



City of Seattle

September 1, 2017

State of Washington
Capital Projects Advisory Review Board
Project Review Committee

RE: Application for Project Approval - Design-Build
Boundary Dam Hydroelectric Units 51, 52, and 54

PRC Panel Members,

The City of Seattle, through its Department of Finance and Administrative Services and Seattle City Light, is excited to apply for *project approval* to use the Design-Build (DB) alternative public works delivery to rehabilitate 3 hydroelectric generators at our Boundary Dam power facility. We are hoping to make this our 3rd DB rehabilitation project for hydroelectric generators.

Following the City's internal contracting process and the PRC Application, this team has put together a comprehensive packet explaining the project, how the project will benefit from the DB approach, the experience of the staff and project team, and the overall procurement and management approach we intend to use.

As part of the City's commitment to process improvement, staffing, and contracting program improvement we have brought Robynne Parkinson on for this project as a DB Advisor. Robynne's primary role will be to help our City teams develop a "progressive" DB program and will augment our existing DB program. To that end, Robynne will remain as a consultant through the entirety of the project advising on not only project pieces but City program efficiencies.

We welcome your questions regarding the project and team as we prepare our presentation materials.

Thank you for your review and consideration. Please feel free to contact me at (206) 684-4542 or Aleanna.Kondelis@seattle.gov.

Sincerely,

A handwritten signature in blue ink that reads "Aleanna Kondelis".

Aleanna Kondelis
City Construction Contracts Manager
Department of Finance and Administrative Services

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

APPLICATION FOR PROJECT APPROVAL
To Use the Design-Build (DB) 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. A Public Body that is *certified* to use the DB procedure and is seeking approval to use this procedure on a DB 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

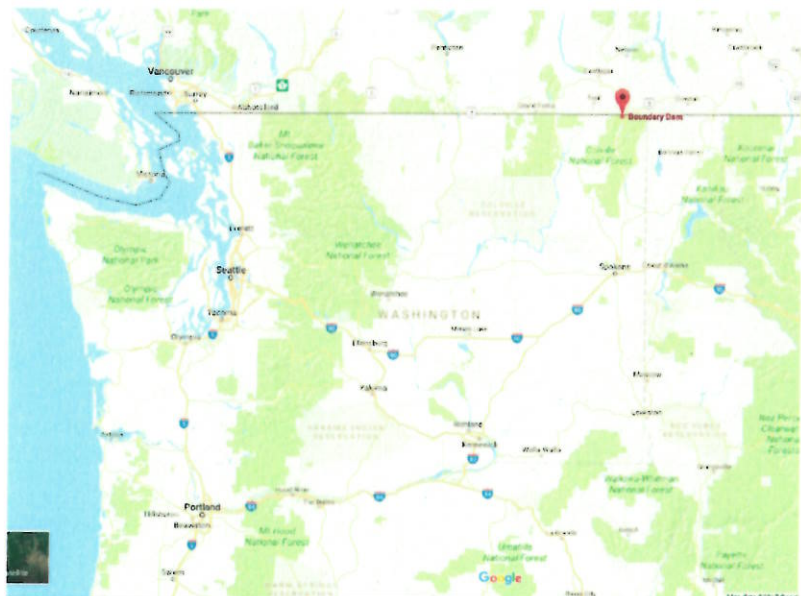
- a) Legal name of Public Body (your organization): City of Seattle
Capital Department: Seattle City Light
- b) Address: PO Box 34023 Seattle, WA. 98124-4023
- c) Contact Person Name: Aleanna Kondelis
- d) Title: Construction Contracts Manager
- e) Phone Number: 206-684-4542
- f) Fax: 206-684-4511
- g) E-mail: Aleanna.Kondelis@Seattle.gov

2. Brief Description of Proposed Project

Please describe the project in no more than two short paragraphs.

Seattle City Light owns and operates the Boundary Hydroelectric Generation Dam located in Pend Oreille County in northeastern Washington. The dam was commissioned in 1967 with four generators (units 51 – 54) totaling 551 MW. Two more generators (units 55 and 56) totaling 399 MW were added in 1986. Hydroelectric generators of this type have an estimated 30-year life-cycle.

Units 51, 52, and 54 are now at the end of their useful life and require overhauls. This project will replace, re-furbish and/or re-use generator components so that the units provide an additional forty-years of service. It is believed that additional generation capacity may be achievable with a modern stator winding design. The units will be overhauled over a three-year construction period running from 2019 to 2022 and are expected to cost an estimated \$61 million.



3. Projected Total Cost for the Project:

A. Project Budget

Costs for Professional Services (A/E, Legal etc.)	\$1,100K
Estimated project construction costs (including construction contingencies:	\$30,300K
Equipment and furnishing costs (included in above)	\$
Off-site costs (off-site manufacturing is included in above)	\$
Contract administration costs (Owner, PM, CM etc.)	\$7,500K
Contingencies (15%)	\$4,500K
Other related project costs (Owner performed concurrent work)	\$19,000K
Sales Tax (7.6% Pend Oreille County)	\$3,000K
Total	\$65,400K

B. Funding Status

Please describe the funding status for the whole project.

Note: If funding is not available, please explain how and when funding is anticipated

Funding has been appropriated for this work by the Seattle City Council as part of the Seattle City Light six-year Capital Plan (rounded for presentation).

Budget ID	Budget Issue	2017	2018	2019	2020	2021	2022	Totals
6351001	Boundary Unit 51	3,200,000	11,000,000	4,400,000	1,500,000	0	0	20,100,000
6353001	Boundary Unit 52	0	0	11,700,000	1,000,000	5,200,000	1,700,000	19,600,000
6535001	Boundary Unit 54	0	7,200,000	5,300,000	5,000,000	1,600,000	0	19,100,000
	Contingencies	650,000	2,000,000	2,000,000	650,000	650,000	650,000	6,600,000
	Totals	3,850,000	20,200,000	23,400,000	8,150,000	7,450,000	2,350,000	65,400,000

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 Example on Design & Construction Schedule)

Activity	Projected Date
RFQ Issued	10/13/17
SOQs Due	11/03/17
Short-List	11/09/17
RFP Issued	11/13/17
Proprietary Mtg. One, Two	1/12/18 & 1/26/18
Proposals Due	2/9/18

Selection of Design-Builder	2/28/18
Negotiations/Contract Execution	3/18
Design Phase including validation periods	3/18 – 3/19
Manufacturing (on-going)	9/18 – 7/21
Construction Phase	7/19 – 4/22
Generator (U51) Outage	7/19 – 4/20
Generator (U54) Outage	7/20 – 4/21
Generator (U52) Outage	7/21 – 4/22

*Please note all consultants and staff have been hired for this project.

5. Why the DB 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:

- *If the construction activities are highly specialized and a DB approach is critical in developing the construction methodology (1) What are these highly specialized activities, and (2) Why is DB critical in the development of them?*
 - 1) Design, manufacturing, and installation of Hydroelectric Generator components is a highly specialized field with less than 10 companies worldwide providing these services. Designs are proprietary and are customized to each unique generator condition using in-house modelling and engineering. These designs may allow the generator to produce more power from the same amount of water flow, or may allow the generator to run at a lower temperature with reduced stresses, reducing maintenance costs.

Manufacturing tolerances are extremely tight and material quality is important. This means that each company has relationships with certain material suppliers and manufacturers. Installation crews are also highly specialized and trained in these proprietary materials.
 - 2) A DB approach will be beneficial in many ways. To overhaul these units, the design-builder will have to take the units apart to determine which of the components can be salvaged and which must be replaced. This evaluation cannot take place until after the units are opened. Because there is an extremely short window that these units may be off line, there is not sufficient time to assess, design and then bid out the work that can only occur on the units once these are down. Further, the units are currently not uniform in design. This project provides the City the opportunity to contract with a single entity that has the capacity to not only maximize the uniformity of the units but also potentially increase the efficiency and capacity of the generators. Uniformity in the generators will also potentially reduce the maintenance needs of the generators. This type of work is unique, and there are a limited number of companies that have the expertise to perform this work. The Design-Builders who work in this area have long term relationships with material sourcing companies and fabrication plants that will allow the Design-builder to get schedule commitments early on. The DB will also be able to manage the sequence of the work to ensure that all components are delivered to site on time. Many components have long lead times (6 months to 1 year).
- *If the project provides opportunity for greater innovation and efficiencies between designer and builder, describe these opportunities for innovation and efficiencies.*

Each short-listed Contractor will be able to present a proprietary equipment design that meets the unique condition of our generating units. These are existing generators that are being overhauled to replace components that have reached the end of their useful life. This necessitates some creative thinking about how modern components will fit and interact with original components.

The design of the copper stator winding will likely be the focus of innovation, as the various manufacturers can present different types that may be able to produce more electricity or require less maintenance.

The sequencing of the design and construction in this project is critical to its success and to achieving an important contract goal: minimizing the amount of time these generators are off line. Critical assessment and design work cannot occur until the unit is taken apart by the constructor. The designer and constructor must then work in close collaboration to assess the condition of the units, design replacement parts and then overhaul the machines as soon as the assessment and design is complete. The project benefits greatly by having the same constructor both deconstruct and then reconstruct the units.

- *If significant savings in project delivery time would be realized, explain how DB can achieve time savings on this project.*

City Light loses revenue when our generating units are not available to the power grid. Therefore, these overhauls must be performed during a work window when our revenue losses are minimized. These work windows are scheduled years in advance and are not easily changed. The ability of a design-builder to lock in schedules with material suppliers and manufacturing facilities even before the designs are finished helps ensure we can meet our outage window requirements. The Design-builder is in the best position to manage the sequencing of design and manufacturing to ensure outage deadlines are met. In addition, the close coordination between the designer and constructor will result in a more efficient process, reducing the amount of time that the units are off line.

6. Public Benefit

In addition to the above information, please provide information on how use of the DB 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 Design-Build method provides public benefit by reducing schedule risk. As discussed above, not meeting our outage window requirements can result in significant revenue loss which could, in turn, affect our rates. A secondary potential benefit, due to the innovation opportunities present with Design-Build, is that we may end up with the capacity to generate more electricity from the same river flow. In addition, one of the goals of the project is to increase the life of these overhauled generators to 40 years. The project will benefit from the design-builder's capacity to innovate to achieve this goal as well as the single source responsibility inherent in the design-build contract if the performance requirements in the design-build contract are not met.

Traditional Design-Bid-Build contracting is not practical for these generator overhauls because detailed designs are performed by the equipment manufacturers and are proprietary. They are based on the known capabilities and relationships with material sources and manufacturing plants. In addition, due to City Light's operational requirements, some generator components are not available for bidder inspection prior to the outage window. Design-Build provides better options for scoping and pricing this work than traditional Design-Bid-Build.

7. Public Body Qualifications

Please provide:

- *A description of your organization's qualifications to use the DB contracting procedure.*

The City of Seattle has extensive of DB experience over the last 12 years. Tolt Water Transmission Operations DBOM, Central Library Curtain Wall, South Transfer Station, Boundary Dam Hydroelectric Units 55 and 56 Rewind, Diablo Dam Units 31 and 32 Rehabilitation, and Mill Pond Dam Removal. Seattle City Light, specifically, has executed 3 Design-Build contracts since 2009, the two generator overhauls and Mill Pond Dam Removal. This SCL team has experience on Units 55/56 and 31/32.

The SCL Power Generation technical team has remained largely intact throughout these previous and ongoing hydroelectric overhauls, working together on both the Boundary and Diablo DB contracts. Our Capital Program Manager and Electrical Engineering Manager were involved in both two previous DB contracts. We have applied lessons learned from each contract and feel confident that we are well positioned to effectively manage this next DB contract. To further bolster our qualifications, we are in the process of expanding our project management and construction management staff training in Design-Build best practices including "progressive" approaches. Because the City would like to continue to grow our experience and add "progressive" DB to our program of delivery options, we have retained Robynne Parkinson, who will remain on contract to us through the completion of these overhauls in 2023, serving as our DB Advisor.

- *A project organizational chart, showing all existing or planned staff and consultant roles.*

Note: The organizational chart must show the level of involvement and main responsibilities anticipated for each position throughout the project (for example, full-time project manager). If acronyms are used, a key should be provided. (See Example on Project Organizational Chart)

See Exhibit A

- *Staff and consultant short biographies that demonstrate experience with DB contracting and projects (not complete résumés).*

Aleanna Kondelis, MPA, Construction Contracts Manager, Finance and Administrative Services

Aleanna has been the construction contracts manager in the City's central contracting unit for 6 years and with the City for almost 9 years. Her responsibilities include management and oversight of all public works contracts delivered by the City of Seattle. She has overseen 19 alternative public works projects in her 8 years with the City. She is also responsible to develop and manage each contracting model used throughout the City. She has a master's in public administration from Seattle University and is a member of the local chapter of DBIA, volunteers with CPARB as requested, is an instructor on public works in the throughout the state. She has been delivering capital projects for 18 years. She will be overseeing the procurement and contract compliance aspects of this project.

Jessica Guerrette, PE, DBIA, Sr. Construction Contracts Specialist, Finance and Administrative Services

Jessica is a licensed professional engineer with over 20 years' experience as a utilities design engineer and 8 years' experience as an owner's advisor for design-build procurements and contract administration. She has also provided analysis and recommendations for determining the best contracting method for major capital projects. Jessica is a member of the local chapter of DBIA, is DBIA-certified and has procured and administered 2 major Design-Build contracts with other owners. She has

been with the City for two years. Jessica reports to Aleanna and will be the procurement and contract administration day-to-day support on this project.

Wanda Schulze, Capital Program Manager, Seattle City Light

Wanda has 25 years of experience working for Seattle City Light in a variety of roles. She has been the Capital Program Supervisor or Manager for the past 10 years. Wanda is responsible for managing the capital project portfolio for the Generation Operations and Engineering Business Unit. The portfolio has an annual budget ranging from \$50M to \$60M and typically includes over 50 projects. Projects are delivered using DB, DBB, or are performed by City Light crews. Wanda manages a group of 10 project managers and has been involved in overseeing two DB contracts: the Boundary Units 55/56 generator overhauls and the Diablo Units 31/32 generator overhauls.

Joshua Jackson, PMP, Assoc. DBIA, Sr. Capital Project Manager, Seattle City Light (Project Manager)

Josh has more than 7 years of experience in project management and contract administration. His public works contracting experience includes serving as the project manager for the \$720k Diablo Powerhouse AC Panel Upgrade, \$7.5M Shoalwater Bay Flood Damage Reduction project, and \$3M Riverview Park Ecosystem Restoration. He also led procurement of a new \$1.8M passenger vessel for the Skagit Hydroelectric Project through an equipment purchase contract that included specific design and manufacturing process. Although he left the USACE before construction contracts were awarded, he also led the design, permitting, and contract development for the \$27M Grays Harbor Navigation Improvement project and \$6.5M Libby Dam Station Service Upgrade. Josh will serve as the lead project manager for the Boundary rewind project. He holds Project Management Professional and Associate DBIA certifications.

Robynne Parkinson, JD, DBIA, Design Build Advisor

Robynne is a nationally recognized expert in design-build delivery and procurement and has significant experience with the Washington state design-build statutes. She has over 28 years as an attorney with over 26 years in construction law and over 20 years of design-build construction experience. Recent projects in Washington include the Port of Seattle International Arrivals Facility, the Okanogan County PUD Enloe Dam project, the Los Angeles County Consolidated Correctional Treatment Facility, the City of Richland City Hall project, the Grant County Public Utilities District Substation Reliability Project, the Port of Seattle's Alternative Utility Facility project, the City of Spokane's Nelson Service Center, the City of Tacoma's Cheney Stadium Renovation, the Spokane Public Facilities District Convention Center Renovation and the Arena renovation. Ms. Parkinson served on the Design-Build Institute of America's National Board from 2010-2016. She has chaired its National Legal and Legislation Committee and is currently the Vice-Chair of its Educational Resources Committee. She is also one of the primary drafters of the DBIA National Contract Forms, including the recently approved Form Request for Qualifications and Request for Proposals. Ms. Parkinson will be assisting the City with the development of the procurement documents and the contract with the design-builder.

Daniel Kirschbaum, PE, Mechanical Engineer Sup, Seattle City Light (Lead Engineer - Mechanical)

Dan has been working at SCL for 19 years and before that he worked in the Naval Nuclear Program as a Field Engineer for 12 years at Puget Sound Naval Shipyard. Dan has a Bachelors in Engineering (Mechanical / Marine) from the State Univ. of New York Maritime College at Fort Schuyler, is a Licensed Professional Engineer and is also an American Welding Society Certified Welding Inspector (CWI). He is responsible for supervising seven engineers and leads the city's technical team in evaluating/developing turbine and generator upgrades for additional electrical generating Responsibilities include scheduling, resource determination and allocation, disassembly and reassembly plans and procedures including unit

alignment measurements and verification and well as commissioning testing. Dan worked on the design-build project for the Boundary Powerhouse Units 55/56 Rewinds as well as the design-build project for Diablo Powerhouse Units 31/32. He has been the Mechanical Engineering Lead Engineer for 4 generator rewinds, and has been assigned to the Boundary Unit 51/52/54 rewinds design build team.

Mike Nordin, Construction Management Manager, Seattle City Light (Lead Construction Manager)

Mike has 35 years of construction industry experience, 29 of which is with the City of Seattle, and 10 years with City Light. He is currently the Manager of the City Light Construction Management Services unit which provides constructability reviews and contract delivery for all City Light construction projects. His career touches all aspects of public works including project planning, constructability review and risk assessment, production of bid documents and estimates, cost negotiations, contract administration, supervision, and management. He is the City Light representative to the City's contract General Conditions Committee as well as Technical Division 2-9 Standards committee, and is the author and editor of many City standards, policies, and construction management procedures and processes. He holds a Bachelor of Science in Construction Management and is a Certified Construction Manager through the Construction Management Association of America. He has completed alternative public works training in 2003 and 2008.

Faz Kasraie, Generation Electrical Engineering Manager, Seattle City Light (Lead Engineer – Electrical)

Faz has been working at SCL for 34 years in several engineering organizations. He is currently the electrical engineering manager responsible for managing the staff of 24 engineers and other personnel supporting CIP/O&M related activities in support of 7 hydro generation facilities. As the GO&E Principal Subject Matter Expert (SME), Faz represents GO&E in other matters such as regulatory and compliance, establishing priorities for System Operations, and working closely with Power Management staff in maintaining SCL's power generation resources and SCL's Integrated Resource Planning six-year plan. Prior to joining the generation organization, Faz spent approximately 24 years in other organizations, including Distribution engineering, serving the City of Seattle customers north of Downtown Seattle both as a lead engineer and later as the manager of the organization, and in Substation Engineering, both as a lead design engineer as well as an engineering supervisor responsible for maintaining 14 major receiving substations, which together serve the entire City of Seattle. Faz has a Bachelor's of Science degree in both Mechanical Engineering and Electrical Engineering from Seattle University. Faz has been a Licensed Professional Engineer in the State of Washington since 1988. Responsibilities include scheduling, resource determination and allocation, and development of the technical specifications for several DB and PW contracts. He worked on the design-build project for the Boundary Powerhouse Unit 55/56 Rewinds as well as the design-build project for Diablo Powerhouse Units 31/32 and as stated was involved with several Public Works contracts both in generation as well as distribution and substation engineering.

Karen Graham, PMP, Sr. Project Manager, HDR Engineering, Inc. (Consultant Subject Matter Expert)

Karen has more than 17 years' experience in the hydroelectric industry in the areas of project management, project controls, procurement, and contract management. Prior to joining HDR in 2007, her responsibilities included supervision of the project management department for a major hydroelectric equipment manufacturer. In this role, she was responsible for execution, both commercially and technically, of all generator modernization contracts in North America. Her Washington State public works alternative contracting experience includes serving as the Owner's Engineer Project Manager for Seattle City Light's generator rehabilitation projects for Boundary Unit 55 and Diablo Units 31 and 32. She has served as the project manager on both new and modernized hydroelectric projects ranging from new generator installations to major equipment overhaul projects

for both private and public clients. Her duties have included financial and schedule responsibilities, subcontractor interface, contract negotiation, and management of construction activities. She will serve as the Project Manager for HDR and is responsible for the HDR Engineering team's efforts on the Boundary Units 51, 52 and 54 generator rebuilds.

- Provide the ***experience and role on previous DB projects delivered*** under RCW 39.10 or equivalent experience for each staff member or consultant in key positions on the proposed project. (See Example Staff\Contractor Project Experience and Role. The applicant shall use the abbreviations as identified in the example in the attachment.)

See **Exhibit B** Team Project Experience and Roles

- *The qualifications of the existing or planned 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 information provided above and in **Exhibit B**

- *If the project manager is interim until your organization has employed staff or hired a consultant as the project manager indicate whether sufficient funds are available for this purpose and how long it is anticipated the interim project manager will serve.*

Joshua Jackson is the project manager and is a permanent employee of Seattle City Light.

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

See **Exhibit B**

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

City of Seattle, Seattle City Light has several project management, construction management and financial controls that will be used to manage scope, schedule, budget, and risk on this project.

Project Management Controls – City Light has implemented a Project Management Framework that outlines requirements for project charters, project management plans, risk registers, financial plans, change management documents, and regular status reports. This project will be managed in compliance with the Framework. A charter has been completed and a project management plan is in progress. This project is being sponsored by the Boundary Operations Manager and the Executive Sponsor is our Business Unit Officer, who is a direct report to our General Manager. This project is a City Light Top 20 Project and is monitored by our Executive Team.

Construction Management Controls – City Light has a long history of managing public works construction projects. Our Construction Management Manual has been developed to include processes and procedures that comply with standard public works contracting requirements and best practices as

well as City-wide and City Light policies and procedures. This includes many tools to manage construction work as well as design phase activities such as risk-assessment and constructability review. Construction phase procedures include standardized processes and forms to manage construction documents, schedule, quality, safety, and cost control.

Financial Controls – City Light has a financial governance policy for capital improvement projects. This policy requires that business cases be complete for projects over \$1M (completed for this project several years ago). Project costs are forecasted using Microsoft Project, and all schedules are updated at least monthly. Budget variance reports are issued quarterly by our Finance Division and explanations must be provided for all variances greater than \$500K. Delays in project milestones that shift costs into future years must also be explained and approved. The Generation Operations and Engineering Business Unit has spent between 92% to 98% of its total capital budget during each of the last 5 years.

- *A brief description of your planned DB procurement process.*

The City plans to use a modified “progressive” two-step procurement process, facilitated by central contracting. The first step will be to issue a Request for Qualification (RFQ) with a project description, goals and objectives, reasons for using the DB process, description of the qualification required including past performance on projects of similar scope and complexity, scoring criteria, and schedule. The SOQs will be reviewed by a team comprised of the SCL Project Manager, SCL Capital Program Manager, SCL Electrical Engineering Manager, SCL Mechanical Engineering Supervisor, and our consultant generator SME. Due to the specialized nature of this work, we expect to receive 4 or 5 SOQs and plan to shortlist 3 firms.

The second step will be to provide the Request for Proposal (RFP) documents to the shortlisted firms.

The RFP will include:

- Generator technical performance requirements
- Existing conditions report(s)
- Minimum technical requirements for function and operations
- Key Personnel requirements
- Schedule requirements (outage)
- Target budget for the DB portion of the project
- Approach to efficient coordination and integration in the powerhouse
- Approach to using historically under-utilized small business and workforce development
- Form of the DB contract (general terms and conditions)

A short-duration generator outage will be scheduled and all shortlisted firms will be invited to site to inspect portions of one of the three generators to be overhauled, and to observe the site location, staging areas, on-site services such as water/power, etc. As mentioned above, certain portions of the machine will not be available for inspection due to the time and effort required to disassemble and reassemble the generator.

A proprietary one-on-one meeting will be held to allow each shortlisted firm an opportunity to present their innovations for generator design, or manufacturing/construction efficiencies and recommendations on which portions of the generator, if any can be recertified for continued use.

The proposals will be reviewed by the same team listed above for the RFQ. Factors such as schedule, generator design, approach to unforeseen conditions, project management controls, quality control plan and other criteria as published will be used to choose the successful proposer. An honorarium of \$200,000 will be provided to the short-listed firms not selected.

- *Verification that your organization has already developed (or provide your plan to develop) specific DB contract terms.*

The City of Seattle has a robust contracting form for design-build that it has been used in the past and updated after each project with lessons learned or best practices. In addition, Robynne Parkinson will be working with the City to modify those contracts to tailor them to the unique risks associated with this specific project. Ms. Parkinson's modifications will be based on her many years of experience with public clients as well as one of the primary drafters of the DBIA National contract forms.

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: *(See Example Construction History. The applicant shall use the abbreviations as identified in the example in the attachment.*

- 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

See **Exhibit C**

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. *(See Example concepts, sketches or plans depicting the project.)* At a minimum, please try to include the following:

- An 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.

Exhibit D, all existing facilities

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.

There have been no audit findings on any project identified in our responses.

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 DB 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 DB process. You also agree that your organization will complete these surveys within the time required by CPARB

I have carefully reviewed the information provided and attest that this is a complete, correct and true application.

Signature: Aleanna Kondelis
Name (please print): ALEANNA KONDELIS
Title: Construction Contracts Manager
Date: 9/1/17



Seattle City Light

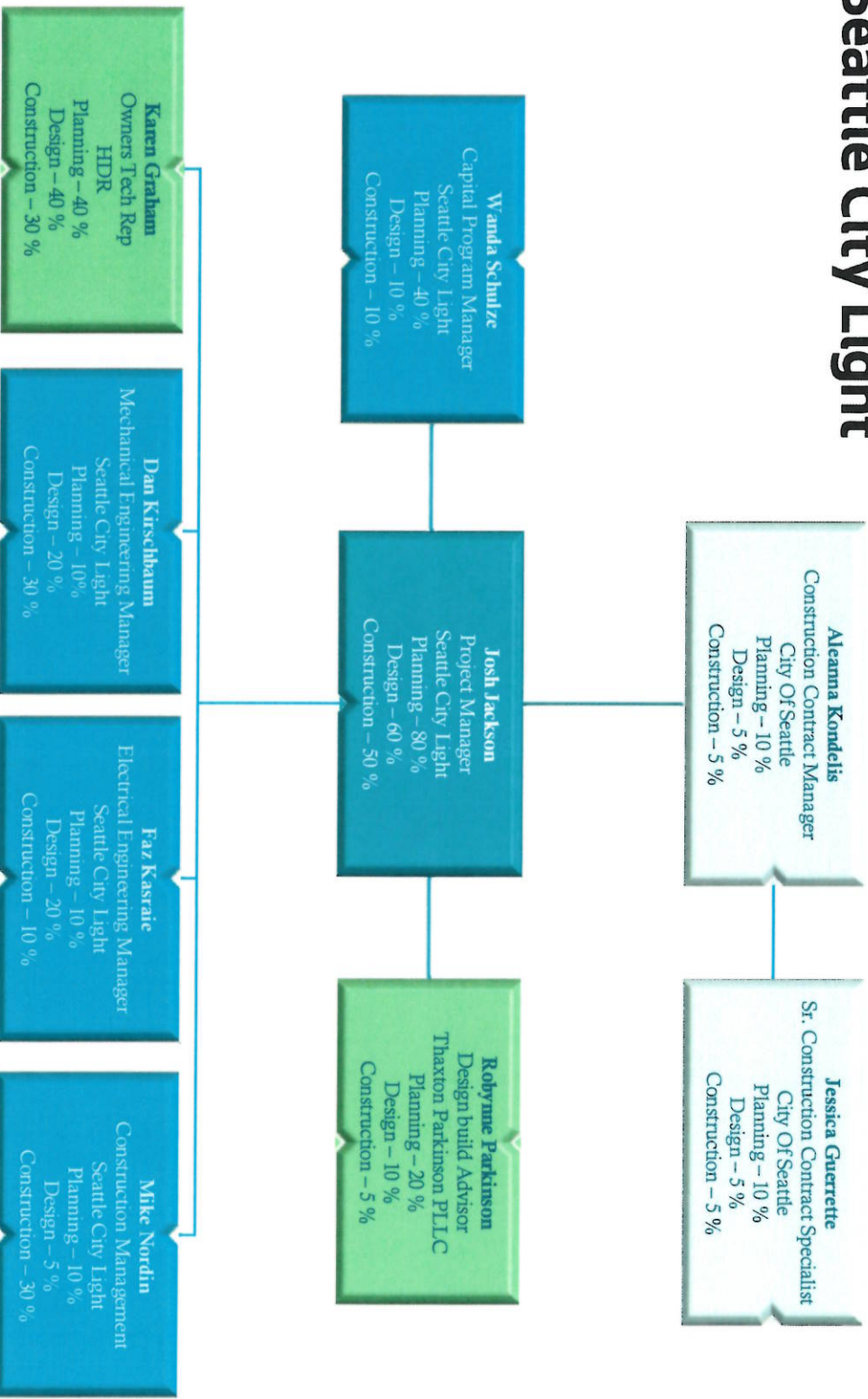


Exhibit A

Seattle City Light - Exhibit B, City's Central Contracting

Role During Project Phases

Name	Summary of Experience	Project Name	Project Size	Project Type	Planning	Design	Construction
Aleanna Kondelis	City's construction contracts manager inside the City's central contracting unit. Responsible for all public works contracting administration throughout the City. Listing alternative public works experience.	Windermere CSO	\$30M	GC/CM	Contracts Manager		Compliance
		First Hill Streetcar	\$68M	GC/CM	Contracts Manager		Compliance
		Boundary Dam Units 55/56	\$30M	DB	Procurement Administrator		Compliance
		Genesee CSO	\$22M	GC/CM	Contracts Manager		Compliance
		North Transfer Station	\$53M	GC/CM	Contracts Manager		Compliance
		North Henderson CSO	\$43M	GC/CM	Contracts Manager		Compliance
		Elliott Bay Seawall	\$340M	GC/CM	Contracts Manager		Compliance
		Mill Pond Dam Removal	\$15M	DB	Contracts Manager		Compliance
		Diablo Unit 31/32 Rehab	\$20M	DB	Contracts Manager		Compliance
		Fire Station 32	\$12M	GC/CM - terminated	Contracts Manager		Compliance
		Landsburg Chlorination Facility Renovation	\$10M	GC/CM	Contracts Manager		Compliance
		Washington Street Pergola	\$2M	DB - DBB	Contracts Manager		N/A
		Seattle North Precinct	\$90M	GC/CM - terminated	Contracts Manager		Compliance
Jessica Guerrette	Over 20 years as utility designer; 8 years as owner's advisor for design-build procurements and contract administration; 2 years at City of Seattle in procurement and contract administration.	Washington Street Pergola	\$2M	DB to DBB	Procurement Administrator	N/A	N/A
		South Transfer Station	\$51M	DB	Procurement Administrator (consultant)	N/A	N/A

Seattle City Light - Exhibit B, City Light Project Management

Role During Project Phases

Name	Summary of Experience	Project Name	Project Size	Project Type	Planning	Design	Construction	
Wanda Schulze	25 years working for Seattle City Light including 18 years of project management and 7 years as Manager of the Generation Project Management Unit.	U55/56 Generator Overhauls	\$41M	DB	None	None	PM supervisor	
		U31/32 Generator Overhauls	\$17.8M	DB	PM supervisor	PM supervisor	PM Supervisor	
		U 53 Generator overhaul	\$11.8M	Emergency PW	PM supervisor	PM supervisor	PM supervisor	
		Boundary Industrial Storage Building	\$600K	D-B-B	PM	PM	PM	
		Newlalem Center Camp Garages	\$300K	D-B-B	PM	PM	PM	
		Ladder Creek Garden Lighting System	\$900K	D-B-B	PM	PM	PM	
Jackson, PMP, DBIA	Project Manager with 7 years experience managing projects of varying size and scope for the US Army Corps of Engineers and SCL.	Diablo AC Panel Replacement	\$720K	D-B-B	PM	PM	PM	
		Skagit Tour Boat	\$1.7M	D-B Purchase	PM	PM	PM	
		Shoalwater Flood Damage Reduction	\$7.5M	D-B-B	N/A	PM	PM	
		Riverview Park Ecosystem Restoration	\$3M	D-B-B	N/A	PM	PM	
		Libby Dam Station Service Upgrade	\$6.5M	D-B-B	PM	PM	N/A	
		Grays Harbor Navigation Improvement	\$27M	D-B-B	PM	PM	N/A	
Robynne Parkinson DB Advisor	Attorney and consultant to the City with 28 years experience as an attorney, 26 years experience in construction law and 20 years experience specifically in design-build construction.	Okanogan County PUD Enloe Dam Project	\$40M	DB	Procurement Co	As needed	As needed	
		Seatac International Arrivals Facility	\$700M	DB	Procurement Co	As needed	As needed	
		Seatac Auxiliary Utility Facility	\$28M	System Procurement	Procurement Co	As needed	As needed	
		Seatac Concourse D Hardstand	\$30M	DB	Procurement Co	As needed	As needed	
		City of Portland, Portland Building	\$100M	DB	Procurement Co	As needed	As needed	
		City of Spokane Riverfront Pavilion	\$19M	DB	Procurement Co	As needed	As needed	
		Los Angeles County Consolidated Correctional Facility	\$1.9B	DB	Procurement Co	As needed	As needed	
		Grant County PUD Substation Reliability Project	\$27M	DB	Procurement Co	As needed	As needed	
		City of Richland Town Hall Project	\$12.5M	DB	Procurement Co	As needed	As needed	
		City of Spokane Refueling Facility	\$14M	DB	Procurement Co	As needed	As needed	

Seattle City Light - Exhibit B, City Light Construction Management

Role During Project Phases

Name	Summary of Experience	Project Name	Project Size	Project Type	Planning	Design	Construction
Mike Nordin	35 years of construction experience - 29 years with the City of Seattle. Certified Construction Manager (CCM). BS in Construction Mgt.	Denny Network Phase 1 & 2	\$46M	D-B-B	N/A	CM	CM
		Denny Substation	\$86M	D-B-B	N/A	CM	CM
		Transmission Line Relocation (Phases 1&2)	\$15M	D-B-B	N/A	CM	CM
		Elliott Bay Seawall	\$360M	GCCM	N/A	CM	CM
		Diablo Generators 31 & 32 Overhaul	\$17.8M	D-B	N/A	N/A	CM
		Mill Pond Dam Removal	\$15M	D-B	N/A	N/A	CM
		Newhalem Penstock Saddles	\$1.5M	D-B-B	N/A	CM	CM
		Terminal-117 Adjacent Streets Cleanup & Stormwater Infrastructure	\$7M	D-B-B	N/A	N/A	CM
		French Creek Tower Replacement	\$1.6M	D-B-B	N/A	N/A	CM
		Boundary Unit 55 Sprayed Concrete	\$5M	D-B-B	N/A	CM	CM
Jade Mott	21+ years experience in Design, Construction and Local Programs. 20 years with WSDOT and 1 year with City of Seattle. BS in Civil Engineer and Professional Engineering License.	Boundary PH Machine Hall Rock Stabilization	\$3M	D-B-B	N/A	CM	CM
		Diablo Generators 31 & 32 Overhaul	\$17.8M	D-B	N/A	N/A	CM
		Newhalem Penstock Saddles	\$1.5M	D-B-B	N/A	CM	CM
		Ross Barge Landing	\$1.6M	D-B-B	N/A	CM	CM
		Town of Diablo Large Septic Sewer System	\$3.5M	D-B-B	N/A	CM	CM
		Gorge Inn Renovation	\$2.5M	D-B-B	N/A	CM	CM
		Diablo Storage Building	\$1.2M	D-B-B	N/A	CM	CM
		Diablo Community Hall	.2M	D-B-B	N/A	CM	CM
		Diablo PH Crane Rehabilitation	\$1.1M	D-B-B	N/A	CM	CM
		Tim Lorkowski	25+ years construction experience - 18 years with the City of Seattle. MS in Civil/Environmental Engineering	Diablo PH Machine Hall Rock Stabilization	\$3M	D-B-B	N/A
Diablo Generators 31 & 32 Overhaul	\$17.8M			D-B	N/A	N/A	CM
Newhalem Penstock Saddles	\$1.5M			D-B-B	N/A	CM	CM
Ross Barge Landing	\$1.6M			D-B-B	N/A	CM	CM
Town of Diablo Large Septic Sewer System	\$3.5M			D-B-B	N/A	CM	CM
Gorge Inn Renovation	\$2.5M			D-B-B	N/A	CM	CM
Diablo Storage Building	\$1.2M			D-B-B	N/A	CM	CM
Diablo Community Hall	.2M			D-B-B	N/A	CM	CM
Diablo PH Crane Rehabilitation	\$1.1M			D-B-B	N/A	CM	CM

Seattle City Light - Exhibit B, City Light Engineering

Role During Project Phases

Name	Summary of Experience	Project Name	Project Size	Project Type	Planning	Design	Construction
Paul Larson	Licensed PE. 20 Years of Engineering Experience. 4 years at SCL. Masters of Science in Civil Engineering.	Boundary Unit 55 Sprayed Concrete	\$5M	D-B-B	Engineering Manager	Engineering Manager	Engineering Manager
		Newhalem Penstock Saddles	\$1.5M	D-B-B	Engineering Manager	Engineering Manager	Engineering Manager
		Spillway # 2 TDG abatement project	\$1.3M	D-B-B	Engineering Supervisor	Engineering Supervisor	Engineering Supervisor
		Spillway # 1 TDG abatement project	\$1.5M	D-B-B	Engineering Manager	Engineering Manager	Engineering Manager
		Seattle City Hall	\$7M	D-B-B	Engineer	Engineering Review	Review / Inspection
Dan Kirschbaum	Licensed PE. 19 years at SCL & another 12 years prior as a Field Engineer for the Naval Nuclear Program at Puget Sound Naval Shipyard. BS In Engineering (Mechanical / Marine).	SeaTac Airport South Terminal Expansion Project	\$280M	D-B-B	Engineer	Engineering Review	Review / Inspection
		Auga at Lake Shore East	Confidential	D-B	PM	PM	PM
		Blue Lake Hydro Electric Project	\$145M	D-B-B	Engineer	Engineering Review	Review / Inspection
		U55/56 - Generator Rewind	\$41M	D-B	Engineer	Engineering Review	Review / Inspection
Bob Fuchs	Licensed PE, 23 years as a Mechanical Engineer. 18 Years at SCL. Bachelor Degree in Economics & Mechanical Engineering.	U31/32 - Generator Rewind	\$17.8M	D-B	Engineer	Engineering Review	Review / Inspection
		U53 - Emergency Generator Rewind	\$11.8M	Emergency	Engineer	Engineering Review	Review / Inspection
		U55/56 - Generator Rewind	\$41M	D-B	Engineer	Engineering Review	Review / Inspection
		U31/32 - Generator Rewind	\$17.8M	D-B	Engineer	Engineering Review	Review / Inspection
		U53 - Emergency Generator Rewind	\$11.8M	Emergency	Engineer	Engineering Review	Review / Inspection
Faz Kasraie	Licensed PE. 34 Years working for SCL. BS degree in Mechanical & Electrical Engineering	U55/56 Generator Rewind	\$41M	D-B	Engineering Manager	Engineering Manager	Engineering Manager
		U31/32 Generator Rewind	\$17.8M	D-B	Engineering Manager	Engineering Manager	Engineering Manager
		U53 - Emergency Generator Rewind	\$11.8M	Emergency	Engineering Manager	Engineering Manager	Engineering Manager
		Diablo AC Panels	\$720K	D-B-B	Engineering Manager	Engineering Manager	Engineering Manager
		U55/56 Generator Rewind	\$41M	D-B	Engineer	Engineering Review	Review / Inspection
Hans Gutmann	Licensed PE. 15 Years working for SCL. BS degree in Electrical Engineering	U53 - Emergency Generator Rewind	\$11.8M	Emergency	Engineer	Engineering Review	Review / Inspection
		U55/56 Generator Rewind	\$41M	D-B	Engineer	Engineering Review	Review / Inspection
Caleb Rush	Licensed PE. For 11 years at SCL. BS in Electrical Engineering.	U55/56 Generator Rewind	\$41M	D-B	Engineer	Engineering Review	Review / Inspection
		U31/32 Generator Rewind	\$17.8M	D-B	Engineer	Engineering Review	Review / Inspection

Seattle City Light - Exhibit B, HDR (Subject Matter Experts)

Role During Project Phases

Name	Summary of Experience	Project Name	Project Size	Project Type	Role During Project Phases				
					Planning	Design	Construction		
Karen Graham	Senior Project Manager for 9 years. Overseeing generator rehabilitation Projects including Design Build projects	Seattle City Light - Diablo Unit 31/32 Generator	\$17.8M	D-B	PM	PM	PM		
		Seattle City Light - Boundary Unit 55 Generator	\$41M	D-B	PM	PM	-		
		SMUD - Union Valley Generator Upgrade	Not disclosed	D-B	Reviewer	Reviewer	Construction Support		
		Brookfield - Hawks Nest Unit 4 Generator Rehabilitation	\$5M	Emergency	PM	PM	PM		
		Xcel Energy - Cabin Creek Pump Storage Plant	Confidential	D-B	PM	PM	PM		
		Consumers Energy - Ludington Pumped Storage Plant Rehabilitation	\$350M	D-B	PM	PM	-		
		TransAlta - Spray Unit 1 Rehabilitation	\$14M	D-B	PM	PM	PM		
		TransAlta - Bighorn Unit 1 Generator Stator Rehabilitation	\$8M	D-B	PM	PM	-		
		Glenn Mottershead							
		Glenn Mottershead	Corporate Consultant and former electric machine designer for a major equipment manufacturer has 37 years of experience in the engineering design, installation, commissioning, testing, troubleshooting, and modernizing of large hydro generators	Seattle City Light - Diablo Unit 31/32 Generator	\$17.8M	D-B	Engineer	Reviewer	Construction Support
Seattle City Light - Boundary Unit 55/56 Generator	\$41M			D-B	Engineer	Reviewer	Construction Support		
SMUD - Union Valley Generator Upgrade	Not disclosed			D-B	Engineer	Reviewer	Construction Support		
Brookfield - Hawks Nest Unit 4 Generator Rehabilitation	\$5M			Emergency	Engineer	Reviewer	Construction Support		
Xcel Energy - Cabin Creek Pump Storage Plant	Confidential			D-B	Engineer	Reviewer	Construction Support		
Consumers Energy - Ludington Pumped Storage Plant Rehabilitation	\$350M			D-B	Engineer	Reviewer	Construction Support		
TransAlta - Spray Unit 1 Rehabilitation	\$14M			D-B	Engineer	Reviewer	Construction Support		
TransAlta - Bighorn Unit 1 Generator Stator Rehabilitation	\$8M			D-B	Reviewer	Reviewer	Construction Support		
Kellen Roberts									
Kellen Roberts	Assistant PM and electrical engineer with experience in key areas of electrical engineering balance of plant work			Seattle City Light - Diablo Unit 31/32 Generator	\$17.8M	D-B	Engineer	-	-
		USACE - The Dalles GSU Transformers Replacement	\$15M	D-B-B	-	Engineer	-		
		USACE - The Dalles Station Service Improvement	\$6M	D-B-B	Engineer	Engineer	-		
		Yakama Power - Drops 2 and 3 Plant Rehabilitation	\$3M	D-B-B	Engineer	Engineer	Construction Support		
		PG&E - Drum 2 Exciter, Governor, and Relay Rehabilitation	\$2.5M	D-B-B	-	Engineer	Construction Support		

Project Name and Description	Delivery Method	Planned Start	Planned Finish	Actual Start	Actual Finish	Planned Budget (\$K)	Actual Budget (\$K)	Reason for Budget or Schedule Overrun
2016-096 Boundary Unit 55 Sprayed Concrete	DBB	August-16	October-16	August-16	October-16	\$ 400	\$ 550	Additional quantities encountered
2015-100E Newhalem Penstock Saddle Emergency Contract	DBB	NA	NA	November-15	January-16	\$ -	\$ 50	Emergency project was not budgeted
2014-505 Boundary Access Road Rockfall	JOC	August-14	November-14	August-14	February-15	\$ 170	\$ 215	Cost overrun due to additional quantities of rock scaling required. Finish date was extended due to weather impacts.
2014-503 Boundary Guard Station Phase 1	JOC	August-14	October-15	August-14	April-16	\$ 480	\$ 510	Cost increase due to higher than planned permitting costs. Finish date delayed due to contractor failure to complete punchlist in timely manner
2014-101 Town of Diablo Large Septic Sewer System	DBB	January-13	February-15	January-13	September-16	\$ 1,200	\$ 4,100	Costs were underestimated for required house modifications and permitting time and costs. Finish date was delayed to complete site restoration and plantings.
2014-108 Ross Barge Landing	DBB	January-13	May-16	January-13	May-16	\$ 3,400	\$ 4,300	Change orders were issued for rockfall fencing and owner-requested suspension due to FERC requirements for minimize recreation impacts.
2013-057 Cedar Falls Penstock Bridge Repainting	DBB	July-12	December-14	July-12	November-16	\$ 4,700	\$ 6,600	Cost and schedule delays due to additional quantities of contaminated soil and two fire season suspensions.
2013-056E Boundary Unit 53 Generator Rewind	Emergency	NA	NA	November-13	June-14	\$ -	\$ 14,000	Emergency rewind was required due to Electrical fault in generating unit.
2013-015 Diablo Storage Building	DBB	July-11	December-12	July-11	August-16	\$ 2,100	\$ 2,300	Building had to be resized during design phase to fit budget. Project was rebid due to solo bidder
2012-011 Boundary Industrial Storage Building	DBB	January-12	July-13	January-12	April-13	\$ 802	\$ 814	
2011-085 Ross Powerhouse Rock Slide Stabilization	DBB	July-11	July-13	July-11	July-13	\$ 2,700	\$ 2,100	
2011-042R Boundary Hoist House Refurbishment Phase 2	DBB	January-11	December-12	January-11	December-12	\$ 230	\$ 240	
2011-024R Boundary Well Decommissioning	DBB	January-11	December-12	January-11	September-12	\$ 150	\$ 180	change order for additional grout quantities
2011-021 Diablo Crane Refurbishment	DBB	January-11	December-14	January-11	October-16	\$ 1,500	\$ 1,900	change orders for lead abatement
2011-009 Gorge Dam Spillgate Recoating	DBB	July-10	December-11	July-10	November-13	\$ 550	\$ 1,500	Change orders for unforeseen bolt replacement added scope and caused work to go to second construction season.
2010-030 Ladder Creek Gardens Lighting System	DBB	January-10	December-11	January-10	November-11	\$ 1,100	\$ 1,200	CM costs were higher than anticipated.
2016-042 Diablo Powerhouse AC Panel Upgrade	DBB	July-15	December-16	July-15	August-17	\$ 700	\$ 900	Contract award was delayed due to non-responsive bidders and protests.
2009-042A Boundary Dam Units 55/56 Rebuild	DB	January-08	April-14	January-08	Ongoing	\$ 31,561,929	\$ 40,967,625	Cost increase was due to change order to add Generator Step-up Transformers to scope. Adding the transformer design and construction to the DB contract allowed us to ensure that all "power train" equipment was compatible and rated for the new capacity. This work was budgeted but in a different project. Schedule delays were caused by various factors including owner suspension to perform US3 emergency work, delays in the transformer design, unexpected repairs due to contractor negligence and owner restrictions on completing some punchlist items.

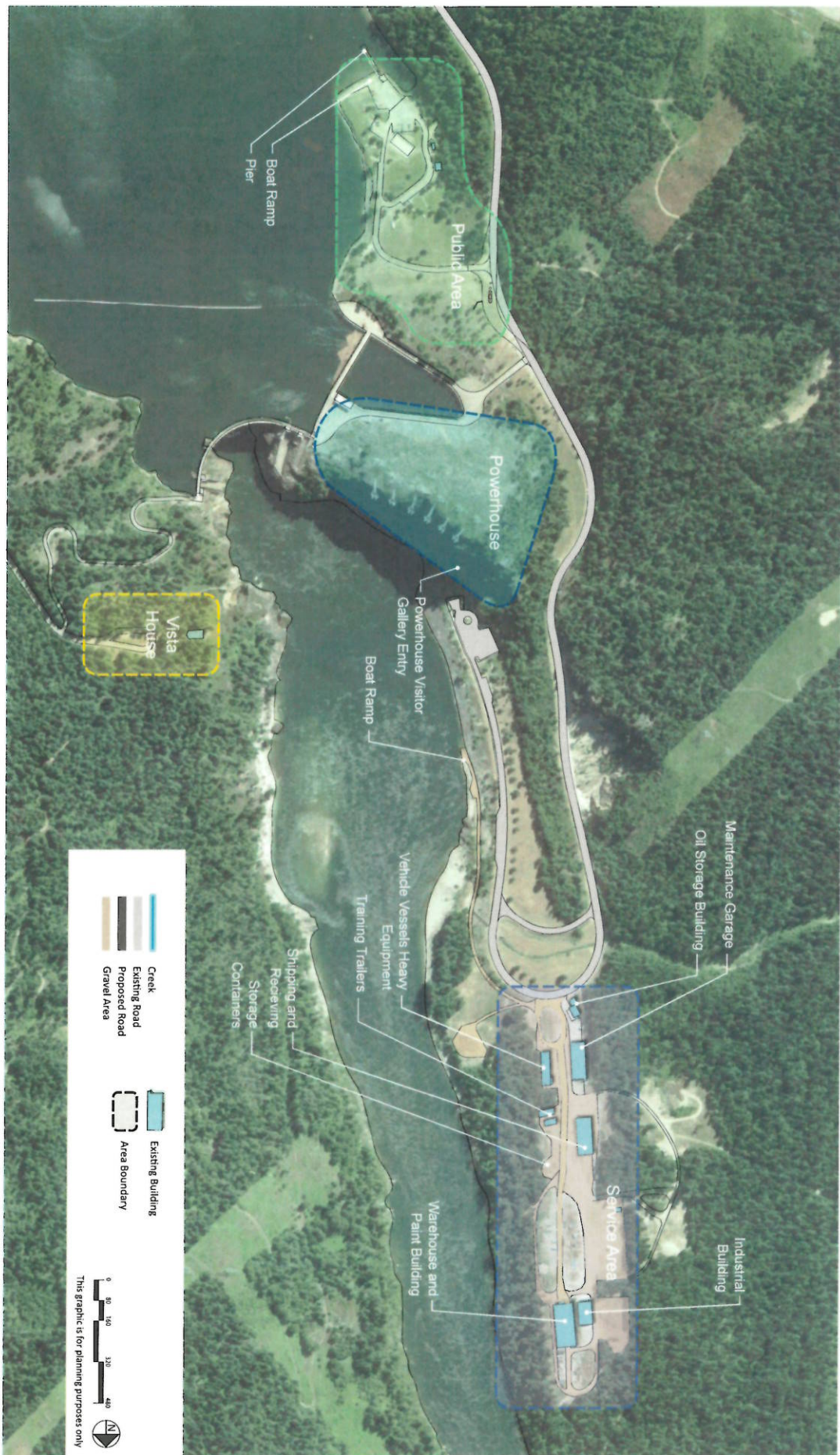
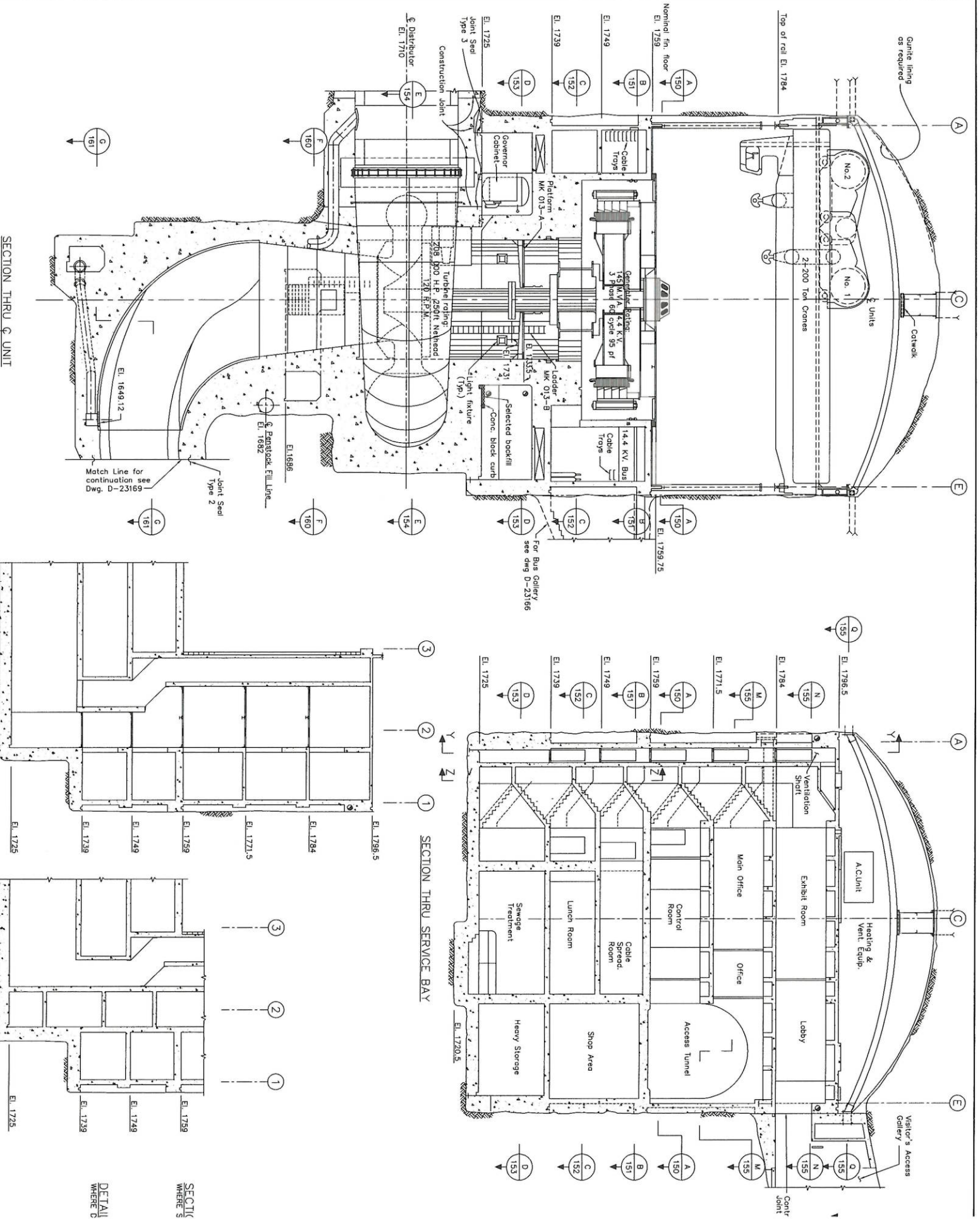


Figure 17. Existing Facilities

Exhibit D



SECTION THRU WHERE S
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