



## TODD BIRKEL, STRUCTURAL ENGINEER

### CURRICULUM VITAE

#### AREAS OF EXPERTISE

Public and Municipal Buildings and Expansions  
Evaluation of Existing Structures  
Foundations for Pre-engineered Superstructures  
Tanks, Chambers and Structures for Liquid Storage or Conveyance

#### EXPERIENCE

26 years of experience in a wide variety of projects and material designs ranging from small retail buildings to large airport and convention facilities. Expertise includes the design of structural steel, reinforced concrete, wood, masonry, hybrid roof systems (wood and steel), and roof raising. A structural/architectural education and well-rounded experience foster efficient and productive communication with design professionals, contractors and clients.

#### AIRPORT

**Dubuque Regional Airport Terminal Building – Dubuque, IA:** Senior structural engineer for new single-story terminal building. The structure features horizontal and tilted cantilevered roof surfaces separated by clerestories and connected by stone monolith walls. The initial construction will accommodate three airlines, three rental car companies, and three arrival/departure gates, with the ability to expand on three sides to accommodate future growth at the airport and the surrounding community.

**Midway International Airport North Security Hall Expansion - Chicago, IL:** Senior project engineer for three-story addition to the existing concourse to allow re-organization of the TSA security process. The structure featured numerous floor-to-floor trusses to allow the new construction to cantilever over Cicero Avenue, and meet the existing bridge structure. The tight site conditions and existing utilities dictated additional steel truss and concrete beam transfer systems near grade level.

**O'Hare International Airport (Terminal 5) - Chicago, IL:** Structural project engineer for a \$350,000,000 airport terminal, featuring 15,300 tons of composite and exposed structural steel. Responsibilities included design, detailing and coordination of floor framing system. Participated in on-site field observations of construction. Coordinated with PMO, City of Chicago and airline representatives to modify floor framing during construction to match revised programming needs. Detailed and coordinated nearly 1,000 beam web penetrations.

#### MUNICIPAL/PUBLIC

**Ambulatory Addition - Elizabeth, IL:** Senior structural engineer for two-story wood and steel framing addition to existing facility.

**Arlington Booster Station - Duluth, MN:** Senior structural engineer for a new single-story building embedded into a hillside to house new booster pumps.

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**Bowling Alley Demolition** – *Viola, WI*: Senior structural engineer for evaluation to assess the existing conditions and propose a means of demolishing the existing building while retaining the structural integrity of the adjacent Old Opera House building.

**City Hall Relocation** – *Galena, IL*: Structural Engineer for renovation and expansion of existing single-story building. The renovation included relocation of an interior column to enlarge the new board room and installation of new beam web penetrations to allow mechanical ductwork to pass through the central beam line. The expansion included a front canopy, entry and restrooms accessible from the exterior.

**Davis County Courthouse** - *Bloomfield, IA*: Senior structural engineer for renovation of clock and bell tower above the Davis County Courthouse building.

**Doughty Road Building** - *Ladysmith, WI*: Senior structural engineer for building remodel including exterior walls modifications, roof framing reinforcement and new self-supporting mezzanines.

**Elizabeth Link Peace Park Redevelopment** - *Madison, WI*: Senior structural engineer for single story irregularly shaped building incorporating a complex system of banners and awnings.

**Krape Park – Restroom** – *Freeport, IL*: Structural engineer for new single-story structure for new restrooms.

**Main Lift Station** - *Elkader, IA*: Senior structural engineer for renovation of existing lift station to raise the surrounding construction out of the 100-year flood plain. The project included replacement of the Control Building, extensive rework of existing dry and wet wells, as well as new foundation walls surrounding the perimeter of the new platform.

**MBR Treatment Facility, Stockbridge-Munsee Community** - *Bowler, WI*: Senior structural engineer for facility featuring sub-grade concrete process tanks and above-grade process buildings.

**McCormick Place Convention Center South Expansion (Mc3D)** - *Chicago, IL*: Structural project engineer for a \$675,000,000 design/build structure. Project was a 2,400,000 square foot expansion (3,200,000 square feet of structure) to the existing facility, including a galleria connecting the new and existing exhibition halls. Responsibilities included design, detailing and coordination of eastern meeting halls, ballrooms and elevated loading docks. Coordinated and collaborated with other design professionals regarding adjacent structural elements that included an elevated roadway, underground water retention system, and composite pier/caisson foundation system.

**McCormick Place Convention Center West Expansion (Mc4West)** - *Chicago, IL*: Senior structural engineer for architectural/engineering components that required special coordination including masonry walls, pylons, portal signage and hybrid interior partitions.

**Public Library** - *Wautoma, WI*: Senior structural engineer for remodel of building interior including modifications of masonry bearing walls, and new entry canopy.

**Public Safety Building – Additions and Remodel** - *Rhineland, WI*: Senior structural engineer single story additions to fire and police departments incorporating open web steel roof joists, and reinforced masonry walls.

**Public Works Building** - *Colfax, WI*: Senior structural engineer for building remodel including new entry canopies and new self-supporting mezzanines.

**Public Works Garage** - *Three Lakes, WI*: Senior structural engineer for concrete foundation supporting pre-engineered building above.

**Retaining Walls – Keystone Park & North River Wall** - *Elkader, IA*: Senior structural engineer for retaining walls along the Turkey River to replace existing construction swept away by flooding.

**Salt Shed** - *Asbury, IA*: Senior structural engineer for 1,200 sq. ft. salt storage structure with 5 ft. tall concrete knee walls supporting a pre-engineered fabric super-structure.

**Senior Community Center and Library Addition** - *North Freedom, WI*: Senior structural engineer for single story building addition incorporating a senior center, a library, as well as a public works garage.

**Signature Flight Support** - *Chicago, IL*: Senior project engineer for airport terminal for private airplanes. The structure features extensive details and design for air-side and land-side canopies.



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**Swine Pavilion** – *West Liberty, IA*: Structural engineer for renovation of existing multi-tiered open wood roof structure at Muscatine County Fair Grounds.

**Utility Building and RBC Building** - *Siren, WI*: Senior structural engineer for concrete foundation supporting pre-engineered buildings above, as well as interior concrete tanks to house the rotating biological contactors (RBC's).

**Vilas Road Pump Station** - *Cottage Grove, WI*: Senior structural engineer for waste water pump station with a single story building above grade and two sub-basements levels for wet wells and pump rooms extending 45 feet below grade.

**Waste Water Facility Upgrade** - *Athens, WI*: Senior structural engineer for facility including RBC tank & foundation for pre-engineered enclosure, as well as screen building and UV structure.

**Waste Water Treatment Plant** - *Arpin, WI*: Senior structural engineer for facility including multi-cell septic tank, and single story control building.

**Waste Water Treatment Facility** - *Clyman, WI*: Senior structural engineer for facility including multi-cell septic/process tank, splitter basin and Utility Building.

**Waste Water Treatment Facility** - *Elkader, IA*: Senior structural engineer and architect for new waste water treatment facility including Headworks Building, and sub-grade Aeromod concrete tank system.

**Waste Water Treatment Facility** - *Hedrick, IA*: Senior structural engineer and architect for new waste water treatment facility including Headworks Building, and sub-grade Aeromod concrete tank system.

**Water Treatment Facility** - *Hubbard, IA*: Senior structural engineer and architect for new water treatment building.

**Water Treatment Facility** - *Hurley, WI*: Senior structural engineer for multi-level structure incorporating wood roof trusses, masonry bearing walls, precast concrete planks, and concrete retaining walls.

**Waste Water Treatment Facility** - *Leon, IA*: Senior structural engineer and architect for new waste water treatment facility including Headworks Building, and sub-grade Fluidyne concrete tank system.

**Waste Water Treatment Facility** - *Peninsula State Park, Door County, WI*: Senior structural engineer for renovation of existing concrete storage tanks including replacement of precast concrete roof planks with new cast-in-place concrete roof slab.

**Waste Water Treatment Facility** - *Port Byron, IL*: Senior structural engineer and architect for new waste water treatment facility including Headworks Building, and sub-grade Aeromod concrete tank system.

**Waste Water Treatment Facility Improvements** - *Winneconne, WI*: Senior structural engineer for facility modifications including foundation for sludge enclosure superstructure, new walls within compact plants, and partially submerged RAS pump station.

**West 32<sup>nd</sup> Street Detention Facility** - *Dubuque, IA*: Senior structural engineer for 20 ft. x 20 ft. x 20 ft. storm water concrete junction chamber, and outflow structure

**Westfield Senior / Community Building** - *Westfield, WI*: Senior structural engineer for single story building featuring wood roof trusses supported by interior and exterior wood bearing walls.

### ROOF RAISING

**Alberto Culver** - *Melrose Park, IL*: Senior project engineer for a 60,000 square foot expansion of the existing warehouse/office facility. The project included raising 40,000 square foot of the existing roof structure approximately 25 feet to allow for the installation of two new elevated floors. While the existing caisson foundations were capable of supporting the additional load, some new spread footings were required. The surrounding lower roof structure was reinforced to support drifting snow. The horizontal cross bracing system was modified and reinforced. Extensive details were created to depict the pre-raised, during raising and post-raised conditions.

**Albertsons, Inc (Jewel)** - *Melrose Park, IL*: Senior project engineer for a 150,000 addition to the north end of the existing dry grocery warehouse. Project also included raising the existing 650,000 roof structure 20 feet to create a space that was 38 feet clear. The existing 50 year old roof structure was raised in five sections.



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Each section needed to act independently, so the existing horizontal cross bracing system was modified and reinforced. Temporary beams and columns support the roof at the junction of raised and unraised structures. Extensive details were created to depict the pre-raised, during raising and post-raised conditions. Numerous coordination sessions with the lifting contractor and the construction manager were required to refine the construction sequence.

#### INDUSTRIAL/MANUFACTURING/DISTRIBUTION

**ACCO Brands USA, LLC. Facility Assessment & Master Plan** - *Booneville, MS*: Senior Structural Engineer for a facility assessment to assess ACCO's existing Booneville, Mississippi facility for manufacturing, warehouse and distribution requirements and to provide recommendations to meet current operational goals for this site, as well as, a master plan report is to examine potential expansion alternatives and recommendations related to building systems, palette count, phased expansion and associated costs to implement.

**Albertsons, Inc.** - *Brea, CA*: Structural project engineer for the renovation of an existing 1,500,000 square foot dry grocery and perishable distribution center. The project featured relocation of building shear walls, removal of bearing walls, installation of mechanized conveyor systems, and a 50,000 square foot freezer expansion. The project employed phased construction to enable continuous operation of the facility during the renovation.

**Albertsons, Inc.** - *Brea, CA*: Senior project engineer for 100,000 square foot freezer expansion to perishable distribution center. The project includes a hybrid roof framing system of open web joists and plywood roof sheathing.

**Albertsons, Inc.** - *Franklin Park, IL*: Senior project engineer for 200,000 square foot freezer expansion to perishable distribution center.

**Albertsons, Inc.** - *Plant City, FL*: Structural project engineer for an addition to a freezer at an existing distribution center.

**Albertsons, Inc.** - *Ponca City, OK*: Structural project engineer for the renovation of an existing warehouse facility. The project featured new structural steel to support relocated conveyor systems and mechanical units.

**Albertsons, Inc.** - *North Salt Lake, UT*: Structural project engineer for an addition to the meat and deli areas at an existing distribution center.

**Albertsons, Inc.** - *Tulsa, OK*: Structural project engineer for new 750,000 square foot dry grocery and perishable distribution center. The project included joists, continuous steel beams, concrete tilt-up wall panels, and drilled pier foundations. The facility features an automated conveyor system in the dry grocery and perishable halves of the building.

**American Plywood Association, Engineered Wood Systems** - *Tacoma, WA*: Structural project engineer for a study to compare construction costs of steel, hybrid and all wood roof framing systems in Atlanta, Chicago, Denver, Houston and Memphis.

**Army and Air Force Exchange Services (AAFES)** - *Lathrop, CA*: Project structural engineer for a new 750,000 square foot distribution center with administrative and retail support spaces. The project includes a hybrid roof framing system of open web joists and plywood roof sheathing. The facility features an extensive conveyor system supported by mezzanine and roof framing.

**Anchor Food Products, Inc.** - *Pecos, TX*: Structural project engineer for the expansion of a food processing facility. Responsibilities included on-going review of the existing pre-engineered structure to support upgraded processing/mechanical equipment.

**Brown Printing, Inc.** - *Woodstock, IL*: Structural project engineer for press room and bindery expansion to an existing warehouse and distribution facility. The press foundation feature drilled piers to minimize settlement and deflection.

**Cranberry Marsh Control Structure** - *Tomah, WI*: Senior structural engineer for water retaining control structure between cranberry bog sections.



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**Eastland Feed and Grain** - *Shannon, IL*: Senior structural engineer for elevated grain bin structure above pre-engineered building.

**Favorite Brands International, Inc.** - *Multiple Locations*: Structural project engineer for incorporating mechanical units and process equipment into existing candy processing facilities.

**Fred Meyer, Inc.** - *Chehalis, WA*: Structural project engineer for an addition to a soft goods warehouse distribution center.

**Fred Meyer, Inc.** - *Puyallup, WA*: Structural project engineer for an addition to a dry grocery and perishable distribution center. The addition features a hybrid framing system of open web steel joists and plywood roof sheathing.

**Huntley Industrial Complex** - *Huntley, IL*: Structural project engineer for a 150,000 square foot speculative industrial building.

**Keebler, President Bakery Warehouse Addition** - *Augusta, GA*: Senior project engineer for addition to the existing distribution facility. The project included the foundation system for a pre-engineered building and an attached office area. The super-flat slab-on-grade received a Golden Trowel Award for the flattest floor of the year in its category, "defined-traffic, Laser Screed wide placement".

**Kroger Company Warehouse/Distribution Center** - *Memphis, TN*: Structural project engineer for new 550,000 square foot dry grocery and perishable distribution center. The project included joist, joist girders, continuous steel beams, concrete tilt-up wall panels and spread footings.

**Medline Industries, Inc. Distribution Center** - *Aberdeen, MD*: Senior project engineer for a 292,500 square foot medical supply distribution center. The design/build project features a steel joist framing system supported by steel columns and exterior tilt-up concrete panels. The foundation system consists of continuous and isolated spread footings.

**Medline Industries, Inc. Distribution Center** - *Dallas, TX*: Senior project engineer for a 125,702 square foot medical supply distribution center addition. The design/build project features a steel joist framing system supported by steel columns and exterior tilt-up concrete panels. The foundation system consists of drilled concrete piers extending approximately 12 feet below existing grade, because of existing expansive soils.

**Medline Industries, Inc. Distribution Center** - *San Antonio, TX*: Senior project engineer for a 193,908 square feet medical supply distribution center. The design/build project features a steel joist framing system supported by steel columns and exterior tilt-up concrete panels. The foundation system consists of drilled concrete piers extending approximately 18 feet below existing grade, because of existing expansive soils. Senior project engineer for two 40'-0" wide boxed-culvert bridges. The structures consist of a multi-span slabs supported by 9'-0" square culvert boxes. The approach pavement features cantilevers skewed wing walls at each end of the culvert.

**Ruiz Food Products Inc. Food Processing Facility** - *Dennison, TX*: Structural engineer for the remodeling, renovation and adaptive re-use of a 262,000 square foot vacant plant into a frozen Mexican entrée production facility for the largest manufacturer of hand held frozen Mexican entrees in the world. Project includes 29,000 square feet of administrative/welfare space, 48,000 square feet of freezer space, 60,000 square feet of process space and 24,000 square feet of product storage and loading docks.

**Seneca Foods Corp.** - *Janesville, WI*: Senior structural engineer for pallet stacking analysis to address OSHA issues.

**Smith's Food & Drug Centers, Inc.** - *Tolleson, AZ*: Structural design engineer for new 1,000,000 square foot dry grocery and perishable distribution center.

**Top Notch Facility Addition and Renovation** - *Galena, IL*: Senior structural engineer for pre-engineered building addition, and extensive renovation of existing building structure and façade.

**Triumph Foods, LLC. Pork Processing Facility** - *St. Joseph, MO*: Lead structural engineer for a new 625,000 square foot hog processing facility. HSAA requirements mandated extensive details to insure the "clean" design of all structural systems.



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**University of Illinois at Chicago (UIC) - Warehouse - Chicago, IL:** Senior project engineer for renovation of existing 50,000 square foot, two-story warehouse facility. The project included repair and/or replacement of the existing wood structure. Half of the second floor was reinforced with new steel beams and columns to support the storage of bookshelves.

**University of Illinois - South Farms Relocation - Urbana, IL:** Senior project engineer for 20 new barn structures and an office to house cattle and sheep. The facility features a system of extensive pits for manure management.

**Watson Foods Company, Inc. - West Haven, CT:** Structural project engineer for the expansion of a polymer processing facility. A sloping site and existing foundations required extensive detailing for the new foundation system. The roof structure was designed to accommodate future mechanical equipment within each bay.

**WinCo Foods - Ceres, CA:** Senior Project Engineer for a 750,000 square foot grocery distribution center.

#### TRANSPORTATION

**City of Chicago, Polk Street Viaduct Reconstruction - Chicago, IL:** Structural project engineer for the reconstruction of Polk Street between Canal Street and the Chicago River. The existing condemned viaduct was removed and replaced with a new steel super-structure to span across the existing railroad tracks.

**Dubuque Intermodal Transit Center - Dubuque, IA:** Structural engineer for re-shoring system supporting new multi-story concrete parking ramp.

**Illinois Department of Transportation - Illinois:** Senior project engineer for pump station buildings #41, #43 and #52. The structures house underground pumps to raise rainwater near depressed roadways.

**Illinois State Toll Highway Authority (Plaza 37) - Illinois:** Structural project engineer for modifications to an existing canopy to support new signs.

**Illinois State Toll Highway Authority (Plaza 51) - Illinois:** Structural project engineer for the renovation of York Toll Plaza. The project included the addition of a stair structure within a toll island connecting an existing tunnel to grade. The project also included modifications to the existing canopy to support new signs.

**Lakeshore East Development Field Boulevard Bridge - Chicago, IL:** Elevated roadways serving a 27-acre mixed-use development located at the intersection of the Chicago River and Lake Shore Drive. Work included a 5-span bridge spanning a total of 350 feet.

**Open Road Tolling Project - Plaza 37 and 51 - Illinois State Toll Highway Authority - Chicago, IL:** Lead Structural Engineer reconstruction of Toll Plaza 51 (York Road) and Toll Plaza 37 (Joliet Road) as part of the Illinois State Toll Highway Authority (ISTHA) Open Road Tolling (ORT) Program. The project is being delivered on an ultra-aggressive schedule requiring the design team to show its flexibility and adaptability in the face of constantly changing client expectations, site conditions, scope requirements and project delivery methods. The project scope includes conversion of the existing conventional plazas to conform to the new ORT concept which allows for full speed operation for I-Pass users. The plazas will be completely reconstructed and widened to accommodate the new plaza configuration. The approach pavement to the plazas will also be reconstructed and widened and several bridges will be reconstructed and/or widened as part of the project scope. Also included in the scope of services are roadway and plaza lighting design, signing and pavement marking, retaining wall design, drainage improvements, environmental coordination, permit applications and plaza building site design. The project included the addition of a stair structure within a toll island connecting an existing tunnel to grade. The project also included modifications to the existing canopy to support new signs.

#### MUSEUM/UNIVERSITY/SCHOOL

**Brookfield Zoo, Primate House - Brookfield, IL:** Structural project engineer for the renovation of an existing structure to install new skylights and sprinkler/rain system.



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**Dalzell Field, Senior High School – Dubuque, IA:** Senior structural engineer for the new ‘Home Support Buildings’ and new ‘End Zone Support Buildings’. The ‘Home Support Buildings’ included the west entry, concessions, restrooms, grandstands and press box. The ‘End Zone Support Buildings’ included the main entry, and the team rooms. The project also included an extensive system of retaining walls to accommodate the existing hilly terrain, the new two-tiered grandstand, the new plaza level, and various new ramps, staircases and elevator connecting the existing school facility to the new multi-level football complex. The Iowa Ready Mix Concrete Association bestowed an Excellence in Concrete Award for the categories of Commercial/Industrial Decorative and Public Works Recreational.

**Eastern Illinois University - Charleston, IL:** Senior project engineer for two-story building to house clinical and human services for university students. The structure features extensive basement and utility tunnel systems for mechanical equipment and piping connections.

**Museum of Science & Industry - Chicago, IL:** Structural project engineer for 3-story underground lobby to link the new underground garage structure with the existing museum. Project responsibilities included design of composite steel beams and coordination of new to existing structure.

**University of Dubuque - Football Scoreboard and Light Masts - Dubuque, IA:** Senior structural engineer for the electronic football scoreboard concrete support pylons and spread footing foundation, as well as the light mast concrete drilled pier foundations.

**University of Dubuque - Housing Development - Dubuque, IA:** Senior structural engineer for multiple four-story buildings for student housing. The structure featured a hybrid system of wood floor framing with light gage steel stud bearing walls.

**University of Dubuque – Practice Facility – Dubuque, IA:** Senior structural engineer for foundation system supporting pre-engineering super-structure enclosing football practice field. The foundation features retaining walls and sub-grade tension ties to resist lateral forces imposed by super-structure frames that span more than 190 feet.

**University of Dubuque – Stoltz Sports Center – Dubuque, IA:** Structural engineer for expansion of existing gymnasium. The structure features new trusses-joists and new truss-girders to enable remove of existing masonry bearing wall, and expansion of gymnasium seating capacity.

**University of Illinois, Chemistry and Life Science Laboratory - Urbana, IL:** Structural design engineer for 6-story and 8-story laboratory complex. The structure features a composite stub girder framing system and column/girder tree construction.

**Washington Middle School Expansion – Dubuque, IA:** Structural Engineer for two-story addition to existing school. The structure features open web steel joists at the roof and precast hollow core concrete slabs at the second floor.

#### OFFICE/RETAIL

**500 West Monroe Building - Chicago, IL:** Structural design engineer for a 45-story office building with 8-story attached garage. Responsible for design of normally reinforced concrete beams, concrete columns, concrete transfer walls, and caissons.

**Apple Computer Flagship Store - Chicago, IL:** Senior project engineer for extensive renovation to existing four-story concrete building on Michigan Avenue. The renovation included removal and replacement of the top two floors. The new structure features numerous transfer girders and floor to floor trusses to accommodate relocated columns.

**Badgerow Office Building – Sioux City, IA:** Structural Engineer for renovation of staircase and egress passageway through existing 12-story office building.

**Bank Block Building – West Union, IA:** Structural engineer for façade and interior renovation of existing three-story building. Structure featured reinforcement of existing timber roof trusses.



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**Blue Cross/Blue Shield Data Center Facility - Waukegan, IL:** Structural project engineer for a 90,000 square foot single story building capable of withstanding seismic, tornadic and blast forces. The facility protects the company's most valuable asset, its data.

**Illinois Center Complex - Chicago, IL:** Structural project engineer for on-going tenant work. Projects ranged from coring slabs for conduit to designing structural steel reinforcement for existing concrete flat slabs.

**ISCAR / Ingersoll - Rockford, IL:** Senior project engineer for tools manufacturing plant and three story marketing office building. The project features composite steel beams and bowstring trusses spanning 115 feet.

**Jewel Express - Multiple Locations:** Senior project engineer for various convenience stores and gas station kiosks adjacent to Jewel grocery stores in the Chicago area.

**One First National Plaza - Chicago, IL:** Structural project engineer for on-going tenant work.

**Retail Facility - Eldridge, IA:** Senior structural engineer and project manager for single-story retail facility incorporating four tenant spaces including McDonalds and Godfather's Pizza.

**Retail Facility - Anamosa, IA:** Senior structural engineer and project manager for single-story retail facility incorporating five tenant spaces including McDonalds.

**Silo Electronics Stores - Chicago, Darien, Lombard & Villa Park, IL:** Structural project engineer for a prototypical retail store.

**Stony Island Retail Plaza - Chicago, IL:** Senior project engineer for 40,000 sq. ft., 25,000 sq. ft. and 20,000 sq. ft. single story buildings. The structure features open web joists, cantilevered beams and masonry bearing walls.

**Wright Block Building - Lancaster, WI:** Structural engineer for a historic renovation and re-design of a 1900 three-story brick building in downtown historic district. Re-supported existing wood bearing walls with new engineered wood post and beam system to align with new interior wall configuration. Converted existing first floor eight business layout into new four business layout, and converted upper floors into thirteen new townhouse style apartments.

**WMS Gaming - Chicago, IL:** Senior project engineer for renovation of existing manufacturing building into new office space. The existing structure required reinforcement for new mechanical units, and modifications for new openings in masonry bearing walls.

### HOTEL/HOUSING

**Benedictine Sisters of Perpetual Adoration - Clyde, MO:** Senior structural engineer for renovation, partial removal and addition to existing facility. Project features numerous opening through existing masonry walls requiring a flexible system of reinforcement and lintels.

**Friendship Manor - Dementia Renovation - Rock Island, IL:** Structural engineer for renovation of existing 3-story wood structure associated with elder care facility. Project features installation of new double tube beams to enable removal of bearing walls beneath the second floor framing level.

**Historic Park Inn - Mason City, IA:** Senior structural engineer for shoring system associated with masonry wall renovation.

**Radford Place Apartment Complex - Dubuque, IA:** Senior structural engineer for foundation system supporting 4-story modular apartment superstructure.

**Raymond Place Condominiums - Dubuque, IA:** Senior structural engineer for three-story condominium building incorporating wood and steel framing supported by a structural slab and concrete drilled piers on a bluff overlooking the downtown area.

**Roy Mann Observation Tower, Apple Canyon Lake Property Owners Association - Apple River, IL:** Senior structural engineer for inspection report documenting the condition, proposed renovation, and proposed ongoing maintenance for the existing multi-level wood tower overlooking Apple Canyon Lake.

**Segmental Retaining Walls, Applewood III - Dubuque, IA:** Senior structural engineer for multiple retaining walls surrounding a new housing facility.





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### REPORTS

**Finkbohner Gymnasium** – *Hopkinton, IA*: Structural evaluation of existing floor and roof framing associated with former Lenox College building.

**Kettle Moraine Egg Ranch** – *Kewaskum, WI*: Structural evaluation and reinforcement of existing barn structure to house new open range egg laying facility.

**McGregor – Marquette Center for the Arts** - *McGregor, IA*: Structural evaluation report for existing three-story building comprised of wood framing and masonry bearing walls.

**Multiple Buildings** – *Britt, IA*: Structural evaluation of four disused multi-story buildings within the downtown area.

**Old Nursing Home** – *Shannon, IL*: Structural evaluation of existing multi-story buildings associated with former nursing home facility.

**Former Rath Packing Company - Office Building** – *Waterloo, IA*: Structural evaluation of existing penthouse level consisting of wood framing.

**Sullivan Hardware / Opera House** - *McGregor, IA*: Structural evaluation report for existing two-story building comprised of wood framing and masonry bearing walls.

**Taylor / Urlich Building** – *Olin, IA*: Structural evaluation report for existing single-story building.

<b>Date</b>	<b>Employer</b>
07/13-Present	Hooting Coyote LLC, 1553 W Morley Road, Elizabeth, IL 61028
05/07-07/13	MSA Professional Services, 9567 U.S. Route 20 West, Galena, IL 61036
08/96-05/07	A. Epstein and Sons International, Inc., 600 West Fulton, Chicago, IL 60661
03/93-08/96	Alfred Benesch and Company, 205 North Michigan Avenue, Chicago, IL 60601
02/93-03/93	Skidmore Owings and Merrill, 224 South Michigan Avenue, Chicago, IL 60604
04/90-02/93	Perkins and Will, 330 North Wabash, Chicago, IL 60611
11/89-04/90	Skidmore Owings and Merrill, 224 South Michigan Avenue, Chicago, IL 60604
05/88-11/89	Samartano and Company, 221 North LaSalle, Chicago, IL 60601

### **EDUCATION**

Bachelor of Science, Architectural Studies, University of Illinois, 1986

Master of Architecture, Structural Option, University of Illinois, 1988

### **PROFESSIONAL AFFILIATION**

Structural Engineer, IL, 081-005310

Professional Engineer, WI, 34733-006

Professional Engineer, IA, 16406

Architect, IL, 001014520

