Village of Oak Park

Request for Qualifications for Phase I Preliminary Engineering Services – Lombard Relief Sewer Project

Stantec Consulting Services Inc. January 30, 2026

Transmittal Letter

Stantec

Stantec Consulting Services Inc.

January 30, 2026

Attention:
Mr. Chris Welch, PE, CFM
Assistant Village Engineer
Village of Oak Park
201 South Blvd.
Oak Park, IL 60302

Reference: Request for Qualifications for Phase I Preliminary Engineering Services – Lombard Relief Sewer Project

Required Information:

Firm's Legal Name:
Stantec Consulting Services Inc.

Entity Type:
Corporation

State of Incorporation:
New York

Principal Address:
350 North Orleans Street,
Suite 8000N
Chicago IL 60654-1610

Mailing Address:
Same as above

Primary Contact:
Tonya Wells, PE, CFM
(312) 262-2220
Tonya.Wells@stantec.com

Dear Mr. Welch and Members of the Selection Committee:

After partnering with the Village of Oak Park (Village) for more than 10 years providing on-call sewer system modeling support, Stantec has developed a deep understanding of the Village's infrastructure and operational needs. The Phase I Preliminary Engineering – Lombard Relief Sewer Project represents a natural next step in our ongoing collaboration, supporting the Village's goals of alleviating flooding throughout its community.

In addition to our work with the Village, Stantec has worked extensively with the Metropolitan Water Reclamation District of Greater Chicago (MWRDGC) and was a major designer for the development, design, and construction of the Tunnel and Reservoir Plan (TARP) system. Not only is Stantec familiar with how MWRDGC's system operates, we also understand and have experience working with MWRDGC's Engineering and Local Sewers Staff in securing approvals and Watershed Management Ordinance (WMO) permits. Additionally, our work in the area gives us extensive knowledge of the Village's sewer system and root causes of flooding that will help us zero in on the Village's challenges faster.

In our proposal, we have identified key staff with first-hand experience working with the Village and the necessary skills needed to successfully deliver the Lombard Relief Sewer Project. In addition to the staff named in our presented organization chart, the local Stantec team has access to over 34,000 professionals to meet almost any need that may arise.

Stantec has demonstrated experience in the planning, design, and engineering of all forms of municipal sewer-related infrastructure. This experience covers all aspects of combined sewer systems, from small- to large-diameter pipes to pump stations, tunnels, modeling, and engineering services during construction.

In addition to our project manager, Tonya Wells, being local to the Village, many from our team call Chicagoland home. Stantec has been serving the Chicagoland market for decades. We have been intimately involved in many significant and impactful projects in this market and are familiar with Village staff and facilities. In addition, we have thoughtfully assembled our subconsultant team, which will be an integral part of delivering this project.

We are committed to providing the services as described in the Request for Qualifications and look forward to supporting your goals and advancing the area's infrastructure together.

Sincerely,
Stantec Consulting Services Inc.

Tonya Wells, PE, CFM
Project Manager
(312) 262-2220 | Tonya.Wells@stantec.com

Background

About Stantec

Stantec is a global leader in sustainable engineering, architecture, and environmental consulting. With approximately 34,000 employees in 450 locations across six continents, Stantec brings together professionals from a wide range of disciplines. Stantec, through its predecessor companies Harza Engineering and MWH, has operated locally since 1920. We have prioritized community, creativity, and strong client relationships, which allows us to connect with the people and places we serve and deliver solutions tailored to their needs.

Water Industry Expertise

Today, Stantec applies both local knowledge and global expertise to address issues like aging infrastructure, population growth, climate change, and the energy transition. Our teams are guided by diverse perspectives and a focus on practical solutions. We aim to create positive, lasting impacts through our work.

At Stantec, community includes everyone affected by our projects, from clients and project teams to residents and stakeholders. Having worked on dozens of large integrated sewer and storm sewer projects, our team is committed to delivering this project successfully, on schedule, within budget and with minimum disruption to impacted communities. We design with community in mind, delivering results that matter.

SERVICES

- Sewer Condition Assessment
- Sewer Trenchless Rehabilitation
- Sewer Replacement
- New Tunnel and Trenchless Pipeline
- Sewer Route Alignment

TECHNOLOGY & INNOVATION

- Advanced Leak Detection Monitoring
- Pipeline Failure Predictive Modeling & AHP Risk-based Assessment
- Smart Cities Services

Why Stantec

- Working with our clients, we are driven to achieve real-world goals.
- Concerns regarding the impacts of increasingly severe and frequent storm events are changing communities' expectations regarding stormwater management.
- Recognizing the interconnections in the watershed between water supply, conveyance, treatment, distribution, wastewater collection and treatment, and reuse is key to our "whole water" strategy.
- Providing a cost-effective and reliable solution for stormwater management that meets public expectations requires a creative mix of traditional grey and emerging green infrastructure solutions. We have the experience and ability to mix and match grey and green infrastructure to meet the needs and objectives of the project.

STRONG LOCAL PRESENCE

In Illinois, our commitment to community is more than just a philosophy, it's a way of life. With over 675 professionals located in Northeastern Illinois and five offices in Chicago (North Orleans and South Michigan), Lombard, Monee, and Naperville—we bring deep local knowledge and a strong regional presence to every project.

Primary Officer/Point of Contact:
Tonya Wells, PE, CFM, Project Manager
(312) 262-2220 | Tonya.Wells@stantec.com

57%
Project team based in Chicago

675+
Employees in Illinois

185+
Registered Professional Engineers in Illinois

#1 Top 10 International Design Firm - Sewer/ Wastewater *(ENR August 2025)*

1. Project Understanding

1.1. PROJECT BACKGROUND, PROJECT DESCRIPTION AND FUNCTIONAL OBJECTIVES OF THE PROPOSED WORKS

The Village of Oak Park has experienced persistent issues with basement flooding resulting from moderate to severe rainfall events. This challenge was notably underscored by storms in 2010, 2011, 2013, and 2023. The Village seeks a qualified engineering design firm to provide Phase I Preliminary Engineering Services to mitigate chronic flooding concerns through the implementation of the Lombard Relief Sewer (LRS) Project.

Oak Park utilizes a combined sewer system designed to transport both sanitary sewage and stormwater runoff to the Metropolitan Water Reclamation District of Greater Chicago (MWRDGC) interceptor system. While the system performs adequately under dry weather conditions, the capacities of both the MWRDGC and Village sewer systems can be exceeded during moderate to heavy precipitation. Surpassing these limits has led to sewer backups into private laterals, ultimately causing basement flooding.

The primary objective of this project is to enhance flood protection for residential basements within the Northeastern position of the Village by constructing the LRS Project. The project involves increasing the size of the existing sewer on Lombard from Greenfield Street to Erie Street to a 96" sewer. It also includes installing a new 96" sewer along Erie Street from Lombard Avenue to Taylor Avenue, and then along Taylor Avenue from Erie Street to Lake Street, ending with a new connection to the MWRDGC interceptor at Lake Street and Taylor Avenue.

Installation of a new sewer along Thomas Street from Lombard Avenue to Hayes Avenue has also been included as part of the LRS Project. The use of permeable pavements and other green infrastructure methods for stormwater management will be assessed and incorporated into the project design if found suitable.

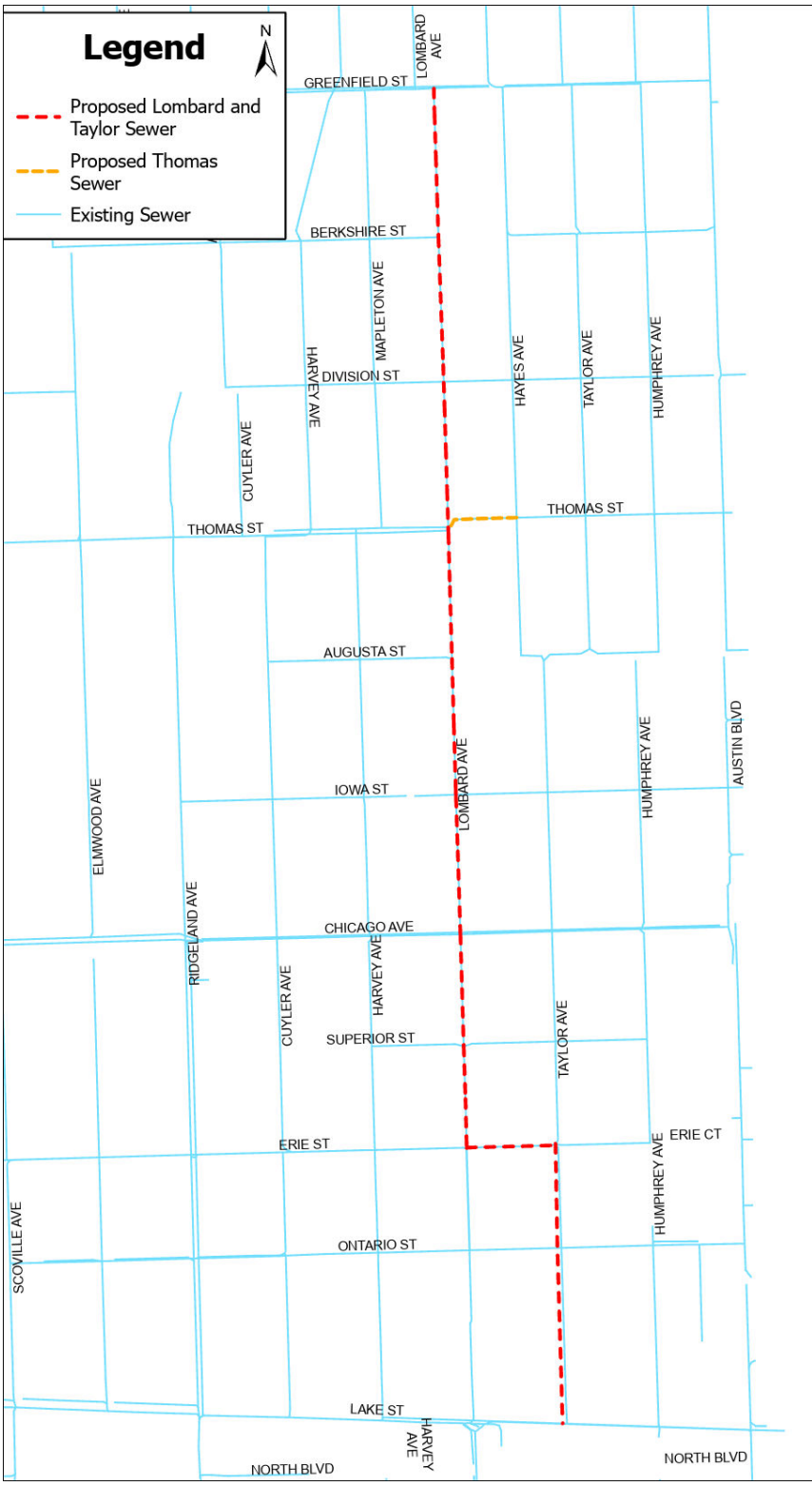


Figure 1: Project Components and Extents

1.2. PROJECT OBJECTIVES AND KEY SUCCESS FACTORS

The primary goals of the project are the following:

1. Support the Village of Oak Park in obtaining the MWRDGC's approval of the proposed connection(s) to its interceptor system through the development of a flow management and flow control strategy that will maintain current operations within safely defined flow control limits for each of the project's connection points to its interceptor system.
2. Advance the form and function design of the proposed works to a level (i.e. 30% design) where the Village and MWRDGC are satisfied that the works (including associated road reconstruction and local infrastructure works) can be feasibly and safely implemented with properly mitigated risks to adjacent infrastructure and utilities along with construction management measures that can minimize impacts to local residents and the public.
3. It is also a key goal of the project that the works be planned for implementation in close communication with other project stakeholders and departmental representatives. More specifically, roadway reconstruction, local infrastructure renewal, protection, and/or relocation needs (including utility protection or relocation) must be clearly understood and well-coordinated such that they do not impact each other's design and implementation timelines, and they continue to provide a properly integrated and cost-effective design solution. Furthermore, the project must be planned for implementation in close coordination with other stakeholders such that the works are constructed in a manner that mitigates impacts to the public, the natural environment, overall customer service, and system operations.

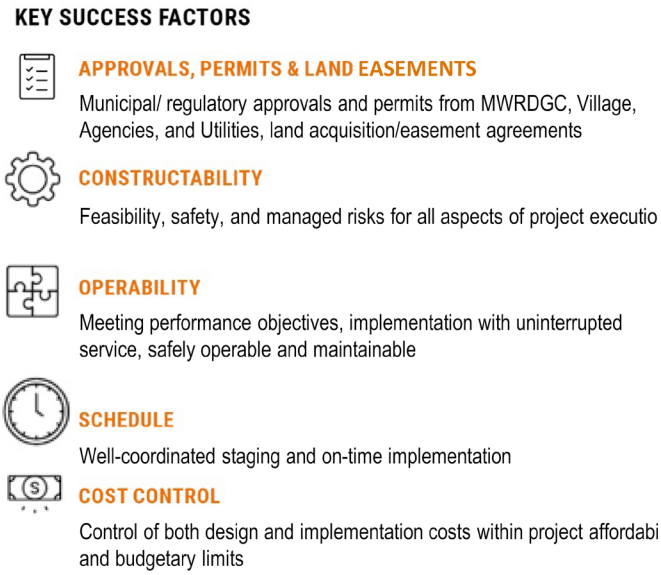


Figure 2: Key Project Success Factors

The factors that are key to our collective success in meeting these project objectives are summarized in **Figure 2.** This includes recognition that the greater certainty on the cost of the project and its implementation schedule is important in that the defined infrastructure components must be implementable within the Village's affordability limits and must also be relied upon to inform the upcoming rate study for the Village's Water and Sewer Fund. This includes gaining a greater level of certainty in the Village's ability to obtain 3rd party financial support in the form of grant funding (i.e. MWRDGC Stormwater Partnership Program, FEMA Grants).

Taylor Avenue at Lake Street looking North

1.3. KEY CONSIDERATIONS AND SOLUTIONS

In the discussion that follows, we outline a number of these key challenges and describe the approaches we will employ to address them and/or solutions we propose to evaluate further such that the overall project goals and objectives are met.

1.3.2. HYDRAULIC AND STRUCTURAL DESIGN OF TIE-INS

The Issue: Based on the initial conceptual design and proposed alignment of the LRS, we have developed an initial profile for the 96" trunk sewer on the basis of maintaining a slope of 0.12% as depicted in **Figure 3** on the following page. Based on this, it is envisioned that a drop of 10-12 ft would be required at the Erie St. connection while the drop structure at Taylor Ave and Lake St would be in the order of 20 ft. In developing the design, it is critical to understand the condition of the existing structures and the surrounding ground conditions.

The Solution: Based on the findings of our modeling assessments and the recommended flow control strategy, our design team will undertake a critical assessment of alternative form and function configurations and hydraulic designs for the proposed flow control structures (i.e., considering both passive and active controls) as well as the tie-in connections to the interceptor itself. Our hydraulic designers and geo-structural engineers will give careful consideration of both hydraulic (operational) and structural (constructability) risks in their assessment of design options and mitigation measures for tying-in to the existing structures on the interceptor. We will also develop the form and function design of the flow diversion and end-point tie-in drop structures from the point of hydraulic performance but also with a focus on the overall layout, ease of access/operation, and ventilation to minimize the risk of odors.

We envision the tie-ins will require the design of drop shafts to provide for energy dissipation (especially the deeper connection at Lake St). The preferred drop shaft is typically dictated by three parameters: depth (i.e., difference in elevation between the higher sewer and the tunnel); range and magnitude of flows to the outlet; and available ROW space/land for construction.

Given the depth and configuration, along with the highly variable nature of the flows anticipated at both connection locations, we propose to undertake an evaluation of the following types of drops based on the aforementioned criteria: Vortex (e.g. tangential vortex, vortex inserts); Baffle; and Plunge (direct drop).

Our review and preliminary design of the drop shaft hydraulics will rely largely on the findings of previous reviews and designs we performed for the City of Chicago, City of Cleveland, City of Ottawa, Region of Peel, the Narragansett Bay Commission (Pawtucket, RI), and others. If the recommended design configuration requires more advance hydraulic assessment of fluid flow in the drop-shafts and de-aeration chambers, we will be able to apply Computational Fluid Dynamic (CFD) modeling analysis as a tool to refine the design. The CFD analysis, if needed, is a value-added task that would either be deferred to the next stage of design development or possibly undertaken under the project dependent upon approval from the Village.

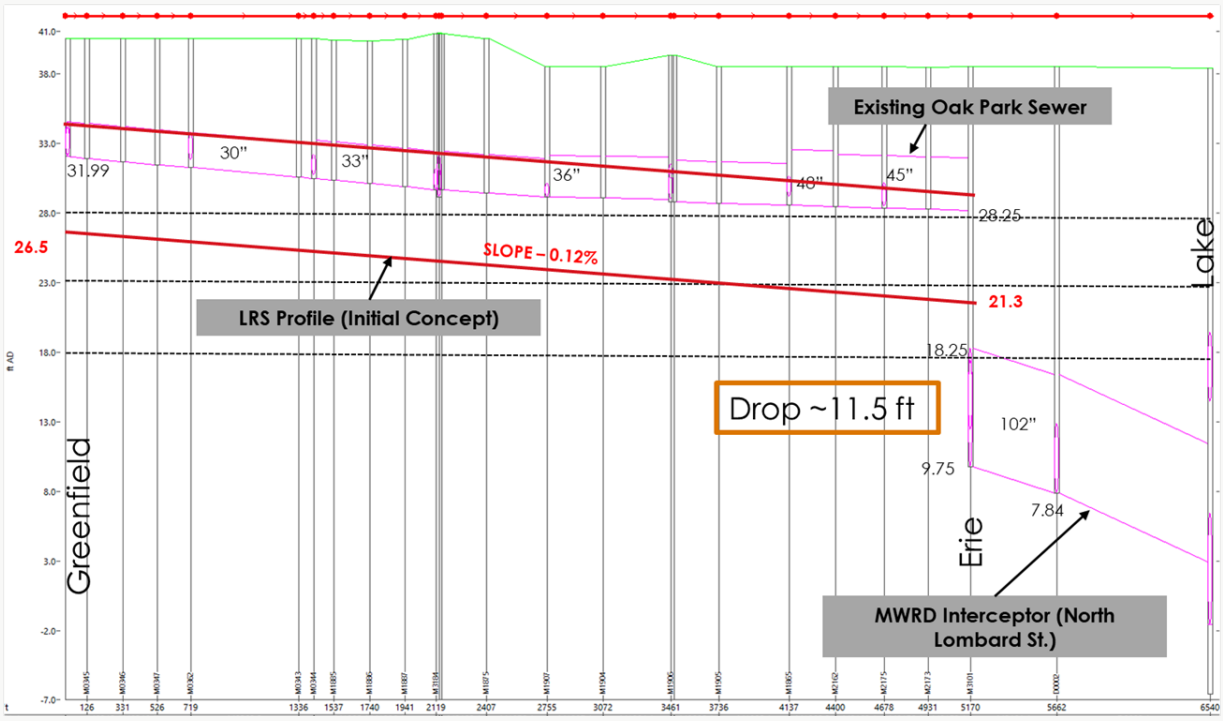


Figure 3: Lombard Relief Sewer Concept: Greenfield to Erie

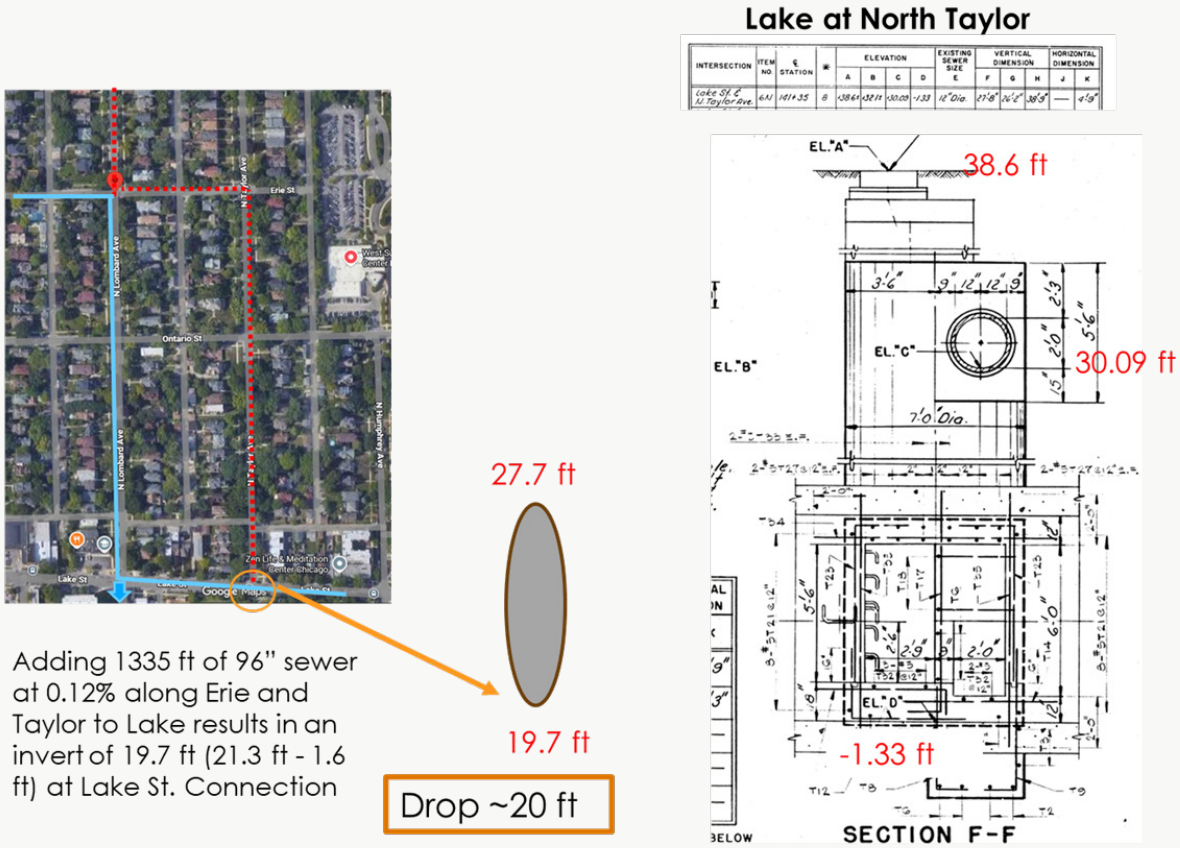


Figure 3: Lombard Relief Sewer Concept: Erie to Lake - Initial Concept for Lombard Relief Sewer Alignment and Profile

1.3.3. INFRASTRUCTURE AND UTILITY CONFLICTS

The Issue: Within an established urban setting, running into conflicts with (or impacting the stability of) existing infrastructure and/or utilities presents a very significant challenge and potentially a primary risk to the feasibility of implementing a large diameter trunk sewer like the 96" LRS. In many cases, these conflicts and/or impacts can be mitigated by relocating or supporting smaller infrastructure/utilities as well as adjusting alignments and/or shaft locations where possible.

Conflicts with larger infrastructure assets and/or utilities that cannot be feasibly or cost-effectively relocated potentially become constraints on both the alignment and profile of the trunk sewer and the location of its associated access shafts. Given that a trunk sewer upgrade project is linear in nature, it is of critical importance to properly mitigate the risk of encountering unforeseen critical conflicts along the excavated alignment to avoid further costly adjustments to the overall profile of the trunk sewer and/or put into question the feasibility of maintaining invert elevations within the constraints of the designated connection points.

The Solution: The RFQ notes that there are several utility crossings that will need to be investigated, including a 4-duct ComEd conduit on Lombard from Lake Street to Erie that may require relocation. In addition to obtaining and base mapping location information on the Village's and the MWRDGC's municipal assets, we will initiate contact with potentially affected utilities very early in the process to inform them of the project as well as request information on their assets within the proposed alignment and anticipated limits of the project (SUE Quality Level D). This initial contact will serve to start the process of initiating a formal Design Stage Request with JULIE. Once the information is compiled and a gap analysis is completed, we propose to meet with potentially impacted utilities as well as the appropriate Village and MWRDGC representatives to review our plan for undertaking further Quality Level C SUE investigations.

Finally, once the preliminary design is sufficiently advanced, we propose to meet again with the affected utilities and asset managers to discuss potential conflicts and impacts as well as the proposed mitigation measures – including the possibility to undertake Quality Level B SUE investigations at specific critical locations if it should be determined that remaining uncertainties pose a significant risk to the feasibility of the proposed design solution.

1.3.4. SUB-SURFACE CONDITIONS

The Issue: It is generally recognized that the characteristics of the ground (soil and groundwater) in which the project will be constructed represents another primary risk that will weigh heavily in the determination of the most feasible means of excavating and constructing the trunk sewer, the shafts, and the tie-in(s) to the interceptor given the trunk sewer's profile and alignment. Similar to the risk of encountering utility conflicts, problems with ground and groundwater conditions along the excavated sewer alignment and/or shafts translate into (potentially significant) schedule and cost impacts if not properly mitigated.

Based on the preliminary profile highlighted in **Figure 3**, the LRS is anticipated to be installed at depths in the order of 20-25 feet. Traditional open-cut installation is typically cost effective at these relatively shallow depths (especially less than 25 feet) provided adequate workspace is available and soil as well as groundwater conditions can be adequately managed.

It is understood that soils within the Village of Oak Park are predominantly a surficial layer of fill underlain by glacial formation of 40 to 70 ft of silty clay with some areas having pockets of sandy soil that could be wet and unstable during excavation. Open-cut excavations for the installation of large diameter sewers in soft to stiff ground conditions at these depths can present significant challenges and risks, particularly:

- Community impacts: Public disruptions and road closures, trench excavation of 12 to 15 ft minimum wide requiring street pavement removal and replacement, and utility interruptions crossing or near the trench excavation.
- Slope instability: Soft to stiff soils often cannot stand unsupported; OSHA or local codes require wide slopes or shoring, sharply increasing the excavation footprint and cost.
- Shoring complexity: Deep trenches in soft to stiff ground may require stacked trench boxes, sheet piles, soldier piles and lagging, or slurry walls. Costs escalate rapidly with depth.
- Surface settlement: Dewatering or excavation-induced movement can affect adjacent utilities, buildings, and roads.

- Excess Materials and Groundwater Management (Soil and Groundwater Quality): Open cut excavation of a 96-inch sewer will result in excess materials that, depending on the quality of the soil, may either be reused on- or off-site. However, should the soil quality exceed regulated parameters the excess soils will need to be disposed at a licensed facility at potentially significant cost. Similarly, contaminated groundwater may require pre-treatment before it can be discharged to the existing sewer system.

For depths in excess of 30-40 feet, single pass or two pass trenchless/tunneling methods may become feasible and economically advantageous if the above risks are prevalent and mitigation measures required to accommodate an open cut excavation method prove to be too costly. However, an excavation depth of 30 ft would only be attained if the pipe profile were lowered to match the invert of the MWRDGC interceptor at Erie St. (El. 9.75 ft still providing for a side connection with a dividing flow control/diversion structure) or potentially even deeper if no connection is provided at Erie St. This could be feasible given that a connection at the Erie St. invert would still result in the LRS invert at the Lake St tie-in being 10 feet above the invert of the MWRDGC interceptor at Lake St.

The Solution: At this stage, it is anticipated that the LRS will be installed by open cut methods at excavated depths in the order of 20-25 feet. However, should our initial constructability risk reviews show that the residual risks and costs of accommodating open-cut construction are excessive, our team will undertake a comparative evaluation of lowering the depth of the sewer and constructing it by tunneling methods.

The characterization of ground conditions along the pipe alignment is thus on the project's critical path. To maintain project schedule, we will need to accelerate the process of defining and executing an appropriate level of investigation to, at minimum, address key uncertainties and determine the feasibility of the preliminary design. Therefore, we propose to conduct a phased sub-surface conditions investigation and characterization analysis during this preliminary design stage. We will start with a desktop study/analysis and gap analysis of available geotechnical borings and hydrogeological data in the project area as well as undertaking a Phase 1 Environmental Site Assessment (ESA) during the initial functional design stage of the project. This desktop assessment will be focused on identifying and characterizing construction risks as well as undertaking a gap analysis that will determine whether it is deemed necessary to undertake a first phase of limited field investigations within the scope of the pre-design assignment to resolve any other key uncertainties that are critical to confirm the feasibility of the project. While this may be considered a provisional scope item, our project team is in a unique position to be able to quickly respond and undertake this work as we have the in-house expertise and specialized services to conduct the necessary investigations.

1.3.5. COMMUNITY AND ENVIRONMENTAL IMPACTS

The Issue: We fully recognized the significant impact that the proposed 96" and approximately 20 ft deep relief sewer will have on the community. Furthermore, our project management and design team understand the mandate of the ***Combined Sewer Management Plan***, where a temporary disruption to the community provides a long-term benefit to reduce the risk of surface and basement flooding in the area. As an open-cut installation, this will most likely result in a highly disruptive curb-to-curb roadway re-construction project over the entire 6500 ft length of the sewer alignment. It will be key to develop a project implementation plan that minimizes the degree of impact while implementing mitigation measures that maintain both continued access and uninterrupted services to residents through the duration of the project.

The Solution: The first approach to reducing resident disruption is through effective communication. Clear and consistent messaging to residents in public consultation during this preliminary and future design assignment, as well as pre-construction notices, will help to establish a level of trust with residents. Stantec will work with the Village to develop such notices and public materials, including hosting a public information session.

Key considerations and associated preventative or mitigation measures include:

- Minimizing duration of direct impacts through Staged Construction: To minimize the duration of direct impacts to the community, it is essential to conduct a thorough review of potential project staging scenarios during the Engineering Design Development and Refinements stage. By carefully assessing the effects of road closures and analyzing the cost implications associated with multiple mobilizations, the Stantec team can develop a recommended staged construction approach that strategically sequences work

activities. This method aims to reduce prolonged disruptions, maintain community accessibility, and optimize project costs, thereby creating a more efficient and community-focused construction approach.

- Traffic Management: This preliminary traffic management strategy will be developed in coordination with the development of the proposed construction staging strategy. It will serve as a precursor to the development of the project Traffic Impact Study and Management Plan in subsequent stages of design. It will provide an overview of access and egress requirements for each of the active construction areas and their potential impacts on traffic both locally and at nearby intersections. This includes considerations for always maintaining access for emergency vehicles as well as the potential to temporarily re-route public transit vehicles.
- Mitigating Tree Impacts: We know that protecting and preserving the environment is important, especially to the Village and its residents. That's why we will review alignments and work to keep construction limited to the roadway and away from street trees or parks where possible. Working closely with our arboricultural team led by (Keven Graham at Terra), we will identify where there may be significant or sensitive trees for incorporation into the design and preservation plans.

1.3.6. PROJECT APPROVALS AND PERMITS

Securing MWRDGC acceptance on the proposed project connections to its interceptor system is key to the success of this project. While in general, obtaining a MWRDGC Watershed Management Permit (WMO Permit) can take several months and with several possible review iterations, we have found that early engagement with MWRDGC Local Sewers Staff has led to receiving clear direction and quicker turnaround on obtaining permits. Stantec recommends that a Permit Determination Request be submitted to the MWRDGC to schedule a pre-application meeting with MWRDGC Local Sewers Staff during the Functional Design Development phase.

2. Description of Approach and Methodology

2.1. OVERALL APPROACH AND WORKFLOW

Figure 4 (on the following page) provides, in the form of an overall workflow diagram, a comprehensive overview of our approach and methodology to complete this preliminary design assignment. It should be noted that, while the approach depicted in the workflow diagram is focused on providing an overview of key tasks, our approach incorporates all task requirements and deliverables outlined in the RFQ.

The following sub-sections further highlight the key features of the approach and methodology depicted in the workflow diagram on the following page.

WE ARE ALREADY ON THE FAST TRACK

Considering all aspects of the project discussed in Section 1.3, we will pick up from our work in the development of the conceptual flow relief solution to quickly re-validate (and refine as necessary) the recommended form and function of the design solution that will proceed to the next stage of preliminary design development by:

- Efficiently conducting functional and operational needs evaluations (supported by systems modeling).
- Conducting constructability reviews of existing designs to identify gaps and opportunities for value enhancing refinements (supported by our constructability reviews as well as a first phase undertaking of critical field investigations and inventories).
- Identifying and evaluating feasible design alternatives that mitigate the identified risks and add value.
- Selecting those alternatives that provide the best value to the Village and the MWRDGC (supported by our alternatives evaluation framework that will support the decision-making process).
- Engaging affected stakeholders, utilities, and property owners early and throughout the process.

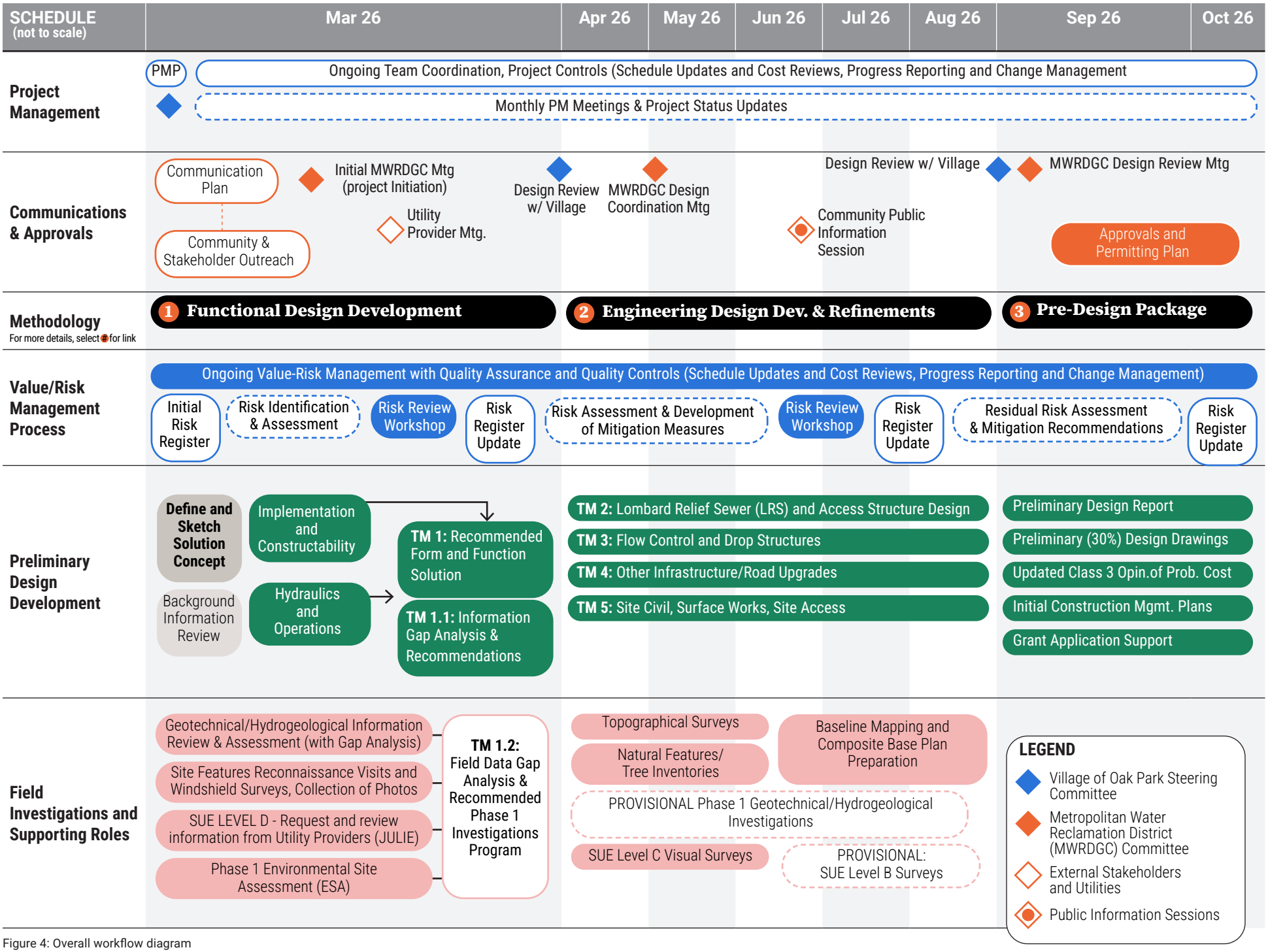


Figure 4: Overall workflow diagram

2.2. PROJECT MANAGEMENT

Stantec follows a 10-Point Project Management Framework, which includes critical tasks that affect both the management of risks and achievement of quality on typical projects that are organized based on the four key stages of project management: initiate, plan, control, and close-out.

This management structure allows us to deliver high-quality, cost-effective deliverables. Through each step of the development of our work products, the Stantec Team will communicate closely with the Village regarding budget, schedule, or scope variances. Upon receipt of the Village's Notice-To-Proceed for this project, the Stantec Team will participate in a project kick-off call to review project schedule, workplan, procedures for communication, initiate key critical data gaps/field verification needs, review and confirm the Village's expectations of project outcomes. Key takeaways from the kickoff meeting will be documented in brief meeting notes and distributed to the Village in electronic format.

Once the project kick-off call occurs, a detailed Project Implementation Plan will be developed by Stantec's Project Manager and Project Technical Lead and reviewed by all team members to provide alignment on project budget, schedule, and scope.

Project financials are to be monitored weekly and the team updated on a regular basis. Any changes to scope and schedule will be identified early and communicated to the Village and approval to proceed received before execution. Regular status reports will also be provided to the Village along with our monthly invoices, and changes will be tracked using a project-specific change log. The status reports will be provided via email and include tasks completed in the previous month and outlining goals for the next month.

Optimized Project Team Communication

No project can be successful without effective communication. The Stantec team places the highest value on communicating and coordinating project progress with the Village to provide collaboration, understanding, and your advocacy of our Work. At the Project Kick Off Meeting, Stantec and Village Staff will discuss approach to communication channels, establish main points of contact, and how information sharing is to be handled internally between Stantec, the Village, and externally with key stakeholders.

We have found that consistent and scheduled touchpoint calls and progress meetings are a valuable tool in keeping a project on track. Our Project Manager will provide regular updates through these touchpoint calls and progress meetings. These communications will include project progress, issues or concerns, and critical activities. We have found these helpful in keeping track of action items and resolving outstanding issues. These will be in addition to specific managed workshops at critical project junctures to help make sure a collaborative approach is maintained throughout the life of the project. Major decisions from these meetings will be documented in meeting notes distributed to the Village in electronic format.

2.3. COMMUNICATIONS AND STAKEHOLDER ENGAGEMENT

Stantec has extensive experience working with communities to build consensus around complicated issues and divergent perspectives. It takes thoughtful planning, transparent decision-making, steady consensus building, and documentation of tangible outcomes.

The Stantec team can tailor its approach to community engagement to fit the Village's needs through the incorporation and utilization of innovative tools including online and in-person meetings.

Our goal is to establish credibility, manage issues, and foster support for successful project implementation. Stantec will develop and manage the project Communications and Stakeholder Engagement Plan, with input and support provided by the Village, which provides various opportunities for consulting, informing, and interacting with the different stakeholders throughout the duration of the project.

With regards to the public, we propose to issue a Notice of Commencement of the project upon completion of the functional design development phase and then follow up with a public information session (open house format) upon developing our draft preliminary designs. Its objective will be to inform the public of the timing of pending construction, review the preliminary design, hear their concerns on potential impacts, and discuss mitigation measures.

A preliminary ***Stakeholder Issues and Strategies Analysis*** will be developed based on the work to be completed in developing the overall relief solution and our understanding of the community context and potential issues that may arise during the design process and the subsequent construction. As part of this analysis, key stakeholders, potential issues or concerns will be identified and stakeholders, potential

issues or concerns, and recommended potential strategies for ensuring an effective consultation process will be developed.

2.4. PRELIMINARY DESIGN DEVELOPMENT AND INVESTIGATIONS

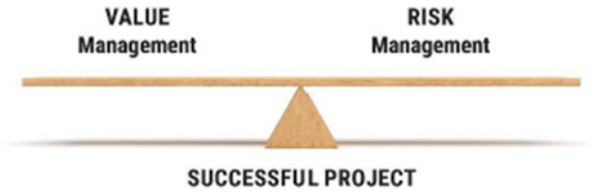
2.4.1. A BENEFICIAL VALUE-ADDED RISK MANAGEMENT APPROACH

Large-scale, multi-faceted, and complex projects like the Lombard Relief Sewer (LRS) Project are potentially subject to a wide range of evolving implementation risks and challenges as they advance from an initial concept through design and implementation. However, they also present opportunities to introduce design enhancements that add value – especially when identified early and diligently acted upon in the project development and implementation process. Our objective will be to work in partnership with the Village, the MWRDGC, and other impacted stakeholders to provide the Village with a sound and fully integrated design solution within a well-coordinated implementation plan.

As our team's Project Manager, Tonya will foster a culture of partnership and collaboration, with a focus on providing high quality services and enhanced value to the Village over the course of the project's delivery lifecycle. This includes applying a proven value/risk management process that transforms ideas and concepts into design enhancements and/or mitigation actions that represent investments with tangible benefits to the project and/or efficiencies in the Village's overall delivery of its Infrastructure Program.

We will use an approach and underlying methodology that evaluates design and risk mitigation options at each step of the design development process with the view of achieving an optimal balance of project value and managed risk (Value/Risk Management Approach). It is an approach that we regularly apply on large, multi-faceted capital infrastructure projects within established urban areas similar to the LRS Project within the urban setting of Oak Park.

A recent example where it was successfully applied, from concept to implementation, is the multi-award-winning Combined Sewer Storage Tunnel Facility in Ottawa. It is a process that our project teams have adopted and are currently applying on other large diameter trunk sewer projects in Niagara Region (i.e. South Niagara Trunk Sewer) and in the Greater Toronto Area (i.e. Region of Peel's Lakeshore Trunk Sewer and Pressure Zone 1 Sub-Transmission Main Project as well as the Queensway East Trunk Sewer, Cawthra Trunk Sewer and Queensway Transmission Main/ Pressure Zone 2 Water Systems Upgrades Project).



We will bring thoughtful, innovative, and pragmatic design solutions that:

- **Reduce implementation risks,**
- **Mitigate construction impacts,**
- **Provide best value for money,**
- **Enhance operability, and**
- **Satisfy the needs of both internal and external stakeholders.**

Resulting in an enhanced design that is fully constructable with implementation risks that can be effectively managed during construction – thus providing for greater certainty on project costs and implementation schedule.

2.4.2. FUNCTIONAL DESIGN DEVELOPMENT (RECOMMENDED FORM AND FUNCTION SOLUTION)

The first stage of this project requires an objective, thorough, and efficient constructability and operational review of the envisioned conceptual design solution and its integration within the existing system. Applying our Value-Risk Management process, Stantec will approach the design with an eye to identifying areas where both practical solutions and innovative concepts can be applied to reduce implementation and operational risks as well as construction impacts, which will also provide better certainty on project costs and schedule. In re-validating and refining the current LRS design solution, we will begin by reconfirming the basis of design performance criteria and operational control objectives with the MWRDGC and the Village.

Having completed the previous work in developing the conceptual solution, we are well positioned to then efficiently transition from a concept to defining a preferred form and functional configuration of the infrastructure that is needed to meet the established

performance objectives and operational constraints. With the preferred configuration established, we can then identify and develop, through constructability and risk assessments, the preferred methods for implementing each component of the system, including the integration of the associated roadway and adjacent infrastructure.

The **Figure 5** graphic to the right is extracted from our overall workflow diagram and further details the tasks that we will undertake in advancing the current conceptual design solution to a form and function description of the recommended design solution. We will present the recommendations in the form of a Technical Memorandum (TM) that will be reviewed in consultation with both the Village and the MWRDGC for their input and approval prior to proceeding to the refinement and further development of the design solution. Based on our review of available information and risk assessments, the TM will include recommendations on the scope of further field investigations deemed necessary to develop the pre-design.

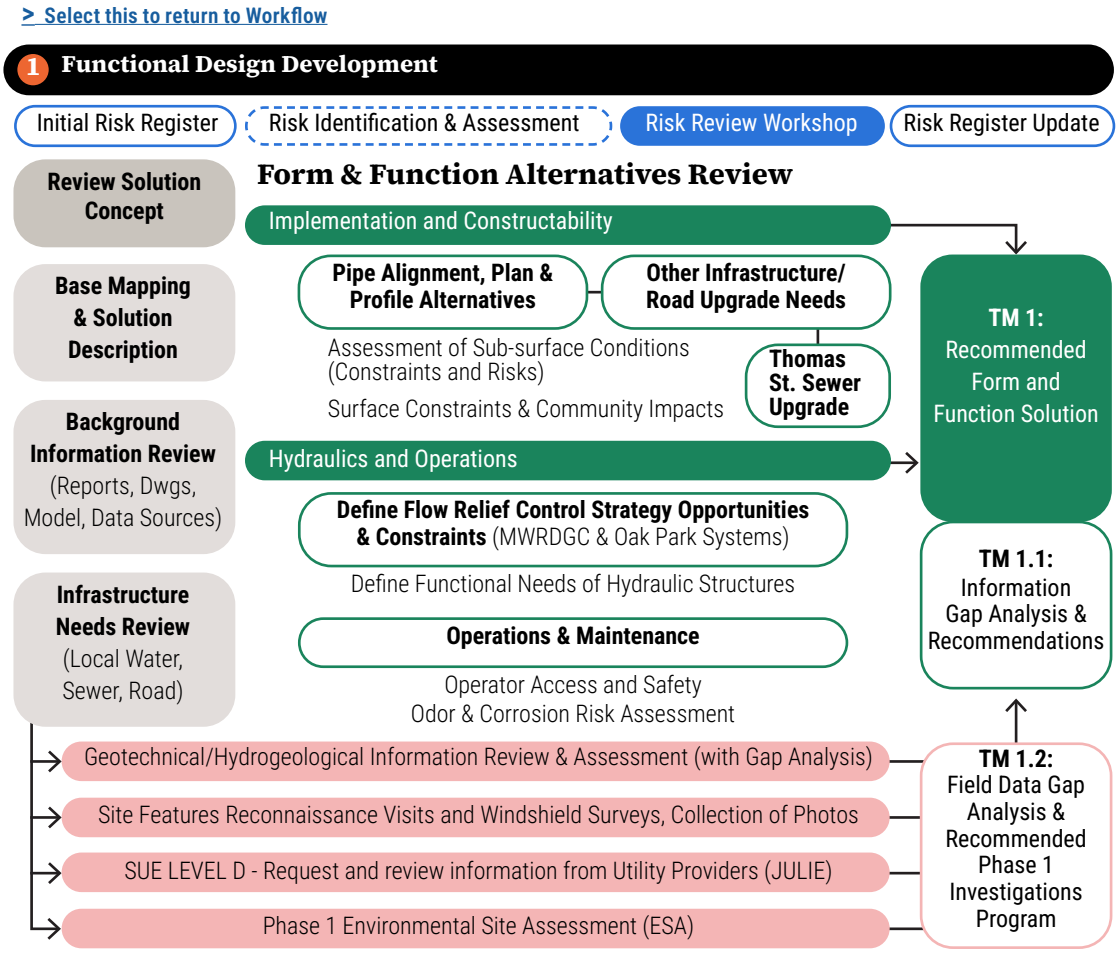


Figure 5: Functional Design Development

2.4.3. ENGINEERING DESIGN AND REFINEMENTS

The workflow diagram in **Figure 6** on the following page lists the various technical analyses and details the evaluations that will be undertaken in developing the engineering designs that will advance the form and function definition of the project to a 30% level of design and updating the Preliminary Design Report (PDR). This will include the integration of design refinements to avoid and/or mitigate risks as well as the development of general guidelines and recommendations on various construction management strategies that are designed to mitigate construction impacts and project delivery risks (i.e. costs and schedule).

As detailed in the workflow, the scope of the design includes the preliminary development of designs for the protection, relocation, and/or replacement of impacted infrastructure and utilities as well as the anticipated curb-to-curb reconstruction of the roadway along the LRS alignment (including the identification of opportunities to integrate green infrastructure solutions). As requested in the RFQ, the scope will include the proposed sewer (and other associated infrastructure/roadway rehabilitation needs) along Thomas Street between Lombard and Hayes Avenues.

We propose to present the designs for each of the components of the project in a series of TMs complete with associated draft pre-design drawings that will be reviewed in consultation with both the Village and MWRDGC for their input and approval prior to proceeding to the finalization of the pre-design and the compilation of the overall preliminary design deliverable.

The draft submission will include the envisioned construction staging strategy and associated Construction Schedule along with a draft Opinion of Probable Construction Cost (OPCC).

2.4.4. PRELIMINARY DESIGN PACKAGE

2.4.5. PRELIMINARY DESIGN REPORT AND DRAWINGS

With the review, input, and approval of the draft pre-design deliverables by the Village and MWRDGC we will proceed with the compilation of the Preliminary Design Package (as detailed in **Figure 7** on the following page). This will include necessary revisions in consideration of input received from the Village, MWRDGC, other stakeholders, and the public. The individual TMs and drawings will thus be compiled into an overall PDR complete with 30% level drawings and each of the elements described in the sub-sections that follow. The PDR will be presented in draft form for final review and comments prior to submitting the final Preliminary Design Package.

Figure 6: Engineering Design Development Workflow

2.4.6. OPINION OF PROBABLE CONSTRUCTION COST (OPCC)

The pre-design package will include an Association for the Advancement of Cost Engineering (AACE) Class 3 OPCC consistent with the 30% design development stage that will include a summary of the project scope of work complete with a work breakdown structure (WBS). This will serve as a baseline budget for the implementation of the project and will support the establishment of Preliminary Capital Phasing and Implementation Plan.

2.4.7. CONSTRUCTION MANAGEMENT AND STAGING PLANS

Construction impact mitigation planning and execution is critical to successful project implementation. At this stage, we will develop the overall recommended strategies, and guideline plans for various aspects of construction, including materials (i.e. soil and groundwater) management strategies, traffic management/emergency access strategies, tree protection and impact mitigation, and flow management strategies to mitigate operational risks during live-system connections and tie-ins. This will include the development of a recommended construction staging plan and associated construction schedule that will be designed to mitigate the duration

and level of identified impacts, as well as factor into the development of the OPCC.

2.4.8. GRANT ASSISTANCE

Stantec's North American Funding Team provides the Village with access to a nationwide network of over 250 funding specialists and more than 30 public financial management experts dedicated to securing grants and loans for municipal clients. Demonstrating proven results, Stantec has submitted over 300 funding applications in the last five years, achieving a 90% success rate. Notably, for the City of Buffalo, New York Sewer Authority, Stantec's Funding Team secured $18.75 million in grants for Green Stormwater Infrastructure.

The Stantec team will research and assess funding options available to the Village for the LRS Project. As noted in the RFQ, the MWRDGC administers its Stormwater Partnership Program that helps communities reduce flooding and improve water quality by supporting local stormwater management projects through cost-sharing. The Stantec team has assisted the Village and other communities in the past in the preparation of technical documentation supporting application requests to MWRDGC under this annual program.

As a requirement of the MWRDGC Partnership Program, projects with construction costs exceeding $3 million dollars are required to complete a Federal Emergency Management Agency (FEMA) Benefit-Cost Analysis (BCA).

The team understands the FEMA BCA Toolkit, methodologies, and reporting requirements that result in a grant-ready package. Our team has accumulated experience in generating creative funding and matching source opportunities. Additionally, we have assisted communities in compiling and submitting grant applications to various agencies, successfully receiving funding as described herein. Notable examples of other projects have included FEMA Flood Mitigation (FMA) grants, including benefit cost analysis, for the Sharon Creek Flood Mitigation Study and the Hancock County Flood Risk Reduction Program (Ohio).

Figure 7: Pre-design Package Workflow

Project Personnel

Our core team is based in our Illinois office and draws on top talent from across North America, including Project Manager Tonya Wells, who resides in the Village. With this depth of experience and local insight, our team is well positioned to deliver effective solutions with confidence and efficiency.

Our long-standing relationship and knowledge with the Village, combined with our local knowledge and national expertise, enables us to deliver effective solutions with confidence and efficiency.

Our proposed organization chart below includes staff who will be assigned to this project for its duration. Resumes of our key personnel are provided.

→ Indicates Key Personnel

Village of Oak Park

Project Manager
→ Tonya Wells PE, CFM

Project Technical Lead
→ Michael DuPont PE

Technical Advisor & QA/QC
→ Brian Kazyak PE
→ Gerry Bauer PE
Beth Knackstedt PE, SE, PMP

Planning and Design

STRUCTURAL
→ Becky Nagy PE
Alex Selsky (RME)

CIVIL
→ Lila Fehr PE
Darren Fox PE, ENV SP
Paxton McDonald EIT
Nishanth Reddy EIT

HYDRAULIC MODELING
Carl Chan PE, D. WRE
Lila Fehr PE

GEOTECHNICAL/ HYDROGEOLOGY
→ Mohammad Djavid PhD, PE
(Trench/ Trenchless Technology)
Abid Mirza PE

GREEN INFRASTRUCTURE
→ Bernadette Callahan PE
→ Rebecca Connolly PE

ROADWAY RESTORATION DESIGN
→ Tyler DePatis PE (Terra)

Matthew Heiberger PE (Terra)
Maria Alonso (Terra)
→ Matt Verheyen

CONSTRUCTABILITY REVIEW
→ Mike Schafer PE

OPINION OF PROBABLE CONSTRUCTION COST (OPCC)
Robert Magna
Don Polla PE, CCP

Support Services

Tree Preservation and Impact Plan/ Landscape/Site Restoration
Keven Graham FASLA, PLA, CLARB (Terra)
Stephen Lekan, PLA, CLARB (Terra)

Survey and Utility Locates
Lea Ann Graves, PLS (Terra)

Permitting and Agency Coordination
Rebecca Connolly PE
Siena Van Horne EIT

Environmental Services (ESA)
Rick Bolliger

Grant Assistance
Lila Fehr PE
→ Thera Novotny PE, PMP, CFM, ENV SP
Andrew W. Martin

Stantec

DBE Subconsultants

TERRA ENGINEERING LTD

RME

Chicago Department of Water Management Professional Sewer Design Engineering Services

Sewer Design Engineering Services for over 18,000 feet of combined sewer, up to 66-inches in diameter and up to 25-feet deep under a Master Agreement. Design services include layout of combined sewer route; coordination with utility owners for existing facility protection; road restoration; IDOT permitting; and production of contract drawings, specifications and cost estimates. Specific tasks included production of contract drawings, specifications, and cost estimates for three different projects.

The team assisted in coordinating with utility entities through the Office of Underground Coordination process and directly interfacing with the client to understand and complete project goals.

KEY INFORMATION

Construction Cost: N/A

Scope Performed:
- Work included sewer design; road restoration; utility and agency coordination; contract documents; and cost estimates

Project Manager and Key Personnel:
- Tonya Wells, Project Manager
- Brian Kazyak, Technical Advisor
- Beth Knackstedt, Principal in Charge
- Rebecca Connolly, Project Engineer
- Nishanth Reddy, Project Engineer

Client Reference: City of Chicago
Nedda Djavid | 312-744-0344
Nedda.djavid@cityofchicago.org

Village of Oak Park On-Call Modeling Services

In 2013, Stantec assisted the Village of Oak Park in the development of its Combined Sewer System Master Plan which identified over 20 projects throughout the Village. Since then, Stantec has provided on-call modeling services to update the Village's Infoworks CS Model based on implemented projects, new or updated sewer data, or to evaluate the impacts of proposed projects.

The Stantec team has completed six separate model/GIS database updates and alternative analyses for the Village since the adoption of the Master Plan.

KEY INFORMATION

Construction Cost: N/A

Scope Performed:
- Supported updates to the Infoworks all-pipes hydraulic model of the Village's combined sewer system.
- Supported updates to the Village's GIS database related to the combined sewer system.
- Developed documentation to support funding applications to the MWRDGC Stormwater Partnership Program.

Project Manager and Key Personnel:
- Thera Novotny, Project Manager
- Lila Fehr, Lead Hydraulic Modeler
- Mike DuPont, Technical Advisor/QA/QC

Client Reference: Village of Oak Park
Bill McKenna | 708-358-5722
mckenna@oak-park.us

Lake Elmo West Connection

Stantec is currently providing engineering services during construction after completing design for MCES of the Lake Elmo West Connection Project. This portion of the 1-WO-500 interceptor is the conduit for the western portion of the City of Lake Elmo and the City of Oakdale to enter the MCES network.

Significant boulders were expected at pipe depths. Constructing an oversized casing allowed the contractor to use a larger Tunnel Boring Machine that could be expected to break apart boulders encountered. This method was combined with pilot tubing for high-stakes crossings, like under a freeway or under a bridge.

Design included geotechnical analyses and a tunneling alternatives analysis. Out of the 5,800 LF of gravity piping designed, over 2,200 LF was installed in six tunnels. All six tunnels were for 72-inch casing pipes with 30-inch sewer pipes.

All tunnels have been successfully completed, including one under I-94 and one under Bielenberg Bridge.

KEY INFORMATION

Construction Cost: N/A

Scope Performed:
- Work included sewer design; geotechnical analysis; tunnel design; restoration; utility and agency coordination; contract documents; and cost estimates

Project Manager and Key Personnel:
- Tonya Wells, Project Manager

Client Reference: Metropolitan Council Environmental Services
Christopher Remus | 651-602-4538
Christopher.remus@metc.state.mn.us

Chicago West Study Area Stormwater Master Plan

This was a strategic stormwater master planning program to address stormwater management needs at a community level. The study area encompassed 7,710-acres of combined sewer area located on Chicago's West Side, that experiences frequent sewer backups and street flooding. Stormwater improvement projects were developed through utilization of an Integrated Catchment Model (ICM) to identify and target areas of localized flooding.

The stormwater improvement projects focused on hyper-local neighborhood drainage issues and prioritized outcomes that provided co-benefits, such as increased tree canopy and reduced urban heat island effects, to provide the greatest contribution to the community.

The goal for this master plan was to identify neighborhood projects that would show immediate, visible results to the Community but that also compliment the City of Chicago's current CIP program and that were also eligible for funding through the MWRDGC's Stormwater Partnership Program. As a result of master planning efforts, 21 bundled conveyance/GSI projects were identified.

KEY INFORMATION

Construction Cost: N/A

Scope Performed:
- Projects were developed based on a two-pronged approach using ICM paired with a GIS desktop study to optimize placement of GSI systems.
- Focused effort on identifying solutions that would be accepted by the Community.
- Developed a fit for purpose prioritization tool that could be easily and readily updated by the City key stakeholders.

Project Manager and Key Personnel:
- Thera Novotny, Project Manager
- Lila Fehr, Lead Hydraulic Modeler
- Rebecca Connolly, GSI Design
- Mike DuPont, Project Technical Lead
- Bernadette Callahan, GSI Technical Lead

Client Reference: Metropolitan Water Reclamation District of Greater Chicago
Ghana Patel | 312-751-3264

Ottawa Combined Sewage Storage Tunnel Detailed Design

Reducing the volume and frequency of combined sewer overflows to the Ottawa River was the key objective of the City of Ottawa's "Ottawa River Action Plan." The Ottawa Combined Sewage Storage Tunnel (CSST) consists of two 3m (9.8 feet) diameter inter-connected tunnels that provide over 43,000 m3 (over 56,000 cubic yards) of additional storage volume to the sewer system.

The tunnels range from 20 - 35m (65 - 115 feet) deep with six major drop shafts 2 - 3m (6.6 - 9.8 feet) in diameter. They were constructed predominantly in shale and limestone with a double shield capable tunnel boring machine. Many of the project sites included substantial fully integrated road rehabilitation and infrastructure renewal following construction of the deep shafts and tunnel connections.

KEY INFORMATION

Construction Cost: $165M

Scope Performed:

- Work includes Feasibility and Environmental Assessment (EA); detailed design development; risk management and mitigation; cost estimating; traffic management planning and design; evaluation of alternative project delivery methods; construction services; and public consultation and communications support

Project Manager and Key Personnel:

- Gerry Bauer, Design Lead

Client Reference: City of Ottawa
Steve Courtland | 613-580-2424 x 16207
Steven.Courtland@ottawa.ca

Sanitary Trunk Sewer and Pressure Zone 1 Watermain Upgrades on Lakeshore Road West

Stantec is leading the detailed design and construction administration for the Lakeshore Trunk Sewer and Zone 1 Subtransmission Main in Port Credit, with CIMA+ supporting as the subconsultant responsible for the subtransmission main design. Building on the Region of Peel's 2019 Schedule C Class EA, Stantec completed a feasibility study that refined the recommended solution, improving system flexibility by deepening the trunk sewer and relocating the proposed pumping station from Richards Memorial Park to Jack Darling Memorial Park.

An EA addendum was completed to support extending the sewer and subtransmission main beneath the Credit River to Elmwood Avenue. The final design includes major tunneled trunk sewer infrastructure, subtransmission main construction via open cut and tunnel, and targeted watermain upgrades.

KEY INFORMATION

Construction Cost: $96M

Scope Performed:

- Work included detailed design of the trunk sewer and subtransmission main; construction administration; feasibility study; flexibility and resiliency solutions; evaluation and relocation of pumping station; and EA addendum

Project Manager and Key Personnel:

- Gerry Bauer, QA/QC Technical Advisor

Client Reference: Metropolitan Council Environmental Services
Lyle LeDrew | 905-791-7800
lyleledrewe@regionofpeel.com

Illinois Department of Transportation
2300 South Dirksen Parkway / Springfield, Illinois / 62764

January 5, 2026

Subject: PRELIMINARY ENGINEERING
Consultant Unit
Prequalification File

Dave Pieniazek
STANTEC CONSULTING SERVICES
350 North Orleans Street
Suite 8000N
Chicago, IL 60654

Dear Dave Pieniazek,

We have completed our review of your "Statement of Experience and Financial Condition" (SEFC) which you submitted for the fiscal year ending Dec 31, 2024. Your firm's total annual transportation fee capacity will be $60,000,000.

Your firm's Home Office FCCM rate of 0.60%, Field Rate rate of 115.86%, Field FCCM rate of 0.41% and Home Office Rate rate of 154.57% are approved on a provisional basis. The rate used in agreement negotiations may be verified by our Bureau of Investigations and Compliance in a pre-award audit. Pursuant to 23 CFR 172.11(d), we are providing notification that we will post your company's indirect cost rate to the Federal Highway Administration's Audit Exchange where it may be viewed by auditors from other State Highway Agencies.

Your firm is required to submit an amended SEFC through the Engineering Prequalification & Agreement System (EPAS) to this office to show any additions or deletions of your licensed professional staff or any other key personnel that would affect your firm's prequalification in a particular category. Changes must be submitted within 15 calendar days of the change and be submitted through the Engineering Prequalification and Agreement System (EPAS).

Your firm is prequalified until December 31, 2025. You will be given an additional six months from this date to submit the applicable portions of the "Statement of Experience and Financial Condition" (SEFC) to remain prequalified.

Sincerely,
Jack Elston, P.E.
Bureau Chief
Bureau of Design and Environment

IDOT Prequalifications

Stantec is prequalified in the following IDOT categories:

- Highways - Roads and Streets
- Special Studies – Location Drainage, Structures

ConsultantsPrequalificationR080

IDOT Prequalified Engineering Consultant List

FIRM	CONTACT INFORMATION
Categories:	Geotechnical Services - Complex Geotech/Major Foundation,Geotechnical Services - General Geotechnical Services,Geotechnical Services - Structure Geotechnical Reports (SGR),Geotechnical Services - Subsurface Explorations,Highways - Freeways,Highways - Roads and Streets,Hydraulic Reports - Waterways: Complex,Hydraulic Reports - Waterways: Typical,Location Design Studies - New Construction/Major Reconstruction,Location Design Studies - Reconstruction/Major Rehabilitation,Location Design Studies - Rehabilitation,Special Plans - Pumping Stations,Special Plans - Traffic Signals,Special Services - Construction Inspection,Special Services - Electrical Engineering,Special Services - Landscape Architecture,Special Services - Mechanical,Special Services - Project Controls,Special Services - Regulated Substances: Simple,Special Studies - Feasibility,Special Studies - Safety,Special Studies - Signal Coordination & Timing (SCAT),Special Studies - Traffic Studies,Special Studies- Location Drainage,Structures - Highway: Advanced Typical,Structures - Highway: Complex,Structures - Highway: Simple,Structures - Highway: Typical,Structures - Moveable,Structures - Railroad,Structures: Major River Bridges,Transportation Studies - Mass Transit,Transportation Studies - Railway Engineering

Financial Stability

Stantec Inc. is a publicly traded entity listed on the New York Stock Exchange (Symbol: STN) and the Toronto Stock Exchange (Symbol: STN). We are required to be financially stable in order to maintain these listings and we are required to adhere to the Internal Control – Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission "(2013 framework)" (the COSO criteria).

We are subject to ongoing independent audits that prove our financial stability and credit worthiness. For a complete view of our audited financial statements, visit the Financial Reports & Filings section of our web site at https://www.stantec.com/en/investors/stantec-financial-information.

Please note that Stantec Inc.'s operating subsidiaries and affiliates (e.g., Stantec Consulting Ltd., Stantec Consulting Services Inc., etc.) are not publicly traded, but are owned and/or controlled by Stantec Inc. Stantec Inc.'s financial statements are consolidated to include its subsidiaries and structured entities that are controlled, but do not necessarily include all affiliates.

Stantec was founded in 1954 and unites approximately 34,000 employees working in over 450 offices across 6 continents.

Appendix - Resumes

Tonya Wells PE, CFM |

Project Manager

KEY QUALIFICATIONS

Years of Experience:
26

Location | Capacity:
Chicago, IL | 60%
(Note: Tonya lives in the Village of Oak Park)

Education:

MS, Civil Engineering, Montana State University

BS, Civil Engineering, Montana State University

Registrations:

Professional Engineer #062.061449, State of Illinois

Professional Engineer #14002, State of Montana

Certified Floodplain Manager # IL-19-00849, State of Illinois

* Denotes projects completed with other firms

About Tonya

Tonya brings 26 years of experience in water resources, civil, and environmental engineering, delivering projects ranging from small assignments to multi million dollar designs. She manages and contributes to technical planning, field investigations, studies, modeling, and design for stormwater management, floodplain management, hydraulic structures, and sewer and water conveyance systems.

Her project management responsibilities include budget and schedule control, contract tendering, client coordination, contract administration, permit acquisition, and preparation of reports and construction documents, along with quality control and assurance.

With strong expertise in hydrologic, hydraulic, and sediment transport modeling, Tonya specializes in solving complex water resource challenges. Her portfolio includes hydrologic and hydraulic studies and designs for watersheds, open channels, pump stations, hydraulic control structures, stormwater systems, collection and distribution networks, and dams—including dam break analyses and dam removals.

Relevant Experience

- Chicago Dept of Water Management Professional Sewer Design Engineering Services | City of Chicago | Project Manager
- Lake Elmo West Connection | Metropolitan Council Environmental Services | Project Manager
- Siphon Outlet Improvements | Metropolitan Council Environmental Services | Project Manager
- CTA Wilson Station Renovation* | Chicago Transit Authority | Drainage Design Task Lead
- Spur Two Water Transmission Main* | Village of Orland Park | Lead Project Engineer
- Analysis of Private Drain Rehabilitation & Replacement Technologies* | City of Chicago | Project Manager
- Great Lakes Water Supply Program* | City of Waukesha | Design Manager
- GI Permeable Pavement Pilot Study* | New York City Department of Design & Construction | Technical Advisor

Michael DuPont

PE

Project Technical Lead

Key Qualifications

Years of Experience:
29

Location | Capacity:
Nashville | 60%

Education:
BS/BSc, Civil Engineering, Marquette University

Registrations:
TN PE #130337

Mike has over 29 years of experience in planning, design, and operations of water, stormwater, and wastewater pipeline projects for the municipal sector. He is a principal in the urban water resources modeling group for the United States and is a technical lead for pipeline improvement projects nationwide. Mike's technical specialties include master planning, hydraulic modeling, pipeline rehabilitation, risk scoring and evaluation, and detailed design. His knowledge of how a pipeline network functions is more than viewing it from a desk in the form of a hydraulic model. For over three years, he was the senior manager for the operations, maintenance, and management of the Milwaukee Metropolitan Sewerage District's conveyance system as part of the MMSD's privatized O&M contract team.

Relevant Experience

- MN-346 Interceptor Replacement | Metropolitan Council Environmental Services | Technical Advisor and Design Support
- Spring Hill Sewer Separation Project | City of Somerville | Hydraulic Modeling Lead
- Basin Planning & SSO Reduction Program | City of San Antonio | Supervising Hydraulic Modeler

Brian Kazyak

PE

Technical Advisor, QA/QC

Key Qualifications

Years of Experience:
27

Location | Capacity:
Chicago | 10%

Education:
BS/BSc, Civil Engineering, Ohio University

Registrations:
IL PE #062059802

Brian is a senior water and wastewater engineering leader with more than 27 years of experience providing technical oversight, QA/QC review, and advisory support for major treatment, pumping, conveyance, and CSO infrastructure projects. He has served as a project technical lead, resident engineer, and member of technical advisory committees, guiding multidisciplinary teams through design, construction, and startup.

Brian's portfolio includes complex treatment-plant upgrades, large-scale pump stations, conveyance, and reservoir and dam rehabilitation projects, where he ensures technical accuracy, constructability, and compliance with industry standards.

Relevant Experience

- Chicago Dept of Water Management Professional Sewer Design Engineering Services | City of Chicago | Project Manager
- Alternative Water Source Study – Phase I & Phase II | City of Joliet | Project Technical Lead
- Evanston Raw Water Intake Replacement | City of Evanston | Technical Lead
- Central Road Pump Station Improvements & Conveyance | Northwest Water Commission | Project Technical Lead, Project Manager

Gerry Bauer

P. Eng.

Technical Advisor, QA/QC

Key Qualifications

Years of Experience:
44

Local | Capacity:
Chicago | 10%

Education:
B.Sc., Civil Engineering, University of Alberta

Registrations:
ON PE #90278409

Gerry is a senior engineering professional with over 40 years of experience providing technical advisory and QA/QC leadership on major municipal, environmental, and transportation infrastructure projects. He specializes in trenchless/tunneling technologies, large-diameter sewer evaluation, and rehabilitation, including co-developing national guidelines with the National Research Council of Canada.

Gerry leads complex functional planning studies and cost-optimized design reviews, and is recognized industry-wide for value engineering and developing sustainable infrastructure best practices. His work has earned multiple awards for excellence in sewer and watermain rehabilitation.

Relevant Experience

- Sanitary Trunk Sewer and Pressure Zone 1 Watermain Upgrades on Lakeshore Road West | Regional Municipality of Peel | QA/QC Technical Advisor
- Ottawa Combined Sewage Storage Tunnel Detailed Design | City of Ottawa | Design Leader
- Tri-Township Sanitary Sewer Collector Replacement | City of Ottawa | Technical Advisor, Project Director
- Santa Ana Trunk Sewer Rehabilitation | Orange County Sanitation District | Technical Advisor

Becky Nagy

PE

Structural Engineer

Key Qualifications

Years of Experience:
13

Location | Capacity:
Cleveland | 25%

Education:
MS, Civil Engineering, Cleveland State University

BS, Civil Engineering, Cleveland State University

Registrations:
OH PE #81964

Becky is a civil and structural engineer with more than a decade of experience designing infrastructure for water, wastewater, and stormwater systems. Her work includes structural design for tunnels, shafts, pump stations, storage tanks, and major treatment-plant facilities.

Becky has deep expertise in concrete and steel design, applying ACI, AISC, and related standards to complex hydraulic and non-hydraulic structures. She regularly leads multidisciplinary coordination, construction-phase support, and condition assessments to deliver safe, durable, and constructible civil infrastructure solutions.

Relevant Experience

- Pearl Street and Jennings Road Storage Tanks and Pump Station Upgrades | Northeast Ohio Regional Sewer District | Lead Structural Engineer
- Superior Stones Canal CSO Improvements | Northeast Ohio Regional Sewer District | Structural Design Engineer
- Valve Replacement Project Phase IV | Mahoning Valley Sanitary District | Project Technical Lead
- Alternative Water Source Program | City of Joliet | Work Package Lead

Lila Fehr

PE

Civil Engineer

Key Qualifications

Years of Experience:
8

Location | Capacity:
Denver | 50%

Education:
BS, Environmental & Ecological Engineering, Purdue University

Registrations:
IL PE #062.073602

Lila is a civil engineer with extensive experience in conveyance and sewer infrastructure, specializing in hydraulic modeling of riverine systems and closed conduit flow. She has applied XP SWMM, HEC RAS, Flow 3D, and ITM to evaluate combined sewer systems, develop stormwater master plans, and support flood risk studies.

Her civil design work includes raw water intakes, large diameter transmission pipelines, and potable water conveyance projects. Lila has also contributed to wastewater treatment projects involving biosolids dewatering, UV disinfection, primary clarification, and biological phosphorus removal, giving her broad technical experience across municipal infrastructure systems.

Relevant Experience

- Chicago West Study Area Stormwater Master Plan | Metropolitan Water Reclamation District of Great Chicago | Lead Hydraulic Modeler
- Village of Oak Park On-Call Modeling Services | Village of Oak Park | Lead Hydraulic Modeler
- 1909 Raw Water Intake Replacement | City of Evanston | Project Engineer
- Alternative Water Source Program | City of Joliet | Project Engineer

Mohammad Djavid

PhD, PE

Trench/Trenchless Technology

Key Qualifications

Years of Experience:
40

Location | Capacity:
Chicago | 10%

Education:
PhD, Geotechnical Engineering, Illinois Institute of Technology

Registrations:
IL PE #062.048838

Mohammad is a trench and trenchless engineering leader with extensive experience delivering geotechnical, design, and construction expertise for CSO, SSO, and major water-conveyance projects. He has led planning, investigation, design, and construction oversight for large-diameter shafts, rock tunnels, and soft-ground tunnels with and without TBMs, including groundwater-control structures. His expertise includes finite-element soil–structure analysis, geotechnical investigations, slope and seepage analysis, and groundwater modeling. A recognized specialist in preparing accurate Geotechnical Baseline Reports, he consistently improves risk management and reduces construction-phase costs.

Relevant Experience

- Albany Park Stormwater Diversion Tunnel | City of Chicago Department of Transportation | Lead Geotechnical Engineer
- Lake Mead Boulder Island Tunnel/Outfall/Diffuser Projects | Clean Water Coalition | Technical Advisor, QC Review
- City of Evanston Combined Sewer Relief Program | City of Evanston | Lead Tunnel/Geotechnical Engineer
- Alternative Water Supply Program | City of Joliet | Tunnel Extension Work Package Lead
- Big Walnut Sanitary Trunk Sewer Extension, Phase 2 | City of Columbus | Geotechnical Lead

Bernadette Callahan

PE

Green Infrastructure

Key Qualifications

Years of Experience:
21

Location | Capacity:
Philadelphia | 10%

Education:
BS, Civil Engineering, University of Delaware

Registrations:
PA PE #PE077478

Bernadette is a principal water resources engineer and project manager with experience in land development, resiliency planning, and green stormwater infrastructure. As Stantec's Green Infrastructure Leader, she has delivered innovative, community focused stormwater solutions that enhance resilience and quality of life. Bernadette specializes in planning and designing integrated green infrastructure systems that maximize triple-bottom-line benefits. Her portfolio includes being principal investigator for the Water Research Foundation's Project 5105: Advancing Benefits and Co-Benefits Quantification and Monetization for Green Stormwater Infrastructure.

Relevant Experience

- Chicago West Study Area Stormwater Master Plan | Metropolitan Water Reclamation District of Great Chicago | Green Infrastructure Lead
- Blue and Green Corridors Stormwater Resilience | City of New Orleans | Project Manager, Green Infrastructure Lead
- New York City Green Infrastructure Program | NYC Department of Design and Construction | Project Manager, Green Infrastructure Lead
- MOVEBR Perkins Road | City of East Baton Rouge | Green Infrastructure Lead

Rebecca Connolly

PE

Green Infrastructure

Key Qualifications

Years of Experience:
6

Location | Capacity:
Minneapolis | 20%

Education:
MS, Civil Engineering, Villanova University

BS, Civil Engineering, Villanova University

Registrations:
IL PE #062.074452

Rebecca is a professional engineer with six years of experience specializing in stormwater management, wet weather solutions, and green stormwater infrastructure (GSI). She leads community focused stormwater and GSI projects nationwide, providing planning, design, and implementation that advance water quality and quantity goals. Her experience includes developing GSI design and O&M manuals, conducting stormwater master planning, and supporting sewer design and water supply allocation studies in the Chicago region.

Rebecca's work is grounded in her research on urban water resources and soil dynamics in GSI systems, strengthening her technical approach.

Relevant Experience

- Chicago Dept of Water Management Professional Sewer Design Engineering Services | City of Chicago
- Chicago West Study Area Stormwater Master Plan | Metropolitan Water Reclamation District of Great Chicago | Green Stormwater Infrastructure Engineer
- City of Tucson Low Impact Development Ordinance Update | City of Tucson | Project Engineer
- 1st Avenue North Reconstruction | City of Minneapolis | Stormwater Engineer

Tyler DePatis

PE (TERRA)

Roadway Restoration Designer

Key Qualifications

Years of Experience:
12

Location | Capacity:
Chicago | 20%

Education:
BS, Civil Engineering, University of Illinois, Urbana-Champaign

Registrations:
IL PE #062.069407

Tyler is a licensed civil engineer with more than 12 years of experience in the design of transportation facilities. He has worked in a variety of projects including heavy highway design, municipal facilities, railroad design and construction inspection, he has also shown proficiency in designing and implementing solutions that effectively mitigate erosion and sediment runoff.

Tyler has also developed a mastery of several key software platforms, including MicroStation, AutoCAD, and Vertical Autoturn. This expertise allows him to design and implement complex projects with a high level of precision and accuracy, ensuring that all aspects of the project are completed on time and within budget.

Relevant Experience

- 2025 Alleys and Sidewalks | City of Evanston | Project Manager
- 2025 MFT Resurfacing | City of Evanston | Project Manager
- Capital Improvement Plan | City of Evanston | Resident Engineer
- Illinois Tollway Contract RR-23-4894 Systemwide Facilities, PH I and II | Cook County | Project Engineer

Matt Verheyen

PE

Roadway Restoration Designer

Key Qualifications

Years of Experience:
14

Location | Capacity:
Chicago | 10%

Education:
BS, Civil Engineering, University of Wisconsin - Milwaukee

Registrations:
IL PE #062070990

Matt is a transportation engineer with 14 years of experience specializing in roadway restoration, rehabilitation, and geometric design. His work spans interstate reconstruction, bridge and culvert replacement, roadway widening, drainage improvements, and maintenance of traffic design for state DOTs and tollway agencies. Matt's background also includes surveying, construction staking, roadway inspection, and as-built documentation, giving him strong insight into constructability and field implementation. He routinely delivers roadway rehabilitation plans, erosion and sediment control design, and interdisciplinary coordination on complex transportation improvement projects.

Relevant Experience

- I-80 Reconstruction (Ridge Road to Houbolt Road) | Illinois Department of Transportation | Transportation Engineer
- ISTHA, I-88 Pavement and Structural Preservation and Rehabilitation Project, Phase II | Illinois Tollway | Staff Engineer in Training
- 2024 Statewide On-Call Bridges and Structures Bureau | Iowa Department of Transportation | Transportation Engineer
- Alum Creek Drive Third Lane Widening | Franklin County Engineer | IR Roadway Design

Michael Schafer

PE

Constructability Review

Key Qualifications

Years of Experience:
35

Location | Capacity:
Cleveland | 10%

Education:
BS, Civil Engineering, Ohio University

Registrations:
OH PE #59524

Mike is a construction manager and design supervisor with 35 years of civil and underground engineering experience, specializing in constructability review for complex trenchless, tunneling, and large diameter sewer projects. He routinely provides QA/QC, constructability input, and construction phase leadership on interceptor tunnels, culvert rehabilitations, bank stabilizations, and major CSO control facilities. Mike's field driven perspective strengthens his ability to identify risks, evaluate sequencing, and resolve construction challenges efficiently. His work spans microtunneling, deep shafts, soft ground tunnels, and large emergency repair and rehabilitation projects.

Relevant Experience

- Big Walnut Sanitary Trunk Sewer Extension Phase 2 | City of Columbus | Principle Construction Oversight Engineer
- Dugway West Interceptor Relief Sewer | Northeast Ohio Regional Sewer District | Task Lead Construction Management
- Lee Road Relief Sewer Improvements | Northeast Ohio Regional Sewer District | Design Project Manager, Construction Administrator
- Shalyer Run Segment C Sewer Replacement | Clermont County Water Resources Department | Construction Manager

Thera Novotny

PE, PMP, CFM, ENV SP

Grant Assistance

Key Qualifications

Years of Experience:
24

Location | Capacity:
Chicago | 10%

Education:
MBA, Business Administration, Lake Forest Graduate School of Management

BS, Civil Engineering, Marquette University

Registrations:
IL PE #062.059980

Thera is a principal water resources engineer and seasoned project manager with more than 24 years of experience delivering stormwater, flood mitigation, and resilience projects. A PMP, CFM, and civil engineer, she leads multidisciplinary and sub-consultant teams on complex municipal programs across the Great Lakes Region. Thera excels in coordinating permitting, technical studies, and design from planning through construction.

She also provides strategic grant assistance support, preparing technical analyses, documentation, and planning materials that help municipalities pursue and secure State and Federal funding.

Relevant Experience

- Chicago West Study Area Stormwater Master Plan | Metropolitan Water Reclamation District of Great Chicago | Project Manager
- Village of Oak Park On-Call Modeling Services | Village of Oak Park | Project Manager
- Melvina Ditch Streambank Stabilization Project | Metropolitan Water Reclamation District of Great Chicago | Project Manager
- Albany Park Stormwater Diversion Tunnel | City of Chicago Department of Transportation | Project Manager

Village of Oak Park, Illinois

And

Stantec Consulting Services, Inc.

ATTACHMENT A – SCOPE OF SERVICES

This Scope of Services to be completed by Consultant (Stantec) for the Village (Village of Oak Park) is pursuant to the mutual promises, covenants and conditions contained in the Agreement between the above named parties dated the ____ day of _____, 2026, in connection with:

"PROFESSIONAL SERVICES AGREEMENT FOR PHASE I PRELIMINARY ENGINEERING SERVICES – LOMBARD RELIEF SEWER PROJECT

PURPOSE

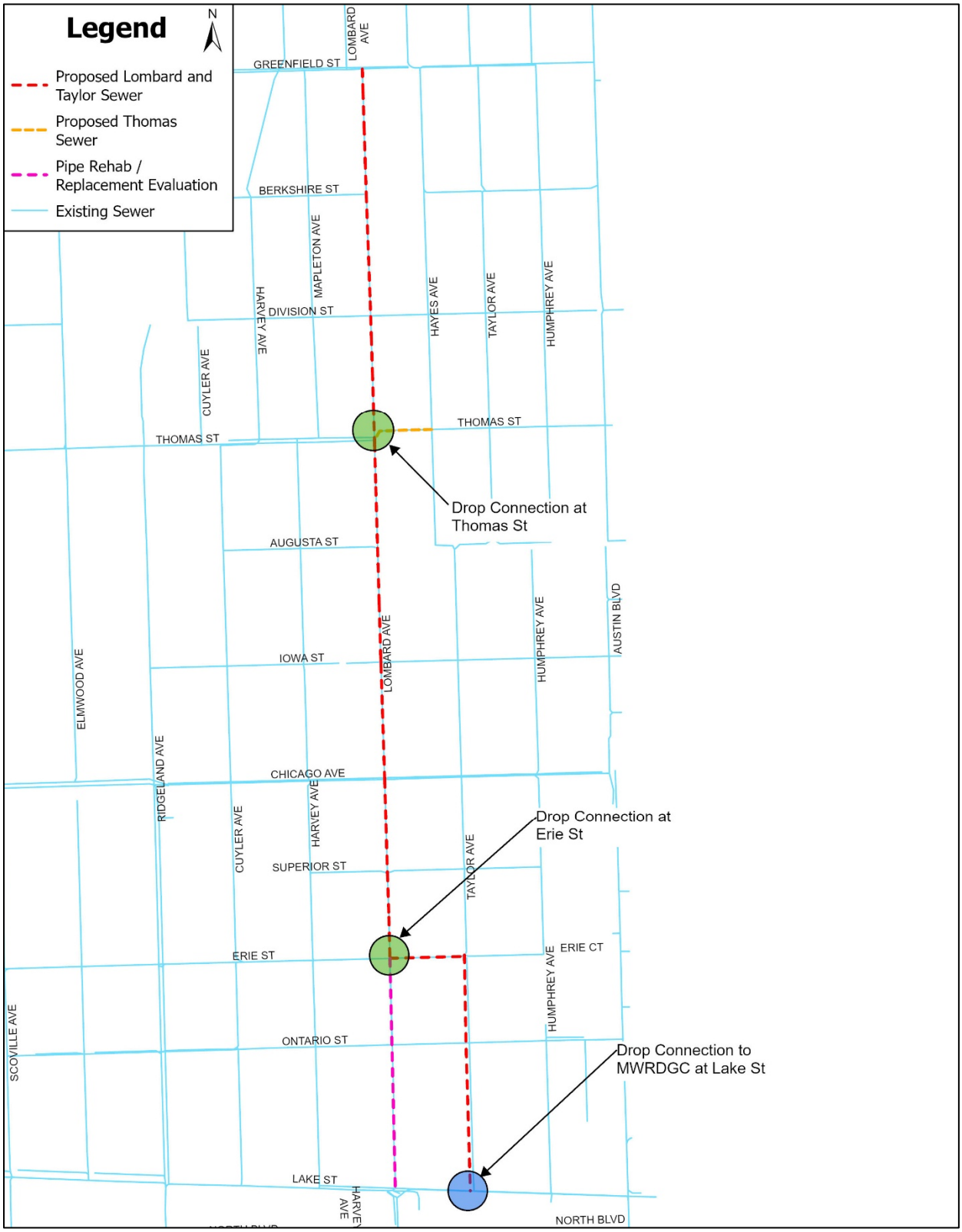
The purpose of this Scope of Services is to provide Phase I preliminary engineering services for combined sewer improvements under the Lombard Relief Sewer Project (Project). These services will include creating preliminary plan and profile drawings for the proposed relief sewer, sizing and laying out key diversion and flow control structures, creating preliminary drawings for water main and lead/galvanized services replacement, site survey and base mapping, identifying utilities and proposed relocations, investigating subsurface soil and groundwater conditions, coordination with Metropolitan Water Reclamation District of Greater Chicago (MWRDGC), and investigating opportunities for green infrastructure.

UNDERSTANDING OF THE ASSIGNMENT

The Village of Oak Park has experienced recurring basement flooding during moderate to severe rainfall events, including major storm events in 2010, 2011, 2013, and 2023. These impacts are driven by capacity limitations within the Village's combined sewer system and the downstream MWRDGC interceptor system during wet weather conditions. The Lombard Relief Sewer (LRS) Project is intended to reduce basement flooding within the northeastern portion of the Village by increasing sewer conveyance capacity and improving hydraulic connectivity to the MWRDGC interceptor system. The proposed improvements include construction of a new large-diameter relief sewer system, associated flow control and drop structures, roadway and utility improvements, and connection(s) to the MWRDGC interceptor, as shown in the figure on the following page. It also involves the replacement of the water main and lead and galvanized service lines up to the house meter.

Phase I Preliminary Engineering Services will advance the project from its current conceptual state to a coordinated and vetted preliminary (30%) design level, providing the Village and MWRDGC with sufficient technical detail to confirm feasibility, manage risk, support permitting, and pursue grant funding.

Lombard Avenue Relief Sewer Project Overview



CONSULTANT'S SERVICES

Stantec will perform the following services described below:

Task 1: Project Management

Task 1a: Project Administration

Once the project kick-off call occurs, a detailed Project Implementation Plan will be developed by Stantec's Project Manager and Project Technical Lead and reviewed by all team members to provide alignment on project budget, schedule, and scope.

A Project Safety Plan will be developed that is in accordance with Stantec and the Village's safety policies. The Safety Plan will be followed by all Stantec employees, subconsultants, and subcontractors working on the Project.

Project financials are to be monitored weekly and the team updated on a regular basis. Any changes to scope and schedule will be identified early and communicated to the Village and approval to proceed received before execution. Status reports will also be provided to the Village along with our monthly invoices, and changes will be tracked using a project- specific change log. The status reports will be provided via email and include tasks completed in the previous month and outlining goals for the next month.

Task 1b: Project Meetings

Kickoff Meeting

Upon receipt of the Village's Notice-To-Proceed for this project, the Stantec Team will participate in a virtual project kick-off meeting to review project schedule, workplan, procedures for communication, initiate key critical data gaps/field verification needs, review and confirm the Village's expectations of project outcomes. At the Project Kick Off Meeting, Stantec and Village Staff will discuss approach to communication channels, establish main points of contact, and how information sharing is to be handled internally between Stantec, the Village, and externally with key stakeholders. Key takeaways from the kickoff meeting will be documented in brief meeting notes and distributed to the Village in electronic format.

Bi-Weekly Coordination Meetings:

Stantec will host bi-weekly virtual update meetings with Village staff. These meetings will be primarily technical meetings, focused on Project updates and needs, but will include a monthly project management update.

Design Review Meetings:

Stantec will meet with the Village for two design review meetings to discuss comments regarding the design. These meetings will be held within two (2) weeks of Stantec's delivery of the Field Data Gap Analysis and Recommended Phase I Investigations Program for the first meeting. The second meeting with be held within two (2) weeks of receiving a Draft Preliminary Design Report. Stantec requests that the Village will provide comments to Stantec in time for this meeting to review and discuss any critical design issues. Key design team staff shall be in attendance for these milestone review meetings. Before the meeting, a list of critical issues for discussion will be developed and will serve as the milestone review meeting agenda. Discussion items will be captured in meeting notes prepared by Stantec.

- **Task 1 Deliverables:**
  - Monthly invoicing with associated progress reports.
  - Meeting notes from kickoff and design review meetings, to be issued to attendees electronically in PDF format.

Task 2 – Functional Design Development

The first stage of this project requires an objective, thorough, and efficient constructability and operational validation of the envisioned conceptual design solution and its integration within the existing system. Stantec will begin by reconfirming the basis of design performance criteria and operational control objectives with the MWRDGC and the Village.

Task 2a – Background Information and Infrastructure Needs Review

A focused desktop review and gap analysis will be performed to identify constraints, data deficiencies, and key risks influencing alignment, profile, constructability, and permitting. Stantec will collect, compile, and review available information as provided by the Village including the following:

- Previous hydraulic modeling, planning studies, and conceptual design materials
- Village and MWRDGC sewer records, mapping, and available GIS data
- Available roadway, utility, and right-of-way information

Task 2b – Site Features Reconnaissance and Windshield Survey

Stantec staff (up to two people) will perform a site visit to visually inspect the project areas. including Lombard Avenue, Erie Street, Taylor Avenue, Lake Street, and Thomas Street. Observations will document existing surface conditions, overhead utilities, driveway access to local buildings, roadway constraints, adjacent land uses, access limitations, and potential community impacts. The purpose of the inspection will be to determine and document existing conditions, refine our understanding of area, and confirm survey requirements. The results of the inspection will be documented through photos which will be used to advise concept development and design.

Task 2c – Geotechnical and Hydrogeological Information Review

Available subsurface information will be collected and reviewed to assess anticipated soil and groundwater conditions along the proposed sewer alignment and at proposed shaft and drop structure locations. This review and initial evaluation will:

- Include compiling geological maps and geotechnical information including available existing boreholes, and water wells searched from data bank or provided by the Village
- Evaluate anticipated excavation depths (generally 20–25 feet) and associated constructability risks
- Identify potential impacts related to soft to stiff glacial clays, groundwater management, and surface settlement
- Document information gaps and create recommendations for phased field investigations and testing

Findings from the geotechnical and hydrogeological information review will be summarized in Technical Memorandum No. 1 – Data Review and Gap Analysis under Task 2g.

Allowance No. 1: Geotechnical Field Investigation and Testing Program

When further geotechnical investigation is needed to fill the geotechnical and groundwater information data gaps and characterize subsurface conditions including drilling and testing (field and laboratory testing), Stantec will develop a geotechnical investigation program. The plan will include a detailed scope of the program that defines the number and depth of boreholes including soil drilling, sampling, field SPT, and laboratory testing. Generally, a borehole shall be of necessary depth, that is several times the width of trench or pit or tunnel below their inverts and at 500 to 1000 ft spacing depending on the subsurface conditions and material variability. Some of the boreholes may be converted to piezometers (observation wells) to measure groundwater fluctuation and perform pump tests to estimate the groundwater inflows and water bearing aquifer properties. Also, boreholes and piezometers are to be drilled or installed at locations of launching and receiving shafts for tunneling if deemed necessary.

An allowance has been created for the costs of managing and executing a geotechnical program, when needed, and to document the geotechnical and hydrogeological findings within a Geotechnical Data Report (GDR). The GDR will document all borehole logs, field and lab test results. Rubino Engineering will be doing the drilling, testing and reporting. Stantec will supervise the drilling and QA/QC the field activity and GDR. The drilling firm will be responsible for permitting, utility clearance, and traffic control during drilling. Stantec will review and analyze data to provide and generate a Geotechnical Interpretive Report (GIR) including design recommendation as needed for the detailed design.

This allowance is $185,000.00 and will be used only after approval by the Village.

Task 2d – Subsurface Utility Engineering (SUE) Level D Review

The Consultant will initiate early coordination with utility providers and perform a SUE Level D review to identify known and potential utility conflicts along the LRS alignment. This effort will include:

- Review of available utility records
- Initiation of utility records collection through JULIE
- Identification of critical crossings, including major conduits and utilities that may constrain alignment or profile

Task 2e– Survey and Baseline Mapping

Baseline mapping and composite base plans will be prepared to support preliminary design development and integration of engineering, utility, and roadway features.

Alignment survey will include surface features, above and below grade utilities, and topographic details at a scale of 1 inch = 20 feet with contours at a 0.5-foot interval along the linear pipeline and streetscape alignments. The survey will be referenced to the NAD83(2011) Horizontal datum and City of Chicago vertical datum, extend 25 feet beyond the public right-of-way or to the building face, whichever is closer, and depict the following:

- Location of roadways, ramps, lane and sidewalk striping, above ground structures, buildings, including canopies and awnings at the frontage, fences, posts and signage, utility boxes and poles, gates, parking signs, waterways, surfacing materials, landscaping, calipers of trees, boring locations, and other physical features, within the survey limits that are pertinent to the proposed work.
- Location of utilities within the project limits, such as overhead wires, hydrants, storm drainage and sewer manholes, including elevation of manhole rims and inverts, and other buried utilities such as gas, electric, cable TV, and telephone. Locations will be derived from features visible at the surface with connecting pipes and conduits derived from historical record drawing information obtained from the Village and JULIE design stage request.
- Develop survey base mapping in a MicroStation/Open Roads version suitable for use in design development and conduct a field check of the mapping.
- Record permanent benchmarks in the area of the survey and set temporary benchmarks every 500 feet.
- Spot elevations of roadway cross-sections approximately every 25 feet
- Spot elevations at pedestrian ramps and driveways extending 25 feet beyond the right-of-way.
- Spot elevations of building foundations and entrances.

The approximate right-of-way will be depicted based on Village GIS data and assessors mapping.

No property line or right-of-way research or analysis is included. The location of buried utilities will be interpreted from available record plans requested from utility companies, visible castings and historical dig-safe markings. Survey data will be compiled as a draft base map in MicroStation/Open Roads software with surface grades as a topographical mesh.

SUE Level B investigations are not included but can be performed at critical structure locations if deemed necessary as part of a future amendment.

Task 2f – Preliminary Environmental Site Assessment (PESA)

A Preliminary Environmental Site Assessment (PESA) will be completed to evaluate environmental conditions along the Subject Alignment within the public right-of-way (ROW) and to identify potential recognized environmental conditions (RECs) or other environmental considerations that could affect construction activities. The assessment will support project planning, design, and construction by identifying potential environmental risks associated with historical and current land uses within and adjacent to the Subject Alignment. The PESA will be accomplished by, and limited to, the following:

- A desktop review of reasonably available environmental information relevant to the Subject Alignment, which may include:
  - Federal and state environmental regulatory database information for sites within standard search distances of the project alignment, including National Priorities List (NPL), federal Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) sites, Resource Conservation Reclamation Act (RCRA) and Treatment, Storage, and Disposal (TSD) facilities, solid waste disposal sites, leaking underground storage tanks (LUST) sites, and voluntary cleanup or brownfield sites.
  - Review of available environmental reports, permits, and regulatory correspondence provided by the client or obtained from public sources.
  - Review of historical land use information along the alignment, including historical aerial photographs, fire insurance maps, USGS topographic maps, and municipal directories, as available
- A reconnaissance of the accessible portions of the Subject Alignment may be conducted to observe current site conditions and identify features that may indicate potential environmental concerns, such as evidence of past industrial or commercial use, fill material, staining, storage areas, or utility appurtenances. Observations will be documented photographically, as appropriate.
- If appropriate based on findings, Stantec may contact local or state agencies to obtain additional information regarding known environmental conditions, past releases, or remedial activities within or adjacent to the project corridor.

- Information obtained during the records review and site reconnaissance will be evaluated to identify potential RECs or other environmental considerations relevant to the Subject Alignment. A memorandum or report will be prepared summarizing:
  - The scope and limitations of the assessment.
  - A description of the Subject Alignment and surrounding land use.
  - Summary of records review and site reconnaissance findings.
  - Identification of any potential environmental concerns to the Subject Alignment.
  - Recommendations for additional environmental evaluation, if any, or construction-phase considerations.
  - General figures of the Subject Alignment, location and plan will also be included.
  - Text of the report will initially be submitted as a draft for one round of review and comment. The draft report may be revised based upon comments made by Village before submittal of the final report. The results of the PESA stated as professional opinions regarding the condition of the Subject Alignment at the time of the assessment. The report has limitations and offers no guarantee that all possible environmental conditions will be recognized or discernible.
- The PESA does not include an All Appropriate Inquiries (AAI) Final Rule 40 CFR Part 312 for protection from environmental cleanup liability under the CERCLA
- The assessment will be limited to the corridor defined by the right-of-way and does not include the individual properties where lead and galvanized service lines will be replaced. Stantec will not contact individual property owners.
- This proposed PESA does not include any sampling or laboratory analysis.
- The report to be delivered by Stantec will be for the sole use of the Village. The report may not be relied upon by any other party without the express written consent of Stantec, which may be withheld at Stantec's discretion. Any such reliance to which Stantec consents will (1) contain a limitation of Stantec's liability which will be no greater than the lesser of $100,000 or the value of Stantec's fees for the report, and (2) only be granted pursuant to the conditions of Stantec's standard form reliance letter (i.e., Stantec will not sign forms of reliance letter proposed by lenders or other third parties)

If further investigation actions are recommended as a result of the PESA, scope and costs associated with further investigation will be defined in the future detailed design amendment as needed and can be performed at the same time with the subsurface geotechnical investigation discussed above..

Task 2g – Form and Function Alternatives Review

Building on previous conceptual work, Stantec will evaluate and refine form and function alternatives for the Project, including:

- Confirmation of hydraulic performance objectives
- Assessment of operational, constructability, and maintenance considerations
- Identification of key diversion and flow control structures

Task 2h – Technical Memorandum No. 1 (TM-1)

The Consultant will prepare **Technical Memorandum No. 1 – Data Review and Gap Analysis**, documenting:

- Background Information Review (reports, drawings, models, data sources)
- Infrastructure Needs Review (local sewer, water, roadway, utilities)
- Hydraulic performance objectives and operational control criteria
- Review of surface constraints and community impacts
- Assessment of subsurface conditions, constraints, and risks
- Operations and Maintenance
- Recommended form and function alternatives
- Recommendations to resolve key uncertainties
- Geotechnical/Hydrogeological Information Review & Assessment
- Proposed geotechnical investigation plan (if needed)
- Site Features Reconnaissance Visits and Windshield Surveys, Collection of Photos
- SUE LEVEL D - Request and review information from Utility Providers (JULIE)
- Preliminary Environmental Site Assessment (PESA)

- **Task 2 Deliverables:**
  - The Stantec team will provide the noted Task 2 deliverables for Village review and comment. It is anticipated that the Village will review each deliverable and provide their comments within two

weeks of submission. All submittals will be PDF copies unless noted otherwise and submitted to the Village via email or SharePoint.

Task 3 – Preliminary Engineering Design and Development

Task 3a – Lombard Relief Sewer and Access Structure Design

The Consultant will develop preliminary engineering concepts for the Project, including:

- Plan and profile concepts for the proposed 96-inch relief sewer
- Concept layouts of access shaft locations, junction chambers, and tie-in locations
- Evaluation of construction methodologies (open cut versus trenchless) and associated excavation limits
- Evaluation of sewer on Lombard between Erie St. and Lake Ave. for either rehabbing or replacement with proposed pipe sized per evaluation to identify elements needed to progress for final design. Proposed pipe sizing will be based on hydraulic modeling.

Task 3b – Flow Control and Drop Structures

Stantec will undertake a critical assessment of alternative form and function configurations and hydraulic designs for the proposed flow control structures (i.e., considering both passive and active controls) as well as the tie-in connections to the interceptor itself. Alternatives will be reviewed for hydraulic performance, energy dissipation, operation in dry- and wet-weather conditions, and access for maintenance. Recommendations will be made for structures that may require advanced hydraulic assessment using Computational Fluid Dynamics (CFD) modeling during design.

Stantec will develop preliminary plan and section drawings for flow diversion, flow control, and drop structures required at MWRDGC interceptor connections. This task will include:

- Hydraulic and operational design configurations
- Evaluation of drop structure types (e.g., vortex, baffle, plunge)
- Consideration of drop structure access, odor, and corrosion risks

Task 3c – Water Main and Lead/Galvanized Service Line Replacement

The Consultant will develop preliminary engineering concepts for the Project. The size of the water main will be provided by the Village based on their water distribution model. The concepts will include:

- Plan and profile concepts for the replacement water service with locations of lead/galvanized services indicated on the plans. Location of lead/galvanized services will be based on the inventory provided by the Village.

Task 3d – Other Infrastructure and Road Upgrades

Stantec will evaluate impacts to adjacent infrastructure and roadway systems, including:

- Protection, relocation, and/or replacement of local water, sewer, and utility infrastructure
- Roadway reconstruction needs associated with curb-to-curb excavation
- Investigate whether existing right-of-way is sufficient for proposed sidewalk improvements
- Identification of opportunities to integrate green stormwater infrastructure where feasible

Opportunities for green stormwater infrastructure will maximize co-benefits, like increased biodiversity and green space, improved street safety, and reduced nuisance flooding. Following recommendations in the Village's Green Infrastructure and Enhanced Land Management Framework, potential GSI systems will prioritize native planting and biodiversity. These may include bump-outs, tree trenches, and stormwater planters. Where there are surface space constraints, other systems may include subsurface systems. Review of GSI opportunities will be focused on Lombard Ave and portions of Taylor Ave and will connect to the proposed conveyance upgrades where feasible for ease of construction and limited neighborhood impacts.

Available roadway, utility, right of way information, mapping, and GIS data will be used to identify flow paths and set planning constraints, including offsets from buildings, properties, and utilities. The project area will be reviewed block-by-block to determine drainage areas, set constraints, and identify feasible GSI locations. Deliverables include PDF maps and GIS layers of feasible GSI locations and corresponding drainage areas.

Task 3e – Technical Memorandum No. 2 (TM-2)

The Consultant will prepare **Technical Memorandum No. 2 – Preliminary Engineering Design**, documenting:

- Conceptual plan and profile drawings and structure layouts

- Recommendations for flow control and drop structures
- Impacts to and recommendations for other infrastructure in the Project alignment
- Pertinent field investigation results and recommendations

- **Task 3 Deliverables:**
    - The Stantec team will provide the noted Task 3 deliverables for Village review and comment. It is anticipated that the Village will review each deliverable and provide their comments within two weeks of submission. All submittals will be PDF copies unless noted otherwise and submitted to the Village via email or SharePoint.

Task 4 – Predesign Package Development

The Consultant will compile the results of Task 3 into a comprehensive predesign package, including:

- Preliminary Design Report (integration of all Technical Memoranda)
- Preliminary (30%) Design Drawings. Plans to include:
    - Sewer plan and profile sheets (23 sheets assumed)
    - Water main and lead service line replacement plan and profile sheets (23 sheets assumed)
    - Roadway restoration plans showing:
        - Limits of disturbance
        - Pavement replacement extents,
        - ADA sidewalk ramp traffic calming locations (assumed to be investigated at 11 intersections. Speed cushions will be replaced in kind)
        - Areas of proposed GSI
        - Typical Sections
    - Structure layout for the three drop structures with interior dimensions to provide detail to progress to final design with structural engineers.
- Association for the Advancement of Cost Engineering (AACE) Class 3 Opinion of Probable Construction Cost (OPCC)
- Initial construction management plans
    - Preliminary traffic management strategy
    - Preliminary construction staging plan and schedule
    - Flow management strategy (connections and tie-ins)
    - Preliminary construction schedule
    - Initial tree protection and potential impact plan. This will include an in-field verification of tree inventory and mapping provided by the Village and assessment of critical locations as determined in the utility planning

- **Task 4 Deliverables:**
    - The Stantec team will provide the noted Task 4 deliverables for Village review and comment. It is anticipated that the Village will review each deliverable and provide their comments within two weeks of submission. All submittals will be PDF copies unless noted otherwise and submitted to the Village via email or SharePoint.

Task 5 – Agency Coordination

The Consultant will coordinate closely with the MWRDGC, utility owners, and service providers to work towards obtaining alignment and connection approvals.

Stantec will support the Village in securing MWRDGC conditional approval for the proposed connection to its interceptor. To initiate the review process, Stantec will prepare and submit a permit determination request to MWRDGC Local Sewers to schedule a pre-application meeting. This submission will include a cover letter that describes the purpose of the project and sketches that provide sufficient detail of the proposed alignment and connection.

Stantec shall participate in and support the Village in the pre-application meeting with MWRDGC. Goals of the meeting are to communicate the Village's intent for the proposed interceptor connection, clarify MWRDGC's permitting requirements and expectations, and confirm specific data, analyses, and documentation required to support the MWRDGC's review and process to secure conditional approval of the project.

To maintain alignment and proactively address the MWRDGC's feedback, Stantec will participate in two additional design coordination meetings with MWRDGC, one to be held at the beginning of Engineering Design and Refinement phase, and the final meeting at the beginning of the preparation of the pre-design package.

Comments received during coordination meetings will be documented in meeting minutes. Up to **40 hours** have been assigned for coordination with MWRDGC.

Once available utility information has been obtained, compiled and reviewed, Stantec shall review the projects potential impact to public and private infrastructure including but not limited to roads, sanitary sewers, storm sewers, water lines, gas, electric, telecommunications, and other underground or surface utilities. Stantec shall notify and coordinate with the Village prior to initiating any communication with utility/service owners. Communications shall be documented and saved to the project folder. Up to **24 hours** has been assigned for utility coordination support.

Task 6 – Village Stakeholder Meeting

Stantec will support public and stakeholder engagement, as requested by the Village, during Phase I Preliminary Engineering Services. Services under this task will include development of a project communication plan, preparation of public outreach and engagement materials, attendance at 1 engagement meeting with key Village Stakeholders to present preliminary designs, anticipated impacts, and mitigation strategies.

- Assumes 2 Stantec Staff to attend engagement meeting in-person.
- A total of **40 hours** has been allocated for providing periodic and on-call support for the development of public outreach and engagement materials as requested by the Village.

Task 7 – Grant Assistance

Stantec will utilize the Federal Emergency Management Agency's (FEMA) Benefit Cost Analysis (BCA) toolkit and published FEMA BCA methodology to generate the required Benefit/Cost information to be used in future grant application requests for the final LRS Project. Data gathered under Functional Design Development (Task 2) and modeling data from the Village's Infoworks CS model will be used as the "without project" and "with project" conditions to calculate anticipated damages and benefits. Values for all properties benefiting from the LRS Project will be obtained from the Cook County Assessors website.

This task assumes the proposed/preferred design will be an independent solution, to reduce flood damage, and the Village will assist in providing:

- FEMA PA Grants Portal summaries for historic disaster damages for debris clearance, damage to Village facilities/property, and/or flood response.
- Damages or flooding levels from historic floods to include where possible, identifying individual flooded properties and flooding levels/damages, and/or NFIP Insurance claims.
- Feedback on anticipated flooding damage/impacts and utilized assumptions in the various BCA iterations.

A BCA narrative detailing the analysis, methods, findings, and associated supporting documentation will be consolidated within the grant application documentation. FEMA BCA narrative, Appendix, and FEMA BCA Toolkit of the LRS Project will be provided in (.pdf electronic format).

Stantec will develop and compile technical materials to support applications to programs such as the MWRDGC Stormwater Partnership Program and FEMA Grant Programs.

Stantec will coordinate on a frequent basis to allow the Village review of the elements of the application as they are completed. Level of effort includes technical support responding/resolving any State/FEMA Requests for Information (RFIs) related to BCA.

Preparation and submittal of the final grant application will be coordinated with Village Staff. Final grant application documentation will be provided to the Village in electronic .pdf or native file format as appropriate.

Allowance No. 2: Review of Other Grant Funding Opportunities

This allowance is for the possibility of funding coming available during the Phase I and is for the purpose of seeking and supporting grant opportunities. This allowance is $30,000.00 and will be used only after approval by the Village.

PERIOD OF SERVICE

Stantec will follow the following deliverable schedule.

1. Deliverable Schedule
    a. TM 1
        i. Draft – 35 days from NTP
        ii. Receive Village Comments - 50 days from NTP
        iii. Final – 60 days from NTP
    b. TM 2
        i. Draft – 90 days from NTP
        ii. Receive Village Comments - 105 days from NTP
        iii. Final – 115 days from NTP
    c. Preliminary Design Report
        i. Draft – 150 days from NTP
        ii. Receive Village Comments - 165 days from NTP
        iii. Final – 175 days from NTP
    d. Preliminary Design Drawings
        i. Draft – 185 days from NTP
        ii. Receive Village Comments - 200 days from NTP
        iii. Final – 210 days from NTP
    e. Class 3 OPCC
        i. Draft – 215 days from NTP
        ii. Receive Village Comments - 230 days from NTP
        iii. Final – 240 days from NTP

Village of Oak Park, Illinois

And

Stantec Consulting Services Inc.

ATTACHMENT B – BASIS FOR COMPENSATION

Table 1 summarizes Stantec's estimated level of effort and fee for performing the scope of services detailed in Attachment A.

TABLE 1
ESTIMATED LEVEL OF EFFORT AND FEE

Task	Labor Hours	Total Billings
Task 1: Project Management	208	$48,564
Task 2: Functional Design Development	781	$159,567
Task 3: Preliminary Engineering Design & Development	944	$192,530
Task 4: Predesign Package Development	1311	$260,468
Task 5: Agency Coordination	64	$13,880
Task 6: Village Stakeholder Meeting	80	$19,000
Task 7: Grant Assistance	284	$61,408
Task 8: Expenses / Subs	-	$177,650
Total:	**3,672**	**$933,067**

Additionally, allowances for *Geotechnical Field Investigation and Testing Program* for $185,000 and *Review of Other Grant Funding Opportunities* for $30,000 have been included within this proposal to provide the Village with controlled contract flexibility. These allowances will not be spent without prior written authorization of the Village's Project Manager.

Stantec's compensation for services related to this project is based on the hourly billing rates presented in Table 2 below. Other terms related to compensation include:

- Hourly billing rates proposed include direct labor, labor overhead, and fee. Rates proposed are valid through December 31, 2026.
- Travel expenses for employees connected with the services of this project will be paid at the rate of 1.1 times the actual cost.
- Costs of reproduction, printing and binding applicable to the Project will be paid at the rate of 1.1 times actual costs.
- Costs for outside and subcontracted services will be paid at the rate of 1.1 times actual cost.

TABLE 2
HOURLY SALARY RATES SCHEDULE

Labor Classification	Labor Billing Rate
Vice President	$320.00
Senior Principal	$285.00
Principal	$270.00
Lead/Supervising	$223.00
Senior	$212.00
Professional	$190.00
Associate	$183.00
Sr. Technician	$164.00
Technician	$150.00