



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

**Application for Project Approval
Heavy Civil GC/CM Delivery**

**Submitted by
City of Spokane
Public Works and Utilities
July 1, 2015**

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

APPLICATION FOR PROJECT APPROVAL
TO USE THE
GENERAL CONTRACTOR/CONSTRUCTION MANAGER (GC/CM)
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.

1. Identification of Applicant

(a) Legal name of Public Body (your organization): [The City of Spokane](#)

(b) Address: [808 W. Spokane Falls Blvd
Spokane, WA 99201](#)

(c) Contact Person Name: [Rick Romero](#)
Title: [Utilities Director](#)

(d) Phone Number: [\(509\) 625-6361](#)
Fax: [\(509\) 343-5760](#)
E-mail: romero@spokanecity.org

2. Brief Description of Proposed Project.

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

The \$175M Next Level of Treatment (NLT) project will be the largest plant of its kind removing phosphorus in the primary, secondary and tertiary treatment processes to the lowest levels of any water reclamation plant in North America. This major expansion of the existing City of Spokane Riverside Park Water Reclamation Facility (RPWRF) will utilize one of two proprietary membrane systems. Both are currently being tested under a pilot project at the RPWRF. The completed project is planned to deliver installed nominal capacity of 50 mgd, with capacity for peak flows of 75 mgd. The project will remove phosphorus during the critical flow season, reducing the phosphorus level in the Spokane River and Long Lake Reservoir downstream.

Utilizing the Heavy Civil GC/CM delivery method, the City plans to complete selection of the membrane vendor in consultation with selected GC/CM firm. Depending on the membrane system selected, the completed design will either be an above ground steel-framed enclosure or a partially below ground concrete structure. The primary parts of the NLT project will be located on the east end of RPWRF on City-owned land.

See Exhibit A for drawings and additional details on plant and project layout.

3. Projected Total Cost for the Project:

A. Project Budget

Costs for Professional Services (A/E, Legal etc.)	\$ 13M
Estimated project construction costs (including construction contingencies):	\$ 126M
Equipment and furnishing costs (included with construction budget)	\$ -
Off-site costs	\$ -
Contract administration costs (Owner, CM etc)	\$ 18M
Contingencies (design & owner)	\$ 7M
Other related project costs (briefly describe)	\$ -
Sales Tax	\$ 11M
Total	\$ 175M

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 will be provided from a combination of cash reserves (approximately \$70M), ongoing sewer rate revenue, and revenue bond proceeds. Cash reserves are adequate for professional services, design, contract administration, and equipment and furnishing costs.

The Director of Utilities, the Mayor, and City Council by unanimous vote support this initial project budget and have obtained \$200 million in bond funding for a variety of projects including the NLT project. Presentations were made to Standard and Poor’s (AA) and to Moody’s (AA2) in San Francisco on October 23, 2014. Bond ratings and approval were received on November 3, 2014. The final budget will require Council approval upon submittal of the GC/CM award recommendation and final GMP (MACC) agreement.

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.

Hold pre-proposal information meeting, release draft RFQ	July 15, 2015
Project Review Committee Presentation	July 23, 2015
Issue Heavy Civil GC/CM RFQ	July 24, 2015
Complete short-list, interviews, fee proposals	September 9, 2015
Award GC/CM	September 21, 2015
Design, engineering, permitting	Sept 2015 – Sept 2016
Subcontract bidding, buyout, negotiate self-performed work—negotiate GMP (or interim GMP’s)	June 2016 - Oct 2016
Construction	July 2016 – April 2019
Commissioning, start-up, and testing	Jan 2018 - July 2019
Plant in service	August 2019

- If your project is already beyond completion of 30% drawings or schematic design, please list compelling reasons for using the GC/CM or D-B contracting procedure.

The design is not past the 30% stage.

5. Why the GC/CM 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 implementation of the project involves complex scheduling, phasing, or coordination, what are the complexities?
If the project involves construction at an existing facility that must continue to operate during construction, what are the operational impacts on occupants that must be addressed? *Note: Please identify functions within the existing facility which require relocation during construction and how construction sequencing will affect them. As part of your response you may refer to the drawings or sketches that you provide under Question 9.*
- If involvement of the GC/CM is critical during the design phase, why is this involvement critical?
- If the project encompasses a complex or technical work environment, what is this environment?
- If the project requires specialized work on a building that has historical significance, why is the building of historical significance and what is the specialized work that must be done?
- If the project is declared heavy civil and the public body elects to procure the project as heavy civil, why is the GC/CM heavy civil contracting procedure appropriate for the proposed project?

The NLT project meets four of the five criteria for use of GC/CM delivery.

Project involves complex scheduling, phasing and coordination all supported by GC/CM delivery:

- Procurement of a proprietary long-lead time, membrane system early in the design stage is critical to efficient design and construction. Once selected, the membrane vendor will participate in extensive design coordination. We currently anticipate the selected GC/CM to participate and advise on the membrane selection and take the lead with design-assist support, delivery coordination and installation oversight.
- NLT construction work will take place adjacent to and within the operating treatment plant. Coordination of construction deliveries, parking, safety, and utilities will be critical to maintaining plant operations while planning for an efficient construction site. The City uses a procedure it calls Construction Impact during Plant Operations (CIPO) to discuss with all involved parties all impacts and necessary steps to construct any element of the project while keeping the plant running and meeting its discharge permit limits.

Construction Impact on Plant Operations

Number: _____
Date: _____

ACTIVITY: _____

PROJECT: _____ CITY PROJECT NO: _____

Contractor: _____ Trades Involved: _____ Requested by: _____

Target Start Date: _____ Duration: _____

Regarding Drawing No. _____ Spec. Section: _____ Schedule: _____

The following work has been identified which will impact normal plant operations: (attach work procedures, systems affected, additional information, or drawings as necessary to fully describe work and impact)

Submitted by Contractor: _____ Date: _____
Review Comments: _____

Reviewed By Engineer: _____ Date: _____

Will work require initiation of Startup and Commissioning Checklist and Approval Sheet? Yes No

Could this CIPO Activity cause an odor release? Yes No
(if yes, then notify SRCAA, Director of PW & Utilities, Director of WWMgmt. & PIO prior to commencing activity)

Does work impact any of the following systems? If so, attach completed and approved Change Worksheet. Digester Gas Digester Solids N/A

City Review Disposition:	Approved	Approved as Noted	Disapproved	N/A
HVAC _____ Date _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Instrumentation and Data _____ Date _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Disapproved Lab _____ Date _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Maintenance _____ Date _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Operations _____ Date _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Administration _____ Date _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Plant Engineer _____ Date _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Safety Captain _____ Date _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Pre-Start Meeting Proceed? YES NO
LO/TO Complete Proceed? YES NO

Reference: CIPO Form

- The current schedule may support one or more early Contract Amendments (mini MACC's) to facilitate the most efficient delivery and risk reduction. In addition to membrane procurement, site excavation and underground utilities may be purchased early in the design process to support summer excavation and erosion control. (The project is on the banks of the Spokane River.)

Involvement of the GC/CM during the design phase is critical:

Selecting one of two vendors piloting membrane treatment equipment will require a rigorous analysis of the cost to complete the structure and systems supporting the membrane technology. Contractor involvement in this analysis will provide a higher confidence level in cost estimates, schedules and other coordination efforts.

In addition, we anticipate heavy pre-construction involvement throughout design including value engineering, constructability review, site logistics planning and more.

The project encompasses a complex and technical work environment:

The construction of treatment facilities including membrane treatment are complex in that they involve the integration of a large package of equipment, piping valves, chemical systems and SCADA systems within civil, structural, mechanical, electrical and instrumentation and control crafts. Selection of a builder on a qualifications rather than low bid basis will help ensure the most qualified contractor and experienced staff build the project. Contractors with the relevant experience for this type of project are limited, accustomed to alternative delivery, and some unlikely to pursue on a low-bid basis.

Heavy Civil Classification:

The project meets statute requirements for Heavy Civil GC/CM delivery as the project work is primarily infrastructure. The City intends to procure the project as Heavy Civil in order to take advantage of the large self-performed work common in treatment plant construction. This will improve the attractiveness of the project to the region's best contractors. The City intends to maintain the flexibility of allowing the GC/CM to self-perform up to the maximum allowed percentage, subject to rigorous analysis, the best overall value to the City.

6. Public Benefit

In addition to the above information, please provide information on how use of the GC/CM 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.
- In the case of heavy civil GC/CM, why the heavy civil contracting procedure serves the public interest

In addition to the justifications outlined above for the use of heavy civil GC/CM on the NLT project, the City anticipates the following public benefits:

Increases predictability and reduces financial risks

GC/CM delivery improves cost and schedule predictability beyond that available using Design-Bid-Build. With the core team members involved during design, cost comparison, value engineering and constructability review efforts are more accurate and more robust.

A qualification-based contractor selection helps ensure quality execution

Only a limited number of contractors have WWTP experience for a project of this scale and GC/CM delivery will help ensure the contractor that builds this project is qualified and experienced.

Planning, coordinating and executing complex building systems is best done with collaboration between designers and builders throughout the project

GC/CM construction supports close collaboration during design, buyout, and construction and the use of modern technologies including Building Information Modeling, Virtual Design and Construction and early award of mechanical electrical subcontracts through EC/CM and MC/CM.

Selecting a contractor under Design-Bid-Build is not practical

Selecting a contractor at the completion of design will greatly increase the risks associated with membrane technology coordination, reduce the opportunity to complete site work in dry weather and greatly increase the likelihood of an unqualified low-bidder winning the work.

Heavy Civil GC/CM serves the public interest

Heavy Civil execution for the NLT project serves the public interest by helping to attract a wider pool of vendors, providing additional flexibility in project delivery, and possibly speeding overall delivery. Many contractors in the vendor pool provide extensive self-performed labor including concrete work, steel erection, as well as piping, pumping and controls. With the ability to negotiate certain scopes of work, early rather than public bidding, the speed of buyout and execution may be accelerated.

7. Public Body Qualifications

Please provide:

- A description of your organization's qualifications to use the GC/CM contracting procedure.
- 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 Attachment C for an example.)
- Staff and consultant short biographies (not complete résumés).
- Provide the **experience and role on previous GC/CM projects** delivered under RCW 39.10 or equivalent experience for each staff member or consultant in key positions on the proposed project.
(See Attachment D for an example.)
- The qualifications of the existing or planned project manager and consultants.
- 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.
- A brief summary of the construction experience of your organization's project management team that is relevant to the project.
- A description of the controls your organization will have in place to ensure that the project is adequately managed.

- A brief description of your planned GC/CM procurement process.
- Verification that your organization has already developed (or provide your plan to develop) specific GC/CM or heavy civil GC/CM contract terms.

The City of Spokane Public Works and Utilities, an experienced and successful builder, has assembled a highly qualified internal management team supported by alternative delivery experts at CH2M and OAC Services.

This project is led by City Engineer, Mike Taylor, and closely supported by Principal Engineer, Lars Hendron, and the City's Integrated Capital Management (ICM) Department. Mike is managing the project and will oversee GC/CM procurement, execution and closeout. Collectively Mike and Lars have successfully delivered \$350 million in capital projects for the City including \$150 million worth of plant upgrades at RPWRF since 2003 and have extensive experience with wastewater technology and are very competent in construction delivery on a complex, operating WWTP.

The City is currently implementing the Program Management Office (PMO) approach for the NLT delivery with critical CH2M staff co-located with City staff, and the GC/CM on the RPWRP project site. CH2M will take the lead to design the project that meets the required output and treatment specifications. City staff including plant managers and operators will be closely involved in detailed decision making for plant operation. The GC/CM will provide estimating, scheduling, phasing, early procurement and eventual execution.

The PMO approach provides highly coordinated needs assessments, planning, design, construction management, and startup assistance, all within the context of plant-wide safety and continuous operation, free of construction-caused effluent violations. Importantly, the PMO approach has evolved to include characteristics similar to GC/CM, and resembles this proposed GC/CM project in the following ways:

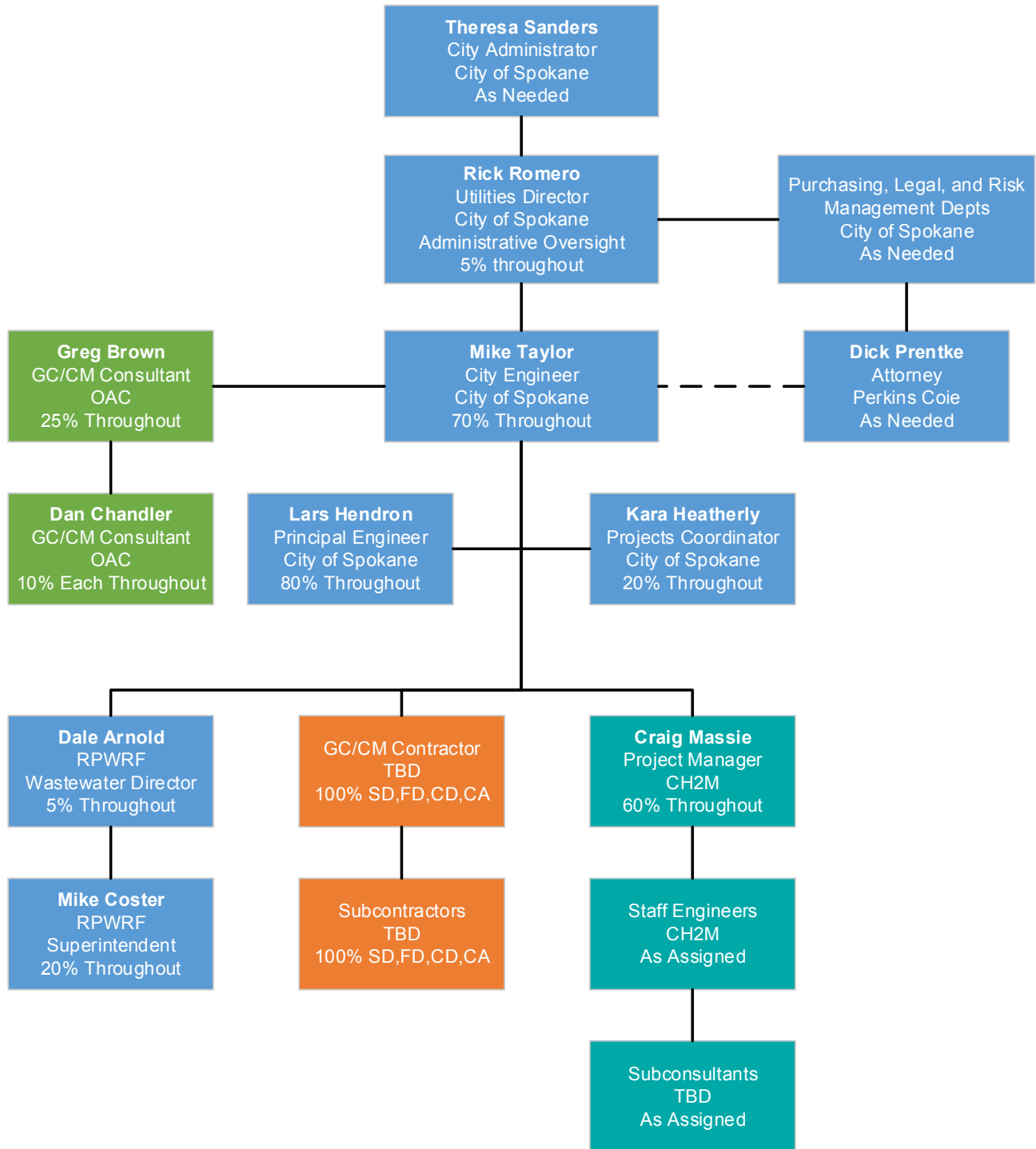
- CH2M was the City's PMO Engineer and has been selected as the Engineer for this project
- Close involvement of RPWRF staff and Engineer during planning and design phases
- On some PMO projects, RPWRF staff and CH2M have collaborated with the General Contractor on design changes that reduced construction and/or operational complexity, risk, and cost.
- Close cooperation among RPWRF staff, CH2M, and the Contractor on activities that affect plant operations, such as planned plant shut-downs and for construction work that could disrupt plant operations.
- Implemented a Design/Construct/Operate Protocol, a hand-off procedure ensuring for each project that the design meets all needs and standards; the constructed project is as designed, and that applicable equipment and aspects are appropriately tested and operational prior to plant staff taking over normal operation.

OAC Services will enhance CH2M's extensive alternative delivery experience (including CM/GC in Oregon) and support City staff with GC/CM consulting including procurement, team building, pre-construction support, subcontractor buyout, GMP negotiations, support during construction and other services as needed.

Eager to expand its internal alternative project delivery experience, the City of Spokane is committed to internal and external training, implementation of best practices, and regular lessons learned meetings.

Nearing completion of its first alternative delivery project, the \$15 million design-build Nelson Service center is completing within budget and ahead of schedule. The City is planning to leverage its strong relationship with OAC Services to execute another successful alternative delivery project while enhancing its internal staff capabilities.

Project Organization Chart



Rick Romero, Director of Utilities, City of Spokane

Rick Romero is the Utility Division Director for the City of Spokane. Rick directs the City's major utility operations, including water, wastewater, and solid waste. He leads a staff of about 600 employees and manages operating and capital construction budgets totaling more than \$250 million a year.

Rick has worked for the City of Spokane since 2008, serving as the City's Internal Auditor until being promoted to Utility Division Director in 2012. Before joining the City, Rick worked for Eastern Washington University (EWU) for 28 years, ultimately serving as the Associate Vice President for Business Services. In that role, he oversaw three design-build projects for the University. He holds Masters and Bachelor's Degrees in Business Administration from EWU.

Rick will provide major project oversight, communications with City Council, and strategic decision making.

Mike Taylor, P.E., City Engineer, Director of Integrated Capital Management, City of Spokane

P. Mike Taylor, P.E. is City Engineer for Spokane, WA, since 2009. He has over 35 years' experience in Civil Engineering as a consultant and was the founder and owner of a civil engineering, land surveying and landscape architecture firm. Mike's past work includes a wide array of public works and private sector projects including airports, municipal streets, sewer, water and storm water projects and he brings a strong business background.

Mike currently directs the Integrated Capital Management Department in an innovative and cost-effective approach to managing the City's \$1.7 billion infrastructure assets. He also served eight years with the US Army as an officer, including a combat tour in Vietnam.

Mike is the overall Project Manager for the NLT project and will develop the primary relationship with the GC/CM contractor.

Lars Hendron, P.E., Principal Engineer for Wastewater, Integrated Capital Management, City of Spokane

Lars Hendron is the Principal Engineer for Wastewater in the Integrated Capital Management Department and will serve as Mike's immediate direct support on all matters associated with NLT. Lars will liaise between the City, Consultants, and Contractor. As Principal Engineer in Wastewater Management for eleven years, previously Lars served as the Program Manager for major water quality capital improvements, including the City's Combined Sewer Overflow Reduction Program, and RPWRF Upgrades Program. These Programs included planning, design, construction, construction management, and administration, executed under PMO approach described above for projects totaling about \$150 million.

Dale Arnold, Director of Wastewater Management, City of Spokane

Dale Arnold has served as Director of Wastewater Management since 2000, overseeing all aspects of collection and treatment. As this Department will be the key user of the completed project, Dale's extensive knowledge is essential to defining project needs. Dale has worked for the City for over 35 years in roles that include RPWRF Superintendent, Director of Environmental Programs, and overseer of the City's Waste-To-Energy Plant.

Dale will provide design review and coordination with existing plan operations.

Mike Coster, Superintendent, Riverside Park Water Reclamation Facility, City of Spokane

Mike Coster is a Level 4 Certified Operator and began working for the City's RPWRF in 1977, rising from Laboratory Supervisor to Superintendent in 2004. Mike directs all day to day activities at RPWRF, ranging from operations and maintenance to laboratory, physical plant, and instrumentation. He has been instrumental in the success of the multiphase 18-year, \$260 million program at RPWRF. His knowledge will be crucial to developing project needs and he will be involved on-site with coordination between the plant, CH2M, and the GC/CM Contractor.

Craig Massie, P.E., Consultant Team Project Manager, CH2M

Craig Massie is a senior project manager with CH2M with 29 years of engineering, project management and construction experience in the water, wastewater, hydropower and fish passage heavy civil infrastructure projects. In the past six years, Craig has managed 5 CM/GC projects in Oregon, ranging in size from \$4.5 million to \$60 million in construction value.

Craig serves the project as overall lead designer and supervisor for CH2M staff engineers and subconsultants.

Greg Brown, AIA, GC/CM Consultant, OAC Services

Greg Brown will serve the project as OAC's primary service provider and coordinator for other staff support when needed. A veteran of nine successful GC/CM school construction projects (7 completed, 2 underway) valued at \$345 million, Greg will advise the city on GC/CM procurement, pre-construction services, GMP negotiations, use of incentives, changes during construction, and project closeout. Greg has over 30 years of industry experience, including 12 years as the Director of Capital Projects and Planning for the Spokane School District, prior to joining OAC. Greg recently completed GC/CM training at the AGC in Seattle to further enhance his deep knowledge of this important delivery method.

Dan Chandler, PE, AIA, GC/CM Consultant, OAC Services

Dan Chandler leads one of the region's premier project management consulting firms and will support the NLT project with GCCM, ECCM and MCCM procurement, on-boarding, contracting and GMP negotiations. A veteran of 40 alternative delivery projects including 27 GCCM projects, Mr. Chandler will work closely with the overall team to bring GCCM best practices to the project and help the City of Spokane build its internal management capability. Dan is currently advising the City of Oak Harbor on its \$70 million Heavy Civil GC/CM WWTP project.

Other available OAC staff members:

Jonathan Miller, Project Manager, OAC Services

A seven year industry and OAC veteran, Jonathan has worked on or completed four GC/CM projects and completed the AGC's GC/CM class. Jonathan's first GC/CM projects were two bundled elementary school projects for the Nine Mile Falls School District. Jonathan will support Greg on an as-needed basis.

Mitch Romero, AIA, Senior Project Manager, OAC Services

Mitch has 23 years of experience in design and construction including five GC/CM projects completed or under way. Recently recruited to OAC, Mitch's previous work was for the Department of State Overseas Building Office where he oversaw extensive complex design-build projects in Belgium and Afghanistan. Mitch will support Greg on an as needed basis.

OAC's 59 person staff including six located in the Spokane are available to support the project on a moment's notice.

Current Staff:

- 59 total employees
- 43 PM/CM staff members
- 25 AGC GC/CM trained
- 23 GC/CM experienced

Dick Prentke, Partner, Perkins Coie, LLP

Mr. Prentke is a partner in the Seattle office of Perkins Coie and chair of its national construction practice. He has practiced with the firm for three decades. He and his colleagues have represented public entities in hundreds of Washington projects. He has been involved with two of the largest "Alternative Public Works" projects in the state, serving as construction counsel to the Seattle Symphony for its design-build concert hall project in downtown Seattle and to the Seattle Mariners for their GC/CM stadium project. He has also represented private owners in billions of dollars of private GC/CM contracts. Mr. Prentke and OAC have collaborated on over 18 GC/CM projects.

See Exhibit B for additional details on NLT project team experience

Organizational Controls

The City will implement extensive project controls and reporting systems to manage the scope, schedule, and budget, and report progress to plant staff, elected officials, and the public. Mike Taylor and Lars Hendron with support from Kevan Brooks, Wastewater Accounting Lead, and Marlene Feist, City of Spokane Utilities Public Information Officer, will utilize City standard project budgeting tools, procurement processes (adapted as needed for GC/CM) and project management websites to manage communications and monitor progress. Detailed schedule and budget progress will be monitored and reported using the Owner's Representative's project management tools and reporting to City officials and stakeholders.

Procurement, including the GC/CM contractor, will be supported by the City of Spokane's Purchasing and Legal Departments and Risk Manager in close concert with the Owner's Representative. Extensive project status reporting will be initiated with the Owner's Representative, including weekly and monthly status updates via email and the existing PMO SharePoint site to provide current information available to the project team, City stakeholders and the public.

Planned GC/CM Process

The City will be using a customized owner-contractor agreement developed by Perkins Coie in close coordination with consultant team members. In addition, the City is planning on a comprehensive Pre-Construction Services scope of work and General Requirements (Division 01) that will be coordinated thoroughly with the contract agreement for the GC/CM construction procurement within Washington State.

Preparation of the GC/CM RFP and selection process, already underway, will be based on an OAC proven approach and modified with the latest lessons learned from other public owners. This process will include selection criteria, interviews and fee proposals.

GC/CM Procurement

The City is planning on using a three-phased GC/CM selection model:

1. Public outreach followed by a Request for Qualifications
 - a. Focusing on relevant experience, proposed team and approach
 - b. Short list for interviews—three, possibly four firms
2. Extensive interviews, site and office visits
 - a. Focusing on team members proposed
3. Fee and Specified General Conditions Bidding
 - a. Focusing on competitive but reasonable fees

The City and Perkins Coie are currently assembling the GC/CM Contract form similar to that used on the first Heavy Civil GC/CM project in the state—the Oak Harbor Clean Water project, currently under construction. This work is being developed in close coordination with the City’s Attorney and Risk Manager.

Completing the Design

The City intends to involve the GC/CM with the design firm in preparation of the schematic design to occur during the pilot phase of the project. The value engineering, constructability and cost estimating input sought from the GC/CM during schematic design would continue through final design, prior to the preparation of the MACC.

8. Public Body (your organization) Construction History:

Provide a matrix summary of your organization’s construction activity for the past six years outlining project data in content and format per the attached sample provided: Project Number, Name, and Description

- Contracting method used
- Planned start and finish dates
- Actual start and finish dates
- Planned and actual budget amounts
- Reasons for budget or schedule overruns

See Exhibits C and D for representative City of Spokane projects.

9. Preliminary Concepts, sketches or plans depicting the project

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

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

Exhibit A includes site plan, associated with each of the two membrane configurations being piloted. These site plans demonstrate the extent of existing plant adjacent to the proposed NLT facilities, proximity to the Spokane River, and the limited construction access.

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.

The City of Spokane has been audited on multiple occasions by the Washington State Auditor's Office. Consistently, there have been no findings.

Caution to Applicants

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

Signature of Authorized Representative

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

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

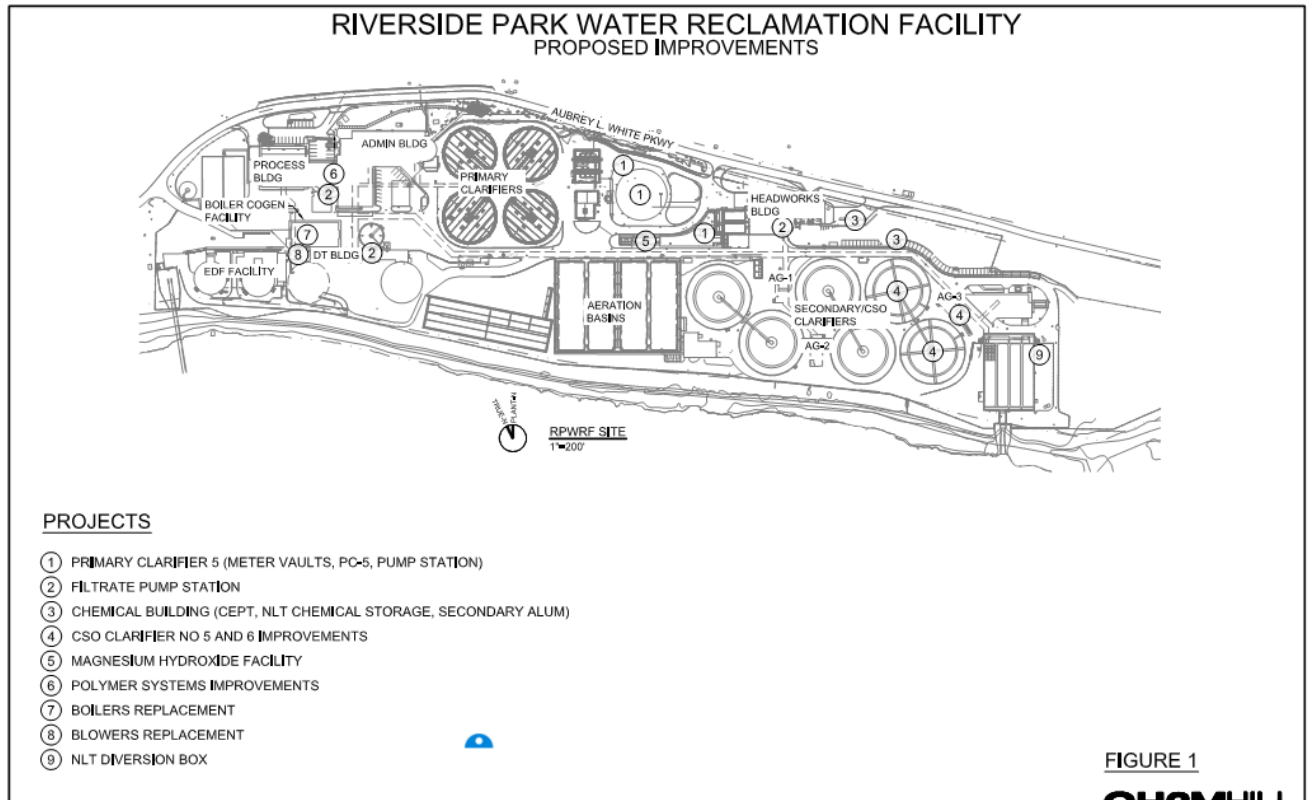
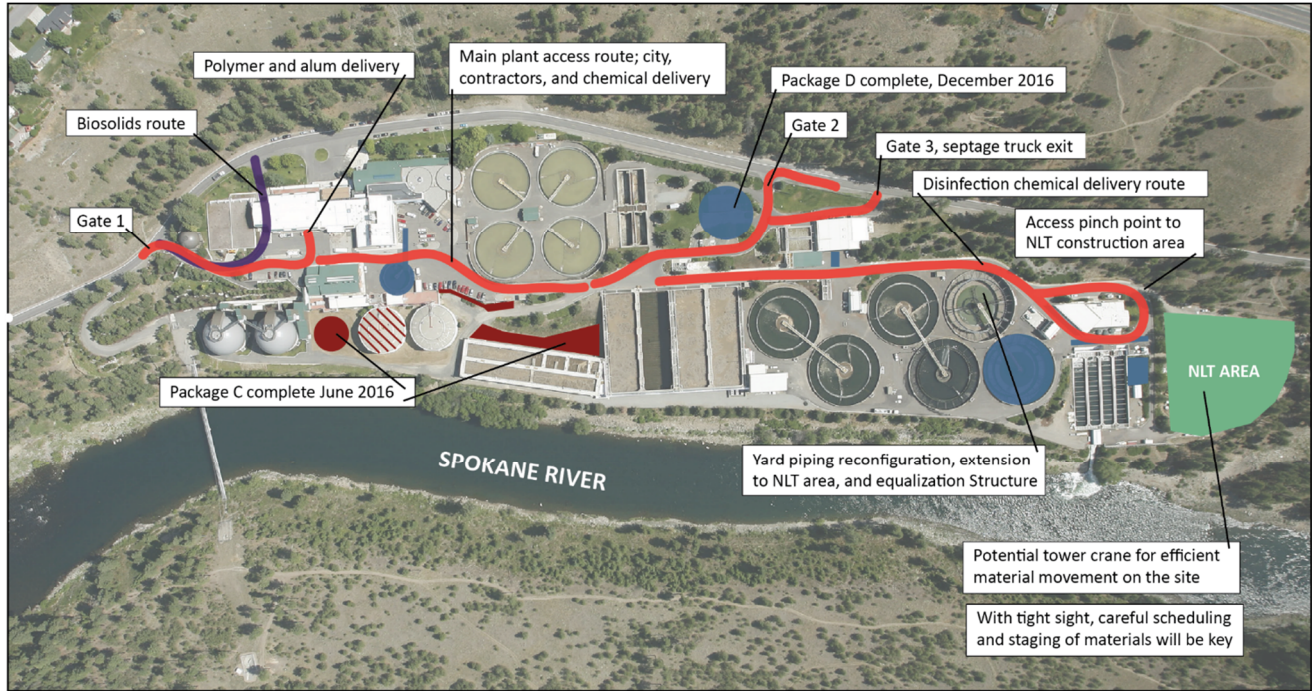
Signature: _____

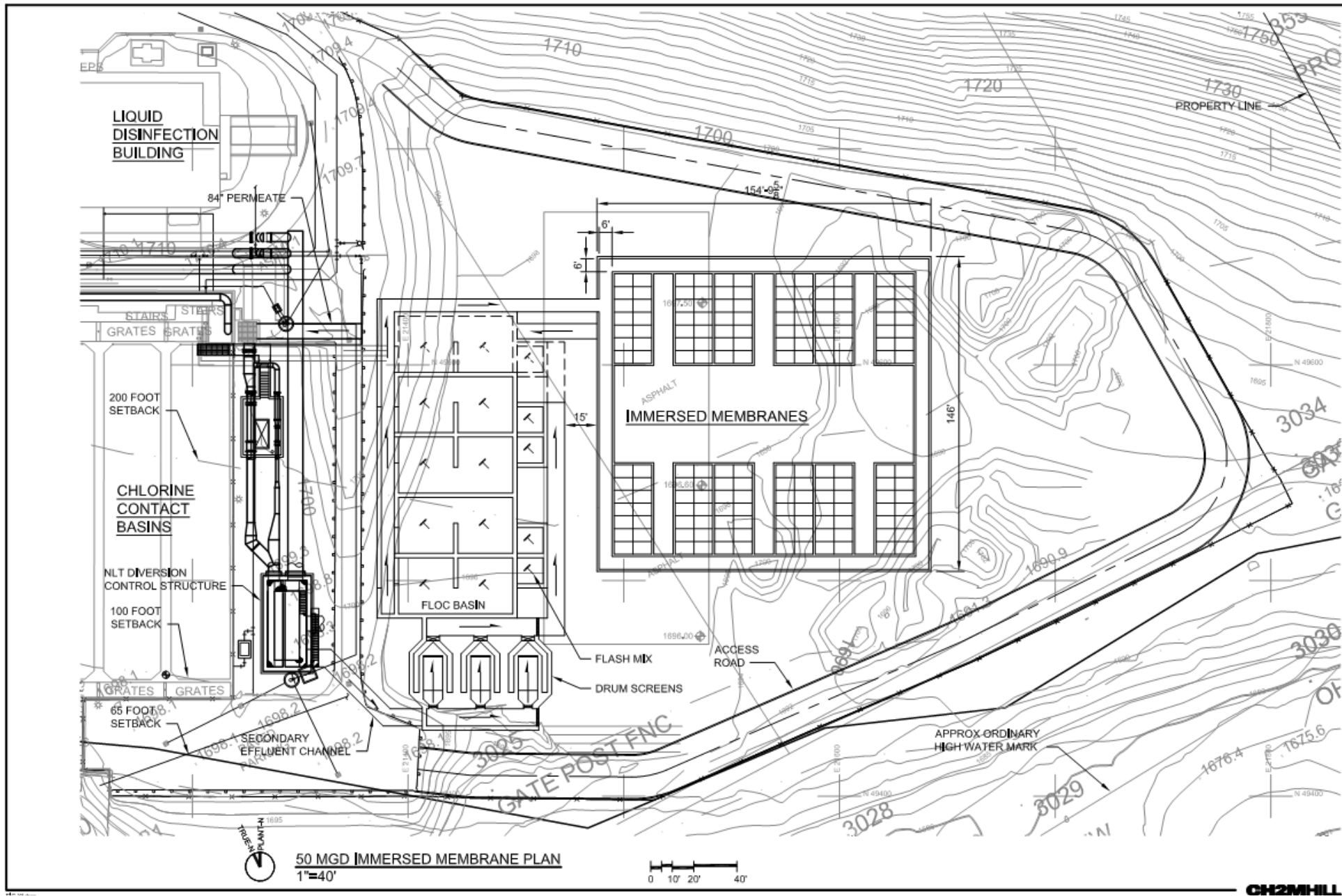
Name: (please print) Rick Romero

Title: Director of Utilities

Date: 7-1-15

Exhibit A – Aerial Photo and Site Layout





General Site Plan

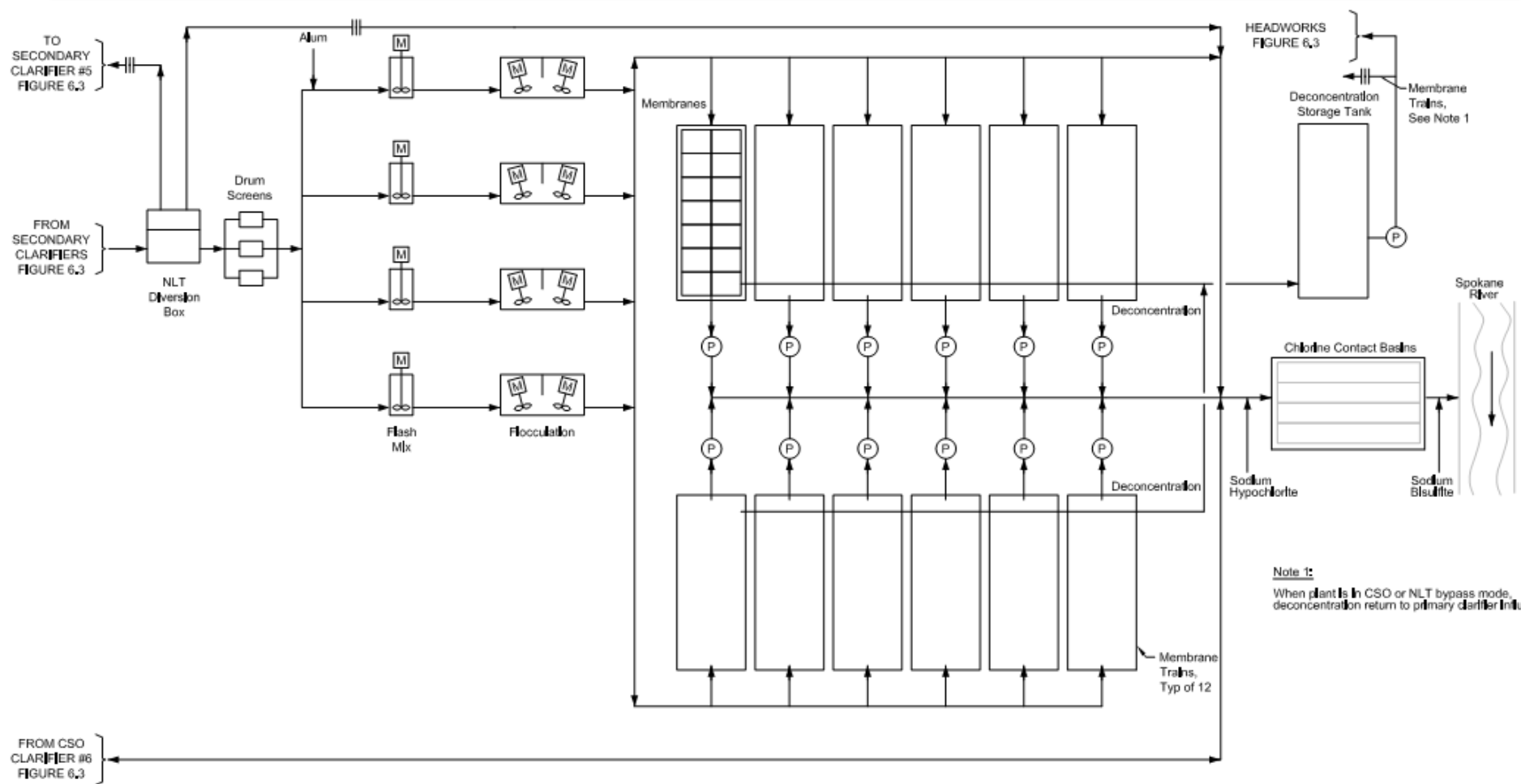


FIGURE 6-4
Process Flow Diagram for NLT and Disinfection
Immersed Membranes



Process Flow Diagram

Exhibit B – Project Team Experience Matrix

The following table lists some (but not all) of the relevant experience of the NLT team.

Name	Summary of Experience	Projects	Construction Budget	Delivery Method	Role During Project Phases		
					Pre-Design	Design	Construction
Mke Taylor, PE	City Engineer City of Spokane	French Fry Factory	\$26M	DBB	PM	PM	PM
		2004 Street Bond	\$121M	DBB	PM	PM	PM
		CSO Program	\$186M	DBB	CITY ENGR	CITY ENGR	CITY ENGR
		35 years private Civil Engineering practice	\$70M/year	DBB/Neg	PIC	PIC	PIC
Lars Hendron, PE	Principal Engineer City of Spokane	Spokane Riverside Park Water Reclamation Facility Upgrades Phases One and Two	\$130M	DBB	PM	PM	PM
		Anacortes WWTP pipelines	\$2M	DBB	PM	PM	PM
		Puget Sound Naval Shipyard, Ship and Submarine Overhauls and Reactor Disposal Projects	\$100M	D/B**	PM	PM	PM
Dale Arnold	Wastewater Director City of Spokane	Spokane Riverside Park Water Reclamation Facility Upgrades Phases One and Two	\$130M	DBB	Customer	Customer	Customer
Craig Massie, PE	Project Manager/Lead Designer CH2M	Mcminnville Water and Light Scott WTP Expansion	\$28M	CMGC*	PM	PM	PM
		Coos Bay WWTP 2	\$24M	CMGC*	PM	PM	PM
		North Albany Lift Station and Forcemain	\$5M	CMGC*	PM	PM	PM
		EWEB Carmen Smith Hydropower	\$60M	CMGC*	PM	PM	PM
Greg Brown, AIA	Senior Project Manager GC/CM Advisor OAC Services	Ferris High School	\$85M	GC/CM	Director	Director	Director
		Rogers High School	\$65M	GC/CM	Director	Director	Director
		Shadle Park High School	\$74M	GC/CM	Director	Director	Director
		Hutton Elem School	\$24M	GC/CM	Director	Director	Director
		Mullen Road Elementary	\$16M	GC/CM	Director	Director	Director
		Salk Middle School (in design)	\$36M	GC/CM	Director	Director	Director
North Central HS Commons Addition (in design)	\$15M	GC/CM	Director	Director	Director		
Dan Chandler, PE, AIA	Principal GC/CM Advisor OAC Services	Mason General Hospital	\$40M	GC/CM	PM PIC	PM PIC	PM PIC
		Oak Harbor WWTP	\$70M	GC/CM	Advisor	Advisor	Advisor
		Olympia City Hall	\$40M	D/B	PM PIC	PM PIC	PM PIC
		Nelson Service Center	\$15M	D/B	PM PIC	PM PIC	PM PIC
		Tahoma High School	\$120M	GC/CM	PM PIC	PM PIC	PM PIC
Dick Prentke	Parnter Perkins Coie, LLP	Mason General Hospital	\$40M	GC/CM			
		Tahoma High School	\$120M	GC/CM	Atty	Atty	Atty
		Clover Park Elementary Schools	\$140M	GC/CM			
		Spring Creek Pedestrian Bridge	\$15M	D/B			

*Oregon's version of GC/CM—very similar to Washington Heavy Civil ** US Navy projects similar to Design-Build

Exhibit C– Public Body Construction Experience

Project Name	City Project #	Budget (\$MM)		Delivery Method	Planning Start	Construction Start	Project Completion		Explanation of Budget or Schedule Overruns
		Planned	Actual				Planned	Actual	
Nelson Service Center	-	\$15	\$17	DB	Jun-12	Apr-14	Sep-15	Dec-15	Project scope changes requested by City.
Headworks and Grit System Improvements	2008181	\$6	\$6	D/B/B	May-09	May-09	Dec-10	Apr-11	
Combined Sewer Overflow Control Facilities	multi	\$50	\$50	D/B/B	Jan-99	Jul-02	Jun 15	Jun 15	On schedule, on budget
RPWRF Upgrades Package A	2009158-160	\$15	\$15	D/B/B	Aug-10	Aug-10	Apr-12	Aug-13	Redesign of Primary Solids Pump Station
Small Projects Package No 1	3852-12	\$5	\$5	D/B/B	Sep-12	Sep-12	Apr-12	Sep-14	Primary Solids Pump Change
RPWRF Upgrades Package B	3934-13	\$8	\$7	D/B/B	Aug-13	Jan-15	Aug-13	Feb-15	Includes changes issued to date, finish date projected
RPWRF Upgrades Package C	1005-14	\$14	-	D/B/B	Sep-14	Sep-14	Sep-16	-	Under Construction
City Swimming Pools--Six pools		\$28	\$28	D/B/B	Feb-09	Aug-08	Jun-09	May-10	Phased construction completion, schedule adjusted based on unusual weather
Dwight Merkel Facility (playfield concession facility)		\$11	\$11	D/B/B	Feb-08	Nov-08	Aug-09	Aug-09	On time on budget

Exhibit D– Additional RFPWRF Projects

Table 1 - Capital Projects Completed (1999-2008)

Task Name	Cost	Start	Finish	Outcome
Belt Filter Press Replacement	\$4,616,550	Mar/99	May/01	Reduced odors Replaced worn-out equipment Increased dewatering capacity
Gravity Belt Thickeners	\$4,616,550	Jan/00	Jul/02	Replaced worn-out equipment Eliminated operational problems with Gravity Thickeners Improved thickening process Reduced the number of unit processes
Electrode Boiler Replacement	\$966,477	Jan/00	May/02	Reduced electrical energy usage
Existing Clarifier Improvements	\$5,424,437	Dec/00	Nov/06	Replaced worn-out equipment Improved process performance
Laboratory-Instrumentation Electrical and Data Center Expansion	\$6,367,297	Oct/01	Oct/04	Improved efficiency of space Provided more useable space Modernized facility non-process facility
Baxter Well Decommissioning (Water Dept)	\$2,589,540	Jun/01	May/02	Complied with water department requirements
New Aeration Basins	\$9,627,951	Nov/01	Dec/05	Increased aerations capacity and nitrifying ability Improved redundancy and reliability of aerations basins
Plant-wide SCADA System Improvements	\$1,514,671	Dec/01	Jun/03	Replaced obsolete control system Improved process control Improved operation and maintenance
AG3 Pump Station Conversion	\$1,591,130	Feb/02	Sep/04	Improved RAS distribution Replaced worn-out equipment Improved RAS pumping system
Plant-wide General Electrical System Improvements	\$2,147,089	Feb/02	Dec/04	Replaced worn-out and obsolete equipment Increased electrical system reliability and redundancy
Use Attainability Analysis	\$801,000	Mar/03	Jul/04	Attempted to persuade regulators to promulgate more favorable effluent phosphorus limits
Plant wide Odor Control Planning	\$99,153	Apr/03	Jul/04	Established plan for improving odor control and reducing odor complaints
Biofilter Revisions	\$136,538	Apr/03	Jul/04	Improved odor control process
Primary Treatment Upgrades-Conceptual Design	\$150,000	Sep/04	Dec/04	Replaced worn-out equipment Improved process control Reduced odors Improved scum handling
Fire Alarm System	\$600,000	Jan/04	Mar/05	Upgraded obsolete systems Established a plant-wide system

Task Name	Cost	Start	Finish	Outcome
Plant wide Heating Demand Assessment	\$75,000	Dec/04	Apr/05	Established criteria for energy efficiency and resource optimization
New Belt Filter Presses w/ Odor Enclosures	\$5,343,080	May/03	May/07	Increased dewatering capacity Improved odor control Improved facility egress
Digester Recirculation System	\$3,469,778	Nov/03	May/07	Replaced worn-out equipment Improved process control Improved process performance (heating at higher % solids)
Plant Water System Improvements	\$5,802,114	Jun/03	Dec/06	Eliminated cross connections between potable water and the other two plant water systems Improved process performance Increased on-site use of treated effluent Improved redundancy and reliability of plant water systems Replaced worn-out equipment
Headworks Improvements	\$1,942,323	Jan/04	Dec/06	Improved maintenance converted to steam heating for improved energy efficiency Increased redundancy Improved performance
Slope Stabilization	\$130,000	Apr/05	Mar/06	Improved slope/embankment Improved river side aesthetics
Riverbank and Habitat Management	\$150,000	Jun/06	May/08	Screened Rpwrf From River Enhanced Riverbank Appearance Reserved Some Acreage For Habitat
Boiler/Co-Gen Facility	\$6,670,000	Jul/04	Aug/06	Addressed old, overcrowded facility Provided space for new egg-shaped digester facility (edf) Provided more redundancy, reliability, and capacity Added space for future energy efficiency improvement equipment and maintenance Provided larger and safer work areas for boiler/operations labor crews
Site Civil for EDF	\$650,000	Apr/05	Apr/06	Improved site for EDF
Digestion System Upgrade	\$47,084,000	Jul/04	Jun/08	Reduced odor Improved energy efficiency Enhanced operator safety Improved digestion process Replaced damaged digester Added redundancy Increased digestion capacity
Aesthetic Mitigation Master Plan	\$124,785	Jul/04	Oct/06	Established a guidance document for current and future architectural, landscaping and educational work onsite, in an effort to improve the image and strengthen connection to community.

Task Name	Cost	Start	Finish	Outcome
Liquid Chemical Disinfection	\$2,430,000	Dec/05	Mar/07	Improved safety for operators, facility, and neighborhood Eliminated risk management program requirements Replaced damaged facility
Primary Treatment Process, Instrumentation, and Control Systems Upgrades	\$180,000	Sep/05	Nov/06	Improved process control
Aeration Basin Dewatering Pump Station and Plantwide Sump Pumps	\$1,870,000	Apr/06	Apr/08	Enhanced spill control Replaced worn-out equipment Separated storm and process drains Improved maintenance access Improved maintenance Improved O&M efficiency
Electrical System Monitoring	\$255,000	May/06	June/08	Improved maintenance Improved O&M efficiency
Headworks Screening and Grit	\$800,000	Jun/06	Dec/07	Replaced worn-out equipment Improved reliability and redundancy Complied with biosolids regulations
Digester Failure	\$700,000	May/04	Mar/08	Helped City comply with L&I requirements Helped City develop strategies for operating with reduced capacity Increased digester gas handling redundancy Provided disaster assistance after Digester No. 3 failure
Pilot Plant Planning	\$160,000	Jan/06	Nov/07	Provided infrastructure for next level of treatment pilot plants
Administration	\$4,224,583	Jan/99	Jun/08	Managed the program for delivery of scope within budget and schedule
Additional Services	\$522,046	Jan/01	Jun/08	Provided advice and assistance with plant engineering and operational issues
Management Reserve Budget				
Phase I	\$121,271,767	Jan/99	Jun/08	