

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

APPLICATION FOR CERTIFICATION of PUBLIC BODY
RCW39.10 Alternative Public Works Contracting- Design-Build [DB]

The CPARB PRC will only consider complete applications. Incomplete applications may delay action on your application. Responses to Questions 3-10 should not exceed 15 pages (font size 11 or larger).

1. Identification of Applicant

- (a) Legal name of Public Body: Port of Seattle
- (b) Address: 2711 Alaskan Way, Seattle, WA 98121
- (c) Contact Person Name: Janice Zahn Title: Assistant Director of Engineering
- (d) Phone Number: 206-787-3798 Fax: 206-787-3188 E-mail: zahn.j@portseattle.org

2. Experience and Qualifications for Determining Whether Projects Are Appropriate for DB under Alternative Contracting Procedure (RCW 39.10.270 (2)(a).) Limit response to two pages or less. (See attached example of a public body's internal project approval flow chart)

Please submit a process chart or list showing: (1) The steps your organization takes to determine that use of the procedure is appropriate for a proposed project; and (2) The steps your organization takes in approving this determination. Also submit the written guidelines or criteria that your organization uses in determining whether this alternative contracting procedure is appropriate for a project.

Prior to requesting Port's Commission approval to proceed with design and construction of a project, a project team consisting of members from Project Management Group, Construction Management Group, and Central Procurement Office holds a meeting with the project sponsor. The project sponsor defines the requirement with respect to scope and schedule. The project team strategizes and agrees upon how the project will be procured in a competitive manner while considering operations, risks, and scheduling needs.

The acquisition plan template is completed by the Project Manager, which documents the technical and business needs that will control how a project will be procured through design, purchasing, services and/or construction. It summarizes the planning considerations, is used as the agenda for the planning meeting(s), documents the agreed upon procurement method and identifies the critical milestones in the acquisition process.

During the acquisition planning meeting(s), the project team determines if an alternative public works contracting method is appropriate based on estimated cost, project objectives, schedule considerations and risks. Since these factors and their priority of importance will vary from project to project, a detailed analysis for the best contracting method is performed. If the team recommends an alternative contracting procedure; a subsequent meeting is conducted with the Managing Director of Capital Development. If the Managing Director is in agreement with the team's recommendation, the Managing Director recommends this method to the Port's Commission for approval to proceed.

See Exhibit A for Process Chart.

3. Project Delivery Knowledge and Experience (RCW 39.10.270 (2)(b)(i).) Limit response to two pages or less.

Please describe your organization's knowledge and experience in delivering projects over the past 10 years, including the complexity of projects your organization built. Describe delivery methods, management structures, and project controls utilized.

The Port has a successful record of accomplishing an ongoing, major capital improvement program. Within the past ten years, the Port has completed over \$1.4 billion in its Capital Improvement Program (CIP), which included the \$412 million Rental Car Facility, the \$231 million Main Terminal 100% Baggage Screening project, the \$31 million Terminal Escalator Modernization project, as well as the \$85 million Runway 16L/34R Reconstruction project. Seaport and Real Estate projects include \$79 million Shilshole Bay Marina Renewal and Replacement, \$23 million Fisherman's Terminal improvement projects, the \$121.5 million T-30/T-91 Cruise Terminal and Container Redevelopment.

The majority of Port projects were procured using the Design-Bid-Build methodology with selective projects utilizing the GC/CM and Design-Build methodology. The Port utilized the GC/CM alternative contracting method for the C-1 Baggage Handling System at Seatac Airport, Shilshole Bay Marina Removal and Replacement project and the Rental Car Facility. The GC/CM method was the preferred method due to the complexity of these projects and the need for contractor input during the design and preconstruction period.

For the C-1 project, the GC/CM method was used to address a combination of complex, evolving baggage screening technologies with complicated and interconnected design and construction scheduling/phasing. Coordination with the impacted airlines, the Transportation Security Administration (TSA), the Port's technical and operations staffs, the Port's design and construction management consultant firms, and the GC/CM firm were essential for development and delivery of the federally-mandated baggage screening system.

For the \$79 million Shilshole Bay Marina project, the construction had to be phased over multiple years to limit disruption to the 24/7 operations of the marina, which included 300 live-boards and the relocation of 1,700 boat slips. Preconstruction discussion with the selected GC/CM was key to generating a schedule that limited operational impacts and optimized construction efficiencies.

On the \$412 million Rental Car Facility project, the site is highly constrained and the level of coordination with rental car companies, public agency partners and internal Port stakeholders created significant challenges that required early contractor participation.

The Port utilized the Design-Build procurement method for the \$30.6 million Terminal Escalator Modernization project at Seatac Airport. The project included replacement of forty-two existing escalators and installing two new escalators in a 24/7 operating facility. The DB method was used to leverage the innovation of the proposer's designer, manufacturer and installer/contractor to develop an approach that minimized airport operational disruptions while achieving the performance requirements the most cost effectively based on the proprietary properties of the various vendor designs. The project completed on time and under budget.

Since 2011, the Port has utilized the Job Order Contract (JOC) format for its Noise Remedy Sound Insulation program in south King County. The program provides sound mitigation for eligible single family residential homes built before the enactment of applicable local jurisdiction codes. Each residence is unique, thus a separate design effort is required for each residence. The JOC format along with the issuance of Work Orders for each project,

matches well with this separate design requirement. The Port will be procuring another JOC contract in 2014 in continued support of the Noise Remedy Sound Insulation program.

4. Personnel with Construction Experience Using Various Contracting Procedures (RCW 39.10.270 (2)(b)(ii).) Limit response to two pages or less. (See attached sample to display personnel experience)

Please provide a chart with your organization's current personnel with construction experience using the contracting procedure and briefly describe their experience (for example, the type of project, the length of time they worked on the project, the tasks they performed, and the percent of time devoted to each task). Only identify those personnel that you reasonably expect will be with your organization over the next three years.

Significant to the effective performance of the CIP are the Port's Project Management Groups, Central Procurement Office and Construction Management Departments, all consolidated within a single Capital Development Division. This organizational structure provides for seamless, responsive and efficient design, construction and contracting support. Essential resources are available to support all types of procurement including the D-B-B, GC/CM and D-B methods.

See Exhibit B for the Port Personnel Experience History.

5. Management Plan and Rationale for Alternative Contracting Projects (RCW 39.10.270 (2)(b)(iii).) Limit response to one page or less. (See attached example of a management plan and rationale for using an alternative contracting procedure.)

Please provide your typical management plan or protocol that you would use to manage a Design-build (D-B) project. Your plan should address the typical roles, types of positions with specific responsibilities and also list any advisory or oversight roles (by expertise).

Overall responsibility for projects resides with the Managing Director, Capital Development Division. Reporting to the Managing Director, the Project Management groups will have the day-to-day management responsibilities with significant roles provided by the Central Procurement Office for procurement, award and closeout of construction contracts, and the Construction Management group for day-to-day management responsibilities of the construction contract. This integrated organizational approach is the standard approach used by the Port with successful results.

The project manager is responsible to manage and facilitate design development and review process utilizing the Port's Design Manual and the Document and Controls Review System, development and oversight of cost estimates and project schedule utilizing in-house and design consultant staffs, utilization of Port cost control procedures and systems, and submission of necessary documents for the Port Commission authorization of the contract advertisement and award, and project funding. Throughout these steps, the project manager will use Port procedures and guidelines to facilitate input from and review by the project team and stakeholders and any other resources necessary to address specific project concerns/issues. Oversight by Port senior management coupled with monitoring and reporting requirements for monthly and quarterly project reviews including funding, provide additional levels of controls.

The proposal development and procurement of Port construction contracts are directed by the Central Procurement Office (CPO) Construction section. The Port will utilize outside consultant technical advisors as needed. A collaborative review between the Construction Manager/Resident Engineer, Project Manager, and Contract Administrator of all documents is also conducted to ensure accuracy and quality. The CPO Director will provide strategic

advice and oversight. The CPO Construction Contract Services Manager reviews and certifies all documents.

For the construction management phase of a project, the Port's Construction Management department will manage the construction contract. Cost growth during construction is tracked using a Construction Trend log database for change management. A construction contingency is established to fund changes during construction and justification codes are assigned to track causes of cost growth. Construction Manager, Resident Engineer, and assigned Port inspectors utilize the Livelink construction management software system to track and manage submittals, RFI's, CB's, change orders, and all other pertinent construction-related documents. The Livelink system complimented by the Regulations for Airport Construction and the construction contract documents govern the construction management and provide for effective project controls. The Port will also utilize outside consultants during the construction phase to assist in-house staff as needed.

See Exhibit C for the Project Organization Chart, identifying the key management positions.

6. Demonstrated Success in Managing Public Works Projects Involving All Types of Contracting Procedures (RCW 39.10.270 (2)(b).) Limit responses to two pages or less. (See attached example table of how to display construction history.)

Please provide a table with the following information for a maximum of twenty-five (25) public works projects with a total cost of at least \$5M each that your organization has managed over the past 10 years:

- Name of project
- Description of project
- Total project cost
- Method of delivery (design-bid-build, GC/CM, design-build, etc.)
- Lead Design Firm (including current contact information)
- General Contractor or Design/Builder (including current contact information)
- Planned construction start at authorization date
- Planned completion date
- Actual construction start date
- Actual completion date
- Reason for schedule overrun (if any)
- Original budget at authorization (not including land acquisition)
- Final Cost
- Reason for cost overrun (if any)

**If the public body has fewer than twenty-five (25) applicable projects, it may list projects under \$5 million if they believe them to be relevant.*

***If the public body has more than twenty-five (25) applicable projects, they should state the number of projects they have managed and provide a list of the twenty-five (25) projects it believes are most relevant.*

See Exhibit D for Port Project History information.

7. Demonstrated Success in Managing at Least One Project Using DB Contracting Procedure Within the Last Five Years (RCW 39.10.270 (2)(b).)(Limit response to one page or less.)

In addition to the information provided in response to Question 7 about projects that your organization has managed using the alternative contracting procedure, please provide a narrative discussion with the following information:

- Appropriateness of the alternative contracting method used for the project(s).

- *Lessons learned from your experience.*

Terminal Escalators Modernization Project – Design/Build Contracting Method

In 2013, the Port successfully completed the Terminal Escalator Modernization project. The project scope included the replacement of forty-two (42) existing escalator systems equipment located throughout the Main Terminal, Concourse B, the north and south transit stations and South Satellite, and two new escalators in the South Satellite. A critical element of work included relocation of electrical and communication network within a Communication Room in the right-of-way of one of the new escalators. The Design-Builder was responsible for removal of all asbestos-containing or other regulated materials (RMM) in the project areas and any design associated with such removal. The project included a community work agreement promoting harmonious labor relations through construction for optimum quality and production, had zero safety incidents and no disputes or claims.

Appropriateness of alternative contracting method used

The design and installation of escalators is dependent on proprietary properties of the various vendors design and specific characteristics of the escalator installed – replacement or renewal. The renewal method involves new mechanical equipment and systems reutilizing the existing truss. The replacement method differs in that the existing truss is not reused; instead the truss and equipment are manufactured off-site and installed in one or multiple segments depending on length. While the performance characteristics of the two escalators types are identical; design, installation and scheduling are significantly different.

The D-B approach promoted competition and innovation and provided the successful proposer's designer, manufacturer, and installer/contractor the opportunity and incentive to work together in developing an approach that minimizes airport operational disruptions while achieving the technical/performance specifications of the contract through efficient and economical means most favorable to their preferred escalator product. With the escalators included in this project being beyond their useful life and incurring increasing levels of failures, the duration for installation on a site-by-site basis and for the overall project has a direct impact on the traveling public and airline operations.

Lessons learned from your experience

There are three main areas regarding lessons learned. First, the decision to proceed with virtually no field investigation prior to issuing the RFP resulted in significant costs and time delays for unforeseen conditions at the new South Sattelite escalators. For the majority of escalators which were in the Main Terminal, the as-builts were sufficient. The six units in Concourse B were delayed due to unforeseen conditions in the ceiling that required a new, extensive hoisting plan – which could have been significantly minimized with prior field investigation.

The second area involved the Port's approach to design review. The RFP did not adequately address the time required for effective design review by the Port, specifically the Port staffing and time period for contractor response to comments. The Port did utilize its bridging documents/project support consultant for design review but Port staff was overwhelmed by the multiple phases and the abbreviated time frames for review/comments. The Port should have better detailed the design review/comments process in the RFP documents, and had more staff available for coordination and reviews.

The third area involves discretionary change orders initiated by the Port for primarily aesthetic improvements such as a change from stainless steel high-deck balustrades to low-deck glass balustrades, stainless steel enclosures and lighting improvements under the escalators, and glass railings, finishes consistent with the newly constructed South Arrivals

Hall. Rather than approaching this project solely as escalator replacement from the onset, a greater effort should have been made to solicit AV management input into aesthetic improvements not typically associated with infrastructure projects but, in this case, greatly enhancing the overall terminal aesthetics.

8. Ability To Properly Manage the Public Body's Capital Facilities Plan (RCW 39.10.270 (2)(b)(vi). Limit response to one page or less.)

As part of this statutory requirement, the PRC needs to determine that the public body has the appropriate project planning and budgeting experience. In addition to the information that's been requested in previous questions, please provide other information to assist the PRC to determine whether the organization has project planning and budgeting experience.

Each year the Port of Seattle Commission adopts a six-year capital budget and plan of finance that includes both committed and business plan prospective projects. Business plan prospective projects are carefully screened by each Operating Division's senior leadership to ensure that there is sufficient justification before they are included in the capital budget and plan of finance.

Each project in the Port's capital budget is tracked as a capital improvement project (CIP) in both the Port's Enterprise Financial System (PeopleSoft) and Enterprise Project Delivery System (Skire Unifier).

In order for a business plan prospective project to become a committed project, a detailed project definition (Project Notebook) must be completed and approved by the Division's senior management. When this project definition step begins, a Project Manager is assigned and a Work Project (WP) is set up in both PeopleSoft and Skire Unifier under the CIP set up when the project was put in the capital budget. The Project Notebook includes detailed identification of the project's scope, the development of a detailed cost estimate to define the project's budget, the development of a detailed schedule, and other relevant factors as identified in the Port's Project Notebook Procedures. This notebook is the basis for requesting the initial project authorization from the Port Commission to proceed with project design. The approved notebook budget is used as the baseline budget for the WP within the PeopleSoft and Skire systems.

The project notebook cost estimate is either developed by the Project Management Group's Cost Estimators or by Port A/E consultants and reviewed by those cost estimators, using consistent conceptual cost estimating methodologies and based on the preliminary planning scope of work. Direct costs of the project are estimated (including a design development allowance), followed by contractor's markups, to establish a target bid amount, and then these costs are used as a basis for construction contingencies, and Washington State Sales Tax (WSST) to calculate a final construction cost. This final number then is used as the basis for soft costs such as Design, Project Management, Construction Management, etc., taking into account historical percentages for projects of a similar size and type and other factors relevant to the specific project.

As the project progresses through the design phases, and the Project Manager receives updated estimates from the Port's Design Team (either A/E consultants or in-house), the Project Management Group's Cost Estimator reviews these estimates. The engineers' estimate is reviewed by the Cost Estimator and put into the standard Port format. On a quarterly basis, five year cash flow projections are updated by the Project Managers with input from the Project Controls staff. The cash flow projections are developed using a work project by work project approach and reported at the CIP level.

9. Ability to Meet the Requirements of Chapter 39.10 of the Revised Code of Washington (RCW 39.10.270 (2)(b)(vii).) (Limit Response to one page or less.)

Please provide any information not presented in your answers to Questions 3-8 further demonstrating your organization's ability to meet the requirements of this chapter.

The Port believes strongly in complying with state laws and regulations and ensuring that projects are managed in ways that are consistent and in compliance. Port staff is actively involved in CPARB, PRC and CPARB subcommittees and understands the importance of provisions within RCW 39.10.

10. Resolution of Audit Findings on Previous Public Works Projects (RCW 39.10.270 (2)(c).) (Limit response to one page or less.)

If your organization had audit findings on any project identified in your response to Question 7, please specify the project, briefly state those findings, and describe how your organization resolved them.

Inadequate project controls procedures and practices were identified in the 2007 Washington State Auditor's Office (SAO) Performance Audit as areas requiring improved oversight and procedures. In response to the audit findings, the Port established in 2008 a new Capital Development Division and a Central Procurement Office (CPO). The Capital Development Division consolidated the existing engineering, project management and construction functions with a new CPO, all steps to improve Port procurement practices, project oversight, and project delivery processes.

The Port has implemented and strengthened control procedures, specifically concerning engineer's estimates, change orders (negotiations, independent estimates, cost analysis, and secondary reviews of contractor change order proposals and documentation), and implemented revisions to the Port's Construction Manual Standard Operating Procedures and Contract Manual. Further, the Port has implemented comprehensive policies and procedures for Service Agreement procurement and contract management. Additional detailed information concerning the audit is available at

http://www.portseattle.org/downloads/news/Audit_Response_20090420.pdf

Since 2007, the Port has been audited annually in its SAO Accountability audit, with no findings. These SAO accountability audits focused on procurement, contracting and change orders. The audits evaluated internal controls and whether the Port of Seattle complied with state laws and regulations and its own policies and procedures.

Signature of Authorized Representative

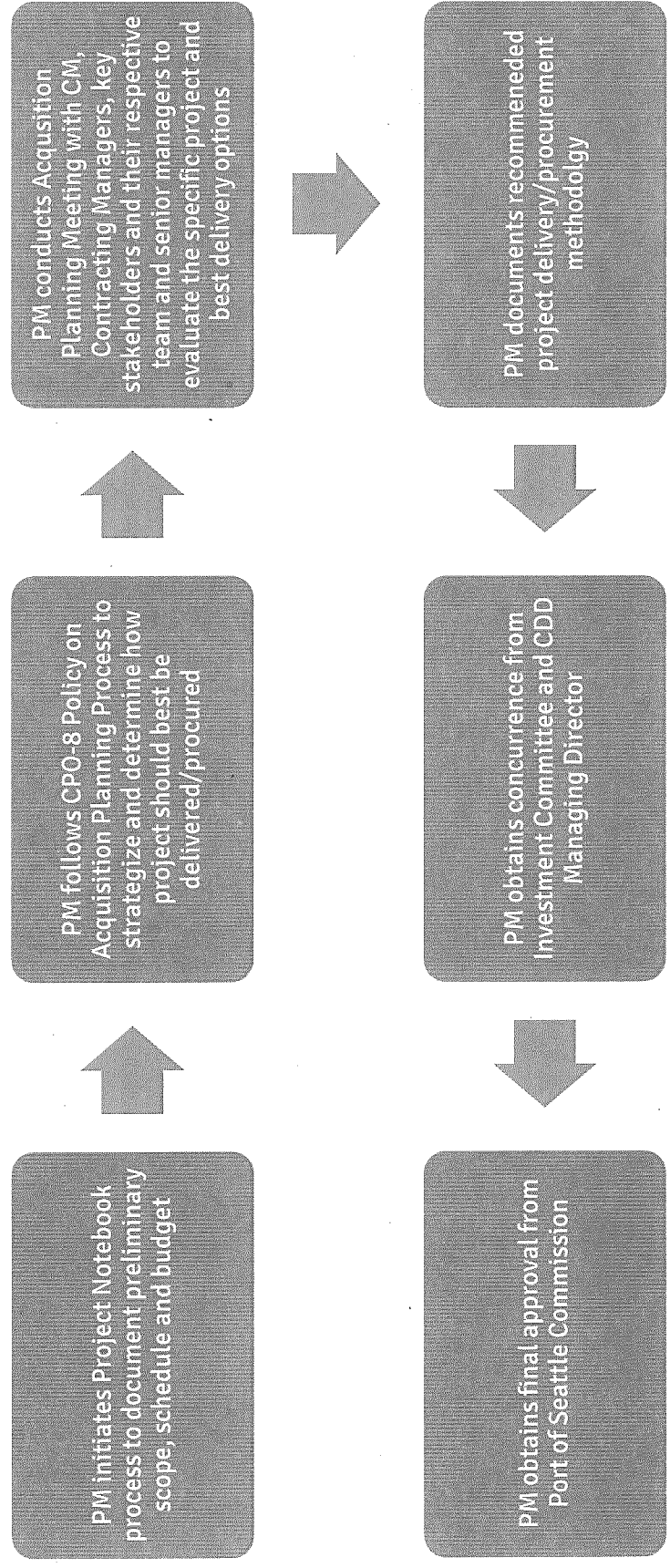
In submitting this application, you, as the authorized representative of your organization, understand that the PRC may request additional information about your organization, its construction history, and the experience and qualifications of its construction management personnel. You agree to submit this information in a timely manner and understand that failure to do so shall render your application incomplete.

Should the PRC approve your request for certification, you also agree to notify CPARB when your organization approves the construction of a project using the alternative contracting procedure(s) for which you are certified; and to participate in brief, state-sponsored surveys at the start and completion of each of these construction projects. You understand that this information will be used in a study by the state to evaluate the effectiveness of the alternative contracting procedure(s).

Name (please print) JANICE ZAHN
Title: ASSISTANT DIRECTOR OF ENGINEERING
Date: 12/30/13



EXHIBIT A: PORT PROJECT DELIVERY REVIEW FLOW CHART



Legend

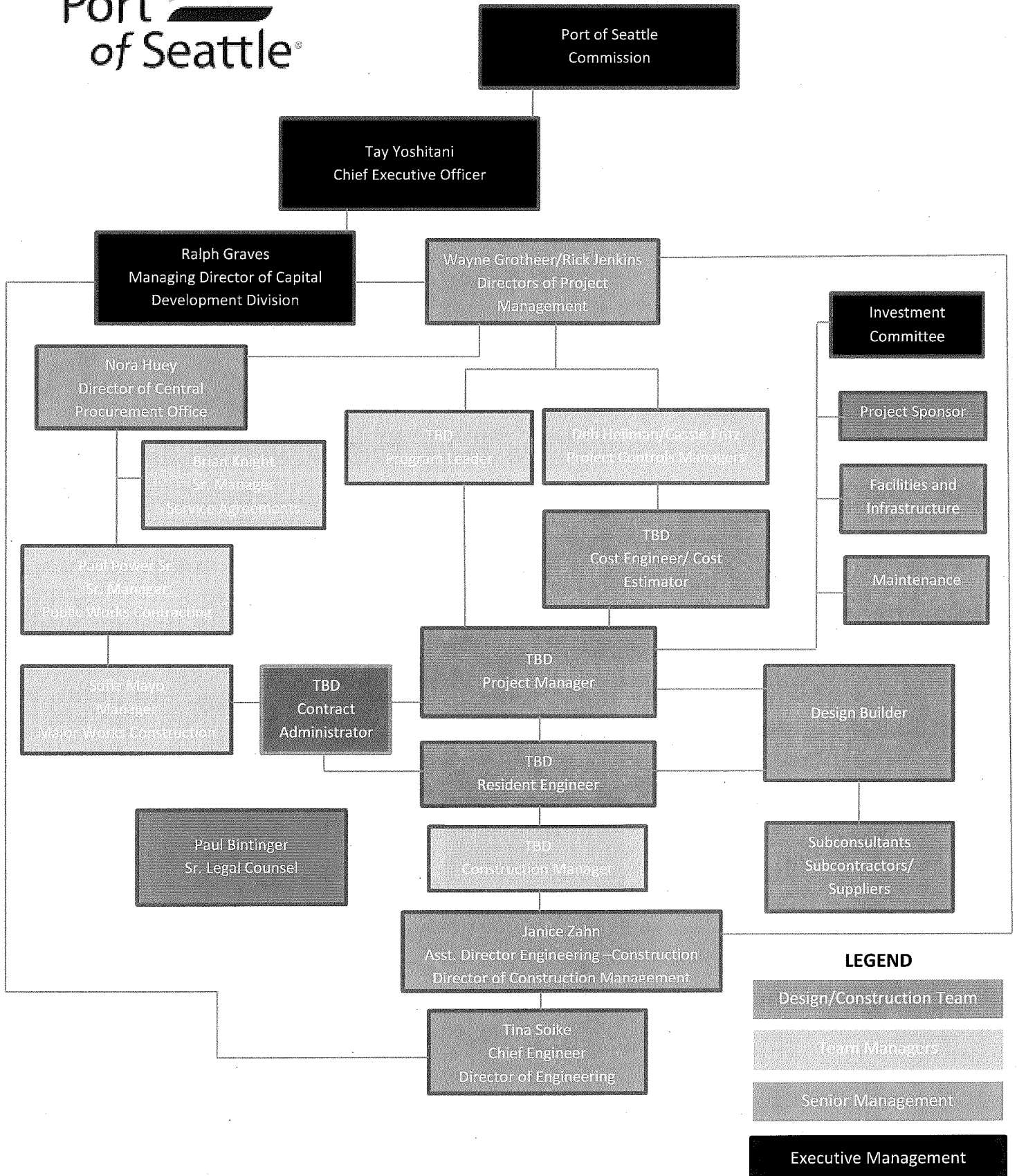
- PM: Project Manager
- CM: Construction Manager
- CDD: Capital Development Division

**EXHIBIT B:
Personnel with Construction Experience Using Various Contracting Procedures**

Name and Title	Summary of Experience	Project Name	Project Size	Project Delivery Type	Role during Project Phases			Role Start	Role Finish
					Planning	Design	Construction		
Ralph Graves, Managing Director of Capital Development Division	39 years of experience, with 29 years at the Army Corps of Engineers responsible for numerous major construction projects. After his military career, Mr. Graves was a project manager in the Seattle Parsons Brinckerhoff office prior to joining the Port in 2008.	Terminal Escalator Modernization Rental Car Facility at STIA Fort Lewis, WA Deployment Center Military Base Housing & Dormitory Projects US Air Force Academy Athletic Fac., CO	\$16.9M \$234.4M \$30 M \$70 M \$25 M	D-B GC/CM D-B D-B D-B	x x x x x	x x x x x	x x x x x	2009 2008 2002 1992 2001	2013 present 2003 2003 2003
CONSTRUCTION MANAGEMENT PERSONNEL									
Janice Zahn, Assistant Director of Engineering - Construction Services	25 yrs experience in the design, construction and project management of capital projects, with last 14 years at the Port. Extensive directly relevant experience with alternative contracting methods. Construction Manager and Project Manager for the Shilshole Bay Marina GC/CM project, C-1 baggage handling system project and currently leading the Construction Management team on the GC/CM Rental Car Facility. Actively involved with CPARB subcommittees and task forces, including RCW 39.10 Reauthorization, GC/CM Heavy Civil, bidder responsibility, industry-wide, Best Value subcommittee and the IPV/BV task force. Licensed PE, MSCE, CMAA and DBIA member.	Consolidated Rental Car Facility Terminal Escalator Modernization C-1 baggage handling system project Shilshole Bay Marina Redevelopment New Cruise Ship Terminal	\$250 M (Const.) \$16.9M \$162.5M \$60M (Const.) \$45M (const)	GC/CM D-B GC/CM GC/CM D-B-B	x x x x x	x x x x x	x x x x x	2008 2009 2008 2004 2006	present 2013 2009 2009 2010
Andrea DeMiuro, Construction Manager	26 yrs of experience as Construction Manager, Project Manager for General Contractor providing constructibility review and cost estimating services from program through construction completion, with last 5 years at the Port. DBIA member and certified.	Marquis residential and commercial projects Commercial retail project - 25 bldgs on 65 acres Terminal Escalator Modernization	\$20M -56M \$98M \$16.9M	G-Max D-B D-B	x x x	x x x	x x x	1997 2006 2009	2006 2008 2013
Scott Thomas, Construction Manager	30 yrs of experience in construction project management. 13 years at the Port as Construction Manager and Resident Engineer. 17 years at several construction companies working in the roles of Project Manager, Project Engineer, Lead Estimator, VP, with many years experience in scheduling and claims management. Licensed PE	Consolidated Rental Car Facility	\$250 M (Const.)	GC/CM	x	x	x	2008	present
Jonathan Ohta, Construction Manager	24 yrs of experience in the design and construction of capital projects. 12 years at the Port as a Construction Manager and Resident Engineer. Licensed PE.	Shilshole Bay Marina Redevelopment New Cruise Ship Terminal Everett Events Center	\$60M (Const.) \$45M (Const.)	GC/CM D-B-B	x x	x x	x x	2008 2008	2009 2010
Kyle Richardson, Construction Manager	24 years of Construction experience, 20 years of Management including Construction Manager Special Projects Division Manager, Sr Project Manager, Programming, Development, Estimating, Cost Management, Claims Management, Advanced Scheduling, Closeout and Commissioning	Shilshole Bay Marina Redevelopment New Cruise Ship Terminal Everett Events Center	\$75M (const)	D-B	x	x	x	2003	2005
Josh Ferrel, Resident Engineer	15 years of experience in construction management as a Project Manager, Project Engineer, and Resident Engineer, with duties including Estimating, Cost Management, Scheduling, Coordination, and Constructibility Review. LEED AP	Terminal Escalator Modernization Northgate Mall Parking Garage Husky Baseball Stadium Multiple projects as a General Contractor	\$16.9M \$17M \$13M 15-30M	D-B D-B D-B G-Max	x x x x	x x x x	x x x x	2012 2006 2012 1999	2013 2006 2012 2012
Rad Milosavljevic, Resident Engineer	20 years of construction experience with progressing level of responsibility from inspection to management of large capital improvement program projects. Projects include work in both public and private sector environments, ranging in value between \$500,000 and \$250,000,000. 12 years with the Port of Seattle. BS and MS. in Aeronautical Engineering, CMAA Member	Consolidated Rental Car Facility	\$250 M (Const.)	GC/CM	x	x	x	2008	present
Ann Paustian, Resident Engineer	25 yrs experience with the construction and project management of capital projects. Worked at the Port of Seattle since 2001 with last 3 years as a Port R/E. Licensed PE.	Consolidated Rental Car Facility	\$250 M (Const.)	GC/CM	x	x	x	2009	present
Tom O'Connell, Resident Engineer	36+ years of construction experience as a Contractor's Quality Control Manager, Field Engineer, Superintendent, Estimator, Project Manager, VP of a small subcontracting firm, Senior Inspector and Resident Engineer. Over 30 years of this time was related to public projects for the Port of Seattle, Corps of Engineers, Navy ROICC, FAA and various	Consolidated Rental Car Facility Shilshole Bay Marina Redevelopment Terminal Escalator Modernization Shilshole Bay Marina Redevelopment Runway 16L/34R Reconstruction	\$250 M (Const.) \$60M (Const.) \$16.9M \$60M (Const.) \$49M	GC/CM GC/CM GC/CM D-B GC/CM	x x x x x	x x x x x	x x x x x	2008 2005 2011 2006 2009	2010 2009 2013 2008 2009
Beckie Pitts, Resident Engineer/Scheduler Chris Sherwood, Resident Engineer	14 yrs of construction management experience with progressing levels of responsibility at the Port of Seattle. Licensed PE.	Terminal Escalator Modernization Shilshole Bay Marina Redevelopment Runway 16L/34R Reconstruction	\$60M (Const.) \$250 M (Const.) \$60M (Const.)	D-B GC/CM D-B-B	x x x	x x x	x x x	2010 2010 2011	2011 2011 2011
Alisa O'Haver, Resident Engineer	17 yrs experience in design and construction management for both public and private projects. Licensed PE.	Consolidated Rental Car Facility	\$250 M (Const.)	GC/CM	x	x	x	2010	2011
Heather Munden, Resident Engineer	9 yrs of construction management experience with progressing levels of responsibility. 5 years at the Port. Licensed PE.	Shilshole Bay Marina Redevelopment	\$60M (Const.)	GC/CM	x	x	x	2006	2008

Jeff Nelson, Assistant Resident Engineer	5 years experience in construction management as an assistant Resident Engineer for the Port	Consolidated Rental Car Facility	\$250 M (Const.)	GC/CM			X	2008	2013
PROJECT MANAGEMENT PERSONNEL									
Wayne Grotheer	33 years professional experience including 26 years engineering management experience in public & private sectors, 4 years experience in current position responsible for all Sea-Tac airport capital projects, 2 years experience as senior manager responsible for Port of Seattle Seaport & Real Estate capital projects amongst other responsibilities. MBA, MSE, licensed PE.	Terminal Escalator Modernization	\$16.9M	D-B				2009	2013
Rick Jenkins	32 yrs: 30 yrs at US Army Corps of Engineers, 2 yrs w/ PoS as Dir of Seaport Project Mgt.	Rental Car Facility at STIA	\$234.4M	GC/CM		X		2009	2012
George England	35 yrs: 2 yrs US Forest Service; 9 yrs US Army Corp of Engineers and 24 yrs Port of Seattle. Focus on structural design, multi-mega program and project experience in Aviation and Seaport projects.	I/N-C Surge Barrier (New Orleans, LA)	~ \$1B	D-B				2007	2008
Mike Tasker	I have 15 years of Navy Civil Engineer Corp Experience managing several projects utilizing the Design Build contract method. I have also attended design build work shops and have the ACOE Design Build Training.	Parking Facility Expansion Rental Car Facility	\$47.5M (Const) M	Des-Bld GC/CM	X	X		1990 2001	1993 2012
Greg Youros	I have 15 years of Navy Civil Engineer Corp Experience managing several projects utilizing the Design Build contract method. I have also attended design build work shops and have the ACOE Design Build Training.	Bachelor Enlisted Quarters	\$68M	D-B	X	X		2009	2010
Steve Schmitt	40 years professional experience including 26 years engineering management experience in public & private sectors. 30 years design experience. 16 years in construction. Marine and aviation projects. MBA, BSEE, licensed PE.	Small Boat Launch	\$2.1M	D-B	X	X		2010	2011
		Applied Instruction Bldg	\$15M	D-B	X	X		2009	2011
		Small Arms Range	\$4.8M	D-B	X	X		1999	2001
		Applied Instruction Bldg	\$5M	D-B	X	X		2000	2002
		Consolidated Rental Car Facility	\$250 M (Const.)	GC/CM	X	X		2008	2012
		Consolidated Rental Car Facility	\$250 M (Const.)	GC/CM	X	X		2009	present
		Port of San Francisco, Third St Bridge	\$10M	D-B	X	X		2005	2007
		Port of Seattle, Satellite Train System	\$150M	D-B	X	X		2002	2005
		Renovation	\$50M	D-B	X	X		2004	2006
		C1 Baggage Handling System	\$19M	D-B	X	X		2004	2006
Joe Nessel	33 years of experience in managing an extensive, yet diverse number of capital projects and programs, the most relevant experience for the subject project consists of the 15 years at Maryland Aviation Administration (modal agency of the MD DOT and owner of BWI Airport) and the 2+ years at the Port. While at MAA, Mr. Nessel oversaw the capital programming, procurement, design and construction programs, all key to delivery of the \$1.8 billion BWI expansion program and, in particular, the Best Value contract for the \$220 million BWI Terminal NB project.	Terminal Escalator Modernization	\$16.9M	D-B	X	X		2009	2013
Ray Moreno	More than 20 years experience in the design and construction of highway projects and approximately 1.5 years for Aviation projects. Deputy project manager on the referenced D-B project.	The I-5 SR 526 to SR 2 HOV Project - Everett, WA	\$240 M	D-B	X	X		2002	2005
Anne Porter		Shilshole Bay Marina Redevelopment	\$60M (Const.)	GC/CM	X	X		2004	2006
CONTRACTING AND PROCUREMENT PERSONNEL									
Nora Huey, Director of Central Procurement Office	22 yrs: 6 at Port & 7 at King County	Terminal Escalator Modernization	\$16.9M	D-B	X	X		2009	2013
		Brightwater Outfall	\$27.5M	D-B	X	X		2005	2008
		Brightwater Treatment		GC/CM	X	X		2004	2008
Paul Fowell, Sr. Manager Public Works Contracting	39 yrs: 15 yrs as Port Construction Contracting, 25 yrs U.S.N.	Terminal Escalator Modernization	\$16.9M	D-B	X	X		2009	2013
		Consolidated Rental Car Facility	\$234.4M	GC/CM	X	X		Present	Present
		Shilshole Bay Marina Redevelopment	\$54.5M	GC/CM	X	X		2003	2009
		C-1 100% Baggage Screening	\$162.5M	GC/CM	X	X		2003	2009
Sofia Mayo, Manager Major Works Construction	15 years: 3 yrs at Port, 12 years at public agencies in California.	San Joaquin Regional Transit District Downtown Transit Center Sunline Transit District Bus Maintenance Facility	14.5M \$3.5M	D-B D-B	X X	X X		2005 2009	2007 2010
PROJECT CONTROLS									
Michael Dyer, Capital Projects Estimator	35 yrs. of experience as Construction Manager, Project Manager and Estimator for consultant providing constructibility review and cost estimating services from program through construction completion. Project manager and estimator for building and civil general contractors. Project and construction manager for National shopping mall developer. 3 years at the Port as capital projects estimator	FT Lewis Brigade Combat Team Complex Increments 3 & 4 (FT. Lewis, WA)	\$68 M	D-B	X	X		2008	2009
		Norhttown Mall Addition (Spokane, WA)	\$13 M	D-B	X	X		1998	2000
		Alderwood Mall Life Style Center 500,000 SF Addition	\$160 M	GC/CM	X	X		2004	2006
Debra Heilman, Senior Programs Control Manager		Terminal Escalator Modernization	\$16.9M	D-B	X	X		2009	2013
Connie Means, Cost Engineer	20 yrs of experience supporting both design and construction projects in both private and public sector, with 8 years in the cost engineering role, supporting the Port of Seattle's Aviation Capital Improvement Program.	Terminal Escalator Modernization	\$16.9M	D-B	X	X		2011	2013

EXHIBIT C: DB PROJECT MANAGEMENT PLAN



LEGEND

- Design/Construction Team
- Team Managers
- Senior Management
- Executive Management

EXHIBIT D: Demonstrated Success in Managing Public Works Projects Involving All Types of Contracting Procedures

The Port of Seattle has managed 40 projects with a total individual cost of at least \$5M over the past 10 years, at a total of approximately \$1.5B.

Project No.	Project Name	Project Description	Total Project Cost	Method of Delivery	General Contractor	Lead Design Firm	Planned Start	Planned Completion	Actual Start	Actual Completion	Original Construction Budget	Final Construction Cost	Cost or Schedule Overrun Reason (if any)
1	Gale Improvements - Electrical Upgrade	The Work includes upgrading the Port-owned Passenger Loading Bridges (PLBs) at the South Satellite to the Port's current standard for 400 HZ power and upgrade the potable water systems at South and North Satellites and Concourse B. The Project includes Asbestos Abatement work.	\$12,211,000	D-B-B	Elcon Corporation	Harris Group	Jun-13	Sep-14	Jun-13	I/P	\$5M	I/P	
2	2013 Airfield Improvement Projects	Work includes removal and replacement of 105,000 linear feet of pavement joint sealant within Taxiway W, Taxiway B and the Apron Pavement Replacement areas. Work also includes removal and replacement of 13,300 square yards of Portland cement concrete paving (PCCP) panels near the South Satellite.	\$6,201,855	D-B-B	Gary Merlino Construction Co Inc	Port of Seattle	Jun-13	Jan-14	May-13	I/P	Jan-00	I/P	
3	Terminal 117 Clean Up	The Work includes: remediation of T-117 Early Action Area of the Lower Duwamish Waterway (LDW) Superfund Site located in King County, Seattle, Washington. Contractor to perform demolition, excavation, dredging, disposal, upland and dredge backfilling, and all related work at the T-117 EAA of the LDW.	\$10,205,117	D-B-B	IMCO General Construction Inc	Crete Consulting	Jan-13	May-14	Jan-13	I/P	\$10.5M	I/P	
4	Exterior Gates and Airfield Improvement Projects	Apron Pavement Replacement - Work includes removal and replacement of Portland cement concrete paving (PCCP) panels at various locations throughout the apron. Fuel Hydrant System and Docking Guidance System Additions. Snow Dump Pavement Expansion, Docking Guidance System Additions.	\$6,201,855	D-B-B	Gary Merlino Construction Co Inc	Port of Seattle	May-12	Jan-13	May-12	Apr-13	\$6.6M	\$6.8M	Differing Site Conditions
5	8th Floor Weatherproofing Project	Removal and replacement of approximately 589,000 square feet of failing weatherproofing membrane with more durable materials. Rehabilitate the roof slab addressing cracks, ponding, and leaking issues. Remove and replace or upgrade 2,000 linear feet (as may be adjusted following complete condition assessment) of existing expansion joints	\$8,067,627	D-B-B	PCL Construction Services Inc	Carl Walker	May-11	Oct-12	Apr-12	I/P	\$6.0M	I/P	
6	Terminal Escalator Modernization	The Design-Builder will be responsible for providing all necessary design and construction services for the replacement of forty-two (42) existing escalators and the installation of two new escalators at STA that are fully-functional, completely operational, and that demonstrate achievement of contract requirements and performance standards.	\$30,579,947	D-B	Turner Construction Company	URS	Jan-11	Oct-13	Jul-11	May-13	\$16.9M	\$22.4M	Unforeseen conditions and added scope
7	Bus Maintenance Facility	Construct a Maintenance and Operations Facilities for a fleet of compressed natural gas (CNG) buses.	\$22,728,471	D-B-B	Ferguson Construction Inc	ARAI/JACKSON	Dec-10	Dec-11	Feb-11	Jul-12	\$13.1M	\$13.4M	Unforeseen conditions and added scope
8	Central Pre-Conditioned Air	Provide and install a centralized chiller plant including chillers, pumps, piping, heat exchangers, ice storage, chilled brine piping to 73 gates and electrical power and switchgear. Provide and install zone steam-to-water heat exchangers, pumps and piping to approximately 73 aircraft gates. Provide and install 73 gate air handling units for aircraft comfort conditioning.	\$52,900,157	D-B-B	Lydig Construction	STANTEC CONSULTING	Sep-10	Dec-12	Nov-10	I/P	\$27.0M	I/P	
9	CRCF Offsite Roadway Improvements and SR99 Bridge Seismic Upgrade	This project provides for improvements to SR-518, International Blvd (SR-99), S 160th St, Host Rd, and the Northern Airport Expressway.	\$18,118,245	D-B-B	MidMountain Contractors Inc	KPFF	May-10	Mar-12	Jul-10	Oct-12	\$7.6M	\$10.6M	Unforeseen conditions
10	East Marginal Way Grade Separation Const (EMWGS)	Construction of a new vehicular overpass structure and other related work. The project (referred to as East Marginal Way Grade Separation) provides for the construction of a new vehicular overpass structure (to separate vehicular traffic from rail traffic) located south of S. Spokane Street (lower Spokane Street) and East Marginal Way intersection in Seattle, Washington.	\$55,204,919	D-B-B	Mowat Construction Company	BERGER ABAM ENGINEERS	Oct-09	Mar-11	Oct-09	Apr-13	\$18.2M	\$19.9M	Differing Site Conditions, ESO - Owner
11	RW 16L-34R Reconstruction	The work includes the reconstruction of 11,900 foot runway 16L-34R and portions of five taxiways. Related work includes pavement demolition, excavation, grading, portland cement concrete and asphalt concrete paving, storm drainage, water mains and flush fire hydrants, electrical ductbanks, airfield lighting systems and guidance signs and other miscellaneous work.	\$59,320,900	D-B-B	ICON Materials	Port of Seattle	Apr-09	Oct-09	Feb-09	Oct-09	\$51.6M	\$49.0M	
12	Rental Car Facility (RCF) - GCCM Construction Final Construction	Scope is for the construction of the Rental Car Facility building and will include a terminal-quality lobby, a transportation center for customer buses, short-term vehicle staging areas, ready/return spaces, and multiple quickturn-around areas (QTAs) for fueling and washing of vehicles.	\$334,627,204	GCCM	Turner Construction Company	KPFF	May-08	Nov-11	May-08	May-12	\$224.8M	I/P	
13	Terminal 91 Cruise Ship Terminal	Relocate the passenger terminal for cruise vessels from Terminal 30 to Terminal 91. The project includes demolition of 4 structures, the construction of 12 structures, and utilization of existing open areas throughout the terminal for accessory parking of about 1300 vehicles, staging areas and traffic/queueing lanes.	\$112,650,656	D-B-B	PCL Construction Services Inc	KPFF	N/A	Dec-08	Aug-07	May-09	\$38.8M	\$43.9M	ESO, Regulatory Requirement
14	Terminal 30 Upgrade	Upgrade the 43-acre Terminal 30 (T30) for year-round container cargo use, including the restoration of 24 acres to its former container cargo use, and other improvements to Terminals 25 & 30, to create large container cargo facility of 60 acres.	Final cost reported as T-30/T-91 program cost.	D-B-B	General Construction Company	BERGER ABAM ENGINEERS	N/A	Jun-09	Aug-07	Oct-09	\$32.8M	\$47.2M	Scope Change
15	3rd Runway, 2007-08 Construction	3rd Runway/Taxiway Construction: The work includes the construction of an 8,500 foot runway and 8 connecting taxiways which includes 260,000 square yards of portland cement concrete pavement and 35,000 tons of asphalt pavement. Related work includes grading, installation of subbase and base course sections, water mains and hydrants, electrical ductbanks, electrical services, airfield lighting systems, fencing and other miscellaneous items.	\$108,451,553	D-B-B	ICON Materials	Port of Seattle	Apr-06	Nov-08	Feb-07	Nov-08	\$79.8M	\$82.9M	Unforeseen conditions

Project No.	Project Name	Project Description	Total Project Cost	Method of Delivery	General Contractor	Lead Design Firm	Planned Start	Planned Completion	Actual Start	Actual Completion	Original Construction Budget	Final Construction Cost	Cost or Schedule Overrun Reason (if any)
16	South 160th St Loop/NER Phase 1	Demolition/relocation of a water tower and adjacent facilities. Demolition of the Redisson Hotel and former bank buildings. Demolition of three return-to-terminal bridges. Construction of temporary detours. Temporary erosion and sediment control. Approximately 3,000 ft. of Northbound lanes, Approximately 3,000 ft. of Southbound lanes, Approximately 9,500 ft. of ramps, and 3 new bridges.	\$73,117,362	D-B-B	Movat Construction Company	HUITT-ZOLLARS	Sep-06	Aug-08	Jul-06	Dec-08	\$93.4M	\$101.3M	Unforeseen conditions & schedule delay due to linkage with another project.
17	3rd Runway-2006 Embankment Construction/RW 16L Safety Area Expansion	Clearing approximately 35 acres, construction of embankments comprising 4,600,000 cubic yards, onsite excavation of 1,800,000 cubic yards and off-site import of 2,800,000 cubic yards. Construction of 35,000 square feet of mechanically stabilized retaining wall. Associated work includes, but is not limited to, storm drainage, modification to FAA facilities, temporary erosion and sediment control, fencing and asphalt paving.	\$ 147,370,088	D-B-B	TTI Constructors	Port of Seattle	Feb-06	Dec-06	Feb-06	Nov-06	\$124.8M	\$122.6M	
18	T-18 North Apron Upgrade	Addition of a new 100-foot gauge landside crane rail and strengthening the vertical load carrying capacity of the waterside crane rail over a length of 2480 linear feet to accommodate future new 100-foot gauge container cranes at the terminal between berths 162 and 286. The 50-foot gauge landside crane rail will be realigned and reconstructed. New steel pile fender system for 2440 linear feet and rehabilitation of the existing timber fender system at the extreme north end of the terminal. New water lines, electrical and lighting work, pavement replacement and demolition. 1,000 linear feet of berth deepening will be required.	\$46,518,569	D-B-B	Manson Construction Company	KPFF	N/A	Aug-08	May-05	Aug-08	\$36.1M	\$39.6M	Unforeseen conditions
19	GCCM Shilshole Bay Marina Renewal and Replacement	Project involves pre-construction work and construction for replacement of docks at Shilshole Bay Marina. Construction of 23 all new floating docks of various sizes (1,409 moorage slips). Construction of access piers, gates, and ramps to floating docks. Demolition of existing docks and piling. Demolition of Central Pier and 1,000 sf maintenance building. New access control system. New Marina Building. Demolition of Existing Marina Building and Existing Restroom/Laundry/Shower Building. Installation of new infrastructure and demolition and abandonment of replaced systems.	\$78,184,241	GCCM	Hoffman Construction Co of Washington	REID MIDDLETON & MITHUN	N/A	May-08	Feb-05	May-08	\$50.2M	\$54.5M	Unforeseen conditions and added scope
20	2004 Airfield Improvement Projects - Contract 1 (Fuel System)	Project includes the completion and commissioning of the new aircraft fuel hydrant system at SeaTac International Airport. Modifications and improvements to the existing fuel farm facility, refurbishment to the three existing fuel tanks, construction of a new Operations Building, modifications to the existing Operations Building, construction of a new Disaster Containment System, and new Fire Protection System, construction of 7,000 linear feet of aircraft fuel piping and 30 fuel hydrant pits and removal and replacement of 20,000 square yards of Portland Cement Concrete pavement.	\$48,943,435	D-B-B	Gary Merlino Construction Co Inc	HNTB	Jun-04	Aug-06	Jun-04	Nov-06	\$49.4M	\$56.0M	Added scope
21	Third Runway - 2004-05 Embankment/MS 154th St Construction	Clearing and grubbing approximately 150 acres, construction of embankments comprising 9,000,000 cubic yards, onsite excavation of 3,300,000 cubic yards, off-site import of 6,000,000 cubic yards, and removal and replacement of 500,000 cubic yards of material for subgrade improvements. Construction of 200,000 square feet of mechanically stabilized retaining walls. Relocation of South 154th Street and 1561st Way from Des Moines Memorial Drive to 24th Avenue South. Relocation of 1000 linear feet of Miller Creek Instream and Wetland Area Enhancements.	\$228,511,362	D-B-B	TTI Constructors	HNTB	Feb-04	Jan-06	Jun-04	Feb-06	\$192.8M	\$197.4M	Added scope
22	C-1 100 % Final Baggage Screening Project	The system consists of two independent EDS modules, each of which has two Explosive Detection machines. Capacity of the system with all machines operational is 1600 bags per hour. The Explosive Trace Detection (ETD) platform will allow for the provision of up to 12 ETD operators. Stairs from the main terminal bagwell floor provides access to the platform. The project also requires relocation of an existing inbound conveyor transport conveyor and the outbound conveyor.	\$218,901,043	GCCM	Turner Construction Company	URS	Aug-04	Mar-07	Jul-04	Jan-09	\$111.3M	\$162.5M	Added scope, termination/rebidding of key sub-bid package
23	C-60 Baggage Handling System	Installation and modifications of C60, C62, and C66 outbound baggage sortation and 100% in-line security screening. Installation of interim inbound systems C60-N72, N73, N74, N78 and N79. Fire protection systems under BHS conveyor, etc.	\$81,110,816	D-B-B	G & T Conveyor Systems	NBBJ	May-04	Sep-08	Sep-04	May-07	\$25.3M	\$44.9M	Added scope
24	WTP/MS Pump Station	Construct a new Industrial Wastewater System Pump Station. Improvements to the Industrial Wastewater Treatment Plant. Upgrade the sludge handling system, etc.	\$13,617,632	D-B-B	URS Corporation	Kennedy/Jank	Jun-03	Sep-06	Aug-04	Jun-06	\$6.7M	\$8.3M	Added scope
25	Auburn Wetland Development	Construction is within wetland and upland areas. Site dewatering, excavation, haul and disposal of 383,000 cubic yards of soil for construction of 42 acres of new wetlands and enhancement of 18 acres of existing wetlands including ponds and drainage ditches; incorporating compost into approximately 35 acres and incorporating bentonite into 5 acres for wetland soils preparation; vegetation removal and surface preparation of 16 acres of wetland buffer areas. Installing 60 acres of wetland and upland plantings and maintaining over a 12-month plant establishment period.	\$17,267,180	D-B-B	Northwest Construction Co.	PARAMETRIX	Apr-04	Jul-07	Jul-04	Aug-07	\$7.9M	\$8.0M	Added scope