



We listen. We solve.®



WALKER NORTH SIDE WATER PROJECT in Minnesota



Ulteig delivers comprehensive engineering/design, program management, technical services and field services that strengthen infrastructure vital to everyday life. An employee-owned company, Ulteig connects people and resources to develop compelling, integrated solutions across the Lifeline Sectors® of power, renewables, transportation and water. Ulteig leverages its expertise throughout North America with a wide range of public and private clients.

STATEMENT OF QUALIFICATIONS

| WATER



- 02 ULTEIG OVERVIEW
- 04 ULTEIG’S LIFELINE SECTORS®
- 06 WATER
- 08 WASTEWATER
- 12 INTEGRATED SOLUTIONS
- 14 LAND SERVICES
- 16 ENVIRONMENTAL
- 28 PLANNING AND STUDIES
- 20 DESIGN AND ENGINEERING
- 26 PROJECT DELIVERY SERVICES
- 30 ASSET MANAGEMENT
- 32 WHAT MAKES ULTEIG DIFFERENT
- 34 LOCATIONS AND CONTACTS
- 36 KEY PERSONNEL

WHO WE ARE

Ulteig is a leader in the engineering industry. We are a team of forward-thinking, innovative experts who make critical connections, putting together the complex, multi-disciplinary strategies needed in today's changing world.

In over 75 years, the Ulteig team has expanded to more than 900 professionals, offering a full range of engineering solutions across 13 offices and various satellite locations throughout North America. We are well-positioned to respond to our clients' evolving needs in a flexible, agile and collaborative manner.

Today, Ulteig manages an average of 2,000 technical and field service projects per year. We are continually expanding our portfolio of projects that serve our core Lifeline Sectors®.

THE VALUES AT OUR CORE

- CLIENT SUCCESS** We create exceptional value through our expertise and collaborative approach.
- INTEGRITY** We are authentic and always do what's right.
- ENTHUSIASM** We are passionate about the work we do and have fun doing it.
- INCLUSION** We seek diverse backgrounds, empower all voices, and value all perspectives.
- AGILITY** We act with speed, flexibility and balance.
- INNOVATION** We leverage ingenuity and foster creative outcomes.

AWARDS AND RECOGNITION



IN 2022, ULTEIG
**MOVED UP
15 SPOTS**
IN THE RANKINGS TO
#124
ON THE ENGINEERING
NEWS-RECORD (ENR) ANNUAL
TOP 500 DESIGN FIRMS LIST.

TOP WORKPLACE RECOGNITION
ZWEIG GROUP HOT FIRM
THE DENVER POST
MINNEAPOLIS/ST. PAUL BUSINESS JOURNAL
STAR TRIBUNE
PRAIRIE BUSINESS MAGAZINE
BEST PLACE FOR WORKING PARENTS

HOW WE WORK

More than ever before, communities rely on the connections that bring infrastructure, services and information to their citizens. Ulteig is committed to designing, planning, building, sustaining and maintaining the interconnected infrastructure vital to everyday life.

OUR PEOPLE & THE PROMISE WE MAKE:

Ulteig is wholly built on the belief that growth starts with individual achievements. Innovation requires talented, curious people. Our employee-owners work in multi-disciplinary teams across core Lifeline Sectors® to learn from each other, create new approaches and devise expert solutions.

In 2021 alone, the Ulteig team grew by nearly 25%. With more than 900 employee-owners completing projects in 46 states and 2 provinces in Canada, and projected growth in 2022, our footprint continues to span North America.



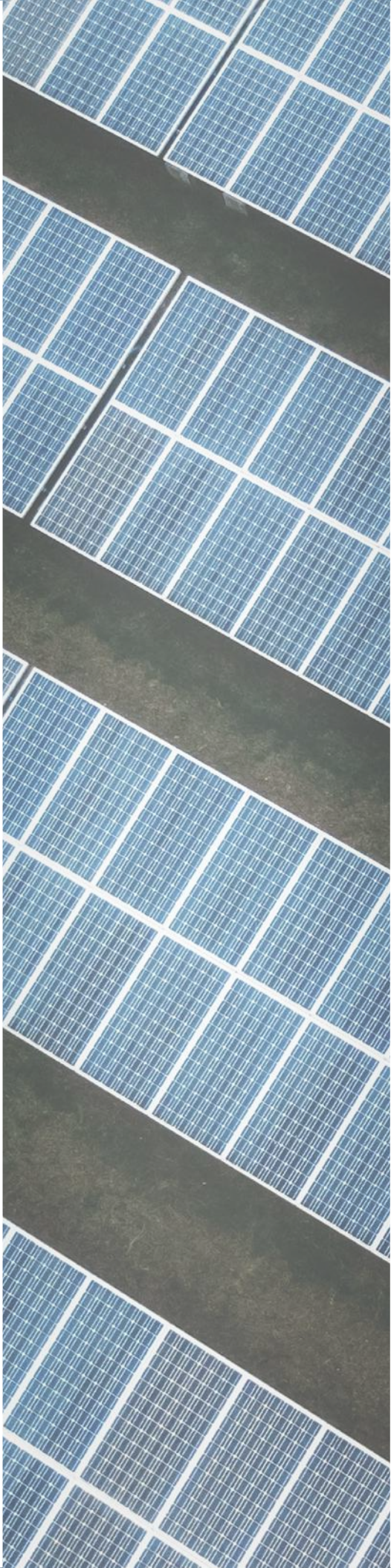


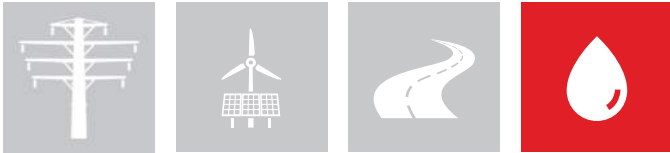
LIFELINE SECTORS.®

At Ulteig we work across the country’s entire infrastructure, the silent foundation that sustains everyday life. We specialize in Power, Renewables, Transportation and Water, and call these LIFELINE SECTORS.

We registered the term Lifeline Sectors because we feel so strongly about what we do. We are creating and maintaining lifelines. We are helping people live cleaner, safer and healthier lives.

 [Learn more about Ulteig’s Lifeline Sectors](#)





WATER

Ulteig’s Water and Wastewater practice has helped a growing list of private and public clients meet the challenges of delivering potable water, treating wastewater to meet environmentally regulated standards/limits and moving surface water runoff to safe collection areas.

Our team of consultants, engineers, data scientists and software programmers have a significant understanding in public and privately managed municipal water & wastewater treatment, distribution, and collection systems inclusive of the industrial and agricultural sectors water resource needs. Our staff have worked with many municipalities throughout the United States & Canada in various capacities: as employees, consultants, and contractors. When it comes to the business of water & wastewater, we get it.

EXPERTISE

SPECIALIZED WATER SERVICES

- Water Distribution Modeling/ Analysis
- Fire Flow Assessments
- Distribution System Field Testing
- Instrumentation and Controls
- Vulnerability Assessments
- Regulatory Compliance
- Rate Studies
- Funding Assistance
- Operations Consulting
- Grant Applications
- Benefit/Cost for Hazard Mitigation Grants
- Area and Connection Charges
- Capital Improvement Planning (CIP) and Budgeting

WATER DISTRIBUTION

- Master Planning
- Water Storage Facilities
- Pumping Stations
- Transmission Mains
- Distribution Mains
- Valve Stations
- Corrosion Control

WATER TREATMENT

- Facility Planning and Design
- Process Optimization/Audits
- Granular Filtration
- Lime Softening
- Iron and Manganese Removal
- Chemical Feed Systems
- Membrane Systems
- Disinfection
- Residuals Management

WATER SUPPLY

- Ground Water Wells
- Surface Water Sources
- Intake Structures
- Horizontal Collector Wells
- Alternate Water Supplies

FACILITY SURFACE WATER MANAGEMENT

- Stormwater Pollution Prevention Plans
- Stormwater Modeling and Quality
- Stormwater BMPs
- Flood Mitigation Studies & Design
- H&H Modeling
- Retention/Detention Ponds
- Site Grading and Drainage
- Dam Inspection, Safety, and Permitting

DID YOU KNOW?

Ulteig has assisted in securing over \$39 million in infrastructure funding over the last five years.



CITY OF BRECKENRIDGE WATER TREATMENT PLANT | MN

The headwaters of the Red River of the North are found where the Otter Tail River and the Bois de Sioux River meet, along the border between Minnesota and North Dakota. It’s here that the small town of Breckenridge, Minnesota, serves as a center of commerce and culture for the area’s sugar beet, corn, soybean and sunflower farmers.

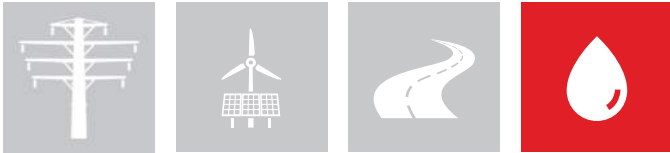
Water is an important ingredient to the success of this region – especially to its farmers. So that’s why the town selected Ulteig to redesign and engineer a replacement for its aging, inefficient 79-year-old water treatment plant.

PREVENTING A DISRUPTION TO THE CITY’S WATER SUPPLY

A huge aspect of engineering the water plant was preventing a disruption to the City’s water supply. With the old plant, local farmers could purchase water from the city but, because of the aging infrastructure, the city increasingly had difficulty meeting that demand.

“Our team pointed out to the City that it was only one catastrophe away from a situation that would not only disrupt the drinking water supply to their residents, but also the water that local farmers would need to maintain their crops,” said Brian Hiles, a Senior Engineer with Ulteig’s water and wastewater team.

With the new water treatment plant, the City’s storage capacity is 1,300,000 gallons. Of that, 1,000,000 gallons comes through the clear well at the water plant and 300,000 gallons is located in the water tower. The city has two days of water capacity in the summer and three to five days in the winter. The maximum daily treatment capacity is 1,440,000 gallons per day (gpd). The average daily use for the City of Breckenridge is 280,000 gpd in the winter and 550,000 gpd in the summer. Sixty percent of daily usage is for residential use, and 40 percent is for institutional, commercial, agricultural and industrial use.



WASTEWATER

At Ulteig, we understand the complexity of demanding projects. Our seasoned Water and Wastewater experts strive to coordinate, follow processes and procedures, and review, recommend and implement improvements successfully with expertise that is unmatched.

EXPERTISE

SPECIALIZED WASTEWATER SERVICES

- Sanitary Sewer System Modeling
- Smoke/Dye Testing
- Instrumentation and Controls
- Rate Studies
- Funding Assistance
- Regulatory Compliance
- Permitting
- Operations Consulting
- Grant Applications
- Benefit/Cost for Hazard Mitigation Grants
- Area and Connection Charges
- Capital Improvement Planning (CIP) and Budgeting

WASTEWATER TREATMENT

- Stabilization Ponds
- Activated Sludge
- Attached Growth Systems
- Nutrient Removal
- Disinfection
- Biosolids Management
- Odor Control
- Water Reuse

WASTEWATER COLLECTION AND CONVEYANCE

- Master Planning
- Inflow/Infiltration Studies
- Sanitary Sewer Evaluation Studies and Design
- Capacity, Management, Operation and Maintenance Compliance
- Sewer Separation
- Trenchless Technologies
- Pump Station Design
- Pump Station Optimization and Rehabilitation
- Force Main Design



HALTON REGION PHASE B SCADA IMPLEMENTATION AT WASTEWATER PUMPING STATIONS PROJECT

The Regional Municipality of Halton currently owns and maintains approximately 90 remote Wastewater pumping stations. The configurations of the stations range from single pump stations to stations with seven pumps, and firm capacities from 1.4 L/s to 1,519 L/s. Ulteig's Hamilton team was retained to provide Preliminary and Detailed Design, Contract Tender Preparation, Construction Contract Administration including Site Inspection as well as PLC/SCADA Programming, Integration and Commissioning Services for the upgrade of five sewage pumping stations: Cardinal Pumping Station, Carrington Pumping Station, Norval Pumping Station, Kingham St. Pumping Station, Lynden Circle Pumping Station.

The project included and assessment of; Pump Station Alarming Systems, Electrical Panels and PLC Control Panels, Control Wiring, Pump Control Schematics (to bring the pump controls to the Regions standards) and utility and auxiliary power requirements. We created contract specifications and drawings detailing the changes required for each of the pump station. The new systems included pump amperage, pump control scheme, the additional of stilling wells, temperature and leak alarms, station discharge and overflow monitoring, site security, auxiliary power, wide area communication systems and hazardous gas monitoring.

OVERALL PROJECT TASKS INCLUDE

Project Management (Monthly Design Meetings, Agenda, Minutes and Updated Project Schedules - posted on a Microsoft SharePoint Portal), Engineering Design, Site Visit & Field Investigation, Process Control Narrative Development I&C Design, P&IDs, Loop Drawings, Specifications & I/O Lists, WAN Network Design, Electrical Upgrades, Detailed Design Review of Specifications and Drawings with the Region (60%, 90%, 100%), PLC (RSLogix 5000) Programming and Wonderware Application Development, Factory Acceptance Testing, Tendering, Construction Contract Administration, QA/QC, Monthly Construction Meetings, Agenda, Minutes and Updated Schedules, Shop Drawing Review, PLC Panel Factory Acceptance Testing, Site Acceptance Testing & Commissioning, SCADA Training, As-Built Drawings and Operations & Maintenance (O&M) Manuals, SCADA Manual Development, Project Closure, Delivery of all Documents and Software, Project Closure Meeting & Lesson's Learned.

WATER ACROSS THE LIFELINE SECTORS®

ULTEIG'S WATER & WASTEWATER EXPERTS WORK HAND-IN-HAND WITH EACH OF THE OTHER LIFELINE SECTORS

POWER

RENEWABLES

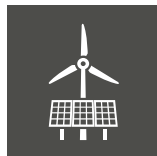
TRANSPORTATION



WATER has a hand in everything we do.



We manage and analyze **FLOODPLAINS** and obtain **ZONING PERMITS** for a variety of development projects including transportation, power, substation and transmission line construction.



We create **STORMWATER POLLUTION PREVENTION PLANS**, complete **HYDROLOGIC ANALYSIS** and craft **STREAM CROSSING & POND DESIGN** for renewable projects.



We design **CULVERTS, STORM SEWERS, STORMWATER BMPS & CHANNELS** and analyze **BRIDGE HYDRAULICS & SCOUR** for transportation projects.

Note: Ulteig's Water & Wastewater capabilities are not limited to those listed above.

SUBSTATIONS IN DANGER | IA

Iowa is known for agriculture – acres and acres of corn, soybeans, oats, hay and alfalfa. It is blessed with rich, dark soil and seemingly endless acres of flat terrain, which are perfect for farming. But some parts of the state are more prone to flooding than others, such as along the Missouri River, on its western border, and the Mississippi River, on its eastern border, both of which have been the source of significant flooding events in recent years.

One of Iowa's three major utilities realized that flood waters and substations do not go well together. And that's why this particular utility hired Ulteig to help it take preventive measures to protect six substations located in six separate counties throughout the state of Iowa. Locations ran from Percival, Iowa, located 45 minutes south of Omaha near the Iowa-Nebraska border, to Davenport, Iowa, on the shores of the Mississippi River.

ANTICIPATE 500-YEAR FLOODS

"Ulteig was tasked with developing a flood mitigation strategy for six substations," said Matt Kavanagh, Director of Client Solutions for Ulteig, "which started by conducting an extensive hydrology and hydraulics study." This involved gathering historical data from the State of Iowa, the Army Corps of Engineers, FEMA and other government bodies, and conducting analyses, including mitigation alternatives to protect the substations from recurring flooding.

For this project, Ulteig determined that in order to mitigate long-term risk it needed to consider a 500-year flooding event, which in some areas would require designing flood protection up to 15 feet above existing grade. The firm's analysis also considered other flooding events, such as the failure of a levee or a dam, which could also possibly swamp a substation.

In the instance where 500-yr flood protection required elevating the site almost 15 feet, the decision was made to relocate the substation. This was determined based on the safety factor of building flood protection to that height and also the financial impacts to relocate outweighed the cost to protect.

On one site, critical equipment was elevated to remove it from flood danger. At another site, where flood waters only impacted a small portion of the facility, an earthen levee was constructed.

Three of the sites required construction of floodwalls surrounding the site utilizing poly sheet pile to eliminate the risk of grounding and electrical shock. These sites also had concrete entrance barriers installed - which utilized removable aluminum barricades and can be erected in the event of a flood. Each of these three sites also had an underground drainage system installed to collect any water from within the substation enclosure and direct it under the flood walls and into the surrounding drainage ditches.

Each of the drainage outlets is equipped with a backflow prevention device which closes in the presence of flood water. The utility owner can then install a submersible pump into the outlet manhole and pump groundwater over the floodwall to keep the substation dry. These efforts will help the client avoid the replacement of compromised equipment and reducing maintenance hours in the future.

LAND SERVICES

Delivering a wide range of land services from land surveying, geographic information systems and right-of-way acquisition. Ulteig brings a unique combination of capacity and experience to your project.

ENVIRONMENTAL

Our environmental team understands the big picture of what your project intends to accomplish. We work together to find solutions that meet your needs while minimizing impacts to the environment and remaining in compliance with federal, state and local regulations.

PLANNING AND STUDIES

Our in-house experts manage all aspects of a wide range of studies in water and wastewater supply, treatment, storage and distribution. With direct access to our team, you have more efficient, reliable and insightful analysis to support informed business decisions. We leverage our vast experience in the water and wastewater market to help you plan for the future.

INTEGRATED SOLUTIONS

Clients depend on us to deliver comprehensive engineering and technical services that strengthen infrastructure vital to everyday life. We provide services in six primary areas of expertise. Ulteig solutions can be leveraged according to your project needs across all of our **LIFELINE SECTORS®**

Click each title to navigate straight to that section.

ASSET MANAGEMENT

At Ulteig, we focus on using data, information, insight, technology and engineering to manage your day-to-day business needs as well as develop strategic long-term plans for management and investments. Our experts develop the data-driven insights critical to creating an informed and prioritized asset roadmap for your business.

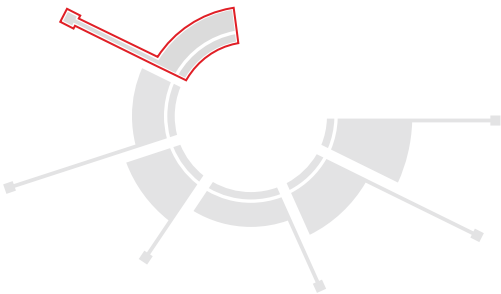
PROJECT DELIVERY SERVICES

As your trusted partner, Ulteig will work with you to determine the best resources to satisfy your unique needs. Our suite of services encompasses a range of solutions related to program and project management, construction management, and other consultative services.

DESIGN AND ENGINEERING

As industry leading infrastructure experts, we develop context-sensitive and cost-effective designs for every phase of water and wastewater projects. From conceptual design through detailed design and construction support we offer detailed design work, development and review of design calculations, selection and design implementation.

LAND SERVICES



As the layout of a project takes shape, Ulteig Surveying, GIS and ROW professionals draw on their expertise to efficiently and effectively manage land surveying projects to keep a project moving forward. From surveying 30+ miles of rural highway to acquiring transmission line ROW for projects crossing three states, Ulteig's Land Services team leverages the latest technology and tools to ensure a project is successful from the very start.

SURVEY

Ulteig's seasoned, highly trained survey team has built a reputation for survey precision and dependability. We use industry-leading hardware and software to gather and lay out field information for many types of land surveys and construction staking projects. Every survey is unique and customized to your precise needs.

LAND SURVEYING EXPERTISE

- ALTA/NSPS Land Title Surveys
- Boundary Surveys
- Cadastral Surveys
- Construction Staking Surveys
- Control Surveys
- Topographic Design Surveys
- Design Surveys
- Easement Surveys
- Elevation Certificates
- Expert Witness Services
- Land Descriptions
- Land Divisions
- Mapping
- Subdivision Platting

RIGHT-OF-WAY ACQUISITION

As the layout of the project takes shape, right-of-way acquisition is an essential step in the process of developing a concept into a successful project site. Ulteig's experienced real estate professionals deliver site acquisition and right-of-way services for a wide range of projects. Ulteig's experts negotiate land purchases, leases, options and easements to best meet the client's project objectives and criteria. The team also handles document preparation, permitting, land title searches and public presentations.

RIGHT-OF-WAY EXPERTISE

- Relocation Assistance and Services
- Land Acquisition
- Title Research
- Crop Damage Assessments
- Lease Program Management



GEOGRAPHIC INFORMATION SYSTEMS EXPERTISE

- Data Collection and Custom Mapping
- GIS Server Solutions
- Technical Support For Utilities
- 360 VMI: Video & Mapping Integration
- Geometric Network Modeling
- GIS Needs Assessments and Implementation Plans
- Mobile Mapping Solutions
- Site Selection
- Suitability Modeling
- Utility Mapping and Modeling

GIS IMPROVES ACCESS TO UTILITY DATA | PRINCETON, MN

Ulteig provided complete utility mapping services using GIS technology for the Princeton Public Utilities. The project consisted of using GPS to survey the water, street lights, and electrical power distribution systems. The GPS survey data provided highly accurate and detailed information about each utility, including integrating the client's customer meter database with the service points. Ulteig also provided a mobile mapping solution for the field maintenance crew, incorporating GPS, and provided the ability to conduct inspections and sketches in the field.

CHALLENGES

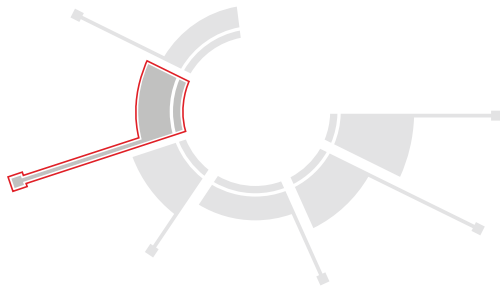
- Maps out of date and difficult to use
- Maintenance records difficult to track
- Locates difficult if to impossible
- Too much dependency on institutional knowledge

GOALS

- Accurate inventory of utilities
- Access to data in the field
- Enable for efficient locates
- Ability to keep data current
- Efficiently protect their assets

RESULTS

- Accurate and up-to-date data that can be viewed in the field
- Maintenance staff can efficiently locate utilities
- Ability to conduct data updates and inspections in the field



ENVIRONMENTAL

At Ulteig, we understand the importance of the environmental process. We have developed a team of environmental professionals with knowledge and experience that is unmatched.

Our team is composed of engineers and environmental scientists who view your projects through multiple lenses. We possess the technical and project management expertise necessary to keep projects moving forward. We work together to find solutions that meet your needs while minimizing impacts to the environment and remaining in compliance with federal, state and local regulations. We are experts at what we do and are honored to play a key role in your project's success. Our team handles and prepares all the environmental documentation, obtains compliance with the National Environmental Policy Act (NEPA) and applicable environmental laws and regulations, permitting and fieldwork, ensuring federal, state and local agency stakeholders are satisfied and that your project proceeds from concept to reality as quickly, efficiently and responsibly as possible. Our team's deep understanding of water and the complexities of each project allow us to effectively navigate environmental review and permitting processes.

NO MATTER THE SIZE OF THE PROJECT, ULTEIG'S ENVIRONMENTAL SERVICES TEAM:

- Handles and prepares environmental documentation, permitting and fieldwork to meet regulations
- Leans on expertise as both engineers and environmental professionals
- Builds trusted relationships with agencies and clients
- Finds expedient solutions to unanticipated problems
- Collaborates with design teams and other partners

EXPERTISE

DESKTOP AND FIELD ANALYSIS	DOCUMENTATION	PERMITTING
<ul style="list-style-type: none">• Wetlands – Delineations, Mitigation, Banking, Monitoring• Environmental Monitoring – Construction, Wetlands, Vegetation, Wildlife• Restoration – Vegetation, Soils, Wetlands• Threatened and Endangered Species - Presence/Absence Surveys, Habitat Surveys, Consultation	<ul style="list-style-type: none">• National Environmental Policy Act review (Catex, EA, EIS)• Planning & Environmental Linkage Studies• Section 6(f) Conversion• Section 7 Biological Assessment/ Section 10 Habitat Conservation Plan Wildlife Accommodation Assessment• Noise Analysis• Mitigation Plans• Phase I Environmental Site Assessment• Spill Containment and Countermeasures Plan• Stormwater Pollution Prevention Plan	<ul style="list-style-type: none">• Section 404 and State Water Resources Permits• Section 401 Water Quality Certification• Section 9 Bridge Permit• Section 402 National/State Pollutant Discharge Elimination System Permit• Watershed District Permit• Floodplain Development Permit• Floodway “No Rise” Certifications



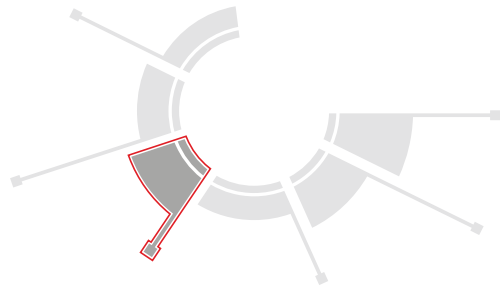
U.S. 52 ENVIRONMENTAL PERMITTING | ND

To improve the flow of traffic and reduce the hazard of slower-moving ag equipment, the North Dakota Department of Transportation turned to Ulteig to design passing and turn lane improvements Along U.S. Highway 52 from Carrington to Fessenden – about a 36-mile stretch. The project crossed the prairie pothole region of North Dakota, which is made up of countless depressional, freshwater wetlands. These glacial wetlands provide habitat to more than 50 percent of North American migratory waterfowl.

Ulteig's Environmental Team conducted an aquatic resources delineation and secured environmental approval for the project. The team's goal was to avoid and minimize wetland impacts to the extent practicable and mitigate for remaining impacts. "The environmental evaluation process was a critical component of securing this project, especially because our scope crosses a few different watersheds and is situated in such a unique landscape," says Ulteig Project Manager Josh Kueber.

"Ulteig's Environmental team completed National Environmental Policy Act documentation along with other surveys, delineations, reviews and assessments that evaluated both the current highway landscape and the effects of the proposed passing lanes project. The team was able to secure a Section 404 permit from the US Army Corps of Engineers successfully on a very tight timeline, working to prepare necessary documents ahead of time and ensure the permit was received prior to bid. This was uniquely difficult in that nine on-site wetland mitigation sites and 26 ditch shifts were required to mitigate all the wetland impacts."

PLANNING AND STUDIES



Our goal is to ensure that consensus is reached and innovative, expert solutions are carried out, creating efficiencies and facilitating communication along the way.

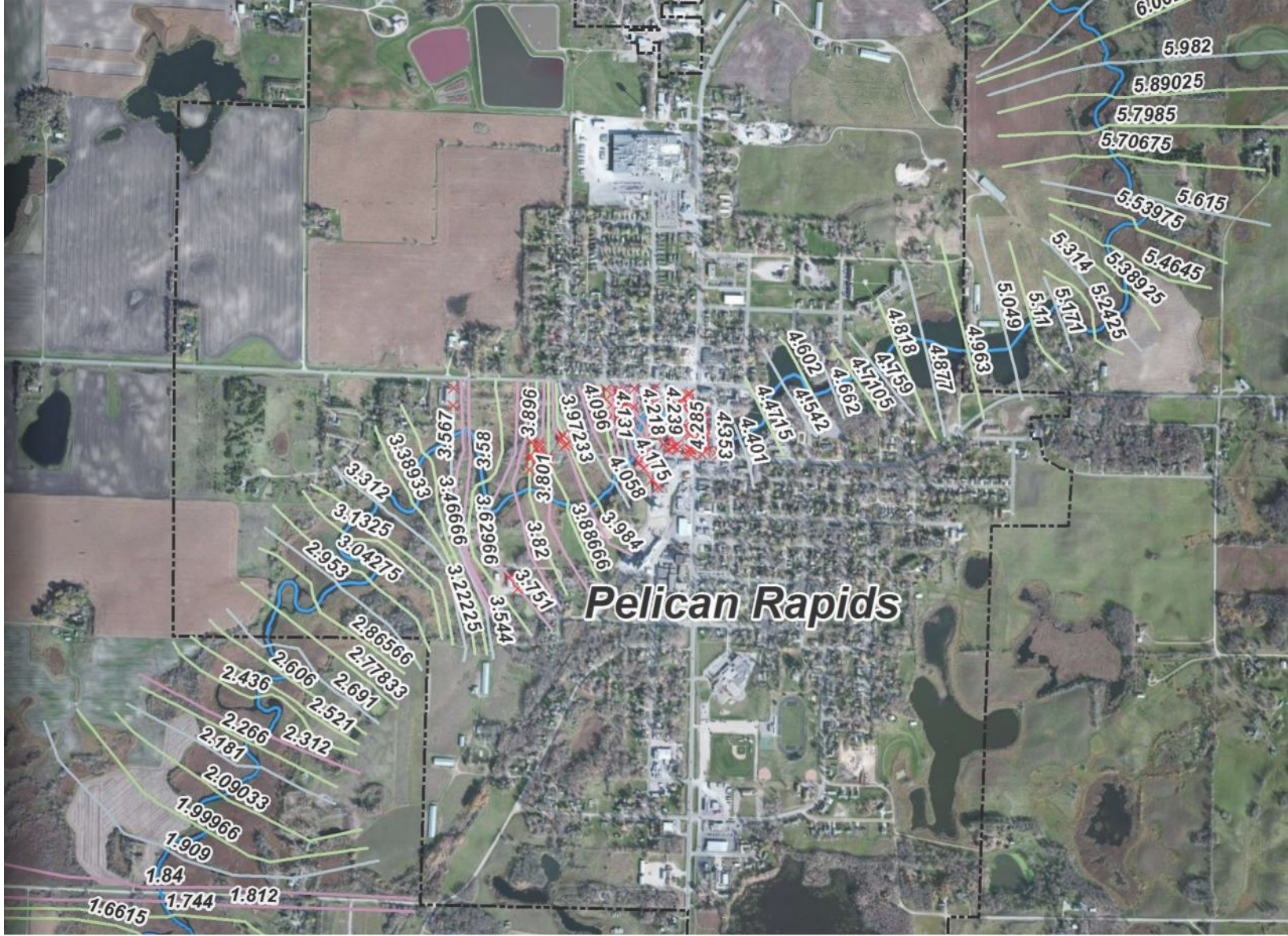
STUDIES

Ulteig’s diverse water and wastewater team is well positioned to conduct a wide range of studies. We manage all aspects of the studies in-house, resulting in better efficiency and communication, and giving you direct and reliable access to our team.

Our studies help clients weigh the myriad alternatives and make informed business decisions. With our vast experience and knowledge of the regulatory environment, we provide insightful analysis to help guide in decision-making, and advise of potential pitfalls and future project considerations.

EXPERTISE

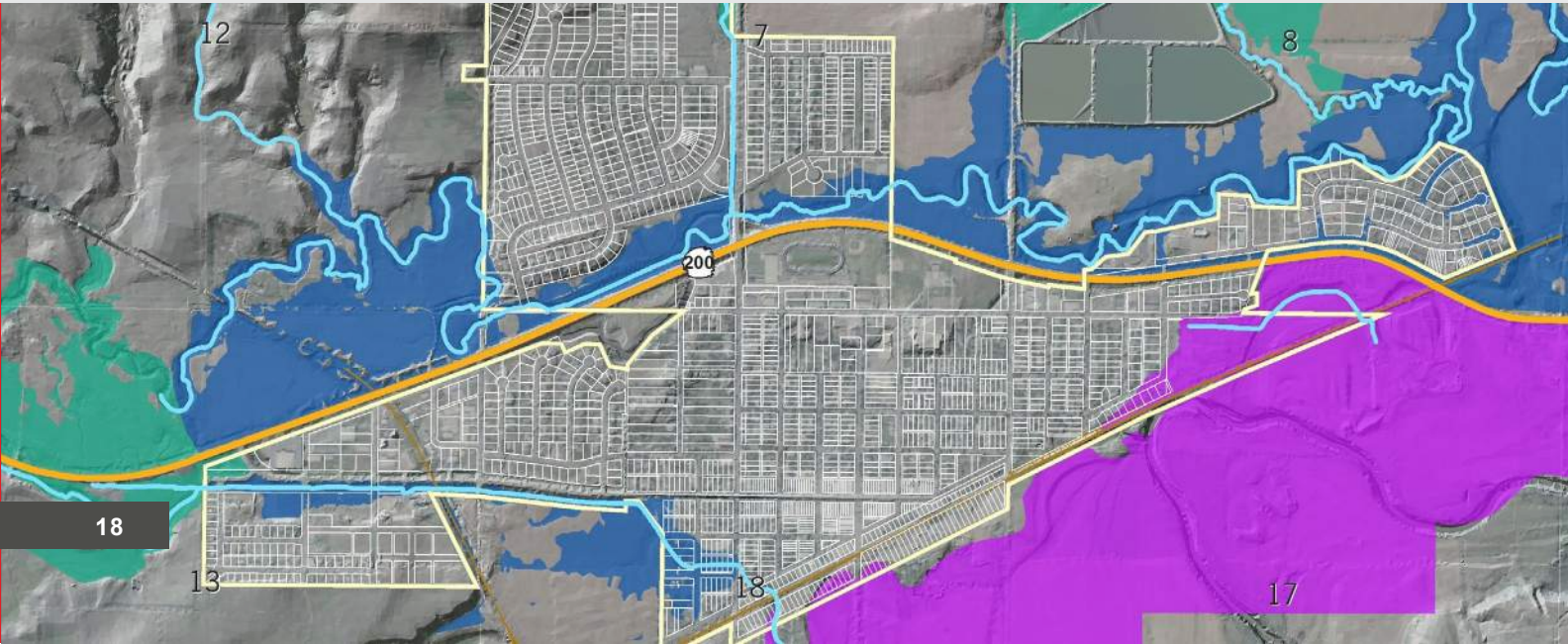
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| • Capital Improvement Plans | • Site Impact Analysis | • Traffic Modeling |
| • Feasibility Studies | • Multi-Modal Plans | • Travel Demand Forecasting |
| • Hydrology & Hydraulic Analysis | • Environmental Documents | • Signal Timing & Coordination |
| • Traffic Analysis | • Public Participation and Consensus Building | |
| • Corridor Studies | | |



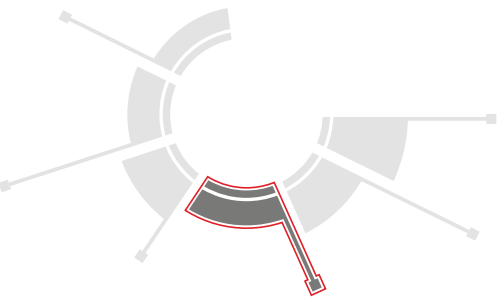
IMPACT OF MILL POND DAM FAILURE | PELICAN RAPIDS, MN

Through a FEMA grant with the Minnesota Department of Natural Resources, Ulteig was hired by the City of Pelican Rapids to perform a dam failure analysis of the Mill Pond Dam and to produce flood inundation maps for the City’s Emergency Action Plan (EAP). Because the Mill Pond Dam is classified as having a high hazard potential in the event of a dam failure by the MNDNR, a requirement for the EAP is to create flood inundation maps for various dam failure scenarios to identify the areas downstream of the dam that are potentially at risk.

Ulteig was asked to prepare these maps with the aid of high-resolution LiDAR along the Pelican River system corridor. This study required revisions to an existing hydrologic model for the Mill Pond Dam drainage basin along with building an unsteady state hydraulic model for the Pelican River system that extends through the city downstream of the dam.



DESIGN AND ENGINEERING



We put our vast knowledge and experience to work for you, assisting from conceptual design through detailed design and construction support. Ulteig's high quality designs are context-sensitive and cost-effective. Our designs strive to balance the competing needs and desires of the clients and end users, while building the framework for quality controls that will guide the implementation of the project. We offer detailed design work, development and review of design calculations, selection and design implementation. Our goal is to provide solid commitment through unmatched client services and create a positive experience for our clients.

WATER RESOURCES ENGINEERING

At Ulteig, we are experts in water resources engineering and the field of hydrology and hydraulics. Our professionals assist public- and private-sector clients in managing stormwater runoff and surface water resources to sustain or improve water quality, minimize flooding and address regulatory challenges.

Working on projects from simple drainage design to major flood control works demonstrates our ability to customize projects or work to fulfill your needs. We integrate natural elements into civil design and look to natural hydrologic systems as inspiration for our constructed solutions.

EXPERTISE

STORMWATER COMPLIANCE & WATER QUALITY

- Urban Stormwater System Design
- Pollutant Loading Prediction
- Low Impact BMP Analysis, Planning and Design
- Load Reductions and Compliance
- Receiving Water Quality Analysis & Prediction
- Construction Site Erosion Control

WATERSHED MANAGEMENT

- Stormwater & Surface Water Management Plans
- Lake & Reservoir Management Plans
- Stream Restoration
- Bank Stabilization
- Dam O&M and EAP Document Preparation
- Flood Insurance Studies
- Risk Assessment

HYDROLOGIC & HYDRAULIC MODELING

- 2D Urban Stormwater Modeling
- Lake & Reservoir Modeling
- Interior Drainage Modeling & Design
- River System Modeling
- Dam Break & Levee Failure Analysis
- Storm Sewer Hydraulic Modeling
- Pond and Storm Sewer Design
- Rate Control, Extended Detention & Hydrograph Management
- Energy Dissipation
- Overland Conveyance Design

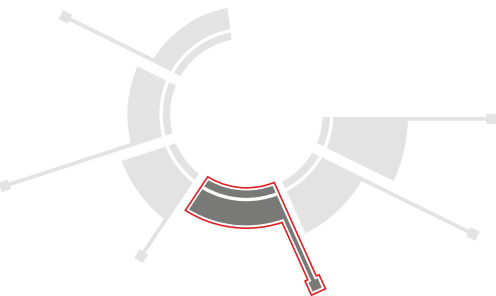
HYDRAULIC & CONTROL STRUCTURES

- Stormwater Pumping Stations
- Multi-Stage Outlets, Control Structures & Diversions
- Bridge and Culvert Hydraulic Assessments
- Agricultural Control Structures
- Dams, Levees and Flood Walls

FLOODPLAIN MANAGEMENT & ANALYSIS

- Flood Insurance Rate Studies
- Conditional Letters of Map Revision (CLOMR)
- Letters of Map Revision (LOMR)
- FEMA Mapping
- Digital Flood Insurance Rate Maps (DFIRMS)
- Flood Elevation Certificates
- Post-Event Urban Flood Studies
- Flood Damage Reduction
- Flood Control Projects
- Flood Preparation and Planning
- Post-Event Recovery and Analysis





DESIGN AND ENGINEERING

SYSTEM INTEGRATION & SCADA ENGINEERING

Ulteig’s SCADA team is an established professional engineering team specializing in water and wastewater controls. Our team of multi-disciplined integrators are experts in electrical design, SCADA, process control, data management systems and commissioning.

Our team is well versed in new build and retrofit automation projects with minimal interruption and downtime, and in a manner that mitigates compliance and operational data loss. Being a vendor agnostic firm, our staff are experienced in various types of PLC, SCADA, Data Collection & Reporting platforms and our conversations do not end at the control system. We have a tremendous amount of experience in process and process control which allows us to discuss optimization strategies to simplify plant operations, create greater operator and management awareness while enabling the ability to extend asset lifecycle and minimize cost.

EXPERTISE

ENGINEERING

- *Electrical and Instrumentation Engineering Design*
- *SCADA Master Planning*
- *Energy Audits & Assessments*
- *SCADA & Engineering Design Standards*
- *Design/Tender Specifications & Contract Administration*
- *Project Management*
- *Process and Systems Optimization*

SCADA

- *Process Control Narrative Development*
- *PLC Programming & HMI Development*
- *Data Management & Reporting*
- *Preventative Maintenance*
- *Testing & Commissioning*

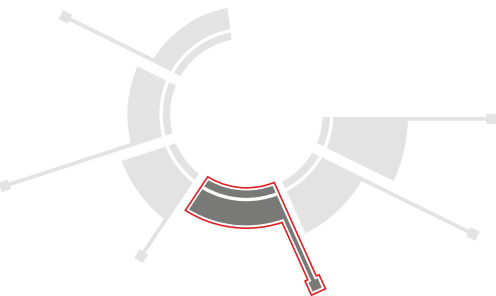
NETWORKING & IT

- *Local & Wide Network Planning & Design*
- *SCADA Server Virtualization Planning & Implementation*
- *Switch, Router and VPN Configuration*
- *Backup and Disaster Recovery Systems*
- *Electronic Document Management Systems*

ICS CYBER SECURITY

- *Security and Vulnerability Assessment*
- *Standards, Policies and Procedures Development*
- *Mitigation and Recovery Planning and Implementation*
- *Compliance to Industry Standards and Practices*
- *Education and Training*





DESIGN AND ENGINEERING

MUNICIPAL

Ulteig helps communities develop and manage their infrastructure and resources by connecting technical expertise to the vision of community leaders and their constituents. We serve a community's municipal engineering needs by providing services that are beyond typical engineering design solutions. Our approach centers on understanding a client's vision and objectives. Ulteig works closely with communities to preserve their resources and distinct characteristics. Together, we develop a path to success.

Our goal is not just to help clients successfully complete their projects, but to establish a long-term partnership. We have engineers, surveyors and technicians who are qualified to serve a city's engineering needs. No matter the size, we can take a project from concept to completion while incorporating specialized knowledge and capabilities.



EXPERTISE

ENGINEERING

- Construction Document Preparation
- Water Services
- Wastewater Services
- Utility Rehabilitation
- Street Rehabilitation
- Land Development/Subdivisions
- City Maps and Utility Records
- Maintenance Assistance
- Permit Applications
- Studies and Reports
- Capital Improvement Plans
- Preliminary Design Studies
- Facility Plans
- Feasibility Studies
- Hydrology and Hydraulic Analysis

FINANCIAL

- Annual Budgets
- Capital Budgets
- Grant and Loan Assistance
- Improvement Bond Determinations
- Public Hearings
- Special Assessment Determinations
- Water and Sewer Rate Studies

PLANNING

- Capital Improvement Planning
- Comprehensive Planning
- Growth Projections
- Infrastructure
- Land Use
- Transportation
- Environmental Assessment Worksheet
- Ordinances and Policies

ENVIRONMENTAL

- NEPA Compliance Documents
- Tribal Coordination
- Biological Resource Evaluation
- Environmental Permitting
- Environmental Siting Analysis
- Noise Analysis and Reporting
- Water and Wetland Resource Evaluation
- Environmental Site Assessments
- Emerging Contaminants Evaluation
- Environmental Monitoring, Mitigation and Restoration
- Federal, State and Local Agency Coordination
- Spill Prevention, Control, & Countermeasure (SPCC) Plans
- 404 Permit Applications
- Erosion Control Designs
- Stormwater Pollution Prevention Plans (SWPPP)
- Wetland Delineation, Mitigation and Restoration

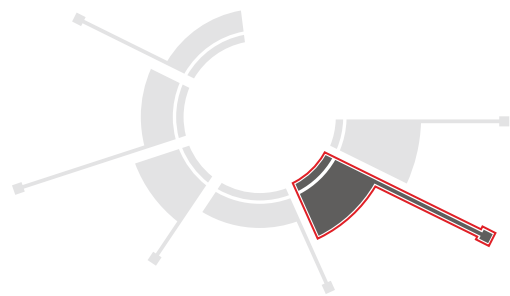


41ST STREET MUNICIPAL PROJECT | SIOUX FALLS, SD

This project consisted of a reconstruction of the 41st Street and Sycamore Avenue intersection in Sioux Falls, South Dakota. The existing intersection was upgraded by widening 41st Street to five lanes of paved concrete including a concrete median and widening Sycamore Avenue to five paved concrete lanes as well. The intersection was designed to accommodate for future traffic volumes and is the ultimate build out for the intersection. Improvements included the replacement of the deteriorated pavement with new doveled 9" PCC pavement, the replacement of watermain with new PVC, new traffic signals and conduit system, roadway lighting, and new ADA corner ramps and pedestrian pushbuttons.

Both 41st Street and Sycamore Avenue are arterial streets, and the intersection replacement design needed to maintain two lane head-to-head traffic in both directions. The design phasing of construction was designed to be in quadrants so traffic could be maintained. Watermain replacement, storm sewer installation and traffic and lighting conduit installation also needed to be phased in order to accommodate for the phased pavement construction.

The project also included the rehabilitation of the 33rd Street and Sycamore Intersection as well as a 2-inch asphalt mill and fill for two miles of Sycamore Avenue from 26th Street to 57th Street. Corner ramps were upgraded to be compliant with ADA requirements along the two-mile mill and fill along Sycamore Avenue.



PROJECT DELIVERY SERVICES

Based on 2020 Net Promoter Score results, Ulteig consistently scores more than 50 percent higher in quality rankings than its average competitor. Our team manages the steps, schedules, planning, engineering and budgets from one central control. As a firm with our own rigorous Quality Management System, we strive to exceed our clients' expectations and provide deliverables that meet specifications.

CONSTRUCTION MANAGEMENT

Our goal for every project is to meet the completion date, control the cost, achieve high quality and keep clients informed of construction progress. Ulteig's Construction Managers monitor all construction activities, identify and manage risks, utilize industry best practices, collaborate with stakeholders and execute and monitor the uniform policies and procedures as established by our clients. In addition, we take responsibility for scheduling, cost reporting, the RFI process, conflict resolution, quality management and the general condition of major equipment deliveries. If required, we can also fulfill the role of on-site Resident Project Representative (RPR), acting as an extension of the project team and providing detailed daily inspection reports for project specific tasks.

Our QA/QC service is implemented through a series of processes that assure each project activity is carried out in a method that meets our clients' expectations. Ulteig is highly proficient in QA/QC implementation and engaging contractors in the process.

EXPERTISE

- Contractor/Subcontractor Management
 - Pre-Construction Meeting
 - Quantity Tracking
 - In-Field Data Logging
 - Construction Activity Documentation
 - Compliance With Contract Documents
 - Quality Assurance/Quality Control
- Third-Party Testing Coordination
 - Material Verification
 - Change Order Analysis and Tracking
 - Productivity Analysis
 - Safety/OSHA Compliance
 - Dispute Avoidance and Resolution

PDS WHAT IS PROJECT DELIVERY SERVICES?

PDS IS A GROUP THAT OFFERS A RANGE OF SERVICES IN PROJECT MANAGEMENT.

PROJECT MANAGEMENT | CONSTRUCTION MANAGEMENT | PORTFOLIO MANAGEMENT

PDS IS HERE TO FIT WHEREVER YOU NEED.



Owner/Developer needs to fill a position to manage a project or portfolio on their behalf.



Ulteig's PDS team is available to help Owner/Developer at any stage in the project.



Ulteig's PDS team will integrate into the Owner/Developer's organization to put project into action.



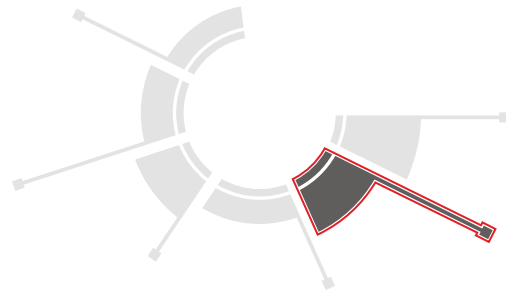
Ulteig's PDS team will interface with the Owner/Developer's team and manage their contract on behalf of the company.



Ulteig's PDS team manages the contractors, engineers and suppliers on behalf of a project or portfolio.



Ulteig's PDS team will take the project to COD, then hand it off to O & M to maintain the project.



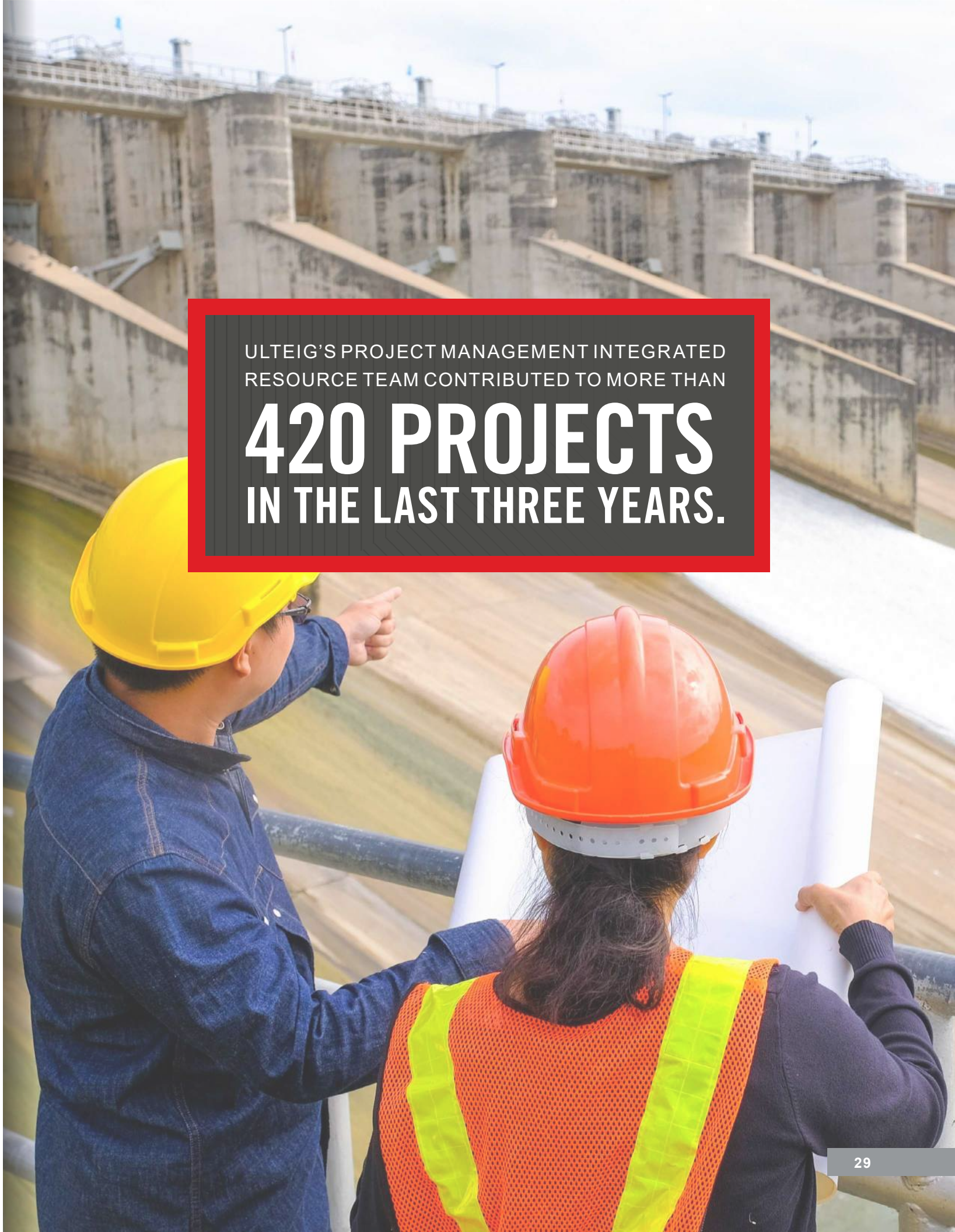
PROJECT DELIVERY SERVICES

PROJECT AND PROGRAM MANAGEMENT

Successful project management begins by assessing and aligning with our clients' requirements and objectives, and culminates with safely delivering projects on time and on budget, despite all issues and obstacles that challenge that objective. Exceptional project management is distinguished by attentive and responsive communication with clients and stakeholders, perpetual proactive risk management and creative resolution of conflicts and issues. Ulteig project managers consistently deliver this value to our clients by employing sophisticated schedule modeling and project controls techniques coupled with expert judgment attained through years of experience delivering successful energy and infrastructure projects. Acting as the project owner's representative and advocate, Ulteig project managers leverage this expertise on behalf of our clients to consistently deliver unparalleled service and value that yields tangible results for the projects we manage.

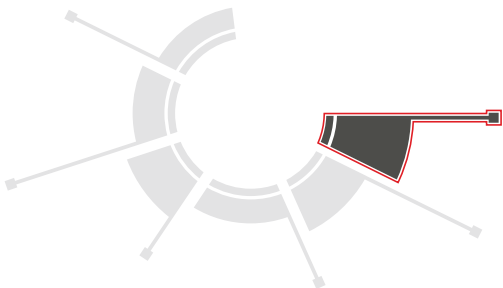
EXPERTISE

- | | | |
|--|--|--|
| • Coordination with Stakeholders | • Project Cost & Cash Flow Forecasting | • Change Order Reviews |
| • Qualitative and Quantitative Risk Analysis | • Earned Value Analysis | • RFI Management |
| • Perpetual Risk Management | • Contract Administration | • Issues Tracking and Resolution |
| • Critical Path Schedule Modeling | • Bid Package Preparation | • Procurement and Logistics Coordination |
| • Schedule Scenario Forecasting | • Architect/Engineer/ Contractor Selection | • Permit Compliance |
| • Project Cost Estimating | • Pay Application Processing | • Progress Reports and Meetings |
| • Project Budget Development | | |



ULTEIG'S PROJECT MANAGEMENT INTEGRATED RESOURCE TEAM CONTRIBUTED TO MORE THAN

420 PROJECTS
IN THE LAST THREE YEARS.



ASSET MANAGEMENT

Our team utilizes data analytics to derive intelligence that informs client business models, investment decisions and solutions that drive operational efficiency.

EXPERTISE

- Data Discovery and Asset Assessment
- Data and Asset Inventory and Migration
- Data Sharing and Integration

- Lifecycle Management
- Analysis, Reporting and Planning
- Application Development, Hosting and Maintenance

Managing and optimizing assets has never been more important. At Ulteig, Asset Optimization focuses on using data, information, insights, technology and engineering to manage your day-to-day business needs as well as identifying and prioritizing strategic asset management, investment decisions and long-term planning. Our team of experts works with you to capture and use data to develop insights critical to determining an informed, prioritized asset management and investment roadmap for your business.

Asset optimization is important to large, complex infrastructure clients as well as less complex clients. We work with all clients, across all Lifeline Sectors.

EXPERT QUOTE

MARK PRESTI, SENIOR MARKET DEVELOPMENT MANAGER - WATER



“Managing and maintaining critical infrastructure can be challenging, especially when limited resources and information exist or a process has not been implemented to understand the state of the current system. A well-defined asset management program creates a more robust model for budgeting, capital planning, and lifecycle replacement by providing visibility into historical information to help enable more informed decisions.”

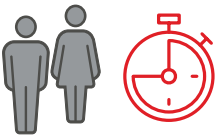
AM WHAT IS ASSET MANAGEMENT?

AM IS A GROUP THAT OFFERS A SUITE OF TOOLS AND SERVICES TO TRACK, MANAGE AND PLAN FOR REPLACEMENT OF ASSETS TO MAXIMIZE FUTURE ASSET PERFORMANCE.

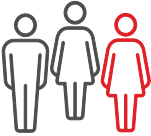
- TECHNOLOGY EVALUATION
 - DATA SHARING & INTEGRATION
 - ANALYSIS, REPORTING & PLANNING
- ASSET OPTIMIZATION AND INFORMATION MANAGEMENT
 - INSIGHT DEVELOPMENT
- DISCOVERY & ASSESSMENT
 - APPLICATION HOSTING, DEVELOPMENT & MAINTENANCE



Clients in all Lifeline Sectors have assets.



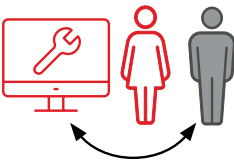
Client assets have a finite lifespan.



Ulteig’s AM team utilizes a trusted client partnership to their benefit. Their deep systems knowledge is available to help converge systems to better manage and optimize client assets.



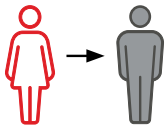
Clients hire Ulteig’s AM team to systematically track, provide solutions and/or replace aging assets.



Ulteig’s AM team acts as a liaison between the client and the right Ulteig-provided and/or third-party solution for improved data capturing, asset management, and investment prioritization.



Ulteig’s AM team identifies system issues, determines upgrade plans, and catalogs assets to prepare for future use and newer technology.



Ulteig’s AM team coaches and collaborates with client to manage their assets and evolving business needs.



WHAT MAKES ULTEIG DIFFERENT?

We are committed to creating a positive experience for our clients throughout a project's duration, offering the advantage of accessibility through exceptional project management, attentiveness and responsive communication.

Ulteig anticipates needs and delivers results with trademark accuracy and timeliness. We proactively manage risks and project issues, constantly reassessing and strategically aligning with our clients' vision, objectives and requirements. We tailor designs and services to meet and exceed expectations.

IT'S ALL ABOUT CONNECTING with clients and their needs. Throughout the process, we are accessible and transparent, listening and solving through the daily connections that are essential to this work. Our clients and their customers depend on these connections that ultimately bring essential services to millions. While our experience spans the nation, we maintain a hometown feel.

A STRONG CONNECTION IS FOUNDATIONAL, whether it involves wires, roads, pipes or people committed to working together for a common purpose. Ulteig generates the connections that strengthen infrastructure—planning, collaborating and creating reliable solutions for our clients and the communities they serve.

WE LISTEN. WE SOLVE.® Our tagline captures the essence of our unique position in the marketplace. "We listen" speaks to partnership, to becoming integrated in our clients' business and truly understanding their needs. We are constantly listening. "We solve" is the promise we make to clients and their communities – we offer comprehensive, long-lasting solutions. This represents everything Ulteig stands for.





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Fargo, ND 58104
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FAX: 888.858.3440

LOCATIONS

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PH: 888.858.3441
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TRANSPORTATION | WATER
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KEY PERSONNEL



MARK PRESTI | SR. MARKET DEVELOPMENT MANAGER - WATER

Mark is an Electrical Engineer with a Master’s Degree in Process Optimization and Design. He has over 25 years of experience in the automation industry developing water & wastewater, treatment, collection & distribution systems for both the municipal and industrial sectors.

LICENSES AND CERTIFICATIONS

- Registered Professional Engineer

EXPERIENCE

- Principal, Water – when acquired by Ulteig; Canada
- President and CEO, NLS Engineering – 8 years; Canada
- Manager of SCADA Engineering & Technical Trades Niagara Region – 7 years; Canada
- Project Engineer – 6 years; Canada



ALDO LOPEZ | TEXAS MARKET LEADER - TRANSPORTATION

Aldo has 16+ years of experience with transportation engineering specializing in H&H Drainage Design and Project Management. He has worked closely with subject matter experts to create and submit successful projects. He focuses on leveraging Ulteig's expertise in the transportation market and collaborates with Ulteig's staff to ensure client projects are of the highest quality, on budget, and on time.

LICENSES AND CERTIFICATIONS

- Registered Professional Engineer
- Certified Flood Plain Manager

EXPERIENCE

- Project Manager at IEA Inc. – 3 years; Houston, TX
- Hydrology & Hydraulics Project Manager at Entech Civil Engineers – 1.5 years; Houston, TX
- Drainage Engineer at WSP – 5.5 years; Houston, TX
- Project and Quality Control Manager at Eii Valve Company – 4 years; Houston, TX
- Project and Quality Control Manager at Process Recovery Systems – 2 years



BRIAN HILES | SENIOR ENGINEER

Mr. Hiles has 25+ years of experience in a variety of municipal engineering disciplines. He is most experienced in the water treatment field where he has spent most of his career working on system improvement projects to bring facilities into compliance and meet state standards and requirements. He is involved in all aspects of his water treatment facility projects including: planning; design; and construction.

LICENSES AND CERTIFICATIONS

- Registered Professional Engineer (Minnesota and North Dakota)

EXPERIENCE

- Water Treatment & Wastewater Collection Engineer at Ulteig – 8 years; Detroit Lakes, MN / WTPs in MN Park Rapids, Menahga, Breckenridge, Winger, Frazee, Twin Valley, and Gary
- Municipal Utilities Engineer at various consulting firms – 17 years; Wisconsin and Minnesota / Water treatment, supply, storage, and distribution at Larson-Peterson & Associates, MSA Professional Services, and Land team



ROGER CLAY | SENIOR ENGINEER

Roger has over 35 years of experience in the water management sector. His specialty is sustainable water resources management and bringing sustainability to technical areas such as site design, stormwater and surface water quality management, and environmental restoration. He strives to provide technically sound and environmentally sustainable services that meet and exceed client expectations for quality deliverables, budget and schedules.

LICENSES AND CERTIFICATIONS

- Registered Professional Engineer (AK, CO, MN, ND, NE, OR, SD, WA & WI)
- Professional Hydrologist (WI)
- LEED Green Associate

EXPERIENCE

- Senior Project Manager at Moore Engineering, Inc – 2.5 years; West Fargo, ND
- Office Leader/Senior Associate at SRF Consulting Group – 2 years; Minot, ND
- Department Manager at Earth Tech/AECOM – 10 years; Minneapolis, MN
- Senior Professional Engineer at Short Elliot Hendrickson – 7 years; MN/WI