AECOM Imagine it. Delivered.

#2020-014

Architecture and Engineering Services for the

CHESTNUT STREET MULTIMODAL STATION

& SHARED SERVICES FACILITY
& CITY OF OXFORD PASSENGER RAIL PLATFORM

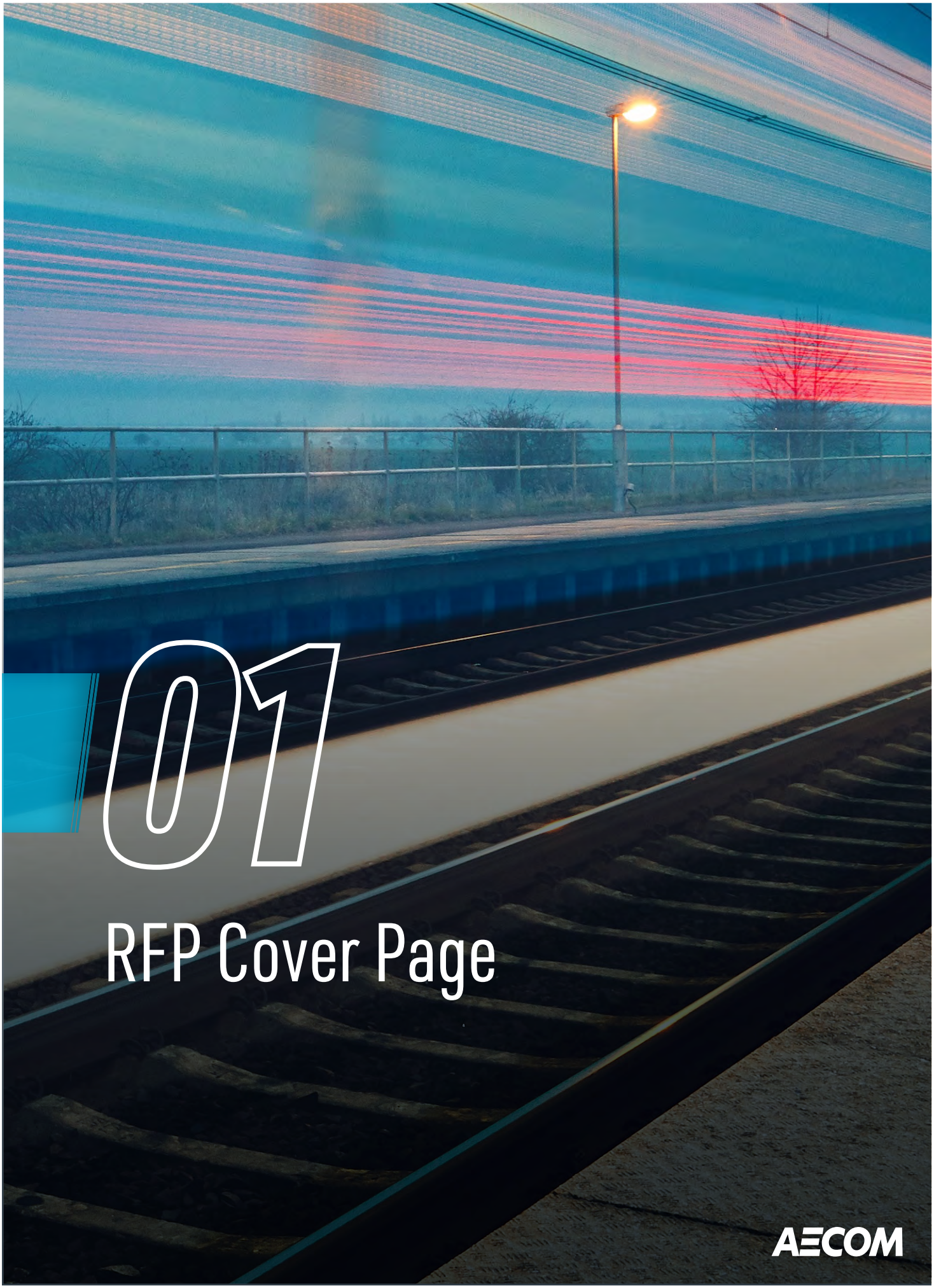


TECHNICAL PROPOSAL

October 19, 2020

Submitted to:
Buttler County Regional Transit Authority
3045 Moser Court,
Hamilton, OH 45011

Submitted by:
AECOM Services of Ohio, Inc.
525 Vine Street,
Suite 1800
Cincinnati, OH 45202



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RFP Cover Page

AECOM

AECOM
525 Vine Street
Suite 1800
Cincinnati, OH 45202
www.aecom.com

513.651.3440 tel
877.660.7727 fax

October 19, 2020

Procurement Department
Butler County RTA
3045 Moser Court
Hamilton, OH 45011

RE: #2020-014 Architecture and Engineering Services for the Chestnut Street Multimodal Station and Shared Services Facility and City of Oxford Passenger Rail Platform

Dear Selection Committee,

Creating the Chestnut Street Facility and Passenger Rail Platform is a once in a lifetime opportunity for Butler County, the City of Oxford, and all of your community stakeholders to realize a best-in-class gateway to your community. The importance of getting this project right is paramount and we are grateful for the opportunity to submit AECOM's qualifications to you. As the premier transportation firm in the nation, ranked #1 in Transportation in Engineering News-Record's 2020 "Top 500 Design Firms", we know that we have above and beyond what it takes to bring your vision to life.

BCRTA wishes to create a welcoming multimodal transit facility connecting BCRTA routes serving Oxford and the University with interurban buses, passenger rail, and bicyclist and commuter students to help your riders get where they need to go in their daily lives. BCRTA's mission is to support Butler County's quality of life and economic development through public transportation solutions and we understand the critical importance of this facility establishing an identity for the City of Oxford and Miami University as a progressive transit-oriented community. The shared services facility will support the BCRTA, Talawanda School District and the University to maintain their vehicle fleets in a centralized state of the art facility increasing operational efficiency and reducing costs.

The Chestnut Street Facility and the Amtrak platform is more than purely a transportation investment. This facility can be leveraged to catalyze economic development and placemaking, enhance quality of life, and improve economic, social, and environmental sustainability. With Miami University, small businesses, cultural attractions, the historically significant downtown, and Oxford residents in mind, this facility can be utilized to maximize benefits to each of these constituencies.

The AECOM team has been coordinating with the City, and more recently the BCRTA, to assist with expertise, strategies, and tools to advance the implementation of BCRTA's vision. The Chestnut Fields shared services facility is the largest capital construction project the BCRTA has undertaken and we know you will need a reliable and capable partner to provide assistance from the conceptual design through construction and commissioning.

WHY AECOM?

National Expertise, Ohio Presence. We provide planning, design and construction services under the auspice of the FTA and FRA project development process to transit agencies, municipalities and governmental clients throughout Ohio and the nation. Our legacy firms have served the greater Cincinnati community since 1947 including work for the City of Oxford and Butler County. Our team will be led by **Steve Robinson, AIA** and an experienced team of Ohio and Indiana-based subject matter experts and designers, some of whom you are already familiar with. We will deliver a transit and passenger rail facility incorporating the leading edge of sustainability and technology in similar facilities nationally with a multidisciplinary team located less than two hours from Oxford.

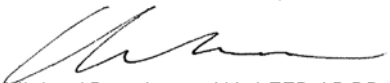
Fully Integrated Services. AECOM offers BCRTA something no other firm can under one roof: peerless transit and railroad design expertise fully integrated with a multi-disciplinary, award-winning architecture, transportation planning, landscape architecture, engineering, environmental services and sustainability design services. This diversity of experience enables the AECOM team to approach BCRTA's goals through a unique lens that will lead to superior, innovative outcomes.

Innovative Approach. As a global firm driven by innovation, our reach and experience is one of the primary reasons our clients seek us out as their partners. To innovate, it is important to look at all opportunities with a beginner's mind. Our size and global reach are only an asset if it is matched with a project team that knows the community, the stakeholders and the opportunities and challenges of the site. Our project manager Steve Robinson along with our key leaders described in our proposal are that team.

We look forward to the opportunity to discuss our proposal with you in detail and to help you achieve your vision of the Chestnut Street Multimodal Station and Shared Services Facility and City of Oxford Passenger Rail Platform project. Please feel free to contact me directly at (614) 975-0767 or at michael.bongiorno@aecom.com.

Sincerely,

AECOM Services of Ohio, Inc.



Michael Bongiorno, AIA, LEED AP BD+C
Vice President, Managing Principal - Design Director
T: (614) 975-0767
E: michael.bongiorno@aecom.com

AS A RESPONSIBLE PROPOSER, AECOM:

✓	Has adequate financial resources, as required during performance of the Contract.
✓	Is able to comply with the required or proposed delivery or performance schedule, taking into consideration all existing business commitments.
✓	Has a satisfactory record of past performance.
✓	Has necessary technical capability to perform.
✓	Certifies that we are not on the U.S. Comptroller General's list of ineligible proposers.
N/A	Is qualified as a manufacturer or regular provider of the equipment being offered.
✓	Is otherwise qualified and eligible to receive an award under applicable laws and regulations.

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Evaluation Criteria

To assist the review and evaluate AECOM's technical response, we've provided the following roadmap of our response in relation to the evaluation criteria for this project.

EVALUATION CRITERIA		**AECOM** ADVANTAGE
	General Experience: Prior experience with projects of similar scale and complexity, specifically planning rail platforms, multimodal stations, and bus maintenance facilities that were successfully implemented and the reliability of past cost estimations. Demonstrated competence with NEPA and other federal requirements. Satisfactory evidence and references provided with proposal. (20%)	AECOM combines our leading national practice in transit design with a strong, local, experienced transit design team to bring you world-class experience and hands-on local support.
	Current Trends: Understanding of current trends in passenger rail development, multimodal stations, public transit bus maintenance infrastructure, and transit-oriented development. (20%) – Architecture (10%) – Engineering (5%) – Environmental (NEPA, LEED, Carbon Emission Impact) (5%)	We list some of trends we know from our work in the field including recent trends arising out of the pandemic that will effect transit design for years to come.
	Performance History: For the last five years with respect to: (a) termination for default, (b) litigation by or against the Proposer and/or its consultants, and (c) judgments entered for or against Proposer and/or its consultants. (15%)	AECOM Services of Ohio, Inc. strives to avoid litigation and has a risk management program in place that includes early recognition of situations that might give rise to a claim, open lines of communication and proactive dispute resolution.
	Key Personnel & Professional Diversity: Professional qualifications and experience of individuals assigned to the Project. A project team with a diverse skill set, including professions and/or experience in Landscape Architecture, Civil Engineering, Structural Engineering and Real Estate Valuation. (15%)	Our highly experienced AECOM team combines with partners from disadvantaged and other businesses to bring you the multi-disciplined team that will make this project successful.
	Beyond the Minimum: Commitment to developing a rail platform, multimodal stations, and bus maintenance facility that provides functional transportation, is aesthetically pleasing, and accessible to a broad user base of different ages and abilities. At least 50% of work completed by prime. Quality engagement and cooperation with available DBE's and EDGE. (10%)	Our project experience highlights the commitment we make to designing exciting projects that contribute to their communities while meeting project goals.
	Jurisdictions: Experience with complex permitting procedures of overlapping jurisdictions such as City, County, State, Amtrak, CSX, Federal Railroad Administration, and Federal Transit Administration. Demonstrated experience in relationships of similar scope. (8%)	Members of our local team have worked in Butler County before, have worked within the context of FTA and FRA requirements, and know how to negotiate the regulatory landscape that will impact these projects.
	Communication: Use of innovative processes that creatively engage key personnel and agency staff, and other stakeholders throughout the project. (7%)	Our plan specifically notes the importance of communication for a multi-stakeholder project like this one and shows our layered approach to keeping all informed.
	On Time: History of effective schedule and budget management for projects of similar scale and complexity (5%)	AECOM uses its deep bench of resources when needed to meet project schedules and budgets. This is discussed further in our project approach.

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Request for Proposals (RFP) Cover Page

Issue Date: September 1, 2020

Title: **#2020-014 Architecture and Engineering Services for the Chestnut Street Multimodal Station & Shared Services Facility & City of Oxford Passenger Rail Platform**

Issuing & Using Agency:

Multimodal Station & Shared Service Facility:	Passenger Rail Platform:
Butler County Regional Transit Authority Attn: Procurement 3045 Moser Court Hamilton, OH 45011	City of Oxford Attn: Michael Dreisbach 15 S. College Ave. Oxford, OH 45056

Proposals for Furnishing the Product(s)/Service(s) Described Herein Will Be Received Until:
October 19, 2020 3:00 PM (EST)

All Inquiries for Information should be directed to address listed above or purchasing@butlercountyrta.com

IF PROPOSALS ARE MAILED OR HAND DELIVERED,
SEND DIRECTLY TO:
BCRTA Procurement, 3045 Moser Court., Hamilton, OH 45011
The Reference Number, Date and Time of proposal submission deadline, as reflected above, must clearly appear on the face of the returned proposal package.

In Compliance With This Request for Proposals And To All Terms, Conditions, and Requirements Imposed Therein and Hereby Incorporated By Reference, The Undersigned Offers And Agrees To Furnish The Goods/Services Described Herein In Accordance With The Attached Signed Proposal Or As Mutually Agreed Upon By Subsequent Negotiation.

Name and Address of Firm:
AECOM Services of Ohio, Inc.
525 Vine Street, Suite 1800
Cincinnati, OH Zip Code: 45202
Telephone: (513) 651-3440
Fax Number: (877) 660-7727
Date: 10/16/20

By: _____ (Signature in Ink)
Name: Michael Bongiorno
Title: Vice President (Please Print)
FEI/FIN Number: 34-1779653
E-Mail Address:
michael.bongiorno@aecom.com

DISADVANTAGED BUSINESS ENTERPRISE (DBE): ( ) YES (X) NO

#2020-014 Architecture and Engineering Services for the Chestnut Street Multimodal Shared Services Facility & City of Oxford Passenger Rail Platform

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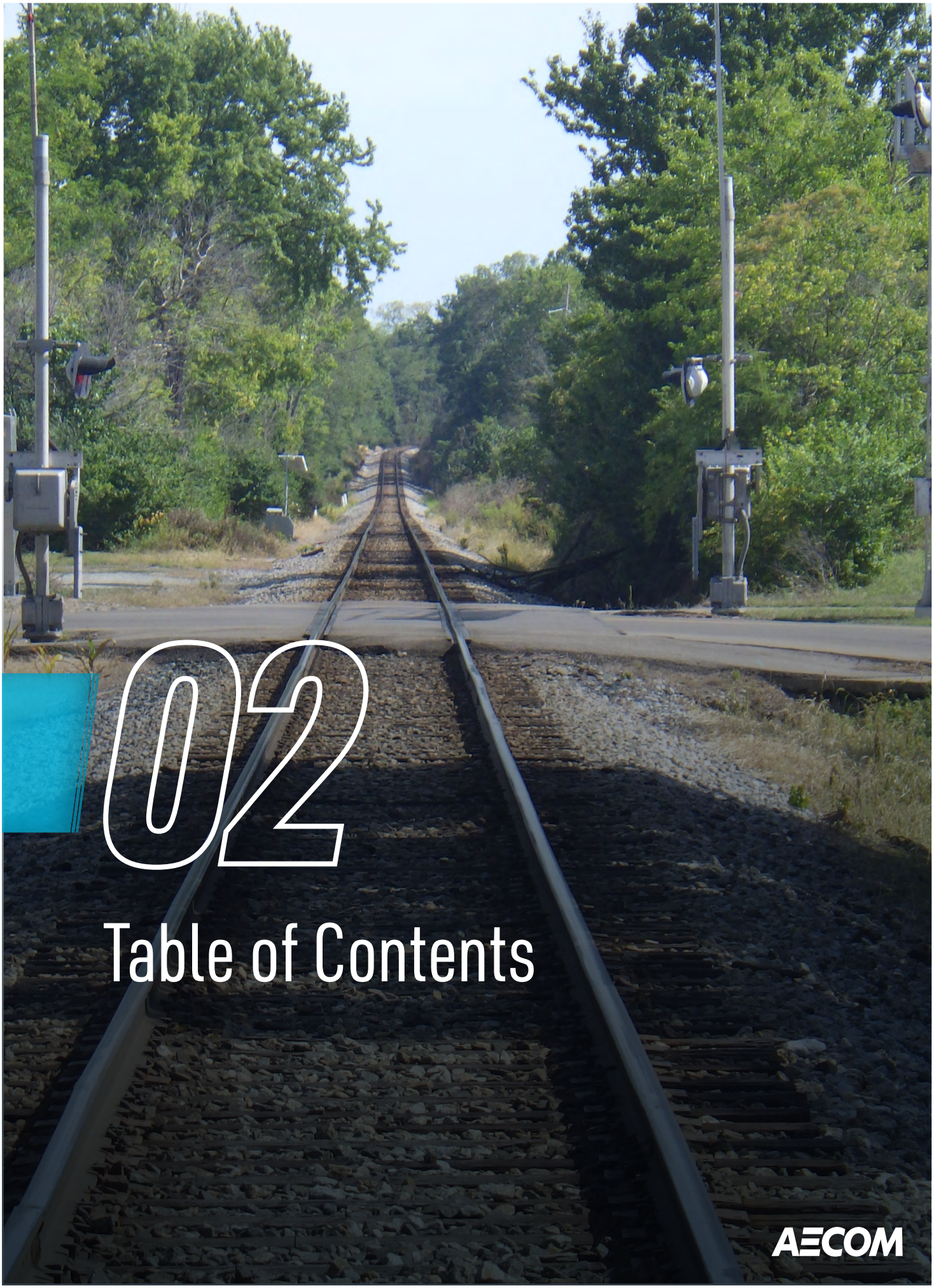

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AECOM

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TECHNICAL PROPOSAL

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Qualifications & Capabilities of the Company

AECOM

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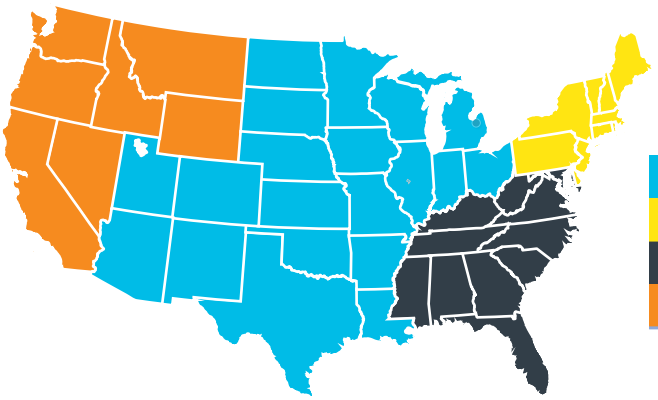
Qualifications and Capabilities of Company

AECOM is ranked #1 in Transportation in Engineering News-Record's 2020 "Top 500 Design Firms".

AECOM Ohio's services dates to the 1940s. Working with Transit Authorities and public clients statewide, we have successfully delivered projects for over 70+ years. AECOM is a fully integrated urban design, transportation, architecture and engineering firm with nearly 800 employees in offices throughout Ohio and Indiana. Our team has delivered transportation and infrastructure projects for numerous clients across the country with close to 900 active contracts with US transit agencies with a total value of $1.56 billion, signaling the industry's trust in AECOM to plan, design and deliver transit systems and solutions.

The work associated with the Chestnut Street Multimodal Station & Shared Services Facility and the City of Oxford Passenger Rail Platform project will be led by technical specialists located in Columbus, OH, Cincinnati, OH, and Indianapolis, IN. Additional AECOM offices in Cleveland, Akron and Toledo will provide support to our staff with a full range of the firm's urban design and transportation services. In addition, we can draw upon the total national resources of our subject matter experts when necessary.

AECOM TRANSIT PROJECTS



Region	#of Projects	Total Professional Services Fees
Central	122	$165,520,831
Northeast	382	$712,435,656
Southeast	211	$195,401,528
West	197	$485,965,038
Grand Total	**912**	**$1,559,323,053**

The four key leaders we bring to this project work in tandem, each bringing important skills and strengths to this project. This leadership team represents the best talent and capabilities AECOM has to offer to BCRTA and the City of Oxford – deep transportation subject matter expertise, award-winning design skills, superior communication skills and advanced project management skills. It is a team whose whole is truly greater than the sum of its individual parts. We can say, without hesitation, that you are getting our best.

»STEVE ROBINSON, AIA

Project Manager & Transit Center Architect/Multimodal Station and Shared Services Facility Lead

Steve was chosen as Project Manager because of his recent experience with both bus and rail transit projects, having led the teams on the award-winning IndyGo Transit Center and the station designs for the Northern Indiana Commuter Transportation District Double Track rail project. Steve has recent experience leading teams for FTA funded multimodal bus and rail transit projects with broad stakeholder groups, knows industry trends and regulations and is skilled at bringing together multiple stakeholder groups to collaborate toward successful projects. Steve, along with our shared team resources, will provide synergy in the design and function between both the BCRTA Shared Services facility and Amtrak Platform projects.

»DAVE WORMALD, PE, AICP
Amtrak Platform Lead

Dave will lead the planning and design of the Amtrak platform and related site work in conjunction with AECOM national Amtrak design practice leaders for the City of Oxford. As an experienced Civil Engineer and planner based in Cincinnati, he has played a key role or managed several major projects in Cincinnati evaluating passenger rail improvements including preliminary engineering for a dedicated station track to accommodate level boarding for the Amtrak Station at Cincinnati's historic Union Terminal. He has an established working relationship with CSX regional engineering staff and familiar with both Amtrak and CSX design standards. Dave has assisted the City's Economic Development department with preliminary scoping the for the implementation of the platform.

»DANIELLE MALUDY, AIA, NCARB
Deputy Project Manager

Danielle is AECOM Columbus' top project manager. In her capacity as Deputy Project Manager for this project, she will support Steve Robinson by coordinating the work of AECOM's internal team in order to allow Steve to focus on client leadership and technical subject matter leadership. The unique assets Danielle brings to BCRTA include superior communication skills, rapid responsiveness, decisiveness, and intricate work plan organization to ensure project schedule and budget alignment. She has been entrusted by Michael to lead all of his highest-profile projects. She intuitively understands people and has high capacity to manage change, which is critical when working public projects with a high level of community impact.

»MICHAEL BONGIORNO, AIA, LEED AP BD+C
Principal-in-Charge

Michael is recognized throughout Ohio for his award-winning thought leadership in design and community engagement. Michael will serve as Principal-in-Charge and Design Principal. In that capacity he will ensure two things: That his team has everything it needs to deliver the BCRTA and City of Oxford a best-in-class multi-modal transit center, and that the design of this facility will capture the imaginations of all stakeholders associated with this development. Michael's clients entrust him to lead their most complex, high-profile projects, including COTA's E-W High Capacity Transit Corridor project. He has earned this trust by continually leading teams to deliver a design process and facilities that ensure excellent outcomes, and we are fortunate that he has committed his considerable design leadership talents to BCRTA.

Resumes of Key Personnel

A

Names, titles, and resumes of key personnel proposed for the duration of the project.

»STEVE ROBINSON, AIA

Project Manager & Transit Center Architect/Multimodal Station and Shared Services Facility Lead

FIRM
AECOM

EDUCATION
BArch, University of Cincinnati, 1980

YEARS EXPERIENCE
35

REGISTRATIONS/ CERTIFICATIONS
Registered Architect, IN #AR00034189

PROFESSIONAL AFFILIATIONS
American Institute of Architects

Steve's recent experience leading architectural teams on FTA funded bus and rail projects will bring insights and technical knowledge of these special building types to our work for BCRTA.

Relevant experience

Steve is a senior architect and leads the Buildings + Places practice in AECOM's Indianapolis office. He has over 35 years of architectural experience in a broad range of building types and recent work experience with bus and rail transit centers and stations. Steve focuses on understanding client goals and leading teams to meet those goals. He has worked in a variety of roles, including project manager, lead designer, and project principal.

Project experience

IndyGo Transit Center, Indianapolis Public Transportation Corporation, Indianapolis, IN. Project principal for the first transit center for IndyGo, a state-of-the-art facility in the heart of downtown Indianapolis that achieved LEED Gold certification and won design awards. The building serves as a gateway to the city and has helped to promote the growth of public transportation in Indianapolis. Although the Indianapolis Transit Center is separate from the bus garage and maintenance facility, the IndyGo maintenance facility was used extensively by the AECOM transit center design team for mocking up designs of bus turning radii and traffic flows. Many of the same components apply, including the importance of accessibility, safe pedestrian and vehicular traffic interface, integration of real-time passenger signage, the need for durable and maintainable materials, and a welcoming image that promotes the dignity of bus ridership. Public input sessions and careful coordination with local government and private sector stakeholders led to positive support in the community and a "Monumental" award from the Indianapolis Chamber of Commerce for Architectural Design Excellence.

Northern Indiana Commuter Transportation District (NICTD), Double Track, Northwest Indiana. Design principal leading the client interface and architectural design team for all buildings associated with this major rail project. The work included new stations and a parking structure and working closely with the FTA and local governing authorities to achieve required approvals and complete designs that enhance the communities. These stations are designed for commuter rail passengers who arrive by car or bicycle, may park their vehicles for the day or be dropped off, and await their train into the City of Chicago from the small towns in northern Indiana where they live. The stations are small

STEVE ROBINSON, AIA

but designed to accommodate future growth in passenger numbers. Steve led the design team that fit these different stations into their communities, including one in an historic district that needed to comply with district guidelines. The primary client praised Steve for his responsiveness and calm approach to working through the challenges of the many local voices.

Northern Indiana Commuter Transportation District (NICTD), Train Station Safety Infrastructure Improvements, East Chicago, IN. Project principal providing architectural design and management services to support train station safety infrastructure improvements at an existing station. Safety improvements were not only within the station but also included the pathway from the parking lot to the station. Rail safety is critical to this project as it will be to the BCRTA project. Steve provided the quality checks to both drawings and specifications for this small but detail intense project.

Greenwood Schools Bus Garage and Maintenance Facility, Greenwood, IN. Project Principal for this bus garage that accommodated about 35 buses indoors or outdoors with three maintenance bays, one wash bay, a fueling stations and electric power hook-ups. This project gives Steve familiarity with some of the technical aspects of bus maintenance and washing facilities, as well as efficient layout principles for bus/large vehicle garages, that will benefit his work on the BCRTA project.

US Postal Service, Architectural Barriers Act Studies, Various Locations, Indiana. Project principal for studies of over a hundred USPS facilities in the Midwest to assess problems and design solutions for accessibility compliance. While the ABA and ADA are somewhat different in scope, they are almost identical in technical application. Accessibility will be key to the success of the BCRTA project and is very likely to scrutinized closely by ADA advocates.

Multiple Campus Master Plans for Cummins, Inc. Project manager leading a team for master planning services at various Cummins campuses globally in order to optimize land use, promote safe and efficient circulation, and envision opportunities for complete build-outs of these sites. This project experience benefit the BCRTA project as we prepare what may be phased planning for a site that includes pedestrian, car, large-vehicle and train traffic.

»DANIELLE MALUDY, AIA, NCARB

Deputy Project Manager

FIRM
AECOM

EDUCATION
MArch, Architecture, Ohio State University-Main Campus, 2015

BSc, Interior Design, Adrian College, 2011

YEARS EXPERIENCE
9

REGISTRATIONS/ CERTIFICATIONS
Registered Architect, OH #ARC.1716956

National Council of Architectural Registration Boards (NCARB)

Danielle is an architect and project manager in AECOM's Columbus office. With experience in the execution of projects of various types, sizes and complexities, including multi-phase design and construction projects, Danielle is responsible for providing leadership, facilitating client communication and coordination as well as the establishment of project processes for all team members from the project conception through project closeout.

Relevant experience

Throughout her nearly decade of experience, Danielle has continued to build long-term relationships with clients through her passion and dedication to deliver successful projects.

Project experience

Kaiser Permanente Hawaii Regional Architect Program. AECOM served as Kaiser Permanente's Hawaii Regional Architect, working closely alongside their National Facilities Services group and the selected Regional General Contractor, providing Program Management, Project Management, and full A/E services on a broad range of renovation and new construction projects throughout the Hawaiian Islands. Significant projects included the design and construction of a new 40,000 LEED Clinic, Facility Condition Assessments for over two dozen facilities throughout the Region, Infrastructure Master Plans for five key facilities, a Hospital Master Plan, and various renovation projects of differing size and complexity. Danielle served as the Deputy Program Manager for the Program from 2017-2020, leading numerous project teams and overseeing over 60 projects through design, construction, and project closeout.

Fairmont State University Student Housing, McKinley and Associates, Wheeling, WV. Danielle's responsibilities included managing design services for a new 400-bed apartment-style residence hall at Fairmont State University. Fairmont State University, with a 120-acre main campus in Fairmont, is part of the state's growing high technology corridor. AECOM designed features that support resident needs with regard to privacy, technology, energy efficiency, sustainability, and community living and learning. Our scope of services included architectural design, space planning, interior design and structural engineering design services. As a part of the campus improvements, AECOM was selected to provide Architectural Design, Space Planning services for Fairmont State University's new 340-bed apartment style residence hall building. Cost: $34 Million.

Ohio University, Jefferson Hall Renovation Planning and Design Services, Athens, OH. Danielle's responsibilities included managing roles in all phases of design from preliminary planning through construction administration. AECOM provided professional A/E services for the renovation of 140,000 SF residence hall and new concept retail food market.

Ohio University, Ohio University Housing Development, Athens, OH. Danielle's responsibilities included managing the construction administration phase including monitoring of construction submittals and questions from the field, in-house tracking,

DANIELLE MALUDY, AIA, NCARB

coordination and reviews, and subsequent processing of said items; and reviewing submitted information for LEED conformance. Danielle also led the punch list process at the conclusion of construction. Ohio University completed a Housing Redevelopment master plan update in April of 2011. The master plan calls for a redevelopment in three phases over a 10-year period. AECOM, working with the University, finalized the conceptual planning of the 3-phased, 10-year project. Cost: $92 Million (Estimated Construction - Phase I)

US Army Corps of Engineers, West Point Science Center Phase 1 - Architectural Design Services, West Point, New York. Danielle's responsibilities included assisting with the construction administration phase including reviewing and processing of submittals and requests for information, preparing bulletins, and participating in LEED coordination meetings during construction.

Boehringer Ingelheim Chilled Water System Upgrades - Site Work, Pipe Vault, Tower Sumps, Boehringer Ingelheim Roxane, Inc., Columbus, OH. Danielle's responsibilities included reviewing submittals containing shop drawings, product data and material samples. AECOM provided architectural and engineering services for a new stand-alone central chilled water plant for the Wilson Road campus. The chiller plant provides chilled water to the existing (HCO facility and Building 35) and on-going building expansions on the west side of campus. This improvement also reduces the load on the existing chilled water plant, giving the existing plant firm capacity. The plant was designed for an initial 4,000 tons of cooling and possible expansion up to 6,000 tons with N+1 redundancy. Expansion can occur 1,000 tons at a time. The new plant is capable of operating as two independent 3,000 ton plants, allowing for maintenance and expansion without a complete plant outage. The initial building is a single story. The cooling towers are located at grade on concrete sumps. The building is served electrically by double ended substations for added reliability. Cost: $15 Million (Estimated Construction)

Ohio University, Bush Hall Renovation, Athens, OH. Danielle's responsibilities included review of contractor's field as-built drawings and coordination with the Project Architect to incorporate information into the Record Drawings for the Owner.. Bush Hall, located on the East Green of the Athens Campus was completed in 1954. The four-story, 29,547 sq ft residence hall is currently home to 102 coed students. A complete building renovation took place updating all building systems including window replacement, interiors and finishes. This is the sixth complete building renovation on the East Green and the first LEED Silver residence hall. These new spaces will be designed to meet the ever changing needs of Ohio University students while maintaining OU's rich history. Cost: $6.4 Million (Estimated)

Franklin County Engineer, Hall of Justice Renovation Design, Columbus, OH. Danielle's responsibilities included reviewing, processing, and issuing submittals; processing requests for information; and preparing bulletins. Also participated in OAC meetings and site visits during construction. The scope of work for this project is part of a comprehensive renovation to the Hall of Justice (HOJ) Building, which is part of the Franklin County Government Center Campus in downtown Columbus. The project's long-term objective was to renovate the HOJ to meet current and future needs of the Franklin County Government Center (FCGC). The renovated HOJ is a multi-tenant support building for the government complex. The renovated building uses the recently installed distributed chilled water loop and new chillers installed in the HOJ, and interconnects with the other buildings in the FCGC for purposes of communications, security, etc. Certain "mission critical" IT and communications pathways run through the HOJ, and were maintained and protected throughout the building renovation. Cost: $24.5 Million.

US Army Corps of Engineers Huntsville, Medical Repair/Renewal 2012-2017 - Building #40 Tripler Army Medical Center, HI. Danielle's responsibilities included preparing schematic layouts for the temporary transition space intended to allow staff to maintain operational during construction. The Department of the Army, Engineering and Support Center, Huntsville selected AECOM Group, Inc. (AECOM) to complete the scope of work to Repair / Renew Building #40 Forensic Toxicology Drug Testing Lab (FTDTL) and Department of Clinical Investigation (DCI), Tripler Army Medical Center, Honolulu. As Prime Contractor, AECOM will provide overall MRR Program and Project Management, serve as Designer of Record and lead the construction effort. Building #40 was constructed in the late 1940s and initially functioned as a Behavioral Health Unit for soldiers returning from World War II. The historic building consists of a Basement, First Floor, Second Floor and Third Floor with limited Penthouse space on the roof. The project will repair and renew Building #40 in its entirety in order to provide facilities for FTDTL and DCI. The proposed repair and renewal effort will reconfigure each floor of the existing facility to provide efficient work flow for both FTDTL and DCI. Mechanical, electrical and plumbing equipment will be housed in a new Central Utility Plant. To support FTDTL and DCI functions during the repair and renewal process, temporary Transition Space will be constructed in an area directly adjacent Building #40. The Transition Space will be demobilized and the area outfitted for its final use at the completion of the project. Cost: $44 Million (Estimated Construction)

»MICHAEL BONGIORNO, AIA, LEED AP BD+C

Principal-in-Charge

FIRM
AECOM

EDUCATION
BArch, Architecture (Cum Laude), Pratt Institute School of Architecture, 1992

YEARS EXPERIENCE
28

REGISTRATIONS/ CERTIFICATIONS
Registered Architect, OH #ARC.0914915

National Council of Architectural Registration Boards (NCARB)

LEED Accredited Professional Building Design + Construction

Certified Tourism Ambassador, #40254

PROFESSIONAL AFFILIATIONS
Board of Trustees – Chair, Greater Columbus Arts Council

Board of Trustees, Columbus College of Art and Design

Member, American Institute of Architects

Member, U.S. Green Building Council, Central Ohio Chapter

Member, Urban Land Institute

AWARDS
2019 Harrison Smith Award for Urban Impacting Projects – Michael B. Coleman Government Center

2019 AIA Columbus Merit Award for the Columbus Spanish Immersion Academy

2018 AIA Columbus Honor Award for the Columbus Metropolitan Library Northern Lights Branch Renovation and Addition

Michael is an award-winning design leader with a passion for community impacting, mission-driven architecture that supports and enhances the fabric of cities and furthers a fundamental belief that great design is the essential building block to vibrant, healthy communities.

Relevant experience

Michael is the Managing Principal and Design Director of AECOM's Columbus, Ohio office. Michael is responsible for driving strategy and design excellence for AECOM's multi-disciplinary design services. He is an award-winning design leader with a passion for community-impacting, mission-driven architecture that supports and enhances the fabric of the city and furthers a fundamental belief that great design is the essential building block to vibrant, healthy communities. While an architect by training and practice, Michael thinks and operates at the scale of cities and regions, which has made him a trusted advisor to public and private community leaders. His work has garnered numerous awards both locally and nationally and his unique design philosophy is why. Michael loves big, bold, innovative ideas. His work consistently deals with natural light and sustainability. Holistically, Michael strives to create projects that provide added value while offering to make something more profound, more sustainable, and timeless. He is a consummate collaborator and consensus-builder with superior communication skills and an ability to capture his client's imaginations.

Project experience

Central Ohio Transit Authority (COTA), E-W High Capacity Transit Corridor, Columbus, OH. Principal-in-Charge of a fully-integrated team to design a new 20-mile High-Capacity Transit line along the main East-West Corridor(s) through Columbus. A focus of Michael's work is on station design, sustainable place-making, equitable neighborhood integration, and negotiating among public and private leaders in the downtown core. Downtown Columbus will serve as a connector of other corridors currently under study and will contain a transit center and maintenance facility.

Central Ohio Transit Authority (COTA), COTA Transit Plan, Columbus, OH. Engaged as an advisor to COTA's Senior Director of Development to provide input and expertise to COTA staff on an update to COTA's Short (5 year) and Long-Range (30 year) Transit Plan for our Central Ohio's mobility future in coordination with MORPC's 5 Year Transportation Improvement Plan and 30 Year Metropolitan Transportation Plan update.

The Columbus Foundation, Columbus Broadband Access Study, Columbus, OH. Principal-in-Charge serving as the primary point of contact between Columbus leaders and AECOM's Technology Solutions Group. Within the wider context of a working group of concerned citizens and organizations in the City of Columbus, this report focused on providing data and analysis around the availability, differentiation, and lack of adoption of internet services by households in the City of Columbus, Ohio as a foundation upon which other policy and planning discussions may be framed. The report presented maps and

MICHAEL BONGIORNO, AIA, LEED AP BD+C

visual information outlining the presence of broadband service within Columbus and identified or prioritize areas where there may be a need for increased access in addition to providing short and long-term recommendations for increasing access in these areas.

Columbus State Community College Capital and Master Plan, Columbus, OH. Principal-in-Charge in support of a $300-$400 Million capital investment and master plan on C-State's Central Ohio Campuses over the next 24 years. Responsibilities include providing advisory support directly to the College's president, orchestrating the work of AECOM's Strategy+ team with AECOM Columbus' internal planning team, and acting as the coordinator of AECOM's work with numerous College stakeholders including the President's executive cabinet, facilities, operations, academic planning, and faculty.

City of Columbus, John R. Maloney Family Health and Wellness Center, Columbus, OH. Lead Architect and Design Principal that provided programming, schematic design through design development for this 21,500 square foot building accommodates basic medical operations, including a Moms2Be program, physical therapy facilities, administrative areas, meeting space, storage space and on-site parking. The design includes an innovative two-sided entrance spine serving the parking lot and Parsons Avenue provides an inviting, light filled entry and a passive security method. The spine also acts as an organizing element that connects program elements while providing the ability to secure them from one another during after-hours use. [Prior to AECOM]

City of Columbus, Michael B. Coleman Government Center (111 N. Front Street), Columbus, OH. Design Principal for a new 180,000 square foot consolidated City office building and parking garage on a newly formed City of Columbus Government Municipal Campus. The vision was to create a one-stop-shop consolidating four City departments: Development, Public Services, Utilities and Building and Zoning. This project earned LEED Silver certification. Bringing these departments together in one central location created operational efficiency for the City and streamlined convenience for patrons requiring assistance from multiple departments in one visit. [Prior to AECOM]

Greater Columbus Convention Center Visitor Center, Experience Columbus, Columbus, OH. Design Principal provided programming and design oversight for a newly designed visitor's center in the Greater Columbus Convention Center. Using environmental graphics, custom designed retail display walls and furniture with locally sourced and reclaimed wood, a digital display wall which can be customized for various conference groups, and a neutral and bright color palette, the design transformed a drab and dated retail space into an image of Experience Columbus that reflected its aspirations. [Prior to AECOM]

»DAVE WORMALD, PE , AICP

Amtrak Passenger Rail Platform Lead

FIRM
AECOM

EDUCATION
MSc, Community Urban Planning, University of Cincinnati, 2010

BSc, Civil Engineering, University of Kentucky, 1992

YEARS EXPERIENCE
28

REGISTRATIONS/ CERTIFICATIONS
Professional Engineer, OH #PE.77824

APA Member #200892

PROFESSIONAL AFFILIATIONS
American Society of Civil Engineers

American Society of Certified Planners

Kentucky Chapter of American Planning Association

City of Fort Thomas, Kentucky Planning Commission

Campbell County, Kentucky Building Appeals Board

Board of Directors Fort Thomas Forest Conservancy

TRAINING
ODOT Traffic Academy Certification: Safety Studies, Interchange Justification Studies, Project Development Process

ODOT Categorical Exclusion Certification

ODOT Project Manager NEPA Class

NHI 139006/FHWA Integrating Freight into the Transportation Planning Process

Caliper Corporation, Traffic Simulation with Transmodeler

CitiLabs- CUBE Travel Demand Model forecasting and post processing

OSHA 10-Hr Construction Safety Training (in progress)

CSX and Norfolk Southern Railroad Worker Safety Training

Dave has 28 years of diverse experience and expertise in the project management, planning, design and construction administration of major infrastructure projects for a variety of Federal, state, local and private clients in the Cincinnati area. His experience includes transportation and land use planning, transit and railroad design, environmental documentation/permitting, GIS spatial analysis, highway/site design, and structural design, flood control and storm water facilities.

Relevant experience

Dave has been an integral member of consultant teams for integrating land-use and transportation. He is familiar with federal and state and LPA local let project development procedures and funding programs. His background as both a civil engineer and certified planner provides a holistic approach to solving clients' needs from capital planning and alternatives analysis to detailed design and construction.

Project experience

Cincinnati Union Terminal Station Track Study, Cincinnati, OH. Dave served as Project Manager for a feasibility study to reconstruct the existing Amtrak rail passenger platform and provide additional station boarding tracks for intercity passenger rail or rolling stock at historic Cincinnati Union Terminal. The project developed multiple alternatives to construct the existing platform, provide a new station track and relocate existing CSX intermodal lead tracks. The project was planned in accordance with CSX and Amtrak standards and would provide ADA level boarding. The City of Cincinnati is coordinating with the stakeholders for potential implementation following renovation of the Cincinnati Museum Center in 2019 however the project has been deferred to COVID-19 impacts on Amtrak and Museum Center Operations.

SORTA On-Call Architectural and Engineering Services IORY Railroad Bridge Rehabilitation. Dave serves as AECOM's Project Manager for our On Call Architectural and Engineering Services for the Southwest Ohio Regional Transit Authority. AECOM is currently providing design, bidding and construction phase services for the rehabilitation of two railroad grade separation structures owned by SORTA which convey the Indiana and Ohio Railway (IORY) Oasis Subdivision over Madison Road and under Montgomery Road (Us-22) in the City of Cincinnati. AECOM also assisted SORTA with a successful Consolidated Rail Improvement and Safety Grant to fund the bridge projects and separate railroad improvements in Hamilton County administered by the IORY. AECOM services included development of the project cost benefit analysis and FRA Categorical Exclusion Checklist. The projects required extensive coordination between the City of Cincinnati, IORY, Ohio Rail Development Commission, affected utilities and the FRA. Construction is expected bot being in fall 2020 and be completed in summer 2021.

DAVE WORMALD, PE, AICP

City of Cincinnati Thornton Avenue Intersection Improvements, Cincinnati, OH. Dave is serving as Project Manager the AECOM design of a new shared use path and traffic signal at the intersection of Thornton Avenue and US-50. The proposed shared use path will form a critical link in the Ohio River Trail West corridor and will link the Sayer Park neighborhood with Fern Bank Park along the Ohio River. There is no pedestrian linkage between the neighborhood and park across US-50 which is a heavily trafficked intermodal freight connector. The project includes a new traffic signal on US-50 with advanced pre-emption for the adjacent CSX and CIND at-grade crossings. The project required extensive railroad coordination with CSX and CIND to arrive at the required signal timing and crossing design as well as new pedestrian at grade crossing. AECOM had completed a feasibility study for the project in 2015 and assisted the City with its successful application for Federal CMAQ funding for the project. Construction is anticipated to being in fall 2021.

Uptown Consortium – Uptown SMART Center Site Selection Planning, Cincinnati, OH. Dave served as Project Manager for AECOM planning services to the Uptown Consortium in Cincinnati Ohio. The consortium is a non-governmental organizing composed of the University of Cincinnati, Several Hospitals and the Cincinnati Zoo to foster economic development in the Uptown Area of Cincinnati. AECOM evaluated transit service demand and for development of conceptual site plans and cost estimates for a new multimodal transit facility planned to be located in the Uptown Innovation Corridor along US42 Reading Road. The facility is envisioned as a key transfer hub for SORTA Metro local and express routes as well as institutional shuttles and potential future BRT. AECOM evaluated multiple alternative sites for the facility, developed levels of service and capacity which were used for the project's CMAQ air conformity analysis. Formal scoping and selection of a preferred site for the facility are anticipated to be completed in 2021. AECOM worked with several stakeholder including the Consortium and is planning consultants, private development partners, City of Cincinnati, Ohio Kentucky Regional Council of Governments (OKI) and the Ohio Department of Transportation (ODOT).

Cincinnati Western Hills Viaduct Replacement Preliminary Engineering Study, Cincinnati, OH. Dave served as Project Manager for this complex preliminary engineering study to develop a preferred alternative for the replacement of the 1930's era Western Hills Viaduct linking I-75 to Westwood and Harrison Avenues in Cincinnati. The project includes the reconfiguration of the existing street network in the highly urbanized neighborhood of South Fairmont in Cincinnati and construction of a new long span bridge over the Millcreek and Railroads. The project included preparation of a D2 NEPA document, and extensive public outreach and stakeholder coordination. This challenging project required coordination with adjoining projects to reconfigure the interchange with I-75 by ODOT and Lick Run Combined Sewer Overflow by the Metropolitan Sewer District of Greater Cincinnati (MSDGC) as well CSX Queensgate Yard and Norfolk Southern located under the existing Viaduct. The project also evaluated the potential impacts to SORTA's Queensgate Operations Center if the CSX Intermodal yard were to be reconfigured to accommodate the new bridge. The preliminary engineering study was completed in fall 2017. The City of Cincinnati is currently working to select the preferred bridge type and secure construction funding.

Eastern Corridor Segment II/III Rail Transit. Dave served as AECOM Project Manager as the lead sub consultant for preliminary engineering evaluation of proposed new rail transit corridors from the Little Miami River to Clermont County Ohio initially developed as part of the Hamilton County TID Eastern Corridor Multimodal Projects. The project evaluated various rail alignments both parallel with the proposed adjacent relocation of SR32 and off alignment alternatives. The project included evaluation of potential new rail crossings of the Little Miami River and preliminary station locations and site access.

ERIK MASO, RA

Project Architect

FIRM
AECOM

EDUCATION
MA, Syracuse University

BSc, Architectural Technology, New York Institute of Technology

YEARS EXPERIENCE
11

REGISTRATIONS/ CERTIFICATIONS
Registered Architect, NY #038328

National Council of Architecture Registration Boards (NCARB)

Erik is a detail-oriented technical architect who makes complex architectural ideas accessible to clients.

Relevant experience

Erik's process is focused on clarity in spatial concepts made both visual through graphic representation and physical through material specificity. His daily practice is based on actively listening to all project constituents and thus artfully crafting balanced architectural responses. His work includes project types ranging from large and complex vertically mixed-use developments and planning studies, to vital urban structures such as pedestrian bridges and transit centers.

Project experience

Ohio State University, Transportation Plan Implementation, Columbus, OH. As part of an enabling project for Ohio State University's Transportation Plan Implementation, Erik led the conceptual design and project delivery for a new 5,000sf conditioned prefabricated transit center and two prefabricated steel canopies. [Prior to AECOM]

Central Ohio Transit Authority (COTA), E-W High Capacity Transit Corridor, Columbus, OH. Project Architect and designer supporting vertical structure design work on a High-Capacity Transit line along the main East-West Corridor through Columbus. A focus of Erik's work is on station design, transit hub design, and maintenance facility design.

Charles Street Partners, Industry Apartments, Columbus, OH. Erik led the design team from conceptual through design development phases for a 6 story, 350,000 gsf mixed-use project consisting of 227 residential apartments, 5,000 sf of street level retail, 213 space two level open parking garage and 12,000 sf of tailored amenity spaces and programming. [Prior to AECOM]

Daimler Group, 80 on the Commons, Columbus, OH. 80 on the Commons is a 12-story, 300,00 sf mixed-use high-rise building consisting of ground level retail and amenities, five floors of commercial office space, with residential, for-rent apartment units above on six additional floors including private roof amenities and event spaces and pedestrian bridge structure. Erik led the design and delivery team from design development through construction administration. [Prior to AECOM]

River Road Partners, LLC, 615 River Road, Edgewater, NJ. Erik led the conceptual planning and massing of 1.8 million gsf of waterfront development along the Hudson River for zoning approval. [Prior to AECOM]

University District of Columbia, Student Center, Washington DC. Staff Architect. Erik's responsibilities included assisting in the documentation and detailing of the exterior envelope; including roof/plaza, curtainwall and base of wall during construction documentation phase. [Prior to AECOM]

University of Florida, Reitz Student Union, Gainesville, FL. Staff Architect/Designer. Erik's responsibilities included lead designer of winning submission to be awarded design and construction contract for the new Reitz Student Center. Erik's role during schematic design included the design of the building envelope, selection of cladding materials and definition of roof and wall assemblies. [Prior to AECOM]

»JOSEPH FISCHER, RA

Specifications and Quality Assurance

FIRM
AECOM

EDUCATION
BSc, Architectural Engineering, Ball State University, 1997

BA, Architectural Engineering, University of Illinois at Urbana-Champaign, 1978

YEARS EXPERIENCE
42

REGISTRATIONS/ CERTIFICATIONS
Registered Architect, OH #ARC.8608117

National Council of Architecture Registration Boards Certificate (NCARB)

PROFESSIONAL AFFILIATIONS
National Council of Architecture Registration Boards

Joseph's deep experience with transit facilities will inform his role as leader of our specifications and quality-control process.

Relevant experience

Joseph wrote the specifications and developed technical details for the recent IndyGo Transit Center and NICTD Double Track projects, and has relevant knowledge gained from many bus and rail transit projects over a 40+ year career.

Project experience

Indianapolis Public Transportation Corporation, IndyGo Transit Center, Indianapolis, IN. Architect provided architectural design services for a new multi-modal transit facility in downtown Indianapolis. The design emphasizes the facility as a gateway to downtown Indianapolis and provides a green public plaza to this important site in the city.

Columbus Recreation and Parks Department, Mill Race Center and Columbus Transit Building, Columbus, IN. Architect provided programming, planning and design of a new Columbus bus transfer location.

Town of Normal, Uptown Station Rail and Bus Transit Area, Indianapolis, IN. Architect provided constructability, specification, and bidding documents for a transit area for trains, buses and taxis, with a 380-car parking structure and a retail and office component. The project qualified for LEED certification and federal funding.

Indianapolis Public Transportation Corporation, Downtown Transfer Center, Indianapolis, IN. Project Architect designed the building and transfer platforms to accommodate an adjacent landscaped public plaza, as well as the bus bays and passenger boarding and alighting platforms with canopy structures for passenger protection from weather. The facility provides indoor waiting and customer service areas, including space for transit center service personnel as well as a bus service call center.

Indianapolis Public Transportation Corporation, Indianapolis Downtown Transit Center Feasibility Study, Indianapolis, IN. Architect prepared a feasibility study to define the overall need for a transit center, how it fits into various bus route structures, and where it will be located within the downtown. This study helps IPTC along with its stakeholder partners to develop new measures of feasibility and establish the criteria with which to assess the benefit of implementing a downtown transit center.

Northern Indiana Commuter Transportation District, Train Station Safety Infrastructure Improvements, East Chicago, IN. Architect for train station safety infrastructure improvements.

Chicago Department of Planning and Development, New 2FM Facility, Chicago, IL. Architect for a future 2FM facility for the city along Wentworth Avenue, under a design-build contract. The facility will improve the city's fleet and facility management operations while spurring further economic development on Chicago's south side.

JOSEPH FISCHER, RA

Indiana Stadium and Convention Building Authority, Indianapolis Convention Center Pedestrian Pathway, Indianapolis, IN. Project Manager managed construction of a tunnel under existing operating railroad tracks to create a climate-controlled pedestrian passageway between the Indiana Convention Center and the Lucas Oil Stadium.

Transport Canada Gordie Howe International Bridge, Windsor, Ontario, Canada and Detroit, MI. Architect for design services for the Gordie Howe International Bridge. The 2.5-km bridge will cross the Detroit River between Ontario and Michigan, connecting the cities of Detroit and Windsor by linking Interstate 75 and Interstate 96 in Michigan with the new extension of Highway 401 (called the Rt. Hon. Herb Gray Parkway) in Ontario.

Chicago Department of Fleet and Facility Management, Vehicle Maintenance Facility Relocation, Chicago, IL. Architect for the relocation of the existing Department of Fleet and Facility Management vehicle maintenance facilities to three sites within the city to disperse services and improve operations. The new facilities will consist of a main shop, a satellite shop, and a fueling station. The main shop includes new construction of a 150,000 square foot, 2-story, heavy-duty municipal vehicle maintenance repair shop and administrative headquarters. The satellite shop includes new construction of a 30,000 square foot heavy-duty municipal vehicle maintenance and repair shop. The fueling station project involves relocation of the existing fuel station function and requires demolition of the existing Department of Street and Sanitation building and the construction of a new fuel station. The fast tracked and collaborative design-build project will provide over 180,000 square feet of fleet maintenance and support facilities in a period of less than 18 months, allowing the city to capture value from underused city property and to re-invest in neighborhood infrastructure.

New York City Department of Transportation, Traffic Management Center and Joint Transportation Management Center Upgrade, New York, NY. Architect for the upgrade of the NYCDOT's traffic management center and joint transportation management center.

Metropolitan Transportation Authority Long Island Rail Road, Penn Station Critical Improvements, New York,NY. Architect for the evaluation and design of improvements to areas within Pennsylvania Station in New York and adjacent 7th & 8th Avenue subway stations. The Penn Station critical improvements project will result in AECOM preparing documents suitable to support the issuance of alternative delivery (design-build) request for proposals to implement the improvements.

Indianapolis Airport Authority, Airport Operations Center - Emergency Operations Center, Indianapolis, IN. Architect involved on the project for a new 15,500 square foot facility to combine the command center for everyday operations such as weather and flight tracking, security, and environmental systems with the dispatch center for emergency response by police, fire, and rescue.

BP North America, Alternative Fuels Vehicle Center Addition, Naperville, IL. Architect for the addition of an alternative fuels vehicle center at BP North America's Naperville campus. The center, housed in a new, free-standing building, would provide showroom area for up to five vehicles where clients and BP staff could view the vehicles, a conference room for up to 30 people, a lounge area, private telephone rooms, and rest rooms.

City of Normal, Uptown Station, Normal, IL. Architect provided programming, planning and design services for this new multimodal rail transit station and a city government facility.

JUDSON HERTER, RA

Subject Matter Expert/Advisor

FIRM
AECOM

EDUCATION
BA, The Ohio State University, Columbus, Ohio, 1969

YEARS EXPERIENCE
51

REGISTRATIONS/ CERTIFICATIONS
Registered Architect, PA #RA007945X

PROFESSIONAL AFFILIATIONS
American Institute of Architects

Judson is a senior architect and project manager in AECOM's transportation group. His responsibilities have included management of light rail transit station designs; preparation of maintenance facility studies; bus maintenance and operational facility programming; flow studies and operations analysis; maintenance equipment selection; plans and specifications; and architectural designing, detailing, and specification writing.

Relevant experience

Judson has also been responsible for design review, cost estimating, building inspection, construction coordination and construction management on projects where he was not involved in the design process.

Project experience

Lee Tran Administration, Operations and Maintenance Facility, Lee County Transit, Ft. Myers, FL. Bus maintenance facility planning participant and maintenance equipment selection designer. Developed equipment schedule and plans with utility requirements and specifications for the equipment. Reviewed equipment Shop Drawings and answered RFIs during construction.

Corridor Cities Transitway (CCT) Operations and Maintenance Facility, Maryland Transit Administration, Gaithersburg, MD. Developing building program with design parameters, equipment schedule, site plan, building plans, building elevations and general construction details to 30% level for an all articulated bus system administration, operations, bus storage and maintenance facility. Detailed cost estimate done including site work to provide a budget for further development.

MST Bus Maintenance and Operations Base, Monterey-Salinas Transit, Monterey, CA. When previous new facility site design was rejected for environmental impact and no other sites could be found, MST hired previous design team to determine how to maximize use of current site and include 20 new electric buses. Visited existing facilities as part of site planning team and participated in bus maintenance facility planning and equipment selection including existing equipment and parts storage systems. Developed new maintenance equipment design and wrote equipment specifications for expanded / modified facility.

Metro Transit New Electric Bus Base Facility, King County, WA. Lead Architect to develop Preliminary Site Designs on three sites for a new all electric bus maintenance and operations facility south of Seattle. The designs will be based on an AECOM all electric bus facility program developed as the basis for all new and existing bus facilities to be used for a Metro Transit all-electric bus fleet by 2040.

JUDSON HERTER, RA

CATA Administration/Maintenance Building and Transit Centers, Lansing, MI. Assessed building and site conditions and developed replacement values at four locations in Lansing and East Lansing for FTA TAM II requirements.

Florida Department of Transportation, Building Assessment and Site Conditions. Assessed building and site conditions with replacement cost calculations at 40 locations in Florida for FTA TAM II requirements. Project went from Florida Panhandle sites to Key West site over four weeks of travel and transit facility inspections and agency communications with notes and photographs to record the findings.

Yuba-Sutter Transit Battery-Electric Bus Feasibility Study, Marysville, CA. Part of the AECOM team who assessed the size, location, type of charging systems which could be used, requirements for new electrical service(s), and service availability from PG&E. Participated in conversations with the designated charger manufacturer and assessed the requirements for the new electric buses ordered. Searched for possible alternative sites for a new facility because of limited space available on the existing site to expand the fleet beyond the existing 50 vehicles.

Citrus Connection Maintenance and Operations Facility, Winter Haven, FL. Developed a building program for 10 vans and 20 buses and modified after discussions with Citrus Connection personnel. Program was used to guide schematic designs for a designated site. Detailed cost estimate was developed including equipment to determine feasibility of design against money available.

HART Bus/Van Maintenance and Operations Facilities, Tampa, FL. Developed building programs for a maximum of 100 vans and 200 buses with site size requirements for various fleet configurations. Programs were used to search for possible satellite sites and / or expansion of the current main facility. Reviewed three schematic building relationships on various site sizes and developed cost estimates for each of the sites for the final report.

LYNX Bus Maintenance Equipment Assessment, Orlando, FL. Provided information on "useful life left" and "unit replacement costs" for all maintenance equipment worth more than $5,000 for an assessment report on all LYNX facilities.

CNG Bus Study, Allegheny County Transit Authority, Pittsburgh, PA. Developed building program, building and site plans for a proposed CNG fueled 90 articulated bus and 90 forty foot bus interior circulation facility with heavy maintenance and maintenance training facilities. A detailed cost estimate was developed using materials and equipment experience from previous projects. The study was used to find a suitable site close to existing busways to build the facility.

Hayward Maintenance Complex, Central Warehouse, Bay Area Rapid Transit (BART), Hayward, CA. Equipment consultant who worked with local warehouse designer to identify needs and general layout of the Central Warehouse to support the rail and support department shops being designed and built on both ends of the warehouse. Wrote equipment specifications and developed equipment cost estimates for the final bid documents.

Guadalupe LRV Maintenance Shop, Valley Transportation Authority (VTA), Santa Clara, CA. Equipment consultant for installation of new body and truck lift in existing shop while current truck maintenance shop, wheel truing, and body shop operations continue.

Juniata Rail Maintenance Facilities, Norfolk Southern Railroad, Altoona, PA. Project Architect assigned to evaluate 30 buildings exterior conditions for renovations and energy conservation measures. Evaluation report proceeded to design of recommended roof replacements, window replacements, and door replacements as part of a $48M renovation project.

Commuter Rail Operations and Maintenance Facility, Sonoma-Marin Area Rail Transit District (SMART), Santa Rosa, CA. AECOM designer on design/build team for Operations and Maintenance Facility for new commuter rail system using rehabilitated former heavy rail right-of-way. Responsible for DMU train maintenance equipment selection, design, specifications and co-ordination with MEP equipment requirements. Used as consultant for building interface and systems requirements since no operating staff available.

KCS Repair In Place Facility, Pearl, LA. Developed outline architectural specifications for a new repair facility in the High Oak Yard for Design/Build Contract bid criteria.

CSX Intermodal Terminal, Baltimore, MD. Developed a final program, floor plans, and outline specifications for a future design/build contract for a new administration building, new maintenance building, and alteration of an existing building on site to support the new CSX intermodal terminal in Baltimore.

Large Vehicle Repair Shop, Virginia Beach, VA. Developed preliminary design and program with Equipment Schedule and Equipment Cut-sheets as guide for final design/build contract.

»PAUL DIEZ, RA

Subject Matter Expert/Advisor

FIRM
AECOM

EDUCATION
MBA, Business Administration, University of Maryland, 2004

BArch, Architecture, University of Florida, 1982

YEARS EXPERIENCE
37

REGISTRATIONS/ CERTIFICATIONS
Registered Architect, MD #14478

PROFESSIONAL AFFILIATIONS
American Institute of Architects

Paul is a versatile, problem-solving professional with 37 years of experience on a wide variety and scale of projects encompassing the full range of architectural practice.

Relevant experience

Paul's experience includes design, project management, preparation of environmental, planning, and technical reports and production of construction documents. For the past 25 years, he has worked almost exclusively in transportation architecture and planning, where he has designed and managed projects from the preliminary design, pre-engineering, and schematic phases, through final design and construction. He specializes in the management and coordination of multi-discipline design teams on large, complex projects. A common thread throughout his projects is a commitment to a civic architecture that joins transit infrastructure and urban design.

Project experience

Northstar Corridor Development Authority, Northstar Commuter Rail, Minneapolis, MN. Project Manager responsible for architectural design of six commuter rail stations and complete design (architectural, facilities, equipment, and track) of the vehicle maintenance and control facility for a 40-mile commuter rail line between Minneapolis and Big Lake. The rail line will have intermodal connections to bus transit and to the Hiawatha LRT line near the downtown Minneapolis station.

Maryland Transit Administration, Purple Line Light Rail Transit, Maryland. Chief Architect for program management of the MTA's 16-mile light rail line extending from New Carrollton in Prince George's County to Bethesda in Montgomery County. It would provide a direct connection to the Metrorail Red, Green, and Orange Lines. The Purple Line would also connect to MARC train, Amtrak, and local bus services. The Purple Line includes 21 LRT stations and two maintenance facilities.

New Jersey Transit, River Line Design-Build (formerly Southern New Jersey Light Rail Transit System), Various Locations, New Jersey. Project Architect for the new commuter rail system connecting Trenton and Camden. The project scope of work included the design and preliminary engineering of 20 rail stations, and review of the final design and construction documents.

Port Authority of Allegheny County, North Shore Connector Light Rail Transit, Pittsburgh, PA. Architectural Task Manager managing all design activities for subconsultant architectural firms for four new LRT stations. Also responsible for design and construction documents for standard and systemwide elements (ADA compliance, fire life safety, vertical circulation elements, and architectural specifications).

Metro, 19th and Dunlap Transit Center, Phoenix, AZ. Project Architect responsible for planning and design of the terminal intermodal transit center for Phoenix Valley Metro Transit's light rail transit northwest extension. The project includes a 1,000-car parking

PAUL DIEZ, RA

structure, bus facilities, a LRT station, a public plaza, urban improvements, and accommodations for future transit oriented development.

Amtrak, Next Generation High Speed Rail Study, Washington, DC. Lead Architect for conceptual design of stations for Amtrak's next generation high-speed rail study, culminating in "A Vision for High-Speed Rail in the Northeast Corridor", a concept plan for a true high-speed rail corridor extending from Washington to Boston. The study confirmed the viability of high-speed rail service in the northeast with trains operating at up to 220 miles per hour on a new, dedicated, 2-track corridor with a trip time of just under three hours and 30 minutes between Washington and Boston. A series of prototype stations and site specific station studies were developed to validate the feasibility of the plan from a facilities perspective.

Amtrak & MARC, Baltimore/Washington International Thurgood Marshall Airport Rail Station, Glen Burnie, MD. Project Architect responsible for planning a new intermodal transportation facility with transit-oriented development at BWI Airport. The 20,000-square-foot station included facilities for MARC and Amtrak trains, buses, and future LRT and APM connections, as well as approximately 400,000 square feet of mixed-used joint development integrated with the station functions.

Los Angeles County Metropolitan Transportation Authority, Norwalk - El Segundo Light Rail Transit, Los Angeles, CA. Senior Designer responsible for final design development and detailing of five automated, medium capacity, elevated, stations along the Los Angeles County Norwalk to El Segundo Green Line. Responsibilities included preparation of contract documents and specifications.

Memphis Area Transit Authority, South Intermodal Terminal, Memphis, TN. Project Architect responsible for design of the MATA's new bust transit center and Greyhound terminal. The terminal will be the focal point for transit services in the Whitehaven area and improve MATA's ability to make efficient connections to intercity bus services. The facility is designed to include a future station on the downtown-airport light rail line. MATA will own and operate the terminal. Greyhound Lines Inc. will be the major tenant. The facility is designed to achieve LEED silver certification.

Spadina Extension Highway 407 Station, Toronto, ON. Architectural Project Manager responsible for design development and final construction documents for a new underground subway station, bus terminal and related surface facilities on an extension of the TTC Spadina Line. The station includes a bus terminal with thirty bus bays and rough build-out for a future BRT/LRT station.

Second Avenue Subway, MTA New York City Transit (NYCT), New York, NY. Lead Architect responsible for developing design guidelines and functional requirements for 16 underground stations for the Second Avenue Subway Project. The new stations are designed to serve many of Manhattan's culturally diverse neighborhoods, integrating the stations into each community's architecture and character. The designs incorporate sophisticated command/control, safety, and security systems; sustainable design features; and artwork, advertising, and retail opportunities.

East Side Access, MTA Long Island Rail Road (LIRR), New York, NY. Project Architect responsible for unified operations modifications to existing facilities in Grand Central Terminal to provide access for the Long Island Rail Road. The station facilities include two train caverns, each with two 1,020-foot by 28-foot center platforms serving four trains and leading to four mezzanines 140 feet below Park Avenue. The project included the expansion and renovation of shops and maintenance facilities, ticketing facilities, and the MTA Police substation.

Riyadh Metro Project. Chief Architect in charge of station and facility design for the Bechtel, Almabani, CCC and Siemens consortium constructing lines 1 and 2 of the Riyadh Metro system. Line 1 runs north and south through the heart of Riyadh, is 38 kilometers long. Line 2 runs east/west, is 25 kilometers long, and traverses Riyadh's newest developments (including King Saud University, the King Abdullah Financial District and King Abdulaziz City for Science and Technology). Mr. Diez was responsible for the design of all stations (with the exception of two iconic stations under separate contract), maintenance facilities and ancillary structures on the project. The project includes 15 deep underground stations, 3 deep underground transfer stations, 5 shallow underground stations, 3 at-grade stations and 11 elevated stations. The project's construction value exceeds $10 billion.

Miami-Dade County Transit Department, Miami Intermodal Center, Miami, FL. Project Architect and Planning Manager responsible for design and the preparation of environmental documents for a transportation hub connecting regional transportation modes and serving as an extension of the MIC. The MIC is planned to include commuter rail, Amtrak, high-speed rail and Metrorail stations, airport terminal facilities, a people mover connection to the airport, and an integrated rental car facility. [Prior to AECOM]

»ALYSSA DICKINSON, LEED GA

Interior Design

FIRM
AECOM

EDUCATION
BA, Interior Design, Michigan State University

YEARS EXPERIENCE
8

REGISTRATIONS/ CERTIFICATIONS
National Council for Interior Design Qualification (NCIDQ) Certified Designer

LEED Green Associate, GBCI

PROFESSIONAL AFFILIATIONS
International Interior Design Association (IIDA)

Alyssa is an interior designer in the Columbus office with experience in workplace, higher education and government facilities, as well as experiential graphic design.

Relevant experience

Alyssa has successfully led projects ranging from academic buildings and student centers, to residential life, dining spaces, and innovative workplaces. She excels at creating interior concepts and implementing them through the design phase to ensure the client's goals and culture are seen and felt in the completed spaces.

Project experience

Otterbein University, Campus Center Renovation, Westerville, OH. Interior Designer responsible for finish selections, interior design development and detailing of this 62,000 square foot facility. Led the development of key spaces such as student lounge, café, dining, multi-cultural and gaming spaces and presented to client. Worked closely with in-house graphics team and the university's archivist to implement storied visuals. Project was taken up to Design Development. [Prior to AECOM]

Ohio Northern University, New Engineering Building, Ada, OH. Interior Designer/Lead Designer responsible for finish selections, interior design development and detailing for this 100,000 square foot facility. Participated in client meetings and helped walk the client through design concepts of key areas including multiple student focused spaces such as open collaborative spaces, huddle rooms and faculty/student meeting zones. Responsible for engaging client on a visit to Steelcase's headquarters to facilitate conversations around the $1.4 Million furniture package. Developed furniture layout and package for coordination with furniture dealers. [Prior to AECOM]

Lycoming College, Gateway Building, Williamsport, PA. Lead Interior Designer responsible for conceptual development of key spaces, such as the atrium, student collaboration spaces, departmental suites and large presentation room through a client visioning session, exploration/selection of materials and furnishings for this 34,000 square foot building. Participated in multiple programming meetings with departments and presented interior concepts to leadership group. [Prior to AECOM]

The Ohio State University, 700 Ackerman Road Renovations, Columbus, OH. Lead Interior Designer responsible for leading multiple programming meetings with the various departments and space planning of a six-story, 108,000 square foot building. Worked with OSU interior designers to translate their Wexner Medical finish standards into applications for office environments including multiple departmental offices, conference spaces and building support areas. [Prior to AECOM]

ALYSSA DICKINSON, LEED GA

Leading EDJE, Bridgepark Tenant Fit-Out, Columbus, OH. Interior Designer responsible for working with client to define design direction of project through precedent imagery, led material selection review meetings and design development of 8,500 square feet of space. Also oversaw that the design intent was carried through by the team. [Prior to AECOM]

Westminster College, Hoyt Hall Science Building, Phase II (Nursing Department Suite, Classrooms, Lobby Space), New Wilmington, PA. Interior Designer responsible for implementing building finish standards developed during the first phase. Worked closely with the University to ensure appropriate furniture selections were made and coordinated procurement and installation with furniture vendor for integration into 8,500 square feet of space. [Prior to AECOM]

Westminster College, Hoyt Hall Science Building, Phase I (Atrium, Classroom, Collaboration and Lab Spaces), New Wilmington, PA. Interior Designer responsible for developing new building finish standards to be implemented across multiple phases. Worked closely with the University to ensure appropriate furniture selections were made and coordinated procurement and installation with furniture vendor for integration into 6,800 square feet of space. [Prior to AECOM]

REV1 Ventures, N. High Streete Tenant Fit-Out, Columbus, OH. Interior Designer responsible for space planning, leading project visioning sessions with the leadership team, finish selection and implementation, design development and construction documentation for 12,300 square feet of space. Also worked with a local furniture vendor to select the furniture and furniture finishes to coordinate with the overall design intent. [Prior to AECOM]

Shawnee State University, S.T.E.M Renovations, Portsmouth, OH. Interior Designer responsible for developing new interior standards for multiple buildings across campus. Participated in walking tour with leadership group of multiple building in Columbus to facilitate discussion on building standards. Worked with design director to space plan multiple facilities to support the Nursing, Sports Medicine, Occupational Therapy, Gaming, Plastics and Business programs. The master plan has been implemented over four phases with the goal of bringing in more natural light and providing student centered spaces. [Prior to AECOM]

Air National Guard, Medical Readiness Facility, Madison, WI. Lead Interior Designer responsible for developing design concepts with architectural team and implementing finish standards provided by the guard. Space types included a public waiting area, exam rooms, open and private office spaces and a large multi-purpose room. Thoughtful design was implemented by creatively using the standard finishes provided to make the most of the space. Prepared for and lead an hours long interiors review meeting to help client understand how their standards were being implemented.

Bridgeway Academy, Alum Creek K12 Building Renovation, Columbus, OH. Lead Interior Designer responsible for multiple user group meetings, summarizing the findings and implementing into the renovation for this unique project. Special consideration was needed due to the users of this building being on the autism spectrum. Worked closely with the directors to ensure a comfortable and flexible environment was being designed. Finish standards were developed with their branding in mind and carefully implemented in a logical manor as to aid in the function and wayfinding in the building. Furniture was also planned out and coordinated with a furniture vendor.

Western Reserve Historical Society, Research Library Renovation, Cleveland, OH. Lead Interior Designer responsible for developing design concepts with project architect as well as new finish standards and furniture. Due to the unique historical aspect of the space, special consideration was taken to preserve but also update and re-energize the space. Along with developing the new material standards, a furniture tour trip was organized to help further the design. Participated in bi-weekly meetings with the WRHS leadership team to update them and to keep progressing the project.

»DEREK
ENSIGN, PE, LEED AP, CEM, CXA
Mechanical Engineering

FIRM
AECOM

EDUCATION
BS, Mechanical Engineering, The Ohio State University, 2007

YEARS EXPERIENCE
14

REGISTRATIONS/ CERTIFICATIONS
Professional Engineer, OH #PE.76743

LEED Accredited Professional

Certified Energy Manager (CEM)

National Council of Engineering Examiners Certified

Certified Commissioning Agent (CxA)

Derek is a registered senior mechanical engineer responsible for the design, development and preparation of engineering plans and specifications for systems such as HVAC. He provides engineering expertise, guidance and technical assistance on a wide variety of projects.

Relevant experience

Derek has been involved with many multi-faceted engineering design teams and has been a key player in various capacities. He has designed a diverse selection of mechanical systems including high efficiency central energy plants, large scale chilled water plants, ground source heat pumps, variable refrigerant systems, fan coil and VAV reheat systems, pool systems, systems for noise sensitive environments, pressurization controls for heat and energy recovery systems, and dedicated outdoor air systems. Parallel to design, he uses energy modeling analyses, Life-Cycle-Cost Analysis (LCCA), CFD (computational fluid dynamics) analysis and building information modeling (BIM) to add value and insight to system efficiency, capital investment vs. life cycle cost, and ultimately to find the most versatile and energy appropriate solution to any building.

Project experience

Northern Indiana Commuter Transportation District (NICTD) Double Track, Northwest Indiana. Mechanical Engineer for two transit stations located in Michigan City, IN and Miller Station in Chesterton, IN. Overall project cost $420 Million. Miller Station included over 2,500 square foot of ticketing, waiting, and support spaces for the local station. Michigan City Station also included over 2,500 square foot of ticketing, waiting and support spaces, but had an added level of complexity including a full parking garage, tenant space for retail and restaurants, and a historic preservation. The Michigan Station involved working closely with the FTA and local governing authorities to achieve required approvals and complete designs that enhance the communities.

Confidential Client, Lakeland, FL. Lead Mechanical Engineer. A new $139 Million main air distribution hub. This 1.2 million square foot main structure was designed to house a series of conveyor systems driven by motors all with variable frequency drives. The project faced an aggressive construction schedule that included being fully designed, constructed and operational within a year from award. The project design included working hand-in-hand with the construction manager from the start to deliver the project on-time and under budget. The close coordination led to multiple bid packages, early release and pre-purchases of major equipment to mitigate the critical path. Mechanically, a facility of this nature and process will develop an immense cooling load that otherwise would harm sensitive microprocessor-based system controls. The 1,500-ton cooling system includes 54 high efficiency variable speed packaged rooftop units serving both the main distribution hub. Mission critical computer support areas are cooled by computer room air conditioning units. Another 50,000 square feet of office area is conditioned by 15 single and multi-zone variable air volume systems. To support a facility of this size, included a 20,000 square

DEREK ENSIGN, PE, LEED AP, CEM, CXA

foot remote maintenance building that would serve as both repair and warehouse supporting the cargo planes, ground equipment, and material handling equipment. Total construction cost of the maintenance facility was $6,000,000.

Confidential Client, Sortation Hub, Hebron, KY. Lead Mechanical Engineer for a new $2.1 Billion main air distribution hub. This 9 million square foot structure was designed to house a series of robotics and conveyor systems driven by motors all with variable frequency drives. To support a facility of this size, included a 55,000 square foot remote maintenance building that would serve as both repair and warehouse supporting the cargo planes, ground equipment, and material handling equipment. Total construction cost of the maintenance facility was $16,500,000.

Mechanical Engineer, Cummins Seymour HH Blockline, Cummins, Inc., Columbus, IN. Lead Mechanical Engineer included leading the complete HVAC and Plumbing design effort for this new industrial facility. This included complete specifications and complete documentation for construction of the facility including offices, manufacturing space, central energy plant and future growth to 180,000 square feet. Provided complete specifications and selections and aided the owner in pre-purchase of large pieces of mechanical equipment to benefit the construction schedule. AECOM was selected to design the new blockline plant for Cummins, Inc. This 60,000 square foot plant houses very large milling machines for producing high horsepower engine blocks, as well as other industrial processes, and is attached to a new energy center, also designed by Derek. The new energy center design included (4) 325 ton screw chillers, new variable primary pumping, chilled water storage/buffer tank, and heat exchangers for a closed loop process cooling system for the engine plant and associated pumps.

»BRIAN WALKER, PE

Electrical/Lighting/Security

FIRM
AECOM

EDUCATION
BS, Electrical Engineering, The Ohio State University, 1992

YEARS EXPERIENCE
27

REGISTRATIONS/ CERTIFICATIONS
Professional Engineer, OH #PE.61832

TRAINING
Seminar, National Electric Code Refresher Course, 1991

Seminar, Lighting Retrofit Training Seminar, 1993

Specialized Training, AutoCAD 12 Training Course, 1993

Seminar, G.E. Lighting Design Seminar, Nela Park Cleveland, OH, 1993

Brian has 27 years of experience as an electrical engineer. He is experienced in the preparation of construction drawings and specifications.

Relevant experience

Brian's design experience includes power distribution systems up to 138 KV, lighting systems, fire alarm systems, telecommunications design, instrumentation and SCADA systems, short circuit analysis/coordination/Arc Flash studies.

Project experience

Confidential Client, Development of a Safety and Security Program. Electrical Engineer. A Transportation Authority in a west coast city is planning the development of a major intermodal terminal for downtown and the construction of a multi-use tower which will be the west coast's tallest building. The terminal will be the nexus for a number of transit operators, including public and private bus operators, commuter rail, Amtrak and eventually high-speed rail. The AECOM team has been tasked with managing the development of a safety and security program. In addition, AECOM has been conducting threat and risk assessments for the proposed Center and the downtown extension of the tunnels that will eventually extend service to the Center. The intent is to identify threats and potential vulnerabilities that need to be addressed as part of design and preliminary engineering to reduce risk. The comprehensive threat and vulnerability assessment will provide critical input that the client's design team will need as it moves from concept validation through schematic design. This will allow the design team to establish realistic design criteria with respect to standoff distances, glazing, surface materials, and additional structural and system hardening possibilities.

UPS Worldport Expansion, Louisville, KY. $500 Million expansion of the client's main air distribution hub. This 1 million square foot pre-cast structure was designed to house a series of conveyor systems. The expansion included 15 KV power distribution using double ended substations. The expansion will use 100 MW of power. Design work included 480 volt power distribution, lighting design and calculations, fire alarm system, and telecommunications. Design work included detailed coordination with client subcontractors and operations personnel.

Confidential Client, Air Distribution Hub, Hebron, KY. A new $2.1 Billion main air distribution hub. This 9 million square foot structure was designed to house a series of conveyor systems driven by motors all with variable frequency drives. The buildings and site is estimated to require approximately 80MW of electrical power with an estimated 64MW for the main building. The power distribution for the site is comprised of a new medium voltage distribution switchgear lineup, three 2MW, 12.47kV diesel generators, and 15kV paralleling switchgear to support the main facility building along with ancillary buildings. The main building includes 242500 kW double-ended substations that distribute 480V, three phase power throughout the building. The emergency distribution system in the main building includes 24 500kW transformers and subsequent electrical distribution equipment

BRIAN WALKER, PE

to provide emergency power for the emergency lighting, legally required power for the smoke evacuation system, and optional standby power to IT MDFs and IDFs.

New Mexico Spaceport Authority, Spaceport America Terminal and Hangar Facility, Las Cruces, NM. As Electrical Engineer, Brian's responsibilities included design of the electrical power, lighting, lighting control and standby generator systems. AECOM was selected to provide project management and all engineering services for the design of this new technically complex terminal and hangar facility at Spaceport America; the first facility ever built for commercial space travel. Selected from an international field of 11 firms, AECOM and Foster+Partners teamed up to design this new 100,000 square foot facility. Designed to achieve LEED Gold certification. Cost: $32 Million.

Fentress Architects, San Francisco International Airport New Air Traffic Control Tower, Denver, CO. As Senior Electrical Engineer, Brian's responsibilities included leading a team of Electrical Engineers and Designers in the design of the power, lighting, telecom, fire alarm and customized FAA monitoring and control system for the ATCT power system. This design/build, FAA-funded project is a clear demonstration of AECOM's deep understanding of engineering, design of highly complex airport buildings and our ability to deliver engineering designs that can be constructed within the envelope of a busy airport terminal complex. The project is anticipated to achieve LEED Silver certification. Cost: $100 Million.

Louisiana State University, Medical Center of Louisiana at New Orleans, New Orleans, LA. Electrical Engineer. The new Louisiana State University (LSU) Academic Medical Center (AMC) of Louisiana in downtown New Orleans will replace the existing LSU Hospital and the existing Charity Hospital. The new Medical Center will be located on a 37-acre campus. The LSU AMC is a very high profile project for New Orleans and the State of Louisiana and is vital in the revitalization of this area of the city. The urban campus will also include a new VA Replacement Hospital. The combined projects will produce one of the most modern medical campuses in the United States with flood and hurricane resistant structures designed to stay online for weeks in the event of a major emergency where utilities are interrupted. The entire project is being designed, simulated and documented for construction on a shared BIM platform to create an aggregated 3D facility simulation of over 1,500,000 square feet. Cost: $768 Million (Estimated Construction).

Department of Veterans Affairs - Office of Construction & Facilities Management, Robley Rex Replacement Medical Center - Central Region, North Chicago, IL. As Electrical Engineer, Brian's responsibilities included leading a team of Electrical Engineers and Designers in the BIM design of the facility. The scope of design includes 13.2 KV campus electrical system, emergency generator, PV, Co-Gen, low voltage power systems, lighting, telecom, access control, CCTV and SCADA system. The AECOM/SmithGroup Joint Venture was selected by the US Department of Veterans Affairs (VA) to provide planning, architectural design and engineering services for a new Veterans Affairs Medical Center (VAMC) and Veterans Benefits Administration (VBA) Regional Office in Louisville, Kentucky. The new consolidated campus will be located on a 34.9-acre greenfield site, which will allow for the incorporation of healing gardens and veteran memorials. The 885,700 square foot mission critical facility will be designed to support state-of-the-art healthcare services, research, regional laundry services, veteran benefits administration, and parking structures for 3,000 vehicles. The new campus will be highly sustainable, and the design will meet the US Green Building Council's (USGBC) LEED Silver rating with renewable energy features and a central cogeneration plant. Cost: $701 Million (Estimated Construction).

United States Army Corps of Engineers, Mobile District, A-E Services Test & Balance, HVAC Controls Assessment, Electrical Tracing and As-Built Update for Guthrie Army Health Clinic, Mobile, AL. Electrical Engineer. The Guthrie Army Community Health Clinic (GACHC) has documented problems with reliability of HVAC equipment, maintaining temperature settings and providing design air flow throughout the clinic, along with humidity control throughout the facility. In efforts to help identify potential remedies to the HVAC issues at Guthrie, the AECOM/Gulf Coast Architectural team was awarded a task order to do an HVAC and Electrical Systems Assessment in 2011, this follow-up task brings closure to all remaining work efforts from the original task order. Specific work completed under this task includes: Test & Balance of HVAC System and Electrical Tracing and Final As-builts. Cost: $29,000 (Fee).

BIRI Roxanne Labs Chiller Plant Improvements, Columbus, OH. Project Electrical Engineer for the upgrade of the chiller plant improvements for the BIRI-Roxanne Labs Campus chiller plant and 13.2 KV electric service/distribution. The scope of the project is the addition of a new chilled water plant and 13.2 KV primary metering service to the campus. The new primary metering service included a preferred and alternate feeds from the Power Co. Upon loss of power from the preferred Power Co. feed the service switchgear automatically transfers to the alternate Power Co. service. Scope included synchronized switching from the 13.2 KV alternate Power Co. circuit to the preferred Power Co. circuit. Scope included 13.2 KV service entrance switch gear, 480 volt double ended substations and site distribution to existing double ended substations.

»ANDY KNAPKE, PE, SE

Structural Engineering

FIRM
AECOM

EDUCATION
MS, Structural Engineering, Purdue University, 1998

BS, Civil Engineering, University of Notre Dame du Lac, 1997

YEARS EXPERIENCE
20

REGISTRATIONS/ CERTIFICATIONS
Professional Engineer, OH #PE.66697

PROFESSIONAL AFFILIATIONS
National Science Foundation Graduate Fellowship

American Institute of Steel Construction

Andy has 20 years of project experience which has included the analysis and design of post-tensioned concrete parking structures, facilities, airport terminals, commercial distribution centers and office buildings.

Relevant experience

Andy's engineering experience includes performing structural engineering analysis, design, and review; programing, modeling and analyzing structures using computer software; developing, as well as supervising, the production of construction documents. He is knowledgeable in designing steel, concrete, wood, and masonry structures as well as any combination thereof. In addition to his engineering expertise, Andy is proficient working within the BIM environment and in the context of an Integrated Project Delivery model.

Project experience

Ohio Department of Transportation, Warren County Full Service Maintenance Facility, Lebanon, OH. Structural Engineer provided structural system selection and preliminary structural layout under a design-build contract for a new 50,000-square-foot office/ maintenance facility for ODOT fleet vehicles and administrative staff.

Indianapolis Public Transportation Corporation, IndyGo Transit Center, Indianapolis, IN. Structural Engineer of record for structural system selection and preliminary structural layout. Also included design oversight throughout detailed design phases and responsible for final checking and design reviews of construction documents. Design of the irregular structures included several large cantilevered elements as well as cable-stayed masts supporting a significant portion of the main roof structure.

Chicago Department of Fleet and Facility Management, Vehicle Maintenance Facility Relocation, Chicago, IL. Senior Structural Engineer performing detailed analysis and calculations of the structural system, under this design-build contract for the relocation of the vehicle maintenance facilities to three sites in order to disperse services and improve operations.

Honolulu Authority for Rapid Transportation, West Oahu Station Group - Ho'opili Station Preliminary Engineering and Design, Honolulu, HI. Structural Engineer provided engineering design support for three new elevated transit stations more than 30 feet above ground with platforms on both sides of the guideways that are connected by bridges protected with cantilevered, stretched fabric membrane.

Honolulu Authority for Rapid Transportation, Farrington Highway Station Design Support, Honolulu, HI. Senior Structural Engineer provided engineering design support for the first segment of this elevated fixed guideway rail system project, which includes seven miles and six stations from East Kapolei to Pearl Highlands.

ANDY KNAPKE, PE, SE

City of Ottawa, Light Rail Transit Tunnel and Facilities, Ottawa, Ontario, Canada. Structural Engineer provided structural engineering design for the unique structural system design for nine rail stations, which involved a hybrid diagrid grid-shell free form structure which utilizes prefabricated HSS section X-frames field bolted together to form a continuous, rigid frame with concealed, internal connections.

Toronto Transit Commission, Scarborough Rail Transit Conversion and Modifications, Scarborough, Ontario, Canada. Structural Engineer provided engineering designs support services for preliminary design of five existing intermodal transit stations and guideway support structures to accommodate the new vehicles being replaced by the TTC.

Transbay Joint Powers Authority, Transbay Transit Center, San Francisco, CA. Lead blast consultant responsible for the provision of a vulnerability assessment.

US Postal Service, Nationwide Construction Management Support Services Indefinite Delivery Contract, Various Locations. Structural engineer providing comprehensive verification of structural designs of several large mail processing facilities. Verification included independent computer modeling and analysis and submittal review during construction. Structures typically used tilt-up wall construction.

United Parcel Service, Centennial Hub Expansion, Louisville, KY. Engineer of Record responsible for performing structural system selection and preliminary structural layout of this 850,000 square foot addition including the full replacement of package handling equipment which nearly doubles the package processing rates thereby increasing e-commerce and retail package commerce.

New Mexico Spaceport Authority, Spaceport America Terminal and Hangar Project Management and Design, Upham, NM. Structural engineer provided structural system selection and preliminary structural layout of this new 100,000 square foot, technically complex, first terminal and hangar facility built for commercial space travel.

United Parcel Service, Swan Island Hub Expansion, Portland, OR. Structural Engineer of record for design oversight of the 92,773 square foot south addition incorporating two operational mezzanines at two different elevations to accommodate administrative and logistics functions of the hub facility.

United Parcel Service, Worldport Phase 1 - Airlines Hub 2000, Louisville, KY. Structural Engineer provided engineering services for the design of a new 2,800,000 square foot sortation building equipped to house a state-of-the-art material handling system resulting in one of the largest package sortation conveying systems in the world.

FedEx Corporation, Ground Service Hub Facility, Houston, TX. Structural Engineer responsible for structural system selection and preliminary structural layout for a 1.4 million square foot spin-off hub expanding package distribution for FedEx Ground.

FedEx Ground, Delivery Service Hub Renovation, Columbus, OH. Structural Engineer responsible for structural system selection and preliminary structural layout of 10,000 square feet of interior office space, including a 2,000 square foot low hazard material storage area; as well as the renovation and expansion of the 4,000 square foot security gateway building.

United Parcel Service, Trabue Hub Expansion, Columbus, OH. Engineer of Record responsible for the structural system selection and preliminary structural layout for this 250,000 square foot addition including a new automated material handling system which significantly increases handling speed.

Amazon, Cincinnati/Northern Kentucky International Airport Hub - Phase 1B, Erlanger, KY. Structural Engineer of record responsible for the design of this major air logistics hub which includes a sortation building, 1200-car parking structure, and miscellaneous buildings for the support and maintenance of ground service equipment used at the airfield. The main logistics building contains several million square feet over multiple floors with enhanced structural performance criteria to accommodate state-of-the-art processing equipment.

US Postal Service, Worldport South Core Study, Columbus, OH. Senior Structural engineer performing detailed analysis and investigation of existing conditions with an emphasis on necessary measures to be taken as part of the design to expand the core building south through the area now occupied with portions of the grade lane hub.

United Parcel Service, Worldport Phases 2 & 3 - North and South Expansions, Louisville, KY. Staff Engineer responsible for performing detailed analysis and calculations of the structural system for this multi-phased expansion of the north and south core facilities including over 1.4 million square feet of added cargo sortation space and adding to the existing high bay structure at the Grade Lane Hub.

»DIMITRIE PRELIPCEANU, AIA

Amtrak Platform Design and Signage Architect

FIRM
AECOM

EDUCATION
MA, Architectural Engineering, Gheorghe Asachi Technical University, 1998

YEARS EXPERIENCE
22

REGISTRATIONS/ CERTIFICATIONS
Registered Architect, NY #035840

PROFESSIONAL AFFILIATIONS
Romanian Order of Architects

American Institute of Architects

TRAINING
OSHA 4-Hour Scaffold Training

Amtrak Track Trained

AWARDS
IHMRS Gold Key Award for Excellence in Hospitality Design NYLO hotel renovation, 2014

Dimitrie has 22 years of experience as an Architect and Project Manager, in New York area and internationally. His past positions include working as a Design Manager and Owner's Construction Manager on large projects throughout New York City Metro area with an emphasis on management and constructability. He has expertise for new and existing facilities for transportation, government, educational, commercial and hospitality clients.

Relevant experience

With extensive knowledge of building design and construction, procurement, permitting and construction administration Dimitrie underlines close collaboration with all parties as a key element for success of all projects. He is thoroughly familiar with Building Codes, including NYC, IBC and ADA. He has experience in budget management, project controls, bid leveling and review process, construction schedule, change orders approvals, special inspections, invoicing and closure procedures. Dimitrie has participated in projects with up to $200 Million construction budget.

Project experience

Amtrak ADA Design Program Manager, New York Metro. Managing ADA compliance projects for more than 50 Amtrak stations throughout continental U.S. The program employs a large (over 70 people) team of engineers and architects spanning five AECOM offices in Northeast.

National Railroad Passenger Corporation/Amtrak, ADA Stations Program (80 Stations), Various Locations. Co-program manager for a nationwide program for ADA compliance for Amtrak stations. Leading a design team of over 60 professionals from multiple AECOM offices and providing technical services across the US. In charge with financials, client interface, staffing, and scheduling for design and construction services.

TIAA-CREF, New York, NY. In charge with managing and executing $12 Million in CAPEX projects across four of the client's top real estate assets in Manhattan. Projects include interior and exterior renovations for class A office buildings in Manhattan. He was responsible for RFPs, bid leveling, design and construction scheduling, technical assessments and approval of all financials pertaining to the execution of these projects. Highlights include the completion of an ultramodern Conference Center and new corporate gym at 780 3rd Avenue, Exterior renovations and repairs required by Local Law 11 at 685 3rd Avenue, New York and full exterior repairs for a landmarked building at 1511 3rd Avenue.

MTA Corona Maintenance Facility, Queens, NY. Design and construction administration phase [Prior to AECOM]

World Trade Center Air Train Connection to JFK Airport Terminals (with Systra Engineering). Conceptual design only. [Prior to AECOM]

DIMITRIE PRELIPCEANU, AIA

NYDOT St. George Ferry Terminal, Staten Island, NY. Construction documents phase. [Prior to AECOM]

Rehabilitation of MTA Neptune Station, Coney Island – Brooklyn, NY. Survey, schematic, construction documents phase and construction administration. [Prior to AECOM]

MTA West 8th Street Station, NY. Survey, schematic and construction documents phase [Prior to AECOM]

NJT, 9th Street - Congress Street HLBR Light Rail and Bus Station and Connecting Tower, Hoboken, NJ. Schematic and Construction documents phase. [Prior to AECOM]

NJT Six stations. ADA predesign services (survey and scope identification). [Prior to AECOM]

New York Department of Transportation, Southbound FDR Highway Rehabilitation. Construction documents phase. [Prior to AECOM]

TTC, New Maintenance Facility for Toronto Transit Commission. Construction documents phase [Prior to AECOM]

»ANGELA BRAZZALE

FRA and Amtrak Coordination

FIRM
AECOM

EDUCATION
Fox College, Administrative/ Secretarial Certificate, Oak Lawn, Illinois

YEARS EXPERIENCE
39

Angela has a significant amount of experience working with several states and agencies with the management and FRA compliance for their rail studies, projects and programs with a mixture of federal, state and railroad funding.

Relevant experience

Angela has been involved in preparing grant applications for federal and state funded programs including FRA high speed intercity passenger rail, Transportation Investment Generating Economic Recovery (TIGER), Consolidated Rail Infrastructure & Safety Improvement (CRISI), Railroad Safety Infrastructure Improvement, and FRA research and development for next generation railroad programs. From 1981 to 2005, she worked at Amtrak during which time she was involved in the planning for the Midwest Regional Rail System, CREATE Program, and assisting with the management of new technology positive train control initiatives in Michigan and Illinois.

Project experience

Wisconsin Department of Transportation, Milwaukee Airport Rail Station Infrastructure Improvements Final Design, Milwaukee, WI. FRA Coordinator for WisDOT's $10.1 Million CRISI grant for improvements at the Milwaukee Airport Rail Station that will benefit passenger and freight rail. Improvements funded by the grant include a new second concrete platform with canopy or shelters; pedestrian overpass integrated with the existing station building; and track realignment. Responsible for preparing FRA required documentation including the Detailed Work Plan along with cost estimate and schedule and FRA Quarterly Reports. Design submittals will be reviewed to confirm that all of the FRA-required components are included in the plans, specifications and estimate.

Metra, Positive Train Control (PTC) Program Management, Chicago, IL. Deputy Project Manager for Metra's $415 Million Positive Train Control (PTC) Installation Program on their commuter rail network in the Chicago metropolitan area. The program includes coordinating activities related to the PTC installations on the wayside signal system, dispatch system back-office server, and onboard locomotives and cab cars. AECOM is facilitating the integration of work by Metra and their system integrator for installations, testing, and revenue service demonstration that will lead to FRA system certification. Responsible for supporting program activities as required, system integrator contract management and invoice review, schedule updates, and preparing reports and documentation for FRA regulatory and FTA/RTA funding compliance.

Northern Indiana Commuter Transportation District, Train Station Improvements, East Chicago, IN. FRA Coordinator for the $5.3 Million Railroad Safety Infrastructure Improvement grant for station improvements to enhance commuter safety by providing a secondary means to exit and enter the platform. Design and construction services for station improvements completed included a secondary ADA-compliant stairwell; platform ingress/egress, video surveillance, and traffic and circulation enhancements. Responsible for preparing the FRA-required Detailed Work Plan along with the cost and schedule.

ANGELA BRAZZALE

Illinois Department of Transportation, Chicago to Quad Cities Program Management Consultant, Chicago to Moline, IL. Deputy Project Manager for IDOT's $222 Million service development program to reintroduce intercity passenger rail service between Chicago and Moline, approximately 167 miles. The federal and state funded program includes coordination with FRA, IDOT, BNSF Railway, Iowa Interstate Railroad, Amtrak, environmental and permitting agencies and local municipalities. Work included overall management and coordination for the preliminary engineering, NEPA, final design and construction phases of the infrastructure improvements. All activities performed adhered to FRA funding requirement for documentation and quarterly reporting on progress, schedule and finances. Responsibilities included supporting program activities as required, managing subconsultant work, developing design and construction phase schedules and cost estimates, coordinating with railroad stakeholders, and preparing FRA progress reports and documentation.

Virginia Department of Rail and Public Transportation (DRPT), Virginia Railway Express's (VRE) Positive Train Control (PTC) Grant Application Evaluation Study, Fredericksburg and Manassas, VA to Washington, DC. Rail Planning Lead for the development of the draft and final professional judgement report on VRE's plan for PTC implementation to support commuter rail service on two rail lines between Fredericksburg and Manassas to Washington, DC over CSX-, NS and Amtrak-owned corridors. Coordinated and documented meetings with the railroads to understand their plans for PTC implementation on corridors over which VRE operated. Prepared professional judgement report based on information gathered from VDRPT, VRE and the host railroads which was supportive of VRE's grant application for PTC funding.

Iowa Department of Transportation, Chicago to Omaha Rail Corridor Investment Study, Chicago, IL to Omaha, NE. Railroad Specialist involved in planning activities for the $2 Million Chicago to Omaha Corridor Investment Study which included a Tier I Environmental Impact Statement (EIS) and a Service Development Plan. Identified Chicago termination points for the five routes analyzed; drafted Technical Memorandum on the Service Development Plan Methodology and Outline; drafted responses to public and agency comments on the EIS; and participated on the team that prepared the draft Service Development Plan.

Wisconsin Department of Transportation (WisDOT), Milwaukee to Madison High-Speed Intercity Passenger Rail Program Funding Obligation Assistance, Milwaukee to Madison, WI. Project Manager working with WisDOT to prepare the first ever FRA and State high-speed intercity passenger rail Grant/Cooperative Agreement for the $810 Million Milwaukee to Madison corridor which was executed on October 31, 2010. The FRA and WisDOT worked together to de4velop the process including documentation require to identify scope, schedule and budget for the program along with milestone deliverables with a path to revenue service implementation. Extensive collaborative work was performed by the FRA and WisDOT to develop the process and also ensure that legal terms were mutually acceptable. Responsible for preparing and updating documentation which included the Statement of Work, Program Management Plan, and Financial Plan. Participated in daily conference calls with FRA and WisDOT to coordinate work activities so that the funding obligation process could be completed in 22 days.

Washington State Department of Transportation, Pacific Northwest Corridor (PNWC) Intercity Passenger Rail Program, Bellingham to Vancouver, WA. Railroad Specialist assisting WSDOT in completing the FRA-required high-speed intercity passenger rail documentation for the $750 Million PNWC Rail Program. Initially, an assessment was prepared of the information gaps I the Program Management Plan, Financial Plan, and Everett Storage Tracks Project Initiation Plan. Upon completion of the assessment, services were provided to revise the program documents and also develop the Service Development Plan for FRA approval to initiate the program. Work activities included participating in program workshops and conference calls. Lessons learned from previous work in Wisconsin provided the basis for identifying the gaps and revising the program documents to the FRA's satisfaction.

Michigan Department of Transportation, Michigan Positive Train Control Program, New Buffalo to Kalamazoo, MI. Deputy Program Manager from 1995 to 2005 for the $40 Million program to develop, install, test and implement an advanced technology, radio-based communications train control system for incremental train speed improvements up to 110 mph on 65 miles of the Amtrak Chicago to Detroit passenger rail corridor between New Buffalo and Kalamazoo. Work activities included preparing the initial grant application and supplemental funding requests; program management and administration; contract administration; oversight to system installation and testing including creating test documents and reports; preparing technical system reports; identifying and tracking anomalies to resolution; and coordination of contractor and Amtrak field work activities. The PTC system was placed in revenue service at 79 mph in 2001, at 90 mph in 2002, and at 110 mph between Porter, Indiana and Kalamazoo in 2012.

ALANNA STROHECKER

CSX Coordination

FIRM
AECOM

EDUCATION
MBA, Business Administration/ Management, University of Maryland-Baltimore, 2008

BEng, Civil Engineering, Villanova University, 2001

YEARS EXPERIENCE
19

PROFESSIONAL AFFILIATIONS
American Railway Engineering and Maintenance of Way Association (AREMA)

TRAINING
Fundamentals of Railroad Engineering

Alanna is a vice president and the Freight Rail market sector leader for AECOM. She has experience in the design, review, and construction of various passenger and freight railroad, highway and utility design projects.

Relevant experience

For the last 16 years, Alanna has progressively managed larger projects and programs within the rail and transit industry. She has proven abilities in completing multiple tasks under short schedule demands. In addition, Alanna has experience managing large teams as well as project budgets. She leads cross-functional teams towards strategic program goals. Her experience includes review of railroad and local planning highway projects. Alanna also has experience in the field review of bridge structures, grade crossings, and facilities adjacent to railroads.

Project experience

CSX Transportation, CSX General Engineering Consulting Contract, Systemwide. Program administrator for the CSX Transportation General Engineering Contract. Responsible for all financial aspects of the $10 Million annual contract with CSXT including project budgets, monthly invoicing, task requests, and internal financial reporting for 300 individual projects. Manages the public projects portion of the general engineering contract, including direct oversight of nine full time employees supervising active projects under review and in construction. Provides engineering oversight of project engineers handling various public projects including proposed overhead bridge replacement/ rehabilitations, undergrade structures, grade crossing modifications, and other adjacent construction projects with CSX Transportation. Represent CSXT at meetings with outside parties and other stakeholders.

BNSF Railway Company, Regional Economic Development, Various Locations. Managed programs from conception to construction for new rail served facilities. Projects included greenfield developments, industrial parks, and customer facility expansion projects worth $500,000 to $50 Million in revenue for BNSF Railway. Program responsibility included coordinating efforts of various departments within BNSF including engineering, operations, service design, marketing, sales, and real estate. Created solid relationships with state commerce, regional economic development, and city contacts within territory to develop new leads for rail service opportunities. Managed all transload facilities within region to drive specific business to those strategic partners.

CSX Transportation, Capital Reliability Projects, Washington, DC. Task Leader responsible for database and budget management for various CSXT capital improvement projects. CSXT has undertaken the projects to improve rail operations. Various projects involved significant trackwork construction and signal relocation. The database updates were performed so that CSXT personnel can be informed about project status and budgetary constraints.

ALANNA STROHECKER

CSX Transportation, Capital Reliability Projects, Baltimore, MD. Task Leader responsible for database and budget management for various CSXT capital improvement projects. CSXT has undertaken the projects to improve rail operations. Various projects involved significant trackwork construction and signal relocation. The database updates were performed so that CSXT personnel can be informed about project status and budgetary constraints.

CSX Transportation, Passenger Station Inventory, Systemwide. Project Engineer responsible for inventory of commuter stations along CSXT's operational right of way. Performed site visits, inspected conditions at passenger stations, and recorded applicable information for CSXT's reference. A physical inventory of the track and passenger conditions was performed. Also provided all data to CSXT at the project's completion.

CSX Transportation, Parker Street Undergrade Bridge Replacement, Springfield, MS. Project Engineer responsible for review of design plans for a bridge replacement. The project included a review of track and structural designs, as well as coordination of CSXT signal facility relocation and fiber optic relocation. Construction will be approximately two years with various CSXT track relocations to replace the undergrade bridge in phases. CSXT operations will continue during construction. Responsible for the development of CSXT costs for relocation of track in phases, as well as signal facilities.

Mississippi Department of Transportation, State Rails Needs Assessment, Mississippi. Task Leader for Cass III coordination, responsible for organizing and administering all interviews of the Class III railroads within the state. Organized both the interview documentation, as well as a 100 percent physical assessment of all 700 track miles of Class III rail lines. Interviews consisted of a discussion of existing short- and long-range plans for the rail lines, including expansion, realignments, future abandonments, and expected growth for each Class III rail line. Data collected was organized for MDOT and analyzed to determine possible modifications to improve freight rail service within the state.

Confidential Client, Major Freight Rail Line Commuter Rail Feasibility Study, Multiple States. Evaluate previously completed cost estimates for the addition of commuter service to a freight rail line. The project consisted of field work to inspect the rail line for possible conflicts and property requirements. All rail structures and existing track infrastructure were field viewed. Cost estimates were then revised to provide a more accurate total based upon additional field work and knowledge of rail construction. Costs included track construction, structures, right of way, frontage roads, drainage, environmental mitigation, railroad facilities, and professional services for the proposed approximate 35-mile corridor.

Pennsylvania Department of Transportation, Keystone Corridor Clearance Evaluation and Potential Truck Diversion Study, Pennsylvania. Benefit Analysis Lead duties included providing support to the cost estimate lead while managing the cost benefit analysis. The study's goal was to identify the feasibility and cost-benefit for obtaining doublestack (vertical and horizontal) clearance in the Keystone corridor from Harrisburg to Philadelphia. Study objectives accomplished included identified the doublestack and piggyback clearance restrictions along the Keystone corridor; identified engineering solutions to obtain clearances; and identified costs and benefits of obtaining the horizontal and vertical clearance. The benefit analysis lead analyzed the viability of various engineering solutions to determine the most efficient method of improvement for each clearance restriction along the corridor.

CSX Transportation, Site Investigation and Engineering, New Orleans, LA to Mobile, AL. Engineer on the project team responsible for site investigation and engineering related to various alternate routes for the proposed relocation of the CSXT rail line. The project included preparation of an environmental impact statement to relocate the CSX Railroad north of the urban area, and locate a corridor for a new multilane east-west roadway north of USH 90 and south of I-10. Project work consisted of planning and estimating relocation costs associated with the various routes through the state of Mississippi. Engineering work consisted of calculations for various grade separated structures, roadway realignments, right-of-way limits, excavation and fill quantities, track structures, and signal work. Preliminary range-of-magnitude corridor estimates were also prepared to aid Mississippi DOT in budgeting of funds, both federally and from a state perspective.

CSX Transportation, Site Investigation and Engineering, Alabama. Engineer on the project team responsible for site investigation and engineering related to various alternate routes for the proposed relocation of the CSXT rail line. The project included preparation of an environmental impact statement to relocate the CSX Railroad north of the urban area, and locate a corridor for a new multilane east-west roadway north of USH 90 and south of I-10. Project work consisted of planning and estimating relocation costs associated with the various routes through the state of Mississippi. Engineering work consisted of calculations for various grade separated structures, roadway realignments, right-of-way limits, excavation and fill quantities, track structures, and signal work. Preliminary range-of-magnitude corridor estimates were also prepared to aid Mississippi DOT in budgeting of funds, both federally and from a state perspective.

»LOU IASCONE

Real Estate Valuation

FIRM
AECOM

EDUCATION
BSc, Finance, University of Akron, 2005

YEARS EXPERIENCE
19

TRAINING
ODOT Prequalification Training Project Management for Right of Way Acquisition Services

ODOT Prequalification Training Title Research

ODOT Prequalification Training Appraisal Review

ODOT Prequalification Training Negotiation

ODOT Prequalification Training Closing

Lou has 19 years of right-of-way acquisition experience on transportation projects. He has worked as both a consultant to and employee of the Ohio Department of Transportation Real Estate offices and property manager for the Greater Cleveland Regional Transit Authority.

Relevant experience

Lou has a wide range of experience performing right-of-way project management and acquisition services on numerous projects. Lou has a thorough understanding of the Federal Uniform Act, Ohio Department of Transportation Right of Way Policies and Procedures, and pertinent federal and state laws. He is proficient in a range of real estate and right-of-way acquisition disciplines including project management, title research, appraisal/review, cost estimating, negotiations, property management, relocation/review, and closing/recording. Lou works closely with the right of way team and agency staff to successfully clear the right of way on schedule.

Project experience

Ohio Department of Transportation, Right-of-Way Acquisition (Med-18-1354), Medina, OH. Deputy Project Manager on the widening and safety improvement on US 42. Right-of-way acquisition services were provided for 88 parcels within a highly commercial area.

Ohio Department of Transportation - District 4, State Route 43 Widening (STA-43-17.24), North Canton, OH. Project Manager responsible for all right-of-way acquisition services for widening State Route 43 to provide one additional through lane in each direction plus a 2-way left-turn lane. The project required acquisition of 119 parcels from residential and commercial properties.

Ohio Department of Transportation, SR 43 Widening (STA-43-17.24), North Canton, OH. Project Manager responsible for all right-of-way acquisition services for widening State Route 43 to provide one additional through lane in each direction plus a two-way left turn lane. The project required the acquisition of 119 parcels from residential and commercial properties.

Ohio Department of Transportation, I-70/US 40/SR 331 Interchange (BEL-70-14.24), St. Clairsville, OH. Project Manager for right-of-way acquisition services for the interchange improvement and widening. The project required acquisition of approximately 20 parcels including commercial, government, and residential properties.

Ohio Department of Transportation, US 62 Widening (HOL-62-26.06), Berlin Township, OH. Assistant Project Manager for right-of-way acquisition services for widening US 62. Right-of-way acquisition was completed on the 53-parcel safety improvement project.

LOU IASCONE

Ohio Department of Transportation, US 250 Widening (ERI-250-0.00), Sandusky, OH. Deputy Project Manager for all right-of-way acquisition services for improvement of US 250. The project consisted of capacity improvements at intersections, widening, and access management improvements. The project required the acquisition of 120 parcels from primarily commercial properties.

Ohio Department of Transportation, SR 2/SR 44/SR 615 Interchange (LAK-2-7.76), Mentor, OH. Performed right-of-way project management and acquisition services for improvement of the State Route 2 interchanges at State Routes 44 and 615. Right-of-way acquisition was completed on 15 parcels for improvement of both interchanges.

Greater Cleveland Regional Transit Authority, Euclid Corridor Transportation, Cleveland, OH. Deputy Project Manager for right-of-way acquisition services for the bus rapid transit project along seven miles of Euclid Avenue. The project required acquisition of 234 parcels.

»JASON RAMLER, PE

Civil/Site Engineering

FIRM
AECOM

EDUCATION
BSc, Civil Engineering, University of Cincinnati, 1997

YEARS EXPERIENCE
22

REGISTRATIONS/ CERTIFICATIONS
Professional Engineer, OH # PE.66988

TRAINING
InRoads Training

Highway/Railroad Grade Crossings

Geopak/Eric Thomas - trainer

ODOT Microstation/Geopak CADD Seminar

Microstation Training/Ethan Schwartz - trainer

Mountain Bike/Hiking Trail Design and Construction Workshop

Modern Roundabout Design Workshop - NE Roundabouts

Professional Trailbuilders Conference

Jason has 22 years civil/site engineering experience in design projects for highways, bicycle and pedestrian facilities and industrial sites.

Relevant experience

Jason's experience includes geometrics, storm sewer drainage, pavement design, traffic control and traffic maintenance, noise barriers, utilities, and right of way plans. He also has experience using civil design software including Geopak, InRoads and Civil 3D.

Jason also has experience developing planning studies for bicycle and pedestrian facilities including bicycle master plans and shared use trail studies.

Project experience

US-27 North, City of Oxford, Butler County, OH. Jason served as engineer of record for the preparation of construction documents for the for the widening of two miles of US 27 from the intersection of Locust Church to Ringwood Road in Oxford, Ohio. The existing two lane rural section was upgraded to a three lane urban section with curb and gutter, sidewalks and a storm sewer system. US 27 serves as the primary gateway into the City of Oxford from the north. The reconstruction of the Corridor with its center turn lane and access management improved safety for motorists and pedestrians, and improved aesthetics. The project included three traffic signals, two new stone veneer retaining walls, landscaping and a special design for the outlet of the storm sewer system in the urban core of Oxford. The project was completed in two phases and completed in 2012.

Thornton Avenue Intersection Improvement and Ohio River Trail Extension, City of Cincinnati Department of Transportation and Engineering, Cincinnati, OH. Jason serves as task manager for the design of a new shared use path crossing the CSX and CIND Railroads at the intersection of Thornton Avenue US 50 (River Road) in western Cincinnati. The shared use path will provide connectivity between Fernbank Park along the Ohio River and the neighborhood of Sayler Park located north of US50 and the railroads. AECOM coordinated with several stakeholders including CSX railroad, CIND railroad, Great Parks of Hamilton County and ODOT to develop plans for the path which will provide functionally for a variety of users, while providing passive crossing safety and accommodating existing track geometry, drainage and active warning devices. The project is currently in final design with construction scheduled for 2022.

Lexington-Fayette Urban County Government, Town Branch Commons - Program Management and General Engineering Services, Lexington, KY. Assisted project team with engineering studies, cost estimates, and design reviews.

Watco Companies, River T Salt Pad PTI Design, Cincinnati, OH. Developed site plans for constructing new pads for salt including containment of stormwater and treatment. Assisted with multiple site studies and drainage analyses prior to final plan development.

JASON RAMLER, PE

City of Cincinnati, Ohio River Trail West Detailed Design - Segments 1 and 2, Cincinnati, OH. Studied multiple alignment alternatives for a multi-use trail along River Road (US 50) and adjacent to CSX and CIND Railroad corridors.

City of Henderson, Statewide LPA General Services 2013-2015 - Riverfront Master Plan, Henderson, KY. Developed a master plan to develop a 126-acre site for heavy or light industrial use. Study included vehicular, rail, and river access; utilities; development of five alternative site layouts; preservation of green space; cost estimates; and implementation strategies.

Groundwork Cincinnati/Mill Creek, Connecting City Trails, Cincinnati, OH. Prepared an engineering feasibility study for a trail master plan to connect existing and proposed trails to create a bicycle and pedestrian transportation network. Study included multiple route alternatives and detailed engineering analysis of each alternative with cost estimates.

Anderson Township, Wolfangel Sidewalks PID, Anderson Township, OH. Developed construction plans for a new sidewalk along Wolfangel Road. Plans included retaining walls, drainage improvements, driveway reconstruction, and multiple utility relocations.

Kentucky Transportation Cabinet, Land Between the Lakes National Recreation Area - Southwest Highway, Cadiz, KY. Developed plans and studies for multiple projects at the recreation area. Project included widening a 5-mile road, drainage improvements, signing and guardrail upgrades, a bicycle plan, and a safety improvement study at the visitor center.

Washington Township, Nutt Road - Phase III A-B, Dayton, OH. Developed construction plans for widening Nutt Road from a 2-lane rural road to a 3-lane urban roadway with curbs and sidewalks. Project included storm sewers, culverts, water line relocations, utility coordination, and right of way plans.

Kenwood Mall LLC, Kenwood Towne Center - Access Improvements Implementaion - Phase IB, Sycamore Township, OH. Developed construction plans for widening the main entrance to Kenwood Towne Centre.

Kentucky Transportation Cabinet, Statewide LPA General Services 2013-2015 - Middletown-Eastwood Trail Extension, Louisville, KY. Developed construction plans for a 3.5-mile, shared-use trail along US 60. Project was part of the 100-mile Louisville Loop trail system around the city. Plans included drainage design, utility relocations, driveway reconstruction, and right of way plans.

Village of Evendale, Evendale Bicycle Master Plan, Evendale, OH. Developed a bicycle master plan to guide development of bicycle facilities. Plan included public involvement with public meetings and surveys. A study of the Mill Creek Trail within the village was also included, a major planned long distance trail beginning at the Ohio River and linking many municipalities. The plan included cost estimates, project prioritization, and implantation strategies. [Prior to AECOM]

YONG WOO LEE, ASLA, AICP, LEED AP

Landscape Architect

FIRM
AECOM

EDUCATION
MLA, University of Pennsylvania

MS, Hanyang University

BS, Hanyang University

YEARS EXPERIENCE
30

REGISTRATIONS/ CERTIFICATIONS
Registered Landscape Architect, MI

Certified Planner

LEED Accredited Professional

PROFESSIONAL AFFILIATIONS
American Society of Landscape Architects

American Institute of Certified Planners

AWARDS
AIA National Urban Design Award, South Capitol Area Plan, 2009

Yong Woo is a landscape architect and urban designer with 30 years of experience in the planning and design of transportation projects integrated with placemaking, public realm, and mobility.

Relevant experience

Yong Woo strives to create true multimodal connections to support transit service but also urban communities through more efficient, equitable and environmentally sensitive transportation systems.

Project experience

Arapaho Center TOD and Transit Center, Richardson, TX. Currently preparing a site plan that creates a synergy of transit operation and transit-oriented development. The key issues are to solidify a preferred location and layout of the transit center and prepare redevelopment plan within station area.

DDOT Mobility & Transit Hub, Detroit, MI. Planning study for making targeted, large-scale investments that will support and promote the transit services. The project envisions "Connection Corner" and "Mobility & Transit Hub" that would result from specific transit capital upgrade, and assess the existing conditions of candidate locations.

Silver Line TOD and Multi-Modal Planning, Grand Rapids, MI. Preparing a study that connects public transportation systems to a series of vibrant and walkable places by maximizing the value of transit service to people and jobs near to major stations. Based on equity, mobility gap and sheds analysis, accessibility frameworks, and multi-modal connectivity strategy are developed.

University of Michigan Transportation Center, Ann Arbor, MI. Currently Preparing site planning, design and construction documentations services for $50 Million transportation center at the University of Michigan. The scope of work includes site plan, existing road realignment, facility program, circulation plan, and sustainable site development.

Cleveland's Multi-modal Transportation Center, Cleveland, OH. Led Transportation for Livable Communities Initiative planning for consolidating Amtrak, Greyhound, and RTA stations. The transportation center serves as the keystone of a wider area plan for redevelopment of Cleveland's lakefront.

Toledo Area Regional Transit Authority Downtown Transit Center, Toledo, OH. Prepared site program and transit plaza design and building renovation services for the downtown transit center. The transit center supports maintenance and the staging areas for 18 buses as well as customer amenities.

Topeka Metro Transportation Facility, Topeka, KS. Provided site feasibility and test fit study for two sites in downtown of Topeka. The scope includes inventory analysis, site and facility programming, conceptual plan and cost estimate.

YONG WOO LEE, ALSA, AICP, LEED AP

ICATS Transit Feasibility Study, Iredell County, NC.
ICATS, through NCDOT engaged AECOM to develop a study that includes operations, administration and maintenance functions and will serve as a multimodal hub. The project includes needs assessment, site evaluation and screening, conceptual design layout and documentation of the categorical exclusion to comply with NEPA regulations, and public involvement.

»SELENA
ZAPATA BUR, AICP
Environmental

FIRM
AECOM

EDUCATION
MCP, Transportation and Environmental Planning, University of Pennsylvania School of Design, 2010

BA, Economics-Political Science, Columbia College, 2006

YEARS EXPERIENCE
10

REGISTRATIONS/ CERTIFICATIONS
American Institute of Certified Planners

AECOM Project Manager Certification

PROFESSIONAL AFFILIATIONS
American Planning Association

Selena is a transportation and environmental planner, focusing on high-speed rail, heavy rail, light rail, streetcar, bus, and associated transit and rail facilities. She has 10 years of rail/transit planning and technical expertise in National Environmental Policy Act (NEPA) analysis for a variety of clients, including local, state, and federal governments and transportation agencies.

Relevant experience

Selina's skills include overall NEPA strategy, alternatives and technical analysis, report writing, and coordination with other project disciplines. Selina has served a primary role on many projects by leading NEPA analyses on the social and built environments and playing an integral role in public involvement, agency coordination and Section 106 efforts.

Project experience

Maryland Transit Administration, Maryland Department of Transportation, Baltimore-Washington Superconducting Maglev Project, Baltimore, MD. Core team member and technical lead supporting the development of the Environmental Impact Statement. Responsibilities include technical guidance and task oversight for assessment of effects on neighborhoods, community facilities, and environmental justice.

Metropolitan Atlanta Rapid Transit Authority (MARTA), Clifton Corridor Transit Initiative, Atlanta, GA. Supporting the development of an EIS for a light rail transit line between two MARTA heavy rail stations, serving Emory University and the CDC. Responsibilities include technical writing and task oversight for assessment of effects on the social environment, and indirect and cumulative effects. Evaluated potential operations and maintenance sites and implications for project route options; and LRT vs. BRT modes.

Virginia Railway Express, Broad Run Expansion Study, Manassas, VA. Prepared and received FTA approval for a Documented Categorical Exclusion for the expansion of the Broad Run Station along the VRE Manassas line and the addition of a third main line in the vicinity of the station.

Metro Transit, BLUE Line Enhancements Phase II BUILD Grant Application. Part of the core team which developed a Better Utilizing Investments to Leverage Development (BUILD) grant application to seek federal funds for a state of good repair project along a portion of the Blue Line, the first light rail line in the Twin Cities metro area.

US Department of Transportation - Federal Railroad Administration, Northeast Corridor Passenger Rail Corridor Investment Plan – NEC FUTURE, Northeast. Part of the core team that developed the Tier 1 EIS. Responsibilities for the Tier 1 EIS development included document strategy and technical writing, environmental liaison to resource leads, and review of technical work. Other project responsibilities included responding to public and agency comments, monthly progress reporting to client, and support for

SELENA ZAPATA BUR, AICP

public involvement, agency coordination, and Section 106 development of a Programmatic Agreement.

Georgia Department of Transportation, Atlanta-Chattanooga High Speed Ground Transportation Project, Atlanta, GA. An author of the Federal Railroad Administration's first combined Tier 1 FEIS/ROD for the high-speed rail project from Atlanta to Chattanooga. Other responsibilities include support for public hearings on and the distribution for the Tier 1 DEIS.

WMATA Heavy Rail & Overhaul Facility, Prince George's County, Maryland: Prepared a DCE for the construction of a heavy repair and overhaul facility for Metrorail vehicles to centralize Metrorail car heavy repair and mid-life overhaul activities at a single facility.

Genesse & Wyoming Railroad, CRISI Grants, United States. Prepared Categorical Exclusions for Positive Train Control freight rail improvements to support Consolidated Rail Infrastructure and Safety Improvements (CRISI) Grant Applications.

Atlanta BeltLine, Inc. (ABI), Crosstown Midtown, Crosstown Downtown, and BeltLine East Streetcar Projects, Atlanta, GA. Supported the development of two DCEs and one EA for three streetcar corridors in ABI's Streetcar System Plan. Responsibilities include technical writing and support for public involvement/agency coordination activities.

Washington Metropolitan Area Transit Authority, Farragut North-Farragut Passageway Feasibility Assessment, Washington, DC. Prepared an environmental scan and supplemental environmental scan of resources to be considered as part of a project to construct a passageway to connect Farragut North and Farragut West Metrorail stations and implement other station improvements.

Washington Metropolitan Area Transit Authority, McPherson Square, Washington, DC. Prepared an environmental scan environmental scan of resources to be considered as part of a project to implement station improvements at the McPherson Square Metrorail station.

Washington Metropolitan Area Transit Authority, White Flint North Entrance Feasibility Study, Washington, DC. Led the preparation of an environmental scan technical memorandum and contributed to site visit technical memorandum and final report containing findings for each project task.

National Railroad Passenger Corporation (Amtrak), PRIIA 212 Implementation, New York, NY. Extension-of-staff to Amtrak during implementation of the Passenger Rail Investment and Improvement Act of 2008 (PRIIA 212). Developed internal goals and key activities for implementation and developed tracking mechanisms and a project collaboration site for contract negotiations to be managed internally.

Washington Metropolitan Area Transit Authority, Columbia Pike Transit Initiative (AA/EA), Arlington, VA. Developed existing conditions and environmental impacts documentation for the project's alternative analysis/ environmental assessment.

Washington Metropolitan Area Transit Authority, Potomac Yard Station Environmental Impact Statement, Alexandria, VA. Research, writing, and preparation of materials related to scoping, initial screening/refinement of alternatives, and DEIS alternatives considered.

RYAN APANOVITCH

NEPA

FIRM
AECOM

EDUCATION
BS, Biology, Fairfield University
Post Graduate Soil Science Certification Program, UMASS Amherst

YEARS EXPERIENCE
17

Ryan has extensive knowledge of both State and Federal environmental regulations and has worked throughout his career building relationships which bridge the gap between transportation and the environment.

Relevant experience

Ryan has 17 years of experience in the environmental field. He has worked for the State of Connecticut Department of Environmental Protection, the State of Connecticut Department of Transportation CTDOT, and most recently as a consultant for CTDOT, Amtrak, Metro-North and G&W.

Project experience

Amtrak, Rail Program Management, Rocky Hill, CT.

Environmental Program Manager:

- Managing all environmental aspects of the permitting, design, and construction for a large scale transportation program involving 647 million dollars in infrastructure improvements along the 62 mile Amtrak New Haven – Hartford – Springfield (NHHS) rail corridor.
- Oversee planning, preparation, and implementation of permits and documentation associated with NEPA/CEPA, cultural, historic, water, contaminated materials, and other natural resources. Perform technical inspections for permit and engineering compliance on five concurrent railroad infrastructure construction projects associated with the NHHS program.
- Review, interpret, and develop policy and procedure for implementation of and compliance with current and future State and Federal environmental and transportation related laws and regulations. Working within requirements stipulated by the programs associated with the National Environmental Policy Act, the Connecticut Environmental Policy Act, the National Historic Preservation Act, the Clean Water Act Sections 401 and 404, the National Pollution Discharge Elimination Systems, and Federal Emergency Management Agency flood regulations.
- Coordinate with Federal, State, and Local regulatory agencies, political officials, and other public and private stakeholders.
- Cost and schedule management, review staffing requirements, develop position criteria, establish roles and responsibilities for project staff, identify deficiencies and develop solutions, and promote coordination among various disciplines to further project, company, and client goals.

RYAN APANOVITCH

CTDOT Preliminary Design for Hydraulic, Scour and Pier Stability Analysis

Deputy Project Manager:

- Responsible for managing the environmental components of the design, survey, and permitting activities to support a boring program and preliminary alternatives analysis for scour countermeasures on the Commodore Hull Bridge carrying Route 8 over the Housatonic River in Derby/Shelton, CT
- Manage environmental resource documentation and development of permits through CTDEEP's LWRD Coastal Resources Program and activities covered under USACE's jurisdiction authorized by Section 404 of the Clean Water Act including coordination with National Marine Fisheries for Endangered Species Act and Essential Fish Habitat compliance.

MNR Waterbury Branch Cab Signal and Auto Train Control Design

Environmental Permitting Support:

- Responsible for coordinating design, survey, and permitting activities between AECOM staff, CTDOT staff, and MNR staff to support permitting needs for the 28 mile long signalization project.
- Delivered two separate permit applications for approval through the State of CT DEEP's Coastal Permitting Program.

G&W Railroad's NECR, CFE, and P&W Lines

Environmental Coordinator for NEPA:

- Responsible for coordinating between planning, design, and construction disciplines from the railroad, private engineering firms, and State sponsors to develop NEPA documents and obtain environmental clearance from the FRA to support multiple grant obligations.
- Deliver oral presentations and written documentation for various railroad operations and construction elements to multidisciplinary groups in order to facilitate comprehensive understanding of environmental impacts.

Department of Transportation, Office of Environmental Planning, Newington, CT.

Transportation Planning – Supervisor:

- In the Office of Environmental Planning working to coordinate between multiple stakeholders on all of the water, noise, and natural resource aspects of permitting, construction, and maintenance for transportation and facility projects. Stakeholders include public and private entities such as design and construction engineers, regulatory agencies, municipal agencies, private landowners and public interest groups.
- Analyzing water resource impacts from point and non-point source pollution in associated with large scale transportation construction projects and maintenance activities using multiple environmental variables and in conformance with Chapter 440 of the Connecticut General Statutes, Section 404 of the Clean Water Act, and Section 402 of the Clean Water Act (National Pollutant Discharge Elimination System Permit Program (NPDES)).
- Primary multidisciplinary team member for the development of the CTDOT's NPDES program. Work included meeting with CTDEEP to develop the statewide MS4 General Permit program requirements, reviewing proposed state regulations associated with the program, writing the permit application for CT DOT's MS4 permit compliance with the six minimum control measures, and identifying DOT resources required for implementation of the permit program.
- Developing and implementing numerous wetland and habitat mitigation and enhancement projects compensating for unavoidable impacts to natural resources.
- Preparing, reviewing and coordinating all aspects of permit applications, technical plan revisions for approved permits, and construction plans.
- Conducting fieldwork involving environmental compliance site inspections, stormwater outfall mapping, point source identification, illicit detection and elimination inspections, water quality monitoring, biological assessments, wetland delineation, physical assessments, and other data collection for the development of environmental reports, permit applications, and permit compliance documents.

Department of Environmental Protection, Wetland Habitat and Mosquito Management Program, Madison, CT.

Resource Assistant/Independent Contractor:

- In the Wetland Habitat and Mosquito Management program working with various state agencies and state biologists to restore and monitor costal wetland habitats, educate the public on coastal restoration and mosquito management, and implement measures to study and manage the state mosquito population.

»TONI HORST, PhD

Benefit Cost Analysis

FIRM
AECOM

EDUCATION
PhD, University of Pennsylvania, 1997

BA, Economics, Oberlin College, 1986

YEARS EXPERIENCE
25

PROFESSIONAL AFFILIATIONS
Society of Benefit Cost Analysis

North American Regional Science Council

Transportation Research Board

Toni is a senior consulting manager in the transportation consulting practice with 25 years of experience. She is a nationally recognized consultant in transportation economics and planning. Her work focuses on analyzing how transportation investment changes local economies.

Relevant experience

Toni's typical projects entail forecasting, economic impact analysis, and fiscal analysis. Recent economic impact assessments have included highway, rail, and port impact studies. Her real estate experience includes projecting commercial development impacts from large projects such as development around highway exits and transit stations. Fiscal analysis has included revenue forecasting, assessment of proposed New Start transit projects, and assessing yields from the implementation of possible new taxes.

Project experience

SORTA Cincinnati Connects FRA Grant Funding Support and BCA, Cincinnati, OH. Toni served as Project Manager for development of a Cost Benefit analysis and funding application support for the Southwest Ohio Regional Transit Authority (SORTA) in partnership with the Indiana and Ohio Railway (IORY) for a successful Consolidated Rail Infrastructure and Safety Improvements (CRISI) funding grant application to the Federal Railroad Administration. A grant of $4.5 Million was awarded to SORTA AECOM provided analysis for monetized benefits for the proposed projects which rehabilitated three railroad bridge structures as well as track improvements and capacity expansion of an intermodal transload facility at Undercliff Yard in the City of Cincinnati. AECOM also completed the FRA Categorical Exclusion documentation for the projects. AECOM is also providing design and construction administration services to SORTA for two of the railroad structure rehabilitations. SORTA is currently executing the funding agreement with the FRA and expects to begin construction in Spring 2021.

OKI Benchmark Terminals Connects FRA Grant Funding Support and BCA, Cincinnati, OH. Toni served as Project Manager for development of a Cost Benefit analysis and funding application support for Benchmark Terminal (a private Ohio River intermodal terminal) in conjunction with the Ohio Kentucky and Indiana Regional Council of Governments (OKI). AECOM also coordinated with the City of Cincinnati, the Southwest Ohio Regional Transit Authority (SORTA), CSX, Central Railroad of Indiana and Ohio Rail Development Commission (ORDC) for a successful Consolidated Rail Infrastructure and Safety Improvements (CRISI) funding grant application to the Federal Railroad Administration. A grant of $1.15 Million was awarded to OKI and Benchmark Terminal to create a new signalized at grade crossing and traffic signal on US-50. The project also includes a new pedestrian crossing and bus stop improvements for to accommodate pedestrians and transit riders for SORTA Route 50. SORTA AECOM provided analysis for monetized benefits for the proposed. AECOM also completed the FRA Categorical Exclusion documentation and a signal warrant analysis for the project. OKI and Benchmark Terminal are coordinating with the FRA to execute the

TONI HORST, PhD

funding agreement and expect to begin construction in 2022.

Los Angeles County Metropolitan Transportation Authority, Eastside Transit Corridor Phase 2, Los Angeles, CA. Task Manager for economic and fiscal impacts technical report and draft environmental impact statement/environmental impact report for the proposed Phase 2 project. The report summarizes the potential for economic and fiscal impacts that could arise from the construction and long-term operation of the project and evaluates the direct and indirect tax revenue impacts, construction-related impacts, construction-related employment impacts, construction spending impacts on the regional economy, and potential mitigation measures for the project. Also prepared the growth-inducing impacts technical report that addresses the project's potential to directly or indirectly induce population, housing, and/or employment growth within the project area and the Los Angeles region.

National Railroad Passenger Corporation (Amtrak), Northeast Corridor - Washington, DC, to Boston, MA, Various Locations. Economics Task Manager leading the assessment of the benefit cost of full, next-generation high-speed rail (HSR) service in the Northeast Corridor (NEC). Because of the NEC's central role in the region's transportation network, the range of potential categories of economic impacts extends to congestion relief to the other modes that operate in the Northeast region and which connect to the NEC. For the BCA, there are four broad classes of benefits: costs avoided and residual system value; user benefits; economic benefits due to productivity gains; and capacity on other modes.

National Railroad Passenger Corporation (Amtrak), Northeast Corridor Passenger Rail Corridor Investment Plan - Washington, DC, to Boston, MA, Various Locations. Economics Task Manager for the benefit cost of full, next-generation high-speed rail (HSR) service in the Northeast Corridor (NEC), a high-speed passenger rail line between three major cities: Washington, DC, New York, and Boston. AECOM and our JV partner are developing a PRCIP that analyzes market, economic, social, financial and environmental conditions associated with improvements required to provide intercity HSR services.

Federal Railroad Administration, Economic Analysis in Support of FRA Track 2 Applications, Ohio. Project Manager and led efforts to provide economic analysis for the Ohio HUB project and North Carolina DOT FRA applications. Benefits included construction and operating impacts, rail vehicle purchases and rehabilitation impacts, transportation benefits, and fiscal impacts. Developed technical memos and worksheets detailing the calculations for reviewers' reference.

Ramsey County, Economic Analysis in Support of FRA and TIGER Application for Intermodal Rail/Transit Station, Ramsey County, MN. Developed economic evaluation of St. Paul Union Station in support of FRA funding application. Benefits included commercial development in vicinity of station, transportation benefits attributable to intermodal connectivity, construction benefits, as well as direct benefits attributable to the depot's operation. Developed technical memos and worksheets detailing the calculations for reviewers' reference. Project was selected to receive TIGER funding; only 51 of 1,300 projects received TIGER funding.

Federal Railroad Administration, Long-Term Investment in Rail Economic Analysis, Washington, DC. Project Manager for a project that provided consulting services. Assisted FRA staff to develop the framework and parameters to create a national strategic plan for passenger and freight rail. Tasks included developing a model to quantify the factors that contribute to intercity travel market sizes and modal splits, exploring the relationship between freight rail investment and passenger rail investment, and developing methodologies for estimating the economic benefits generated by various service types and markets.

Washington Metropolitan Area Transit Authority, Business Case for Transit, Washington, DC. Constructed a set of scenarios to capture how the region would change in the absence of transit service--the road investment needs, congestion impacts, travel cost impacts, and land value impacts - an estimated the associated impacts. A large part of the analysis effort was a series of hedonic regressions were estimated to quantify the property value premium associated with access to high quality transit. Results were obtained for office, multifamily and residential property types. WMATA wanted to demonstrate the value it delivers to the economy of the metropolitan area. The funding needs to maintain and expand the transit system are substantial and should be viewed in the context of the benefits they provide. Against a backdrop of funding needs, a crucial unanswered question is, "how does the region benefit from continued funding of Metro and the public transit system?" WMATA undertook this study to complete a comprehensive measurement of the benefits of its transit services, and create a business case for transit funding. In doing so, WMATA sought to quantify its benefits using metrics and measure consistent with a variety of internal, regional, and federal initiatives.

»KEVIN SHEAHEN, PE

Cost Estimating

FIRM
AECOM

EDUCATION
MBA, Business Administration/ Management, University of Evansville, 1986

BSc, Mineral Engineering, Michigan Technological University, 1979

YEARS EXPERIENCE
18

REGISTRATIONS/ CERTIFICATIONS
Professional Engineer, OH #PE.49166

Certified Professional Estimator

PROFESSIONAL AFFILIATIONS
American Society of Professional Estimators

American Society of Civil Engineers

American Institute of Steel Construction

Society of Mining Engineering

TRAINING
Nuclear Density Gauge Operator

Lockout/Tagout

Hearing Protection Training

Fire Extinguisher Training

Basics of Fall Protection

OSHA HAZWOPER 40-Hour Training

Project Management Bootcamp 1

OSHA 10-Hour Construction Safety Training

Kevin has extensive experience in various areas of the construction and design fields encompasses construction project management, cost estimating, construction phase services, change order preparation, FTA Standard Cost Category Estimates, railroad and light rail systems.

Relevant experience

Kevin also has experience with bulk material handling, underground construction procedures, underground storage bunkers, bulk material storage silos, construction estimating, airport system estimating, structural designing, drawing QA/QC reviews, specification writing and reviews, and mine grouting procedures.

Project experience

Greater Cleveland Regional Transit Authority, Red Line/HealthLine Extension Alternatives Analysis Study, Cleveland, OH. Cost Estimator provided capital cost estimates and estimate methodology technical memo for different alignments for heavy rail, light rail transit, bus rapid transit, and enhanced bus alignments.

Metrolinx, RER Transit Project, Toronto, Canada. Cost Estimator prepared conceptual estimates using FTA SCC format capital cost methodology unit pricing for LRT project expansions along five different alignments. A combined total of over 200 km of new trackwork.

Metropolitan Atlanta Rapid Transit Authority, Atlanta Streetcar Project, Atlanta, GA. Lead Estimator conducted and independent estimate of the entire Atlanta Street Car project. Estimate within less than 1% of the construction bid.

Maryland Transit Authority, Baltimore Washington International Airport Train Station, Baltimore, MD. Cost Estimator provided a conceptual estimate based on conceptual design documents for renovating an existing station.

Virginia Rails Express, Kings Street Station, Alexandria, VA. Cost Estimator provided a conceptual estimate of the pedestrian tunnel based on conceptual design.

Metropolitan Atlanta Rapid Transit Authority, Atlanta Streetcar Design/Build, Atlanta, GA. Lead estimator provided an independent detailed estimate for comparison of Design-Build bids for the trackwork, embedded track, OCS, platforms, pavement and sidewalks.

Washington Metropolitan Area Transit Authority, North Capital Garage, Washington, DC. Lead Estimator estimated five different alternatives for bus garage locations.

Washington Metropolitan Area Transit Authority, Branch Avenue Station Access, Washington, DC. Cost Estimator estimated proposed roadway access revisions, parking

KEVIN SHEAHEN, PE

garage, landscaping, traffic control, sitework, and demolition for the proposed Branch Avenue Station upgrade.

Washington Metropolitan Area Transit Authority, Yard and Heavy Maintenance Facility Cost Estimating, Washington, DC. Cost Estimator estimated five different proposed yard and rail maintenance facilities including all related site work.

City of Austin, Austin Urban Rail NEPA Study, Austin, TX. Cost Estimator provided capital cost estimates for six separate urban rail alignments and six separate bus rapid transit alignments. An LPA was selected and was approved by the local authority for local publication.

Maryland Transit Administration, Howard Street Crossover and Realignment, Baltimore, MD. Cost Estimator provided capital cost estimates and construction schedules for two different proposed crossover installations and for a realignment for either a total LRT shutdown or a single track option. Continuing cost estimating and scheduling for the project as the design develops.

Maryland Transit Authority, MARC Yard, Maryland. Cost Estimator prepared an independent estimate of a claim against MTA for a pit rail structure system.

Southeastern Pennsylvania Transportation Authority, King of Prussia Rail Extension, Norristown, PA. Lead Estimator provided capital cost estimates for 12 separate transit alignments each with an alternate of using steel or concrete girders. Continued working with preliminary design estimating 5 alignments with 3 different types of aerial structures.

Maryland Transit Administration, Maryland Transit Administration Kirk Avenue Bus Maintenance Facility, Baltimore, MD. Cost Estimator provided a constructability review for 85% design documents as well as an independent estimate of the proposed bus storage facility.

Metropolitan Transportation Authority - Metro North Railroad, Grand Central Station Information System, New York, NY. Cost Estimator provided conceptual estimate for replacing all of the information, gate, and platform electronic boards at GCT.

Amtrak, Amtrak Yards, California. Cost Estimator estimated renovation of OMF office building and yard security modifications.

Amtrak, Chicago Union Station, Chicago, IL. Cost Estimator estimated 11 different proposed access improvement projects. Projects included improved entrances, elevators, stairways, escalators, wider platforms, and platform renovations.

Washington Metropolitan Transit Authority, Navy Yard Station, Washington, DC. Cost Estimator estimated multiple alternates for an additional underground station entrance and expansion of the existing mezzanine to accommodate improved vertical circulation.

Amtrak, Pullman Building and Yard, New Orleans, LA. Cost Estimator estimated 30%, 60%, 90%, and 100% designs for modification and upgrade of the existing utilities both exterior and interior for the Pullman Building and the surrounding yard.

Washington Metropolitan Area Transit Authority, Station Pedestrian and Bike Access Improvement, Washington, DC. Cost Estimator estimated pedestrian and bicycle improvements for 91 existing stations. Improvements included sidewalks, lighting, traffic signals, pavement markings, and pedestrian bridges.

Northern Virginia Transportation Commission, Multiple Transit Related Regional Transit Projects, Fairfax Transit Action, Virginia. Cost Estimator estimated multiple (157) Northern Virginia regional transit projects as part of a program involving planning and cost-benefit testing for a variety of projects ranging in value, including roadway, pedestrian, bicycle, bus, and ITS related projects.

US Army Corps of Engineers, Rail Infrastructure Projects, Escanaba, MI. Cost Estimator provided estimates for new freight rail lines, bridge structures, rail yard, limestone barge loading, taconite barge loading, and coal barge loading.

Regional Transit Authority for Southwest Michigan, Miscellaneous Projects, Ann Arbor Area, MI. Cost Estimator provided a conceptual estimate of the commuter rail additional rail, stations, systems, maintenance facilities, and project professional services.

Massachusetts Bay Transportation Authority, Rail Repair/Maintenance, Boston, MA. Cost Estimator estimated multiple alternates for in-situ rail repairs, replacement, tie replacements for combinations of LRT and Heavy Rail during evening shut downs, partial shutdowns, and full weekend shutdowns.

Amtrak, 30th Street Station Rehabilitation, Philadelphia, PA. Cost Estimator estimated multiple phases of interior and exterior building renovation cost estimation, coordination, planning and scheduling.

Subconsultants

B

Identify subconsultants by company name, address, contact person, telephone number, and project function.

AECOM has assembled a highly qualified team for this assignment. We have a track record of excellent relationships with local subconsultant firms and in most cases work together as an integral team to complete project activities. This promotes teamwork and develops the skills of individual staff members. We have assembled a team that has unmatched qualifications to successfully carry out this project, as seen below.

GEOTECHNOLOGY, INC. | Geotechnical Engineering

1780 Carillon Boulevard
Cincinnati, OH 45240
T: (513) 825-4350
Contact: Shawn Reed, PE

AECOM has worked extensively with Geotechnology throughout the Cincinnati area. They have provided services for multiple projects with Miami University and have archival information on more than 200 soil borings in the project area. Their familiarity with local geologic conditions will be an asset the BCRTA and City of Oxford.

BERDING SURVEYING, INC. | Surveying

SDVOSB

741 Main Street
Milford, Ohio 45150
T: (513) 831-5505
Contact: Tim Schwoeppe, PS

AECOM has teamed with Berding Surveying on a wide range of projects throughout the greater Cincinnati area. They have experience with multiple public sector clients using federal transportation funds and are familiar with Butler County conveyance standards.

CAD-VANTAGE, INC. | CAD Drafting Services

DBE

P.O. Box 53913
Indianapolis, IN 46253
T: (317) 272-0254
Contact: Rachel Sebree

AECOM has worked successfully in the past with the DBE firm CAD-Vantage, Inc. to provide technical staffing for our projects. CAD-Vantage employees sit right alongside AECOM staff where they collaborate and learn as integrated and productive team members. We look forward to our continued collaboration with CAD-Vantage on this project.

STONE ENVIRONMENTAL ENGINEERING & SCIENCE, INC. | Environmental Support

EDGE

748 Green Crest Drive
Westerville, OH 43081
T: (614) 865-1874
Contact: Mary Sharrett, PE, CPESC, LEED AP

AECOM has teamed with Stone Environmental and Engineering and Science due to their diverse skill sets that are tailored to the scope of work expected for this project including performing the ESA for the existing fuel tanks on site. Stone specializes in regulated materials and authored statewide guidance manual on the subject for the Ohio Department of Transportation.

ENGAGE PUBLIC AFFAIRS | Public Engagement

DBE

1650 Watermark Drive, Suite 210
Columbus, OH 43215
T: (614) 565-2819
Contact: Marie Keister, APR, AICP

Marie Keister, APR, AICP, is a nationally-recognized stakeholder engagement expert with 30 years' experience working on rail projects across the country. Marie has worked on strategic planning efforts for numerous transit agencies throughout Ohio and will bring her expertise in public engagement to this project.

»SHAWN REED, PE

Geotechnical Engineer

FIRM
Geotechnology, Inc.

EDUCATION
MS, Candidate, Civil Engineering, Wayne State University

BS, Geological Engineering, Michigan Technological University, 1998

YEARS EXPERIENCE
21

REGISTRATIONS/ CERTIFICATIONS
Professional Engineer, OH #PE.69536

Shawn has extensive experience consisting of the coordination, implementation, and management of geotechnical explorations, design of deep and shallow foundations, design of temporary and permanent structural earth retention systems, consultation for stabilizing active landslides, coordination of forensic engineering studies for the evaluation of existing distressed underground foundations and structures, and coordination of field personnel for construction observation.

Relevant experience

Shawn is proficient in Ensoft Pile Software (APILE, LPILE, PYWALL), Geostudio Software by GEOSLOPE (SLOPE/W, SIGMA/W), UASLOPE (program developed by University of Akron to develop landslide forces on drilled shaft foundations), CRSP (Colorado Rockfall Simulation Program), MSEW (program to compute the external/internal stability of MSE walls).

Project experience

Norfolk-Southern (NS) Railroad Bridge Replacement, Painesville, OH*. This project consists of the replacement of an existing multi-span railroad bridge over the Grand River in Painesville, OH. The new bridge includes 7 spans with the top of rail roughly 100 feet above the Grand River. In 2012, Shawn was responsible for the onsite field inspection and logging of several test borings at proposed substructure locations, geotechnical capacity calculations of 7-foot diameter drilled shaft foundations to accommodate multiple axial and lateral loading conditions, and was the primary author in the final geotechnical report to NS and the design team. As part of the construction phase in 2017, Shawn offered on-site technical guidance to the design team and NS during installation of the drilled shaft foundations to ensure successful rock penetration and borehole stabilization under polymer slurry wetmethod installation methods.

HAM-LMST-BEECH Little Miami Scenic Trail Improvement Project, Cincinnati, OH. This ODOT LPA project will connect the existing Little Miami Scenic Bike Trail with the existing Otto Armleder Bike Trail via the widening of the existing State Route 32 Bridge over Beechmont Avenue. Shawn's project responsibilities included the geotechnical design of a new soil nail wall in support of a low clearance cut into a spill-through slope below a bridge abutment to accommodate the proposed new bike trail. The design of this project is currently in the ODOT Stage 2 design phase.

Heraeus Building Addition, Vandalia, OH. This project consists of a 9,100 square foot addition to an existing manufacturing facility with strict foundation settlement tolerances. Shawn served as project manager for this project with responsibilities consisting of overseeing the exploration and testing program, participating and contributing in design team meetings, and peer reviewing a final report that offered dual foundation options to satisfy project settlement requirements.

SHAWN REED, PE

Ohio Department of Transportation, District 10 Task Order Contract, Various Counties, OH*. Project Geotechnical Engineer. This on-call contract involved the quick response to several emergency landslides impacting state-owned roadways across multiple ODOT District 10 counties. Landslides ranged in depth from shallow failures over bedrock to deep embankment or cut failures some of which completely intercepted the roadway making it impassable to traffic. Project responsibilities involved interaction with subcontract drilling and testing firms, field logging of borings and review of instrumentation, development of laboratory testing programs, and design of permanent landslide stabilization typically involving drilled shaft retaining walls in accordance with ODOT Geotechnical Bulletin 7 (Drilled Shaft Landslide Stabilization Design).

Ohio Department of Transportation, FRA-70-22.61, Columbus, OH*. Lead Project Geotechnical Engineer. This project involved reconfiguring the system-to-system interchange of IR-70 and IR-270. The geotechnical exploration spanned four years in three separate phases covering a total of 190 borings drilled for new bridge flyover ramps, new or widened embankments, new pavements, new retaining walls, and sound walls. Project related responsibilities included participating in weekly team meetings, evaluating various deep foundation alternatives, conducting analyses, QC review of calculations from other geotechnical staff, and authoring five comprehensive structure foundation and/or roadway reports in accordance with ODOT requirements. Shawn worked closely with structural and roadway designers in the presentation of the Stage I plans to ODOT to ensure compliance with the geotechnical recommendations. This project is ongoing with Stage 2 and 3 plans scheduled for delivery to ODOT in early to mid-2020 with construction scheduled to begin during the Summer of 2021.

Ohio Department of Transportation, HAM-71-3.81, Cincinnati, OH*. Lead Project Geotechnical Engineer. The project was a comprehensive improvement to the local street network and the 1-71 corridor in the Uptown area of the City of Cincinnati. Working for the Contractor in a Design-Build alternative delivery to ODOT, Shawn was part of the team developing a set of plans and specifications for a new combined tight diamond and folded diamond interchange at MLK Drive. Nearly two miles of I-71 roadway were impacted along with 8 new or rehabilitated bridges on or over I-71 and associated ramps. Project responsibilities included researching historic documents and developing foundation design recommendations for preliminary pricing, followed through with the field coordination of more than 80 shallow and deep borings after contract award, designed and/or reviewed the design of several types of retaining walls (i.e. soil nail, soldier pile and lagging, precast stem, MSE) that supported roadway cuts for ramp construction, and provided deep foundation calculations and recommendations for multiple bridge widenings and one new bridge construction, authored and/or peer reviewed several technical memoranda.

***Services performed while with another firm.**

»JOSEPH HAUBER, PE

Geotechnical Engineer

FIRM
Geotechnology, Inc.

EDUCATION
MS, Geotechnical Engineering, University of Cincinnati, 2007

BS, Civil/Environmental Engineering, University of Cincinnati, 2006

YEARS EXPERIENCE
15

REGISTRATIONS/ CERTIFICATIONS
Professional Engineer, OH #PE.75310

OSHA 10-Hr Construction Certification

Joseph's civil and geotechnical engineering experience includes design, surveying, laboratory testing, and field construction testing. Presently, he manages and performs engineering and testing services including: geotechnical explorations; slope stability and settlement analyses; foundation analyses and design; analysis and design of gravity, cantilevered, and tied-back earth retention systems; and pavement designs.

Relevant experience

Joseph reviews and supervises engineering work performed by project engineers, prepares proposals for new projects, and is responsible for promoting and fostering client relationships. Joseph served as president of the Northern Kentucky Chapter of the Kentucky Society of Professional Engineers (KSPE) in 2014/2015; and was awarded ENR Midwest's 2017 Top Young Professionals.

Project experience

Wathen Lane Bridge Replacement, Henderson, KY. Project Manager. The Wathen Lane Bridge Replacement Project involves razing an existing bridge at a creek crossing and replacing the bridge with a reinforced concrete box culvert. Site grading will involve cuts and fills on the order of 10 to 11 feet in depth. We performed a geotechnical exploration for the project, which involved borings, laboratory testing, and settlement analyses. The culvert design is currently proceeding through the design phase.

Terraced Restoration of Interstate Right-of-Way, I-71/75, Covington, KY. Geotechnical Engineer. The Terraced Reforestation project is located along an 8-acre site that parallels Interstate 71/75 in Covington, Kentucky. The project involved the construction of twelve terraces that parallel each other. The combined lengths of the terraces, which are connected in series by headwalls of the underdrain systems of the individual terraces, equate to roughly 4,740 lineal feet. Each terrace consists of a bioretention cell to collect rain water resulting in attenuation of the peak flow conditions of given rain events within the Willow Run Watershed. The cells also promote evapotranspiration and water quality improvements. Slope stability analyses and field infiltration tests were performed to aid in the design of these terraces. During construction, extensive testing was performed on the bioretention soil mix that was utilized in the cells. We performed a geotechnical exploration for this project, performed slope stability analyses, and provided construction review services, including infiltration testing with double- and single-ring infiltrometers.

Extension of Eastern Avenue Tied-back Retaining Wall, Covington, KY. Project Geotechnical Engineer. In 2012, an ongoing landslide along the west bank of the Licking River and adjacent to Eastern Avenue had extended beyond the previous limits of the landslide that was stabilized with a series of tied-back retaining walls in the late 1990s, and the expanded landslide was impacting Eastern Avenue. As part of this project, the southern tiedback retaining wall from the late 1990s was extended 24 feet to the north and 106 feet to the south. The existing and extended sections of the tied-back wall involved soldier beams and tiebacks socketed into the bedrock. We performed the geotechnical

JOSEPH HAUBER, PE

exploration to evaluate the expansion of the landslide and inform the design of the retaining wall extensions. Archival geotechnical data were also used to reduce the scope of the geotechnical exploration. We also performed the design of the tied-back retaining wall extensions.

Wendell Ford Boulevard Extension, Boone County, KY.
Project Manager. The Wendell Ford Boulevard extension involves 3,730 feet of new roadway on the south side of the Cincinnati/Northern Kentucky International Airport in Boone County, Kentucky to connect Wendell Ford Boulevard to Aero Parkway. The earthwork on this project included cuts on the native ridgetops on the order of 17 feet and fills within the native valleys on the order of 25 feet. The fill slopes on the project were designed as steep as 2.5 horizontal to 1 vertical with one of the larger fill embankments in the area of an existing drainage swale containing alluvial sediments. Our services included a geotechnical exploration, recommendations for earthwork operations, stability analyses for the proposed cut and fill slopes, and pavement design and construction recommendations.

US 68 Bridge over Lawrence Creek, Mason County, KY.
Project Manager. The US 68 Bridge over Lawrence Creek in Mason County, Kentucky is a five-span, prestressed concrete, I-girder bridge that is 757 feet in length. Bridge inspectors began noticing problems on the bridge shortly after its opening in the late 1990's. Both abutments have moved inward, resulting in an elimination of the gap between the backwall and ends of the prestressed concrete girders. The elastomeric bearings are showing excessive deformations, and the abutment backwalls and bridge seats exhibit heavy cracking. Significant settlement of the approach fill (upwards of 100 feet thick) has also occurred over the years. Both battered and vertical piles were driven through the approach fill embankments to support the abutments. Geotechnology was retained to perform a geotechnical exploration, slope stability analyses, settlement analyses, batter pile foundation analyses, and monitoring services, including slope inclinometers and settlement magnetometers. Geotechnology also provided consultation on the geotechnical aspects of various repair alternatives.

»KEVIN WEAVER, PE, CWI

Geotechnical Engineer

FIRM
Geotechnology, Inc.

EDUCATION
BS, Civil Engineering, University of Cincinnati, 1999

YEARS EXPERIENCE
25

REGISTRATIONS/ CERTIFICATIONS
Professional Engineer, OH #PE.69808

American Welding Society, Certified Welding Inspector

NRMCA Ready Mixed Concrete Inspecting Engineer: OH, KY, IN

OSHA 10-Hr Construction

Kevin has experience in civil and geotechnical engineering, including design, surveying, laboratory testing and field construction testing.

Relevant experience

Kevin's involvement ranges from Design Geotechnical Engineer to Construction Review/ Special Inspections Project Management. Kevin's special inspection capabilities include: drilled shaft, augercast and driven piles review; review of installation and proof and performance testing for tieback anchors; review foundation bearing surfaces; review of seismic resistance connections; review of reinforcing steel and placement of cast-in-place concrete; visual review of welded and bolted connections for structural steel, floor and roof decks; review of floor deck shear connectors; structural wood framing; cold formed steel framing; review of general masonry construction and masonry reinforcing steel; spray-applied and intumenscent fireproofing review and testing; anchor bolt pullout testing; review of post-tensioned multi-strand tendon installation and stressing; review of paint coating thicknesses.

Project experience

City of Cincinnati Fire Station #9, Cincinnati,OH. Project Manager performed review of RAM aggregate piers, drilled shafts, reinforced concrete construction, visual review of welded and bolted connections for structural steel, reviewing of masonry construction for reinforcement, grouting and general construction.

Fifth Third Arena Renovation, University of Cincinnati, Cincinnati, OH. Construction Materials Testing Manager. Scope of services included fireproofing and structural steel review.

Miami University's RH North Quad Renovations, Farmer School of Business, King Library Rehabilitation, North Academic Parking Garage, North Chiller Plant, Presser Hall, Psychology Building and Animal Care Facility, School of Engineering and Applied Science, Southeast Campus Parking Garage, Steam Plant Boiler Control Upgrades, Phase I, Student Apartment Housing, T-Wall, Women's Softball Facility West, Campus Steam Loop Connector, Oxford, OH. Senior Project Manager performed bulk earthwork and backfill testing, review of bearing surfaces, visual review of welded and bolted connections for structural steel, coordinate NDE for welds, drilled shaft review, reinforcing steel and placement of cast-in-place concrete, review of general masonry construction, masonry reinforcing steel and grout placement, anchor bolt pullout testing, review of post tensioned multi-strand tendon installation and stressing.

Guernsey Crossing, Chillicothe, OH. Construction Materials Manager responsible for testing and special inspection services which included foundation review, dry well infiltration testing, asphalt and concrete testing, floor flatness review, and structural steel and masonry review.

KEVIN WEAVER, PE, CWI

Blue Jay Elevated Storage Tank, Hamilton County, OH. Senior Project Manager performed review of bearing surfaces, reinforcing steel, visual review of welded and bolted connections for structural steel, coordinate NDE for full penetration welds.

Central Parkway Pedestrian Bridge, Cincinnati, OH. Senior Project Manager performed visual review of welded and bolted connections for structural steel.

Cincinnati Zoo & Botanical Gardens Vine Street Entry Village; Cheetah Building and Cat Arena; Uptown Crossings; Solar Canopy; Africa Detention Basin; African Savannah Café, Cincinnati, OH. Senior Project Manager performed drilled shaft review, bearing surfaces for foundation, review of reinforcing steel and placement of cast in place concrete, visual review of welded and bolted connections for structural steel, review of general masonry construction and masonry reinforcing steel, anchor bolt pullout testing.

Xavier University Hoff Academic Quad & Residence Hall & Dining Complex, Cincinnati, OH. Senior Project Manager. The Hoff Academic Quad includes the Learning Commons and Williams College of Business and the Central Utility Plant. Geotechnology's material testing and special inspections for the project included review of drilled piers and footings, reinforced concrete review and testing, masonry review, review of structural steel welded and bolted connections, fireproofing and anchor bolt pullout testing. The Residence Hall houses 535 students in four connected towers, and the Dining Complex seats approximately 725 people. The towers were constructed as a reinforced concrete structure which utilized the maturity method to accelerate formwork removal.

Talawanda High School Building, Oxford Township, OH. Project Manager performed a preliminary geotechnical exploration of the project site in early 2009 and performed construction review services and special inspections services for the project which was completed in 2012. Geotechnology's services included materials testing of soils, asphalt, concrete and masonry, and review of structural steel installation, footing and foundation excavations, insulated concrete forms (ICF) and structural masonry.

Boyd E. Smith Elementary School, Milford, OH. Senior Project Manager responsible for construction materials testing and special inspection services including soil compaction, concrete relative humidity testing, roof decking, reinforcing steel observation, foundations observation, and floor flatness review.

Charles L. Seipelt Elementary School, Milford, OH. Senior Project Manager responsible for construction materials testing and special inspection services for the 53,000 square foot building. Our services included soil compaction, footings, masonry, structural steel, fireproofing, pavement subgrades and concrete relative humidity testing.

GERARD BERDING, PS

Surveyor

FIRM
Berding Surveying, Inc.

EDUCATION
University of Cincinnati, Construction Management, 1974-1978

U.S. Army, Fire Direction Control, Field Artillery, 1972-1974

Associates Degree, Cincinnati State Technical College, 1970-1972

YEARS EXPERIENCE
45

REGISTRATIONS/ CERTIFICATIONS
Professional Surveyor, OH #PS.6880

PROFESSIONAL AFFILIATIONS
Professional Land Surveyors of Ohio, Southwest Chapter, twice Past President

National Society of Professional Surveyors

American Congress of Surveying and Mapping

American Society of Highway Engineers

Gerard has over 45 years of surveying experience, including extensive field work for both engineering related survey matters and boundary line retracement surveys.

Relevant experience

Gerard has resolved countless property line locations, prepared and overseen the preparation of various plats and documents requested by the individual property owner, public agency, developer and attorney.

In 1991, he established G. J. Berding Surveying, Inc., expanding the firm to its present size of 15 professional and technical support personnel.

The years that Gerard has been involved in the surveying field span a period of change within the profession. From transit and tapes, field books and cosine tables, to an era of electronic measuring devices, digital read outs, data collectors, high speed computers and satellite positioning, Gerard retains a sense of history and understanding for what has transpired within the surveying field and how it relates to present day surveying challenges.

Project experience

Butler County Veterans Highway. Survey Project Manager

Symmes Road Extension. Survey Project Manager

Wasson Way (rails to trails). Survey Project Manager

»TIM SCHWOEPPE, PS

Surveyor

FIRM
Berding Surveying, Inc.

EDUCATION
Associates Degree, Cincinnati State Technical College, 1990

YEARS EXPERIENCE
32

REGISTRATIONS/ CERTIFICATIONS
Professional Surveyor, OH #PS.8410

FAA Certified Remote Pilot

PROFESSIONAL AFFILIATIONS
Professional Land Surveyors of Ohio, Southwest Chapter

National Society of Professional Surveyors

U.S. Institute of Building Documentation

Tim is lead surveyor for projects involving public agencies; he prepares design level topographic surveys, easement plats, right-of-way plans, and legal descriptions, working with clients and public agencies to efficiently complete the task at hand.

Relevant experience

Tim has 32 years in the surveying profession, of which 21 years have been with Berding Surveying. He oversees and prepares plans for public and private projects, leads efforts in the boundary resolution of field located monuments with record information, and is proficient in courthouse research of pertinent documents for survey retracements. Tim is ODOT qualified, having completed the necessary coursework, training and prerequisites for the design of right of way plans.

Project experience

Cincinnati Streetcar. Survey Project Manager

Oxford Area Trails Phase III and Phase IV. Survey Project Manager

Montgomery Road/Ronald Reagan Highway Roundabout. Survey Project Manager

»MARY SHARRETT, PE, LEED AP, CPESC, AHES, AHPD

Environmental

FIRM
Stone Environmental Engineering & Science, Inc.

EDUCATION
BSCE, University of Cincinnati

YEARS EXPERIENCE
27

REGISTRATIONS/ CERTIFICATIONS
Professional Engineer, OH #PE.62782

LEED Accredited Professional

Certified Professional Erosion & Sediment Control (CPESC)

OSHA 40-Hr HAZWOPER

HAZWOPER Site Supervisor

Certified Asbestos Hazard Evaluation Specialist (AHES)

Certified Asbestos Hazard Project Designer (AHPD)

Approved by USFWS for Running Buffalo Clover Surveys

PROFESSIONAL AFFILIATIONS
American Society of Civil Engineers

Women Transportation Seminar (WTS) – Board, Corporate Membership

Mary has over 27 years of engineering and environmental consulting experience and specializes in bringing projects from concept through final construction.

Relevant experience

Throughout her career, Mary has also been involved with public involvement meetings, agency meetings and negotiations, stakeholder sessions, and project Partnering Sessions to address public, stakeholder, and regulatory agency concerns. For one of Stone's largest projects, Mary served as the Environmental Protection Program and Procedure Manager for ODOT's $480M Portsmouth Bypass construction project. In this role, she prepared the Environmental Consultation Management Plan (ECMP), which provided the procedures to review, confirm, and document that the construction is in compliance with all Environmental Commitments, regulations, and applicable Government Approval requirements for the project.

Project experience

Environmental Assessment (EA) Documentation

- Trumbull MHA Parkman Landing, Warren, OH –EA Document, Phase I and II ESA, Wetland Delineation, Waterway Permitting.
- Communities for Veterans, Kerrville, TX –Environmental and Compliance Findings form for the multi-family housing development.
- Kirby Manor – 11500 Detroit Avenue Cleveland, OH – Phase I ESA, Asbestos, and Lead for 9-story apartment building for HUD funding for National Church Residences.
- Ohio Avenue School, Columbus, OH – HUD documentation including asbestos, mold, radon, and lead for Columbus Public Schools.
- Village at Sycamore Creek, Section 11, Pickerington, OH – HUD documentation on behalf of Dominion Homes.
- Pickerington Point, Pickerington, OH – HUD documentation including noise evaluation for nearby train whistle stop.
- Village at Glen Ridge, Newark, OH – HUD ESA and Compliance Findings completed on behalf of Dominion Homes.
- Albany Crossing, Plain Township, OH – HUD Document Update on behalf of Dominion Homes.
- Village of Jefferson Run and Village at Lehner Woods – HUD Environmental Assessment, HUD Environmental and Compliance Findings form, with a Finding of No Significant Impact (FONSI) for the two projects.

Environmental Protection Plan – Mansfield Lahm ANG Base, Ohio. Project Manager. Project included interior demolition of concrete block/brick, asbestos abatement, and remodeling as well as exterior installation of utilities, storm sewer structures, concrete

MARY SHARRETT, PE, LEED AP, CPESC, AHES, AHPD

apron, and landscaping. Prepared Environmental Protection Plan (EPP) following a site walk through at the base. The EPP was developed to aid the contractor in compliance with environmental regulations and protection of environmental resources. The EPP describe roles and responsibilities, defined procedures, define training needs, and referenced other environmental documents (e.g., SWPPP).

Ohio Department of Transportation, Statewide Environmental Site Assessment Task Order, Various Locations, OH. Project Manager for WAS-7-17.6 Marietta Ph I ESA, MRG-37-9.59 Malta Phase I ESAs, and BEL-7-14.7 Right of Way Tier 1 / Delineation / Tier 2 / MW Abandonment. Responsible for scoping, contracting, overall company resource management, coordination of staff, addressing project challenges encountered by staff, and general review of project plans. Developed ODOT's 2018 Regulated Materials Review (RMR) Manual.

CLE-Pierce Township Park, Pierce Township, OH. Project Manager for CE Level 2 documentation for the construction of sidewalk and multi-use trail to extend the existing trail network into the southwest portion of Pierce Township Park. In addition, relocation of existing multi-use trail along the south side of Locust Corner Road to improve safety for users. Conducted RMR Screening for potential regulated materials.

Mine Void Grouting, Beaver Excavating, Zanesville, OH. Senior Engineer. Prepared the Health and Safety Plan and Work plan for this grouting project having concerns with explosive gases and unknown, suspected contamination. The Health and Safety Plan provided necessary actions to protect workers and equipment, including monitoring headspace in worker's breathing zone using a photo-ionization detector, monitoring explosivity limits in the boreholes, and periodically monitoring headspace readings in drilling cuttings. Water level monitoring was also included in the Plan due to concern of contaminant release into nearby drainage ditches. Groundwater sampling was also conducted and compared to Ohio BUSTR action levels.

Hazardous Materials Survey (Asbestos and Lead Based Paint) – WPAFB Runway/Taxiway 5L-23L Replacement – WPAFB, Dayton, OH. Project Manager. STONE performed hazardous materials assessment on the 5L-23L runway at WPAFB during demolition and replacement activities. The scope of work involved a survey of potential hazardous materials (asbestos-containing materials and lead-containing paint) and included nondestructive and/or destructive sampling as applicable and documentation of the type and quantities of asbestos and lead-containing paint present. With confined-space trained and certified personnel, entered electrical manholes throughout the airfield to assess and sample suspect asbestos-containing materials. With x-ray fluorescence (XRF) analyzer operator, assessed suspect lead-containing paint on all lighting fixtures, runway striping, and painted outbuildings. Work was performed within a tight schedule during off-hours to limit the time the main runway and airfield had to be shut down. Coordination with other consultants and contractors was imperative.

Waterline Extension Perry Township Environmental Documentation, Brown County, OH. Project Manager for completion of a Phase I Hazardous, Toxic and Radioactive Waste (HTRW) Investigation required by the U.S. Army Corps of Engineers (USACE) for 37,000 linear feet of waterline. The waterline was to be located on or adjacent to the existing ROW. Completed the Environmental Assessment (EA) for the project to determine the scope of impacts for the project. The EA was reviewed by the USACE and minimal comments were provided.

Hamilton 138 KV Transmission Line Environmental Documentation, Hamilton and Fairfield, OH. Prepared and managed the report documentation for a 2-mile and a 4-mile overhead transmission line route, with a 100-foot wide corridor study area. The routes included hundreds of individual parcels. Reports were prepared for submission to the Ohio Power Siting Board in accordance with OAC 4906-15-06 and 07. Documentation included socioeconomic and land uses, identification of noise-sensitive areas, wetland and stream evaluation, ecological and threatened and endangered species, and cultural resources.

CURTIS WHITE

CADD Drafting Services

FIRM
CAD-Vantage, Inc.

EDUCATION
Associate Degree, Computer Aided Drafting Design Program, ITT Technical Institute, 1997

YEARS EXPERIENCE
23

Curtis has a multi-disciplined civil background in AutoCAD with a strong eye for detail. He has a very strong working knowledge of Civil Plan Set sheets including but not limited to; site demolition, grading, utility, details, cross sections, and plan and profile drawings of subsurface tunneling, water lines and sewers.

Relevant experience

Curtis has used every version of AutoCAD from release R11 (1995) through the release of 2019, including Civil 3D. Curtis works well under pressure in a fast-paced setting.

Project experience

Citizens Energy Group, Indianapolis Water Division, Indianapolis, IN. CAD Design Engineer. Designed construction plans for the relocation of public water mains. Responsible for precise route, pipe sizes, invert elevations, part list requirements, and coordination with surrounding utilities.

Black & Veatch, Indianapolis, IN. CAD Technician. Created detailed plan and profile sheets, site plans, grading plans, demolition/relocation plans, and details for three separate 18' diameter subsurface tunnel projects. Included in the scope of work were subsequent launch and retrieval shafts, drop shafts, tunnel vent shafts and sewer relocation.

Lee & Ryan. CAD Operator. Fulfilled 100% of drafting needs for entire company. Duties included setup, edits, and completion of report supporting figures such as site layout map, soil analytical map, groundwater analytical map, potentiometric map, and cross sections/ profiles. Each map has corresponding quarterly sample data that is required to be updated and issued to the State for the purpose of continued observation of potentially hazardous sites such as fueling stations.

Deep Rock Tunnel Connector, Indianapolis, IN. CAD Technician. Worked on-site at AECOM, Indianapolis. Efficiently executed role in creation of project drawings for Deep Rock Tunnel Connector, a tunneling project spanning over 8 miles in length. Responsible for project's site plans, grading plans, demolition/relocation plans, maintenance of traffic plans, cross sections, and plan and profile sheets for the 18' diameter tunnel and subsequent launch and retrieval shafts.

American Structurepoint, Inc. CAD Technician. Self-sufficiently worked as member of a team, while taking lead role in creation and completion of production drawings from preliminary stage exhibits through construction plan sets and bid set documents. Responsible for projects varying in size from half acre to 100 acres. Handled multi-million-dollar projects including The Indiana State Museum, Rusty Wallace's Iowa Speedway, Hamilton Town Center Mall and the East Chicago Water Treatment Facility.

TY RIDDLE

CADD Drafting Services

FIRM
CAD-Vantage, Inc.

EDUCATION
Associate Degree, Industrial Drafting, Ivy Tech Community College, Muncie, IN, 1989

YEARS EXPERIENCE
31

Ty is a team-oriented and self-directed AutoCAD Technician with personal integrity and professional ethics. He is proficient in AutoCAD with a growing knowledge of Civil 3D.

Relevant experience

Ty is currently serving as part of the design team designing the Indianapolis Deep Tunnel System for Citizens Energy Group. He previously supported several airport projects such as Runway Replacement and Rehabilitation, Taxiway and Apron Construction, and Terminal Building and Hangar Building Construction.

Project experience

Citizens Energy Group, Indianapolis Water Division, Indianapolis, IN. CAD Technician. Currently serving as part of the design team designing the Indianapolis Deep Tunnel System for Citizens Energy Group.

Black & Veatch Water Division, Indianapolis, IN. CAD Technician. Creating detailed CAD drawings and maintaining accurate design documentation for the Water Department.

Butler, Fairman & Seufert, Inc., Indianapolis, IN. Airport Technician. Created detailed CAD drawings and maintained accurate design documentation for the Airport Department. Also responsible for entering and maintaining airspace case studies into the FAA OE/AAA website for review and approval by the FAA. Occasionally, assisted in the Road, Water, Trails, Bridge, and Environmental departments as well.

Congdon Engineering Associates, Inc., Woolpert, Inc. and Butler, Fairman & Seufert, Inc., Indianapolis, IN. CAD Technician. Projects included Arrival and Departure Lanes, and overall Mapping at the new Midfield Terminal at the Indianapolis International Airport.

»MARIE KEISTER, APR, AICP

Public Engagement

FIRM
Engage Public Affairs

EDUCATION
BA, Behavioral Sciences & Communication, The Ohio State University

YEARS EXPERIENCE
30

REGISTRATIONS/ CERTIFICATIONS
Public Relations Society of America (APR)

Certified Planner

PROFESSIONAL AFFILIATIONS
Public Relations Society of America (APR)

American Institute of Certified Planners

Advisory Board Member, Franklin University Dept. of Community Engagement

Chair, Communications Working Group, DriveOhio Alliance

Board member, Greater Ohio Policy Center

Member, American Planning Association

Member, Women's Transportation Seminar

Member, Public Relations Society of America, Columbus chapter

Member, Urban Land Institute, Columbus chapter

Former board member, Ohio Aviation Association

Former member, International Association of Public Participation

Marie is president of Engage Public Affairs, LLC, and specializes in communication strategy and informed decision-making in the public policy arena.

Relevant experience

Named one of the Top 50 Women in PR nationally in 2016 by PR News, Marie is a highly regarded facilitator known for building community goodwill and consensus. Marie is a published author, accomplished public speaker and has won numerous local and national communication awards. Her firms have worked on high profile infrastructure projects for 55+ of ENR's top 500 Design Firms in the U.S. Her experience includes:

- Three decades of experience bringing diverse stakeholders together to build consensus and implement complex public and private sector projects, including numerous transit initiatives.
- Expert at handling crisis communication situations and implementing processes to promote transparency and prevent controversy.
- Created and led CH2M HILL's national Public Involvement Community of Practice and advised project managers across the U.S. on communication, community involvement and media outreach strategies. CH2M HILL, now Jacobs, was at the time the nation's eighth largest transportation, water and environmental engineering consulting firm.
- Facilitated hundreds of presentation panels, task forces, strategic planning sessions, advisory committees and community meetings.
- Published author of numerous articles on successful community engagement and media management techniques; oversaw the development of Transportation Research Board's public involvement edition of "TR News".
- Named Washington State Department of Transportation "Wall of Fame" honoree; "Woman of the Year" and "Member of the Year" by Women's Transportation Seminar, Columbus chapter; winner of numerous local and national awards for communication and public outreach efforts, including a Silver Anvil Commendation of Achievement from Public Relations Society of America.

Project experience

Central Ohio Transit Authority (COTA), NextGen, Columbus, OH. Public Involvement Lead and Facilitator. To prepare for future economic and popultion growth, COTA NextGen sought to create a unrestricted community vision for the future of public transportation in central Ohio. Marie designed and implemented the public/stakeholder involvement program; facilitated the Project Advisory Group, public/stakeholder meetings and focus groups; and oversaw the development of the project brand/logo, website, electronic newsletter, rider survey, fact sheets and other public information materials.

MARIE KEISTER, APR, AICP

Ohio Department of Transportation (ODOT), Statewide Transit Plan, Statewide, OH. Public Involvement Lead and Facilitator. Designed public involvement program, conducted key leader interviews, and led development of communication tools including: logo, project website, electronic newsletter, rider survey, fact sheets and other public information materials. Marie also facilitated the stakeholder Steering Committee.

Delaware County Transit, Strategic Framework and Action Plan. Marie facilitated a series of strategic work sessions with the Board of Directors and staff that led to the creation of Mobility Solutions for a Changing World, A Strategic Framework and Action Plan. The plan includes a roadmap for introducing three pilots and transforming DCT into the county's mobility leader.

Ohio Department of Transportation (ODOT), Access Ohio 2045. Strategist and Facilitator. Guiding Ohio's transportation policies and investment strategies for the next 20 years, Access Ohio 2045 is preparing the state to make wise investment decisions under multiple future scenarios. Marie and her team are leading the public engagement and education program. Marie designs and facilitates the Steering Committee and public meetings, and advises on policy, engagement and education, which has included 30 regional stakeholder and public workshops, webinars, a project website, fact sheets, surveys and other educational efforts. This effort was featured at a TRB poster session.

ODOT Active Transportation/Mode Shift: "Your Move. Advisor/Strategist. Walk. Bike. Bus." campaign. Provided best practice research and advised on stakeholder engagement and public education strategy designed to promote mode shift. Includes paid advertising creative development and media placement, social media, website, train the trainer bicycling education sessions throughout Ohio and grassroots engagement.

Ohio Department of Transportation (ODOT), Ohio 3C "Quick Start" Passenger Rail Environmental Assessment. Public Involvement Lead and Facilitator. Conducted extensive public involvement program with radio, social media, public meetings, community leader working group and online surveys – all in just six weeks so that a stimulus grant request could be submitted to the Federal Railroad Administration. Ohio was awarded the $400 million grant, but the new governor returned the funds and discontinued the project.

Ohio Rail Development Commission, Ohio Hub Plan. Public Involvement Lead and Facilitator. Oversaw and facilitated public and agency involvement efforts in 10 Ohio cities while summarizing the economic development benefits of introducing passenger rail and expanding existing freight rail capacity. Efforts included collaboration with seven regional planning commissions and metropolitan planning organizations, community meetings and aggressive grassroots outreach and media relations. Also led public involvement for ORDC's/ODOT's High Speed Rail Ohio Programmatic Environmental Impact Statement.

East-West Gateway, St. Louis Trolley Project. Public Involvement Counsel. Advised on effective public involvement and outreach techniques, particularly as it related to addressing concerns and opportunities related to rail investments. Included stakeholder interviews, public meetings, project website and newsletters, media relations and an economic development forum featuring a Portland, Oregon developer and streetcar champion.

Multiple Long-Range Plans and Strategic Visions. Public Involvement Lead and Facilitator. Planned, promoted and facilitated stakeholder/public involvement processes for visioning/long-range transit, freight and passenger rail, logistics and bike plans for numerous transportation, municipal and advocacy organizations in numerous states.

Proposer and Subconsultants Firm Profile

C

Brief profile of the proposer and any subconsultant(s), including the principal line of business, year founded, form of organization, number and location of offices, number of employees, and a general description of the proposer's financial condition.

AECOM is the world's premier infrastructure firm, delivering professional services throughout the project lifecycle – from planning, design and engineering to consulting and construction management. We partner with our clients in the public and private sectors to solve their most complex challenges and build legacies for generations to come. On projects spanning transportation, buildings, water, governments, energy and the environment, our teams are driven by a common purpose to deliver a better world.

AECOM has significant rail infrastructure knowledge and design expertise. Our interdisciplinary teams of specialists are planning and designing integrated high-speed and intercity passenger rail systems all across the world.

Our mass transit expertise spans more than 100 years and includes work with rail and bus companies, major transit agencies, governments and private organizations. In North America, our multi-disciplinary team includes more than 6,500 transit, rail, tunnel, bridge and systems engineers; transit architects; urban designers and financial experts.

Ranked as #1 in General Building, #1 in Transportation and #2 in Mass Transit & Rail in *Engineering News-Record* magazine's annual industry rankings for 2020, transit agencies rely on AECOM to help safely move millions of people every day. We work with clients from conceptual planning through operation to develop complete transit and intercity rail solutions that meet critical mobility requirements. We partner with clients to help transform their visions into reality.

#1 TOP500 **ENR2020** GENERAL BUILDING

#1 TOP500 **ENR2020** TRANSPORTATION

#2 TOP500 **ENR2020** MASS TRANSIT & RAIL

Subconsultant Firm Profiles

GEOTECHNOLOGY, INC. | Geotechnical Engineering

Geotechnology, Inc. provides a comprehensive range of consulting services in applied earth and environmental sciences; exploration; geotechnical engineering; soils, rock, and construction materials testing; non-destructive testing; special inspections; geophysics and deep foundation testing. Technical expertise, thorough knowledge of regulations, and strong management capabilities form a solid foundation for resolution of the most complex and challenging engineering issues. Geotechnology focuses on providing the professionals and resources that best fit client's goals and are necessary to successfully accomplish their projects.

Principal Line of Business: Geotechical Engineering
Year Founded: 1984
Form of Organization: S Corporation
Number and Location of Offices: 10; OH, KY, AR, MS, MO, IL, KS, TN
Number of Employees: Over 260
General Description of the Proposer's Financial Condition: Generally strong and good financial standing

BERDING SURVEYING, INC. | Surveying

Berding Surveying (SDVOSB certified) is a professional services firm that provides professional surveying services and is an early user and innovator in applying advanced surveying techniques and technology. The firm has been able to work with its existing client base to utilize 3D laser scanning technology to solve tough and once seemingly impossible challenges in locating the built environment. Their ability to apply core surveying knowledge to control and constrain scanned data has resulted in the firm being recognized as a regional leader within the field of 3D scanning.

Principal Line of Business: Surveying
Year Founded: 1991
Form of Organization: S Corporation
Number and Location of Offices: 1; Milford, OH
Number of Employees: 15
General Description of the Proposer's Financial Condition: Good financial standing

CAD-VANTAGE, INC. | CAD Drafting Services

CAD-Vantage, Inc. (DBE certified) is a computer-aided design and drafting firm that provides CAD drafting, detailing and staffing to architectural, engineering, design and maintenance professionals. Other services include AutoCAD, Microstation, Revit and GIS Technicians who can perform onsite at clients' office for short or long term use.

Principal Line of Business: CAD Staffing Services (AutoCAD, Microstation, REVIT/BIM)
Year Founded: 1995
Form of Organization: S Corporation
Number and Location of Offices: 1; Indianapolis, IN
Number of Employees: 9
General Description of the Proposer's Financial Condition: Good financial standing

STONE ENVIRONMENTAL ENGINEERING & SCIENCE, INC. | Environmental Support

Stone Environmental Engineering & Science, Inc. (EDGE certified) is an Ohio-based consulting firm offering a full range of environmental, ecological, engineering, and surveying services. Stone's diverse team of engineers, ecologists, geologists, surveyors, and scientists are passionate about helping to improve the environment around us, both natural and manmade. Since their founding in 1989, their reputation has been built on a responsiveness and flexibility reflective of their commitment to project excellence and client satisfaction. In 2018 Stone was awarded DBE Consultant of the Year by ODOT for their professionalism, integrity in work standards and performance.

Principal Line of Business: Environmental, Ecological and Engineering Design
Year Founded: 1989
Form of Organization: Corporation
Number and Location of Offices: 3; Westerville, OH; Dayton, OH; Akron, OH
Number of Employees: 18
General Description of the Proposer's Financial Condition: Good financial standing

ENGAGE PUBLIC AFFAIRS | Public Envolvement

Engage Public Affairs, LLC (DBE Certified) was founded in 2004 and provides facilitation, policy, community engagement, public information, research, visioning, advocacy and media relations counsel to organizations tackling complex issues, seeking consensus and a positive community profile. Engage is led by Marie S. Keister, APR, AICP, a nationally-recognized stakeholder engagement expert with 30 years' experience working on rail projects across the country. She has led engagement efforts for what is now known as Sound Transit, Louisville's look at BRT and light rail, St. Louis Delmar Loop Trolley, Ohio's high speed programmatic environmental impact statement and 3C rail passenger rail project, COTA's FastTrack major investment study and NextGen high capacity corridor plan, and the proposed Columbus trolley. Marie has worked on strategic planning efforts for numerous transit agencies throughout Ohio, including ODOT's Statewide Transit Plan.

Principal Line of Business: Stakeholder Engagement, Public Relations and Communication
Year Founded: 2004
Form of Organization: S Corporation
Number and Location of Offices: 2; Dublin, OH; Columbus, OH
Number of Employees: 3
General Description of the Proposer's Financial Condition: Good financial standing

Organziational Chart

D

Show the entire project team and their areas of responsibilities, key personnel and their roles, and the reporting relationships between the team members BCRTA and the City desire to understand specific reporting structure and its relation to both projects.

PRINCIPAL-IN-CHARGE
Michael Bongiorno, AIA, LEED AP BD+C

PROJECT MANAGER
Steve Robinson, AIA, LEED AP BD+C

DEPUTY PROJECT MANAGER
Danielle Maludy, AIA, NCARB

BCRTA MULTIMODAL STATION & SHARED SERVICES FACILITY LEAD
Steve Robinson, AIA

Project Architect
Erik Maso, RA

Specificiations and Quality Assurance
Joseph Fischer, RA

Interior Design
Alyssa Dickinson, LEED GA

FTA Coordination
Angela Brazzale

Mechanical Engineering
Derek Ensign, PE

Structural Engineering
Andy Knapke, PE, SE

Subject Matter Experts/ Advisors
Judson Herter, RA
Paul Diez, RA

CITY OF OXFORD AMTRAK PASSENGER RAIL PLATFORM LEAD
Dave Wormald, PE, AICP

Amtrak Coordination
Angela Brazzale

CSX Coordination
Alanna Strohecker

Benefit Cost Analysis
Toni Horst, PhD

Amtrak Platform Design and Signage
Dimitrie Prelipceanu, AIA

Real Estate Valuation
Lou Iascone

SHARED RESOURCES

Site/Civil Engineering
Dave Wormald, PE, AICP
Jason Ramler, PE

Landscape Architecture
Yong Woo Lee, ASLA, AICP, LEED AP

Electrical/Lighting/Security
Brian Walker, PE

Cost Estimating
Kevin Sheahan, PE

NEPA
Ryan Apanovitch

Enviromental
Selina Zapata Bur, AICP
Mary Sharrett, PE, LEED AP, CPESC, AHES, AHPD (SE)

Geotechnical Engineering
Shawn Reed, PE (GEO)
Joseph Hauber, PE (GEO)
Kevin Weaver, PE, CWI (GEO)

Surveying
Gerard Berding, PS (BSI)
Tim Schwoeppe, PS (BSI)

CAD Drafting Services
Curtis White (CVI)
Christopher (Ty) Riddle (CVI)

Public Engagement
Marie Keister, APR, AICP (EPS)

All staff is **AECOM** unless otherwise noted

GEO Geotechnology, Inc.
BSI Berding Surveying, Inc.
CVI CAD-Vantage, Inc. (DBE)
SE Stone Environmental & Engineering Science , Inc. (EDGE)
EPS Engage Public Affairs, LLC (DBE)

Key Personnel

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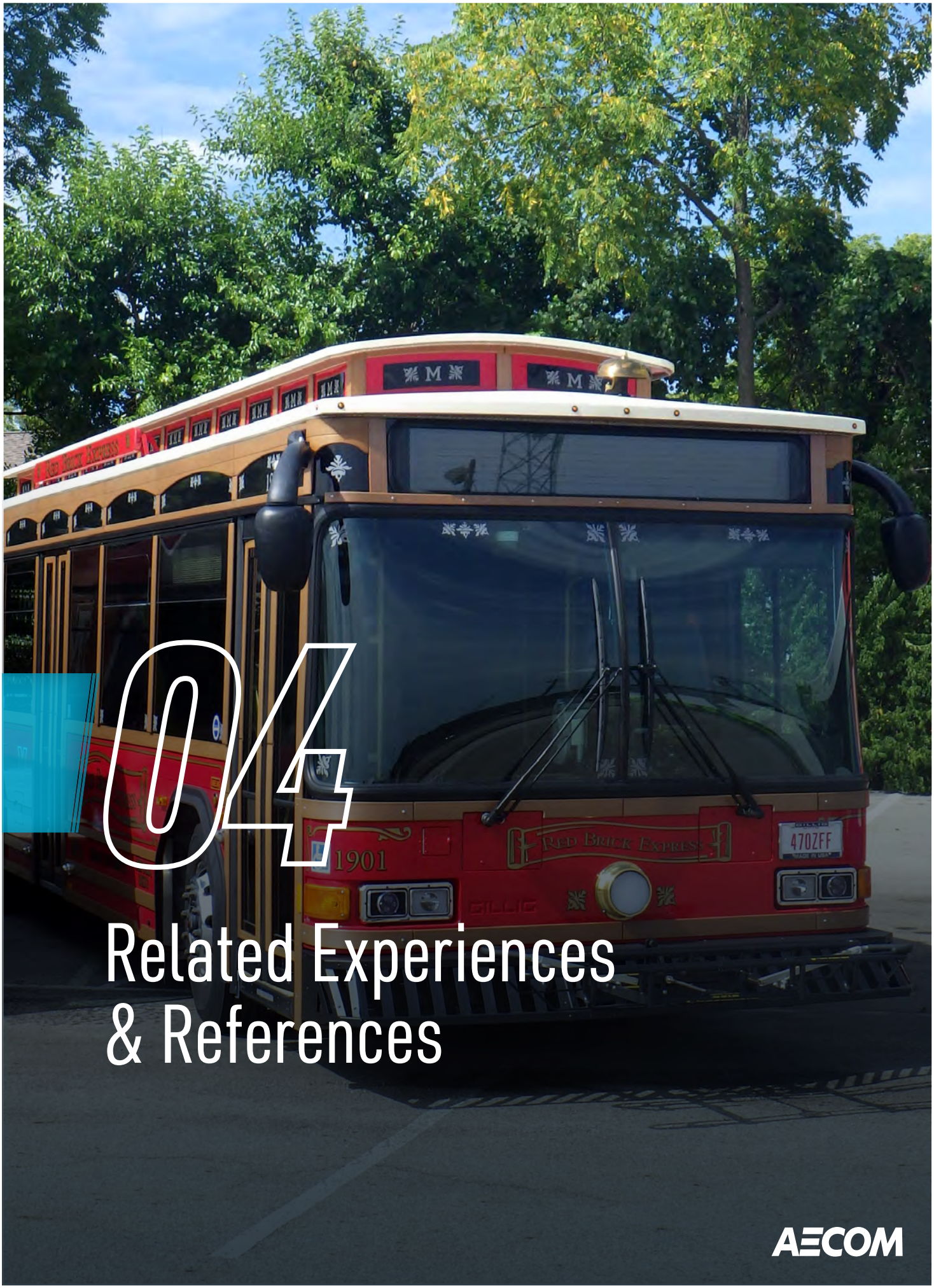

04 Related Experiences & References

AECOM

04

Related Experiences and References

At AECOM, we seek a balance between art and technology, form and function, beauty and purpose, vision and result.

AECOM is the nation's leader in transportation architecture and design. The firm has been ranked #1 in Transportation and Mass Transit/Rail every year since 2001 by Engineering News-Record. At AECOM, we seek a balance between art and technology, form and function, beauty and purpose, vision and result. Our architects, engineers, planners, and construction professionals have helped shape the world around us, especially transportation systems and supporting infrastructure and maintenance facilities that enable our way of life and future.

With a long history of success implementing architectural solutions for a variety of passenger rail and transit projects, our team is poised to fulfill the challenges of a constantly moving world. Critical to our design process is our ability to strategically select materials and form to maximize sustainable environmental conditions. We collaborate with clients and project teams to implement plans that bring long term performance to transit systems. We assemble teams that deliver positive impact to projects at all scales.

The AECOM team offers BCRTA and the City of Oxford unmatched depth of experience in all aspects of design for bus and rail transportation and maintenance facilities. AECOM has performed some of the most significant high-speed and intercity passenger rail and public transit planning, design, construction management, and program management projects in the world, including Denver Union Station and the new PATH Transit Center in New York City. We believe that capital investments in facilities should be aligned with measurable, sustainable business benefits. Our portfolio reflects this commitment to excellence and client satisfaction. The projects below are a small selection of the many we could include, and were chosen because these projects embody your stated goal of having an integrated facility that is up to date with current trends in the industry, which safely and efficiently accommodates its users, and "go beyond the minimum" to contribute to their communities.

Denver Union Station

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AECOM Relevant Projects:

TRANSIT CENTER, MAINTENANCE FACILITY AND PLATFORM EXPERIENCE

Client	Project Name	Location	Year Completed	Federally Assisted/ Funded	Amtrak Coordination	CSX Coordination	Bus Maintenance Facility	Passenger Waiting Facility	Multipmodal Station/ Components	Shared Services Facility	Rail Platform Design	Rail/Bike Pedestrian Access	NEPA
TRANSIT CENTER AND MAINTENANCE FACILITY EXPERIENCE													
Indiana Public Transit Corporation	IndyGo Transit Center	Indianapolis, IN	2016					■	■				■
Lee County, Florida	LeeTran Administration, Operations and Maintenance Facility	Ft. Myers, FL	2015				■		■	■			
Chicago Infrastructure Trust and City of Chicago Fleet and Facilities Management	New Fleet and Facility Management Headquarters	Chicago, IL	2019				■		■	■			
Northern Indiana Commuter Transportation District	Miller Station	Miller, IN	2020	■				■	■	■			
Cleveland Planning Commission	Cleveland Multimodal Transportation Center	Cleveland, OH	2016						■				
University of Michigan	Transportation Operations Complex	Ann Arbor, MI	2017				■	■		■			
Northern Indiana Commuter Transportation District	Michigan City Station	Michigan City, IN	2020	■				■	■	■			
Central Ohio Transit Authority	E-W High Capacity Transit Corridor	Columbus, OH	Current				■						
Uptown Consortium, Inc.	Uptown Smart Center	Cincinnati, OH	2018	■				■	■	■		■	
Dallas Area Rapid Transit	Downtown Dallas Bus Transfer Center Study	Dallas, TX	2018					■	■		■		
City of Richardson	Arapaho Transit Center and TOD Study	Richardson, TX	2020					■	■				
City of Ann Arbor	Ann Arbor Station Environmental Review	Ann Arbor, MI	2017					■	■		■		
Muskegon County, MI	Muskegon Area Transit Center Renovation and Addition	Muskegon, MI	2013						■				
Blue Water Area Transit Commission	Blue Water Transfer Center	Port Huron, MI	2016						■				
Interurban Transit Partnership (The Rapid)	Lake Line BRT	Grand Rapids, MI	2020						■	■			
Cadillac Wexford Transit Authority	New Bus Transit Facility	Cadillac, MI	2010				■		■	■			
Cleveland Airport System	Cleveland Hopkins Vehicle Maintenance Building	Cleveland, OH	2017						■				
Transit Authority of Lexington (Lextran)	Lextran New Transit Headquarters Complex	Lexington, KY	2016				■			■			
American Electric Power	Sandusky Service Facility	Sandusky, OH	2018				■			■			
City of Calgary	Calgary Bus Maintenance and Storage Facility	Calgary, Alberta, Canada	2019				■						
Mass Transportation Authority	CNG Bus Storage Facility	Flint, MI	2016				■						
Toledo Area Regional Transit Authority	Downtown Regional Transit Center	Toledo, OH	2020				■	■	■	■			
Maine Department of Transportation	Acadia Bus Maintenance and Administration Facility	Trenton, ME	2011				■		■	■			

Key Featured Project

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AECOM Relevant Projects:

TRANSIT CENTER, MAINTENANCE FACILITY AND PLATFORM EXPERIENCE

	Client	Project Name	Location	Year Completed	Federally Assisted/ Funded	Amtrak Coordination	CSX Coordination	Bus Maintenance Facility	Passenger Waiting Facility	Multipmodal Station/ Components	Shared Services Facility	Rail Platform Design	Rail/Bike Pedestrian Access	NEPA
	San Joaquin Regional Transit District	RTD Bus Maintenance and Operations Center	Stockton, CA	2016				■		■	■			
	Maryland Transit Administration	Corridor Cities Transitway Operations and Maintenance Facility	Gaithersburg, MD	2019				■		■	■			
	Monterey Salinas Transit District	Monterey Bay Operations and Maintenance Facility	Monterey, CA	2017				■			■			
	PLATFORM EXPERIENCE													
🔑	Amtrak	ADA Stations Program	Various, US	Ongoing	■	■			■			■		
🔑	Northern Indiana Commuter Transportation District	Double Track Final Design	Northwest, IN	2020	■		■		■			■		
🔑	Northern Indiana Commuter Transportation District	East Chicago Station Access Improvements	East Chicago, IN	2020	■				■			■		
🔑	Wisconsin Department of Transportation	Milwaukee Airport Rail Station Second Platform Design	Milwaukee, WI	Ongoing		■			■			■		
🔑	City of Cincinnati	Thornton Avenue Intersection Improvements	Cincinnati, OH	2021	■		■						■	■
🔑	City of Cincinnati	Union Terminal Station Track Study	Cincinnati, OH	2014		■	■		■	■		■	■	
🔑	Hamilton County, OH	Eastern Corridor Rail Trail Segment 2-3	Hamilton County, OH	2013	■				■	■	■	■	■	■
	Amtrak	Project Management Oversight	Various, US	2026	■	■						■		
	Amtrak	ADA Stations Program, Plano Station Improvements	Plano, IL	2020	■	■						■		
	CSX	General Engineering Consultant, Civil and Structural CSXT Railroad System	Various, US	2015			■						■	

🔑 Key Featured Project

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»INDYGO TRANSIT CENTER
INDIANAPOLIS, IN

AECOM

CLIENT
Indianapolis Public Transportation Corporation

SERVICES
Architecture
Engineering

PERIOD OF INVOLVEMENT
2013-2016

OVERALL VALUE
$20 Million

CLIENT'S REPRESENTATIVE
Jennifer M. Bruner, J.D.
Director of Compliance and Civil Rights
DBE Liaison Officer
Indianapolis Public Transportation Corporation/ IndyGo
1501 W. Washington Street
Indianapolis, IN 46222
T: (317) 614-9272
E: jbruner@indygo.net

KEY PERSONNEL
Steve Robinson, AIA
Andy Knape, PE, SE
Joseph Fischer, RA, LEED AP BD+C, NCARB

AECOM led the architectural and engineering design of a new multi-modal transit facility in downtown Indianapolis.

Project summary

The facility is located on a tight urban footprint. The design emphasizes the facility as a gateway to downtown Indianapolis and provides a green public plaza to this important site in the city. At the same time, the design is practical and functional, adding efficiency to transit operations and safety for the patrons. The center also promotes dignity of ridership, comfort for drivers, and cost effective services for the citizens.

This project links with other key sustainable elements of downtown Indianapolis, building on the revitalization and investment that is occurring around the former Market Square arena site. It is adjacent to the dynamic Cultural Trail and has options for bike sharing, car sharing, electric vehicle charging, and other green modes of transportation. It carefully integrates stormwater run-off into a green catch basin system that supports on-site vegetation.

»LEETRAN ADMINISTRATION, OPERATIONS AND MAINTENANCE FACILITY

FT. MYERS, FL

AECOM

CLIENT
Lee County

SERVICES
Architecture
Engineering

PERIOD OF INVOLVEMENT
2010-2015

OVERALL VALUE
$32 Million

CLIENT'S REPRESENTATIVE
Steve Myers
Director
Lee County Transit
6035 Landing View Road
Fort Myers, FL 33907
T: (239) 533-8726
E: smyers@leegov.com

KEY PERSONNEL
Judson Herter, RA

AECOM provided complete architectural and engineering design services for a new $32 Million bus maintenance facility for the Lee County, Florida bus fleet.

Project summary

AECOM provided complete architectural and engineering design services for a new $32 million bus maintenance facility for the Lee County, Florida bus fleet. The newly constructed Lee Tran Administration, Operations and Maintenance Facility serves the expanding needs of Lee Tran and houses administrative, service operation, and maintenance functions. It includes Administrative Offices of approximately 12,800 sf. Transportation Operations Offices of approximately 20,000 sf. and a Vehicle Maintenance Building of approximately 44,500 sf. The maintenance building has 18 bays with lifts for repair of the buses. The facility includes bus fueling and cleaning stations in ancillary buildings. The facility supports approximately 500 employees, 124 buses, 90 paratransit vehicles, 47 support staff vehicles, and 300 employee parking spaces.

The Administrative Offices serve office and clerical staff, customer service, provides public meeting space, IT and training functions. The Operations Building houses supervisory staff, dispatch, driver check-in and prep area, vehicle inspection and release for both Fixed Route and Paratransit Services. The Maintenance Buildings provide for maintenance staff, warehouse functions, route maintenance, facility maintenance, vehicle maintenance and repair, inspection, wash, interior detailing and fueling.

Sustainable Features
All buildings have steel frame and tilt-up concrete wall construction, LED lighting, and energy efficient mechanical systems. The maintenance building incorporates a continuous clerestory window system bringing natural light to the center of the maintenance bays. A concrete strengthening agent was added to the concrete flooring in the maintenance bays to provide added durability. The project is registered with the US Green Building Council for LEED certification. It is anticipated the project will receive LEED silver certification for the Administration/Operations Building and LEED certified for the Maintenance Building.

Integrated Design Process
At the beginning of design the latest version of the LEED Registered Project Checklist is reviewed with the client to determine what is needed during the design, construction and operation of the building to achieve various LEED levels. At each design level the checklist is reviewed to determine what has been accomplished and what possible changes may be needed to add or maintain the level being pursued. Materials and systems used on previous LEED certified projects are presented to the client to ensure they are consistent with the client's expectations for the project.

NEW FLEET AND FACILITY MANAGEMENT HEADQUARTERS
CHICAGO, IL

AECOM

CLIENT
Chicago Infrastructure Trust and City of Chicago Fleet and Facilities Management

SERVICES
Architecture
Engineering
Design
Construction
Permitting
Sustainability

PERIOD OF INVOLVEMENT
2017-2019

OVERALL VALUE
$40.2 Million

CLIENT'S REPRESENTATIVE
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Commissioner
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KEY PERSONNEL
Andy Knape, PE, SE
Joseph Fischer, RA

AECOM partnered with the Chicago Infrastructure Trust (CIT) and the Department of Fleet and Facility Management (2FM) in a fast track and collaborative design-build process for the delivery of three new facilities.

Project summary

AECOM provided design and construction services for the relocation of the existing vehicle maintenance 2FM facilities to three sites within the City to disperse services and improve operations.

The new facilities consist of the following:

- Main Shop: new construction of a 150,000 square foot, two-story, heavy-duty municipal vehicle maintenance repair shop, and administrative headquarters for 2FM.
- Satellite Shop: new construction of a 30,000 square foot heavy-duty municipal vehicle maintenance and repair shop.
- Fueling Station: relocation of the existing fuel station function; requires demolition of the existing Department of Street and Sanitation building and the construction of a new fuel station.

The project provides over 180,000 square feet of fleet maintenance and support facilities in a period of less than 18 months, allowing the City of Chicago to capture value from underutilized City property and to re-invest in neighborhood infrastructure.

AECOM successfully employed it's integrated delivery model to provide a state-of-the-art, sustainable and custom facility that has improved operations and reduced costs.

»NICTD MILLER STATION
MILLER, IN

AECOM

CLIENT
Northern Indiana Commuter Transportation District

SERVICES
Design

PERIOD OF INVOLVEMENT
2019-2020

OVERALL VALUE
$8 Million

CLIENT'S REPRESENTATIVE
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KEY PERSONNEL
Steve Robinson, AIA
Joseph Fischer, RA

AECOM designed the station as part of a larger rail and platform project also led by AECOM.

Project summary

AECOM led the design of this FTA funded large commuter rail project working closely with a Northern Indiana Commuter Transportation District (NICTD) team that was dedicated to the project. The project included multiple new platforms along with new stations in several cities. This station, in Miller Indiana, accommodates the many commuters that use the line to go from their homes in Indiana to their work in Chicago on a daily basis. The station is designed for multi-modal arrival, including car parking and drop-off options, as well as pedestrian and bicycle access.

Accessibility for all passengers and safety were key drivers of the design which also incorporates real-time signage for passenger convenience. Design reviews with the surrounding community ensured that the design would reflect and enhance the local surroundings while still being consistent with the NICTD brand and FTA funding regulations.

»CLEVELAND MULTIMODAL TRANSPORTATION CENTER

CLEVELAND, OH

AECOM

CLIENT
Cleveland Planning Commission

SERVICES
Transit Planning
Transit-oriented Design
Architecture
Urban & Streetscape Design

PERIOD OF INVOLVEMENT
2015-2016

FEE VALUE
$500,000

CLIENT'S REPRESENTATIVE
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KEY PERSONNEL
Yoo Wong Lee, ASLA, AICP, LEED AP

AECOM worked with Planning Commission and Parsons Brinckerhoff to develop concept plan for a multi-modal station and site development for potential joint development opportunities.

Project summary

The transportation facility serves as the keystone of a wider area plan for redevelopment of Cleveland's lakefront by consolidating Amtrak, Greyhound, and RTA services, and providing pedestrian access between Cleveland's downtown civic center and its lakefront.

The project provided technical feasibility, site analysis and area development plan that supports transportation modal choice and accessibility, convenient connections and transit-oriented development. The plan aimed to create an iconic, memorable and vibrant place for public and commerce in the lakefront setting.

»TRANSPORTATION OPERATIONS CENTER
ANN ARBOR, MI

AECOM

CLIENT
University of Michigan

SERVICES
Programming
Design
Construction Documentation

PERIOD OF INVOLVEMENT
2017-2020

OVERALL VALUE
$32 Million

CLIENT'S REPRESENTATIVE
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KEY PERSONNEL
Yoo Wong Lee, ASLA, AICP, LEED AP

AECOM provided programming, design and construction document services for the University of Michigan for a new transportation facility.

Project summary

The facility was designed to improve the operational efficiencies among several transportation and facility service departments. The facility will accommodate functions that include transportation administration, transportation operations (driver support areas), bus and vehicle maintenance, fueling and wash bays for buses and fleet vehicles. The facility comprises four major components as listed below.

This project was put on-hold indefinitely until another site could be selected. AECOM provided site selections options for UM's new site. AECOM is currently designing a second project for the University to accommodate a new project site. The construction value for this project is approximately $32 million. This facility will comprise similar components as stated below minus light duty vehicle repair bays and their car rental operations.

Maintenance Building
- Bus Repair Bays
- Preventive Maintenance Inspection Bays
- Heavy, Medium and Light Duty Vehicle Repair Bays
- Heavy and Light Duty Equipment Repair Bays
- Paint Booth and Body Shop
- Parts and Tire Storage Rooms
- Vehicle Maintenance Shops and Support Areas
- Welding Shop

Administration Building
- Office and Crew Support Areas
- Transit Operations Dispatch and Drivers Areas
- Maintenance and Driver Training Rooms

Bus Storage and Bus Wash Buildings
- Enclosed, Heated Bus Parking
- Interior Clean Positions for Buses
- Diesel Fueling for Buses
- Automated Bus Wash

Vehicle Service Building
- Enclosed Interior Clean Positions for Fleet Vehicles
- Covered Fueling for Fleet Vehicle
- Automated Vehicle Wash

NICTD MICHIGAN CITY STATION

MICHIGAN CITY, IN

AECOM

CLIENT
Northern Indiana Commuter Transportation District

SERVICES
Design

PERIOD OF INVOLVEMENT
2019-2020

OVERALL VALUE
$14 Million

CLIENT'S REPRESENTATIVE
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KEY PERSONNEL
Steve Robinson, AIA
Joseph Fischer, RA

The design incorporates an historic terracotta train station facade into a new station and commuter parking structure.

Project summary

When upgrading commuter rail service for the Northern Indiana Commuter Transportation District (NICTD), the AECOM team was asked to incorporate the historic terracotta facade of the old train station into a modern station built into a new parking garage. The goal was to sensitively fit into the historic district in downtown Michigan City while still reflecting the an updated image and providing expected amenities for passenger convenience.

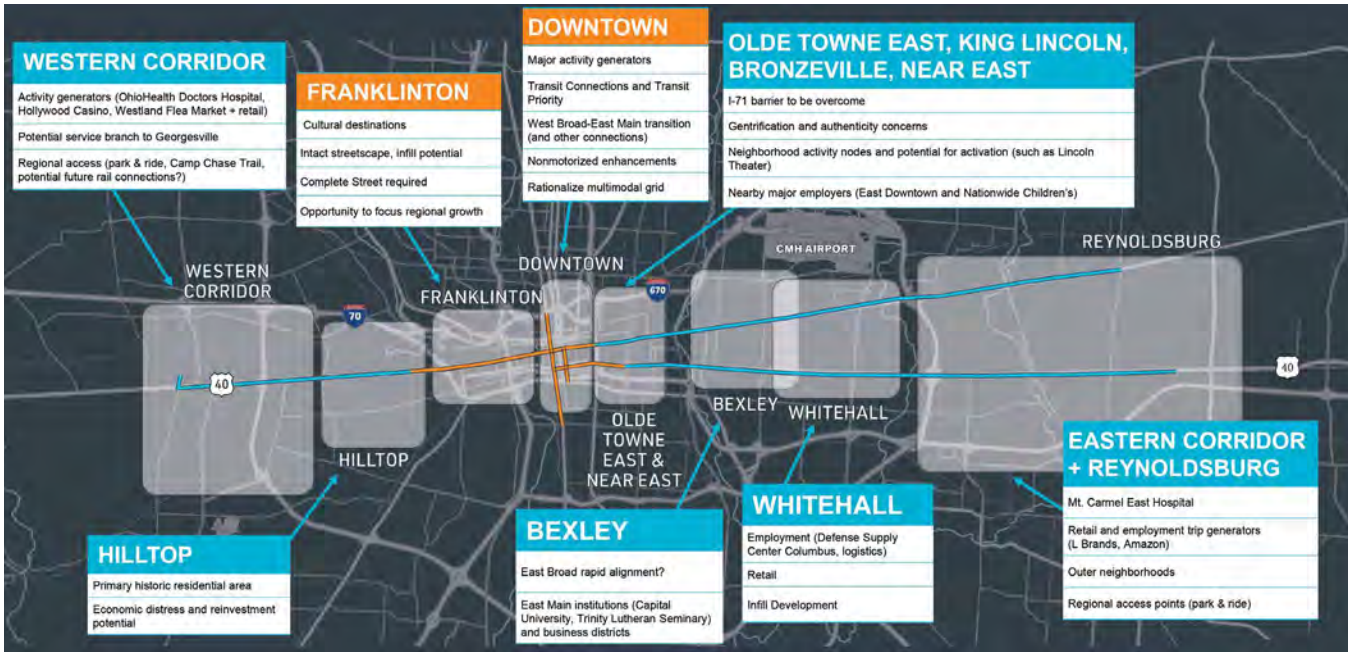
The AECOM design team faithfully documented the facade and prepared plans for its disassembly and reconstruction onto a 300 person garage that also accommodates passenger waiting and new retail/restaurant options. The station is built at the height of the new raised rail platforms to maximize safety during travel between the two.

The AECOM design team also helped NICTD shepherd the project through reviews by the FTA and the local historic preservation board, achieving the necessary approvals while keeping the project on schedule.

»COTA E-W HIGH CAPACITY TRANSIT CORRIDOR

COLUMBUS, OH

AECOM



CLIENT
Central Ohio Transit Authority (COTA)

SERVICES
Project management, transportation planning and 30% design development

Comprehensive public involvement process

Transit Oriented Development planning

Locally preferred alternative development

FTA CIG planning and coordination

PERIOD OF INVOLVEMENT
2020-2023

OVERALL VALUE
$5.6 Million

CLIENT'S REPRESENTATIVE
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KEY PERSONNEL
Michael Bongiorno, AIA, LEED AP BD+C
Erik Maso, RA

AECOM is currently working with the Central Ohio Transit Authority (COTA) to plan and design a new 20-mile High Capacity Transit line along the main East-West Corridor(s) through Columbus.

Project summary

The primary scope of work is to lead a large, complex team to examine alternatives for High-Capacity Transit along the East-West Corridor, and 30% Design for the Locally Preferred Alternative High-Capacity Transit and certain Streetscape elements for the East-West Corridor in Central Ohio. As part of this work, transit station design, sustainable place-making, equitable neighborhood integration, public art integration, transit-oriented development, and comprehensive public engagement services are being provided. Eight major neighborhoods comprise the corridor with Downtown Columbus serving as the hub of other corridors currently under study and will contain a transit center and maintenance facility.

»UPTOWN SMART CENTER
CINCINNATI, OH

AECOM

CLIENT
Uptown Consortium, Inc.

SERVICES
Bos Operations Analysis
Transit Planning and Preliminary Engineering
Traffic Engineering
Site Design
Cost Estimating

PERIOD OF INVOLVEMENT
2017-2018

OVERALL VALUE
$6.5 Million

CLIENT'S REPRESENTATIVE
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Uptown Consortium, Inc.
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KEY PERSONNEL
Dave Wormald, PE, AICP
Jason Ramler, PE

AECOM was retained by the Uptown Consortium, Inc. (UCI) to evaluate service demand, assist with site selection and develop conceptual cost estimates for a new multimodal transit facility (Uptown SMART Center) planned for the Uptown Innovation Corridor in Cincinnati, Ohio.

Project summary

The UCI is an non profit community development organization with institutional partners including the University of Cincinnati, Cincinnati Zoo, US Health and several private healthare organizations. The UCI is charged with promoting community development and in the Uptown Area surrounding the University and other member institutions.

The UCI is working in partnership with the City of Cincinnati and Southwest Ohio Regional Transit Authority to plan and implement the Uptown SMART Center facility. The City of Cincinnati is the current project sponsor and was awarded CMAQ funding for construction through the Ohio Kentucky Indiana Regional Council of Governments.

The Uptown SMART Center is envisioned as a key transfer hub for SORTA Metro local and express routes as well as institutional shuttles and potential future BRT.

AECOM developed planned service levels for SORTA and institutional shuttles to define the operational capacity needed for the facility to establish the footprint and circulation requirements. The operational assumptions developed by AECOM were subsequently used for the NEPA and CMAQ air conformity analysis. We evaluated multiple potential sites proposed by UCI for egress, circulation, site and property impacts as well as operational fit with existing and proposed transit service in the Uptown area.

The public transit facility will likely be integrated with a privately developed mixed use development and parking facility serving multiple users. The facility will be designed to accommodate potential future utilization by automated self driving vehicles.

The UCI, SORTA and the City of Cincinnati are currently working to finalize site selection for the facility with design and construction anticipated in FY 2023.

AMTRAK ADA STATIONS PROGRAM 2014-2019

VARIOUS, US

CLIENT
Amtrak Corporation

SERVICES
Facility Conditions Assessments
Full Design Services
Construction Administration

PERIOD OF INVOLVEMENT
2014-2019

OVERALL VALUE
$20 Million

CLIENT'S REPRESENTATIVE
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KEY PERSONNEL
Dimitrie Prelipceanu, AIA

AECOM has been retained by Amtrak Corporation to design and manage ADA improvements for over 80 stations nationwide.

Project summary

Mandated by Congress and financed by the Federal Railroad Administration (FRA), the program consists of collaborative assessments and design and construction of physical improvements to provide access to Amtrak's intercity rail transportation program in compliance with Title II of the Americans with Disabilities Act of 1990. The complex design and construction administration program has been managed by an experienced AECOM B+P architectural team in New York and New Jersey and has involved more than 90 design professionals across six AECOM offices.

Our team completed assessments of existing conditions, predesign due diligence, full design services as well as construction administration. AECOM has used a multi disciplined team consisting of architects, civil and geotechnical engineers, MEPS engineers as well as landscape, SPHO, and historical specialists.

The scope of work includes:

- Access to Public Right of Way (PROW): Design an accessible pathway to and from the PROW, parking lots, stations, platforms stairs, ramps, public transit and tunnels.
- Elevators and Elevator Hallways: Design and document alterations to the existing elevators and elevator hallways for DOTAS 2006 compliance. Restrooms renovations: Alter and/ or modify the existing men's and women's restrooms as necessary to meet DOTAS 2006 compliance.
- Signage: Provide all signage required by the DOTAS 2006 and Amtrak signage standards.
- Waiting Area renovations: Alter items in the waiting area as necessary for DOTAS 2006 compliance. Install power door operators.
- New ADA Platforms and canopies. Platform: Design a new platforms, including lighting and canopies which complies with Amtrak standards, as necessary to comply with ADA requirements. Design improvements necessary to provide a concrete platform for passenger boarding including detectable warning, painted warning strips and warning lettering.
- Concrete accessible walkway and ramps connecting the platform to the station.

»NICTD DOUBLE TRACK FINAL DESIGN

CHESTERTON, IN

CLIENT
Northern Indiana Commuter Transportation District

SERVICES
Structural Engineering
Civil Engineering
Mechanical/Electrical/Plumbing
Surveying
Geotechnical Engineering
Environmental Design

PERIOD OF INVOLVEMENT
2019-2020

OVERALL VALUE
$290 Million

CLIENT'S REPRESENTATIVE
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KEY PERSONNEL
Steve Robinson, AIA

AECOM is providing structural, civil, architectural, MEP, survey, geotechnical and environmental design services to complete final design for the Double Track NWI project.

Project summary

Final design included design of a continuous second track with related signal, power, communications, bridge, track infrastructure and station improvements over 26.6 miles. Improvements include the addition of 1.8 miles of signal work at the far western and eastern ends of the project and the construction of 16.1 miles of new second mainline track and new overhead catenary system between Gary and Michigan City. The project involves replacing 1.9 miles of embedded, in-street track with a segregated, double track in Michigan City. Along 10th and 11th Streets in Michigan City, 19 at-grade road and rail crossings will be closed, and the remaining ones will be upgraded with automatic warning devices consisting of flashers, gates and bells. The project includes four new TGG Railroad bridges over CSX, Hobart Road, Norfolk Southern Railroad and the main entrance road to ArcelorMittal in Burns Harbor to support the second mainline. Two storage tracks for additional rush-hour trains, two high-level platforms and additional parking will be constructed at the Gary/Miller Station. One high-level and one low-level platform will be constructed at the Portage/Ogden Dunes Station.

EAST CHICAGO STATION ACCESS IMPROVEMENTS

EAST CHICAGO, IN

AECOM

CLIENT
Northern Indiana Commuter Transportation District

SERVICES
Final Design
Construction Management

PERIOD OF INVOLVEMENT
2018-2020

OVERALL VALUE
$8 Million

CLIENT'S REPRESENTATIVE
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KEY PERSONNEL
Steve Robinson, AIA
Joseph Fischer, RA

Civil, structural, track and signal design for improved access to high-level boarding platforms at a commuter rail station.

Project summary

AECOM performed the final design and provided complete construction management services for this commuter rail station improvement in Northwest Indiana. The primary purpose of this project was to provide an alternate means of access and egress between the station's parking lot below and the boarding platform situated on an elevated track-supporting railroad embankment. The core element of the project was a new pedestrian tunnel for commuters constructed beneath outbound Track 1. AECOM provided for maintenance of NICTD commuter rail and CSS&SB freight-rail traffic during tunnel construction by detailing and specifying the use of the Shield-Excavator Jacked-in-Placed method of tunnel construction.

Our structural engineers designed a new headhouse situated between Tracks 1 and 2 that provided access up to track and platform level from the end of the tunnel. Our architects prepared a design and plans for a full-enclosing canopy over the headhouse. Our team designed a new cast-in-place concrete walkway supported by drilled piers, also with a fully enclosed canopy system, that connected the new headhouse to an existing one and the adjacent boarding platform. Modifications were also designed for the existing headhouse to improve the flow of commuters boarding and disembarking trains.

Additional design work included new lighting, camera and surveillance systems, overhead heating in the headhouse, and ticket vending machines. Modifications, including installing soil-grouted tieback anchors were also designed to retrofit an existing tall MSE retaining wall system through which the new tunnel was constructed.

With commuter and freight rail traffic passing though the station, gauntlet tracks are required to enable freight trains to clear the high-level boarding platforms. As part of this commuter station improvement project, the AECOM design team provided for relocation and replacement of #10 Turnouts for the gauntlet tracks at both ends of the station. New #20 turnouts were provided, with the straight move being reversed from that of the previous #10s to enhance passenger rail operations into and out of the station, with freight rail traffic now making the diverging move. Modifications were also being designed for the associated required changes to the signal system for the relocated and reconfigured control points.

»MILWAUKEE AIRPORT RAIL STATION 2ND PLATFORM DESIGN

MILWAUKEE, WI

AECOM

CLIENT
Wisconsin Department of Transportation – Bureau of Railroads & Harbors

SERVICES
Platform Design
Railroad Coordination
Stakeholder Coordination

PERIOD OF INVOLVEMENT
2019-Ongoing

OVERALL VALUE
$8 Million (Construction)
$10.1 Million (FRA Grant)

CLIENT'S REPRESENTATIVE
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KEY PERSONNEL
Angela Brazzale
Dimitrie Prelipceanu, AIA

In 2019, FRA awarded WisDOT a $10.1 Million Consolidated Rail Infrastructure and Safety Improvements (CRISI) discretionary grant for the design and construction of a second platform along with associated improvements at Amtrak's Milwaukee Airport Rail Station.

Project summary

The grant funds design and construction of improvements that include an 800-foot concrete platform with canopy on the west side of the CP tracks. Elevator towers will be constructed on the east and west sides of the tracks with an overhead bridge to provide pedestrian access between the station and the new west passenger platform. The elevator tower on the east side of the tracks will be integrated with the existing station building and walkway. Trackwork includes rail resurfacing and one third tie replacement for the east and west main tracks along with intertrack fencing.

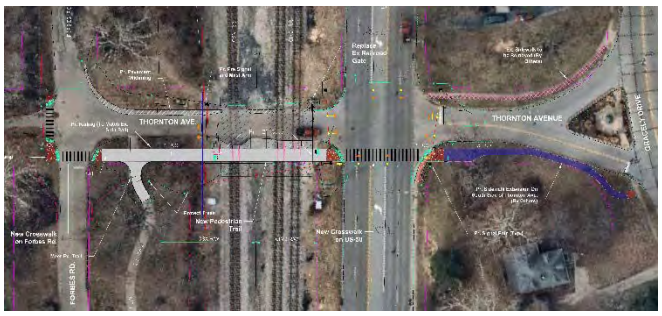
AECOM prepared two pedestrian overpass alternatives for consideration by the project stakeholders which include CP, Amtrak, Milwaukee County and Milwaukee International Airport – one to the north and one to the south of the existing station. The South Option was selected as the preferred alternative. Preliminary engineering is now in development for the preferred alternative. Survey and geotechnical work has been completed. AECOM's design scope also includes the completion of necessary environmental and utility documents and permits, railroad coordination, and FRA reporting.

Construction is planned to start during 2022.

»THORNTON AVENUE INTERSECTION IMPROVEMENTS

CINCINNATI, OH

AECOM



CLIENT
City of Cincinnati

SERVICES
Shared Use Path Design
Railroad Coordination (CSX/ CIND)
Traffic Signal Design with Railroad Pre-Emption
Funding Assistance
NEPA (C-2 CE)

PERIOD OF INVOLVEMENT
2015-2021

OVERALL VALUE
$1.2 Million

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KEY PERSONNEL
Dave Wormald, PE, AICP
Jason Ramler, PE

This project will provide a critical pedestrian and bicycle link to the park facilities for the residents of Sayler Park as well as provide a key link in the long term expansion of the Ohio River Trail from downtown Cincinnati to western Hamilton County.

Project summary

AECOM was retained by the City of Cincinnati to complete a feasibility study to construct a new shared use path linking Fernbank Park located along the Ohio River with the westside neighborhood of Sayler Park. There was a lack of connectivity for residents of the neighborhood located north of the park since there was not a pedestrian crossing for US-50 and three railroad crossings operated by CSX and the Central Railroad of Indiana.

AECOM worked with several stakeholders including both railroads, the Park District, ODOT and the Ohio Rail Commission to develop a conceptual plan for the crossing which required a new traffic signal to accommodate the pedestrian crossing and improve safety of vehicles exiting Thornton Avenue. Due to the proximity of the signal to the at grade railroad crossing, advanced railroad pre-emption and dynamic messaging signs were incorporated with the traffic signal.

AECOM assisted the City with a successful application to secure Congestion Management and Air Quality (CMAQ) for the project.

AECOM was subsequently retained to complete construction documents for the path and signal and assist with railroad coordination. AECOM worked with the City, Ohio Rail Development Commission and Railroads to establish the parameters for the advanced pre-emption including a pre-signal located south of the CSX track. The traffic signal railroad interface will be provided with in accordance with ODOT Supplemental Specification 814.

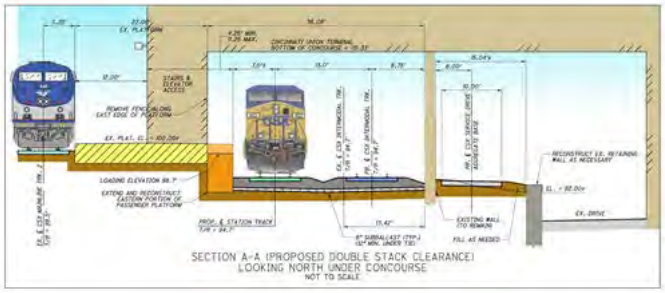
Additionally, AECOM is providing NEPA services for a C-2 categorical exclusion document. Design will be completed in 2020 with construction planned in FY22.

The City of Cincinnati intends to use this project as a prototype for similar upgrades to existing signals in the US-50 Corridor paralleling the CSX and CIND railroads which is a heavily traveled intermodal connector along the Ohio River serving several inland waterway terminals.

»CINCINNATI UNION TERMINAL STATION TRACK STUDY

CINCINNATI, OH

AECOM



CLIENT
City of Cincinnati

SERVICES
Rail Passenger Platform Design
Railroad Coordination with Amtrak/CSX
Railroad Engineering
Topographic Survey

PERIOD OF INVOLVEMENT
2011-2015

OVERALL VALUE
$100,000

CLIENT'S REPRESENTATIVE
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KEY PERSONNEL
Dave Wormald, PE, AICP

The City of Cincinnati retained AECOM to evaluate the feasibility to add a dedicated station track and passenger platform modifications to serve the historic Cincinnati Union Terminal.

Project summary

The Amtrak *Cardinal* currently stops in the early morning hours staging from the existing CSX mainline at the rear of the building on the last remaining platform from the former Concourse A removed in 1974. Approximately 30 trains a day utilize the CSX mainline. The existing platform does not provide level boarding and does not meet current ADA standards. The Cincinnati Museum Center also had expressed interest in potential temporary exhibits of rolling stock on site as part of its programming.

AECOM conducted a new topographic survey of the platform and approach track work as well as researching archival record drawings, right of way and facility information. Nine alternatives were developed for the proposed station track which provide varying connections to the north and south and differing tangent lengths to accommodate passenger boarding. The goals for the station track are to provide the following:

- Additional accommodations for existing Amtrak or future intercity passenger rail service.
- A layover/staging area for private railroad cars and equipment.
- Give CSX additional capacity and operational flexibility for intermodal operations when the station track is not in use.

The new station track would permit level boarding for passengers and staging of the *Cardinal* or other rolling stock while minimizing impacts to CSX operations.

AECOM worked closely with Amtrak, CSX and City staff to evaluate the alternatives and select the preferred alternative for implementation. Approximately 2,700 feet of track would be relocated including new turnouts and signal modifications.

The preferred alternative would provide level for boarding for approximately 600 feet and connections to the CSX intermodal lead track to the north and south. For this arrangement it would be possible to allow joint operations on the station track with CSX to provide additional flexibility to access and operate on intermodal tracks Nos. 1 and 2.

The estimated cost for the modifications to the station platform and related track work were estimated to be approximately $4.1 Million in 2014 dollars. The implementation of the station track and platform modifications were deferred due to a larger reconstruction of the Union Terminal Complex undertaken by Hamilton County from 2016 to 2018 which required the temporary relocation of the Amtrak station facilities. The City intends to work with the stakeholders on future potential implementation pending available funding.

»OLD TALAWANDA HIGH SCHOOL SITE

OXFORD, OH

CLIENT
Miami University

SERVICES
Geotechnical Services

PERIOD OF INVOLVEMENT
2014-2015

FEE
$13,350

CLIENT'S REPRESENTATIVE
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KEY PERSONNEL
Kevin Weaver, PE, CWI

Geotechnology provided geotechnical services to the Old Talawanda High School Site.

Project summary

Geotechnology's scope of services included compaction testing of the subgrade soils, aggregate subbase, and asphalt pavement for the parking lot and concrete testing. Additionally, test pits were reviewed due to the poor subgrade soils at the site in order to provide recommendations on undercut depths.

The previous location of Talawanda High School was located southwest of the intersection of West Chestnut Street and South Beech Street. After demolishing the school, a 4.6-acre surface grade parking lot was constructed at the site.

»WASSON WAY RAILROAD CORRIDOR SURVEY

CINCINNATI, OH

CLIENT
CSX and City of Cincinnati

SERVICES
ALTA Survey

PERIOD OF INVOLVEMENT
2015-2016

FEE
$158,000

CLIENT'S REPRESENTATIVE
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KEY PERSONNEL
Gerard Berding, PS

Berding Surveying oversaw the preparation of an ALTA Survey of the 4.1 mile railroad corridor (Norfolk Southern) from Norwood (Montgomery Road) on the west, to Fairfax (Wooster Pike) on the east.

Project summary

Extensive record research was undertaken for reference in understanding the evolution of property lines and property rights of the original railroad operator and those of the adjoiners. Utility agencies operating in the area were contacted for field markings and record information.

A linear GPS survey control network was established along the existing corridor to facilitate the detailed location of existing physical features, evidence of property ownership and existing monumentation along the route.

Project delivery entailed property line resolution, platting of parcels and review of a Title Commitment addressing matters of record affecting the corridor.

A high level of collaboration with CSX and the City of Cincinnati was done for this Federally Assisted Funding project.

» REDLINE BRT AND PURPLE LINE
INDIANAPOLIS, IN

CLIENT
Citizens Energy Group

SERVICES
CAD Design

PERIOD OF INVOLVEMENT
2019-Ongoing

OVERALL VALUE
$96,000

CLIENT'S REPRESENTATIVE
Jeremy Kosegi, PE
Manager Capital Project Delivery
Underground Engineering & Construction
2150 Dr. Martin Luther King Jr. Street
Indianapolis, IN 46202
T: (317) 429-3992

KEY PERSONNEL
Curtis White
Ty Riddle

CAD-Vantage supplied CAD design services for Citizen Energy Groups Redline BRT ad Purple Line projects.

Project summary

Redline BRT
Designed and drafted public and private water main relocations For IndyGo Red Line Route. Relocations and elevation changes were based off conflicts with new sewers, gas lines, and bus stop stations.

Purple Line
Creating plans for the relocation of water mains in order to avoid conflict with proposed storm sewer installation. These relocations include lowering, offsetting, or complete replacement of portions of the water main along 38th Street.

» LIMITED PHASE I ESA AND VAPOR INTRUSION STUDY

COLUMBUS, OH

CLIENT
Central Ohio Transit Authority (COTA)

SERVICES
Limited Phase I Environmental Site Assessment (ESA)
Vapor Intrusion Study

PERIOD OF INVOLVEMENT
2020-2020

OVERALL VALUE
$12,200

CLIENT'S REPRESENTATIVE
Paul Bauer
APTIM Applied Sciences & Engineering
500 Penn Center, Suite 1000
Pittsburgh, PA 15235
T: (412) 858-1594
E: paul.bauer@APTIM.com

KEY PERSONNEL
Mary Sharrett, PE, LEED AP, CPESC, AHES, AHPD

Stone conducted a Limited Phase I Environmental Site Assessment (ESA) and Vapor Intrusion Study with a focus on trichloroethylene (TCE).

Project summary

Ohio EPA requested that the Property conditions be assessed to ensure concentrations of TCE meet the new federally mandated indoor air levels. The ESA identified two potential sources of TCE from former Property uses - a dry cleaner and an automotive repair facility. The vapor intrusion study focused on these areas on the Property. STONE personnel installed five soil borings, collected soil samples, and collected soil gas samples using Summa canisters. The laboratory results were compared to Ohio EPA Voluntary Action Program (VAP) commercial/industrial indoor air standards due to vapor intrusion, the U.S. EPA Vapor Intrusion Screening Level (VISL) Calculator for commercial and residential near-source gas concentrations, and Ohio EPA's August 2016 "Guidance Document Recommendations Regarding Response Action Levels and Timeframes for Common Contaminants of Concerns at Vapor Intrusion Sites in Ohio".

»STATEWIDE TRANSIT NEEDS STUDY

STATEWIDE, OH

CLIENT
Ohio Department of Transportation

SERVICES
Communication/Engagement Strategy

PERIOD OF INVOLVEMENT
2013-2015

FEE VALUE
$111,520

CLIENT'S REPRESENTATIVE
Chuck Dyer, Administrator,
Office of Transit
Ohio Department of Transportation
1980 West Broad Street
Columbus, OH 43223
T: (614) 466-3718
E: chuck.dyer@dot.state.oh.us

KEY PERSONNEL
Marie Keister, APR, AICP

The Statewide Transit Needs Study quantified how well existing transit services match today's needs and what types of services may be needed to meet future demand.

Project summary

The goal was to create a long term strategy for how Ohio and its local transit systems can partner to meet transit ridership needs today and in the future. Led by Marie Keister, Engage Public Affairs and it's subconsultant, MurphyEpson developed the message strategy and study brand, guided the design and copy for the website, and kept stakeholders engaged through electronic newsletters, surveys, public meetings and a Steering Committee facilitated by Marie Keister. Marie is now assisting the advocacy community with grassroots efforts to build statewide support for increasing funding for transit

05 Technical Proposal

AECOM

05

Technical Proposal

AECOM's peerless architecture, engineering, transit and railroad expertise and diversity of experience enables our team to approach BCRTA and the City of Oxford's goals through a unique lens that will lead to superior, innovative outcomes.

OUR INTEGRATED APPROACH

The RFP asks that we avoid using the approach section to simply restate the scope, but instead focus on how we plan to accomplish each task. In the approach section below, we describe our process, weaving in discussion of our relevant experience, current trends that are likely to affect the project, our focus on communication and project controls, and our commitment to the design excellence this project deserves. We follow the structure of your stated scope elements, sometimes combining for brevity, but understanding that each element is important to the process.

While we have organized the discussion of our approach into the two task work streams as outlined in the RFP, a unifying project management approach and shared staff – AECOM and subconsultants - across both components will enable efficiency and compatible design. Ultimately, while the two projects begin planning and preliminary design activities concurrently in the short term, they are likely to diverge in the final design stages and construction because of the different commitments of funding that the governing stakeholders have.

MANAGING THIS PROJECT SUCCESSFULLY

Our first step will be collaboratively developing a Project Management Plan (PMP) with the BCRTA and City. Projects that are well-planned, well-organized and conducted with a knowledgeable and informed team of support professionals are very likely to succeed. The initial planning phase of a project is critical to start the project on the right track. Good project planning plays a key role in keeping the stakeholders informed, managing our team, and keeping the project on track in terms of schedule, budget, environmental, and safety activities. Important elements of the PMP for this project include definition of a strong management structure and clear roles and responsibilities quality assurance, schedule and budget control, communications strategies, risk identification and management, and safety.

Project Management

Staffing a project with a strong management team is critical for project success. Our Project Manager, **Steve Robinson, AIA** will lead and oversee the project teams for both the BCRTA Station and Amtrak Platform workstreams. Steve is a licensed architect and senior project manager with recent experience leading teams for FTA funded multimodal bus and rail transit projects involving complex stakeholder groups. He led the AECOM team for the IndyGo Transit center that won multiple design awards, achieved LEED Gold certification, and is loved by the community. His work

on the Northern Indiana Commuter Transportation District (NICTD) Double Track project includes close coordination of the new stations with the rail platforms and shelters. Steve, along with our shared team resources, will provide synergy in the design and function between both the BCRTA Shared Services facility and Amtrak Passenger Rail Platform projects, although we propose to manage the unique schedules, funding, and stakeholders for each project discretely, allowing each to advance through the project development process as necessary.

Steve will be supported by a strong management team, including **Danielle Maludy, AIA, NCARB** as Deputy Project Manager and **Dave Wormald, PE, AICP** as lead of the Amtrak Platform project.

In her capacity as Deputy Project Manager for this project, Danielle Maludy will support Steve Robinson by coordinating the work of AECOM's internal team in order to allow Steve to focus on client leadership and technical subject matter leadership. The unique assets Danielle brings to BCRTA include superior communication skills, rapid responsiveness, decisiveness, and intricate work plan organization to promote project schedule and budget alignment. She intuitively understands people and has high capacity to manage change, which is critical when working public projects with a high level of community impact.

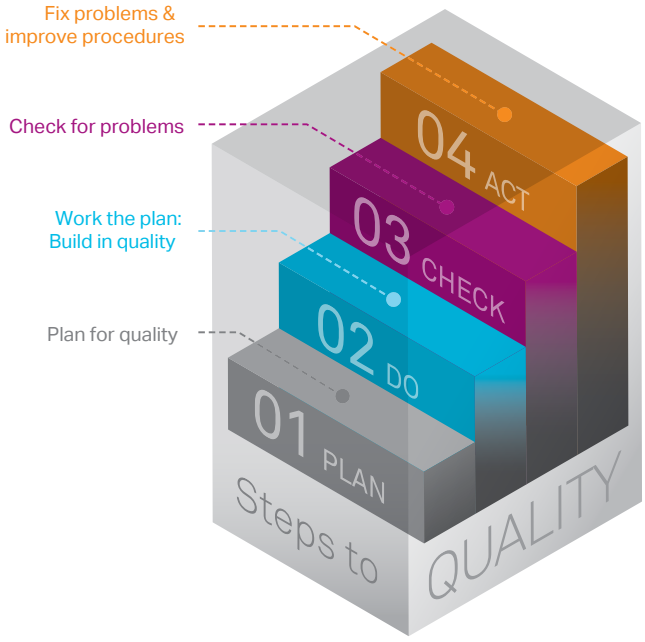
Dave Wormald will lead the planning and design of the Amtrak platform and related site work. Dave will be supported by AECOM national Amtrak design practice leaders for the City of Oxford. He is an experienced Civil Engineer and planner based in Cincinnati. He has played a key role or managed several major projects in Cincinnati evaluating passenger rail improvements including preliminary engineering for a dedicated station track to accommodate level boarding for the Amtrak Station at Cincinnati's historic Union Terminal. He has an established working relationship with CSX regional engineering staff and is familiar with both Amtrak and CSX design standards. Dave has assisted the City's Economic Development department with preliminary scoping the for the implementation of the platform. He will also assist Steve and Danielle managing the Civil/Site design and NEPA coordination for the Shared Services Facility.

Quality Assurance/Quality Control

Another key component of our Project Management Plan is the integration of quality into our everyday efforts. Our team will be defined by our quality of product. Providing complete and coordinated contract documents is an everyday challenge when multiple disciplines and team members are pushing forward. To control this process, AECOM uses an ISO-9000 certified Quality Management System, which is ingrained in all our everyday tasks. Getting started on the correct path is a primary objective of our Quality Management Process. Prior to starting work, we will require each task manager to define the work per the scope in a Technical Task Protocol (TTP), which will be approved by the discipline Task Manager, routed to the Quality Manager, and distributed to the team to start the work. The TTP is critical in that it functions as the design framework, enabling our team to perform the work in an effective and technically sound manner with the deliverables, applicable codes, and design guidelines delineated. As work progresses, interdisciplinary coordination becomes crucial. It is the discipline Task Manager's responsibility to manage this communication and evaluation throughout design development. All contributing disciplines progress at similar rates to ensure these critical reviews are validated by level of design completion.

As deliverables are finalized, the management team will review the deliverables set. We will assess completeness, constructability, and value. Once satisfied, the PM and our Quality Manager will complete and sign the Technical Quality Review Record, signifying approval for delivery.

While the development of construction documents and technical design for the building, site improvements, and Amtrak platform may not be particularly complex, there are certain elements that must be right for the success of the both projects' operations. Our team includes Steve Robinson as lead Transit Architect and Project Manager, and Joe Fischer as Specifications Writer/Quality Control Lead, each chosen because of their subject matter expertise which includes recent work on the IndyGo (bus)



Transit Center and the NICTD (passenger rail) Double Track projects. Steve and Joe will work within the structured AECOM quality control process to ensure quality is reviewed during every phase of the design process and to see that critical items specific to this scope of work such as bus circulation, separation of pedestrian and vehicular conflicts, maintenance functions, and ability to accommodate potential electric vehicles and dynamic messaging, are incorporated into an efficient and sustainable facility that will serve the BCRTA and other stakeholders well into the future.

Schedule and Budget Control

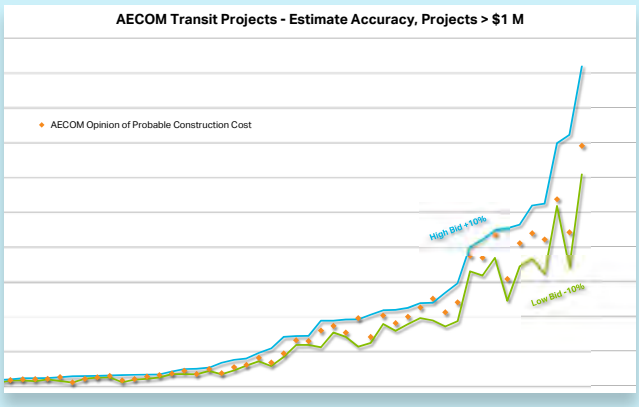
Schedule control for projects such as this also involves dynamic tracking and proactive management of the design tasks and critical path dependencies. The RFP requires that seven calendar days be allowed for Owner review of the various submissions, and although we will certainly include that time, we believe that the FTA review cycle for some design and environmental documents will likely take longer than seven days so our Project Manager will share regular updates of the schedule with the core stakeholder team, accommodate needed review times, and communicate with the team members that must drive each schedule milestone. The intent is to substantially complete the design for the Shared Services Facility within 18 months to allow the project to be bid in FY 2022. We believe that this is a realistic and achievable schedule assuming that the project stakeholders are in mutual agreement on the scope and program for the facility. The schedule for the final design and construction of the Amtrak Passenger Rail Platform may vary from the Shared Services Facility, depending on the nature of funding and approvals by Amtrak and CSX.

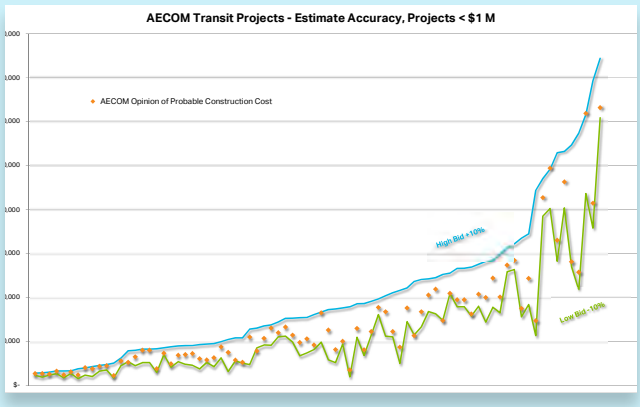
Budget control is a critical component of every successful project and requires frequent and honest communication. We recognize that the funding available for the project is fixed and that the design will be developed to meet the programmatic needs within the project funding limits. As requested in the BCRTA Shared Services Facility scope of work, it is anticipated that at the completion of the preliminary design phase (30% to 50%) the BCRTA intends to conduct a value engineering and constructability exercise to validate costs and to look for opportunities to drive cost savings while meeting the programmatic needs of the stakeholder group. As Deputy Project Manager, Danielle will maintain a change management log throughout the design process which will be shared with the Owner on a regular basis to address change requests that have impacts on the project schedule and/or budget. We will discuss these impacts together with the Owner so that we can agree upon any modifications necessary to tasks in order to remain within the overall fixed budget for the project. Open and early communication is best to keep the budget on track.

Effective budget control starts with reliable cost estimates. AECOM is different from most design firms in that we have full-time cost estimators on staff. These professionals are closely connected to the construction market and thus have a better understanding of probable costs than the average design team member can have. Leading our cost estimation team is Kevin Sheahen. He is a national resource for transit project cost estimating. Kevin is highly respected by transit engineering managers at other agencies throughout the country because his cost estimates have withstood the test of many competitive procurements.

AECOM'S COST ESTIMATE PERFORMANCE

AECOM has performed a multitude of cost estimates for transit projects as reflected in the charts below.





Communication with Multiple Stakeholders

When projects involve multiple parties, as this one will, we strongly suggest that a "Core Stakeholder Team," with representation from each of the parties, be established. The AECOM design team would meet by video conference with this team on a recurring basis, keeping them abreast of progress and asking for their assistance with inputs when needed. Others can certainly be added to these discussions when needed, but we find having a consistent Core Team helps coordinate the communication and builds consensus as the design moves forward. Given the broad impact of transit projects on any community, we anticipate the need for community engagement beyond just the core stakeholder team. To that end, our team includes subconsultant **Engage Public Affairs** and **Marie Keister** to lead stakeholder and public engagement. BCRTA is familiar with Marie from previous engagement work performed and the insight she gained from that previous work will provide enormous benefit to the communication process.

As we continue to practice measures to limit the spread of COVID-19 in our communities, the means that were traditionally used to engage community members in transportation project development, such as in-person meetings, workshops, gatherings and events, will need to be supplemented or replaced with virtual mechanisms. AECOM can facilitate on-site charrettes; but we recommend that they be scheduled only when they can be conducted safely given social distancing restrictions. AECOM has developed innovative solutions to host participatory charrettes online including our Virtual Town Hall tool. If COVID-19 safety and travel restrictions are still in place when the project begins, we propose an online Program Validation Charrette, followed by a report defining the program and refinements of that report based on Core Stakeholder Team reviews. Once accepted, that program will serve as the guide for future design concepts and decisions. Besides the critical objective of supporting community safety, AECOM has found in many cases that virtual events attract significantly more participants than in-person events, resulting in a higher return on your public-outreach investment.

Following consultant team selection and during refinement of final scope of services, we propose to hold a session with the Core Stakeholder Team to evaluate and confirm communication and engagement goals. The work session agenda items are anticipated to include:

- Review of purpose and need and FTA/FRA project development processes applicable to the respective projects and objectives for the public engagement efforts
- Identifying key audiences and discussing established and/or new messaging
- Identifying engagement strategies that to meet FTA/FRA requirements to engage underserved populations, bringing equity and inclusion to the forefront
- Sharing what has and has not been successful in similar efforts
- Determining how we will measure and document effectiveness

Engage Public Affairs implemented public involvement activities during the Access Ohio 2045 long-range transportation plan project (L) and COTA's NextGen project (R)

Virtual Stakeholder Engagement

AECOM's interactive web-based tool allows clients to engage and consult with stakeholders from their computer or mobile device. **This tool allows clients to continue driving stakeholder engagement with their projects during the COVID-19 pandemic.** By providing a more resilient approach to engagement, this tool will allow clients to engage with a wider audience who cannot attend in-person meetings.

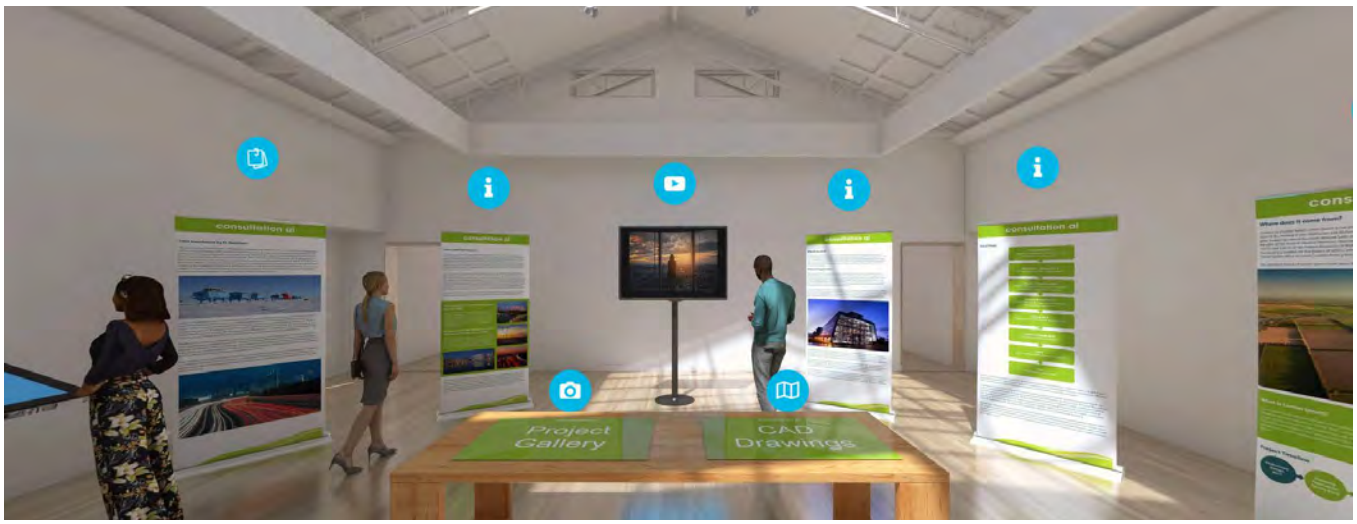
Through the platform, a virtual event can be personalized to show consultation materials including virtual reality and sound demonstrations, videos, maps, plans and pop up banners. The tool allows for instant feedback so stakeholder reaction can be captured and saved for analysis and accurate reporting. There is also a chat function so on-hand experts can remotely answer questions as visitors look around the materials, similar to what would take place during an in-person event. The virtual platform can be integrated with live video chat as well to enable a variety of interaction methods.

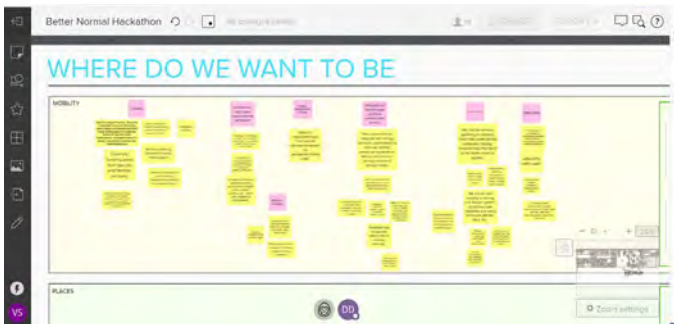
View here: https://consultation.ai/demo/

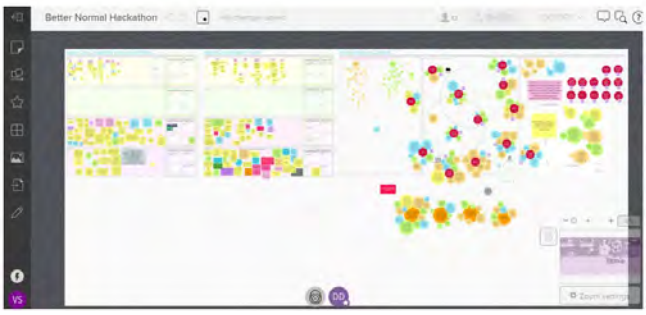
Integrating Solutions to Deliver Virtual Charrettes

On June 24, 2020, AECOM held a virtual hackathon to begin the process of working toward a Better Normal. With the global COVID-19 pandemic, there has been much discussion around arriving at, and adapting to, the "new normal". The purpose of the hackathon was to define what happens if we do nothing, the vision of the better normal, and actions, strategies, and policies to help create a better normal.

Integrating off-the-shelf solutions AECOM convened a diverse group of policy makers and experts from across the industry and around the U.S. over a five hour event. We used one of our favorite new collaboration tools, Mural, and Zoom to host a multi-phased whiteboarding process with over 35 real-time contributors and concurrent interactive facilitated breakout sessions. Over 200 virtual post-it note ideas were created in 20 minutes, and participants worked simultaneously to group, vote on, and prioritize solutions into an actionable strategy for developing a better normal.







Screenshots of virtual Mural whiteboard from AECOM facilitated hackathon. The whiteboard was used to enable participants to simultaneously develop, organize, and vote on actions to create a better post-pandemic normal around the issues of mobility, community, and environment.

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MULTIMODAL STATION AND SHARED SERVICES FACILITY

SCOPE AND APPROACH

Cleveland Multi-modal Transportaion Facility Grand Hall Concept | Cleveland, OH

PART 1: PRELIMINARY ARCHITECTURAL CONCEPT DESIGN & ENGINEERING

TASK 1: Program Study

There has clearly been programmatic thinking done to define the needs of the project based on the funding applications and subsequent efforts to develop the RFP. We commend this effort, and also recognize that inputs and conditions evolve over time, and it is best to start the project with a validation of the programmatic information. Not only does this provide updates and/or help secure any information available, but it allows the AECOM design team to hear firsthand the emphasis on various opportunities and concerns that the stakeholders have. Specifically, we would like to have a more detailed understanding of the needs of the Talawanda School District and the disposition of their existing facilities immediately south of the proposed building.

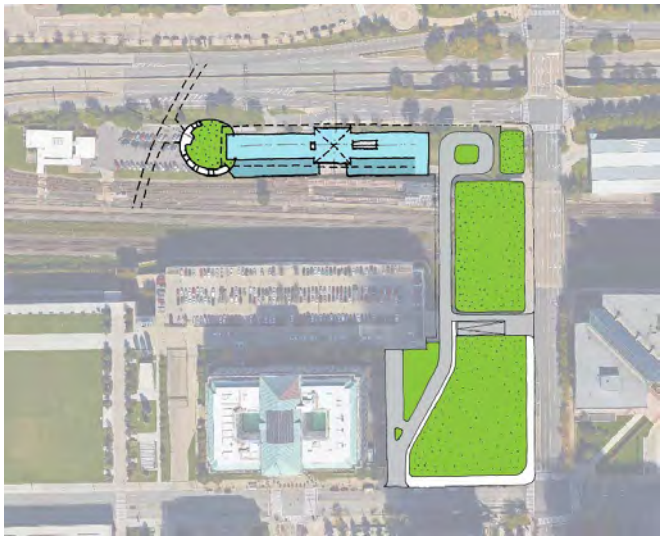
The Part 1 task will include a site property and topographic survey by our subconsultant, Berding Surveying. One of the primary goals of this task will be to confirm the footprint of the facility and overall construction limits so that the BCRTA can execute a long-term lease with Miami University for the facility and to confirm the relative allocation of space both within the facility and surrounding the site by the project users. Berding can provide legal descriptions or conveyance exhibits that may be required for leases or easements associated with the project. It is our understanding that no fee simple right-of-way or property acquisition is planned at this time.

Design options will be explored to accommodate up to 20 transit vehicles within the structure if the space and budget permits, as well as to accommodate school bus parking, employee parking, long-term parking for patrons of the Amtrak platform as well as linkages with Miami University's existing Chestnut Fields Parking lot.

Site access will remain from Beech Street and relocated Main Street, however there may be some modification to Main Street/to provide for improved pedestrian connectivity with the proposed Amtrak Platform while maintaining access to the Oxford Township Offices and Oxford municipal garage.

There are several utilities on site which may need to be relocated in addition to the existing fueling facility. These utilities will be assessed early in the project to understand the level of complexity including City owned water and any associated cost implications regarding sewer facilities.

The result of this phase of the project will be a preliminary site plan showing the limit of the building, ancillary facilities, parking, utility relocations/services, site drainage as well as vehicular, bike and pedestrian circulation. These exhibits would form the subject of a Program Validation Charrette, followed by a report defining the program and refinements of that report based on Core Stakeholder Team reviews. Once accepted, that program will serve as the guide for future design concepts and decisions.



Cleveland Multimodal Access Study

TASK 2: Site Selection Alternative Study (Optional if Needed)

While we understand the proposed site defined in the RFP to be the only location under consideration for the shared use facility and Amtrak stop, there may be some need for documentation of the alternatives analysis considered in the pre-proposal phase of project planning performed as part of the prior CMAQ and TIGER funding applications. This documentation would help support the overall NEPA documentation for the project.

We will work proactively with the users to confirm that the site can accommodate the proposed programmatic needs for all users including the BCRTA, Miami University, and Talawanda School District without fatal flaws. We will provide support to document the decision-making process and factors that were utilized to select the proposed site and why potential alternative sites were eliminated. There are a variety of elements that can be considered in the site selection process including but not limited to the following:

- Land availability
- Space for future growth
- Impacts to existing environmental resources both cultural and ecological
- Availability of utilities
- Location relative to existing and proposed transit services
- Ease of vehicular, pedestrian and rail accessibility
- Proximity to Miami University and surrounding supportive land uses
- Need for commercial or residential relocations
- Relative topography and earthwork costs

We can assist in the development of matrices for compilation of any site considered and the selection of the present location as needed.

TASK 3: Preliminary Environmental Study

Based on information provided by the BCRTA, is it our understating that a draft Categorical Exclusion document per 23 CFR §771.118 has been prepared for the shared services facility by BCRTA staff and has been submitted to FTA Region 5 staff for review. The BCRTA has not confirmed the CE designation uses for the draft CE document, but it is likely that the project as currently defined would be eligible under FTA CE-9 (Assembly or construction of facilities that is consistent with existing land use and zoning requirements) and uses primarily land disturbed for transportation use. The FTA has indicated that additional supporting documentation and investigation are required for the potential regulated materials associated with the existing buried diesel fuel tanks on site as well as surrounding cultural resources under the Section 106 process. We will work with BCRTA staff to address the FTA comments and complete the necessary documentation as required.

Our team includes multi-disciplinary professionals based in Cincinnati who can provide the environmental services which may be necessary for the project. AECOM has provided NEPA documentation for many transit projects regionally and nationally. Our subconsultant Stone Environmental and Engineering Services will conduct a phase 1 ESA for the selected site focused on the existing diesel tanks and any other historic regulated material concerns. Our team will work with BCRTA staff and the FTA to provide the additional documentation needed to successfully process a CE for the project in an efficient manner while reducing unnecessary or redundant tasks.

TASK 4: Concept Drawings

Rarely is there just one design solution for a site. The AECOM team will prepare conceptual design site alternatives, including the previous concept developed by the BCRTA, for review with the stakeholders. At this time, we assume that the development of conceptual alternatives will be limited to the site defined in the RFP. This transit center serves as a gateway to Oxford and the University for many travelers and deserves a design that is both functional and reflective of the community character developed through superior placemaking. To that end, we have assembled a bespoke team of building and site designers and technical experts that are a perfect fit for the creation of this gateway. Combining the deep subject matter leadership of Steve Robinson and Dave Wormald with the context sensitive architectural design leadership of our award-winning design leader, Michael Bongiorno, BCRTA and the City of Oxford will get the best of both worlds under one roof to ensure a functional and inspiring facility that, when done, will look like it belongs on this site and nowhere else. In that spirit, we will develop a number of options and will work interactively with the Core Stakeholder Team to build consensus around a design they are excited to share with the Community. Simply put: Our goal is to get it right. In addition to the site plan schemes, AECOM will also develop preliminary programmatic summary, floor plans/bubble diagrams, and adjacency diagrams to begin to understand and convey how each component of the building and site will work together.

TRENDS

As a new decade began in January 2020, interest in high-speed and improved intercity passenger rail service continued to excite a growing number of people across the entire political spectrum and a variety of age cohorts. The most notable service development of 2019 was the continued growth in Amtrak ridership and the continuing success of the Brightline service in south Florida between Fort Lauderdale and West Palm Beach. Electrification of the Caltrain commuter line between San Jose and San Francisco is underway and construction on the high-speed rail system in California continued. New locomotives and rolling stock have been introduced in California, the Pacific Northwest and in the Midwest. The environmental planning for a high-speed rail line between Houston and Dallas by Texas Central Railway was nearing completion.

Ridership on the national Amtrak system was up in 2019. **Amtrak carried a record 32.5 million passengers in FY 2019** with record growth on the Northeast Corridor and state-supported lines. The latest ridership report from Amtrak reflects a year-over-year **increase of 800,000 passengers**—the highest in the system's history—and the **ninth consecutive year Amtrak has carried more than 30 million passengers.** The *Cardinal* enjoyed ridership growth. Then COVID-19 became a pandemic and the economy shut down and intercity travel by airplane and train fell by 90 percent! Eventually, a vaccine will be developed, and the world will return to normal. We have an opportunity during this lull in train travel to build for the future. And a station stop in Oxford to serve the needs of the community and student travelers is an effort to build on the pre-pandemic growth in demand for train travel.

Similar trends were seen in bus transit. There was consistent growth in many markets followed by steep declines due to COVID-19. Before the onset of the pandemic, Bus Rapid Transit (BRT) was seen as a viable investment for many cities when compared to the steep initial costs of other systems. Electrification of bus fleets became a dominant pattern. More central to the Chestnut Street Multimodal Shared Services Facility & City of Oxford Passenger Rail Platform are the following trends we see through our extensive work in bus and rail transit:

- Electrification of bus fleets suggests that planning now should facilitate future addition of or conversion to the equipment necessary for the fueling and maintenance of electric buses.
- Real-time signage remains important to riders despite the increased prevalence of phone-based apps for bus tracking, arrival notifications, and related information.
- Desire for multi-modal travel continually increases, driving requirements for good planning of everything from "kiss-and-ride" passengers to bicyclist and pedestrians.
- "Dignity-of-Ridership" efforts have increased the diversity of the bus riding public, as has personal commitment to fighting climate change.
- WiFi and other accommodations can make commute time more viable as work time.
- Transit stations are seeking revenue opportunities such as changeable advertising signage on platforms.
- Focus on Sustainable design is both good stewardship in the community and also a way of promoting ridership.
- **PROJECTED TREND:** AECOM believes COVID-19 will change the focus on personal health protection in all forms of transit even after COVID-19 has been controlled. Planning for this new multi-modal facility should include significant attention to design decisions that can help minimize health risks.

PART 2: NEPA COMPLIANCE/ARCHITECTURAL AND ENGINEERING (10-30%)

TASK 1: Preliminary Design Documents

Once a conceptual design is approved during Part 1, we will work with the BCRTA to refine the scope of work for the subsequent phase of design. This preliminary design phase will build on the conceptual design developed in Part 1 helping to streamline the design process and will develop the details of the multi-faceted project and define the spatial relationships and functionality for passengers, staff, and a variety of transit vehicles. Not only does the project budget come into focus in this phase, but this is where project quality, durability, and functionality are established.

The multidisciplinary AECOM team will work across our architecture, landscape architecture and engineering disciplines and subconsultants to create an integrated design. We will use the Core Stakeholder Team meetings for input and to keep them abreast of progress. AECOM will conduct interim presentations of components of the design during these meetings so that the end-product of this phase is not a surprise to anyone but a culmination of the work they have already seen.

Having achieved LEED Gold status for the IndyGo Transit Center, we know where the opportunities lie for sustainable transit facilities and will explore these with the Core Stakeholder Team during this phase of the work, such as green infrastructure solar powered lighting and similar features. This will be more fully developed during conceptual design.

Also, the BCRTA has indicated that it plans to incorporate potential bus electrification as it modernizes its fleet over the next decade, so planning during this phase will determine how changes in vehicle propulsion and maintenance needs may affect the design of this project now with an eye to the future. AECOM is working currently with several bus systems across the country to electrify their fleets; national expert Andrew Bui is available to review and future-proof our plans.

TASK 2: NEPA Compliance Process

As noted in Task 1, AECOM will work closely with the BCRTA and FTA to complete the necessary investigations and documentation to complete the project Categorical Exclusion document in accordance with 23 CFR §771.118.

A review of the Ohio BUSTER files does not indicate any evidence of leaks or release from either tank since their initial installation. There are no Section 6(f) or 4(f) resources present nor any relocations anticipated. There are no ecological resources on site and no cultural recourses within the area of potential effect however Section 106 consultation process with OSHPO may be necessary to confirm this determination. We will launch this OSHPO early in the project, as we recognize the coordination back and forth can take a period of months.

The need for post construction best management practices for stormwater quality and quantity will be determined. It is not anticipated that any waterway permits will be required for the project; however, documentation of the lack of jurisdictional waterways may be required. The amount of new impervious area is expected to be minimal and there are no FEMA special flood hazard areas in the project limits.

TASK 3: Interagency Coordination/Public Process

This scope task covers the ways in which the AECOM design team may be involved with presentations or meetings with the City and various agencies, including 3-D presentations. AECOM now works in 3-D from the very start of projects, so these tools are available to us throughout the project.

On our recent double tracking project for the Northern Indiana Commuter Transit District (NICTD), AECOM developed presentation tools ranging from colored

SUSTAINABLE DESIGN OPPORTUNITIES

There may be many sustainable design opportunities like the ones that AECOM used to help IndyGo achieve **LEED Gold** certification for their new transit center. Some that particularly excite us for this project include:

- On-site stormwater capture to minimize outflows and irrigate landscapes
- Small-scale demonstration projects that show how renewable energy sources might serve a future electric bus fleet
- Multi-modal support through secure bicycle storage
- Air filtration and other systems that help fight viral and bacterial infection risks
- Enhanced energy performance for the building envelope to control operating cost while improving the carbon footprint

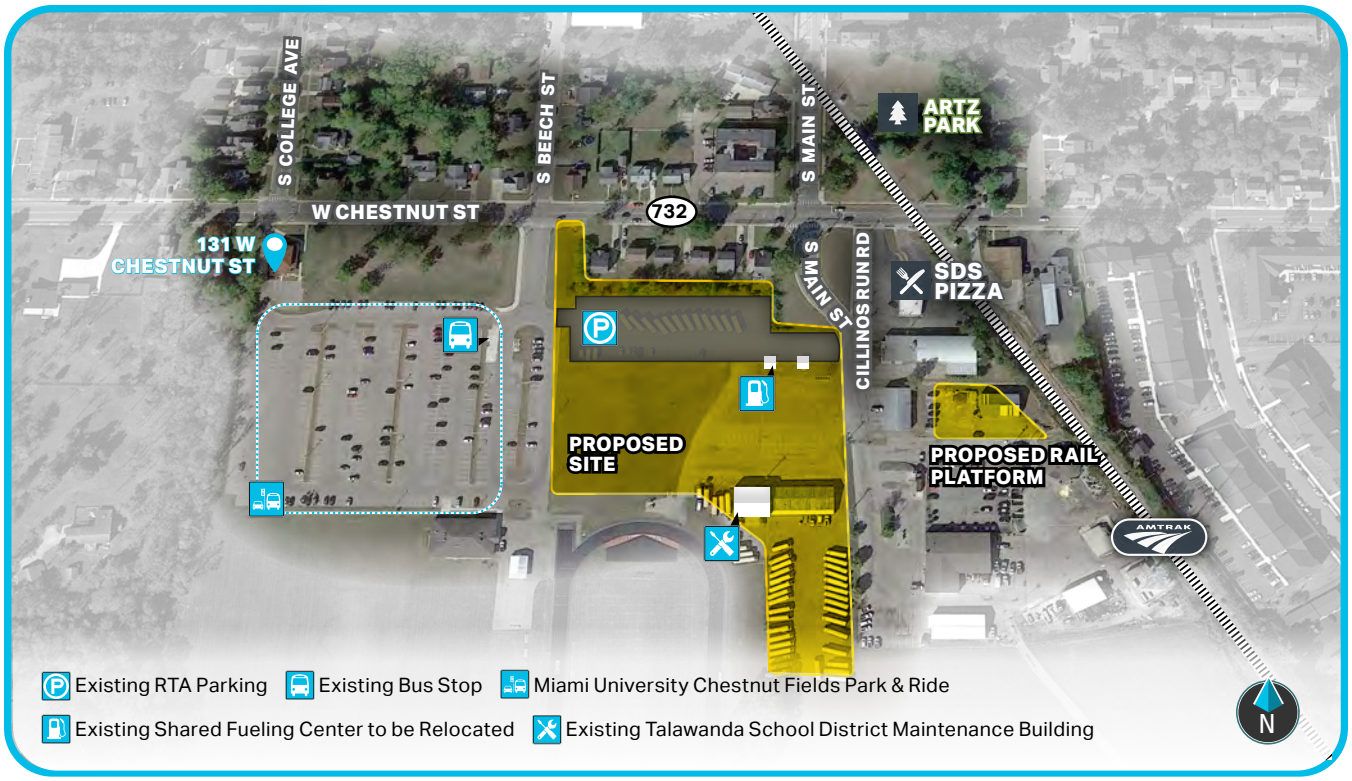
elevations to fully rendered 3-D images from multiple viewpoints, which were used in multiple meetings with the local historic preservation board. We presented the project several times, each time showing that we listened to community input and reflected that input in our evolving design. These sessions helped successfully shepherd the project through a committee that was resistant to change in the downtown area.

We have a history of coordinating with either FTA and/or FRA on our federally funded projects, such as the NICTD double track and IndyGo transit center projects. We have excellent working relationships with the federal agencies as well as CSX and Amtrak.

TRANSIT ACHIEVEMENTS

Extensive, proactive agency, stakeholder and public outreach and engagement aimed at developing broad consensus on design solutions and improvement options is fundamental to all projects undertaken by AECOM. In fact, the National Association of Environmental Professionals (NAEP) selected the **Red Line/HealthLine Extension Study for a 2016 National Environmental Excellence Award**. The Award recognized excellence in the award category of Public Involvement/Partnership.

AECOM developed color renderings and 3-D elevations from multiple viewpoints for IndyGo



Proposed sites for BCRTA's Chestnut Street Multimodal Station & Shared Services Facility and City of Oxford Passenger Rail Platform

TASK 4: Architectural Design/Engineering (10-30%)

During this Task 4 phase of work, our subconsultant partner, **Geotechnology**, will conduct a site-specific geotechnical investigation based upon the preliminary designs. Geotechnology has a wealth of local geotechnical knowledge within the Oxford area that will greatly benefit the project. Specifically, they have completed numerous geotechnical exploration and construction materials testing projects in support of a wide variety of improvements to the Miami University campus over the past 16 years. Given their extensive local subsurface knowledge and experience in very close proximity to the project, Geotechnology can more effectively assist the design team in the selection of a preferred foundation system based on more than a hundred laboratory tests of soil samples recovered from dozens of nearby archival test borings coupled with our own familiarity with subsurface conditions common to the area.

In planning a geotechnical exploration for the proposed facility, consideration will be given to our understanding of any prior development that may have predated its current use, as well as the relevancy of our own archival records along with the locations, dimensions, and loads of proposed structures. Geotechnology will work with the design team in evaluating the capacity and settlement characteristics of the foundation soils in determining the appropriateness of shallow spread footings. Supplemental shallow borings will be incorporated into the geotechnical exploration where new or reconstructed pavements are planned to determine the support characteristics of the pavement subgrade. Significant earthwork, retaining walls or other structures are not anticipated. Anchorage and buoyancy considerations for buried fuel tanks and oil water separators will be included in the geotechnical recommendations.

PART 3: FINAL DESIGN (30%-100%)

TASK 1: Value Engineering

AECOM has the depth of resources to involve independent reviewers in a Value Engineering (VE) Charrette. This "fresh eye" approach brings options for real value engineering (VE), not just cost cutting. Cost cutting can be important at times, but better VE sessions help the project optimize the value received for investment. When involved in VE sessions, AECOM in-house construction estimators can give timely cost information for the items being considered.

VALUE ENGINEERING AT INDYGO

Value Engineering can now be greatly informed by the energy modelling that AECOM does for projects. On the **IndyGo Downtown Transit Center** project, we knew we wanted the design to include a lot of glass and that high-performance glass would be necessary to meet our sustainability goal of LEED Gold. High performance glass can be expensive so energy modelling allowed us to determine the levels of solar and thermal control the glass would need to provide without us having to specify costly levels of glass that would not pay back in energy savings. This true value engineering effort optimized the investment while achieving the performance we demanded.

TASKS 2-4: Construction Bid Documentation / 60% / 90% / 100%

AECOM prides itself on producing excellent construction documents and successfully utilizing design tools such as Revit and BIM360 to allow for enhanced, real-time coordination throughout the design process. To achieve these, we employ a strong team of professionals and consultants, structuring them into focused teams that address each project. Under the strong leadership of Steve Robinson, these teams will be working through the interim submissions and monthly progress meetings with the Core Stakeholder Team.

In order to facilitate an accelerated construction schedule, AECOM has vast experience in delivering projects through various bid-packages which effectively allows construction to start sooner. If deemed necessary for this project, AECOM would evaluate the project scope and schedule demands to determine the quantity of bid packages required and the schedule in which they would be delivered.

AECOM employs a thorough quality control process that includes reviews before every deliverable, to allow a comprehensive and coordinated set of documents to be delivered to the Client for their review and feedback. There will be important points made during these reviews, and we use a structured comments process so each item is recorded, responded to and the commenter can know how each is resolved.

PART 4: CONSTRUCTION PHASE SERVICES WITH COMMISSIONING AND PROJECT CLOSE OUT/ WARRANTY

AECOM will provide bidding and construction phase services as requested in the RFP. Our team has provided similar services for construction projects and asset management programs throughout Ohio and worldwide. AECOM functions as the owner's agent to manage the documentation from consultants and construction contractors/vendors and has provided professional management to hundreds of projects in both the public and private sectors, often under critical time pressures involving complicated decision-making.

Through our construction observation services we have helped our clients meet the budget, time, quality and reporting requirements of federal, state and local agency projects. Many times, these services are provided as an extension of our design services (see Tasks 1 through 3).

TASK 1: Bid Phase Services

AECOM will furnish a pdf version of the bidding documents and assist the Owner (and its Owner's Rep, if retained) in holding the bid opening for the project as described in the RFP. During the bidding, our design team will work the BCRTA to answer requests for information questions and produce any needed addenda.

Our team will review contractors' bids for conformity with the design intent and comparison with the estimated costs. We will subsequently provide recommendations pertaining to the contract award. We use the same team members who participated in the design to perform these bid phase

services, and these members are also involved with a technical review, if requested by the Owner, of any bids received.

TASKS 2-4: Construction Phase Services (Optional – Enhanced Construction Services) / Close Out / Warranty

AECOM's Construction Phase Services for the BCRTA will be led by the same technical team during the design process for project continuity and efficiency. AECOM has successfully used this approach for several station design projects including the PATH Station at the World Trade Center in New York City. It streamlines the process and reduces error due to misinterpretation of architectural and engineering drawings.

SUBTASK 2B: Construction Management/Inspections

AECOM will act as Architect/Engineer of Record to review conformance with contract plans and specifications. The anticipated duration of construction is 12-18 months but will be known in more detail following confirmation of the project scope and submittal of the production schedule by the Contractor or CM Firm. Construction observation includes participation in weekly contractor meetings and schedule updates as defined in the project bidding documents. AECOM will furnish BCRTA records of regular inspection reports and contractor progress as well as outstanding items that need to be addressed. Project architecture and engineering staff will participate in field inspections and coordination meetings on a regular basis.

SUBTASK 2C: Contractor Change Orders

AECOM will coordinate with BCRTA to review contractor-initiated change orders. The number and extent of any contractor change orders remain unknown at this time. No work will be done on the change order scope until BCRTA issues written approval.

SUBTASKS 3-4: Project Close Out/Warranty

As-Built Record Drawings

AECOM will revise the contract plans as needed to reflect the as-built conditions recorded by the Contractor and BCRTA and furnish Record Drawings in digital format for the BCRTA. It should be noted that depending on the timing of the construction of the Amtrak platform some modifications may be needed at the Shared Transit facility to incorporate passenger rail signage, information etc. which could occur after the final punchlist for the shared services facility.

AECOM has designed transportation maintenance facilities and shared services facilities for the Northern Indiana Commuter Transit District (T), LeeTran in Ft. Myers, FL (C) and for the University of Michigan in Ann Arbor, MI (B)

»PASSENGER RAIL PLATFORM

SCOPE AND APPROACH

Amtrak Platform Design | Sebring, FL

INTRODUCTION

The City of Oxford Ohio is a beautiful college town in rural Ohio located northwest of Cincinnati. It is the home of Miami University with a student population of nearly 20,000 students. Only about 40 percent of the student population is from Ohio. Many of the students come from neighboring Indiana and the Chicago area in Illinois. To better serve the transportation and mobility needs of the out of state student population, the City, in conjunction with Miami University, intends to develop a railroad passenger station facility to serve the Amtrak *Cardinal* long distance passenger train service. The *Cardinal's* current schedule between New York City, Washington DC, Cincinnati, Indianapolis and Chicago would serve the station during late night / early morning hours with bi-directional service on three days per week (Sunday, Wednesday and Friday). The project will be planned and designed in conjunction with a proposed multimodal Shared Services Facility being developed by the Butler County Regional Transit Authority located west of and adjacent to the site. Amtrak patrons will use the transit facility for parking as well as indoor waiting during overnight hours. A lighted pedestrian connection will be provided between the transit facility and the platform.

Ridership projections for this service have not been confirmed at this time but are anticipated to be less than 10,000 annually. Amtrak had previously consulted with *Cardinal* corridor stakeholders to explore an expansion to daily service but there are no definitive plans to increase the frequency of *Cardinal* service to daily departures at this time. Indiana had studied extending its state supported Hoosier train to Cincinnati several years ago, which would have provided daily service between Cincinnati, Indianapolis and Chicago in conjunction with the *Cardinal*. But Indiana has since curtailed operation of the Hoosier and Ohio has not stepped forward to provide a state-supported intercity passenger train operating service between Cincinnati and Chicago.

AECOM has assisted the City of Oxford in developing the initial planning and design scope of services including site visits with City staff starting in 2017. We are very familiar with the site and its opportunities and constraints. Nationally, AECOM has led Amtrak's program to upgrade its

passenger facilities to meet ADA standards. The City and Miami University have initiated coordination with Amtrak to proceed with planning and preliminary design for the new station, although it is our understanding that Amtrak has not assigned a project manager at this time. The City and University have committed $750,000 in local funding towards the Amtrak facility at this time. The intent of the project sponsors is to minimize costs to the extent possible; however, additional funds could be needed. The project will follow FRA project development procedures to allow for potential application of Federal funding to assist with construction if necessary.

As part of the Basis of Design Report, AECOM will develop cost estimates allowing project stakeholders to determine if they wish to proceed with local funding or seek potential external funding. AECOM has a successful track record of helping clients obtain federal transportation funding from sources which could apply to this multimodal project. There are advantages and disadvantages to securing federal funding which could impact the project schedule and costs which we will evaluate in a Benefit Cost Analysis as the project costs and parameters are identified.

AECOM ASSISTANCE WITH FRA CRISI FUNDING

In the past two years, AECOM has helped the **Southwest Ohio Regional Transit Authority** and the **Ohio Kentucky Indiana Regional Council of Governments** secure FRA Consolidated Rail Infrastructure and Safety Improvements Program (CRISI) funding.

PROJECT DESCRIPTION

The Passenger Rail Platform project will consist of a new side platform located along the southwest side of the CSX railroad south of Chestnut Street (CSX MP BD-038.8). The dimensions of the passenger platform must be confirmed with Amtrak which will affect its location relative to Chestnut Street and the adjacent shared services facility. In addition to the passenger boarding platform, the project will include minor site grading, stormwater collection and drainage

Amtrak's *Cardinal* Line with proposed new stop in Oxford, OH

PROJECT UNDERSTANDING

With an expected ridership of fewer than 10,000 annual passengers, the proposed facility is categorized by Amtrak as a Category 4 Shelter Station and is not required to be staffed or provide restrooms but will be operated in conjunction with the BCRTA Shared Services Facility to provide these amenities.

along the railroad right-of-way; a shelter; sidewalks; signage; landscaping; lighting; perimeter fencing; and cameras. The project will be partially located on railroad and property currently owned by the Talawanda School District. The platform itself would be constructed partially within CSX right-of-way; modifications to existing railroad facilities (track and wayside equipment) are not anticipated at this time although this assumption will be confirmed by CSX during the study.

Station parking and a passenger drop-off / pick-up area will be provided at adjacent BCRTA Shared Service Facility. The project includes providing Americans with Disabilities Act (ADA)-compliant public access between the platform, adjacent streets, the loading area and station parking. Parking and pedestrian access (new sidewalks) will be provided to the proposed station platform as well as lighting and security provisions. Near-term parking will be provided at the BCRTA Shared Services Facility.

SCOPE OF SERVICES

The proposed scope of work for the Amtrak Station is as follows, some common elements will be performed in conjunction with the adjacent BCRTA Shared Services Facility. The success and schedule for the development and implementation of the *Cardinal* Station will be largely dependent on the participation and coordination between the local sponsors, Amtrak and CSX as the host railroad. The City has indicated that Amtrak will lead the coordination with the CSX. It will likely be necessary for the City to enter into Preliminary Engineering and Construction Agreements with CSX during the course of the project. AECOM will provide the technical leadership to meet the needs of the project however the approvals and agreements necessary for implementation of the *Cardinal* Service will rest with the stakeholders.

The Site Analysis and Planning tasks include data collection of the existing site, identification of the location, size and configuration of the platform and related connections, improvements to the existing sidewalks at the at grade crossing on Chestnut street. This will allow us to identify potential easements or right of way acquisitions from the parties involved, followed by completion of a draft FRA Categorical Exclusion checklist.

During the Preliminary Engineering tasks, we will develop schematic designs for the station facility and site improvements at a 30% level of design to next complete a Basis of Design Report, provide a preliminary cost estimate including construction and right of way costs, and establish the construction limits and construction schedule. The construction limits will be used to determine preliminary temporary and permanent right of way needs and the potential environmental area of affect for NEPA documentation if necessary, as well as input for a Benefit Cost Analysis.

INITIAL FIRST STEPS

The initial tasks will be to engage with Amtrak to confirm communication protocols, responsibilities and roles. **AECOM has established working relationships with Amtrak and CSX and understands the policies, standards and procedures of both entities**.

SITE ANALYSIS AND PLANNING

TASKS 1-5: Topographic and Property Survey, Project Control, Railroad Coordination and Utilities

As part of the overall combined program for the BCRTA Shared Services Center and Passenger Rail Platform, our surveying subconsultant, Berding, will perform a topographic and property survey of the site. The survey area for the Amtrak stop is anticipated to be less than 1 acre of the overall 6 acre site.

Berding will establish project control, benchmarks and reference points as described under Item 35 of the Scope of Services in the ODOT Survey and Mapping Specification. Two class B project control points will be established outside of the anticipated limits of construction and railroad right of way.

The AECOM team will provide all planimetric features and utility within the limits of the project, including:

- A digital terrain model with contours at 1 foot intervals
- Buildings, pavement, sidewalks, walls, fencing and parking areas
- Poles, manholes, inlets culvert or other surface utilities and marked subsurface utilizes
- Invert and sizes of all storm/sanitary sewers at each manhole, inlets etc.
- Centerline of all stormwater ditches
- Existing rails including top of rail at 10 ft intervals, signal poles, rail lubricator or any other railroad facilities
- Existing signs, pavement markings, signal heads, strain poles and traffic controller devices

It is anticipated that 6 parcels may be involved in the project at this time. Property owner notification is required at least 48 hours in advance. The City of Oxford will furnish the property owner notification to the selected Consultant. Complete all boundary work in accordance with O.A.C. 4733 & O.R.C. 4733. Long term leases or fee simple acquisition will be needs if Federal Funds are used.

TASK 7: Preliminary Engineering (30%)

Platform

Upon receipt of the survey and identification of the anticipated *Cardinal* boarding parameters from Amtrak, we will identify the location, size and overall configuration of station platform in relation to the CSX track and abutting properties. The platform is anticipated to be a side platform located west of the existing CSX track. The platform is likely to encroach on an existing track side drainage ditch and will need to be enclosed under the platform or relocated. Drainage from the site will not be diverted, directed toward CSX, or increased in quantity without approval and agreement with CSX.

AECOM has been providing General Engineering services to CSX since 1997, working on over 250 CSX transportation rail projects.

PLATFORM UNDERSTANDING

We currently anticipate that the proposed platform will not include full platform length level-boarding but will be a low-level platform (8 inches above top of rail) to maintain existing track clearances without modifications to CSX facilities.

AECOM is assisting Amtrak with a Station Accessibility Improvements Design project in Plano, IL.

If so, the top of platform elevation will be lower than the abutting properties to the west and will require some grading and ramps to comply with ADA requirements. The platform will provide a minimum useable width of 12 feet perpendicular to the rail and comply with all Amtrak and CSX clearance and off-set distances. The length of the platform will be determined by Amtrak and is dependent on equipment used for the Amtrak *Cardinal* Service and assumed to be a minimum of 550 ft. The *Cardinal's* typical consist includes a single locomotive, two to three Amfleet II long-distance coaches, a single Amfleet II Diner-Lite diner-lounge car, one or two Viewliner I sleeping cars, and a Viewliner II baggage-dorm car. The long-term impacts of COVID-19 on Amtrak's service models remain to be determined. Specific provisions to meet ADA requirements under 49 CFR 27.42 are to be confirmed by Amtrak. It is assumed at this time that the station design will include alternatives to level boarding such as car-borne lifts, station-based lifts, or mini-high platforms. Where level-entry boarding cannot be provided due to freight-clearance requirements or mixed equipment, Amtrak will submit a narrative that shows how they intend to meet the performance standard on behalf of the City; AECOM will assist Amtrak with the narrative documenting the design constraints.

The platform will slope away from the track to prevent wheelchairs, strollers, baggage carts and other items from rolling towards the track. We will investigate the use of pre-cast or cast-in-place platform designs and make recommendations on a preferred structure type.

Shelter

The design is planned to incorporate provisions for a prefabricated or site-built shelter on or adjacent to the platform. The shelter shall provide protection from precipitation and wind, although it will not be fully enclosed or conditioned. The architectural details for the shelter will be confirmed but it is assumed that they will be consistent with the materials palette and aesthetic of the BCRTA Shared Services Facility. During this phase we will determine the size, location and features of the proposed shelter in relation to the platform and surrounding project area.

Geotechnical Investigation and Design

Our subconsultant Geotechnology, Inc. will provide recommendations for the proposed platform design. Site specific samples or soil borings have not been obtained at this time. Geotechnology will provide recommendation for the platform foundations, retaining walls or modifications to the existing railroad track bed. It is anticipated that 2 to 4 soil borings will be required based on the current assumed construction limits for the station platform. The geotechnical investigation will be coordinated with the BCRTA shared services center minimize mobilization costs. Right of Entry Agreements will be executed for any field investigations on CSX right of way.

Pedestrian Access

Pedestrian access to the station will be via an accessible pathway from the public right of way on Main Street/Colins Run Road to the proposed platform. As part of the design to improve the existing pedestrian crossing on Chestnut Street we will Investigate the possibility of a secondary pathway from the public right of way along Chestnut Street

AECOM has established working relationships with Amtrak and has extensive experience with Amtrak cooridnation.

to the proposed platform west of the track while at the same time controlling access to the platform during non-operating hours to discourage trespassing.

We will confirm the geometry of the pathway and impacts to the existing pavement/loading dock and parking, fencing and stormwater drainage to identify the limits of temporary or permanent easements/right of way. Long term plans may include eventual reuse of this parcel the design will not preclude reconfiguration of the site other potential supporting uses in the future. New at-grade pedestrian or vehicular crossings over the CSXT railroad will not be permitted. Railroad crossings will be limited to the existing signalized crossing at Chestnut Street (DOT 154079C). It is assumed that the existing sidewalks across the at-grade crossing on Chestnut Street reconstructed as part of the proposed station improvements. Potential impacts to the operation of the existing warning devices at the crossing due to the station stop will be identified during preliminary design. It is likely that stopped Amtrak equipment will activate the gates on Chestnut Street and East Main Street while stopped at the station. We will work with CSX to determine if any modifications to the existing train detection circuits will be necessary however the current early morning stop schedule should not lead to traffic congestion or delay.

PEDESTRIAN ACCESS

At this time, the pathway from Colins Run Road is anticipated to be located generally parallel to the southern parcel line of the Nelson Morrow Building owned by the Talawanda Board of Education and provide a direct link to the BCRTA shared services center and parking.

Signage

The Amtrak *Graphic Signage Standards Manual* provides guidance in planning station signage and naming. Signs that are located on the non-platform, curbside, or street side of the station provide wayfinding to and from the stations, station identification, vehicular direction, and curbside information. AECOM maintains a digital library of Amtrak design and graphics standards for application to this project.

We will identify the location of signage required per Oxford and Amtrak standards, including the following:

- City identification signage at the platform
- Station identification signage
- Vehicular wayfinding signage
- Accessible parking (part of BCRTA Shared Services Center)
- Accessible pathway directional signage (in conjunction with BCRTA Shared Services Center)

Electrical/Lighting

Platform and pathway lighting is an important safety and security concern. Lighting levels must meet the values set forth in Amtrak Engineering Stations Standard Design Practices. We will identify the number, location and configuration of lighting including provision for power to lights and cameras/power on the platform. The pole, fixture and controls will be coordinated with the BCRTA Shared Services Center.

LIGHTING AND SECURITY

The lighting will be actively controlled to provide full illumination only when necessary during operating hours.

Communications/Data
It is assumed that a least one security camera will be provided at the platform area. AECOM will confirm the location and configuration of security cameras and provisions for communications/data with the City of Oxford and BCRTA.

Landscaping
It is assumed that the project will include provisions for some minimal landscaping in the platform area outside of railroad right of way. At this time the requirements for permanent stormwater best management practices (BMPs) remain to be determined. Any BMPs will be developed in accordance with the local requirements and the current edition of the Ohio Department of Natural Resources (ODNR) Rainwater and Land Development Manual. Landscaping shall be coordinated with the City of Oxford, BCRTA and other stakeholders to provide a consistent sustainable site for the owners and transit/Amtrak patrons.

TASK 8: Basis of Design (BOD) Report

Basis of Design Report
Prior to development of Construction Documents and Specifications, AECOM will prepare a report documenting project assumptions and design criteria. We will prepare a report summarizing findings information for use by the City of Oxford, Amtrak and CSX, presenting key principles from the work in previous tasks in narrative, tabular, and graphical/illustrative formats. It is expected to include the following data:

- Description and interpretation of observations from site surveys, geotechnical reports and other investigations, etc.
- Description, analysis, evaluation, and recommendations concerning the results of planning-level environmental reviews
- Description and comparison of alternatives for platform components, and articulation of design intent
- Confirmations that modifications to track, wayside equipment or grade crossing are not required
- Key planning assumptions, constraints, parameters and decision-making data included in the 30% Preliminary Engineering design
- Analyses of relevant Ohio and City of Oxford building codes and zoning regulations, with references
- Narrative of technical and community requirements, and how they will be incorporated into this project
- Drawings and/or renderings prepared in previous tasks

Meetings
We anticipate that there will be a need for a minimum of monthly coordination meetings with City and stakeholder staff during the development of the Basis of Design and coordination of approvals among Amtrak, CSX, FRA and other stakeholders. Some meetings can be integrated with the overall BCRTA Shared Services Facility program. However, at times the key decision points, stakeholder and regulatory framework for the Amtrak station will be distinct from the BCRTA project and will include separate participants.

It is anticipated that the project will include three formal project review meetings with Amtrak staff. The project includes a meeting with City and Amtrak representatives to respond to review comments provided on the draft basis of design report. AECOM will prepare written agenda and summary minutes for each meeting. Our project manager Steve Robinson, task lead Dave Wormald and key technical staff will participate in each meeting as appropriate to the topic.

Estimate of Construction Cost
AECOM will prepare an estimate of probable cost based on historical costs for similar type of projects or work. The estimate will consider special conditions that may have significant impacts on the cost of construction. A reasonable contingency factor shall be included in the cost estimate.

Construction Schedule
AECOM will develop a projected construction schedule from Notice to Proceed through the end of the construction phase and shall consider applicable lead times for specific equipment. At this time it is assumed the construction would require approximately six months and be completed in a single phase of work. The work schedule will need to be coordinated with operating schedules for CSX and at this time do not appear to be a significant constraint. Federal construction funding could take two to three years before it is available. A six-month duration would be required for completion of construction documents and specifications under the current project assumptions. The construction timeline for the platform and related services is also anticipated to take approximately six months.

CONSTRUCTION SCHEDULE

It should be noted that the overall schedule for construction will also be predicated on the availably of construction funding if it exceeds the local contribution currently in place. Federal construction funding could take two to three years before it is available.

Design Criteria

Amtrak Station Design Practices

The Basis of Design Report and construction documents will be completed per applicable requirements in Amtrak's Station Standard Design Practices ("EP4000") unless otherwise noted. Platform and any other railroad related work shall be in accordance with applicable CSXT Standards. Improvements located outside of the platform area will be developed in accordance with City of Oxford Standards.

Maintenance

Unnecessary flat horizontal surfaces will be avoided, and adequate trash receptacles shall be employed. Surfaces shall be designed to be low-maintenance and to withstand pedestrian traffic. Adequate provision of water and drainage will be provided to all areas for cleaning and maintenance purposes. The design shall provide for domestic water service and a hose bib at the platform for maintenance purposes. We will also investigate the feasibility of rainwater harvesting to supply water to the platform without the need for new service.

TASK 9: Environmental Documentation

The City of Oxford may utilize Federal funding for future phases of project development for the Amtrak Passenger Rail Platform. Specific funding sources and agency oversight responsibilities beyond the locally-contributed funding have not been identified at this time. If Federal funding is utilized, the project will require investigation and documentation of environmental analysis required under the National Environmental Policy Act (NEPA).

Based on the current proposed project location and scope of work, this project is not anticipated to individually or cumulatively have a significant effect on the human environment and will not require the preparation of either an environmental impact statement (EIS) or an environmental assessment (EA). It is assumed that the project will be cleared under a FRA Categorical Exclusion (CE) at this time. There are no known cultural or ecological resources that will be adversely affect within the project area.

The preliminary design scope of work includes identification of the project area of potential effect (APE) preparation of a project level Federal Railroad Administration (FRA) Categorical Exclusion (CE) Worksheet as well as supplemental screening or investigations necessary for its completion. AECOM staff have completed the FRA CE process for multiple projects including the SORTA Cincinnati Connects project in conjunction with the Genesee and Wyoming Railroad in 2020.

TASK 10: Benefit Cost Analysis (BCA)

The AECOM team includes economic and financial experts who are skilled in preparing transportation Benefit-Cost Analyses comparing the monetized benefits accruing from an infrastructure project and the costs to develop it, suitable for review and use by a variety of project stakeholders. Using the data and findings from the previous tasks, we will prepare a report with narrative and tabular data consistent with USDOT and FRA guidelines for BCA analysis if the project participants intend to move forward with Federal Funding Applications.

BENEFIT COST ANALYSIS EXPERIENCE

AECOM has completed BCA's for two successful FRA CRISI grants in for **SORTA** and **OKI** in the past two years.

TASK 11: CONSTRUCTION MANAGEMENT OF RAIL PLATFORM

It is our understanding that the City of Oxford will require assistance with bidding and construction phases services for the Amtrak Platform.

AECOM will provide bidding and construction phase services as requested in the RFP. AECOM will furnish a pdf version of the bidding documents and assist the City in holding the bid opening for the project. During the bidding, our design team will work the City and Amtrak to answer requests for information questions and produce any needed addenda.

Our team will review contractors' bids for conformity with the design intent and comparison with the estimated costs. We will subsequently provide recommendations pertaining to the contract award. We use the same team members who participated in the design to perform these bid phase services, and these members are also involved with a technical review, if requested by the Owner, of any bids received.

The construction will generally be conventional construction of stormwater improvements, sidewalks, and slab on grade with lighting, signage and a shelter. AECOM will supplement City staff as needed during the construction phase of work. Our estimates in Attachments B and D assume the part time onsite inspection to be supplemented by project design staff as needed. AECOM will furnish BCRTA records of regular inspection reports and contractor progress as well as outstanding items that need to be addressed. Project architecture and engineering staff will review contractor submittals and and coordination meetings on a regular basis.

The duration of construction will not be established until completion of final design and selection of a contractor but is assumed to be less than 6 months. Ideally, the timeline for construction will coincide with the proposed Shared Services facility however it will be dependent on the funding sources used. It is assumed that the two projects will be bid separately.

It is anticipated that most construction can take place without the need to maintain traffic on Chestnut Street or Main Street/Collins Road impacts to existing pedestrian circulation or railroad operations should be minimal however railroad protection will be necessary during sitework and platform construction adjacent to the tracks. Work on CSX right of way will be subject to the railroad's construction and safety standards.

SCHEDULE

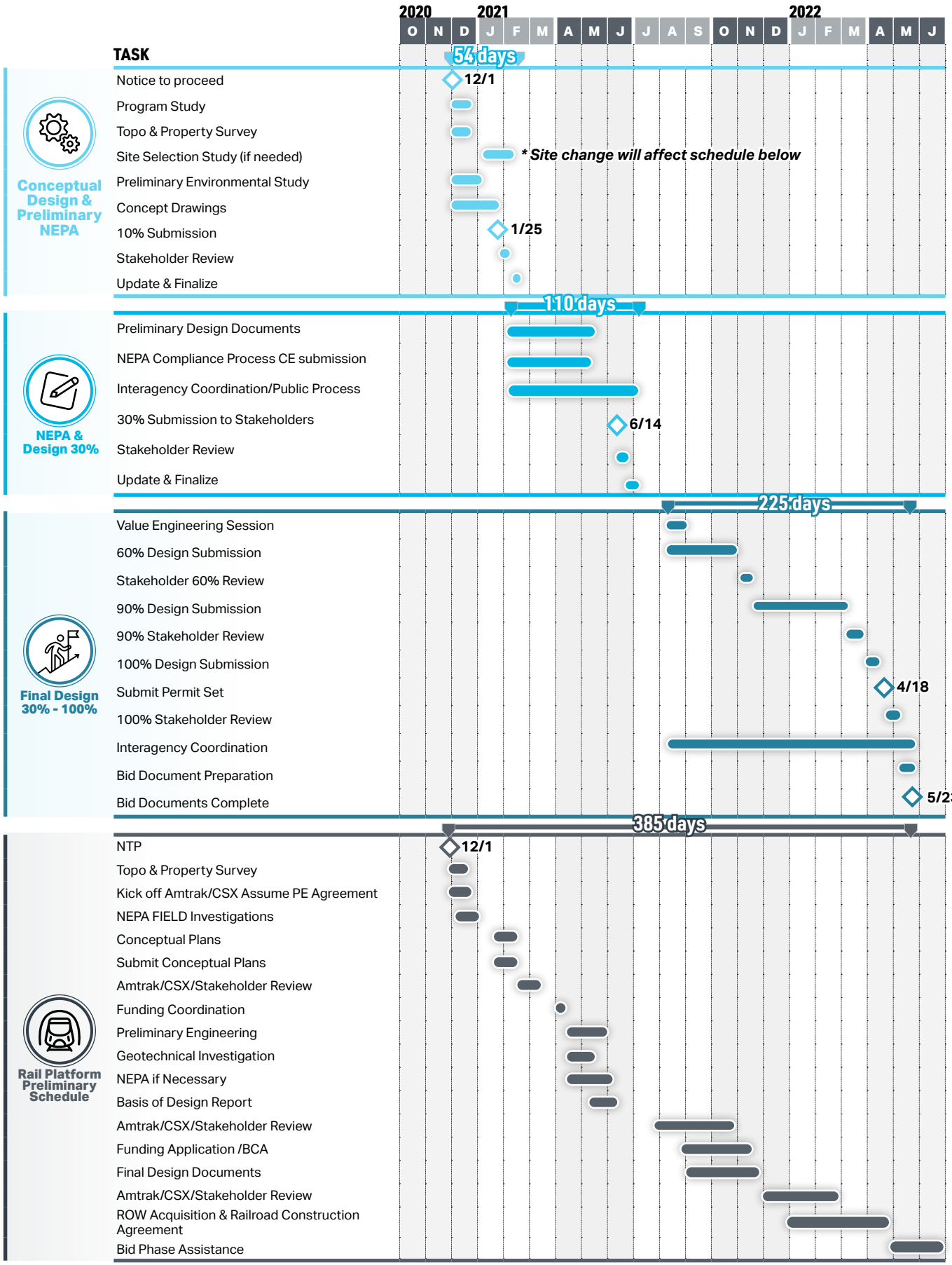
While the initial phases of planning and design for the Amtrak Passenger Rail Platform and BCRTA Shared Services Facility will be generally in sync, they may diverge as each project moves towards construction. The overall timeline for introduction of a new Amtrak stop in Oxford and Passenger Rail Platform will be dependent on the decision-making process between Amtrak, CSX and the FRA.

It is assumed that the City will execute a preliminary engineering agreement with CSX soon after the initiation of this project. The duration for the Site Analysis, Preliminary Engineering, and the Basis of Design Report tasks requested in this RFP is anticipated to be 180 days. This would permit the City and University to consider the need for project funding in fiscal 2022 planning. This timeline is for the requested planning, design and engineering services only and does not include delays associated with obtaining construction funding or interagency reviews and approvals. The overall schedule for construction will also be predicated on the availably of construction funding if it exceeds the local contribution currently in place. Federal construction funding could take two to three years before it is available. A six-month duration would be required for completion of construction documents and specifications under the current project assumptions. The construction timeline for the platform and related services is also anticipated to take approximately six months.

We have included a schedule of both projects as seen on the following page.

AECOM planned and designed the entire system including all station platforms for the SunRail commuter train in Orlando FL which operates on CSX tracks.

SCHEDULE


2020
2021
2022
O N D J F M A M J J A S O N D J F M A M J
TASK
54 days
Notice to proceed
12/1
Program Study
Topo & Property Survey
Site Selection Study (if needed)
* Site change will affect schedule below
Preliminary Environmental Study
Concept Drawings
10% Submission
1/25
Stakeholder Review
Update & Finalize
Conceptual Design & Preliminary NEPA
110 days
Preliminary Design Documents
NEPA Compliance Process CE submission
Interagency Coordination/Public Process
30% Submission to Stakeholders
6/14
Stakeholder Review
Update & Finalize
NEPA & Design 30%
225 days
Value Engineering Session
60% Design Submission
Stakeholder 60% Review
90% Design Submission
90% Stakeholder Review
100% Design Submission
Submit Permit Set
4/18
100% Stakeholder Review
Interagency Coordination
Bid Document Preparation
Bid Documents Complete
5/23
Final Design 30% - 100%
385 days
NTP
12/1
Topo & Property Survey
Kick off Amtrak/CSX Assume PE Agreement
NEPA FIELD Investigations
Conceptual Plans
Submit Conceptual Plans
Amtrak/CSX/Stakeholder Review
Funding Coordination
Preliminary Engineering
Geotechnical Investigation
NEPA if Necessary
Basis of Design Report
Amtrak/CSX/Stakeholder Review
Funding Application /BCA
Final Design Documents
Amtrak/CSX/Stakeholder Review
ROW Acquisition & Railroad Construction Agreement
Bid Phase Assistance
Rail Platform Preliminary Schedule

Butler County Regional Transit Authority

RFP 2020-014 Chestnut Fields A&E

Attachment D Scope Checklist

Proposers must complete the checklist and fill in their estimated hours in order to be considered responsive to the proposal.

Task	Submitted	Total Hours
1. Preliminary Architectural Concept Design/Engineering	x	490
a. Program Study	x	194
b. Site Selection Alternative Study (OPTIONAL)	x	68
c. Preliminary Environmental Study	x	68
d. Concept Drawings	x	160
2. NEPA Compliance and Architectural Design/Engineering (10%-30%)	x	TBD
a. NEPA Compliance	x	TBD
b. Interagency Coordination/Public Process	x	TBD
c. Architectural Design/Engineering (10%-30%)	x	TBD
3. Final Architectural and Engineering Design (30%-100%)	x	TBD
a. Value Engineering Charette	x	TBD
b. Construction Bid Documentation	x	TBD
c. 60% Architectural & Engineering Design	x	TBD
d. 90% and 100% Architectural & Engineering Design	x	TBD
e. Interagency Coordination	x	TBD
4. Bid Phase Services	x	TBD
a. General Contractor & Public Bid	x	TBD
b. Construction Phase Services	x	TBD
c. Project Close-Out	x	TBD
d. Warranty	x	TBD

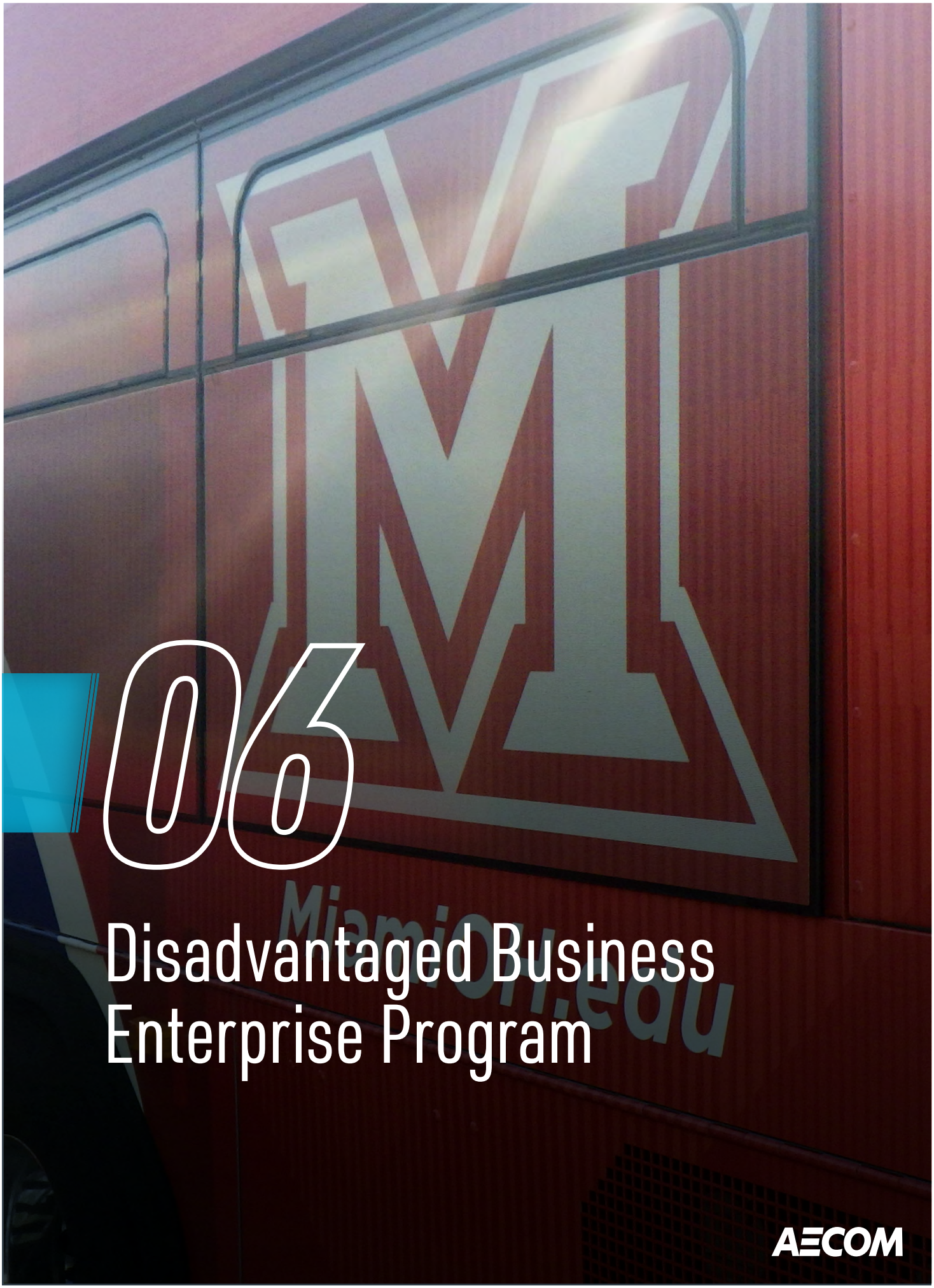
City of Oxford

RFP 2020-014 Chestnut Fields Amtrak A&E

Attachment D Scope Checklist

Proposers must complete the checklist and fill in their estimated hours in order to be considered responsive to the proposal.

Task	Submitted	Total Hours
1. Topographic and Property Survey	**x**	**120**
2. Project Control	**x**	**Included in Task 1**
3. Railroad Coordination	**x**	**132**
4. Topographic Survey	**x**	**Included in Task 1**
5. Property Survey	**x**	**Included in Task 1**
6. Utilities	**x**	**Included in Task 1**
7. Preliminary Engineering (30%)	**x**	**280**
a. Platform, Shelter, Geotechnical Investigation and Design, Pedestrian Access, Signage, Electrical/Lighting, Communications/Data, and Landscaping		
8. Basis of Design (BOD) Report (100% Design)	**x**	**380**
9. NEPA Review	**x**	**132**
10. Benefit Cost Analysis (BCA)	**x**	**220**
11. Construction Management of Rail Platform	**x**	**224**
a. Bidding, contracting, and construction management		



06

Disadvantaged Business Enterprise Program

AECOM

06

Proposers DBE Program

We Make Impactful Changes to Support the Growth and Prosperity of DBE Firms

AECOM is committed to meeting BCRTA's 0.29% race-neutral transit DBE goal and 5% EDGE goal for this project.

AECOM takes great pride in being an industry leader for helping disadvantage business enterprise firms (DBE) expand their business through meaningful participation. We select DBE partners on the basis of the expertise they bring to a project team, the opportunity to help them develop their staff, and the ability to expand their business through meaningful and productive work.

AECOM has an outstanding track record for DBE participation. We often strive to exceed DBE participation goals and following the spirit of these programs, identify ways to engage our DBE partners to help them grow their business and develop new marketable skills. We have been recognized for our DBE inclusion efforts by the Minority Engineer magazine, Airport Minority Advisory Council, the Women in Transportation Seminar and the National Association of Minority Contractors.

Encouraging Diversity, Growth and Equity (EDGE) Participation

The State of Ohio's Encouraging Diversity, Growth and Equity (EDGE) program provides an EDGE to small businesses by Encouraging Diversity, Growth and Equity in public contracting. EDGE is an assistance program for economically and socially disadvantaged business enterprises. AECOM recognizes the important role small and socially disadvantaged businesses play in our economy and believes in contributing to the communities in which we work. We believe that small and diverse businesses bring innovation and expertise that assist AECOM in supporting our customers and their missions. Our reputation as an industry leader in the support of small and diverse firms can be seen in our participation in mentor-protégé programs and through the many awards and commendations we have received.

AECOM has a long history of successfully partnering with EDGE firms to deliver projects and task assignments for. AECOM was recently named to the Women's Business Enterprise National Council 16th Annual List of America's Top Corporations for exemplary supplier diversity programs and its continued commitment to subcontracting with woman-owned small businesses. In 2019. AECOM received the Large Business Award for Support to Federal Small Business Programs from the Society of American Military Engineers. In 2017, AECOM received the Small Business Industry Award (SBIA) – Large Business Prime Contractor of the Year Award from NASA/AMES Research Center.

The AECOM team is committed to meeting the 5% EDGE utilization goals established for this contract. We have partnered with several EDGE subconsultant firms that collectively provide a wide range of services required for this contract. Our team recognizes the importance of the EDGE program to the City of Oxford and Butler County RTA, and we are committed to making it successful.

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AECOM has added Ohio DBE certified firms to our team, therefore this form is not applicable.

ATTACHMENT J - DISADVANTAGED BUSINESS ENTERPRISE (DBE) GOOD FAITH EFFORTS

PART 1: GUIDELINES
On DOT-assisted projects that have an established DBE Contract Goal or establish a DBE Participation expectation (no specific contract goal), the Prime Contractor must make sufficient Good Faith Efforts ("GFEs") to meet the goal or expectation. The Prime Contractor can meet this requirement in either one or two ways. First, the Prime Contractor can meet the requirement with sufficient DBE participation. Second, the Prime Contractor can document adequate GFEs to meet the DBE requirement on the project. Both ways require review and approval. CFR Title 49, Part 26, Appendix A, states that determination concerning the sufficiency of the Prime Contractor's GFEs is a judgement call and using quantitative formulas is not permitted to make the determination.

Demonstration of GFEs
A Prime Contractor must show that it took all necessary and reasonable steps to achieve a DBE goal which could reasonably be expected to obtain sufficient DBE participation, even if it was not successful. The documentation should reflect that the Prime Contractor was actively and aggressively trying to obtain DBE participation sufficient to meet the DBE contract goal. Mere pro forma efforts are not an acceptable demonstration of a Prime Contractor's GFEs in meeting the DBE requirements.
A Prime Contractor selecting portions of work to be performed by DBEs will increase the likelihood that the DBE requirements will be achieved. This includes, where appropriate, breaking out contract work items into economically feasible units (i.e. smaller tasks or quantities) to facilitate DBE participation, even when the Prime Contractor might otherwise prefer to perform these work items with its own forces.

Documentation of GFEs
Evidence of GFEs should include, but are not limited to, a list of names, a number of contact attempts, how firms were contacted (i.e. copies of e-mail, letters, etc.), addresses, and telephone numbers of DBEs that were considered; a description of the information provided regarding the plans and specifications for the work selected for subcontracting; and evidence as to why agreements could not be reached for DBEs to perform the work. Please note that documentation provided may be subject to audit.

Additional Considerations
The fact that there may be some additional costs involved in finding and using DBEs is not in itself sufficient reason for a Prime Contractor's failure to meet the contract DBE requirement, as long as such costs are reasonable.
The ability or desire of a Prime Contractor to perform the work of a contract with its own organization does not relieve the Prime Contractor of the responsibility to make GFEs.
Prime Contractors are not required to accept higher quotes from DBEs if the price difference is excessive or unreasonable. It should be noted that excessive or unreasonable will be evaluated on a case by case basis while reviewing the Prime Contractor's total GFEs submittal.
In the event of a substitution or a replacement of a DBE on a project, a Prime Contractor's inability to find a replacement DBE at the original price is not alone sufficient to demonstrate GFEs.
Prime Contractors should select DBE firms that have been DBE certified with the proper NAICS codes for the work the DBE will be performing. Conversely, DBE firms should not commit to work that they do not have the proper NAICS codes to perform.

AECOM has added Ohio DBE certified firms to our team, therefore this form is not applicable.

PART 2: DBE UNAVAILABILITY CERTIFICATION

Not Applicable _____ Not Applicable _____
(Affiant) *(Date)*

of AECOM Services of Ohio, Inc.
(Prime or General Bidder)

certify that prior to the bid opening date, I contacted the following DBE contractors to obtain a bid/proposal forservices/supplies necessary to be performed on RFP-2020-014.

Disadvantaged Service/Supplies

Date	Contractor *(Must be DBE)*	Item(s) Sought *(i.e., Unit Price, Material & Labor, Labor Only, etc.)*
Not Applicable	Not Applicable	Not Applicable

Attach a detailed narrative of efforts made to involve disadvantaged contractors, subcontractors, & suppliers as suggested in Attachment J, Part 1.

Not Applicable

To the best of my knowledge and belief, said disadvantaged contractor(s) was unavailable (exclusive of unavailability due to lack of agreement on price) for work on this project, or unable to prepare a bid/proposal for the following reasons:

Not Applicable

Signature: _____
(Prime or General Contractor)

Date: 10/15/20

Not Applicable was offered an opportunity
(DBE firm)s

participate on the above identified Legal Notice on Not Applicable by Not Applicable
(date) *(Source)*

ATTACHMENT K - DBE CONTRACTOR COMMITMENT

PART 1: DBE UTILIZATION
The undersigned bidder/offeror has satisfied the requirements of the bid specification in the following manner (please check the appropriate space):

X The bidder/offeror is committed to a minimum of 0.29 % DBE utilization on this contract.

_____ The bidder/offeror (if unable to meet the DBE goal of ____%) is committed to a minimum of ____% DBE utilization on this contract a submits documentation demonstrating good faith efforts.

Name of bidder/offeror's firm: AECOM Services of Ohio, Inc.

State Registration No. 874572

By _____ Vice President
(*Signature / Title*)

PART 2: DBE PARTICIPATION CONFIRMATION

Name of bidder/offeror's firm: AECOM Services of Ohio, Inc.
Address: 525 Vine Street, Suite 1800
City: Cincinnati State: OH Zip: 45202
Name of DBE firm: CAD-Vantage, Inc.
Address: P.O. Box 53913
City: Indianapolis State: IN Zip: 46253
Telephone: (317) 272-0254
Description of work to be performed by DBE firm:

CAD drafting services will take place during Part 2 and 3 of the Multimodal Station & Shared Services Facility project.

The bidder/offeror is committed to utilizing the above-named DBE firm for the work described above. The estimated dollar value of this work is $ TBD in Part 2 and 3 of the Multimodal Station & Shared Services Facility project.

Affirmation

The above-named DBE firm affirms that it will perform the portion of the contract for the estimated dollar value as stated above.

By _____ Vice President
(Signature / Title)

If the bidder/offeror does not receive award of the prime contract, any and all representations in this Letter of Intent and Affirmation shall be null and void.

(Submit this page for each DBE subcontractor.)

PART 2: DBE PARTICIPATION CONFIRMATION

Name of bidder/offeror's firm: AECOM Services of Ohio, Inc.
Address: 525 Vine Street, Suite 1800
City: Cincinnati State: OH Zip: 45202
Name of DBE firm: Stone Environmental and Engineering Science, Inc.
Address: 748 Green Crest Drive
City: Westerville State: OH Zip: 43081
Telephone: (614) 865-1874
Description of work to be performed by DBE firm:

ESA Phase I for the site and supplemental NEPA field investigations as needed. Also providing engineering assistance for fueling center. Stone is also EDGE Certified.

The bidder/offeror is committed to utilizing the above-named DBE firm for the work described above. The estimated dollar value of this work is $ See price proposal under separate cover for Part 1 and Part 2 of the Multimodal Station & Shared Services Facility project and for ESA Phase I and NEPA for the passenger rail platform project.
Affirmation
The above-named DBE firm affirms that it will perform the portion of the contract for the estimated dollar value as stated above.
By _____ Vice President
(Signature / Title)

If the bidder/offeror does not receive award of the prime contract, any and all representations in this Letter of Intent and Affirmation shall be null and void.
(Submit this page for each DBE subcontractor.)

PART 2: DBE PARTICIPATION CONFIRMATION

Name of bidder/offeror's firm: AECOM Services of Ohio, Inc.
Address: 525 Vine Street, Suite 1800
City: Cincinnati State: OH Zip: 45202
Name of DBE firm: Engage Public Affairs, LLC
Address: 1650 Watermark Drive, Suite 210
City: Columbus State: OH Zip: 43215
Telephone: (614) 565-2819
Description of work to be performed by DBE firm:

Public Engagement/Stakeholder Communication

The bidder/offeror is committed to utilizing the above-named DBE firm for the work described above. The estimated dollar value of this work is $ TBD to begin in Part 2 of the Multimodal Station & Shared Services Facility project.

Affirmation

The above-named DBE firm affirms that it will perform the portion of the contract for the estimated dollar value as stated above.

By _____ Vice President

(Signature / Title)

If the bidder/offeror does not receive award of the prime contract, any and all representations in this Letter of Intent and Affirmation shall be null and void.

(Submit this page for each DBE subcontractor.)

ATTACHMENT L - EVIDENCE OF DBE CERTIFICATION

AFFIDAVIT OF DISADVANTAGED BUSINESS ENTERPRISE

State of INDIANA

County of MARION

I hereby declare and affirm that I am the PRESIDENT (Title)

and duly authorized representative of CAD-Vantage, Inc. (Name of Company)

whose address is PO BOX 53913 INDIANAPOLIS, INDIANA 46253

I hereby declare and affirm that I am a disadvantaged business enterprise and can be found listed in the Ohio Unified Certification Program (UCP) as AWP Vendor ID:_____

I DO SOLEMNLY DECLARE AND AFFIRM UNDER THE PENALTIES OF PERJURY THAT THE CONTENTS OF THE FOREGOING DOCUMENT ARE TRUE AND CORRECT, AND THAT I AM AUTHORIZED, ON BEHALF OF THE ABOVE FIRM, TO MAKE THIS AFFIDAVIT.

By: Rachel Silcox (Affiant) 10-12-20 (Date)

On this 12 day of October, 20 20, before me, Jennifer R Roberts, known to me to be the person described in the foregoing affidavit acknowledged that he/she executed the same in the capacity therein stated and for the purpose therein contained.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

Jennifer R Roberts (Notary Public)

My Commission Expires: 07/20/2025 (SEAL)

JENNIFER R. ROBERTS
Marion County
My Commission Expires
July 20, 2025

#2020-014 Architecture and Engineering Services for the Chestnut Street Multimodal Shared Services Facility & City of Oxford Passenger Rail Platform

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v.5.0

Ohio Unified Certification Program

OHIO DEPARTMENT OF TRANSPORTATION

WWW.OHIOUCP.ORG

Certified Disadvantaged Business Enterprise

CAD-Vantage, Inc.

AWP Vendor ID: D47803519

This certificate acknowledges that, on the date this certificate was printed, the above named firm was eligible to participate as a Disadvantaged Business Enterprise (DBE) in Ohio and was certified to perform the following types of work as a DBE:

NAICS Code	NAICS Title/Descriptor	Effective Date
541340	Drafting Services	02/20/2014
541512	Computer Systems Design Services	02/20/2014

To verify the above named firm's eligibility to participate as a DBE/ACDBE in Ohio and the work types in with the above named firm is currently certified, check the Ohio Unified DBE Directory at www.ohioucp.org.

Date Printed: October 07, 2020

Original Certification Date: February 20, 2014

Page 1 of 1

ATTACHMENT L - EVIDENCE OF DBE CERTIFICATION

AFFIDAVIT OF DISADVANTAGED BUSINESS ENTERPRISE

State of Ohio

County of Franklin

I hereby declare and affirm that I am the President + CEO (Title)

and duly authorized representative of Engage Public Affairs, LLC (Name of Company)

whose address is 7759 Crawley Dr., Dublin, OH 43017

I hereby declare and affirm that I am a disadvantaged business enterprise and can be found listed in the Ohio Unified Certification Program (UCP) as AWP Vendor ID 060514005

I DO SOLEMNLY DECLARE AND AFFIRM UNDER THE PENALTIES OF PERJURY THAT THE CONTENTS OF THE FOREGOING DOCUMENT ARE TRUE AND CORRECT, AND THAT I AM AUTHORIZED, ON BEHALF OF THE ABOVE FIRM, TO MAKE THIS AFFIDAVIT.

By Marie S Keister (Affiant) 10/9/2020 (Date)

On this 9th day of October 20 20, before me

Marie S. Keister, known to me to be the person described in the foregoing affidavit acknowledged that he/she executed the same in the capacity therein stated and for the purpose therein contained.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

Amy R McKitrick (Notary Public)

My Commission Expires: 02/05/2022 (SEAL)

Amy R. McKitrick
Notary Public, State of Ohio
My Commission Expires 02/05/2022

Ohio Unified Certification Program

OHIO DEPARTMENT OF TRANSPORTATION

WWW.OHIOUCP.ORG

Certified Disadvantaged Business Enterprise

Engage Public Affairs, LLC

AWP Vendor ID: 060514005

This certificate acknowledges that, on the date this certificate was printed, the above named firm was eligible to participate as a Disadvantaged Business Enterprise (DBE) in Ohio and was certified to perform the following types of work as a DBE:

NAICS Code	NAICS Title/Descriptor	Effective Date
541820	Public Relations Agencies	03/15/2011

To verify the above named firm's eligibility to participate as a DBE/ACDBE in Ohio and the work types in with the above named firm is currently certified, check the Ohio Unified DBE Directory at www.ohioucp.org.

Date Printed: October 07, 2020

Original Certification Date: December 31, 2014

Page 1 of 1

ATTACHMENT L - EVIDENCE OF DBE CERTIFICATION

AFFIDAVIT OF DISADVANTAGED BUSINESS ENTERPRISE

State of Ohio

County of Franklin

I hereby declare and affirm that I am the President
(Title)

and duly authorized representative of Stone Environmental Engineering + Science, Inc.
(Name of Company)

whose address is 748 Green Crest Drive, Westerville, Ohio 43081

I hereby declare and affirm that I am a disadvantaged business enterprise and can be found listed in the Ohio Unified Certification Program (UCP) as AWP Vendor ID: n/a

I DO SOLEMNLY DECLARE AND AFFIRM UNDER THE PENALTIES OF PERJURY THAT THE CONTENTS OF THE FOREGOING DOCUMENT ARE TRUE AND CORRECT, AND THAT I AM AUTHORIZED, ON BEHALF OF THE ABOVE FIRM, TO MAKE THIS AFFIDAVIT.

By: _____ 10-8-2020
(Affiant) (Date)

On this 8th day of October, 20 20, before me, Mary Sharrett, known to me to be the person described in the foregoing affidavit acknowledged that he/she executed the same in the capacity therein stated and for the purpose therein contained.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

Lesley C. Walden
(Notary Public)

My Commission Expires: _____ (SEAL)

NOTARY PUBLIC STATE OF OHIO

LESLEY C WALDEN
Notary Public
State of Ohio
My Comm. Expires
August 5, 2025

Ohio Unified Certification Program

OHIO DEPARTMENT OF TRANSPORTATION

WWW.OHIOUCP.ORG

Certified Disadvantaged Business Enterprise

Stone Environmental Engineering and Science, Inc.

AWP Vendor ID: D26833112

This certificate acknowledges that, on the date this certificate was printed, the above named firm was eligible to participate as a Disadvantaged Business Enterprise (DBE) in Ohio and was certified to perform the following types of work as a DBE:

NAICS Code	NAICS Title/Descriptor	Effective Date
541330	Engineering Services	(*)
	Civil Engineering	08/07/2017
	Environmental Engineering	08/07/2017
541620	Environmental Consulting Services	08/14/2014

To verify the above named firm's eligibility to participate as a DBE/ACDBE in Ohio and the work types in with the above named firm is currently certified, check the Ohio Unified DBE Directory at www.ohioucp.org.

Date Printed: October 07, 2020

Original Certification Date: August 14, 2014

(*) - This denotes that the firm is certified in one or more descriptors under this NAICS code, but not in the code as a whole.

Page 1 of 1

Ohio | Department of Administrative Services

Mike DeWine, Governor
Jon Husted, Lt. Governor
Matt Damschroder, Director

06/26/2019

Mary Sharrett
Stone Environmental Engineering & Science, Inc.
748 Green Crest Dr.
Westerville, OH 43081

SUBJECT: Encouraging Diversity, Growth and Equity (EDGE) Program
Certification Number: EDGE-6900
Effective Dates: 06/26/2019 through 06/26/2021

Dear Mary Sharrett:

As you are aware, a company desiring to participate in the State of Ohio's Encouraging Diversity, Growth and Equity program must demonstrate to this Office that the company is owned and controlled by an individual that is socially and economically disadvantaged for at least the previous one year.

After careful review of the application and supporting documentation you provided to this office, the Equal Opportunity Division of the Ohio Department of Administrative Services (DAS) has determined that Stone Environmental Engineering & Science, Inc. satisfactorily meets the requirements set forth in Section 123:2-16-01 of the Ohio Administrative Code as is required for participation in the program. This letter shall serve as the State's official certification to this effect.

This letter also acknowledges that Stone Environmental Engineering & Science, Inc. has been categorized under the Architecture and Engineering procurement category for EDGE program participation.

Although the EDGE program does not require a company to demonstrate capability and/or experience with any code or classification prior to or during certification, the UNSPS code(s) listed below identify the company's stated capabilities. Please note: EOD does not validate that the company has demonstrated capability and/or experience in any of the following UNSPS code(s).

1. 77100000 Environmental management
2. 77101500 Environmental impact assessment
3. 77101600 Environmental planning
4. 77101700 Environmental advisory services
5. 77101800 Environmental auditing
6. 77102000 Environmental reporting services
7. 81100000 Professional engineering services
8. 81101500 Civil engineering
9. 81102200 Transportation engineering

Please note that one month prior to the expiration date of this certification, your company is required to submit a completed Recertification Affidavit form for our review relative to the company's qualifications for continuing participation in the EDGE program. Additionally, you must formally notify this division of any changes that occur within your company that effect ownership, managerial and/or operational control within thirty days of such changes occurring. Similar notification must be provided to us of any changes to the company's name, business address, telephone numbers, principal products/service or other basic contact and commercial activity information.

Failure to provide a completed Recertification Affidavit or to notify this office of such changes to your company in a timely manner may result in the revocation of your certification status.

If you need any assistance or have questions about the EDGE program, its objectives, or its operation, please contact the Business Certification and Compliance Unit at 614-466-8380.

Sincerely,

Eric M. Seabrook
Deputy Director
State EEO Coordinator

*As set forth in Section 123:2-16-01 -3 of the Ohio Administrative

Equal Opportunity Division
4200 Surface Road
Columbus, Ohio 43228

614-466-8380 | Phone
614-728-5628 | FAX
das.eod@das.ohio.gov| email: das.ohio.gov

07

Attachments A-E

AECOM

07

Attachments (A-E)

ATTACHMENT A – SUMMARY OF PROPOSAL REQUIREMENTS

Failure to Submit Any of the Following Documents May Render Your Proposal Non-Responsive

Proposal Submission: Complete the following checklist indicating that the documents required for this proposal are enclosed.

- X RFP Cover Page
- X Table of Contents
- X Qualifications & Capabilities
- X References and Related Experience
- X Technical Proposal – Multimodal Station & Shared Services Facility
- X Technical Proposal – Passenger Rail Platform
- X Attachment A – SUMMARY OF PROPOSAL REQUIREMENTS (this form)
- X Attachment C – Receipt of Addenda
- X Attachment D – Scope Checklist
- X Attachment E – Certification of Lobbying Restrictions
- X Attachment F – Certification of Government-Wide Debarment
- X Attachment G – Personal Property Tax Affidavit
- X Attachment J – DBE Good Faith Efforts
- X Attachment K – DBE Contractor Commitment
- X Attachment L – Evidence of DBE Certification
- X Bureau of Worker's Compensation Certificate
- X Employer Liability Insurance Certificate
- X Commercial General Liability Insurance Certificate
- X Commercial Auto Liability Insurance Certificate
- N/A Proposer's Warranty Information (as required)
- N/A Bid Bond (as required)
- X Attachment B - Price Proposal Form (SEALED SEPARATELY)

	Vice President
Authorized Signature	*Title*
Michael Bongiorno	Vice President
Signature Name Printed	*Title Printed*
AECOM Services of Ohio, Inc.	10/15/20
Company Printed	*Date*

#2020-014 Architecture and Engineering Services for the Chestnut Street Multimodal Shared Services Facility & City of Oxford Passenger Rail Platform

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v.5.0

ATTACHMENT C – RECEIPT OF ADDENDA

The undersigned acknowledges receipt of the following addenda to the Documents.

(Give number and date of each. Please submit with NA if no addendums issued)

Addendum Number 1 Dated 09/24/20

Addendum Number 2 Dated 10/12/20

Addendum Number _____ Dated _____

Addendum Number _____ Dated _____

Addendum Number _____ Dated _____

Addendum Number _____ Dated _____

Addendum Number _____ Dated _____

Failure to acknowledge receipt of all addenda may cause the Proposal to be considered non-responsive to this Request for Proposal, which will require rejection of the Proposal.

Signature

Vice President

Title

ATTACHMENT E – CERTIFICATION OF LOBBYING RESTRICTIONS

The undersigned certifies, to the best of his or her knowledge and belief, that:

1. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

3. The undersigned shall require that the language of this certification be included in the award documents for all sub-awards at all tiers (including subcontracts, sub-grants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

_____ Signature of Contractor's Authorized Official

Michael Bongiorno, Vice President
_____ Name and Title of Contractor's Authorized Official

10/15/20
_____ Date

Firms that engage in lobbying must submit Standard Form LLL in addition to this certification

ATTACHMENT F – GOVERNMENT-WIDE DEBARMENT AND SUSPENSION

2 CFR part 180
2 CFR part 1200
2 CFR § 200.213
2 CFR part 200 Appendix II (I)
Executive Order 12549
Executive Order 12689

Debarment, Suspension, Ineligibility and Voluntary Exclusion

The Contractor shall comply and facilitate compliance with U.S. DOT regulations, "Non-procurement Suspension and Debarment," 2 C.F.R. part 1200, which adopts and supplements the U.S. Office of Management and Budget (U.S. OMB) "Guidelines to Agencies on Governmentwide Debarment and Suspension (Non-procurement)," 2 C.F.R. part 180. These provisions apply to each contract at any tier of $25,000 or more, and to each contract at any tier for a federally required audit (irrespective of the contract amount), and to each contract at any tier that must be approved by an FTA official irrespective of the contract amount. As such, the Contractor shall verify that its principals, affiliates, and subcontractors are eligible to participate in this federally funded contract and are not presently declared by any Federal department or agency to be:

a) Debarred from participation in any federally assisted Award;

b) Suspended from participation in any federally assisted Award;

c) Proposed for debarment from participation in any federally assisted Award;

d) Declared ineligible to participate in any federally assisted Award;

e) Voluntarily excluded from participation in any federally assisted Award; or

f) Disqualified from participation in ay federally assisted Award.

By signing and submitting its bid or proposal, the bidder or proposer certifies as follows:
The certification in this clause is a material representation of fact relied upon by the AGENCY. If it is later determined by the AGENCY that the bidder or proposer knowingly rendered an erroneous certification, in addition to remedies available to the AGENCY, the Federal Government may pursue available remedies, including but not limited to suspension and/or debarment. The bidder or proposer agrees to comply with the requirements of 2 C.F.R. part 180, subpart C, as supplemented by 2 C.F.R. part 1200, while this offer is valid and throughout the period of any contract that may arise from this offer. The bidder or proposer further agrees to include a provision requiring such compliance in its lower tier covered transactions.

Date: 10/15/20

Signature:

Company Name: AECOM Services of Ohio, Inc.

Title: Vice President

ATTACHMENT G - PERSONAL PROPERTY TAX AFFIDAVIT

(O.R.C. 5719.042)

The person making a proposal shall submit to the BCRTA Executive Director a statement affirmed under oath that the person with whom the contract is to be made was not charged at the time the proposal was submitted with any delinquent personal property taxes on the general tax list of personal property of any county in which the taxing district has territory or that such person was charged with delinquent personal property taxes on any such tax list, in which case the statement shall also set forth the amount of such due and unpaid delinquent taxes and any due and unpaid penalties and interest thereon. If the statement indicates that the taxpayer was charged with any such taxes, a copy of the statement shall be transmitted by the Manager of Administration to the county treasurer within thirty (30) days of the date it is submitted.

STATE OF Ohio
COUNTY OF Franklin

The undersigned being first duly sworn states that he/she is (check one):

■ the proposer OR □ the duly-authorized representative of the proposer

to whom a contract pursuant to Invitation for Proposal No. ~~2020-015 for LEGAL SERVICES~~ was awarded; and further states that, at the time the proposers' proposal was submitted (check and complete as required):
Proposal No. 2020-014 for Architecture and Engineering Services for the Chestnut Street Multimodal Station & Shared Services Facility & City of Oxford Passenger Rail Platform

■ proposer was not charged with any delinquent personal property taxes on the general tax list of personal property of Hamilton County, Ohio
(County, State)

□ proposer was charged with delinquent personal property taxes on the general tax list of personal property of as follows: ______
(County, State)

$ ______ in due and unpaid delinquent taxes

$ ______ in due and unpaid penalties and interest thereon

Name of Proposer: Michael Bongiorno
Authorized Signature: [signature]
Title: Vice President
Company: AECOM Services of Ohio, Inc.
Address: 525 Vine Street, Suite 1800
City, State, Zip: Cincinnati, OH 45202

Sworn to before me and subscribed in my presence this ~~10th~~ 15th BB day of

, October 20 20 .

[signature]
Brian Bennett
My Commission Expires 4-19-2024

[Notarial seal: State of Ohio]

#2020-014 Architecture and Engineering Services for the Chestnut Street Multimodal Shared Services Facility & City of Oxford Passenger Rail Platform

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ACORD

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 03/31/2020

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Marsh Risk & Insurance Services CA License #0437153 633 W. Fifth Street, Suite 1200 Los Angeles, CA 90071 Attn: LosAngeles.CertRequest@Marsh.Com CN101348564-STND-GAU-20-21	**CONTACT NAME:** * **PHONE (A/C, No, Ext):** **FAX (A/C, No):** **E-MAIL ADDRESS:**
INSURED AECOM 1999 Avenue of the Stars, Suite 2600 Los Angeles, CA 90067	**INSURER(S) AFFORDING COVERAGE** — **NAIC #** **INSURER A :** ACE American Insurance Company — 22667 **INSURER B :** N/A — N/A **INSURER C :** SEE ACORD 101 **INSURER D :** **INSURER E :** **INSURER F :**

COVERAGES **CERTIFICATE NUMBER:** LOS-002257911-18 **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	X **COMMERCIAL GENERAL LIABILITY** CLAIMS-MADE [X] OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: [X] POLICY [ ] PRO-JECT [ ] LOC [ ] OTHER:			HDO G7123311A	04/01/2020	04/01/2021	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG	$ 1,000,000 $ 1,000,000 $ 5,000 $ 1,000,000 $ 2,000,000 $ 2,000,000
A	**AUTOMOBILE LIABILITY** X ANY AUTO OWNED AUTOS ONLY HIRED AUTOS ONLY SCHEDULED AUTOS NON-OWNED AUTOS ONLY			ISA H25301730	04/01/2020	04/01/2021	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident)	$ 1,000,000 $ $ $
	UMBRELLA LIAB OCCUR **EXCESS LIAB** CLAIMS-MADE DED RETENTION $						EACH OCCURRENCE AGGREGATE	$ $
C	**WORKERS COMPENSATION AND EMPLOYERS' LIABILITY** ANYPROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? Y/N: N **(Mandatory in NH)** If yes, describe under DESCRIPTION OF OPERATIONS below	N / A		SEE ACORD 101	04/01/2020	04/01/2021	X PER STATUTE [ ] OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	 $ 1,000,000 $ 1,000,000 $ 1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)
EVIDENCE OF COVERAGE

CERTIFICATE HOLDER	**CANCELLATION**
AECOM 1999 Avenue of the Stars, Ste. 2600 Los Angeles, CA 90067	**SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.** **AUTHORIZED REPRESENTATIVE of Marsh Risk & Insurance Services** James L. Vogel

AGENCY CUSTOMER ID: CN101348564
LOC #: Los Angeles

ACORD

ADDITIONAL REMARKS SCHEDULE

AGENCY Marsh Risk & Insurance Services	**NAMED INSURED** AECOM 1999 Avenue of the Stars, Suite 2600 Los Angeles, CA 90067
POLICY NUMBER	
CARRIER / **NAIC CODE**	**EFFECTIVE DATE:**

ADDITIONAL REMARKS

THIS ADDITIONAL REMARKS FORM IS A SCHEDULE TO ACORD FORM,
FORM NUMBER: 25 **FORM TITLE:** Certificate of Liability Insurance

Workers Compensation/Employer Liability cont.

Policy Number	Insurer	States Covered
WLR C6692340A	Indemnity Insurance Company of North America - NAIC # 43575	AOS
WLR C66923320	ACE American Insurance Company - NAIC # 22667	CA, AZ, MA
SCF C66923368	ACE American Insurance Company - NAIC # 22667	WI Retro

Performance History

For the last five years with respect to: (a) termination for default, (b) litigation by or against the Proposer and/or its consultants, and (c) judgments entered for or against Proposer and/or its consultants.

a) Termination for Default
Upon knowledge and belief, formed after reasonable inquiry, within the past five (5) years, AECOM Services of Ohio, Inc. (i) has not failed to complete a contract where the other party to such contract was not in breach unless the contract afforded AECOM Services of Ohio, Inc. that right and (ii) AECOM Services of Ohio, Inc. has not had a contract terminated by a client wherein that termination was ultimately determined to be other than for convenience.

b) Litigation by or Against the Proposer and/or its Consultants
AECOM Services of Ohio, Inc. is a wholly owned subsidiary of AECOM, which is an organization comprised of approximately 120 operating companies and affiliates having a total current employment of 80,000 persons worldwide that perform design, engineering, planning and related professional services and execute thousands of projects annually. As with any large service company, from time to time, it is unavoidably involved in claims, litigation, and alterative dispute resolutions which may allege third party personal injury, property damages or breach of contract. Further, in the ordinary course of business, AECOM Services of Ohio, Inc. may be subject to, and resolves, state and federal regulatory proceedings regarding its services, such as Department of Building and OSHA violations.

As instructed by counsel, AECOM Services of Ohio, Inc. does not voluntarily comment on pending or past claims, litigation, or arbitration or other alternative dispute resolution matters for a number of reasons, including, but not limited to, a desire and need to maintain the attorney-client privilege, the protections of the attorney work product doctrine, and the private and confidential nature of settled claims and litigation, and mediation, arbitration and other alternative dispute matters, which often are associated with confidentiality and non-disclosure agreements.

In the opinion of management, AECOM Services of Ohio, Inc. is adequately insured to address any pending or threatened claims and litigation. AECOM Services of Ohio, Inc. strives to avoid litigation and has a risk management program in place that includes early recognition of situations that might give rise to a claim, open lines of communication and proactive dispute resolution. None of our current litigation could reasonably be expected to have a material adverse effect on AECOM Services of Ohio, Inc. or its ability to perform under this or any other contract. If you require additional information, please contact Region Chief Counsel, Michael Klerer, at michael.klerer@aecom.com.

c) Judgments Entered for or Against Proposer and/or its Consultants
See response above.

Geotechnology's litigation in the past 5 years:

Geotechnology is currently involved in litigation of two issues associated with our professional services. In each matter, Geotechnology strongly denies any wrongdoing and is aggressively defending our position. Details of these two matters are as follows:

- A general contractor made a third-party claim of negligent misrepresentation on a construction project where Geotechnology was providing construction materials testing and inspections for the architect. Despite ordering and installing out of spec fill material as well as neglecting to provide the testing agency (Geotechnology) the specifications for said materials in advance of placement as called for in the project specification, the general contractor alleges that Geotechnology should have stopped them from improperly placing that material. The general contractor is claiming damages for the abatement of their mistake. Geotechnology and its counsel are aggressively defending our position that we were in no way at fault in this matter.
- A company not party to a contractual relationship with Geotechnology is claiming restitution for damages that were incurred as part of the partial failure of a soldier pile wall that was designed by Geotechnology. Geotechnology also provided limited construction materials testing for said installation. There is strong evidence indicating that the changing of the slope configuration and the inappropriate operation of heavy construction equipment on the back side of the wall post-construction are the direct and proximate causes for the wall's failure. Nonetheless, the company is claiming damages against Geotechnology. Geotechnology and its counsel are aggressively defending our position that we were in no way at fault in this matter.

AECOM's other proposed subconsultants do not have any pending litigation or judgments against their respective firms.

AECOM Technical Services, Inc. ("ATS") has reviewed the RFP for the Architecture and Engineering Services for the Chestnut Street Multimodal Station & Shared Services Facility & City of Oxford Passenger Rail Platform projects. While we are in substantial agreement with the terms included therein, in the event of award, ATS respectfully reserves the right to negotiate final contractual provisions in an effort to reach a mutually agreeable contract in line with appropriate industry standards.

ABOUT AECOM

AECOM is the world's premier infrastructure consulting firm, delivering professional services throughout the project lifecycle – from planning, design and engineering to consulting and construction management. We partner with our clients in the public and private sectors to solve their most complex challenges and build legacies for generations to come. On projects spanning transportation, buildings, water, governments, energy and the environment, our teams are driven by a common purpose to deliver a better world. AECOM is a Fortune 500 firm with revenue of approximately $20.2 billion during fiscal year 2019. See how we deliver what others can only imagine at aecom.com and @AECOM.