

Peter W. Madson, P.E.
Principal Engineer

Biosketch

Mr. Madson's over 18 years of experience include a diversified scope of facilities engineering services at projects located throughout the United States. Mr. Madson is a Partner in National Property Consulting Group, LLC (NPC), serves as a Principal Engineer, and manages the overall operations of the firm. Mr. Madson was previously a Senior Engineer and the Group Leader for the Facilities, Indoor Air Quality (mold/asbestos/lead-based paint), and Geotechnical Engineering department for the Cincinnati office of a large national engineering consulting firm. In that role, Mr. Madson was responsible for providing senior leadership and direction on routine to complex facilities engineering projects that provide quality, timely, and cost-effective solutions to problems with our client's facilities.

Mr. Madson's primary technical focus is Property Condition Assessments and facilities engineering, which consists of assessment and rehabilitation design related to solving problems with building system failures including facades/curtain walls (building envelope), roofing, water intrusion/mold, structural and foundation systems, and pavements and floor slabs. Mr. Madson has been responsible for conducting and managing these projects throughout the United States and is currently a Registered Professional Engineer in Ohio and Kentucky.

In the early 1990's, Mr. Madson worked as an engineer co-op at Viox & Viox, PSC. Mr. Madson's duties at Viox & Viox included land surveying, storm/sanitary sewer pipe sizing and placement design, retention basin sizing and location design, and earthwork calculations.

Specialized skill areas include:

- Building Envelope (exterior walls and roofing) assessment and rehabilitation
- Water intrusion/mold studies
- Structural rehabilitation
- Pavement and floor slab rehabilitation
- Property Condition Assessments (well over 300 properties assessed)
- Americans with Disabilities Act (ADA) compliance
- New construction and renovation plan/cost review

Education

B.S., Civil and Environmental Engineering (Structural Concentration), 1995, University of Cincinnati.

Licenses/Registrations/Certifications

Professional Engineer - OH, 2000, Registration Number #E 64489, Expires 12/31/2013
Professional Engineer - KY, 2002, Registration Number #22770, Expires 6/30/2014

Project Experience

The following summarizes highlights and typical projects with which Mr. Madson has been involved.

PROPERTY CONDITION ASSESSMENTS

General

Mr. Madson has extensive experience performing over 300 Property Condition Assessments (PCAs) over the past 17 years. Properties assessed include full-service hotels, retail (single stores, strip centers, malls), commercial office, apartment complexes (affordable and market rate), industrial warehouses, parking garages, mobile home parks, bus terminals, and golf courses. Mr. Madson has experience performing PCAs for properties ranging in size from 2,000 square feet to over 1,000,000 square feet. Mr. Madson has performed PCAs throughout the country, including downtown high-rise office buildings in major cities such as Pittsburg, Detroit, New York City, San Francisco, Cleveland, Cincinnati, and Chicago. Mr. Madson has performed or led PCAs ranging from baseline ASTM 2018-08 to very detailed specialist PCA work to gain a thorough understanding of the building.

Senior/Principal Engineer, Full Service Hotels and Resorts - Nationwide

Mr. Madson coordinated and performed Property Condition Assessments (PCA) at well over 60 full service hotels nationwide such as Sheratons, Hiltons, Marriotts, Renaissance, Westins, Embassy Suites and others in order to assist HEI Hotels and Resorts in making decisions about purchasing the properties. The hotels ranged in ages from approximately 3 to 100 years (one hotel even started in the late 1700's!), contained up to 400 guest rooms each, and ranged from low to high rise. The PCAs included evaluations of the Civil/Site, Pavement, Roof, Structure, Foundation, Exterior Wall, Mechanical, Electrical, Plumbing, Fire Protection systems, and compliance with the Americans with Disabilities Act. Most of the projects included performing specialist investigation work and coordination of a team of specialists for very thorough evaluations of the hotels.

Principal Engineer, 21 Building Office Park – Overland Park, KS

Mr. Madson served as a facade specialist in performing detailed exterior wall evaluations at 21 separate office buildings within a large office park for our client. The office buildings ranged from one to 16 stories in height. Mr. Madson prepared a report for each building that included a detailed summary of the conditions, repair recommendations, and cost estimates.

Principal Engineer, Mark-to-Market Property Condition Assessments

Mr. Madson has either performed or directed Property Condition Assessments at over 17 apartment complexes for HUD/OAHP's Mark-to-Market program. The apartment complexes ranged in size from 16 to over 800 units. The PCAs included evaluations of the Civil/Site, Pavement, Roof, Structure, Foundation, Exterior Wall, Mechanical, Electrical, Plumbing, and Fire Protection systems. The PCAs also included a review for general compliance with the Americans with Disabilities Act and completion of the Environmental Restrictions Checklist.

Principal Engineer, Mark-to-Market "Green" Property Condition Assessments and OAHP Green Retrofit Property Condition Assessment

Mr. Madson has directed "Green" Property Condition Assessments and "Green Retrofit Property Condition Assessments" at over 20 apartment complexes. HUD/OAHP's Mark-to-Market program, which in October 2007 modified the scope of work to a "Green" Property Condition Assessment. The "Green" Property Condition Assessment includes a comparison of Green alternatives to the repair recommendations along with budgets for those repairs if performed in a Green manner. The Assessment also includes an Energy Audit and Integrated Pest Management Inspection. The "Green Retrofit Property Condition Assessment" was a new

OAHF scope of work created for the American Recovery and Reinvestment Act in 2009. Apartment complexes ranged in size from 40 to over 800 units.

Principal Engineer, MAP Capital Needs Assessments

Mr. Madson has either performed or directed Capital Needs Assessments at various senior living/nursing home projects for refinancing under HUD's Multifamily Accelerated Processing Program. The CNAs included evaluations of the Civil/Site, Pavement, Roof, Structure, Foundation, Exterior Wall, Mechanical, Electrical, Plumbing, Fire Protection systems, and accessibility.

Principal Engineer, USDA Rural Development Capital Needs Assessments

Mr. Madson has either performed or directed Capital Needs Assessments at various apartment complexes for financial restructuring under the USDA Rural Development Multifamily Housing Preservation and Revitalization program. The CNAs included evaluations of the Civil/Site, Pavement, Roof, Structure, Foundation, Exterior Wall, Mechanical, Electrical, Plumbing, Fire Protection systems, and accessibility.

Project/Senior Engineer, Greyhound Terminal Portfolio, Nationwide

Mr. Madson coordinated the Property Condition Assessment (PCA) work for a portfolio of over 25 Greyhound terminals located throughout the United States over a 3 year period. The work was performed to assist Greyhound in evaluating the condition of their facilities for lease-renewal purposes. Mr. Madson developed standardized field procedures, reporting, served as the client liaison for the work, and performed several of the PCAs. The PCAs included evaluations of the Civil/Site, Pavement, Roof, Structure, Foundation, Exterior Wall, Mechanical, Electrical, Plumbing, and Fire Protection systems. The PCAs also included a review for general compliance with the Americans with Disabilities Act.

AMERICANS WITH DISABILITIES ACT (ADA)

Senior Engineer, BP/Amoco, Nationwide

Mr. Madson was part of a team performing Americans with Disabilities Act (ADA) surveys of all company owned BP/Amoco gasoline stations throughout the United States as part of this ongoing project. Mr. Madson performed the surveys at over 220 BP/Amoco gasoline stations for the Midwest Business Unit at sites in Ohio, Pennsylvania, Michigan, Indiana, Kentucky, and Tennessee. The surveys were performed to assess each facilities level of compliance with the ADA and to provide recommendations for meeting compliance.

Principal, Accessibility Assessments of Full Service Hotels

Mr. Madson served as Principal for performing full accessibility assessments of full service hotels for compliance with the ADAAG and appropriate local or state accessibility requirements. The projects ranged in size from 8- to 10-stories, contained between 200 and 400 guestrooms, and were constructed from 1985 through 2000. The accessibility assessments included all public areas and accessible guestrooms. Local or state accessibility codes were reviewed to identify more stringent criteria than contained in the ADAAG.

Principal, Accessibility Assessments of Multi-Family Housing and Senior Living Centers

Mr. Madson served as principal in the performance of Property Condition Assessments of many multi-family housing complexes and Senior Living centers. The assessments included an accessibility component to evaluate the facilities against the ADAAG and UFAS guidelines.

WATERPROOFING/ MOLD/ FAÇADE AND ROOF

Senior Engineer, West High School – Columbus, Ohio

Mr. Madson prepared the complete construction drawings and specifications for replacement of the flat roofing sections at this 80+ year old high school. The project included the replacement of 13 separate flat roofing sections with a new built-up roofing system, evaluation of bids, and contract administration/construction monitoring during the project.

Senior Engineer, Hilton – Cleveland East, Beachwood, Ohio

Engineer of Record for the assessment and water intrusion rehabilitation design for this project involving repair/replacement/re-detailing of masonry walls, windows, roofing systems, etc. of the 400-room hotel. Project activities included air sampling for mold types and concentrations, detailed assessment of the building to identify sources of water intrusion and to recommend repairs, preparation of construction drawings and specifications for the repair of the building, and construction monitoring.

Senior Engineer, Courtyard Hotel, Beachwood, Ohio

Engineer of Record for the design of the complete replacement of the Exterior Insulation and Finish System (EIFS) wall system and steel stud wall framing for the 4-story/17-year old hotel. Long term water intrusion had severely deteriorated the wall system, leaving complete replacement as the most desirable option for repair. The design documents included complete drawings and technical specifications for the rehabilitation and construction monitoring was performed during the construction. As a part of the project, Mr. Madson coordinated a team of professionals to perform an asbestos survey of the materials to be demolished.

Senior Engineer, Doubletree Club Hotel, Largo, Maryland

Mr. Madson performed a detailed assessment of the building envelope of this 6 story/184 guestroom hotel for the purpose of identifying and recommending repairs to stop on-going water intrusion. The exterior wall system consisted of an aluminum window wall system, Exterior Insulation and Finish System (EIFS), and masonry. Mr. Madson subsequently lead a team of professionals to perform destructive observations (removal of windows, EIFS, and drywall) for the purpose determining the actual construction and testing of the HVAC system in order to recommend short and long-term options for repair to alleviate the water intrusion problems. Mr. Madson then prepared the drawings and specifications for the chosen repair and provided construction monitoring and administration services throughout the project.

Senior Engineer, Omni Severin Hotel, Indianapolis, Indiana

Mr. Madson performed a structural condition assessment of the copper cornice at the 13th story of this 88 year old hotel in downtown Indianapolis. Strong winds previously blew off several sheets of copper and Mr. Madson assessed the cornice and its structural supports, provided preliminary repair recommendations and opinions of cost. Mr. Madson subsequently led a team to perform a detailed water intrusion assessment of the building envelope of the hotel, which included EPDM roofs and brick masonry walls, and to provide repair recommendations to alleviate the water intrusion and opinions of cost.

Senior Engineer, Lawrenceburg Police Station, Lawrenceburg, Indiana

Mr. Madson led a team of professionals in preparing specifications for the abatement of mold-contaminated materials within the 100-year old police station. The project included sampling for mold, asbestos, and lead based paint. Following completion of the specifications, Mr. Madson wrote the bid advertisement, performed the bid opening on behalf of the City of Lawrenceburg,

recommended a contractor, and led the subsequent abatement monitoring and clearance sampling effort. The project consisted of 2 phases of abatement (the basement followed by portions of the first floor) so that the police station could remain in operation during the abatement.

Project/Senior Engineer, Extended Stay America, Nationwide

Mr. Madson performed and led staff in performing Exterior Insulation and Finish System (EIFS) related services (non-invasive and invasive assessments, and construction monitoring for installation of new EIFS) for the purpose of determining the cause and extent of water intrusion damage and at over 15 Extended Stay America (ESA) Hotels nationwide. Mr. Madson also performed technical review of reports prepared by various staff at over 25 additional ESA properties.

STRUCTURAL ENGINEERING

Senior Engineer, Condado Trio, San Juan, Puerto Rico

Mr. Madson performed a Structural Condition Assessment of the Condado Trio Hotel development, located along the Ocean Front in the Condado area of San Juan, Puerto Rico. The development included 474 guestrooms within the La Concha Hotel, the Condado Beach Hotel (Vanderbilt Hotel and the Annex), the Convention Center, and parking garages associated with the La Concha Hotel and the Annex. The facilities are reinforced concrete structures and were constructed at various times from 1919 to approximately 1974. Portions of the buildings were partially demolished and the hotels had been vacant for several years, during which time the properties suffered deterioration and vandalism. The Hotel Development Corporation (a government entity in San Juan) was interested in soliciting proposals from developers to redevelop the properties and required an assessment of the properties to determine what structural repairs were required. Mr. Madson was part of a two-person team assessing the properties and prepared a report of our findings, repair recommendations, and budgetary costs.

Senior Engineer, Lakeview Estates, Port Clinton, Ohio

Mr. Madson was the Engineer of Record for the assessment of the Lakeview Estates apartment complex in Port Clinton, Ohio. The property was developed in 1981 and contained 105 units in 5 buildings. Various settlement-related problems had been occurring over the past several years and our client requested that we assess the properties to determine the cause and to recommend repairs. Mr. Madson led a team of engineers to perform a visual and invasive assessment of the buildings, including test pits, hand auger borings, cuts through the exterior masonry walls, and interior drywall to determine the current condition and soil types/consistency for the purpose of providing appropriate repair recommendations. Based on our findings, repairing the buildings to sufficiently stop the settlement would be cost-prohibitive. However, based on the current condition, building construction, and other factors, we were able to recommend monitoring over time and making isolated repairs to cracks as they occur, thereby saving the client a significant amount of money.

Project/Senior Engineer, Greyhound Terminal, Cincinnati, Ohio

Mr. Madson performed various assessments and provided various repair and monitoring recommendations for the Greyhound Terminal in Cincinnati, Ohio. As a result of various building component settlement-related issues Mr. Madson was to assess the building to determine its condition and to provide recommendations for repair. Based on our observations, we made recommendations for a temporary repair of a settled and sagging window wall system and monitored those repairs. Mr. Madson worked with the Cincinnati Building Department and issued a letter summarizing the problems and providing justification that significant repairs were

not required, thereby saving the client a significant amount of money. Mr. Madson was hired to re-visit the facility in 2002 to update the condition assessment. At that time, monitoring was recommended to measure the cracks over time to see if movement is occurring. In early 2005, Greyhound requested Mr. Madson to coordinate a geotechnical exploration of the site to determine the cause of the settlements and provide repair recommendations. Mr. Madson then prepared construction drawings for a structural slab on grade installation at a portion of the terminal and provided construction monitoring during installation of the slab.

Project Engineer, Tornado Damaged Houses, Cincinnati, Ohio

Mr. Madson performed various assessments of homes damaged by the tornado that touched down in Cincinnati in April 1999 for State Farm Insurance Company. Assessments were performed for the purpose of determining if the houses could be re-built on the existing foundations and to assist SFIC if claims of tornado damage submitted by various home owners were valid (i.e. was the damage being claimed actually caused by the tornado or was it caused by other factors). Mr. Madson provided reports with varying recommendations for rebuilding the homes and our opinions of various types of damage to the homes that SFIC could use to make informed decisions about the claims.

PAVEMENTS/FLOOR SLABS

Senior Engineer, Great American Ballpark – Cincinnati, Ohio

Mr. Madson led a team to perform an assessment of cracked floor slab areas at the new Cincinnati Reds' stadium – Great American Ballpark – shortly after construction. Many of the slab areas throughout the stadium experienced varying degrees of distress. Mr. Madson's team performed a detailed documentation of the cracks and levels of distress in each slab area; reviewed all construction material testing reports/records; performed various destructive and non-destructive testing activities including removing cores for petrographic analysis and impact echo testing; and performed various structural analyses to provide opinions as to the cause of distress and repair recommendations.

Project/Senior Engineer, Dana Warehouse, Dry Ridge, Kentucky

Mr. Madson led a team of engineers to perform an assessment of failed areas of the slab on grade within this 320,000 square foot warehouse and an assessment of the significantly deteriorated concrete pavement used for truck traffic. Each assessment included visual observations, borings and assessment of the subgrade materials, engineering analysis of the existing slab and pavement sections, design of new slab and pavement sections, and repair recommendations. Mr. Madson also led the effort to perform construction monitoring and materials testing services for the repair of the concrete pavement.

Senior Engineer, Bridgestone/Firestone Facilities, Nationwide

Mr. Madson was the lead engineer in developing the pavement engineering program for Bridgestone/Firestone (BFS) facilities nationwide. These services included developing a master set of construction/repair specifications for 3 levels of repair including minor, moderate, and significant; developing procedures for staff to utilize in the field for assessing the pavements for BFS; and providing oversight and technical assistance to field staff performing pavement assessments in the field. Preparation of the master specifications and standard procedures allowed us to respond quickly to BFS' needs and provide value through a centralized, and standardized procedure.

Senior Engineer, 911 Irving Park Rd., Chicago, Illinois

Mr. Madson lead the assessment of the slab on grade at this vacant 50,000 square-foot, 20-year old warehouse facility. The slab was exhibiting various types of distress. Mr. Madson led a team in performing a visual assessment, coring of the floor slab, and hand auger borings to determine the consistency and quality of the subgrade soils. Following the assessment, a report was prepared detailing our findings and repair recommendations.

Project/Senior Engineer, Ryder Facilities, Nationwide

Mr. Madson led and performed assessments and prepared specifications for the repair/rehabilitation of numerous pavements for Ryder facilities nationwide. Mr. Madson provided the technical direction of the paving program and developed standard field assessment checklists and procedures, master construction specifications, and standardized procedures. Preparation of the master specifications and standard procedures allowed us to respond quickly to Ryder and provide value through a centralized reporting and a single point of contact.

CONSTRUCTION LOAN MONITORING

Mr. Madson has completed construction loan monitoring services at many projects, which included up-front pre-development document review to evaluate the feasibility of the proposed construction, cost reviews to evaluate the construction budget, and periodic construction monitoring throughout the period to evaluate the in-place construction and the contractor's payment applications. The services have allowed our clients to be confident that the proposed development could be performed for the budget amounts, the in-place construction is proceeding properly, and the draw requests are complete and accurately reflect the construction progress. Mr. Madson has performed this work for the construction and/or renovation of large office/warehouse buildings, apartment complexes, a hospital, and a condo conversion.

PHASE I AND PHASE II ENVIRONMENTAL SITE ASSESSMENTS

Mr. Madson has performed Phase I and Phase II Environmental Site Assessments for vacant lots, retail facilities, industrial facilities, and high-rise office towers.

Employment History

- Principal Engineer, National Property Consulting Group, LLC, Cincinnati, Ohio, May 2005 to Present.
- Principal Engineer, Facility Energy Consultants, LLC, Cincinnati, Ohio, October 2008 to 2010.
- Senior Engineer/Group Leader, MACTEC Engineering and Consulting, Inc., Newport, Kentucky, April 2003 to May 2005.
- Staff to Senior Engineer, Law Engineering and Environmental Services, Inc. (a former company of MACTEC), Newport, Kentucky, July 1995 to April 2003
- Engineer Co-Op (Co-Operative Education), Viox and Viox, PSC, Erlanger, Kentucky, Non-Academic Quarters 1992 through 1994.