



**CHRISTOPHER B. BURKE ENGINEERING, LTD.**

9575 West Higgins Road Suite 600 Rosemont, Illinois 60018 TEL (847) 823-0500 FAX (847) 823-0520

September 3, 2021

Village of Orland Park  
Public Works Department  
15655 Ravinia Avenue  
Orland Park, IL 60462

Attention: Mr. Kenneth Dado  
Utility Operations Manager

Subject: Proposal for Design, Bidding, and Construction Engineering Services  
Silver Lake West Stage 2 and El Cameno Re'al Water Main Replacement

Dear Mr. Dado:

Christopher B. Burke Engineering, Ltd. (CBBEL) is pleased to submit this proposal to provide Design, Bidding, and Construction Engineering Services for the Silver Lake West Stage 2 and El Cameno Re'al Water Main Replacement Project. Below is our Understanding of the Assignment, Scope of Services and Estimated Fee.

**UNDERSTANDING OF THE ASSIGNMENT**

The Village of Orland Park (Village) is seeking an engineering consultant to perform design, bidding, and construction engineering services related to the Silver Lake West Stage 2 and El Cameno Re'al Water Main Replacement Project in Orland Park, Illinois. The engineering consultant will prepare plans and specifications, construction cost estimates, obtain the necessary permits and perform Phase III construction engineering services.

CBBEL's familiarity with Village Staff and experience performing design and construction oversight for the Village's annual water main improvement project for the past several years ensures that CBBEL understands the assignment and allows us to be very competitive with our fee on this proposal.

**SCOPE OF SERVICES**

**Task 1 – Kickoff Meeting:** Once CBBEL is given the notice to proceed with design, CBBEL will set up a kickoff meeting with key CBBEL Project staff and the Village to discuss the goals and objectives of the Project. Key elements of the meeting will include confirmation of the project scope and schedule, coordination efforts with outside agencies, and design criteria. CBBEL will prepare an overall improvement exhibit to discuss the proposed alignment of the water main and fire hydrant locations.

**Task 2 – Preliminary Design:** Based on the feedback from the kickoff meeting, CBBEL will prepare Plans, Specifications, and an Engineer’s Estimate of Probable Cost for the project. The design will use Village GIS data overlaid on an aerial as the base map. The Plans, Specifications, and an Engineer’s Estimate of Probable Cost will be provided to the Village for review and comment prior to the Village review meeting.

**Task 3 – Village Review Meeting:** CBBEL will submit the preliminary design for the Village’s review and then schedule a review meeting to discuss the comments.

**Task 4 – Field Reconnaissance:** CBBEL will perform field inspection of the affected drainage structure to determine repair scope. This task shall also include assessment of the affected curb and sidewalk to determine replacement limits.

**Task 5 – Final Design:** CBBEL will revise the Plans, Specifications, and an Engineer’s Estimate of Probable Cost based on comments generated in the Village Review Meeting. The final design shall then be submitted to the IEPA and will be ready for bid.

**Task 6 – IEPA Permitting:** CBBEL will prepare and submit an IEPA permit application for watermain construction.

**Task 7 – Bidding Assistance:** CBBEL will prepare an Advertisement for Bids on behalf of the Village. CBBEL will then notify qualified contractors regarding this project. CBBEL will respond to contractor questions during the bidding process and provide addenda as necessary. CBBEL will assist the Village and attend the bid opening, perform reference checks, provide bid evaluation and tabulation, and provide a letter of recommendation to the Village for the most responsive contractor.

**Task 8 – Pre-Construction**

- Review the Contractor’s schedule for compliance with any milestones and/or restrictions found in the contract documents. CBBEL will review the schedule for constructability to ensure that the work is being completed in a logical sequence.
- Prepare all project files prior to the start of construction. This shall include reviewing all applicable construction inspectors’ checklists found in IDOT’s Construction Manual to anticipate any issues that may arise during construction.
- Facilitate the Pre-Construction Meeting.
- CCDD testing will be completed by the Village.

**Task 9 – Shop Drawing Review / Request for Information (RFI) Responses**

CBBEL’s staff will assist the RE in reviewing shop drawings for the water main, water main liner, storm sewers, structures, and other elements as required.

- Check and approve, or reject and request resubmittal of, any submittals made by the contractor for compliance with the contract documents.
- Shop Drawings and Contractor Submittals:
  - Record data received, maintain a file of drawings and submissions, and check construction for compliance with them.
  - Review Contractor’s submittals for compliance with contract documents. Notify the Village of any deviations or substitutions. With the notification, provide the Village with a recommendation for acceptance or denial, and request direction from the Village regarding the deviation or substitution.
- Review and coordinate responses to any RFI from the Contractor in a timely manner and maintain a separate file for each request.

## **Task 10 – Construction Observation**

*The duration of this task is based on an assumed five months of construction. CBBEL has estimated hours from May 1, 2022 to October 1, 2022; the Resident Engineer is estimated at 50 hours per week due to the complexity of this project.*

### *CONSTRUCTION OBSERVATION*

- Observe the progress and quality of the executed work. Determine if the work is proceeding in accordance with the Contract Documents. CBBEL shall keep the Village informed of the progress of the work, guard the Village against defects and deficiencies in the work, and advise the Village of all observed deficiencies of the work and disapprove or reject all work failing to conform to the Contract Documents.
- Provide extensive on-site observations of the work in progress and field checks of materials and equipment through an RE who shall:
  - Serve as the Village’s liaison with the contractor working principally through the contractor’s field superintendent.
  - Be present whenever the contractor is performing work on-site, associated with the project.
  - Cooperate with the contractor in dealing with the various local agencies and utility companies having jurisdiction over the Project.
  - Record names, addresses and telephone numbers of all contractors, subcontractors, and major material suppliers.
  - Attend all construction conferences. Arrange weekly progress meetings and other job conferences if required. Maintain and circulate copies of records of the meetings.
  - Review contractor’s progress on a weekly basis and update the progress schedule. Compare actual progress to the contractor’s approved schedule. If the project falls 14 calendar days behind schedule, work with the contractor to determine the appropriate course of action to get back on schedule. The contractor is required to submit a revised schedule for approval prior to further payments being made.
  - Maintain orderly files of correspondence, reports of job meetings, shop drawings and other submissions, RFI responses, original contract documents including all addenda, change orders and additional drawings issued after the award of the contract.
  - Prepare any contract changes needed as construction proceeds. Once the contractor submits a proposal, assist the Village in their review and provide a recommendation.
- Determine if the project has been completed in accordance with the contract documents and if the contractor has fulfilled all obligations.
- Except upon written instruction of the Village, the RE shall not authorize any deviation from the Contract Documents.
- Alert the Contractor’s field superintendent when materials or equipment are being installed before approval of shop drawings or samples, where such are required, and advise the Village when it is necessary to disapprove work as failing to conform to the Contract Documents.
- Discuss the truck routes with the Contractor and monitor that the identified routes are being used.
- All CBBEL personnel and their sub-consultants will comply with the Village’s current safety guidelines.

### *CONSTRUCTION DOCUMENTATION*

- Keep an inspector’s daily report book and project diary in the Village’s format, recording hours on the job site, weather conditions, general and specific observations, daily activities, quantities placed, inspections, decisions, and list of visiting officials, as outlined in IDOT’s Construction Manual. Additionally, prepare photo documentation of construction to be submitted in both hard and digital formatting.

- Prepare payment requisitions and change orders. Review applications for payment with the Contractor for compliance with established submission procedure and forward them with recommendations to the Village.
- Schedule any material testing at the frequency required by IDOT's QC/QA provisions. Also obtain and document all material inspection received from the Contractor as outlined in the Project Procedures Guide of IDOT's Construction Manual.
- Prepare a monthly written update to the Village summarizing the Project status, costs and schedule.

#### **Task 11 – Material QA Testing**

- Our geotechnical subconsultant will provide QA testing outlined in the IDOT Project Procedures Guide.
- The following items are not included:
  - QA plant testing
  - Soil analysis
  - Additional testing required for Change Order or Contingency Allowance items.

#### **Task 12 – Record Drawings**

- CBBEL field personnel will maintain a set of working drawings showing changes in the work during construction.
- At completion of the project, CBBEL shall complete as-built record drawings. The drawings shall provide, at a minimum, the following information:
  - As-built locations and elevations, including rims and inverts, of the proposed water main improvements and sewer improvements, using the base sheets of the design drawings as a reference.
  - The minimum scale shall be 1"=50 feet.
  - CBBEL shall deliver to the Village copies of the as-built drawings in pdf format and computer files in MicroStation latest version on a CD disc, and 2 copies of the PDF on 11 by 17 (half size) plan sheets.

#### **Task 13 – Post-Construction**

- Prior to final inspection, submit to the Contractor a list of observed items requiring correction and verify that each correction has been made.
- Conduct final inspection with the Village and prepare a final punch list of items to be corrected.
- Verify that all items on the final punch list have been corrected and make recommendations to the Village concerning acceptance.
- Prepare final pay estimate and change order(s) for the Village's approval.
- Verify all necessary material inspection has been received and documented.

#### **Direct Costs**

CBBEL will bill direct costs of \$65/day for Vehicle Usage. We have budgeted one engineer at 100 Working Days for this task.

**FEE ESTIMATE**

Based on the above Scope of Services, our Estimate of Fee of \$322,488.00 is detailed further in the attached CBBEL Work Effort.

We will establish our contract in accordance with the Master Agreement and associated rates attached for the Village of Orland Park.

Please sign and return one copy of this agreement as an indication of acceptance and notice to proceed. Please feel free to contact us anytime.

Sincerely,



Michael E. Kerr, PE  
President

Enclosure: Work Effort

THIS PROPOSAL ACCEPTED FOR VILLAGE OF ORLAND PARK:

BY: \_\_\_\_\_  
TITLE: \_\_\_\_\_  
DATE: \_\_\_\_\_

**VILLAGE OF ORLAND PARK  
SILVER LAKES WEST WATERMAIN STAGE 2 & CAMENO RE'AL - DESIGN, BIDDING, AND CONSTRUCTION OBSERVATION  
WORK EFFORT AND FEE STRUCTURE**

Classification	Engineer			Consultant	Total Hours	Total Cost
	V	III	I/II			
Rate (\$/hr)	\$173.00	\$125.00	\$102.00	\$1.00		
Task 1 - Kickoff Meeting	16	8			24	\$ 3,768.00
Task 2 - Preliminary Design	120	160	400		680	\$ 81,560.00
Task 3 - Village Review Meeting	20	20			40	\$ 5,960.00
Task 4 - Field Reconnaissance	4	24	24		52	\$ 6,140.00
Task 5 - Final Design	80	100	120		300	\$ 38,580.00
Task 6 - IEPA Permitting	16	20	20		56	\$ 7,308.00
Task 7 - Bidding Assistance	8		20		28	\$ 3,424.00
Task 8 - Pre-Construction	8		16		24	\$ 3,016.00
Task 9 - Shop Drawing Review / Request for Information (RFI) Responses	16		16		32	\$ 4,400.00
Task 10 - Construction Observation	240		1000		1240	\$ 143,520.00
Task 11 - Material Testing				6000	6000	\$ 6,000.00
Task 12 - Record Drawings	16		40		56	\$ 6,848.00
Task 13 - Post-Construction	8		40		48	\$ 5,464.00
Subtotals	552	332	1696	6000	2580	
Percentage of Hours	21.4%	12.9%	65.7%	232.6%	100.0%	
Total Personnel Cost	\$95,496.00	\$41,500.00	\$172,992.00	\$6,000.00	<b>Total Payroll Cost =</b>	<b>\$315,988.00</b>
					<b>Direct Cost =</b>	<b>\$ 6,500.00</b>
					<b>TOTAL COST =</b>	<b>\$ 322,488.00</b>

