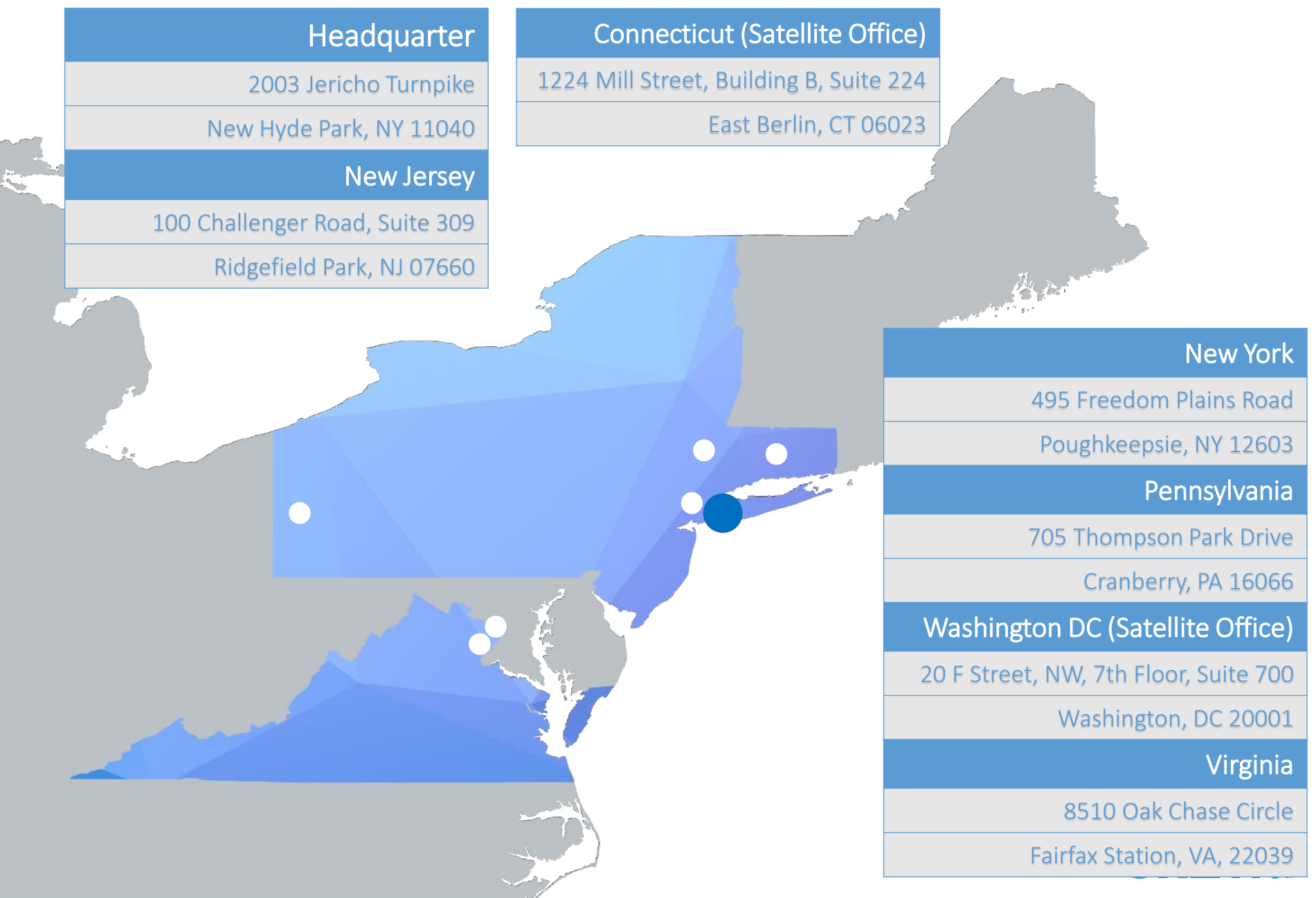
20 F Street, NW, 7th Floor, Suite 700

Washington, DC 20001

## Virginia

8510 Oak Chase Circle

Fairfax Station, VA, 22039



# Certifications



M&J has obtained Disadvantaged Business Enterprise (DBE), Small Business Enterprise (SBE) and Minority Business Enterprise (MBE) from various state and county/city organizations:

- Small Business Administration (SBA) 8(a) Program Participant, Graduate Date: 2024
- New York State Metropolitan Transportation Authority (DBE)
- New York State Department of Transportation (DBE)
- Suffolk County (MBE)
- Nassau County (MBE)
- Port Authority of New York and New Jersey (DBE)
- New Jersey Department of Transportation (SBE)
- New Jersey Turnpike Authority (SBE)
- Connecticut Department of Transportation (DBE)
- Port Authority of Allegheny County (DBE)
- Massachusetts SOMWBA (MBE/DBE)
- Florida Department of Transportation (DBE)
- Maryland Department of Transportation (MBE/SBE)
- District Department of Transportation Washington, D.C. (DBE)
- Texas Department of Transportation (DBE)
- Pennsylvania Department of General Services (MBE)
- Port Authority of Allegheny County (DBE)
- Pennsylvania Department of General Services (SBA)



# Clientele



- US Department of Defense - US Army Corps of Engineers (USACE)
- US Department of Homeland Security
- New York State Metropolitan Transportation Authority - NYC Transit, Long Island Rail Road, Metro North Railroad, Bridges & Tunnels, Capital Construction Company
- New York State Department of Transportation
- New York State Office of General Services
- New York State Department of Economic Development
- New York State Thruway Authority
- New York City Department of Transportation
- New York City Department of Design and Construction
- New York City Economic Development Corporation
- New York City Department of Environmental Protection
- Nassau County Department of Public Works
- Suffolk County Department of Public Works
- City of New Rochelle, NY
- Port Authority of New York & New Jersey
- New Jersey Department of Transportation
- New Jersey Turnpike Authority
- Connecticut DOT
- Connecticut Transit
- City of Norwalk, CT
- City of Stamford, CT
- Pennsylvania Department of Transportation



# Key Personnel



## Our Leadership:

- Maqsood Malik, P.E., President, CEO
- Albert Pozotrigo, P.E., Executive Vice President  
Director of Construction Management
- Arnold Rubenstein, P.E., Vice President  
Director of Intelligent Transportation Systems Group
- Alexandros Constantinides, P.E., Vice President  
Director of Tunneling, Rail & Transit Group
- Roland Ericsson, MarE, Vice President  
General Manager
- Haralambos (Bob) V. Vasiliadis, Ph.D., P.E., DEE, D.WRE, CIH, Senior Vice President  
Director of Water Resources and Environmental Engineering
- Asad Malik, Vice President of Federal Services
- Manuel J. Silva, P.E., Vice President  
Director of Construction Services
- Shawn Kelly, P.E., Associate Vice President
- Ramesh Ramanathan, Associate Vice President  
Program Director – Global Marketing & Safety

## Advisors:

- George J. Pierson
- Hon. Col USA (Ret.) Alphonso Maldon Jr.

# Construction Management Division



7

Project Managers

13

Resident Engineers

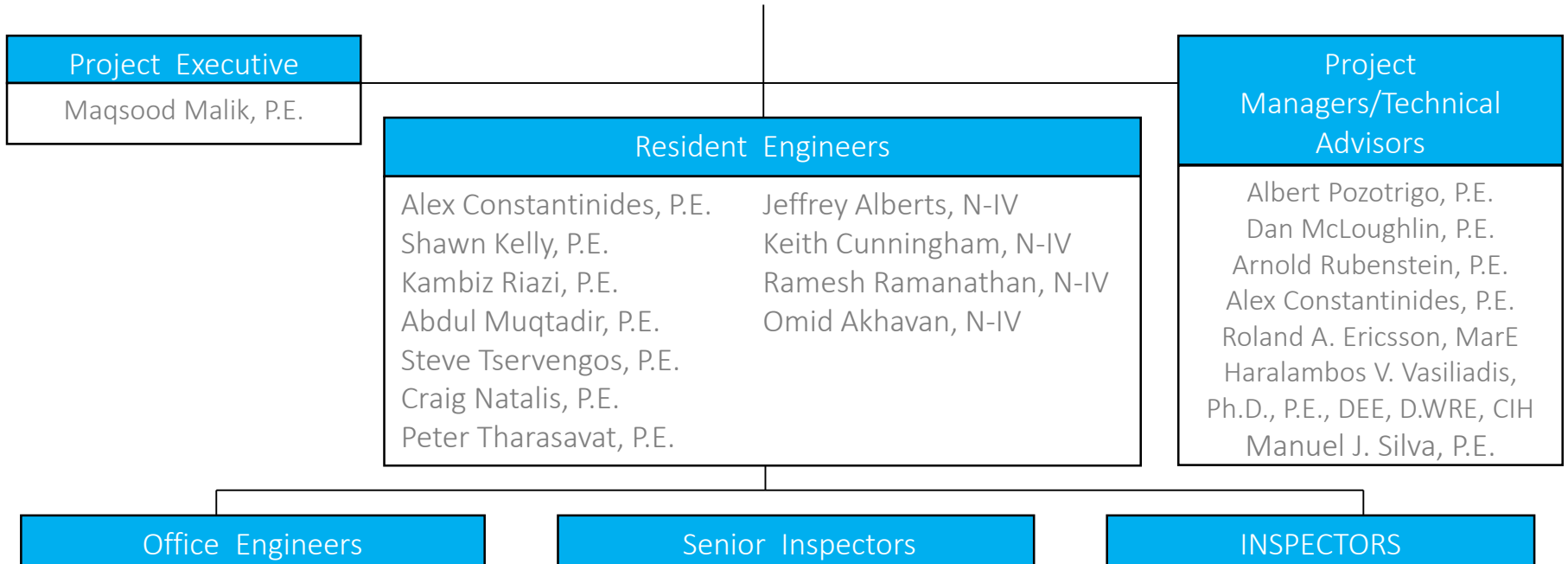
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Office Engineers

33

Inspectors  
(ASCE I – IV and  
NICET II – IV)

# CI/CM ORGANIZATION CHART



## Maqsood Malik, P.E., President

- Founder of M&J
- 25+ years of experience
- Highway/bridge, structural/civil engineering
- ITS construction
- In recent years, Mr. Malik has served as a Project Manager for many ITS and Civil projects and has developed managerial skills that are critical to managing the staff and achieving the objectives of the clients. Mr. Malik is a problem solver who has substantial skills as an arbitrator which helps improve the working relationship between the various parties that must work together to successfully achieve the mission results. He has the proven ability to hire and maintain the critical staff that is necessary to attain goals.



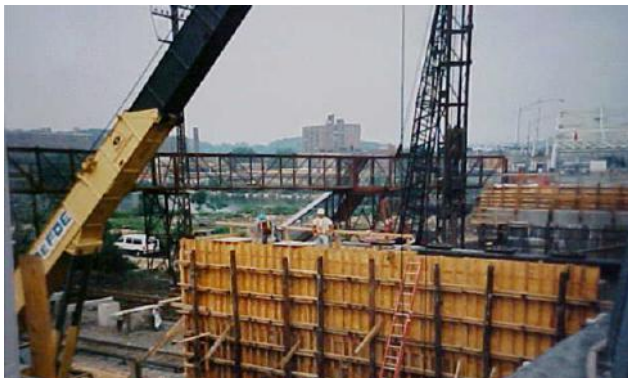
## Albert Pozotrigo, P.E., Resident Engineer

- 35+ Years of Experience
- BS, Civil Engineering, Rutgers University, 1978
- Professional Engineer in NY, PA, CT
- ASCE President of Met Section (2015)
- NYC College of Technology – Member of Advisory Committee



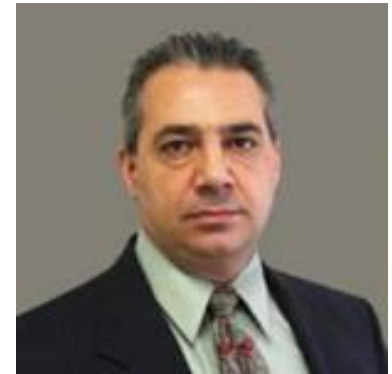
## Albert Pozotrigo, P.E., Relevant Projects

- NYSDOT, CI - Alexander Hamilton Bridge; \$420 Million, 2009 - 2014
- NYSDOT, CI - FDR Drive Reconstruction; \$147 Million, 2003 - 2007
- NYSDOT, CI - Route 9A (West Side Highway) Reconstruction, BBT to Chambers Street, \$90 Million, 1997-2001
- NYSDOT, CI - Route 9A (West Side Highway) WTC Reconstruction; Post 9/11/2001, \$30 Million, 2001-2003
- NYSDOT, CI - Resurfacing of 7 miles on the Major Deegan Expressway from the RFK Bridge to the Westchester County Line, NY; \$57 Million, 1994-1997
- NYSDOT, CI - Taconic State Parkway, Washburn Road to Route 100, Westchester County, \$21 Million, 1992-1994



## Alex Constantinides P.E., Resident Engineer

- 22+ Years of Experience
- MS, Civil Engineering, 2002
- BE, Civil Engineering, 1992
- Professional Engineer in New York
- NACE L-1, TCC, SAT, ACI, OSHA 10 Hours
- Primavera Expedition 7.0 For Contract Administration
- Primavera P3 / P6 for CPM Scheduling



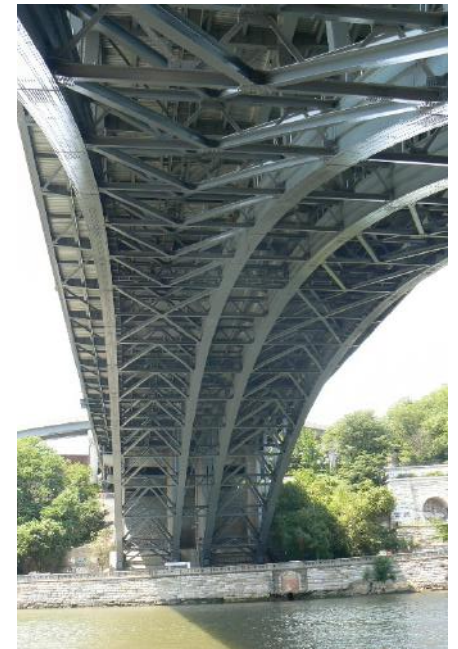
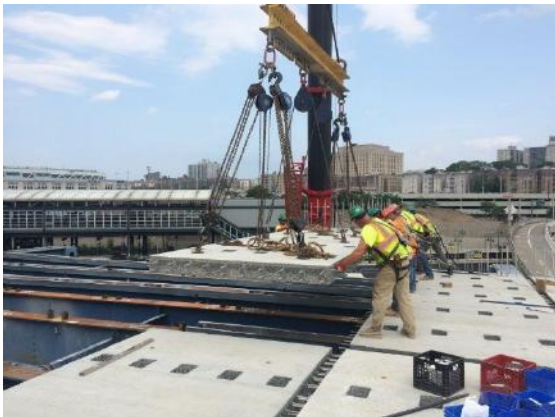
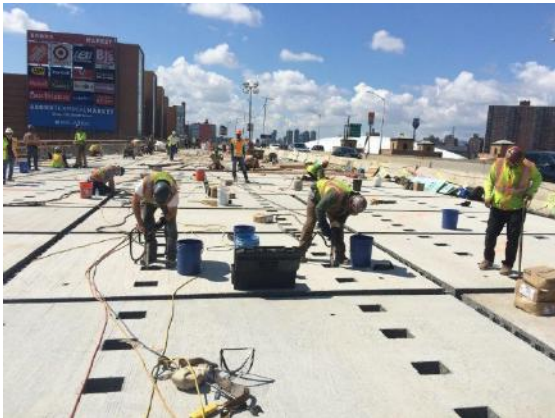
## Alex Constantinides P.E., Resident Engineer

- QMT , CI – Superstorm Sandy Restoration and Mitigation of the QMT, \$236 M, 2014 - Present
- NJTA, CI - Installation of Installation of VMS on the Turnpike and Parkway, \$27 M, 2012 – Present
- NJTA, CI - Guide Signs on NJTPK and GSP, \$27 M, 2012-present
- NYSDOT, CI - When and Where Maintenance of ITS Systems in the Bronx and Queens Counties, \$7 Million, 2009 – 2011
- MTA B&T, CI - Structural Hardening of the Bronx Whitestone Bridge, NYC \$39 Million, 2007 – 2009
- MTA B&T, CI - Exhaust Fan Replacement and Rehabilitation of the Tunnel Roadway Drainage System at Queens Midtown Tunnel, \$26 Million, 2002 – 2007
- MTA LIRR, CI - Structural Repairs at the Dutch Kills Draw Bridge (Railroad Swing Bridge), \$2.3 Million, 2001 – 2002



## Manuel J. Silva, P.E.

- 32+ Years of Experience:
- M.E., Civil Engineering, Manhattan College, 1987
- B.E., Civil Engineering, Manhattan College, 1984
- Professional Engineer in NY



## Manuel J. Silva, P.E. – Relevant Projects

- Served 2 ½+ Years (Nov. 2013 – June 2016) as Regional Construction Manager, NYSDOT R-11
  - 10 NYSDOT R-11 Construction Contracts, \$640 Million
  - 60 Locally-Sponsored (NYCDOT, NYCDDC, NYCEDC, NYCDPR, HRPT, Nassau County, Suffolk County, etc.) Federally Funded **Construction** Contracts and 16 Railroad Contracts in the NYC and LI Regions, \$3 Billion
  - Managed R-11 CPM Scheduling Group
- Served 14 Years (Nov. 1999 -Nov. 2013) as Area Construction Supervisor, NYSDOT R-11
  - 24 Construction Contracts including:
    - AHB and Highbridge Interchange Ramps, 2009- 2014, \$420 Million
    - Route 9A (West Side Highway), 1999 – 2002, 5 Contracts, \$400 Million
- Served 8 ½ Years (May 1991 – Nov. 1999) as Engineer-In Charge, 8 Contracts, NYSDOT R-8
- Served 6 ½ Years (Nov. 1984 – May 1991) as Chief Inspector/Inspector, 8 Contracts, NYSDOT R-8
- Served 5 Months (June 1984 – Nov. 1984) in Design, NYC Bureau of Water Supplies, NYCDEP



## Roland A. Ericsson, MarE

- Degree in Marine Engineering and Naval Architecture from the Swedish Royal Merchant Marine Academy, 20 years as an Officer in the Merchant Marine
- 23 years as a Consultant/Executive in the Greater NYC area
- Experience from environmental contracting in NY, NJ, PA
- Experience from local large projects such as East Side Access, Trans Hudson Express Tunnel, Harbor Siphon, Queensboro Bridge, etc.



## Select Current Projects

- PennDOT Rapid Bridge Repair Project, a \$1B P3 program
- MTA-NYCT, Sea Beach Line, 9-stations, \$230M reconstruction program
- MTA-LIRR, 5-year on-call agreement for Project Controls Services
- NYCDEP, CM/CI for mechanical upgrades at Wards Island WWTP
- NYCEDC, CI East River Esplanade/South Street Seaport reconstruction

## Raouf K. Girgis, PMP, International Associate Member, AIA



- Certified Project Management Professional, level II by the U.S. Department of Defense (DoD), U.S Army Corps of Engineers.
- Architectural Engineer who has spent 25 years of outstanding / exceptional performance service as a direct hire employee for the US Army Corps of Engineers, Middle East District, Winchester, VA as a Construction Project Manager.
- Responsible for the overall management, control, coordination and execution of major projects, including the planning, design, cost estimating, and scheduling, at various US military bases throughout Egypt and the Middle East
- Represented the owner of those projects (US Air Force Command / Egyptian Army) in construction management execution phase of those projects, supporting the military facilities for the Army, Navy and Air Forces to implement the Foreign Military Sales agreement between the U.S., Egyptian and Yemeni Governments

## Raouf K. Girgis, PMP, International Associate Member, AIA

### Membership of Professional Bodies, Education and Certificate

- U.S Department of Defense, U.S Army Corps of Engineers, "Certified Project Management Professional, level II"
- Project Management Institute, "Certified as Project Management Professional"
- Egyptian Engineers Syndicate, "Licensed as Consultant Construction Project Management Engineer"
- The American Institute for Architects, Intl. Assoc. AIA Member
- Egyptian Engineers Syndicate, "Licensed as Architectural Engineer", July 1977
- Faculty of Fine Arts, Architectural Division, Cairo, Egypt, Architectural Engineering Bachelor Degree, July 1976

### Professional Highlights

- Project Management
- Program Coordination
- Construction Management
- Contract Administration
- Project Control
- Technical Support

## Raouf K. Girgis, PMP, International Associate Member, AIA

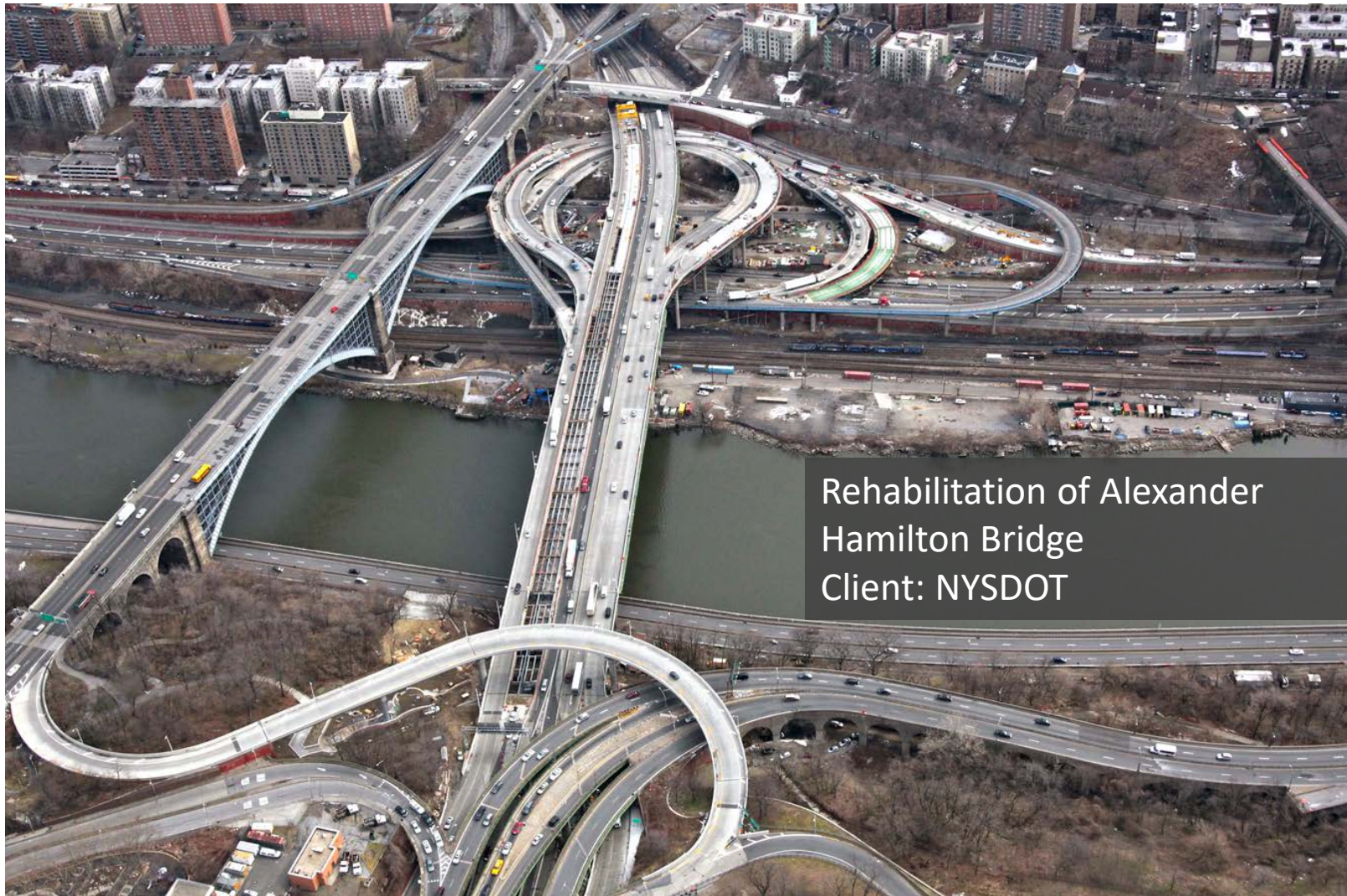
### Training and Certificates

- CQM for Contractors (USACE)
- 30-hour OSHA Certificate
- A-E Contracting, USACE Prospect Training Center, 2011
- Construction Contract Administration, USACE Prospect Training Center, 2010
- Defense Acquisition University
- Contracting Officer Representative with a Mission Focus
- Ethics Training for Acquisition Technology and Logistics
- Contract Source Selection
- Contract Negotiation Techniques
- Earned Value and Financial Management Reports
- Cost Estimating
- Meeting Management
- 2007 U.S Army Corps of Engineers, Leadership Development, Winchester, VA
- Program Tier II (One year Leadership program), Winchester, VA
- Design Build Construction, Jan 2008, Winchester, VA
- Leadership Developing Managerial Skills
- Communication and Team Building
- Project Scheduling (NAS)- Prospect Course - USACE, Huntsville, AL
- USACE, Resident Management System, San Diego, CA
  - Scheduling Techniques With An Application on Primavera
  - Bentley MicroStation Certificate

## Raouf K. Girgis, PMP, Intl. Assoc. AIA

- Fields of Construction Experience:
- Project management and Construction of new and or upgrades of F-16 Air Force base in several Egyptian Air Force bases for Egypt Area Office and Technical support / Contract Administration for Golf Region Area Office.
- The project size ranges between \$21 million - \$280 million. Those projects consists of architectural/civil, mechanical, and electrical construction , runways and taxiways, aircraft parking aprons, hardened aircraft shelters, unit training facility (F-16 Simulator), maintenance facilities, dining facilities. multi-unit housing and administration facilities with associated landscaping and paving, electrical power plant/generation and distribution systems, water and sewage treatment plants and distribution systems, major heating and air-conditioning systems, control tower, electronic control and communications systems, and numerous other facilities.
- The Yemen \$3 million project consists of Design and Construct of Pier, Khour Omeryah, Aden

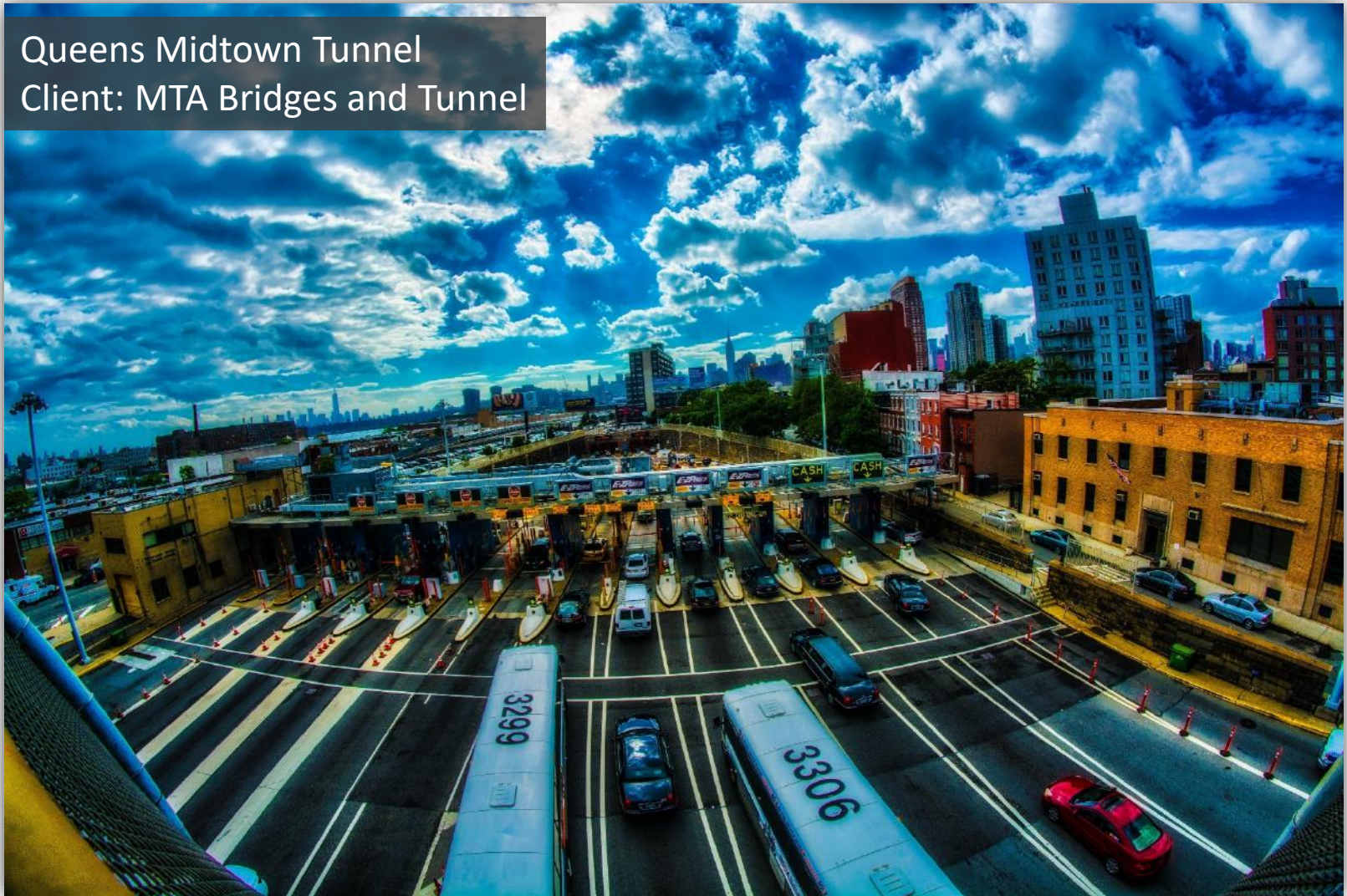
# Construction Inspection Services



Rehabilitation of Alexander  
Hamilton Bridge  
Client: NYSDOT

# Construction Inspection Services

Queens Midtown Tunnel  
Client: MTA Bridges and Tunnel



# Construction Inspection Services

Rapid Bridge Replacement  
Client: PennDOT



# Technology Division

- Cyber Security
- Information Assurance
- Network Mitigation
- Tech Support
- SDLC
- Security Threats Mitigation
- Access Controls
- Firewall Configuration
- Malware Detection
- Intrusion Detection Systems
- Security Policies
- Pen Test/Vulnerabilities Scan
- Disaster Recovery
- VPN Configuration/Remote Access
- Security/CCTV/High Secure Radio
- Software Development/Integration



## Arnold D. Rubenstein, P.E., Group Leader

- 30+ Years of Experience
- BS, Civil Engineering, Cooper Union, 1977
- MBA, Computer Methodology, Baruch College, 1983
- Professional Engineer, NJ, NY, CT, PA and FL
- Expertise in Planning, Design, Construction Support, Operations & Maintenance of ITS and Security Projects
- Expertise in Traffic Engineering, Controllers, Systems, Timing, Highway Lighting
- Expertise in Software Development & Communications
- Former MTA B&T Project Manager



## Arnold D. Rubenstein, P.E. – Relevant Projects

- NYSDOT Major Deegan/Mosholu ITS Design
- NYSDOT/NYSP Troop G Traffic Management Center Design - Ongoing
- NYSDOT Region 11 TAMS + Fiber-Optic Reverse Engineering Study
- NYSDOT Region 11 Project Manager for Western Queens Corridor ITS
- NYSDOT Kosciuszko Bridge Design/Build
- TBTA ATM IDEAS Agency-Wide ITS System Deployment PM
- MTA Police Department Public Service Radio System Upgrade
- NJDOT ITS, RT 1 Adaptive Traffic Signals
- NJDOT ITS Maintenance 2013 + Route 1 Adaptive Resident Engineer
- NJDOT Route 78 Over Route 1 Lighting Design
- New Rochelle Traffic Signal System Communications & CCTV Design
- NCDPW Traffic Engineering On-Call – Accessible Pedestrian Signal Study Including Deployment Standards and Evaluation Tool
- Stamford Urban Transitway Intelligent Transportation System + Traffic Signal System Software

# MTAPD Land Mobile Radio Project

## Skills:

- Networking
- Site Design
- Electronics
- Communications
- Structural Design



# NYSDOT Troop G Traffic Management Center



## Skills:

- ATMS Software
- Gig-E Ethernet/ Fiber-
- Optic Design/Testing
- LAN/WAN Configuration
- Video Networks
- Interagency
- Rack Layouts/ Server
- Design/ Configuration
- PS+E/RFP Development
- NTCIP
- Video Wall
- System Engineering
- Planning/Conceptual
- Design

# Engineering Design Division

Facilities

Transportation Group

# Engineering Design Team

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3

Project Managers

4

Electrical Engineers

2

Traffic Engineers

2

Civil Engineers

2

Structural Engineers

2

CADD

2

Mechanical Engineers

# Facilities



Structural Engineering



Seismic Isolation



Progressive Collapse



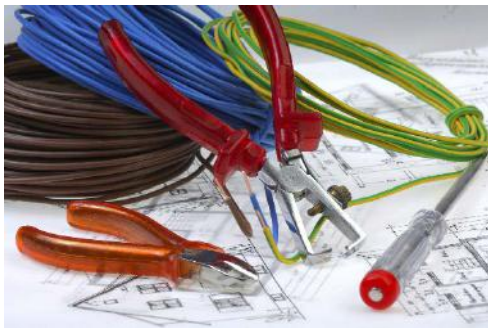
Performance of Structures Under Extreme Loading



Passive Energy Dissipation Systems



Telecommunications



Electrical



Mechanical



Plumbing

## Troy Morgan, Ph.D., P.E.

- 15 Years of Experience in Consulting and Academia
- Ph.D. and M.Eng., Civil & Environmental Engineering, University of California, Berkeley. Post-doctoral appt. at Pacific Earthquake Engineering Research Center
- Licensed Professional Engineer in CA, NY, NJ, CT, and GA
- Currently Adjunct Professor at NYU Tandon School of Engineering. Formerly Assistant Professor at the Center for Urban Earthquake Engineering at the Tokyo Institute of Technology



## Troy Morgan, Ph.D., P.E.

- Published over 30 articles in the area of structural analysis and response under extreme loadings such as earthquake, hurricanes, impact, and blast.
- Served as a technical consultant on projects for Nuclear Regulatory Comm., Dept. of Energy, Dept. of Defense, General Services Administration and Overseas Building Operations.
- Specialist in analysis and design of critical facilities for high confidence of operability given occurrence of extreme loading event.
- Past projects include federal office buildings, embassies, nuclear power facilities, military complexes, national laboratories, hospitals, and pipelines

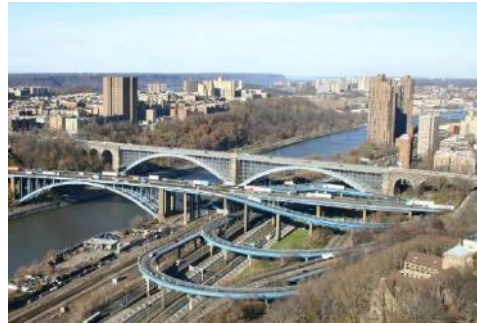
## Troy Morgan, Ph.D., P.E. – Projects

- Impact Analysis for Nuclear Facilities
- Nuclear Power Generation Facility
- DOE Energy Laboratory
- Advanced Seismic Assessment
- Small Modular Reactors
- Stem Cell Research Center

# Transportation Group



Highway



Bridge



Rail and Transit



Tunneling

# Stamford Urban Transitway ITS



## Skills:

Concept Planning

Design/Plans

RFP Development

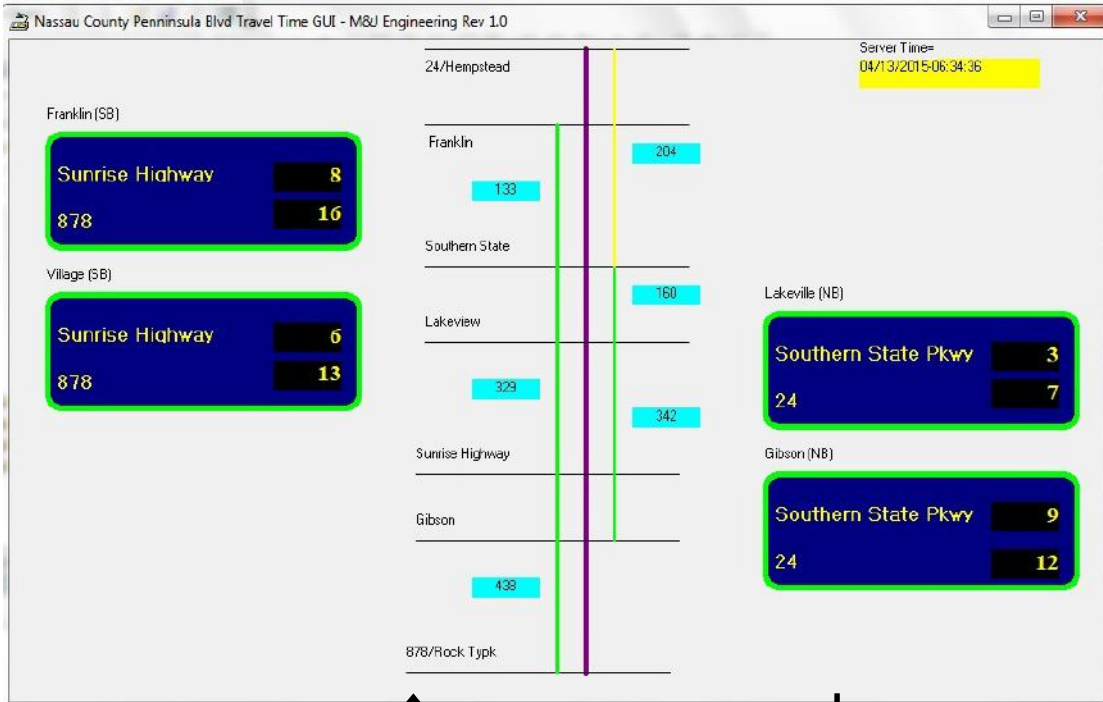
Software

Integration/Testing

Communications

Electronic Signage/Kiosk

# Nassau County Peninsula Travel Time Server



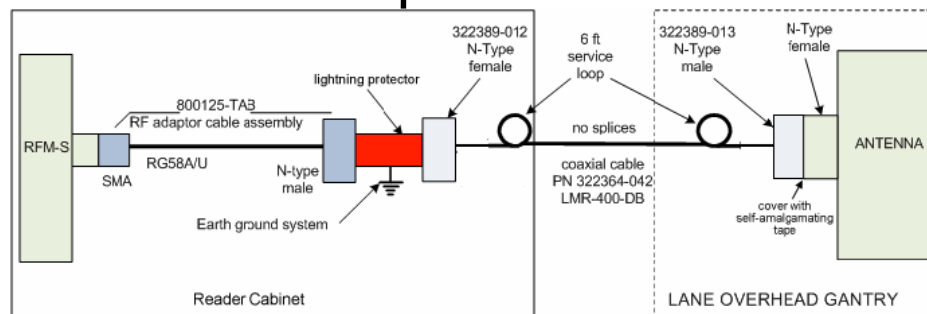
## Skills:

Real-Time Software

Networking

Integration

Server/Workstation



# City of Stamford STDWIN Traffic System



## Skills:

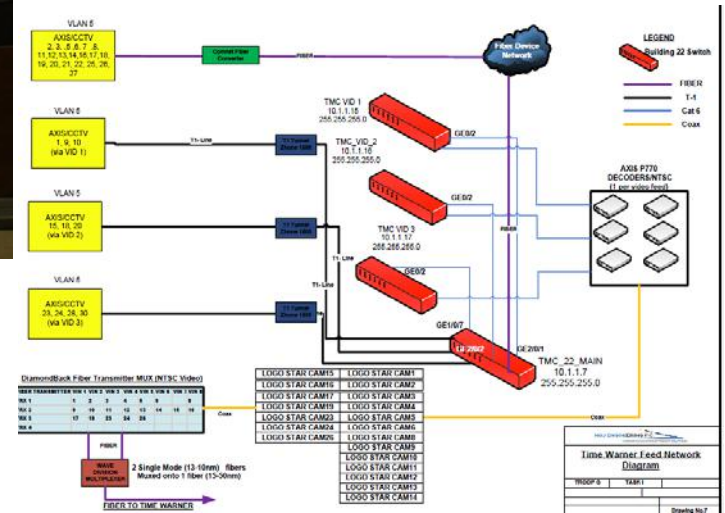
- Real-Time Software
- Networking
- Integration
- Server/Workstation

# NYSDOT TMC Design & As-Builts

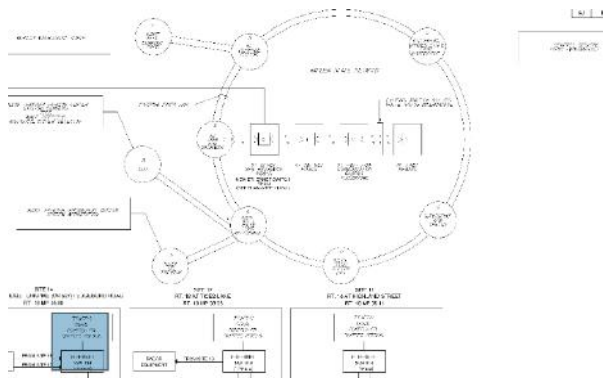


## Skills:

- Conceptual Design
- Concept of Operations
- Networking
- As-Builts for Central and Field
- Data Center Design
- Electronics



# NJDOT Route 18 Adaptive Traffic Design



## Skills:

- Design Plans
- Fiber-Optic Transmission
- Networking
- Communication Architecture

# Water Resources and Environmental Engineering Division



Water Resources  
Engineering



Engineering  
Resiliency



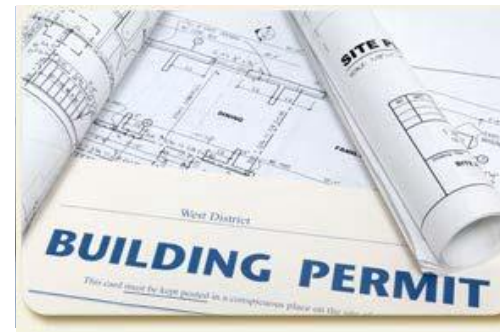
Environmental  
Engineering



Environmental  
Sustainability



Engineering  
Management



Compliance &  
Permitting



Industrial Hygiene &  
Field Services

## H. (Bob) V. Vasiliadis, Ph.D., P.E., DEE, D.WRE, CIH

- 28+ Years of Experience in Consulting, Teaching and Research
- Ph.D. and M.Sc., Civil & Environmental Engineering, New York University (NYU) Tandon School of Engineering (then Polytechnic University), 1991
- Professional Engineer (1994) and Certified Industrial Hygienist
- Diplomate Member of the Academies of Environmental Engineers (DEE), Water Resources Engineers (D.WDRE), Academy of Industrial Hygiene, American Industrial Hygiene Association, and Member of ASCE, ABIH, ACGIH, etc.
- OSHA Safety, HAZWOPER and Confined Spaces certified
- SSPC-C3/5 (competent person for deleading) certified
- NYU Tandon School of Engineering: Research Professor and Adjunct (full) Professor since 1987
- City College of the City of New York: Adjunct (full) Professor and Research Associate since 1993



## H. (Bob) V. Vasiliadis – Relevant Projects

Served as Technical Advisor, Project Manager, Senior Environmental Engineer, or Senior Environmental Compliance Professional on the following projects:

- NYCDOT Brooklyn Bridge (BRC270C/P), \$650M, 2010-2015; Williamsburg Bridge (BRC253BBA+253C+253CC), >\$1B, 1998-2010; Manhattan Bridge (BRC156A+156C+253BBA), 2004-2013; Reconstruction of Seven Bridges on the Shore (Belt) Parkway; City Island Bridge, Five Bridges over BQE/GCP, Roosevelt Island Bridge, etc.
- NYSDOT Alexander Hamilton Bridge, \$420 Million, 2009; NYSDOT Brooklyn-Queens Expressway (D259766), 2005-2009
- GSA Brooklyn General Post Office and Federal Court House, 2005-2006
- SUNY Fashion Institute of Technology, 2007-2015
- NYCDEP, Pennsylvania Ave., Fountain Ave. Landfills and Alley Creek
- Various TBTA projects, such as: RFK (aka Triboro) Bridge (TB-64A and TB-64B), Whitestone Bridge, Throgs Neck Bridge
- Various NYCT projects in all 5 boroughs of NYC as Senior Technical Advisor and Industrial Hygienist

# Water Resources Engineering and Resiliency

- Water resources systems design, analysis, management and optimization
- Surface and groundwater hydrology and floodplain analysis
- Hydraulic engineering and hydraulic structures
- Wetlands and erosion control studies
- Coastal and inland (riverine) flood impact analysis and mitigation
- Extreme events risk analysis and assessment
- Planning of flood control structures
- Reservoir Management based on optimal operating policies with consideration to the environmental and ecology



# Environmental Engineering and Sustainability

- Ambient and indoor air quality monitoring and control
- Environmental, community and occupational noise monitoring, exposure assessment and control
- Potable water and wastewater treatment and pollution control
- Surface water, stormwater and groundwater sampling, analysis and contamination remediation
- Surface/subsurface soil investigation
- Hazardous, universal, municipal, medical/infectious waste management
- Toxic and hazardous materials management
- Environmental audits and site assessments
- Environmental Impact Statements
- Risk/Reliability Analysis and Life Cycle Analysis

## Engineering Management, Compliance & Permitting

## Industrial Hygiene & Field Services





Noise Monitoring  
Macombs Dam Bridge  
Client: CCA Civil



Microbial Assessment  
One State Street Plaza  
Client: GEI Consultant

Q/A

THANK YOU