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January 21, 2026

Proposal LA26.038

Chantell O'Neal
Assistant Director
Engineering Division
416 North Franklin Street
Fort Bragg, CA 95437
Via Email: coneal@fortbraggca.gov

Subject: Oak Street Utilities Assessment Proposal

Dear Ms. O'Neal:

Lumos & Associates, Inc. (Lumos) is pleased to provide this proposal for engineering and related services for Oak Street Utilities Assessment Proposal in Fort Bragg, CA.

Project Understanding

The City of Fort Bragg is seeking to better understand which existing sewer and storm drain facilities within the project area should be replaced, upgraded, or rehabilitated. This assessment is intended to provide a defensible, data-driven basis for future capital improvement planning, coordination with roadway projects, and prioritization of limited infrastructure funding.

The proposed work includes a condition assessment of storm drain systems, with an optional sanitary sewer system condition assessment, utilizing available records, field investigations, and closed-circuit television (CCTV) inspections. Findings will be summarized in technical reports documenting existing conditions, deficiencies, and recommended improvement strategies.

The following scope of work is proposed to facilitate the successful delivery of the project.

Task 1 – Storm Drain CCTV

Lumos will subcontract a NASSCO Pipeline Assessment Certification Program (PACP) condition assessment survey of the designated storm mains to provide a standardized, comprehensive evaluation of pipe condition that supports asset management and rehabilitation planning. The work shall include CCTV inspection by a PACP-certified operator, systematic coding of structural and operational defects using current NASSCO PACP standards, and quality assurance/quality control (QA/QC) review in accordance with NASSCO QC guidelines to ensure accuracy and completeness of the condition dataset. Deliverables shall be formatted for use in utility asset systems and support rehabilitation prioritization.

Deliverables:

- PACP-coded inspection database and electronic CCTV logs in NASSCO-compliant format
- QA/QC summary report documenting sample review results, error rates, and corrective actions
- Summary condition assessment report with defect frequencies and severity

Task 2 – Storm Drain Potholing

Lumos will contract with a qualified contractor to perform a field investigation including potholing for up to 8 hours within the proposed project limits. It is estimated that approximately 8 – 10 potholes will be performed in that time span, contingent on traffic and ground conditions. Exploration depth will range from one (1) to five (5) feet below ground surface, or practical refusal, whichever comes first. Lumos or the contracted exploration company will complete the USA Dig clearance and will provide the excavation/backfill/hot mix patching services, and the traffic control. Encroachment permit application for the potholing will be completed and submitted by Lumos as required.

Deliverables:

- Pothole Investigation Report

Task 3 – Storm Condition Analysis & Proposed Upgrades

Lumos will perform a storm drain condition assessment without hydraulic modeling. This effort includes:

- Investigation of abandoned or inactive storm drain conduits and their condition
- Guidance on proper abandonment methods
- Evaluation of rehabilitation versus replacement strategies. Investigation of abandoned or inactive storm drain conduits and their current condition
- Identify if Cast-In-Place Pipe (CIPP) rehabilitation methods are reasonable solutions to aging, active pipes.
- Identification of best practices for proper abandonment of storm drain facilities
- Evaluation of rehabilitation alternatives, including lining versus replacement, considering roadway restoration and traffic control impacts
- Evaluation of opportunities to coordinate storm drain improvements with future roadway reconstruction projects
- Preparation of approximately 15% conceptual design documents showing pipe alignments, profiles and sizes based on 2004 SDMP recommendations

Deliverables:

- Storm drain condition assessment summary
- 15% level conceptual design documents illustrating recommended alignments and improvements

Task 4 – Project Contingency/Additional Support Services

The Project Contingency is specifically for additional out-of-scope work as may be required which are unidentifiable at this time. This task shall be utilized and initiated at the sole discretion of the City and will be performed on a time and materials basis in accordance with the current Lumos fee schedule.

Task 5 – Sanitary Sewer CCTV (Optional)

Lumos will subcontract a NASSCO Pipeline Assessment Certification Program (PACP) condition assessment survey of the designated sewer mains to provide a standardized, comprehensive evaluation of pipe condition that supports asset management and rehabilitation planning. The work shall include CCTV inspection by a PACP-certified operator, systematic coding of structural and operational defects using current NASSCO PACP standards, and quality assurance/quality control

(QA/QC) review in accordance with NASSCO QC guidelines to ensure accuracy and completeness of the condition dataset. Deliverables shall be formatted for use in utility asset systems and support rehabilitation prioritization.

Deliverables:

- PACP-coded inspection database and electronic CCTV logs in NASSCO-compliant format
- QA/QC summary report documenting sample review results, error rates, and corrective actions
- Summary condition assessment report with defect frequencies and severity

Task 6 - Sewer Condition Analysis (Optional)

Lumos will perform a sewer condition analysis without development of a hydraulic model. This effort includes:

- Review of available flow monitoring data, where available, to assess relative capacity
- Review of CCTV inspection results to document pipe condition
- Review of as-built records to evaluate pipe age, material, and configuration

This task will focus on condition-based assessment rather than quantitative hydraulic capacity evaluation.

Deliverables:

- Sewer condition assessment summary
- Identification of priority rehabilitation or replacement locations

Assumptions / Exceptions

Lumos has made the following assumptions in preparation of this proposal:

- No permitting or application work is included with this proposal.
- This proposal does not include floodplain modeling, analysis, FEMA permitting, or FEMA coordination.
- Prevailing wages have not been assumed by our inspectors/technicians while on site. If prevailing wages are required, the above costs will be adjusted accordingly.
- Lumos will prepare approximately 15% conceptual design documents. No further design or construction level design documents are included with this proposal.
- While the potholing effort is limited to 8 hours, the quantity of potholes may be increased or decreased depending on site conditions.

Schedule

It is estimated that the Scope of Services can be completed within four (4) to six (6) months of contract execution.

Fees

The tasks described in the Scope of Services will be completed for the following fees:

Task	Description	Fee
Task 1	Storm Drain CCTV	\$18,150
Task 2	Storm Drain Potholing	\$24,200*
Task 3	Storm Condition Analysis & Proposed Upgrades	\$29,700
Fixed Fee Subtotal		\$ 72,050.00
Task 4	Project Contingency	\$10,000
Total		\$ 82,050.00
*Deduct \$19,000 if the City Crew can perform potholing.		

Tasks 1 through 3 will be billed as a fixed fee based on percent complete. Task 4 will only be initiated at sole discretion by the City and will be billed on a Time and Materials (T&M) basis.

The table below represents the fixed fee tasks for the optional work scoped under Tasks 5 and 6:

Task	Description	Fee w/ Optional Tasks
Task 5	Sanitary Sewer CCTV (Optional)	\$18,700
Task 6	Sewer Condition Analysis (Optional)	\$13,200
Subtotal		\$ 31,900.00

Tasks 5 and 6 would only be executed under written consent from the City.

Lumos will be happy to amend this proposal as necessary to provide additional services not included in the above scope of work, or to amend the proposed services to better match the City's needs.

If this proposal is acceptable, please issue a task order at your earliest opportunity.

Thank you again for allowing Lumos to provide you with this proposal. Please do not hesitate to call me if you have questions or concerns, as we would be happy to discuss them with you.

Sincerely,



Aaron Brusatori, P.E.
Group Manager



Ian Mahaffey, P.E.
Senior Engineer