

State of Washington  
Capital Projects Advisory Review Board (CPARB)  
Project Review Committee (PRC)

**APPLICATION FOR PROJECT APPROVAL**  
**TO USE THE**  
**GENERAL CONTRACTOR/CONSTRUCTION MANAGER (GC/CM)**  
**OR DESIGN-BUILD (D-B) ALTERNATIVE CONTRACTING PROCEDURE**

The CPARB PRC will only consider complete applications: Incomplete applications may result in delay of action on your application. Responses to Questions 1-8 and 10 should not exceed 20 pages (font size 11 or larger). Provide no more than six sketches, diagrams or drawings under Question 9. (*Note: A **Public Body** that is certified to use the GC/CM procedure and is seeking approval to use this procedure on a GC/CM project with a total project cost of less than \$10 million is not required to submit information for Questions 7 or 8.*)

**1. Identification of Applicant**

- (a) Legal name of Public Body (your organization):  
City of Gig Harbor
- (b) Address:  
3510 Grandview Street  
Gig Harbor, WA 98335
- (c) Contact Person Name: Stephen T. Misiurak, P.E.  
Title: City Engineer
- (d) Phone No.: 253-853-7626 Fax: 253-853-7597  
E-mail: [misiuraks@cityofgigharbor.net](mailto:misiuraks@cityofgigharbor.net)

**2. Brief Description of Proposed Project**

Please describe the project in no more than two short paragraphs. (See Attachment A for an example.)

The proposed project at the City's Wastewater Treatment Plant (WWTP) consists of multi-phase modifications to replace aging facilities, increase in wastewater treatment capacity, and improvement to effluent water quality. The work proposed in Phase I includes site work; selective demolition; pumping and piping modifications; and construction of a new centrifuge building and centrifuge, a new clarifier and associated piping, three new concrete anoxic basins and associated electrical upgrades, and a new headworks building and associated new equipment. Phase II includes construction of a new lab and employee building, UV disinfection, third effluent pump, vector truck load-out station, fourth clarifier, aeration basin #4 mechanical equipment, utility water pumps, blower, final paving, landscaping, and site work.

**3. Projected Total Cost for the Project:**

*Note: By law, the D-B contracting procedure cannot be used unless the total cost of the project is over \$10 million. Although there is no total project cost requirement for using the GC/CM contracting procedure, every applicant must provide the information requested in Question 3.*

**A. Project Budget**

Costs for Professional Services (A/E, Legal etc.)	\$ 1,200,000
Estimated project construction costs (includes 10% contingency):	\$16,500,000
Equipment and furnishing costs	\$ included
Off-site costs	\$ n/a
Contract administration costs (owner, cm etc)	\$ 500,000
Other related project costs (briefly describe)	\$ n/a
<b>Total (with sales tax &amp; contingency)</b>	<b>\$18,200,000</b>

## B. Funding Status

Please describe the funding status for the whole project.

*(If funding is not available, please explain how and when funding is anticipated)*

A Public Works Trust Fund Loan (PWTF) has been secured in the amount of \$10,000,000.00 for Phase I. Additional PWTF loans will be sought for Phase II. The remaining funding required to complete the work will be funded through revenue bonds and general facility charges. The City is currently establishing an increase to the sewer general facility charge (connection fee) in order to pay for this project and other needed sewer infrastructure projects. The connection fees will increase from approximately \$3,000 per sewer connection to over \$8,000 per connection.

## 4. Anticipated Project Design and Construction Schedule

Please provide:

- The anticipated project design and construction schedule, including (1) procurement; (2) hiring consultants if not already hired; and (3) employing staff or hiring consultants to manage the project if not already employed or hired. *(See Attachment B for an example schedule.)*

Milestone	Target	Worse Case
Retain GC/CM Project Management Consultant	February 2008	N/A
Submit CPARB Application	March 2008	N/A
Select Legal Council	March 2008	April 2008
PRC Presentation	March 27, 2008	N/A
Establish GC/CM Selection Committee	March 2008	April 2008
30% Construction Documents	March 2008	N/A
Issue RFQ for GC/CM General Contractor	April 2008	May 2008
Select GC/CM Contractor	April 2008	May 2008
VE and Design Review	June 2008	July 2008
90% Construction Documents	June 2008	July 2008
Submit Phase II Engineering Report	July 2008	August 2008
MACC	July 2008	August 2008
Ecology approval Plans and Phase II Engineering Report	August 2008	September 2008
Phase I Construction – Start	August 2008	September 2008
Phase II Construction – Start	January 2009	May 2009
Phase I – Substantially Complete	December 2009	January 2010
Construction Complete	June 2010	January 2011

## 5. Why the GC/CM or D-B Contracting Procedure is Appropriate for this Project

Please provide a detailed explanation of why use of the contracting procedure is appropriate for the proposed project. Please address the following, as appropriate:

**For GC/CM projects:**

- **If implementation of the project involves complex scheduling, phasing, or coordination, what are the complexities?**

Implementation of the project involves scheduling, phasing, and coordination complexities. Currently, the City of Gig Harbor WWTP is at capacity. As a result, the City has a moratorium on growth, and specifically side sewer connections. Future sewer connection commitments are in place. Therefore, the development schedule

has been compressed, requiring the overlap of design and selection of the GC as well as the compression of multiple phases of work to complete the system of operation, which includes but is not limited to:

- WWTP Phase I Improvements
- WWTP Phase II Improvements
- On-Shore Outfall Infrastructure Improvements
- Off-Shore Outfall Infrastructure Improvements

Wastewater treatment plants are complex facilities that require specialized structures and systems. Constructing improvements to an existing operational WWTP involves an added complexity due to the operational challenges of installing the improvements while maintaining the operation of the plant. This added complexity further increases the need for well choreographed scheduling, phasing, and coordination of construction and operational needs.

These complexities arise at each stage of construction and include sequencing of demolition, electrical control and supply systems, temporary pumping and piping systems for by-pass work, and treatment functions. Scheduling, phasing, and coordination of these construction elements are vital in maintaining operation of the WWTP during construction and keeping water quality effluent within the required NPDES permit limits.

Phase I construction activities allow sequencing of startups of process equipment/facilities to make room for new Phase II facilities. The site is very small leaving little area for construction equipment access and storage of material. The constraints limit access to the existing facilities for operation and maintenance of equipment. Limited space for construction, the need for collaboration during this critical construction phase, and maintaining operation of the WWTP drives the need for a general contractor (GC) and construction manager (CM) lead team.

- **If the project involves construction at an existing facility that must continue to operate during construction, what are the operational impacts on occupants that must be addressed?** *(Please identify functions within the existing facility which require relocation during construction and how construction sequencing will affect them. As part of your response you may refer to the drawings or sketches that you provide under Question 9.)*

All connected sewers within the City flow to this one WWTP. Therefore, all aspects of the existing WWTP must remain in operation during construction of the proposed improvements. At 60 percent design, the GC/CM will understand the existing process flow and how construction of the new facilities impact current operations. Reasonable assumptions can then be made on how best to sequence construction activities, phase construction, provide temporary facilities, provide temporary by-pass pumping and temporary power, etc. The GC/CM will provide valuable insight to the most efficient sequencing, and means and methods to accomplish the temporary modes of operation. The GC/CM will work with the design team to determine step-by-step maintenance processes that will allow the work to take place in a staged and well organized manner.

The proposed improvements will involve temporarily relocating the lab and employee area to a modular building until the new permanent lab/operations building is completed. Selective demolition of the present control building will be required in order to access a new clarifier and other improvement work areas. Construction of anoxic aeration basins will be complex because of the depth of necessary grading and lack of working space. The installation of shoring may also be required. The footprint of the existing treatment plant and proposed improvements provides limited space that will drive the contractor's ability to stage and sequence the project. See Attachment A.

- **If involvement of the GC/CM is critical during the design phase, why is this involvement critical?**

It is critical to the success of the project to develop a solid working relationship with the owner, designer, owner's representative, treatment plant operator, and the contractor. This delivery method will bring forth a collaborative team environment that is less likely to be a confrontational or adversarial relationship as most complex projects can become in a traditional design-bid-build delivery method.

The City has a limited budget to complete the project and it is anticipated that the GC/CM involvement during the design phase will provide the City with an additional resource for identification and resolution of design issues related to plant operation and constructibility, ensuring that construction cost estimates are accurate. The GC/CM involvement is critical to help ensure that the funds budgeted based on construction cost estimates will be adequate, reducing the potential for cost overruns resulting from errors and omissions. As the project consists of upgrades and modifications to an existing plant, the risk of exposure to unknown existing conditions is relatively high. The GC/CM method of contracting will provide for an additional resource to limit the risk associated with the WWTP modifications.

- **If the project encompasses a complex or technical work environment, what is this environment?**

Modification to the existing WWTP involves both complex and technical challenges that require a specialized contractor and construction staff. The use of poor record drawings of the existing plant is the basis for the design of the improvements. Utilizing the GC/CM method will provide an opportunity for the contractor to become familiar with the existing conditions, proposed improvements, and plant operation during the design phase, which is a direct contrast to the more limited exposure that a standard design-bid-build process would allow. The GC/CM method would also provide an opportunity for the contractor to independently verify the existing conditions and better coordinate the design and construction of the upgrades and modifications.

- **If the project requires specialized work on a building that has historical significance, why is the building of historical significance and what is the specialized work that must be done?**

N/A

## 6. **Public Benefit**

In addition to the above information, please provide information on how use of the GC/CM or D-B contracting procedure will serve the public interest. For example, your description must address, but is not limited to:

- *How this contracting method provides a substantial fiscal benefit; or*
- *How the use of the traditional method of awarding contracts in a lump sum (the "design-bid-build method") is not practical for meeting desired quality standards or delivery schedules.*

The GC/CM process will benefit tax and rate payers of the City of Gig Harbor through better coordination of knowledge and objectives of the design team and the contractor, while incorporating on-going constructibility reviews. The GC/CM will help ensure completion of the project on time and within budget. The City of Gig Harbor is currently not allowing additional connections to the City's sewer system through a self-imposed moratorium. If the project comes in over budget for the traditional design-bid-build method of construction, the taxpayers will lose both time and money if the project has to be re-designed and/or re-bid.

Funding for the modifications will come from a Public Works Trust Fund loan and paid for by connection fees and sewer rate increases. The GC/CM contracting method will provide real time cost estimates that will account for the volatile costs of construction in the past few years. Keeping the project within budget and on time will provide the public with a fiscally responsible solution to the plant expansion.

The GC/CM method of contracting will allow the contractor to build a schedule early and provide insight to potential conflicts. This contract method could also provide information that would allow an early or phased start of portions of the project and therefore reduce the time to construct the project. In addition, required bypassing of certain portions of the plant to maintain operation will be identified and reviewed early.

The GC/CM method of contracting will provide an opportunity to maintain a tighter schedule and allow a higher probability of building the project within budget.

Both of these goals will save the rate- and tax-payers' funds over the 30-year duration of the project loan.

## 7. **Public Body Qualifications**

Please provide:

### **a) A description of your Organization's qualifications to use the GC/CM contracting procedure.**

The City of Gig Harbor has engaged Parametrix, Inc., (PMX) as project management consultants to lead the Wastewater Treatment Plant (WWTP) Upgrade project team. PMX's team leader for this project is Jim Dugan, Principal-in-Charge. Jim is supported by John Burk, PE, Senior Consultant. Through the course of the project, PMX will work closely with Stephen Misiurak, City Engineer, and Darrell Winans, Treatment Plant Supervisor, for Gig Harbor.

Jim Dugan's GC/CM projects are routinely completed within budget, without contract disputes, and with high Owner-satisfaction feedback. Jim's most recent and relevant two GC/CM projects are the Greater Tacoma Convention and Trade Center (\$78 million) and Stadium High School renovations (\$108 million).

Through his role in the Greater Tacoma Convention and Trade Center, Jim was responsible for management of the design process, management of the bid package process, and contract administration during construction of the Trade Center, which was contracted using the GC/CM process. The overall project was comprised of three major components: the convention center, a multi-story parking garage, and a one-city block of site improvements. A key challenge for the project was to incorporate large architectural program requirements into a sloping site in a tight urban setting. Additionally, project funding and owner bidding preferences required that contract documents be packaged individually for each bid package and carefully integrated into the bid review and contracting phase to ensure mitigation of scope and bidding gaps.

Jim was responsible for design and management of the Stadium High School design process, renovation of the historic school, and contract administration services during construction. This complex 300,000-square-foot project involved an unusual degree of complexity due to its small urban site and the degree of unknowns buried within the site area. Through careful collaboration between the owner and design and construction team, onsite problem solving occurred seamlessly. A deliberate effort occurred on Jim's part to ensure open, positive communication toward all issues. In addition, Jim was responsible for leading or participating in presentations before City and County councils,

community groups, Neighborhood Associations, and user groups to gain alignment, input, and support. Jim also teamed with Bassetti Architects to create the Education Specifications for Stadium High School. This effort included meeting with all academic leads, and facility and administrative staff.

The project delivery method for Stadium High School was GC/CM. Extensive value engineering was accomplished through design flexibility without diluting design integrity. Onsite contract administration further ensured design integrity and cost control as market-driven economic challenges were mitigated and unknown 100-year-old site and building challenges were resolved through innovative design and construction means and methods solutions.

**b) A Project organizational chart, showing all existing or planned staff and consultant roles:**

See Attachment B.

**c) Staffs and consultants short biographies.**

Jim Dugan has extensive GC/CM experience managing the planning, design, engineering, and construction phases of GC/CM agreements for clients in both public and private markets.

With 30 years of experience, Jim provides his clients with the necessary project management and leadership skills needed to plan, hire, and manage the design consultants and construction contractors to meet program requirements, budget restrictions, and schedule requirements, as well as work collaboratively with all agencies having jurisdiction.

John Burk, PE has over 18 years of experience providing project and construction management for a wide variety of infrastructure and building projects. His most recent owner's representative role was for the Pilot Travel Center in Tumwater, Washington, where he facilitated planning, design, permitting, coordination, and construction management for a new semi-truck fueling station with a convenience store. The project included extension of utilities more than a mile away from the site.

John's previous relevant experience was with the City of McCleary where he was the owner's representative and acting City Engineer for planning and design of the Wastewater Treatment Plant project. Pursuant to state and federal water quality regulations, the City of McCleary upgraded their wastewater treatment plant to accommodate 20-year growth in the service area, eliminate current NPDES permit exceedances, and replace worn out and aging facilities. Parametrix provided facility planning, permitting, funding, design, and construction management for the project. Key challenges on this project were keeping the facility in operation during construction and within permitted discharge limits.

Improvements to the WWTP included replacement of the existing dual trickling filter/biofilter with a new sequencing batch reactor, new solids handling system including aerobic digesters, belt filter press, and biosolids pumping system, new influent pumps, fine screen and grit tank, new ultraviolet disinfection system to replace chlorination, effluent chiller and heat exchanger, effluent reaeration system, new outfall diffuser, and administration building remodel and new laboratory.

Shannon Thompson is an experienced senior construction manager in a wide range of construction projects. Shannon has managed for private, commercial and environmental projects while specializing in project management, regulatory compliance and construction management. He has experience in negotiating with contractors, suppliers,

and regulatory agencies to achieve his client's goals. Shannon most recently managed the City of Port Angeles Landfill Closure to bring the project in on time and under budget by 1.5 percent.

Steve Misiurak, PE – City Engineer, has more than 20 years of design and distribution experience in water, stormwater, and wastewater, as well as all aspects of public works projects and project management. Steve has extensive experience in all aspects related to the management and oversight of the City's engineering department. His previous project experience provides him with strong construction project management and inspection skills. Steve works well as a team player and provides excellent customer service and public relations to the Gig Harbor community.

Darrell Winans, Treatment Plant Operator has 20 years experience in wastewater treatment with a Group 3 certification. He has a diverse range of experience in the field, from being an operator in a small package plant to design review and has acted as general contractor for the construction of a completely new SBR facility. He has also been physically involved in planning, design review and construction of 3 outfall projects, one extension's and two extension/replacements. He was the assistant lead operator in charge in a 4.1 MGD facility. And currently is the Supervisor in charge of the City of Gig Harbor wastewater treatment and collection system.

Dave McBride, PE, Cosmopolitan Engineering Group, is a senior environmental engineer, project manager, and design engineer specializing in water resources. He has a Master of Science degree in Environmental Fluid Mechanics and Hydrology. His project work includes water and wastewater treatment facilities planning, process design, piping and mechanical and field studies, water quality and reuse evaluations, construction administration, and NPDES permitting assistance.

Legal Counsel – TBD

Kirk Robinson, Robinson Company, is experienced in third party financial analysis, cost estimating, and scheduling.

Select detailed resumes may be found in Attachment C.

- d) **Provide the *experience and role* on previous GC/CM or D-B projects for each staff member or consultant in key positions on the proposed project. (See Attachment D for an example.)**

See Section 7-a, above.

- e) **The qualifications of existing or planned for project manager and consultants.**  
*Note: For design-build projects, you must have personnel who are independent of the design-build team, knowledgeable in the design-build process, and able to oversee and administer the contract.*

See Section 7-a, above.

- f) **The qualifications of an interim project manager until your organization has employed staff or hired a consultant as the project manager. Also indicate whether sufficient funds are available for this purpose and how long it is anticipated the interim project manager will serve.** *Note: This information is required only if your organization has yet to select a project manager at the time of application.*

The project management functions for the WWTP will be completed as a collaborative effort by a number of City staff, members of the design team, and PMX. Each will use his or her own unique talents and experience to manage various components of the project

through the program phase, the design phases, construction, relocation of the laboratory and staff, and operations sequencing. The attached matrix in Attachment D more particularly identifies each team member and the specific project management tasks for which he or she is responsible.

- g) **A brief summary of the construction experience of your organization's project management team that is relevant to the project.**

See Section 7-a, above.

- h) **A description of the controls your organization will have in place to ensure that the project is adequately managed.**

The project management team, as described above and in Attachment D, will provide the necessary oversight to maintain the construction schedule and adherence to the budget. There are provisions built into the City's management process that will ensure contractor and subcontractor invoice reconciliation and payment, a monthly review of project cost accounting, and preparation of periodic variance reports. A clear and concise record of all construction meetings, change orders, and schedule fluctuations will be established and documented. Close supervision of the onsite construction activities will occur.

- i) **A brief description of your planned GC/CM or D-B procurement process.**

The City sees this as a multi-phased process as outlined below:

1. Establish GC/CM Selection Committee
2. Issue RFQ for GC/CM General Contractor
3. Select GC/CM General Contractor using the following criteria:
  - GC/CM experience of the proposed workload
  - Recent, current, and projected workload
  - Approach to executing this project
  - Current financial statement and 5-year financial history
  - Analysis of proposed fee structure
4. Select apparent successful finalist, conduct interview, and negotiate contract

- j) **Verification that your organization has already developed (or provide your plan to develop) specific GC/CM or D-B contract terms.**

The City of Gig Harbor will use the University of Washington's standard GC/CM contract updated January 9, 2008, and tailored for Gig Harbor's project.

**8. Public Body (your organization) Construction History:**

Provide a matrix summary of your organization's construction activity for the past six years outlining project data in content and format per the attached sample provided:

- Project Number, Name, and Description
- Contracting method used
- Planned start and finish dates
- Actual start and finish dates
- Planned and actual budget amounts
- Reasons for budget or schedule overruns

Please see Attachment E.

**9. Preliminary Concepts, sketches or plans depicting the project**

To assist the PRC with understanding your proposed project, please provide a combination of up to six concepts, drawings, sketches, diagrams, or plan/section documents which best depict your project. In electronic submissions these documents must be provided in a PDF or JPEG format for easy distribution. Some examples are included in attachments E1 thru E6. At a minimum, please try to include the following:

- A overview site plan (indicating existing structure and new structures)
- Plan or section views which show existing vs. renovation plans particularly for areas that will remain occupied during construction.

*Note: applicant may utilize photos to further depict project issues during their presentation to the PRC*

Please see Attachment A – Overall Site Plan and Isometric View.

**10. Resolution of Audit Findings On Previous Public Works Projects**

If your organization had audit findings on any project identified in your response to Question 8, please specify the project, briefly state those findings, and describe how your organization resolved them.

N/A

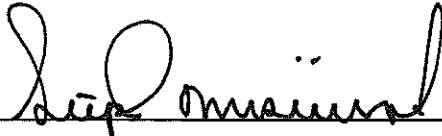
**Caution to Applicants**

The definition of the project is at the applicant's discretion. The entire project, including all components, must meet the criteria to be approved.

**Signature of Authorized Representative**

In submitting this application, you, as the authorized representative of your organization, understand that: (1) the PRC may request additional information about your organization, its construction history, and the proposed project; and (2) your organization is required to submit the information requested by the PRC. . You agree to submit this information in a timely manner and understand that failure to do so shall render your application incomplete.

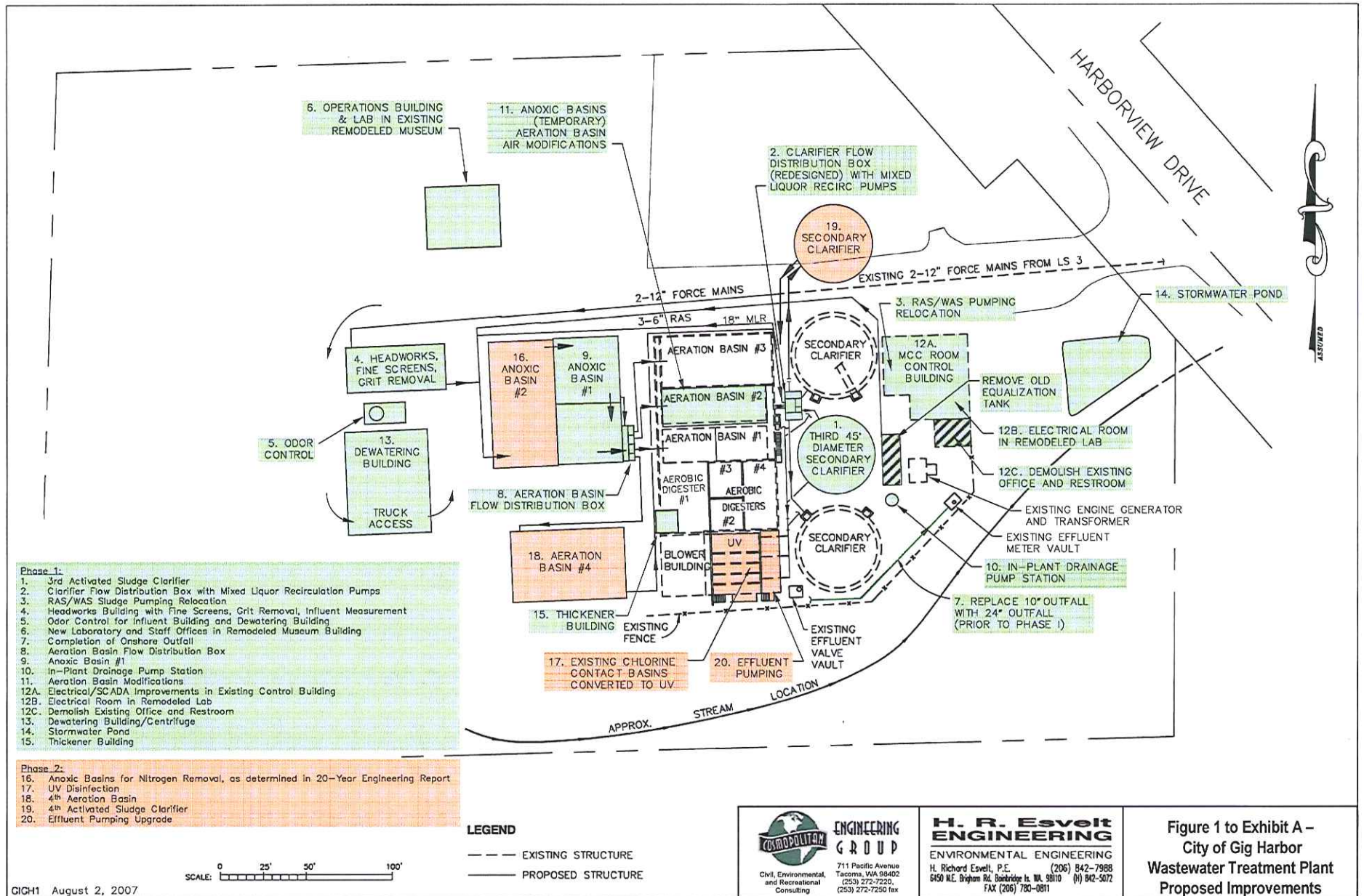
Should the PRC approve your request to use the GC/CM or D-B contracting procedure, you also understand that: (1) your organization is required to participate in brief, state-sponsored surveys at the beginning and the end of your approved project; and (2) the data collected in these surveys will be used in a study by the state to evaluate the effectiveness of the GC/CM or D-B process. You also agree that your organization will complete these surveys within the time required by CPARB

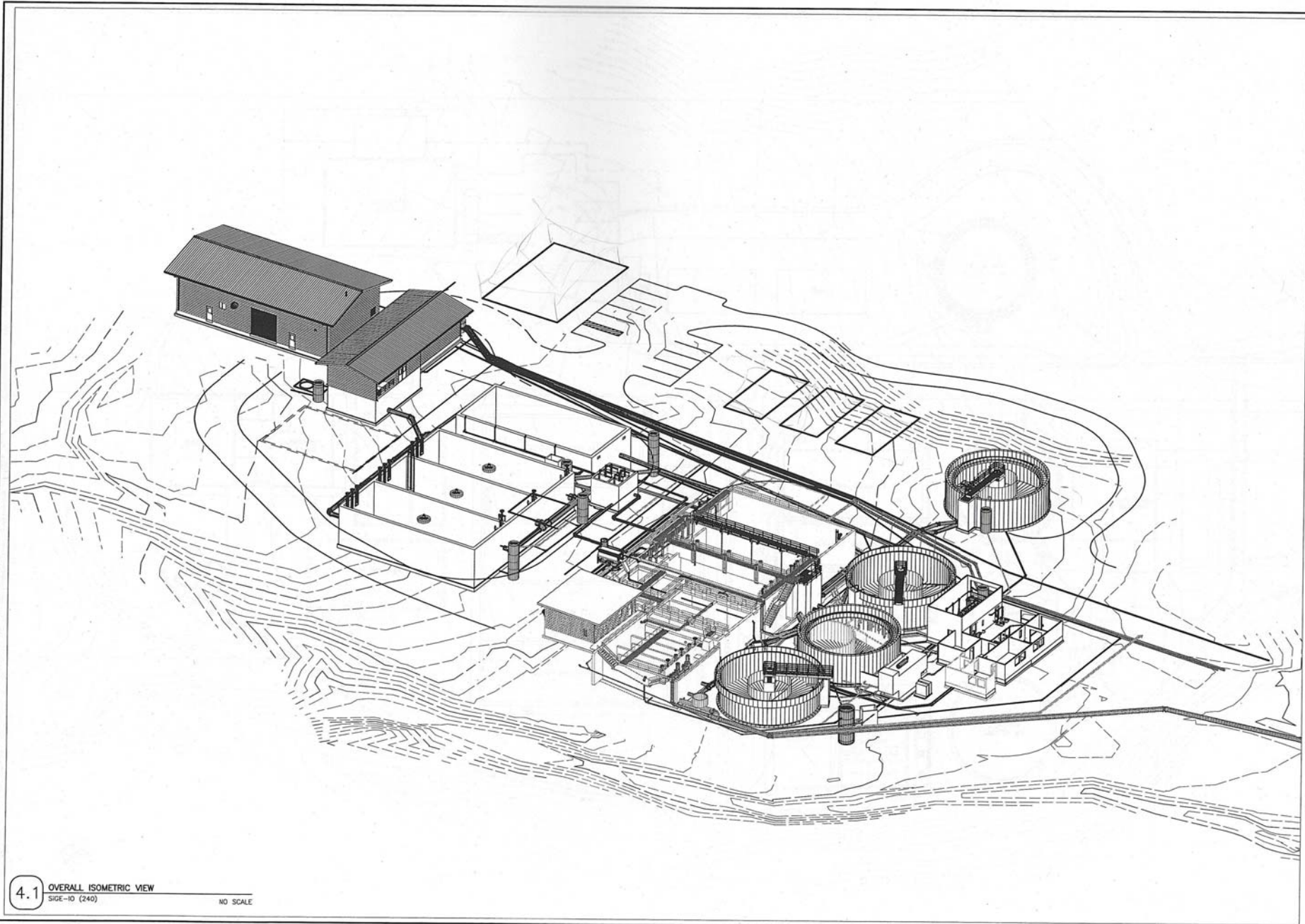
  
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Name (please print) STEPHEN MISIURAK

Title: City ENGINEER

Date: 3/3/2008





4.1 OVERALL ISOMETRIC VIEW  
SIDE-10 (240) NO SCALE

Structural Research Company

Spokane Office  
1000 W. 1st Ave., Suite 806  
Spokane, WA 99204  
(509) 624-6005  
email: sr@srmpac.com

WWTP EXPANSION  
DESIGN TEAM



OVERALL SITE ISOMETRIC

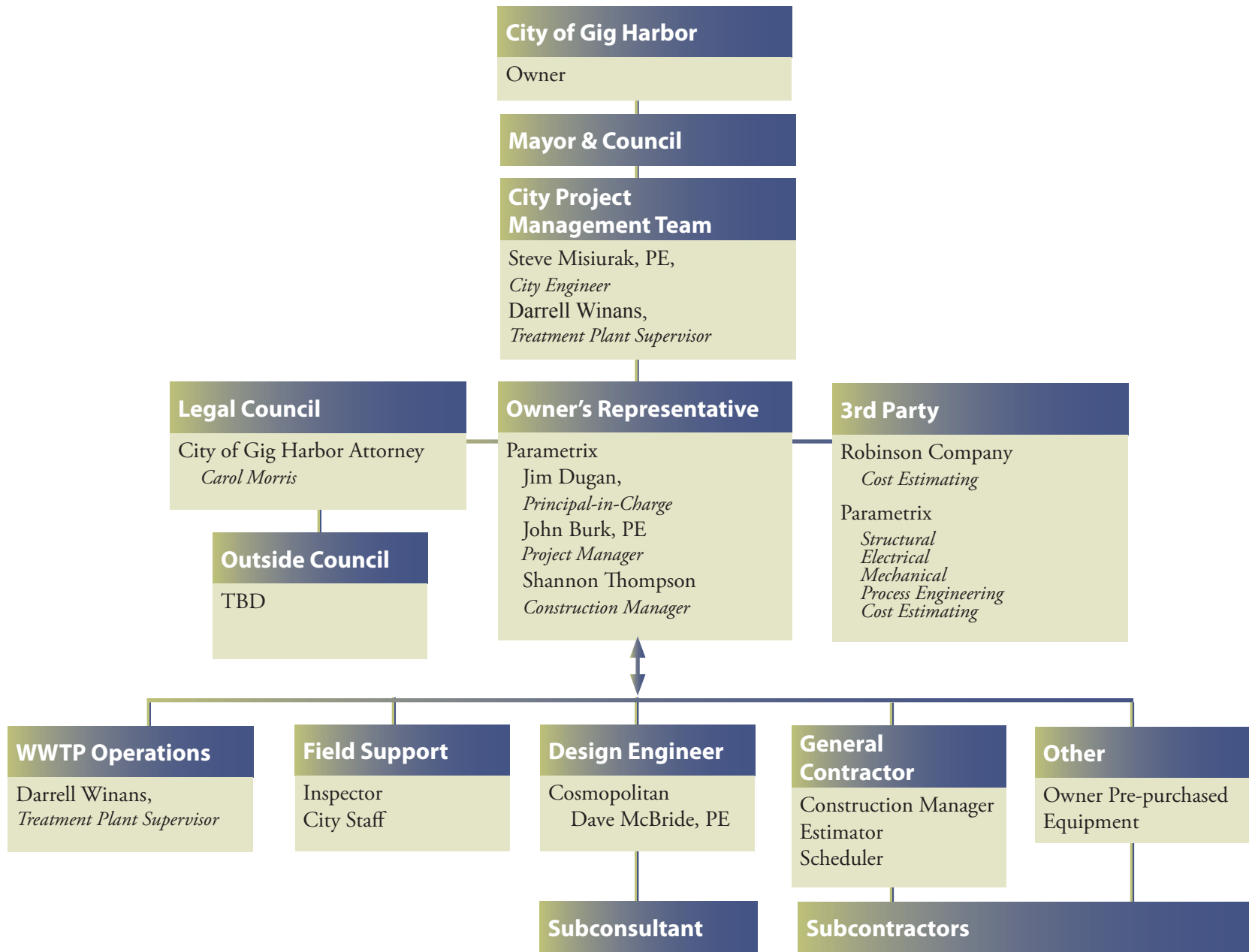
City of Gig Harbor  
Wastewater Treatment Plant  
Phase 1 Improvements

revisions  
drawing status  
preliminary

Sheet  
S1

Sheet 11 of 233

# City of Gig Harbor Wastewater Treatment Plant Project Team



**STEPHEN T. MISIURAK, P.E.**

**7320 Creekwood Pl., NE  
Bremerton, WA 98311  
Home 360-308-0092  
Work 253-851-6170**

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**PROFESSIONAL PROFILE**

*More than 20 years of design and distribution experience in water, stormwater, wastewater, all aspects of Public Works and Project Management...Strong experience in all aspects related to the management and oversight of the City's engineering department,...Strong construction project management and inspection experience... Works well both as a team player and independently...Strong customer service and Public relations experience...Extensive working knowledge of AutoCAD, AdCADD, Microsoft Excel, WaterCad, ... Bachelor of Science in Civil Engineering... Professional Engineer (P.E.) and City Engineer for the City of Gig Harbor.*

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**CAREER HIGHLIGHTS**

**City Engineer**

*City of Gig Harbor, Gig Harbor, WA (Sept 2001-Present)*

Responsible for planning, organizing, directing and coordinating activities of all the units of Civil Engineering Department; provides engineering services for the construction, maintenance and repair of city streets and storm drains, buildings, parks and grounds maintenance, water and sewer system maintenance and repair and operation of a sewer treatment plant; supervises technical and administrative support staff; utilizes considerable independent judgment and initiative to carry out program objectives within the framework of engineering principles, practices and established policies and procedures; prepares engineering designs for city projects; reviews and evaluates proposed projects; prepares reports and makes recommendations to the Community Development Director; determines priorities and work sequences necessary to achieve objectives and assigns work to subordinate personnel in accordance with priority and need; confers and coordinates with those within or outside the city staff and provides written and oral responses to a variety of inquiries and problems regarding matters involving municipal engineering policies, procedures, standards, and environmental impact reporting requirement; prepares and/or supervises the preparation of plans and specifications for the construction of municipal infrastructure projects, including, but not limited to: roadways, sanitary sewer, sidewalks, traffic control devices, landscaping, drainage and stormwater management projects, water, and parks; signs and places a seal of approval on plans prepared under direct supervision; prepares and manages project budgets and schedules; ensures projects are in compliance with approved budgets and schedules; supervises a staff of three inspectors, one engineering drafting technician, and one associate engineer; reports directly to the Community Development Director;

presents projects or issues to City Council and/or other elected/appointed boards and committees as requested by the Community Development Director; performs concurrent Project Engineer duties.

- Received \$3.2 M in 2008 TIB State Grant Funding.
- Received previous Sidewalk Grant TIB funding.
- Responsible for the construction management and oversight of approximately \$12 Million City capital street, water, sewer, storm, parks, and waste water treatment plant projects.
- Supervises a staff of six employees.
- Prepares, updates and submits to the State the City's yearly 6 year Transportation Improvement Program (TIP).
- Prepares, administers, and monitors the Departments yearly budget including project capital program and operating budget.
- Prepares and submits grant applications for various City capital projects.
- Manages consultant engineers, geotechnical, and survey support staff.
- Attends City council meetings and conducts public presentations.

### **Project Engineer**

*City of Gig Harbor, Gig Harbor, WA (Jan 2000-Aug 2001)*

Prepares and supervises design, preparation of plans, specifications, cost and quantity estimates, bid documents, and addenda for public works projects, including street, sewage system, water system, storm drainage system, and park improvements; performs and supervises construction support services including on-site inspection, project coordination, preparation and negotiation of change orders, material source review, review and preparation of progress estimates, contract records preparation and management, and contract correspondence; reviews and assists in review of development proposals and construction plans submitted for City review; assists in the Department planning and program management, including elements of the City's Comprehensive Plan, capital improvement program, updates and revisions to the Public Works Standards.

- Project Engineer for a \$ 3 Million roundabout and one mile 5 lane roadway (East/West) Project in Gig Harbor.
- Project Engineer for a \$1 Million Sewage Pump Station.
- Project Engineer for a \$750,000 Pt. Fosdick Drive Roadway Reconstruction Project.
- Project Engineer for a \$500,000 6,500 LF 16" Distribution Waterline Project.
- Project Engineer for a \$300,000 Water pump station.
- Project Engineer for a \$500,000 Kimball Drive Roadway Reconstruction Project.
- Manages consultant engineers, geotechnical, and survey support staff.

### **Civil Engineer II**

*City of Bremerton, Bremerton, WA (Mid 1997-Dec 1999)*

Responsible for the design, design review, and preparation of contract specifications and drawings, construction management, and inspection of various water, storm, combined storm and sanitary separation, and sanitary improvement projects; oversees and coordinates with consultants and other government agencies; performs permit acquisitions, coordinates, assists, and works closely with City water, wastewater, and storm and sanitary operation and

construction personnel on a variety of system enhancements and modifications; responsible for a variety of storm/sewer separation (CSO) reduction projects; prepares quantity and budget calculations and estimates on a variety of water, storm, and sanitary projects; prepares technical reports for various water and or sanitary source, storage, and system improvements.

### **Civil Engineer I**

*City of Bremerton, Bremerton, WA (Mid 1996-Mid 1997)*

Responsible for the design, preparation of contract specification and drawings, construction management, and inspection of various public works projects; prepared project progress estimates, change orders and reports; developed budget projections and directed field technical personnel; researched, analyzed and resolved engineering problems on City and private development projects; prepared and reviewed technical reports related to various engineering assignments; lead engineer responsible for the design and implementation of the first City traffic calming program and handicap curb cut program; coordinated and overseen local street and arterial street improvement projects; conducted water system modeling; interpreted the modeling results and recommended source, storage, and system improvements; performed public presentations before city residents and City Council members.

### **Associate Engineer**

*Las Virgenes Municipal Water District, Calabasas, CA (1995-1996)*

Responsible for conducting studies of plant processes, efficiencies, capacity enhancement and other requirements for all the treatment and pumping facilities in the water, reclaimed water, and wastewater systems; providing technical support for pilot projects and evaluating existing facilities; and designing, inspecting, managing, and coordinating rehabilitation and upgrade programs to existing treatment and pumping facilities.

### **Assistant Engineer**

*Las Virgenes Municipal Water District, Calabasas, CA (1990-1995)*

Responsible for plan checking tract water and sewer construction drawings for conformance to district format and specifications; computing water and sewer fee schedules in accordance with district ordinances; answering inquiries from private developers, engineers, contractors, and the public; designing and preparing detailed layout and design construction drawings via AutoCAD and AdCADD; reviewing finished products for accuracy and conformance within design requirements; performing budget calculations and preparing estimates of cost and quantities of work; assisting in the development of work for the consultant contracts; preparing contract documents and specifications; conducting pre-bid job tours; conducting bid openings; construction project management; directing inspection staff; directing geotechnical and survey consultants; assisting in the operation of construction projects.

# Jim Dugan

*GC/CM Expert*

Jim has extensive experience managing the planning, design, engineering and construction phases and services for clients in both public and private markets. With formal training in civil engineering, Jim provides his clients with the necessary project management and leadership skill needed to plan, hire, and manage design and construction consultants and contractors consistent with program requirements, budget restrictions, schedule requirements as well as work collaboratively with all agencies having jurisdiction.

Jim is committed to and highly visible in his community, as the President and founder of the Dugan Foundation, a local non-profit animal welfare foundation, and as the President of the Tacoma School District School Board. Jim is a team leader and is highly respected for his common sense, practical solutions, articulate communication skills and his high energy non-nonsense approach to plan and forward projects to completion.

## Selected Project Experience

### **Greater Tacoma Convention & Trade Center – Tacoma, WA** **GC/CM Delivery Method**

Managed the design process from programming to construction documents and permitting, provided pre-construction constructibility and value engineering services, developed the bid package strategy and implemented the bid package process, participated with the owner to hire the General Contractor, managed on-site construction activities for conformance and compliance with contract documents thru the construction phase, managed the project close-out process and managed the warranty phase for one year after occupancy. Unique project complexities included dense urban setting for construction, complex public funding sources, site environmental mitigation, site Indian sacred ground management, and high profile City project.

### **Stadium High School – Tacoma, WA** **GC/CM Delivery Method**

Managed the design process from programming to construction documents and permitting, provided pre-construction constructibility and value engineering services, developed the bid package strategy and implemented the bid package process, participated with the owner to hire the General Contractor, managed on-site construction activities for conformance and compliance with contract documents thru the construction phase, managed the project close-out process and managed the warranty phase for one year after occupancy. Unique project complexities included dense urban setting for construction, historic agency compliance at local and state levels, complex public funding sources, site environmental mitigation, and high profile School District project.

### **Public**

- Greater Tacoma Convention & Trade Center, Tacoma, Washington
- Cama Beach State Park Modernization, Camano Island, Washington
- Stadium High School Modernization and Addition, Tacoma, Washington
- President, Dugan Foundation - Pierce County Public, Non-Profit Animal Welfare Organization
- Executive Leadership Team – Team Leader for a Pierce County, City of

*Years of Experience: 30*

### *Education*

BS, Civil & Environ.  
Engineering, 1978 WSU

Tacoma, Metro Parks, Tacoma School District strategic leadership team developing Pierce County into a no-kill companion animal community.

- President, Tacoma School District #10 Board of Director Position

### **Industrial / Manufacturing**

- General Motors de Mexico Engine & Car Assembly Plant, Saltillo, Mexico
- Boeing Military Building 13-03 AWACS Facility, Seattle, Washington
- Boeing Aerospace Company Underground Laser Testing Facility, Seattle, Washington
- Boeing Commercial Airplane Company, 777 Expansion Program, Everett, Washington
- Boeing Commercial Airplane Company Landing Gear Offload Facility, Seattle, Washington
- Malaysian Air Aircraft Maintenance Building, Kuala Lumpur, Malaysia
- Philadelphia Newspapers Incorporated Schuylkill Printing Plant, Philadelphia, Pennsylvania
- The Columbus Dispatch New Remote Printing Production Facility, Columbus, Ohio
- Neighborhood Beverage Bottling Plant, Los Angeles, California
- Pacific Coca Cola Bottling Company New Remote Syrup Plant, Bellevue, Washington
- Garrett Freight Lines Distribution Center, Seattle, Washington
- Safeco Insurance Company Warehouse Facility and Print Shop, Redmond, Washington
- Sundstrand Data Control Manufacturing Facility, Redmond, Washington
- The Boeing Company Corporate Headquarters Remodel, Seattle, Washington

### **Commercial**

- Riverside Ford Dealership, Sumner, Washington
- Mazatlan Restaurant, Bonney Lake, Washington
- Parametrix Sumner Office Master Plan, Sumner, Washington
- Solaria Spa Conceptual Design, Olympia, Washington
- Seattle First National Bank, Remote Branch Bank Facility, Richland, Washington

### **Department of Defense**

- Rapid Deployment Joint Task Force Headquarters, MacDill Air Force Base, Tampa Bay, Florida
- Boeing Strategic Defense Initiative Aerospace Program Complex, Kent, Washington
  - Materials & Process Laboratory
  - Thermal Systems Integration Laboratory
  - Advanced Research Projects Laboratories
  - Short Range Attack Missile Assembly Plant
  - SDI Sensor Calibration and Systems Integration Laboratory
  - C-Safe Radio Frequency Shielded Laboratory
  - Sensitive Controlled Information Facilities
  - Hard Mobile Launcher – Weapon Control Systems
  - Class 100 Clean Rooms

# John Burk, PE

*Project Manager*

John has a wide range of consulting and public works experience. He has provided project management and construction management for: solid waste, hazardous waste, recycling, transportation, municipal engineering, water/wastewater, and surface water projects. He has conducted site assessments, provided remedial investigations and feasibility studies on several private, federal, and local government properties.

Much of John's early experience included landfill closure, infrastructure improvements for solid waste handling facilities, and methane management. Some of his solid waste experience included transfer station and recycling facility design. His transportation design work includes TIB and Federal funding, WSDOT projects, and transit station design. John has provided City Engineering functions for several municipalities facing rapid growth and helped them ensure they maintained a level of service for sewer collection and treatment, water availability, and roadway infrastructure to support development needs. Some of the work included sewer engineering plan updates, and facility reports for water and wastewater facilities.

While at the City of Tacoma, John oversaw the surface water utility. His responsibilities included ensuring compliance with the stormwater NPDES permit, development of budgets and the capital improvement program, sewer/storm sewer plan review for land development, and stormwater monitoring compliance in accordance with EPA's order on the Thea Foss Superfund Clean-up project.

## Selected Project Experience

### Tacoma Central Wastewater Treatment Plant – Tacoma, WA

John assisted in the in the analysis of the plant effluent pump and outfall force main to resolve hydraulic problems in their discharge to Commencement Bay.

### Northwest Speedway – Kitsap County, WA

As a project engineer, John was responsible for planning utility extensions to serve the new speedway and Port of Bremerton.

### Pilot Travel Center #151– WA

John served as project manager and construction manager for the off-site utility construction at the new Pilot Travel Center Truck Stop.

### Wastewater Plant River Bank Protection – Montesano, WA

As project manager for an emergency repair to the City's waste water lagoon embankment, John oversaw the action taken to prevent the failure, due to the erosion caused by the Wynoochee River.

### Westport On-call Plan Review Services – Westport, WA

John was the project manager who oversaw the review of developer's engineering drawings for compliance with City standards and codes

*Years of Experience: 17**Education*

BS, Civil Engineering, 1989

*Registrations*

Professional Engineer, WA

### **Well No. 1 Booster Pump Station – Orting, WA**

As construction manager, John provided oversight during the last phase of the construction of the City's new reservoir and booster pump station.

### **Puyallup River Bridge Utility Improvements – Orting, WA**

As part of the Parametrix team, John served as the project engineer responsible for providing design and construction management for the project. The design included the installation of a hanger-supported, 6-inch sanitary sewer forcemain across the new bridge.

### **Downtown Improvement Project – McCleary, WA**

John served as the project manager responsible for phase I and II. Phase I design revitalized downtown sidewalks, parking, and lighting. Phase II included construction of a transit station for Grays Harbor transit and a park & ride lot.

### **Salishan Master Utility Plan – Tacoma, WA**

As the project manager John was responsible for evaluating existing utilities including stormwater, sanitary sewer, water, power, gas, communication, and cable TV to support the redevelopment of the entire 150-acre site. The Master plan included outlining the design standards and construction requirements for all utilities.

### **Cama Beach - Redevelopment and Historical Preservation Project – Camano Island, WA**

John served as the project engineer for a utility master plan to serve existing buildings and new structures with all new utilities. Project is in an environmentally sensitive area and is a midden site for the local Tribes. Special care was needed to design around the historical theme of the park. Work included design of on-site sewage treatment system, stormwater facilities, drinking water reservoir and distribution system, parking lots and roads to access the site.

# Shannon Thompson

## *Construction Management*

Shannon is a senior construction manager experienced in a variety of construction projects. Shannon specializes in project management, regulatory compliance, and construction management for private, commercial, and environmental projects. He has worked for private firms, as well as city, state, and federal agencies. He has worked on many unique projects and enjoys the challenge of overcoming the obstacles these projects have.

Shannon is experienced in managing a variety of project types from restoration to heavy civil construction projects. He has experience negotiating with contractors, suppliers, and regulatory agencies to achieve his clients' goals. Shannon recently worked with the Department of Ecology to manage oil clean-up along the Strait of Juan de Fuca for the City of Port Angeles. He is familiar with the federal ICS system. He has provided logistics planning, safety management, project estimation, and project field QA/QC.

## Selected Project Experience

### **Landfill Engineering and Environmental Services 2006 – Port Angeles, WA**

Shannon successfully managed the landfill closure to bring the project in on time and 1.5 percent under budget. The management of the slope stabilization and seawall projects has required responses to change order requests, drill plan reviews, and the development of a spreadsheet showing the as-built measurements. Shannon made decisions and kept the project moving forward with the minimum amount of delay to construction when problems were encountered. Shannon was the safety officer for the Department of Ecology during the oil cleanup on the Strait of Juan de Fuca.

As the construction manager he is responsible for contract management, construction administration, construction observation, QA/QC, and documenting the daily construction progress. His responsibilities included compiling daily reports and photo records, interpreting the project design stated in the construction documents, attending regularly scheduled meetings, conducting weekly construction progress meetings, and negotiating and preparing change orders, work directives, defective work notices, RFIs, and contract clarifications documents. Shannon reviewed submittals, pay requests, construction schedules, and sequencing; responded to issues of claims; issued monthly reports; and managed on-site personnel. He also confirmed the quality of contractor supplied material and workmanship. He is the liaison between the client and the contractor, subcontractors, and regulatory agencies. Shannon identified potential work items that could be value engineered to keep quality while reducing construction cost. He presented his ideas to the designer, contractor, regulators, and City to obtain approval and cost savings. One of his approaches to reduce topsoil thickness saved the City over \$60,000 and took over one week off the contractor's schedule.

Shannon kept financial records for the construction project. He tracked the work completed weekly to keep financial information and project schedule status current. With this information, he reported financial status to the City weekly. For monthly contractor pay requests, this tracking would expedite reviews and approval. Shannon reported monthly on the project status in bulletin format to the City. The bulletins were suitable for public distribution and reporting to upper management. Shannon also prepared all other correspondence required for the project.

*Years of Experience: 18*

### *Education*

BS, Ecology with a Restoration Emphasis, 1997  
AS, 1994

## **Castle Rock Development – Eagle ID - Boise, ID**

In 2002, Shannon assessed a site before the developer purchased the property, advising the company on potential hurdles to overcome for construction on a site adjacent to the Boise River. In 2005, Shannon was asked by the developer to help with the problems he encountered during the construction phase of the project with poor quality workmanship by the subcontractors. Shannon assessed the work already completed, evaluated the utility, landscape, and irrigation system, and recommended a plan to repair all defective work and sequence the rest of the work to complete the project.

By providing the construction management for the project and sequencing the work to be more efficient and cost-effective, Shannon saved the developer thousands of dollars. Shannon also designed a three-hole golf course and entrance feature and finished the landscape design and irrigation system, adding more value to this high-end development. All the lots were sold at an average price of \$650,000 by the end of 2005. In 2006, Shannon finished the on-site cromaglass water treatment system for household sewage, installed grinder pumps on each lot, and brought homes on-line to the system as they were constructed.

He evaluated another potential commercial site for the developer, providing a list of problems that was used to negotiate the final purchase price. Shannon completed the final phase of the landscape, golf course, and automatic fertilization system. He also provided QA/QC on subcontract work preformed, installed street lamps, added signs, and helped to develop a maintenance plan. This work was performed prior to joining Parametrix.

## **LDS Church, Harmony Building – Fort Collins, CO**

Prior to joining Parametrix, Shannon's construction company installed a series of drain tiles and surface drainage systems to mitigate ground water from a perched water table causing damage to the church building, landscape, and asphalt parking lot. The project finished under budget and one month ahead of schedule. Shannon did the estimating, scheduling, construction management, and site safety. The project was completed while the building was still in use by the church.

## **Level (3) Communications – Denver, CO**

Prior to joining Parametrix, Shannon was the assistant project manager for a company in the Denver area where he managed multiple aspects of an initial fiber optics project in the states of Colorado, Wyoming, Utah, Oklahoma, and Texas. He developed a strategic land restoration plan following the completion of the fiber optic project, as well as standard operating procedures for employees to follow throughout the duration of the project. He developed and implemented GIS and GPS data collection policies and procedures. He also developed a GIS/GPS employee training syllabus and conducted employee training in the use of these systems.

He developed and managed procedures for tracking over \$500K worth of sophisticated equipment used to complete this project. He developed and maintained relationships with the client, personnel from corporate offices, field offices, subcontract engineers, and suppliers, and coordinated the standardization of operating procedures across the spectrum of organizations working on this project. He developed logistical plans to ensure proper equipment, material, and people were brought together at the appropriate time and location to complete various aspects of the project. He also developed and implemented project safety procedures.

## THE ROBINSON COMPANY – COST ESTIMATING

### Partnering For Success

Teamwork is essential in today's construction market. Project success measured in terms of cost control, schedule accuracy, design quality, and risk management demands highly skilled coordination from the earliest phase. As a full-service preconstruction firm, The Robinson Company is well known for our cost and schedule accuracy. Working on behalf of the Architect or Owner, our comprehensive services range from developing early cost budgets to coordination of the entire front-end effort. Early cost budgets are implemented in the predesign, programming, or preschematic stages. The Robinson Company provides conceptual estimates on over 50 projects each year. These estimates are often performed without definitive information and are usually completed before the beginning of schematic design.

### Knowledge and Experience Set Us Apart

Founded in 1985 as a cost estimating firm, The Robinson Company has expanded and targeted its services to meet the changing needs of our clients offering in-depth knowledge and project experience along the way. We have developed cost estimates for all types of public facilities including a wide range of municipal buildings, office complexes, fire and police stations, educational facilities, hospitals and medical facilities, libraries, and cultural centers. Having worked exclusively in the Northwest over the last 23 years, our knowledge of the local bid market has proven to be both accurate and a valuable asset to the design team.

### Responsive Service, Measurable Value

At The Robinson Company, we never lose sight of our mission: to keep our clients a step ahead, and partner with them to minimize their risk. We offer comprehensive services from project inception through contractor selection, and the flexibility to adapt as conditions change. The Robinson Company interacts daily with a wide range of contractors and suppliers; allowing us to offer accurate and realistic information as the project evolves. The following is a partial list of our services:

Feasibility/Predesign Studies	New vs. Modernization Analysis
Cost Modeling	Detailed Cost Estimates
Schedules	Constructability Reviews
Cost Monitoring	Contract Development
Estimate Review/Reconciliation (GC/CM)	

### A Unique Approach, a Talented Staff

The Robinson Company approaches every project from the Owner's perspective, with a contractor's knowledge. Our staff of 14 includes experienced estimators and project managers with strong backgrounds in general contracting. This means that we consider how every element of a project relates to cost, schedules, and logistics of the construction process. Our estimators are trained to be proactive. They will evaluate the building elements and ask the critical questions during the design process. This thorough evaluation helps ensure all the costs are covered in the planning and design stages.

## **Attachment D**

### **Gig Harbor Wastewater Treatment Plant – Roles & Responsibilities including percent dedicated to project**

#### **Mayor Hunter & Council (% as needed)**

- Final project authority
- Contract signing authority
- Final Budget and MACC approval

#### **Carol Morris – City Attorney with outside expert GC/CM Counsel (% as needed)**

- Provide Administration, contract development and oversight

#### **Steve Misiurak, PE – City Engineer (20%)**

- Oversight of funding and management of bond activities
- Contract negotiation with key players (designers and GC/CM)
- Invoice approval
- Change Order approval

#### **Darrell Winans – Treatment Plant Supervisor (50%)**

- Maintaining operation and permit compliance for the WWTP
- Project planning, design review, phasing, operation issues, temporary facility oversight
- Decision maker for facility design options and solutions
- O&M planning and implementation

#### **James Dugan – Parametrix Principal-in-Charge (15% or more if necessary)**

- Compliance GC/CM Alternative Delivery method RCW 39.10
- GC/CM mentoring, facilitation, and training
- Council education and Public meeting facilitation
- Dispute resolution process

#### **John Burk, PE – Parametrix Owner’s Representative for Gig Harbor (50%)**

- Management and oversight of project team, design team and consultants
- Robinson Company - Subconsultant 3<sup>rd</sup> Party cost estimating and scheduling
- Project lead and point of contact for all project-related issues and activities

- Liaison with GC/CM, City staff, and its design team
- Negotiate MACC with GC/CM
- Supervise permit and approval process
- Lead the project team through the GC/CM application, review and selection process
- Issue and follow RFP procedure for consultants and GC/CM

**David McBride, PE –Project Manager for plant design (75% Design, 15% Const.)**

- Delivery of project plans, specifications, including programmatic performance and technical requirements.
- Design subconsultant management
- Responsible for permitting documents
- RFI responses

**Shannon Thompson - Construction Management (75% or more during Construction)**

- Provide day-to-day owner representation during construction
- Monitor budget and schedule throughout the life of the project
- Manage permit and approval process
- Reconcile and approve invoices
- Maintain contract documentation and change orders as needed
- QA
- In charge of inspectors

**GC/CM – Contractor -**

- Overall delivery of Project – schedule, budget
- Delivering a completed project
- Constructibility analysis
- Master schedule
- Cost estimating
- MACC
- QC
- Subcontractor bid packages
- Subcontractor contract compliance

## City of Gig Harbor, WA - Construction History Completed Projects\* (7 years)

No.	Project Name	Project Description	Contracting Method	Planned Start	Planned Finish	Actual Start	Actual Finish	Planned Budget	Actual Budget	Reason for Budget or schedule overrun
1	Borgen Blvd.	New Road Construction	D-B-B	Nov-00	Sep-01	Jun-00	Jan-03	\$3,500,000	\$2,760,000	
2	Pump Sta 3A	Construct new sewage pump station	D-B-B		Sep-00	Mar-99	Jun-03	\$600,000		
3	Bayridge Ave water main and storm sewer	New 8" water main and storm sewer	D-B-B		Sep-00	Oct-99	Aug-00	\$280,000	\$203,000	
4	Point Fosdick Imp.	Street Widening	D-B-B		Dec-00	May-00	Feb-01	\$852,000	\$719,000	
5	Bujachich to Burnham Dr. and Woodworth Ave. water main	New 16" water main	D-B-B		Dec-00	Mar-01	Jun-01	\$500,000	\$513,000	Authorized additions to project
6	Kimball Drive Imp.	Street Widening	D-B-B		Nov-00	Apr-01	Sep-02	\$750,000	\$466,000	
7	Well 5 and 6	New pumps and controls	D-B-B		Aug-00	Feb-02	May-03	\$250,000	\$238,000	
8	Grandview St. Imp.	Curb, gutter, sidewalk imp.	D-B-B		Sep-02	May-02	Jun-03	\$403,000	\$238,000	
9	Judson St. and Stanich Ave storm sewer imp.	Install new storm sewer	D-B-B		Aug-02	Sep-02	Mar-03	\$200,000	\$224,000	Authorized additions to project
10	Skansie Ave. to 72nd St. waterline	New 12" water main	D-B-B		Apr-03	May-03	Oct-03	\$245,000	\$230,000	
11	Pump Station 2	Replace pump station and install new 8" force main	D-B-B		Nov-04	May-05	Jul-06	\$1,000,000	\$896,000	
12	36th St and Pt. Fosdick Int. Imp.	Construct Roundabout at Intersection	D-B-B		Dec-05	Jun-05	Mar-06	\$995,000	\$865,000	
13	Rushmore water main replacement	New 8" water main	D-B-B		Dec-05	Jun-05	Aug-05	\$400,000	\$201,000	
14	Burnham Dr sewer line replacement	Replace shallow sewer line	D-B-B		Aug-06	Jun-06	Aug-06	\$350,000		
15	Pump Station 2	Complete construction of pump station	D-B-B		Nov-05			\$850,000		
16	Borgen Blvd.	Complete project closeout	D-B-B		Sep-01			\$500,000		
17	Pump Station 2	Capacity Improvements	D-B-B		Dec-02			\$451,000		
18	Kimball Dr. Imp.	Complete street widening	D-B-B		Nov-01			\$425,000		
19	Rosedale Pedestrian Imp.	1000' curb, gutter and sidewalk	D-B-B		Sep-06			\$300,000		
20	Plant Upgrades	Replace aeration blowers	D-B-B		Sep-06			\$245,000		
21	Rosedale Pedestrian Imp.	1000' curb, gutter, and sidewalk	D-B-B		Nov-05			\$200,000		

\* Projects with Planned Budgets greater than or equal to \$200,000