



THOMAS W. OKITE, P.E., CFM | Project Manager
Rockford, IL 61107
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Mr. Okite is an experienced civil engineer with a broad background in technical design, project engineering, and management. Past experience has included a variety of municipal, commercial, and residential projects. He specializes in stormwater management and erosion control, traffic and transportation engineering, water distribution systems, lift and pump stations, construction observation and engineering, and residential and commercial subdivision site planning and design. He is a Certified Floodplain Manager. Mr. Okite joined the firm in 2020 and is a Project Manager in our Rockford office.

EDUCATION

- Northern Illinois University, Master's, Business Administration, 2006
- University of Wisconsin – Madison, Bachelor of Science, Civil Engineering, 1998

REGISTRATION

- Professional Engineer, Illinois, 062-059584, 2007
- Professional Engineer, Iowa, 19898, 2010

CERTIFICATIONS

- **IDOT, Erosion and Sediment Control Module III: Inspection**
- IDOT, Documentation of Contract Quantities, #19-15637
- IDOT, STTP-S33 Soils, #3472065

MEMBERSHIPS

- Illinois Society of Professional Engineers
- Wisconsin Society of Professional Engineers
- Illinois Association for Floodplain & Stormwater Management

PREVIOUS EMPLOYMENT

- Artisan Consulting Engineers, LLC, Principal, 2009-2020
- Arc Design Resources, Inc., Civil Engineer, 1999-2009

Florence Township, Loran Road Relocation – Project Manager

Phase I, II and III engineering services for the relocation of approximately 1000-feet of Loran Road. The scope of work includes topographic survey, parcel research, roadway design, culvert design, ROW acquisition including title commitment, appraisal, review appraisal and negotiation, and permitting. This project is being funded by the Federal Emergency Management Agency.

City of Rockford, Charles Street Rehabilitation – Project Manager

Providing concept planning services for the reconstruction of Charles Street from 28th Street to Parkside Drive. The proposed improvements include the removal of an existing median, adjust lane widths and the addition of a multi-use path on the south side of the roadway. Scope of services includes topographic survey, evaluation of lane widths, a recommendation for a revised pavement cross-section to have a multi-use path, complete streets concepts, concept plans, ADA compliance, and soil evaluation. Underground and aerial utilities are also being reviewed to help coordinate relocation and upgrades as needed. The review of existing traffic signals and recommendations for upgrades are also included in the project.

City of Rockford, Arden Court Drainage Pond – Project Manager

Providing engineering services related to the urban flooding analysis at the Chelsea Avenue/Arden Court Drainage Pond in the City. The Arden Court Pond has a documented history of flooding problems when the pond overtops it overflows to several streets and related properties. Chastain is analyzing the drainage pond to understand further the source and scope of the urban flooding issue affecting this area. The study will utilize Bentley's CivilStorm and PonPack software to model the existing conditions and to perform the alternative analysis. Scope of service includes a written drainage study report with exhibits, concept plans of the proposed improvements with possible public outreach.

Village of Bolingbrook, Canterbury Culvert – Hydraulic Engineer

Providing Phase I & II engineering services for removal and replacement of the culvert under Canterbury Lane for the Village. This project is locally funded using. The culvert conveys Lily Cache Creek under Canterbury Lane, which consists of 3 CMP elliptical barrels in severely deteriorated condition. Canterbury Lane is a heavily traveled collector road. Scope of services includes survey, geotechnical services, culvert hydraulics modeling, preparation of Phase I documents and Phase II plans, specifications, and cost estimates.

DeKalb County Highway Department, Waterman Road Culvert Extension – Project Manager

Phase I study and Phase II design engineering services for culvert extension under Waterman Road, with adjacent ditch modifications. The scope of work includes the preparation of the environmental

permitting, ditch hydraulics, structural design of the box culvert extension, an extension of the existing storm sewer, the design of new ditches according to the revised hydraulics, preparation of ROW plats as needed, and pavement patching.

Metropolitan Water Reclamation District of Greater Chicago - Palos Heights Stormwater Management Phase II Planning & Design, Chicago, Illinois – Project Engineer

Chastain provided Stormwater Management Phase II Planning and Design services as part of a regional stormwater initiative. Project goals were to identify causes and develop a plan to mitigate chronic street and yard flooding in the Cypress Drive area. There are several properties along a tributary to Navajo Creek which flood with regular frequency. Planning efforts included field survey of approximately six city blocks including streets, side yards and rear yard areas, conduct property owner interviews, and perform hydrologic and hydraulic modeling to simulate current conditions and evaluate proposed solutions. Design efforts included development of design plans and contract documents to implement a preferred mitigation alternate. Mitigation efforts included a combination of flood storage, new culverts and new storm sewer collection systems. Hydrologic and hydraulic modeling were completed utilizing a combination of HEC-HMS, TR-20, HEC-RAS, and XP-SWMM. Project deliverables were a Preliminary Drainage Report of findings and solutions inclusive of preliminary (30%) plans of the selected alternative.

Macon County Highway Department, Reas Road Bridge Replacement – Hydraulic Engineer

Phase I and Phase II services to replace the two bridges on Reas Bridge Road (CH 24) over Lake Decatur. The pair of bridges will be built on the Beltway alignment and will be of full width through the lake corridor per the Beltway Phase I study. Scope of services included topographic survey, hydraulic survey using fathometer, permitting (US Army Corp, IDNR, IEPA), shop drawings as needed, bridge and hydraulic phase I work (BCR, TSL, PBDHR), environmental documents (Project Development Report and ESR), guardrail improvements, final plans/specs/bid documents, and ROW. Project is being financed using state funds and MFT funds. Engineer's estimate of construction cost is \$10 million.

Previous Experience:

Location Design Studies - Rehabilitation

Mr. Okite has supervised and performed final review of location design studies. He has developed and evaluated alternatives that are appropriate for rehabilitation of existing highways. He has created and supervised engineering plans involved with geometric design, bridge improvements, pavement rehabilitation, safety investigations, drainage analysis and public involvement.

Sample Project Experience

Principal in charge of creating several of the following: Watermain extension designs, drainage analysis, storm sewer designs, sanitary sewer designs, specifications, probable costs estimates of proposed improvements, evaluation of all permitting required, Geotechnical and Phase I Environmental reports, Review PSG/IDOT/FHWA Meeting Minutes & Review Public Involvement Documentation.

- 6 Hononegah Rd. Widening of Roadway (Winnebago County, IL)
- N. Avenue Complete Replacement (USACOE Rock Island Arsenal, IL)
- Fairwind Blvd, Widening and South Extension of Roadway (Sandwich, IL)
- IDOT ADA Compliance Plan, (Oregon and Polo, IL)
- Jane Addams Tollway Reconstruction and Add a Lane (Boone & Winnebago, IL)
- US 30, No Build Assessment Work Order 1 IDOT PTB 175 Item 17 Job No. P-92-022-14 (Morrison, IL)
- US 20, Traffic Analysis Work Order 3 IDOT PTB 175 Item 17 Job No. P- 92-022-14 (Freeport, IL)
- IDOT I-280 Bridge Crash Analysis (Milan, IL)

Hydraulic Reports – Waterway Typical and/or Complex

Mr. Okite has supervised and performed work that includes hydrologic / hydraulic analysis and modeling for culverts and bridges. He is proficient in the use of USGS regression equations and steam gage weighting analysis as well as applying hydrologic modeling tools such as HEC-1, HEC-HMS, and TR-20. He has performed critical storm duration analysis and reservoir/storage routing analyses. He has

experience that includes complex floodplain geometry, urbanized settings with sensitive flood receptors, and floodplain management studies such as FEMA revisions, flood optimization studies, and waterway studies. He has thorough knowledge of IDOT drainage policies and procedures, Illinois drainage laws and IDNR-OWR, USACOE and other regulatory agencies.

Sample Project Experience

Principal in charge of creating several of the following: hydraulic design and waterway information tables, hydrologic/hydraulic analysis of

watersheds, drainage routes that impact improvements, design development of any alternate opportunities, cross sections, permits including USACOE, IDNR, IEPA, specification writing, construction documents, and construction support.

- Interstate Boulevard, Hydraulic Reports (City of Loves Park, IL)
- Dement Road & IL Route 38, Hydraulic Reports (City of Rochelle, IL)
- Picken Culverts Hydraulic Reports (Winnebago County, IL)
- IL Route 173 Channel Modification Hydraulic Reports (Village of Machesney Park, IL)
- Jane Addams Tollway Reconstruction and Add a Lane (Boone & Winnebago, IL)
- Coon Run Levee District Hydraulic Reports (Scott & Morgan Counties, IL)
- IDOT PTB 188, I-180 Bridge - (Bureau, Putnam County, IL) assisted design, completed survey 2019, Prime Burns & McDonnell

Special Studies - Location Drainage

Mr. Okite has supervised and performed final review of engineering services necessary for the hydrologic / hydraulic analyses for highway drainage facilities. This work consists of the design of ditches, storm drains, and storage facilities. He has exceptional competencies with the use of hydrologic and hydraulic computer modeling systems. He is very familiar with the permit rules of IDNR- OWR (Office of Water Resources) and other regulatory agencies, and Illinois drainage laws.

Sample Project Experience

Responsible for the preparation of hydraulic reports, channel modifications, wetland mitigation plans, water quality certifications, SWPPP and erosion control plans, impact mitigation permits; floodplain management services including ordinances, letters of map change, floodplain protection, restoration and planning.

- N. Avenue Complete Replacement (USACOE Rock Island Arsenal, IL)
- Dement Rd. Hydrologic/Hydraulic Analysis (Rochelle, IL)
- Interstate Blvd. Hydraulic Design, Joint Permit Application (Loves Park, IL)
- Picken Farm Culverts Hydraulic Design, Permit Coordination (Winnebago County, IL)
- Route 173 Channel Modification Hydraulic Analysis (Machesney Park, IL)
- Jane Addams Tollway Reconstruction and Add a Lane (Boone & Winnebago, IL)
- Coon Run Levee District Dredging (Scott & Morgan Counties, IL)

Highways - Roads & Streets

Mr. Okite has served as Lead Engineer for Design on a number of local roads and streets projects. This work has included improvement studies, safety studies, pavement and geometric designs, roadway permitting, stop control and signal warrant analyses, Intersection Design Studies and signal designs.

Sample Project Experience

Principal in charge of engineering services on roadway construction projects including design, administration, plans, special provisions and estimate of cost, construction observation and daily inspection, change orders and final documentation.

- Hononegah Rd. Widening of Roadway (Winnebago County, IL)
- N. Avenue Complete Replacement (USACOE Rock Island Arsenal, IL)
- Fairwind Blvd, Widening and South Extension of Roadway (Sandwich, IL)