Browns Point Elementary School Replacement





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

Application for GC/CM Project Delivery Approval

Submitted by

Tacoma Public Schools #10 February 26, 2016





February 26, 2016

Project Review Committee c/o State of Washington Department of Enterprise Services Engineering & Architectural Services P.O. Box 41476 Olympia, Washington 98504-1476

Attention: Danelle Bessett, Administrative Support

Dear PRC members:

We have attached our application for approval to utilize GC/CM contracting for the Browns Point Elementary School Replacement project.

Tacoma Public Schools has completed two previous GC/CM projects and currently has two others that are under construction. Key members of our Browns Point Elementary project team have been intimately involved in those projects, and will be able to utilize the "best practices" derived from our experience on those projects to improve the delivery of this project.

We also have the assistance of additional technical GC/CM experts. These include legal assistance from Graehm Wallace of Perkins Coie and advisory assistance from Doug Holen, the former director of University of Washington's Capital Projects Office South and one of the pioneers of GC/CM project delivery in the state of Washington. They will review draft GC/CM contract language and be used as a resource for this project.

We look forward to your review of our application. Should you have any questions, please contact me.

Sincerely,

watzky

Director, Planning and Construction Tacoma Public Schools #10



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

Contents

1. Identification of Applicant1
2. Brief Description of Proposed Project1
3. Projected Total Cost for the Project1
A. Project Budget1
B. Funding Status2
4. Anticipated Project Design and Construction Schedule2
5. Why the GC/CM Contracting Procedure is Appropriate for this Project
6. Public Benefit
7. Public Body Qualifications
Project organizational chart, showing all existing or planned staff and consultant roles:
8. Tacoma Public Schools Recent Construction History21
9. Preliminary Concepts, Sketches, or Plans Depicting the Project
10. Resolution of Audit Findings On Previous Public Works Projects
Attachment A – Preliminary Concepts, Sketches, or Plans Depicting the Project1
Attachment B – Prior and Current District GC/CM Experience: Historic Stadium and Lincoln High Schools Modernization
Attachment C – Potential GC/CM Preconstruction Scope of Work7



1. Identification of Applicant

(a)	Legal Name of Pu	blic Body: Tacc	oma Pu	blic Schools #10	
(b)	Address: 3223	Union Avenue S.	Secon	d Floor, Tacoma, '	WA 98409 (Planning & Construction)
(c)	c) Contact Person Name: Rob Sawatzky Title: Director of Planning & Construction				ector of Planning & Construction
(d)	Phone Number:	253-571-3350	Fax:	253-571-3360	E-mail: rsawatz@Tacoma.K12.Wa.US

2. Brief Description of Proposed Project

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

The existing Browns Point Elementary School (BPES) is located in NE Tacoma on an 18.72 acre site. The existing school is comprised of two buildings, including both the original Browns Point Elementary School (23,965 SF circa 1952) and former Meeker Middle School (50,813 SF circa 1960). The buildings are joined by a covered walk. While the site is owned by Tacoma Public Schools, they have a joint use agreement with Tacoma Metro Parks. The south side of the property is comprised of recently improved athletic fields. This area is off limits for the new building project. The site is also bisected by a storm water easement running north-south along the east edge of the building. While the site is adequate for its intended use, it does present construction challenges with the amount of space available for construction activities and keeping separation between the existing school, athletic fields and the construction area, and respecting the underground utility easement.

The project is to replace the existing facility with a new elementary school to house 550 students, at approximately 59,000 SF, and likely a 2-story configuration. The existing BPES and the community playfields must remain in use during construction. The remaining property available to develop for the new school is the NE corner of the site along 51st Street and Browns Point Boulevard. Once construction of the new building is complete, the existing buildings will be demolished and the site re-developed into parking, yards and playfields. The anticipated MACC for the project is \$18,000,000. The District and the Design Team have completed Pre-design and Programming efforts and the project is currently in early Schematic Design. The District desires to bring aboard a GC/CM contractor prior to the completion of Schematic Design. The GC/CM will provide Predesign Services throughout the remainder of the design and permitting process. It is anticipated that construction would begin in the summer of 2017 and would be completed in the summer of 2018 to allow occupancy for the fall of 2018.

3. Projected Total Cost for the Project

A. Project Budget

Costs for Professional Services (A/E team, etc.)	\$ 2,900,000
Project MACC	\$ 18,000,000
Construction Contingencies	\$ 2,000,000
Equipment and Furnishing Costs	\$ 1,900,000
Off-site Costs	\$ 400,000
Contract Administration Costs (Owner, CM, etc.)	\$ 2,000,000
Contingencies (design and owner)	\$ 1,300,000



Other Related Project Costs (permits, fees, etc.)	\$ 500,000
Sales Tax	\$ 2,000,000
Total	\$ 31,000,000

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

The project is funded from the proceeds from a \$500 million capital bond issue approved by Tacoma voters in February of 2013. Therefore, the District anticipates that sufficient funds will be available from these funds to complete the project.

4. Anticipated Project Design and Construction Schedule

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.

Project milestone dates are shown in the table below.

Project Schedule	Start	Finish
Programming (Ed Specs)	10/21/2015	3/25/2016
Schematic Design	3/9/2016	6/15/2016
Design Development	6/15/2016	9/22/2016
Construction Documents	9/22/2016	4/12/2017
Agency Review/Permitting	1/13/2017	4/12/2017
MACC Estimate/Negotiation (90% CD's)	April 2017	April 2017
Construction	5/13/2017	8/31/2018
Substantial Completion		8/6/2018
Punchlist/Final Completion/Closeout	7/9/2018	8/31/2018
Owner Move-in	8/6/2018	8/31/2018
First Day of School		9/3/2018
Warranty	8/6/2018	8/6/2019
GC/CM Schedule		
PRC Application		3/1/2016
PRC Presentation		3/24/2016
First publication of RFP for GC/CM Services		3/25/2016
Second publication of RFP for GC/CM Services		4/4/2016



B.

Project Schedule	Start	Finish
Project Information Meeting (Date subject to change.)		4/5/2016
RFP Submittal Deadline		4/11/2016
Open & Score Submittals Received	4/11/2016	4/13/2016
Notify Submitters of Most Highly Qualified Submitters & Invite to Interview		4/14/2016
Interviews with Short-Listed Firms		4/21/2016
Notify Submitters of Most Highly Qualified Firms & Invited to Submit RFFP		4/22/2016
RFFP Submittal Deadline		5/6/2016
Notify Submitters of Scoring and Most Qualified GC/CM		5/9/2016
Pre-Con Work Plan Due		5/30/2016
School Board Approval of GC/CM Selection		6/9/2016
Pre-Con Agreement Executed		6/10/2016
Pre-Con Services	6/10/2016	4/12/2017

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

The project is currently transitioning from the programming phase into schematic design. It is our intent to contract with a GC/CM and have them on board providing predesign services prior to the end of the schematic design phase.

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?

The GC/CM contracting method is appropriate for the project for the following reasons:

Complex Scheduling & Critical Phasing – Construction scheduling will have to consider that the project will be on an occupied site with children, staff and the public present. School is in session from September through June and the athletic fields that are onsite are a Metro Parks Tacoma funded facility that is used year around by the community. The schedule is tied to essential opening/occupancy dates based on the fixed academic school year calendar, complicated by anticipated public and community processes and unpredictable permitting processes for environmental and off-site elements.



Site Constraints – Heavy construction activity will occur on this site that is surrounded by a residential neighborhood on all sides; the GC/CM will need to support the District in responding to community concerns about construction impacts. In addition, the existing playfields were built using funding provided by the Metropolitan Park District of Tacoma. These fields are used year around by the community for outdoor recreation opportunity. It is required to maintain community access to the playfields during construction. Safety issues exist related to use of and separation between the construction site, the existing buildings and the playfields.

Community Interest – Tacoma Public Schools (TPS) has a strategic plan mandate to improve education through a number of factors and processes. One factor is through community involvement and joint community use. This will be a continuous facet of this project. Public workshops to solicit community input and feedback will occur as part of the design process for this project. This will impact the design and construction and require additional flexibility.

Safety – The neighborhood is predominately residential. The site fronts on 51st St. NE on the north and borders Browns Point Blvd. and 49th St. NE on the east and south. The majority of the parking and the bus loop occurs along 51st Street. Since nearly three quarters of the site is occupied by a building and playfields that need to remain during construction, it will be challenging to identify adequate areas for construction vehicles, lay-down space and job shacks without impacting parking and public access. Care will need to be taken to not disrupt the occupied elementary school and to keep the site safe for the students and the community. The neighborhood will be affected by construction traffic, noise, and dust. Having a GC/CM onboard will assist in strategizing mobilization, staging, and lay down so as not to disrupt the existing school and neighborhood any more than necessary. For these reasons, GC/CM involvement during design and planning is critical to developing a feasible site logistics and phasing plan.

Inflation – In order to facilitate construction, it is anticipated that early bid packages may be needed to facilitate a shortened construction window and avoid bidding during unfavorable timeframes. The assistance of the GC/CM contractor would be instrumental to managing and coordinating these early bid packages. Anticipated early bid packages may include the following:

- Sitework and Grading
- > Concrete Foundations and Slabs
- Structural Steel

This would also allow for the project to reach substantial completion within the 14 month construction window and prior to the beginning of the 2018 school year. Without early bid packages, bids may come in substantially higher than anticipated due to a glut of projects bidding in the early summer months. Getting early bid packages on the street would also allow us to take full advantage of the summer of 2017 as soon as school is out. If we can't get an early start, the result might be that the building would not be completed prior to the beginning of the 2018 school year and the budget could be impacted by increased escalation costs projected to be as much as 5%-6% per year in a potentially volatile market.

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.

Occupied Site – For this project, the elementary school population will remain on-site and the buildings will be fully occupied during construction. It is also required to maintain community access/use of the existing playfields during construction. Safety issues related to use of and



separation between the construction site, the existing building and the playfields is critical. Care will need to be taken to not disrupt the occupied school and playfields and to assure the safety of students, staff and the public during construction.

Critical Phasing – The new school will be built on a portion of the site while the existing facilities and fields continue to be occupied. When the new building is substantially completed, the existing building will be demolished and the area will then be converted to playfields. The project will benefit with the involvement of a GC/CM to help develop plans for barriers and controls that also maintain site access to community parking, playfields and the occupied elementary school. The construction controls will need to minimize sound, odor, and dust to address occupant safety and health concerns. The GC/CM will be able to assist in methods to isolate building construction activities from the public so that construction crews can safely perform the activities they are required to do.

Safety – Construction must be coordinated to always maintain public safety. Circulation between buildings, material drop-off, and construction parking areas will all need to be carefully planned and managed to avoid hazards from construction. Contractor lay-down space, construction access, and construction zones will all need to be planned, and may change as the project progresses.

Neighborhood Traffic/Access/Contractor Staging Constrictions – The school is located in Tacoma's Browns Point neighborhood, in the middle of an area that includes both single family and multifamily housing developments. Due to the mix of school related vehicle traffic, residential vehicle traffic, pedestrian traffic, construction traffic, public/student recreation and the movement of heavy equipment and building materials on-site and off-site will affect construction logistics. Parking and lay-down space are a concern. General project material deliveries will likely need to be specially coordinated and communicated to the neighboring community in order to not impact daily commuter traffic and quality of life.

The GC/CM Contractor would participate during pre-construction both as a valued team member and the responsible party to implement and maintain temporary construction measures, access, and lay-down for the work.

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

The GC/CM will have significant input to the design process to make sure systems and facilities, circulation, and safety considerations are all integrated into the design and bid documents and remain on budget, TPS has successfully used the GC/CM delivery method on two other recent high school projects and is currently using it on two schools (Stewart Middle School & McCarver Elementary) that are under construction. GC/CM input during the design of these facilities has proven invaluable in achieving the District goals for the design and construction of the facilities: staying in budget, minimizing the impact to the educational process, and maintaining a safe environment for staff, students and the community.

The GC/CM will provide expertise to the District and the Architect to determine the best approach to construction phasing and sequencing in order to accomplish the construction as efficiently as possible. The GC/CM will also provide value in advising on constructability, feasibility, value analysis, and other design phase deliverables. The GC/CM Contractor plays a vital role during pre-construction to assist in preparing the 100% CDs, early bid packages and most importantly to assume the cost and schedule risk of delivering the project.

The GC/CM method allows for more creative tactics to pro-actively mitigate such risks, such as pre-qualifying and/or pre-selecting a mechanical and electrical subcontractor during pre-construction. The mechanical subcontractor could be hired during pre-construction services and



participate in reviews of the documents, and provide a negotiated subcontract that better reflects the coordinated scope of work.

GC/CM involvement during the design phase is critical. Effectively planning and executing educational projects relies on a clearly developed and effectively executed plan to communicate to all project participants the specific scope, boundaries, constraints, and contingency plans for each discreet phase of the project. Leading the development of the phased work plan will be a crucial role of the GC/CM during the pre-construction phase. This plan will detail the precise steps needed by each sub-trade to effectively and safely complete the work.

If the project requires specialized work on a building that has historical significance:

Why is the building Historic? – Not applicable to this project

What is the specialized work that must be done? - Not applicable to this project

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

Manage Costs in an Inflating Market – With the GC/CM involved in evaluating the design documents and participating during the design process, it is anticipated that unforeseen impacts due to inflation conditions and changes will be greatly reduced, leading to reduced costs and to a reduced potential for schedule impacts during construction.

Having a GC/CM Contractor on board during design will help to focus design phase work to more cost effectively explore solutions that are viable, buildable, cost effective and efficient, thus enabling the District to keep better and more prudent control of construction phase changes on an occupied site.

The more complex the project and phasing, the more likely there could be claims for construction phase changes. A small delay could result in missing a critical milestone in the academic window which could result in a delayed opening.

Allocation of Risk – Our experience is that construction delay claims are not inexpensive and take a tremendous amount of staff time and resources to resolve.

- A design-bid-build contractor may not be as willing to maintain a schedule that it did not participate in developing and may have nothing to lose if the schedule slides due to scope changes.
- > The GC/CM process offers an "open book" cost accounting of the work.
- Incentives to achieve early completion and cost savings can be used to help achieve fiscal goals.
- Through pre-construction, the GC/CM will understand the work long before bids; will participate in setting schedule and packaging the scope to fit the marketplace and realistically set expectations before work is bought, lowering risk of non-responsible sub-bidding.
- > GC/CM participates and owns pre-construction cost estimating.
- > GC/CM participates actively in constructability reviews early in the design process, resulting in cost-effective and value-based solutions which the Architect welcomes.



- > Because the basic arrangement between Owner and GC/CM is relationship-based, the chance of costly litigation diminishes greatly.
- Phasing of bid buy-out and flexibility to adjust bid packages as the work is bought out allows for cost management by the Owner and GC/CM team.

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.

GC/CM provides substantial public benefit over traditional design-bid-build by:

Real Time, Market Based Cost Estimates – The GC/CM can provide a MACC and a Total Construction Cost (TCC), and more real time costs based on current marketplace results to validate scope and budgeting during the design process. The GC/CM process assists in making the project more fiscally responsible and viable to the public by having the Contractor participate in constructability reviews, value analysis, design-team contractor coordination, and use of design phase overlap to accelerate project completion, lowering construction costs and stretching the buying power of the District.

Producing a More Efficient, Accurate Phasing Plan – By engaging the expertise of the contractor who will actually be performing the work, the GC/CM will study the existing conditions, the desired scope of work, and the unique scheduling constraints of the school in order to build the most efficient phasing plan possible for the campus modernization and additions project and communicate this information to all parties involved. In the GC/CM selection, we plan to weigh the selection criteria heavily toward contractor staffing, particularly the preconstruction team and the construction superintendent.

Better Coordination of Equipment Purchases – Providing better coordination with equipment purchases including MEP coordination, vendor coordination, timing, rough-in, delivery, off-loading, and storage will benefit the public. Communicating the need for this level of coordination on a design-bid-build method is complex and very difficult to enforce with uncooperative contractors.

More Responsive and Responsible Bids – Because of the scale and complexity of this project, the District believes the risk to achieving schedule from any major subcontractors that may not be responsible sub-bidders could be great. Constructability and error/omission issues are often not raised by the Contractor until after bidding, and changes made during construction are more costly than changes made prior to bidding.

Better Ability to Accommodate Ongoing Activities at Site – The fiscal benefit of GC/CM involvement is to play a critical role in preparing a feasible and safe construction plan within an occupied neighborhood including an operating primary school on the site. The GC/CM method also allows for advanced and early work by a single contractor, reducing the risks associated with multiple prime contractors on a single site.

Complex Scheduling – The project construction schedule prepared by the GC/CM provides a more detailed and accurate CPM schedule of how the project will actually be built. This schedule will better indicate when and where major construction impacts will occur, facilitating better design phase discussions on how to reduce these impacts early in the design phase rather than during construction. This early detection will also assist school staff and administration in the preparation and notification of students, staff, visitors, and the community of upcoming construction zones, operational relocations, and site and noise disruptions before any become an issue.

Ongoing Value Analysis and Constructability Review – The GC/CM method facilitates more of an on-going Value Analysis and Constructability Review Process during design. This "ongoing" approach results in a more economical design and a better bid package with fewer change orders, and less risk



of lost time and added costs for in-value engineering at each design phase if the project goes over budget.

7. Public Body Qualifications

Description of Organization's Qualifications to Use the GC/CM Contracting Procedure:

Tacoma Public Schools has a history of placing a high priority on Capital Improvements of its facilities. In 2001, Tacoma Public Schools Board of Directors approved a 30-year plan to replace or modernize the school district's aging facilities. In April 2001, the first 10-year installment of this plan began with the passage of a \$425 million bond. In this first phase of the plan, the Tacoma Public Schools completed 27 major capital projects valued at more than \$500 million in construction value.

The GC/CM delivery method has/is being used on four previous projects for Tacoma Public Schools. The delivery method was used on two previous GC/CM pilot projects for modernization of historic schools: Stadium High School, completed 2006, and Lincoln High School, completed in 2007. Both projects were extremely successful by District standards. Stadium High School was completed on schedule and on budget. Lincoln High School was completed under budget and on schedule, and returned funds to the District as well. Both projects were bid during times of high escalation and challenging bid and market conditions. In addition to these completed projects, the District has two other projects, Stewart Middle School and McCarver Elementary School, both are historic restoration projects that are currently being constructed using the GC/CM delivery method.

Steve Murakami (TPS Chief Operating Officer) and Rob Sawatzky (TPS Director of Planning and Construction) and their staff have been intimately involved in the GC/CM projects at Stewart Middle School and McCarver Elementary School. The District hired Parametrix to supplement their staff in a Project Management and GC/CM advisory role and Greene Gasaway to supplement their staff in a Construction Administration support role on some of their current construction projects. Jim Dugan (Parametrix) and his staff have been involved in all four of the prior GC/CM projects for Tacoma Public Schools. The Parametrix team has also been involved in successfully implementing the GC/CM delivery method on a number of projects for other clients.

The track record of Tacoma Public Schools and their project management team on previous GC/CM projects has demonstrated that they have the knowledge and experience to successfully implement the GC/CM delivery method for this project.

Stadium High School

The District utilized the GC/CM project delivery in completing the complex renovation and additions of historic Stadium High School, a complex renovation of a historic structure which was completed on time and on budget despite procurement occurring during a period of significant escalation in materials prices. A key challenge of this project was to blend modern high school programmatic needs into the context of a historic building and campus and still



complete the project as originally planned and designed. This would not have been possible under a traditional D/B/B project. Jim Dugan and Paul Popovich of Parametrix served in key roles on the project.

Originally built in 1890 as a hotel, and opened as a high school in 1906, Stadium High School has the capacity to house more than 1,800 students and 110 faculty members. The historic exterior shell was restored to its original elegance and interior spaces were upgraded and modernized. Design



began in the fall of 2001, construction began in June 2004, and the project was completed on schedule and within budget in September 2006.

Lincoln High School

Lincoln High School is comprised of 172,427sf three-story main structure built in 1913, a cafeteria/commons addition (1996), a new two-story library (1987), a 62,512sf gymnasium (constructed in 1967 with a large addition in 1987), a 16,147sf Industrial Arts Building (1973), Lincoln Bowl Complex, and a two classroom structure for the horticulture department.



The Lincoln High School Renovation was scheduled to be

completed in 2008. The District needed to accelerate the completion of Lincoln High School by one year in order to accommodate program needs. The acceleration plan called for early major work in the summers of 2005 and 2006 in order to complete the main renovation work in one year with a completion in the summer of 2007. The project was completed on schedule and within budget.

Overall District Project Experience

The District has completed more than 20 major capital projects—new construction as well as modernizations—over the past 15 years. These projects were completed using funds approved by the Tacoma voters with a 2001 Bond Issue and a 2013 Bond Issue. This District has 4 projects currently under construction, 4 in design and 6 in planning. This large pool of recent construction projects as well as the experience and knowledge gained is the reason that the District will successfully deliver this project. Significant projects completed, under construction or in design/planning within the District are listed below (detailed project data for some is provided in Section 8):

Project	Delivery Method	Total Project Value	Completed		
2001 Bond Issue: The \$425 million bond program included work done on all five primary high schools in the District, along with nine middle and elementary schools receiving either remodeling or new buildings:					
Geiger Montessori	D/B/B	\$26,802105	2012		
Meeker Middle School	D/B/B	\$5,366,854	2002		
Larchmont Elementary School	D/B/B	\$2,829,915	2002		
Giaudrone Middle School	D/B/B	\$25,466,726	2003		
Mann Elementary School	D/B/B	\$7,662,287	2003		
Whitman Elementary School	D/B/B	\$6,925,144	2003		
Mount Tahoma High School	D/B/B	\$77,025,223	2004		
Foss High School	D/B/B	\$31,727,700	2005		
Stafford Elementary School	D/B/B	\$17,090,930	2005		
Fern Hill Elementary School	D/B/B	\$18,082,753	2006		
Stadium High School (GC/CM)	GC/CM	\$107,967,536	2006		
Wilson High School	D/B/B	\$28,919,765	2006		
Lincoln High School (GC/CM)	GC/CM	\$75,170,798	2007		
Gray Middle School	D/B/B	\$41,788,413	2009		
First Creek Middle School	D/B/B	\$44,067,441	2009		
Baker Middle School Replacement	D/B/B	\$47,521,000	2012		
Hunt Middle School (Replacement)	D/B/B	\$50,270,094	2012		



Project	Delivery Method	Total Project Value	Completed		
2013 Bond Issue: The \$500 million bond program includes work to be done on fourteen school facilities in the District. The following current projects were included in the Bond funding:					
Washington Elementary School (Historic Renovation)	D/B/B	\$31,000,000	2014		
Stewart Middle School (Historic Renovation)	GC/CM	\$66,000,000	Under Const.		
McCarver Elementary School (Historic Renovation)	GC/CM	\$39,000,000	Under Const.		
Wainwright Intermediate School (Replacement)	D/B/B	\$35,000,000	Under Const.		
Wilson High School (Renovation/Addition)	D/B/B	\$60,000,000	Under Const.		
Science and Math Institute @ Pt. Defiance Zoo	D/B/B	\$18,000,000	In Design		
Arlington Elementary School (Replacement)	D/B/B	\$28,000,000	In Design		
Mary Lyon Elementary School (Replacement)	D/B/B	\$28,000,000	In Design		
Browns Point Elementary School (Replacement)	GC/CM	\$31,000,000	In Design		
Grant Elementary School (Replacement)	D/B/B	\$28,000,000	In Planning		
Birney Elementary School (Renovation)	D/B/B	\$31,000,000	In Planning		
Downing Elementary School (Renovation)	D/B/B	\$30,000,000	In Planning		
Boze Elementary School (Replacement)	D/B/B	\$31,000,000	In Planning		



Project organizational chart, showing all existing or planned staff and consultant roles:



Browns Point Elementary Project Organization



Staff and consultant short biographies (not complete résumés):

Steve Murakami, REFP – Chief Operations Officer (COO), Tacoma Public Schools

Steve has 18 years of school design and construction experience. Project experience includes new and renovated elementary, middle, and high schools, as well as multiple skill centers. His experience with phased remodels gives him the insight and the technical background for executing complex remodels. Steve's passion lies with the melding of educational delivery concepts into the built environment, ultimately creating places of learning that engage the student and support the educational model.

Project	Project Value	Delivery Method	Tasks Performed	Time Involved
Browns Point Elementary School, Tacoma Public Schools	\$31,000,000	GC/CM	Program Director	2013- present
Stewart Middle School, Tacoma Public Schools	\$66,000,000	GC/CM	Program Director	2013- present
McCarver Elementary School, Tacoma Public Schools	\$39,000,000	GC/CM	Program Director	2013- present
Mary Lyon Elementary School, Tacoma Public Schools	\$28,000,000	D/B/B	Program Director	2013- present
Arlington Elementary School, Tacoma Public Schools	\$28,000,000	D/B/B	Program Director	2013- present
Science and Math Institute, Tacoma Public Schools	\$18,000,000	D/B/B	Program Director	2013- present
Wilson High School, Tacoma Public Schools	\$60,000,000	D/B/B	Program Director	2013- present
Wainwright Intermediate School, Tacoma Public Schools	\$35,000,000	D/B/B	Program Director	2013- present
Washington Elementary School, Tacoma Public Schools	\$31,000,000	D/B/B	Program Director	2012-2014
Northwest Career & Technical Academy	\$16,000,000	D/B/B	Project Manager and Lead Designer	2008 to 2010
Geiger Montessori School, Tacoma Public Schools	\$26,800,000	D/B/B	Project Manager	2009 to 2011
LaVenture Middle School, Mount Vernon School District	\$13,500,000	D/B/B	Project Manager	1999 to 2002



Rob Sawatzky – Director of Planning and Construction (Director), Tacoma Public Schools

Rob has 22 years of experience consisting of school operation and planning as well as oversight of design and construction. Project experience includes new and renovated elementary, middle and high schools. His experience with 2 current GC/CM historic remodels and 6 current design bid build projects as well as his robust educational experience gives him the insight and background for executing complex projects. Rob's passion lies in integrating educational best practice with the built environment, ultimately creating the most engaging working and learning spaces that support an educational model where imparting, thinking, creating, discovering and exchanging information is central to learning experiences for kids.

Project	Project Value	Delivery Method	Tasks Performed	Time Involved
Browns Point Elementary School, Tacoma Public Schools	\$31,000,000	GC/CM	Program Manager	2015-present
Stewart Middle School, Tacoma Public Schools	\$66,000,000	GC/CM	Program Manager	2015-present
McCarver Elementary School, Tacoma Public Schools	\$39,000,000	GC/CM	Program Manager	2015-present
Mary Lyon Elementary School, Tacoma Public Schools	\$28,000,000	D/B/B	Program Manager	2015-present
Arlington Elementary School, Tacoma Public Schools	\$28,000,000	D/B/B	Program Manager	2015-present
Science and Math Institute, Tacoma Public Schools	\$18,000,000	D/B/B	Program Manager	2015-present
Wilson High School, Tacoma Public Schools	\$60,000,000	D/B/B	Program Manager	2015-present
Wainwright Intermediate School, Tacoma Public Schools	\$35,000,000	D/B/B	Program Manager	2015-present



Jim Dugan – Owners Project Director (Parametrix)

Jim has 38 years of experience managing the planning, design, engineering, and construction of industrial, commercial, and institutional projects in both public and private markets. With formal training in civil engineering and project management, he provides his clients with project management and leadership skills needed to plan, hire, and manage design and construction consultants and contractors consistent with program requirements, budget restrictions, and schedule requirements, as well as work collaboratively with all agencies having jurisdiction. Jim is skilled at long-range strategic planning and scheduling, budget forecasting and compliance to the plan, public speaking/presentations and collaboration with stakeholders, and conflict resolution and claims mitigation.

Jim is highly experienced in alternative project delivery, including two major recent GC/CM projects in the Tacoma area.

Project	Project Value	Delivery Method	Tasks Performed	Time Involved
Stewart Middle School, Tacoma Public Schools	\$66,000,000	GC/CM	Project Director, GC/CM Coordination, PM/CM	2013-present
McCarver Elementary School, Tacoma Public Schools	\$39,000,000	GC/CM	Project Director, GC/CM Coordination, PM/CM	2013-present
Stadium High School, Tacoma Public Schools	\$107,967,000	GC/CM	GC/CM Coordination, CM (Full Time On-site During Construction)	2004 to 2007
Greater Tacoma Convention and Trade Center	\$58,200,000	GC/CM	Project Manager (Full Time On-site During Construction)	2002 to 2004
Wilson High School, Tacoma Public Schools	\$60,000,000	D/B/B	Project Director, PM/CM	2013-present
Wainwright Intermediate School, Tacoma Public Schools	\$35,000,000	D/B/B	Project Director, PM/CM	2013-present
Washington Elementary School, Tacoma Public Schools	\$31,000,000	D/B/B	Project Director, PM/CM	2012-2014
Willapa Elementary School Modernization	\$1,250,000	D/B/B	Principal In Charge	2012 to 2013
Chinook Middle School Modernization and Additions , North Thurston Public Schools	\$12,000,000	D/B/B	Principal In Charge	2008 to 2010
South Bay Elementary School Modernization and Additions, North Thurston Public Schools	\$12,000,000	D/B/B	Principal In Charge	2007 to 2009



Paul Popovich – Project Manager (Parametrix)

Paul is an accomplished Sr. Project Manager and licensed architect with over 30 years of professional experience in the Pacific Northwest. His management style brings all parties together, developing solutions that meet a client's facility needs including program overview, budget assessment, and scheduling coordination as well as specific task scheduling.

Paul's recent project experience includes Stewart Middle School and McCarver Elementary School, both GC/CM delivery, for Tacoma Public Schools where he led extensive coordination between all parties during design and construction, including the GC/CM Contractor. Paul has extensive experience coordinating with outside parties like the Historic Advisory Committee, the Office of Superintendent of Public Instruction (OSPI), and other governing agencies from inception through project closeout. Other TPS projects that Paul managed have included Wainwright intermediate School, Jason Lee Middle School, both D/B/B projects, and Stadium High School, one of the first GC/CM projects valued at greater than \$20 million. Paul also provided project management and Owner's Representative services for North Thurston Public Schools, which includes the phased renovations of South Bay Elementary and Chinook Middle Schools.

Project	Project Value	Delivery Method	Tasks Performed	Time Involved
Stewart Middle School, Tacoma Public Schools	\$66,000,000	GC/CM	Project Manager	2013-present (Fall 2016)
McCarver Elementary School, Tacoma Public Schools	\$39,000,000	GC/CM	Project Manager	2013-present (Summer 2016)
Stadium High School Historic modernization and additions	\$107,967,000	GC/CM	Design PM; On-site Construction Admin	2000 to 2007
Wainwright Intermediate School, Tacoma Public Schools	\$35,000,000	D/B/B	Project Manager	2013-present (Fall 2016)
Willapa Valley Elementary School (Willapa Valley PS)	\$1,250,000	D/B/B	Project Manager	2012 to 2013
Chinook Middle, and South Bay Elementary Schools Mod & Addns (North Thurston SD)	\$12,000,000 \$12,000,000	D/B/B D/B/B	Project Manager	2007 to 2012
Jason Lee Middle School	\$26,000,000	D/B/B	Design PM, Part-time Construction Admin	1997 to 2000



Doug Holen – GC/CM Advisor

Douglas J. Holen is the former Director of the Capital Projects Office at the University of Washington. Doug has over 35 years of experience in project management, construction, contract administration, and facilities management. At the University, Doug served as the Project Director for the project management teams responsible for the planning, design, and construction of the repair, alteration, and new construction projects in the University of Washington Medical Center, School of Medicine, Health Sciences and at the Harborview Medical Center where he oversaw several projects completed using the GC/CM method of contracting. Doug recently served as a mentor for project teams at Western Washington University utilizing GC/CM procurement for the Miller Hall Renovation (a \$45M renovation of a historic structure) and Carver Gymnasium Renovation (a \$60M renovation). He also served on CPARB for five years, and has participated in over 30 GC/CM projects.

Doug will be assisting the District in preparing and reviewing GC/CM contract documents, will provide guidance to the project team during the GC/CM selection process, and will assist as needed regarding GC/CM management issues throughout the life of the project.

Graehm Wallace – District Legal Counsel (Perkins Coie)

Graehm Wallace is a partner in the Seattle office of the law firm Perkins Coie LLP. In connection with many GC/CM projects, Mr. Wallace has provided legal assistance for school districts, including preparation of GC/CM contract documents and providing advice regarding compliance with the requirements of RCW Chapter 39.10 for GC/CM projects. For example, Mr. Wallace does all of the GC/CM contracts for the Spokane School District, including Ferris High School Modernization and Addition (2010-2012), North Central High School Classroom Addition (2013-present), and Mullan Road Elementary Modernization and Addition (2013-present). Mr. Wallace has seventeen years of experience working in all areas of construction transactions, counseling and litigation, and has provided legal assistance to over 50 Washington school districts. This work covers all aspects of contract drafting and negotiating, including preconstruction, architectural, engineering, construction-management, GC/CM, design-build, bidding, advice during construction, and claim prosecution and defense. Mr. Wallace is recognized in The Best Lawyers in America for the practice area of Construction Law.

Brian Fitzgerald, AIA – Principal, TCF Architecture

Brian has practiced Architecture for over 37 years specializing in K-12 facility design, with services provided to twenty area school districts. Brian demonstrates unique skill in assessing the feasibility of projects of varying scopes and scale, and planning logical approaches to suit challenging parameters.

A broad-scale thinker, Brian excels in leadership of planning processes and collaboration with diverse stakeholder groups. For this project, he will lead the planning, and oversee the design process, and as Principal in Charge, oversee the maintenance of budget and schedule control.

Project	Project Value	Delivery Method	Tasks Performed	Time Involved
Lake Wilderness Elementary School, Tahoma School District	\$42,858,000	GC/CM	Principal in Charge/ Educational Planner	2015 to current
Washington Elementary School and Early Childhood Learning Center, Wenatchee School District	\$35,600,000	GC/CM	Principal in Charge/ Educational Planner	2014 to current



Olympia Regional Learning	\$32,044,500	GC/CM	Principal in Charge/	2012 to
Academy, Olympia School District	(approximate)		Educational Planner	2015
Lincoln High School Modernization, Tacoma School District in collaboration with DLR Group	\$75,170,800	GC/CM	Principal in Charge/ Educational Planner	2003 to 2007

Brian Ho, AIA – Project Manager, TCF Architecture

Brian Ho specializes in managing the planning, design and construction of K-12 projects, with a special focus on elementary schools. Adept at balancing the many facets planning through development of full construction documents, Brian's style of communication invites collaboration and responsiveness from his teams. His designs create sustainable, hardworking and flexible spaces that accommodate the variety in uses required by shared public facilities.

As Project Manager/ Lead Designer, Brian will create appropriate and well-resolved design concepts, manage the site assessment and planning, and oversee the in-house production team with the goal of meeting the District's overall schedule, cost goals and specific needs of user groups.

Project	Project Value	Delivery Method	Tasks Performed	Time Involved
Lake Wilderness Elementary School, Tahoma School District	\$42,858,00	GC/CM	Project Manager/ Lead Designer	2015 to current
Washington Elementary School and early Childhood Learning Center, Wenatchee School District	\$35,600,000	GC/CM	Project Manager/ Lead Designer	2014 to current
Peter G. Schmidt Elementary, Tumwater School District	\$28,350,000 (approximate)	D/B/B	Project Manager/ Lead Designer	2014 to current
Olympia Regional Learning Academy, Olympia School District	\$32,044,500 (approximate)	GC/CM	Project Manager/ Lead Designer	2012 to 2015

Ted LeCompte – Project Architect, TCF Architecture

With 37 years of experience in the field, Ted has contributed his technical expertise toward the production of K-12 projects for the past 13. An experienced Project Architect, he is currently performing construction administration services on the new Ocosta Elementary School, a project making national headlines for its contribution toward disaster preparedness.

Project	Project Value	Delivery Method	Tasks Performed	Time Involved
Ocosta Elementary School Replacement, Ocosta School District	\$17,653,500	D/B/B	Technical Architect/ Construction Admin.	2014 to current
Washington Elementary School and early Childhood Learning Center, Wenatchee School District	\$35,600,000	GC/CM	Quality Control Architect	2014 to current
Lopez Island School Modernization, Lopez Island School District	\$9,588,000	D/B/B	Technical Architect	2015 to current
Milford High School for the Performing Arts, Milford Exempted Village School District	\$33,000,000	GC/CM	Project Architect	2008 to 2010



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.

Specific GC/CM experience for each proposed staff members and consultants is described in each of the Staff and Consultant Biographies.

The qualifications of the existing or planned project manager and consultants.

Qualifications of the project manager and consultants are described in the Staff and Consultant Biographies.

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

Parametrix was selected is under contract and will serve as the project manager for this project. Funds for the position are available from the 2013 bond issue proceeds.

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

Construction experience for each proposed staff member and consultant is described in the Staff and Consultant Biographies.

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

Consistent with previous major capital projects, this project will be managed through Tacoma Public Schools Office of Planning and Construction. The project's overall organizational format starts at the top with project reviews and approvals by TPS's School Board. From there, it proceeds to the Superintendent, then to the Chief Operations Officer and then to the Director of Planning and Construction. The District's project specific staffing will include a full-time project manager from start of design through occupancy, on-site construction representatives, and support from the Planning and Construction staff. Maintenance and Operations staff will be routinely consulted throughout the project and participate in all design phase reviews, value analysis, and constructability reviews.

Over the past decade, the District has developed a comprehensive management system that has been successful in delivering projects on time and within budget, including historic and occupied renovations, during a time of unprecedented industry-wide cost escalation.

Each project has been led by the District's Director of Planning and Construction, now Rob Sawatzky and his staff, and supplemented by consultants, Parametrix Inc., who specialize and excel in Project Management/Construction Management and GC/CM processes and procedures. The Architect, TCF Architecture, was selected based on the best expertise in design and construction of educational facilities, including projects delivered using the GC/CM delivery method. In addition, the District will employ the legal expertise of Graehm C. Wallace, a construction attorney who is highly experienced in the construction industry and with alternative delivery methods.

The roles and responsibilities of the District, Architect, and their consultants and the GC/CM have been established in a matrix of responsibilities that is published with the Request for Proposal and is included in TPS's GC/CM contract documents. The Project Manager monitors the various activities



and the deliverables established in the matrix and keeps the appropriate party on point for their respective work throughout the life of the project.

Controls are also exercised through a signature authority process for changes which is consistent across all projects in the District's Capital Program. The MACC will include a risk contingency (minimum 2% of construction cost) to be used by the team during coordination of the work and specifically during subcontract buyout. Use of any of these contingency funds by the GC/CM shall be approved by the District. The Director of Planning and Construction (Director) will have authority to approve spending from the Owner's contingency funds up to the set limits with certain controls. The Director has a \$40,000 per occurrence signature authority. This allows most items to be resolved at the site, reserving more expensive matters for further review. Changes and directives above \$40,000 are signed by the District's Chief Operations Officer or Superintendent. The day to day site Project Management team works closely with the Director to keep him fully informed of any potential cost issues.

This approach balances the need for direct decisions made by the District with capability at the site to manage emerging issues that arise, and has proven to work well across both GC/CM and Design-Bid-Build projects.

Adherence to the established scope, phasing of the work, and budget will be paramount in the management and control of the project. Construction cost estimates by the Architect and the GC/CM Contractor are reconciled at the end of each design phase. Value analysis and Constructability review will be ongoing and are an established agenda item in the weekly coordination meetings. Market prices will be constantly monitored for impacts to the current estimates or the established Total Contract Cost. Once the MACC is negotiated, the GC/CM, Project Manager, and Architect will constantly evaluate the construction documents to determine if there are any changes that impact the agreed to MACC. If so, then these changes will be brought back in line with the budget and the established MACC. At an intermediate review of the construction documents, the design team will be required to provide a list of changes/further development of design from the previous submittal as a means to identify and control scope that is not part of the Total Contract Cost (TCC). At completion of the construction documents, the GC/CM is required to review the specifications and the drawings to determine if there are any changes that may have been incorporated and to re-confirm the MACC and the TCC.

As part of the preconstruction services (Refer to Attachment C), the GC/CM will develop a subcontracting bid plan and schedule for bidding, as well as for phased construction and early procurement. The Architect's design deliverables will be integrated with the GC/CM bidding and construction plan. Early and frequent meetings with the City permit agencies, fire department, and other code officials prior to permit intakes will help ensure that permit comment requirements that may affect the MACC will be mitigated.

A brief description of your planned GC/CM procurement process

Our procurement process will build upon our previous experience with GC/CM project delivery, and will including the following:

- > Marketing of the project to experienced potential GC/CM candidates.
- > Soliciting and ranking initial Statements of Qualifications.
- > Interviewing shortlisted GC/CM candidates.
- > Soliciting pricing proposals from the highest ranked firms.
- > Recommending award to the highest ranked firm.

We anticipate being able to advertise the GC/CM request for proposals by March 25, 2013. We intend to review submittals, develop a shortlist, conduct interviews of short-listed firms, and receive



bids from selected firms by May 6 2016. We will then take the Preconstruction Services Contract with the successful firm to our Board for approval in late May. This will allow the GC/CM team to join the project team well in advance to the end of Schematic Design.

TPS intends to utilize Doug Holen, former Director, Capital Projects South at the University of Washington as an industry expert to participate with us in the GC/CM selection and contracting process. We will also use the services and advice of Graehm Wallace of Perkins Coie for legal issues during the project.

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

Tacoma Public Schools has developed standardized GC/CM RFP, selection documents, and contract specification documents. These documents were successfully utilized on the Stadium High School, Lincoln High School, McCarver Elementary and Stewart Middle School projects and we will continue to build on this experience. Our intent is to complete drafts of those documents for this project and include them for reference in the GC/CM RFP. The documents will likely include the RFP, scoring methodology, selection process, general and special conditions, general requirements, preconstruction services scope of work, and cost allocation matrix including cost items, definitions, and how paid.

We will be updating these documents to reflect current industry best practices. As part of this review, we will evaluate model documents such as those developed by the University Washington, solicit input from our outside legal counsel and revise to incorporate any recent RCW updates. Final construction contract documents will be modeled upon contract documents that our attorneys have successfully used with other Washington school districts on GC/CM projects. Attachment C includes a listing of the anticipated scope of GC/CM Preconstruction Services work.



8. Tacoma Public Schools Recent 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 No. 1	Project Name Stadium High School	Project Description Historic Additions and	Contract Method GC/CM	Planned Start June 2004	Planned Finish August 2006	Actual Start same	Actual Finish same	Original Construction Budget \$80,402,175	Actual Cost of Construction \$79,615,054	Reasons for Budget or Schedule Overruns NA
2	Lincoln High School	Modernization Historic Additions and Modernization	GC/CM	June 2006	August 2008	June 2005	August 2007	\$76,000,000	\$75,170,798	GC/CM provided opportunity to move project ahead one year
3	Baker Middle School	New replacement school on existing site	D/B/B	June 2010	August 2012	same	same	\$51,000,000	\$47,521,000	NA
4	Gray Middle School	New replacement school on existing site	D/B/B	June 2007	August 2009	same	same	\$45,000,000	\$41,788,413	NA
5	First Creek Middle School	New replacement school on existing site	D/B/B	June 2006	August 2008	same	same	\$49,000,000	\$44,067,441	NA
6	Geiger Elementary School (Montessori)	New replacement school on existing site	D/B/B	June 2010	August 2012	same	same	\$28,300,000	\$26,822,105	NA
7	Fern Hill Elementary School	Historic Additions and Modernization	D/B/B	June 2004	August 2006	same	same	\$18,100,000	\$18,082,753	NA
8	Washington Elementary School Renovation (Historic structure)	Historic Additions and Modernization	D/B/B	June 2013	August 2014	June 2013	August 2014	\$18,800,000	\$23,539,464	Board approved additional scope and alternates
9	Wainwright Intermediate School	New Replacement School on existing site	D/B/B	June 2015	August 2016	June 2015	TBD	\$23,300,000	TBD	N/A (Under Construction)
10	Stewart Middle School	Historic Additions and Modernization	GC/CM	June 2015	August 2016	June 2015	TBD	\$40,600,000	TBD	N/A (Under Construction)
11	McCarver Elementary School	Historic Additions and Modernization	GC/CM	June 2015	August 2016	June 2015	TBD	\$25,500,000	TBD	N/A (Under Construction)
12	Wilson High School	Modernization and Addition	D/B/B	June 2015	August 2016	August 2016	TBD	\$34,000,000	TBD	N/A (Under Construction)

Tacoma Public Schools' recent construction activity is summarized below.

Figure 1. Tacoma Public Schools Construction History, Last Six Years



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:

- 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

The project is currently in the programming phase and will soon be transitioning into schematic design. At this point, there aren't any conceptual plans or sections developed for the project. Something may be available by the time that we present to the PRC. See Attachment A for a conceptual site plan.

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 District has received no audit findings on any projects identified above.



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.

	Del	
Signature:		

Name: (please print) _____ Rob Sawatzky

Title: Director of Planning & Construction; Tacoma Public Schools #10

Date: 2 · 26 · 16



Attachment A – Preliminary Concepts, Sketches, or Plans Depicting the Project



Figure 1 – Existing Browns Point Elementary Site

Figure 2 – Conceptual Browns Point Elementary Site



BROWNS POINT ELEMENTARY SCHOOL REPLACEMENT CONCEPT PLAN JANUARY 7, 2016

TCF rehitecture



Attachment B – Prior and Current District GC/CM Experience: Historic Stadium and Lincoln High Schools Modernization

Stadium High School

The results of Stadium High School and Lincoln High School have demonstrated that the Tacoma Public Schools has successfully implemented the GC/CM project delivery method.

The District utilized GC/CM project delivery in completing the complex renovation of historic Stadium High School, a complex renovation of a historic structure which was completed on time and under budget despite procurement occurring during a period of significant escalation in materials prices. A key challenge of this project was to blend modern high school programmatic needs into the context of a historic building and campus and still complete the project as originally planned and designed. This would not have been possible under a traditional D/B/B project. Two of the key members of that project team, Jim Dugan and Paul Popovich, have been retained by the District to manage this project.



Figure 1. Stadium High School Modernization Key Data

Originally built in 1890 as a hotel, and opened as a high school in 1906, Stadium High School has the capacity to house more than 1,800 students and 110 faculty members. The historic exterior shell was restored to its original elegance and interior spaces were upgraded and modernized. The original theatre proscenium archway and specific interior features were kept and new spaces complement the character of the original design. A new Performing Arts Center building housing the gymnasium, performing arts, and larger program spaces is located adjacent to the original building. The completed facility encompasses more than 300,000 square feet of building space.

The building is sited to allow for both school and public use. The lobby/galleria opens onto the plaza, creating an indoor/outdoor gathering space. Extensive data/communication, mechanical and electrical systems were incorporated within the project providing a state-of-the-art facility. For example, "smart board" computer whiteboard technology was used in each classroom.



Parametrix (through Krei Architecture, a Parametrix Company) served as architect-of-record responsible for design and management of the design process, renovation of the historic school. Jim Dugan and Paul Popovich of Parametrix provided contract management services during design, and full-time, on-site construction contract administration services during construction of the Stadium High School.

Design began in the fall of 2001, construction began in June 2004, and the project was completed on schedule in September 2006, the Stadium High School centennial. Extensive value engineering was accomplished through design flexibility without diluting design integrity.

This project was a highly challenging renovation of a historic structure that had been built in 1890 as a hotel for the Northern Pacific Railroad, then after a fire converted to an urban high school in 1905.

The project entered construction in 2004 at a time of rapid escalation in labor and materials prices (particularly pipe and steel). Market material price increases and delay impacts to construction due to lack of material availability and inconsistency in deliveries as planned and promised by material providers were also significant challenges.

Highlights of strategies deployed to successfully complete the project include:

- Selection of a GC/CM to help manage contract packaging and procurement strategies. We broke the single comprehensive design package into 40 sub-packages and bid each separately to provide for the maximum flexibility in scoping and timing.
- We also secured authorization to increase the percentage of self-performed work by the GC/CM to provide greater control and utilize already in place overhead costs.
- > Extensive value analysis/constructability sessions during the CD phase that extended throughout the bidding and construction phases.
- The Owner, Architect, and Contractor agreed to pool all contingencies and to establish a "Joint Project Leadership Team" to discuss and agree on how all contingency was used. The entire GC/CM team knew as an example that tough choices due to rising material costs, impacts to overhead, as well as schedule delays would potentially occur.
- A full-time on-site Construction Administration team was established throughout construction to facilitate potential time delays due to unknowns. The on-site team provided same day clarifications and directions needed to mitigate costs, provide clarifications, and address the extensive number of unknowns that knowingly would occur opening up the origin 1890 building.



Lincoln High School

Lincoln High School is comprised of 172,427 gsf three-story main structure built in 1913, a cafeteria/commons addition (1996), a new two-story library (1987), a 62,512 gsf gymnasium (constructed in 1967 with a large addition in 1987), a 16,147 gsf Industrial Arts Building (1973), Lincoln Bowl Complex, and a two classroom structure for the horticulture department.

City of Tacoma Landmarks – The City's historic governing body required the District to maintain the look and character of the existing façade and maintain the original architectural features and detailing of the auditorium.







The original building (1913) was modernized to meet current code and educational program needs, as well as a major upgrade to the auditorium/performance hall. The Industrial Arts Building was modernized in its existing location. Increased parking space and site lighting was provided. The pool and gymnasium were upgraded, as well as improved access to Lincoln Bowl sports complex.

The Lincoln High School Renovation was scheduled to be completed in 2008. During the planned 2 years of construction, Lincoln High School was housed at the Old Mt. Tahoma High School site. This site, once Lincoln was relocated, was converted to the Gray Middle School. The District needed to accelerate the completion of Lincoln High School by one year in order to accelerate the ultimate relocation of the Gray Middle School Program to the Old Mt. Tahoma Site. The acceleration plan called for early major work in the summers of 2005 and 2006 in order to complete the main renovation work in one year with a completion in the summer of 2007.

The GC/CM contracting method was successful for several reasons:

- Scheduling Considerable construction and coordination work needed to be performed in the construction year July 2006 to August 2007. Not completing this work in time would have impacted early completion of Gray Middle School. The current view of the schedule required the general contractor to "hit the ground running" in July 2006. The ability of a GC/CM to pre-plan and prepare in advance for the construction was crucial to the success of the project.
- 2) Work Packaging and Sequencing of Work There was significant advantages to working with a GC/CM during the design to understand Owner concerns and design intent and to help produce a design that best met time and budget constraints. It also allowed the GC/CM to sequence the construction work to best achieve the design goals.



Stewart Middle School (Currently under construction as a GC/CM project.)

Stewart Middle School was constructed in 1924 for Tacoma Public Schools. The existing building is on both the city and state's registry of historic buildings. It most recently housed 500 students in 6th through 8th grade. The newly modernized school has been designed to house 650 students. The new facility will be a 125,000-square-foot two-story school with an additional full ground level floor. The square footage will be reduced from its original 147,657 square-feet with the demolition of various additions. In order to accommodate a modern educational program, the existing gymnasium, built in 1973, was demolished along with a classroom addition of the same era to accommodate a modern school program. A new full regulation gymnasium and auxiliary gym have been designed as an addition to the historic building. The grass play field will be upgraded to a regulation football, soccer synthetic field with a running track.

The project includes the renovation and modernization of the existing facility that has historical significance to the community. The building has not had a significant renovation in its history. The historic nature of the building and the amount of indeterminate assemblies and unknown features/details made this project especially worthy for GC/CM delivery. The work includes uncovering and preservation of hidden historic features, extensive replacement of interior finishes, structural upgrades and replacement of the HVAC, electrical, plumbing, and



controls systems. The project will preserve the character of the historic exterior features of the building and will include cleaning/repointing brick, replacing windows, seismically upgrading the entire facility and addressing ADA compliance issues. The project will also incorporate site design elements to develop separation between buses, parent drop-off, service vehicles and pedestrian traffic. Generally, the project will enclose a modern educational program within a historic building envelope, while being sensitive to the balance between modern programs and systems and the historic character of the entire facility.



McCarver Elementary School (Currently under construction as a GC/CM project.)

McCarver Elementary School was originally constructed in 1924 in Tacoma, Washington, for Tacoma Public Schools. The existing building currently houses approximately 425 students in Kindergarten

through 5th grade. The newly modernized school has been designed to house a student population of 425 students. The newly renovated facility will remain an 83,000-square-foot, two-story school with a partial lower level. Sharing the site/campus with McCarver Elementary is McCarver Primary School. When construction is completed on the Elementary School, some of the Primary School student population and programs will be relocated back to the renovated McCarver Elementary School.



The existing elementary school population has been moved off-site to a "swing school" during the duration of construction to ensure student safety. The project includes the renovation of the 1924 building that is on the City and State Historic Registry. The building has had minor renovations over the years. The school includes a large central auditorium that was modernized in the 1970s. Original ceiling and wall plasterwork remains above the suspended ceiling. The historic nature of the building and the amount of indeterminate assemblies and unknown features/details made this project especially worthy for GC/CM delivery. The work includes uncovering and preservation of hidden historic features, extensive replacement of interior finishes, structural upgrades and replacement of the HVAC, electrical, plumbing, and controls systems. The project will preserve the character of the

historic exterior features of the building and will include cleaning/repointing brick, replacing windows, seismically upgrading the entire facility and addressing ADA compliance issues. The project will also incorporate site design elements to develop separation between buses, parent drop-off, service vehicles and pedestrian traffic. The project will enclose a modern educational program within a historic building envelope, while being sensitive to the balance between modern programs and systems and the historic character of the entire facility.





Attachment C – Potential GC/CM Preconstruction Scope of Work

GC/CM Schematic Phase Services are expected to include:

- Prepare a detailed milestone schedule for the project from the onset of design through the completion of construction and substantial completion.
- Assist in evaluating the need for EC/CM and MC/CM delivery methods, and if selected administer the RFQ process to procure EC/CM and MC/CM team members.
- Review the schematic phase drawings, specifications & estimates and provide constructability, value engineering and scheduling comments.
- Prepare a construction cost estimate for the entire work based upon the final schematic design submission. The GC/CM and the design team will reconcile the estimates in conjunction with Tacoma Public Schools (TPS) to reduce (if necessary) the cost of the work to be within the MACC.
- Review the drawings and specifications for the schematic design submittal and make recommendations on construction phasing requirements.
- Review the record drawings and investigate the existing conditions at the Project site to ensure that the documents reflect the actual conditions on site.

GC/CM Design Development Phase Services are expected to include:

- Provide constructability comments and estimating services and evaluate critical elements of the design as the elements are formulated.
- Review the drawings and specifications, as well as component procurement packages.
- Provide comments on construction feasibility.
- Identify products or materials with long lead times for procurement.
- Make recommendations for phased construction, if appropriate.
- Propose alternative designs or materials and comments on site logistics, including the adequacy of access, site utilities, and lay-down area.
- Review the drawings and specifications for the final design development submittal and provide formal value engineering recommendations.
- Identify subcontract bid packages and material procurement packages that could be advertised prior to the completion of the Construction Documents.
- Complete an interdisciplinary plan check (QA/QC review) for the final design development submittal.
- Prepare a construction cost estimate for the entire work based upon the final design development submission. The GC/CM and the design team will reconcile the estimates in conjunction with TPS to reduce (if necessary) the cost of the Work to be within the MACC.

GC/CM Construction Document Phase Services are expected to include:

- Prepare procurement documents for long-lead-time materials if necessary.
- Revise the project schedule as required to reflect changes that have occurred during design or to reflect a change or more refined schedule for procurement of materials, subcontract buyout, or construction.
- Prepare and process the application(s) for all necessary building permits. Monitor and expedite the permitting process as necessary to ensure that the construction permits are received in a timely fashion.
- Monitor the development of the Construction Documents.
- Provide value engineering and constructability reviews of elements of the design when requested by the Design Team and TPS.



- Assist in the development of phasing requirements and safety measures required for the occupied portions of the building.
- Prepare construction cost estimates for the entire work based upon both the mid and final Construction Documents submittals.
- Complete an interdisciplinary plan check (QA/QC review) of both mid and final Construction Documents submittals.
- Verify that the Construction Documents reflect the existing conditions on-site.
- Negotiate with the District the construction services MACC, and establish the total contract cost.

