

RMS

**CLARK COUNTY
STAFF REPORT**



DEPARTMENT/DIVISION: Public Works / Salmon Creek Wastewater Treatment Plant

DATE: September 23, 2014

REQUEST: Authorize the Public Works Director to sign a Commitment of Reimbursement letter with Clark Regional Wastewater District for design phase services in the estimated amount of \$53,452 for the Clark County Upper Salmon Creek Interceptor Restoration Project. Also authorize the Director to sign any supplemental requests up to 10 percent of the estimated amount.

CHECK ONE: X Consent CAO Hearing

PUBLIC WORKS GOALS:

- Provide safe and efficient transportation systems within Clark County
- Continue responsible stewardship of public funds
- Promote family-wage job creation and economic development to support a thriving community
- Maintain a desirable quality of life
- Improve environmental stewardship and protection of natural resources
- Increase partnerships and foster an engaged, informed community
- Make Public Works a great place to work

BACKGROUND: The Salmon Creek Interceptor between I-205 and the Salmon Creek Bridge just to the west of I-205 has experienced severe corrosion due to elevated levels of hydrogen sulfide exposure. In the spring of 2012, Clark County and Clark Regional Wastewater District (District) engaged Brown & Caldwell to complete a detailed condition assessment of the interceptor and two District trunklines. The assessment was completed in the spring of 2013 and the recommendation was to restore the Upper Salmon Creek Interceptor and the two trunklines using trenchless methods (cured in place pipe) and manhole restoration.

Clark Regional Wastewater District has selected Brown and Caldwell from their current Consultant Roster to provide professional engineering services related to restoration of the Upper Salmon Creek Interceptor. The design phase services include general project management, permitting, public outreach and design. This work is a direct continuation of the condition assessment work completed in 2013 of the interceptor. The total estimated design phase costs are \$53,452.

The Design Phase Services will be reimbursed by Clark County in accordance with the attached Letter of Agreement and a Reimbursable Work Order. The construction phase services and physical construction of the project will be reimbursed by the Discovery Clean Water Alliance in a future budget.

COMMUNITY OUTREACH: This project has been presented at Discovery Clean Water Alliance Board meetings and will include project specific outreach.

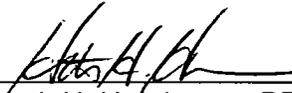
BUDGET AND POLICY IMPLICATIONS: Public Works has sufficient budget to cover this expense.

FISCAL IMPACTS: Yes (See Attached Fiscal Impacts Form) No

PW 14-096

ACTION REQUESTED: Authorize the Public Works Director to sign a Commitment of Reimbursement letter with Clark Regional Wastewater District for design phase services in the estimated amount of \$53,452 for the Clark County Upper Salmon Creek Interceptor Restoration Project. Also authorize the Director to sign any supplemental requests up to 10 percent of the estimated amount.

DISTRIBUTION: Please provide a copy of the approved staff report to Public Works Administration.



Heath H. Henderson, PE
Public Works Director/County Engineer

APPROVED: 

CLARK COUNTY, WASHINGTON
BOARD OF COMMISSIONERS

DATE: 9/23/14

SR#: 212-14

FISCAL IMPACT ATTACHMENT

Part I: Narrative Explanation

I.A - Explanation of what the request does that has fiscal impact and the assumptions for developing revenue and costing information.

The Salmon Creek Interceptor between I-205 and the Salmon Creek Bridge just to the west of I-205 has experienced severe corrosion due to elevated levels of hydrogen sulfide exposure. In the spring of 2012, Clark County and Clark Regional Wastewater District (District) engaged Brown & Caldwell to complete a detailed condition assessment of the interceptor and two District trunklines. The assessment was completed in the spring of 2013 and the recommendation was to restore the Upper Salmon Creek Interceptor and the two trunklines using trenchless methods (cured in place pipe) and manhole restoration.

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Part II: Estimated Revenues

| Fund #/Title | Current Biennium | | Next Biennium | | Second Biennium | |
|---|------------------|--------|---------------|--------|-----------------|--------|
| | Sewer | Total | Sewer | Total | Sewer | Total |
| Sanitary Sewer Repair & Replacement Fund (4583) | | | | | | |
| | | | | | | |
| | | | | | | |
| Total: | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 |

II.A - Describe the type of revenue (grant, fees, etc.)

Clark County will reimburse Clark Regional Wastewater District \$53,452 for design phase services for the Upper Salmon Creek Interceptor Restoration Project.

Part III: Estimated Expenditures

III.A - Expenditures summed up

| Fund #/Title | FTE's | Current Biennium | | Next Biennium | | Second Biennium | |
|---|-------|------------------|----------|---------------|-------|-----------------|-------|
| | | Sewer | Total | Sewer | Total | Sewer | Total |
| Sanitary Sewer Repair & Replacement Fund (4583) | | \$53,452 | \$53,452 | | | | |
| | | | | | | | |
| | | | | | | | |
| Total: | | \$53,452 | \$53,452 | \$0 | \$0 | \$0 | \$0 |

III.B = Expenditure by object category

| Fund #/Title | Current Biennium | | Next Biennium | | Second Biennium | |
|----------------------|------------------|----------|---------------|-------|-----------------|-------|
| | Sewer | Total | Sewer | Total | Sewer | Total |
| Salary/Benefits | | | | | | |
| Contractual | \$53,452 | \$53,452 | | | | |
| Supplies | | | | | | |
| Travel | | | | | | |
| Other controllables | | | | | | |
| Capital Outlays | | | | | | |
| Inter-fund Transfers | | | | | | |
| Debt Service | | | | | | |
| Total: | \$53,452 | \$53,452 | \$0 | \$0 | \$0 | \$0 |



COMMISSIONERS
 Norm Harker
 Denny Kiggins
 Neil Kimsey
 GENERAL MANAGER
 John M. Peterson, P.E.

8000 NE 52 Court Vancouver, WA 98665 PO Box 8979 Vancouver, WA 98668
 Phone (360) 750-5876 Fax (360) 750-7570 www.crwwd.com

September 9, 2014

Heath Henderson, Public Works Director
 Clark County Public Works
 PO Box 9810
 Vancouver, WA 98666-9810

**RE: Upper Salmon Creek Interceptor Repair
 Commitment of Reimbursement**

Dear Mr. Henderson:

As you are aware, the Salmon Creek Interceptor between the Salmon Creek Bridge and I-205 has experienced severe corrosion due to elevated levels of hydrogen sulfide exposure. In the spring of 2012, Clark County and Clark Regional Wastewater District (District) engaged Brown & Caldwell to complete a detailed condition assessment of the interceptor along with two other District trunklines. The assessment was completed and the recommendations presented to the Discovery Clean Water Alliance's Management Infrastructure Committee in the spring of 2013. Those recommendations included restoration of both District trunklines, as well as the Upper Salmon Creek Interceptor using trenchless methods (cured in place pipe).

The District has selected Brown & Caldwell to provide final plans, specifications and estimate to complete the recommended restoration of the District trunklines. The Upper Salmon Creek Interceptor entails a very similar scope of work. On behalf of Clark County and the Discovery Clean Water Alliance, the District will contract with Brown & Caldwell for final design of the Upper Salmon Creek Interceptor, provided that the County is willing to reimburse the District for those costs. The detailed scope of work and estimated costs are described in the attached scope of work. At this time, the level of effort is anticipated to be approximately \$53,452.

A reimbursable account number will be assigned to this work upon receipt and approval of this endorsed letter of commitment. Any cost incurred by the District, on behalf of the above stated work, will be billed to you at the address listed above, unless otherwise directed. If you are in agreement to reimburse the District for the costs incurred, please provide the appropriate endorsement below acknowledging the terms and conditions of this commitment letter.

If you have any questions, please contact Robin Krause, District Engineer, at (360) 993-8821 or by email at rkrause@crwwd.com.

Sincerely,

Clark County Public Works

 General Manager
 Clark Regional Wastewater District

Signature: _____
 Heath Henderson, P.E.

Title: Public Works Director

Date: _____

Attachment



Exhibit A

Scope of Services

Salmon Creek Trunk Restoration Project Work Plan and Schedule

Brown and Caldwell (BC) will provide engineering design services for the restoration of the Salmon Creek Interceptor that has evidence of corrosion and degradation between Northeast Corbin Road and Northeast 119th Street. This Scope of Services describes the engineering process and steps required to prepare construction (bid) documents for the restoration work. The required level of effort for completing the Scope of Services is detailed in Attachment B.

Phase 1. Project Management

Objective: To assemble, manage, and lead a cohesive project team to execute the scope and deliver a technically sound work product that is completed within the constraints of the budget and schedule.

Activities: The following activities will be performed as part of the project management task:

- Organize and lead a kickoff meeting with the Clark Regional Wastewater District's (District) project manager. District staff and various stakeholders will review and confirm project description, scope, schedule, and budget, and discuss other items of importance to BC or the District.
- Prepare a project management plan and schedule to provide the project team with details regarding project scope and execution.
- Establish and follow a project quality assurance/quality control (QA/QC) plan which includes senior technical review of all deliverables.
- Manage work done by the project team, including subconsultants. This includes scheduling, workload planning, coordination, quality control, and invoicing.
- Schedule and conduct progress and project milestone meetings (assumed to be bi-weekly on average) with the District's project manager and others, as needed. Provide an agenda prior to each meeting and follow up with meeting notes that summarize action items and decisions.
- Prepare and submit a monthly invoice with backup documentation and progress report.
- Correspond with the District during the course of the work.
- Prepare progress reports or present information during progress meetings or conference calls to identify budget status, progress status, recent activities, and upcoming activities.



Deliverables: Monthly invoices with progress reports

Phase 2. Permitting

Objective: To identify and obtain all necessary permits to construct the project.

Activities: BC will identify areas of impact and determine the need for additional assessment and associated permits. BC will identify the need for noise variance permits and conduct all work required to obtain them.

BC will coordinate with District staff who will take the lead on Clark County (County) construction permits and Washington State Department of Transportation (WSDOT) utility permits.

District's Role: The following will be performed by District staff:

- Execute all permits and pay all associated permit fees.
- Coordinate with other utilities, Clark County, and WSDOT.
- Complete and submit for approval County construction and WSDOT utility permits

Deliverables: Two copies of completed permit applications

Assumptions: All permitting coordination activities can be handled remotely; meetings or additional field activities with individual agencies are not included in this scope and budget.

Phase 3. Public Involvement, Permits of Entry, and Temporary Construction Easements

Objective: To provide public outreach and obtain necessary documents to allow public cooperation and construction access for the restoration work.

Activities: **Task 3A – Public Involvement:** BC will identify all stakeholders who may be impacted by construction and prepare a stakeholder list, including a brief description of specific issues or concerns related to each stakeholder. BC will communicate with project stakeholders, notify property owners directly, and/or leave door hangers while working in and around private properties. BC will attend one neighborhood meeting that is coordinated, scheduled, and facilitated by the District, to discuss the restoration projects with impacted private property owners and the general public. BC will provide technical and graphical support services including displays, renderings, and/or other supporting documents to convey information to the public. BC will provide the District with comprehensive meeting notes.

Task 3B – Permits of Entry (POEs): BC will identify locations where POEs are required for design and construction activities. POEs and easement documents will be prepared in accordance with District guidelines. BC will prepare POE forms to conform to District format, and acquire property owners' signatures.

Task 3C – Temporary Construction Easements (TCEs): No TCEs are needed for this project.

Deliverables: Draft and final POEs for execution by the District.



Assumptions: The following are assumed in determining the public involvement services:

- Four POEs will be obtained.
- Zero TCEs will be required.

Phase 4. Design Engineering

Objective: To prepare detailed engineering plans and specifications for bidding and construction. This Scope of Services includes the restoration of up to 12 manholes and 2,400 linear feet [LF] of reinforced concrete sewer pipe (RCP) on the Salmon Creek Interceptor:

- Manhole (MH) 6-288 to MH 28-1—2,060 LF of 21-inch-diameter RCP
- MH 28-1 to MH 9-508—336 LF of 24-inch diameter RCP

Activities: **Task 4A – Design:** BC will complete design for the restoration of the Salmon Creek Interceptor and associated manholes. A 50 percent, 90 percent, and draft final design will be prepared for the District's review and comment. For each milestone, BC will prepare full plan and profile construction drawings, technical specifications, and engineer's cost estimate. Technical specifications will include the following:

- restoration work
- permit requirements
- private property and access constraints
- traffic control requirements
- sewer flow diversion
- site restoration
- measurement and payment provisions

Task 4B – Hydraulic Analysis: BC will perform a spreadsheet hydraulic analysis to determine the impact of the restoration to the capacity of the Salmon Creek Interceptor.

Task 4C – Conceptual Bypass Requirements: BC will coordinate closely with the District to understand flow bypassing requirements from the upstream collection system and add constraints into the Contract Documents. BC will prepare conceptual bypass drawings (not signed or sealed) that are approved by the District to aid the bidders in understanding one possible bypassing option.

Task 4D – Traffic Control: BC will coordinate with Clark County to determine traffic control requirements on Northeast Salmon Creek Avenue and work underneath Interstate 205.

District's Role: The following will be performed by District staff:

- Provide geographic information system (GIS) data including topographic contours.
- Provide all known hydraulics information regarding average and peak flows from upstream collection system and pump stations.
- Provide information on proposed collection system master plan projects.
- Provide standard front-end documents to incorporate into the bidding documents.
- Review and provide comments within 2 weeks of receiving each deliverables package.
- Provide any CAD (drafting) standards that the District requires.

Deliverables: Deliverables include the following:

- Hydraulic analysis technical memorandum
- Fifty percent, 90 percent, and draft final design packages each including technical specifications, drawings, itemized engineer's estimate of cost, and previous design submittal comment log with responses. Six half-size sets of drawings will be provided at the 50 percent, 90 percent, and draft final design milestones with three full-size sets provided with the hard-copy final set.

Assumptions: The following is assumed in determining the scope of design services:

- A geotechnical investigation is not required for the design of the trenchless cured-in-place liner or manhole/structure coatings.
- No additional topographic survey or utility locating work is required due to the trenchless nature of the restoration; GIS and as-built data are sufficient for the design effort.
- One meeting will be held after each deliverable to discuss the design package and clarify comments or concerns.

Proposed Schedule

| | |
|------------------------------|--------------------|
| Kickoff meeting | September 25, 2014 |
| 50 percent design submittal | October 31 , 2014 |
| 90 percent design submittal | November 26, 2014 |
| Draft final design submittal | December 31, 2015 |

The schedule is subject to change based on actual start date, modification to the scope, and private property coordination requirements.

**Exhibit B
Budget**

**Clark Regional Wastewater District
Salmon Creek Trunk Restoration
August 21, 2014**

| Phase | Phase Description | Project Manager Supervising Engineer Lee Robert K | Project Coordinator Cage D | Project Oversight Supervising Engineer Lough W | Project QA/QC Manager Hansen R | Senior Designer Whitney S | Engineer II Armans E | Supervisor Word Processing Pare Wendy M | Accountant Vasquez E | Total Labor Hours | Total Labor Cost | APC | Travel | JLA Public Involvement | Total Expenses Cost | Total Cost |
|--------------------|-------------------------------------|--|-------------------------------|---|-----------------------------------|------------------------------|-------------------------|--|-------------------------|-------------------|------------------|--------------|--------------|------------------------|---------------------|---------------|
| 001 | Project Management | 18 | 14 | 4 | 0 | 0 | 0 | 0 | 0 | 40 | 5,736 | 320 | 400 | 0 | 720 | 6,456 |
| *** | Default Task | 18 | 14 | 4 | 0 | 0 | 0 | 0 | 0 | 40 | 5,736 | 320 | 400 | 0 | 720 | 6,456 |
| 002 | Permitting | 8 | 0 | 0 | 0 | 0 | 16 | 2 | 0 | 26 | 3,440 | 208 | 200 | 0 | 408 | 3,848 |
| *** | Default Task | 8 | 0 | 0 | 0 | 0 | 16 | 2 | 0 | 26 | 3,440 | 208 | 200 | 0 | 408 | 3,848 |
| 003 | Public Involvements and POEs | 16 | 0 | 0 | 0 | 0 | 12 | 0 | 0 | 28 | 4,384 | 224 | 500 | 8,000 | 9,124 | 13,508 |
| 001 | 3A Public Involvement | 8 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 12 | 1,984 | 96 | 200 | 5,000 | 5,546 | 7,530 |
| 002 | 3B Permits of Entry | 8 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 16 | 2,400 | 128 | 300 | 3,000 | 3,578 | 5,978 |
| 004 | Design Engineering | 46 | 0 | 0 | 8 | 64 | 76 | 15 | 0 | 209 | 27,968 | 1,672 | 0 | 0 | 1,672 | 29,640 |
| 001 | 4A Design | 32 | 0 | 0 | 8 | 48 | 48 | 12 | 0 | 148 | 20,064 | 1,184 | 0 | 0 | 1,184 | 21,248 |
| 002 | 4B Hydraulic Analysis | 6 | 0 | 0 | 0 | 0 | 16 | 3 | 0 | 25 | 3,152 | 200 | 0 | 0 | 200 | 3,352 |
| 003 | 4C Conceptual Bypass Requirements | 4 | 0 | 0 | 0 | 8 | 4 | 0 | 0 | 16 | 2,168 | 128 | 0 | 0 | 128 | 2,296 |
| 004 | 4D Conceptual Traffic Control Plans | 4 | 0 | 0 | 0 | 8 | 8 | 0 | 0 | 20 | 2,584 | 160 | 0 | 0 | 160 | 2,744 |
| GRAND TOTAL | | 88 | 14 | 4 | 8 | 64 | 104 | 17 | 4 | 303 | 41,528 | 2,424 | 1,100 | 8,000 | 11,924 | 53,452 |

Hours and Dollars are rounded to nearest whole number.
The Hourly Billing Rates will be revised annually on a calendar-year basis.

| Engineering | Technical/Scientific | Administrative | Hourly Rate |
|--|--|---|-------------|
| Drafter Trainee | Field Service Technician I | Word Processor I Office/Support Services II | \$57 |
| Assistant Drafter | Field Service Technician II | Word Processor II Office/Support Services III | \$65 |
| Drafter Engineering Aide Inspection Aide | Field Service Technician III | Accountant I Project Analyst I Project Coordinator I Office/Support Services IV Word Processor III | \$76 |
| Engineer I Senior Drafter Senior Illustrator Inspector I | Geologist/Hydrogeologist I Scientist I Senior Field Service Technician | Accountant II Project Analyst II Project Coordinator II Word Processor IV | \$90 |
| Engineer II Inspector II Lead Drafter Lead Illustrator | Geologist/Hydrogeologist II Scientist II | Accountant III Project Analyst III Senior Project Coordinator Area Business Ops. Mgr I Technical Writer Word Processing Supervisor | \$104 |
| Engineer III Inspector III Senior Designer Supervising Drafter Supervising Illustrator | Geologist/Hydrogeologist III Scientist III | Accountant IV Administrative Manager | \$121 |
| Senior Engineer Principal Designer Senior Construction Engineer Senior Engineer | Senior Geologist/Hydrogeologist Senior Scientist | Senior Technical Writer | \$142 |
| Principal Engineer Principal Construction Engineer Supervising Designer | Principal Geologist/Hydrogeologist Principal Scientist | Corp.Contract Administrator | \$167 |
| Supervising Engineer Supervising Constr. Engineer Supervising Engineer | Supervising Scientist Supervising Geologist/ Hydrogeologist | Assistant Controller | \$196 |
| Managing Engineer | Managing Geologist/Hydrogeologist Managing Scientist | Area Bus Ops Mgr IV | \$218 |
| Chief Engineer Executive Engineer Vice President | Chief Scientist Chief Geologist/Hydrogeologist | Corp Marketing Comm. Mgr. | \$240 |

SID 53224

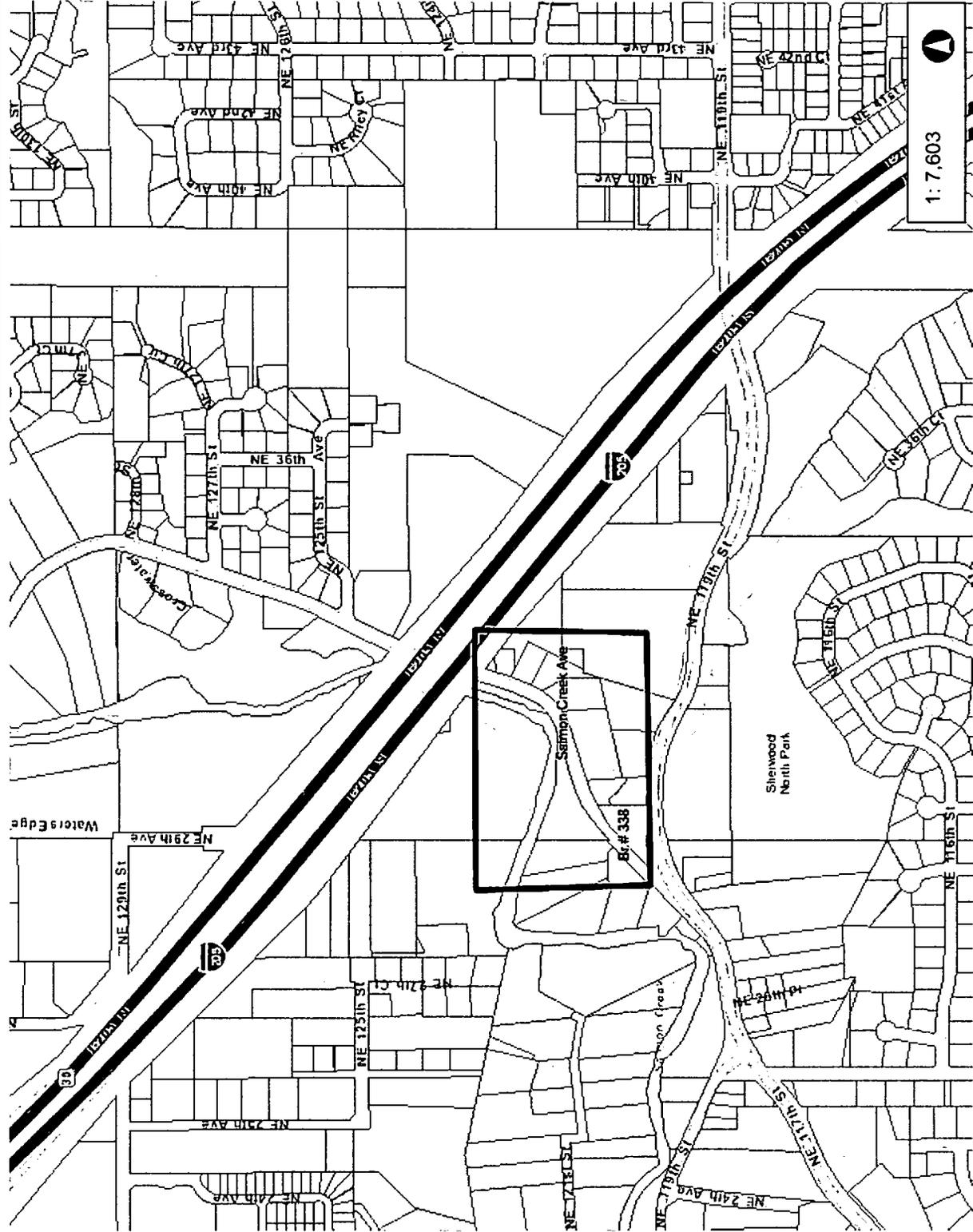


Upper Salmon Creek Interceptor Restoration Project



- Legend**
- Taxlots
 - County Outline
 - World Street Map

Notes:



1: 7,603

1,267.1 Feet

633.57

1,267.1

WGS_1984_Web_Mercator_Auxiliary_Sphere
 Clark County, WA - GIS - <http://gis.clark.wa.gov>

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