EXHIBIT A

SCOPE OF WORK

CITY OF CAMAS
STEP MAIN INSPECTION – DESIGN SERVICES

PROJECT UNDERSTANDING

The Septic Tank Effluent Pump (STEP) line that serves Wafertech, LLC (Wafertech), is experiencing plugging issues due to a buildup of scale. Wafertech primarily discharges industrial wastewater generated from silicon chip manufacturing. The scale is cement-like, and based on the analyses conducted, appears to be predominantly calcium phosphate, calcium silicate, and silica. There is concern that the City's STEP Main into which Wafertech discharges, is also scaled. The Camas STEP Main carries domestic, commercial, and industrial flows from west Camas to the north along Parker Road, then to the southeast along Lake Road south of Lacamas Lake, and then to the south along Everett Road, eventually carrying flow to the wastewater treatment plant (WWTP). The pipe is mostly made of PVC and varies in diameter from 8 inches to 24 inches.

There are challenges assessing the degree of scaling in buried pipe. If severely scaled, it may not be possible to complete the assessment from the interior of the pipe, due to the inability of devices to transit through the pipe. The recommended technology for assessment of the potentially (severely) scaled pipe is pipe penetrating radar (PPR), which can be used to assess the degree of scaling from the exterior of the pipe following excavation. The City has received a proposal from SewerVue Technology (SewerVue), a leading pipe inspection firm, for conducting PPR inspection of the City's STEP lines. Because each scale and pipe is unique (impacting the radar measurements), SewerVue has proposed that the inspection be completed at three locations expected to range from unscaled to highly-scaled, to verify that the technology provides the information desired. Based on consultation with the City, the following locations have been selected.

1. Wafertech's discharge line, near the point of connection to the City's STEP Main, likely severely sealed.

2. A location in the City's STEP Main upstream of Wafertech's discharge coming from Parker Road, a line unlikely to be scaled.

3. A location in the City's STEP Main downstream of Wafertech's connection point, along Lake Road, expected to be moderately scaled.

The locations anticipated for these excavations are shown in the attached figure.

This Scope includes the design of excavation and restoration and traffic control for a Contractor to support this inspection effort. Only Location 3 is expected to require significant restoration and traffic control, as the other two locations are off the road and unpaved.

In addition to these Design Tasks, this Scope includes pre-inspection planning and coordination with SewerVue and the City. It is assumed that SewerVue's effort is contracted directly to the City. Onsite assistance during the excavations and inspections is not included and would be addressed in a separate Scope or Amendment.

It is assumed that the work will be completed by a Contractor selected from the City's small works roster in a competitive bid.

The Scope is provided as follows. Exhibit B (attached), shows the not-to-exceed estimated cost for the effort.

DESIGN

Task 1 – Project Management and Oversight

Provide overall project management and oversight of the project work by the Project Manager and Principal-in-Charge. Services include the following:

A. Procure sufficient staff resources to dedicate to the project.

B. Manage and control project budget and schedule.

C. Manage and provide monthly Progress Reports and invoices.

Task 2 – Kickoff Meeting

Conduct a kickoff meeting with the City staff to confirm Scope, identify critical path schedule and Task items, format and schedule for Deliverables, major project assignments, Stakeholder Contacts, and any special regulatory and funding agency requirements. The discussion will include, but not be limited to, the following topics:

A. Review City-provided Record Drawings of existing system.

B. Review and confirm project understanding.

C. Review and confirm project schedule and Milestones/Deliverables.

D. Identify project Stakeholders and discuss their needs and impacts on the project.

E. Document the discussion of the meeting and distribute to all attendees.

Task 3 – Pre-Inspection Planning and Coordination with SewerVUE

A. Conduct up to three remote meetings with SewerVUE and City staff.

B. Review and comment on updated Proposal from SewerVUE and Contract with the City.

C. Prepare a short Technical Memorandum (Letter Report) summarizing SewerVUE's site requirements and how they will be met, access issues, traffic control, schedules for excavation, inspection, restoration, and data evaluation.

D. Coordinate SewerVUE's schedule with Contractor's.

Deliverable

1. Technical Memorandum.

Task 4 – 90 Percent Design

Prepare project Drawings, Specifications, and Cost Estimates for the work, representing a 90 Percent Design effort for City review and comment.

A. Plans – Prepare Construction Plans in City-approved format to include title sheet, legend, location and vicinity maps, Plan and Profile Sheets, special notes, special details, etc.

B. Specifications – Prepare project specifications in WSDOT format referencing the *2022 Standard Specifications for Road, Bridges, and Municipal Construction*. Specifications to include City-approved Proposal, Contract, and Bonding Documents, similar to that used in the bid form provided by the City for the 2023-2026 Commercial Sewer Tank Pumping Project.

C. Quantities and Cost Estimates – Calculate bid quantities and prepare Construction Cost Estimates.

D. Review Meeting – Meet with City staff as may be required to review project status and solicit concerns/comments.

Task 5 – Final Design

Prepare Final Design Drawings and Specifications for use as Bid Documents suitable for small works roster bidding, award, and construction of the project. Specifications will be prepared in WSDOT format, meeting City requirements, adhering to City codes and State guidelines where, and when applicable. Plans shall be prepared in City-approved format to include Plan and Profile Sheets and special details. Services will include the following.

A. Final Plans – Prepare Final Bid/Construction Plans in City-approved format to include title sheet, legend, vicinity and location map, Plan and Profile Sheets, special notes, special details, etc.

B. Specifications (Final) – Prepare Final Specifications in WSDOT format to include Proposal, Contract, Bonding Documents, and Technical Specifications.

C. Quantities and Cost Estimates – Prepare Final Quantity Takeoff and Construction-Level Construction Cost Estimate.

Task 6 – Quality Assurance/Quality Control

Oversee two in-house, quality assurance/quality control (QA/QC) meetings at Gray & Osborne's office during the course of the design project. The meetings will include senior project staff, selected design team members, and City staff (as required and/or desired). Meetings are to take place at the following levels.

- Kickoff.
- 90 Percent Design.

Ensure incorporation of relevant recommendations and suggestions into Bid/Construction Documents resulting from QA/QC reviews.

Task 7 – Bid Support

Assist the City during the bid phase. Services include the following.

A. Support City staff to answer bid inquiries during bid phase.

B. Support City staff to prepare any Bid Addenda as may be required.

SCHEDULE

The City desires the inspection to occur in July or August of 2024 to minimize school-related traffic impacts. It is anticipated that the project will be bid by April 2024.

BUDGET

The maximum amount payable to the Engineer for completion of work associated with this Scope of Work, including contingencies, salaries, overhead, direct non-salary costs, and net fee, is set forth in the attached Exhibit B. This amount will not be exceeded without prior written authorization of the City.

PROJECT ASSUMPTIONS REGARDING CITY RESPONSIBILITIES

This Scope of Work and the resulting maximum amount payable is based on the following assumptions as required for the development of the project. See also item assumptions noted in the aforementioned Tasks. Changes in these assumptions and responsibilities may cause a change in scope of the services being offered and result in a corresponding adjustment of the Contract price.

1. It is assumed that the work will be completed by a Contractor selected from the City's small works roster in a competitive bid.

2. It is assumed that SewerVue's effort is contracted directly to the City.

3. Onsite assistance during the excavations and inspections is not included and would be addressed in a separate Scope or Amendment.

EXHIBIT B

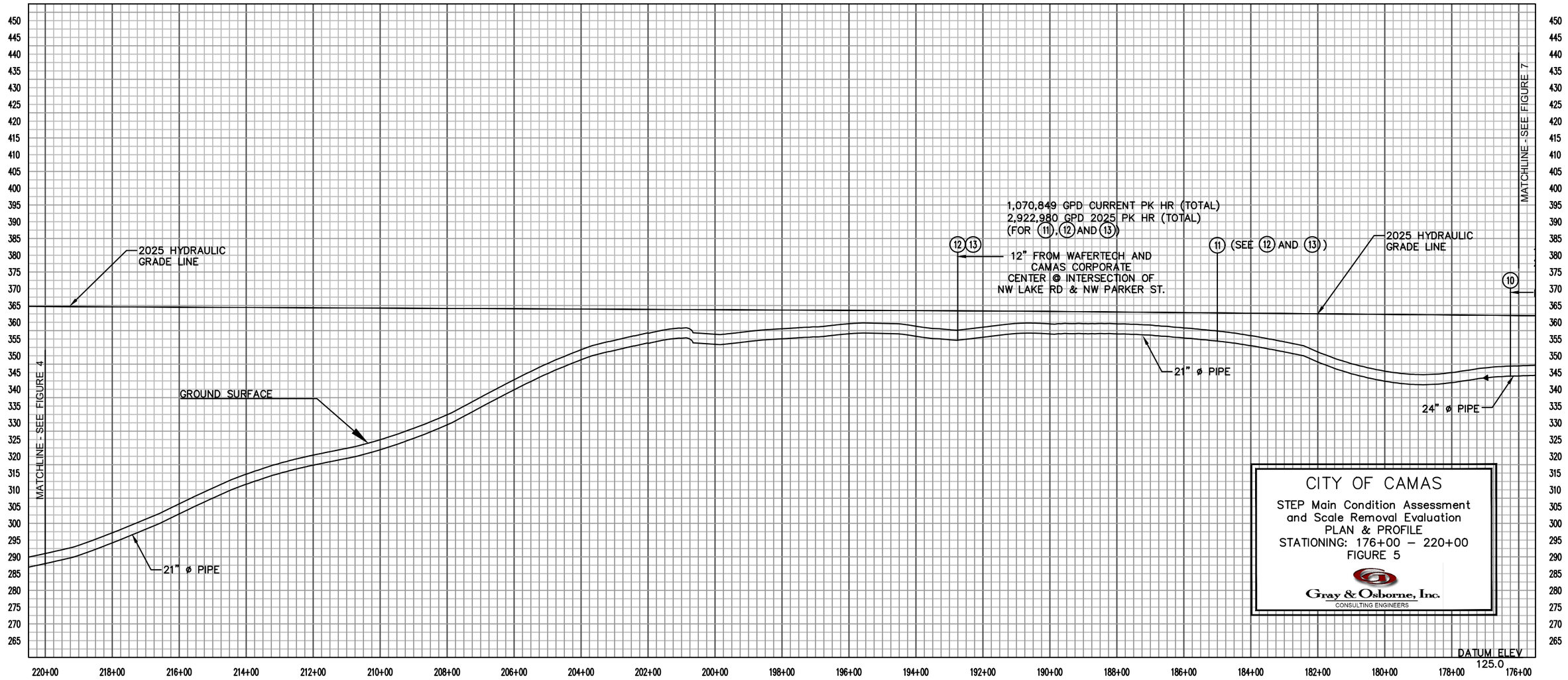
ENGINEERING SERVICES
SCOPE AND ESTIMATED COST

City of Camas - Step Main Inspection - Design Services

Tasks	Principal Hours	Project Manager Hours	Project Engineer Hours	AutoCAD/ GIS Technician/ Engineer Intern Hours
1 Project Management and Oversight	4	8		
2 Kickoff Meeting		4	4	
3 Pre-Inspection Planning and Coordination with SewerVUE Technology	4	32	8	
4 90 Percent Design	2	12	16	20
5 Final Design		4	8	6
6 Quality Assurance/Quality Control	4	4	4	
7 Bid Support	2	4	4	2
Hour Estimate:	16	68	44	28
Fully Burdened Billing Rate Range:*	$150 to $245	$140 to $245	$125 to $185	$65 to $175
Estimated Fully Burdened Billing Rate:*	$235	$210	$145	$100
Fully Burdened Labor Cost:	$3,760	$14,280	$6,380	$2,800

Total Fully Burdened Labor Cost:	$	27,220
Direct Non-Salary Cost:		
Mileage & Expenses (Mileage @ current IRS rate)	$	300
TOTAL ESTIMATED COST:	**$**	**27,520**

* Actual labor cost will be based on each employee's actual rate. Estimated rates are for determining total estimated cost only. Fully burdened billing rates include direct salary cost, overhead, and profit.



CITY OF CAMAS

STEP Main Condition Assessment
and Scale Removal Evaluation
PLAN & PROFILE
STATIONING: 176+00 – 220+00
FIGURE 5

Gray & Osborne, Inc.
CONSULTING ENGINEERS