



ARCHITECTS

SCHREIBER
STARLING
WHITEHEAD



HEALTH SCIENCES CENTER BUILDING

Project No. 2022-001

Pre-Design Services

CONTENTS

| | |
|----|---|
| 1 | Cover Letter |
| 2 | Attachment 1 |
| 3 | Executive Summary |
| 4 | Introduction |
| 5 | Qualifications of Key Personnel |
| 7 | Supporting Consultants & Diverse Business & Inclusion Strategies |
| 12 | Relevant Experience |
| 20 | Project Approach and Innovation |
| 22 | Past Performance & Project Management |
| 24 | Sustainable Design Experience |
| 25 | Life Cycle Cost Analysis Experience |
| 26 | Federal Form SF330 Part II |

August 31, 2021

Ms. Ariel Birtley
Department of Enterprise Services
Engineering & Architectural Services
1500 Jefferson Street SE
Olympia, WA 98501

RE: Statement of Qualifications: Pre-Design Services for the Health Sciences Center Building
Renton Technical College
DES Project No. 2022-001

Dear Ms. Birtley and Members of the Selection Committee:

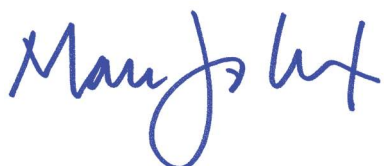
The 2021-23 capital budget offered support of community and technical colleges at a level not seen for many biennia. With design funding now appropriated for Renton Technical College's Health Sciences Center Building, the college is wise to perform its pre-design study this year to free up this funding. The Health Sciences Center Building offers the potential for efficiencies and synergies between the college's allied health programs and sets the stage for new successes both planned and unknown. The team you select for the pre-design will play an instrumental role setting up this project for success. The main issue is time; with NTP planned for October 1 you need a team not just experienced in allied health facilities but fluent in OFM's pre-design process and able to complete its work prior to OFM's December 2021 deadline.

SSW Architects has deep knowledge of the SBCTC ecosystem, allied health facilities, and OFM pre-designs. For over 33 years we have provided a full range of A/E services for clients throughout the state, with eighty percent of our work focused on higher education. We have served five universities and twenty-two community or technical colleges, including working with Renton Technical College on early planning for what has become the Health Sciences Center Building. Of particular relevance, we have been selected to perform four dozen OFM pre-designs, including 11 within the past three years. In 2018, we completed a full pre-design for the 65,000 gsf Center for Allied Health Education at Bates Technical College in just seven weeks.

Our planning and design philosophy is tailored to the needs of public agencies. We are pleased to offer a planning and design team with a combination of talent, skills, and experience in solving facilities needs for active learning communities. We believe above all that no matter the scale and budget, a successful project is realized through a dynamic and inclusive process. To ensure that all stakeholders are heard, and that we meet the call for design justice voiced in the RFQ and at the pre-submittal conference, we have tailored our team to represent not just allied health facility planning excellence but to better relate to the multi-faceted experiences of the campus community. It is our first and continuing task as designers to listen to, and be receptive to, the wealth of ideas that Renton administrators, staff, faculty, and students will bring to the Health Sciences Center Building.

We meet our commitments and deliver on our promises. You will find SSW Architects a genuine team player, applying planning expertise, talent, and technical skill when and where they will be most effective. Thank you for considering us to be part of your team.

Respectfully,



Mary Jo Lux, AIA
Principal



STATE OF WASHINGTON
DEPARTMENT OF ENTERPRISE SERVICES

*1500 Jefferson St. SE, Olympia, WA 98501
 PO Box 41476, Olympia, WA 98504-1476*

Designated Point of Contact for Statement of Qualifications

| | | |
|---|-----------------|------------------------------------|
| Point of Contact Name and Title Mary Jo Lux AIA, Principal | | |
| Firm Name Schreiber Starling Whitehead Architects | | |
| Address 901 Fifth Avenue, Suite 3100 | | |
| City Seattle | State WA | Zip 98164 |
| Telephone O: 206.682.8300 C: 206.285-4252 | | Email lux@sswarchitects.com |

Addresses of multiple office locations of firm (if applicable)

| | |
|-------------------------------|-------|
| Address Not Applicable | |
| City | Phone |
| Address | |
| City | Phone |
| Address | |
| City | Phone |
| Address | |
| City | Phone |

Diverse Business Certifications (if applicable)

Certification issued by the Washington State Office of Minority and Women’s Business Enterprise (OMWBE)

- Minority Business Enterprise (MBE)
- Woman Business Enterprise (WBE)
- Minority Women Business Enterprise (MWBE)

Certification issued through the Washington State Department of Veteran’s Affairs

- Veteran Owned Business

Certification issued through Washington Electronic Business Solution (WEBS)

- Small Business Enterprise (SBE)

EXECUTIVE SUMMARY

Introduction

Schreiber Starling Whitehead Architects is committed to improving our community. We do this by creating architecture that reflects our client's vision, respects the fabric of place, and celebrates the beauty of the Pacific Northwest.

Qualifications of Key Personnel

Mary Jo Lux, AIA - Principal-In-Charge: 24 years experience. SBCTC project experience includes the Shop Renovation (Olympic College), Automotive Trades Renovation and Expansion (South Seattle College), and Seattle Maritime Academy (Seattle Central College). Her pre-design experience includes the Center for Science and Technology/CC4 (Cascadia College) and Automotive Trades Renovation and Expansion.

Ross Whitehead, AIA - Planning Principal: 29 years experience. He has led OFM pre-design studies for projects with Shoreline Community College, Everett Community College, Lake Washington Institute of Technology (LWTech), Bates Technical College, Cascadia College, The Evergreen State College, and the Washington Military Department.

Tam Ly, AIA - Project Manager: 16 years experience. Past roles include Project Manager for the Center for Allied Health Education (Bates Technical College, including pre-design) and Samuelson Hall (Central Washington University), Project Architect for the Pacific Tower Renovation (Department of Commerce), and Architect for the Allied Health Building (LWTech).

Monica Verastegui, AIA - Project Architect: 9 years experience. Past roles include Project Manager for the Thurston County Readiness Center, and Project Architect for the Diversity Student Center and International Student Services remodels at Edmonds College.

Our team includes consultants with expertise in pre-design studies, higher education facilities, healthcare education, and that embodies our commitment to diverse business inclusion.

Relevant Experience

We consider the following Schreiber Starling Whitehead projects most relevant to the Renton Health Sciences Center Building:

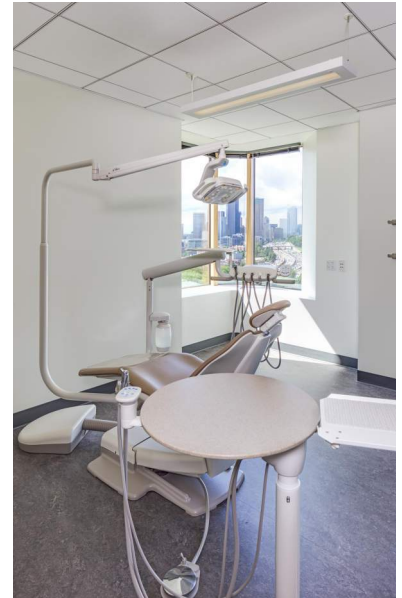
- Center for Allied Health Education (including Pre-Design) - *Bates Technical College*
- Center for Science & Technology (CC4) Pre-Design - *Cascadia College*
- Samuelson STEM Center (including Pre-Design) - *Central Washington University*
- Building 27W Allied Health and Building 31 IT Programs Renovations - *Cascades Job Corps Center at Sedro Woolley*
- Seminar I Renovation Pre-Design- *The Evergreen State College*
- Pacific Tower Health Education Center/Renovation - *Seattle Central College/Department of Commerce*
- Allied Health Building (including Pre-Design) - *Lake Washington Institute of Technology*
- Laura Angst Hall (including Pre-Design) - *Skagit Valley College*

Life-Cycle Cost Analysis Experience

With 90 percent of our work being for state agencies, all our major capital projects take life cycle costs into consideration during the pre-design and design phases. Our experience in LCCAs and ELCCAs includes use of OFM's Life Cycle Cost Model (LCCM) and Life Cycle Cost Tool (LCCT). We know our clients' operations and maintenance budgets are never generous. Our design philosophy values flexible spaces made from robust materials, MEP systems that are not just efficient but easy to maintain, and high-performance building envelopes, all of which contribute to low life-cycle costs.

Sustainable Design Experience

Our commitment to sustainability is exemplified by our body of work, which includes the first LEED-certified SBCTC facility (LWTech's Corporate Education Center at Redmond) and the state's first LEED Platinum higher education facility (Laura Angst Hall at Skagit Valley College). SSW has led the design and construction administration efforts for eight Silver, five Gold, and one Platinum LEED-certified buildings.



Pacific Tower dental clinic operator, Seattle Central College in collaboration with NeighborCare



Samuelson Hall, Central Washington University

INTRODUCTION

Founded in 1987, we are a team of seventeen thoughtful and motivated architects and planners, equipped with proven project delivery methods and supported by technically proficient consultants sharing our core values. As the focus of our practice is entirely in the public sector, we have developed an understanding of the unique project delivery requirements for municipal, state, and federal agencies. We work at all scales and offer a full range of architectural services including:

- Capital Funding Request Assistance / Project Request Reports
- Functional Programming
- Project Feasibility / Pre-Design Studies
- Master Planning
- Building Condition Evaluation
- Site Design
- Building Design
- Renovation
- Restoration (including restoration of historic properties)
- Adaptive Reuse
- Building Envelope Improvement (including roofing replacement)
- Interior Design

Our firm is highly service-oriented. We are proud of the fact that our first clients are still clients, and that with nearly all our clients we enjoy repeat selection. Planning for future major capital projects is a central element of our commitment to client service. Our reputation for effective capital planning is well known; of the 24 projects added to the SBCTC pipeline in 2018, we assisted in the Project Request Reports for ten of them. We have a well-established reputation for high-quality pre-design studies, as evidenced by our having been selected to perform 11 predesigns within the last three years. Our process derives its strength through an inclusive and interactive project partnership with the project stakeholders. All our work consistently reflects our core values of simplicity, flexibility, and durability, while being responsive to the greater context of environmental sustainability and community enhancement. Our projects are delivered on time and within budget.

QUALIFICATIONS OF KEY PERSONNEL

The experience, enthusiasm, and commitment of the talented individuals comprising Schreiber Starling Whitehead Architects are the most valuable resources that we offer our clients. All professional staff at Schreiber Starling Whitehead Architects are graduate architects, some with multiple-discipline educational training. Schreiber Starling Whitehead Architects is a very stable firm with an average staff tenure of eleven years. We do not pursue projects without the assurance each member of our team has sufficient capacity to meet project demands at a high level of performance.

We pursue an integrated team approach to each project, where our role is that of key facilitator, design leader, and advocate for project success. Our process recognizes that each member of the team brings to the design effort individual knowledge and experience that combine to produce results greater than the sum of their parts. Each individual must be allowed to contribute unique concerns and knowledge to the final product in order to achieve true success. The resulting work reflects the shared wisdom, ideas, and talents of our clients and staff.

Our firm is founded on the core belief that the consistent and genuine involvement of our principals is critical to building and maintaining long-term relationships with our clients, and to assuring the most effective outcomes for their projects. Our principals lead all pre-design and planning studies we perform, and remain actively involved in all projects through their completion. Essential to our success is our insistence to maintaining the same individuals on our teams for the life of each project. Our clients and their contractors deserve to know their design team carries a complete knowledge of the project at any point within its execution.



Mary Jo Lux, AIA

Project Role: Principal-in-Charge and Primary Contact

Time Commitment: Predesign: 40%; Design: 60%; Construction: 20%

Operating from her solid base of professional skills, Mary Jo has demonstrated time and again her ability to effectively manage all aspects and phases of public projects. Her commitment to excellence, whether for restroom remodels or major new facilities, has been lauded by clients and respected by contractors. Her design sensitivity and thoughtful execution of project responsibilities results in projects that are not just well-built but completed on-time and on-budget. Mary Jo is familiar with City of Renton permitting requirements through her recent leadership on Fire Station No. 15 for the Renton Regional Fire Authority.

Education:
Bachelor of Architecture
Washington State University,
1995

Registration:
Washington, 2006

MARY JO'S REPRESENTATIVE EXPERIENCE:

- **Shop Building Renovation** - Olympic College
- **Automotive Technology Renovation/Expansion** (incl. Pre-Design) - South Seattle College
- **Center for Science & Technology/CC4 Pre-Design** - Cascadia College
- **Seattle Maritime Academy** (including Pre-Design) - Seattle Central College
- **Puget Sound Industrial Excellence Center** - South Seattle College



Ross Whitehead, AIA LEED AP Assoc. DBIA

Project Role: Planning Principal

Time Commitment: Predesign: 40%; Design: 5%; Construction: 0%

Atypical of practicing architects, Ross' early front-line experience as a contractor gives him a unique understanding of the regulatory, bidding, and construction process, and enables him to produce very biddable and constructible documents. His construction experience solidified his understanding of the critical need for early alignment of scope and budget through the pre-design process. Ross' sense of humor is evident in him being one of three individuals responsible for design and construction of "The Fremont Troll," a community-owned sculpture under Seattle's Aurora Bridge.

Education:
Master of Architecture
Univ. of Washington, 1991

BS, Civil Engineering
Washington University, 1985

Registration:
Washington, 1999

ROSS' REPRESENTATIVE EXPERIENCE:

- **STE(A)M Education Center Pre-Design** - Shoreline Community College
- **Center for Design** (including Pre-Design) - Lake Washington Institute of Technology
- **Center for Allied Health Education** (including Pre-Design) - Bates Technical College
- **Baker Hall Replacement Pre-Design** - Everett Community College
- **Center for Science and Technology/CC4 Pre-Design** - Cascadia College
- **Building 27W Allied Health & Building 31 IT Programs Renovations** - Cascades Job Corps
- **Seminar I Renovation Pre-Design** - The Evergreen State College
- **Pacific Tower Health Education Center/Renovation** - WA Dep't of Commerce & Seattle Central
- **Allied Health Building** - Lake Washington Institute of Technology



Tam Ly, AIA

Project Role: Project Manager

Time Commitment: Predesign: 60%; Design: 80%; Construction: 60%

On each of his projects, Tam combines a commitment to careful planning and a rigorous appreciation for design coupled with energetic oversight of the construction process. Most recently, Tam has served as Project Manager for our Bates Technical College's Center for Allied Health Education progressive design-build project. This role has strengthened his innate ability to inspire a high degree of performance from contractors.

TAM'S REPRESENTATIVE EXPERIENCE:

- **STE(A)M Education Center Pre-Design** - *Shoreline Community College*
- **Center for Allied Health Education** (including Pre-Design) - *Bates Technical College*
- **Samuelson STEM Center** - *Central Washington University*
- **Pacific Tower Health Education Center/Renovation** - *WA Dep't of Commerce & Seattle Central*
- **Allied Health Building** - *Lake Washington Institute of Technology*

Education:
Master of Architecture
Columbia University, 2004

BS in Environmental Design,
University of Colorado, 2001

Registration:
Washington, 2015



Monica Verastegui, AIA LEED BD+C

Project Role: Project Architect

Time Commitment: Predesign: 20%; Design: 100%; Construction: 100%

Monica brings to our team an unerring ability to maintain order and enforce design intent on complex projects with multiple stakeholders. She is highly adept at establishing in-depth understandings of client needs and aspirations, and responding with appropriate architectural solutions. Monica is approaching completion of the Thurston County Readiness Center in Tumwater, a \$35M facility serving the administrative and training needs of National Guard artillery units. The facility includes classrooms, administrative areas, a medical suite, and a variety of informal gathering spaces. In the process of working with the WMD, Monica has developed a specialty modifying existing National Guard facilities to support gender equity.

MONICA'S REPRESENTATIVE EXPERIENCE:

- **Thurston County Readiness Center** - *Washington Military Department*
- **Student Diversity Center** - *Edmonds College*
- **International Student Services** - *Edmonds College*
- **Snohomish Readiness Center Renovations** - *Washington Military Department*
- **Washington Aerospace Training and Research Center Renovation** - *Edmonds College*

Education:
Bachelor of Architecture
University of Tennessee, 2008

Registration:
Washington, 2017



Keith Schreiber, AIA NCARB Assoc. DBIA

Project Role: Quality Assurance/Quality Control Review

Time Commitment: Predesign: 5%; Design: 5%; Construction: 0%

Keith, a founding principal, continues an active role in the firm. A hands-on architect and trusted advisor to his clients, Keith's early professional experience in healthcare design and subsequent roles as principal-in-charge on several SBCTC allied health facilities gives him an in-depth understanding of the documentation that will be required for the Health Sciences Center Building.

KEITH'S REPRESENTATIVE EXPERIENCE:

- **Center for Allied Health Education Pre-Design** - *Bates Technical College*
- **Samuelson STEM Center** - *Central Washington University*
- **Pacific Tower Health Education Center/Renovation** - *WA Dep't of Commerce & Seattle Central*
- **Pacific Tower Due Diligence Investigation** - *WA Dep't of Commerce*
- **Laura Angst Hall (Science & Allied Health Building)** - *Skagit Valley College*

Education:
Bachelor of Architecture
University of Idaho, 1977

Registration:
Washington, 1983
Oregon, 2017

Supporting Consultants & Diverse Business Equity and Inclusion Strategies

Developing fully functional projects that integrate well with existing facilities requires an extensive team effort. To assure successful results for Renton we will include on our team appropriate specialty consultants sharing our client-focused service ethos. We have developed strong relationships with consultants skilled not just in their areas of specialty but in the particular demands of pre-design studies. With a mind toward improving prospects for diverse business enterprises, we also assess whether a project presents opportunities for nurturing traditionally underrepresented talent or those not yet familiar with the agency.

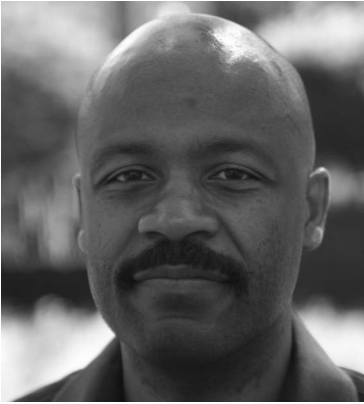
Schreiber Starling Whitehead assists our clients in meeting their diverse business participation goals. We understand the intrinsic value of project teams that truly represent the diverse voices of our society, and the benefits gained when those voices are empowered. We have collaborated with diverse business enterprises since our inception in 1987, and our project teams are well-versed in each others' processes and do not require the team-building efforts too often seen as an inhibitor to diversity. As a start, from our own perspective as a certified small business we engage other small businesses on nearly all of our projects. In the process we have forged strong long-term relationships with minority-, women-, and veteran-owned business enterprises, including consultants we have proposed for our Health Sciences Center Building team. We also value diversity in our office, as evidenced by our current staff makeup:

- We are 25 percent woman-owned
- Women make up 50 percent of our staff
- 24 percent of our staff represent minority populations

We aim to exceed the 10% MBE, 6%WBE, 5% veteran-owned business, and 5% Washington Small Business goals established by DES, and despite past successes we will not rest on our laurels until diversity becomes quotidian. We actively employ our Diverse Businesses Inclusion Plan to maintain existing relationships and develop new partners. Several features of our Plan are instrumental to its success:

- Assembling marketing materials within the relatively short time period available between the release of RFQs and submittal deadlines can be very difficult for historically underrepresented businesses. We maintain a list of viable diverse business consultants and pre-qualify them as appropriate for the types of projects we pursue. We track upcoming opportunities and reach out to those pre-qualified firms we see as a good fit *prior* to the release of project RFQs to assure they have the time to appropriately and effectively respond.
- As specialists in public sector projects, we help our diverse business consultants that are new to public work to understand the delivery processes that make the project sector unique. We provide assistance in completing the forms and other paperwork required in public contracting.
- Cash flow is extraordinarily important to business success. We promptly invoice consultant work and *always* pay within five days of being paid by our clients.
- We are visible to prospective consultants through participation in networking events, educational programs, and business organizations catering to the interests of diverse businesses. We provide information on our firm and work to generate interest in the diverse business consulting community.

We confirm all registrations through the OMWBE online database of registered firms, the Department of Veteran's Affairs, and WEBS. We report our progress on every state project through B2Gnow.



Roz Estimé

The Estimé Group - MBE (self-certified)

Project Role: Health Education/Lab Planner

The Estimé Group's experience covers a broad range of science and health facility planning project types; including allied health, healthcare & medical facilities, basic science research, chemistry, medicinal chemistry, micro and molecular biology, environmental testing, biotechnology, and pharmaceutical, vivarium, BSL-3 and vivarium facilities, and specialized quarantine facilities.

Led by Roz Estimé, The Estimé Group applies technical expertise to identify efficient and creative solutions to lab planning and medical planning for medical research, hospital, clinic, and college/university clients. The challenge in healthcare and laboratory planning is the design of effective flexible environments that support future growth and facilitate both individual and collaborative work. To meet this challenge the Estimé Group designs facilities to fulfill the functional requirements of each user group's unique needs through a collaborative process involving the entire project team. In programming workshops Roz will gain a detailed understanding of the primary function of each space, determine the space requirements, identify critical support and office adjacency relationships, and define the specific equipment and infrastructure required to support the program. The expertise Roz brings will make the pre-design process more efficient, more manageable, and more cost-effective. He will help the program stakeholders make informed decisions based on thorough analysis of their needs. In so doing Roz will help the project team avoid the time-consuming mistakes and lost opportunities too common in the development of STEM facilities.

ROZ'S REPRESENTATIVE EXPERIENCE:

- **STE(A)M Education Center Pre-Design** - Shoreline Community College (w/ SSW)
- **Center for Allied Health Education** (including Pre-Design) - Bates Technical College (w/ SSW)
- **Pacific Tower Health Education Center** - Seattle Central College (w/ SSW)
- **Allied Health Building** - Lake Washington Institute of Technology (w/ SSW)



Marjorie Lund, PE, SE, DBIA

Lund Opsahl - WBE

Project Role: Lead Structural Engineer

Since 1997, Seattle-based WBE structural engineering firm Lund Opsahl has offered a deep level of knowledge and experience across a wide range of building types. Services include new building structural designs, assessments, and evaluations; seismic retrofits; adaptive reuse; historic building renovations; sustainable buildings; master planning and studies; construction support engineering; tenant improvements; and special structures.

Marjorie's work on 24 Washington State higher education campuses spans decades, including current health sciences work at Shoreline Community College, and encompasses highly successful teaming experiences with SSW Architects on numerous endeavors. Marjorie's depth of technical expertise extends far beyond her work with community colleges and includes leadership of Lund Opsahl's healthcare practice.

Marjorie consistently delivers clear, concise project definitions while contributing creative ideas necessary to efficiently meet college goals. Her extensive portfolio and deep understanding of DES processes and OFM Guidelines, extensive pre-design experience, and relevant project experience will provide unique, essential support for this project.

MARJORIE'S REPRESENTATIVE EXPERIENCE:

- **STE(A)M Education Center Pre-Design** - Shoreline Community College (w/ SSW)
- **Health Sciences and Advanced Manufacturing Building** (including Pre-Design) - Shoreline Community College
- **Center for Design** (including Pre-Design) - Lake Washington Institute of Technology (w/ SSW)
- **Shop Building Renovation** - Olympic College (w/ SSW)
- **Miller Hall Pre-Design** - University of Washington (w/ SSW)



**Darren Schwend, PE, LEED AP
Notkin/P2S**

Project Role: Lead Mechanical Engineer

Notkin/P2S offers expertise in mechanical systems designed to reduce energy and water consumption, lessen reliance on hazardous materials, and minimize impact to the environment. They assist clients in obtaining rebates from electric, gas, and water utility companies, including metering that allows deductive wastewater credits. Notkin/P2S works with owners to understand their energy and sustainability goals, helping them make informed decisions. Reasonable access to replace equipment as the facility ages is also a focus of the firm’s designs. Notkin/P2S strives to provide the lowest energy consumption possible within project budgets on all its projects. The advanced simulation software they use provides owners the information they need to make decisions that truly integrate the building envelope, building orientation, lighting systems, and HVAC systems.

Darren is a versatile mechanical engineer and experienced project manager in the conception, design, and execution of mechanical systems for higher education and healthcare facilities. His extensive work for Washington State institutions includes the Lake Washington Institute of Technology, University of Washington, Washington State University, Seattle Central College, and Green River College. At healthcare facilities such as EvergreenHealth and the University of Washington Medical Center, Darren leads the development of innovative systems to support complex needs involving advanced medical equipment, 24/7 operations, and highly sensitive environments. Darren’s collaborative approach to working with owners, architects, and other team members consistently delivers projects that satisfy complex project needs.

DARREN’S REPRESENTATIVE EXPERIENCE:

- **STE(A)M Education Center Pre-Design** - *Shoreline Community College (w/ SSW)*
- **Center for Design** (including Pre-Design) - *Lake Washington Institute of Technology (w/ SSW)*
- **Automotive Technology Renovation/Expansion** (incl. Pre-Design) - *South Seattle (w/ SSW)*
- **Pacific Tower Health Education Center/Renovation** - *WA Dep’t of Commerce & Seattle Central College (w/ SSW)*
- **Liberty Hall** (Science & Allied Health Bld’g, incl. Pre-Design) - *Everett Community College*
- **Allied Health Building Pre-Design** - *Clover Park Technical College*

Notkin/P2S will subcontract engineering production to Blue Trident, LLC, an SBA-certified 8(a) Business Development Program participant and Service-Disabled Veteran Owned Small Business (SDVOSB) certified through the Department of Veterans Affairs, Center for Veterans Enterprise (CVE), and currently registered with the Washington Department of Veterans Affairs as a Veteran Owned Business. They are a Washington state certified Minority Business Enterprise (MBE) and certified Disadvantaged Business Enterprise (DBE). Notkin/P2S’ relationship with Blue Trident spans more than a decade.

Blue Trident’s Chief Engineer is Emmanuel “Manny” Bautista, a retired naval officer who served over 22 years in the U.S. Navy’s Civil Engineer Corps. He has more than 31 years of experience leading engineering and facilities management organizations and directing complex design and construction programs.



**Sean Bollen, PE
Wood Harbinger**

Project Role: Lead Electrical Engineer

Wood Harbinger’s 90 employees provide a full range of electrical design services and technology consulting. Founded in 1967, Wood Harbinger is an employee-owned firm, with principals actively involved in the design, quality control and management of all projects. Wood Harbinger’s professional engineers and designers bring to each project practical, real-world experience; active support for the owner’s vision for the project; and a focus on sustainability and life cycle costs. Wood Harbinger’s design philosophy encompasses a hands-on, pro-active approach that encourages active collaboration with the owner’s representatives, other design disciplines, and the contractor. Wood Harbinger’s system designs emphasize energy efficiency,

environmental quality, system flexibility for future growth, constructability, and ease of maintenance and operation.

Sean has 26 years of experience providing the electrical design for commercial, educational, healthcare, governmental, and industrial projects. His expertise includes design and commissioning of medium and low voltage power distribution, motor controls, interior and exterior lighting, and fire protection systems.

SEAN'S REPRESENTATIVE EXPERIENCE:

- **STE(A)M Education Center Pre-Design** - *Shoreline Community College (w/ SSW)*
- **Center for Design** (including Pre-Design) - *Lake Washington Institute of Technology (w/ SSW)*
- **Automotive Technology Renovation/Expansion** (incl. Pre-Design) - *South Seattle (w/ SSW)*
- **Pacific Tower Health Education Center/Renovation** - *WA Dep't of Commerce & Seattle Central College (w/ SSW)*
- **Lindbloom Student Union** - *Green River College (w/ SSW)*
- **Allied Health Building** - *Lake Washington Institute of Technology (w/ SSW)*



Ding Ye, PE
Reid Middleton, Inc.

Project Role: Lead Civil Engineer

Reid Middleton also has extensive project experience with community colleges ranging from surveying, land use entitlements, SEPA, master planning, structural and civil engineering design, and construction phase assistance. They have an established history and quality reputation for designing infrastructure solutions and have provided these services on over 164 projects for community colleges.

Ding has 24 years of experience in civil, environmental, and construction engineering. His unique and broad range of capabilities includes site development, environmental restoration, construction management, and purchasing. Ding's specific experience is in general site development and stormwater management, including water system, sanitary sewer, erosion control, site grading, drainage, hydraulics calculations, stormwater detention/retention, water quality, and computer modeling.

DING'S REPRESENTATIVE EXPERIENCE:

- **STE(A)M Education Center Pre-Design** - *Shoreline Community College (w/ SSW)*
- **Health Sciences and Advanced Manufacturing Building** - *Shoreline Community College*
- **Lindbloom Student Union** - *Green River College (w/ SSW)*
- **Salish Hall** - *Shoreline Community College (w/ SSW)*
- **Building 44 Improvements** - *U.S. Navy (w/ SSW)*



Jennifer Munde, PLA
Osborn Consulting - *DBE/WBE*

Project Role: Landscape Architect

Osborn Consulting understands the need for durable and easy-to-maintain facilities that are specifically tailored to each client's budget and staffing, creating site designs that are beautiful, inspiring, and cost-effective. Their staff is skilled at collaborating closely with project teams and identifying client's unique needs. It is Osborn's mission to design spaces with multiple uses, providing rich experiences that support the social environment and level of quality needed for today's public works.

Jennifer is an urban designer and landscape architect with 25 years of experience designing and managing public projects, providing site design and analysis, leading coordination with architects and engineers, creating conceptual design graphics for community meetings and collaboration, and creatively including sustainable practices as a baseline in all projects. Her project experience ranges from neighborhood parks and schools to urban design master planning for transit-oriented developments. She excels at collaborating with multiple disciplines, using her drawing skills and background in architecture, fabrication, and landscape architecture, ultimately interpreting and expressing these varied points of view in her designs.

JENNIFER'S REPRESENTATIVE EXPERIENCE:

- **STE(A)M Education Center Pre-Design** - *Shoreline Community College (w/ SSW)*
- **Center for Design** (including Pre-Design) - *Lake Washington Institute of Technology (w/ SSW)*
- **Early Learning Center** - *Everett Community College*
- **Northwest Career and Technical Academy** - *Skagit Valley College campus*



Mike Read

TENW

Project Role: Traffic Engineering

Formed in 1999, TENW provides quality transportation planning and design consulting services throughout the Pacific Northwest. TENW's success is built upon a passionate and dedicated team deeply committed to the success of their clients' projects by providing superior service with a focus on responsiveness, creativity, quality, attention to detail, and a pragmatic approach to problem solving. Specialties include traffic impact analysis; parking; roadway, intersection, and traffic signal design; non-motorized planning; and ADA compliance.

Mike is a principal engineer and founder of TENW. His diverse experience includes corridor studies, transportation impact analyses for SEPA/NEPA environmental assessments and impact statements on individual projects and programmatic assessments, multimodal transportation design, traffic operations analysis, transportation alternatives analysis, transit and nonmotorized planning. He has accumulated over 30 years of experience in the transportation engineering profession.

Mike has studied parking and pedestrian crossing issues associated with the Health Sciences Center Building site through his work on Renton Technical College's 2016 RTC Campus Master Plan. As such he is poised to make an immediate contribution to our team.

MIKE'S REPRESENTATIVE EXPERIENCE:

- **Center for Design** (including Pre-Design) - *Lake Washington Institute of Technology (Firm experience, w/ SSW)*
- **Campus Master Plan** - *Renton Technical College*



John Langer

John Langer Consulting - *Veteran-Owned Business*

Project Role: Cost Estimating

Since 1991, John has been providing cost estimating, scheduling, value analysis, and constructibility review services to clients in the Pacific Northwest. After spending more than twenty-two years working for general contractors, John developed an independent cost consulting practice where he develops check estimates for projects prior to bid, conceptual estimates for proposed projects, and provides third-party estimates for change orders or claims analysis. He has completed more than \$750 million in check estimates and developed in excess of \$900 million in conceptual and pre-bid cost estimates. Additionally, he has completed over 120 constructibility reviews for owners and architects and has participated in more than 100 value analysis studies and facilitated 25 of those.

JOHN'S REPRESENTATIVE EXPERIENCE:

- **STE(A)M Education Center Pre-Design** - *Shoreline Community College (w/ SSW)*
- **Center for Design** (including Pre-Design) - *Lake Washington Institute of Technology (w/ SSW)*
- **Miller Hall Pre-Design** - *University of Washington (w/ SSW)*
- **Thurston County Readiness Center Value Engineering Study** - *Washington Military Department (SSW project)*
- **Laura Angst Hall Value Engineering Study** - *Skagit Valley College (SSW project)*

RELEVANT EXPERIENCE

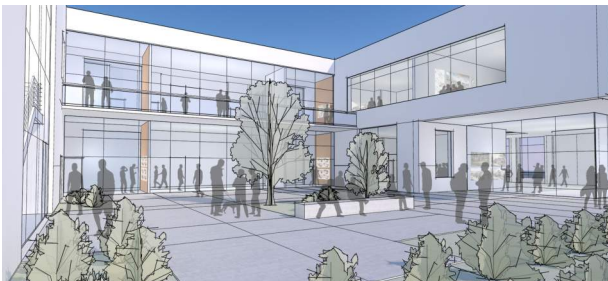
Pre-Design Experience

Schreiber Starling Whitehead Architects has successfully completed dozens of pre-designs for public agencies. These pre-designs have been instrumental in legislative appropriations exceeding \$500,000,000. Our deep knowledge of the state's OFM project budget/funding process allows us to effectively package pre-design documents for rapid OFM review and approval. All our submitted pre-design reports have resulted in fully-funded projects. In just the past three years we have been involved in eleven pre-design studies:

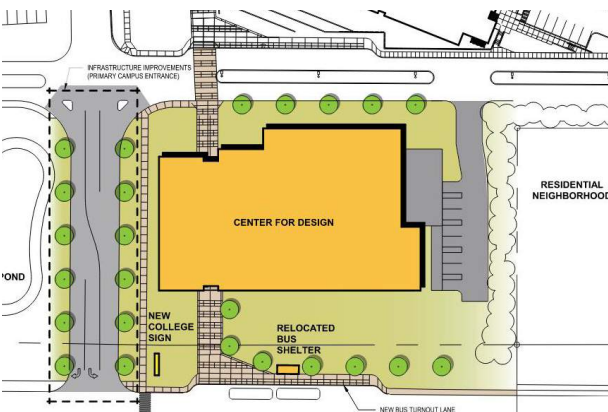
- STE(A)M Education Center Pre-Design - *Shoreline Community College (in process)*
- Baker Hall Replacement Pre-Design - *Everett Community College*
- Miller Hall Renovation Pre-Design - *University of Washington*
- Renovation & Expansion of the Anacortes Readiness Center Pre-Design - *Washington Military Department*
- Center for Design Pre-Design - *Lake Washington Institute of Technology*
- Transportation Building Preservation Pre-Design, Olympia - *WSDOT*
- Life Skills Training Center Pre-Design - *Washington State School for the Blind*
- Academic & Physical Education Building Pre-Design - *Center for Deaf and Hard of Hearing Youth*
- Center for Science and Technology/CC4 Pre-Design - *Cascadia College*
- Medical Mile Health Science Center Pre-Design - *Bates Technical College*
- North County Pre-Design - *Clark College*

The following pre-designs reflect our recent experience with SBCTC facilities of a similar degree of effort that we would expect for the RTC Health Sciences Center Building pre-design:

CENTER FOR DESIGN PRE-DESIGN Lake Washington Institute of Technology, Kirkland



The Center for Design continues our professional relationship with LWTech begun in 2001. Schreiber Starling Whitehead Architects first participated in early planning of the Center for Design in 2013, and led the successful PRR effort in 2017. We were selected to perform the pre-design in 2019, and the college subsequently expanded our agreement to include full A/E services through project completion.



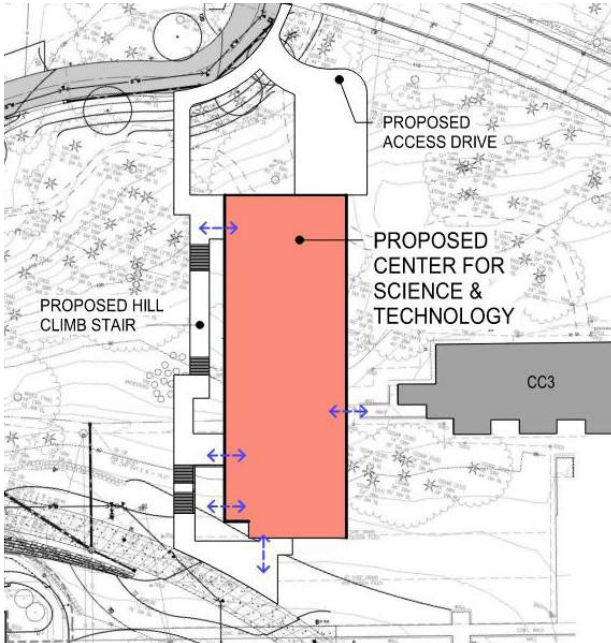
The Center for Design is an immersive STE(A)M facility housing all programs of the college's School of Design and Applied Arts: Applied Design, User-Centered Design, Digital Gaming and Interactive Media, Architectural Technology, and Art. Its concept is based on the premise that creativity is the skill most necessary for career success in design and technology fields, and that creativity is most effectively taught through a merging of traditional STEM and Art training. Key to the building's success will be the spaces shared by all programs, which both contribute to a collegiate atmosphere and better promote applied design and technology programs to the campus community. This includes a large multi-purpose space which will play the role of presentation room, large-group collaboration space, student lounge, and campus event center. The 49,900 gross-square-foot two-story facility is the first campus building designed to physically engage the surrounding community.



A key challenge of this project to the college's direction that facility design embody the college's commitment to Equity, Diversity, and Inclusion. Design responses include an insistence on universal access rather than simple ADA compliance; that all toilet rooms be gender-neutral; that space be provided to support new mothers, private religious observance, and wellness; that materials not just be warm and welcoming but that they be ethically sourced; and that the overall design sensibility be deliberately neutral.

Graphic support for Center for Design pre-design, LWTech

CENTER FOR SCIENCE AND TECHNOLOGY (CC4) PRE-DESIGN Cascadia College, Bothell



Site diagram; Center for Science and Technology (CC4), Cascadia College

To remain a viable choice for post-secondary education, Cascadia has planned the Center for Science and Technology (CC4) with a focus on improving student access to STEM (Science, Technology, Engineering, and Math) degrees and promoting integration of STEM programs with the humanities. Through the State Board for Community and Technical College's capital project submission process, the Center for Science and Technology entered the capital funding pipeline in 2016. SSW Architects participated in preparation of the successful Project Request Report.

The CC4 pre-design study concluded that an all-new Center for Science and Technology located at the heart of campus offers the best opportunity to improve STEM-specific educational outcomes for Cascadia's students. Totalling 54,000 gsf, the CST will satisfy Cascadia's goal of providing access to inclusive STEM education by meeting local demand for access to a college education, expanding the college's STEM offerings, and implementing the college's integrated education model specific to STEM programs. It will increase the college's facility capacity by 600 FTE. The CST will provide students with multiple opportunities to engage in active learning through formal instructional environments and a broad variety of informal practice labs, collaborative workspaces, and student support facilities.

SEMINAR I PRE-DESIGN The Evergreen State College, Olympia



Renderings developed in support of Seminar I pre-design study, The Evergreen State College

The Evergreen State College's Seminar I was completed in 1974 and anchors the northwest corner of Red Square. Its original uses – small-scale instruction, faculty offices, and campus administrative support – were largely supplanted as Evergreen's interdisciplinary program-based pedagogy took root and created preference for large-scale highly flexible classroom/lab environments. This advancement contributed to the building's loss of purpose and its conversion to a secondary facility despite its prominent location at the ceremonial heart of campus. Seminar I was also intended to be the first phase of a much larger facility and its service spaces and equipment were sized to support the full build-out. As a result, Seminar I suffers from an exceptionally low net-to-gross efficiency (42 percent) and highly inefficient use of its (now obsolete) mechanical and electrical equipment.

The building currently houses the college's Health and Counseling Center, Police Services and affiliated Parking Services, the Advancement Division's call center, and miscellaneous unrelated offices, none of which fit well within the building's existing constraints. To return Seminar I to prominence and to re-set its support infrastructure to a scale commensurate with actual need, our pre-design study concluded a full renovation was necessary, supported by minor additions. Proposed work included converting oversized mechanical spaces into occupied facilities.


Work including extensive programming (led by Roz Estimé) of a 8,400 gsf clinic for the Health and Counseling Center, and concluded it was best constructed as a separate facility. Our team provided a separate feasibility report for this clinic, which was successfully funded and constructed.



Samuelson STEM Center, Central Washington University

Major Capital Project Experience

While the Health Sciences Center Building RFQ is for pre-design services only, Renton may choose to continue with its pre-design consultant into full A/E services. We have direct experience with each element of the Health Sciences Center Building through major projects we have completed. The table below highlights several of these projects, and how they are directly relevant to Renton Technical College. Project descriptions follow on the next several sheets.

| Health Sciences Center Building - Potential Program Elements | Center for Allied Health Education | Samuelson Hall | Health Education Center | Allied Health Building | Angst Hall |
|--|--|--|---|--|--|
| | Bates Technical College | Central Washington University | Seattle Central College | LWTech | Skagit Valley College |
| |  |  |  |  |  |
| Performed Pre-Design | ✓ | ✓ | | ✓ | |
| STEM Programs | ✓ | ✓ | ✓ | ✓ | ✓ |
| Flexible Classrooms | ✓ | ✓ | ✓ | ✓ | ✓ |
| Healthcare Skills Labs | ✓ | | ✓ | ✓ | ✓ |
| Dental Skills Labs | ✓ | | ✓ | ✓ | |
| Simulation Labs | ✓ | | ✓ | ✓ | ✓ |
| Public Health Clinic | ✓ | | ✓ | ✓ | |
| Site Complexity | ✓ | ✓ | ✓ | ✓ | ✓ |
| Informal Study Spaces | ✓ | ✓ | ✓ | ✓ | ✓ |
| Faculty Offices | ✓ | ✓ | ✓ | ✓ | ✓ |
| Year Completed | 2021 | 2018 | 2016 | 2011 | 2009 |
| Size (gross square feet) | 65,000 gsf | 140,000 gsf | 80,000 gsf | 83,550 gsf | 64,000 sf |
| Budget (MACC) | \$34,718,000 | \$46,280,000 | N.A. | \$24,018,000 | \$20,742,000 |
| Final Construction Cost | \$37,224,000 | \$42,948,000 | \$34,461,000 | \$22,657,000 | \$22,542,000 |
| Reference | Dennis Flynn DES Project Manager 253-208-9207 | Bill Yarwood Director Capital Planning 509-963-1120 | Lincoln Ferris VP Admin Services 206-934-3169 | Casey Huebner Director LWTech Facilities 425-739-8252 | Tim Wheeler Director SVC Facilities 360-416-7751 |

CENTER FOR ALLIED HEALTH EDUCATION

Bates Technical College

Tacoma, Washington



The Medical Mile Health Science Center, when it opens in Fall 2021, will be the first new building on the Bates Technical College Downtown Campus in nearly 60 years. It will support all healthcare programs offered by the college. Schreiber Starling Whitehead Architects teamed with The Walsh Group on the Medical Mile, Washington's first purely academic progressive design-build project. As a first task SSW led the pre-design effort, facilitating programming workshops with representatives of Bates' Practical Nursing, Nursing Assistant, Dental Assisting, Dental Laboratory Technician, Denturist, Hearing Aid Specialist, Medical Assistant (AMA/CMA), Occupational Therapy Assistant, Phlebotomy, and Simulation Operation Technician programs. The latter program is housed in an extensive simulation suite containing exam and hospital room mockups with associated control rooms, medication dispensing equipment, a mock reception/office space, and debrief facilities. In addition to allied health classrooms and skills development labs, the building has a multi-purpose science lab equipped for Anatomy & Physiology, Chemistry, and Microbiology instruction, including preparation and storage facilities and a digital cadaver lab. The pre-design effort was completed in seven weeks.

The four-story building floats over a parking level which serves patients of Bates' public health clinics and provides preferential parking for bike commuters and charging stations for electric vehicles. The structural grid was established by the parking layout, with modifications made on subsequent floors to accommodate academic space requirements. Of critical importance to the college, the facility has only negligible impact on Downtown Campus parking capacity while adding 65,000 gsf of modern academic space.

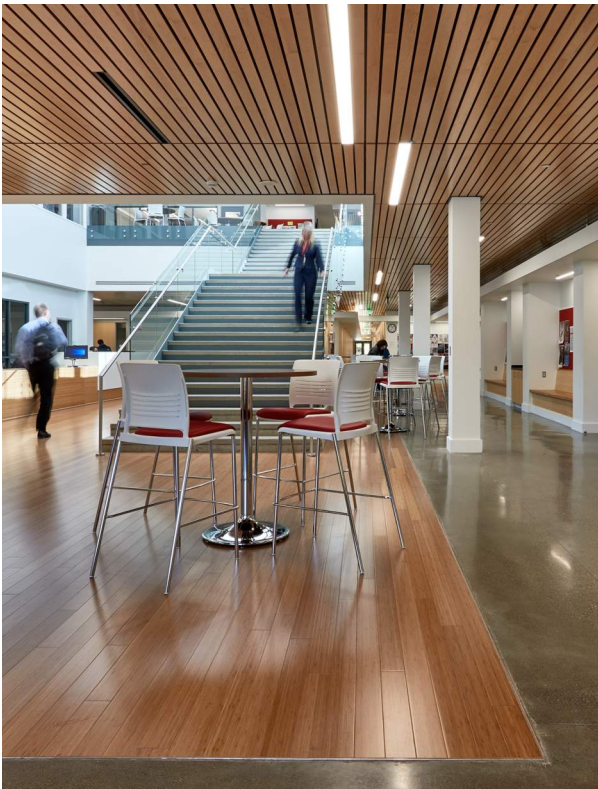
LEED v4 Silver certification is pending.



SAMUELSON STEM CENTER

Central Washington University

Ellensburg, Washington



Located in the heart of the Central Washington University campus, the existing 107,000 square-foot Samuelson Union Building (SUB) was a conglomeration of building segments built between 1928 and 1967. After extensive programming and planning with the university administration, faculty and students, the vision of recreating Samuelson as a vibrant center for technical learning was realized in Fall 2018 when the \$45M construction phase was completed. The project involved demolishing 57,750 sf of existing space, renovating the 49,250 sf SUB wing constructed in 1967, and adding 90,750 sf of new construction.

Housing the departments of Computer Science, Information Technology and Administrative Management, Mathematics, and the Multi-Modal Learning Center, the new Samuelson STEM Center features technology and media-rich learning spaces including learning labs, maker-spaces, informal peer-to-peer break-out spaces, classrooms, labs, and faculty offices. It also houses a Cyber Security Lab and a 5,000 square-foot data center supporting the university's campus-wide IT needs. LEED certification is pending.



PACIFIC TOWER HEALTH EDUCATION CENTER / RENOVATION

Washington State Department of Commerce
Seattle Central College
Seattle, Washington



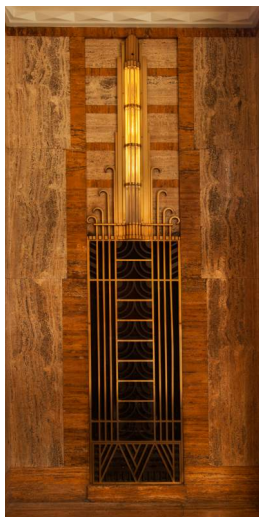
Early in 2013 the Seattle College District was asked by the legislature for input regarding an opportunity for creating a new Allied Health Center in the Pacific Tower, a unique and iconic landmark in the Seattle skyline. While a preliminary programming and concept response typically would involve extensive meetings with faculty and administration and take a number of months, the district needed to respond within weeks. Due to our having recently completed new health education buildings of a similar scale and scope, the district enlisted our help under our state On-Call Architect agreement to develop an initial list of academic, lab, and support spaces that could serve 300-FTE, and to develop “test-to-fit” concept diagrams organizing the space over several floors.



Subsequent to that study, the Washington Department of Commerce, also through our On-Call agreement, engaged our team to conduct a thorough investigation of the core and shell of the Pacific Tower as part of its due-diligence in preparation for entering a long-term lease. Using the State Lease Standards as our guide, our team evaluated all building elements including code compliance as well as determining the expected service life of the installed equipment. Our recommendations included immediate correction of accessibility and envelope deficiencies, and systems improvements, totaling \$3.4 million. We also provided a recommendation for mid- and far-term improvement/operation costs over the expected 30-year life of the lease.



Ultimately, we were selected by the Department of Commerce as architect for not just the College’s spaces but for the remaining 120,000 gross square feet of space in Commerce’s lease. Our scope included improvements to the historic building’s envelope including its windows, minor through major tenant improvements for approximately 12 different organizations, structural systems upgrades, and integration of an independent ESCO (Energy Services Company) contract. The City of Seattle also required that the building be made compliant with current life safety and energy codes.



ALLIED HEALTH BUILDING

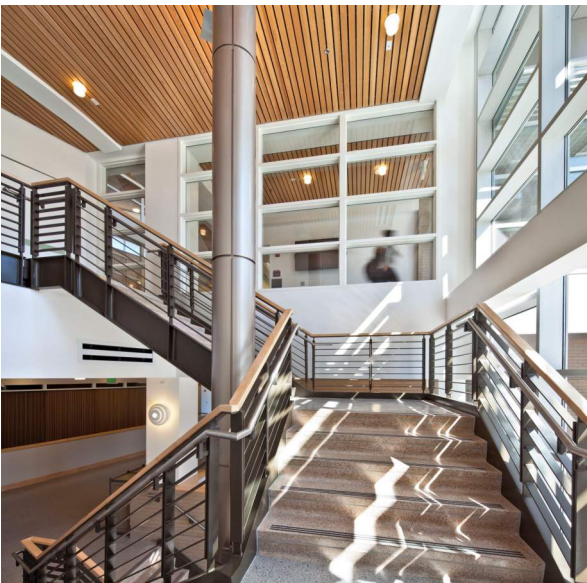
Lake Washington Institute of Technology
Kirkland, Washington

The LWTech Allied Health Building provides facilities for all programs of the School of Health Sciences (Certified Nursing Assistant, Practical Licensed Nursing, Registered Nursing, Medical Assisting, Medical Billing and Coding, Physical Therapy Assistant, Occupational Therapy Assistant, Funeral Service Education, Health Sciences and Public Health). The building also houses the Washington Network for Innovative Careers, a high school skills center offering allied health programs (Dental Assisting and Medical Assisting). The new building includes flexible technology-rich general classrooms for both college and rental use, and a five-room simulation suite each with an associated control room. A portion of the facility is designed for future use as a health clinic operated in partnership with a community health care provider.

Schreiber Starling Whitehead Architects developed a design that connects the new 83,550-sf three-story building with the existing LWTech East Building, providing direct links to an existing dental clinic and campus fitness center. It is also the only campus building offering direct on-grade access to parking.

The building organization extends an existing atrium and provides multiple informal student gathering spaces for collaborative learning.

The building received LEED Silver certification.



LAURA ANGST HALL

Skagit Valley College
Mount Vernon, Washington



Schreiber Starling Whitehead Architects, together with Yost Grube Hall, created designs for this new 64,000-sf building providing labs, classrooms and offices for the Science and Allied Health programs at Skagit Valley College. It replaces the original Angst Hall which was built in 1956.

The new Laura Angst Hall provides learning environments for registered and practical nursing, medical assistant, pharmacy technician, phlebotomy assistant, and medical billing and coding. The nursing program features two new state-of-the-art human simulation labs where students practice their skills on animatronic mannequins that instructors control while their fellow students observe the training on large screens in the adjacent classrooms. In addition to these medical facilities, the new building also houses physical science programs providing classrooms and labs for astronomy, biology, chemistry, environmental conservation and physics. The project also provides 5,000 square feet of general education, interactive, distance-learning classrooms. Wi-fi networks and smart classrooms give students options for learning offered by other colleges and four-year universities across Washington.

Laura Angst Hall is the first Higher Education Building in Washington State to achieve LEED Platinum certification by the U.S. Green Building Council.



PROJECT APPROACH AND INNOVATION

Our Philosophy and its Application: A Dynamic and Inclusive Process

No matter the scale, a successful public project is best achieved through a dynamic and inclusive process. This process identifies and meets the goals, needs, and aspirations of the building users while respecting the project's social and environmental context. It is a dynamic process in that it evolves as the project evolves, and inclusive in that all interested parties are encouraged to participate. The City of Renton, and Renton Technical College, constitute highly diverse communities and it is critical that the Health Sciences Center Building's design celebrates and supports that diversity. We view our primary role in this process as that of facilitator, and have structured our team to be credible within your constituency.

We also recognize that in the public project environment, the number of individuals and groups having a stake in the successful outcome can be quite large. Schreiber Starling Whitehead Architects is experienced in working with committees, building users, facilities staff, administrators, students, and the larger public. To assure that all stakeholders are involved, we employ open, interactive workshops during both planning and design. Our pre-design workshops are intended to test the project concept established by the PRR against current college needs and available funding. We focus on a broad range of issues including program and space requirements, inter-functional and intra-functional relationships, systems requirements, LEED implementation, and how best to meet the needs of historically underserved populations. In each of these workshops our team will include facilitators best able to draw out critical information, whether they be healthcare education specialists, energy wonks, or persons who through personal experience uniquely empathize with diverse constituents. The raw information gathered in these workshops will be distilled into a comprehensive, inclusive, and nuanced program that both informs and disciplines the subsequent design process.

In addition to strong leadership and technical skill we bring an attitude of openness to all our projects. It is our first and continuing task as designers to listen to, and be receptive to, the wealth of ideas that stakeholders bring forth. We know some of those ideas are clear and ready for development. We also understand that others may need a supportive forum, an alternative perspective, or a fast and accurate technical response to take shape and be ready for use. As with our expectations for the A/E team, our philosophy recognizes that each stakeholder brings to the project individual knowledge and experience which combines with the contributions of others to produce results far greater than the sum of individual contributions.



Allied Health Building, LWTech

Topics Unique to Pre-Designs

A central purpose of the OFM pre-design process is the investigation of alternate solutions. During the pre-design workshops we will apply our planning skills to brainstorm possible solutions to a wide range of project issues. Between workshops our team will analyze each alternate solution to determine its appropriateness and the degree to which it meets the project goals and program needs. The results of our analyses will be brought back to the stakeholders for verification. As the alternates are further developed, costs and implementation schedules will be developed for each. At this point the college will have considerable material to enable an informed selection of the preferred alternate, which will receive detailed attention as our planning team prepares the final report.

Too often in state-funded projects it is evident once the pre-design process begins that the requested budget is inadequate to realize all the facilities or equipment needs outlined in the PRR. Realized later in the design process, this typically means that the users' needs are compromised or the ability to maximize the program benefit of the funding spent is lost. We believe that the key to assuring that this doesn't happen is set in the programming process we conduct in pre-design. Our role in this process is to assist the stakeholders to complete work left unresolved from prior planning work and to identify potentially changed conditions. We then ally current "real-world" knowledge of the construction market and public funding process to confirm project goals are achievable. The budget verification analysis we perform at this time goes deeper than simply applying published area costs to the program space total. We look at the program, site development, systems



performance, design, and schedule needs, and identify those that are unique. We then ensure that the budget identifies and addresses the cost impact of each unique issue.

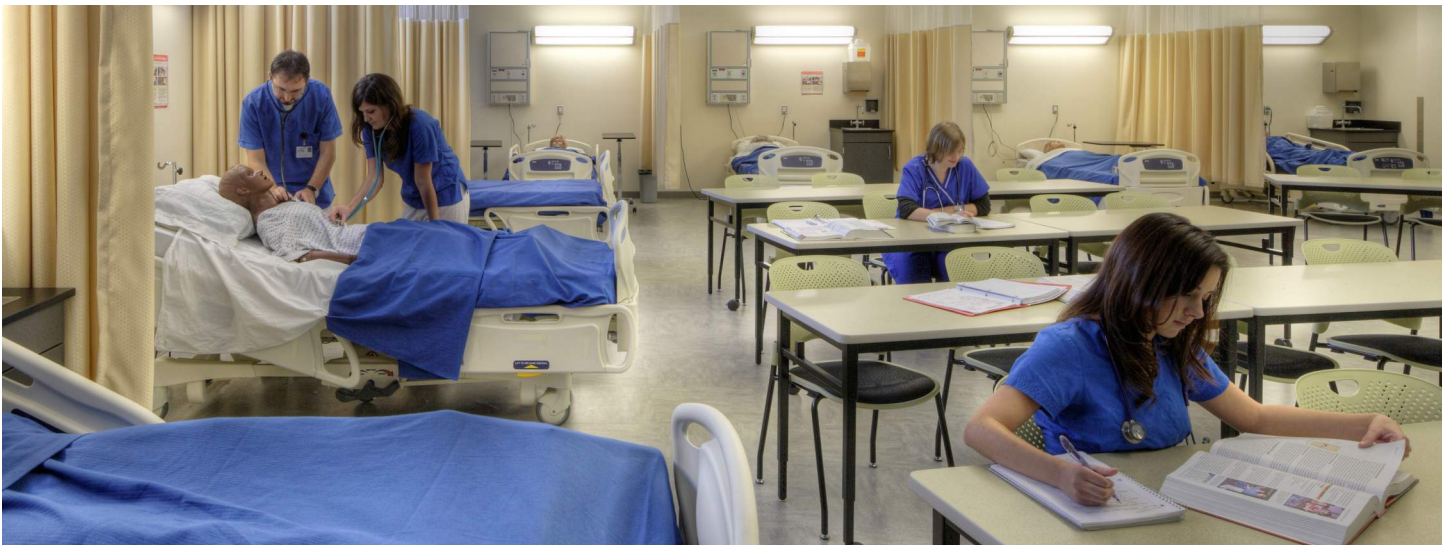
The implementation schedule for both design and construction will be a key element to study during the pre-design process. We will develop scenarios that take into account various outcomes for legislative appropriation, municipal land use constraints, permitting, and code updates to help Renton decide upon a project schedule that best balances these factors and assures the highest use of funding on what really matters - development of a Health Sciences Center Building that best meets student needs now and in the future.

Design Approach

Your RFQ gives you the option of extending the services of our pre-design team through project completion. If DES and the college choose to exercise this option, Schreiber Starling Whitehead Architects bases our design process on the belief that quality design lies in creating spaces that integrate into their community, producing spaces in harmony with their social and environmental context. The appearance of our projects becomes as varied as their function and location, and our only style is the expression of use and user vision—not of changing fashion.

During the earliest phase of design we have the ability to achieve the most significant positive impacts on the project. The most important initial task for the design team is to verify that perceived needs remain actual needs, and that they remain achievable within the budget. We will meet with project stakeholders to verify the decisions made during pre-design, confirm overarching goals, and work collaboratively to define a course of action. Every subsequent decision made for the life of the project is weighed against the project goals established at this point, a highly effective technique for protecting against scope creep.

In our process there is a strong sense that each project develops uniquely from the inside out and that each user's experience within it is extremely important. As the design evolves we continue to engage project stakeholders to assure the design satisfies the needs of a diverse community. We fervently believe that on the day the facility opens for use that each person entering the building sees that they have not only been heard but that their voice has contributed to the success of the facility.



Top to bottom: Simulation suite at SCC's Pacific Tower; SVC Laura Angst Hall simulation facility (during visit of Governor Jay Inslee); LWTech Allied Health Building neonatal ICU skills lab; and Angst Hall Nursing skills lab.

PAST PERFORMANCE AND PROJECT MANAGEMENT

Experience with Active Campuses

Removing an existing building and constructing the new Health Sciences Center Building while minimizing impacts on college operations will require careful planning and proactive implementation. With eighty percent of our work being for higher education clients, we know that minimizing campus disruption is a baseline expectation. Prior to forming Schreiber Starling Whitehead Architects, our founding principals worked in healthcare design. On healthcare projects, maintaining uninterrupted operations and minimizing disturbances was essential, sometimes literally a matter of life and death. Their experiences formed the basis for our decision-making process, wherein the disruptive potential of each element of work - whether it be dust, noise, utility disruption, etc. - is taken into account and mitigation measures are included in the construction documents to eliminate or reduce their impacts on campus occupants and operations.

Off-Campus Development Issues

In our experience a number of complications arise when a college develops a building off its main campus, and especially when that building is separated from campus by a major arterial such as NE 3rd Street/NE 4th Street. Complications can include expanded permit requirements, class scheduling challenges, pedestrian safety, and operational inefficiencies. To be sure these issues are addressed and resolved to the college's satisfaction, our team includes the services of TENW, a traffic engineer tasked with performing the analyses and mitigation work likely to be required by permitting authorities as well the design of paths of travel that are both accessible, non-intimidating, and provide safe passage.



Permitting Agencies

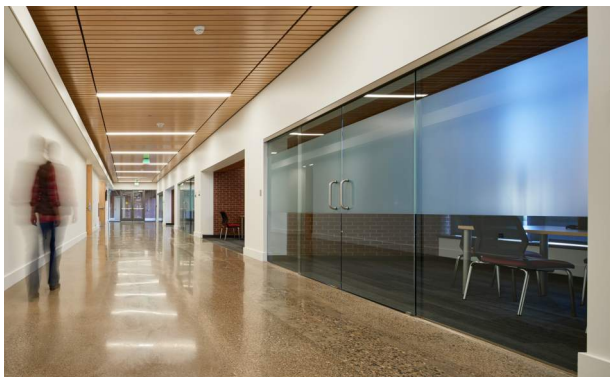
Having successfully completed projects throughout the state, including at Renton Technical College, we have proven our ability to develop the documentation necessary to meet local permit requirements. To ensure timely project approval and issuance of permits, we will work closely with the city and other authorities having jurisdiction and develop the permit documents such that permit submittals occur as early as possible and with the greatest likelihood of smooth processing.

Document Production and Quality Assurance Control

The Health Sciences Center Building pre-design report will be scrutinized both at the SBCTC and at OFM. It is essential that the document be comprehensive and that it be accurate. Delays to OFM's approval, due to a poorly assembled report, places the timely release of project funding at risk and jeopardizes the orderly progression of the remaining project. Quality assurance and control begins at pre-design, and prior to issuance of any pre-design deliverables our in-house QA/QC reviewer will perform an in-depth review to assure document quality. ***As a testament to the efficacy of our QA/QC system, of four dozen pre-design reports we have submitted to OFM not one has been returned with comments or concerns.***

For our design work, providing clear, concise, and complete information to the contractor is the primary goal of our QA/QC process. Schreiber Starling Whitehead Architects continually strives to achieve quality construction documents that are both biddable and constructible. Biddable documents ensure that all bidders can clearly understand the scope of the project and that the contract price will be competitive. Constructible documents ensure that project costs will not escalate through the construction phase due to errors or omissions.

The foundation of our quality assurance/quality control program rests on assembling teams staffed with individuals experienced and qualified in the appropriate building type and size of project. As is expected of any A/E firm performing work with state agencies, our QA/QC processes have been formalized in our Quality Management Plan and are rigorously followed on all our projects. For document quality control, at each design



Top to bottom: SVC Laura Angst Hall Chemistry lab; CWU Samuelson informal learning spaces; LWTech Allied Health Building accessible pathways on each of three levels



The design of new decidedly modern elements borrowed from features of the historic fabric; Pacific Tower Renovation, Seattle Central College/Department of Commerce

milestone we employ our checklist-based QA/QC review system to identify inconsistencies and errors so that they may be corrected prior to final printing. This review is performed by our QA/QC reviewer, who for an independent perspective is unaffiliated with the production team.

A measure of the success of our quality control program is the low incidence of change orders encountered during construction resulting from document errors or inconsistencies. ***We have averaged less than two percent changes attributed to design errors/omissions on all projects completed to date.***

Budget Management

The goal of project cost management is to provide a fully-functional facility within the budget parameters established by our clients. A critical role of pre-design is to demonstrate that the project as conceived is achievable - i.e. that scope and cost are aligned - or if not to put in place measures necessary to establish that alignment. To that end our team's independent cost consultant, knowledgeable of the local construction economy, will provide concept-level estimates during the pre-design process.

To balance scope and cost during design, we use a three-part budget management process. The first part is based on the precept that accurate estimating begins with the designers' understanding of the cost implications of their decisions. At the start of design the project team establishes initial quantities and quality expectations, from which they develop preliminary area-based costs. This allows for budgeting project elements that may not yet be "on paper." We minimize "design inflation" by assigning responsibility for each cost element to individual team members. The second part of our process is concurrent with design development. As details are generated and materials selected, costs are developed for each item of work and the material, product, and systems options are measured against initial and life-cycle costs to provide maximum value for expense. Our final design phase cost management step is the development of detailed, independent estimates at project milestones. Our cost consultant John Langer confirms quantities and applies current cost data, verified by suppliers and contractors, then determines the likely bid climate to generate progressively more detailed cost estimates. ***We have averaged bid-to estimate accuracy of +/- 5% on projects bid to date.***

Schedule

Schreiber Starling Whitehead Architects maintain vigilant project management through a task-based scheduling system to ensure that contract schedules are met or bettered. The specific actions necessary to accomplish project tasks are identified, assigned to team members, and given maximum duration and intermediate review timelines. Regular team meetings permit the management team to forecast possible shortfalls and to commit additional staff and team resources to meet the schedule milestones.

The majority of our work has been for academic institutions that operate on a rigid academic calendar. These clients simply cannot tell students that they must defer their education until next quarter while their building is under construction. As such, our firm's culture places great importance on schedule compliance on all projects, academic or otherwise.

SUSTAINABLE DESIGN EXPERIENCE

We have successfully designed and certified the following LEED buildings:



Platinum

- *Laura Angst Hall (Science & Allied Health Building)*
Skagit Valley College



Gold

- *Self Learning Commons*
Whatcom Community College
- *Charles Lewis Hall (Academic & Student Services Building)*
Skagit Valley College
- *Seattle Fire Station 28*
Seattle Fire Department
- *Seattle Fire Station 38*
Seattle Fire Department
- *Fort Lewis Readiness Center,*
WA Military Department



Silver

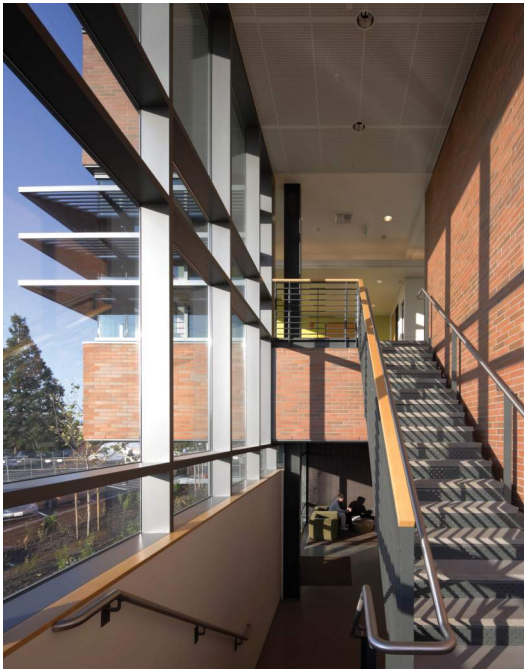
- *Lindbloom Student Center*
Green River College
- *Allied Health Building*
LWTech
- *Salish Hall*
Green River College
- *Corporate Education Center*
LWTech, Redmond Campus
- *Missile Assembly Building #3*
United States Navy
- *Wood Technology Center*
Seattle Central College
- *Colin Building Addition*
South Seattle College
- *Maritime Academy*
Seattle Central College

We realize that the most important challenge facing the architectural profession today is the design and construction of buildings that promote environmental and occupant health. The most sustainable thing any of us can do is to create successful, long-lasting buildings that support flexible use, embrace natural processes, and require the least effort and cost to maintain. For our firm, it's not just about receiving the points; whether LEED, Net Zero, or any other sustainability measuring tool, sustainable design is at the core of our practice.

Practically, the Health Sciences Center Building must attain at minimum LEED Silver certification. To achieve this through the current version of LEED (Version 4.1) will take a concerted effort that begins at pre-design. Our approach to sustainable design not only focuses on reduced utility costs, but also contributes to improved productivity and well-being of the building's occupants and neighborhood. These features carry costs which must be considered when solidifying the overall project scope. Common green features we suggest be given attention include connections to nature through access to fresh air, daylight, and views; attention to occupant comfort (ergonomics and thermal, olfactory, and noise/vibration control); tight building envelopes; use of materials with minimized negative environmental impacts; highly efficient mechanical and electrical systems; on-site power generation; and preference for shared over dedicated spaces. Our site designs typically include drought-tolerant and native plantings, light fixtures that do not impact adjoining properties, and electric vehicle charging stations.

LEED: Leadership in Energy and Environmental Design

Schreiber Starling Whitehead Architects has long been a member of the United States Green Building Council and we have several LEED-accredited professionals on our team to guide the design of our projects along LEED standards. Capital funding of public projects can never be characterized as plentiful, and it is frequently difficult to achieve mandated LEED certification levels. We are very proud of our ability to achieve and exceed sustainable building goals within available budgets. We also have direct experience in developing grant proposals and rebates for on-site energy generation. For Skagit Valley College's Laura Angst Hall we wrote a grant application to OFM which resulted in receiving a \$360,000 grant for a 30-kw photovoltaic system. This system had sufficient impact for Angst Hall to be the first LEED Platinum-certified higher education facility in the state.



Sustainable design features at Laura Angst Hall include the melding of interior and exterior spaces, raingardens incorporated into SVC's Environmental Conservation curriculum; and a photovoltaic array.

LIFE CYCLE COST ANALYSIS EXPERIENCE



SSW Architects, Notkin/P2S, and John Langer each have direct and extensive experience providing life-cycle and energy life-cycle cost analyses for our projects, including use of OFM's Life Cycle Cost Model (LCCM) and Life Cycle Cost Tool (LCCT) processes. We have used the LCCM in all our recent pre-designs to compare alternate solutions and to support the preferred solution.

An iceberg aptly illustrates the total costs of facility ownership. While initial development costs are visible and well-understood, over 30 years of a building's life the present value of maintenance, operations, and utility costs is nearly as great as the initial project costs. As we explore design alternatives, we will develop estimates of the total cost of the building, from initial construction through operation/maintenance. By comparing life cycle costs for various design configurations, we will explore trade-offs between low initial costs and long-term cost savings, identify the most cost-effective system for a given use, and determine how long it will take for a specific system to pay back its incremental cost.

Operations & Maintenance Cost Benchmarking

During the pre-design phase of the Health Sciences Center Building, we will develop a "benchmark budget" with design and construction cost estimates based upon the approved C-100 and data from past projects. Concurrently we will work with the Renton Technical College Facilities staff to set an O&M benchmark using their historical operations and maintenance data from existing campus buildings for those components that apply to this project.

Comparative Analysis

During the Schematic Design (SD) and Design Development (DD) phases, the design team will make increasingly detailed decisions about the final design for the building, including mechanical, electrical, structural, telecommunications, and plumbing systems. During this period, we will conduct a series of analyses comparing the total costs of various building system options.

Study Categories

The design team will assess the value to the project of up to 14 possible life cycle cost (LCC) comparisons in six general categories. Within each category, the specific comparisons involve options for addressing the same need. The following are examples of the 14 comparison areas, illustrating how they are applied to an actual project. Specific systems or options considered will vary with the type, scale, and intended use of the building.

Energy Systems

1. Centrally connected vs. stand-alone systems
2. Alternative energy systems (e.g., solar photovoltaics, solar thermal, fuel cells)
3. Equipment options for stand-alone systems (energy modelling of alternatives e.g., air-cooled chillers vs. VRF/DOAS, vs. refrigerant-based direct-expansion [DX] units)

Mechanical Systems

4. Air distribution systems (e.g., variable volume vs. constant volume, overhead vs. underfloor)
5. Water distribution systems (e.g., various piping systems and pumping options)

Electrical Systems

6. Indoor lighting sources and controls
7. Outdoor lighting sources and controls
8. Distribution (e.g., transformers, buss ducts, cable trays)

Building Envelope

9. Skin and insulation options
10. Roofing systems (various materials and insulation methods)
11. Glazing, daylighting, and shading options

Siting/Massing

12. Solar orientation, floor-to-floor height, and overall building height
13. Landscape, irrigation, and hardscape options

Structural Systems

14. Systems/materials selection (e.g., steel vs. concrete, cast-in-place vs. pre-cast)

