Proposal Due: July 18, 2016 - 2:00 p.m. PST

Reynolds School District #7 CM/GC Services for Reynolds High School Additions and Renovation



SKANSKA

4. PROPOSAL FORM

CONSTRUCTION MANAGER/GENERAL CONTRACTOR (CM/GC) SERVICES

Reynold School District – Reynolds High School Additions & Security Entrances District Wide

The undersigned proposer submits this proposal in response to the Reynolds School District's Request for Proposals (RFP) dated June 9, 2015, for the contract named above. The proposer warrants that proposer has carefully reviewed the RFP and that this proposal represents proposer's full response to the requirements described in the RFP. The proposer further warrants that if this proposal is accepted, the proposer will contract with the Reynolds School District, agrees to all terms and conditions found in the attached contract, and will provide all necessary labor, materials, equipment, and other means required to complete the work in accordance with the requirements of the RFP and contract documents.

No proposal will be considered unless the proposer is licensed with the State of Oregon Construction Contractors Board, pursuant to ORS 701.055 (1), prior to submitting a proposal. The proposer hereby acknowledges the requirement to carry or indicates the ability to obtain the insurance required by the contract documents. Indicate in the affirmative by initialing here:

The proposer hereby acknowledges receipt of Addendum Nos. 1, , , to this RFP. Name of

Proposer: Business Address: Telephone Number: Fax Number: Email Address:

222 SW Columbia Street, Suite 300

Portland, OR 97201

Phone 503.382-0900, Fax 503-382-0901, Tim.Baugus@skanska.com

Authorized Signature:

Printed/Typed Name: Tim Baugus

Title: Senior Vice President, Account Manager

Date: July 18, 2016

State of Oregon Construction Contractors Board License No: 153980

Note: Complete and execute this form and include as the first page of the proposal.

Reynolds School District - Reynolds High School Additions & Security Entrances District Wide Construction Manager/General Contractor (CM/GC) Services RFP



July 18, 2016

Skanska USA Building Inc. 222 SW Columbia St, Suite 300 Portland, OR 97201 Phone 503.382.0900 Fax 503.382.0901 Www.usa.skanska.com

Bob Collins, Senior Project Manager, DAY CPM Reynolds School District 1204 NE 201st Avenue Fairview, OR 97024

Re: RE: RFP – Construction Manager/General Contractor Services for the Reynolds School District - Reynolds High School Additions and Renovations

Dear Bob and members of the selection committee:

The Reynolds High School project requires teamwork, transparency, communication and experience. Skanska brings open and collaborative processes with an unmatched level of experience in K-12 building, innovative techniques and extensive in-house resources, offering the Reynolds School District a value-filled project with a client-focused approach. Our team is available to perform preconstruction activities immediately and can start construction as early as October 1, 2016. Skanska is the right choice for the Reynolds High School project because we offer the following:

K-12 Leaders: Over the last 15 years we have completed more than 170 K-12 projects with twenty school districts in Oregon and SW Washington. Many of these projects were complicated, phased projects on occupied campuses. Our team has completed multiple K-12 projects of similar scale and are committed to the success of this project. You will find that this team is accountable, listens, and finds solutions that meet your needs on all levels including fast-track schedules, cost, safety, and quality. We are confident that we will exceed your expectations for a CM/GC.

Cost and Schedule Confidence: We know you need cost and schedule certainty on this project. We have opened every one of our K-12 project on time and deliver our projects on budget. This team has proven experience with early, accurate budgeting and keeping projects on budget from the start of preconstruction through completion. Our team has a track record of less than a two percent variance in budget from our original budgets to final GMP. Our combined processes and team expertise will ensure the project costs do not exceed funds available and that the program is maximized for Reynolds School District.

Partnership - In the last 13 years, we have completed 11 school projects with DOWA-IBI, the most of any general contractor in Portland. Our integrated approach to project delivery has enabled DOWA-IBI/Skanska to drive exceptional quality and value into our projects.

Local, MWESB: Over the past 5 years Skanska has done more than \$90 million of work with subcontractors and suppliers in the Reynold's School District, \$14.9 million of this work was with MWESB subcontractors.

CM/GC Knowledge: Skanska's core business delivery method is CM/GC contracting. Over 80 percent of our work is with repeat clients. We understand the collaborative nature of the process and bring lessons learned from over 6,000 CM/GC projects.

Thank you for your time and the opportunity. We hope you agree that Skanska is the right partner to help the Reynolds School District succeed.

Sincerely,

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Tim Baugus / Senior Vice President Skanska USA Building Inc.



3.2.2.1 Management of the Work

SKANSKA

3.2.2.1 Management of the Work

A. Preconstruction Services Plan

Reynolds School District's (RSD's) goal for the Reynolds High School project is to be accountable and value minded with the public's money, be socially responsible with the procurement of the project, and provide an exceptional learning environment for its students. Skanska understands these goals and will partner with RSD, DOWA-IBI, and Day CPM to manage the CM/GC process with:

- **Commitment** Our team will work hard to support every aspect of the Reynolds High School project as a means to get the job done on time and on budget
- **Collaboration** We will work collaboratively with the team to achieve the project goals
- Accountability We will honor our word and follow through on our promises
- Respect We will treat others with respect and go out of our way to help team members be successful
- Open communication We will operate in an environment of trust and we will encourage open feedback to allow for continuous improvement
- **Value** We will provide value to the team by reducing cost and providing the maximum program for RSD.

1. Investigating Existing Conditions

The preconstruction period of this project presents a valuable opportunity to investigate existing conditions. During the summer of 2016, we will investigate the Reynolds High School site conditions. We have the technical skill and field experience to survey the building and identify and mitigate the hidden risks and opportunities. We will focus on reducing the potential for impacts from unforeseen conditions.

Our evaluation includes the following:

- Review the as-built documents
- Provide ground penetration radar and pot holing on the site to verify underground information
- Evaluate the existing structural, mechanical and electrical conditions for potential risks and opportunities.
- When school resumes in September 2016, Skanska will observe the flow of traffic and pedestrians in order to confirm phasing and logistics plans and avoid disruption and safety and security concerns for the students during the course of the project.

Responsible: David Franke, project manager; Dan Clark, senior superintendent

Deliverables: Narratives/photos

Investigating and Understanding Existing Conditions

PSU Ondine Residence Hall

During a preconstruction meeting with the structural engineer, it was determined that we should expose and test the strength of the rebar couplers in the existing concrete structure. Our exploration did not find any rebar couplers, but instead rebar alignment sleeves that did not provide any strength. The findings were given to the structural engineer and several options were developed, evaluated and priced to determine the most cost-effective solution.



RSD | Reynolds High School Additions and Renovation | 3.2.2.1 Management of the Work Page 2

2. Design and Construction Document Coordination Reviews

Our goal for design and construction document coordination is to partner with the RSD, Day CPM and DOWA-IBI to fulfill or exceed RSD's vision for Reynolds High School within the budget and schedule. This will be achieved by providing a robust coordination effort to help DOWA-IBI produce a quality set of construction documents. Our coordination approach includes:

- Preconstruction kick-off meeting This meeting lays the ground work for effective communication throughout the project and integrates the best practices methodologies as our baseline for a successful preconstruction process.
- **Constructability review** our team will review and comment on the construction documents. Our reviews include:
 - Teaming with DOWA-IBI to evaluate the best ways to build. This includes evaluation of different building systems, products and details. The result is improved quality at an equal or lower cost.
 - Coordination across design disciplines including architectural, structural, mechanical, electrical, plumbing and civil. This lowers construction costs and shortens the schedule. Skanska will use the BIM (building information modeling) model to cross reference the design elements to help improve constructability.
 - A quality control review to ensure that documents are complete and correct for bidding and construction.

The result of our coordination efforts produces increased project quality and value, on-time delivery, reduced project risk, reduction or elimination of change orders and a cohesive, well informed project team.

Responsible: David Franke, project manager **Deliverables:** Report and review of comments during design meetings

3. Design and Target Cost Validation Cost Estimating and Price Volatility

The District is spending limited bond dollars, so it is vital that we have reliable cost estimates to ensure that the project stays within the budget. Over-estimating the cost results in lost opportunities to add program, while under estimating puts the project at financial risk. On more than \$2 billion of K-12 projects, Skanska's Portland office has consistently delivered



from conceptual design to final cost with an average of 98 percent budget-to-actual accuracy. Additionally, we welcome reconciliation with other professional estimators and routinely reconcile to within one percent.

Our estimating department tracks current market trends and is constantly bidding work, so we have real-time market feedback. Currently the construction market is very busy and subcontractors are being very selective about taking on new work. We will draw upon our established relationships with the subcontractor community to get quality subcontractors at a reasonable price. We have already made great progress on our subcontractor outreach campaign for this project which we will continue through buyout. We view it as our responsibility to help make this project as attractive to potential bidders as possible to preserve the budget.

Another way that we can control costs on a project like this is through self-perform work. Skanska self-performs concrete, structural steel and rough carpentry work and has an extensive historical cost database. We will competitively bid the scopes and when we are low the District will benefit from the savings.

Design and Target Cost Validation

More and more, we are working with project teams to set responsible early budgets and design to those budgets instead of the traditional milestone estimating process. Our deep experience in K-12 building allows us to create early conceptual cost models that accurately describe what your high school program should cost. This serves as our target for each trade package and we work diligently with the design team to maintain those targets. This budget discipline keeps the project on track and prevents costly and frustrating delays due to unplanned value engineering. Although the process of putting targets on each scope of work can seem limiting, it results in creativity because it requires our team to find innovative solutions within the target budget. This participation in the design process is where we excel, bringing together our market knowledge, subcontractor relationships and deep experience to ensure success.

Cost Tracking

Our preconstruction team for the Reynolds High School project will utilize Timberline Estimating software, and On Screen Takeoff (OST), to establish and maintain an easy to follow and detailed backup between all estimate iterations. **These tools not only provide the detail, but also allow for evaluation of different options instantaneously.** During design and estimate meetings, we can evaluate different scope options with immediate feedback on any particular change and see how it affects the overall budget. These tools are accurate and fast which is what this project needs.

If the BIM models of the project are available, we will coordinate with the design team to load the model with properties that allow us to quickly extract quantities. When we spend less time measuring and counting, we can spend more time providing value added services.

Responsible: Steve Clem, estimating **Deliverables:** Comprehensive estimates

Example of On Screen Take-Off Used in Cost Estimating

ACT 104,850 SF

- Gyp Ceilings Standard Paint 843 SF
- Exposed Structure Architectural 7,768 SF
- Auditorium Suspended Acoustical Clouds 6,468 SF
- Drywall Fascia 4'h 739 LF
- ACT Mylar 4,353 SF



4. Constructability Issues and Safe Work Practices

To get the most value during preconstruction, we will conduct a constructability analysis. This analysis examines the materials, systems and elements that will facilitate the efficiency of both schedule and cost, as well as safety and security, while minimizing/eliminating the impact of the construction process on the schools operations.

Some constructability issues might include:

 Prefabricated wall panels - can expedite construction, reduce cost and provide added risk with raising large wall panels by crane. Skanska will plan



BSD Middle School - prefabrication of wall panels

this work to avoid injuries by engineering pick points and having pick plans that keep workers and the public out of harms way.

 Public right-of-way - Skanska will work with the city to close sidewalks and streets as necessary to protect RSD students and the public. We will also require all workers to wear high visibility vests and experienced flaggers will be employed to keep the public safe. This work will happen when the students are not there; during summer breaks and weekends.

Skanska shares common values with RSD. As a team we will ensure that RSD students, staff and visitors are safe. Skanska's "Care for Life" value is our top priority. We are focused on the well-being of everyone involved with our projects.

Preconstruction planning activities to ensure project safety and security include:

- Site logistics plan together with RSD and Day CPM, we will develop a plan to ensure the safety and security of the students, staff and visitors from the flurry of adjacent construction activity. Details of our plan are included in Question 3.2.2.1.7. Phasing and Sequencing.
- Prefabrication work with DOWA-IBI to design the building so we can construct as much of the project as possible in a factory setting with workers feet on the ground. The result is improved safety, schedule and cost.
- Subcontractor prequalification we review the safety qualifications of every subcontractor on our project. Those that cannot perform the work safely are excluded from the project. We will not put the students or construction workers lives at risk.

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5. Value Engineering (VE)

Phil Carter led the VE effort and saved more than \$6.4 million dollars on his last three K-12 projects. Phil will lead our team and evaluate and present viable VE options for consideration and approval. We understand that timing of VE is critical. The building systems VE needs to be done before design development starts. Ideally product and detail VE needs to be done early in the construction document process. We will always look for ways to save the RSD money and we will offer ideas throughout construction.

Skanska's Portland office has worked on more than 170 K-12 projects and know that school district maintenance budgets are typically under-funded. We will recommend options that will give RSD the opportunity to build a school that is durable, easy to maintain and energy efficient. Some of these ideas have been successful in past projects and include:

- Prefabricated concrete panels (tilt-ups) On our Redmond High School project, it saved \$1,300,000 and three months on the schedule.
- Foundation design changes the architectural design included a foundation drain and vapor retarding system but our interpretation of the geotechnical report indicated that it was not required. The question was posed to the geotechnical engineer who confirmed that it was not needed which saved the district \$132,000.
- Track material changes- a portion of the field (not the track itself) included a specialty track material that we asked if it was needed and it was not saving the district \$400,000.
- Metal panel system changes -alternate metal panel systems have saved up to \$150,000
- Window system changes alternate window systems have saved up to \$26,000.
- Acoustical deck system changes alternate acoustical metal deck systems could save up to \$330,000.

Responsible: Phil Carter, project executive **Deliverables:** Cost reduction options

Edy Ridge Elementary/Laurel Ridge Middle School, Sherwood, OR

Skanska does not stop our value engineering efforts once construction begins. After the GMP was established on the Edy Ridge Elementary/Laurel Ridge Middle School project, Skanska's team



led efforts to save Sherwood School District additional savings through the following suggestions:

- Changing air handler models
- Using an alternate sheathing product
- Raising the ball fields using excess on-site topsoil rather than exporting the material

Result of Value Analysis Change

Skanska's value engineering efforts saved the District \$540,000.

6. Schedule Change Recommendations

Occupied high school renovations and expansions are challenging. They must be phased and scheduled to ensure that the students are safe and there are no disruptions to any school activities or public events. We have developed a successful plan to complete the work safely, cost-effectively while minimizing the disruption to existing operations. During preconstruction, we will discuss our approaches with you and get your valuable input to complete the plan.

Once the phasing plan is completed, the team will build the detailed construction schedule. The team will incorporate all the school and public events that are scheduled to take place into the schedule and phasing plans to ensure there are no impacts to any events. We will also ensure that the logistics plan keeps a safe separation between the students, staff, public and the construction activities.

The following are some considerations in the sequencing and scheduling of the Reynold High School project:

- All school functions must be maintained.
- Access to each building must be available at all times. This includes access for students and first responders.
- All utilities to each space must be maintained. This includes heating, cooling, power, communication and classroom bells.

In order for the students to move into the north classrooms (phase one), it is likely that the new boiler conversion must be complete to handle this added heating load. Our plan is to complete the new boiler and the hydronic piping to the north addition in the summer of 2017. Reynolds High School will not need the boilers in the summer and the route from the boiler room to the north addition will be available while students are gone during summer break.

While some work is accelerated (like the boiler), some work is delayed in order to keep the school functioning. For example, to maintain access on the West side of the school, we intend to leave out the building addition between the learning center and life skills addition until the students are on the 2018 summer break.

One schedule challenge will be the kitchen remodel. The kitchen needs to be operational during the school year so the only option for renovation is the 12 week summer break. Our team has extensive experience renovating kitchens during the summer months and is confident that this can be accomplished.

Some of the work is disruptive, such as, heavy demolition work and utility shutdowns that are needed to bring on new systems. We schedule these activities when the students are not in the school, during summer, winter and spring holidays.



Skanska working through the Christmas holiday during a utility shutdown for a High Tech Confidential Client

Our schedule, which is included in section 3.2.2.4, was created to reflect construction sequence and duration relationships.

In order to renovate classroom spaces, the teachers must move out. We will partner with the District to minimize the moves to no more than one. Our plan involves the creation of new space in phase one so teachers can move to their new space (one move) which allows us to renovate their existing space.

Incorporate Changes to Avoid Impact to the Schedule

Skanska understands that there will be changes on the project and our job is to work to find ways to incorporate them within the schedule. The key is to be flexible and have open communication within the team. Our team is nimble and has experience on projects such as the Beaverton School Districts New Middle School that resulted in finishing a 167,000-SF Middle school on a challenging site in 15 months and will bring this same approach to the Reynolds High School.

Advice for Long-Lead Procurement Packages

The market in the northwest is very busy and lead times are growing. Skanska is continually monitoring data to stay on the cutting edge for material and labor availability both locally and nationally. This information will help the team make sure the resources we need for the project will be on site and on time. We will work with the team to:

- Review early drawings and investigate possible recommendations for materials that could save either time or money for the project.
- Identify long-lead items such as the new boiler and hydronic system to the north addition. It is likely that this needs to be operational by the time the north addition is turned over during the Christmas break 2017. We regularly order equipment early to ensure on time delivery and avoid additional cost markups.
- Other potential long lead items include new electrical services, windows, science lab casework, equipment, and fume hoods.

Responsible: David Franke, project manager; Dan Clark, senior superintendent

Deliverables: procurement schedule; Early identification of long-lead items

Aggressive Schedules and Unforeseen Conditions

The Blumel Hall student residences for Portland State University began with a very aggressive schedule. Skanska had to complete remodels of 187 residences over 9 floors in just 7 months. Once the project was underway, we discovered that the shell of building had been leaking and was full of mold.

The unforeseen mold abatement took five -six weeks to complete. Our concern was that if the subcontractors left the project, it would be difficult to get started up again. We reviewed the schedule and found ways to adjust it in order to work in other areas not affected by the abatement to keep the crews onsite.

Once the abatement was finished, we worked hard to make up the lost time on the schedule. Due to the close proximity to other residences, we were not able to work a second crew at night, but we did work 10 hour days/six days a week. Even with the unexpected issues, we were able to deliver the project two weeks early!

7. Recommended phasing and sequencing of work to maximize construction site efficiencies

The following are several key phasing and sequencing issues that will help deliver the school with as little disruption as possible while maintaining the construction schedule and keeping the school's costs low.

North and west addition - Completion of the new classroom spaces in phase one will not restrict access into the school and when complete it allows the movement of classes out of existing spaces and into the new spaces. The existing spaces are then available for renovation. A prime benefit is the early delivery of new classrooms and labs during the winter holiday break in 2017. The other benefit is the high school will not need modular classrooms that are expensive and take up valuable space.

Site utility installation - Bringing in new utilities to the new, larger school will require trenching outside the new building envelopes/construction work space. In order to avoid school disruptions, we plan to do this work during the summer of 2017 when students/staff are off site.

New entry vestibule, counseling and student services - In the beginning of **phase one** we will reroute the utilities that are currently running from the existing boiler room to the main school building on top of the covered walk way. They will be rerouted underground and will be online for the turnover of the new classrooms and science lab rooms. A temporary entrance to the school will be added north of the existing administration offices to allow student and staff access while the new entry and utility work are being performed. At the same time, we will build the new counseling and student services building, this will allow a place for the administration staff to move into temporarily while the existing administration office is renovated.

New administration and renovation of existing science

labs - will be completed in **phase two** while the new entry and vestibule are complete, providing a safe passage for students and staff around the work zone. There will be strategic shutdowns during long weekends and school breaks so that services can be maintained while school is in session. **Phase two** work will be complete when the students leave for the 2018 summer break, this allows the transition into phase three.

Kitchen, building renovation - In the summer of 2018 we will finish the final **phase three**, which includes the completion of the counseling, student services, renovation of science labs, building remodel and kitchen remodel.

We propose "pull planning" in the "big room" for all sequencing and schedule planning.

Responsible: Dan Clark, senior superintendent **Deliverables:** Phasing plans



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Legend: Fence Under Construction Building Entrance Construction Gate Construction Gate Construction Parking Secondary Construction Laydown Construction Entry for Buses & Cars

RSD | Reynolds High School Additions and Renovation | 3.2.2.1 Management of the Work Page 8



8. Assessment and recommended site logistics requirements;

All of our logistics plans center around student safety and security and being a good neighbor to the Reynolds High School and surrounding neighbors. At the same time we will maintain the construction schedule and ensure worker productivity that results in cost efficiency. Elements of our plan include:

- Building access access is provided into and out of the buildings at all times, this includes egress doors and pathways that might be in the construction zones.
- **Signage** we will provide clear signage at each phase for directing students, staff, the public, and vendor deliveries.
- **Isolation** we will isolate the construction workers from the students from the time that the workers arrive to the site until the time that they leave the site. Before any worker can work on site, they must attend our jobsite orientation and agree to all the conditions for work on site.
- **Pathways** we will establish clear construction pathways so that there are no disruptions to the school operations.
- Deliveries Materials delivered to the site will be done with consideration to the school schedule and surrounding neighbors and businesses activities. They will be planned in order to minimize disruption with safety and security

being the guiding principle for routes and times. We will also schedule our deliveries around the bus drop off and pick up schedules to avoid any conflicts with traffic flow.

- Noise reduction Our team will propose many items that can be prefabricated offsite to limit the amount of noise producing activities on site, some considerations would be framed walls and roof structure as well as any prefabricated mechanical and plumbing products.
- Clean and organized site Just-in-time deliveries to our site will help maintain a clean and organized jobsite. Our recycle center will be kept out of view and work areas will be kept clean.
- Weekly updates we conduct regular meetings with the District and Principal Wade Bakley to define upcoming work activities and to ensure there are no surprises. Threeweek look-ahead schedules for construction activities will be provided to keep everyone informed of what is going on and to facilitate needed coordination with the District and community functions that may occur at the high school.

Responsible: Dan Clark, senior superintendent **Deliverables:** Site logistic plans

9. Subcontract Plan and MWESB

The approach to engage subcontractors in buyout of the project starts early. Skanska will leverage our relationships with key subcontractors and promote excitement about the project. This will prepare key subcontractors, including local and minority subcontractors to set time aside for bidding and pricing activities.

Skanska has knowledge of current industry trends, lead times and material depletion which may become obstacles in our path to successful buyout. We will partner with the design team and RSD to mitigate any issues early in the project planning. For example, we know there is a shortage of masons in the industry so as a team we should discuss the possibility of using another material that might be better suited for the project.

Skanska's project manager David Franke will work with Diversity Manager Mel Jones to develop a plan to provide the best opportunities to maximize MWESB subcontractor participation. Plan highlights will include:

- Review MWESB subcontractors from the Skanska's database, MWESB directories for the City of Fairview, Gresham and Troutdale. We will ensure all local subcontractors and tradespeople are aware of the project and excited to be part of the team.
- Identify and incorporate MWESB subcontractor strengths related to this project
- Provide mentoring by encouraging subcontractors to use local resources and sub-tier subcontractors through bidding requirements.
- Provide options for enhancing MWESB participation such as MWESB only bid packages, mandatory sub-tier participation, and qualitative scoring for subcontracting RFPs. This information will be presented to the District, DAY CPM and DOWA-IBI for review and approval.

Responsible: David Franke, project manager **Deliverables:** Detailed plan

10. Cost Estimating Methodology

We know that the RSD maintains the highest level of fiscal responsibility to the community it serves. Fiscal responsibility and transparency are two of Skanska's values as well. We understand that RSD has no other funding source and that the project team must meet the budget. We also understand that during design if the estimate is overly conservative we may miss opportunities to enhance the Reynolds High School project.

Cost estimating methodology and systems

Our estimators have estimated more than 170 K-12 projects in the last ten years and have in-house experience in all building systems including mechanical and electrical.

Skanska will employ our budget management process from the control budget and throughout the project using Target Value Design. Once the targets are established for each package, all subsequent drawings and specifications will be measured against this control value to identify conformance or variance. We will be in constant communication with DOWA-IBI as the drawings and specifications are developed to give the team real-time feedback and creative solutions to keep the project on budget.

We will analyze any changes to cost and schedule with each revision and communicate these changes to the team. All revisions from the control budget will be tracked for decision by the District regarding whether the change will be incorporated into the project. This method will keep the project on budget during preconstruction, GMP and through project completion.

- First estimate The foundation of our budget control is a very solid and comprehensive first estimate. This estimate will become the control estimate for the life of the project and will form the basis of the Target Value Design process.
- Value options We will encourage subcontractor and vendor sponsored ideas for providing value during bidding and construction. Add alternates are also possible solutions for protecting the budget while allowing for added operational sustainability value during construction.
- Methodical subcontracting practices Bidding and subcontracting based on clear and concise documents and bid package instructions means there will be no holes or gaps that could turn into change order requests. We conduct post-bid interviews with subcontractors to ensure there are no misunderstandings about scope. This foundation of "tight" subcontracting means that we will not bring unnecessary scope gap issues to the table.
- Monitor costs during construction Every potential cost will be tracked in an open book format using a Cost Event Log (CE) and resolved quickly by our team. We will also help you to forecast potential future costs during construction. It is our experience that the faster issues are resolved, the less risk and better value we receive in quality, schedule and cost.

Responsible: Steve Clem, estimating **Deliverables:** Comprehensive estimates

Preconstruction Services for Past Projects

Philomath High School Expansion and Renovation, Philomath, OR

\$20.6 million, 140,000-SF project involved a multi-phased renovation of an active high school and community facility, including a complete demolition of the existing classroom wings and gym followed by construction of a new, two-story tilt-up classroom structure and a new administration area. Skanska added an additional classroom area to the building's south wing, and building MEP and life-safety systems were upgraded throughout. The project also add two new gymnasiums, the larger, primary gym (including a locker room) and a smaller auxiliary one. Work took place while the facility, which also houses a community pool, was partially occupied and in use.

During preconstruction, we provided: early site analysis and risk assessment, constructability reviews, value engineering ideas, early procurement strategies, life cycle analysis, green building strategies, budgets at each drawing phase, and local subcontractor involvement. This project was completed on time and under budget. We returned savings to the District from the GMP.



North Clackamas School District, Rex Putnam High School Renovation, Milwaukie, OR

\$12.4 million phased renovations to the occupied high school and included extensive work on multiple areas throughout the school. Among the areas updated were the building envelope, mechanical systems and electrical systems as well as general building maintenance, ground and site work and facility improvements.

During preconstruction, we provided: early site analysis and risk assessment, constructability reviews, value engineering ideas, early procurement strategies, life cycle analysis, green building strategies, budgets at each drawing phase, and local subcontractor involvement. This project was completed on time and under budget. We returned savings to the District from the GMP.

REX PORX PORX

Portland State University, School of Business Karl Miller Center, Portland, OR

\$47.5 million, 97,000-SF refurbishment of the existing Graduate School of Education and School of Business Administration and a new 37,000-SF pavilion and atrium. The modernization and upgrade includes additional classrooms, programs offices, and student break-out rooms. New construction includes an addition to the north end of the building. The project will also include new retail space at the street level. New and existing spaces will be connected by a glazed atrium provided for communal student activity. The project is targeting LEED Platinum.

During preconstruction, Skanska provided existing building analysis, estimating, value engineering, constructability review, logistics planning, scheduling, long-lead procurement, public bidding, and permit assistance. This project is on track to be completed on time and on budget.



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B. Understanding of Scope

The Reynolds High School Renovation is a complicated phased renovation of an occupied high school. There is significant risk on projects such as these to the students, staff, and the community if the wrong CM/GC partner is selected. Skanska has successfully completed many of these complicated occupied school projects and several with DOWA. Skanska kept the students, staff, and the community safe and maintained school operations with no disruptions. This was done through creative planning during preconstruction and project execution during construction. Key issues and potential constraints that we have identified for this project include:

- Busy market currently the construction market in the Pacific Northwest is very busy and many projects are struggling to attract qualified subcontractors which results in projects that are over budget. As a result of our long standing relationships with qualified local subcontractors, reliable estimating, creative value engineering, strategic procurement process and efficient construction delivery processes, we have an exceptional track record of attracting quality subs in busy markets. As a result we can help our clients increase value while lowering cost.
- Schedule The Reynolds School District made a promise to the community that the Reynolds High School Renovation would be ready for the students by the fall of 2018. This is an opportunity for the Reynolds School District to show the community that they can deliver on its promises. We have never delivered a school late and we will have the Reynolds High School Renovation substantially completed by August 31, 2018.
- Budget The current budget may be strained with all of the needs for this renovation. This team is committed to building the Reynolds High School to be energy efficient, durable and low cost maintenance. Our experienced school building team has unique specialties and passion for delivering schools that drive down the operating costs for school districts. The result is more of the Reynolds School District's operating funds being used for students instead of operating its facilities. Our in-house mechanical and electrical specialists can team with Interface Engineering in identifying cost effective mechanical systems that are very energy efficient. We take a value added approach to this mission. Skanska considers not only first cost but also life cycle costs to determine the most beneficial options for the MEP design of the project.

C. Work Sequencing and Phasing

In order to ensure that an occupied high school renovation is successful, there needs to be a well thought out plan that considers the school functions and the project schedule and budget. The plan needs to be developed in partnership with RSD, DOWA-IBI and Day CPM. Our team is very experienced with occupied renovation/expansions like this and will take the lead in developing, communicating and delivering a successful phasing plan. We are committed to your success and exceeding your expectations.

Details of one of our plans was discussed earlier in our response to your RFP. The results of a great plan are limited RHS inconvenience, complete access all the time, no utility disruptions, cost effective, on budget and on time delivery.

Challenge: Keeping disruptions to a minimum

Solution:

- Accomplish disruptive work during summer, Christmas, spring breaks and at night
- Use low impact tools whenever feasible. Instead of using rotohammers we would use core drills
- No deliveries during student arrival and departure times
- Preplan work well in advance and communicate potential disruptions at least two weeks in advance
- Avoid disruptions to school utilities.



Redmond High School Renovation, Redmond, OR

D. Fast-Track Projects

For more than 20 years we have been delivering fast-track, public education CM/GC projects throughout Oregon and we have never delivered a school late. These are elements in our toolbox that we use to ensure a timely delivery:

- Teamwork We staff our projects with passionate, seasoned school builders who work with the design team and owner in a true partnership throughout the life of the project. They communicate early on the critical activities that will ensure a smooth running project. Our team works with subcontractors, suppliers and permit officials to drive the schedule. Extra effort is put on the early resolution of potential risks. They know that the students are arriving on September 4, 2018 and they will ensure that the school will be ready, beautiful and a safe and secure learning environment.
- Technology We use powerful technology (Primavera P6) to assist our team to develop and update the schedule. We also use Autodesk BIM 360 Field to manage quality checklists on our iPads in the field.
- Approach Long lead and critical activities are identified and acted on early. We look for opportunities to shorten the schedule through the use of prefabrication or creative sequencing.

We know how important an on-time delivery is to RSD and we will treat the Reynolds High School as a fast-track project in our approach and team structure.

Fast Track: Beaverton Middle School

Project Manager, David Franke, is on schedule to complete a 167,000-SF middle school on a challenging site in 15 months. It was critical to the Beaverton School District bond plan to have this project completed on time which is one of the reasons they selected us - they knew we would deliver.



New Beaverton Middle School, May 17, 2016

E. Fostering Great Relationships

At Skanska we understand that our job is not just to build a building, it is also to build relationships. We know that our actions reflect directly on the reputation of Reynolds School District and how you are viewed in the community. That is why you have our commitment to act ethically, responsibly, and to be accountable to you and the community for our actions. As an extension of RSD, we will represent you in the best light at all times.

We also understand that successful projects start with a collaborate spirit, regardless of the contract structure. Skanska is committed to this collaborative project delivery. In our first team meeting we will discuss the goals of the project, needs of the school district and milestones for deliverables. Our philosophy is to be a partner and any good partnership begins with trust and open communication.

We will continually update all stakeholders on budgets during preconstruction and through the end of the project. Schedule progress and any contingency usage will be tracked and reported regularly so that everyone is as up to date and informed as we are.

Throughout construction, we will continue to facilitate communications to ensure that all stakeholders and the community are fully informed. Processes that can be used with approval from the team include:

- 1. Community/faculty notifications and impact awareness
- 2. PTA meetings and memo inserts
- 3. Monthly school bulletins construction updates
- 4. Town hall meetings to notify faculty and community of project milestones and events
- 5. Project tours for students and community members
- 6. inSite Monitor We use our proprietary inSite Monitor and app, which allow our team to remotely monitor dust, noise and vibrations in occupied areas. The project team will be able to monitor the sensors real-time on their smart phones or desktop computers and set alerts to be notified



when a sensor reaches a pre-set level. This feature will allow them to investigate and resolve any issues proactively.

 Project Corners app - Skanska has developed this new app to provide high level project information to our stakeholders. By downloading the app on iTunes, stakeholders can receive project alerts, project milestones, news and project photos.



RSD | Reynolds High School Additions and Renovation | 3.2.2.1 Management of the Work Page 13

- Events for students, staff, parents and neighbors, including: Local and Diverse Partnership 8.
 - Groundbreaking
 - -Topping off ceremony
 - Ribbon cutting
- 9. Budget transparency through continuous updates
- 10. Monthly principal meetings where risks and opportunities are shared openly
- 11. Risk Awareness
 - Subcontractor Minimize exposure, defense of bid _ documents
 - Design Changes Schedule and cost implications
 - Unforeseen conditions No Cost Change Solutions when available.

We do not anticipate any issues with the project that communication and planning cannot resolve in advance. Open communication, transparency and maintaining a harmonious relationship with RSD, Day CPM and DOWA-IBI is the key to the project's success.

Skanska understands the value of using local and diverse partnerships. Keeping bond dollars local boosts the local economy and highlights the District's diverse resources. Skanska has used many local MWESB businesses with great success including:

- Affordable Electric Inc. (DBA/MBE) - Fairview, OR
- Bright Star Electric Co. (ESB) Gresham, OR
- Dirt and Aggregate Interchange Inc. (DBE, MBE) -Fairview, OR
- Eagle Stripping Services Inc. (ESB) Fairview, OR
- QED Lab Inc. (ESB) Gresham, OR
- Reliable Fence and Construction Inc. (ESB) Gresham, OR
- WB Painting & Decorating Inc. (DBE/WBE) Gresham, OR
- Western Rebar Inc. (WBE) Troutdale, OR.

In order to help MWESB subcontractors be successful in construction, we provide training to develop their skills. These subcontractors get the opportunity to learn from and meet the people who are procuring work. Through this interaction we are able to appropriately size the scope packages to enhance minority participation.

Giving Back to the Community

Skanska's Oregon office personnel are heavily involved in the communities where we work, live and play. Among the charities and events that we support and have participated in are:

- Zoo Wildlife Board
- Oregon Zoo Zoo LaLa
- Portland Schools Foundation
- Freshwater Trust
- ACE Mentorship
- Architects in Schools
- Construction Apprenticeship
- PCC ETAP
- OAME
- Junior Achievement
- CANStruction
- Leukemia and Lymphoma Society
- Providence Festival of Trees
- NAMCO
- Street of Eames

- AMA
- Bull Session
- Wishes on Wheels
- Bowl-a-Rama
- **Better Bricks**
- CAR
- Meridian Park Gala
- St. Charles Gala
- First Tee Celebrity Golf **Tournament/Dinner**
- Gales Creek Camp
- REAP
- Light the Night (Pictured) below)
- Schoolhouse Supplies
- Women in Trades.



Women in Trades



ACE Mentorship



3.2.2.2 Personnel and Organization

SKANSKA

3.2.2.2 Personnel and Organization

A. Project Organization Chart



Staff Responsibilities

| Employee and Title | Duties and Responsibilities |
|---|---|
| David Franke Project Manager | Project Management/QA/QC: Day-to-day point of contact responsible for technical and managerial leadership, coordination of subcontractors. |
| Dan Clark Senior Superintendent | Construction Management and Supervision: Responsible for onsite activities, supervises, sequences, coordinates, monitors work to ensure completion. |
| Phil Carter Project Executive | Construction Management and Project Management: Oversees construction, leverages experience and expertise to ensure project remains on schedule and within budget. |
| Jennifer McMullen Vice President Safety | Safety: Leverages in-depth knowledge of safety trends and risk assessment methods to offer valuable insights on advancing project's safety and health. |
| Steve Clem Vice President Preconstruction | Estimator: Cost estimating, GMP development, value engineering, and constructability review efforts. |
| Tim Baugus Account Manager | Company Executive: Direct oversight for team, provides continuity from preconstruction through construction phase. Responsible for project and has authority to bind the firm. |
| Brian Busby Senior Project Engineer | Assist Project Management/QA/QC: Responsible for submittals, RFI's and change orders. Assists with scheduling, ordering, material tracking and meetings. |

B. Team Work Percentage and Location

| Employee | David Franke | Dan Clark | Brian Busby | Phil Carter | Jennifer McMullen | Steve Clem | Tim Baugus |
|---------------------------------|-----------------|----------------|----------------|----------------|----------------------|---------------|---------------|
| Design Location | Portland | Portland | Portland | Portland | Portland | Portland | Portland |
| Construction Location | Onsite | Onsite | Onsite | Office | Office | Office | Office |
| Design Work Percentage | 60 percent | 30 percent | 20 percent | 25 percent | 5 percent | 35 percent | 5 percent |
| Construction Work Percentage | 100 percent | 100 percent | 100 percent | 25 percent | 5 percent | 5 percent | 5 percent |

C. Team Resumes

Please find the team resumes at the end of this section.

D. Company Organizational Chart



Skanska USA Building will be providing all personnel and equipment for this project.

David Franke Project Manager



David serves as the day-to-day point of contact during the construction phase. He is responsible for the technical and managerial leadership of the project and for coordination of subcontractor support resources. David manages the coordination of all project documents, and reviews and updates the project schedule to ensure the timely completion of the project. He chairs and records all project meetings, approves subcontractor pay applications, negotiates subcontractor change requests and issues the monthly progress report.

16 years in industry

15 years with Skanska

George Fox University B.S., Project Management

University of Phoenix B.A., Business Management

Beaverton School District, New Beaverton Middle School, Beaverton, OR

(K-12, New Building) \$52 million, 166,000-SF new middle school built to house 1,100 students. This building features classrooms, science labs, library, main and auxiliary gymnasiums, alcove courtyards, outdoor learning space and a terrace attached to the art room. The cafeteria and common areas have many exposed concrete elements such as stairs and floors, and large windows to provide natural day light. A pedestrian walkway connects the north and central wing on the second floor.

Cost: \$51 million; **Dates:** May 2015 - July 2016 **Reference:** Scott Johnson, Beaverton School District, Project Manager, 503.591.4552

Woodland School District, Woodland High School, Woodland, WA

(K-12, New Building) \$44.7 million, 150,000-SF new replacement high school. This phased project began in late winter 2013 and was open fall of 2015. Classrooms are supported by areas for administration, academic and career counseling, a library, computer rooms, and a cafeteria located in a large central Commons. The Commons are sized to provide food service and function as a performance space that includes a stage and retractable theater seating.

Cost: \$45 million; **Dates:** October 2013 - July 2015 **Reference:** Michael Green, Woodland School District, Superintendent, 360.841.2700

Confidential High Tech Client, D1D 1272 Conversion, Hillsboro, OR

(Occupied Renovation, Active Campus) This Construction Program added P1272R Tools and related BB/ PSSS/Flex to the D1D Fab, RFS2, CUB3 Facilities. In addition, the team was responsible for construction of D1D/RFS2/CUB3 modifications to enable the D1X Factory construction project, installation of new P1272 Tools and AMHS systems in the new D1X Facility. Lastly, P1274TD Tools and all related BB/PSSS/FLEX scope are incorporated into this project. This program also includes RP1 BB/PSSS/FLEX and TI, as well as the RA Site Labs and Sort Scopes.

Cost: Confidential Dates: March 2011 - December 2013 **Reference:** Confidential

Confidential High Tech Client, Progressive Build, Hillsboro, OR

(Occupied Renovation, Active Campus) Project consists of major additions and renovations to Basebuild, PSSS, and Flex areas in the D1D, CUB 3, and RP1 facilities as well as lab and sort floor renovations. The majority of the Basebuild systems are being upgraded to increase capacities to existing systems in support of new owner technology. Work is being performed while factory manufacturing operations are occurring.

Cost: Confidential **Dates:** July 2008 - October 2009 **Reference:** Confidential

Resume Page 1

Dan Clark Senior Superintendent



Dan is located onsite full-time during the construction phase and responsible for onsite activities. He supervises, sequences, coordinates and monitors all work to ensure that it is completed to the highest quality standards. Dan manages the day-to-day efforts of the subcontractor field staff to include all subcontractor meetings and pre-task planning. Also, he assumes a role in the preconstruction phase providing input and direction in the constructability reviews, logistics and safety planning. Dan ensures the jobsite is safe, clean and secure.

27 years in industry

1 years with Skanska

Portland Community College

A.S., Building Construction Technology

OSHA 30

VP - General and Concrete Contractors Association

Trustee on the Board - Oregon Washington Employers Apprenticeship and Training Trust

*Project completed before joining Skanska

Confidential - Skanska USA Building Inc.

Portland Public Schools, Franklin High School Renovation, Portland, OR

(K-12, Renovation/Expansion) \$88 million, 287,000-SF renovation project includes approximately 136,000-SF of new construction and 143,000-SF of renovation of existing buildings. Originally constructed in phases in 1915, portions of Franklin High School have been deemed historically significant. The project is seeking LEED Silver certification.

Cost: \$88 million; **Dates:** June 2015 - July 2017 **Reference:** Ken Fisher, Portland Public Schools, Program Manager, 503.916.3579

Clackamas Town Center Renovation and Expansion, Clackamas, OR*

(Occupied Renovation, Active Campus) \$75 million extensive renovation of the Clackamas Town Center mall. The scope included a new six-story, design-build parking garage, seven new buildings, two building pads for stand-alone restaurants and outdoor plazas with four outdoor glass canopy covered escalators. The interior renovation included demolition of the existing food court, elevator addition, and a movie theater and a ice rink addition that doubled the food court in size. The project also included reconfiguration of all parking lots including new curbs, landscaping and new storm water treatment facilities

Cost: \$75 million; **Dates:** January 2005 - November 2007 **Reference:** Richard Ryberg, Former Construction Manager, General Growth Properties, 503.260.0093

Washington Square Phase I and II, Tigard, OR*

(Occupied Renovation, Active Campus) \$40.5 million, 415,000-SF construction of a five-story parking garage, two sky bridges and mall utility rerouting and upgrades. Scope also included a two-level structural steel mall addition with a service tunnel below grade connecting the new structures with the existing mall. Construction also involved a two-story parking garage and mall expansion.

Cost: \$40.5 million; **Dates:** April 2003- November 2004 **Reference:** Rick Beason, Former Construction Manager, Macerich 206.919.0362 – Rick is currently employed at Center Cal Properties.

Maryville Nursing Home, Beaverton, OR*

(Occupied Renovation, Active Campus) \$3.4 million 12,000-SF addition of a skilled nursing wing with additions and remodels to existing dining areas and a physical therapy wing – construction is wood framing on a concrete crawl space foundation with brick, cedar and cement board siding.

Cost: \$3.4 million; **Dates:** April 2014 - March 2015 **Reference:** Bob Burns, Former Project Manager, Specht Properties 503.781.4793

Brian Busby Senior Project Engineer



Brian in onsite full time throughout construction. He is responsible for contracts, submittals, RFIs and change orders, and assists the project manager with bid packages, procurement, schedule reporting, cost reporting and permitting. Brian tracks and inspects material deliveries and assists with project status reports and meetings.

11 years in industry

1 years with Skanska

Dunwoody College of Technology Construction Project Management **Portland Public Schools, Portland Public Schools Franklin High Renovation,** Portland, OR (K-12, Renovation with New Construction) \$88 million, 287,000-SF renovation project with historical components. The project includes approximately 136,000-SF of new construction and 143,000-SF of renovation of existing buildings. Originally constructed in phases in 1915, portions of Franklin High School have been deemed historically significant. The project is seeking LEED Silver certification.

Cost: \$88 million; **Dates:** June 2015 - July 2017 **Reference:** Ken Fisher, Portland Public Schools, Program Manager, 503.916.3579

Woodland School District, Woodland High School, Woodland, WA

(K-12, New Building) \$45 million, 150,000-SF new replacement Woodland High School. This two phase project began in late winter 2013 and completed for the 2015-16 school year. Classrooms are supported by areas for administration, academic and career counseling, a library, computer rooms, and a cafeteria located in a large central commons. The commons is sized to provide food service and function as a performance space that includes a stage and retractable theater seating.

Cost: \$45 million; **Dates:** October 2013 - July 2015 **Reference:** Michael Green, Woodland School District, Superintendent, 360.841.2700

Target Corporation, Minneapolis, MN*

(Renovations Expansions, Occupied Campuses) As Senior Project Lead Brian was responsible for creating scope, schedule and budget for merchant driven multi-location projects throughout the entire Target chain ranging in cost up to \$15,000,000. Brian managed expectations of various cross-functional teams to ensure optimal outcomes for all vested parties and created new workflow processes for utilizing existing facilities service contractors to complete various scopes of work for the interior construction team.

Cost: \$15 million; **Dates:** October 2013 - July 2014 **Reference:** Dan Aherns Target Corporation, Program Manager, 800.394.1885

Target Corporation, Minneapolis, MN*

(Renovations Expansions, Occupied Campuses) As the owner's representative Brian coordinated multiple store remodels simultaneously in the Tacoma market. He oversaw onsite construction for three unique urban format retail stores and navigated challenging developer negotiations for a new store development in the San Jose area. Brian also managed the on-site construction for a revolutionary new electronics and entertainment layout in a live store environment as well as created numerous best practices and training documents to assist in construction management development.

*Project completed before joining Skanska

Confidential - Skanska USA Building Inc. **Cost:** \$42 million; **Dates:** November 2010 - October 2013 **Reference:** William Heitzman, Target Corporation, Regional Owners Site Representative, 800.394.1885

Phil Carter Project Executive



Phil provides direct management oversight for the project team. He provides continuity from preconstruction through the entire construction phase and ensures the appropriate resources are available for the project. He takes an active role in key milestone events in the preconstruction phase to include the partnering session, GMP development, value engineering, constructability and schedule reviews. Phil oversees construction and leverages his experience and expertise to ensure the project remains on schedule and within budget.

34 years in industry

19 years with Skanska

University of Nevada Reno B.S., Civil Engineering

OSHA 10

Philomath High School Renovation and Expansion, Sherwood, OR

(K-12, Renovation with New Construction) \$20.6 million, 140,000-SF project involved a major, multiphased overhaul and occupied renovation of an active high school and community facility, including a complete demolition of the existing classroom wings and gym followed by construction of a new, two-story tilt-up classroom structure and a new administration area. Skanska added an additional classroom area to the building's south wing, and building MEP and life-safety systems were upgraded throughout. The project also add two new gymnasiums, the larger, primary gym (including a locker room) and a smaller auxiliary one. Designs honor the community's logging roots by utilizing large timber framing elements. Work took place while the facility, which also houses a community pool, was partially occupied and in use.

Cost: \$38.6 million; **Dates:** September 2007 - June 2009 **Reference:** Dan Jamison, Sherwood School District, Former Superintendent, 503.542.4325

Redmond School District, Ridgeview High School, Redmond, OR

(K-12, New Building) \$63 million, 276,000-SF new high school facility includes 32 classrooms, 17 labs, student collaboration areas, and complete theatrical and athletic facilities. The new facility accommodates 1,400 students. The project was built LEED Gold certified and includes photovoltaic elements to help provide power to the school.

Cost: \$63million; Dates: September 2009 - February 2012 **Reference:** Jerry Milstead, Redmond School District, 541.306.0844

Sherwood School District, Sherwood High School Renovation and Addition, Sherwood, OR (K-12, Renovation, Occupied Campus) \$33.5 million, 103,500-SF multiple-phase renovation of a high school. Among the areas renovated or expanded were the general classroom areas, music department and industrial arts areas as well as the kitchen, gym, locker rooms and library. Throughout the facility cosmetic upgrades were performed while the commons was renovated following a roof structure bump-up.

Cost: \$33.56 million; **Dates:** July 2007 - December 2008 **Reference:** Dan Jamison, Sherwood School District, Former Superintendent, 503.542.4325

Portland Public Schools, Franklin High School Renovation, Portland, OR

(K-12, Renovation with New Construction) \$88 million, 287,000-SF renovation project includes approximately 136,000-SF of new construction and 143,000-SF of renovation of existing buildings. Originally constructed in phases in 1915, portions of Franklin High School have been deemed historically significant. The project is seeking LEED Silver certification.

Cost: \$88 million; **Dates:** June 2015 - July 2017 **Reference:** Ken Fisher, Portland Public Schools, Program Manager, 503.916.3579

Confidential - Skanska USA Building Inc.

Jennifer McMullen Vice President Environmental Health and Safety



Jennifer has a masters in Engineering and drives results-oriented environmental, health and safety (EHS) initiatives, offering over 15 years of industry experience, implementing strategic improvement initiatives throughout diverse work environments. She is a focused program manager with proven ability to lead cross functional teams, driving elegant solutions to complex opportunities. Leverages in-depth knowledge of safety trends and risk assessment methods to offer valuable insights on advancing EHS program health.

20 years in industry

2 years with Skanska

University of

Tennessee M.S., Industrial Engineering (Ergonomics/Human Factors Engineering)

University of Tennessee

B.S., Mechanical Engineering (Biomedical Engineering concentration)

Ergonomics

First Aid/CPR

IFE Orientation

OSHA 510

Supervisory Skills Training

Confidential - Skanska USA Building Inc.

Beaverton School District, New Beaverton Middle School, Beaverton, OR

(K-12, New Construction) \$51 million, 166,000-SF new middle school built to house 1,100 students. The school will be a two-story structure comprised of structural concrete, steel framing, and precast concrete panels. The project has a \$1.5 million site package that includes baseball, football and soccer fields as well as a covered play area. The school is being built on a 16-acre site

Cost: \$51 million; **Dates:** May 2015 -July 2016 **Reference:** Scott Johnson, Beaverton School District, Project Manager, 503.591.4552

Portland Public Schools, Franklin High School Renovation, Portland, OR

(K-12, New Building, Renovation) \$88 million, 287,000-SF renovation project includes approximately 136,000-SF of new construction and 143,000-SF of renovation of existing buildings. Originally constructed in phases in 1915, portions of Franklin High School have been deemed historically significant. The project is seeking LEED Silver certification.

Cost: \$88 million; **Dates:** June 2015 - July 2017 **Reference:** Ken Fisher, Portland Public Schools, Program Manager, 503.916.3579

Beaverton School District, New Beaverton Middle School, Beaverton, OR

(K-12, New Building) \$51 million, 166,000-SF new middle school built to house 1,100 students. The school will be a two-story structure comprised of structural concrete, steel framing, and precast concrete panels. The project has a \$1.5 million site package that includes baseball, football and soccer fields as well as a covered play area. The school is being built on a 16-acre site.

Cost: \$51 million; **Dates:** May 2015 - July 2016 **Reference:** Scott Johnson, Beaverton School District, Project Manager, 503.591.4552

Confidential High Tech Client, Confidential Project, Hillsboro, OR

(Active Occupied Campus) Project consists of major additions and renovations to basebuild, bulk gas and chemical systems, and clean room flex areas in the D1D, CUB 3, and RP1 facilities. Significant projects included a new 480v. electrical substation addition, capacity upgrades to the VOC exhaust systems, extensive chemical treatment skid expansions and environmental upgrades to the main boiler system. The majority of the Basebuild systems are being upgraded to increase capacities to existing systems in support of new owner technology. Work was performed while factory manufacturing operations were occurring.

Cost: confidential; **Dates:** February 2013- September 2016 **Reference:** Confidential

RSD | Reynolds High School Additions and Renovation | 3.2.2.2 Proposed Personnel and Organization Resume Page 5

Tim Baugus, LEED AP Senior Vice President/Account Manager



As one of Oregon's true K-12 construction leaders, and a conscientious steward of public funds, Tim takes great care to ensure his clients are thoroughly satisfied throughout his projects. His extensive relationships with subcontractors and suppliers throughout the Northwest make him an invaluable resource for the team.

31 years in industry

27 years with Skanska

Arizona State University B.S., Construction Management Philomath High School Renovation and Expansion, Sherwood, OR

(K-12, Renovation with New Construction) \$20.6 million, 140,000-SF project involved a major, multiphased overhaul and occupied renovation of an active high school and community facility, including a complete demolition of the existing classroom wings and gym followed by construction of a new, two-story tilt-up classroom structure and a new administration area. Skanska added an additional classroom area to the building's south wing, and building MEP and life-safety systems were upgraded throughout. The project also add two new gymnasiums, the larger, primary gym (including a locker room) and a smaller auxiliary one. Designs honor the community's logging roots by utilizing large timber framing elements. Work took place while the facility, which also houses a community pool, was partially occupied and in use.

Cost: \$38.6 million; **Dates:** September 2007 - June 2009 **Reference:** Dan Jamison, Sherwood School District, Former Superintendent, 503.542.4325

North Santiam School District, Stayton Elementary School/Middle School and Sublimity Schools Renovations, Stayton and Sublimity, OR

(K-12, Active Campus) \$6.7 million, 68,000-SF addition and renovation for the Stayton Elementary School and Sublimity School. Renovations included window replacements, seismic upgrades, mechanical upgrades and ADA upgrades. The Stayton ES addition is an 8,000-SF kitchen, multi-purpose room, restrooms and two new classrooms. The Sublimity addition includes two classrooms. All of the remodel work occurred in the summer to avoid disrupting the students.

Cost: \$6.7 million; **Dates:** May 2014 - December 2014 **Reference:** Andy Gardner, North Santiam School District, Superintendent, 503.769.2171

Portland Public Schools, Franklin High School Renovation, Portland, OR

(K-12, Renovation with New Construction) \$88 million, 287,000-SF renovation project includes approximately 136,000-SF of new construction and 143,000-SF of renovation of existing buildings. Originally constructed in phases in 1915, portions of Franklin High School have been deemed historically significant. The project is seeking LEED Silver certification.

Cost: \$88 million; **Dates:** June 2015 - July 2017 **Reference:** Ken Fisher, Portland Public Schools, Program Manager, 503.916.3579

Woodland School District, Woodland High School, Woodland, WA

Cost: \$45 million; Dates: October 2013 - July 2015

(K-12, New Building) \$45 million, 150,000-SF new replacement Woodland High School. This two phase project began in late winter 2013 and completed for the 2015-16 school year. Classrooms are supported by areas for administration, academic and career counseling, a library, computer rooms, and a cafeteria located in a large central commons. The commons is sized to provide food service and function as a performance space that includes a stage and retractable theater seating.

Confidential - Skanska USA Building Inc.

Reference: Michael Green, Woodland School District, Superintendent, 360.841.2700

RSD | Reynolds High School Additions and Renovation | 3.2.2.2 Proposed Personnel and Organization Resume Page 6

Steve Clem, LEED AP, BD+C Vice President Preconstruction



Steve is the Vice President of Preconstruction for Skanska's Oregon office, and is personally involved in the cost estimating, GMP development, value engineering, and constructability review efforts for every project the office undertakes. He works closely with the construction team to develop the bid packages and determine best value recommendations. As a project manager for Skanska, Steve was involved in many different kinds of projects, from healthcare to office facilities, and has carried that knowledge to his current role.

19 years in industry

19 years with Skanska

University of Puget Sound B.S., Physics

University of Oregon M.S., Graduate Studies Physics

LEED AP BD+C

LFA - Living Future Accredited

OSHA 10

SAVE International Associate Value Specialist

USGBC, Cascadia Chapter USGBC Member

Member, Living Future Institute Member

Confidential - Skanska USA Building Inc. **Sherwood School District, Edy Ridge Elementary and Laurel Ridge Middle Schools,** Sherwood, OR (K-12, New Building) \$38.6 million, 160,000-SF new school facility features separate facilities for elementary and middle school students, with shared common spaces, built on a 29.5-acre site. The school can accommodate up to 1,100 students, and features large windows to take advantage of natural lighting and polished concrete floors. Work on the project included offsite improvements such as sewer and water line improvements. The project achieved LEED Gold certification.

Cost: \$38.6 million; **Dates:** September 2007 - June 2009 **Reference:** Dan Jamison, Sherwood School District, Former Superintendent, 503.542.4325

Beaverton School District, New Beaverton Middle School, Beaverton, OR

(K-12, New Building) \$51 million, 166,000-SF new middle school built to house 1,100 students. The school will be a two-story structure comprised of structural concrete, steel framing, and precast concrete panels. The project has a \$1.5 million site package that includes baseball, football and soccer fields as well as a covered play area. The school is being built on a 16-acre site.

Cost: \$51 million; **Dates:** May 2015 - July 2016 **Reference:** Scott Johnson, Beaverton School District, Project Manager, 503.591.4552

Oregon Episcopal School, Portland, OR

(K-12, New Building, Occupied Campus) \$11.5 million, 47,000-SF new lower school for the Oregon Episcopal School. The project will be a 2.5-story building built on a sloped site currently occupied by the beginning school, which will be demolished as a portion of the work. The project scope also includes site improvements, a new covered play area, development of new playground spaces, relocation of a driveway adjacent to the site, and new storm water treatment facilities.

Cost: \$11.5 million; **Dates:** June 2015 - August 2016 **Reference:** John von Behren, Oregon Episcopal School, Director of Facilities, 503.768-3161

Portland Public Schools, Franklin High School Renovation, Portland, OR

(K-12, New Building, Renovation) \$88 million, 287,000-SF renovation project includes approximately 136,000-SF of new construction and 143,000-SF of renovation of existing buildings. Originally constructed in phases in 1915, portions of Franklin High School have been deemed historically significant. The project is seeking LEED Silver certification.

Cost: \$88 million; **Dates:** June 2015 - July 2017 **Reference:** Ken Fisher, Portland Public Schools, Program Manager, 503.916.3579



3.2.2.3 Cost Management

SKANSKA

3.2.2.3 Cost Management

A. Approach to Cost Estimating and Value Engineering

Skanska has worked with multiple school districts across the state, and we understand how important it is for Reynolds School District to keep its promises to the community. We will help you uphold your commitment for what will be built, but also when it will be completed and how much it will cost. We are experts at helping school districts build successfully, and, as your partner, we will work with you to make sure the commitments made to the community through the Bond Campaign are kept.

We know the project budget cannot exceed the dollars available. We also know that you need to have confidence in the budgets you receive from your CM/GC so you can make good decisions. Skanska's in-house multidisciplinary preconstruction Estimating Services Group allows us to provide unmatched, accurate budgets early on. This group has extensive experience in engineering, architecture, mechanical and electrical systems, construction and procurement. All of our estimating is done in-house. We secure subcontractor involvement to certain major trades in the early stages of preconstruction, and involve these trades more as we approach the development of the GMP.

Preconstruction Methodology

Successful preconstruction starts with good communication and partnership. To facilitate communication, Skanska will develop a plan for the construction of the project. This plan is called the Project Execution Plan (PEP) and becomes the road map for project success. Once the PEP is approved by all team members (Reynolds School District, Day CPM, DOWA-IBI and Skanska) the preconstruction processes can begin in earnest.

The services we will provide include:

- Detailed Estimates Skanska will perform a detailed review of the design, including a complete detailed in-house estimate and a detailed narrative stating what the basis of the estimate is. This detailed information is reviewed and scrutinized by the team (Skanska, Reynolds School District, Day CPM and DOWA-IBI) and required revisions will be incorporated to provide a strong control estimate. This collaborative approach ensures we have a complete and consistent scope aligning with the budget and competitive pricing.
- Value Engineering (VE) On public projects such as

the Reynolds High School project, we work hard to build facilities the community will take pride in while spending the public dollars wisely. Our extensive experience on school projects has reinforced the importance of working with multiple stakeholders, from board members to facilities personnel to the community at large.

Part of delivering the best value is weighing first costs against life cycle costs. We will not present ideas that cut costs up front and leave RSD with expensive maintenance or replacement costs down the road. In addition, we will never stop value engineering on your project. Skanska's company culture and reputation is based on client satisfaction, and our open-book value engineering process means that we will continue to return cost savings to you, even after executing the GMP.

Skanska is uniquely qualified to guarantee costs for your project because of our relevant experience with similar projects throughout the region, and coupled with our knowledge of the local construction market conditions, we will ensure an accurate and complete GMP.

Additional services we provide during preconstruction are scheduling, logistics planning, subcontractor outreach, BIM modeling and sustainability consulting.

VE: Ridgeview High School

As the school district's CM/GC partner and advocate on the Ridgeview High School project, we took

great pride in generating solutions that cut costs while adding value. We ground and overlaid the existing road in lieu of removal and replacement, a strategy that supported the client's sustainability goals



while saving \$90,000. Additionally, Skanska brought a structural solution to the table that met the architect's goals, maximized the schedule, employed local workers and benefited the project's bottom line. By integrating tilt-up concrete construction into the heart of the design, we were able to bring savings to the school district well in excess of \$5 million.

B. Cost Tracking

Open communication is on of Skanska's core values and the key to a successful project. We want our customers to feel confident in our cost management efforts, therefore we utilize an open book policy and share cost information throughout the entire duration of the project. We are able to provide immediate updates through our accounting reporting system at any given time as requested by RSD, DOWA-IBI or Day CPM.

Through the budgeting phase we will be utilizing our estimating software with the most current rates and costs that we have tracked for all scopes. This process will be completely transparent as we move through all stages of the project from conceptual to GMP.

We utilize the software Prolog to track all costs on the project. Every potential cost from RFI responses to revisions to scope through the submittal process and owner requested changes are entered in Prolog and tracked until cost has been closed out.

Along with up-to-date cost reports provided in our weekly owner meeting we will provide a full monthly report with project updates, schedule, pictures and overall status of cost management.

C. Contingency

Protecting the budget is a business fundamental. Contingency is an important aspect of the CM/GC process and is managed by the collective team in an open-book environment. For the Reynolds High School project, we recommend three types of contingency that are managed through the preconstruction and construction process:

- CM/GC estimating contingency
- CM/GC construction contingency
- Owner contingency.

These contingency amounts are established by the team based on the development of the design at each stage of the project. As the project scope narrows down to the final design and the GMP is established, the contingencies will be reduced to an amount the team feels is appropriate to carry forward to avoid budget challenges.

Skanska will provide Reynolds School District and Day CPM with an accounting of the portion of the CM/GC contingency that the contractor intends to use. During construction, Skanska will inform RSD of contingency status at regular project meetings so that a clear sense of issues can be understood. Skanska will identify saving early to allow RSD to utilize the finds as needed.

Reducing Contingencies

The planned contingencies will be reduced methodically during preconstruction as more is known about the project and as risks are mitigated. We have found great success using a detailed contingency worksheet that allows us to release contingency by bid package once the estimating risks have passed. During construction, unused CM/

GC construction contingency can be reduced and returned to RSD after all significant potential exposure issues have been identified and resolved. For this type of project, we recommend that these decisions be made with a conservative mindset. All contingency reduction discussions will be team decisions and will be discussed openly.

D. Documenting the GMP

The GMP will be developed listing all the components of the documents, which can be sorted in CSI format for ease of tracking. Skanska is a proponent of very detailed estimates that eliminate allowances and lump sums wherever practical. We are guaranteeing the entire GMP, this allows the entire team to have clarity of the scope. We can also sort the estimate by bid package, which allows for easy comparison with subcontractor bids. A list of qualifications and clarifications will also be included to help define any areas of ambiguity. Once the GMP has been reviewed and agreed upon, it will be used as the base line for the project.

During construction of CMGC projects, the design team may issue documents that add to or change the construction documents. If the change is a further development of and consistent with the documents, it is within the GMP and is not a change order. "Changes in scope, systems, kinds and quality of material, finishes or equipment" (refer to Article 6.4.2. in Reynolds School District contract) as well as conditions that are different from that shown in the documents or reasonably expected would be outside the scope of the GMP.



Sherwood Elementary School, Sherwood OR

RSD | Reynolds High School Additions and Renovation | 3.2.2.3 Cost Management Page 18

E. Past Performance

In the last seven years, our local Oregon office has completed more than 100 CM/GC projects, most of which had a GMP. Through the CM/GC process and GMP development, our teams are extremely successful at helping the owner and architect get the best value and most program utilizing our thorough value engineering and constructability reviews. Below are some of our featured projects that are CM/GC.

| Past Performance on CM/GC Projects | | | | | | | |
|---|----------------------------------|------------|--------------|------------------------------------|------------------------------------|--|--|
| Project | Client | Completion | GMP | Change Orders | Contact | | |
| Crestline Elementary School Replacement | Evergreen School District | 7/14/14 | \$15,036,883 | \$236,776 (owner scope changes) | Sue Steinbrenner (360) 604-4081 | | |
| Stayton Elementary School/Middle School and Sublimity Schools Renovations | North Santiam School District | 12/19/2014 | \$6,716,526 | \$ 536,239 (owner scope changes) | Andy Gardner (503) 769-2171 | | |
| Shaver Elementary School Renovation | Parkrose School District | 8/24/2012 | \$1,023,089 | \$125,089 (owner scope changes) | Mary Larson (503) 408-2103 | | |
| Boiler Retrofit | Portland Public Schools | 10/16/2012 | \$7,019,707 | -\$784,075 (returned savings) | Patrick LeBoeuf (503) 916-3072 | | |
| Philomath High School Expansion and Renovation | Philomath School District | 9/10/2012 | \$20,190,643 | \$445,175 (owner scope changes) | Dan Forbess (541) 929-3169 | | |
| Ridgeview High School | Redmond School District | 2/29/2012 | \$61,800,000 | \$1, 259,000 (owner scope changes) | Jerry Milstead (541) 306-0844 | | |
| New Science Building and Administration Renovation | Jesuit High School | 4/01/2011 | \$4,398,199 | \$6,922 (owner scope changes) | Ken Foley (503) 292-2663 | | |





3.2.2.4 Schedule, Quality, Safety

SKANSKA

3.2.2.4 Schedule/Quality/Safety

A. Approach to Managing Schedule

Completion of the Reynolds High School by August 2018 will be achieved through our schedule management. Our approach to schedule management can also achieve much more than a guaranteed move in date:

- Lower cost
- Improved quality
- Minimize disruption to ongoing school activities.

We suggest that the construction start during spring break 2017 and be accomplished in three phases for the following reasons:

- Starting during spring break of 2017 will allow us to get the construction zone secured without disruption to ongoing school operations. Starting earlier may not allow DOWA-IBI enough time to complete the design. Shifting the start of construction to spring break will also allow additional time for preconstruction. This translates into more time to produce a quality set of construction documents and will result in lower construction cost, higher quality, and a more efficient construction sequence with less risks.
- Dividing the work into three phases will significantly reduce the inconvenience to ongoing school operations.
- By starting in March 2017 we will be able to get the north addition winterized before the onset of the winter 2017. This will reduce cost, improve quality, speed construction and reduce project risks.
- Phase one is the key to success for the remainder of the project, it will consist of turning over the added classrooms, science rooms and learning center additions during the winter holiday break of 2017. This will allow the staff to move into the new classrooms spaces and be ready for the students when they return from the Winter break.
- Phase two will be established and construction will begin while the students are out of school for the 2017 winter break. We feel this is important because it allows us to setup safe, secure pathways and construction zones within the existing school while there are minimal ongoing operations.
- Phase three renovation work will be completed during the 2018 summer break when the students are out of school.

In August 2018 we all will enjoy the sense of accomplishment as your renovated and expanded school is complete and ready for the students to learn in a great, safe environment!

Schedule Risks

Elements of the project that could put the schedule at risk include:

- Permits together with DOWA-IBI, we will communicate with the City early about the project needs for permits. By shifting the construction start date, they will be afforded more time to issue the permit.
- Material procurement with our experience in building schools, we know what the critical materials are to focus on to ensure there are no delays to the project.
- Surprises hidden in the existing building a thorough building investigation will flush out many or all of these surprises. We discussed our plan in section 1a.
- A busy market Skanska has a long history of construction in the Portland market and in turn developed strong and loyal relationships with many of the local subcontractors. They know our expectations and how to deliver the quality and timely products that our clients expect. Because of our strong relationships with the subcontractor market we can ensure we will have strong participation during bidding and construction phases.

Schedule Tools/Reports

We utilize Primavera P6 scheduling software. Throughout the life of the project, we update the schedule weekly to ensure the team is making the needed progress and make adjustments to stay on track. The schedule is reported at the Reynolds, DOWA-IBI weekly team meeting.

Several of our scheduling formats are detailed below:

- **Executive** Summarizes key elements and used at a high level to share progress.
- Milestone Key elements include design deliverables, permits, GMP, bid packages, start dates, building dry-in, commissioning and move in date.
- Three-week look ahead The project schedule is supported by a three-week "look ahead" schedule which is used to drive the daily production. These schedules allow us to break the project into smaller pieces to communicate and manage daily activities at the foreman level.

| Reynolds Hig | jh School | | | | | | Print Date: 14-Jul-16, Da | ta Date: 18-Jul-16 |
|---------------|--|---------------|---------------|----------------------|---------------------------------|---|--|-----------------------------|
| Activity ID | Activity Name | Dur Start | Finish | 116 2017 2017 | 5 | 2018 | 2019 | 2020 |
| | | | | us u4 u1 u2 u3 | Ω4 Ω | 75 | us u4 u1 u2 u3 u4 | a a |
| Reynolds | High School | 11-INC-22 299 | 6 01-Oct-18 | | | | | |
| Executive | Summary | 384 27-Mar-1 | 17 01-Oct-18 | | | | 01-Oct-18, Executive Summary | |
| EXE100 | Start Phase 1 Construction | 0 27-Mar-1 | 17* | Start Phase 1 | l Constr <mark>u</mark> ction | | | |
| EXE101 | Phase 1 Substantial Completion | 0 | 15-Dec-17* | | Phase | e 1 Substant | al Completion | |
| EXE102 | Start Phase 2 Construction | 0 18-Dec- | 17 | | Start | Phase 2 Col | <mark>nstruc</mark> tion | |
| EXE103 | Start Phase 3 Construction | 0 18-Jun-1 | 8* | | | S | tari Phase 3 ¢onstruction | |
| EXE104 | Overall Substantial Completion | 0 | 31-Aug-18* | | | | Overall Substantial Completion | |
| EXE105 | Final Completion | 0 | 01-Oct-18 | | | | Final Completion | |
| Academic | Calendar | 529 25-Mar-1 | 17 04-Sep-18 | | | | 04-Sep-18, Academic Calendar | |
| CAL100 | 2017 Spring Break | 9 25-Mar-1 | 17* 02-Apr-17 | 2017 Spring | Break | | | |
| CAL101 | 2017 Summer Break | 81 17-Jun-1 | 17* 05-Sep-17 | | 2017 Summer | Break | | |
| CAL102 | 2017 Winter Break | 17 16-Dec- | 17* 01-Jan-18 | | 201 | 7 Winter Bre | ak | |
| CAL103 | 2018 Spring Break | 9 24-Mar-1 | 18* 01-Apr-18 | | | 2018 Spi | ring Break | |
| CAL104 | 2018 Summer Break | 81 16-Jun-1 | 18* 04-Sep-18 | | | | 2018 Summer Break | |
| Preconstru | uction | 211 22-Jul-16 | 6 24-May-17 | 24-May- | -17, Pre <mark>co</mark> nstruc | ction | | |
| Project Awa | Ird | 118 22-Jul-16 | 6 11-Jan-17 | ▼ 11-Jån-17, Project | Award | | | |
| Design | | 90 22-Aug-1 | 16 03-Jan-17 | 03-Jah-17, pesign | | | | |
| Project Pern | mitting | 36 22-Nov- | 16 17-Jan-17 | ▼ 17-Van-17, Project | Permitti <mark>ng</mark> | | | |
| Subcontract | tor Buyout | | 17 01-Mar-17 | 1-Mar-17, Sub | ocontrac <mark>to</mark> r Buyc | , it | | |
| Critical Mate | erial & Equipment Procurement | 70 15-Feb-1 | 17 24-May-17 | 24-May- | -17, Critical Mate | ə <mark>r</mark> lal & Equipi | ment Procurement | |
| Constructi | ion | 364 27-Mar-1 | 17 31-Aug-18 | | | | 31-Aug-18, Construction | |
| Phase 1 | | 174 27-Mar-1 | 17 01-Dec-17 | | | o <mark>-</mark> 17, Ph <mark>ase</mark> | | |
| Classroom | Additions - Sciences / Classrooms / Leaming Center / Life SI | 174 27-Mar-1 | 17 01-Dec-17 | | 01-Dec | o-17, Classro | orn Additions - Sciences / Classrooms / Le. | arhing Center / Life Skills |
| Entrance Ad | bdition - Main Ent / Counseling / Student Services | 156 20-Apr-1 | 7 01-Dec-17 | | 01-Dec | o <mark>-</mark> 17, Ent <mark>ran</mark> t | se Addition - Main Ent;/ Counsieling / Student | Services |
| Phase 2 | | 130 18-Dec- | 17 21-Jun-18 | | | | 1-Jun-18, Phase 2 | |
| Remaining | Main Ent Addition / Admin | 130 18-Dec- | 17 21-Jun-18 | | Ļ | | 1-Jun-18, Remaining Main Ent Addition / Adi | |
| Sciences / C | Career / Health Renovations | 100 18-Dec- | 17 09-May-18 | | | | ay-18, Sciences / Career / Health Renovation | |
| Phase 3 | | 54 18-Jun-1 | 18 31-Aug-18 | | | | 31-Aug-18, Phase 3 | |
| Commons / | Kitchen / Servery / Culinary Arts / SPED Renovations | 44 18-Jun-1 | 18 17-Aug-18 | | | . | 🔰 17-Aug-18, Commons / Kitchen / Şerve | y / Culinary Arts / \$PED |
| West Entran | nce Addition | 54 18-Jun-1 | 18 31-Aug-18 | | | F | art 31-Aug-18, West Entrance Addition | |
| Sitework | | | 17 30-Aug-18 | | | | 30-Aug-18, Sitework | |
| West | | 15 10-Aug-1 | 18 30-Aug-18 | | | | 30-Aug-18, West | |
| North | | 30 27-Sep-1 | 17 08-Nov-17 | | | 17, North | | |
| East | | 35 12-Apr-1 | 8 31-May-18 | | | Б О | -May-18, East | |
| South | | 20 12-Apr-1 | 8 09-May-18 | | | | ay-18, South | |
| Courtyards | | 214 27-Sep-1 | 17 02-Aug-18 | | | | 02-Aug-18, Courtyards | |
| Project Clo | oseout | 210 04-Dec- | 17 01-Oct-18 | | | | 01-Oqt-18, Project Closeout | |
| CLO100 | Phase 1 Owner Punch | 10 04-Dec- | 17 15-Dec-17 | | Phase | a 1 Owner P | und h | |
| CL0101 | Final Commissioning | 20 06-Aug-1 | 18 31-Aug-18 | | | | Final Commissioning | |
| CLO102 | Final Owner Punch | 10 20-Aug-1 | 18 31-Aug-18 | | | | Final Owner Purich | |
| CLO103 | Substantial Completion / Turnover | 0 | 31-Aug-18 | | | | Substantial Completion / Turnover | |
| CLO104 | Close Out Documents | 20 04-Sep-1 | 18 01-Oct-18 | | | | Close Out Documents | |
| CLO105 | Final Completion | 0 | 01-Oct-18 | | | | Final Completion | |
| | tual Work Critical Bemaining Work | Ū | , nemm | | | | | |
| | | 5 | , minim | | | | | |
| | | | | | | | ANUNANU | _ |

B. Labor and Material Availability

The construction market in the Pacific Northwest is very busy and there is cost inflation and some labor shortages. The key to minimizing the impact is making our project attractive to the market and finding the best window to bid and build which we described earlier. Our approach to driving down the costs and ensuring adequate workers involves the following:

- Leverage our long relationship with subcontractors and encourage them to bid
- Draw from our depth of resources and database to generate a comprehensive bidders list and provide a variety of bids in each category to help drive costs down
- Provide quality design documents to reduce the bidding risk
- Develop an efficient project approach so the subcontractors can work productively
- Leverage underutilized subcontractors including our MWESB partners to provide opportunities to bid.

Skanska tracks current labor and material availability and pricing so that we are aware of any challenge for our projects and develop plans to mitigate those challenges.

C. Opportunities and Challenges

We have identified some challenges and opportunities in completing the Reynold High School Renovation in the most efficient manner possible, to drive down costs, deliver the highest level of quality and have the school substantially complete by August 31, 2018.

- Busy market to avoid the need for local trades that have limited resources due to a busy construction market, we can incorporate different designs to avoid utilizing these trades. For example, currently there is a shortage of brick masons but not carpenters so we could use concrete walls in lieu of structural masonry walls.
- Phasing of the project to minimize disruption- This project is complicated because of working on a busy campus and not having flex space available to relocate students. It is further complicated because the construction happens all the way around the campus. Skanska has developed a creative approach to the project that will help minimize impact and keep the students, staff, and public safe. See section 3.2.2.1.7 for the detailed plan for the project.
- Current utility plant location The current utility plant is located in the gym and the services run across the canopy to the main building. This canopy gets demolished for the new expansion so the challenge is maintaining these

services to the building during the school year. Skanska has developed a plan to demo the existing lines, create a utility tunnel, and run the new lines in the utility tunnel during the first summer. This will allow the existing building to operate while the entry expansion is being built.

• **Early order of schedule critical items** - we will identify and order any schedule critical materials or equipment early to avoid any schedule delays.

D. Quality Control Plan

David Franke and Dan Clark will manage quality during preconstruction and during construction. They will tailor the quality control program to meet the specific requirements for each trade on this project. Our approach to quality is to ensure that construction activities comply with the contract, design and workmanship requirements. Our experience has proven that a successful quality control program requires the following:

- Design and Constructability Reviews Quality management starts the day we are selected as your CM/ GC, commencing preconstruction. In order to prevent surprises in cost, quality or schedule, we will integrate with DOWA-IBI and engineers starting with our partnering meeting at project commencement. These conversations and collaborative efforts are imperative to accurately understand the scope necessary and resolve any constructability issues before the drawings are complete.
- Submittals Review all material and equipment submittals to ensure they comply with requirements before being submitted to the design team. This keeps the project moving forward, avoids time consuming revisions or potential miscommunication.
- Mock-ups We construct mock-ups to establish a standard of quality and to test and validate the design intent for the components for items such as the exterior envelope.
- MEP coordination -We assemble our MEP subcontractor team early, allowing them to take ownership in design assist, budgeting, and to



provide modeling to discover routing conflicts or tie-in challenges long before the craft personnel arrive onsite. By

Quality Control Case Study Jesuit High School New Science Building

The Skanska team meticulously reviewed field conditions for exterior enclosure and photo documented the entire skin construction progress in order to avoid any potential leaks. This



is one of Skanska's standard inclusions in every project's quality control plan. We also hired for a third-party review of the exterior enclosure, which included both drawing reviews and field visits to ensure proper installation of window wraps and weather barriers.

teaming with the MEP group members, and completing detailed design reviews and MEP coordination drawings, construction cost and coordination challenges are identified on paper instead of in the field. This will help us avoid costly schedule impacts, and eliminate costly rework.

- Pre-installation conference Meet with design team members and subcontractors onsite, before starting work to review project requirements, quality expectations, requests for information (RFIs), project documents, installation details, quality expectations, testing requirements and mock-ups.
- Exterior skin/building envelope coordination meetings -Similar to the MEP coordination process, the most effective tool for assuring an efficient, leak-free exterior is to conduct detailed coordination with the exterior skin team early. Potential quality issues or conflicts can be identified and resolved before construction starts.
- Follow-up inspections David Franke and Dan Clark monitor ongoing work segments to assure continuing conformance. They periodically review work after the installation begins to confirm installation details and conformance. Non-conforming items are tracked through our QA/QC process to assure timely resolution.

iPad/Tablet for Improved Quality

The use of the iPad in the field has proved to be a great tool for quality control. With the ability to store and organize PDF files, the iPad brings all current ASIs, RFIs, drawings and specifications to the field, through a wireless connection onsite. This allows the quality control manager to always have real-time information for verifying the proper layout and installation of material.

This tool also allows quick development of deficiency lists, issuance of non-conformance reports and is vital to documenting the commissioning process from the pre-functional checklist to start-up reports and functional testing.

Quality Assurance Using Technology



PCC Willow Creek – Quality Control

Value engineering research recommended a reduction of the overall height of the building for cost purposes. Such a change affected the ceiling to floor height where all of the mechanical, electrical, plumbing and fire suppression systems were located. Skanska decided that 3D modeling would be the most effective way to shrink the space while ensuring all systems were coordinated and would fit in the space. The result was zero RFIs for MEP and fire suppression systems. This was a very conscientious and successful process.



E. Safety Program

Our goal is simple: Our jobsites will be injury free for everyone who comes into contact with them. We will take every measure to ensure the safety of the students, staff, public and our workers while working on the Reynolds High School project.

Our approach to safety is called an Injury-Free Environment^{*} (IFE). The IFE culture centers on a single, simple belief that every injury is preventable.

For each project, we develop a site- specific safety plan which defines safety standards for that project. Our plan reflects the construction industry's highest safety standards.

Skanska Safety: Injury Free Environment

With our superior safety track record on active sites, you can rest assured that your students, staff, the public and our workers will be safe during our work. Safety is one of Skanska's values, and this team has proven our commitment to safe construction on busy campuses.

The key element of our Injury-Free Environment (IFE) culture is empowering every worker to halt unsafe work practices wherever and whenever they occur. Skanska's goal is a mindset where the worker understands that "All injuries are preventable, and no injuries are acceptable!"



Safety Training and Audits

For safety practices to be effective, they must be communicated to all craft working on site. Skanska provides specific employee site safety and logistics orientations and expected conduct on a project that is on an active school campus. This training is comprehensive, effective and includes jobsite clean-up practices. Prior to being permitted to work on site, each worker must agree to the stringent safety, security, and site conduct requirements demanded by our project team.



Jobsite Safety Training

We also hold regular site safety inspections and audits by the project manager, superintendent, corporate safety office, and other staff. Daily inspections are completed by Skanska personnel and our partner subcontractors. All inspections are documented on the work site and specific direction is provided and any violations must be corrected immediately.

Employee and Subcontractor Accountability

One of the principals of IFE is that everyone is responsible for safety on the jobsite. Everyone has the ability and authority to stop an unsafe act. The culture that we share with our subcontractors is a positive one that fosters empowerment and partnership in regards to safety that leads to successful zero injury projects. However, when workers do not comply with jobsite safety and conduct requirements may be removed from the project.

Company EMR

Skanska is acknowledged throughout the nation as a leader in safety. Our Injury-Free Environment culture has enabled us to achieve one of the industry's lowest Experience Modification Rates (EMR). Our current EMR is 0.60, it was 0.58 in 2014 and 0.60 in 2015.

SKANSKA

3.2.2.5 Local Market, MWESB and Community
3.2.2.6 Contract Format
3.2.2.7 Deviation from the RFP

SKANSKA

3.2.2.5 Local/MWESBE/Community

A. Local Knowledge and Participation

Skanska has been working in Multnomah County for nearly 30 years. In the last 15 years our office has completed over 170 K-12 projects with twenty school districts in Oregon and Southwest Washington. These schools total more than \$500 million to our communities to enhance learning environments for our children. Skanska has enjoyed its work in the City of Troutdale and the relationships we built with the local subcontractors, building permit officials and the community.

Our subcontractor partners know that we run our projects responsibly and trust that they will be successful on our projects. For this reason they are able to provide us the best pricing in the market and this savings is passed on to our clients. On the Reynolds High School project, RSD will benefit from our relationships with subcontractors through increased competition and fair competitive pricing.

We work as an integrated and collaborative team with our clients, construction management firms, architect partners, permitting officials, subcontractors and the community.

Skanska celebrates diversity in the local communities we serve, and we recognize differences among us as strengths and assets. We strive to build working relationships that will positively impact the community and businesses for years to come.



B. MWESB Firms

Skanska Partnered MWESB Firms

Below is a list of State of Oregon certified businesses we have partnered or subcontracted with in the last two years.

African American Owned Enterprise

Final Touch NW

Tinman Enterprises Asian/Pacific Islander **Owned Enterprise**

Green Art Landscape

In Line Commercial Construction Inc

Asian-Indian American Owned Enterprise

I Ten Associates Inc

Emerging Small Business

Bridgeway Contracting LLC

Cascade Tower & **Rigging Inc**

Crossfire Sprinkler Company Inc

Crown Fire Systems Inc

Diverse Works Inc

Klinger Masonry Inc

L J Pearson Construction Inc

Madden & Baughman Engineering Inc

Pagh Custom Woodworking Inc

River City Rebar LLC

Hispanic Owned Enterprise

Zavala Corporation

Minority Business Enterprise

Carr Construction, Inc. LLC

High Tech Crating Inc Quality Erectors & Construction Inc SBM Management

Turtle Mountain Construction Waco Scaffold & Equipment Co Inc

Native American **Owned Enterprise**

Apollo Mechanical Construction

Paul M Wolff Co Service-Disabled Veteran Owned

Business Atez Inc

Small Business

A2 Fabrication Inc

Anderson Contract

Art Cortez **Construction Inc**

Baxter Builders LLC Bend Commercial

Glass

Cash's Drapery Inc

Classique Floors Inc Dannick Corporation

Edge Construction

Supply

Co Inc

Faison Construction

Green Team Cleaning Huser Integrated Technologies LLC

Design Inc Laboratory Design & LLC M Brown Industries Madras Sanitary **Munitor Construction** NW Construction General Contracting Pacific Fire Systems LLC Renegade Sports Surfacing Inc River City Glass SRM Architecture & Marketing Stryker Construction Sunburst Fabrications Vancouver Paving Co Wallace Group Inc Western Rebar Inc **Small Disadvantaged Business** Buffalo Welding Inc Dirt & Aggregate Interchange Inc Veteran Owned **Business** Adventures in Advertising All American Fire Protection Inc

Building Materials Specialties Caughlin's Commercial Floorcovering Inc Central Oregon Heating & Cooling Inc Cleaning & Restoration Supply Coastwide Ready Mix **Concrete Inspection** Creative Ceilings Inc Current Electrical **Construction Company** LLC Harris Rebar Columbia **Basin** Inc Jackle Signs Systems LLC MultiCraft Plastics **Oversite Images** Satellite Shelters Inc Women Owned Enterprise AK LTD Advanced Metal Allsource Construction Supply Inc **BC** Installation Inc Buds Expert Tree Care Chick of All Trades Cochran Inc Cochran Technologies

Cox Fire Protection Inc

DFW Electric Group Ductz of Greater Portland General Sheet Metal Works Inc Gibson Door Inc Green Deconstruction Services Inc H&L Corporation Highland Fire Protection Co Home Team All the Bases Inc Life Rax Company Little John's Portable Toilets Inc Make Ready Plus Marco Ideas Unlimited Olympic Glove & Safety Cố Inc Pacific Window Tinting Parrish Excavating Inc Prestige Tile & Stone Raz Transportation Staton Companies Vancouver Roofing & Sheetmetal Co We Cut Concrete Inc West Meyer Fence

D&H Flagging Inc

RSD | Reynolds High School Additions and Renovation | 3.2.2.5. Local/MWESBE/Community | 3.2.2.6. | 3.2.2.7. Page 26

Increasing Diverse Business Participation

We have an effective and long-standing diversity and inclusion plan that goes far beyond individual project goals. In 2015, Skanska utilized over 100 diverse firms equaling roughly \$43 million in business. Our subcontractors trust us because we help them build capacity and they know diversity is a mainstay of our business model. It is because of this trust that we are best positioned to outperform on the recruitment of diverse businesses.

Skanska's formalized outreach efforts in Troutdale are led by our Diversity Manager Mel Jones, who builds relationships with local MWESB subcontractors/suppliers by hosting events, providing learning opportunities and partnering with influential groups such as OAME, NAMC, and OTW.

Regional Certification Day



Most recently, Skanska organized the first Oregon/Washington Regional Certification Day. This event, held in March 2016, gathered agencies such as State of Oregon CoBID, OMWBE, ASTRA, SBA, GCAP, and ODOT together in one room to provide subcontractors with information on minority business certifications. Subcontractors could obtain information on the certification process and those with documentation ready were certified that day.

Skanska and other general contractors were also present and available to pre-qualify subcontractors on the spot. With 75 firms in attendance, the event was a success, and participants were excited by the opportunity to ease an often confusing system. Going forward, this event will occur twice yearly along with a Washington Certification Day. The relationships gained through our team's outreach have led to the development of an internal BOOST program. Headed by our Diversity Committee, this free, ten-week course is designed to give MWESB subcontractors and suppliers the tools necessary to bid on and successfully complete projects.

In our BOOST program, we have developed a list of common issues that arise while working with under-utilized subcontractors, and created a system for eliminating these issues through training. Specifically, this curriculum focuses on the insurance bonding, blueprint reading, estimating, bidding, contracts, construction accounting, scheduling, project execution, LEED/sustainability and project closeout.

Our diversity program extends from high school and college ACE (Architects, Contractors and Engineers) outreach programs to our Construction Management Acceleration Program (CMAP) training courses that target under-utilized businesses.

Subcontractor Selection Process

Our team uses the following steps to package sub-bids in order to maximize MWESB participation:

- Create maximized list of project-specific candidates from MWESB Databases: Skanska's in-house database, City of Troutdale, Hoovers, State of Oregon and OAME and NAMCO memberships.
- Contact candidates early in the project's planning through early bid fax, announce the project at OAME and NAMCO meetings and hold Town Hall Meetings to gain project awareness.
- Contact candidates during bidding through bid fax solicitation and phone contact, advertisements in publications, including periodicals typically seen by MWESB firms like Univision and direct mail solicitation to candidates utilizing all listed outreach sources.
- Identify select "MWESB-only" scope while maintaining competitive pricing and quality.
- Promote project at a Skanska MWESB opportunity outreach.
- Hold pre-bid meetings for MWESB contractors prior to bid.
- Support MWESB contractors post construction in continuing to grow their business.

Local Trades and Suppliers

Similar to the way we attract diverse subcontractors, we are able to reach out and procure local trades and suppliers. Local business participate in many of the outreach events we do and are excited to partner with us. We engage local businesses and suppliers to reap the environmental and cost benefits for our projects. By narrowing the radius from which we pull suppliers and materials we cut down on the carbon footprint of our business.

Our selection process for small and local suppliers includes evaluating a business's backlog to ensure they can fulfill a job's requirements in this market. This important check provides financial security for both our supplier and client, ensuring the job will be completed successfully. In addition we look for opportunities for joint check agreements with suppliers, helping small trades secure better rates on materials and services. This approach allows us to pass savings on to our clients.

Over the past ten years, Skanska has partnered with more than 40 subcontractors that are located within the Reynolds School District boundaries. These partnerships have totaled more than \$96.5 million for your local community.

C. Supporting District Goals

Skanska shares in the Reynolds SD value of diversity. We call it "Be better together". We will team with RSD to achieve your Local and Diverse Partnership Program(LDPP) goals, by leveraging our relationships with over 100 BOOST graduates. This will ensure the jobsite reflects the ethnic and gender make-up of the Troutdale area. Beginning with our preconstruction meeting to jobsite orientations through construction, Skanska management will carefully and consistently monitor progress to accomplish your goals.

The Reynolds SD community has and will continue to benefit by the programs we have in place. These programs include the following:

1. Student/Career technical education

The following are examples of our ongoing outreach and investment in the lives of students that we offer to you:

- **Construction camp** summer trade internship for high school students.
- **Project tours** provide students with guided tours and the chance to interact and ask questions to construction professionals.
- **Company tours** introduce students to our different departments.
- **Internships** hire high school students to intern on the project. We work closely with the District to select students for this program. This program has been

used on most of our high school projects, including Ridgeview, Philomath and Redmond.

- **Job shadows** the opportunity to experience a day in the life of a construction worker.
- **Panel discussions** the chance to hear project team members sitting on a panel answer questions about the project and the industry.
- Leadership training leadership classes through our Skanska University that students can attend.

2. Workforce hiring and training

Skanska is actively involved in the hiring, employment and training of diverse and young workers. In order for these new workers to better learn and work safely, we have a buddy system in which we pair them up with a journey.

3. Faculty/staff

We participate in a number of activities for education professionals. Skanska recently lead an inclusive leadership workshop for construction management professors to teach them about unconscious bias and how it plays out in the workforce.



Above: Mel Jones, Diversity Manager, recognized as one of "America's Top Diversity Champions" by Diversity Business Magazine

BOOST Training with a Business Focus Skanska's BOOST training program is an awardwinning program led by diversity manager Mel Jones. It is a free ten-week course designed to give MWESB subcontractors and suppliers the tools necessary to work with us and to grow their business.

4. Social responsibility and sustainability

Skanska leads the construction and development communities in high-performance green construction and consulting services. Consistently ranked among the Top Green Contractors in the United States by Engineering News-Record magazine, Skanska has more than 110 LEED® registered and certified projects in the United States.

Skanska offers a comprehensive array of green building services that are tailored to meet the needs of the project and to complement the skills of the RSD and the project team.

5. Mentor protégé

For the past decade we have a Mentor Protégé program that focuses on accelerating training for minority contractors. The objectives of our program is to increase the volume of work that protégé firms perform and successfully deliver.

Within the Mentor Protégé program we create two teams of mentors for each protégé. An organized three-year curriculum is delivered by meeting at least once monthly where mentoring activities include creating a business plan, building a marketing strategy, sustainability training, safety training, accounting and legal assistance. The end goal of this program is to progress protégé firms toward independence.

6. Partnerships for the community

Skanska is an active participant in the following community organizations:

- SafeBuild Alliance mentoring committee
- OAME Oregon Association of Minority Entrepreneurs - Mel Jones, our diversity manager sits on the Board of Advisory for OAME.
- NAMCO National Association of Minority Contractors Oregon
- HMCC Hispanic Metropolitan Chamber of Commerce

In addition, we are working with the following career development outreach organizations:

- **OTW** Oregon Tradeswomen
- **PYB** Portland Youth Builders
- Constructing Hope
- **REAP** Reaching and Empowering All People.

3.2.2.6 Contract Format

We are committed to negotiating a mutually agreeable contract.

3.2.2.7 Deviations from the RFP

We have no deviations from the RFP.



3.2.3 Fee Proposal

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3.2.3 Fee Proposal

A. Preconstruction Services

Our preconstruction fee is \$160,000. This amount includes \$30,000 for our team to review the as-built plans and an extensive existing building evaluation.

B. Construction Services

CM/GC Fixed Fee

Our proposed fee, as a percentage of the GMP is 4.95 percent. This fee includes corporate office overhead and profit, performance and payment bonds, CGL insurance, builder's risk insurance, and corporate home office staff. This fee does not include the cost for subcontractor payment and performance bonds or subguard, which is a cost of the work.

Self-perform Work

We propose to self-perform the concrete and carpentry scope and we will publicly bid the work in accordance with the contract.

Mark-ups for direct costs of selfperform related work are 8 percent.

General Conditions Estimate

Our estimate for general conditions is **\$1,542,251**. Please find our cost breakdown to the right.

General Conditions Breakdown

| Item | Quantity | Units | Est Total |
|---------------------------------------|----------|-------|-------------|
| Project Manager | 84.1 | wk | \$334,170 |
| Project Engineer | 84.1 | wk | \$180,626 |
| Scheduler | 8.41 | wk | \$22,040 |
| Mechanical Coordinator | 2 | wk | \$13,911 |
| Electrical Coordinator | 2 | wk | \$13,911 |
| Project Accountant | 8.41 | wk | \$12,698 |
| Estimator | 4 | wk | \$13,430 |
| IT Labor | 4 | wk | \$12,640 |
| Field supervision | 84.1 | wk | \$437,094 |
| Foreman | 84.1 | wk | \$255,830 |
| Safety Engineer | 12 | wk | \$36,288 |
| Office Trailer Rental | 19 | mo | \$11,400 |
| Office Trailer Set Up | 2 | wk | \$3,763 |
| Office Trailer Utility Hook up | 1 | ls | \$500 |
| Office Temporary Electric | 19.36 | mo | \$4,840 |
| Office Temporary Water / Sewer | 19.36 | mo | \$1,452 |
| Job Sign | 1 | ea | \$2,000 |
| GC Office Furniture | 1 | ls | \$500 |
| Office Supplies | 19.36 | mo | \$5,808 |
| Drinking Water | 84.1 | wk | \$12,615 |
| Copy Machines | 1 | ea | \$6,000 |
| Telecommunications | 19.36 | mo | \$11,616 |
| Mobile Phone Communications | 19.36 | mo | \$5,808 |
| Project Management Information System | 19.36 | mo | \$11,616 |
| Courier Charges | 84.1 | wk | \$8,410 |
| Blueprints / Reproduction | 1 | ea | \$2,500 |
| Progress Photos | 19.36 | mo | \$5,808 |
| Trailer Permits | 1 | ls | \$500 |
| Testing Services - Background Check | 1 | ls | \$500 |
| Field Toilets | 19.36 | mo | \$13,552 |
| Dump Fee & Hauling | 19.36 | mo | \$19,360 |
| Daily Cleaning | 84.1 | wk | \$42,975 |
| Temporary Fence | 2000 | lf | \$4,000 |
| First Aid | 84.1 | wk | \$4,205 |
| Safety Signs | 20 | ea | \$4,000 |
| Safety Glasses | 250 | ea | \$2,500 |
| Drug Screening | 20 | ea | \$1,000 |
| Small Tools & Supplies | 84.1 | wk | \$4,205 |
| Fuel & Oil | 2 | mo | \$500 |
| Superintendent Auto Expenses | 19.36 | mo | \$9,680 |
| Forklift / Lull | 8 | wk | \$8,000 |
| Superintendent Auto Expenses | 19.36 | mo | \$9,680 |
| Forklift / Lull | 8 | wk | \$8,000 |
| Total | | | \$1,542,251 |

RSD | Reynolds High School Additions and Renovation | 3.2..3 Fee Proposal Page 30



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