

Sedro-Woolley Innovation For Tomorrow

SWIFT CENTER



FRASER & GRAY BUILDING SCHEMATIC DESIGN

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FRASER AND GRAY BUILDINGS

This study was prepared for the Port of Skagit to assist in assessing the feasibility and cost for renovating the Fraser and Gray buildings into multi-tenant office buildings in support of the Port's innovation and sustainability program for the campus. Both buildings have been unoccupied since Northern State Hospital (NSH) closed in the 1970s. With little maintenance, they have performed poorly over this period of vacancy and have fallen into substantial disrepair. Fraser and Gray were built in 1914 and served as medical wards for male patients; therefore contributing to NSH's core operations. The floor plans for these buildings are nearly identical, with a two-story T-shaped footprint and flanking one-story octagonal sunrooms. The basement and attic spaces, where most of the existing mechanical equipment is house, could not be accessed as part of this study.

Given the failing existing conditions that prevail throughout much of Fraser and Gray, demolition may be a more viable treatment strategy than renovation. The sun room structures have deteriorated beyond repair and require complete demolition and replacement. Demolition costs are included for comparison with this renovation study.

Scope of Work

The project scope includes a change of occupancy from institutional/ health care to educational, office, and low-hazard industrial use. The original floor plan and circulation routes are substantially maintained. A new stair is proposed for compliance with fire and life-safety requirements, along with an automatic fire sprinkler system throughout the building. Historic, non-complying stairs are refurbished or reconstructed entirely. A new elevator provides ADA access to the upper floor and basement mechanical space. By removing non-loadbearing partition walls separating former patient rooms, space is provided for larger offices, meeting rooms, and restroom facilities. The multi-bed wards serve as new classroom and studio work space.

Hazardous material abatement of existing interior finishes, mechanical equipment and piping is required. Substantial remediation of the primary structural components is anticipated due to inadequate protection against water intrusion. Voluntary seismic reinforcement is also recommended. Existing mechanical, plumbing, and electrical systems are past their useful life. New modern systems are proposed to suit the building's new use and meet energy code requirements. On the interior, new gypsum wallboard shall replace damaged lath and plaster at walls and ceilings. Light metal-stud furring on the inside face of exterior walls allows for insulation and improved energy performance. Where maintained, interior doors and windows will be refurbished or replaced with similar materials. The existing wood finish flooring requires replacement.

Exterior envelope improvements include repairs to stucco finish siding,

replacement of all steel sash windows with double-hung assemblies, and new doors and finish hardware. The existing clay-tile roof needs to be removed to facilitate repair and replacement of steel truss framing. For cost savings, a new asphalt shingle roof system is proposed and the two existing skylights replaced. The enclosed walkway connecting Fraser and Gray will be reconstructed. New entrance vestibules are proposed at the north ends of Fraser and Gray to provide access from Hub Drive and adjacent parking and sidewalks.

Design Review

The renovation of Fraser and Gray is intended to be in conformance with the Design Guidelines for the Center of Innovation and Technology adopted in 2015. An architectural historian has received these documents on behalf of the Port of Skagit and has found the design to meet or exceed the design guidelines. Where damaged is minimal, historic character-defining features are preserved and refurbished.



Cost Estimate Assumptions

Construction cost estimates for Fraser and Gray are based on the enclosed schematic design drawings. Due to the conceptual level of these design plans, a 20% design contingency is included in the cost estimate.

Construction cost estimating was prepared using 2022 wage labor rates. All costs are shown in current dollar as of December 2022. Detailed cost breakdowns are provided at the end of this report for more information.

Fraser & Gray - Building Renovation Construction Cost Estimate Summary

Hard Cost		
Construction		4,860,361
General Requirements		358,382
General Conditions		539,248
Overhead + Profit	12%	690,959
	Subtotal	6,448,950
Contingency	20%	1,289,790
	Total Hard Cost \$	7,738,740
Soft Costs		
Sales Tax	8.6%	665,532
Permits	1.0%	77,387
Project Management	1.5%	116,081
A/E Fees	9.4%	727,442
	Total Sof Cost	1,586,442
	Combined Total \$	9,325,182

Fraser & Gray - Sun Rooms (2 Total) Construction Cost Estimate Summary

Hard Cost		
Construction		277,090
General Requirements		10,200
General Conditions		19,500
Overhead + Profit	12%	36,814
	Subtotal	343,604
Contingency	20%	68,721
	Total Hard Cost \$	412,326
Soft Costs		
Sales Tax	8.6%	35,460
Permits	1.0%	4,123
Project Management	1.5%	6,185
A/E Fees	9.4%	38,759
•	Total Sof Cost	84,527
	Combined Total \$	496,853

Fraser & Gray - Site Improvements Site Improvements Estimate Summary

Hard Cost Construction General Requirements General Conditions			221,054 6,850 19,578
Overhead + Profit	12%		19,799
	Subtota		267,281
Contingency	10%	\$	26,728
	Total Hard Cost	: \$	294,009
Soft Costs			
Sales Tax	8.6%		25,285
Permits	1.0%		2,940
Project Management	1.5%		4,410
A/E Fees	9.4%		27,637
	Total Sof Cost		60,272
	Combined Tota	\$	354,281
Demolition & Removal Cost		\$	733,088

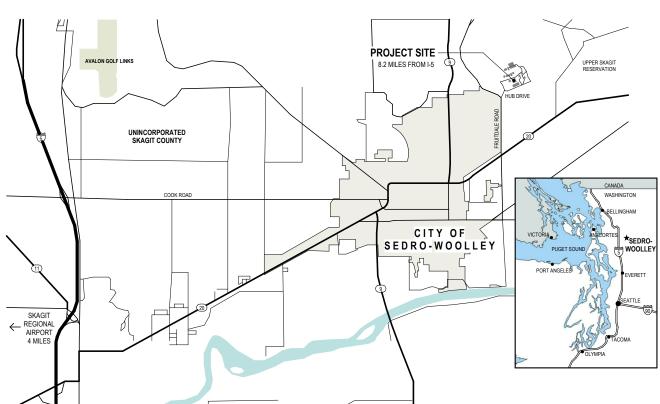


Port of Skagit - SWIFT Center Rehabilitation of Gray and Fraser Buildings



Image of the Existing Gray Building Exterior (Fraser Building Similar)

Vicinity Map



Project Team

PBS ENGINEERING AND ENVII 214 EAST GALER STREET SEATTLE WA T 206 233 9639 ATTENTION: MARK HILEY mark.hiley@pbsusa.com

PORT OF SKAGIT COUNTY
15400 AIRPORT DRIVE
BURLINGTON, WA 98233
T 360 75 TOTON; HEATHER ROGERSON
heatherr@portofskagit.com KINGWORKS STRUCTURAL ENGINEERS 600 DUPONT STREET, STE. B BELLINGHAM, WA 98225 T 360-714-8260 ATTENTION: JACK KING jack@king-works.com STRUCTURAL ENGINEER: RMC ARCHITECTS, PLLC 1223 RAILROAD AVENUE BELLINGHAM, WA 98225 T 360 676 7733 ATTENTION: JEFF MCCLURE METRIX ENGINEERING jeff.m@rmcarchiitects.com ATTENTION: LEXIE COSTIC ATTENTION: BRADY BELL bradyb@metrixeng.com K ENGINEERS INC.
208 3RD STREET
LYNDEN, WA 98264
T 360-353-4757
ATTENTION: STEVE TEVELDE
stevetevelde@k-engineers.com

COST ESTIMATOR: GTQ CONSULTING LLC

GTQ CONSULTING LLC 1050 LARABEE, SUITE 104 #481 BELLINGHAM, WA 98225 T 360 961 5470 ATTENTION JIM QUICK jgquick@outlook.com

Drawing Index

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G301 G302 G310	EXISTING BUILDING ELEVATIONS EXISTING BUILDING ELEVATIONS EXISTING BUILDING SECTIONS
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PRESENTATION LEVEL 1 FLOOR PLAN PRESENTATION LEVEL 2 FLOOR PLAN

Project Information

*NOTE: ALL ADDRESSES ARE SEDRO-WOOLLEY, WA 98284 BUILDING ADDRESS PART OF THE SWIFT CENTER (SEDRO-WOOLLEY INNOVATION FOR TOMORROW), THE FORMER STATE-OWNED NORTHERN STATE HOSPITAL CAMPUS. PARCEL NUMBER: SKAGIT COUNTY ID NO. P38607 (PARCEL A), P39356 (PARCEL B), P100646 (PARCEL C), P100632 (PARCEL D) PARCELS (NOTED ABOVE) LEGAL DESCRIPTIONS ARE FULLY DESCRIBED IN TRANSFER AGREEMENT BETWEEN DEPARTMENT OF ENTERPRISE SERVICES FOR THE STATE OF WASHINGTON AND THE PORT OF SKAGIT COUNTY, AND CAN ALSO BE FOUND AT THE OFFICE OF THE SKAGIT COUNTY ASSESSOR LEGAL DESCRIPTION PROJECT DESCRIPTION RENOVATION AND REHABILITATION OF THE GRAY BUILDING (FORMER MALE WARD 5, CIRCA 1914) AND THE FRASER BUILDING (FORMER MALE WARD 4, CIRCA 1914)... DEFERRED PERMIT SUBMITTALS: CITY OF SEDRO-WOOLLEY, PUBLIC (P) - REFER TO SWMC 17.32 ZONING: BUILDING CODE REQUIREMENTS INTERNATIONAL BUILDING CODE (BC), 2018 EDITION INTERNATIONAL EXISTING BUILDING CODE (BEC), 2018 EDITION INTERNATIONAL BUFCHANICAL CODE (IMC), 2018 EDITION INTERNATIONAL FIRE. CASC CODE (IFC), 2018 EDITION INTERNATIONAL FIRE CODE (IFC), 2018 EDITION UNFORM PLUMBING CODE (IPC), 2018 EDITION UNFORM PLUMBING CODE (IPC), 2018 EDITION

WASHINGTON STATE ENERGY CODE (WSeC), 2018 EDITION *NOTE: ALL CODES ARE SUBSEQUENTLY MODIFIED BY WASHINGTON ADMINISTRATIVE CODE (WAC)

IEBC. PRESCRIPTIVE COMPLIANCE METHOD (IEBC 301.3.1) SELECTED CODE / APPROACH:

A-3 ASSEMBLY (LECTURE HALLS) B BUSINESS (OFFICES) E EDUCATION F-2 LOW HAZARD INDUSTRIAL

CONSTRUCTION TYPE

BOTH BUILDINGS ARE TWO LEVELS ABOVE GRADE AND A BELOW GRADE CRAWL SPACE AND PARTIAL BASEMENT. THE PRIMARY STRUCTURE IS REINFORCED CONCRETE WITH STEEL FRAMED TRUSSES AT THE ROOF. THE FIRST TWO FLOORS COUSIST OF REINFORCED CONCRETE EXASS SPANNING SETWEEN REINFORCED CONCRETE COLUMNS. EXTERIOR WALLS ARE INFILL HOLLOW CLAY TILE WALLS PLACED BETWEEN THE CONCRETE COLUMNS AND BEAMS. THE ROOF CONSISTS OF STEEL TRUSSES SPANNING BETWEEN PERINETER CONCRETE ESAMS AND COLUMNS WITH WOOD CAR DECKING. THE FOUNDATION SYSTEM FOR THE BUILDING IS REPORCED CONCRETE SHALLOW SPREAD AND STRIP FOOTINGS. INTERIOR WALLS ARE ALSO INFILL HOLLOW CLAY TILE.

TYPE IIIA WITH NON-COMBUSTIBLE 2 HOUR RATED EXTERIOR WALLS AND INTERIOR ELEMENTS OF ANY MATERIAL PERMITTED BY THE CODE PER IBC 2018 602.3

ALLOWABLE HEIGHT AND AREA:

AREA SUMMARY

SECOND FLOOR

TOTAL: ROOF AREA: 14 877 SF

PLUMBING FIXTURES NOTE:

GROSS FLOOR AREA = 22,262 SF TOTAL.
ASSUME OFFICE OCCUPANCY = 1 PER 150 SF GROSS = 149 OCCUPANTS (75 MALE + 75 FEMALE)
PER 2018 IBC CD = 3 * WC + 2 LAW MALE AND 3 WC + 2 LAV FEMALE (6 WC + 4 LAV TOTAL REQUIRED)

THUS.

PROVIDE 2 WC + 1 LAV MALE AND 2 WC + 1 LAV FEMALE PER FLOOR (8 WC + 4 LAV TOTAL PROVIDED)

ADDITIONALLY 2 DRINKING FOUNTAINS REQUIRED (1 PER 100 OCCUPANTS)-PROVIDE 1 DF PER FLOOR.

ADDITIONALLY SERVICE SINK REQUIRED -PROVIDED ON PIRIST FLOOR

ADDITIONALLY PROVIDE ONE ACCESSIBLE SHOWER WITH CHANGE ROOM PER FLOOR (NOT REQUIRED)

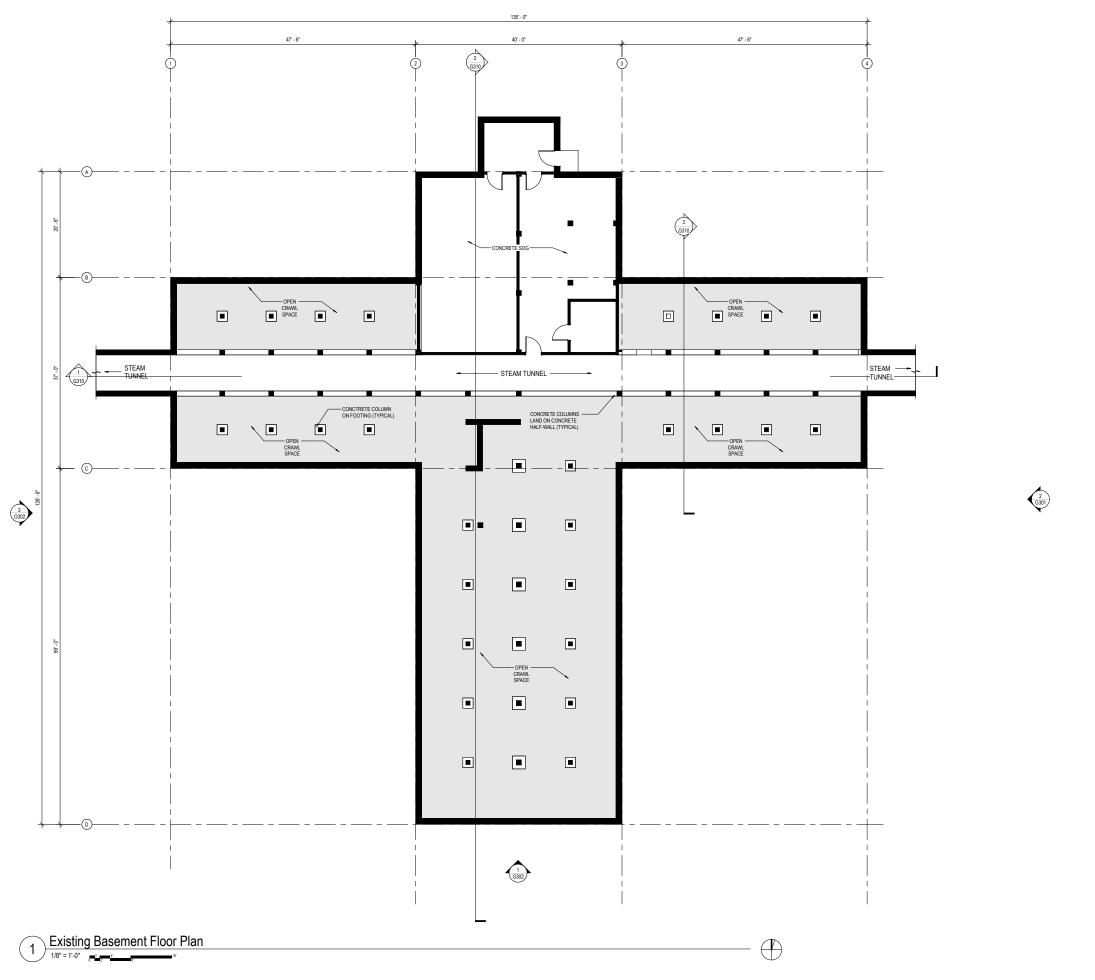
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Port of Skagit - SWIFT Center

Gray and Fraser Buildings Feasibility Study
Northern State Hospital Campus
Sedro-Woolley, WA 98284

Job No: 2203
ISSUE IN CONTROL
COVER SHEET







EXISTING BASEMENT FLOOR PLAN

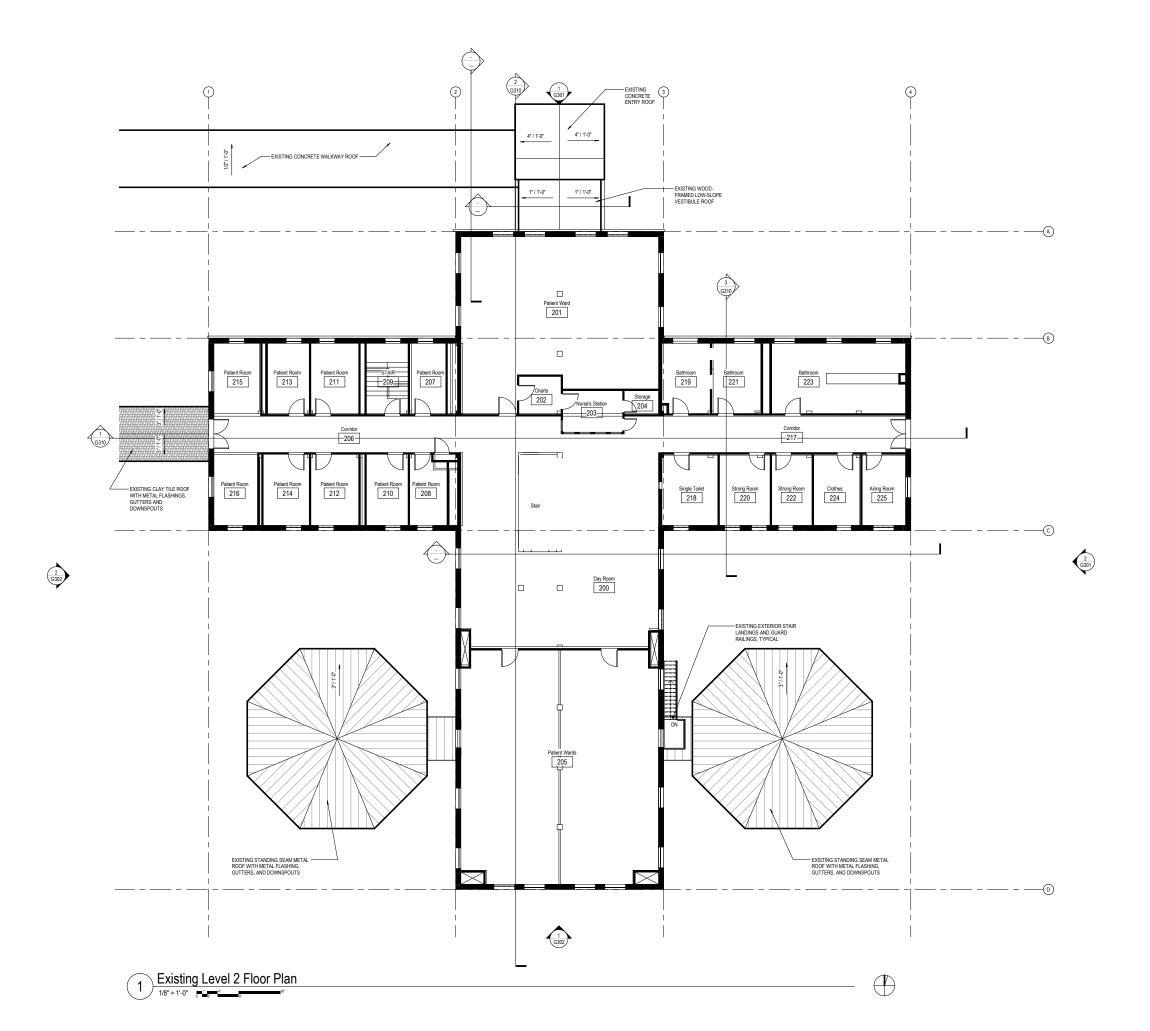
G200



Job No. 2003 Bater 2022/09/26
File No. 2003 Gray Bulding red
Drawn By ... AMC
Checked By ... MC
Issued for ... Cost Opinion

EXISTING LEVEL
1 FLOOR PLAN

DRAWINGS NOT TO SCALE

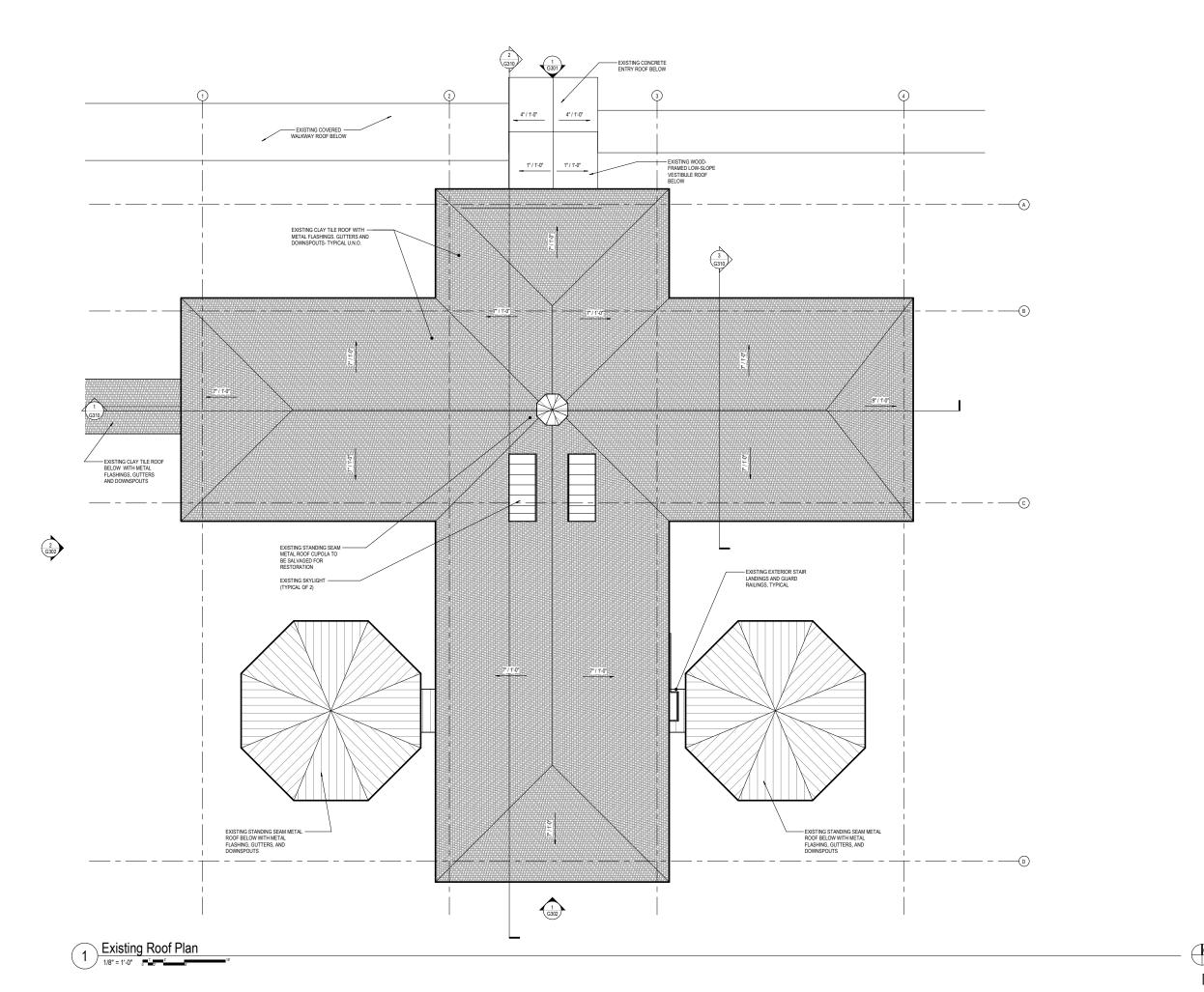




Job No: 2203 Date: 2022/09/26
File No: 2203 Gray Building nd
Drama By: AMC
Checked By: JMC
Issued for: Cest Opinion

EXISTING LEVEL 2 FLOOR PLAN

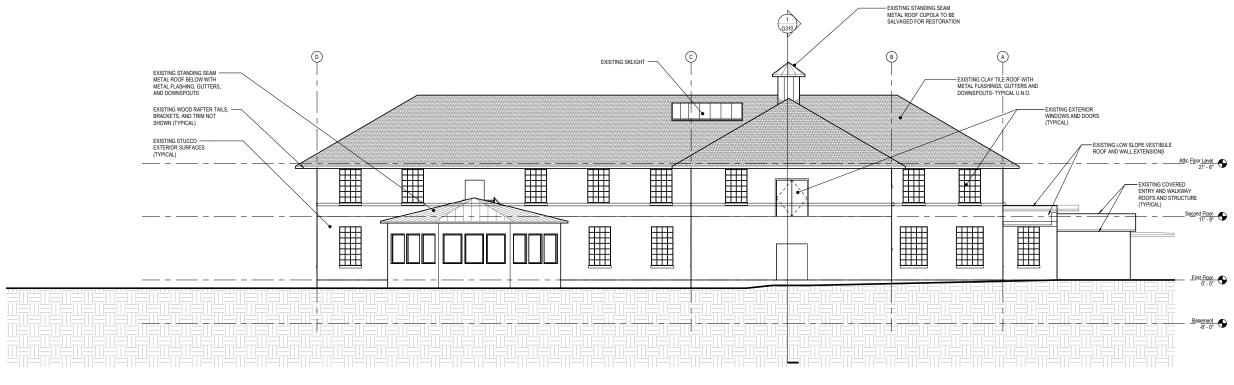
G202



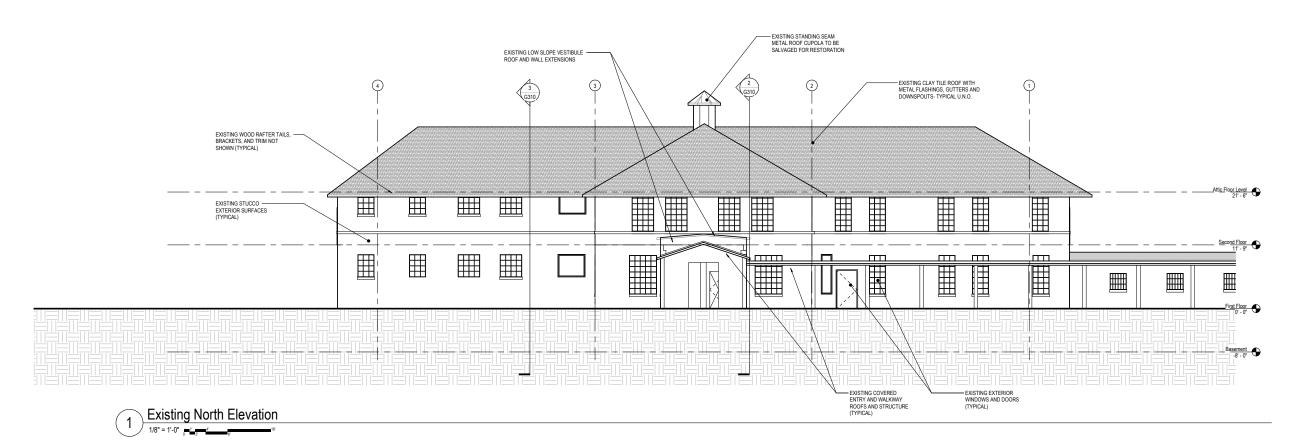


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File No. 2203 Gray Building nt
Drawn By: AMC.
Checked P.AMC.
Issued for: Cost Opinion

EXISTING ROOF
PLAN



Existing East Elevation

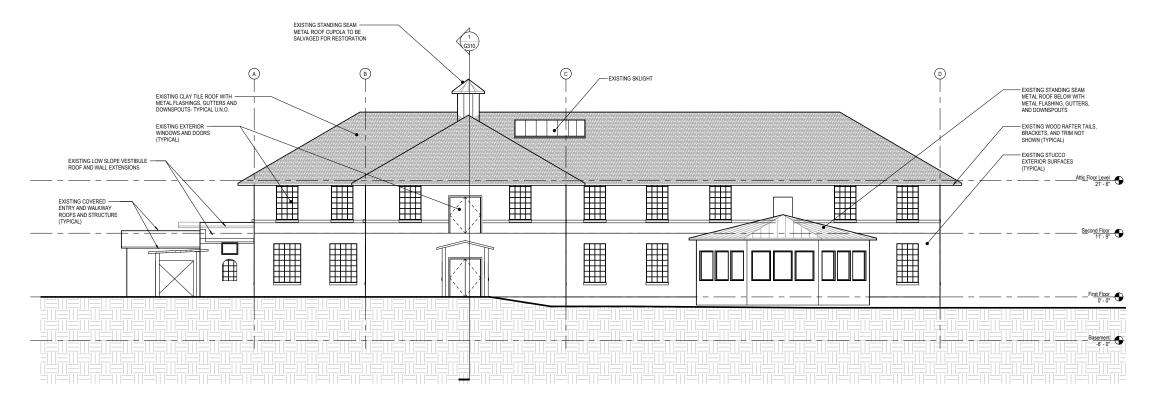


Port of Skagit - SWIFT Center

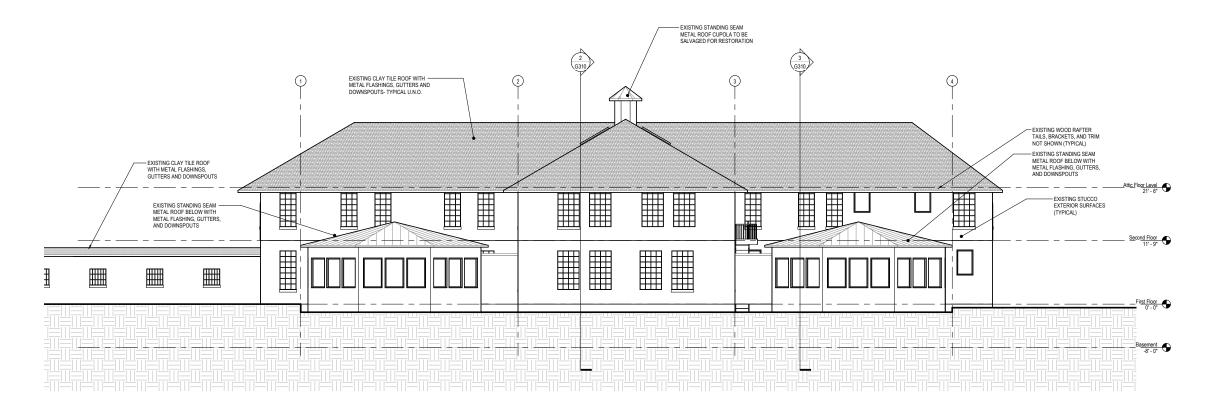
Gray and Fraser Buildings Feasibility Study
Northern State Hospital Campus
Sedro-Woolley, WA 98284

Issued for: Cost Opinion **EXISTING** BUILDING **ELEVATIONS** G301





Existing West Elevation 1/8" = 1'-0"



Existing South Elevation

Port of Skagit - SWIFT Center

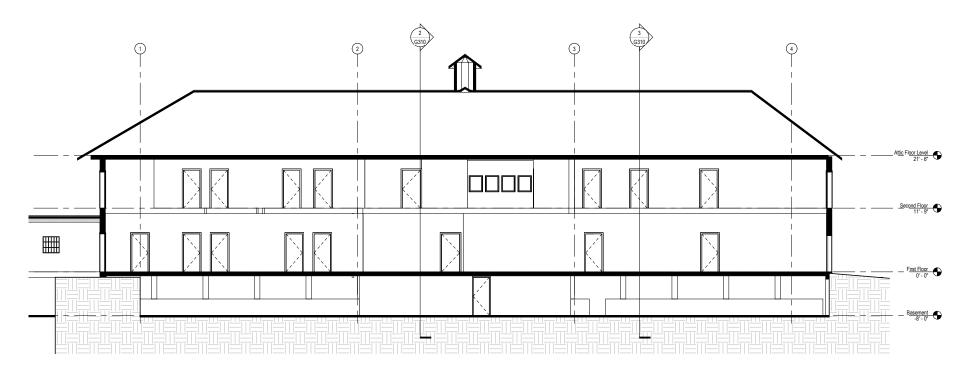
Gray and Fraser Buildings Feasibility Study
Northern State Hospital Campus
Sedro-Woolley, WA 98284 Issued for: Cost Opinion **EXISTING** BUILDING **ELEVATIONS** G302





Existing Section 3

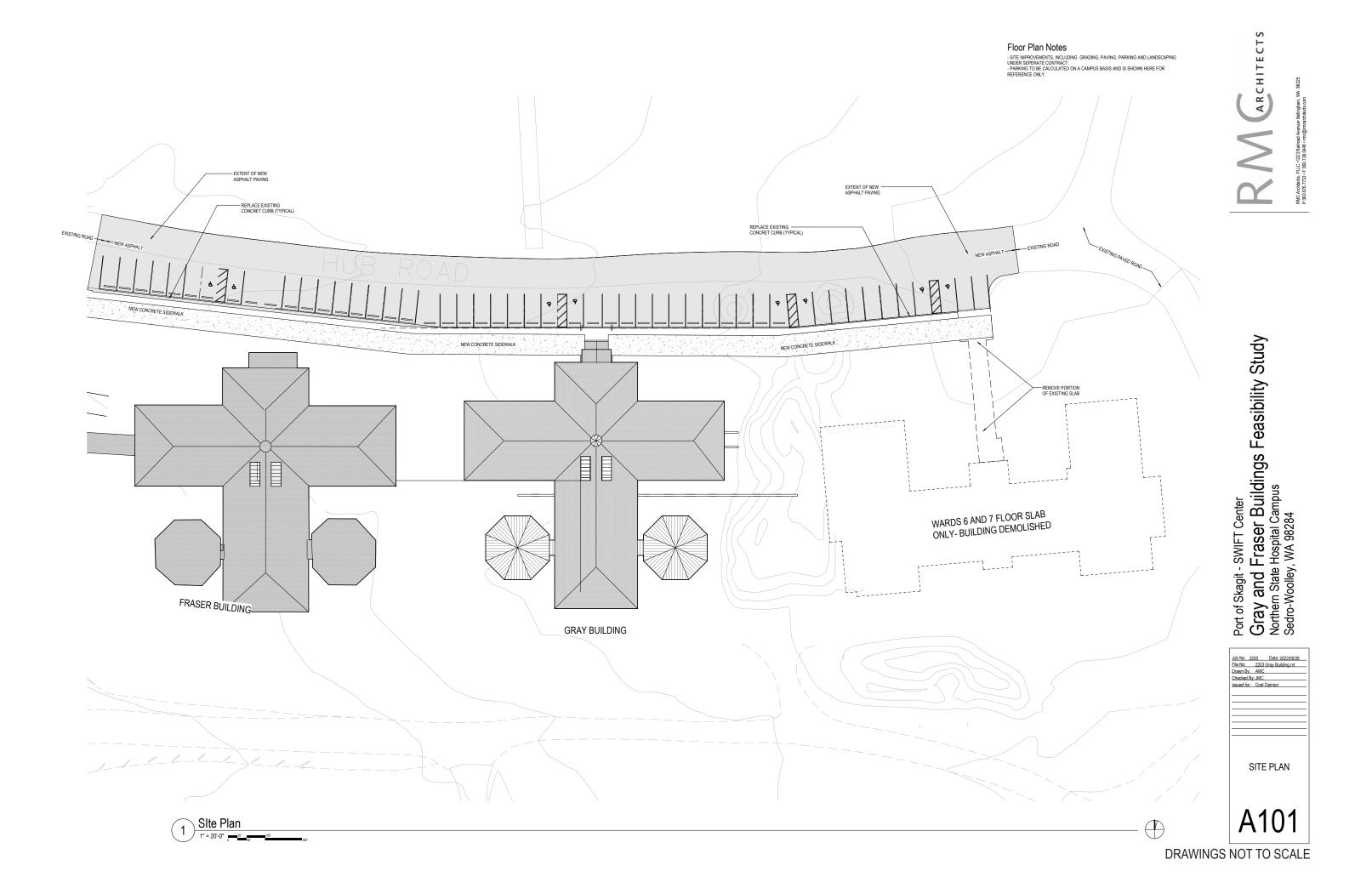
Existing Section 2

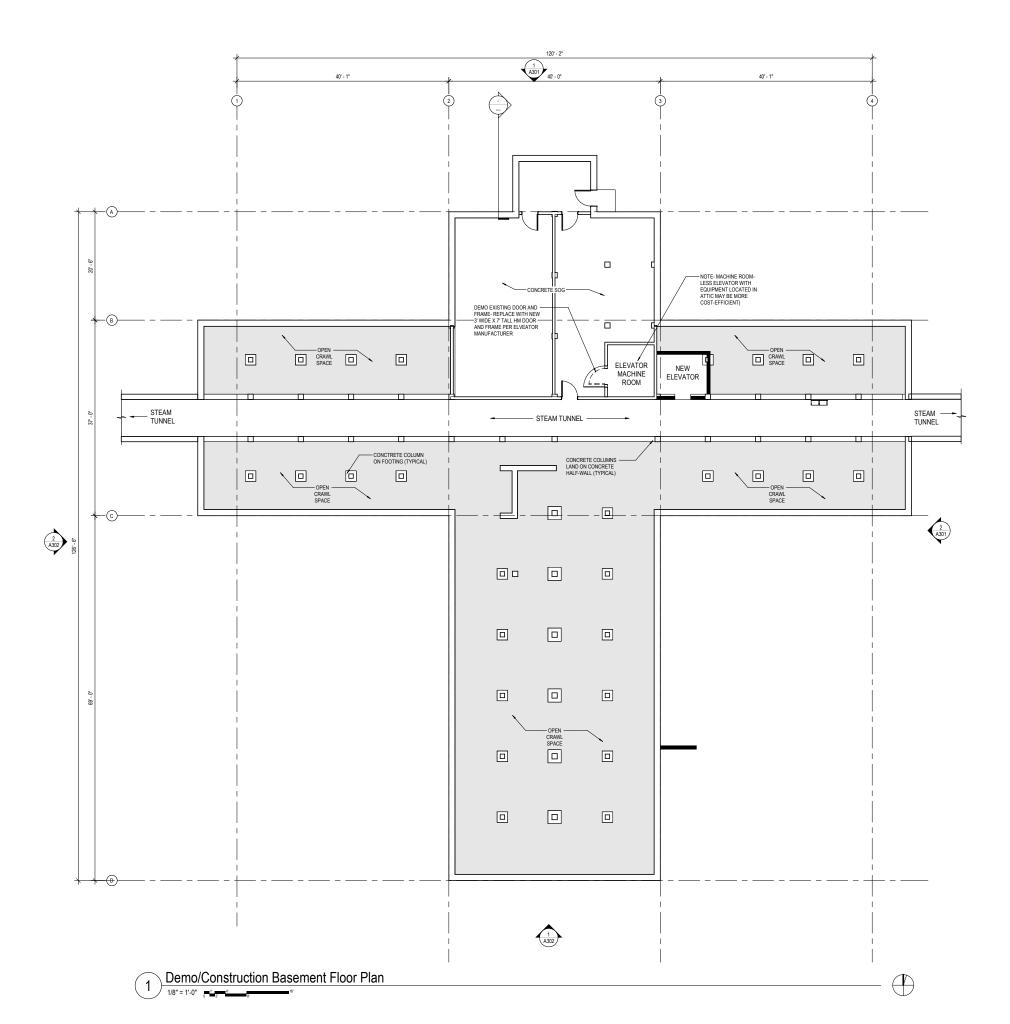


Existing Section 1

Port of Skagit - SWIFT Center

Gray and Fraser Buildings Feasibility Study
Northern State Hospital Campus
Sedro-Woolley, WA 98284 EXISTING BUILDING SECTIONS G310





Floor Plan Notes

Wall Legend

FIOOT F12(1) NOCIES

1. EXISTING INTERIOR DOOR FRAMES TO REMAIN IN PLACE UNLESS NOTED OTHERWISE. REFURBISH FRAMES IN PREPERATION FOR REPAINT AND NEW DOOR LEAFS AND TRANSON LITSS WHERE OCCURS

2. REPLACE EXISTING INTERIOR WOOD DOOR LEAFS WITH SIMILAR.
3. REPLACE EXISTING INTERIOR DOOR TRANSON LITES WITH SAFETY GLAZING.
4. REPLACE INTERIOR AND EXTERIOR DOOR HARDWARE WITH ACCESSIBLE HARDWARE.
5. NEW INTERIOR AND EXTERIOR DOORS, FRAMES, AND TRANSONS TO MATCH EXISTING.
6. INTERIOR RELITE FRAMES TO REMAIN IN PLACE UNLESS NOTED OTHERWISE.
FURBURSH FRAMES IN PREPARATION FOR REPAIR AND INSTALLATION OF NEW GLAZING. USE SAFETY GLAZING WHERE REQUIRED BY COOL.
7. REPLACE EXISTING EXTERIOR STEEL SASH WINDOWS WITH NEW WOOD SINGLE HUNG WINDOWS WITH INSULATED DIVIDED LITES (TYPICAL)

EXISTING STUCCO AND PLASTER OVER CLAY TILE EXTERIOR WALL TO REMAIN

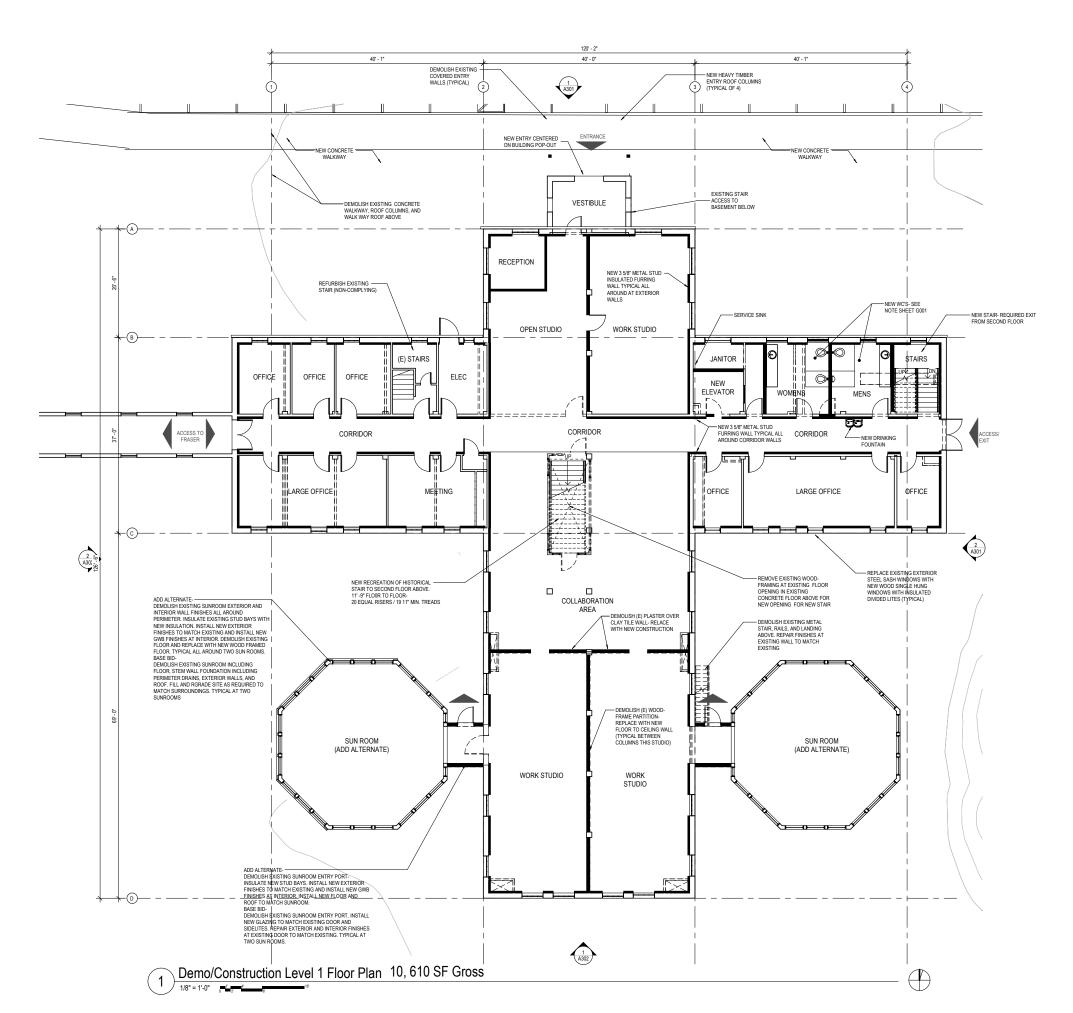
EXISTING WOOD FRAMED EXTERIOR SUN ROOM WALL TO REMAIN (ADD ALTERNATE- DEMOLOISH UNDER BASE BID)) EXISTING PLASTER OVER CLAY TILE INTERIOR WALL TO REMAIN EXISTING PLASTER OVER CLAY TILE INTERIOR WALL TO BE DEMOLISHED NEW GWB ON 3 5/8" METAL STUD INTERIOR FURRING WALL AT EXTERIOR WALLS AND CORRIDORS. INSULATE AT EXTEROR WALLS.

// ARCHITECTS

Port of Skagit - SWIFT Center Gray and Fraser Buildings Feasibility Study Northern State Hospital Campus Sedro-Woolley, WA 98284

Job No: 2203 Date: 2022/09/26
File No: 2203 Gray Building.rvt
Drawn By: AMC Checked By: JMC

Issued for: Cost Opinion DEMO / CONSTRUCTION BASEMENT FLOOR PLAN A200



Floor Plan Notes

FIGURE PICTURES OF THE REPAIRS NO FEMALE IN PLACE UNLESS NOTED OTHERWISE. REFURBISH FRAMES IN PREPERATION FOR REPAINT AND NEW DOOR LEAFS AND TRANSON LIFES WHERE OCCUR.

2. REPLACE EXISTING INTERIOR WOOD DOOR LEAFS WITH SIMILAR.

3. REPLACE EXISTING INTERIOR DOOR TRANSON LITES WITH SAFETY CLAZING HEADWARE.

4. REPLACE INTERIOR AND EXTERIOR DOOR HARDWARE WITH ACCESSIBLE HARDWARE.

5. NEW INTERIOR AND EXTERIOR DOORS FRAMES, AND TRANSONS TO MATCH EXISTING.

6. INTERIOR RELITE FRAMES TO REMAIN IN PLACE UNLESS NOTED OTHERWISE. REFURBISH FRAMES IN PREPARATION FOR REPAIR AND INSTALLATION OF NEW GLAZING. USE SAFETY CLAZING WHERE REQUIRED BY CODE.

7. REPLACE EXISTING EXTERIOR STEEL SASH WINDOWS WITH NEW WOOD SINGLE HUNS WINDOWS WITH INSULATED DIVIDED LITES (TYPICAL)

Wall Legend

EXISTING STUCCO AND PLASTER OVER CLAY TILE EXTERIOR WALL TO REMAIN EXISTING STUCCO AND PLASTER OVER CLAY TILE EXTERIOR WALL TO BE DEMOLISHED

EXISTING PLASTER OVER CLAY TILE INTERIOR WALL TO REMAIN

☐ EXISTING PLASTER OVER CLAY TILE INTERIOR WALL TO BE DEMOLISHED. NEW GWB ON 3 5/8" METAL STUD INTERIOR FURRING WALL AT EXTERIOR WALLS AND CORRIDORS. INSULATE AT EXTEROR WALLS.

NEW GWB ON METAL STUD INTERIOR PARTITION WALL

ARCHITECTS

Port of Skagit - SWIFT Center

Gray and Fraser Buildings Feasibility Study
Northern State Hospital Campus
Sedro-Woolley, WA 98284

Job No: 2203 Date: 2022/09/26 File No: 2203 Gray Building.rvt

Drawn By: AMC Checked By: JMcClure DEMO / CONSTRUCTION LEVEL 1 FLOOR PLAN A201

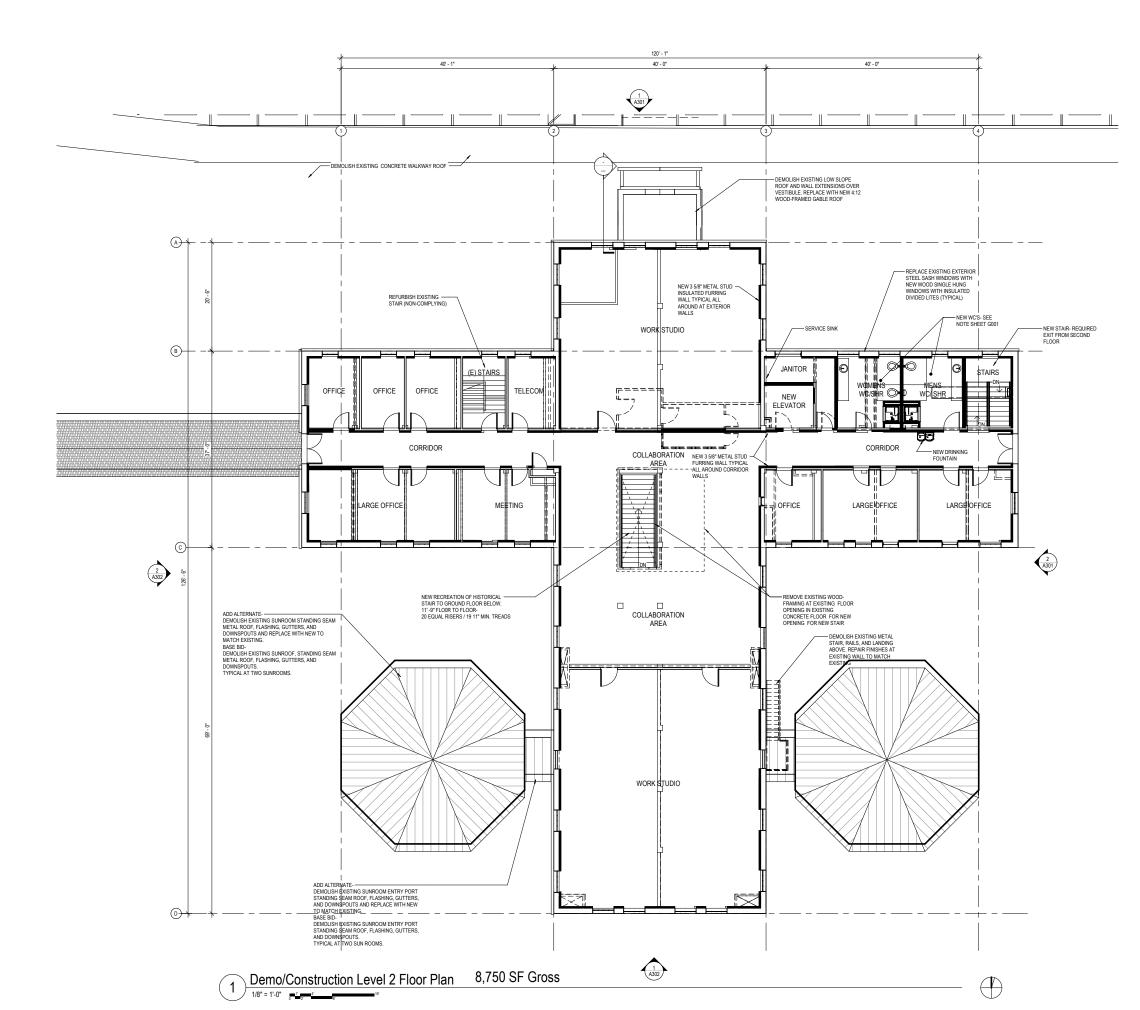


 Job No:
 2203
 Date:
 202/09/26

 File No:
 2203 Gray Building.rvt

 Drawn By:
 AMC

 Checked By:
 JMcClure
 Issued for: Cost Opinion DEMO / CONSTRUCTION LEVEL 2 FLOOR PLAN



- FIOOF PIAN NOTES

 1. EXISTING INTERIOR DOOR FRAMES TO REMAIN IN PLACE UNLESS NOTED OTHERWISE. REFURBISH FRAMES IN PREPERATION FOR REPAINT AND NEW DOOR LEAFS AND TRANSOIL LIES WHERE OCCUR.

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Wall Legend

EXISTING STUCCO AND PLASTER OVER CLAY TILE EXTERIOR WALL TO REMAIN EXISTING STUCCO AND PLASTER OVER CLAY TILE EXTERIOR WALL TO BE DEMOLISHED EXISTING WOOD FRAMED EXTERIOR SUN ROOM WALL TO REMAIN (ADD ALTERNATE- DEMOLOISH UNDER BASE BID)) EXISTING PLASTER OVER CLAY TILE INTERIOR WALL TO REMAIN ☐ ☐ EXISTING PLASTER OVER CLAY TILE INTERIOR WALL TO BE DEMOLISHED.

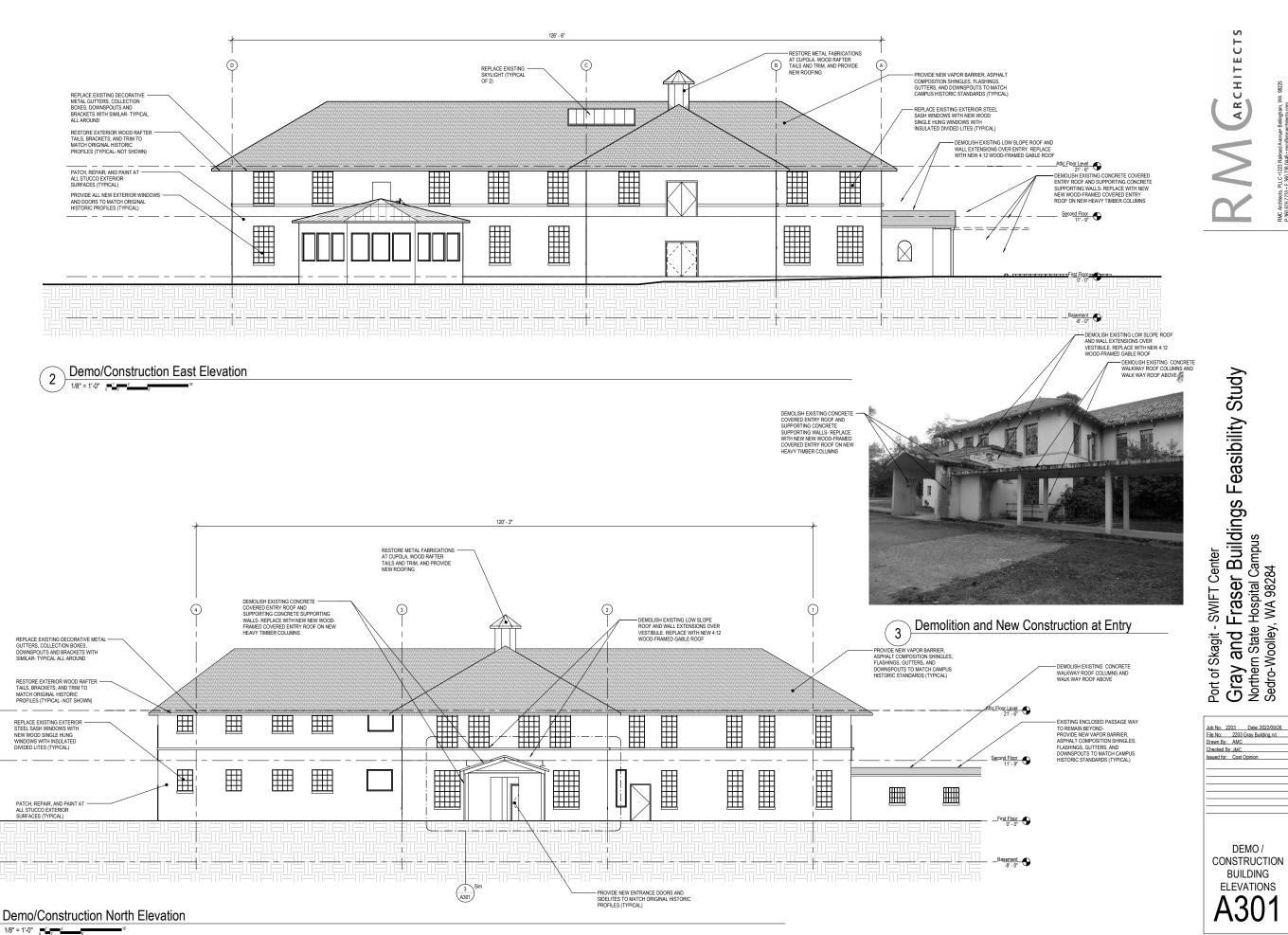
1/8" = 1'-0"



Port of Skagit - SWIFT Center

Gray and Fraser Buildings Feasibility Study
Northern State Hospital Campus
Sedro-Woolley, WA 98284

Job No: 2203 Date: 2022/09/26
File No: 2203 Gray Building.rvt
Drawn By: AMC
Checked By: JMC
Issued for: Cost Opinion DEMO / CONSTRUCTION ROOF PLAN A210



DRAWINGS NOT TO SCALE

DEMO /

BUILDING

ELEVATIONS

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ARCHITECTS

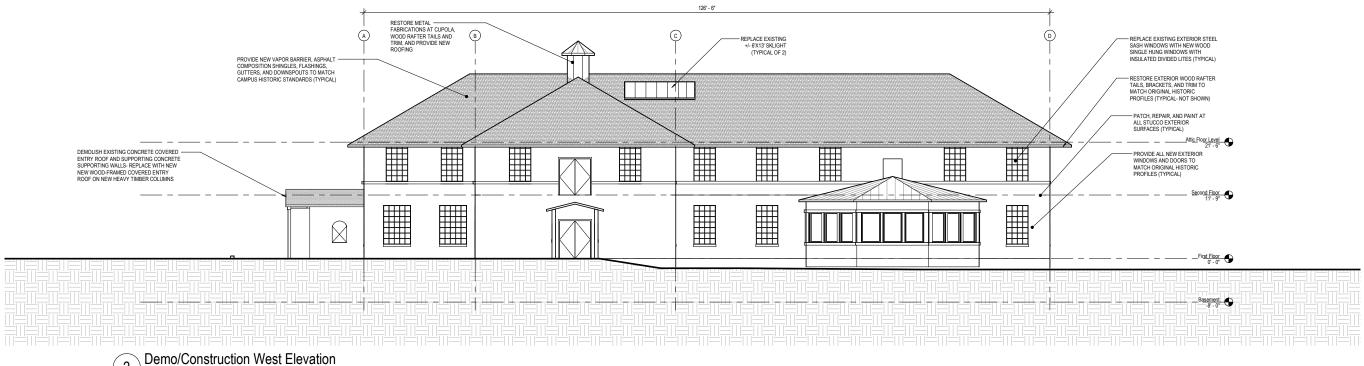
 Job No:
 2203
 Date: 2022/09/26

 File No:
 2203 Gray Building.rvt

 Drawn By:
 AMC
 Checked By: JMC Issued for: Cost Opinion

DEMO / CONSTRUCTION BUILDING **ELEVATIONS**

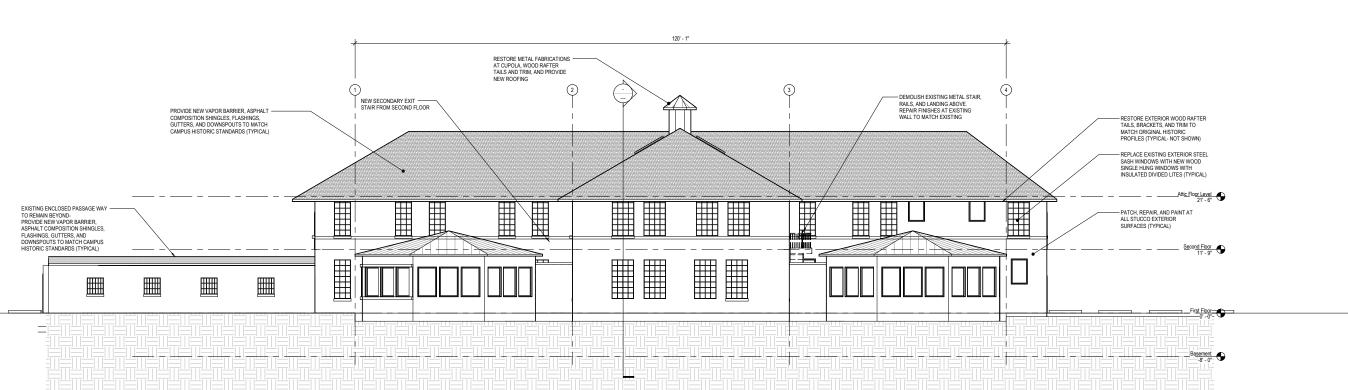
A302



1/8" = 1'-0" 0 1' 2 4'

Demo/Construction South Elevation

1/8" = 1'-0"

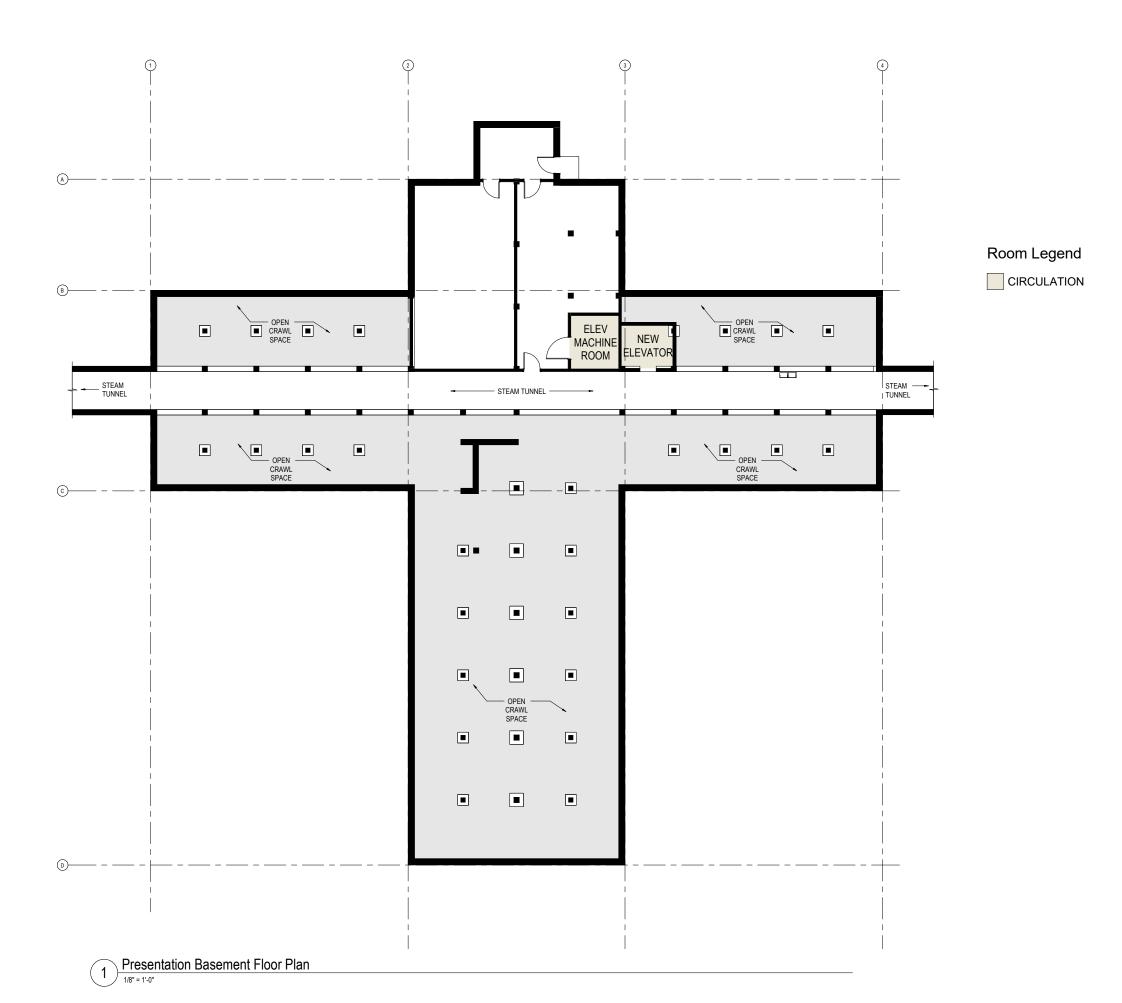


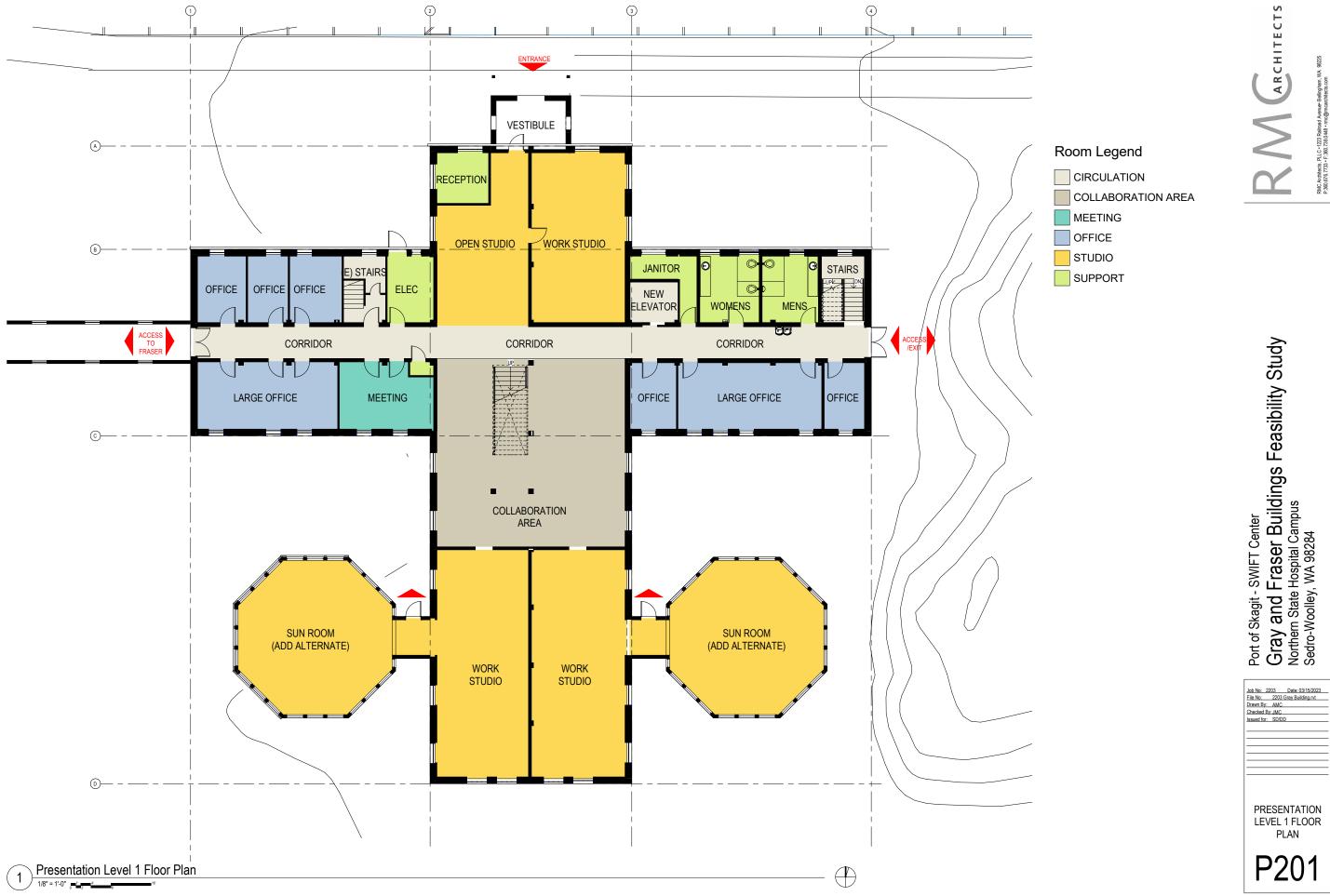


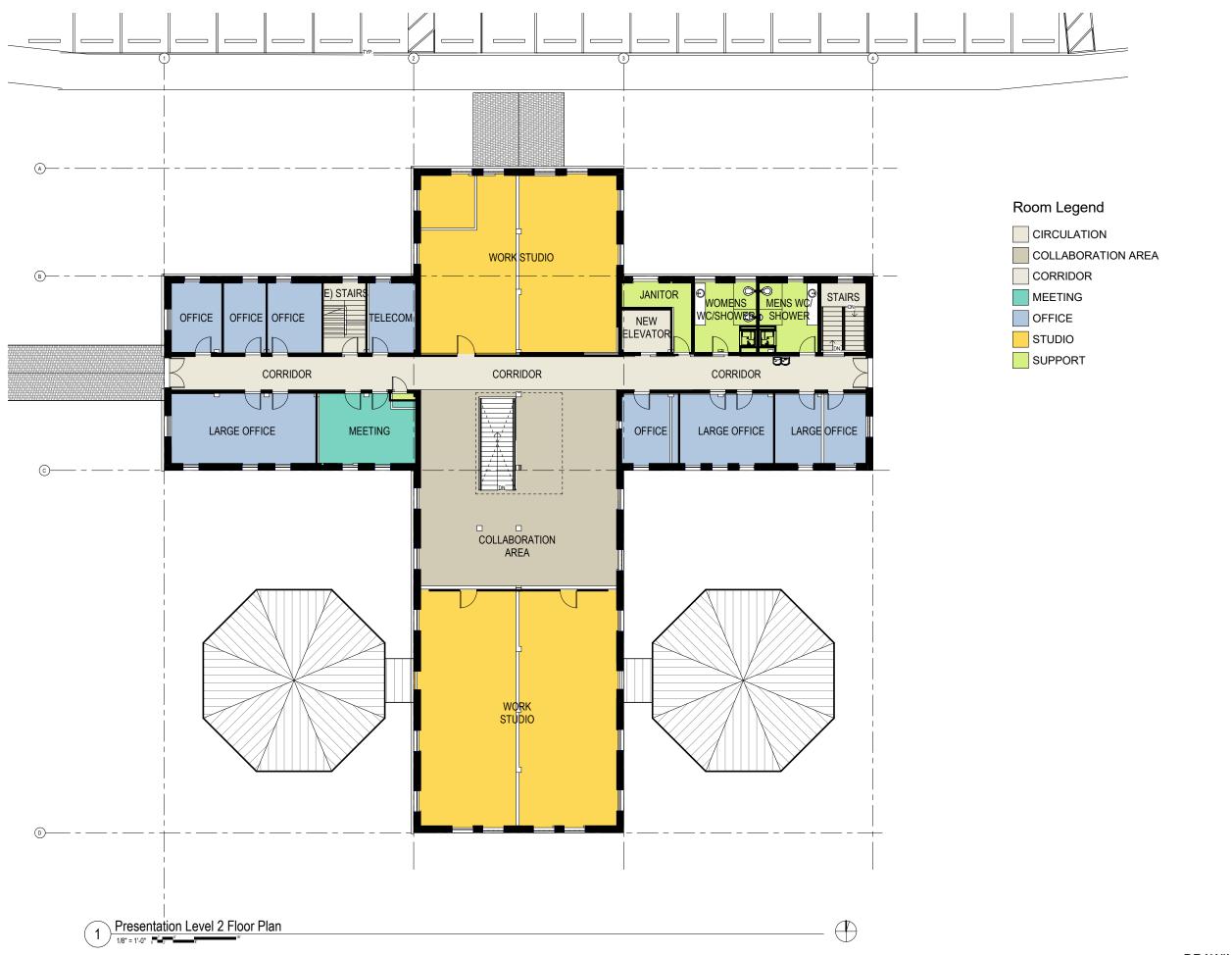
Job No: 203 Date: 03/15/2023
File No: 2203 Gray Building Int
Drawn By: AMC
Checked By: AMC
Issued for: SD/DD

PRESENTATION BASEMENT FLOOR PLAN

P200







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Port of Skagit - SWIFT Center

Gray and Fraser Buildings Feasibility Study
Northern State Hospital Campus
Sedro-Woolley, WA 98284

PRESENTATION LEVEL 2 FLOOR PLAN



September 22, 2022

Jeff McClure RMC Architects 1223 Railroad Avenue Bellingham, WA 98225

Project: Building Structural Narrative for Fraser and Gray - Swift Center KW PROJ #:22090

Dear Jeff:

Kingworks has been contracted to provide the following services as they relate to the Fraser and Gray buildings at the Swift Center. Our scope during the feasibility phase of this project includes providing the following in narrative form:

- Brief overview of the building's primary structure, including descriptions of the gravity and lateral force resisting systems and comment on the building structural condition and expected seismic performance.
- Findings of a code study of the proposed renovations as it relates to the structural aspects
 of the IEBC to determine any code required structural upgrades, including seismic
 improvements.
- Provide preliminary structural description for the addition of new elevators
- Provide a preliminary description of recommended voluntary seismic upgrade strategies

No original construction drawings have been provided for these buildings. This report is based on the following:

- Visual observations performed on 7/27/2022.
- A historic register nomination narrative
- Familiarity with Coleman Building, which is a similar building (type and vintage)
- 2018 International Existing Building Code (IEBC).

Building Structural Description:

Fraser and Gray buildings were built around 1914. It is our understanding the buildings were originally intended to serve as wards for patients at the Northern State Hospital. There seem to have been few, or no modifications or upgrades to the primary structural system since original

construction. Both buildings have two levels above grade, and it is assumed that they each have below grade crawl spaces and partial basements.

The primary structure for both buildings can best be described as reinforced concrete frame with steel framed trusses at the roof. The first two floors consist of reinforced concrete slabs spanning between reinforced concrete columns. Exterior walls are constructed with infill hollow clay tile masonry placed between the concrete columns and beams. The roofs consist of wood decking over steel trusses spanning between perimeter concrete beams and columns. The foundation system for the building is reinforced concrete shallow spread footings.

Structural Assessment:

This opinion is based only on the brief site visit and visual observations. Access was not provided for the basement, and observation of the roof structure was limited to looking through a hole in the ceiling over the second floor. For the most part, structural components are covered by finishes and were not observed directly. However, if there were structural issues from excessive deflection or settlement, they would have been detectable despite the presence of finishes. The buildings were generally in disrepair, with debris on the floor, tree branches and vines growing through broken windows, and obvious water intrusion issues from the roof. Given the extent of the water damage, it would not be surprising to find wood decay issues and corrosion issues in the attic. It is also possible that there will be corrosion and condition issues with reinforced concrete structural elements since the water intrusions seems to have occurred over a long period and interior concrete elements generally would not have been constructed with adequate concrete cover over the reinforcing steel to provide corrosion protection. It is our opinion that both buildings will require significant structural remediation if the client decides to renovate them.

We expect that this building would provide protection of life safety for occupants in minor, and possibly moderate earthquakes. With reinforced concrete components acting as boundaries around the un-reinforced masonry infill panels in the building, this building will have more ductility and perform better than typical un-reinforced masonry buildings. However, the building would not perform as well as buildings constructed to modern code requirements. With the concrete and masonry construction, the building has a high mass to be excited by accelerations due to earthquake ground motion. The masonry infill panels will initially be able to provide significant resistance to shear loads, but this resistance will rapidly diminish when the masonry is forced to deflect beyond its elastic limits and starts to fracture. Building damage, including possible collapse could result from long duration earthquakes or ones with high magnitude accelerations. The majority of interior, non-bearing partition walls are constructed with slender and unreinforced clay tile masonry construction. These partition walls have almost no ability to withstand large out of plane loads and they would be expected to present a hazard to occupants due to collapse which could result in direct harm and/or obstruct evacuation.

2018 International Existing Building Code (IEBC) Requirements:

It is our understanding that the Port of Skagit is considering renovating these buildings. It is assumed that the repurposed buildings would be used as offices. Renovation would largely consist of restoring structural components, modifying some interior spaces and updating finishes. Mechanical and electrical systems would be replaced. Impacts to the primary structural system would likely include the cutting of openings for new mechanical distribution systems, and the addition of elevators.



Renovations to existing buildings are required to follow the provisions of the International Existing Building Code (IEBC). The IEBC defines three levels of alteration and calls for increasingly stringent structural requirements as the level assignment increases. In our opinion the proposed renovation would be classified as a Level 3 Alteration without substantial structural alteration. Substantial structural alteration is defined as "an alteration in which the gravity load - carrying structural elements altered within a 5 year period support more than 30 percent of the total floor and roof area of the building" [IEBC202]. As a level 3 alteration, the building must comply with the IEBC requirements for alteration level 1, 2, and 3. The attached flow chart shows the structural aspects of the IEBC requirements. The red arrow on the flow chart indicates our opinion of the logic and requirements for this project.

Lateral Load System: Since the anticipated scope of the project would not include substantial structural alteration, there would be no requirement for the building lateral load resisting system to be shown to comply with, or upgraded to comply with, the modern lateral load requirements for current wind loads and 75 percent earthquake loads. However, IEBC explicitly requires the following measures for this building:

- 1) IEBC 906.4 requires anchoring the roof structure to the exterior walls. This would probably involve attaching the existing trusses to the walls and installing anchorage points between the trusses that would anchor the wood decking to the walls. Spacing for these anchor points is typically 4 to 6 feet.
- 2) IEBC 906.7 requires the removal or bracing of unreinforced masonry partitions in the work area and adjacent to egress paths. For this building and the scope of this project, all of the interior walls on the first and second floor will require: 1) removal, 2) reinforcement using installation of an adjacent wall to brace the existing wall (probably a metal stud wall that will be anchored to the slabs at the top and bottom and anchored to the masonry wall with frequent ties), or 3) reinforcement using vertically oriented, and regularly spaced, adhered fiber glass or carbon fiber strips on both faces of the existing masonry walls and extending to connect to the slabs above and below the wall. In our opinion, option 3 is probably most appropriate means to provide out of plane bracing of the walls unless new furring walls are going to be required for other reasons, such as for electrical runs for switches and outlets, or for insulation.

Gravity Load System: Per IEBC section 806.2, existing gravity resisting members will need to be evaluated at any location where their new loading is increased by more than 5 percent, or their capacity is decreased due to alteration by more than 5 percent. The original live load for the buildings would likely be classified as hospital use by current building codes. Patient rooms for hospitals are currently designed for a 40 pound per square foot (PSF) live load, whereas office spaces are designed for a 50 PSF live load. With no original structural information available, it is not possible to definitively determine the existing floor live load capacity without undertaking a study to determine the quantity and position of the reinforcement bars in the existing slabs, beams, and columns. Based on review of drawings from other buildings on the campus, it is likely that the existing reinforcing is adequate but additional investigation and analysis should be performed if a renovation project is undertaken. It is possible that some spaces will be found to be insufficient for the loads. Those areas will require either structural reinforcement or the posting of load restriction signs. In general, it will be necessary to ensure that the weight of new finishes and mechanical distribution systems not exceed 5% of the existing assembly weights. Structural alterations that remove sections of concrete slab floors or roofs (such as for elevators, stairs, or mechanical distribution) will require analysis. The addition of carbon fiber or structural steel reinforcement below slabs may be required in the vicinity of the alterations (or load increases).



Narratives for planned structural modifications:

Elevators: If new elevators are required for the buildings. It is anticipated that a new pit and foundation structure will be required in the basement at each location. New elevator shaft walls are anticipated to be reinforced concrete or reinforced CMU so that the walls will be able to provide lateral support for rails and support for the new openings in the existing slab at the two floors. See attached SSK-02.

Voluntary Seismic Improvement

If additional seismic improvements are undertaken beyond the code requirements, the following discussion describes recommendations.

Lateral Load Resisting System Options: The current lateral system of the building relies on the masonry infill walls that fill the areas between the existing concrete columns and beams around the exterior of the building. As previously discussed, the masonry infill does not provide the ductility and energy absorption that would be required to resist long duration or strong ground motions due to earthquake. There are two options that seem most effective to improve the current system. The first option would be to strengthen the existing exterior masonry walls with composite materials. With this option, one or both faces of the existing exterior walls would be strengthened using either adhered fiberglass or carbon fiber sheets, or by applying a sprayed fiber reinforced cementitious matrix. The second option is to replace strategically selected existing masonry walls on the interior or exterior of the building with new reinforced concrete shear walls. With this second option, if larger lengths of wall are installed, the overturning forces that result from resisting the earthquake lateral loads could be managed by the existing basement walls and foundation. If it is decided that installing less walls would be more cost effective, then the walls could be minimized to smaller core areas, possibly around stair and elevator shafts. These cores will require significant new foundations, possibly with micro piles or other deep foundation components to resist large overturning forces.

Other seismic improvements: Other seismic improvements that we would recommend include providing out of plane bracing of exterior unreinforced masonry walls. This would be accomplished by installing structural metal stud walls on the inboard side of the exterior walls and anchoring the studs to the masonry walls at close intervals. Note that new furring walls are already planned for the project to facilitate the addition of insulation and electrical outlets and controls. The added cost for providing the out of plane bracing would be for heavier metal studs and increased attachment requirements.

Page **5** of **5**

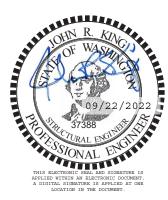
Conclusion:

Please let us know if you have any questions or concerns. We would be happy to expound on any topic if needed. After you have had a chance to review the recommendations contained herein, we would welcome the opportunity to meet with you to discuss our findings and develop a scope for a subsequent phase of work, which would provide construction drawings for the improvements that you choose to enact.

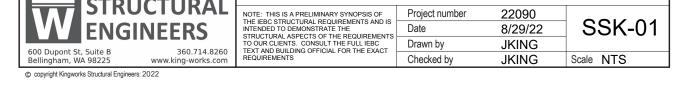
Sincerely,

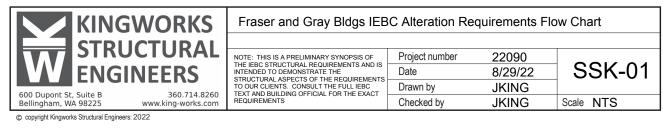
John R (Jack) King, PE, SE Principal

Attachments: SSK-01 Fraser & Gray Buildings IEBC Flowchart SSK-02 Elevator Pit Sketch









IEBC 2018 Fraser and Gray **Bldgs ALTERATION**

PROJECT SCOPE INCL<mark>U</mark>DES A CHANGE IN OCCUPANCY, A CONNECTED ADDITION, BLDG

IS AN HISTORIC BLDG, OR- BLDG IS TO BE

PROJECT SCOPE ONLY INCLUDES REMOVAL AND REPLACEMENT OR COVERING OF EXISTING

MATERIALS, ELEMEN<mark>T</mark>S, EQUIPMENT, OR FIXTURES WITH NEW ONES THAT SERVE THE

SAME PURPOSE

ALTERATION WORK AREA

EXCEEDS 50% OF BUILDING AREA

ALTERATION LEVEL 2

ALTERATION GRAVITY

MEMBERS: CHECK ALL

ALTERED MEMBERS AND

STRENGTHEN THEM AS

NEEDED WHERE: ALTERED LOAD S INCREASED BY MORE THAN 5%

ALTERED MEMBER CAPACITY IS REDUCED BY MORE THAN 5%

ALTERATION TO LATERAL

CHECK LATERAL SYSTEM FOR ANY OF THE FOLLOWING:

INCREASE LATERAL LOAD IN ANY

RESISTING ELEMENT BY MORE THAN

DECREASE LATERAL CAPACITY OF ANY RESISTING ELEMENT BY MORE THAN 10%?

CREATE STRUCTURAL

IRREGULARITY?

DESIGN VOLUNTARY SEISMIC IMPROVEMENTS PER

DEVELOPERS DISCRETION

DONE

806.3

807.4

NO

NO

NO

CHAPTER 8

IEBC 605 THRU 608

IEBC 602

IEBC 603

YES

YES

YES

NO

MAKE CORRECTIONS TO

ELIMINATE 10% EXCESS

AND/OR IRREGULARITY

YES

CAN ELEMENTS BE

REINFORCED OR HAVE

THERE LOADS REDUCED

ND/OR CAN STRUCTURA IRREGULARITY BE CORRECTED BY SOME

NO

YES

PROJECT IS OUTSIDE THE

SCOPE OF THIS FLOW CHART.

ALTERATION LEVEL 1

CHAPTER 7 STRUCTURAL REQUIREMENTS APPLY

TO RE-ROOFING AND EQUIP REPLACEMENT ONLY

CHECK EXISTING MEMBERS WHERE LOADS ARE INCREASED BY MORE THAN 5%. BRACE PARAPETS WHERE RE-ROOF AREA EXCEEDS 25% OF ROOF

SECTION 706

CHAPTER 9

906.6

ALTERATION LEVEL 3

PROVIDE WALL ANCHORS AT

ROOF AND FLOOR LINES

BRACE URM PARAPETS

BRACE OR REMOVE URM

PARTITIONS WITHIN THE

WORK AREA AND ADJACENT

TO EGRESS PATHS FROM

THE WORK AREA

IS THIS A SUBSTANTIAL

STRUCTURAL ALTERATION?

DOES THE ALTERATION IMPACT

STRUCTURAL MEMBERS SUCH THAT

THE TRIBUTARY AREA TO THE

ALTERED MEMBERS EXCEEDS 30%

OF THE BUILDING AREA (FLOOR

PLUS ROOF)

FULL RETROFIT

FULL BUILDING LATERAL

SYSTEM SHALL SATISFY IBC

1609 AND 1613 WITH 75%

SEISMIC FORCES PERMITTED

NOTE THIS IS PROBABLY

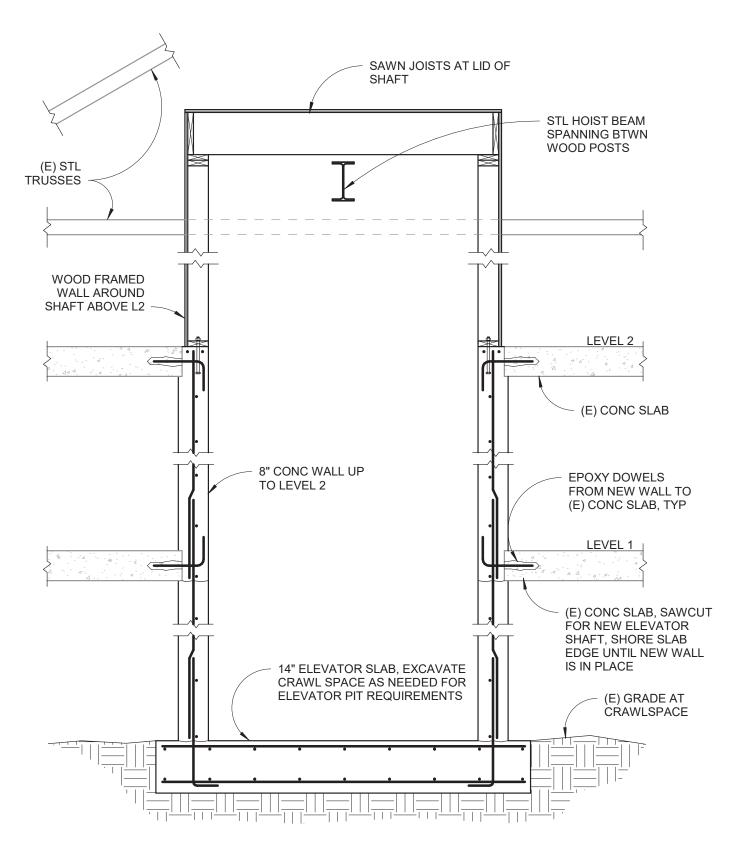
EXPENSIVE.

906.2

906.2

YES

DONE





SCHEMATIC STRUCTURE AT NEW ELEVATOR SHAFT					
SWIFT CENTER -FRASER & GRAY BUILDINGS					
PRELIMINARY	Project number	22090			
	Date	8/29/2022	SSK-02 I		
	Drawn by	JKING			
	Checked by	JKING	Scale 1/2" = 1'-0"		

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FRASER AND GRAY BUILDINGS PORT OF SKAGIT MECHANICAL BASIS OF DESIGN – PLANNING PROGRESS DESIGN NARRATIVE

Mechanical

Updated 08/22/2022

Design Intent: The mechanical system for the Fraser and Gray Buildings is intended to be balanced concept to meet important design, operational features and project goals including but not limited to, ease of maintenance, life cycle, occupant comfort, indoor air quality, reduction to operational funds, acoustics, programming and integration of spaces, and Port of Skagit Standards.

Port of Skagit is interested in validating future modernized buildings being tied into the campus steam plant. Although the steam plant is outside the scope of these projects, the proposed HVAC system takes into consideration the fact that the steam plant may not exist throughout the life of the new buildings mechanical systems.

In addition to the steam plant consideration, mechanical cooling is an important consideration for an office building that will be occupied all year.

The remainder of this design narrative summarizes the proposed system approach for the Fraser and Gray Buildings. The approaches as identified in this memo are preliminary in nature and will require a meeting with facilities and maintenance personnel to ensure the defined approach is in-line with Port of Skagit expectations.

Applicable Codes and Standards:

The mechanical design shall meet or exceed, but not be limited to, the following codes:

International Building Code (IBC)
International Mechanical Code (IMC)
International Fuel Gas Code (IFGC)
International Fire Code (IFC)
Uniform Plumbing Code (UPC)
Washington State Energy Code (WSEC)
National Fire Protection Association (NFPA)

The mechanical design shall meet or exceed, but not be limited to, the following standards:

ASHRAE Standard 52.1 – Gravimetric and Dust Spot Procedures for Testing Air-Cleaning Devices Used in General Ventilation for Removing Particulate Matter ASHRAE Standard 55 – Thermal Comfort

ASHRAE Standard 62.1 – Ventilation for Acceptable Indoor Air Quality



227 Williams Ave S, Renton, WA 98057 Office: 425 336 2822 Fax: 425 336 2802

Planning Progress Design Narrative Fraser and Gray Building – Port of Skagit Page 2

ASHRAE Standard 90.1 – Energy Standard for Buildings Except Low Rise Residential SMACNA – Sheet Metal & Air Conditioning Contractors

Design Criteria

Table 1. Outdoor Design Temperatures

Design Season	Temperature		
Outdoor Winter DB	19.0°F*		
Outdoor Summer			
DB	78°F*		

^{*}values taken from 2018 WSEC

Table 2. Building Envelope

	U-	
Building Envelope	value	Component Description
Exterior Wall*	0.104	Existing concrete, insulated
Glazing	0.38	Metal framing, SHGC = 0.38
Exterior Door	0.37	Hollow metal door, insulated core.
Roof	0.26	Existing concrete floor, insulated roof
Floor Over Unconditioned		
Basement*	0.029	Insulated

^{*}values taken from 2018 WSEC default values

Plumbing Systems:

- 1. The existing plumbing systems are past their useful life and will be replaced with new.
- 2. Utilities:
 - a. The domestic water system will be connected to the campus water loop located in the existing utility tunnel.
 - b. The sewer system will be connected to the existing site sewer. Connection will be at 5'-0" outside of the building.
 - c. All roof drainage will be via gutters and downspouts, exterior to the building, and will be picked up by the site work contractor and connected to the storm drainage system designed by the civil engineer.
- 3. Water Service: The main building water service will be provided in the basement mechanical room. The service riser and main building backflow preventer will be located in this space and will serve the domestic cold water systems. The mechanical room will also contain the equipment to serve the domestic hot water systems. Piping services will be adequately isolated to provide ease of maintenance accessible through ceiling tiles or access doors. New piping services shall be sized in conformance with the Uniform Plumbing Code.
- 4. Irrigation: No plumbing scope.



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Planning Progress Design Narrative Fraser and Gray Building – Port of Skagit Page 3

- 5. Domestic Hot Water System: Hot water will be provided by an electric heat pump water heater, and storage tank. Unit will supply domestic hot water to the building. All domestic water heaters will be designed with hot water recirculation piping and pumps to keep hot water available at fixtures. The heat pump water heater will be located outside, on grade. Water heater storage tank and appurtenances will be provided in the basement mechanical room.
- 6. Plumbing Fixtures: Lavatories and wash fountains will use electronic sensor faucets with batteries. Water closets will manually operated, 1.28 gpf flush valves and urinals will use battery operated, 0.125 gpf flush valves.
- 7. Sanitary Waste and Vent System: A sanitary waste and vent system will be installed to serve all potable fixtures within the building.
- 8. Natural Gas System: There will be no natural gas.

Fire Sprinkling System:

- 1. The existing buildings are not sprinklered.
- 2. The sprinkler system will be connected to the existing site water. Connection will be at 5'-0" outside of the building.
- 3. The first and second floor will be completely sprinkled with wet system coverage in conformance with NFPA 13 and local AHJ requirements. The design will include a wet pipe system to serve all interior occupied areas and combustible void spaces. Where design coordination allows, building overhangs will be protected with dry sidewall heads off of the wet system. Concealed heads or head guards will be provided at all sprinkler heads subject to damage.
- 4. The basement and attic will be sprinklered with dry system coverage if they remain unheated and uninulated.
- 5. The double detector check valve (DDCV) and dry and wet risers will be located in the basement mechanical room.
- 6. A fire department connection (FDC) and post indicator valve (PIV) will be provided on site by civil.

Heating, Ventilating and Air Conditioning System:

- 1. The existing HVAC system is past its useful life and will be replaced with new.
- 2. Heating and Cooling Plant:
 - a. The heating and cooling plant will consist of central VRF heat pumps. Refrigerant piping will be piped to refrigerant selector box's and then to fan coil terminal units.
- 3. Ventilation:
 - a. Central dedicated outdoor air system "DOAS" air handling units with enthalpy wheel type heat recovery will supply ventilation air to single duct VAV terminal units (no filters, fans or coils) at each zone served. Air handlers will have supply fans, exhaust fans, filters and heat recovery. VAV units will modulate airflow to provide outdoor ventilation air to the space, control economizer cooling capability and close dampers



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Planning Progress Design Narrative Fraser and Gray Building – Port of Skagit Page 4

when the zones are unoccupied for energy savings. Air will be supplied by overhead type diffusers. Return air will be overhead.

- b. DOAS air handling units will be located in the attic.
- 4. Zone Heating and Cooling:
 - a. VRF fan coil units will provide heating and cooling at each zone. Fan coils will be ducted or ceiling cassette style.
 - b. Ducted fan coils that serve the second floor will be located in the attic. Ducted fan coils that serve the first floor will be ceiling mounted in the hallway.
 - c. Ducted fan coils will be provided in spaces with open to structure ceilings. Ductless fan coils will be provided in spaces with ceilings.
- 5. Exhaust Systems: Dedicated outdoor air system fans will handle exhaust air for toilet rooms. Dedicated exhaust fans will serve the custodial areas and any specialty exhaust needs where more control of the airflow is required. Fans will be direct drive ECM type with speed controller.
- 6. MDF, IDF and Elevator Machine Rooms: Split system air conditioning units will provide separate and independent means of cooling these spaces requiring 24/7 cooling.
- 7. Building Automation System (BAS): The mechanical systems in the building will be controlled and monitored by a direct digital building automation control system (BAS) with BACnet interface and web-based capability. The VRF system will have its own integrated control system. The VRF control package will be provided with a BACnet interface to allow the BAS to provide the following VRF fan coil control:
 - a. Outputs
 - ° On/off
 - ° Set mode
 - ° Set temperature
 - Prohibit on/off at room controller
 - ° Prohibit mode at room controller
 - ° Prohibit set temperature at room controller
 - ° Air direction
 - b. Inputs
 - On/off status
 - Mode state
 - ° Room temperature
 - Fan speed state
 - Air direction state
 - ° Alarm
 - ° Error code
 - Network communication state
 - ° Expansion controller communication state
 - c. In addition to VRF system interface, the BAS will be capable of monitoring and controlling other systems in the building such as energy metering, and lighting controls, and also can interface to provide metering outputs to the building control system graphic interface.



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Planning Progress Design Narrative Fraser and Gray Building – Port of Skagit Page 5

END OF NARRATIVE



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Port of Skagit – Swift Center – Fraser/Gray Buildings Electrical Schematic Design Narrative 9/15/2022

Project Description

The Fraser/Gray renovation project is intended to modernize the existing buildings into a multi-tenant office and innovation resource building. They are 2 story buildings, approximately 19,104 square feet each. The existing exterior walls are intended to remain with the interior of the building being selectively remodeled. Some existing walls will be removed, some walls will remain, and others will be new. A new elevator will be added to each of the buildings to provide elevator access to the second floor.

Power Services & Distribution

The Fraser and Gray Buildings have been disconnected from the campus 4,160 volt medium voltage system and have had no power source since the spring of 1993.

The Fraser medium voltage vault and main electrical room are located beneath the Fraser building in its basement. It is physically connected to the utility tunnel system and also has an exterior stairway down to the basement. It has abandoned primary power cable routed from the Denny building through the tunnel into Fraser and out again toward Gray. The medium voltage cables have been cut off in the vault with their ends unsealed. Given they are not energized and left unsealed, they are not recommended to be reused. All of the medium voltage transformers and switches have been removed.

To re-energize Fraser on the campus power system, the closest source of power is from the Denny building vault. The Denny switchgear has an open switch position that is intended to supply Fraser. The old abandoned medium voltage cable will need to be replaced with new and reconnected to the Denny switch. The building will also need new medium voltage transformers and switches in order to be re-energized with power from the campus system.

To re-energize Fraser from the Puget Sound Energy (PSE) system, the closest source is a vault along the East Road. This is further away than the campus power located in Denny, however, the Port is not overly interested in owning their own primary power system so this may be a first step to eventually phase out the campus primary power system. PSE power would need to be trenched from the existing PSE vault to near the Fraser Building and a new above grade PSE padmount transformer will need to be installed.

The 1990's drawings did not reveal a medium voltage vault in the basement of Gray or how the Gray building was suppled power. Given there was no medium voltage vault, it is assumed that Gray was supplied with secondary power from either the Fraser Vault to the west or the abandoned Snohomish Building Vault to the east. Gray has a similar exterior lower basement door as Fraser so it is assumed that it had a Vault prior to the 1990's drawings or at least the main electrical room was located in the basement.

Gray has abandoned medium voltage cables routing through the tunnel from Fraser and out again toward the Snohomish vault. The medium voltage cables route through Gray and do not splice or terminate in Gray.

Similar to Fraser, the old cables in Gray will need to be removed and new power brought to it from either the campus power system or the PSE system from the same locations and methods as described for Fraser.



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There are no main switchboards in Fraser or Gray so new switchboards will need to be added to supply the building along with the addition of a new elevator and the increased electric load of new mechanical units.

The existing branch circuit panels within the building are at the end of their lifecycle, are obsolete, and are too small for the intended renovation. New branch panels will be needed to support the new work.

New building service cables, main panel, feeders, branch circuits, and branch panels will be sized per the National Electric Code for the connected load.

Wiring methods in finished areas will be concealed type as much as possible. Exposed wiring methods will be provided in the basement, attic, mechanical equipment rooms, utility areas, and on interior concrete walls that don't get new wall furring methods. Surface metal raceway will be installed where visible to the building occupants and in public spaces. Electrical Metallic Tubing (EMT) will be used for indoor/dry locations. Exposed exterior conduit will be Galvanized Rigid Steel.

Outlet devices and wiring junction boxes will be installed in steel outlet boxes, sized for equipment devices and wire-fill capacity.

Wire for feeder, power, and lighting, circuits shall be type THHN/THWN, 75°C 600-volt rated, thermoplastic insulation, copper conductor, stranded, except below grade wire shall be XHHW.

Branch Circuits

Minimum size branch circuits will be 20 amps, #12 AWG copper wire. Wire size shall be increased as required for ampacity of loads served and when applicable, to compensate for voltage drop.

Equipment ground conductors for feeder circuits, branch circuits, control circuits, etc. installed in metallic raceways will be redundant, consisting of both an electrically continuous metal raceway system and the separate equipment ground cable run in the same raceway with the circuit conductors.

Branch circuits supplying outlets shall not exceed 7 duplex receptacles per 20-ampere circuit.

Motors, heating, and other specific equipment will be supplied with dedicated circuits sized and coordinated to the equipment's electrical characteristics.

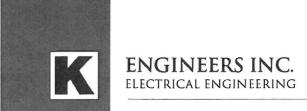
Wiring Devices

The existing outlets and light switch devices are old, worn, cracked in some cases, their color appears to have faded over time, and they have not been energized since 1993. It is recommended that existing devices be replaced. With the reconfigured floor plans and new walls, most existing devices will be removed. New devices installed throughout the building will be specification grade switches and receptacles. Special amperage and voltage outlets will be provided for specific equipment as required. Cover plates will be stainless steel or white vinyl in commercial spaces. Ground fault interrupter receptacles will be specified in locations required by the National Electrical Code.

Grounding System

New grounding will be provided to comply with Article 250 of National Electric Code and Washington State Electrical Safety Standards, Chapter 296-46B WAC.

Electrical main service equipment shall be grounded to made electrodes consisting of 5/8 x 10' driven copperclad ground rods, and connected to the building's metal water piping, structural steel and concrete rebar.



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Communications grounding busbars will be provided and connected to the building's main electrical service, local distribution panelboards, water piping and building steel.

Surge Protection Devices (SPDs)

There is no surge protective devices in the building. New surge protective devices will be provided to reduce possible damage to sensitive electronic equipment resulting from momentary excessive voltage surges. Electronic surge protection equipment will be mounted separately near the main panel, protecting the main and each downstream 120/208-volt panelboard serving receptacle outlets that supply computers and other sensitive equipment.

Lighting

All existing lighting is fluorescent type, rusty and has not been energized since 1993. Most are pendant type and appear to have been changed from original incandescent pendant type fixtures because many of the pendants do not fit the original supply boxes and appear crooked. All light fixtures will be replaced with new LED type throughout the facility. Site lighting will be a combination of building mounted and canopy mounted lighting. No pole lighting of the parking lot is anticipated with this project. All exterior lighting will utilize a full cutoff design so they are dark sky compliant and reduce glare to the neighbors.

All lighting will be designed to Washington State Energy Code and the Illuminating Engineering Society of North America standards. Lighting calculations, modeling, and photometric plans will be performed.

Lighting control will be automatic utilizing standalone power packs and occupancy sensors in each room. Daylight harvesting shall be provided in all daylight zones.

Local switches will be used for manual control of the fixtures and occupancy sensors will be installed to save energy by turning off the fixtures in unoccupied rooms.

Offices will be illuminated to 50 foot-candles and conference rooms will be in the 35 to 40 foot-candle range.

Restrooms will be illuminated to 20 foot-candles.

Corridors and stairways will be illuminated to an average 15 foot-candles.

Mechanical and electrical rooms and janitor's closets will be illuminated to 15 foot-candles with 4-foot industrial fixtures.

Illuminated exit identification signs will be provided to identify egress pathways in accordance with building codes.

Egress lighting shall be powered from integral battery packs with selected fixtures and wall mounted battery packs emergency lighting units.

Telecommunications

The buildings do not have telephone, catv, or fiber services. The buildings do not have telephone or data outlets. The buildings do not have telecom rooms. All new telecom systems will need to be provided.

New telecom services can be accessed from the Denny building via the existing campus tunnel system. The Port of Skaqit owns a fiber system that is part of a campus fiber optic network.



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New telecom rooms will need to be provided for MDF's and IDF's that provide a space for telecom racks and equipment. The rooms will need to be conditioned and lockable. The most efficient design would position telecom rooms near the center of the buildings so that cables are able to reach all points of the buildings and more telecom rooms are not needed.

To supply the first floor, the building construction lends itself well to position a new main telecom room (MDF) in the basement so that new telecom cables can be routed through the basement and stub up into the first floor rooms to supply telecom outlets.

To supply the second floor, an IDF should be located on the second floor so that cables can be routed up into the attic space, route horizontally through the attic, then drop back down to second floor rooms to supply telecom outlets.

By using the basement and attic spaces to route cables, it will reduce the amount of visible surface raceway and also allow future additions, changes, and deletion of cables as tenants and building needs change.

The overall intent of the new telecom system is that it will be a shared system primarily used for internet access. There will not be separate telecom systems for each tenant.

Horizontal cabling infrastructure will consist of Cat6A cabling and outlets installed throughout the facility. Cables shall be routed through the building's basement and attic and terminate in the MDF and IDF rooms.

Wiring shall be continuously routed and supported by suitable wire management components and cable tray.

Field testing and certification will be performed for all cabling infrastructure.

Wireless access point outlets and devices will be provided throughout the buildings.

Fire Detection and Alarm

There is no fire alarm system in the buildings. New addressable fire alarm systems will need to be added. Wherever the new fire sprinkler room is added, it should be large enough to also accommodate the main fire alarm panel for each building.

The fire alarm system will comply with the International Fire Code, ADA requirements and applicable NFPA codes. It will consist of manual pull stations, smoke and heat detectors, fire sprinkler water flow switches, and horn/visual notification devices installed throughout the buildings.

The buildings will have a full fire sprinkler system (by mechanical). The building fire alarm system will supervise the fire sprinkler system and notify any alarm conditions. Each separate sprinkler system riser and floor zone flow and tamper switch will be monitored.

Partial building smoke detection will be provided with devices located in corridors and common areas. (full detection in every space is not anticipated and not required by code because the building will be fully sprinkled). Duct type smoke detection will be provided as needed for damper control and HVAC unit shutdown. Audible horns and visual alarms (strobes) will be provided throughout the facility.

A remote annunciator will be installed at the building entrance lobbies. The panel will automatically communicate all alarms and trouble to 24-hour alarm monitoring services.



208 THIRD STREET LYNDEN, WA 98264 TEL (360) 354-4757 FAX (360) 354-6794

Elevator Lobby Two-Way Communication System

With the new elevator, a two-way intercom system will be provided at each elevator lobby on any floor not on grade. It will allow voice communications from any floor to a ground floor master station and annunciator. The system shall provide repeating tone and LED light signals for each individual zone at the annunciator to indicate when evacuation assistance is requested. When the signal is acknowledged, the call station shall be notified audibly and visually that help is on the way.

Audio/Video Systems

Conference rooms, meeting rooms, etc. are anticipated to have Audio/Video outlets and wiring to support projectors and/or large flat screens. Quantity and locations will be determined as the project progresses through design phases.

Security & Access Controls

The building does not have any existing security & access control systems. It is anticipated that a certain level of these systems will be added with the renovation. The level of detail and locations of devices will be determined with owner coordination as the project transitions through design phases.

Video Surveillance

The building does not have any existing surveillance systems. It is anticipated that a certain level of these systems will be added with the renovation. The level of detail and locations of devices will be determined with owner coordination as the project transitions through design phases.

Emergency Responder Radio System

Coordination with the Skagit County will be required to determine if an Emergency Responder Radio System will be required as part of the renovation for this building.

Engine-Generator Set

There is no Engine-Generator Set planned for this building.

Steve TeVelde, P.E., K Engineers, Inc.



208 Third Street, Lynden, WA 98264 Tel (360) 354-4757, Fax (360) 354-6794

LECTRICAL ENGINEERING

POS - SWIFT Center Fraser Building Renovation

Pre-Schematic Design Cost Estimate

8/19/2022

Description	Quantity	Unit	Cost	Total
Building				
Demolition	19104.0	ls	\$0.90	\$17,193.60
Electrical Distribution & Devices	19104.0	sf	\$11.65	\$222,561.60
Lighting Distribution & Fixtures	19104.0	sf	\$9.80	\$187,219.20
Lighting Controls	19104.0	sf	\$2.63	\$50,281.73
Exterior Perimeter & Canopy Lighting	19104.0	sf	\$0.73	\$13,907.71
Telecom. Conduit, Cabling, Supports	19104.0	sf	\$5.75	\$109,848.00
Audio/Video System	19104.0	sf	\$1.23	\$23,536.13
Fire Alarm System	19104.0	sf	\$2.25	\$42,984.00
Security, Access Controls System	19104.0	sf	\$1.23	\$23,536.13
Video Surveillance System	19104.0	sf	\$1.60	\$30,566.40
Elevator Lobby 2-way Intercom System	1.0	ls	\$8,000.00	\$8,000.00 \$72,163.45
Elec General Cond., Mob/demob, etc. (10%)	19104.0		\$41.97	\$801,797.95
sub-total	19104.0		φ41.9 <i>1</i>	\$601,797.95
Primary Power Source from Campus system				-
Campus primary power from Denny switch	400.0	If	\$200.00	\$80,000.00
Fraser primary switch	1.0	ea.	\$30,000.00	\$30,000.00
Fraser padmount primary transformer	1.0	ea.	\$35,000.00	\$35,000.00
sub-total	1.0	ca.	Ψ55,000.00	\$145,000.00
000 10101				V1-10,000.00
Alternate - Primary power source from PSE				
DEDUCT campus primary costs listed above				(\$145,000.00)
PSE Primary power from vault on East Road	1020.0	lf	\$300.00	\$306,000.00
Trenching & Excavation	1020.0	lf	\$35.00	\$35,700.00
PSE vaults	3.0	ea.	\$7,000.00	\$21,000.00
PSE padmount primary transformer	1.0	ea.	\$40,000.00	\$40,000.00
Note: Part of this PSE cost could be shared			,	,
with Gray if Gray is renovated 1st, as				
the system will pass right by Gray				
sub-total				\$257,700.00
Costs Not Included:				
Emergency Responder Radio System				
Generator.				
7074				0040 707 07
TOTAL				\$946,797.95

Hazardous Materials Survey Report

Port of Skagit SWIFT Center **Gray Building** 2051 Hub Drive Sedro-Woolley, Washington 98284

Prepared for: **RMC Architects** 1223 Railroad Avenue Bellingham, Washington 98225

September 2022 PBS Project 41140.018



Hazardous Materials Survey Report **RMC Architects**

Port of Skagit SWIFT Center - Gray Building Sedro-Woolley, Washington

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Supporting Data

APPENDICES

Appendix A: RMC Architect Reference Drawings

Appendix B: PLM Bulk Sampling Information

PLM Bulk Sample Inventory PLM Bulk Sample Laboratory Data Sheets PLM Bulk Sample Chain of Custody Documentation

Appendix C: AA Lead Paint Chip Sampling Information

AA Lead Paint Chip Sample Inventory AA Lead Paint Chip Laboratory Data Sheets AA Lead Paint Chip Chain of Custody Documentation

Appendix D: PBS Inspector Certifications

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September 2022 PBS Project 41140.018

Port of Skagit SWIFT Center – Fraser Building Hazardous Materials Survey Report **RMC Architects** Sedro-Woolley, Washington

1 INTRODUCTION

1.1 Project Background

PBS Engineering and Environmental Inc. (PBS) performed a hazardous materials survey of the Gray Building at the Port of Skagit SWIFT Center in Sedro-Woolley, Washington in conjunction with the planned renovation of the structure. The intent of this investigation is to ensure compliance with applicable regulatory requirements that a "good faith inspection" for asbestos-containing materials (ACMs) be performed prior to renovation and restoration activities.

All accessible areas associated with the project were inspected for the presence of ACMs, lead-containing paint (LCP), mercury containing components, and polychlorinated biphenyls (PCBs) associated with florescent light fixtures. PBS based its survey on a project walk through with RMC Architects and Port of Skagit personnel on May 23, 2022.

1.2 **Building Descriptions**

The Gray Building was originally constructed in 1915 and is two-stories with a basement and attic encompassing approximately 22,162 square feet. Currently, the structure is vacant with severe deterioration of exposed interior surfaces throughout many of the spaces. The building was previously heated/cooled via mechanical systems located in the basement and the attic. Domestic hot water and steam was provided by the power plant located northeast of the Gray Building.

Interior floor finishes include: 9" vinyl floor tile, sheet vinyl flooring, ceramic tile, and carpet on concrete or wood substrates. The walls are typically clay tile or gypsum block below plaster, or plaster on wood lath. The ceilings are typically plaster, some with 12" glued acoustical tiles. The exterior of the building is textured plaster, and the roof consists of clay tiles with copper clad cupolas. The windows are typically metal framed throughout the first floor, second floor, and the attic with some wood-framed windows in select areas. The windows are wood framed in the basement.

1.3 Survey Process

Accessible areas included in the project scope were inspected by Asbestos Hazard Emergency Response Act (AHERA) Certified Building Inspector Janet Murphy (Cert. No. IMR-22-8300A, Exp. 3/23/2023) on May 20, 2022. PBS endeavored to inspect all accessible areas of the scope of work. Inaccessible areas consist of those requiring selective demolition, fall protection, or confined space entry protocols to gain access. The boiler room and tunnel were not inspected during the survey as they were flooded.

When observed, suspect materials were sampled. All samples were assigned a unique identification number and transmitted for analysis to Seattle Asbestos Test (NVLAP #201057-0) under chain-of-custody protocols. Samples were analyzed according to EPA Method 600R-93/116 using Polarized Light Microscopy (PLM), which has a reliable limit of quantification of 1% asbestos by volume.

PBS endeavored to determine the presence and estimate the condition of suspect materials in all inaccessible areas included in the scope of work. While PBS has endeavored to identify the ACMs that may be found in concealed locations, additional unidentified ACMs may exist.

PBS field identified room numbers that are different from room numbers shown on RMC Architects drawings, which are included in Appendix A for reference. Room numbers presented in this report and in the sample inventories will be reported as "PBS field number (Corresponding RMC number)".

> September 2022 PBS Project 41140.018



Hazardous Materials Survey Report **RMC Architects**

Port of Skagit SWIFT Center – Fraser Building Sedro-Woolley, Washington

2 FINDINGS

2.1 Asbestos-Containing Materials (ACMs)

The following materials were determined to contain **greater than 1% asbestos** as part of this investigation.

- 9" vinyl floor tile and black mastic First and second floor nurse's offices and storage approximately 300 SF
- White flexible duct connectors (vibration cloth) Throughout attic approximately 6 EA, 36 LF
- Valve gaskets (various sizes) Attic and boiler Room (assumed) approximately 35 EA
- Hard (magnesium block and corrugated ("air cell") pipe insulation runs, less than 8-inch outer diameter - Concealed locations throughout - approximately 725 LF
- Hard-mudded pipe insulation fittings, less than 8-inch outer diameter Concealed locations throughout - approximately 500 EA

The following materials sampled and found not to contain detectable concentrations of asbestos as part of this investigation:

- Textured plaster/stucco throughout building exterior
- Counter laminate and mastic the Nurse's station
- Window glazing compound on all exterior windows
- Interior window frame caulk wardrooms throughout
- Wall/ceiling plaster and finish coat throughout
- Black breaker box material (assumed) electric panels in basement and boiler room
- Gray/Brown/Tan sheet vinyl with jute backing and black mastic wardrooms throughout
- Black vapor barrier beneath wood floors throughout
- Pink sink undercoat nurse's station
- Terra cotta floor tile and grout restrooms and showers
- Terra cotta wall block and grout throughout;
- Brown covebase mastic throughout;
- Hexagonal ceramic floor tile and grout restroom floors
- 12" white or fissured ceiling tile and associated mastic throughout hall
- Ceramic wall tile/grout/plaster in showers and restrooms
- Black vapor barrier paper under wood floors throughout
- Black asphaltic paper under terra cotta roof tiles
- Black asphaltic roofing over flat roof at entry to building
- Black asphaltic paper under sheet metal roof of sunrooms
- Brown braided wire insulation

Refer to Appendix B for specific samples locations and associated laboratory analysis.



September 2022

PBS Project 41140.018

2.2 Lead-Containing Components

Eleven (11) representative painted coatings were sampled for lead content. The samples were assigned unique identification numbers and transmitted to NVL Laboratories, Inc. (AIHA IH #101861) in Seattle, Washington under chain-of-custody protocols for analysis using Flame Atomic Absorption. Eleven of the samples collected were determined to contain lead above detectable limits

Lead was detected in the following painted coatings.

- Yellow/Concrete/Wall (16% lead)
- Brown/Concrete/Sill (11% lead)
- Yellow/Concrete/Exterior wall (16% lead)
- Tan and yellow/Wood/Door frame (0.80% lead)
- White/Plaster/Wall (2.7% lead)
- Green, yellow and pink/Metal/Window frame (1.7% lead)
- White/Plaster/Ceiling (0.38% lead)
- White, green and yellow/Plaster/Wall, (1.1% lead)
- Green/Plaster/Wall (0.12% lead)
- White, green and yellow/Concrete/Sill (9.1% lead)
- Pink/Plaster/Wall (0.50% lead)

PBS observed a total of approximately 9 lead vent caps on roofs throughout. Lead vent caps should be removed and recycled according to applicable state and federal regulations.

Refer to Appendix C for specific sample locations and associated laboratory analysis.

2.3 Mercury-Containing Components

All fluorescent light tubes are presumed to contain mercury. Approximately one hundred and forty-five (145) six-foot light tubes were observed in the accessible areas of the building.

2.4 PCB-Containing Components

PBS observed magnetic light fixture ballasts throughout all floors of the building. Magnetic ballasts are known to contain PCBs. PBS observed approximately 36 magnetic ballasts throughout the building. All ballasts should be inspected prior to being disposal.

PBS observed light fixtures that have areas of residual oil from leaking magnetic ballasts. It is estimated that approximately 4 light fixtures have been impacted by suspect PCB oil on the fixtures. All fixtures should be inspected for evidence of leaking magnetic ballasts prior to disposal.

3



September 2022 PBS Project 41140.018

RECOMMENDATIONS

Hazardous Materials Survey Report

RMC Architects

3.1 Asbestos-Containing Materials (ACMs)

PBS recommends that all ACMs that may be impacted by project activities be removed prior to impact. A qualified Washington State licensed asbestos abatement contractor should be employed to remove all such ACMs according to applicable local, state, and federal regulations.

The possibility exists that additional suspect ACMs may be present in concealed locations, including but not limited to, equipment, wall and ceiling cavities, and utility chases. These materials may include, but are not limited to, waterproofing membrane, internal gaskets, caulking and sealants of heating, ventilation, and air conditioning (HVAC) equipment and construction adhesives and wall mastics. In the event that suspect ACMs are uncovered during construction, contractors should stop work immediately and inform the owner promptly for confirmation testing. All untested materials should be presumed asbestos-containing or tested for asbestos content prior to impact.

3.2 Lead-Containing Components

Representative interior and exterior painted coatings were found to contain lead. Impact of painted surfaces with detectable concentrations of lead requires construction activities to be performed according to Washington State Department of Labor and Industries (L&I) regulations for Lead in Construction, Washington Administrative Code (WAC) 296-155-176. All waste shall be handled in accordance with the State of Washington Department of Ecology Dangerous Waste Regulations (WAC 173-303).

Lead vent caps should be removed and recycled according to applicable state and federal regulations.

Painted coatings may exist in inaccessible areas of the work area or in secondary coatings. Any previously unidentified painted coatings not sampled should be considered lead containing until sampled and proven otherwise. Dust control and housekeeping is crucial in preventing worker exposures.

3.3 Mercury-Containing Components

Fluorescent lamps and liquid thermostat switches are known to contain mercury vapor. PBS recommends that all fluorescent lamps and liquid thermostat switches be carefully handled and recycled/disposed of in accordance with the contract documents and applicable regulations during construction activities. Breakage of lamps and thermostat switches should be avoided to prevent potential exposures to mercury. L&I requires specific training, handling, engineering controls, and disposal practices when performing this work. All waste shall be handled in accordance with WAC 173-303.

3.4 PCB-Containing Components

PBS recommends all light ballasts be inspected prior to disposal. Magnetic ballasts, light fixtures with evidence of leaking ballasts, and wall-mounted transformers should be presumed to contain PCBs and properly removed, stored, transported and disposed of in accordance with WAC 173-303 and 40 CFR Part 761 Subpart D. If electronic ballasts (not magnetic) are identified within the building, they can be segregated from the magnetic ballast waste stream. Electronic ballasts do not contain PCBs and can be disposed of as general debris in compliance with applicable codes and endpoint facility requirements.



Hazardous Materials Survey Report Port of Skagit SWIFT Center – Fraser Building RMC Architects Sedro-Woolley, Washington

5

Please do not hesitate to contact us if you have any questions regarding this report or require additional information.

Report prepared by:

Janet Murphy

AHERA Building Inspector Cert. # IMR-22-8300A , Exp. 3/2/2023 Report reviewed by:

Mark Hiley

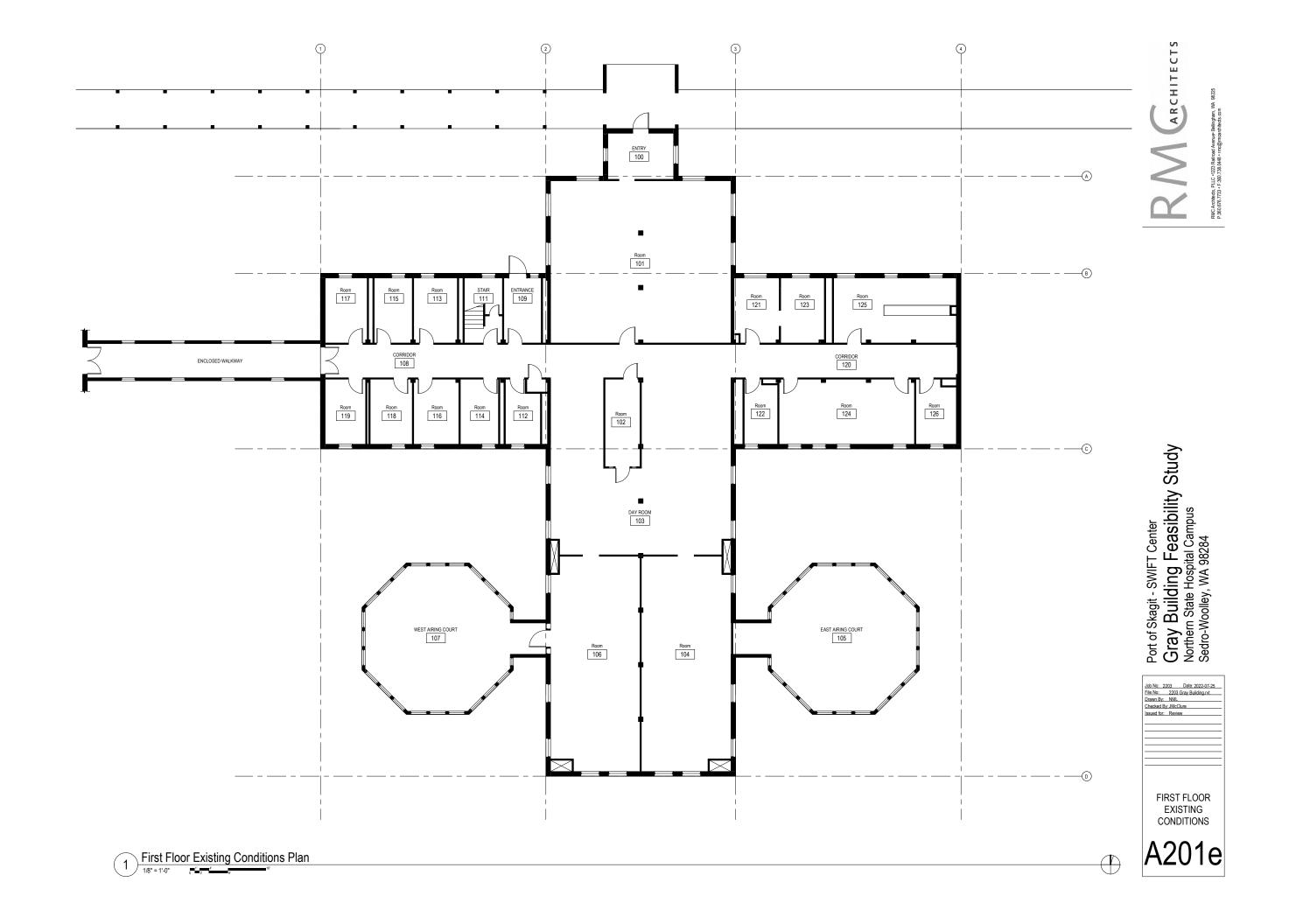
Senior Project Manager

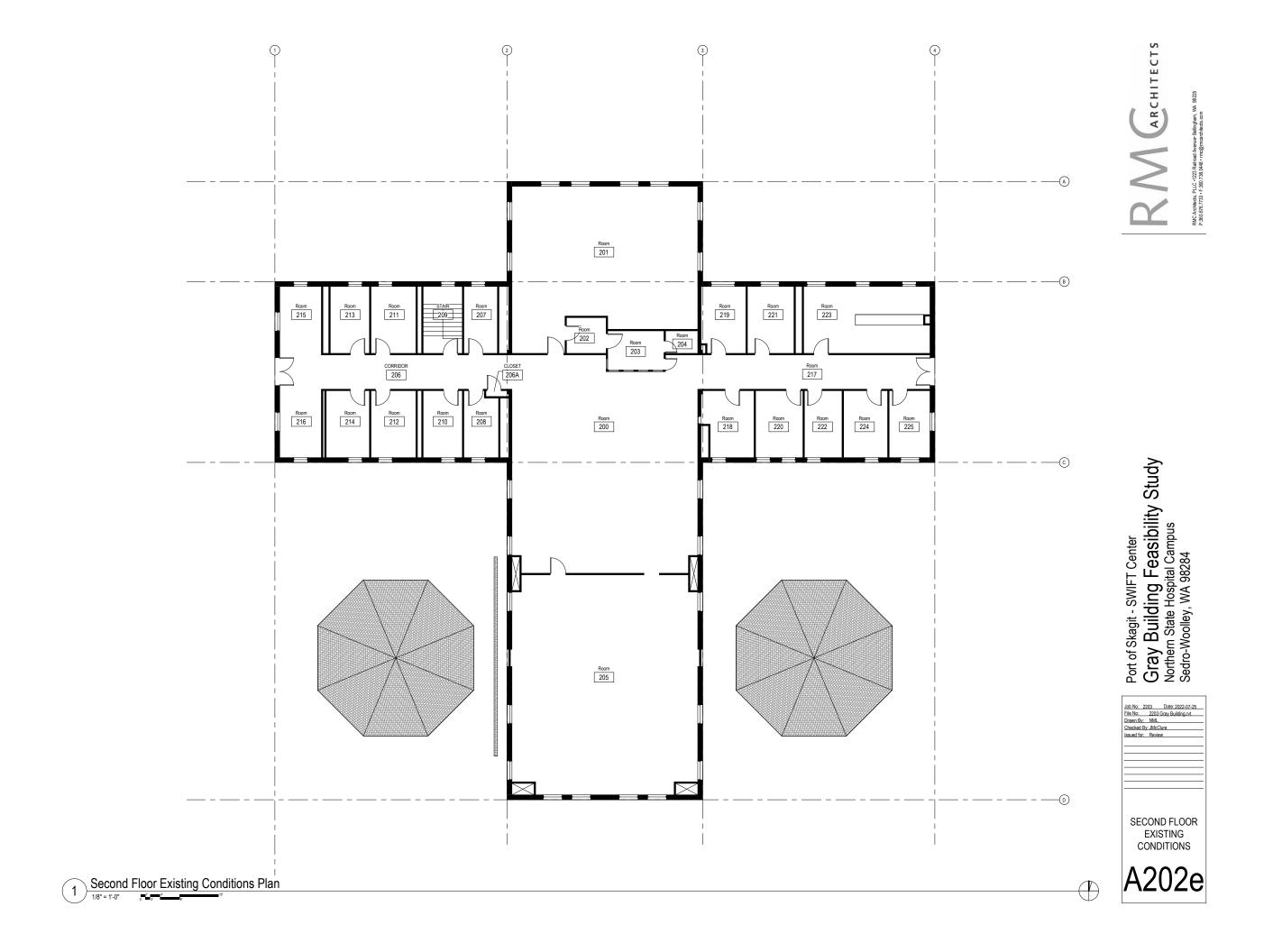
Mark a. Diley



September 2022 PBS Project 41140.018 **APPENDIX A**

RMC Architects Reference Drawings





APPENDIX B

PLM Bulk Sampling Information
PLM Bulk Sample Inventory
PLM Bulk Sample Laboratory Data Sheets
PLM Bulk Sample Chain of Custody Documentation

SWIFT Center - Gray Building RMC Architects

PBS Engineering + Environmental
PBS Project #41140.018

рі м	ACRECTAC	CAMDIE	INVENTORY
FLIVE	ASDES I US	JAIVIFLE	HINVEINIONI

PBS Sample #	Material Type	Sample Location	<u>Lab Description</u>	Lab Result	<u>Lab</u>
41140.018 -01	Round vibration cloth	Attic on western blower	Layer 1: Gray fibrous material	58% Chrysotile	SAT
41140.018 -02	Square vibration cloth	Attic on western blower	Layer 1: Gray fibrous material	55% Chrysotile	SAT
41140.018 -03	Air cell pipe insulation	1st Floor restroom (125) toilet chase	Layer 1: Gray fibrous material	4% Chrysotile	SAT
41140.018 -04	Mag pipe insulation	1st Floor shower (123) ceiling	Layer 1: White powder material	8% Chrysotile 3% Amosite	SAT
41140.018 -05	Black residual mastic	Store room under stairs	Layer 1: Black mastic with paint	NAD	SAT
41140.018 -06	12" White ceiling tile and brown mastic	2nd floor NE corridor	Layer 1: White fibrous material with paint Layer 2: Brown mastic	NAD NAD	SAT
41140.018 -07	12" White ceiling tile and brown mastic	1st floor NE corridor	Layer 1: White fibrous material with paint Layer 2: Brown mastic	NAD NAD	SAT
41140.018 -08	Exterior stucco	Sun room SE	Layer 1: Gray sandy/brittle material with paint	NAD	SAT
41140.018 -09	Exterior stucco	Sun room NE	Layer 1: Gray sandy/brittle material	NAD	SAT
41140.018 -10	Exterior stucco	Sun room NE	Layer 1: Gray sandy/brittle material with paint	NAD	SAT

SWIFT Center - Gray Building	PBS Engineering + Environmental
RMC Architects	PBS Project #41140.018

PBS Sample #	Material Type	Sample Location	Lab Description	Lab Result	<u>Lab</u>
41140.018 -11	9" Gray vinyl floor tile	Floor 1 Nurse's office (102)	Layer 1: Gray tile	2% Chrysotile	SAT
	Black mastic		Layer 2: Black mastic	2% Chrysotile	
41140.018 -12	9" Gray vinyl floor tile	Floor 2 room 14 (201)	Layer 1: Gray tile	2% Chrysotile	SAT
	Black mastic		Layer 2: Black mastic	2% Chrysotile	
41140.018 -13	9" Dark gray vinyl floor tile	Nurse's station (201)	Layer 1: Dark gray tile	2% Chrysotile	SAT
	Black mastic	,,	Layer 2: Black mastic	2% Chrysotile	
41140.018 -14	Brown counter laminate	1st floor nurse's office (102)	Layer 1: Brown brittle rigid material	NAD	SAT
41140.010 14	Yellow mastic	13t 11001 Hurse's Office (102)	Layer 1: Yellow mastic	NAD	3A1
41140.018 -15	Gray sheet vinyl and black mastic	Room 2-11 (222)	Layer 1: Gray sheet vinyl	NAD	SAT
			Layer 2: Black mastic	NAD	
41140.018 -16	Gray sheet vinyl and black mastic	Room 1-2 (122)	Layer 1: Gray sheet vinyl	NAD	SAT
			Layer 2: Black mastic	NAD	
41140.018 -17	Brown sheet vinyl with	Room 1-4 (101)	Layer 1: Brown sheet vinyl	NAD	SAT
	jute backing and	,	Layer 2: Tan woven fibrous material	NAD	
	brown mastic		Layer 3: Brown mastic	NAD	
41140.040.40	CII Dia da Cascala a	D 2 11 (12 A)	Lavor 1. Diaglambia	NAD	CAT
41140.018 -18	6" Black Covebase	Room 2-11 (124)	Layer 1: Black rubbery material	NAD	SAT
	Brown mastic		Layer 2: Brown mastic	NAD	

PBS Sample #	Material Type	Sample Location	Lab Description	Lab Result	<u>Lab</u>
41140.018 -19	Black Covebase 4"	Nurse's station (201)	Layer 1: Black rubbery material	NAD	SAT
	brown mastic		Layer 2: Brown mastic	NAD	
41140.018 -20	6" Gray Covebase brown mastic	Room 1-2 (122)	Layer 1: Gray rubbery material	NAD	SAT
	Brown mastic		Layer 2: Brown mastic	NAD	
44440040 24		D 4 2 (122)		NAB	CAT
41140.018 -21	Interior window frame caulk	Room 1-2 (122)	Layer 1: Gray brittle material with paint	NAD	SAT
41140.018 -22	Exterior window pane putty	NW exterior	Layer 1: Gray brittle material with paint	NAD	SAT
41140.010 22	Exterior window pane party	TWW CACCION	Layer 1. Gray brittle material with paint	NAD	3/(1
41140.018 -23	Exterior window pane putty	Exterior Run Room S	Layer 1: Gray brittle material with paint	NAD	SAT
	,				
41140.018 -24	Exterior window pane putty	NE Exterior	Layer 1: Gray brittle material with paint	NAD	SAT
41140.018 -25	Exterior window pane putty	Exterior Sun Room N	Layer 1: Gray brittle material with paint	NAD	SAT
41140.018 -26	Exterior window pane putty	S Exterior	Layer 1: Gray brittle material with paint	NAD	SAT
41140.018 -27	Hexagon ceramic floor tile / grout	Room 1-3 (103)	Layer 1: White ceramic	NAD	SAT
			Layer 2: Gray brittle/sandy material	NAD	
411.40.01020	AAGUS L. CL. C. C. L. L.	D 4.2 (102)		NAD	CAT
41140.018 -28	White subway tile / mentor bed	Room 1-3 (103)	Layer 1: White ceramic	NAD	SAT
			Layer 2: Gray brittle/sandy material	NAD	
41140.018 -29	Beige ceramic wall tile	1st Floor NE Restroom	Layer 1: White ceramic	NAD	SAT
41140.010 -29	beige cerainic wall the	13t HOOLINE VESTIONIII	Layer 1. Writte Cerainic	NAU	3A1

PBS Sample #	Material Type	Sample Location	Lab Description	Lab Result	<u>Lab</u>
	Grout		Layer 2: Trace clear mastic	NAD	
	Gray mortar bed		Layer 3: Gray brittle material	NAD	
41140.018 -30	Pink ceramic floor tile	1st floor NE corridor	Layer 1: Pink ceramic	NAD	SAT
	and grout		Layer 2: Gray brittle/sandy material	NAD	
	-		Layer 3: Trace clear mastic	NAD	
444.0040.04		2 10 15 11		NAS	CAT
41140.018 -31	Yellow ceramic wall tile	2nd floor NE corridor	Layer 1: Yellow ceramic	NAD	SAT
	Gray mortar bed		Layer 2: Gray brittle material	NAD	
41140.018 -32	Terra cotta floor tile / mortar	Attic Stairwell	Layer 1: Red brittle material	NAD	SAT
			Layer 2: Gray brittle/sandy material	NAD	
41140.018 -33	White and gray plaster wall	Room 1-6 (101)	Layer 1: White brittle material	NAD	SAT
			Layer 2: Gray brittle/sandy material	NAD	
41140.018 -34	Paint, white and gray wall plaster	Room 1-10 (119)	Layer 1: White brittle material with paint	NAD	SAT
			Layer 2: Gray brittle/sandy material	NAD	
41140.018 -35	Paint, white and gray wall plaster	Room 2-9 (221)	Layer 1: White brittle material with paint	NAD	SAT
			Layer 2: Gray brittle/sandy material	NAD	
44440.04000	NAME:	D 2 40 (225)		NIAD	CAT
41140.018 -36	White and gray wall plaster	Room 2-10 (225)	Layer 1: White brittle material with paint	NAD	SAT
			Layer 2: Gray brittle/sandy material	NAD	

PBS Sample #	Material Type	Sample Location	Lab Description	Lab Result	<u>Lab</u>
•	•	•	·		
41140.018 -37	Paint, white and gray wall plaster	Restroom	Layer 1: White brittle material with paint	NAD	SAT
			Layer 2: Gray brittle/sandy material	NAD	
41140.018 -38	Paint, white and gray ceiling plaster	Room 2-9 (221)	Layer 1: White brittle material with paint	NAD	SAT
			Layer 2: Gray brittle/sandy material	NAD	
41140.018 -39	Brown braided wire insulation	Room 2-3 (205) Wall Outlet	Layer 1: Brown woven fibrous material	NAD	SAT
			Layer 2: Trace black mastic	NAD	
41140.018 -40	Black paper vapor barrier	Underwood Floor in Hall	Layer 1: Black asphaltic fibrous material	NAD	SAT
41140.018 -41	Black paper vapor barrier	Under Sun Room Wood Floor	Layer 1: Black asphaltic fibrous material	NAD	SAT
41140.018 -42	Black asphaltic roofing	Roof (flat) over front entry to	Layer 1: Black asphaltic fibrous material	NAD	SAT
		gray building	Layer 2: Black asphaltic material with sand	NAD	
			Layer 3: Black asphaltic material with	NAD	
			fibrous material		
41140.018 -43	Black asphaltic paper	Under tera cotta roofing tile over	Layer 1: Black asphaltic material with	NAD	SAT
		central roof	fibrous material		
41140.010 44	Disable and bold are asset	Hadaa daada waxaal aa af af	Lavor 1. Dia de controlida Characterial	NIAD	CAT
41140.018 -44	Black asphaltic paper	Under sheet metal roof of	Layer 1: Black asphaltic fibrous material	NAD	SAT
		sun room			
41140.018 -45	Exterior stucco	Exit NE	Lavor 1: Gray candy/brittle material with paint	NAD	SAT
41140.010 -45	EXTERIOR STUCCO	EXIL INE	Layer 1: Gray sandy/brittle material with paint	INAU	SAI

SWIFT Center - Gray Building RMC Architects

PBS Engineering + Environmental PBS Project #41140.018

PBS Sample #	Material Type	Sample Location	Lab Description	Lab Result	<u>Lab</u>
41140.018 -46	Exterior stucco	Exit SW	Layer 1: Gray sandy/brittle material with paint	NAD	SAT
41140.018 -47	Exterior stucco	Exit NW	Layer 1: Gray sandy/brittle material with paint	NAD	SAT
41140.018 -48	Exterior stucco	Exit SE	Layer 1: Gray sandy/brittle material with paint	NAD	SAT
41140.018 -49	Exterior stucco	Exit S	Layer 1: Gray sandy/brittle material with paint	NAD	SAT

SEATTLE ASBESTOS TEST, LLC

Lynnwood Laboratory: 19701 Scriber Lake Road, Suite 103, Lynnwood, WA 98036, Tel: 425.673.9850, Fax: 425.673.9810, NVLAP Lab Code: 200768-0

www.seattleasbestostest.com, admin@seattleasbestostest.com

Project Manager: Mark Hiley

Client: PBS Engineering and Environmental, Seattle

Address: 214 E Galer Street, Suite 300, Seattle, WA 98102

Tel: 206,233,9639

Date Report Issued: 5/25/2022

Date Analyzed: 5/25/2022 Client Job#: 41140.018

Project Location: Gray Building

Laboratory batch#: 202210076

Samples Received: 49

Enclosed please find the test results for the bulk samples submitted to our laboratory for asbestos analysis. Analysis was performed using polarized light microscopy (PLM) in accordance with Test Method US EPA - 40 CFR Appendix E of Part 763, Interim Method of Determination of Asbestos in Bulk Insulation Samples and Test Method US EPA/600/R-93/116.

Percentages for this report are done by visual estimate and relate to the suggested acceptable error ranges by the method. Since variation in data increases as the quantity of asbestos decreases toward the limit of detection, the EPA recommends point counting for samples containing between <1% and 10% asbestos (NESHAP, 40 CFR Part 61). Statistically, point counting is a more accurate method. If you feel a point count might be beneficial, please feel free to call and request one.

The test results refer only to the samples or items submitted and tested. The accuracy with which these samples represent the actual materials is totally dependent on the acuity of the person who took the samples. This report must not be used by the client to claim product certification, approval, or endorsement by Seattle Asbestos Test, LLC, NVLAP, NIST, or any agency of the Federal government. The test report or calibration certificate shall not be reproduced except in full, without written approval of the laboratory. If the sample is inhomogeneous the sub-samples of the components are analyzed separately as layers. This report in its entirety consists of this cover leter, the customer sampling COC or data sheet, and the analytical report which is page numbered.

This report is highly confidential and will not be released without your consent. Samples are archived for 30 days after the analysis, and disposed of as hazardous waste thereafter.

Thank you for using our service and let us know if we can further assist you.

Sincerely

SZhang

Steve (Fanyao) Zhang Approved Signatory



14.

2022/0076 SAT LABORATORY CHAIN OF CUSTODY

25

Project: U	ray Duilding		Project #: 4/1 4	0.0
Analysis req	uested: PLM		Date:	
Reling'd by/	Signature:	1 murpy		- 401
Received by	Signature:	alan	Date/Time:	2/22
	Email	ALL IANIOISES	Date/Time: 3/2	3/10
E-mail results		ALL INVOICES to: seattles	p@phases.com	
Willem Ma		☑ Janet Murphy	□ 110 m = 13	
Gregg Mid		Kaitlin Soukup	☐ Holly Tuttle☐ Mike Smith	
✓ Mark Hiley ☐ Tim Ogden		Allison Welch	Ferman Fletche	
Ryan Hunte		Toan Nguyen	Cameron Budni	•
Prudy Stouc		Peter Stensland	Kameron DeMo	
		Claire Tsai		
URN AROUND	TIME:			
1 Hour		24 Hours	☐ 3-5 Days	
2 Hours 4 Hours		48 Hours	Other_	
Sample #	Mater	ial	Location	T
	Round Vibration	a Clath 1		Lab
2.	Square Vibra		ttic on Western Blow	er
3.	A Call Dias		ttle on Western Blow	er
4.	Maa Pipe Insu		FI. RR Toilet Chase	
5.	BU 1. 1	lation 1st	Fl. Shower Ceiling	9
6.		al Mastic Stor	e Rm Under Stairs	
7	12"White Ceiling Til	Land Mostic 2n	d Fl. NE Corridor	
8	<u>r., 1</u>	157	FI NE Corridor	
9.		vaco Sun	Room SE	
	11	50	n Room NF	
10.	11	Sui	Room NE	
11.	bray Vinyl Flo	or Tile Fl.	1 Nurse's Office	
	"Gray Vinyl Flo Black Ma	stic	333 - 1126	
12	9" Gray Viny	Toor Tile F1	2, Rm 14	
	A			

CONTRACT CALEBRATE COST THE STATES WARREN FINE TO THE WARRENCE SEC. STATES OF A PRINCIPALITY.

Vellow Mastic

9" Dar Gray Viryl Floor Tile
Black Mastic Nurse's Station

1st FI. Norses Office

PBS

202210076 SAT LABORATORY CHAIN OF CUSTODY

Project: Gray Buil	dina	December 11110 -10
Analysis requested:	PLM	Project #: 4/1/40,018
Relinq'd by/Signature:	Janet murph	Date:
Received by/Signature:	6 Cixio	Date/Time: 5/23/22 / 4:2
E-mail results to: Willem Mager	Email ALL INVOICES to: souttleap	mor, sayada
Gregg Middaugh Mark Hiley	Janet Murphy Kaitlin Soukup Allison Welch	☐ Holly Tuttle ☐ Mike Smith ☐ Ferman Fletcher
☐ Tim Ogden ☐ Ryan Hunter ☐ Prudy Stoudt-McRae	☐ Toan Nguyen ☐ Peter Stensland ☐ Claire Tsai	Cameron Budnick Kameron DeMonnin
TURN AROUND TIME:		U
1 Hour 2 Hours 4 Hours	24 Hours 48 Hours	☐ 3-5 Days ☐ Other

	SAMPLE DATA	FORM	
Sample #	Material	Location	La
15.	Gray Sheet Vinyl and Black Mastic	F1. 2 RA11	-
16.	u' u'	F1. 1 Rm2	
17	Brown Sheet Viryl with	F1. 1. Pm 4	-
-	Sute Backing and		
18	Brown mastic		
10	G" Black Covebase Brown Mastir	F1.2, Rm 11	
19.	Black Covebase 4"	Nurse's Station	
	Brown Mostic	NVISES STATION	
20,	6" Gray Coul base	F1.1. Rm2	-
	Brown Mastic		
21.	Interior Window Frome Caulk	1st Fl. Rm5	
22	Exterior Window Pane Putty	NW Exterior	***
24.	Exterior Window Pane Putty	Exterior Sun Room S.	
	Exterior Window Pane Putty	NE EXTERIOR	
2-6	Exterior Window Pane Potty	Exterior Sun Room N.	
27 1	terior Window Pane Putty	S. Exterior	
- J F	exagon Ceramic FloorTile/Grout	15+ FI, RM3	

THE SALES STREET LAST WATER MATERIAL WATER STREET, WAS RESTORATED BY MALES AND THE WATER STREET, WATER STREET

PBS

2022/0076 5AT LABORATORY CHAIN OF CUSTODY

Project: Gray 13	vilding	Project #: 411 40, 018
Analysis requested:	PLM	Date:
Relinq'd by/Signature:	Just much	Date/Time:
Received by/Signature:	G COU	Date/Time: 5/73/72/14:2
E-mail results to:	Email ALL INVOICES to: seattleap	
☐ Willem Mager ☐ Gregg Middaugh ☐ Mark Hiley ☐ Tim Ogden ☐ Ryan Hunter ☐ Prudy Stoudt-McRae	Janet Murphy Kaitlin Soukup Allison Welch Toan Nguyen Peter Stensland Claire Tsai	Holly Tuttle Mike Smith Ferman Fletcher Cameron Budnick Kameron DeMonnin
TURN AROUND TIME: 1 Hour 2 Hours	24 Hours 48 Hours	3-5 Days Other

	SAMPLE DATA	FORM	
Sample #	Material	Location	Lab
28.	White Subway Tile / Mentar Bee		Lac
29.	Deige Ceramic Wall Tile	ISTFI. NE RR	
	Grout		
30,	Pinle Ceramic Floor Tile	15T FI. NE Corridor	
31.	Yellow Ceromic Wall Tile	9	
32,	Gray Mortas Ged Terra Cotta Floor Tile / Mortar		
33,	whiteand Gray Plaster	IST FI RMG	-
34, 1	aint, white and Gray Wall Plaster	15t Fl. Rpn 10	
-	hite and Gray wall Plaster	2nd Fi Rm 9 2nd Fi Rm 10	
010 6	rint. White and Gray wall Plaster	Restonna	-
000 19	int White and Gray Ceiling Plaster	2nd Fl. Rm9	
70		Rm2-3 wall outlet Underwood Floor in Hall	
41 1		Under Sun Room Wood Floor	



2022/0076 SAT LABORATORY CHAIN OF CUSTODY

Project: Gray Bo Analysis requested: Relinq'd by/Signature: Received by/Signature:	Janet much	Project #: 41140.018 Date: Date/Time: 5/23/22 /4:25
E-mail results to: Willem Mager Gregg Middaugh Mark Hiley Tim Ogden Ryan Hunter Prudy Stoudt-McRae	Fmail ALL INVOICES to: seattlean Janet Murphy Kaitlin Soukup Allison Welch Toan Nguyen Peter Stensland Claire Tsai	Holly Tuttle Mike Smith Ferman Fletcher Cameron Budnick Kameron DeMonnin
TURN AROUND TIME: 1 Hour 2 Hours 4 Hours	24 Hours 48 Hours	☐ 3-5 Days ☐ Other

	SAMPLE DATA	FORM	
Sample #	Material	Location	
42	Black Asphaltic Roofing		Lab
	The see may	Roof (flat) Over front	
43	Black Asphaltic Paper	entry to Gray Building Under Tera Cotta	
	1 10 10 10 10 10 10 10 10 10 10 10 10 10	Roofing Tiles over	
		Central Roof	
44	Black Asphaltiz Paper	Under Sheet	
	,	Metal Roof of	
1. =		Sun Room.	
45	Exterior Stucco	Ext. NE	
46	- 1/	Ext. Sw	
40	11	Ext. NW	
76	1/	Ext, SE	
-41	11	Ext, 5	
	*		
		:	

TAXALT GALER STREET SUITS THE SEATTLE WA DRIVE FOR EXTREM MAIN 4 866 ST CLAUSAR 4 PERSON LOW

SEATTLE ASBESTOS TEST

Lynnwood Laboratory: 19701 Scriber Lake Road, Suite 103, Lynnwood, WA 98036, Tel: 425.673.9850, Fax: 425.673.9810, NVLAP Lab Code: 200768-0

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ANALYTICAL LABORATORY REPORT

[PLM] EPA -- 40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples;

EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials [PLM] Client: PBS Engineering and Environmental, Seattle Attn.: Mark Hiley

Address: 214 E Galer Street, Suite 300, Seattle, WA 98102

Batch#: 202210076 Job#: 41140.018 Date Received: 5/23/2022 Samples Rec'd: 49 Date Analyzed: 5/24/2022

Project Loc.: Gray Building

		SZhana
Analyzed by: Cici Xu Steven	Approved Signature	Steve (Fanyao) Zhang, President
The same of the sa	Approved alguardry.	Steve (ranyao) Zhang, Presiden

Lab ID	Client Sample ID	Layer	Description	%	Asbestos Fibers	Non-fibrous Components	1 %	Non-asbestos Fib
1	1	1	Gray fibrous material	58	3 Chrysotile	Filler	24	
2	2	1	Gray fibrous material	55	Chrysotile	Filler	27	Cellulose
3	3	1	Gray fibrous material	4	Chrysotile	Filler	23	Cellulose
4	4	1	White powdery material	8		Binder, Filler	15	Cellulose
5	5	1	Black mastic with paint		None detected	Mastic/binder, Paint	4	Cellulose
6	6	1	White fibrous material with paint		None detected	Paint, Filler, Perlite	65	Cellulose
		2	Brown mastic		None detected	Mastic/binder	3	Cellulose
7	7	1	White fibrous material with paint		None detected	Paint, Filler, Perlite	63	Cellulose
		2	Brown mastic		None detected	Mastic/binder	4	Cellulose
8	8	1	Gray sandy/brittle material with paint		None detected	Sand, Filler, Binder, Paint	3	Cellulose
9	9	1	Gray sandy/brittle material		None detected	Sand, Filler, Binder	2	Cellulose
10	10	1	Gray sandy/brittle material with paint		None detected	Sand, Filler, Binder, Paint	4	Cellulose
11	11	1	Gray tile	2	Chrysotile	Vinyl/binder, Mineral grains	2	Cellulose
		2	Black mastic	2	Chrysotile	Mastic/binder	4	Cellulose
12	12	1	Gray tile	2	Chrysotile	Vinyl/binder, Mineral grains	3	Cellulose
		2	Black mastic	2	Chrysotile	Mastic/binder	3	Cellulose
13	13	1	Dark gray tile	2	Chrysotile	Vinyl/binder, Mineral grains	2	Cellulose
		2	Black mastic	2	Chrysotile	Mastic/binder	3	Cellulose
14	14	f	Brown brittle/rigid material		None detected	Filler, Binder, Fine particles	65	Cellulose
		2	Yellow mastic		None detected	Mastic/binder	4	Cellulose
15	15	1	Gray sheet vinyl		None detected	Vinyl/binder		None detected
		2	Black mastic		None detected	Mastic/binder	3	Cellulose
16	16	1	Gray sheet vinyl		None detected	Vinyl/binder		None detected
		2	Black mastic		detected	Mastic/binder	2	Cellulose
17	17	1	Brown sheet vinyl		None detected	Vinyl/binder		None detected

1 of 4

SEATTLE ASBESTOS TEST

Lynnwood Laboratory: 19701 Scriber Lake Road, Suite 103, Lynnwood, WA 98036, Tel: 425.673,9850, Fax: 425.673,9810, NVLAP Lab Code: 200768-0

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ANALYTICAL LABORATORY REPORT

[PLM] EPA - 40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples; EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials

client: PBS Engineering and Environmental, Seattle Attn.: Mark Hiley Batch#: 202210076 Job#: 41140.018

Address: 214 E Galer Street, Suite 300, Seattle, WA 98102 Date Received: 5/23/2022

Samples Rec'd: 49 Date Analyzed: 5/24/2022

Samples Analyzed: 49

[PLM]

Project Loc.: Gray Building

			06
alyzed by: Cici Xu/Steven	Approved Signatory:	Steve (Fanyao) Zhang,	Presid

Lab ID	Client Sample ID	Layer	Description	%	Asbestos Fibers	Non-fibrous Components	%	Non-asbestos Fibers
17	17	2	Tan woven fibrous material		None detected	Filler, Binder	85	Synthetic fibers
		3	Brown mastic		None detected	Mastic/binder	2	Cellulose
18	18	1	Black rubbery material		None detected	Rubber/binder	2	Cellulose
- 7		2	Brown mastic		None detected	Mastic/binder	2	Cellulose
19	19	1	Black rubbery material		None detected	Rubber/binder	3	Cellulose
		2	Brown mastic		None detected	Mastic/binder	3	Cellulose
20	20	1	Gray rubbery material		None detected	Rubber/binder	3	Cellulose
	20	2	Brown mastic		None detected	Mastic/binder	4	Cellulose
21	21	1	Gray brittle material with paint		None detected	Filler, Binder, Paint	2	Cellulose
22	22	1	Gray brittle material with paint		None detected	Filler, Binder, Paint	2	Cellulose
23	23	1	Gray brittle material with paint		None detected	Filler, Binder, Paint	3	Cellulose
24	24	1	Gray brittle material with paint		None detected	Filler, Binder, Paint	3	Cellulose
25	25	1	Gray brittle material with paint		None detected	Filler, Binder, Paint	2	Cellulose
26	26	1	Gray brittle material with paint		None detected	Filler, Binder, Paint	2	Cellulose
27	27	1	White ceramic		None detected	Ceramic/binder		None detected
-		2	Gray brittle/sandy material		None detected	Binder, Sand	2	Cellulose
28	28	1	White ceramic		None detected	Ceramic/binder		None detected
	20	2	Gray brittle/sandy material		None detected	Binder, Sand	3	Cellulose
		1	White ceramic		None detected	Ceramic/binder		None detected
29	29	2	Trace clear mastic		None detected	Mastic/binder	2	Cellulose
		3	Gray brittle material		None detected	Filler, Binder	2	Cellulose
		1	Pink ceramic		None detected	Ceramic/binder		None detected
30	30	2	Gray brittle/sandy material	1	None detected	Binder, Sand	2	Cellulose
		3	Trace clear mastic	- 1	None detected	Mastic/binder	2	Cellulose

SEATTLE ASBESTOS TEST

Project Loc.: Gray Building

Lynnwood Laboratory: 19701 Scriber Lake Road, Suite 103, Lynnwood, WA 98036, Tel: 425.673.9850, Fax: 425.673.9810, NVLAP Lab Code: 200768-0

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ANALYTICAL LABORATORY REPORT

[PLM] EPA – 40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples; EPA 600/R-93/118: Method for the Determination of Asbestos in Bulk Building Materials

Client: PBS Engineering and Environmental, Seattle Attn.: Mark Hiley

Address: 214 E Galer Street, Suite 300, Seattle, WA 98102

Batch#: 202210076 Job#: 41140.018 Date Received: 5/23/2022

Samples Rec'd: 49 Date Analyzed: 5/24/2022

SZhang Analyzed by: Clci Xu/Stever

[PLM]

Lab ID	Client Sample ID	Layer	Description	%	Asbestos Fibers	Non-fibrous Components	%	Non-asbestos Fibe
31	31	1	Yellow ceramic		None detected	Ceramic/binder		None detected
31	31	1	Gray brittle material		None detected	Filler, Binder	3	Cellulose
32	32	1	Red brittle material		None detected	Filler, Binder	3	Cellulose
JZ	JZ.	2	Gray brittle/sandy material		None detected	Binder, Sand	2	Cellulose
33	33	1	White brittle material		None detected	Filler, Binder	3	Cellulose
00	55	2	Gray brittle/sandy material		None detected	Binder, Sand	3	Cellulose
34	34	1	White brittle material with paint		None detected	Filler, Binder, Paint	4	Cellulose
04		2	Gray brittle/sandy material		None detected	Binder, Sand	2	Cellulose
35	35	1	White brittle material with paint		None detected	Filler, Binder, Paint	3	Cellulose
30	33	2	Gray brittle/sandy material		None detected	Binder, Sand	3	Cellulose
36	36	1	White brittle material with paint		None detected	Filler, Binder, Paint	2	Cellulose
50	30	2	Gray brittle/sandy material		None detected	Binder, Sand	2	Cellulose
37	37	1	White brittle material with paint		None detected	Filler, Binder, Paint	3	Cellulose
J.	37	2	Gray brittle/sandy material		None detected	Binder, Sand	2	Cellulose
38	38	1	White brittle material with paint		None detected	Filler, Binder, Paint	2	Cellulose
		2	Gray brittle/sandy material	9	None detected	Binder, Sand	3	Cellulose
39	39	1	Brown woven fibrous material		None detected	Filler, Binder	85	Synthetic fiber
	50	2	Trace black mastic		None detected	Mastic/binder	3	Cellulose
40	40	1	Black asphaltic fibrous material		None detected	Filler, Asphalt, Binder	67	Cellulose
41	41	1	Black asphaltic fibrous material		None detected	Filler, Asphalt, Binder	68	Cellulose
		-1	Black asphaltic material	H	None detected	Asphalt/binder	3	Cellulose
42	42	2	Black asphaltic material with sand		None detected	Asphalt/binder, Sand	4	Cellulose
		3	Black asphaltic material with fibrous material		None detected	Asphalt/binder, Filler	23	Cellulose

2 of 4 3 of 4

SEATTLE ASBESTOS TEST

Lynnwood Laboratory: 19701 Scriber Lake Road, Suite 103, Lynnwood, WA 98036, Tel: 425.673.9850, Fax: 425.673.9810, NVLAP Lab Code: 200768-0

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Pederal government.

ANALYTICAL LABORATORY REPORT

[PLM] EPA -- 40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples;

EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials

Attn.: Mark Hiley

Address: 214 E Galer Street, Suite 300, Seattle, WA 98102

Job#: 41140.018

client: PBS Engineering and Environmental, Seattle Batch#: 202210076

Date Received: 5/23/2022

Samples Rec'd: 49

Date Analyzed: 5/24/2022

Project Loc.: Gray Building

SZhang

Lab ID	Client Sample ID	Layer	Description	%	Asbestos Fibers	Non-fibrous Components	1 %	Non-asbestos Fibers
43	43	1	Black asphaltic material with fibrous material		None detected	Asphalt/binder, Filler	25	Cellulose
44	44	1	Black asphaltic fibrous material		None detected	Filler, Asphalt, Binder	69	Cellulose
45	45	1	Gray sandy/brittle material with paint		None detected	Sand, Filler, Binder, Paint	3	Cellulose
46	46	1	Gray sandy/brittle material with paint		None detected	Sand, Filler, Binder, Paint	2	Cellulose
47	47	1	Gray sandy/brittle material with paint		None detected	Sand, Filler, Binder, Paint	2	Cellulose
48	48	1	Gray sandy/brittle material with paint		None detected	Sand, Filler, Binder, Paint	3	Cellulose
49	49	1	Gray sandy/brittle material with paint		None detected	Sand, Filler, Binder, Paint	2	Cellulose

4 of 4

APPENDIX C

AA Lead Paint Chip Sampling Information

AA Lead Paint Chip Sample Inventory AA Lead Paint Chip Laboratory Data Sheets AA Lead Paint Chip Chain of Custody Documentation

SWIFT Center - Gray Building RMC Architects

AA LEAD PAINT CHIP SAMPLE INVENTORY

PBS Sample #	Paint Color / Component or Substrate	Sample Location	Results (mg/kg)	Results (%)	<u>Lab</u>
41140.018 -Pb01	Yellow / Concrete / Wall	Exterior Sun Room	160000.0	16.00	NVL
41140.018 -Pb02	Brown / Concrete / Sil	Exit Sill North	110000.0	11.00	NVL
41140.018 -Pb03	Yellow / Concrete / Exit Wall	Exit Northwest	160000.0	16.00	NVL
41140.018 -Pb04	Tan Yellow / Wood / Door Frame	Room 2-7 (216)	8000.0	0.80	NVL
41140.018 -Pb05	White / Plaster / Wall	Room 2-13 (218)	27000.0	2.70	NVL
41140.018 -Pb06	Green, Yellow, Pink / Metal / Window Frame	Room 2-8 (210)	17000.0	1.70	NVL
41140.018 -Pb07	White / Plaster / Ceiling	Room 1-1 (124)	3800.0	0.38	NVL
41140.018 -Pb08	White, Green, Yellow/ Plaster/ Wall	Room 1-2 (122)	11000.0	1.10	NVL
41140.018 -Pb09	Green / Plaster / Wall	1st Floor Nurse's Office	1200.0	0.12	NVL
41140.018 -Pb10	White, Green, Yellow / Concrete / Sil	Room 1-4 (101)	91000.0	9.10	NVL
41140.018 -Pb11	Pink / Plaster / Wall	1st Floor Stairwell	5000.0	0.50	NVL

May 23, 2022

Janet Murphy **PBS Environmental - Seattle**214 E Galer St. Suite. 300

Seattle, WA 98102



NVL Batch # 2209478.00

RE: Total Metal Analysis

Method: EPA 7000B Lead by FAA <paint>

Item Code: FAA-02

Client Project: 41140.018 Location: Gray Building

Dear Ms. Murphy,

NVL Labs received 11 sample(s) for the said project on 5/20/2022. Preparation of these samples was conducted following protocol outlined in EPA 3051/7000B, unless stated otherwise. Analysis of these samples was performed using analytical instruments in accordance with EPA 7000B Lead by FAA <paint>. The results are usually expressed in mg/Kg and percentage (%). Test results are not blank corrected.

For recent regulation updates pertaining to current regulatory levels or permissible exposure levels, please call your local regulatory agencies for more detail.

At NVL Labs all analyses are performed under strict guidelines of the Quality Assurance Program. This report is considered highly confidential and will not be released without your approval. Samples are archived after two weeks from the analysis date. Please feel free to contact us at 206-547-0100, in case you have any questions or concerns.

Sincerely,

Shalini Patel, Manager Metals Lab

Enc.: Sample results





Phone: 206 547.0100 | Fax: 206 634.1936 | Toll Free: 1.888.NVL.LABS (685.5227) 4708 Aurora Avenue North | Seattle, WA 98103-6516

page 1 of 4

Analysis Report

Total Lead (Pb)

Client: PBS Environmental - Seattle
Address: 214 E Galer St. Suite. 300
Seattle, WA 98102

Attention: Ms. Janet Murphy

Project Location: Gray Building



Batch #: 2209478.00

Matrix: Paint Method: EPA 3051/7000B Client Project #: 41140.018 Date Received: 5/20/2022 Samples Received: 11 Samples Analyzed: 11

	Lab ID	Client Sample #	Sample Weight (g)	RL in mg/Kg	Results in mg/Kg	Results in percent	
'	22359652	41140.018-Pb1	0.1831	55	160000	16	
	22359653	41140.018-Pb2	0.1945	51	110000	11	
	22359654	41140.018-Pb3	0.1852	54	160000	16	
	22359655	41140.018-Pb4	0.1956	51	8000	0.80	
	22359656	41140.018-Pb5	0.1808	55	27000	2.7	
'	22359657	41140.018-Pb6	0.1962	51	17000	1.7	
	22359658	41140.018-Pb7	0.1828	55	3800	0.38	
'	22359659	41140.018-Pb8	0.1886	53	11000	1.1	
	22359660	41140.018-Pb9	0.1914	52	1200	0.12	
	22359661	41140.018-Pb10	0.1899	53	91000	9.1	
	22359662	41140.018-Pb11	0.1907	52	5000	0.50	

Sampled by: Client

Analyzed by: Yasuyuki Hida Date Analyzed: 05/23/2022 Reviewed by: Shalini Patel Date Issued: 05/23/2022

Issued: 05/23/2022 Shalini Patel, Manager Metals Lab

RL = Reporting Limit
'<' = Below the reporting Limit

Percent = Milligrams per kilogram / 10000 Note: Method QC results are acceptable unless stated otherwise.

Unless otherwise indicated, the condition of all samples was acceptable at time of receipt.

Bench Run No: 2022-0523-07

mg/ Kg =Milligrams per kilogram

FAA-02

page 2 of 4

LEAD LABORATORY SERVICES



Company PBS Environmental - Seattle	NVL Batch Number 2209478.00
Address 214 E Galer St. Suite. 300	TAT 2 Days AH No.
Sea ttle, WA 9 8 10 2	Rush TAT
Project Manager Ms. Janet Murphy	Due Date 5/24/2022 Time 2:00 PM
Phone (206) 233-9639	Email janet.murphy@pbsusa.com
Cell (206) 409-9904	Fax (866) 727-0140

Proj	ect Name/Nu	ımber: 41140.018	Project Location: Gray Building	
Subc	ategory Flam	ne AA (FAA)		
Ite	m Code FAA	-02 E P A	7000B Lead by FAA <paint></paint>	
To	tal Numba	er of Campion 1	1	D 16 1
10	tai Numbe	r of Samples1	<u> </u>	Rush Samples
	Lab ID	Sample ID	Description	A/R
1	22359652	41140.018-Pb1		A
2	22359653	41140.018-Pb2		A
3	22359654	41140.018-Pb3		A
4	22359655	41140.018-Pb4		A
5	22359656	41140.018-Pb5		A
6	22359657	41140.018-Pb6		A
7	22359658	41140.018-Pb7		A
8	22359659	41140.018-Pb8		A
9	22359660	41140.018-Pb9		A
10	22359661	41140.018-Pb10		A
11	22359662	41140.018-Pb11		A

	Print Name	Signature	Company	Date	Time
Sampled by	Client				
Relinquished by	Client				
Office Use Only	Print Name	Signature	Company	Date	Time
Received by	Rachelle Miller		NVL	5/20/22	1400
Analyzed by	Yasuyuki Hida		NVL	5/23/22	
Results Called by					
☐ Faxed ☐ Emailed					
Special		ı			

Date: 5/20/2022 Time: 1:57 PM

Entered By: Rachelle Miller

PBS

LABORATORY CHAII

2209478

Project: Gray Bu	Idina	Project #: 4// 40 , 0/8
Analysis requested:	I Lead AAS,	M 20 2027
Relinq'd by/Signature:	Junet Murphy	Date: 11 a y 20, 2022 Date/Time: May 20, 2022
Received by/Signature:	Rochia M.	Date/Time: 5/10/12 1400
	Email ALL INVOICES to: seattleap@	pbsusa.com
E-mail results to:		
Willem Mager	Janet Murphy	☐ Holly Tuttle
Gregg Middaugh	Kaitlin Soukup	Mike Smith
Mark Hiley	Allison Welch	Ferman Fletcher
☐ Tim Ogden	☐ Toan Nguyen	Cameron Budnick
Ryan Hunter	Peter Stensland	★ Kameron DeMonnin
Prudy Stoudt-McRae	Claire Tsai	
TURN AROUND TIME:		
1 Hour	24 Hours	3-5 Days
2 Hours	₩ 48 Hours	Other
4 Hours		

	SAMPLE DATA I	FORM	
Sample #	Material	Location	Lab
Pbl	Yellow / Concrete / Wall	Exterior Sun Room	
Pb2	Brown / Concrete /5:1	Ext. Sill N.	
Ph3	Yellow / Concrete /Ext wal	I Ext. NW	
P 6 4	Yellow I wood Door Frame	Rm 2-7	
965	white IPlaster / Wall	Rm 2-13	
166	Green, Yellow, Pink (Motol/ window)	Rm 2-8	
Pb7	White / Plaster/ Ceiling	Rm 1-1	
168	white, Green, Yellow Plasta / Con11	Rm1-2	
P69	Green/Plaster/Wall	1st Fl. Nurses Office	
Pblo	white Green Yellow / Concrete / 5:1	Rm1-4	
1911	Pink/Plaster/Wall	1st Fl. Stairwell	
		At a second	
	Y'		

214 EAST GALER STREET SUITE 300 SEATTLE WA 98102 + 206 23 - 9639 MAIN + 866 /27 0140 FAX + P8505A .OM

APPENDIX D PBS Inspector Certifications

THIS IS TO CERTIFY THAT

JANET MURPHY

HAS SUCCESSFULLY COMPLETED THE TRAINING COURSE for

ASBESTOS INSPECTOR / MANAGEMENT PLANNER REFRESHER

In accordance with TSCA Title II, Part 763, Subpart E, Appendix C of 40 CFR

Course Date:

03/23/2022

Course Location:

Online,

Certificate:

IMR-22-8300A



CCB #SRA0615 4-Hr Training

AHERA is the Asbestos Hazard Emergency Response Act enacting Title II of Toxic Substance Control Act (TSCA)

Expiration Date:

03/23/2023

For verification of the authenticity of this certificate contact:
PBS Engineering and Environmental Inc.

4412 S Corbett Avenue

Portland, OR 97239

503.248.1939

Andy Fridley, Instructor

		CURRE		UNIT		LABOR	LABOR	MATERIAL	MATERIAL			SUBCONTRACT	SUBCONTRACT		BCONTRACTOR	LINE	DIVISION
ITEM	DESCRIPTION	QUANTITY	UNIT	LABOR	MANHOURS	RATE	COST	UNIT COST	COST	UNIT COST	COST	UNIT COST	SUBTOTAL COST	CONTING.	COST	TOTAL	TOTALS
DIVISION	2 - DEMOLITION & REMOVAL															_	325,668
	DEMOLITION - METAL STAIRS) EA	20.000		80.00	1,600.00	-	BLW		-					1,600	323,000
	ROOFING - CLAY	11,136.00		0.016		80.00	14,240.00	-	BLW							14,240	
-	METAL ROOFING	2,400.00		0.008		80.00	1,520.00	-	BLW							1,520	
024170	ROOF SHEATHING - 10% ALLOWANCE	1,114.00		0.023	26	80.00	2,080.00	-	BLW							2,080	
	GUTTERS AND FLASHING	1,592.00		0.025		80.00	3,200.00	-	BLW							3,200	
024160	DOORS & FRAMES DOORS ONLY	23.00		0.500 0.350	12	80.00	960.00	-	BLW							960	
024164	WINDOWS (2,574 SF)	130.00	LVS	1.250	163	80.00	480.00 13,040.00	-	BLW BLW							480 13,040	
024104	FOUNDATION VENTS	31.00		0.800		80.00	2,000.00	-	BLW							2,000	
024170	INTERIOR BLOCK PARTITIONS	5,081.00		0.056		80.00	22,800.00	-	BLW		10,000.00					32,800	
	EXTERIOR BLOCK WALLS	2,280.00) SF	0.020	46	80.00	3,680.00	-	BLW							3,680	
	ROOF STRUCTURE	2,560.00		0.020		80.00	4,080.00	-	BLW							4,080	
004404	FLOOR STRUCTURE	160.00		0.080	13		1,040.00	-	BLW							1,040	
024184	FLOORING - WOOD SLEEPER & GROUT SUBFLOOR (88 CY)	11,425.00 11,425.00		0.012 0.017		80.00	10,960.00 15,520.00	-	BLW BLW							10,960 15,520	
	TILE - FLOOR	11,425.00 NIC		0.017	194	00.00	15,520.00	-	DLVV							NIC	
	TILE - WALLS	744.00		0.018	13	80.00	1,040.00	-	BLW							1,040	
024185	HARD LID		ALLW	10.000		80.00	800.00	-	BLW							800	
	PLUMBING/MECHANICAL DEMOLITION	19,382.00		0.008		80.00	12,400.00	-	BLW							12,400	
	ELECTRICAL DEMOLITION	19,382.00		0.006		80.00	9,280.00	-	BLW							9,280	
024125	CONCRETE DEMOLITION - SLAB ON GRADE	11.00		1.250	14		1,120.00	-	BLW							1,120	
	FOUNDATIONS/WALLS/COLUMNS ELEVATED SLABS	41.00 19.00		2.500 4.600	103 87	80.00	8,240.00 6,960.00	-	BLW BLW	-						8,240 6,960	
	SHORING		ALLW	20.000		80.00	1,600.00	500.00	500.00							2,100	
	SAWCUTTING	1,536.00		SUB	SUB	00.00	1,000.00	SUB	SUB			4.00	6,144.00		6.144.00	6,144	
	CLEAN/PREP EXISTING WALLS/CEILINGS	34,924.00		0.010		80.00	27,920.00	1.00	34,924.00		5,000.00		2,11110		5,11100	67,844	
	ASPHALT DEMOLITION	SEE FRONTA	GE				·		·							SEE FRONTAGE	
	REMOVE & REPLACE - COPOLA (REHAB ALLOWANCE)		EA	20.000		80.00	1,600.00	2,500.00	2,500.00							4,100	
	CONCRETE & BLOCK DISPOSAL	200.00		0.250		80.00	4,000.00	22.00	4,400.00							8,400	
	DEBRIS DISPOSAL TEMPORARY PROTECTION	482.00	ALLW	0.350 40.000		80.00	13,520.00 3,200.00	35.00 1.000.00	16,870.00 1.000.00							30,390 4,200	
026100	CONTAMINATED SOILS REMOVAL & DISPOSAL	NIC		40.000	40	80.00	3,200.00	1,000.00	1,000.00							4,200 NIC	
	HAZARDOUS MATERIALS ABATEMENT - VINYL FLOORING	420.00		SUB	SUB			SUB	SUB			3.25	1,365.00		1,365.00	1,365	
	CLOTH DUCT CONNECTORS	36.00		SUB	SUB			SUB	SUB			25.00	900.00		900.00	900	
	ELECTRICAL PANEL INSULATORS	100.00		SUB	SUB			SUB	SUB			22.00	2,200.00		2,200.00	2,200	
	VALVE GASKETS	35.00		SUB	SUB			SUB	SUB			15.00	525.00		525.00	525	
	RESIDUAL PIPE INSULATION	800.00		SUB	SUB			SUB	SUB			10.00	8,000.00		8,000.00	8,000	
	HARD PIPE INSULATION PIPE FITTINGS	500.00 500.00		SUB SUB	SUB SUB			SUB SUB	SUB SUB			15.00 15.00	7,500.00 7,500.00		7,500.00 7,500.00	7,500 7,500	
	FLOURESCENT LAMPS	145.00		SUB	SUB			SUB	SUB			8.00	1,160.00		1,160.00	1,160	
	PCB BALLASTS	36.00		SUB	SUB			SUB	SUB			50.00	1,800.00		1,800.00	1,800	
	ABATEMENT CONTAINMENT AND SET-UP	1.00	LS	SUB	SUB			SUB	SUB			20,000.00	20,000.00		20,000.00	20,000	
	LEAD PAINT PROGRAM		ALLW	SUB				SUB	SUB			2,000.00	2,000.00		2,000.00	2,000	
DIV // CLOSS	SPOT ABATEMENT	1.00	ALLW	SUB	SUB			SUB	SUB			2,500.00	2,500.00		2,500.00	2,500	
	3 - CONCRETE																114,323
033000	PLACING - FOUNDATIONS		CY	4.000		80.00	320.00	80.00	80.00							400	
	STAIRS PANS & LANDING (POUR & FINISH) WALLS	27.00	CY	8.000 1.200		80.00	1,280.00 2,560.00	80.00 80.00	160.00 2,160.00							1,440 4,720	
	PRESSURE GROUTING	27.00		SUB	SUB	80.00	۷,500.00	80.00 SUB	2, 160.00 SUB			450.00	12,150.00		12,150.00	12,150	
	SLAB ON GRADE		CY	2.000		80.00	1,280.00	80.00	640.00			100.00	12,100.00		,100.00	1,920	
031100	FORMING - FOUNDATIONS		SFCA	0.150		80.00	880.00	1.20	86.00							966	
	WALLS	2,196.00		0.080		80.00	14,080.00	3.25	7,137.00							21,217	
033500	FINISHING - WALLS	2,160.00		0.008	17	80.00	1,360.00	0.10	216.00							1,576	
024200	SLAB ON GRADE	384.00		0.015	6	80.00	480.00	0.10	38.00							518	
031300	FINE GRADE & SCREED - FOUNDATIONS SLAB ON GRADE	20.00 384.00		0.080		80.00	160.00 960.00	0.25 0.25	5.00 96.00							165 1,056	+
031500	CONCRETE ACCESSORIES	36.00		0.030	12	50.00	ABV	6.00	216.00							216	1
	FOUNDATION INSULATION	NIC						2.20								NIC	
	SLAB SEALER	780.00		0.014	11	80.00	880.00	0.25	195.00							1,075	
032100	REINFORCING		TN	25.000	50	80.00	4,000.00	3,500.00	7,000.00			-				11,000	
	CONCRETE HANDLING	36.00					4517	55.00	1,980.00							1,980	1
022700	UNDER SLAB/FOOTING MATERIAL		CY	CLID	CLID		ABV	30.00	180.00			00.00	EQ 000 00		F0 000 00	180	
	SHOTCRETE EXTERIOR SHEAR WALLS (25%) DRILL & EPOXY	2,400.00 48.00		SUB 0.200	SUB 10	80.00	800.00	SUB 3.00	SUB 144.00	1		22.00	52,800.00		52,800.00	52,800 944	
	I 4 - MASONRY	40.00		0.200	10	-		3.00	- 144.00	<u> </u>	_					344	10,000
	STRUCTURAL BLOCK WALL PATCHING	1.00	ALLW	SUB	SUB			 SUB	 SUB			10,000.00	10,000.00		10,000.00	10,000	10,000
041000	OTTOOTOTAL DECON WALL FATCHING	1.00	//TLLVV	JUB	300			SUB	300		1	10,000.00	10,000.00	<u> </u>	10,000.00	10,000	

		CURREI		UNIT	LABOR	LABOR	MATERIAL				SUBCONTRACT			JBCONTRACTOR	LINE	DIVISION
ITEM	DESCRIPTION	QUANTITY	UNIT	LABOR	MANHOURS RATE	COST	UNIT COST	COST	UNIT COST	COST	UNIT COST	SUBTOTAL COST	CONTING.	COST	TOTAL	TOTALS
DIVISION	5 - METALS		<u> </u>													43,396
	METAL RAILINGS	120.00		0.220		2,080.00	60.00	7.200.00							9,280	10,000
000200	METAL STAIRS		FOS	20.000	40 80.00	3,200.00	4,500.00	9,000.00							12,200	
	DETAILING	1.00						2,500.00							2,500	
	METAL GRATING	NIC													NIC	_
	METAL FABRICATIONS - SLAB SUPPORT @ STAIRS SEISMIC TRUSS BRACING (PERIMETER ANGLE)	1.00 522.00		50.000 0.150	50 80.00 78 80.00	4,000.00 6,240.00	5,000.00 8.00	5,000.00 4,176.00							9,000 10,416	+
DIVISION	6 - WOOD & PLASTICS	522.00	LF					4,170.00							10,410	158,980
	FASTENERS. CONNECTORS	19,382.00	SE			BLW	0.60	11,629.00							11,629	150,900
	SEISMIC BOLTING	130.00		0.250	33 80.00	2,640.00	6.00	780.00							3,420	-
	ROUGH CARPENTRY	6,138.00		0.032	196 80.00	15,680.00	0.80	4,910.00							20,590	
061603	SHEATHING - ROOF - 10% ALLOWANCE	1,114.00	SF	0.022	25 80.00	2,000.00	2.20	2,451.00							4,451	
	CANOPY ROOF	360.00		0.020	7 80.00	560.00	2.20	792.00							1,352	
004700	FLOOR SHEATHING	11,425.00		0.018	206 80.00		1.90	21,708.00							38,188	
061700	STRUCTURAL WOOD - COLUMNS (8X8) - MATERIAL COLUMNS - INSTALL	40.00		1.600	6 80.00	480.00	40.00	1,600.00 ABV							1,600	_
	TRUSSES (4' O.C.)	4.00		0.400		160.00	750.00	3,000.00							3,160	
062620	FRP PANELINGS	NIC			32.30			-,:							NIC	1
064000	ARCHITECTURAL WOODWORK (BATHROOM COUNTERS)	32.00		0.700	22 80.00	1,760.00	100.00	3,200.00							4,960	
	ARCHITECTURAL WOODWORK (OTHER)	NIC													NIC	
	DISPLAY CASES RECEPTION COUNTER	NIC 1.00	ALLW					10,000.00					1		10,000	+
064600	INTERIOR FINISH CARPENTRY - WINDOW SILLS	4,125.00		0.060	248 80.00	19,840.00	6.00	24,750.00							44,590	-
004000	HISTORICAL - TREADS & RISERS	32.00		0.750		1,920.00	250.00	8,000.00							9,920	-
	BANNISTER	40.00		0.600	24 80.00	1,920.00	80.00	3,200.00							5,120	
DIVISION	7 - WEATHER PROTECTION															344,064
070000	EXTERIOR WALL IN-FILLS (FULL ASSEMBLY)	126.00	SF	1.500	189 80.00	15,120.00	35.00	4,410.00			12.00	1,512.00		1,512.00	21,042	
	FOUNDATION WATERPROOFING - ELEVATOR PIT ONLY	420.00		SUB	SUB		SUB	SUB			4.20	1,764.00		1,764.00	1,764	
	SHEET WATERPROOFING (WEATHER BARRIER)	SEE 070000													SEE 070000	
	WATER REPELLANTS INSULATION - BATT WALLS R-19	NIC 8,795.00		SUB	SUB		SUB	SUB			1.40	12,313.00		40.040.00	NIC	
072100	BATT ROOF R-49	9,228.00		SUB	SUB		SUB	SUB			1.40 1.80	12,313.00		12,313.00 16,610.40	12,313 16,610	-
	SOUND	3,300.00		SUB			SUB	SUB			1.20	3,960.00		3,960.00	3,960	_
	RIGID INSULATION	NIC	;									,		-	NIC	
074200	EXTERIOR PLASTER (MICROMESH COAT WITH COLOR)	9,317.00		SUB	SUB		SUB	SUB			12.00	111,804.00		111,804.00	111,804	
070500	WALL IN-FILLS	SEE 070000		10.000	40 00 00	200.00	500.00	500.00							SEE 070000	_
	FIRE STOPPING VAPOR RETARDERS	1.00 NIC	ALLW	10.000	10 80.00	800.00	500.00	500.00							1,300 NIC	-
	ASPHALT SHINGLE ROOFING SYSTEM	11,168.00		SUB	SUB		SUB	SUB			10.50	117,264.00		117,264.00	117,264	-
	SHEET METAT FLASHING	1,783.00		0.030	53 77.00	4,081.00	4.20	7,489.00			10.00	111,201.00		111,201.00	11,570	-
	FLEXIBLE FLASHING (WINDOW PERIMETER TREATMENT)	1,804.00		0.060	108 80.00	8,640.00	1.40	2,526.00							11,166	
077123	GUTTERS	612.00		SUB	SUB		SUB	SUB			12.00	7,344.00		7,344.00	7,344	
077000	DOWNSPOUTS	1,020.00		SUB	SUB		SUB	SUB			8.50	-,		8,670.00	8,670	_
	ROOF ACCESSORIES JOINT SEALANTS - WINDOWS	1,604.00		0.120	192 77.00	14 784 00	0.65	1,043.00			-	-		-	NIC 15,827	-
079000	MISC.		ALLW	40.000			350.00	350.00							3,430	-
079202	FLOOR CAULKING	NIC				5,000.00									NIC	
DIVISION	8 - OPENINGS															375,108
081213	HOLLOW METAL FRAMES	25.00	EA	1.500	38 80.00	3,040.00	350.00	8,750.00							11,790	
	REHAB EXISTING HOLLOW METAL FRAMES	30.00		4.000			25.00	750.00							10,350	
	HOLLOW METAL RELITES		ALLW	1.500		160.00	500.00	500.00							660	_
081313	HOLLOW METAL TRANSOMES HOLLOW METAL DOORS (INSULATED)	14.00	LVS	1.750 0.500		2,000.00 240.00	250.00 625.00	3,500.00 3,125.00			1		1		5,500 3,365	+
	WOOD DOORS		LVS	0.500		1,760.00	400.00	17,600.00			1		1		19,360	+
	ACCESS PANELS		EA	0.500		308.00	75.00	600.00							908	†
	HISTORIC MAIN ENTRY ASSEMBLY	1.00		SUB	SUB		SUB	SUB			20,000.00	20,000.00		20,000.00	20,000	
	WINDOWS (1,904 SF)	84.00		2.500		16,800.00		185,400.00							202,200	
	SKYLIGHTS DOOR HARDWARE	130.00		SUB		0.640.00	SUB	SUB			220.00	28,600.00		28,600.00	28,600	
	DOOR HARDWARE GLASS & GLAZING - TRANSOM REPLACEMENT	49.00 30.00	LVS	2.200 SUB		8,640.00	500.00 SUB	24,500.00 SUB			275.00	8,250.00		8,250.00	33,140 8,250	+
000100	CLEAR CEILING PANELS	320.00		SUB			SUB	SUB			45.00	,	+	14,400.00	14,400	+
089100	VENTS & LOUVERS - FOUNDATION (186 SF)	31.00		2.000		4,960.00	375.00	11,625.00			.5.50	,		,	16,585	†
DIVISION	9 - FINISHES														NIC	699,662
	NON-STRUCTURAL METAL FRAMING	27,439.00	LF	0.040	1,098 80.00	87,840.00	1.20	32,927.00							120,767	
	GWB (HANG & TAPE)	30,355.00		0.016		38,880.00	1.30	39,462.00			1.90	,		57,674.50	136,017	
	EXISTING PLASTER PATCHING (INTERIOR)	9,927.00		SUB			SUB	SUB			5.00	,		49,635.00	49,635	
093100	TILE - FLOOR & WALL	2,224.00	SF	SUB	SUB		SUB	SUB			20.00	44,480.00		44,480.00	44,480	

11/11/2022

		CURRE	NT	UNIT		LABOR	LABOR	MATERIAL	MATERIAL	EQUIPMENT	QUIPMENT	SUBCONTRACT	SUBCONTRACT	SUB	SUBCONTRACTOR	LINE	DIVISION
ITEM	DESCRIPTION	QUANTITY	UNIT	LABOR	MANHOURS	RATE	COST	UNIT COST	COST	UNIT COST	COST	UNIT COST	SUBTOTAL COST	CONTING	COST	TOTAL	TOTALS
095100	ACOUSTICAL CEILINGS	10,940.00		SUB				SUB	SUB			14.00	153,160.00		153,160.00	153,160	
096001	FLOOR PREP	18,189.00		0.016			23,280.00	0.20	3,638.00							26,918	
	FLOOR PROTECTION		ALLW	40.000		80.00	3,200.00	2,000.00	2,000.00						24 422 22	5,200	
096500	RESILIENT FLOORING - VCT	628.00		SUB				SUB	SUB			50.00	31,400.00		31,400.00	31,400	
096513 096800	RESILIENT BASE & ACCESSORIES CARPETING	3,382.00 1,146.00		SUB SUB	SUB SUB			SUB SUB	SUB SUB			5.00 45.00	16,910.00 51,570.00		16,910.00 51,570.00	16,910 51,570	
	PAINTING - EXTERIOR CONCRETE	1,404.00		SUB				SUB	SUB			2.20	3,088.80		3,088.80	3,089	
099110	SOFFITS AND OUTRIGGERS (REPAIR & PAINT)	1,224.00		SUB				SUB	SUB			6.00	7,344.00		7,344.00	7,344	
099123	PAINTING - INTERIOR	40,282.00		SUB				SUB	SUB			1.32	53,172.24		53,172.24	53,172	
	10 - SPECIALTIES																21,650
	VISUAL DISPLAY SURFACES	NIC						-	-	_			-			NIC	21,000
101100	DISPLAY CASES	NIC														NIC	
101400	SIGNAGE - ROOM	38.00		0.250	10	80.00	800.00	45.00	1,710.00							2,510	
101100	DIRECTIONAL		DEA	0.250		80.00	160.00	50.00	300.00							460	
	CODE REQUIRED		ALLW	4.000		80.00	320.00	350.00	350.00							670	
102100	TOILET COMPARTMENTS	6.00		6.000		80.00	2,880.00	1,200.00	7,200.00							10,080	
	CORNER GUARDS	10.00		0.200		80.00	160.00	25.00	250.00							410	
	TOILET & BATH ACCESSORIES	42.00		0.350		80.00	1,200.00	50.00	2,100.00							3,300	
104400	FIRE EXTINGUISHERS AND CABINETS	12.00	EA	0.350	4	80.00	320.00	175.00	2,100.00							2,420	
	FLAG POLES		EA	10.000	10	80.00	800.00	1,000.00	1,000.00							1,800	
	MISC. SPECIALTIES	NIC														NIC	
DIVISION	11 - EQUIPMENT																2,730
113100	RESIDENTIAL APPLIANCES	3.00	EA	2.000	6	80.00	480.00	750.00	2,250.00							2,730	
	PROJECTION SCREENS	NIC							,	1						NIC	
DIVISION	12 - FURNISHINGS																24,360
	ROOM FURNISHINGS	B/C														B/O	21,000
	WINDOW BLINDS	84.00		0.500	42	80.00	3,360.00	250.00	21,000.00							24,360	
	ENTRANCE MATTS	B/C		0.000	12	. 00.00	0,000.00	200.00	21,000.00							B/O	
	SITE FURNISHINGS	NIC														NIC	
	13 - SPECIAL CONSTRUCTION	NIC														NIC	
	14 - CONVEYANCE SYSTEMS	1410														1410	405.000
																	125,000
	ELEVATOR - 3 STOPS	1.00	EA	SUB	SUB	5		SUB	SUB			125,000.00	125,000.00		125,000.00	125,000	
DIVISION	- MECHANICAL			-				-					-			-	1,555,520
	FIRE PROTECTION	31,034.00		SUB				SUB	SUB			5.00	155,170.00		155,170.00	155,170	
	PLUMBING	19,382.00		SUB	SUB			SUB	SUB			12.40	240,336.80		240,336.80	240,337	
240000		19,382.00	SF	SUB	SUB	3		SUB	SUB			59.85	1,160,012.70		1,160,012.70	1,160,013	
	- ELECTRICAL & SPECIAL SYSTEMS																1,013,314
26000	ELECTRICAL	19,382.00		SUB	SUB	3		SUB	SUB			44.80	868,313.60		868,313.60	868,314	
	GENERATOR	NIC		OLID	OLID			OLID	OLID			445,000,00	445.000.00		445.000.00	NIC	
D. 110101	NEW SERVICE ENTRANCE (CAMPUS SYSTEM)	1.00	EA	SUB	SUB	i .		SUB	SUB			145,000.00	145,000.00		145,000.00	145,000	
	31 - EARTHWORK		-														28,096
310000	SITE CLEANING @ STRUCTURE	540.00		SUB			40.700.00	SUB	SUB			15.00	8,100.00		8,100.00	8,100	
	EXCAVATION (INTERIOR) EXPORT DEWATERING	43.00 NIC		4.000	172	80.00	13,760.00	12.00	516.00	+						14,276 NIC	-
312319	BACKFILLING (INTERIOR) IMPORT	11.00		6.000	66	80.00	5,280.00	40.00	440.00	+						5,720	
	TRENCHING & BACKFILL (AREA DRAIN)	11.00	CY	0.350		80.00		7.50	-	†						0	
	EROSION & SEDIMENTATION CONTROL	NIC														NIC	
DIVISION	32 - SITE IMPROVEMENTS																8,491
	CONCRETE - SIDEWALKS & MISC.	5.00	CY	1.750		80.00	720.00	80.00	400.00							1,120	5,101
	FINISHING	400.00		0.060		80.00	1,920.00	0.20	80.00	1						2,000	
	FG&S	400.00	SF	0.030	12	80.00	960.00	0.25	100.00							1,060	
32200	WEDLED WIRE FABRIC	440.00		0.020		80.00		1.40	616.00							1,336	
	CONCRETE HANDLING		CY	2.000	10	80.00	800.00		05.00							800	
	CONCRETE ACCESSORIES		CY CY					5.00 30.00	25.00							25 150	
321216	UNDER SIDEWALK MATERIAL ASPHALT PAVING	SEE FRONTA		+			+	30.00	150.00	+						150	-
	CONCRETE BARRIER CURB	SEE FRONTA		+						+			-		-	SEE FRONTAGE	+
	BOLLARDS	NIC								+ +						SEE FRONTAGE	
	FENCING & GATES	NIC											-		-	NIC	
329000	LANDSCAPING	SEE FRONTA	ĞE										-		-	SEE FRONTAGE	
	IRRIGATION SYSTEM	NIC														NIC	
	LAWN REHABILITATION	1.00	ALLW	SUB	SUB	3		SUB	SUB	1		2,000.00	2,000.00		2,000.00	2,000	
DIVISION	33 - SITE UTILITIES																10,000
	SITE WATER UTILITY DISTRIBUTION PIPING		ALLW	SUB				SUB	SUB			5,000.00	5,000.00		5,000.00	5,000	
	SANITARY SEWERAGE PIPING		ALLW	SUB	SUB	3		SUB	SUB			5,000.00	5,000.00		5,000.00	5,000	
	STORM UTILITY DRAINAGE PIPING FOUNDATION DRAINAGE	NIC NIC								1						NIC NIC	
			1.1	1	1	1	1			1		1		1		NIIC	1

11/11/2022

	CURRENT	UNIT	LABOR	LABOR	MATERIAL	MATERIAL	EQUIPMEN	TEQUIPMENT	SUBCONTRACT	SUBCONTRACT	SUB SU	JBCONTRACTOR	LINE	DIVISION
ITEM DESCRIPTION	QUANTITY UNIT	LABOR	MANHOURS RATE	COST	UNIT COST	COST	UNIT COST	COST	UNIT COST	SUBTOTAL COST	CONTING.	COST	TOTAL	TOTALS
GENERAL REQUIREMENTS														358,38
01.71.23.13 SITE SURVEY / LAYOUT	NIC									-			NIC	
UTILITY HOOK-UP FEES 01.51.13.10 CONSTRUCTION POWER	NIC 14.00 MON	10.000	140 60.00	8,400.00		BY OWNER							8,400	
01.51.36.20 TEMPORARY WATER	NIC	10.000	140 00.00	0,400.00		DI OWNER							NIC	
01.51.29.30 TEMPORARY NATURAL-GAS	NIC												NIC	
01.51.26.35 TEMPORARY LIGHTING	10.00 MON	10.000	100 60.00	6,000.00	300.00	3,000.00							9,000	
01.51.23.20 TEMPORARY HEATING	4.00 MON	20.000	80 60.00	4,800.00	200.00	800.00		4,000.00					9,600	
01.52.19.15 TEMPORARY SANITARY FACILITIES (2 EA)	14.00 MON				160.00	2,240.00							2,240	
01.56.26.15 TEMPORARY CONSTRUCTION FENCING	1,200.00 LF		40					7,200.00					7,200	
TEMPORARY STORM WATER POLLUTION CONTROL	NIC												NIC	
01.74.13.10 GENERAL CLEAN	14.00 MON	60.000	840 60.00	50,400.00									50,400	
01.74.19.20 GARBAGE DUMP	14.00 MON	8.000	112 60.00	6,720.00	800.00	11,200.00							17,920	
01.58.13.10 TEMPORARY SIGNAGE	1.00 ALLW	10.000	10 60.00	600.00	500.00	500.00		2,000,00					1,100	
MATERIAL & EQUIPMENT HANDLING TRUCK - 1-TON FLATBED - JOB VEHICLE	14.00 MON 14.00 MON	20.000	280 60.00	16,800.00			950.00	2,000.00 13,300.00					18,800 13,300	
01.74.23.20 FINAL CLEAN	19,382.00 SF				0.25	4.846.00		10,000.00					4.846	
EQUIP - FORKLIFT	14.00 MON				0.20	7,070.00	2500.00	35,000.00					35,000	
SCAFFOLDING	11,223.00 SF						12.00	134,676.00					134,676	
01.54.19.20 CRANE	2.00 MON						7500.00	15,000.00					NIC	
MAN-LIFTS	14.00 MON						2400.00	33,600.00					33,600	
EQUIPMENT - FUEL & MAINTENANCE	14.00 MON				700.00	9,800.00							9,800	
CONSUMABLES	1.00 LS				2,500.00	2,500.00							2,500	
GENERAL CONDITIONS														539,24
PLAN REPRODUCTION	1.00 LS				500.00	500.00							500	
01.78.33.20 BOND	6,450,000.00 DLR				0.0083	53,212.50							53,213	
01.78.32.10 INS - LIABILITY	6,450,000.00 DLR				0.0080	51,600.00							51,600	
01.78.32.20 INS - BLDRS RISK	6,450,000.00 DLR				0.0011	7,095.00							7,095	
TAX - STATE BUSINESS	NIC												NIC	
TAX - WA STATE SALES TAX	NIC												NIC	
PERMITS 01.45.23.10 TESTING LABORATORY SERVICES	NIC												NIC	
01.02.10.10 PROJECT MANAGER (14 MO x 60 MH/MO)	NIC 840.00 MH				125.00	105,000.00							105,000	
01.03.30.10 SUPERINTENDENT (14 MO x 174 MH/MO)	2,436.00 MH				90.00	219,240.00							219,240	
01.02.40.10 PROJECT ADMINISTRATOR (14 MO x 40 MH/MO)	560.00 MH				35.00	19,600.00							19,600	
01.04.88.10 YARD LABOR	600.00 MH				40.00	24,000.00							24,000	
01.07.48.10 TEMP IT/COMMUNICATION	14.00 MON				400.00	5,600.00							5,600	
01.52.13.15 TEMPORARY OFFICE	14.00 MON				425.00	5,950.00							5,950	
01.52.13.78 TEMPORARY OFFICE UTILITIES	14.00 MON				300.00	4,200.00							4,200	
01.07.55.55 OFFICE SETUP & CONSUMABLES	1.00 EA		20 60.00	1,200.00	400.00	400.00		1,200.00					2,800	
01.07.40.10 PICKUP TRUCK	14.00 MON						800.00	11,200.00					11,200	
01.04.49.10 SAFETY TOOLS & EQUIPMENT (FALL PROTECTION)	14.00 MON				1,600.00	22,400.00							22,400	
POSTAGE & U.P.S.	14.00 MO	00.000	00 00 00	4 000 00	75.00	1,050.00							1,050	
01.77.01.10 CLOSEOUT PROCEDURES	1.00 LS	80.000	80 60.00	4,800.00	1,000.00	1,000.00							5,800	
TOTAL			8,947	678,453.00		1,151,438.50		272,176.00				3,671,403.04	5,757,991	5,757,99
			-7	-,		, 31,121.00		,,,,,,,,,,,				-,- ,	-,,-31	2,121,00
OH&P - 12	2%									OH&P - 12%			690,959	690,95
CONSTRUCTION TOTAL	AL TOTAL MA	ANHOURS	8,947						COI	NSTRUCTION TOTAL			6,448,949	6,448,94
	TOTAL SF OF		17,500										, ,	, , ,
CONTINGENCY OWNER 20									CONTIN	GENCY OWNER 20%	,		1,289,790	1,289,79
		RS PER SF	0.5113											
TOTA	AL				-					TOTAL			7,738,739	7,738,73
COST/S	SF I									COST/SF			442	442

		CURRENT	UNIT	LABOR		MATERIAL				SUBCONTRACT		SUBCONTRACTOR	LINE	DIVISION
ITEM	DESCRIPTION	QUANTITY UNIT	LABOR	MANHOURS RATE	COST	UNIT COST	COST	UNIT COST	COST	UNIT COST	SUBTOTAL COST CONTING	COST	TOTAL	TOTALS
DIVISION	2 - DEMOLITION & REMOVAL													
DIVISION														00.404
024124	SOFT DEMOLITION ROOFING - CLAY	11,136.00 SF	0.004	45 80.00	3,600.00		BLW	20,000					3,600	88,404
024124	METAL	2,400.00 SF	0.004		,		BLW	ABV					400	
	GUTTERS & DOWNSPOUTS	1,592.00 LF	0.010				BLW	ABV					1,280	
	DOORS & FRAMES	67.00 EA	0.350		1,840.00		BLW	ABV					1,840	
	METAL WINDOWS FOUNDATION VENTS	2,574.00 SF 31.00 EA	0.015 0.200				BLW BLW	ABV ABV					3,120 480	
	ROOF STRUCTURE	13,360.00 SF	0.200				BLW	ABV					8,560	
021110	ROOF SHEATHING	13,360.00 SF	0.000	ABV	ABV		BLW	ABV					ABV	
	EXTERIOR FRAMED WALLS	2,280.00 SF	0.006		,		BLW	ABV					1,120	
	FRAMED FLOOR STRUCTURE	160.00 SF	0.022				BLW	ABV					320	
	HARD LID CEILINGS FLOORING - WOOD	8,078.00 SF 11,425.00 SF	0.012 0.006				BLW BLW	ABV ABV					7,760 5,520	
	SLEEPER & GROUT SUBFLOOR	88.00 CY	0.500		3,520.00		BLW	ABV					3,520	
	PLUMBING/MECHANICAL DEMOLITION	17,500.00 SF	0.008				BLW	ABV					11,200	
	ELECTRICAL DEMOLITION	17,500.00 SF	0.006		8,400.00		BLW	ABV					8,400	
	DEBRIS DISPOSAL	783.00 LCY	0.150	117 80.00	9,360.00	28.00	21,924.00						31,284	
	HARD DEMOLITION	222.00.004	01.15	CLID		OLID	0.10			405.00	24.000.00	24.000.00	24.000	231,346
	CONCRETE - FOOTINGS AND COLUMNS SLAB ON GRADE	332.00 CY 70.00 CY	SUB SUB			SUB SUB	SUB SUB			105.00 70.00	34,860.00 4,900.00	34,860.00 4,900.00	34,860 4,900	
	ELEVATED FLAT SLABS & BEAMS	778.00 CY	SUB			SUB	SUB			90.00	70,020.00	70,020.00	70,020	
	CONCRETE WALLS	307.00 CY	SUB			SUB	SUB			110.00	33,770.00	33,770.00	33,770	
	EXTERIOR BLOCK WALL	232.00 CY	SUB			SUB	SUB			50.00	11,600.00	11,600.00	11,600	
	INTERIOR BLOCK WALL CONCRETE & BLOCK DISPOSAL	286.00 CY 1,719.00 LCY	SUB 0.150		20,640.00	SUB 24.00	SUB 41,256.00			50.00	14,300.00	14,300.00	14,300 61,896	
		1,7 19.00 LC1	0.130	236 60.00	20,040.00	24.00	41,230.00						01,090	58.450
026100	HAZARDOUS MATERIALS CONTAMINATED SOILS REMOVAL & DISPOSAL	NIC											NIC	58,450
028000	HAZARDOUS MATERIALS ABATEMENT - VINYL FLOORING	420.00 SF	SUB	SUB		SUB	SUB			3.25	1,365.00	1,365.00	1,365	
	CLOTH DUCT CONNECTORS	36.00 LF	SUB			SUB	SUB			25.00	900.00	900.00	900	
	ELECTRICAL PANEL INSULATORS	100.00 SF	SUB			SUB	SUB			22.00	2,200.00	2,200.00	2,200	
	VALVE GASKETS	35.00 EA 800.00 LF	SUB SUB			SUB SUB	SUB SUB			15.00	525.00 8,000.00	525.00 8,000.00	525 8,000	
	RESIDUAL PIPE INSULATION HARD PIPE INSULATION	500.00 LF	SUB			SUB	SUB			10.00 15.00	7,500.00	7,500.00	7,500	
	PIPE FITTINGS	500.00 EA	SUB			SUB	SUB			15.00	7,500.00	7,500.00	7,500	
	FLOURESCENT LAMPS	145.00 EA	SUB			SUB	SUB			8.00	1,160.00	1,160.00	1,160	
	PCB BALLASTS	36.00 EA	SUB			SUB	SUB			50.00	1,800.00	1,800.00	1,800	
	ABATEMENT MOBILIZATION, CONTAINMENT AND SET-UP SPOT ABATEMENT	1.00 LS 1.00 ALLW	SUB SUB			SUB SUB	SUB SUB			20,000.00	20,000.00 2,500.00	20,000.00 2,500.00	20,000 2,500	
	LEAD & SILICA COMPLIANCE	1.00 ALLW	SUB			SUB	SUB			5,000.00	5,000.00	5,000.00	5,000	
DIVISION	- ELECTRICAL & SPECIAL SYSTEMS													1,000
	ELECTRICAL - DISCONNECT & SAFING	1.00 LS	SUB	SUB		SUB	SUB			1,000.00	1,000.00	1,000.00	1,000	
DIVISION	31 - EARTHWORK													30,856
	SITE CLEANING AND REFRESHING	1.00 ALLW	SUB			SUB	SUB			2,500.00	2,500.00	2,500.00	2,500	
	MASS BACKFILL FINAL GRADING & HYDROSEED	1,759.00 CY 0.50 ACRES	0.015 10.000			14.00 2,500.00	24,626.00 1,250.00						26,706 1,650	
	L REQUIREMENTS	0.00 ACITED											1,030	28,100
	SITE SURVEY / LAYOUT	NIC								-	-		NIC	20,100
	UTILITY HOOK-UP FEES	NIC												
	CONSTRUCTION POWER	2.00 MON	10.000	20 60.00	1,200.00		BY OWNER						1,200	
	TEMPORARY WATER	NIC											NIC	-
	TEMPORARY NATURAL-GAS TEMPORARY LIGHTING	NIC 1.00 MON	10.000	10 60.00	600.00	300.00	300.00						NIC 900	NIC
	TEMPORARY HEATING	NIC	10.000	10 00.00	000.00	300.00	300.00						0	
	TEMPORARY SANITARY FACILITIES (2 EA)	5.00 MON				160.00	800.00						800	
	TEMPORARY CONSTRUCTION FENCING	800.00 LF						6.00	4,800.00				4,800	
	TEMPORARY STORM WATER POLLUTION CONTROL	NIC 2.00 MON	00.000	10 00 00	2 400 00								NIC 2 400	NIC
	GENERAL CLEAN TEMPORARY SIGNAGE	2.00 MON 1.00 ALLW	20.000 10.000			500.00	500.00						2,400 1,100	
	FORKLIFT	2.00 MON	10.000	10 00.00	000.00	300.00	300.00	3,500.00	7,000.00				7,000	
	MAN LIFTS	NIC						,	,				NIC	
	TRUCK - 1-TON FLATBED - JOB VEHICLE	2.00 MON						950.00	1,900.00				1,900	
	EQUIPMENT - FUEL & MAINTENANCE CONSUMABLES	2.00 MON 1.00 LS				1,500.00 5,000.00	3,000.00 5,000.00						3,000	
	L CONDITIONS					,	· ·						5,000	EE 050
01.78.33.20		550,000.00 DLR				0.0083	4,537.50						4,538	55,653
01.10.33.20	טאוטט	550,000.00 DLK				0.0083	4,537.50		L	1			4,538	

PLANS DATED: N/A

	OUDDENT	LINUT	LABOR	1.4000	MATERIAL	MATERIAL	FOLUDIAENT	FOURNIENT	OLIDOONITDAGT	OUDOONTDAOT	OLID	CURCOUTRACTOR	LINE	DIV/IOIONI
TEM DECORIDE ON	CURRENT	UNIT	LABOR	LABOR	MATERIAL	MATERIAL			SUBCONTRACT	SUBCONTRACT		SUBCONTRACTOR	LINE	DIVISION
ITEM DESCRIPTION	QUANTITY UNIT	LABOR	MANHOURS RATE	COST	UNIT COST	COST	UNIT COST	COST	UNIT COST	SUBTOTAL COST	CONTING	COST	TOTAL	TOTALS
01.78.32.10 INS - LIABILITY	550,000.00 DLR				0.0080	4,400.00							4,400	
01.78.32.20 INS - BLDRS RISK	550,000.00 DLR				0.0011	605.00							605	
TAX - STATE BUSINESS	NIC												NIC	
TAX - WA STATE SALES TAX	NIC													NIC
PERMITS	NIC												NIC	NIC
01.45.23.10 TESTING LABORATORY SERVICES	NIC													
01.02.10.10 PROJECT MANAGER (2 MO x 40 MH/MO)	80.00 MH				125.00	10,000.00							10,000	
01.03.30.10 SUPERINTENDENT (1 MO x 174 MH/MO)	174.00 MH				90.00	15,660.00							15,660	
01.02.40.10 PROJECT ADMINISTRATOR (2 MO x 40 MH/MO)	80.00 MH				35.00	2,800.00							2,800	
01.04.88.10 YARD LABOR	50.00 MH				40.00	2,000.00							2,000	
01.07.48.10 TEMP IT/COMMUNICATION	2.00 MON				400.00	800.00							800	
01.52.13.15 TEMPORARY OFFICE	2.00 MON				425.00	850.00							850	
01.52.13.78 TEMPORARY OFFICE UTILITIES	2.00 MON				300.00	600.00							600	
01.07.55.55 OFFICE SETUP & CONSUMABLES	1.00 EA		20 60.00	1,200.00	400.00	400.00		1,200.00					2,800	
01.07.40.10 PICKUP TRUCK	2.00 MON						800.00	1,600.00					1,600	
01.04.49.10 SAFETY TOOLS & EQUIPMENT (FALL PROTECTION	ON) 2.00 MON				1,600.00	3,200.00							3,200	
01.77.01.10 CLOSEOUT PROCEDURES	1.00 LS	80.000	80 60.00	4,800.00	1,000.00	1,000.00							5,800	
TOTAL			1,300	100,400.00		145,508.50		16,500.00				231,400.00	493,809	493,809
)H&P - 12%									OH&P - 12%			50.057	50.05
	DH&P - 12%									UH&P - 12%	1		59,257	59,25
CONSTRUCTION	ON TOTAL TOTAL	MANHOURS							CON	ISTRUCTION TOTAL			553,066	553,060
	TOTAL SF	OF BUILDING	17,500											
CONTING	ENCY 10%									CONTINGENCY 10%			55,307	55,30
		HRS PER SF	0.0743											
	TOTAL						1			TOTAL			608,372	608,372
										AREA (SF))		17,500	1750
										COST/SF	:		35	3:

ITEM	DESCRIPTION	QUANTITY UNIT	UNIT LABOR	LABOR MANHOURS RATE	LABOR COST	MATERIAL UNIT COST	MATERIAL COST	EQUIPMENT UNIT COST		SUBCONTRACT UNIT COST	SUBCONTRACT SUBTOTAL COST	SUB CONTING.	SUBCONTRACTOR	LINE TOTAL	DIVISION TOTALS
I I LIVI	DESCRIPTION	QUANTITI UNII	LABOIT	WANTOOKS KATE	0031	ONTI COST	0031	ONIT COST	0031	ONIT COST	30BTOTAL COST	CONTING.	0031	TOTAL	TOTALS
DIVISION	2 - DEMOLITION & REMOVAL								-						28,112
024125	CONCRETE DEMOLITION - SLAB ON GRADE	86.00 CY	0.750		5,200.00	=	BLW		5,000.00					10,200	
	FOOTINGS & COLUMNS	21.00 CY	1.100	23 80.00	1,840.00	-	BLW							1,840	
	ELEVATED SLAB ASPHALT DEMOLITION	35.00 CY 102.00 CY	1.250 0.200	44 80.00 20 80.00	3,520.00 1,600.00	-	BLW BLW							3,520 1,600	+
	CONCRETE DISPOSAL	188.00 LCY	0.250	47 80.00	3,760.00	18.00	3,384.00							7,144	+
	ASPHALT DISPOSAL	112.00 LCY	0.250		2,240.00	14.00	1,568.00							3,808	
	CONTAMINATED SOILS REMOVAL & DISPOSAL	NIC												NIC	
	HAZARDOUS MATERIALS ABATEMENT	NIC												NIC	
	I - ELECTRICAL & SPECIAL SYSTEMS ELECTRICAL	NIC							-						
	I 31 - EARTHWORK													NIC	10,556
	ROUGH GRADING	22,300.00 SF	0.001	29 80.00	2,320.00									2,320	10,556
	EXCAVATION - EXPORT	413.00 CY	0.100		3,280.00	12.00	4,956.00	1						8,236	
312319	DEWATERING	NIC												NIC	
DIV/IOION	EROSION & SEDIMENTATION CONTROL	NIC												NIC	
	I 32 - SITE IMPROVEMENTS ICONCRETE - SIDEWALKS & MISC.	70.00 CY	1.750	123 80.00	9,840.00	80.00	5,600.00							15,440	182,386
321001	FINISHING	5,760.00 SF	0.060	346 80.00		0.20	1.152.00							28.832	
	FG&S	5,760.00 SF	0.030	173 80.00	13,840.00	0.25	1,440.00							15,280	
32200	WEDLED WIRE FABRIC CONCRETE HANDLING	6,336.00 SF 70.00 CY	0.020			1.40	8,870.00	1						19,030	
	CONCRETE HANDLING CONCRETE ACCESSORIES	70.00 CY 70.00 CY	2.000	140 80.00	11,200.00	5.00	350.00							11,200 350	+
	UNDER SIDEWALK MATERIAL	75.00 CY				30.00	2,250.00							2,250	+
321216	ASPHALT PAVING	2,161.00 SY	SUB	SUB		SUB	SUB			32.00	69,152.00		69,152.00	69,152	
321614	BASE COURSE CONCRETE BARRIER CURB	360.00 CY 490.00 LF	ABV SUB	ABV SUB		ABV SUB	ABV SUB			30.00	ABV 14,700.00		ABV 14,700.00	ABV 14,700	
	PRECAST CONCRETE CURBS	NIC	306	300		300	300	'		30.00	14,700.00		14,700.00	NIC	+
321723	PAVEMENT STRIPING	1,086.00 LF	SUB	SUB		SUB	SUB			0.90	977.40		977.40	977	
323000	PAVEMENT MARKINGS SITE IMPROVEMENTS - MISC.	7.00 EA NIC	SUB	SUB		SUB	SUB			25.00	175.00		175.00	175 NIC	
	LANDSCAPING	1.00 ALLW	SUB	SUB		SUB	SUB			5,000.00	5,000.00		5,000.00	5,000	+
02000	IRRIGATION SYSTEM	NIC		332		332				0,000.00	0,000.00		0,000.00	NIC	
DIVISION	33 - SITE UTILITIES														
	SITE WATER UTILITY DISTRIBUTION PIPING	NIC												NIC	
	SANITARY SEWERAGE PIPING STORM UTILITY DRAINAGE PIPING	NIC NIC												NIC NIC	
	L REQUIREMENTS													NIO	6,850
	SITE SURVEY / LAYOUT	NIC							_					NIC	0,030
01.7 1.20.10	UTILITY HOOK-UP FEES	NIC													+
	CONSTRUCTION POWER	0.50 MON	10.000	5 60.00	300.00		BY OWNER							300	
	TEMPORARY WATER	NIC												NIC	
01.52.19.15	TEMPORARY SANITARY FACILITIES (2 EA) TEMPORARY STORM WATER POLLUTION CONTROL	1.00 MON NIC				160.00	160.00	1						160 NIC	
01.74.13.10	GENERAL CLEAN	0.50 MON	60.000	30 60.00	1,800.00									1,800	+
	GARBAGE DUMP	0.50 MON	8.000		240.00	800.00	400.00	1						640	
01.58.13.10	TEMPORARY SIGNAGE	0.50 ALLW	10.000		300.00	500.00	250.00							550	
01.74.02.00	MATERIAL & EQUIPMENT HANDLING	0.50 MON	20.000	10 60.00	600.00	250.00	250.00	,	2,000.00					2,600 250	
01.74.23.20	FINAL CLEAN EQUIPMENT - FUEL & MAINTENANCE	1.00 ALLW 0.50 MON				250.00 700.00	250.00 350.00							350	+
	CONSUMABLES	1.00 LS				200.00	200.00							200	
GENERA	L CONDITIONS								-						19,578
	PLAN REPRODUCTION	1.00 LS				500.00	500.00							500	
01.78.33.20		265,000.00 DLR				0.0083	2,186.25							2,186	
	INS - LIABILITY	265,000.00 DLR				0.0080	2,120.00							2,120	
01.70.32.20	INS - BLDRS RISK TAX - STATE BUSINESS	265,000.00 DLR NIC				0.0011	291.50							292 NIC	
	TAX - WA STATE SALES TAX	NIC												NIC	+
	PERMITS	NIC												NIC	
	TESTING LABORATORY SERVICES	B/O				105.00	0.750.00							B/O	
	PROJECT MANAGER (0.5 MO x 60 MH/MO) SUPERINTENDENT (0.5 MO x 174 MH/MO)	30.00 MH 87.00 MH				125.00 90.00	3,750.00 7,830.00							3,750 7,830	+
	PROJECT ADMINISTRATOR (0.5 MO x 40 MH/MO)	20.00 MH				35.00	7,830.00							7,030	+
	YARD LABOR	30.00 MH				40.00	1,200.00							1,200	+
	TEMP IT/COMMUNICATION	0.50 MON				400.00	200.00	1						200	
	TEMPORARY OFFICE	NIC						000.00	400.00					NIC	
	PICKUP TRUCK SAFETY TOOLS & EQUIPMENT (FALL PROTECTION)	0.50 MON NIC						800.00	400.00					400 NIC	+
01.04.49.10	ONI LITI TOOLO & LQUIFINIENT (FALL PRUTEUTION)	INIC										1		INIC	

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		CURREI	NT	UNIT		LABOR	LABOR	MATERIAL	MATERIAL	FQUIPMENT	EQUIPMENT	SUBCONTRACT	SUBCONTRACT	SUB SI	JBCONTRACTOR	LINE	DIVISION
ITEM	DESCRIPTION	QUANTITY		LABOR	MANHOURS		COST	UNIT COST	COST	UNIT COST		UNIT COST		CONTING.	COST	TOTAL	TOTALS
01.77.01.10	CLOSEOUT PROCEDURES	1.00	LS	5.000	5	60.00	300.00	100.00	100.00							400	
	TOTAL				1,265		100,020.00		50,057.75		7,400.00				90,004.40	247,482	247,482
	OH&P - 12%												OH&P - 8%			19,799	19,799
	CONSTRUCTION TOTAL											CO	NSTRUCTION TOTAL			267,281	267,281
	CONTINGENCY OWNER 10%											CONTIN	IGENCY OWNER 10%			26,728	26,728
	TOTAL												TOTAL			294,009	294,009

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		CURREI		UNIT		LABOR	LABOR	MATERIAL				SUBCONTRACT	SUBCONTRACT		BCONTRACTOR	LINE	DIVISION
ITEM	DESCRIPTION	QUANTITY	UNIT	LABOR	MANHOURS	RATE	COST	UNIT COST	COST	UNIT COST	COST	UNIT COST	SUBTOTAL COST	CONTING.	COST	TOTAL	TOTALS
DIVISION	1 2 - DEMOLITION & REMOVAL																-8,077
	DEMOLITION - METAL ROOFING	-1.200.00		0.008	-10	80.00	(800.00)		 BLW							-800	-0,077
	WINDOWS (335 SF)	SEE BASE		0.000	-10	00.00	(000.00)		DLW							SEE BASE	+
024170	EXTERIOR FRAMED WALLS	-752.00	SF	0.020	-15	80.00	(1,200.00)	-	BLW							-1,200	
	ROOF STRUCTURE	-1,054.00		0.020	-21	80.00	(1,680.00)	-	BLW							-1,680	
	FLOOR STRUCTURE	SEE BASE					(0.000.00)									SEE BASE	
024125	CONCRETE DEMOLITION - FOUNDATIONS CONCRETE DISPOSAL	-16.00		2.500		80.00	(3,200.00)	-	BLW (400,00)							-3,200	
	DEBRIS DISPOSAL	-21.00	LCY	0.250 0.350		80.00	(400.00) (160.00)	22.00 35.00	(462.00) (175.00)							-862 -335	+
026100	CONTAMINATED SOILS REMOVAL & DISPOSAL	NIC		0.000		00.00	(100.00)	00.00	(170.00)							NIC	-
	HAZARDOUS MATERIALS ABATEMENT - VINYL FLOORING	NIC	;													NIC	
DIVISION	3 - CONCRETE	NIC														NIC	
DIVISION	N 4 - MASONRY	NIC	:												_	NIC	
	N 5 - METALS																1,840
	METAL RAILINGS	24.00) E	0.220		80.00	400.00	60.00	1.440.00							1,840	1,840
	N 6 - WOOD & PLASTICS	24.00			5			00.00	1,440.00							1,040	22.057
	FASTENERS, CONNECTORS	770.00					BLW	0.60	462.00							462	23,657
060600	SEISMIC ROOF BRACING) ALLW	8.000	8	80.00	640.00	500.00	500.00							1,140	+
061000	ROUGH CARPENTRY	276.00		0.032	9	80.00	720.00	0.80	221.00							941	
	SHEATHING - WALLS	128.00		0.018	2	80.00	160.00	1.50	192.00							352	+
	FLOOR SHEATHING	1,182.00		0.018	21	80.00	1,680.00	1.90	2,246.00							3,926	
061700	STRUCTURAL WOOD - GLB - MATERIAL	64.00		-			BLW	30.00	1,920.00							1,920	
	GLB - INSTALL	2.00		4.000	8	80.00	640.00		ABV							640	
	TJI - MATERIAL TJI - INSTALL	416.00 20.00		0.550	11	90.00	880.00	8.50	3,536.00 ABV							3,536	
064600	INTERIOR FINISH CARPENTRY	910.00		0.550 0.060		80.00	4,400.00	6.00	5,460.00							9,860	+
	7 - WEATHER PROTECTION	310.00		0.000			,	0.00	,							9,000	17,610
	FOUNDATION WATERPROOFING	NIC		<u></u>												NIC	17,010
	SHEET WATERPROOFING (WEATHER BARRIER)	140.00		0.030	4	80.00	320.00	1.65	231.00							551	+
	WATER REPELLANTS	NIC		0.000		00.00	020.00	1.00	201.00							NIC	-
072100	INSULATION - BATT WALLS R-19	508.00) SF	SUB	SUB			SUB	SUB			1.40	711.20		711.20	711	
	BATT ROOF R-49	790.00		SUB	SUB			SUB	SUB			1.80	1,422.00		1,422.00	1,422	
	EXTERIOR PLASTER (MICROMESH COAT WITH COLOR)	508.00		SUB	SUB			SUB	SUB			12.00	6,096.00		6,096.00	6,096	
072500 072600	FIRE STOPPING VAPOR RETARDERS	NIC NIC														NIC NIC	
072000	METAL ROOFING - PATCHING	1,054.00		SUB	SUB			SUB	SUB			2.00	2,108.00		2,108.00	2,108	-
076200	SHEET METAT FLASHING	80.00		0.030		77.00	154.00	4.20	336.00			2.00	2,100.00		2,100.00	490	
	FLEXIBLE FLASHING (WINDOW PERIMETER TREATMENT)	400.00		0.060		80.00	1,920.00	1.40	560.00							2,480	
	GUTTERS & DOWNSPOUTS	NIC														NIC	
079000	JOINT SEALANTS - WINDOWS	364.00		0.120	44	77.00	3,388.00	0.65	237.00							3,625	
DIV/IOION	MISC.	1.00	ALLW	1.000	1	77.00	77.00	50.00	50.00							127	_
	N 8 - OPENINGS																49,460
081213	HOLLOW METAL FRAMES HOLLOW METAL TRANSOMES	2.00) EA) EA	1.500 1.750	3	80.00	240.00 160.00	350.00 250.00	700.00 250.00							940 410	
081313	HOLLOW METAL TRANSOMES HOLLOW METAL DOORS (INSULATED)		LVS	0.500	1	80.00	80.00	625.00	625.00							705	+
	WOOD DOORS		LVS	0.500	1	80.00	80.00	400.00	400.00							480	
085000	WINDOWS (335 SF)	23.00	EA	2.500	58	80.00	4,640.00		40,965.00							45,605	
	DOOR HARDWARE	2.00	LVS	2.200	4	80.00	320.00	500.00	1,000.00			-				1,320	
DIVISION	N 9 - FINISHES															NIC	12,696
	GWB (HANG & TAPE)	1,298.00		0.016		80.00	1,680.00	1.30	1,687.00			1.90	2,466.20		2,466.20	5,833	
	RESILIENT FLOORING - VCT	6.00		SUB	SUB			SUB	SUB			50.00	300.00		300.00	300	
	RESILIENT BASE & ACCESSORIES CARPETING	108.00 85.00		SUB SUB	SUB SUB			SUB SUB	SUB SUB			5.00 45.00	540.00 3,825.00		540.00 3,825.00	540 3,825	+
	PAINTING - EXTERIOR - SOFFITS	220.00		SUB	SUB			SUB	SUB			2.20	3,825.00		484.00	3,825	+
	PAINTING - INTERIOR	1,298.00		SUB	SUB		+	SUB	SUB			1.32	1,713.36		1,713.36	1,713	+
	10 - SPECIALTIES	NIC														NIC	
	N 11 - EQUIPMENT	NIC														NIC	+
	N 12 - FURNISHINGS	INIC														INIC	0.740
	WINDOW BLINDS) E A	 0 E00		90.00	060.00	250.00	 5 750 00							6.740	6,710
	N 13 - SPECIAL CONSTRUCTION	23.00		0.500		80.00	960.00	250.00	5,750.00							6,710	
		NIC														NIC	
	N 14 - CONVEYANCE SYSTEMS	NIC														NIC	
DIVISION	N - MECHANICAL						Ţ										20,790
	FIRE PROTECTION	770.00		SUB	SUB			SUB	SUB			5.00	3,850.00		3,850.00	3,850	
220000	PLUMBING	NIC														NIC	

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	CURRENT	UNIT	LABOR	LABOR	MATERIAL	MATERIAL	FOLIIDMENT	FOLIDMENT	SUBCONTRACT	SUBCONTRACT	SUB S	SUBCONTRACTOR		LINE	DIVISION
ITEM DESCRIPTION	QUANTITY UNIT		MANHOURS RATE	COST	UNIT COST	COST	UNIT COST	COST	UNIT COST		CONTING.	COST	`	TOTAL	TOTALS
TIEW BESCHI HON	QUANTITI UNIT	LABOR	WANTOONS TATE	0001	01411 0001	0001	01411 0001	0001	01111 0001	OODTOTAL COOT	CONTINUE	0001		TOTAL	TOTALO
240000 HVAC	770.00 SF	SUB	SUB		SUB	SUB			22.00	16,940.00		16,940.00		16,940	
DIVISION - ELECTRICAL & SPECIAL SYSTEMS															13,860
26000 ELECTRICAL	770.00 SF	SUB	SUB		SUB	SUB			18.00	13,860.00		13,860.00		13,860	
DIVISION 31 - EARTHWORK	NIC													NIC	
DIVISION 32 - SITE IMPROVEMENTS	NIC				-									NIC	
DIVISION 33 - SITE UTILITIES	NIC													NIC	
GENERAL REQUIREMENTS				-							_				5,100
GENERAL REQUIREMENTS	170,000.00 DLR				0.03	5,100.00								5,100	
GENERAL CONDITIONS															9,750
GENERAL CONDITIONS	170,000.00 DLR				0.04	6,800.00								6,800	
01.78.33.20 BOND	170,000.00 DLR				0.0083	1,402.50								1,403	
01.78.32.10 INS - LIABILITY	170,000.00 DLR				0.0080	1,360.00								1,360	
01.78.32.20 INS - BLDRS RISK	170,000.00 DLR				0.0011	187.00								187	
TOTAL			203	16,099.00		82,980.50		-				54,315.76		153,395	153,395
OH&P - 12%										OH&P - 12%				18,407	18,407
CONSTRUCTION TOTAL	TOTAL	MANHOURS	203						CON	ISTRUCTION TOTAL				171,803	171,803
	TOTAL SF (OF BUILDING	770												
CONTINGENCY OWNER 20%		LIDO DED OF	0.0000						CONTING	GENCY OWNER 20%			-	34,361	34,36
TOTAL	M	HRS PER SF	0.2636							TOTAL				206,163	206,163
COST/SF										COST/SF				268	268

