

## CONTRACT FOR PROFESSIONAL ENGINEERING SERVICES

THIS Contract, entered into this day, between the CITY OF RAYMOND, Washington, hereinafter called the "Agency"; and GRAY & OSBORNE, INC., Consulting Engineers, Seattle, Washington, hereinafter called the "Engineer".

### WITNESSETH:

WITNESSETH THAT, whereas, the Agency now finds that, from time to time, in the growth and development of the Agency, there will be the need for the engagement of professional engineering services. The purpose of this Contract is to define the services to be performed and method of payment for professional engineering services which may, from time to time, be authorized by the Agency.

NOW, THEREFORE, in consideration of the mutual covenants and agreements herein contained, the parties hereto do mutually agree as follows:

### ARTICLE 1

#### EMPLOYMENT OF THE ENGINEER

The Agency, acting pursuant to its vested authority, does hereby engage the Engineer and the Engineer agrees to furnish the engineering services as requested by the City of Raymond in connection with the Agency's Regional Wastewater Treatment Plant. These services are outlined in this Contract and shall be undertaken upon request by the Agency to the Engineer, then only for the services so requested. The Engineer shall furnish a scope of work and costs for each service requested which will become a lettered exhibit to the Contract. *(Intergovernmental Contract)*  
*has entered into an Intergovernmental Contract for Wastewater Services. Said Intergovernmental Contract specifies the formation of*

The Agency ~~has formed~~ *engage* a Regional Wastewater Coordinating Committee (RWCC) for the management and administration of the Agency's Regional Wastewater Treatment Plant Project. The RWCC shall also ~~employ~~ *engage* the services of a ~~Regional Manager~~ *an Administrative Manager* to be appointed by the Mayors of Raymond and South Bend to assist them in their duties in this regard. The RWCC and ~~Regional Manager~~ *Administrative* shall act as agents for the Agency and the Engineer shall report to the RWCC and the ~~Regional~~ *Administrative* Manager throughout the duration of this Contract.

### ARTICLE 2

#### CHARACTER & EXTENT OF ENGINEERING SERVICES

The attached Exhibit "A," "Scope of Work for the City of Raymond, ~~cities of Raymond~~ Regional Wastewater Treatment Plant Engineering Design Services" describes the

*Services of the Engineer shall be performed to design the Regional Facilities as specified and in accordance with the Intergovernmental Contract.*

engineering service to be provided under this Contract. The term of this Contract shall be for twenty-four (24) months from the date of execution. The Engineer shall also complete Plans and Specifications for the purpose of demonstrating "Readiness to Proceed" for a Public Works Trust Fund Application by May 2009.

### SPECIAL SERVICES

Special services may be required during the performance of the services contemplated within this Contract, and as described in the budget which are outside the professional expertise of the staff of Gray & Osborne, Inc. The special services which are anticipated at this time are for outfall, river crossing and Pump Station 11 design; geotechnical investigation; archaeological survey; process design review; and financial analysis.

If additional special services are found to be necessary at a later date, the Agency may employ the special professional expertise and pay the cost thereof, or, the Agency at its option, may direct the Engineer to employ the special expertise. *The performance of Special Services shall be limited to the Regional Facilities as defined in the Intergovernmental Contract.*

The information so secured shall be made available to the Agency and the Engineer for the use and development of the Agency's projects.

## ARTICLE 3

### SCOPE OF OWNER SERVICES

The AGENCY shall provide or perform the following:

Provide full information as to the Agency's requirements for the Project. The Agency shall provide available information pertinent to the site of the Project, including previous reports, drawings, plats, surveys, utility records, and any other data relative to the Project. Absent specific written direction to the contrary, the Engineer shall be entitled to reasonably rely upon the completeness and accuracy of such documentation.

Examine all studies, reports, sketches, estimates, specifications, drawings, proposals, and other documents presented by the Engineer.

## ARTICLE 4

### COMPENSATION

It is mutually agreed that the Agency will compensate the Engineer for services furnished based on the cost reimbursement method.

CITY OF RAYMOND  
Mayor ~~Robert Jungar~~  
230 Second Street  
Raymond, Washington 98577

and the address of the Engineer shall be as follows:

GRAY & OSBORNE, INC.  
President of the Board  
701 Dexter Ave. North  
Suite 200  
Seattle, Washington 98109-4339

## ARTICLE 20

### ATTORNEY'S FEES

The parties agree that in the event a civil action is instituted by either party to enforce any of the terms and conditions of this Contract, or to obtain damages or other redress for any breach hereof, the prevailing party shall be entitled to recover from the other party, in addition to its other remedies, its reasonable attorney's fees in such suit or action and upon any appeal therefrom.

IN WITNESS WHEREOF, the parties hereto have executed this Contract as of the day and year written below.

**ENGINEER: Gray & Osborne, Inc.**

**AGENCY: City of Raymond**

By: \_\_\_\_\_  
(Signature)

By: \_\_\_\_\_  
(Signature)

Name/Title: Thomas M. Zerkel, P.E., President

Name/Title: \_\_\_\_\_  
(Print)

Date: \_\_\_\_\_

Date: \_\_\_\_\_

"Equal Opportunity/Affirmative Action Employer"

## **EXHIBIT A**

### **SCOPE OF WORK CITY OF RAYMOND REGIONAL WASTEWATER TREATMENT PLANT**

#### **ENGINEERING DESIGN SERVICES**

~~JULY 28, 2008~~

*Update to Current*

Provide the engineering design services as described in the Contract for "Professional Engineering Services", Article 2, Character & Extent of Engineering Services, including the preparation of Plans and Specifications for the Regional Wastewater Treatment Plant and Willapa River Crossing Pipeline, as listed below and as described in the May 2007 Cities of South Bend and Raymond *Regional General Sewer Plan/Wastewater Facilities Plan* (May 2007 Plan). Design work shall include all necessary civil, mechanical, structural, geotechnical, architectural, electrical design, and special services to adequately show and describe all new facilities and modifications to existing facilities, as described below. These improvements will replace the existing wastewater treatment facilities at each city with a new Regional Wastewater Treatment Plant (WWTP) located at the site of the existing Raymond WWTP, provide upgrades to existing Raymond Pump Station No. 11, and construct a new pipeline under the Willapa River to convey the consolidated wastewater flows from South Bend and Raymond Pump Station Nos. 11 and 3 to the Regional WWTP. The Regional WWTP will be designed for a maximum month flow capacity of 2.91 million gallons per day.

Plans and specifications will be prepared in accordance with Chapter 173-240 WAC and shall be submitted to the Departments of Ecology and Health for approval. The Engineer shall support the efforts of the Agency until such approvals are secured.

Applications for permits required for construction of the Regional Wastewater Facilities will be completed and submitted to the appropriate permitting agencies.

#### **DESIGN OF REGIONAL WASTEWATER TREATMENT PLANT**

Plans and Specifications shall be prepared for a complete and operating WWTP designed to meet the projected NPDES Permit requirements identified in the May 2007 Plan. The plant shall be designed to meet current Orange Book reliability requirements.

##### **Item 1 – Headworks**

Design a new pile-supported, concrete headworks structure consisting of a Parshall flume with an influent flow meter, a mechanical fine screen, a parallel manual bar screen, an aerated grit chamber with blower and grit removal equipment, and flow splitter boxes to divide plant flows equally between the two downstream aeration basins and a future third

channel will be equipped with an automatic, composite sampler. Provisions for future expansion (space for additional banks or modules) shall be incorporated in the design.

#### **Item 7 – Outfall**

Design a new outfall pipe and diffuser in the Willapa River adjacent to the treatment plant for discharge of effluent. The anticipated design is a pile-supported gravity outfall and two- to four-port diffuser, oriented perpendicular to the ambient currents.

The design development phase of this project will establish the final alignment and profile for the new treatment plant outfall, the final diffuser configuration (number and spacing of ports), and update the mixing zone study as appropriate. The evaluation will also determine the sizing, pipe material, hydraulic grade line, and armoring and anchoring of the outfall. Both trenchless and open cut alternatives will be evaluated. The results and recommended design will be documented in the predesign report for this project.

#### **Item 8 – Non-Potable Water System**

Design a new non-potable water (NPW) system to pump reclaimed plant effluent through a distribution pipe system to in-plant uses of recycled water, including the influent screen, grit classifier, clarifier surface sprays, alkalinity chemical dilution, and yard hydrants. The NPW system will include two centrifugal pumps, hydro-pneumatic pressure tank, basket strainer, and automatic controls.

#### **Item 9 – City Water System**

Design a city (potable) water system to distribute this water to emergency shower/eye wash stations and other potable water uses at the plant. The system will be provided with backflow prevention, air gap on RP, in compliance with Department of Health requirements.

*Handwritten: L ??*

#### **Item 10 – Aerobic Digester and Blowers**

Design two new, pile-supported, concrete, parallel aerobic digesters of approximately 125,000 gallons each and equipped with fine bubble air diffusers, air supply piping, submersible mixers, waste sludge feed and digester sludge withdrawal piping, sludge withdrawal pump for a haul truck, sludge withdrawal pump for dewatering equipment feed, and manually-operated decant systems. The digesters will be provided with two positive displacement blowers and air piping for air supply to the diffusers. The location of the blowers will be determined in the predesign report and incorporated in the design.

#### **Item 11 – Class A Biosolids Treatment System**

Design a new biosolids treatment system to convert aerobically digested sludge to Class A quality. This system will use lime addition and heat treatment in a rotary screen thickener and a screw press to dewater the biosolids and treat them to comply with the requirements of Chapter 173-308 for Class A biosolids. Design a new solids handling building to house the Class A biosolids treatment equipment. The equipment will include a lime storage silo, lime treatment tank, polymer feed system, thickener, screw press, boiler system, product screw conveyor, and controls for automatic operation. Redundancy and geotechnical requirements will be evaluated in the predesign report.

#### **Item 12 – Auxiliary Generator**

Design an auxiliary generator for emergency power for essential systems at the treatment plant. The generator will be located outdoors and provided with a weatherproof, *sound-attenuating* enclosure. Reliability requirements will be evaluated in the predesign report.

#### **Item 13 – Laboratory and Control Building**

Design an expansion of the existing control building at the Raymond WWTP to provide additional laboratory and office space. Size, layout and location of additional laboratory/control building space will be determined in the predesign report after additional structural, HVAC and functional evaluation of the existing building space and future needs.

#### **Item 14 – Yard and Mechanical Piping**

Design yard and mechanical piping as required to serve the new treatment structures and processes.

#### **Item 15 – Site Improvements**

Design site improvements as needed to provide access, fencing, drainage, and landscaping. Access and fencing design will consider Homeland Security guidelines. The removal of accumulated biosolids will also be addressed in the design.

#### **Item 16 – Vector and Leachate Dump Facility**

Design vector and leachate dump facility. The plan for this facility will be determined in the predesign report.



## **Item 17 – Electrical**

Design electrical, instrumentation and control systems to provide power supply to electrical loads and to monitor and automate equipment systems. Control and monitoring of equipment will use programmable logic controllers (PLC) and a HMI (human-machine-interface) computer system. Design defines and describes the functionality and programming requirements for PLCs and HMI systems. Design services shall not include programming of PLC and HMI devices. The Specifications shall indicate that copies of HMI/PLC programs shall be provided to the RWCC.

### **PREDESIGN OF RAYMOND PUMP STATION NO. 11 UPGRADES**

Design improvements to existing Raymond Pump Station No. 11 will be evaluated in the predesign report to increase capacity to 1,800 gpm and adequate Total Dynamic Head to convey the design flow through the existing 12-inch-diameter pressure line and the new Willapa River crossing to the new Regional WWTP. This predesign shall consider flow conditions when flows from South Bend and from existing Raymond Pump Station No. 3 are also being conveyed through the river crossing. The improvements considered in the predesign report shall include the modifications to upgrade Pump Station No. 11's mechanical, structural, and electrical systems to provide the required capacity. Electrical system upgrades will be considered including the installation of variable frequency drives for the three pumps. The suitability of the existing auxiliary generator shall also be evaluated as needed for the new motor loads.

*I am still uncomfortable - PS 11 is not a regional facility. Scope should be limited to incremental requirements due to additional*

### **DESIGN OF WILLAPA RIVER CROSSING PIPELINE**

Design a new 20-inch-diameter HDPE pressure line beneath the Willapa River to convey the combined flows from South Bend Pump Station No. 3 and Raymond Pump Station Nos. 11 and 3 to the new Regional Wastewater Treatment Plant. This line will be designed with pig-launching station for cleaning, isolation valves, and, as needed, air release valves and blow offs. This pressure line shall be designed for installation by directional drilling beneath the river bed.

*flows from South Bend, if allowed to be included*

A bathymetric survey will be completed under this river crossing task, which will include a topographic survey of (1) The Willapa River for 100 feet upstream and downstream of the proposed crossing, from bank to bank, and (2) the river bank and bottom along the alignment of the proposed outfall.

### **SUBMITTALS AND PERMIT APPLICATIONS**

Provide services for preparation of submittals for document approval and applications for required construction permits for the project, including the necessary city permits for the WWTP improvements, including a building permit and grading permit. It is understood that a conditional use permit will not be required. The following permit applications and

submittals shall be provided to the City and the appropriate agencies for review and approval:

- a. City of Raymond – Plans and specifications at 30 percent, 50 percent, and 90 percent completion
- b. Department of Ecology – Final plans and specifications
- c. Department of Health – Final plans and specifications
- d. City of Raymond – Applications for Building Permit, Grading Permit, Shorelines Permit
- e. Department of Ecology – SEPA
- f. Department of Ecology/USEPA – NEPA including Biological Assessment/ESA Consultation
- g. Department of Ecology – Construction Stormwater Permit
- h. Department of Ecology – Water Quality 401 Certification;
- i. Department of Fish & Wildlife – Hydraulic Project Approval
- j. Army Corps of Engineers – 404 Permit; Section 10 Permit
- k. Southwest Air Quality Authority – Notice of Construction permit for new emissions (as required)

#### **PREDESIGN REPORT**

A draft predesign report will be produced to document critical design criteria and design decisions. After review by the Cities and the RWCC, and incorporation of comments, a final predesign report will be produced. The draft and final predesign reports will incorporate the findings of evaluations conducted by the survey team, geotechnical engineers, archaeologists, sensitive areas surveyors, rate/financing specialist, and process design reviewers.

#### **MEETINGS/SITE VISITS**

Attend monthly meetings with the ~~City~~ *Agency and/or RWCC*, regulatory agencies, and funding agencies to discuss project issues and present project status reports. Conduct site visits to determine as-built conditions and to assist design efforts. (A total of 12 meetings is budgeted.)

#### **BID AND AWARD SERVICES**

Prepare the Call for Bids and distribute it to the local paper of record and the Daily Journal of Commerce (publication costs shall be billed directly to the ~~City~~ *Agency* and are not included in this Contract). Prepare and distribute bid documents to the ~~City~~ *Agency* and RWCC, planning and regulatory agencies, utility companies, and interested bidders. Maintain a planholder's list. Answer and record bid inquiries. Prepare and issue bid addenda, if required. Review bids, check references, prepare and distribute a certified bid tabulation, and prepare a letter of recommendation to award.



## EXHIBIT "C"

### GRAY & OSBORNE

#### COMPUTATION OF OVERHEAD MULTIPLIER

Federal, State, and Local Taxes .....	23.87%
Insurance and Medical .....	19.27%
Professional Development and Education .....	6.32%
Vacations and Holidays .....	13.95%
Administration (Typing, CADD, GIS, Computer)** .....	46.92%
Rent, Utilities, and Depreciation .....	14.74%
Office Expenses .....	11.40%
Recruiting .....	1.18%
Professional Services .....	1.23%
Incentive & Retirement .....	31.57%
Facilities Cost of Capital .....	0.55%

**TOTAL:** ..... 171%

#### **PROFESSIONAL ENGINEERING SERVICES CONTRACT ENGINEER'S REPRESENTATIVE PAYROLL RATES THROUGH JUNE 15, 2009\***

<u>Employee Classification</u>	<u>Payroll Rates</u>		
Draftsman/Technician/Engineering Intern	\$15.00	to	\$33.00
Design/Civil Engineers	18.00	to	36.00
Electrical/Structural Engineers	24.00	to	50.00
Environmental Tech./Specialist	27.00	to	38.00
Project Engineers	25.00	to	48.00
Principal Engineers/Project Managers	32.00	to	56.00
Field Inspectors/Resident Engineers	22.00	to	45.00
Field Survey Crew (2 Person)	43.00	to	75.00
Field Survey Crew (3 Person)	70.00	to	98.00
Professional Land Surveyor	33.00	to	42.00
Secretary/Word Processor		N/A**	

\* Updated annually, ~~together with the overhead.~~

All actual out-of-pocket expenses incurred directly on the project are added to the billing. The billing is based on direct out-of-pocket expenses; meals, lodging, laboratory testing and transportation. The transportation rate is \$0.58 per mile or the current maximum IRS rate without receipt of IRS Section 162(a).

\*\* Administration expenses include secretarial and clerical work; GIS, CADD, and computer equipment; owned survey equipment and tools (stakes, hubs, lath, etc. - Note: mileage billed separately at rate noted); miscellaneous administration tasks; facsimiles; telephone; and printing costs, which are less than \$150.

*Should this not be in parenthesis?*