

CLERK'S CONTRACT and AGREEMENT COVER PAGE

Legistar File ID#: 2020-0487

Innoprise Contract #: C20-0126

Year: 2020-2025

Amount:

Department: EP&S - Khurshid Hoda

Contract Type: Master Agreement Professional Engineering Services

Contractors Name: Christopher B Burke Engineering LTD

Contract Description: Professional Engineering Services (projects are attached as Exhibit B)
Exhibit B - C21-0028 143rd Street - Compensatory Storage Site Evaluation
Exhibit B - C21-0029 - Structural Review of Wireless Communication Facilities
Exhibit B - C21-0037 - Silver Lake West Water Main Replacement
Exhibit B - C21-0053 - STP Improvements 151st Street Resurfacing
Exhibit B - C21-0092 - Fernway Subdivision Road and Drainage Improvements
Exhibit B - C21-0105 - Stormwater Master Plan
Exhibit B - C21-0127 - Tank No. 7 Rehab Engineering Oversight
Exhibit B - C21-0128 - Tank No. 4 Rehab Engineering
Exhibit B - C21-0129 - Tank No. 6 Rehab Engineering
Exhibit B - C21-0135 - La Reina Re'al Stormwater Improvements
Exhibit B - C21-0144 - Fernway Road & Ditch Reconstruction Phase 6
Exhibit B - C22-0023 - Main Pump Station Upgrade Engineering
Exhibit B - C22-0030 - Elevated Tanks #10 & #8 Rehab Engineering
Exhibit B - C22-0048 - Construction oversight for rehab of #6 & #4
Exhibit B - 22001264 - Catalina Water Main Project



Exhibit B

CHRISTOPHER B. BURKE ENGINEERING, LTD.

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

May 3, 2022

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
Catalina Subdivision Water Main Replacement and Storm Sewer Improvements

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 Catalina Subdivision Water Main Replacement and Storm Sewer Improvements 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 Catalina Subdivision Water Main Replacement and Storm Sewer Improvements 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.

Based on the information provided in the Request for Proposals, and our extensive experience with water main and storm sewer projects within the Village, we anticipate the following scope of work:

- Water Main consists of approximately 7,000 linear feet of water main lining, and approximately 30,000 linear feet of open cut water main replacement. It is our understanding that there are no lead services within the project area, therefore the scope of water services improvements consists of replacement from the main to the B-Box.
- Storm Sewer improvements will vary depending on the results of stormwater modeling analysis. Conceptually we approximate 16,000 linear feet of rear yard storm sewer, 6500 linear feet of existing storm sewer to be upsized to 24" or 36" diameter sewer, and installation of 1300 linear feet of 48" diameter trunk line for an approximate total of 24,000 LF of new sewer. We assume that the majority of the rear yard sewers will be installed in existing

easements and anticipate approximately 30 side yard easements to outlet the system into the sewer network within the roadway.

- Roadway will be patched and restored accordingly. Resurfacing or reconstruction of the road will be performed under a separate project.

Please note that this proposal does not include cleaning and televising of the existing sewer system. It is highly recommended that existing sewers be televised and evaluated.

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 – Storm Sewer System Evaluation: CBBEL will model the subdivision and evaluate the existing storm sewer system for capacity, ponding, and flooding related issues. CBBEL will attend a Town Hall meeting and assist the Village in evaluating issues identified at the meeting. The proposed system will limit ponding to less than 6" and not increase flowrates or downstream water surface elevations. All existing storm sewers or drain tiles less than 10" will be increased to at least 10". Sewer cleaning, televising and evaluation of existing pipe conditions is explicitly excluded from this proposal.

Task 3 –Topographic Survey: We will obtain topographic survey of the project area as needed to design the proposed improvements for all street segments containing watermain and/or sewer replacement. The survey will be used as a base map for design purposes. Included are the following survey tasks:

1. Horizontal Control: Utilizing state plane coordinates (NAD '83, Illinois East Zone 1201); CBBEL will establish recoverable primary control.
2. Vertical Control: We will establish elevations on new horizontal control points based on NAVD '88 Vertical Datum.
3. Field topographic survey to locate and measure pavement, curbs, trees, fences, walks, curb cuts, utilities, approximate right-of-way and other pertinent site features.
4. Field Survey to determine detailed utility structure rim and invert elevations, pipe size and material.
5. Field level run to establish vertical control.
6. Office calculations and plotting of field data.
7. Drafting of an existing conditions plan in a Microstation drawing file.

We will create design base sheets from the survey at a scale of 1" = 20'. This task will also include identification of approximate roadway right-of-way.

Task 4 – 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 5 – 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 6 – Field Reconnaissance: CBBEL will perform a visual field inspection of the affected drainage structures to determine repair scope. This task shall also include assessment of the affected curb and sidewalk to determine replacement limits.

Task 7 – 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 8 – IEPA Permitting: CBBEL will prepare and submit an IEPA permit application for watermain construction.

Task 9 – Easement Exhibits: Due to unknowns related to the potential results of the storm sewer system evaluation, this task is based on preparing easement exhibits for 30 side yards. We assume that the majority backyard drainage improvements will be constructed within existing easements and will only require a simple letter construction access agreement which will be coordinated by the Village Staff. We have included fee to prepare the anticipated 30 side yard easements to outlet the system into the sewer network within the roadway. Any additional effort will be performed as part of a change order. Coordination/Negotiation with property owners and potential purchase of easements shall be performed by Village Staff.

Task 10 – 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 11 – 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 12 – 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 13 – Construction Observation

The duration of this task is based on an assumed eight months (from April 1 through November 30) of construction per year/phase as noted in the RFP. The Resident Engineer is estimated to be full time 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 14 – 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 15 – 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 16 – 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.

FEE ESTIMATE

Based on the above Scope of Services, our Estimate of Fee of \$1,320,528.00 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:	 E-SIGNED by George Koczwar on 2022-06-06 14:38:52 GMT
TITLE:	<u>Village Manager</u>
DATE:	<u>June 06, 2022</u>

JFA

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VILLAGE OF ORLAND PARK
CATALINA WATERMAIN AND STORM SEWER
WORK EFFORT AND FEE STRUCTURE

Classification Rate (\$/hr)	WATER				STORM SEWER			
	V	Engineer III	III/II	Consultant	V	Engineer III	III/II	Consultant
Task 1 - Kickoff Meeting	\$208.00	\$152.00	\$121.00	\$1.00	\$208.00	\$152.00	\$121.00	\$1.00
Task 2 - Storm Sewer System Evaluation	16		20		16		20	
Task 3 - Topographic Survey				100000	160	360		
Task 4 - Preliminary Design	80	320	400		80		400	
Task 5 - Village Review Meeting	14				14			
Task 6 - Field Reconnaissance	2		40		2		40	
Task 7 - Final Design	60	120	160		60	120	160	
Task 8 - EPA Permitting	8	24						
Task 9 - Easement Exhibits					20	80		
Task 10 - Bidding Assistance	10		16		5			
Task 11 - Pre-Construction	6		16		4		12	
Task 12 - Shop Drawing Review / Request for Information (RFI) Responses	16				8			
Task 13 - Construction Observation	600		2560		300		1280	
Task 14 - Material Testing				10000				10000
Task 15 - Record Drawings	20		60		20		80	
Task 16 - Post-Construction	12		40		8		40	
Subtotals	844	464	3332	110000	697	560	2080	60000
Percentage of Hours	0.7%	0.4%	2.8%	93.2%	0.6%	0.5%	1.8%	50.9%
Total Personnel Cost	\$175,552.00	\$70,528.00	\$403,172.00	\$110,000.00	\$144,976.00	\$85,120.00	\$251,680.00	\$60,000.00
								Total Payroll Cost = \$1,301,028.00
								Direct Cost = \$ 15,500.00
								TOTAL COST = \$ 1,320,528.00

FUND BREAKDOWN	WATER FUND	STORM FUND	TOTAL
2023	\$323,000.67	\$275,842.00	\$598,842.67
2024	\$223,000.67	\$137,842.00	\$360,842.67
2025	\$223,000.67	\$137,842.00	\$360,842.67



