2020 PROJECT PROPOSAL CHECKLIST

2021-23 Biennium Four-year Higher Education Scoring Process

WSUINSTITUTION	CAMPUS LOCATION
365 - Washington State University	Pullman
PROJECT TITLE	**FPMT UNIQUE FACILITY ID # (OR NA)**
Johnson Hall Demolition	A00267
PROJECT CATEGORY	**PROJECT SUBCATEGORY**
Replacement	Standalone
PROPOSAL IS	
New or Updated Proposal (for scoring)	**Resubmitted Proposal (retain prior score)**
☒ New proposal ☐ Resubmittal to be scored (more than 2 biennia old or significantly changed)	☐ Resubmittal from 2017-19 biennium ☐ Resubmittal from 2019-21 biennium
CONTACT	**PHONE NUMBER**
Jason Baerlocher	509-335-9012

PROPOSAL CONTENT

- ☒ Project Proposal Checklist: this form; one for each proposal
- ☒ Project Proposal Form: Specific to category/subcategory (10-page limit)
- ☒ Appendices: templates, forms, exhibits and supporting/supplemental documentation for scoring.

INSTITUTIONAL PRIORITY

- ☒ Institutional Priority Form. Sent separately (not in this packet) to: Darrell Jennings.

Check the corresponding boxes below if the proposed project meets the minimum threshold or if the item listed is provided in the proposal submittal.

MINIMUM THRESHOLDS

- ☒ Project is not an exclusive enterprise function such as a bookstore, dormitory or contract food service.
- ☐ Project meets LEED Silver Standard requirements.
- ☒ Institution has a greenhouse gas emissions reduction policy in place in accordance with RCW 70.235.070 and vehicle emissions reduction policy in place per RCW 47.01.440 or RCW 43.160.020 as applicable.
- ☐ Design proposals: A complete predesign study was submitted to OFM by July 1, 2020.
- ☐ Growth proposals: Based on solid enrollment projections and is more cost-effectively providing enrollment access than alternatives such as university centers and distance learning.
- ☐ Renovation proposals: Project should cost between 60 – 80% of current replacement value and extend the useful life of the facility by at least 25 years.
- ☐ Acquisition proposals: Land acquisition is not related to a current facility funding request.
- ☐ Infrastructure proposals: Project is not a facility repair project.
- ☒ Stand-alone, infrastructure and acquisition proposals: is a single project requesting funds for one biennium.

2020 PROJECT PROPOSAL CHECKLIST

2021-23 Biennium Four-year Higher Education Scoring Process

REQUIRED APPENDICES

- ☒ Capital Project Report CBS 002
- ☒ Project cost estimate:
  - CBS 003 for projects between $2 million and $5 million
  - Excel C-100 for projects greater than $5 million
- ☐ Degree Totals and Targets template to indicate the number of Bachelors, High Demand and Advanced degrees expected to be awarded in 2021. (Required for Overarching Criteria scoring criteria for Major Growth, Renovation, Replacement and Research proposals).
- ☒ Availability of Space/Campus Utilization template for the campus where the project is located. (Required for all categories/subcategories except Infrastructure and Acquisition proposals).
- ☒ Assignable Square Feet template to indicate program-related space allocation. (Required for Growth, Renovation and Replacement proposals, all categories/subcategories).

OPTIONAL APPENDICES

Attach supplemental and supporting project documentation, *limit to materials directly related to and needed for the evaluation criteria*, such as:

- ☐ Degree and enrollment growth projections
- ☐ Selected excerpts from institutional plans
- ☐ Data on instructional and/or research space utilization
- ☐ Additional documentation for selected cost comparables (acquisition)
- ☒ Selected materials on facility conditions
- ☐ Selected materials on code compliance
- ☐ Tables supporting calculation of program space allocations, weighted average facility age, etc.
- ☐ Evidence of consistency of proposed research projects with state, regional, or local economic development plans
- ☐ Evidence of availability of non-state matching funds
- ☒ Selected documentation of prior facility failures, high cost maintenance, and/or system unreliability for infrastructure projects
- ☒ Documentation of professional assessment of costs for land acquisition, land cleanup, and infrastructure projects
- ☒ Selected documentation of engineering studies, site survey and recommendations, or opinion letters for infrastructure and land cleanup projects
- ☒ Other: WSU Facility Development Plan

I certify that the above checked items indicate either that the proposed project meets the minimum thresholds or the corresponding items have been included in this submittal.

Name: Kate Kamerrer Title: Exec Director, Finance, Business and Building Services

Signature: Kate Kamerrer Date: 08/20/2020

INSTITUTION	CAMPUS
Washington State University	Pullman, WA
PROJECT TITLE	
Johnson Hall Demolition	

SUMMARY NARRATIVE

- *Problem statement (short description of the project – the needs and the benefits)*
- *History of the project or facility*
- *University programs addressed or encompassed by the project*

Problem Statement - Washington State University requests $8,000,000 in the 2021-23 Capital Budget for the demolition of Johnson Hall on the Pullman campus to capitalize on the rare appropriation of federal funds to replace the aged building with a new 105,000 square foot state-of-the-art research facility.

WSU ranks among the top research institutions in the world in the area of plant sciences. This reputation has been largely garnered through the accomplishments of faculty in the College of Agricultural, Human, and Natural Resource Sciences (CAHNRS) and its long-term partnership with co-located scientists from the United States Department of Agriculture (USDA)-Agricultural Research Service (ARS). WSU is home to more ARS scientists than any university in the country. While dramatic improvements have been made, scientists housed in Johnson Hall are making use of facilities that are grossly inadequate for conducting cutting-edge plant science research. Johnson Hall was constructed in 1961. The maintenance and operation of this facility has become increasingly expensive and the building structure and mechanical layout make it a poor candidate for renovation. It was originally constructed with shallow floor-to-floor heights which do not accommodate the mechanical systems and distribution necessary for modern, functional research space. This lack of functionality and general poor condition jeopardizes the model for funding research, which is based on attracting large, competitive, external grants. The success of the WSU/ARS partnership is linked to the ability to carry out solid fundamental research upon which applied research programs are based.

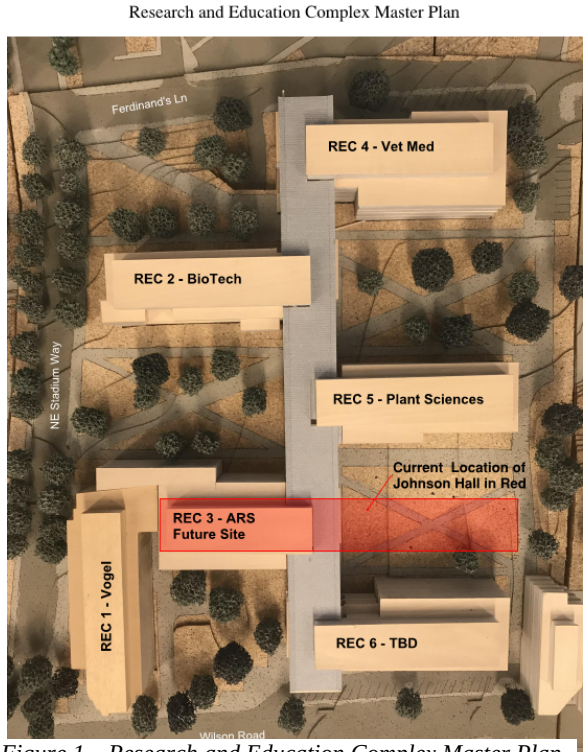

Figure 1 – Research and Education Complex Master Plan

History - The WSU Campus Master Plan includes the development of a research and graduate education core on the east side of the Pullman campus. The Research and Education Complex plays prominently in this master plan by supporting molecular science from CAHNRS, the College of Veterinary Medicine, and the College of Arts and Sciences. (Figure 1)

Original plans for the complex included six buildings with five WSU facilities and one USDA/ARS facility and the intention that ARS and WSU researchers be fully integrated in the complex. Thus far, four of the planned six buildings have been constructed. Though uncommon to receive federal funds for capital construction, federal funds have been appropriated to fully fund the design and construction of a new USDA/ARS Plant Biosciences Building on the Pullman campus. This facility is intended to be an integral

part of the Research and Education Complex with connections to the core spine collaboration area and Vogel. As shown in Figure 1, the new USDA/ARS Plant Biosciences Building was planned to be sited on the current location of Johnson Hall.

The new, federally-funded USDA/ARS Plant Biosciences Building will advance the creation of a precinct on the Pullman campus in which biological sciences is aggregated through a series of interconnected facilities that encourage interdisciplinary collaboration among the institution's leading faculty and students. Part of the university's success in plant sciences is due to a partnership with the USDA/ARS. This research partnership is exemplary and one of the strongest federal-state partnerships in the nation. The collaboration between WSU and USDA/ARS in the creation of this facility will be unprecedented and continue to build upon what is already an excellent partnership.

To date, a comprehensive engineering study, site survey, good faith survey, and Phase 1 environmental study have all been performed on the Johnson Hall facility and site by industry professionals. Executive summaries from each of these studies have been included in **Appendix A**. Programming and predesign efforts on the federally funded USDA/ARS Plant Biosciences Building are currently underway with construction expected to begin immediately following the demolition of Johnson Hall in 2022.

University Programs - Johnson Hall is currently occupied by the following programs and approximately 330 faculty, staff, students, and USDA scientists work in the facility. All of these programs will be positively affected by the long term vision of this project in the master plan.

Programs (or portions thereof) that will be relocated to the new USDA/ARS Plant Biosciences Building:

- Crop and Soil Sciences Department
- Grain Legume Genetics Physiology Research (USDA/ARS)
- Horticulture Department
- Northwest Sustainable Agroecosystems Research (USDA/ARS)
- Plant Germplasm Introduction and Testing Research (USDA/ARS)
- Plant Pathology Department
- USDA Administrative support
- Wheat Health, Genetics, and Quality Research (USDA/ARS)

Programs (or portions thereof) that will be relocated to improved/purpose built space on campus:

- WSU Apparel, Merchandising, Design and Textiles Department
- WSU CAHNRS Graduate Advising Center
- WSU Biological Systems Engineering
- WSU CAHNRS Business Center
- WSU Global Campus (for IT classroom support needs)
- WSU School of the Environment
- WSU Horticulture Department - Potato Research

GENERAL CATEGORY SCORING CRITERIA

1. Age of building since last major remodel

Identify the number of years since the last substantial renovation of the facility or portion proposed for renovation. If only one portion of a building is to be remodeled, provide the age of that portion only. If the project involves multiple wings of a building that were constructed or renovated at different times, calculate and provide a weighted average facility age, based upon the gross square feet and age of each wing.

Johnson Hall was constructed in 1961 and received a small addition in 1967. The building has not experienced any substantial renovations since the original construction date, a span of almost 60 years.

2. Condition of building

Provide the facility's condition score (1 superior – 5 marginal functionality) from the 2016 Comparable Framework study, and summarize the major structural and systems conditions that resulted in that score. Provide selected supporting documentation in appendix, and reference them in the body of the proposal.

Johnson Hall was originally constructed as a facility for research and education. It has a current Comparable Framework Study score of 5 (Needs Improvement – Marginal Functionality) with annual operating costs in excess of $1,000,000 and a deferred maintenance back log value exceeding $29,000,000 (**Appendix B**). As a result of this project, Johnson Hall will be demolished, paving the way for the new state-of-the-art USDA/ARS Plant Biosciences Building.

Justification:

Building	Gross Sq Ft	Year Constructed	Year Renovated	FCI Score	Comparable Framework Score	DM Backlog
Johnson	194,017	1961	n/a	0.76	5	$29,422,733

In 2014-2015, WSU conducted facility condition assessments of multiple buildings through VFA, a well-known consulting firm that provides facility assessment services. VFA determines overall building condition by Facility Condition Index (FCI), a ratio of facility requirements to the replacement value, and provides real time FCI updates based on lifecycle requirements associated with critical building systems.

Johnson Hall contains many critical building systems that have past their useful life and are in need replacement. Examples include:

- Air Handling Units
- Primary Electrical Service
- Building Electrical Distribution
- Cooling Tower
- Building Controls and IT Infrastructure
- Mechanical Distribution System
- Elevators
- 500 ton chiller (currently not operational)
- Building Envelope (windows, cladding, doors)
- Fire Alarm System (Figure 2)

Figure 2 - Johnson Hall Fire Alarm Panel

Over the past five years, WSU Facilities Services has received an average of nearly 70 reactive maintenance requests per month for Johnson Hall. The Maintenance Log Summary below shows the number of service calls addressed each year over the past five years and their associated cost.

Johnson Hall Maintenance Log Summary		
Year	**Number of Calls**	**Cost**
2015	706	$436,500
2016	808	$604,500
2017	861	$581,500
2018	838	$462,750
2019	966	$499,140

3. Significant health, safety, and code issues

It is understood that all projects that obtain a building permit will have to comply with current building codes. Identify whether the project is needed to bring the facility within current life safety (including seismic and ADA) or energy code requirements. Clearly identify the applicable standard or code, and describe how the project will improve consistency with it. Provide selected supporting documentation in appendix, and reference them in the body of the proposal.

Demolition of Johnson Hall will eliminate all existing life safety, accessibility, and code deficiencies. Construction of this facility and most of its systems are consistent with the code that was in place when the building was constructed in 1961, 60 years ago. However, the facility does not meet current code in many areas.

Justification:
Reference the following for a summary of example items in the facility that do not meet current codes:

Life Safety:

- Johnson Hall was constructed prior to the formation of the National Fire Protection Association, and as such, the items listed below are not compliant with this code:
  - Existing visual and audible fire alarm notifications.
  - Existing fire alarm coverage.
  - No fire sprinklers in the building.
  - Fire separation – long corridors with no fire separation (Figure 3) and stairwells are open with windows and no standpipes.
- Asbestos Containing Materials – ducting, insulation, flooring and other finishes are insulated or made with asbestos-containing materials as was common at the time of construction.

Figure 3 - Johnson Hall Corridor

ADA 2010 Standards:

- Due to the age of the facility, the items listed below are not compliant with portions of the ADA standards, (chapters 3 through 8):
  - Lab furnishings and fixtures
  - Lab safety equipment
  - Corridors and egress pathways
  - Restrooms

Washington Energy Code:

- The state of Washington has adopted numerous energy initiatives since Johnson Hall was constructed. As a result, the list below includes some of the significant items that do not comply with current energy codes.
  - Existing constant volume air handling systems are energy inefficient along with every fume hood having its own constant volume exhaust fan.
  - Existing controls for operation of room temperature and regulation of air flow are pneumatic or operated with manual dampers. WEC requires electronic controls that can vary with loading.
  - Building exhaust system does not include code required heat recovery and with each fume hood having individual exhaust it is impractical to retrofit this to the facility.
  - Current lights controls are manually operated and do not include occupancy sensors. In addition, the lighting type does not comply with current energy use regulations.

4. Reasonableness of cost

Provide as much detailed cost information as possible, including baseline comparison of costs per square foot (SF) with the cost data provided in Chapter 5 of the scoring process instructions and a completed OFM C-100 form. Also, describe the construction methodology that will be used for the proposed project.

This replacement project will use the Design Build method of delivery and is well within OFM standards for reasonableness of cost. The estimated Maximum Allowable Construction Cost (MACC), which includes both the demolition which is the subject of this request and the federally funded replacement facility, is approximately 94% of the expected MACC for a research lab facility escalated to the construction mid-point.

Justification:
Reference the following for a comparison of estimated project MACC (including both the new USDA/ARS Plant Biosciences Building and the demolition of Johnson Hall) against OFM standards.

OFM Chapter 5		**Proposed Project Estimates**	
Program Type	Research Labs	Anticipated Mid-Const. Date	2/15/2024
Cost Index at Mid-Const. Date	1.13	Estimated MACC	$60,824,627
Expected MACC/GSF	$545	Estimated GSF	105,000

OFM Standard Comparison			
Metric	OFM Standard	Proposed Project	% Difference
MACC/GSF at Mid-Const. Date	$616	$579	94%

The estimated Maximum Allowable Construction Cost (MACC) noted above was determined by combining the MACC for the new federally funded USDA/ARS Plant Biosciences Building (estimated by the United States Army Corps of Engineers at $56,854,203) with the MACC for the demolition of Johnson Hall (estimated in the C100 at $3,970,424). Reference **Appendix C** for additional detail.

Please note, the C100 document submitted with this project proposal includes only the costs associated with this $8,000,000 request to demolish Johnson Hall.

If applicable, provide Life Cycle Cost Analysis results demonstrating significant projected savings for selected system alternates (Uniformat Level II) over 50 years, in terms of net present savings.

A Life Cycle Cost Analysis is not required for a standalone replacement request.

5. Availability of space/utilization on campus

Describe the institution's plan for improving space utilization and how the project will impact the following:

A. The utilization of classroom space

Classroom improvements are not included in this program. Reference **Appendix D** for Availability of Space/Campus Utilization data for the Pullman campus.

B. The utilization of class laboratory space

This renovation will serve research laboratories, not teaching laboratories.

6. Efficiency of space allocation

A. *For each major function in the proposed facility (classroom, instructional labs, offices), identify whether space allocations will be consistent with Facility Evaluation and Planning Guide (FEPG) assignable square feet standards. To the extent any proposed allocations exceed FEPG standards, explain the alternative standard that has been used, and why. See Chapter 4 of the scoring process instructions for an example. Supporting tables may be included in an appendix.*

The FEPG Standard does not include a guideline for research labs and service areas, as they are particular to the specific research taking place. The proposed space allocations for the new USDA/ARS Plant Biosciences Building will dramatically improve on the current inefficiencies within Johnson Hall and encourage sharing of space and resources to allow for more collaboration among researchers and the disciplines that overlap.

B. *Identify the following on form CBS002:*

Reference **Appendix E** for the program-related space allocation summary. Note that the numbers provided are for the new federally funded USDA/ARS Plant Bioscience Building that will replace Johnson Hall.

1. *Usable square feet (USF) in the proposed facility* **67,279 SF**
2. *Gross square feet (GSF)* **105,000 SF**
3. *Building efficiency (USF divided GSF)* **64.1%**

7. Adequacy of space

Describe whether and the extent to which the project is needed to meet modern educational standards and/or to improve space configurations, and how it would accomplish that.

The removal of Johnson Hall is a planned part of a series of strategic facility replacements and renovations as shown in university's Facility Development Plan, Pullman Campus Master Plan and the Research and Education Complex Master Plan. Construction of the new USDA/ARS research facility will dramatically improve program space configuration by providing a modern research environment that meets current health and safety standards.

Justification:
WSU's Facility Development Plan is focused on identifying and prioritizing capital projects which balance continued stewardship and renewal of existing facilities and infrastructure within a framework for responsible growth. The plan recognizes the urgent need to address a large and rapidly growing deferred maintenance backlog which has been identified as a significant risk to future operations at all of the WSU campuses as they age. Additionally, the goals of this plan are consistent with the Master Plans for each of the WSU campuses which together include emphasis on open spaces, pedestrian access, community connection and campus identity, and research and/or program excellence.

The Research and Education Complex Master Plan which is included in the Facility Development Plan (**Appendix F**) does not include Johnson Hall. Instead, this plan calls for Johnson Hall to be removed and replaced with a new facility that meets the research and education needs of WSU faculty and students.

With the demolition of Johnson Hall, this project will clear a path for an investment to improve facilities and leave a legacy in capital assets through learning space improvements, research benefits, and the continued USDA-WSU partnership in the new USDA/ARS Plant Biosciences Building. This partnership between WSU and USDA is the model strived for nationwide by the USDA in all their locations across the nation. This new research facility will be intermixed with researchers from both WSU and the USDA in a 50/50 blend.

TEMPLATES REQUIRED IN APPENDIX FOR SCORING

- Availability of space/campus utilization
- Program-related space allocation

OFM

365 - Washington State University
Capital Project Request

2021-23 Biennium

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Version: 10 2021-23 WSU Capital Budget Request

Report Number: CBS002
Date Run: 8/20/2020 1:37PM

Project Number: **40000271**
Project Title: **Johnson Hall Demolition**

Description

Starting Fiscal Year: 2022
Project Class: Program
Agency Priority: 3

Project Summary

Washington State University requests $8,000,000 in the 2021-23 Capital Budget for the demolition of Johnson Hall on the Pullman campus to capitalize on the rare appropriation of federal funds to replace the aged building with a new 105,000 square foot state-of-the-art research facility. The building structure and mechanical layout of Johnson Hall makes it a poor candidate for renovation. Therefore, when the Research Education Complex was master planned in 2004, Johnson Hall was slated to be replaced by a new facility. Johnson Hall currently houses scientists from four United States Department of Agriculture – Agricultural Research Service (USDA/ARS) Research Units as well as three WSU academic departments and fosters close collaboration between these units. All will be relocated into the new USDA/ARS Plant Biosciences Building that will be constructed on the current site of Johnson Hall.

Project Description

Identify the problem or opportunity addressed. Why is the request a priority? This narrative should identify unserved/underserved people or communities, operating budget savings, public safety improvements or other backup necessary to understand the need for the request. For preservation projects, it is helpful to include information about the current condition of the facility or system.

WSU ranks among the top research institutions in the world in the area of plant sciences. This reputation has been largely garnered through the accomplishments of faculty in the College of Agricultural, Human, and Natural Resource Sciences (CAHNRS) and its long-term partnership with co-located scientists from the United States Department of Agriculture (USDA)-Agricultural Research Service (ARS). WSU is home to more ARS scientists than any university in the country.

While dramatic improvements have been made, scientists housed in Johnson Hall are making use of facilities that are grossly inadequate for conducting cutting-edge plant science research. Johnson Hall was constructed in 1961. The maintenance and operation of this facility has become increasingly expensive and the building structure and mechanical layout make it a poor candidate for renovation. It was originally constructed with shallow floor-to-floor heights which do not accommodate the mechanical systems and distribution necessary for modern, functional research space. Due to the age of the facility and the way it was originally constructed, many critical issues cannot be addressed properly. Johnson Hall is consistent with the codes that where in place when the building was constructed in 1961 which is prior to the Americans with Disabilities Act (ADA). Many parts of the building do not meet ADA requirements and the facility was constructed without a fire sprinkler system which puts lives at risk. The facility has a Comparable Framework Study Score of 5 (Needs Improvement – Marginal Functionality). This lack of functionality and general poor condition jeopardizes the model for funding research, which is based on attracting large, competitive, external grants. The success of the WSU/ARS partnership is linked to the ability to carry out solid fundamental research upon which applied research programs are based.

The fiscal year 2019 Federal Congressional funding included monies to design and build a new USDA/ARS Plant Biosciences Building on the WSU Pullman campus. This facility is intended to be an integral part of the Research and Education Complex with connections to the core spine collaboration area and Vogel. As such, the building site for this new USDA/ARS Plant Biosciences Building was planned to occupy the current location of Johnson Hall. The demolition of Johnson Hall will clear a path for this once-in-a-lifetime investment opportunity to improve facilities and leave a legacy in capital assets through learning space improvements, research benefits, and USDA-WSU partnership in the new USDA/ARS Plant Biosciences Building.

What will the request produce or construct (i.e., predesign or design of a building, construction of additional space, etc.)? When will the project start and be completed? Identify whether the project can be phased, and if so, which phase is included in the request. Please provide detailed cost backup.

Washington State University requests $8,000,000 in the 2021-23 Capital Budget for the demolition of Johnson Hall on the Pullman Campus. These funds will allow the facility to be decommissioned and demolished by August of 2022. This will allow the construction of the new USDA/ARS Plant Biosciences Building which will commence in September of 2022.

How would the request address the problem or opportunity identified in question 1? What would be the result of not taking action?

In the event that Johnson Hall is not demolished ahead of the federally funded USDA/ARS Plant Biosciences Building, the USDA/ARS facility will need to be constructed in an alternate, less desirable location. The alternate location would be disconnected from other research facilities in the complex and have devastating long term effects on the team's ability to conduct effective research. In addition the expensive annual operating cost and the $29,000,000 deferred maintenance backlog

Description

will not be addressed and WSU will continue to contend with an underutilized and inefficient facility.

What alternatives were explored? Why was the recommended alternative chosen? Be prepared to provide detailed cost backup. If this project has an associated predesign, please summarize the alternatives the predesign considered.

In 2001, WSU launched a university wide strategic planning initiative that focused on nine key areas of study. This initiative was the foundation for the development of the Research and Education Complex to bring together multiple disciplines into one collaborative complex centered on biotechnology research and education.

The complex vision included multiple phases of development centered on the goal to create one cohesive research facility connected by a core collaboration spine. In order to maintain this cohesive vision, Johnson Hall would eventually need to be replaced with a new facility. Individuals originally housed in Johnson Hall would then be relocated to new facilities in the complex. Multiple alternate building sites have been explored that would allow the new USDA/ARS Plant Biosciences Building to be constructed without demolishing Johnson Hall, however none of the alternative sites sufficiently address the research needs and long term vision of the complex.

Which clientele would be impacted by the budget request? Where and how many units would be added, people or communities served, etc.

Johnson Hall is currently occupied by the following programs and approximately 330 faculty, staff, students, and USDA scientists work in the facility. All of these programs will be positively affected by the long term vision of this project in the master plan.

Programs (or portions thereof) that will be relocated to the new USDA/ARS Plant Biosciences Building:
· Crop and Soil Sciences Department
· Grain Legume Genetics Physiology Research (USDA/ARS)
· Horticulture Department
· Northwest Sustainable Agroecosystems Research (USDA/ARS)
· Plant Germplasm Introduction and Testing Research (USDA/ARS)
· Plant Pathology Department
· USDA Administrative support
· Wheat Health, Genetics, and Quality Research (USDA/ARS)

Programs (or portions thereof) that will be relocated to improved/purpose built space on campus:
· WSU Apparel, Merchandising, Design and Textiles Department
· WSU CAHNRS Graduate Advising Center
· WSU Biological Systems Engineering
· WSU CAHNRS Business Center
· WSU Global Campus (for IT classroom support needs)
· WSU School of the Environment
· WSU Horticulture Department - Potato Research

Does this project or program leverage non-state funding? If yes, how much by source? If the other funding source requires cost share, also include the minimum state (or other) share of project cost allowable and the supporting citation or documentation.

Though uncommon to receive federal funds for capital construction, federal funds have been appropriated to fully fund the design and construction of a new 105,000 square foot USDA/ARS Plant Biosciences Building on the Pullman campus. Therefore, WSU requests only $8,000,000 in 2021-23 Capital Budget to cover costs associated with the demolition of Johnson Hall.

Describe how this project supports the agency's strategic master plan or would improve agency performance. Reference feasibility studies, master plans, space programming and other analyses as appropriate.

WSU's Facility Development Plan is focused on identifying and prioritizing capital projects which balance continued stewardship and renewal of existing facilities and infrastructure within a framework for responsible growth. The plan recognizes the urgent need to address a large and rapidly growing deferred maintenance backlog which has been identified as a significant risk to future operations at all of the WSU campuses as they age. Additionally, the goals of this plan are consistent with the Master Plans for each of the WSU campuses which together include emphasis on open spaces, pedestrian access, community connection and campus identity, and research and/or program excellence.

The Research and Education Complex Master Plan which is included in the Facility Development Plan does not include Johnson Hall. Instead, this plan calls for Johnson Hall to be removed and replaced with a new facility that meets the research and education needs of WSU faculty and students from the College of Agricultural, Human and Natural Resource Sciences, the

Project Number: 40000271
Project Title: Johnson Hall Demolition

Description

College of Veterinary Medicine, and the College of Arts and Sciences.
Original plans for the complex included six buildings with five WSU facilities and one USDA/ARS facility and the intention that ARS and WSU researchers be fully integrated in the complex. Thus far, four of the planned six buildings have been constructed. Though uncommon to receive federal funds for capital construction, federal funds have been appropriated to fully fund the design and construction of a new USDA/ARS Plant Biosciences Building on the Pullman campus. This facility is intended to be sited on the current location of Johnson Hall with connections to the core spine collaboration area and Vogel. With the demolition of Johnson Hall, this project will clear a path for an investment to improve facilities and leave a legacy in capital assets through learning space improvements, research benefits, and the continued USDA-WSU partnership in the new USDA/ARS Plant Biosciences Building. This partnership between WSU and USDA is the model strived for nationwide by the USDA in all their locations across the nation. This new research facility will be intermixed with researchers from both WSU and the USDA in a 50/50 blend.

Does this decision package include funding for any Information Technology related costs including hardware, software (to include cloud-based services), contracts or staff? If the answer is yes, you will be prompted to attach a complete IT addendum. (See Chapter 10 of the operating budget instructions for additional requirements.)
This request does not include any Information Technology related costs.

If the project is linked to the Puget Sound Action Agenda, describe the impacts on the Action Agenda, including expenditure and FTE detail. See Chapter 12 Puget Sound Recovery) in the 2021-23 Operating Budget Instructions.
This proposed project is not linked to the Puget Sound Action Agenda.

How does this project contribute to statewide goals to reduce carbon pollution and/or improve energy efficiency? Please elaborate.
Capital projects identified in the University's Facility Development Plan contribute directly to a reduction in the deferred maintenance backlog, through either significant renovation, rehabilitation or replacement of existing facilities. In addition, the development plan's guiding principles include energy efficiency improvements, carbon reduction and water savings.
The current programming and predesign efforts taking place on the new USDA/ARS Plant Biosciences Building that will replace Johnson Hall acknowledges the requirements of House Bill 1257 (Washington State Clean Energy Standards) and House Bill 2311 (Greenhouse Gas Emissions) and strives to include energy improvements and carbon reduction throughout all project design and execution. In addition, demolishing Johnson Hall will effectively remove an aging building with obsolete and energy inefficient systems.

Is there additional information you would like decision makers to know when evaluating this request?
In order to fulfill the long term vision of the Research and Education Complex and to allow the four previously constructed facilities within the complex to function properly, the new USDA/ARS Plant Biosciences Building should ideally be constructed on the site of Johnson Hall. The new USDA/ARS facility has already received federal funding and will allow the complex to come together as originally envisioned once Johnson Hall has been removed.
*Reference the project proposal and associated appendices for additional information.

Location
City: Pullman **County:** Whitman **Legislative District:** 009

Project Type
Intermediate

OFM

365 - Washington State University
Capital Project Request
2021-23 Biennium

*

Version: 10 2021-23 WSU Capital Budget Request

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Description

Growth Management impacts

WSU Pullman's physical planning policies are coordinated with many agencies and government units. The Growth Management Act and its companion Traffic Demand Management legislation and the State Environmental Policy Act, however, are applicable to WSU's physical facilities and programs. Growth Management Act (GMA)-WSU will coordinate with Counties and Municipalities throughout the State to ensure compliance with GMA. WSU will avoid construction or activities which would permanently impair "critical" areas on its campuses as they are defined in the GMA. Transportation Demand Management-A companion piece of legislation sets forth a policy for Transportation Demand Management in which the State of Washington will provide leadership. The Director of the State of Washington Department of General Administration (DGA) is required to develop a commute trip reduction plan for state agencies which are Phase I major employers WSU will conform to the plans developed by DGA. State Environmental Policy Act (SEPA)-WSU has adopted procedures set forth in the State Environmental Policy Act Handbook December 1988 and the State Environmental Policy Act Rules Chapter 197-11 Washington Administrative Code Effective April 4, 1984. Adherence to these procedures will be one of the principal means by which WSU coordinates its compliance with Growth Management requirements.

New Facility: Yes

How does this fit in master plan

See: https://gis.wsu.edu/portal/apps/MapSeries/index.html?appid=9cc577c31d314e0fb75c0d519e82802f

Funding

Acct Code	Account Title	Estimated Total	Expenditures Prior Biennium	Expenditures Current Biennium	2021-23 Fiscal Period Reapprops	2021-23 Fiscal Period New Approps
062-1	WSU Building Account-State	8,000,000				8,000,000
	Total	**8,000,000**	**0**	**0**	**0**	**8,000,000**

Acct Code	Account Title	Future Fiscal Periods 2023-25	2025-27	2027-29	2029-31
062-1	WSU Building Account-State				
	Total	**0**	**0**	**0**	**0**

Schedule and Statistics

Start Date	End Date

OFM

365 - Washington State University
Capital Project Request
2021-23 Biennium

*

Version: 10 2021-23 WSU Capital Budget Request

Report Number: CBS002
Date Run: 8/20/2020 1:37PM

Project Number: **40000271**
Project Title: **Johnson Hall Demolition**

Schedule and Statistics

	Start Date	End Date
Predesign	07/01/2021	08/01/2021
Design	8/1/2021	12/1/2021
Construction	12/1/2021	6/1/2022

	Total
Gross Square Feet:	168,394
Usable Square Feet:	100,000
Efficiency:	59.4%
Escalated MACC Cost per Sq. Ft.:	24
Construction Type:	Research Facilities
Is this a remodel?	No
A/E Fee Class:	A
A/E Fee Percentage:	10.42%

Cost Summary

		Escalated Cost	% of Project
Acquisition Costs Total		**0**	**0.0%**
Consultant Services			
Pre-Schematic Design Services		0	0.0%
Construction Documents		295,741	3.7%
Extra Services		0	0.0%
Other Services		134,705	1.7%
Design Services Contingency		21,727	0.3%
Consultant Services Total		**453,352**	**5.7%**
Maximum Allowable Construction Cost(MACC)	**3,970,424**		
Site work		196,821	2.5%
Related Project Costs		0	0.0%
Facility Construction		3,773,603	47.2%
GCCM Risk Contingency		305,124	3.8%
GCCM or Design Build Costs		526,339	6.6%
Construction Contingencies		198,579	2.5%
Non Taxable Items		0	0.0%
Sales Tax		390,036	4.9%
Construction Contracts Total		**5,390,501**	**67.4%**
Equipment			
Equipment		0	0.0%
Non Taxable Items		0	0.0%
Sales Tax		0	0.0%

OFM

365 - Washington State University
Capital Project Request
2021-23 Biennium

*

Version: 10 2021-23 WSU Capital Budget Request

Report Number: CBS002
Date Run: 8/20/2020 1:37PM

Project Number: **40000271**
Project Title: **Johnson Hall Demolition**

Cost Summary

	Escalated Cost	% of Project
Equipment Total	**0**	**0.0%**
Art Work Total	**39,802**	**0.5%**
Other Costs Total	**1,709,235**	**21.4%**
Project Management Total	**407,395**	**5.1%**
Grand Total Escalated Costs	**8,000,285**	
Rounded Grand Total Escalated Costs	**8,000,000**	

Operating Impacts

No Operating Impact

Narrative

This is a demolition project, no additional FTE required.

Capital Project Request

2021-23 Biennium

*

Parameter	Entered As	Interpreted As
Biennium	2021-23	2021-23
Agency	365	365
Version	10-A	10-A
Project Classification	*	All Project Classifications
Capital Project Number	40000271	40000271
Sort Order	Project Priority	Priority
Include Page Numbers	Y	Yes
For Word or Excel	N	N
User Group	Agency Budget	Agency Budget
User Id	*	All User Ids

STATE OF WASHINGTON
AGENCY / INSTITUTION PROJECT COST SUMMARY

Updated June 2020

Agency	Washington State University
Project Name	Washington State University Pullman - Johnson Hall Demolition
OFM Project Number	40000271

Contact Information	
Name	Jason Baerlocher
Phone Number	509-335-9012
Email	jason.baerlocher@wsu.edu

Statistics			
Gross Square Feet	168,394	MACC per Square Foot	$23
Usable Square Feet	100,000	Escalated MACC per Square Foot	$24
Space Efficiency	59.4%	A/E Fee Class	A
Construction Type	Research Facilities	A/E Fee Percentage	10.42%
Remodel	No	Projected Life of Asset (Years)	0
Additional Project Details			
Alternative Public Works Project	Yes	Art Requirement Applies	Yes
Inflation Rate	2.38%	Higher Ed Institution	Yes
Sales Tax Rate %	7.80%	Location Used for Tax Rate	3,812
Contingency Rate	5%		
Base Month	June-20	OFM UFI# (from FPMT, if available)	A00267
Project Administered By	Agency		

Schedule			
Predesign Start	July-21	Predesign End	August-21
Design Start	August-21	Design End	December-21
Construction Start	December-21	Construction End	June-22
Construction Duration	6 Months		

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Project Cost Estimate

Total Project	**$7,693,069**	Total Project Escalated	**$8,000,290**
		Rounded Escalated Total	**$8,000,000**

STATE OF WASHINGTON
AGENCY / INSTITUTION PROJECT COST SUMMARY

Updated June 2020

Agency	Washington State University
Project Name	Washington State University Pullman - Johnson Hall Demolition
OFM Project Number	40000271

Cost Estimate Summary

Acquisition			
Acquisition Subtotal	**$0**	**Acquisition Subtotal Escalated**	**$0**

Consultant Services			
Predesign Services	$0		
A/E Basic Design Services	$287,741		
Extra Services	$0		
Other Services	$129,275		
Design Services Contingency	$20,851		
Consultant Services Subtotal	**$437,867**	**Consultant Services Subtotal Escalated**	**$453,353**

Construction			
GC/CM Risk Contingency	$292,825		
GC/CM or D/B Costs	$505,123		
Construction Contingencies	$190,575	Construction Contingencies Escalated	$198,580
Maximum Allowable Construction Cost (MACC)	$3,811,500	Maximum Allowable Construction Cost (MACC) Escalated	$3,970,424
Sales Tax	$374,402	Sales Tax Escalated	$390,037
Construction Subtotal	**$5,174,425**	**Construction Subtotal Escalated**	**$5,390,504**

Equipment			
Equipment	$0		
Sales Tax	$0		
Non-Taxable Items	$0		
Equipment Subtotal	**$0**	**Equipment Subtotal Escalated**	**$0**

Artwork			
Artwork Subtotal	**$39,802**	**Artwork Subtotal Escalated**	**$39,802**

Agency Project Administration			
Agency Project Administration Subtotal	$390,974		
DES Additional Services Subtotal	$0		
Other Project Admin Costs	$0		
Project Administration Subtotal	**$390,974**	**Project Administation Subtotal Escalated**	**$407,396**

Other Costs			
Other Costs Subtotal	**$1,650,000**	**Other Costs Subtotal Escalated**	**$1,709,235**

Project Cost Estimate

Total Project	**$7,693,069**	Total Project Escalated	**$8,000,290**
		Rounded Escalated Total	**$8,000,000**

Cost Estimate Details

Acquisition Costs					
Item	**Base Amount**		**Escalation Factor**	**Escalated Cost**	**Notes**
Purchase/Lease					
Appraisal and Closing					
Right of Way					
Demolition					
Pre-Site Development					
Other					
Insert Row Here					
ACQUISITION TOTAL	**$0**		**NA**	**$0**	

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Cost Estimate Details

Consultant Services				
Item	**Base Amount**	**Escalation Factor**	**Escalated Cost**	**Notes**
1) Pre-Schematic Design Services				
Programming/Site Analysis				
Environmental Analysis				
Predesign Study				
Other				
Insert Row Here				
Sub TOTAL	**$0**	**1.0278**	**$0**	Escalated to Design Start
2) Construction Documents				
A/E Basic Design Services	$287,741			69% of A/E Basic Services
Other				
Insert Row Here				
Sub TOTAL	**$287,741**	**1.0319**	**$296,921**	Escalated to Mid-Design
3) Extra Services				
Civil Design (Above Basic Svcs)				
Geotechnical Investigation				
Commissioning				
Site Survey				
Testing				
LEED Services				
Voice/Data Consultant				
Value Engineering				
Constructability Review				
Environmental Mitigation (EIS)				
Landscape Consultant				
Other				
Insert Row Here				
Sub TOTAL	**$0**	**1.0319**	**$0**	Escalated to Mid-Design
4) Other Services				
Bid/Construction/Closeout	$129,275			31% of A/E Basic Services
HVAC Balancing				
Staffing				
Other				
Insert Row Here				
Sub TOTAL	**$129,275**	**1.0420**	**$134,705**	Escalated to Mid-Const.
5) Design Services Contingency				
Design Services Contingency	$20,851			
Other				
Insert Row Here				
Sub TOTAL	**$20,851**	**1.0420**	**$21,727**	Escalated to Mid-Const.
CONSULTANT SERVICES TOTAL	**$437,867**		**$453,353**	

Green cells must be filled in by user

Cost Estimate Details

Construction Contracts				
Item	**Base Amount**	**Escalation Factor**	**Escalated Cost**	**Notes**
1) Site Work				
G10 - Site Preparation	$190,000			
G20 - Site Improvements				
G30 - Site Mechanical Utilities				
G40 - Site Electrical Utilities				
G60 - Other Site Construction				
Other				
Insert Row Here				
Sub TOTAL	**$190,000**	**1.0359**	**$196,821**	
2) Related Project Costs				
Offsite Improvements				
City Utilities Relocation				
Parking Mitigation				
Stormwater Retention/Detention				
Other				
Insert Row Here				
Sub TOTAL	**$0**	**1.0359**	**$0**	
3) Facility Construction				
A10 - Foundations				
A20 - Basement Construction				
B10 - Superstructure				
B20 - Exterior Closure	$312,500			
B30 - Roofing				
C10 - Interior Construction				
C20 - Stairs				
C30 - Interior Finishes				
D10 - Conveying				
D20 - Plumbing Systems	$130,000			
D30 - HVAC Systems				
D40 - Fire Protection Systems				
D50 - Electrical Systems	$94,000			
F10 - Special Construction				
F20 - Selective Demolition	$2,755,000			
General Conditions	$330,000			
Other				
Insert Row Here				
Sub TOTAL	**$3,621,500**	**1.0420**	**$3,773,603**	
4) Maximum Allowable Construction Cost				
MACC Sub TOTAL	**$3,811,500**		**$3,970,424**	

5) GCCM Risk Contingency				
GCCM Risk Contingency	$292,825			
Other				
Insert Row Here				
Sub TOTAL	**$292,825**	**1.0420**	**$305,124**	
6) GCCM or Design Build Costs				
GCCM Fee	$351,390			
Bid General Conditions	$0			
GCCM Preconstruction Services	$153,733			
Other				
Insert Row Here				
Sub TOTAL	**$505,123**	**1.0420**	**$526,339**	
7) Construction Contingency				
Allowance for Change Orders	$190,575			
Other				
Insert Row Here				
Sub TOTAL	**$190,575**	**1.0420**	**$198,580**	
8) Non-Taxable Items				
Other				
Insert Row Here				
Sub TOTAL	**$0**	**1.0420**	**$0**	
Sales Tax				
Sub TOTAL	**$374,402**		**$390,037**	
CONSTRUCTION CONTRACTS TOTAL	**$5,174,425**		**$5,390,504**	

Green cells must be filled in by user

Cost Estimate Details

Equipment					
Item	**Base Amount**		**Escalation Factor**	**Escalated Cost**	**Notes**
E10 - Equipment					
E20 - Furnishings					
F10 - Special Construction					
Other					
Insert Row Here					
Sub TOTAL	**$0**		**1.0420**	**$0**	
1) Non Taxable Items					
Other					
Insert Row Here					
Sub TOTAL	**$0**		**1.0420**	**$0**	
Sales Tax					
Sub TOTAL	**$0**			**$0**	
EQUIPMENT TOTAL	**$0**			**$0**	

Green cells must be filled in by user

Cost Estimate Details

Artwork					
Item	**Base Amount**		**Escalation Factor**	**Escalated Cost**	**Notes**
Project Artwork	$0				0.5% of total project cost for new construction
Higher Ed Artwork	$39,802				0.5% of total project cost for new and renewal construction
Other					
Insert Row Here					
ARTWORK TOTAL	**$39,802**		**NA**	**$39,802**	

Green cells must be filled in by user

Cost Estimate Details

Project Management				
Item	**Base Amount**	**Escalation Factor**	**Escalated Cost**	**Notes**
Agency Project Management	$390,974			
Additional Services				
Other				
Insert Row Here				
PROJECT MANAGEMENT TOTAL	**$390,974**	**1.0420**	**$407,396**	

Green cells must be filled in by user

Cost Estimate Details

Other Costs					
Item	**Base Amount**		**Escalation Factor**	**Escalated Cost**	**Notes**
Mitigation Costs					
Hazardous Material Remediation/Removal	$1,650,000				
Historic and Archeological Mitigation					
Other					
Insert Row Here					
OTHER COSTS TOTAL	**$1,650,000**		**1.0359**	**$1,709,235**	

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C-100(2020)
Additional Notes

Tab A. Acquisition
Insert Row Here

Tab B. Consultant Services
Insert Row Here

Tab C. Construction Contracts
Insert Row Here

Tab D. Equipment
Insert Row Here

Tab E. Artwork
Insert Row Here

Tab F. Project Management
Insert Row Here

Tab G. Other Costs
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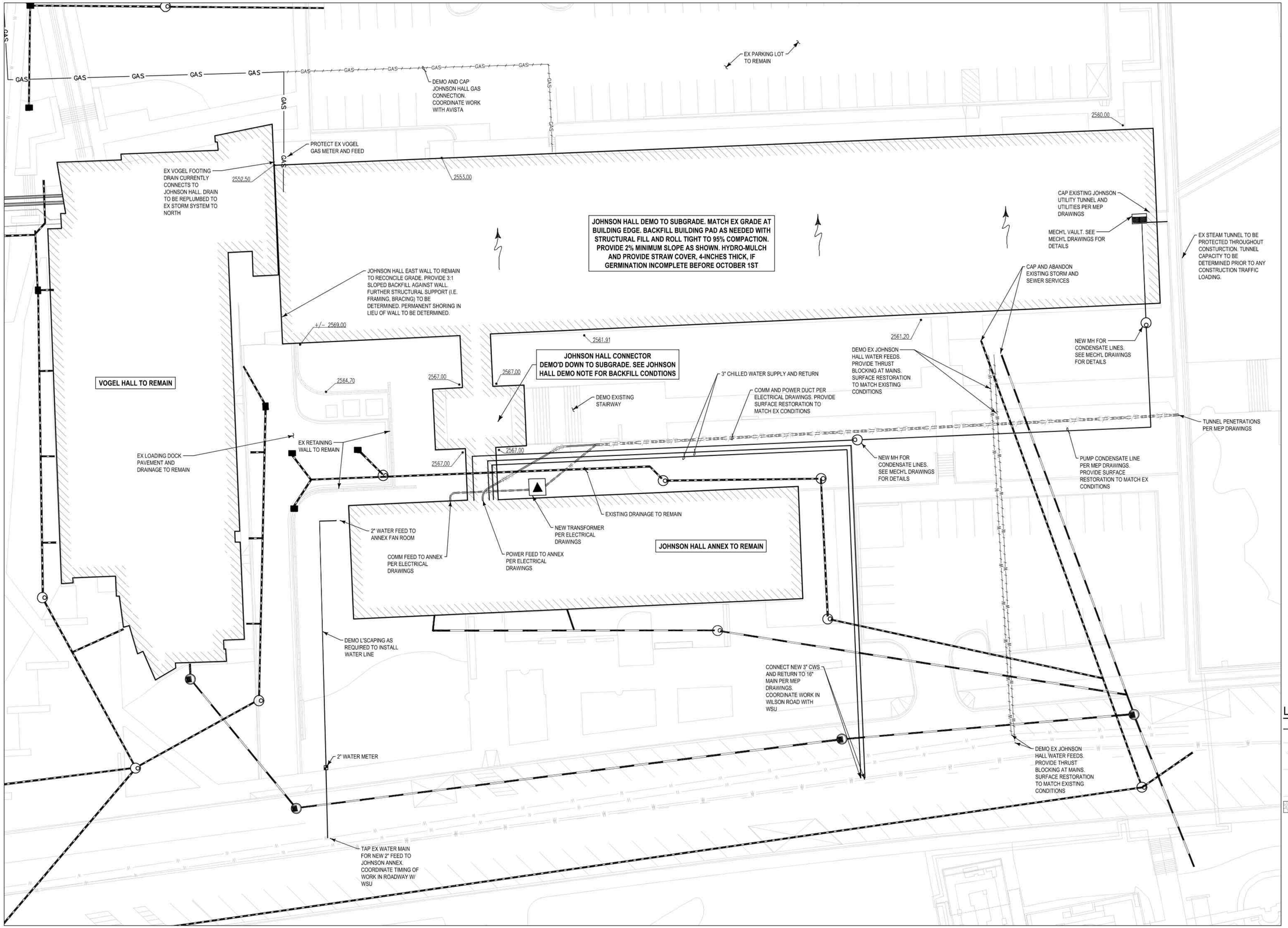
Appendix A - Engineering Study

Johnson Hall Demolition

Civil Schematic

2020-01-14



General Notes:

Trees and other landscaping to be preserved to the maximum extent feasible.

Disturbed landscaping areas to be reseeded/landscaped to match previous condition unless otherwise directed by WSU.

Utilities shown for rebuild/reconnection to the Johnson Annex are based upon information currently available.

Any downspouts or roof drainage lines from the Annex that connect to Johnson hall to be rerouted to ex storm system at nearest connection point.

Final grading of building pad to be gentle with slopes kept to a minimum. Backfill and structural solutions against Vogel Hall make this condition subject to change. Additional permanent site stabilization measures may apply.

Legend

- N 78°53'26" E – 46.81' — PROPERTY LINE
- 8" SD @ xx% — SEWER PIPE
- YD/CO/CB/CB 2/MH
- 8" SS @ xx% — STORM PIPE
- SANITARY MH/CO
- 12" DI W — WATER LINE
- BUILDING PAD RESTORATION

COUGHLIN PORTER LUNDEEN

801 SECOND AVENUE, SUITE 900
SEATTLE, WA 98104

(206) 343-0460 www.cplinc.com

JOHNSON HALL ADDITION

VOGEL HALL

SEE FLOOR PLANS NEXT PAGE.

JOHNSON HALL ANNEX

JOHNSON HALL

SITE RETAINING WALL TO REMAIN

~2550

~2558

~2564

~2567

~2553

DEMOLISH JOHNSON HALL AND CONNECTION TO JOHNSON HALL ANNEX

TWO LEVEL CONNECTION TO JOHNSON ANNEX. SEE ANNOTATED PHOTOS ATTACHED.

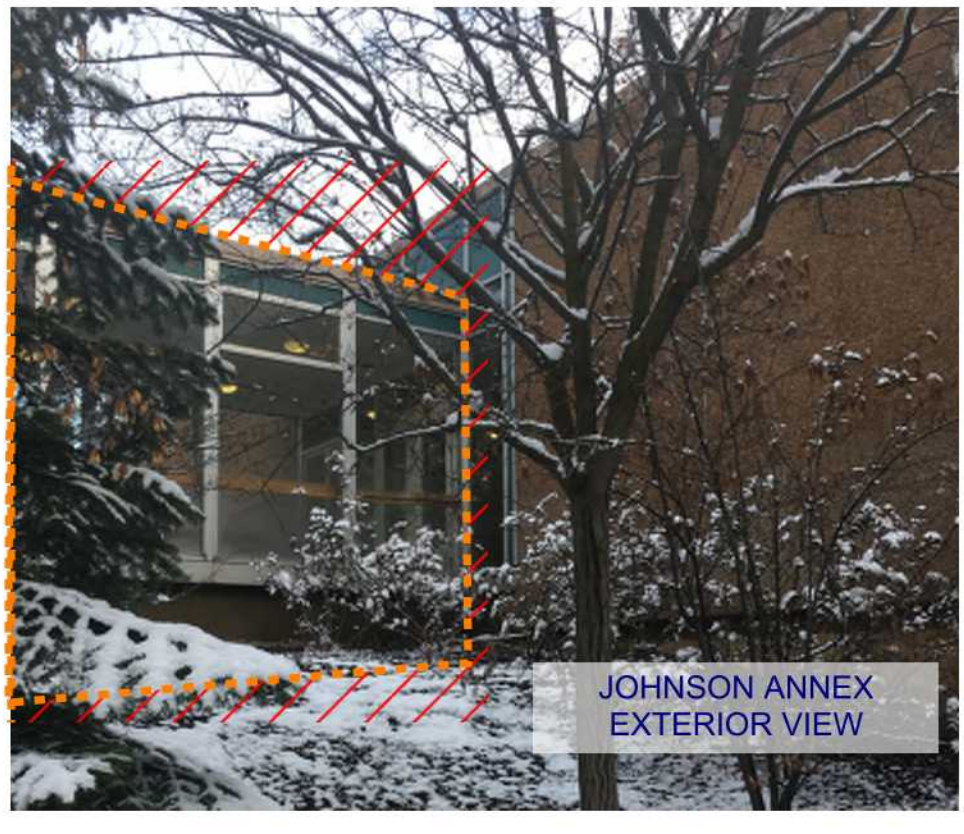
NORTH

SITE PLAN

LMN ARCHITECTS
1/16/2020

JOHNSON ANNEX
EXTERIOR VIEW

DEMOLISH GROUND LEVEL, AND LEVEL 1 OF JOHNSON ANNEX CONNECTION.



JOHNSON ANNEX
EXTERIOR VIEW

JOHNSON HALL ANNEX
CONNECTION TO JOHNSON HALL

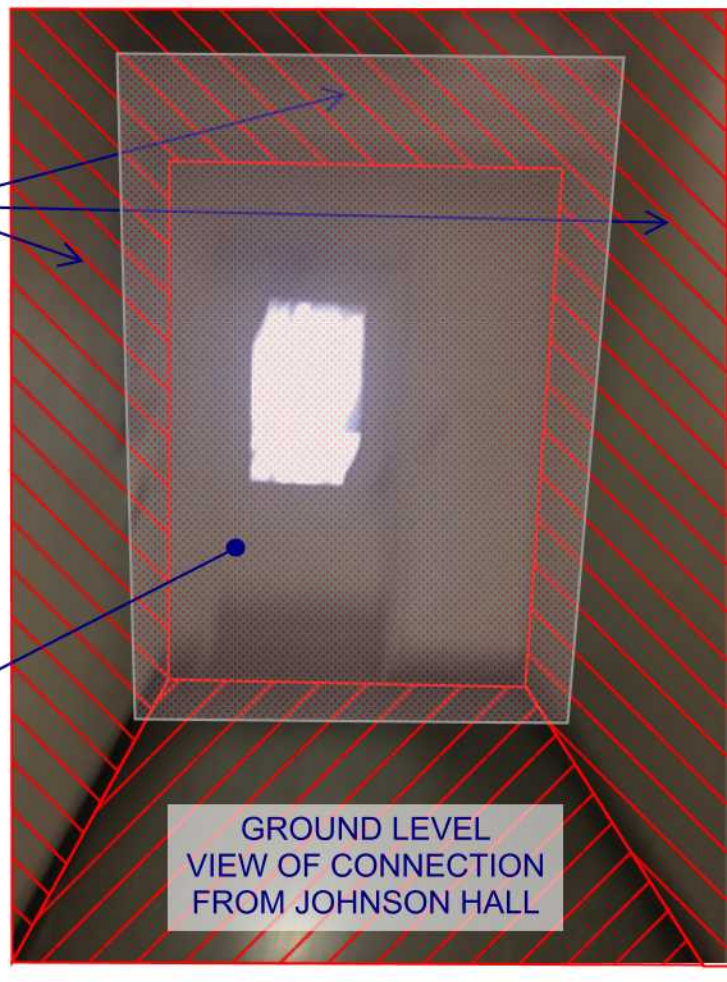
DEMOLISH JOHNSON ANNEX CONNECTION.

DEMOLISH INTERIOR GLAZING. INFILL OPENING WITH MTL STUD EXTERIOR WALL, AND METAL PANEL CLADDING.

GROUND LEVEL
VIEW OF CONNECTION
FROM JOHNSON ANNEX

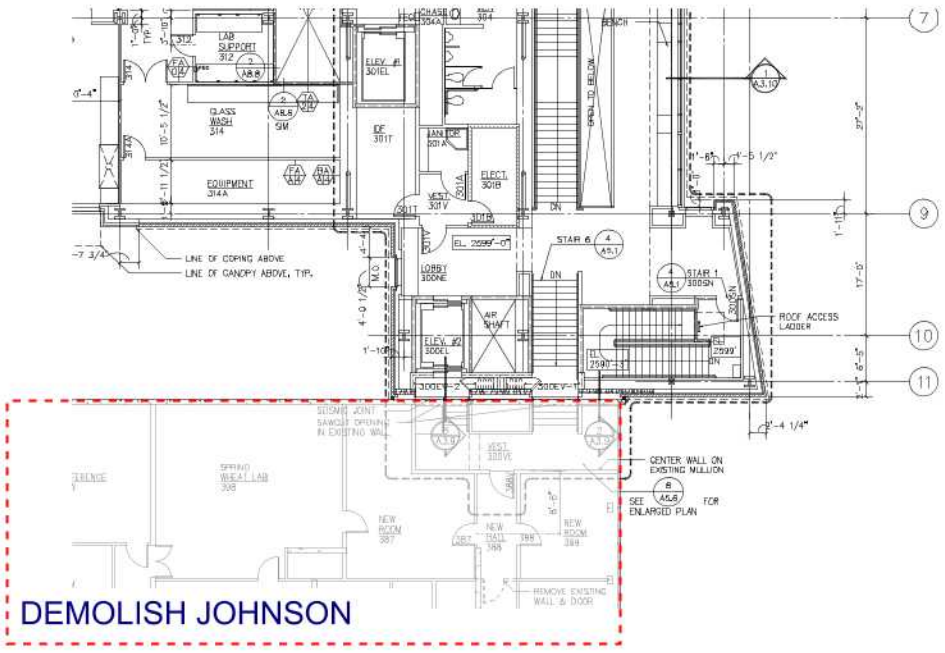
-REMOVE DOOR.
-INFILL OPENING WITH INSULATED METAL STUD WALL.

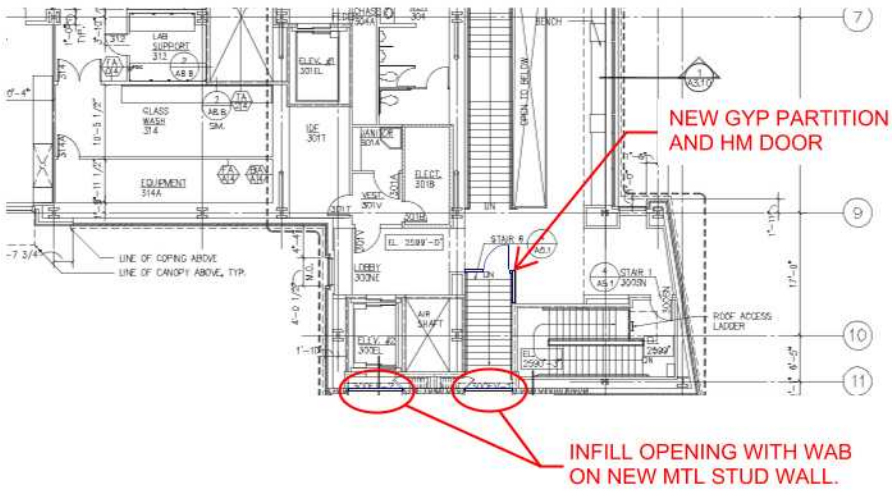
NEW CAST IN PLACE WALL. WATERPROOFING AT BELOW GRADE PORTIONS OF WALL. EXPOSED CONCRETE AT ABOVE GRADE PORITONS.



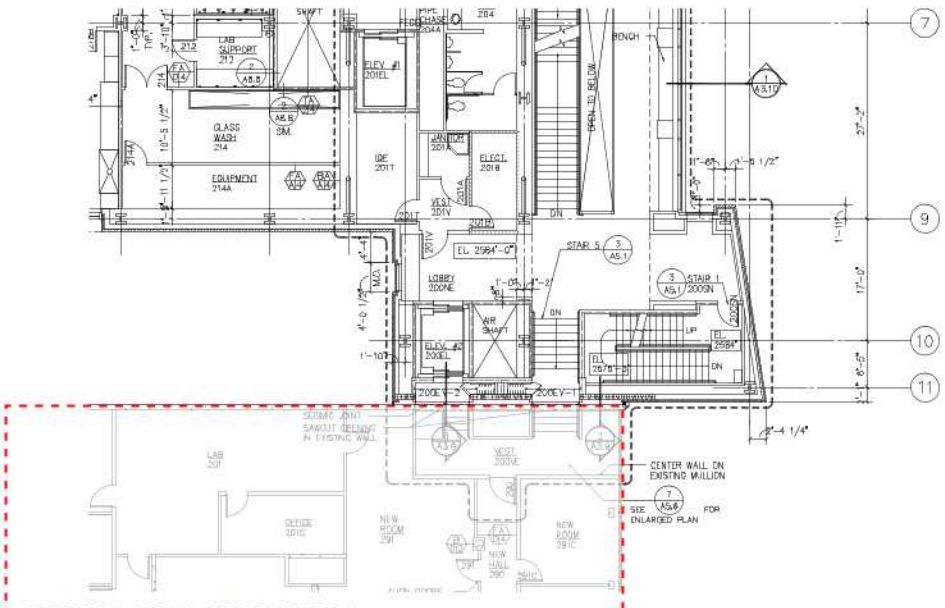
GROUND LEVEL
VIEW OF CONNECTION
FROM JOHNSON HALL

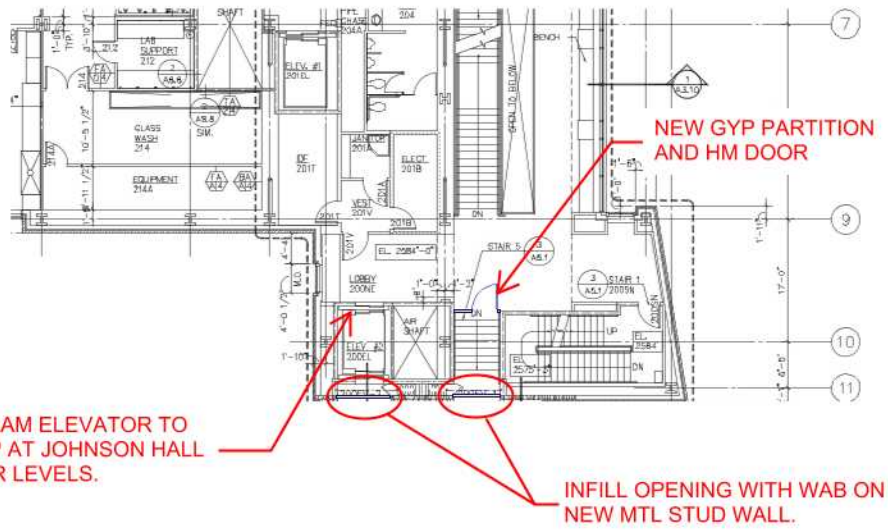
LMN ARCHITECTS
1/16/2020



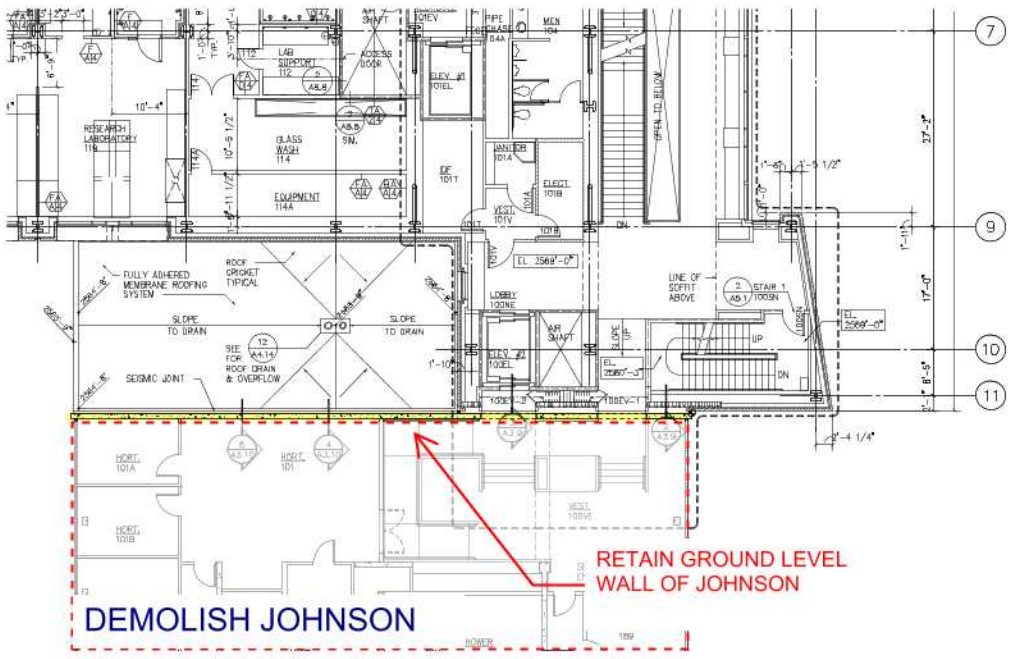


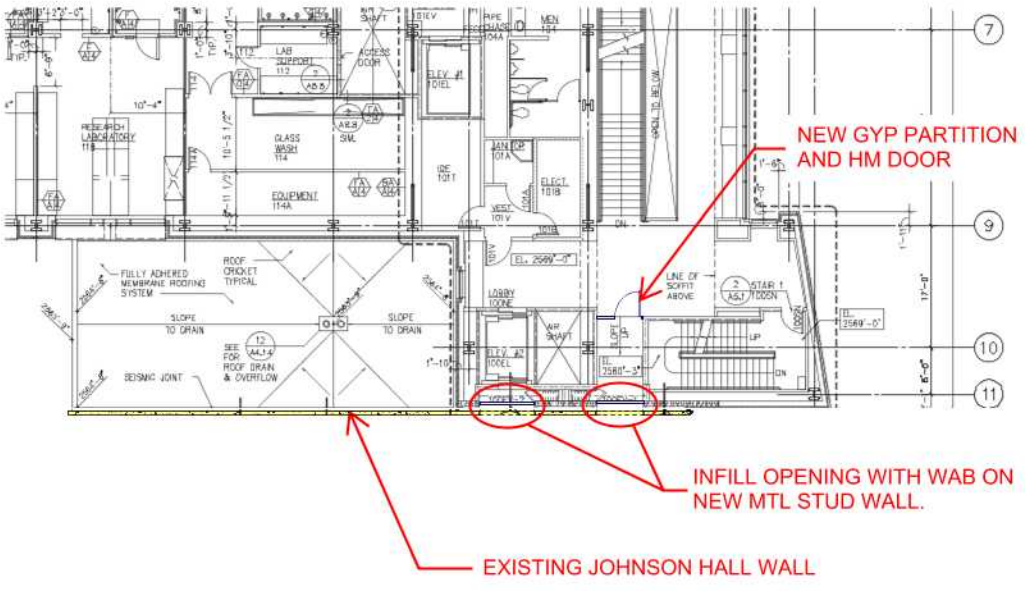
LV 3



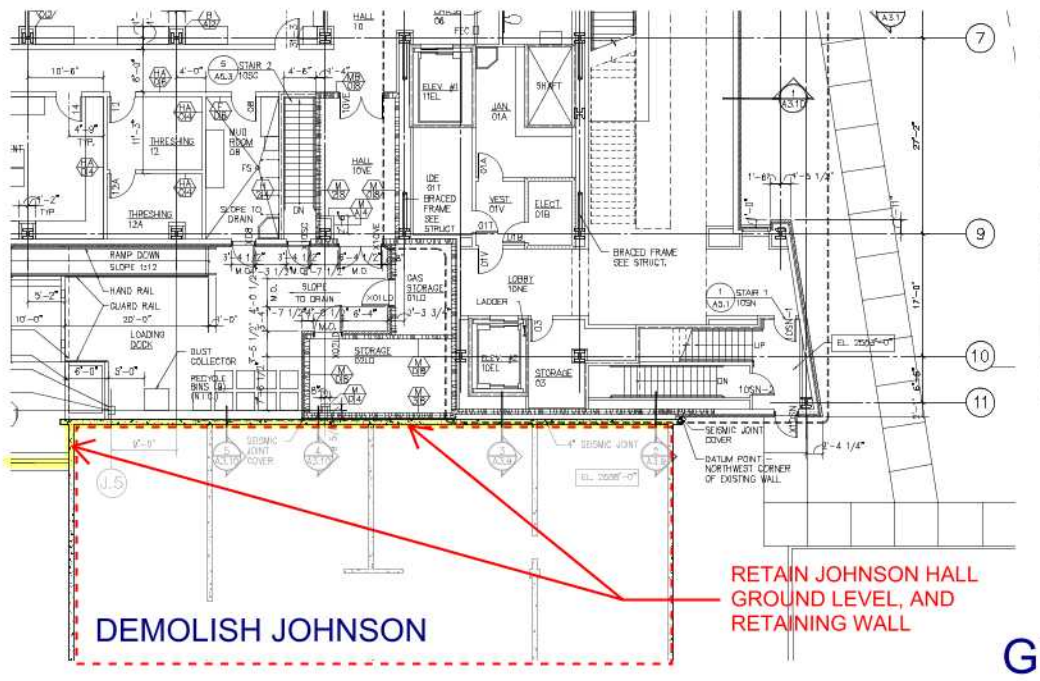


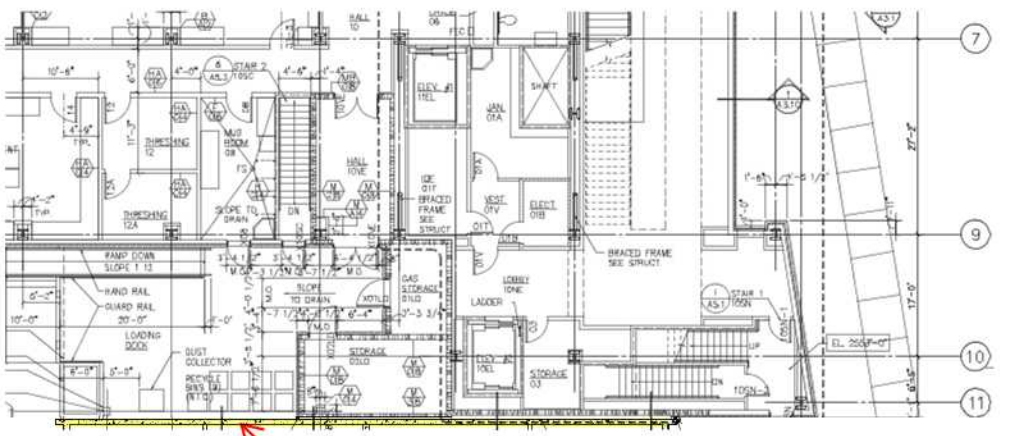
LV 2





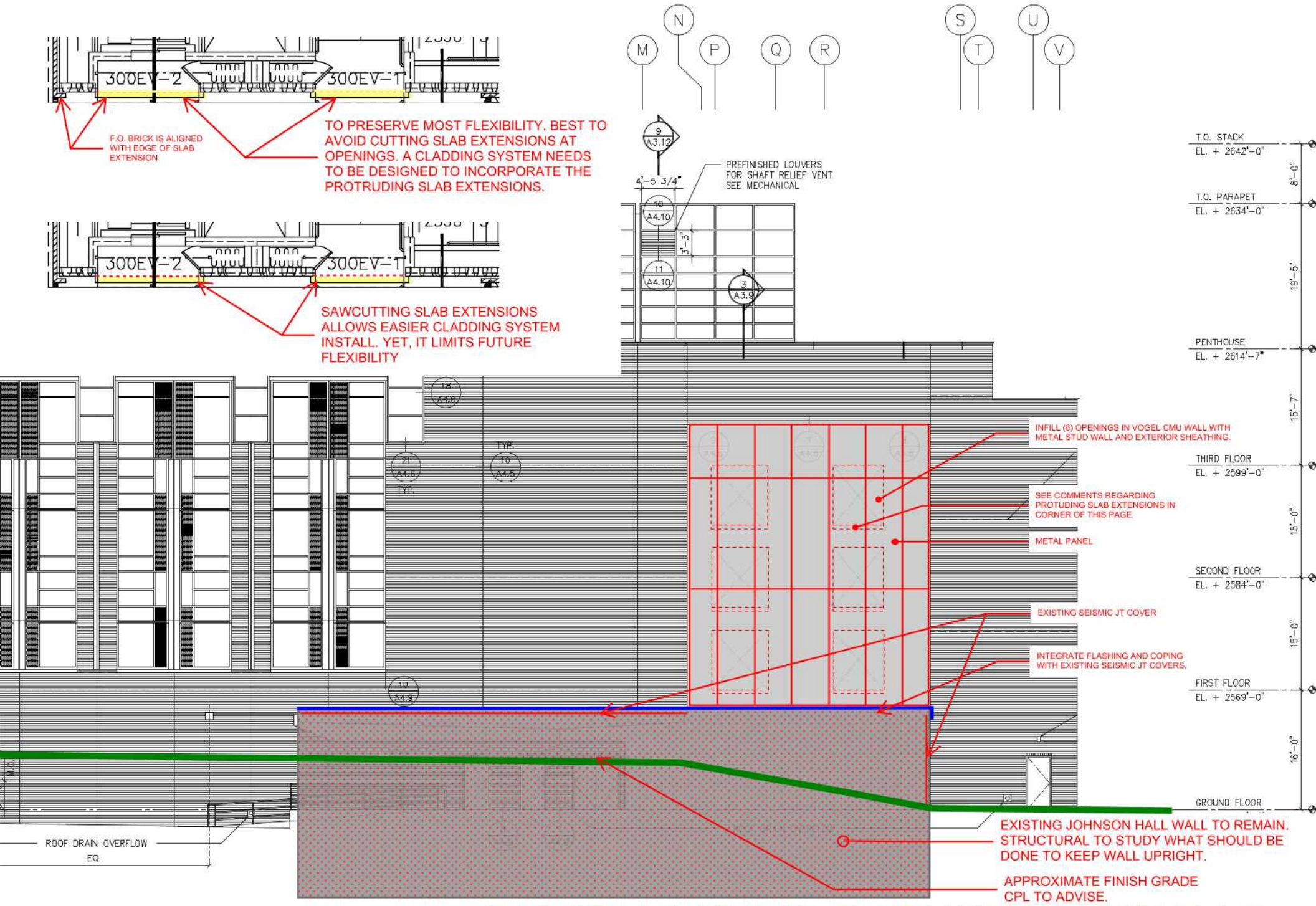
LV 1





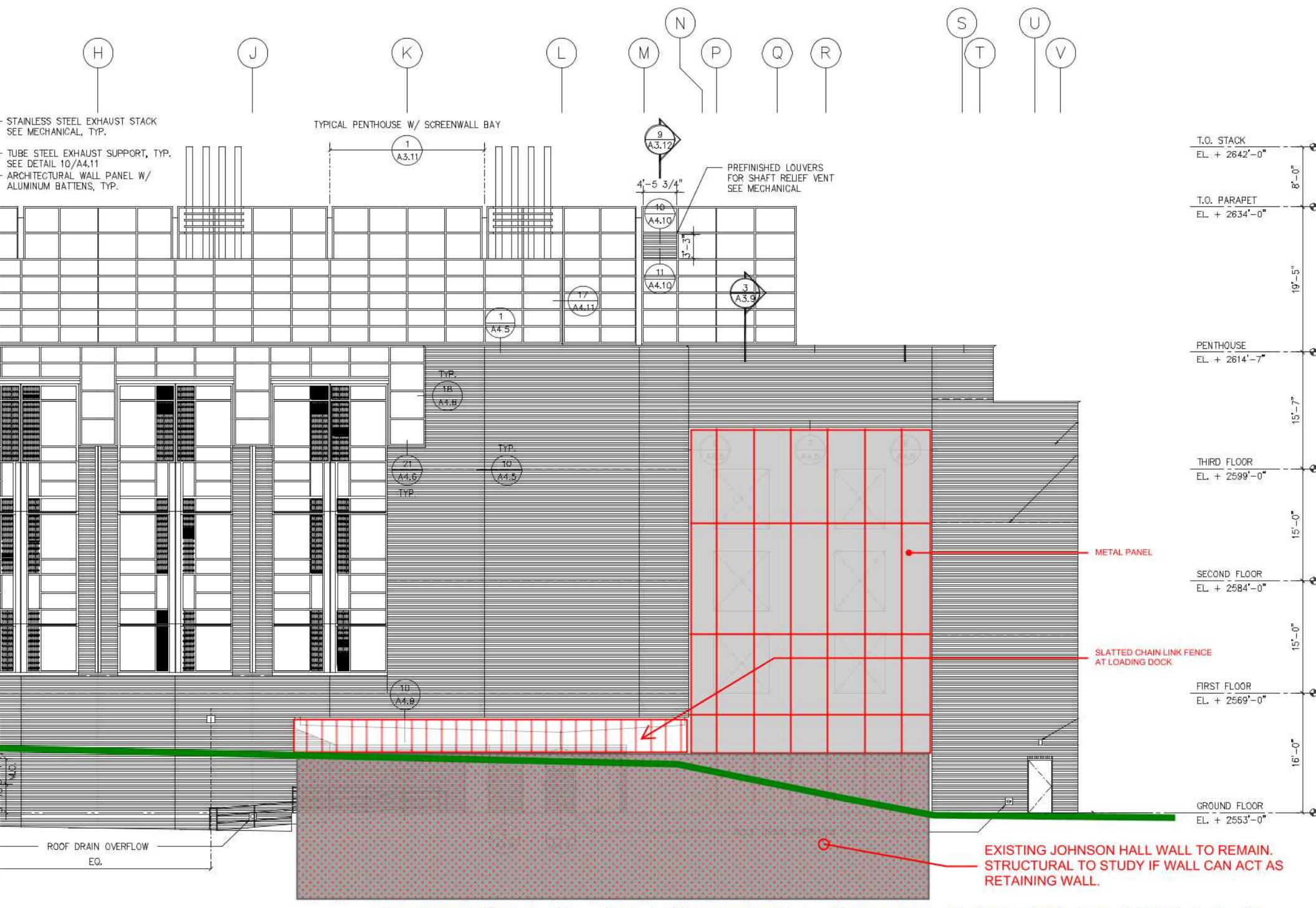
GRND LV

LMN ARCHITECTS
1/16/2020



OPTION 1-KEEP GROUND FLR WALLS

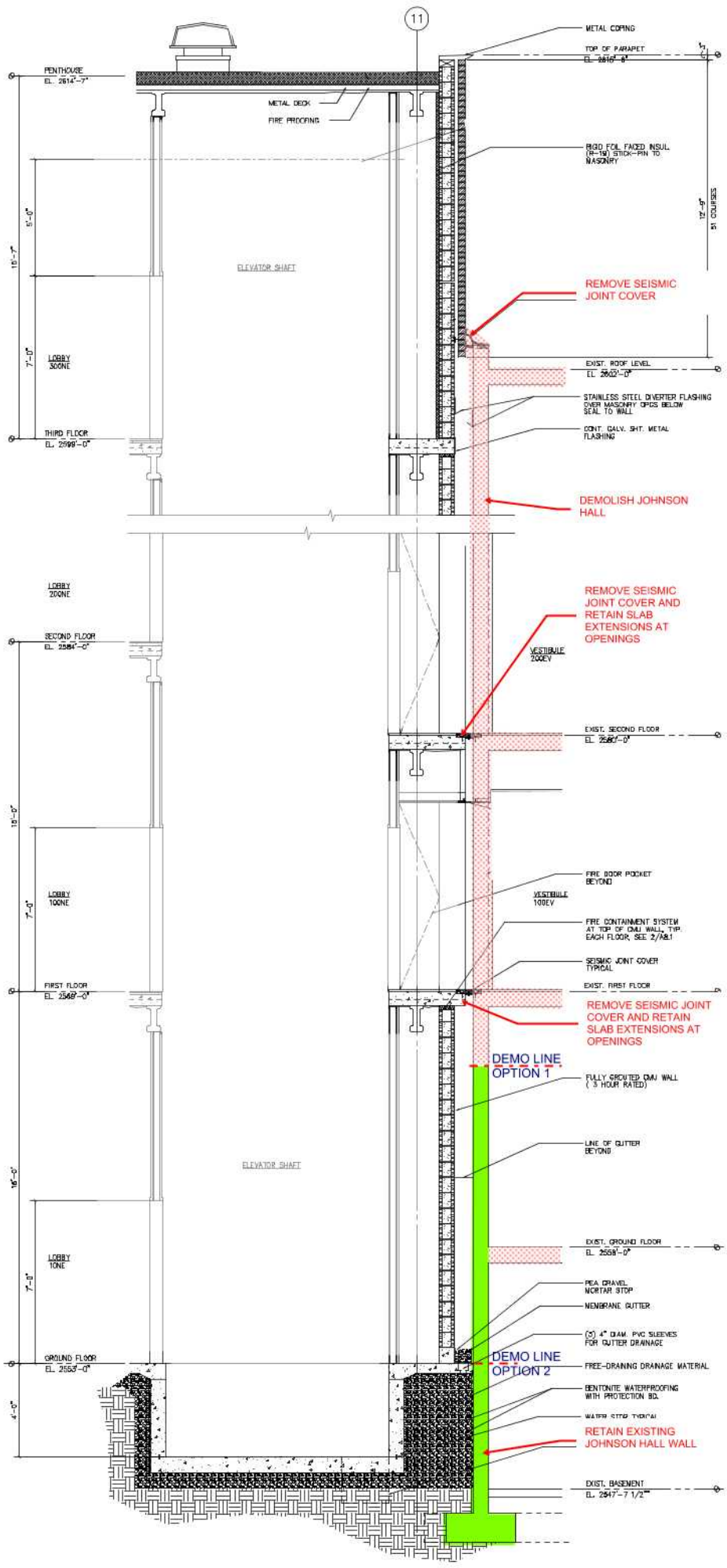
1 A3.2 EAST ELEVATION
SCALE: 1/8" = 1'-0"

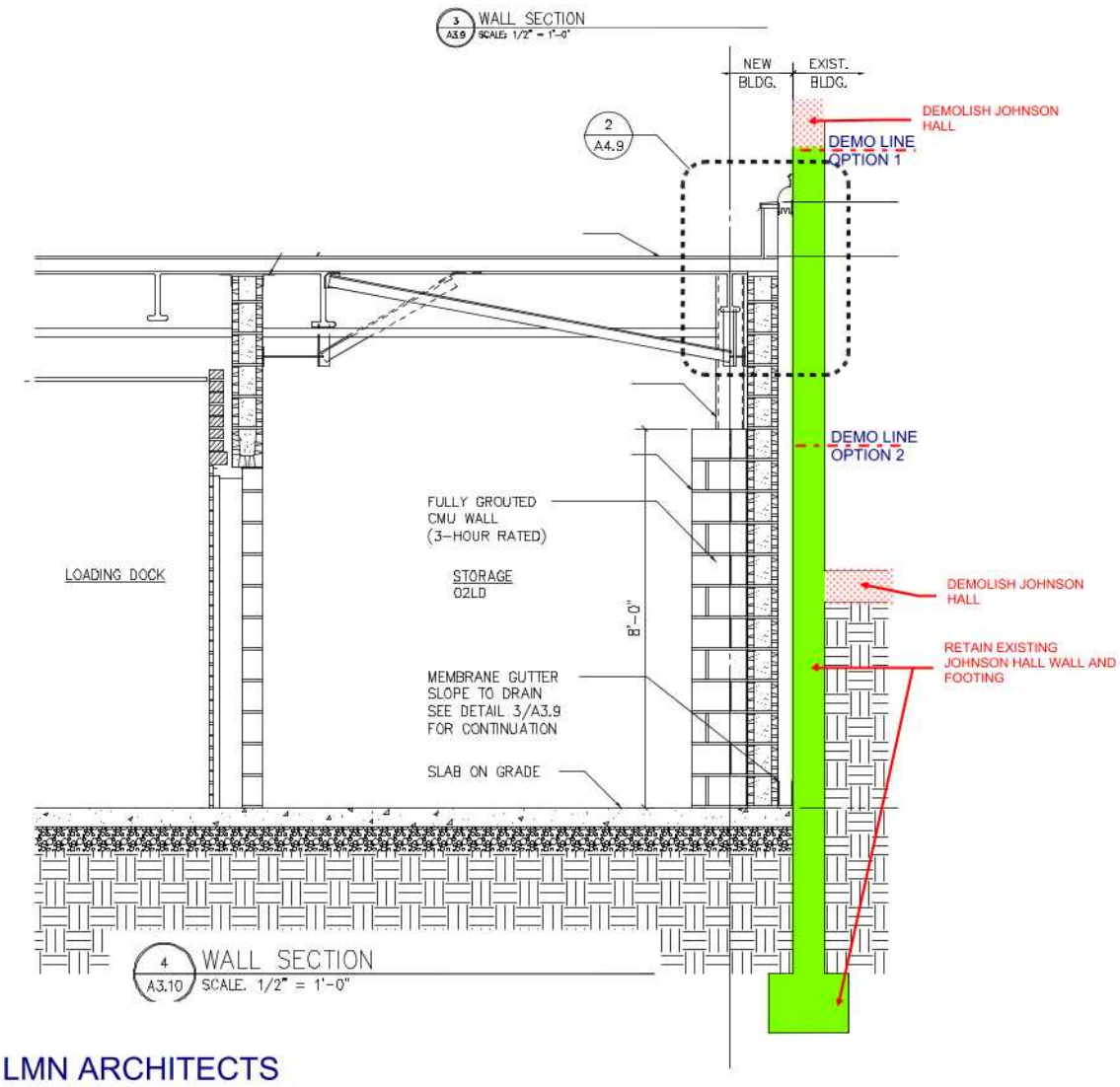


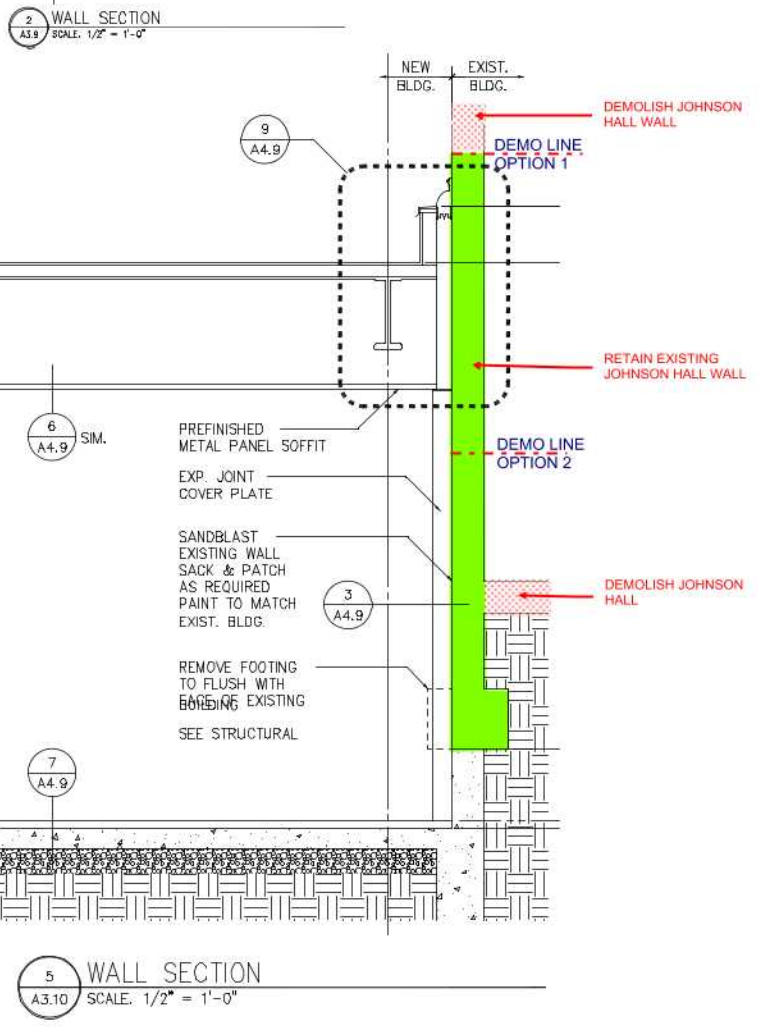
OPTION 2- SHORTEN GROUND FLR WALLS

1 EAST ELEVATION

LMN ARCHITECTS
1/16/2020

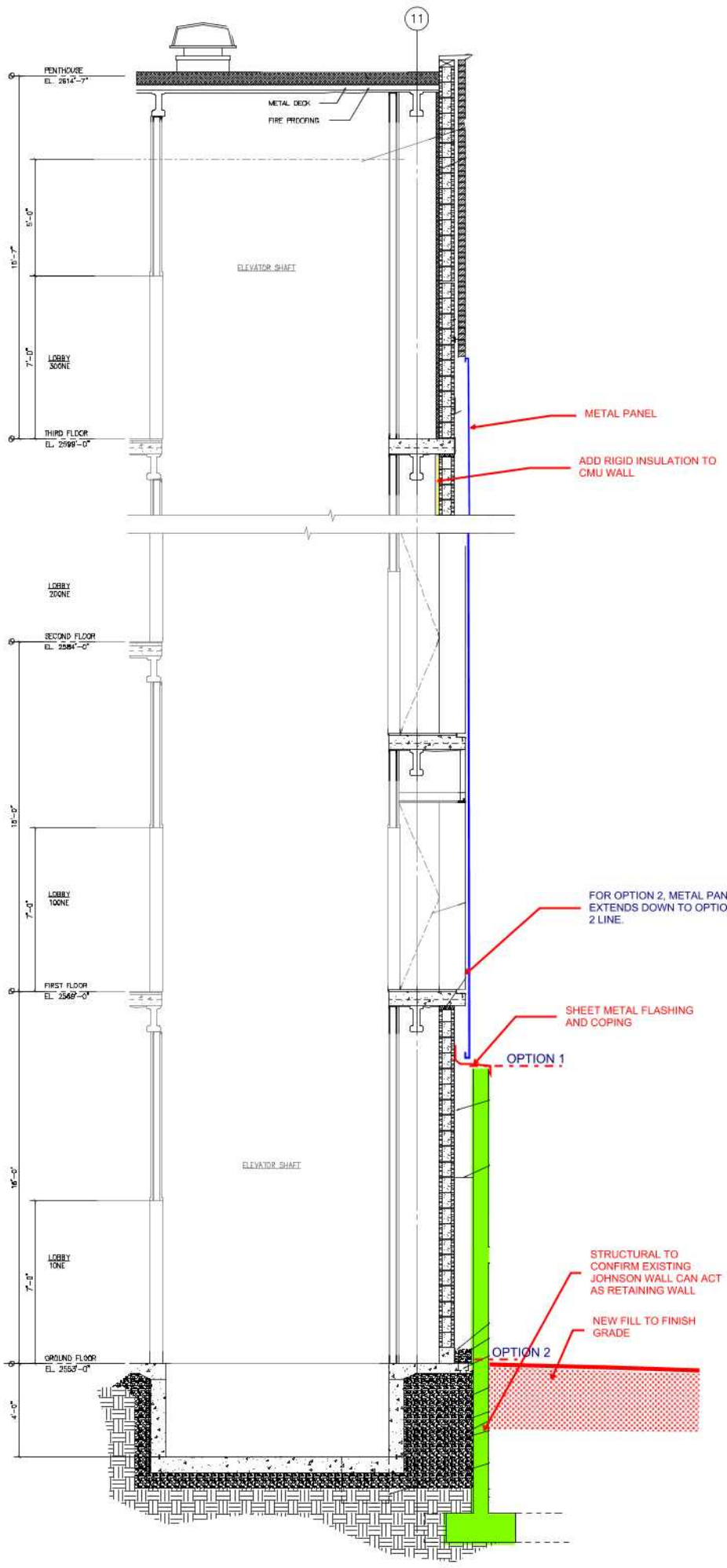


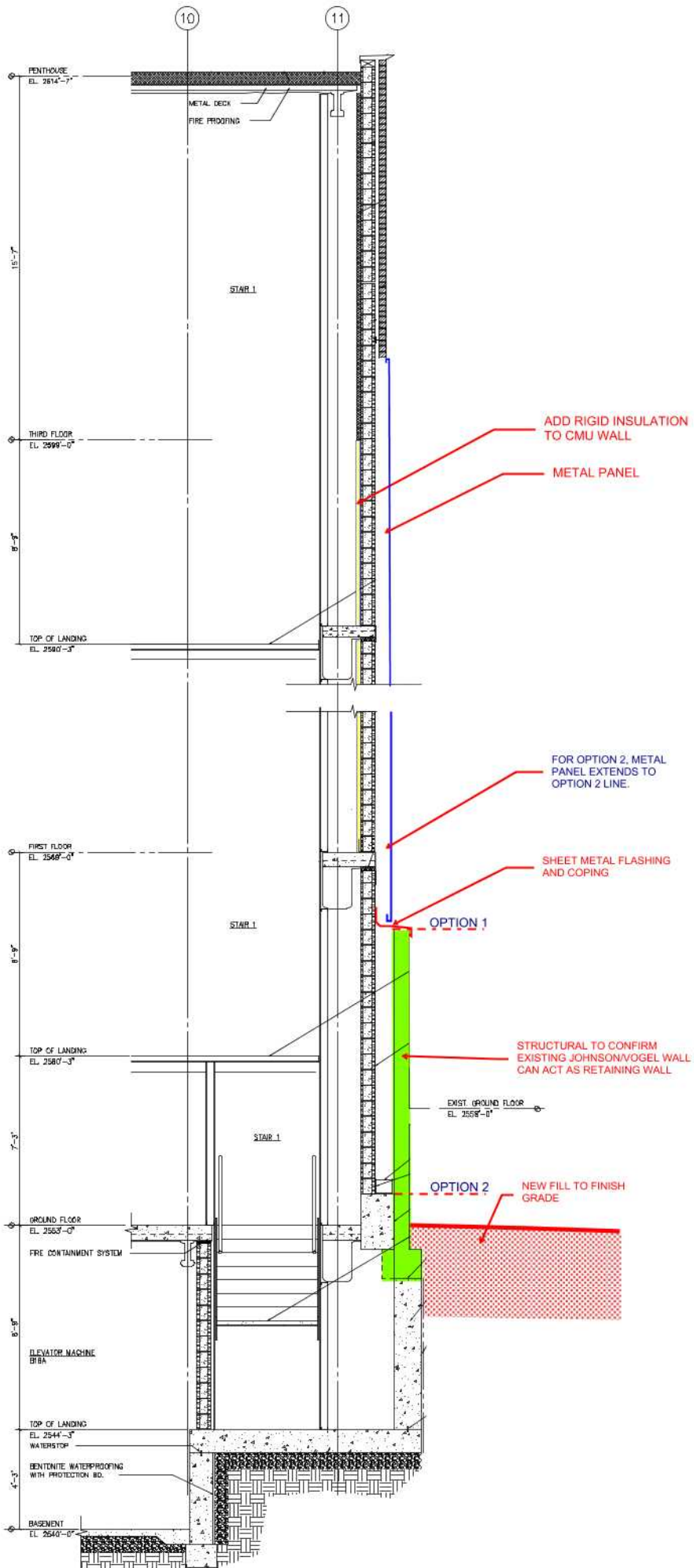


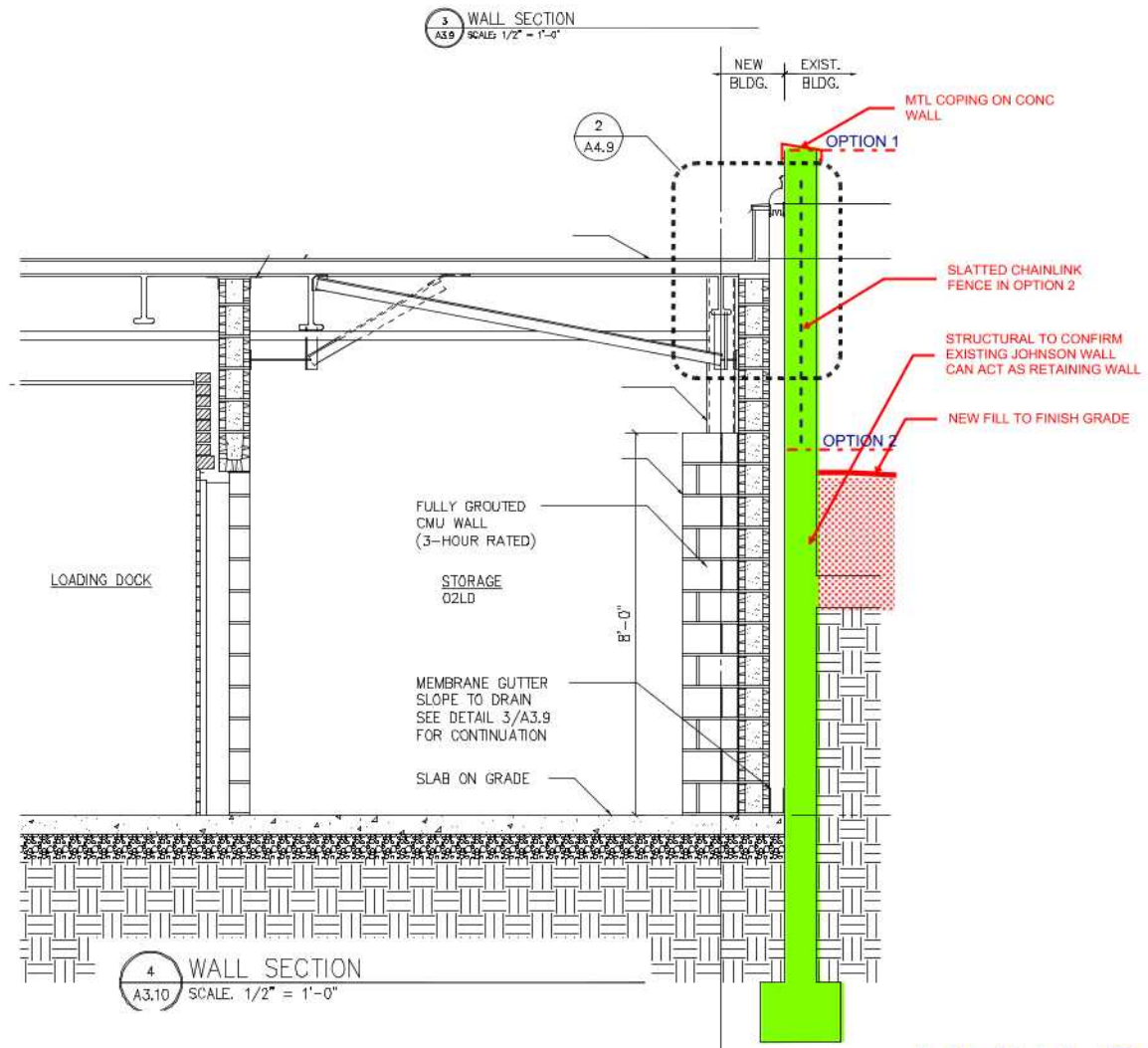


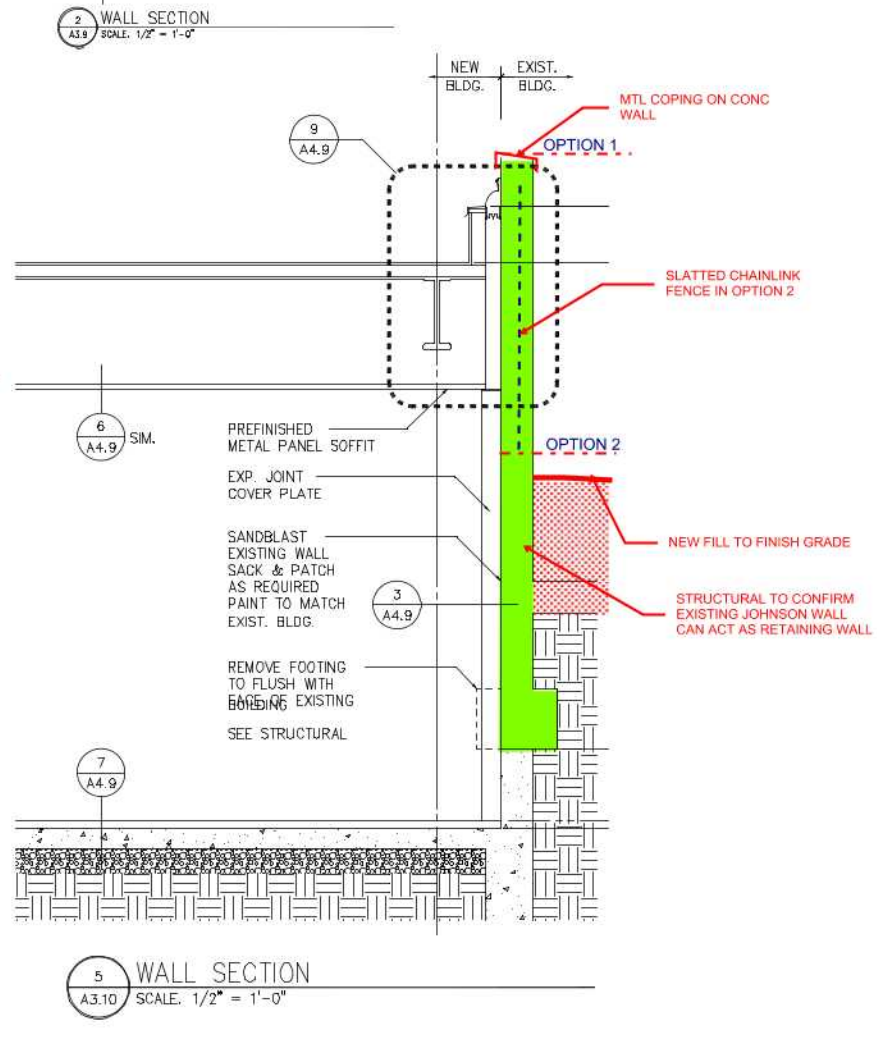
LMN ARCHITECTS
1/16/2020

DEMOLITION SECTIONS



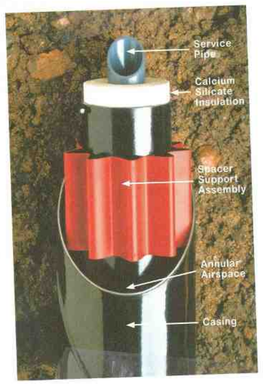






LMN ARCHITECTS
1/16/2020

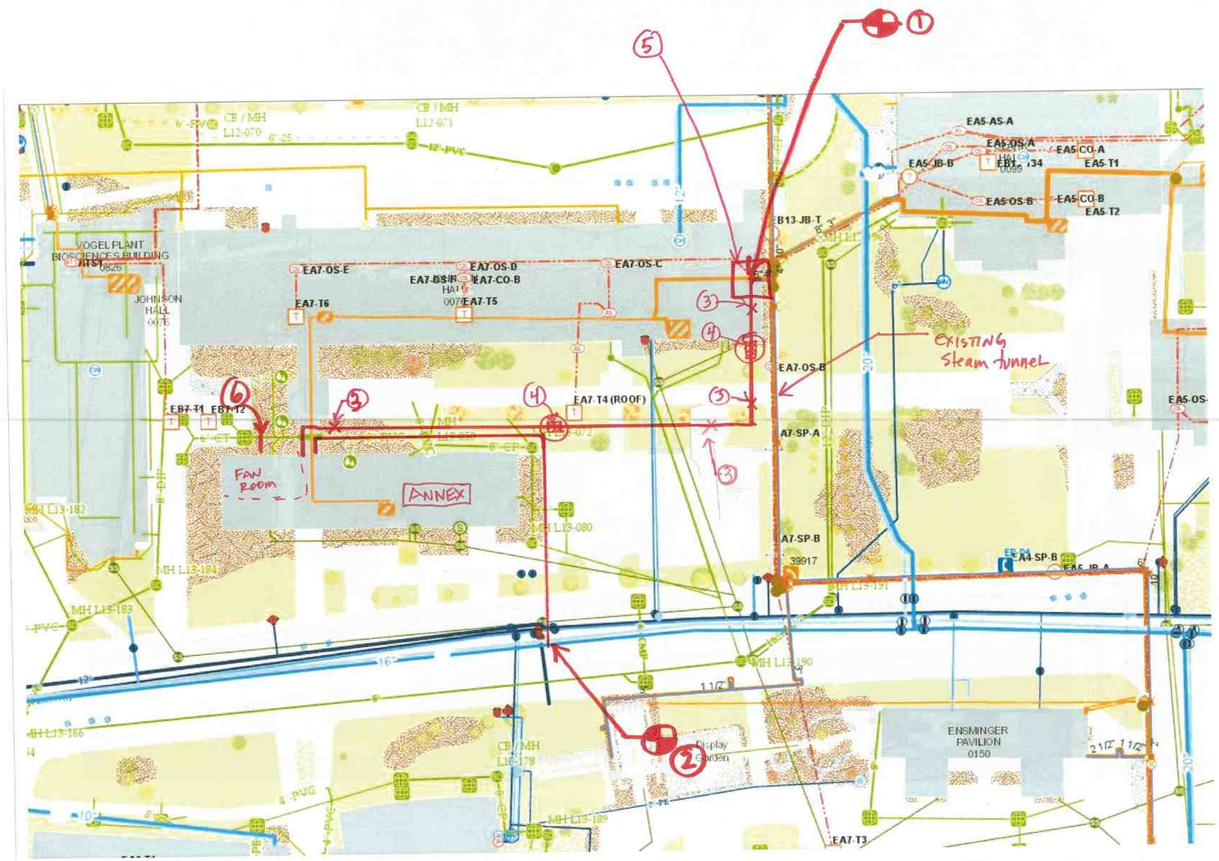
NEW CONSTRUCTION SECTIONS



Steam/Condensate pipe

Keynotes:

1. Create vault at tunnel intersection. Existing feeds to Johnson Hall are 6" HPS, 4" high pressure steam and 2 ½" pumped condensate.
   a. Provide a T and isolation valve in the pumped condensate line for a 1 ½" feed PC to the Annex. Sleeve new direct buried pumped condensate conduit through the vault wall with link seal around pipe for water seal.
   b. Provide a 2 ½" isolation valve in the pumped condensate for future extension.
   c. Provide a tee and isolation valve in the 6" high pressure steam line for a 2" HPS feed to the Annex. Sleeve new high pressure direct buried steam conduit through the vault wall with link seal around pipe for water seal.
   d. Provide a 6" HPS and 4" HPS isolation valve in the HPS lines for future extension.
   e. Provide high pressure drip at 6" and 4" HPS steam lines and pipe back to tunnel PC with a sparge tub connection where the high pressure drip connects to the existing pumped condensate.
   f. Provide ½" warm up throttling valve and bypass around the 2" Annex isolation valve for the new 2" hps warm up.
2. Connect new 3" chilled water supply and return to existing 16" mains located in Wilson road. Provide Valve/valve boxes for building isolation near mains.
3. Anchor in HPS and PC pipe. Install anchors in concrete blocks. Anchor blocks to be physically separated from chilled water lines by several feet.
4. Expansion joint located in manhole. Provide full size drip leg in high pressure steam line high pressure condensate trap and pipe condensate into the steam line with a sparge tube.
5. Vault formed at intersection of east tunnel and east end of Johnson Hall.
6. 2" water service



Scale 1" = 50' +/-

KEY
1. Domestic water, blue/dark blue
2. Chilled water, blue/light blue
3. Sanitary sewer, dark green
4. Storm drain, light green
5. Power, red
6. Comm., gold
7. Steam, gray

General Notes:

1. Johnson Hall and the connector to Johnson Hall annex will be demolished.
2. Johnson Hall mechanical services (steam, condensate, chilled water, domestic water) are fed to the annex through a tunnel.
3. After demolition, the annex needs to function for 5 years. Solutions for services to the annex do not need to be designed to the 30-50 year criteria commonly provided for campus buildings but the building does need to be functional for 5 years.
4. Vogel, which shares a wall with Johnson Hall, does not share services with Johnson Hall except for chilled water. See Johnson Hall notes below.
5. The size and extent of the addition to Vogel Hall is unknown but WSU did not believe it would occupy the entire footprint of Johnson Hall.
6. Provide Link seal at all penetrations of vaults, manholes, tunnels, foundation walls.

Johnson Hall Notes

1. The chiller plant at the top of Johnson is primarily used for winter cooling on campus. This plant will be removed in the project demolition and WSU presently has no plans to salvage any of the equipment. This scope does not include rebuild of plant as WSU will be examining other options elsewhere on campus to meet their winter cooling demand. Johnson Hall has 12" underground feeds from the north near the east end of Johnson Hall and 8" feeds from the west from Vogel
   a. Cap 8" feeds from Vogel in Vogel at the top floor and provide isolation valves in Vogel for future use and extension to future REC building expansion.
   b. Cap 12" under ground feeds immediately outside of Johnson at northeast feed.
2. There was some interest in retaining the east/west basement tunnel in Johnson. Due to need to elevation difference between basement and grade, is was discussed that retaining the tunnel would not allow for a flat/clean site and may be an obstacle for future work on the site. It is recommended that perhaps 10-15 feet of the tunnel remain at the east end as a vault for future extension of tunnels to the future Johnson Hall replacement Building.

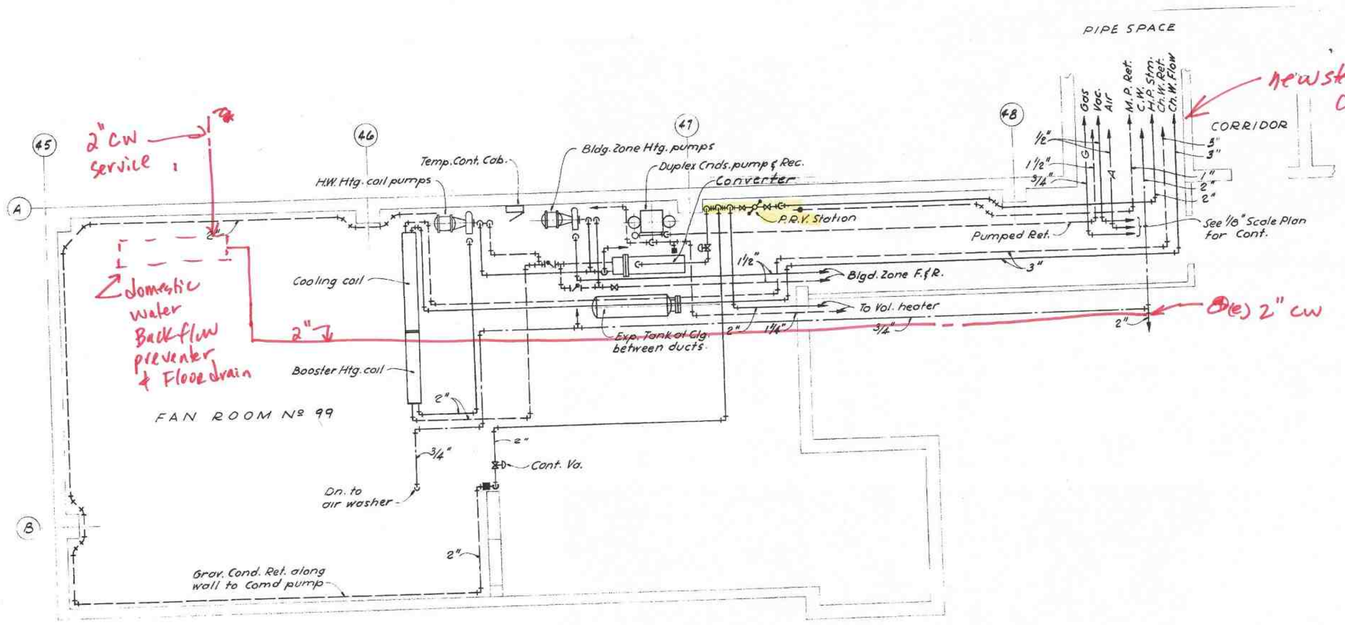
Annex Notes

1. Utilities for the annex are fed from Johnson Hall (water, steam, condensate, chilled water)
2. The annex has its own independent fan systems so air distribution within the annex is unaffected by the demolition of Johnson Hall.
3. Utilities that can be abandoned (and are not required in the Annex): Vacuum, Lab Compressed air, Lab Gas.
4. The annex does not have fire sprinkling.
5. Utilities from Johnson that need to be reestablished for the Annex
   a. Compressed air.
      i. Compressed is used for pneumatic controls in the annex and needs to be retained. The east penthouse has a control air compressor, but it cannot be determined if this feeds all of the control air in the building.
      ii. Based upon compressed air pipe routing from Johnson Hall, a small control air compressor with dryer and blowdown should be anticipated for the basement mechanical room in the annex as this is likely fed from Johnson Hall.
   b. Chilled water
      i. The building requires 3" supply and return water service. Ideally this would route to the northwest mechanical room.
   c. Domestic Water
      i. The building requires a 2" domestic cold-water service with double check backflow preventor assembly. Ideally this would route to the northwest corner of the annex. Backflow prevention to be located in the north or west walls of the northwest ground level mechanical room that is partially below grade on the north side of the building.
      ii. The building has an electric water heater that will be retained.
   d. Steam and condensate
      i. 2" campus steam enters the north side of the lower level annex mechanical room from an inaccessible steam crawl space. Steam is reduced in a single stage pressure reducing station (60# to 10#) and feeds steam coils in the building.
      ii. Gravity condensate is piped to a condensate receiver and 1 ½" condensate is pumped from the receiver to the campus condensate return system. Receiver and pump to be retained. The building does not have a flash tank.
      iii. Budget:
         1. Remove existing PRV and add new steam PRV to reduce 100 psi steam to 10 psi steam.
         2. Remove existing safety relief valve and provide new (reutilize existing 2 ½" vent through roof)
         3. New Flash tank for receipt of high-pressure condensate from drip legs. Tie into safety relief valve vent.
         4. Provide new direct buried 2" campus steam service and 1 ½" pumped condensate from the Johnson Hall new vault to the annex connection.
      iv. Direct Buried Steam/Condensate Pipe Materials: Budget prefabricated direct buried pipe installed in conduit equal to Perm pipe ESCON A Ferro-Shield. Service pipe-schedule 80 carbon steel, welded. Dryable insulation. 10 gauge steel outer conduit with corrosion resistant coating. Internal guides for expansion/contraction.

1.9.2020

ANNEX MECH SITE PLAN

M1



PLAN OF FAN ROOM
PIPING ONLY
SCALE: 1/4" = 1'-0"

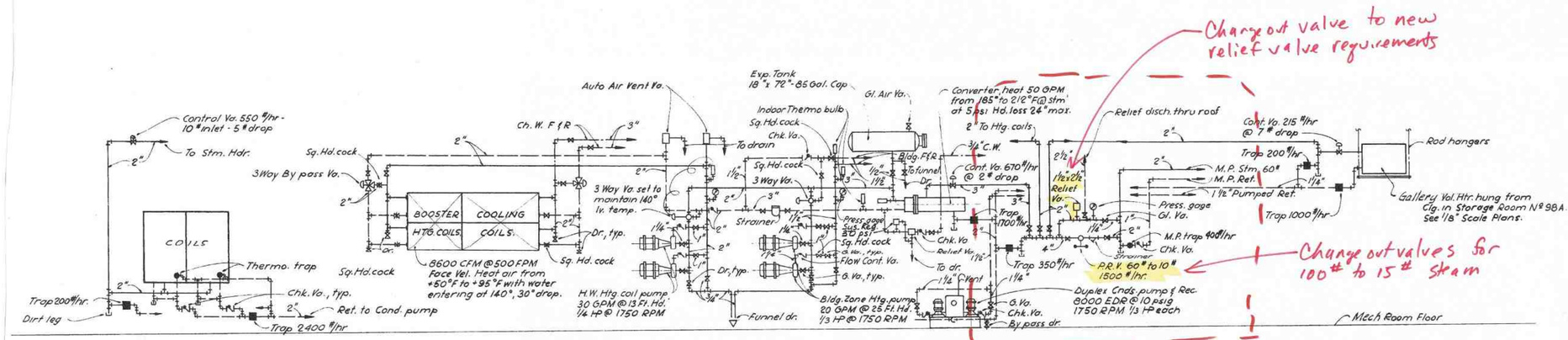


DIAGRAM OF PIPING IN FAN ROOM
SCALE : NONE

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ANNEX MECH ROOM

M2

FEEDER SCHEDULE

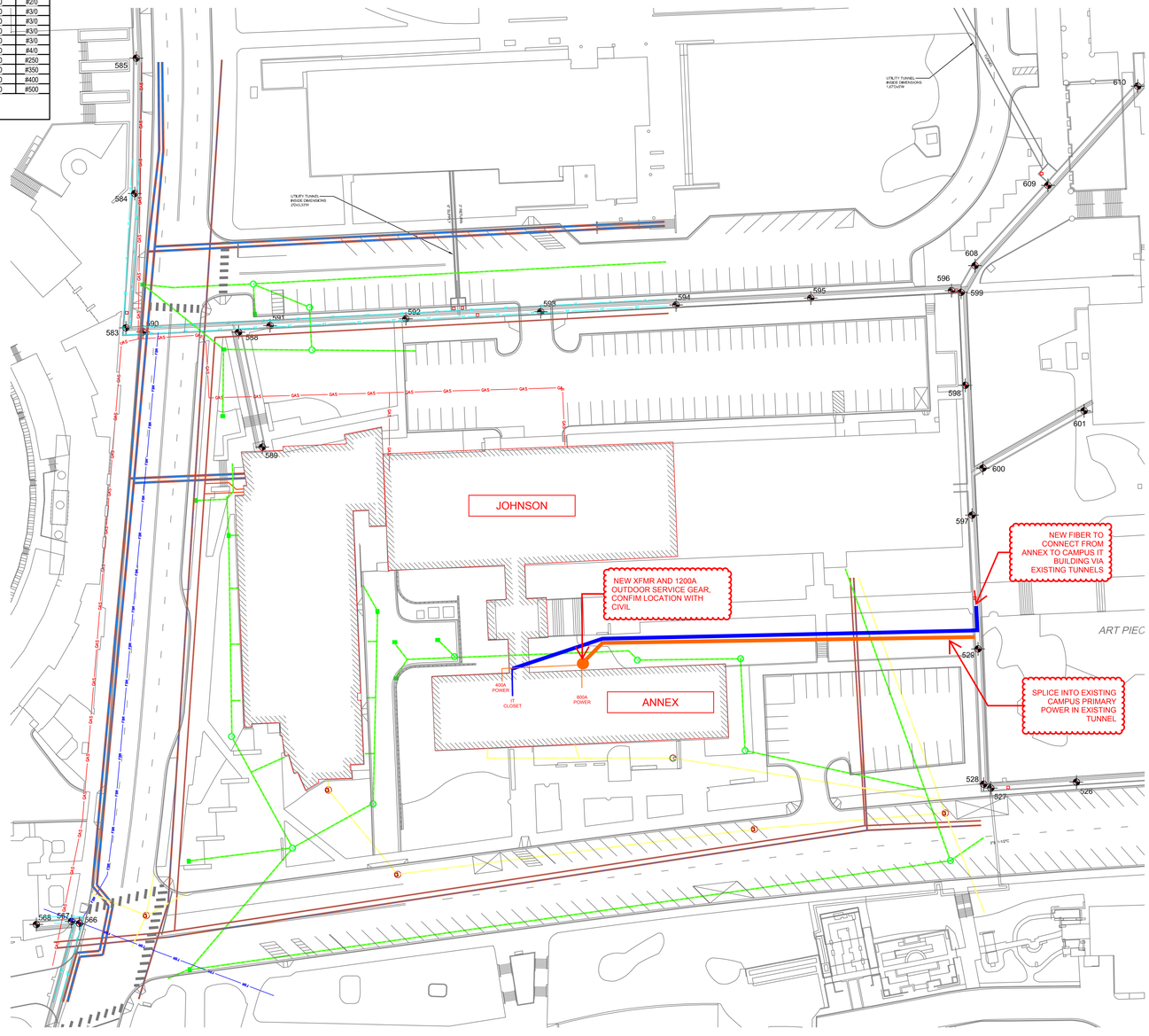
AMPACITY (AMPS)	FEEDER WITH NEUTRAL					FEEDER WITH 200% NEUTRAL AND ISOLATED GROUND					FEEDER WITHOUT NEUTRAL				
	FEEDER NUMBER	NUMBER OF SETS	CONDUIT (INCHES)	CONDUCTOR	GROUND	FEEDER NUMBER	NUMBER OF SETS	CONDUIT (INCHES)	CONDUCTOR	GROUND	FEEDER NUMBER	NUMBER OF SETS	CONDUIT (INCHES)	CONDUCTOR	GROUND
20	20N	1	3/4	4#12	#12	20K	1	3/4	3#12+#8	2#12	20	1	3/4	3#12	#12
30	30N	1	3/4	4#10	#10	30K	1	1	3#8+#4	2#10	30	1	3/4	3#10	#10
40	40N	1	1	4#8	#10	40K	1	1	3#8+#3	2#10	40	1	1	3#8	#10
50	50N	1	1	4#6	#8	50K	1	1 1/4	3#6+#1	2#8	50	1	1	3#6	#8
60	60N	1	1 1/4	4#4	#8	60K	1	1 1/4	3#4+#1	2#8	60	1	1 1/4	3#4	#8
70	70N	1	1 1/4	4#4	#8	70K	1	1 1/2	3#3+#1/0	2#8	70	1	1 1/4	3#4	#8
80	80N	1	1 1/2	4#3	#8	80K	1	1 1/2	3#3+#2/0	2#8	80	1	1 1/4	3#3	#8
90	90N	1	1 1/2	4#2	#8	90K	1	1 1/2	3#2+#3/0	2#8	90	1	1 1/4	3#2	#8
100	100N	1	2	4#1	#6	100K	1	2	3#1+#3/0	2#6	100	1	1 1/2	3#1	#6
125	125N	1	2	4#1	#6	125K	1	2 1/2	5#2/0	2#4	125	1	1 1/2	3#1	#6
150	150N	1	2	4#1/0	#6	150K	1	2 1/2	5#3/0	2#4	150	1	2	3#1/0	#6
175	175N	1	2	4#2/0	#4	175K	1	2 1/2	5#4/0	2#2	175	1	2	3#2/0	#4
200	200N	1	2 1/2	4#3/0	#4	200K	1	3	5#250	2#2	200	1	2	3#3/0	#4
225	225N	1	2 1/2	4#4/0	#2	225K	1	3	5#300	2#2	225	1	2 1/2	3#4/0	#2
250	250N	1	3	4#250	#2	250K	1	4	5#400	2#1/0	250	1	3	3#250	#2
300	300N	1	4	4#350	#2	300K	1	4	5#500	2#1/0	300	1	3	3#350	#2
350	350N	1	4	4#500	#1/0	350K	2	2 1/2	5#4/0	2#2/0	350	1	4	3#500	#1/0
		1	4	4#600	#1/0	400K	2	3	5#250	2#2/0	400	1	4	3#600	#1/0
450	450N	2	2 1/2	4#4/0	#2/0	450K	2	3	5#300	2#2/0	450	2	2 1/2	3#4/0	#2/0
500	500N	2	3	4#250	#2/0	500K	2	4	5#400	2#2/0	500	2	3	3#250	#2/0
		2	4	4#350	#2/0	600K	2	4	5#500	2#3/0	600	2	3	3#350	#2/0
700	700N	2	4	4#500	#3/0	700K	4	2 1/2	5#4/0	2#3/0	700	2	4	3#500	#3/0
800	800N	2	4	4#600	#3/0	800K	4	3	5#250	2#3/0	800	2	4	3#600	#3/0
1000	1000N	3	4	4#400	#3/0	1000K	4	4	5#400	2#3/0	1000	3	3	3#400	#3/0
		4	4	4#350	#3/0	1200K	4	4	5#500	2#3/0	1200	4	3	3#350	#3/0
1600	1600N	4	4	4#600	#4/0	1600K	8	3	5#250	2#4/0	1600	4	4	3#600	#4/0
2000	2000N	5	4	4#500	#250	2000K	8	4	5#400	2#250	2000	5	4	3#500	#250
2500	2500N	6	4	4#600	#350	2500K	10	4	5#400	2#350	2500	6	4	3#600	#350
3000	3000N	8	4	4#500	#400	3000K	10	4	5#500	2#400	3000	8	4	3#500	#400
4000	4000N	10	4	4#600	#500	4000K	16	4	5#400	2#500	4000	10	4	3#600	#500

NOTES:

1. CONDUIT SIZES ARE BASED ON THWN INSULATION FOR ALL CONDUCTORS AND RGS CONDUIT.

LEGEND

- NEW BURIED POWER, (1)4"C W/ MV CABLE
- NEW BURIED COMM, (1)4"C W/ FIBER
- NEW BURIED/SURFACE POWER CONDUIT W/ CABLING, AMPERAGE SIZE AS NOTED
- NEW BURIED/SURFACE COMM CONDUIT, (1)4"C W/ FIBER



Johnson Hall Demo Cost Scoping Study - Electrical

General Notes:

1.The electrical systems for Johnson Hall & the Annex have both exceeded their useful service life. Minor improvements have been made where noted below.

2.The exact timeline for eventual demolition of the Annex is not defined, but it is anticipated the Annex will be demolished within 5 years.

Johnson Hall Notes:

1.The Electrical and Telecom services exist in the tunnel level. Electrical and Telecom campus feeds enter the Johnson hall tunnel from the East.

2.Electrical and Telecom distribution systems originate from the tunnel level and then feed vertical to upper floors. It appears feasible to maintain the electrical systems at the tunnel level if the tunnel remains and only the floors above are demolished.

3.Demo of the tunnel level West of Grid 10 is feasible with no impact to the electrical systems, since the Electrical and Telecom services are all East of Grid 10 at the tunnel level.

4.If the tunnel level remains, the building demolition shall include removal of abandoned low voltage cabling and equipment in the tunnel.

Annex Notes:

1. Utilities for the Annex are fed from Johnson Hall through the existing Tunnel/Utilidor that runs North-South along Grid 10 between the buildings. Power services include (1)400A, 208V feed to the 1958 Annex and (1)600A, 208V feed to the 1967 Annex Addition. Both services originate from Johnson Hall at the tunnel level near Grid 10.

2. A remodel of the 1967 portion of the Annex building was performed in approximately 2015. New lighting and power was provided at that time. Additionally, new fire alarm systems were installed for the entire Annex.

3. Utilities from Johnson Hall the need to be reestablished to allow Johnson Hall tunnel demo as follows:

Power (Normal)
A new electrical service would need to be provided. Assume a single 1200A, 208V service could be established to refeed the 600A and 400A distribution panels in the Annex. New service would include capacity for new Mechanical loads. A location on the site would be needed for the 208V , 500kva service transformer. The new 1200A switchboard would be located near the new transformer.

Power (Emergency)
Feeder 13 is not currently provided to the Annex for life safety loads. Assume that a new 2000W lighting inverter will be provided to backup egress and exit lighting loads with minimum 90 minutes of run time per code. Intercept existing Panel X circuits at ground level and feed from new inverter, which shall be fed from the nearest normal power panel.

Telecom
A new telecom service would need to be provided. Assume new outside plant fiber from the existing campus IT building to the existing Annex via the existing campus tunnel system. New buried pathways from the tunnel east of Johnson Hall to the NW corner of the Annex. Assume new full height cabinet in the Annex IDF to house new telecom service equipment.

Fire Alarm
A new campus fiber connection would need to be provided for monitoring. Assume fiber for fire alarm connection will be included in the new Telecom service to the building.

ANNEX ELECTRICAL SITE PLAN - SHEET E1

DATE: 01-09-2020

US Army Corps of Engineers ®
Walla Walla District
BUILDING STRONG®

PHASE I ENVIRONMENTAL SITE ASSESSMENT
WASHINGTON STATE UNIVERSITY
JOHNSON HALL
PULLMAN, WASHINGTON

July 2020
PPL-C-2020-0013

Contents

APPENDICES

ACRONYMS & ABBREVIATIONS

ASTM	American Society for Testing and Materials
BER	Business Environmental Risk
CEG	Conditionally Exempt Generators
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act of 1980
CORRACTS	Corrective Action Report
CREC	Controlled REC
CSCS	Confirmed and Suspected Contamination Sites
ECP	Environmental Condition of Property
ECR	Environmental Covenants Registry
EPA	United States Environmental Protection Agency
ERNS	Emergency Response Notification System
ESA	Environmental Site Assessment
HREC	Historical Recognized Environmental Condition
HTRW	Hazardous, Toxic, or Radioactive Waste
LQG	Large Quantity Generator
LUST	Leaking Underground Storage Tank
NFA	No Further Action
NPL	National Priority List
PCB	Polychlorinated Biphenyls (PCBs)
RCRA	Resource Conservation and Recovery Act
REC	Recognized Environmental Conditions
SQG	Small Quantity Generator
SWDF	Solid Waste Disposal Facilities
SWDS	Solid Waste Disposal Sites
TSD	Treatment, Storage, and Disposal
USACE	United States Corps of Engineers
UST	Underground Storage Tank
WDOE	Washington Department of Ecology

1.0 GENERAL SITE INFORMATION

Project Information:	Phase I Environmental Site Assessment (ESA)
Site Information:	Johnson Hall Building (0.8 acres), a 1.3-acre open lot (Site 1), and a one-acre open lot (Site 2) 1820 Northeast Wilson Road Washington State University, Pullman Campus Pullman, Washington
Site Access Contact:	Mr. Jason Baerlocher, Project Manager (509) 335-9012
Client Information:	Mr. Jason Baerlocher Washington State University Pullman, WA 509-335-9012

SIGNATURE PAGE

This report was prepared by:
Kristen M. Shacochis-Brown, P.W.S., V. P.W.D.
Army Corps of Engineers-Environmental Compliance Section
Walla Walla District
201 North Third Avenue
Walla Walla WA 99362
(509) 527-7262

Signature:_____

This report was reviewed by:
Matthew Drumheller
Army Corps of Engineers-Environmental Compliance Section
Walla Walla District
201 North Third Avenue
Walla Walla WA 99362
(509) 527-7121

"I declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in 40 CFR Part 312. I have the specific qualifications based on education, training, and experience to assess a parcel of the nature, history, and setting of the subject parcel. I have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312."

Signature:_____

1.0 EXECUTIVE SUMMARY

1.1 Subject Property Description

The subject property consists of three adjacent sites: two vacant lots (Site 1 and Site 2) and the Johnson Hall building located at the intersection of NE Stadium Way and Wilson Road within the Research and Education Complex of the Washington State University campus in Pullman, Washington (Figure 1). Site 1 is an approximately 1.3-acre vacant lot located between Vogel Hall, Johnson Hall and School of Molecular Biosciences and NE Stadium Way. Site 2 is an approximately one-acre vacant lot bordered by Hulbert Hall, Clark Hall and the Horticulture and Landscape Architecture Display building. The Johnson Hall Building sits on approximately 0.8 acres and is located at 1820 Northeast Wilson Road, Washington State University, Pullman Campus, Pullman, Washington

Access to the subject property is from Wilson Road and NE Stadium Way.

Adjacent and vicinity properties are in use as part of the college campus.

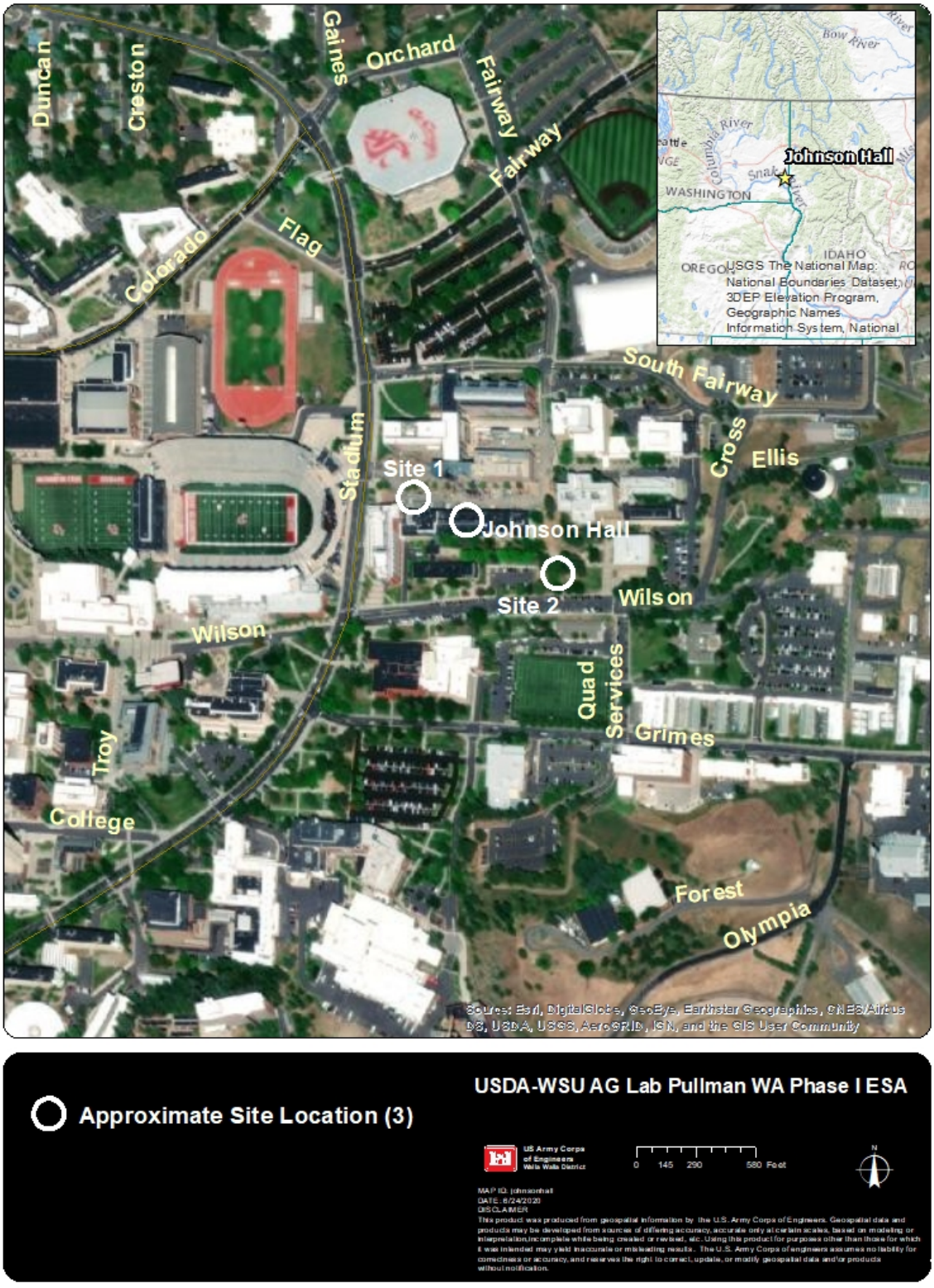


Figure 1. Location of the Subject Property. The Subject Property consists of Site 1, Site 2, and Johnson Hall.

1.2 Data Gaps

To the Army Corps of Engineers (Corps) knowledge, no data gaps have been encountered during the preparation of this ESA.

1.3 Summary of Findings

The Corps performed a Phase I Environmental Site Assessment in substantial conformance with the scope and limitations in ASTM Practice E1527-13. Any exceptions to, or deletions from, this practice are described in Section 2.2 of this report. The Corps did not identify recognized environmental conditions, as that term is defined by ASTM, in connection with the subject parcel.

1.4 Recommendations

Based on the information presented in this report, the Corps does not recommend additional investigation with respect to the potential for recognized environmental conditions in connection with the property.

- Chemicals, chemical waste and other hazardous waste should be properly handled and disposed of in an appropriate manner. A copy of the WSU handbook is found in Appendix H.
- Sink traps and drains should be inspected for possible chemical and radiation contamination.
- Asbestos and lead have been found at various locations throughout Johnson Hall. These materials should be disposed of an appropriate manner. A copy of the Good Faith report is found in Appendix H.
- PCB ballasts need to be disposed of according to the WSU handbook. A copy of the handbook is found in Appendix H.

Conclusions and opinions presented for this assessment are based solely on the information derived from the study sources and references noted in the appendices and presented within this report. If additional information becomes available that is not included in this report, such information may lead the Corps to modify the opinions and conclusions contained herein.

The Corps recommends that this Executive Summary be used solely as a broad description of the environmental conditions at the site. The entire document, including appendices, should be read completely prior to the development of independent conclusions on the environmental status of the subject parcel.

2.0 INTRODUCTION

2.1 Purpose

The purpose of the Phase I Environmental Site Assessment (ESA) was to evaluate the current and historical conditions of the subject parcel consistent with good commercial or customary practice as outlined by the ASTM Practice E1527-13. As part of these requirements, the Corps

acting as the Environmental Professional endeavors to identify "recognized environmental conditions" (REC) in connection with the subject parcel.

ER-200-2-3 states that the Phase I ESA must comply with applicable standards for performing either a Phase I or Phase II Environmental Site Assessment as defined in American Society for Testing and Materials (ASTM) Standard E 1527-13 entitled "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process," or ASTM E 1903-11, "Standard Guide for Environmental Site Assessment: Phase II Environmental Site Assessment Process" as appropriate.

A **Recognized Environmental Condition** (REC**)** is defined by ASTM E1527-13 as: the presence of or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that suggest a material threat of a future release to the environment. *De minimis* conditions are not recognized environmental conditions.

A *de minimis* condition is defined by ASTM as a condition that generally does not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. Conditions determined to be *de minimis* conditions are not recognized RECs or Controlled REC's.

A condition for the exclusion of petroleum is defined by the ASTM as: "The exclusion from [Comprehensive Environmental Response, Compensation, and Liability Act] liability provided in 42U.S.C. §9601(14), as interpreted by the courts and [Environmental Protection Agency (EPA)]: "The term (hazardous substance) does not include petroleum, including crude oil or any fraction thereof which is not otherwise specifically listed or designated as a hazardous substance under subparagraphs (A) through (F) of this paragraph, and the term does not include natural gas, natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel (or mixtures of natural gas such as synthetic gas)."

A Business Environmental Risk (BER) is identified by the ASTM as: "A risk which can have a material environmental or environmentally-driven impact on the business associated with the current or planned use of a parcel of commercial real estate, not necessarily limited to those environmental issues required to be investigated in this practice."

Certain RECs are further characterized as follows:

A **Controlled REC** is a REC resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to implementation of required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls).

An **Historic REC** is a REC characterized as a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to

the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls).

A **Vapor Encroachment Condition (VEC)** is defined as "presence or likely presence of Chemical of Concern vapors in the subsurface of the Property caused by the release of vapors from contaminated soil or groundwater either on or near the Property."

The Corps, as an Environmental Professional, uses professional judgment to render an opinion as to whether a VEC represents a REC.

The identification of RECs in connection with the Subject Property could impose an environmental liability on owners or operators of the site, reduce the value of the site, or restrict the use or marketability of the site. This Report does not include or address groundwater, soil, or extraneous material contamination under the soil surface with respect to testing, coring, or sampling. If a REC is noted, further investigation may be necessary to evaluate the scope and extent of potential environmental liabilities.

2.2 Scope of Work

The Corps conducted this Phase I ESA at the parcel in substantial compliance with ASTM Standard E1527-13. The methodologies within this ASTM are utilized to identify RECs associated with the Subject Property and includes the following tasks:

- Conducting a record search and reviewing all reasonably attainable federal, state, and local government information and records to determine possible onsite sources of hazardous substances and environmental condition of the property.
- Reviewing of all reasonably attainable federal, state, and local government records of adjacent facilities that could have released or likely released contamination to determine possible offsite sources of hazardous materials.
- Analysis of historical data on prior uses of the property and the surrounding area.
- Interviews with the owner and/or tenants or other knowledgeable sources.
- Visual site inspection of the property to identify possible hazardous substance sources.
- Identification of contamination sources using data gathered and evaluation of risk they pose and the effect to the categorization of the environmental condition of the property.
- Identification of all ongoing actions that may affect the environmental conditions of the property.
- Determination of the environmental condition of the property.
- A site reconnaissance.

A Phase I ESA does not include sampling or testing of air, groundwater, surface water, or building materials. If required, such activities would be carried out in a Phase II ESA. For this Phase I ESA, no additions to the ASTM E1527-13 standard were made.

2.3 Significant Assumptions

This report is intended for use on a voluntary basis by the Client who wishes to assess the environmental condition of the subject parcel considering commonly known and reasonably ascertainable information. The report is site specific and time specific in that it relates to the assessment of environmental conditions on the specific parcel at the time of the preparation of this report.

ASTM Practice E1527-13 notes that while the purpose of such investigations is to reduce uncertainty, no environmental site assessment can wholly eliminate uncertainty regarding the potential for RECs on a property. Not every property warrants the same level of assessment. Consistent with good commercial or customary practice, the appropriate level of environmental site assessment will be guided by the type of property subject to assessment and on the information developed over the course of inquiry.

There is a possibility that even with the proper application of these methodologies there may exist on the Property conditions that could not be identified within the scope of the assessment or which were not reasonably identifiable from the available information. The Corps believes that the information obtained from the record review and the interviews concerning the site is reliable. However, the Corps cannot and does not warrant or guarantee that the information provided by these other sources is accurate or complete. The methodologies of this assessment are not intended to produce all-inclusive or comprehensive results, but rather to provide ARS with information relating to the property.

2.4 Limitations and Exceptions

The Corps has conducted a Phase I ESA, which consisted of a visual site visit, a site history review, a review of practically reviewable federal and state environmental records, and/ or interviews or interview attempts with persons knowledgeable about the property. This ESA was researched and prepared following the general protocols outlines in ASTM Standard E 1527-13 by the Corps for the use of the Client in accordance with the defined scope of services provided in an agreement between the Corps and the Client. The conclusions provided in this report are based solely upon the information reported in this document.

Additional information with respect to the property or adjacent properties that was not available to us at the time this assessment was prepared could modify the conclusions stated herein. This report has been prepared in accordance with current generally accepted engineering and environmental practices and with generally accepted definitions of "Phase I" or "Level 1" ESAs; no other warranty, expressed or implied, is made as to the professional advice provided under the terms of our agreement and included in this report.

No sampling and testing for asbestos containing materials, mercury, lead in paint, lead in water, indoor air quality, or radon are included in this assessment. Washington State University conducted an assessment for the presence of Asbestos and Lead Paint, titled "*Good Faith Survey Johnson Hall (#0076) Washington State University Pullman Washington*", conducted in 2017, and did identify the presence of Asbestos and Lead Paint on site. The report is found in Appendix H.

The field identification of wetlands or other preservation areas is not included in this assessment. The evaluation of compliance issues (e.g., actions taken under the Emergency Planning and Right to Know Act, employee notification and training under the Occupational Safety and Health Act, etc.) is specifically excluded from this assessment. This assessment did not include a review or audit of operational environmental compliance, or of any environmental management systems (EMS) that may exist on the property.

Reference materials (including but not limited to road maps, historic maps, directories, deeds, and government documents) reviewed during the preparation of this report are believed to be accurate and complete per the circumstances of their preparation. Per ASTM E1527-13, the Corps, as an environmental professional, is under no obligation to verify independently information obtained from others.

Conclusions and recommendations presented in this report should not be construed as legal advice.

2.5 Special Terms and Conditions

This Phase I ESA was performed in substantial accordance with and/or consistent with the provisions contained in ASTM E1527-13 Standard Practice for Environmental Site Assessments. Instructions as to the location of the property, access, and an explanation of the properties and facilities to be assessed were provided by the Client.

2.6 Reliance

This Phase I ESA was performed by the Corps for Washington State University (Client) and is provided for the sole use of the Client and their designated representatives. Use of this report by any other party will be at that party's sole risk. The Corps accepts no liability for the use or reliance on this report by any other party.

3.0 SITE DESCRIPTION

3.1 Location and Legal Description

The subject property consists of three sites: two vacant lots and the Johnson Hall building located at the intersection of NE Stadium Way and Wilson Road within the Research and Education Complex of the Washington State University campus in Pullman, Washington. Site 1 is an approximately 1.3-acre vacant lot located between Plant Sciences Building, Johnson Hall, and NE Stadium Way. Site 2 is an approximately one-acre vacant lot bordered by Hulbert Hall, Clark Hall and the Horticulture and Landscape Architecture Display building. The Johnson Hall Building sits on approximately 0.8 acres.

Access to the subject property is from Wilson Road and NE Stadium Way.

3.2 Site and Vicinity Description

The City of Pullman has identified the subject property as zoned "Washington State University" in the Comprehensive plan. As such, all activities normally associated with higher education are permitted. Academic facilities are appropriate activities within this category. It is located within the WSU science, agriculture, and technology section of campus. The property is developed on all four sides of the subject property. Adjacent and vicinity properties are college buildings mainly for teaching, classrooms, and research.

3.3 Current Use of the Property

Johnson Hall is currently in use as a research and teaching facility with faculty offices. Site 1 and Site 2 are vacant lots that are underdeveloped with access to campus utilities.

3.4 Description of Site Improvements

The subject property is located within the WSU science, agriculture, and technology section of campus. The property is developed on all four sides of the subject property. Adjacent and vicinity properties are college buildings mainly for teaching, classrooms, and research.

There is an access road to the subject property on NE Stadium Way along the west side of the subject property and Wilson Road to the south of the subject property.

3.5 Current Use of Adjoining Properties

The Corps observed the following uses of adjoining properties.

North	School of Molecular Biosciences Johnson Hall Annex Clark Hall
Northeast	Clark Hall
East	Hulbert Hall
Southeast	Ensminger Pavilion and Wilson Road
South	Wilson Road and Ensminger Pavilion
Southwest	Horticulture and Landscape Architecture Display
West	Vogel Plant Biosciences Building
Northwest	NE Stadium Way and Washington State Athletic Stadium

Clark Hall is the WSU Extension Service offices. It houses faculty offices and research labs for the animal science and plant physiology departments and the institute of biological chemistry. There are teaching labs and classrooms.

Plant Sciences Building: Newly Constructed as of 2019. It is connected to Johnson Hall.

Hulbert Hall is the central location of the WSU Extension service and includes the College of Agricultural, Human and Natural Resource Sciences, Department of Human Development, administrative offices of USDA research services, and several other agriculture-related departments.

Ensminger Pavilion is a building that is available for campus events up to 400 people.

Vogel Plant Biosciences Building consists of biotechnology research, teaching labs, and research labs. Most of the research includes genomic, proteomic, and bioinformatic analysis in support of the University's plant science research.

4.0 USER PROVIDED INFORMATION

The following information was provided from the client.

4.1 Owner, Property Manager, and Occupant Information

Property Contact: Mr. Jason Baerlocher, Project Manager
P.O. Box 641150
WSU Facilities Service
Pullman, WA 99164-1150
(804) 717-8374

Occupants: Crop and Soil Sciences Department
Grain Legume Genetics Physiology Research (USDA/ARS)
Horticulture Department
Northwest Sustainable Agroecosystems Research (USDA/ARS)
Plant Germplasm Introduction and Testing Research (USDA/ARS)
Plant Pathology Department
USDA Administrative support
Wheat Health, Genetics, and Quality Research (USDA/ARS)
Apparel, Merchandising Design and Textiles Department
Advising Center
Biological Systems Engineering
Business Center
Global Campus (for IT classroom support needs)
School of the Environment

4.2 Reason for Performing Phase I ESA

The purpose of this Phase I Environmental Site Assessment (ESA) was to identify existing or potential Recognized Environmental Conditions (as defined by ASTM Standard E1527-13) in connection with the subject property. The Corps understands that the findings of this study will be used to evaluate a pending financial transactions and leasing agreements in connection with the property.

5.0 RECORDS REVIEW

5.1 Standard Environmental Record Sources

The Corps contracted Environmental Risk Information Services (ERIS) to conduct a search of Federal and State databases containing known and suspected sites of environmental contamination. The number of listed sites identified within the approximate minimum search distance (AMSD) from the Federal and State environmental records database listings specified in ASTM Standard E1527-13 are summarized in the Map Findings Summary Table which is presented in Appendix C.

The Corps has reviewed the records and made a professional judgment as to which has potential relevance to the property. Detailed information for sites identified within the AMSDs and Sections 5.1.1 and 5.1.2. Copies of the ERIS research data and a description of the databases are included in Appendix E of this report.

5.1.1 Assessment Property

The property is not identified in the databases researched by ERIS.

5.1.2 Adjacent and Vicinity Properties

Adjacent and vicinity properties are not listed in the environmental databases researched by ERIS with the following exceptions:

Two underground storage tank facilities within the vicinity of the subject property:

- WSU Motor Pool, located within 0.31 mile distance of the subject property contains three operational Underground Storage Tanks (USTs) that contain unleaded and alcohol blend gasoline. Three additional USTs were removed and historically stored leaded and unleaded gasoline and used motor oil. This site is located at a lower elevation than the subject property. Based on distance and lower elevation, this site is at low risk of contaminating the subject property.

- The Murrow Hall Loading Dock, located within 0.47 miles of the subject property, contains one UST. The UST is on site and contains Diesel Fuel for Emergency power generation. It was installed in 1997 and is not known to be leaking. This site is 37 feet lower in elevation than the subject property. Based on distance and lower elevation, this site is at low risk of contaminating the subject property.

Two Historic LUST's

- A Leaking Underground Storage Tank (LUST) was reported in the WSU Motor Pool site in 1993 (Facility/Site Id 94456782, Cleanup Site ID: 11146) and contaminated both the soil and groundwater with petroleum. The WDOE records indicate that the site was remediated and the incident is **closed**. The site is at a lower elevation than the subject property.

- A Leaking Underground Storage Tank (LUST) was reported in 1993 at the WSU Horticulture Shop, located approximately 0.09 miles away from the subject property (Facility Site ID 27829687, cleanup site ID: 8564). This tank contained petroleum and was removed in 1997. The record indicates that the incident is **closed**. This site is 24 feet higher than the subject property.

Five State Voluntary Clean Up Sites

- The WA WSU Livestock Pavilion, located within 0.07 miles of the subject property, underwent a site hazard assessment in 1999-2001. The site was found to contain below cleanup levels of heavy metals and no further action was needed. The incident is **closed**.

- The WSU Fulmer Hall Crawlspace (Fac Site ID 808), located 0.43 miles from the subject property, is undergoing a state cleanup for heavy metals. The soil is confirmed to contain above cleanup level of heavy metals and groundwater is suspect. This site is approximately 42 feet lower in elevation than the subject property. Based on distance and the site being at a lower elevation, the site is at low risk of contaminating the subject property.

- WSU K-House, located approximately 0.43 miles from the subject property, has underwent voluntary cleanup for petroleum-diesel contamination in the local soil. The WDOE has indicated that no further action is necessary and that the incident is **closed.**

- The WSU Road Paint Shop located 0.38 miles from the Subject Property (FAC Site ID: 809, Cleanup Site ID 75) is undergoing voluntary cleanup. WDOE has reported the site contains heavy metals, non-halogenated solvents, and polychlorinated biphenyls (PCB). Soils are contaminated and are contained within the site. The site is approximately 9 feet lower in elevation than the subject property. Based on distance and the site being at a lower elevation, this site is at a low risk of contaminating the subject property.

- WA WSU Scrap Metal Yard, located 0.54 miles from the subject property, is undergoing toxics cleanup program. The incident is open (Interaction ID 1727) and the site is suspected to contain polychlorinated biphenyls and heavy metals above the cleanup level. Groundwater is suspected to be contaminated and soils are confirmed. This site is located 37 feet lower than the subject property. Based on distance and the site being at a lower elevation, this site is at a low risk of contaminating the subject property.

In summary, all the LUST sites within the AMSD were closed by the Washington Department of Ecology (WDOE). The Corps did not identify ongoing environmental cleanups with potential current risk to the property being assessed.

5.2 Additional Environmental Record Sources

The ASTM identifies alternative environmental sources to include regulatory files, on-site records, user provided records, records from local government agencies, and interviews with regulatory officials and/or other individuals knowledgeable about environmental conditions on the property.

The Corps has reviewed WSU Environmental Services Employee Handbook and Emergency Response Standard Operating Procedures. WSU has indicated that this plan has been implemented for 40+ years. A copy of the Handbook is found in Appendix H.

5.3 General Site Setting

5.3.1 Topography

The subject property (i.e. all three sites) is located on a ridge that has an average slope of 3.5%. The subject property ranges from 2551 to 2567 feet above Mean Sea Level and slopes west southwest towards the South Fork of the Palouse River.

5.3.2 Surface Water Bodies

There are no surface water bodies on the property. The nearest natural surface water bodies appear to be the South Fork of the Palouse River, located within 0.78 miles to the west of the subject property and three small ponds approximately 0.3 miles to the south of the subject property. There is a drainage divide that separates the three ponds from the subject property.

5.3.3 Geology and Hydrology

The site is in the Washington Columbia Basin physiographic province. According to ERIS report, this area is composed of Miocene volcanic rocks that may be in excess of 10,000 feet overlaid by Quaternary nonmarine Pleistocene deposits of perglacial eolian deposits.

According to the U.S. Department of Agriculture's Soil Conservation Service, National Cooperative Soil Survey, the dominant soil types on the subject parcel are classified as Palouse silt loam. This soil type is a silt loam that extends to a depth of 60 inches and is rated as being moderately permeable and available water capacity is high.

Depth to groundwater was not measured for this assessment.

No settling ponds, lagoons, surface impoundments or natural catch basins were observed on the subject property during this investigation.

Stormwater runoff runs off the subject property and onto Stadium Way, Wilson Road, or South Fairway Drive.

The subject property is not located within a Flood Hazard Zone.

5.4 Historical Use

5.4.1 Historical Summary

Historical information identifying the past site use was obtained from a variety of sources as detailed in Appendix E of this report and included: City Directories, Aerial Photographs, Sanborn Fire Insurance Maps, and topographic Maps. The Corps contracted Environmental Risk Information Services (ERIS) to conduct a search of a variety of sources that included:

- Aerial Photographs
- Sanborn Fire Insurance Maps
- Topographic Maps
- City Directories
- Building Permits (not available for this site)

Copies of the ERIS historical research data are included in Appendix D of this report.

Based on this review, the following summary of site history has been assembled:

- Prior to 1961, the Subject Property consisted of agricultural land, stables, and barns. Barns are observed on aerial photographs. These barns are labeled turkey, brooder, incubator on Fire Insurance Maps from 1929 through 1952.

- Johnson Hall was constructed between 1952 and 1961.

- Clark Hall and Hulbert Hall were constructed between 1961 and 1975. The site has changed little since that time.

In summary, the only apparent use of the parcel has been as a research center for WSU University since the early 1960's. Prior to this time, the property was agricultural.

5.4.2 Environmental liens and Activity/Use Limitations

The Environmental Lien Search provided by ERIS is included in Appendix D. No environmental liens or activity/use limitations are identified at the property.

5.4.3 Vapor Encroachment Evaluation

The Corps utilized the ERIS Radius Report to evaluate properties located within applicable ASTM E2600-10, Tier 1 Default Areas of Concern. Based on this review, The Corps did not identify conditions within Tier 1 Default Areas of Concern which could not be ruled out as VEC, with the following exceptions:

- Washington State University Pullman Plan Materials Center Johnson Hall 113 was identified as a station operated for Electric Power Generation/Alternative Fuels. No vapors should be associated with this fueling station.

5.4.4 Radon

Whitman County is within Federal EPA Radon Zone 2. These are Counties with predicted average indoor radon screening levels from 2 to 4 pCi/L. The EPA/State Residential Radon Survey of Washington was conducted during 1991-1992. The data is based on 2 to 7-day charcoal canister measurements form the lowest level of each home tested.

6.0 SITE RECONNAISSANCE

6.1 Methodology and Limiting Conditions

The site reconnaissance was conducted on June 16, 2020, by Kristen Shacochis-Brown. Weather conditions at the time of the site reconnaissance were mostly cloudy. Temperatures were in the low to mid-50's.

The survey excludes areas of the building which were inaccessible such as personal offices and three lab/classrooms (Room 20, 272, 326 and Annex classroom) as well as a room in the basement marked "Flammable Storage". Other areas such as elevator mechanical rooms, shafts and pits, enclosed pipe chases in laboratories, and the transformer vault were not accessed for safety reasons. In addition, the utility tunnel corridors were not accessed, however, we received pictures of the tunnels on June 30, 2020. In the Corps opinion, the limiting conditions encountered do not represent and obstacle to our ability to identify REC in connection with the property.

The Site Reconnaissance Summary is included in Appendix B.

6.2 General Site Setting

The subject property is located within the Research Center of the Washington State University Campus in Pullman, Washington along NE Stadium Way and Wilson Road. The surrounding area is the WSU campus and consists of other research buildings, offices, and classrooms as well as the football stadium.

The subject property consists of approximately 3-acre area of land containing three sites: a 1.3 acres site (Site 1), a one-acre site (Site 2), and the Johnson Hall Building (0.8 acres). Site 1 and Site 2 have no improvements except sidewalks. An underground utility corridor is located along the southern extent of Site 1, north of Johnson Hall. Buildings surround the subject property to the north, east, and south. NE Stadium Way is located to the west.

Access is via NE Stadium Way and Wilson Road.

6.3 Site Reconnaissance Findings

6.3.1 Hazardous Substances

This section addresses substances considered a necessary part of commercial, agricultural, or industrial operations at a site (for example, a chemical used in a manufacturing process). For purposes of this assessment, the concern regarding such substances is that there be visible and/or readily obtainable evidence that the substances are being stored, used, and (if pertinent) disposed of in a manner consistent with applicable regulations. The term "hazardous substance" is used as defined in the ASTM Standard E1527-13.

As defined by the above paragraph, The Corps did not observe hazardous substances associated with identified site uses on the subject parcel during the site reconnaissance with the following exceptions:

In Johnson Hall:

- Janitorial products in gallon-sized or smaller containers located throughout Johnson Hall.
- Paint in gallon sized or smaller containers located in the basement and stored in a closet.
- Laboratory chemicals, including acids, corrosive materials, and strong bases throughout the laboratory/research rooms. Containers were five gallons or smaller.
- Five-gallon drums for disposal of hazardous waste/laboratory chemicals.
- X-Ray equipment and equipment containing radioactive chemicals (tracers).
- Sign indicating that attic room is presumed to contain asbestos.

Site 1:

- No hazardous substances were observed.

Site 2:

- No hazardous substances were observed.

The Corps did not observe evidence of visible indications of release of the identified hazardous substances during the site reconnaissance. Photographs of general site conditions are found in Appendix B.

6.3.2 Petroleum Products

This section addresses petroleum products not stored in tanks.

During the reconnaissance, the Corps did not observe petroleum products on the subject parcel during the site reconnaissance, with the following exception:

- Used Motor oil stored in a drum in the basement.
- Various oil products and lubricants in gallon sized or smaller containers in basement and attic of Johnson Hall.

The Corps did observe evidence of visible indications of release of petroleum products during the site reconnaissance. The release was found to be *de minimis*. Photographs of general site conditions are found in Appendix B.

6.3.3 Underground Storage Tanks (UST)

During the site reconnaissance, the Corps did not observe visible indication of USTs (such as fill pipes, vent pipes, pump island cutouts, etc.).

6.3.4 Aboveground Storage Tanks (AST)

During the site reconnaissance, the Corps did not observe visible indications of AST's.

6.3.5 Containers with Unidentified Contents

This section addresses containers that could not be visually and/or physically observed or confirmed. The Corps did not observe containers holding unidentified contents on the subject parcel during the site reconnaissance, with the following exception:

- One small bucket of unknown liquid (less than a pint) in a small container in the basement. It appeared to be lubricant or hydraulic fluid. It was in an area where there appeared to be leaking machinery. The material appeared to be contained but was not labeled.
- One gas container filled with unknown liquid, likely petroleum based, was observed in the basement. It also was in an area of leaky machinery.

6.3.6 Equipment Likely to Contain PCBs

This section addresses equipment that may contain polychlorinated biphenyls (PCBs). PCBs belong to a broad family of manufactured organic chemicals known as chlorinated hydrocarbons. PCBs were domestically manufactured from 1929 until their manufacture was banned in 1979 because of their potential toxicity. Due to their non-flammability, chemical stability, high boiling point, and electrical insulating properties, PCBs were used in hundreds of industrial and commercial applications including electrical, heat transfer, and hydraulic equipment.

The Corps site reconnaissance does not address transformers owned and operated by an electrical utility unless there is a visible sign of release of transformer fluid.

The Corps did not observe equipment likely to contain PCBs during the site reconnaissance, except for the following:

- Old florescent light ballasts that are temporarily disposed of in the basement may contain PCB's. These materials should be disposed of in an appropriate manner.

The site reconnaissance observed three pad-mounted transformers located in the basement of the site. The transformers appeared to be in good condition and no staining or leaking was observed

beneath the transformers. The transformers are unlikely to represent an environmental concern to the Site. These transformers were labeled non-PCB. The Corps did not observe visible indication of release of PCB's, transformer fluid associated with equipment or transformers owned and maintained on or near the parcel.

6.3.7 Building Interior Observations

Interior Staining/Corrosion

The Corps did not observe significant interior staining/corrosion inside the property building during site reconnaissance.

Sumps/Floor Drains

The Corps did not observe any sumps or floor drains during the site reconnaissance, except the following:

Floor drains are in the basement and a few classrooms. According to WSU, the drains feed to a central collection and then the municipal sewer system.

Sinks and toilets are connected to the municipal sewer system.

Heating/Cooling

The building is heated and cooled via gas furnaces and HVAC units.

6.3.8 Exterior Observations

Pits, Ponds, Lagoons

The Corps did not observe pits, ponds or lagoons on the site during the site reconnaissance.

Ditches/Drop Inlets/Conveyances

The Corps did not observe any ditches on or immediately adjacent to the sites. The Corps did not observe any visible staining on the ground during the site reconnaissance.

Solid Waste Dumping/Landfills

The Corps did not observe readily apparent evidence of solid waste dumping, suspect fill material, or landfills on any of the three sites during the site reconnaissance.

Stained Soil or Pavement

The Corps did observe evidence of stained soil on the parcel during the site reconnaissance.

Stressed Vegetation

The Corps did not observe readily apparent evidence of stressed vegetation on the parcel during the site reconnaissance.

Wells

The Corps did not observe evidence of a well on the parcel during the site reconnaissance.

Septic Systems

The Corps did not observe readily apparent evidence of septic systems on the parcel during the site reconnaissance. The site is connected to sanitary and stormwater systems that are under the purview of WSU. Sanitary sewage generated by the University is treated at the City of Pullman's wastewater treatment facility.

7.0 INTERVIEWS

The Corps interviewed Mr. Jason Baerlocher in person during the site inspection. Based on this interview:

- Mr. Baerlocher is aware that the building may contain asbestos containing building materials and lead-based paint. A report of the findings is attached to this Phase I ESA in Appendix H.
- Mr. Baerlocher has indicated that biological agents are managed under biosafety protocols, biological agents would be limited to recombinant DNA and plant pathogens.
- Mr. Baerlocher is not aware of any spills of chemicals or petroleum on the property or nearby properties.
- Mr. Baerlocher is not aware of any environmental cleanups on or near the property.
- Mr. Baerlocher is not aware of any activity or land use limitations in place on the site or that have been filed or recorded in a registry.
- Mr. Baerlocher has specialized knowledge or experience related to the parcel or nearby properties.
- Mr. Baerlocher is aware of past uses of the property for the years that it has been in current ownership and is aware of specific chemicals that may be or once were present on the parcel.
- Mr. Baerlocher is not aware of any obvious indicators that may point to the presence or likely presence of contamination on the parcel.
- Mr. Baerlocher had no other knowledge or experience with the parcel that may be pertinent to determining its environmental condition.

On June 29, 2020, the Corps interviewed Mr. Richard Partine, safety officer for USDA for Johnson Hall. He indicated that inspections audits are done by WSU Environmental Health and Safety. Drinking water is tested for safety and there are annual inspections of Johnson Hall. The USDA does have an inventory list of chemicals for Johnson Hall labs.

On June 23, 2020, Jason Sampson, WSU safety officer, was interviewed. He indicated that the site undergoes routine testing and clean up based on annual audits. He provided a copy of the Hazardous Waste Disposal Plan. A copy of this manual is in Appendix H.

8.0 FINDINGS

ASTM E1527-13 requires that Phase I ESA reports shall have a Findings section which identifies known or suspect REC, Controlled REC, Historical REC, and *de minimis* conditions. Based on the Corps's review of the public environmental database records, historical maps and records, and the site reconnaissance, the Corps identified the following.

8.1 Recognized Environmental Condition

A **REC** is defined by ASTM E1527-13 as: the presence of or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that suggest a material threat of a future release to the environment. *De minimis* conditions are not recognized environmental conditions.

The Corps did not identify conditions or observations relative to the parcel which, in our opinion, represent a REC.

8.2 Controlled REC

A **Controlled REC** is a REC resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to implementation of required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls).

The Corps did not identify conditions or observations relative to the property which, in our opinion, represent a Controlled REC.

8.3 Historic REC

An **Historic REC** is a REC characterized as a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls).

The Corps did not identify conditions or observations relative to the parcel which, in our opinion, represent an historic REC.

8.4 Vapor Encroachment Condition

A **Vapor Encroachment Condition (VEC)** is defined in ASTM Guide E2600 as "presence or likely presence of Chemical of Concern vapors in the subsurface of the Property caused by the release of vapors from contaminated soil or groundwater either on or near the Property."

The Corps did not identify conditions relative to the parcel which, in our opinion, represent a VEC.

8.5 De minimis Conditions

A *de minimis* condition is defined by ASTM as a condition that generally does not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. Conditions determined to be *de minimis* conditions are not recognized RECs nor Controlled REC's.

The Corps did identify conditions or observations relative to the parcel which, in our opinion, represent a release of hazardous substances or petroleum products that would be classified as *de minimis*. These releases are found in the basement mechanical room and in the attic.

9.0 OPINIONS

ASTM E1527-13 requires that Environmental Professionals include their opinion on the impact on the property of conditions identified in the Findings Section, and, if appropriate, whether additional investigation is appropriate to detect the presence of hazardous substances or petroleum products.

The Corps identified no REC in the Findings. Since an historic REC is by definition a REC that "has been addressed to the satisfaction of the applicable regulatory authority," the impact on the property from the identified HREC, if any, has been previously adequately addressed to the satisfaction of the WDOE.

Since no RECs, Controlled RECs, or other historic RECs were identified in the Findings, there is no need to provide an opinion on other potential impact to the parcel. Petroleum releases appeared to be de minimis condition.

10.0 CONCLUSIONS

ASTM E1527-13 requires that Phase I ESA reports include a Conclusions Section that summarizes all REC (including Controlled REC) connected with the property.

The Corps performed a Phase I Environmental Site Assessment of the parcel in substantial conformance with the scope and limitations in ASTM Practice E1527-13. Any exceptions to, or deletions from, this practice are described in Section 2.2 of this report. This assessment has revealed no evidence of recognized environmental conditions in connection with the subject property.

11.0 RECOMMENDATIONS

Recommendations are not required by the ASTM E1527-13 Standard but are generally provided by the Corps in cases where they may be useful to the report user's analysis of Landowner Liability Protections and/or business environmental risk.

- Based on the information presented in this report, the Corps does not recommend additional investigation with respect to the potential for recognized environmental conditions in connection with the property.
- Chemicals, chemical waste and other hazardous waste should be properly handled and disposed of in an appropriate manner. A copy of the WSU handbook is found in Appendix H.
- Sink traps and drains should be inspected for possible chemical and radiation contamination.
- Asbestos and lead have been found at various locations throughout Johnson Hall. These materials should be disposed of an appropriate manner. A copy of the Good Faith report is found in Appendix H.

Opinions, conclusions, and recommendations presented for this assessment are based solely on the information derived from the study sources and references noted in the appendices and presented within this report. If additional information becomes available that is not included in this report, such information may lead the Corps to modify the opinions and conclusions contained herein. The Corps recommends that these conclusions be used solely as a broad description of environmental conditions at the site. The entire document, including appendices, should be read completely prior to the development of independent conclusions on the environmental status of the property.

12.0 REFERENCES

Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, ASTM Practice E 1527-13

Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions, ASTM Guide E2600

Appendix B - Asset Report

Asset Detail Report

By Asset Name

Region: Pullman - WSU Main Campus **Asset:** JOHNSON HALL
Campus: Pullman Campus - Assessed Buildings **Asset Number:** 0076

Assets are ordered by Asset Name **Currency: USD**

Statistics

FCI Cost:	29,422,733	**FCI:**	0.76
RI Cost:	36,053,318	**RI:**	0.93
Total Requirements Cost:	36,053,315		
Current Replacement Value:	38,671,752	**Date of most Recent Assessment:**	Sep 2, 2014

Type	Building		
Area	194,017 SF		
Use	ACADEMIC INSTRUCTION	**Construction Type**	IBC - Type II A
Floors	5	**Historical Category**	None
Address 1	1820 WILSON RD	**City**	PULLMAN
Address 2	-	**State/Province/Region**	UNITED STATES OF AMERICA
Year Constructed	1961	**Zip/Postal Code**	99164
Year Renovated	-	**Architect**	-
Ownership	Client Owned	**Commission Date**	-
		Decommission Date	-

Photo

JOHNSON HALL

Asset Description

General:

The Johnson Hall is located on the Washington State University Campus in Pullman, Washington. The building is situated near NE Stadium and Wilson Road. The structure is a 195394 square-foot (GSF), 5 story structure (including basement, not

penthouse). According to WSU information, construction for the existing building was completed in 1961, underwent various minor work since with exception of the annex which underwent a complete renovation in 2014.

The building contains mechanical equipment associated in the penthouse and basement. Per the 2012 International Building Code, Chapter 3, and Section 303 – Assembly Group, this building is classified as Occupancy Group A3. According to the 2012 International Building Code, Chapter 6, Section 602, this building's construction type is Type II - Noncombustible, as determined from field observations.

Requirements

Requirement Name	Renewal	Prime System	Category	Priority	Action Date	Estimated Cost
ACT System - Concealed Spline Renewal	Yes	C3030 - Ceiling Finishes	Lifecycle	1- Due within 1 Year of Inspection	Sep 2, 2014	618,041
AHU-1 - Const Volume w/Distribution Renewal	Yes	D3040 - Distribution Systems	Lifecycle	3- Due within 5 Years of Inspection	Sep 2, 2017	637,625
AHU-1A - Const Volume w/Distribution Renewal	Yes	D3040 - Distribution Systems	Lifecycle	3- Due within 5 Years of Inspection	Sep 2, 2017	267,365
AHU-2 - Const Volume w/Distribution Renewal	Yes	D3040 - Distribution Systems	Lifecycle	3- Due within 5 Years of Inspection	Sep 2, 2017	637,625
AHU-3 - Const Volume w/Distribution Renewal	Yes	D3040 - Distribution Systems	Lifecycle	3- Due within 5 Years of Inspection	Sep 2, 2017	255,050
Aluminum Windows Renewal	Yes	B2020 - Exterior Windows	Lifecycle	1- Due within 1 Year of Inspection	Sep 2, 2014	1,196,700
Automatic Openers - Pair - Orignal Renewal	Yes	B2030 - Exterior Doors	Lifecycle	1- Due within 1 Year of Inspection	Sep 2, 2014	16,032
Automatic Openers - Pair - Original Renewal	Yes	C1023 - Interior Door Hardware	Lifecycle	1- Due within 1 Year of Inspection	Sep 2, 2014	48,097

Asset Detail Report

By Asset Name

Requirement Name	Renewal	Prime System	Category	Priority	Action Date	Estimated Cost
Automatic Openers - Single - Original Renewal	Yes	C1023 - Interior Door Hardware	Lifecycle	1- Due within 1 Year of Inspection	Sep 2, 2014	8,936
Branch Wiring - Non-GFCI Receptacle - Rooftop	No	D5021 - Branch Wiring Devices	Life Safety	1- Due within 1 Year of Inspection	Sep 2, 2015	245
Branch Wiring - Non-GFCI Receptacle - Room 152	No	D5021 - Branch Wiring Devices	Life Safety	1- Due within 1 Year of Inspection	Sep 2, 2015	245
Branch Wiring - Non-GFCI Receptacle - Room 201C	No	D5021 - Branch Wiring Devices	Life Safety	1- Due within 1 Year of Inspection	Sep 2, 2015	245
Branch Wiring - Non-GFCI Receptacle - Room 25	No	D5021 - Branch Wiring Devices	Life Safety	1- Due within 1 Year of Inspection	Sep 2, 2015	245
Branch Wiring - Non-GFCI Receptacle - Room 339	No	D5021 - Branch Wiring Devices	Life Safety	1- Due within 1 Year of Inspection	Sep 2, 2015	245
Branch Wiring - Non-GFCI Receptacles - Dark Room 318	No	D5021 - Branch Wiring Devices	Life Safety	1- Due within 1 Year of Inspection	Sep 2, 2015	491
Branch Wiring - Non-GFCI Receptacles - Room 248	No	D5021 - Branch Wiring Devices	Life Safety	1- Due within 1 Year of Inspection	Sep 2, 2015	491
Branch Wiring - Non-GFCI Receptacles - Room 42	No	D5021 - Branch Wiring Devices	Life Safety	1- Due within 1 Year of Inspection	Sep 2, 2015	1,472
Branch Wiring - Obstructed Panel Access - Room 288	No	D5021 - Branch Wiring Devices	Life Safety	1- Due within 1 Year of Inspection	Sep 21, 2015	211
Branch Wiring - Obstructed	No	D5021 - Branch	Life Safety	1- Due	Sep 21,	208

Requirement Name	Renewal	Prime System	Category	Priority	Action Date	Estimated Cost
Panel Access - Room 380		Wiring Devices		within 1 Year of Inspection	2015	
Branch Wiring - Power Receptacle Lacking - Johnson Annex Rooftop	No	D5021 - Branch Wiring Devices	Life Safety	1- Due within 1 Year of Inspection	Sep 2, 2015	2,531
Branch Wiring Renewal	Yes	D5021 - Branch Wiring Devices	Lifecycle	1- Due within 1 Year of Inspection	Sep 2, 2014	887,630
CMU Block Walls - Facing 1 Side Renewal	Yes	C1010 - Partitions	Lifecycle	1- Due within 1 Year of Inspection	Sep 2, 2014	58,386
Carpeting - Tile - 2000 Renewal	Yes	C3020 - Floor Finishes	Lifecycle	1- Due within 1 Year of Inspection	Sep 2, 2015	4,029
Chillers - Centrifugal w/Cooling Tower Renewal	Yes	D3030 - Cooling Generating Systems	Lifecycle	3- Due within 5 Years of Inspection	Sep 2, 2023	479,899
Cisco 4500 Series Switch Renewal	No	D50392 - LAN Network - Wired	Lifecycle	2- Due within 2 Years of Inspection	Nov 8, 2018	28,219
Concrete - Painted Renewal	Yes	C3020 - Floor Finishes	Interior Finishes	1- Due within 1 Year of Inspection	Sep 2, 2014	441
Curtain Wall System Renewal	Yes	B2020 - Exterior Windows	Lifecycle	1- Due within 1 Year of Inspection	Sep 2, 2014	668,381
Custodial/Utility Sinks Renewal	Yes	D2010 - Plumbing Fixtures	Lifecycle	3- Due within 5 Years of Inspection	Sep 2, 2017	43,010
DDC/Pneumatic System - Hybrid Renewal	Yes	D3060 - Controls and	Lifecycle	3- Due within 5	Sep 2, 2020	28,219

Requirement Name	Renewal	Prime System	Category	Priority	Action Date	Estimated Cost
		Instrumentation		Years of Inspection		
DX Condensing Unit - 1968 Renewal	Yes	D3030 - Cooling Generating Systems	Lifecycle	2- Due within 2 Years of Inspection	Sep 2, 2016	18,556
DX Condensing Unit Renewal	Yes	D3030 - Cooling Generating Systems	Lifecycle	3- Due within 5 Years of Inspection	Sep 2, 2017	3,711
Distribution Equipment - 1200A 480V Renewal	Yes	D5012 - Low Tension Service and Dist.	Lifecycle	1- Due within 1 Year of Inspection	Sep 2, 2014	121,879
Distribution Equipment - 3000A 208Y/120V Renewal	Yes	D5012 - Low Tension Service and Dist.	Lifecycle	1- Due within 1 Year of Inspection	Sep 2, 2014	1,544,584
Distribution Equipment - Capacity Upgrade Needed	No	D5012 - Low Tension Service and Dist.	Capacity	2- Due within 2 Years of Inspection	Sep 2, 2016	2,886,132
Door Assembly - 3 x 7 HM Renewal	Yes	B2030 - Exterior Doors	Lifecycle	1- Due within 1 Year of Inspection	Sep 2, 2014	29,877
Door Assembly - 6 x 7 HM Renewal	Yes	B2030 - Exterior Doors	Lifecycle	1- Due within 1 Year of Inspection	Sep 2, 2014	24,587
Door Assembly - 6 x 7 Storefront - Original Renewal	Yes	B2030 - Exterior Doors	Lifecycle	1- Due within 1 Year of Inspection	Sep 2, 2014	30,846
Drinking Fountains - Wall-Mount Single-Height Renewal	Yes	D2010 - Plumbing Fixtures	Lifecycle	3- Due within 5 Years of Inspection	Sep 2, 2017	64,388
Ductwork: Clean and Balance	No	D30 - HVAC	Reliability	2- Due within 2 Years of	Sep 2, 2016	35,647

Requirement Name	Renewal	Prime System	Category	Priority	Action Date	Estimated Cost
				Inspection		
Emergency Eyewash Units Renewal	Yes	D2010 - Plumbing Fixtures	Lifecycle	3- Due within 5 Years of Inspection	Sep 2, 2018	60,442
Emergency Shower Units Renewal	Yes	D2010 - Plumbing Fixtures	Lifecycle	3- Due within 5 Years of Inspection	Sep 2, 2018	48,356
Exhaust System - Fume Hoods Renewal	Yes	D3040 - Distribution Systems	Lifecycle	3- Due within 5 Years of Inspection	Sep 2, 2017	1,651,613
Exhaust System - General Building Renewal	Yes	D3040 - Distribution Systems	Lifecycle	3- Due within 5 Years of Inspection	Sep 2, 2017	242,054
Exhaust System - Restroom w/Roof Fan Renewal	Yes	D3040 - Distribution Systems	Lifecycle	1- Due within 1 Year of Inspection	Sep 2, 2015	11,949
Exit Signs - Lacking - Basement Floor	No	D5092 - Emergency Light and Power Systems	Life Safety	1- Due within 1 Year of Inspection	Sep 2, 2015	6,094
Exit Signs - Lacking - Ground through Third Floors	No	D5092 - Emergency Light and Power Systems	Life Safety	1- Due within 1 Year of Inspection	Sep 2, 2015	183,833
Exit Signs - Lacking - Room 401	No	D5092 - Emergency Light and Power Systems	Life Safety	1- Due within 1 Year of Inspection	Sep 2, 2015	3,830
Exit Signs - Lacking - Room C201	No	D5092 - Emergency Light and Power Systems	Life Safety	1- Due within 1 Year of Inspection	Sep 2, 2015	3,406
Exit Signs Renewal	Yes	D5092 - Emergency Light and Power Systems	Lifecycle	3- Due within 5 Years of Inspection	Sep 2, 2024	129,142

Requirement Name	Renewal	Prime System	Category	Priority	Action Date	Estimated Cost
Fan Coil System - Cabinet - Heating/Cooling - 4 Pipe Renewal	Yes	D3040 - Distribution Systems	Lifecycle	3- Due within 5 Years of Inspection	Sep 2, 2017	251,690
Feeder Distribution System #1 Renewal	Yes	D5011 - High Tension Service and Dist.	Lifecycle	1- Due within 1 Year of Inspection	Sep 2, 2014	1,100,321
Feeder Distribution System #2 Renewal	Yes	D5011 - High Tension Service and Dist.	Lifecycle	1- Due within 1 Year of Inspection	Sep 2, 2014	1,100,321
Feeder Distribution System #3 Renewal	Yes	D5011 - High Tension Service and Dist.	Lifecycle	1- Due within 1 Year of Inspection	Sep 2, 2014	1,100,321
Fire Alarm System - Coverage Upgrade Needed	No	D5037 - Fire Alarm Systems	Life Safety	1- Due within 1 Year of Inspection	Sep 2, 2015	947,685
Fire Alarm System - Johnson Annex Renewal	Yes	D5037 - Fire Alarm Systems	Lifecycle	3- Due within 5 Years of Inspection	Sep 2, 2024	165,109
Fire Alarm System - Johnson Hall Renewal	Yes	D5037 - Fire Alarm Systems	Lifecycle	1- Due within 1 Year of Inspection	Sep 2, 2014	800,598
Fire Protection - Building Not Sprinklered	No	D40 - Fire Protection	Building Code	4- Not Time Based		986,300
Fittings - Signage (Room Numbering and Identification) - Original Renewal	Yes	C1035 - Identifying Devices	Interior Finishes	1- Due within 1 Year of Inspection	Sep 2, 2014	22,552
Fixed Theater Seating - Deluxe Renewal	Yes	E - Equipment and Furnishings	Lifecycle	1- Due within 1 Year of Inspection	Sep 2, 2014	114,451
GWB 2HR Rated Walls Renewal	Yes	C1010 - Partitions	Lifecycle	1- Due within 1 Year of	Sep 2, 2014	55,204

Requirement Name	Renewal	Prime System	Category	Priority	Action Date	Estimated Cost
				Inspection		
GWB Taped and Finished - Original Renewal	Yes	C3030 - Ceiling Finishes	Lifecycle	1- Due within 1 Year of Inspection	Sep 2, 2014	523,322
Glazed Brick Renewal	Yes	C3020 - Floor Finishes	Interior Finishes	1- Due within 1 Year of Inspection	Sep 2, 2014	57,334
HVAC Distribution System - Ductwork Renewal	Yes	D3040 - Distribution Systems	Lifecycle	3- Due within 5 Years of Inspection	Sep 2, 2017	955,558
INSTALL PROCESS COOLING SYSTEMS; REFRIGERATION SYSTEMS	No	D3030 - Cooling Generating Systems	Technological Improvements	1- Due within 1 Year of Inspection	Jul 5, 2017	451,508
Indoor Air Quality (IAQ) - Testing	No	D30 - HVAC	Life Safety	1- Due within 1 Year of Inspection	Sep 2, 2015	13,186
Interior Doors - Corridor Doors not Fire Rated	No	C1020 - Interior Doors	Life Safety	1- Due within 1 Year of Inspection	Sep 2, 2015	583,253
Interior Doors - Non-Compliant Door Hardware	No	C1020 - Interior Doors	Accessibility	3- Due within 5 Years of Inspection	Sep 2, 2019	46,324
LAN System Renewal	Yes	D50392 - LAN Network - Wired	Technological Improvements	1- Due within 1 Year of Inspection	Sep 2, 2014	1,131,479
Laboratory Equipment - College - Original Renewal	Yes	E - Equipment and Furnishings	Lifecycle	1- Due within 1 Year of Inspection	Sep 2, 2014	450,551
Laboratory Sinks Renewal	Yes	D2010 - Plumbing Fixtures	Lifecycle	3- Due within 5 Years of Inspection	Sep 2, 2017	1,325,819

Requirement Name	Renewal	Prime System	Category	Priority	Action Date	Estimated Cost
Lighting - Interior - Emergency Lighting Lacking	No	D5022 - Lighting Equipment	Life Safety	1- Due within 1 Year of Inspection	Sep 2, 2015	167,583
Main Electrical Service #1 - 1600A 208Y/120V Renewal	Yes	D5012 - Low Tension Service and Dist.	Lifecycle	1- Due within 1 Year of Inspection	Sep 2, 2014	151,039
Main Electrical Service #2 - 1000A 208Y/120V Renewal	Yes	D5012 - Low Tension Service and Dist.	Lifecycle	1- Due within 1 Year of Inspection	Sep 2, 2014	117,829
Natural Gas Distribution for Lab Renewal	Yes	D2090 - Other Plumbing Systems	Lifecycle	3- Due within 5 Years of Inspection	Sep 2, 2020	752,858
Painted Finish - Average (1 Coat Prime - 2 Coats Finish) Renewal	Yes	C3010 - Wall Finishes	Interior Finishes	1- Due within 1 Year of Inspection	Sep 2, 2014	43,616
Perimeter Heat System - Hydronic Fin Tube Renewal	Yes	D3040 - Distribution Systems	Lifecycle	3- Due within 5 Years of Inspection	Sep 2, 2017	1,163,129
Plumbing Fixttures - Acid Neutralization Basin Lacking	No	D2090 - Other Plumbing Systems	Building Code	2- Due within 2 Years of Inspection	Sep 2, 2016	22,327
Plumbing Fixtures - Floor Drains Lacking Under Emergency Showers	No	D2010 - Plumbing Fixtures	Reliability	1- Due within 1 Year of Inspection	Sep 2, 2015	16,419
Pocket Door Assembly - 3 x 7 Wood Renewal	Yes	C1020 - Interior Doors	Lifecycle	1- Due within 1 Year of Inspection	Sep 2, 2014	15,737
Refrigeration Unit - 1975 Renewal	Yes	D3032 - Direct Expansion Systems	Lifecycle	1- Due within 1 Year of Inspection	Sep 2, 2015	173,618
Refrigeration Unit - 2006	Yes	D3032 - Direct	Lifecycle	3- Due	Sep 2, 2020	173,618

Requirement Name	Renewal	Prime System	Category	Priority	Action Date	Estimated Cost
Renewal		Expansion Systems		within 5 Years of Inspection		
Repair SE Sidewalk (cracked and broken 60' x 6')	No	G2030 - Pedestrian Paving	Lifecycle	2- Due within 2 Years of Inspection	Apr 4, 2019	0
Restroom Accessories Renewal	Yes	C1030 - Fittings	Lifecycle	3- Due within 5 Years of Inspection	Sep 2, 2020	43,481
Restroom Fixtures Renewal	Yes	D2010 - Plumbing Fixtures	Lifecycle	2- Due within 2 Years of Inspection	Sep 2, 2016	668,219
Restrooms - Aged and Not Accessible	No	C1030 - Fittings	Accessibility	3- Due within 5 Years of Inspection	Sep 2, 2019	641,984
Roof Drainage - Gravity Renewal	Yes	D2040 - Rain Water Drainage	Lifecycle	3- Due within 5 Years of Inspection	Sep 2, 2017	476,168
Sanitary Waste - Gravity Disch Renewal	Yes	D2030 - Sanitary Waste	Lifecycle	3- Due within 5 Years of Inspection	Sep 2, 2017	598,250
Security System - Access Control Renewal	Yes	D5038 - Security and Detection Systems	Lifecycle	3- Due within 5 Years of Inspection	Sep 2, 2020	39,157
Steam Piping and Condensate Return Renewal	Yes	D3040 - Distribution Systems	Lifecycle	3- Due within 5 Years of Inspection	Sep 2, 2017	508,863
Stucco On CMU Walls Renewal	Yes	B2010 - Exterior Walls	Lifecycle	3- Due within 5 Years of Inspection	Sep 2, 2021	41,499
Swinging Doors - 3 x 7 HM - NR Renewal	Yes	C1020 - Interior Doors	Lifecycle	1- Due within 1	Sep 2, 2014	357,214

Requirement Name	Renewal	Prime System	Category	Priority	Action Date	Estimated Cost
				Year of Inspection		
Swinging Doors - 3 x 7 HM - Rated - Original Renewal	Yes	C1020 - Interior Doors	Lifecycle	1- Due within 1 Year of Inspection	Sep 2, 2014	18,193
Swinging Doors - 3 x 7 Wd - Full Glass - Original Renewal	Yes	C1020 - Interior Doors	Lifecycle	1- Due within 1 Year of Inspection	Sep 2, 2014	638,525
Swinging Doors - 3 x 7 Wd - NR - Original Renewal	Yes	C1020 - Interior Doors	Lifecycle	1- Due within 1 Year of Inspection	Sep 2, 2014	547,912
Swinging Doors - 6 x 7 Storefront - Original Renewal	Yes	C1021 - Interior Doors	Lifecycle	1- Due within 1 Year of Inspection	Sep 2, 2014	20,564
Swinging Doors - Pair - 6 x 7 HM - NR Renewal	Yes	C1020 - Interior Doors	Lifecycle	1- Due within 1 Year of Inspection	Sep 2, 2014	26,390
Swinging Doors - Pair - 6 x 7 HM - Rated Renewal	Yes	C1020 - Interior Doors	Lifecycle	1- Due within 1 Year of Inspection	Sep 2, 2014	18,431
Swinging Doors - Pair - 6 x 7 Wd - NR - Original Renewal	Yes	C1020 - Interior Doors	Lifecycle	1- Due within 1 Year of Inspection	Sep 2, 2014	119,957
TBar System - 1996 Renewal	Yes	C3030 - Ceiling Finishes	Interior Finishes	2- Due within 2 Years of Inspection	Sep 2, 2016	58,984
Tectum Ceiling System Renewal	Yes	C3030 - Ceiling Finishes	Interior Finishes	1- Due within 1 Year of Inspection	Sep 2, 2014	15,559
Toilet Partitions Renewal	Yes	C1030 - Fittings	Lifecycle	1- Due within 1 Year of	Sep 2, 2014	40,772

Asset Detail Report

By Asset Name

Requirement Name	Renewal	Prime System	Category	Priority	Action Date	Estimated Cost
				Inspection		
Traction Geared Passenger Elevator #1 - Exposed Live Electrical Parts - Room 400EL	No	D1010 - Elevators and Lifts	Life Safety	1- Due within 1 Year of Inspection	Sep 2, 2015	4,322
Traction Geared Passenger Elevator #1 Renewal	Yes	D1010 - Elevators and Lifts	Lifecycle	1- Due within 1 Year of Inspection	Sep 2, 2014	242,355
Traction Geared Passenger Elevator #2 - Exposed Live Electrical Parts - Room 406	No	D1010 - Elevators and Lifts	Life Safety	1- Due within 1 Year of Inspection	Sep 2, 2015	3,996
Traction Geared Passenger Elevator #2 Renewal	Yes	D1010 - Elevators and Lifts	Lifecycle	1- Due within 1 Year of Inspection	Sep 2, 2014	242,355
Transformer Vault - Improper Fire Separation	No	B10 - Superstructure	Life Safety	1- Due within 1 Year of Inspection	Sep 2, 2015	28,837
Unit Heaters - Hot Water Renewal	Yes	D3050 - Terminal and Package Units	Lifecycle	3- Due within 5 Years of Inspection	Sep 2, 2020	13,957
VAT Renewal	Yes	C3020 - Floor Finishes	Interior Finishes	1- Due within 1 Year of Inspection	Sep 2, 2014	566,929
VCT - 1996 Renewal	Yes	C3020 - Floor Finishes	Interior Finishes	1- Due within 1 Year of Inspection	Sep 2, 2014	26,736
VCT - 2000 Renewal	Yes	C3020 - Floor Finishes	Interior Finishes	1- Due within 1 Year of Inspection	Sep 2, 2015	1,490
Wall Covering - Linen Renewal	Yes	C3010 - Wall Finishes	Lifecycle	3- Due within 5 Years of Inspection	Sep 2, 2024	4,149

Asset Detail Report

By Asset Name

Requirement Name	Renewal	Prime System	Category	Priority	Action Date	Estimated Cost
Water Coolers - Wall-Mount Dual-Height Renewal	Yes	D2010 - Plumbing Fixtures	Lifecycle	3- Due within 5 Years of Inspection	Sep 2, 2020	8,585
Water Dist Complete Renewal	Yes	D2020 - Domestic Water Distribution	Lifecycle	3- Due within 5 Years of Inspection	Sep 2, 2020	706,635
Water Heater - Elec - Residential - 52 Gal Renewal	Yes	D2020 - Domestic Water Distribution	Lifecycle	1- Due within 1 Year of Inspection	Sep 2, 2015	4,383
Water Heater - Steam - Storage Tank Renewal	Yes	D2020 - Domestic Water Distribution	Lifecycle	3- Due within 5 Years of Inspection	Sep 2, 2017	102,954
Water Supply - Potable Water Storage - Above Ground Tank - 250,000 Gallons Renewal	Yes	G3011 - Potable Water Distribution and Storage	Lifecycle	1- Due within 1 Year of Inspection	Sep 2, 2015	100,770
Wet Standpipe System Renewal	Yes	D40 - Fire Protection	Lifecycle	3- Due within 5 Years of Inspection	Sep 2, 2017	683,470
Window AC Units Renewal	Yes	D3050 - Terminal and Package Units	Lifecycle	3- Due within 5 Years of Inspection	Sep 2, 2017	77,847
Wireless System Upgrade	No	D50393 - LAN Network - Wireless	Technological Improvements	2- Due within 2 Years of Inspection	May 21, 2017	381,524
Total						**36,053,315**

Appendix C - Professional Cost Estimate

SKANSKA

Estimate Date: 2/25/2020

	Johnson Hall Demo and Abatement Budget Estimate		VALUE	$/sf
			168,394 SF	
SITEWORK				
A10	**Civil and Site Utilities**		**190,000**	$1.13/SF
INTERIOR / EXTERIOR				
B10	**Exterior Improvements**		**312,500**	$1.60/SF
SERVICES				
C10	**Mechanical, Plumbing & Fire Protection**		**130,000**	$.77/SF
C20	**Electrical**		**94,000**	$.56/SF
EQUIPMENT &FURNISHINGS				
D10	**None**			
SPECIAL CONSTUCTION & DEMOLITION AND ABATEMENT				
F10	**Abatement & Demo**		**4,500,000**	$26.72/SF
BUILDING SITE				
G10	**Site Fence and Toilets**		**26,000**	$0.13/SF
ACCEPTED ALTERNATES & EXTENDED PRECON SERVICES				
H10	**ACCEPTED BCS**			
H20	**GENERAL REQUIREMENTS & LOGISTICS**		**380,157**	$1.95/SF
	SUBTOTAL DIRECT CONSTRUCTION COST		**5,632,657**	37.90774215
	INDIRECT PROJECT COSTS			
	GENERAL CONDITIONS			
	DESIGN COMPLETION CONTINGENCY	**0.00%**	**$0**	
	CONSTRUCTION CONTINGENCY	5.00%	292,825	
	NON-MEP ESCALATION ALLOWANCE (Assumes September 1, 2019 Project Buyout / Start)	0.00%	$0	
	ESCALATION ALLOWANCE		Included in Cost-of-Work Above	
	SUBTOTAL		**5,925,482**	
	GLI	0.90%	53,329	
	SUBCONTRACTOR DEFAULT INSURANCE (SDI - In lieu of Sub Bonds)	1.20%	71,106	
	BUILDER'S RISK - BY OWNER	0.00%	$0	
	B&O TAX - STATE	0.471%	27,909	
	B&O TAX - CITY	0.222%	13,155	
	SUBTOTAL		**6,090,981**	
	SERVICE & FEE			
	DESIGN SERVICES AND PERMITTING (Permit by Owner)	0.00%		
	OVERHEAD & PROFIT	4.25%	351,390	
	TOTAL CONSTRUCTION COST WITHOUT WSST		**6,442,371**	

Availability of Space/Campus Utilization Template

2020 Four-year Higher Education Scoring Process

Required for all categories except Infrastructure and Acquisition.

Project Name:	Johnson Hall Demolition
Institution:	Washington State University
Campus Location:	Pullman

Identify the average number of hours per week each (a) classroom seat and (b) classroom lab is expected to be utilized in Fall 2018 on the porposed porject's campus. Please fill in the green shaded cells for the **campus** where the project is located.

(a) General University Classroom Utilization		**(b) General University Lab Utilization**	
Fall 2019 Weekly Contact Hours	222,087	Fall 2019 Weekly Contact Hours	37,921
Multiply by % FTE Increase Budgeted	0.00%	Multiply by % FTE Increase Budgeted	0.00%
Expected Fall 2020 Contact Hours	222,087	Expected Fall 2020 Contact Hours	37,921
Expected Fall 2020 Classroom Seats	10,577	Expected Fall 2020 Class Lab Seats	2,592
Expected Hours per Week Utilization	**21.0**	**Expected Hours per Week Utilization**	**14.6**
HECB GUC Utilization Standard	22.0	HECB GUL Utilization Standard	16.0
Differrence in Utilization Standard	-5%	Differrence in Utilization Standard	-9%

If the campus does not meet the 22 hours per classroom seat and/or the 16 hours per class lab HECB utilization standards, describe any institutional plans for achieving that level of utilization.

WSU's Facilities Development plan is focused on identifying and prioritizing capital projects which balance continued stewardship and renewal of existing facilities and infrastructure within a framework for responsible growth. While recent completed projects have aided progress towards reaching state targets for classroom and laboratory utilization, additional improvements are still required. This proposed project plans to remove existing underutilized space and replace it with modern laboratory space that will exceed HECB utilization standards. This guiding principle for all WSU projects will contribute to achieving the state's target space utilization goals.

Appendix E - Space Allocation

Program Related Space Allocation Template

Assignable Square Feet

Required for all Growth, Renovation and Replacement proposals.

Institution: Washington State University

Campus location: Pullman, WA

Project name: Johnson Hall Demolition

Input the assignable square feet for the proposed project under the applicable space types below:

Type of Space	Points	Assignable Square Feet	Percentage of total	Score [Points x Percentage]
Instructional space (classroom, laboratories)	10	2,758	4.10	0.41
Research space	2	38,658	57.46	1.15
Office space	4	25,863	38.44	1.54
Library and study collaborative space	10		0.00	0.00
Other non-residential space	8		0.00	0.00
Support and physical plant space	6		0.00	0.00
Total		**67,279**	**100.0**	**3.10**

WSU Facility Development Plan

WSU Facilities Services | Geographic Information System

Pullman 2021-2023

Johnson Hall Demolition
$8,000,000 (Design and Construction)

ARS Plant Biosciences Building
$105,000,000 (Federal Funding)

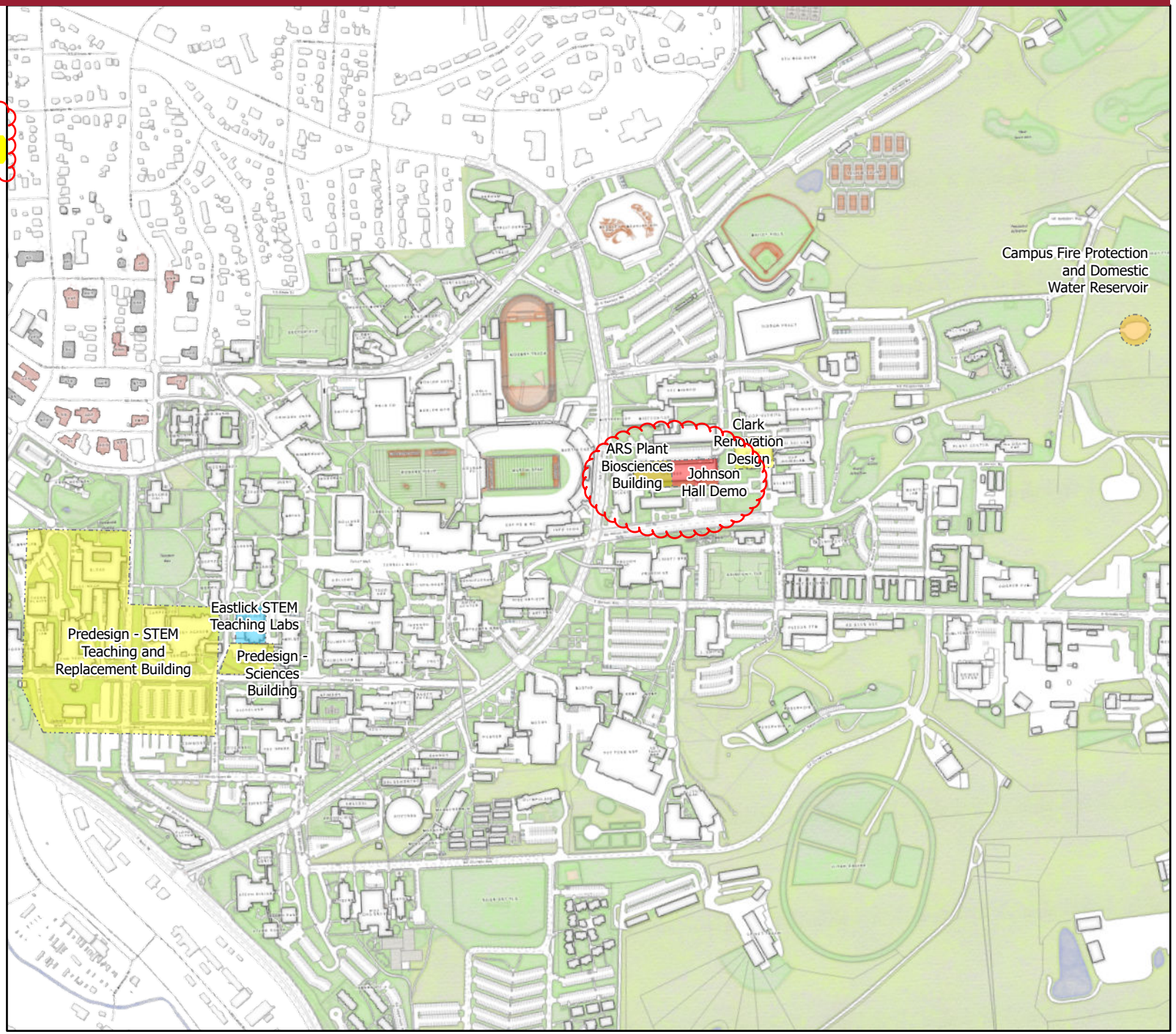
Campus Fire Protection and Domestic Water Reservoir
$8,000,000 (Design and Construction)

Pullman Sciences Building
$500,000 (Predesign)

STEM Teaching and Replacement Building – VCEA
$500,000 (Predesign)

STEM Teaching Labs
$4,900,000 (Design and Construction)

Clark Hall Research Lab Renovation
$4,900,000 (Design and Construction)



WSU Facility Development Plan

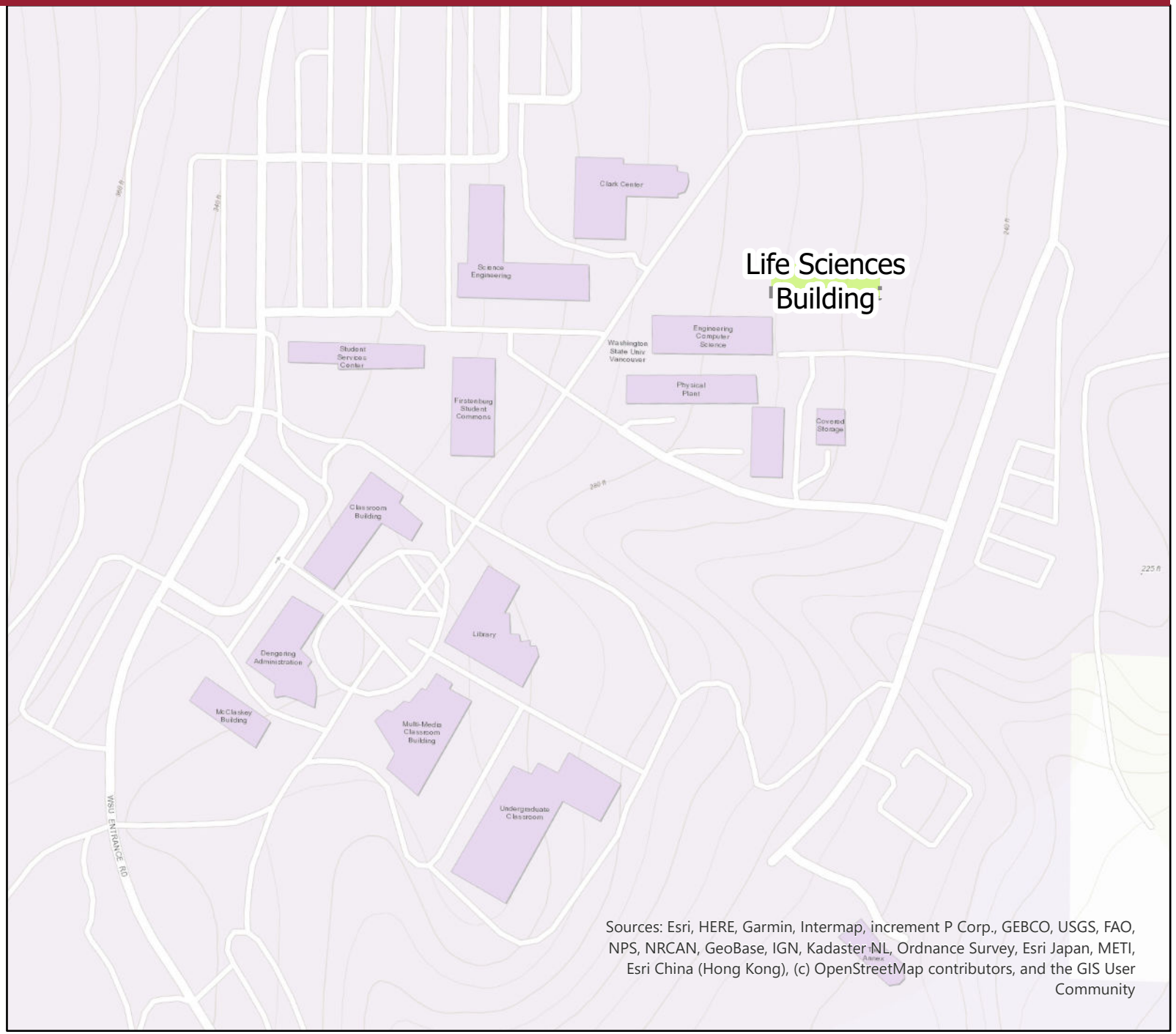
Spokane 2021-2023

Spokane Phase One Building Renovation
$15,000,000 (Design and Construction)

WSU Facility Development Plan

Vancouver 2021-2023

Vancouver Life Sciences Building
$52,600,000 (Construction)



WSU Facility Development Plan

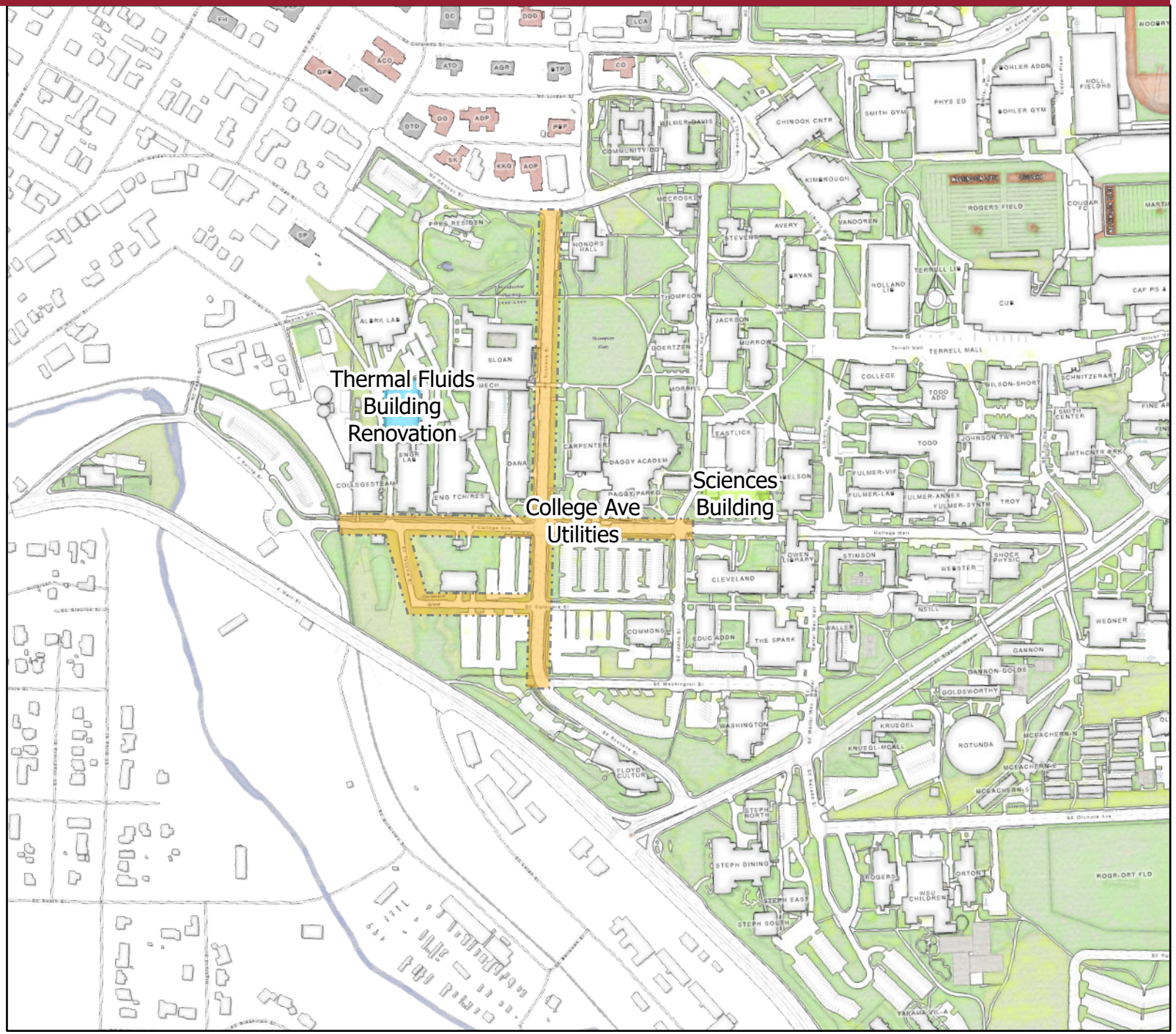
Pullman 2023-2025

Pullman Sciences Building
$53,000,000 (Design, Heald Hall Demolition and Construction)

College Avenue Utility Upgrades
$10,000,000 (Design and Construction)

Thermal Fluids Building Renovation
$10,000,000 (Design and Construction)

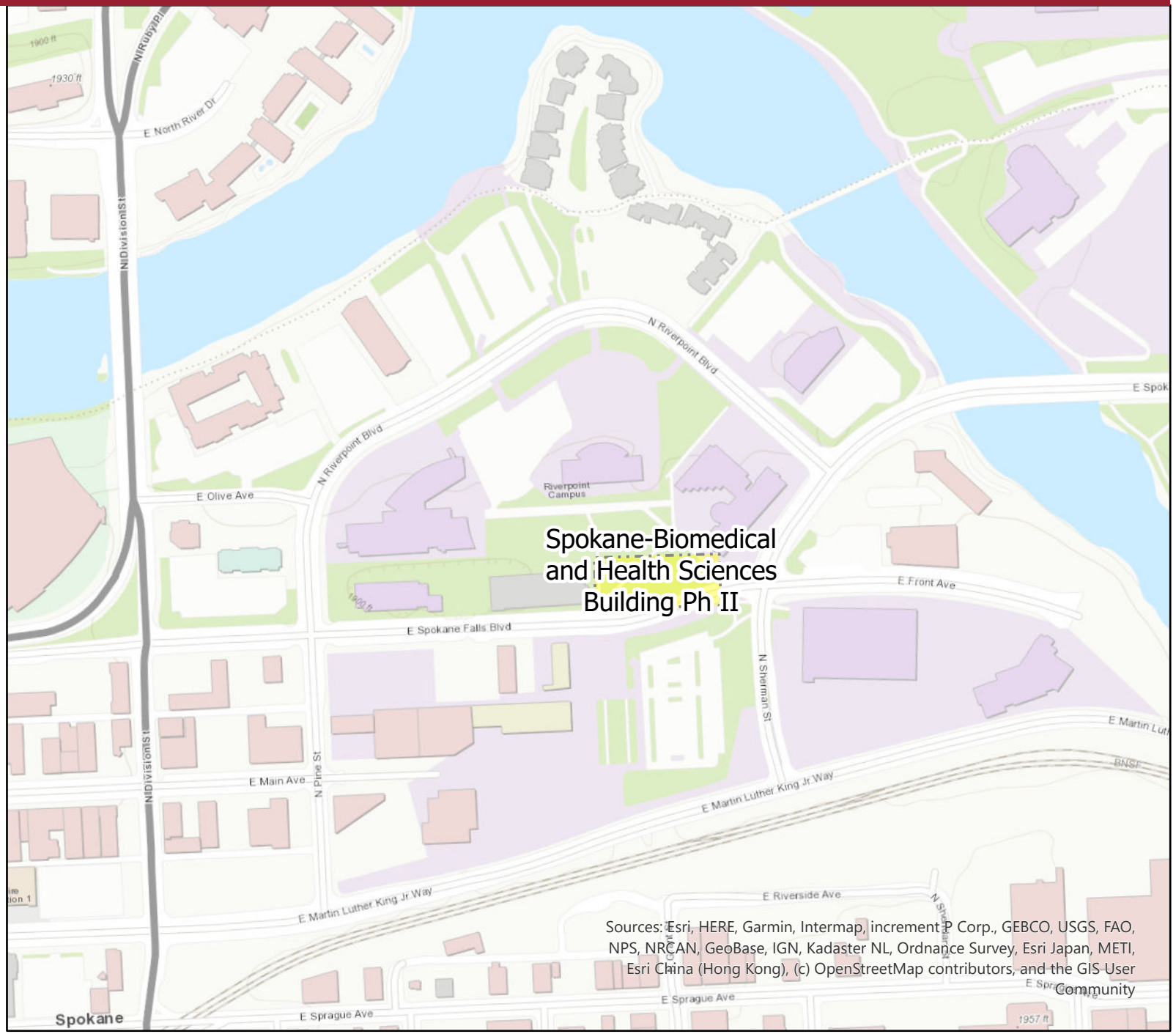
Building Systems (roofs, elevators, envelope, BAS, MEP)
$10,000,000 (Design and Construction)
(Multiple locations - not shown on map)



WSU Facility Development Plan

Spokane 2023-2025

Spokane-Biomedical and Health Sciences Building Ph II
$5,000,000 (Design)



WSU Facility Development Plan

Pullman 2025-2027

STEM Teaching and Replacement Building – VCEA
$8,000,000 (Design and Dana Hall Demolition)

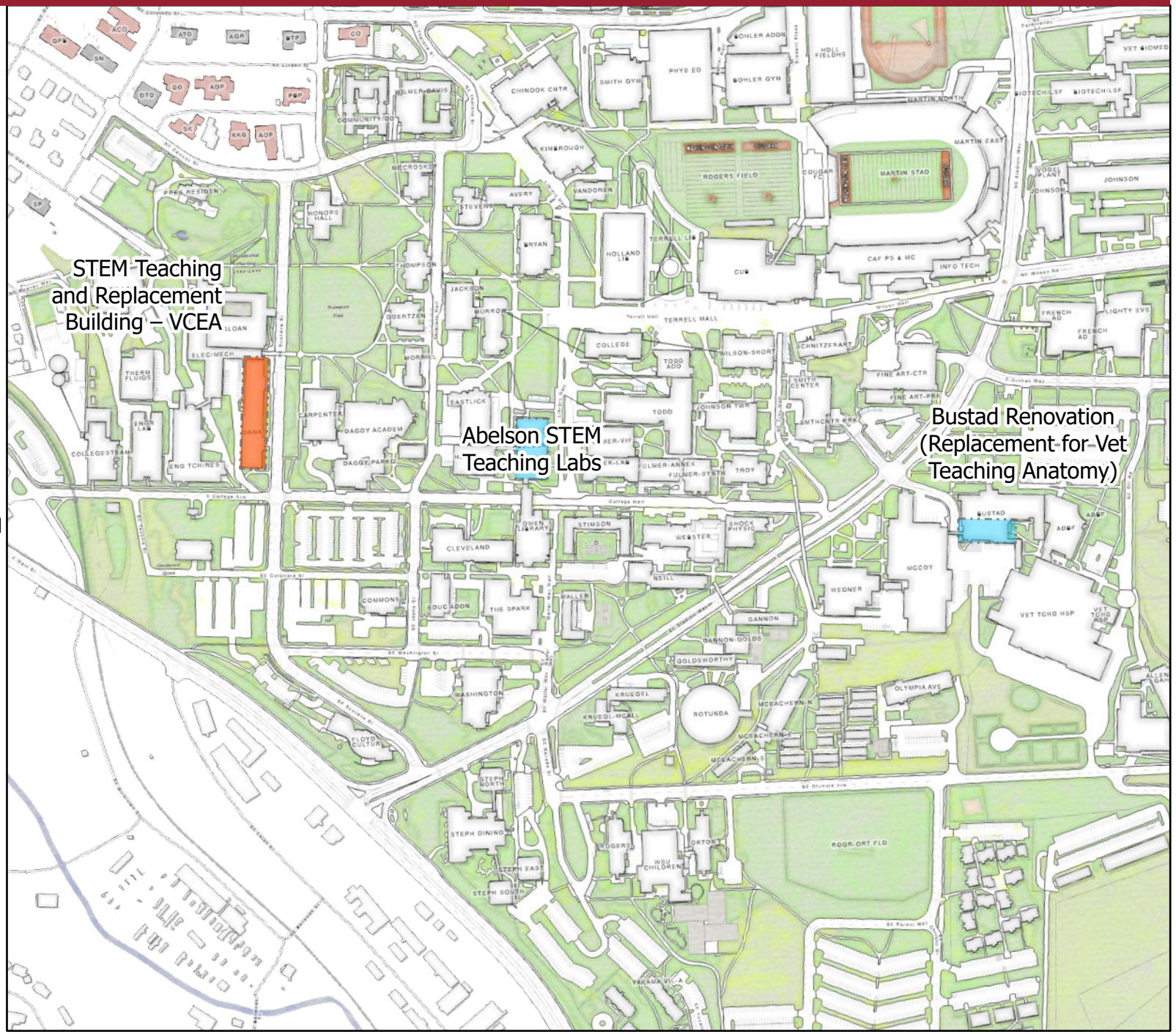
Washington State University Pullman - STEM Teaching Labs
$5,000,000 (Design and Construction)

Bustad Renovation (Replacement for Vet Teaching Anatomy)
$10,000,000 (Design and Construction)

Infrastructure (electrical, water, chilled water, steam, tunnels)
$10,000,000 (Design and Construction)
(Multiple locations - not shown on map)

Learning Renovations
$10,000,000 (Design and Construction)
(Multiple locations - not shown on map)

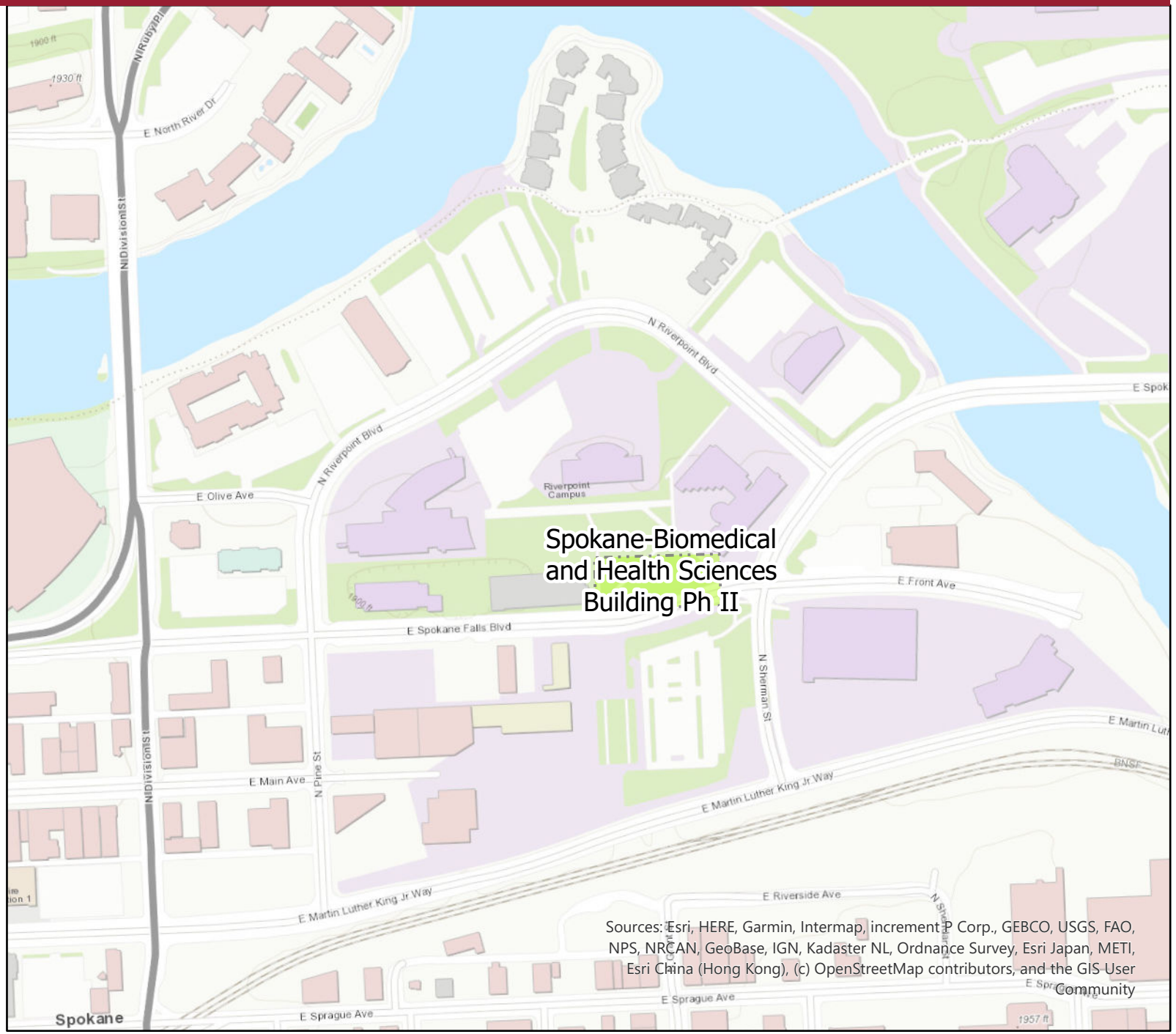
Information Technology Renovations
$5,000,000 (Design and Construction)
(Multiple locations - not shown on map)



WSU Facility Development Plan

Spokane 2025-2027

Spokane-Biomedical and Health Sciences Building Ph II
$35,000,000 (Construction Phase 1)



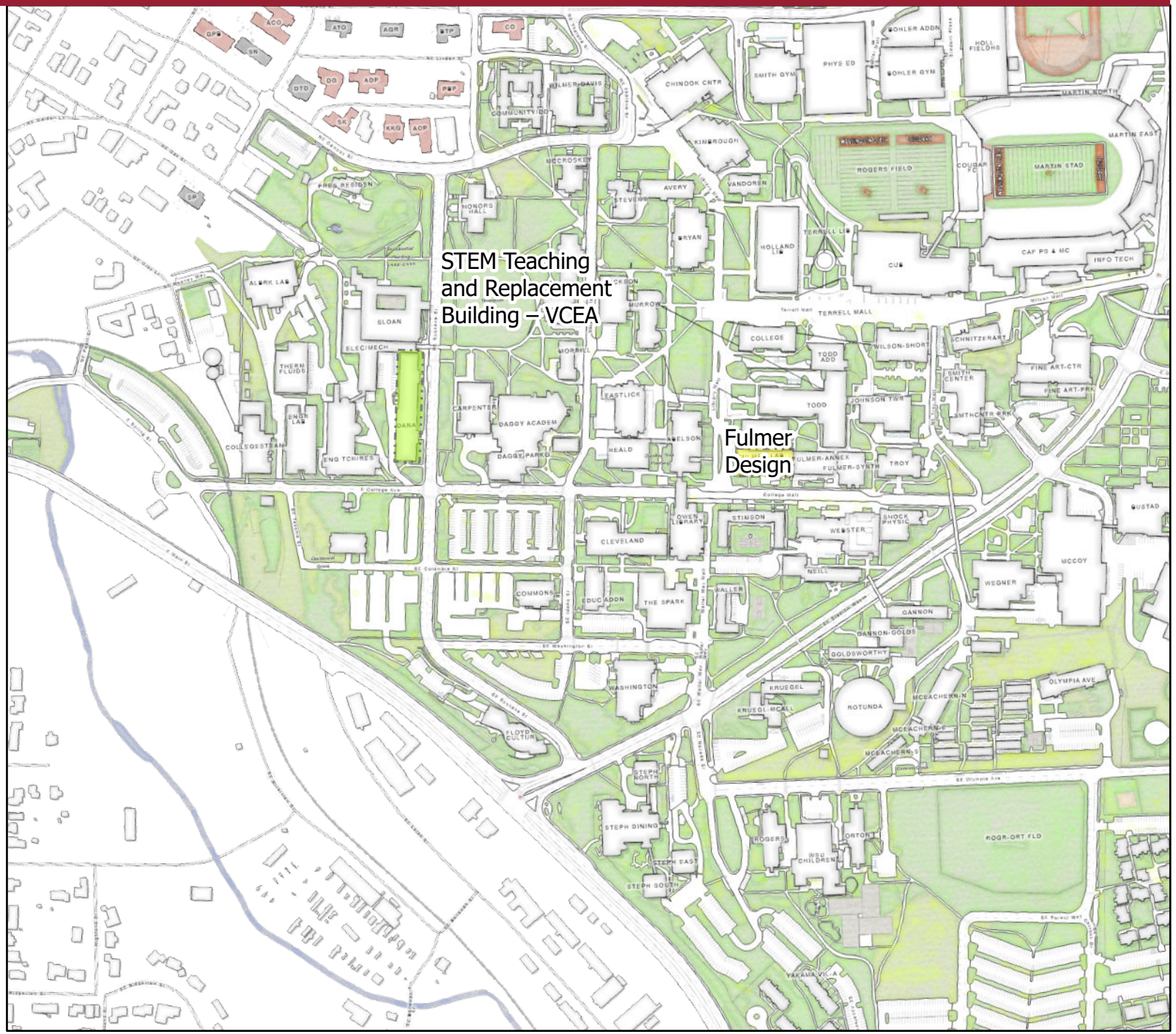
WSU Facility Development Plan

Pullman 2027-2029

STEM Teaching and Replacement Building – VCEA
$45,000,000 (Construction)

Fulmer Hall Renovation Phase 1
$3,000,000 (Design)

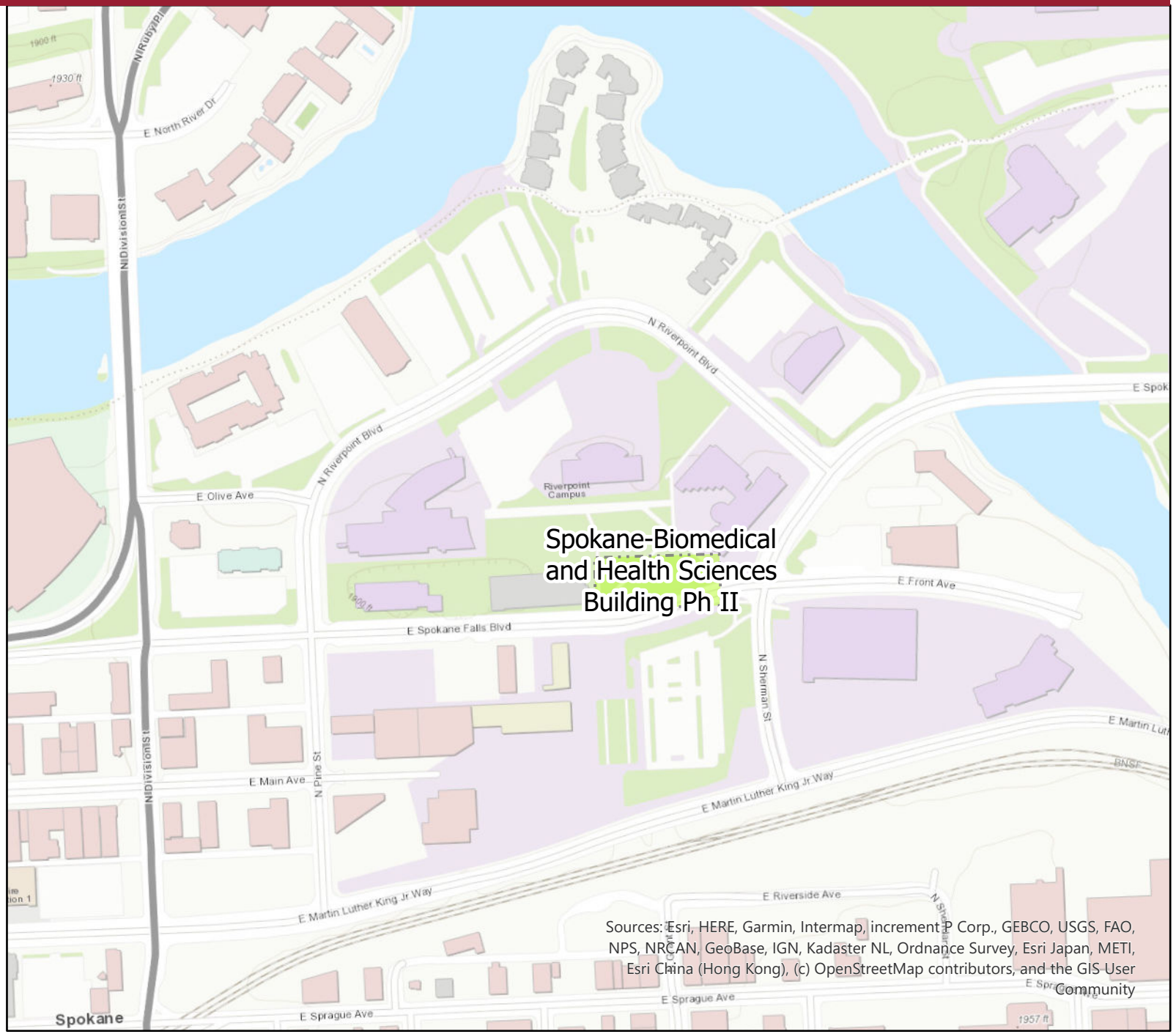
Research Renovations
$10,000,000 (Design and Construction)
(Multiple locations - not shown on map)



WSU Facility Development Plan

Spokane 2027-2029

Spokane-Biomedical and Health Sciences Building Ph II
$35,000,000 (Construction Phase 2)



WSU Facility Development Plan

Pullman 2029-2031

Fulmer Hall Renovation Phase 1
$35,000,000 (Construction)

Engineering Renovation/Replacement Ph 2 – VCEA
$8,000,000 (Design and Demolition of Daggy Hall)

McCoy Hall Demolition
$8,000,000 (Design and Demolition of McCoy Hall)

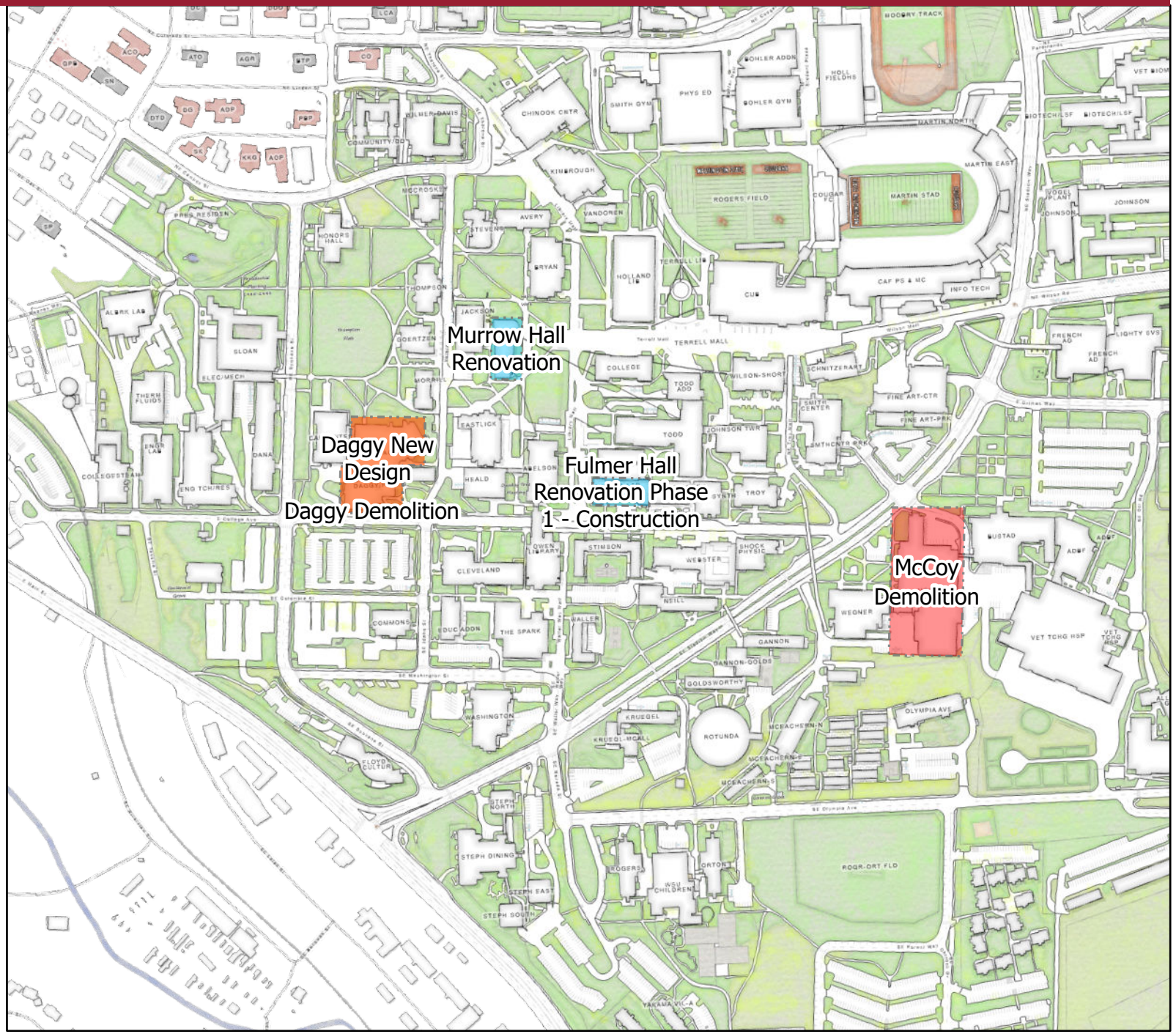
Murrow Hall Renovation
$3,000,000 (Design)

Building Systems (roofs, elevators, envelope, BAS, MEP)
$10,000,000 (Design and Construction)
(Multiple locations - not shown on map)

Infrastructure (electrical, water, chilled water, steam, tunnels)
$10,000,000 (Design and Construction)
(Multiple locations - not shown on map)

Learning Renovations
$10,000,000 (Design and Construction)
(Multiple locations - not shown on map)

Information Technology Renovations
$5,000,000 (Design and Construction)
(Multiple locations - not shown on map)



2020 PROJECT PROPOSAL CHECKLIST

2021-23 Biennium Four-year Higher Education Scoring Process

INSTITUTION	CAMPUS LOCATION
365 - Washington State University	Pullman
PROJECT TITLE	**FPMT UNIQUE FACILITY ID # (OR NA)**
Campus Fire Protection and Domestic Water Reservoir	N/A (new facility)
PROJECT CATEGORY	**PROJECT SUBCATEGORY**
Infrastructure	Standalone
PROPOSAL IS	
New or Updated Proposal (for scoring)	**Resubmitted Proposal (retain prior score)**
☒ New proposal ☐ Resubmittal to be scored (more than 2 biennia old or significantly changed)	☐ Resubmittal from 2017-19 biennium ☐ Resubmittal from 2019-21 biennium
CONTACT	**PHONE NUMBER**
Kate Kamerrer	509-335-9314

PROPOSAL CONTENT

- ☒ Project Proposal Checklist: this form; one for each proposal
- ☒ Project Proposal Form: Specific to category/subcategory (10-page limit)
- ☒ Appendices: templates, forms, exhibits and supporting/supplemental documentation for scoring.

INSTITUTIONAL PRIORITY

- ☒ Institutional Priority Form. Sent separately (not in this packet) to: Darrell Jennings.

Check the corresponding boxes below if the proposed project meets the minimum threshold or if the item listed is provided in the proposal submittal.

MINIMUM THRESHOLDS

- ☒ Project is not an exclusive enterprise function such as a bookstore, dormitory or contract food service.
- ☐ Project meets LEED Silver Standard requirements.
- ☒ Institution has a greenhouse gas emissions reduction policy in place in accordance with RCW 70.235.070 and vehicle emissions reduction policy in place per RCW 47.01.440 or RCW 43.160.020 as applicable.
- ☐ Design proposals: A complete predesign study was submitted to OFM by July 1, 2020.
- ☐ Growth proposals: Based on solid enrollment projections and is more cost-effectively providing enrollment access than alternatives such as university centers and distance learning.
- ☐ Renovation proposals: Project should cost between 60 – 80% of current replacement value and extend the useful life of the facility by at least 25 years.
- ☐ Acquisition proposals: Land acquisition is not related to a current facility funding request.
- ☒ Infrastructure proposals: Project is not a facility repair project.
- ☒ Stand-alone, infrastructure and acquisition proposals: is a single project requesting funds for one biennium.

2020 PROJECT PROPOSAL CHECKLIST

2021-23 Biennium Four-year Higher Education Scoring Process

REQUIRED APPENDICES

- ☒ Capital Project Report CBS 002
- ☒ Project cost estimate:
  - CBS 003 for projects between $2 million and $5 million
  - Excel C-100 for projects greater than $5 million
- ☐ Degree Totals and Targets template to indicate the number of Bachelors, High Demand and Advanced degrees expected to be awarded in 2021. (Required for Overarching Criteria scoring criteria for Major Growth, Renovation, Replacement and Research proposals).
- ☐ Availability of Space/Campus Utilization template for the campus where the project is located. (Required for all categories/subcategories except Infrastructure and Acquisition proposals).
- ☐ Assignable Square Feet template to indicate program-related space allocation. (Required for Growth, Renovation and Replacement proposals, all categories/subcategories).

OPTIONAL APPENDICES

Attach supplemental and supporting project documentation, *limit to materials directly related to and needed for the evaluation criteria*, such as:

- ☐ Degree and enrollment growth projections
- ☐ Selected excerpts from institutional plans
- ☐ Data on instructional and/or research space utilization
- ☐ Additional documentation for selected cost comparables (acquisition)
- ☐ Selected materials on facility conditions
- ☐ Selected materials on code compliance
- ☐ Tables supporting calculation of program space allocations, weighted average facility age, etc.
- ☐ Evidence of consistency of proposed research projects with state, regional, or local economic development plans
- ☐ Evidence of availability of non-state matching funds
- ☒ Selected documentation of prior facility failures, high cost maintenance, and/or system unreliability for infrastructure projects
- ☒ Documentation of professional assessment of costs for land acquisition, land cleanup, and infrastructure projects
- ☒ Selected documentation of engineering studies, site survey and recommendations, or opinion letters for infrastructure and land cleanup projects
- ☒ Other: WSU Facility Development Plan

I certify that the above checked items indicate either that the proposed project meets the minimum thresholds or the corresponding items have been included in this submittal.

Name: Kate Kamerrer Title: *Exec Director, Finance, Business & Building Systems*

Signature: Kate Kamerrer Date: 08/14/2020

INSTITUTION	CAMPUS
Washington State University	Pullman
PROJECT TITLE	
Campus Fire Protection and Domestic Water Reservoir	

SUMMARY NARRATIVE

- *Problem statement (short description of the project – the needs and the benefits)*
- *History of the project or facility*
- *University programs addressed or encompassed by the project*

Problem Statement - Washington State University is requesting $8,000,000 in the 2021-23 capital budget to construct a new fire protection and domestic water reservoir to serve the Pullman campus. WSU's four reservoirs are essential to providing domestic water for drinking, sanitation, and fire protection to university facilities and occupants, but all four have exceeded their intended life and one is permanently out of service. This leaves the university in a vulnerable position; regular preventive and corrective maintenance must be performed to assure reliability, but the system lacks the redundancy to allow a reservoir to be taken offline for the maintenance work to occur. Without a replacement, the lack of storage capacity endangers WSU's ability to provide water to meet regulatory requirements and fulfil its educational and research missions. A new reservoir is essential to continued provision of a safe and reliable water supply to the campus.

WSU owns and operates the water system serving all of the Pullman campus, and this system functions independently from the adjacent City of Pullman. Historically the water system was served by four reservoirs, which range in age from 45- to over 70-years- old.

Name	Capacity (gallons)	Year Constructed
East Reservoir	2,000,000	1947
High Tank	100,000	1947
West Reservoir	2,000,000	1963
North Fairway Reservoir	2,000,000	1975

History - In 2018 the East reservoir began leaking significantly. Several options for repair were investigated but none were found to be cost effective due to the non-compliant wood roof structure and other deferred maintenance requirements. An engineering analysis of the water system storage capacity determined that minimal regulatory compliance was being met so the East reservoir was removed from service and a replacement reservoir became the university's highest infrastructure priority.

University Programs - The new reservoir will serve the entire campus and is essential to the continued operation of the university in Pullman. No university programs can occur without a reliable domestic and fire protection water supply.

GENERAL CATEGORY SCORING CRITERIA

1. Significant health, safety, and code issues

A. Identify whether the project is needed to bring the facility within current life safety (including seismic and ADA), energy, utilities or transportation code requirements.

B. Clearly identify the applicable standard or code, and describe how the project will improve consistency with it. Provide selected supporting documentation in appendix and reference in the body of the proposal.

This proposed project will address multiple code issues associated with life safety, energy and utilities.

Justification:
The Washington State Department of Health's (DOH) Water System Design Manual provides a consistent framework for the design of large water systems compliant with Washington State's corresponding regulatory requirements (WAC 246-290) and dictates the standards a water system must meet. Section 4.4.3 of the DOH Design Manual defines water storage requirements for operational, equalizing, standby, and fire protection storage. In its current state, WSU's system is compliant with these storage requirements, but with zero redundancy and only when all remaining large reservoirs are in service and available. With either the North Fairway or West reservoirs out of service due to planned or unexpected outages, not only would the system's storage capacity be inadequate to meet Department of Health requirements, but the unavailability of these important system components creates substantial operational challenges and a high risk of water contamination. Since periodic outages at the existing reservoirs are required for maintenance, cleaning, and major repairs and renewal, without the added capacity of another reservoir the current situation makes this work impossible. Additionally, an unplanned outage would be disastrous to campus operations but is also increasingly likely with a long list of deferred maintenance needs to the campus water system. With no redundancy or opportunity to work on the reservoirs, the university is always at risk of losing its water supply.

In 2018 the Department of Health notified the university that the East Reservoir's wood roof structure was not compliant with the standards for domestic water storage as defined by WAC section 246-290-235; a copy of this correspondence can be seen in **Appendix A**. Considering the age of the reservoir structure, recent multiple leaks, and other deferred maintenance requirements, the cost to replace the roof structure and address the other needs exceeds the East reservoir's replacement value. A new water reservoir will succinctly address the current deficiencies and assure compliance with current health regulations.

2. Evidence of increased repairs and/or service interruption

Identify prior facility repairs, work order repair history or contractor repair call-outs, increased utility and/or maintenance costs, and/or system unreliability. Provide selected supporting documentation in appendix, and reference them in the body of the proposal.

The WSU Pullman campus fire protection and domestic water system has experienced multiple repairs and service interruptions over the past five years and beyond.

Justification:
The detailed work order history shown in **Appendix B** indicates (59) work orders related to the water system and reservoir over the past six years with an average of almost (10) per year. Each of the work orders noted represent a corresponding risk to safety and the reliable delivery of water, particularly since 2018 when the storage capacity was greatly reduced with the decommissioning of the East reservoir. Many of the issues necessitating these work orders could be addressed with the renewal of obsolete or end-of-life equipment, but without any

inherit redundancy this work is nearly impossible to complete. Thankfully, due to the efforts of dedicated staff there have been only isolated water service interruptions affecting only small portions of campus, but enhanced water conservation measures and irrigation restrictions have been imposed on several occasions due to unplanned outages in the system. This proposed project will return storage capacity and the redundancy to the water system allowing work orders like these to be addressed appropriately and the risks of system unreliability greatly reduced.

3. Impact on institutional operations without the infrastructure project

Describe how and the extent to which there would be an impact on existing operations and programs. Describe the potential impact on future, already funded or planned construction projects or program needs should this infrastructure project not occur.

An unplanned outage or failure at any of the reservoirs would have serious impacts on existing operations or programs. The inability to provide water for drinking and sanitation would create a public health crisis. The safety of the public could be endangered, millions of dollars in research projects impacted, accreditations placed at risk, and the reputation of the university damaged. The importance of the water supply to the campus cannot be understated

4. Reasonable estimate

Provide as much detailed cost estimate information as possible, including documentation of professional assessment of costs (may contain opinions of external experts or experienced project management staff from the institution).

A detailed cost estimate for a new reservoir has been compiled by Parametrix, a civil engineering firm specializing in infrastructure. Please see **Appendix C**.

5. Engineering study

Identify whether there is a completed comprehensive engineering study, site survey and recommendations or opinion letter. Provide referenced supporting documentation in appendix.

A comprehensive engineering study of the proposed reservoir was also performed by Parametrix, including an analysis of the proposed site, revising the water system hydraulic model to include the new reservoir, and reviewing the necessary piping connections to the existing distribution network. Please see an executive summary of this study in **Appendix D**.

6. Support by planning

Describe the proposed project's relationship and relative importance to the institution's:

A. Campus/facilities master plan

B. Ongoing academic and/or research program need and strategic plan

The construction of a new reservoir is a requirement to support the University's Development Plan, its long-term planning and strategic missions, and ongoing academic and research programs; a reliable water supply for both domestic and fire protection uses is essential to WSU's ability to function. For further information please see the University's Development Plan in **Appendix E**.

7. Resource efficiency and sustainability

Document project benefits associated with low-impact stormwater management techniques, improvements in energy and resource conservation, and use of renewable energy sources

This project will incorporate low impact storm water management techniques to address runoff from the top of the reservoir and the surrounding hardscape, and will also provide improvements in resource use by reducing leaks in the system and assuring operational efficiency. It is also notable that this project is due to the age and condition of the system, but not due to campus growth or an increase in water resource use. Recognizing declining aquifer levels and the finite nature of the campus' water source, WSU began focused conservation efforts in the 1980's; while campus square footage has increased by almost 40 percent since that time, the annual water use has decreased by more than 40 percent over the same period. The replacement of the reservoir will also further reduce undocumented water use, due to leaks that frequently occur from within the base of the reservoirs. Washington State University values the importance of incorporating resource conservation and sustainability practices in all projects.

OFM

365 - Washington State University
Capital Project Request

2021-23 Biennium

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Version: 10 2021-23 WSU Capital Budget Request

Report Number: CBS002
Date Run: 8/13/2020 4:25PM

Project Number: **40000272**
Project Title: **Campus Fire Protection and Domestic Water Reservoir**

Description

Starting Fiscal Year: 2022
Project Class: Preservation
Agency Priority: 4

Project Summary

Washington State University is requesting $8,000,000 to construct a new fire protection and domestic water reservoir to serve the Pullman campus. WSU's four reservoirs are essential to providing domestic water for drinking, sanitation, and fire protection to university facilities and occupants, but all four have exceeded their intended life and one is permanently out of service due to persistent leaks and a non-compliant wood roof structure. A new reservoir is essential to continued provision of a safe and reliable water supply to the campus.

Project Description

Identify the problem or opportunity addressed. Why is the request a priority? This narrative should identify unserved/underserved people or communities, operating budget savings, public safety improvements or other backup necessary to understand the need for the request. For preservation projects, it is helpful to include information about the current condition of the facility or system.

WSU has four reservoirs dating from 1948 to 1973. In 2018 the oldest reservoir was decommissioned, as the necessary repairs were a greater cost than a wholesale replacement. Although WSU's water system is compliant with Department of Health regulations for storage capacity, the system currently operates without redundancy. Regular preventive and corrective maintenance must be performed to the remaining reservoirs to assure system reliability, but all three must remain in operation to meet fire flow and reserve capacity requirements, despite their advanced age and a long list of deferred maintenance needs. Lacking the redundancy which would allow a reservoir to be taken out of service means that necessary work cannot occur and the likelihood of significant outages affecting campus personnel and functions increases greatly. A new reservoir is an essential priority for the university.

What will the request produce or construct (i.e., predesign or design of a building, construction of additional space, etc.)? When will the project start and be completed? Identify whether the project can be phased, and if so, which phase is included in the request. Please provide detailed cost backup.

This project would construct a new two-million-gallon reservoir, provide the corresponding site improvements and access road, and would install new required piping to link the new reservoir to the existing distribution network. The design and construction of this project would be completed in the 21-23 biennia, with most construction activities anticipated for the 2022 summer construction season. A detailed cost estimate compiled by Parametrix can be seen in Appendix C.

How would the request address the problem or opportunity identified in question 1? What would be the result of not taking action?

Constructing a new reservoir will return much-needed redundancy to the domestic and fire protection water system, assure WAC and Department of Health compliance, and will address a long list of maintenance requirements that have been deferred due to the inability to perform the work. If no action is taken a significant water system failure is not only likely but imminent. An inability to provide water for drinking and sanitation would create a public health crisis, impact millions of dollars in research projects, place accreditations at risk, and damage the reputation of the university.

What alternatives were explored? Why was the recommended alternative chosen? Be prepared to provide detailed cost backup. If this project has an associated predesign, please summarize the alternatives the predesign considered.

Repair of the existing out of service reservoir was considered, but the work required to address deferred maintenance, replacement of the wood roof structure with a compliant material, and correcting water leaks from the structure exceeds the replacement cost. A new reservoir is the most viable and cost-effective solution to succinctly address fire flow needs, reliability, and public health.

Which clientele would be impacted by the budget request? Where and how many units would be added, people or communities served, etc.

The new reservoir will serve the entire Pullman campus community and is essential to the continued educational, research and business operations of the university. No university programs can occur without a reliable domestic and fire protection water supply.

Does this project or program leverage non-state funding? If yes, how much by source? If the other funding source requires cost share, also include the minimum state (or other) share of project cost allowable and the supporting citation or documentation.

This project will only utilize state funding.

OFM

365 - Washington State University
Capital Project Request
2021-23 Biennium

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Version: 10 2021-23 WSU Capital Budget Request

Report Number: CBS002
Date Run: 8/13/2020 4:25PM

Project Number: **40000272**
Project Title: **Campus Fire Protection and Domestic Water Reservoir**

Description

Describe how this project supports the agency's strategic master plan or would improve agency performance. Reference feasibility studies, master plans, space programming and other analyses as appropriate.
The construction of a new reservoir is a requirement to support the University's Development Plan, its long-term planning and strategic missions, and ongoing academic and research programs; a reliable water supply for both domestic and fire protection uses is essential to WSU's ability to function. For further information please see the University's Development Plan in Appendix E.

Does this decision package include funding for any Information Technology related costs including hardware, software (to include cloud-based services), contracts or staff? If the answer is yes, you will be prompted to attach a complete IT addendum. (See Chapter 10 of the operating budget instructions for additional requirements.)
This request does not include or require any Information Technology related costs.

If the project is linked to the Puget Sound Action Agenda, describe the impacts on the Action Agenda, including expenditure and FTE detail. See Chapter 12 Puget Sound Recovery) in the 2021-23 Operating Budget Instructions.
This proposed project is not linked to the Puget Sound Action Agenda.

How does this project contribute to statewide goals to reduce carbon pollution and/or improve energy efficiency? Please elaborate.
The new reservoir contributes to increased energy efficiency by reducing undocumented water loss due to leaks, thus resulting in decreased energy use due to the avoided pumping of groundwater. The increased available storage capacity will also provide added flexibility to when well pumps are operated, reducing electrical use at peak time and avoiding utility surcharges. It is also noteworthy that this project is due to the age and condition of the water system, but not due to campus growth or an increase in water resource use. WSU began focused conservation efforts in the 1980's; while campus square footage has increased by almost 40 percent since that time, the annual water use has decreased by more than 40 percent over the same period.

Is there additional information you would like decision makers to know when evaluating this request?
Please see the corresponding Project Proposal Form for additional information regarding this request.

Location
City: Pullman **County:** Whitman **Legislative District:** 009

Project Type
Infrastructure (Major Projects)

Growth Management impacts
WSU Pullman's physical planning policies are coordinated with many agencies and government units. The Growth Management Act and its companion Traffic Demand Management legislation and the State Environmental Policy Act, however, are applicable to WSU's physical facilities and programs. Growth Management Act (GMA)-WSU will coordinate with Counties and Municipalities throughout the State to ensure compliance with GMA. WSU will avoid construction or activities which would permanently impair "critical" areas on its campuses as they are defined in the GMA. Transportation Demand Management-A companion piece of legislation sets forth a policy for Transportation Demand Management in which the State of Washington will provide leadership. The Director of the State of Washington Department of General Administration (DGA) is required to develop a commute trip reduction plan for state agencies which are Phase I major employers WSU will conform to the plans developed by DGA. State Environmental Policy Act (SEPA)-WSU has adopted procedures set forth in the State Environmental Policy Act Handbook December 1988 and the State Environmental Policy Act Rules Chapter 197-11 Washington Administrative Code Effective April 4, 1984. Adherence to these procedures will be one of the principal means by which WSU coordinates its compliance with Growth Management requirements.

Funding

Acct Code	Account Title	Estimated Total	Expenditures Prior Biennium	Current Biennium	2021-23 Fiscal Period Reapprops	New Approps
057-1	State Bldg Constr-State					
062-1	WSU Building Account-State	8,000,000				8,000,000

OFM

365 - Washington State University
Capital Project Request
2021-23 Biennium

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Version: 10 2021-23 WSU Capital Budget Request

Report Number: CBS002
Date Run: 8/13/2020 4:25PM

Project Number: **40000272**
Project Title: **Campus Fire Protection and Domestic Water Reservoir**

Funding

Total	**8,000,000**	**0**	**0**	**0**	**8,000,000**

		Future Fiscal Periods			
		2023-25	**2025-27**	**2027-29**	**2029-31**
057-1	State Bldg Constr-State				
062-1	WSU Building Account-State				
	Total	**0**	**0**	**0**	**0**

Schedule and Statistics

	Start Date	End Date
Predesign	07/01/2021	08/01/2021
Design	9/1/2021	2/1/2022
Construction	3/1/2022	9/1/2022

	Total
Gross Square Feet:	1
Usable Square Feet:	1
Efficiency:	100.0%
Escalated MACC Cost per Sq. Ft.:	6,059,571
Construction Type:	Civil
Is this a remodel?	No
A/E Fee Class:	C
A/E Fee Percentage:	7.21%

Cost Summary

		Escalated Cost	% of Project
Acquisition Costs Total		**0**	**0.0%**
Consultant Services			
Pre-Schematic Design Services		0	0.0%
Construction Documents		0	0.0%
Extra Services		30,927	0.4%
Other Services		52,205	0.7%
Design Services Contingency		(60,046)	-0.8%
Consultant Services Total		**478,527**	**6.0%**
Maximum Allowable Construction Cost(MACC)	**6,059,571**		
Site work		425,539	5.3%
Related Project Costs		1,142,313	14.3%
Facility Construction		4,491,719	56.2%
GCCM Risk Contingency		0	0.0%

OFM

365 - Washington State University
Capital Project Request
2021-23 Biennium

*

Version: 10 2021-23 WSU Capital Budget Request

Report Number: CBS002
Date Run: 8/13/2020 4:25PM

Project Number: **40000272**
Project Title: **Campus Fire Protection and Domestic Water Reservoir**

Cost Summary

	Escalated Cost	% of Project
Construction Contracts		
GCCM or Design Build Costs	0	0.0%
Construction Contingencies	303,447	3.8%
Non Taxable Items	0	0.0%
Sales Tax	496,315	6.2%
Construction Contracts Total	**6,859,332**	**85.7%**
Equipment		
Equipment	0	0.0%
Non Taxable Items	0	0.0%
Sales Tax	0	0.0%
Equipment Total	**0**	**0.0%**
Art Work Total	**39,801**	**0.5%**
Other Costs Total	**78,050**	**1.0%**
Project Management Total	**544,290**	**6.8%**
Grand Total Escalated Costs	**8,000,000**	
Rounded Grand Total Escalated Costs	**8,000,000**	

Operating Impacts

No Operating Impact

Narrative

This is an Infrastructure project request.

OFM

Capital Project Request

2021-23 Biennium

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Parameter	Entered As	Interpreted As
Biennium	2021-23	2021-23
Agency	365	365
Version	10-A	10-A
Project Classification	*	All Project Classifications
Capital Project Number	40000272	40000272
Sort Order	Project Priority	Priority
Include Page Numbers	Y	Yes
For Word or Excel	N	N
User Group	Agency Budget	Agency Budget
User Id	*	All User Ids

STATE OF WASHINGTON
AGENCY / INSTITUTION PROJECT COST SUMMARY

Updated June 2020

Agency	Washington State Univeristy
Project Name	Campus Fire Protection and Domestic Water Reservoir
OFM Project Number	40000272

Contact Information	
Name	Jeff Lannigan
Phone Number	509-335-7221
Email	lannigan@wsu.edu

Statistics			
Gross Square Feet	1	MACC per Square Foot	$5,812,600
Usable Square Feet	1	Escalated MACC per Square Foot	$6,059,571
Space Efficiency	100.0%	A/E Fee Class	C
Construction Type	Civil Construction	A/E Fee Percentage	7.21%
Remodel	No	Projected Life of Asset (Years)	50
Additional Project Details			
Alternative Public Works Project	Yes	Art Requirement Applies	Yes
Inflation Rate	2.38%	Higher Ed Institution	Yes
Sales Tax Rate %	7.80%	Location Used for Tax Rate	Pullman
Contingency Rate	5%		
Base Month	August-20	OFM UFI# (from FPMT, if available)	N/A (new facility)
Project Administered By	Agency		

Schedule			
Predesign Start	July-21	Predesign End	August-21
Design Start	September-21	Design End	February-22
Construction Start	March-22	Construction End	September-22
Construction Duration	6 Months		

Green cells must be filled in by user

Project Cost Estimate

Total Project	**$7,678,117**	Total Project Escalated	**$8,000,004**
		Rounded Escalated Total	**$8,000,000**

STATE OF WASHINGTON
AGENCY / INSTITUTION PROJECT COST SUMMARY

Updated June 2020

Agency	Washington State Univeristy
Project Name	Campus Fire Protection and Domestic Water Reservoir
OFM Project Number	40000272

Cost Estimate Summary

Acquisition			
Acquisition Subtotal	**$0**	**Acquisition Subtotal Escalated**	**$0**

Consultant Services			
Predesign Services	$0		
A/E Basic Design Services	$303,630		
Extra Services	$30,000		
Other Services	$186,413		
Design Services Contingency	-$57,510		
Consultant Services Subtotal	**$462,533**	**Consultant Services Subtotal Escalated**	**$478,527**

Construction			
GC/CM Risk Contingency	$0		
GC/CM or D/B Costs	$0		
Construction Contingencies	$290,630	Construction Contingencies Escalated	$303,447
Maximum Allowable Construction Cost (MACC)	$5,812,600	Maximum Allowable Construction Cost (MACC) Escalated	$6,059,571
Sales Tax	$476,052	Sales Tax Escalated	$496,316
Construction Subtotal	**$6,579,282**	**Construction Subtotal Escalated**	**$6,859,334**

Equipment			
Equipment	$0		
Sales Tax	$0		
Non-Taxable Items	$0		
Equipment Subtotal	**$0**	**Equipment Subtotal Escalated**	**$0**

Artwork			
Artwork Subtotal	**$39,801**	**Artwork Subtotal Escalated**	**$39,801**

Agency Project Administration			
Agency Project Administration Subtotal	$213,175		
DES Additional Services Subtotal	$0		
Other Project Admin Costs	$0		
Project Administration Subtotal	**$521,301**	**Project Administation Subtotal Escalated**	**$544,291**

Other Costs			
Other Costs Subtotal	**$75,200**	**Other Costs Subtotal Escalated**	**$78,051**

Project Cost Estimate

Total Project	**$7,678,117**	Total Project Escalated	**$8,000,004**
		Rounded Escalated Total	**$8,000,000**

Cost Estimate Details

Acquisition Costs					
Item	**Base Amount**		**Escalation Factor**	**Escalated Cost**	**Notes**
Purchase/Lease	$0				
Appraisal and Closing	$0				
Right of Way	$0				
Demolition	$0				
Pre-Site Development	$0				
Other					
Insert Row Here					
ACQUISITION TOTAL	**$0**		**NA**	**$0**	

Green cells must be filled in by user

Cost Estimate Details

Consultant Services				
Item	**Base Amount**	**Escalation Factor**	**Escalated Cost**	**Notes**
1) Pre-Schematic Design Services				
Programming/Site Analysis				
Environmental Analysis				
Predesign Study				
Other				
Insert Row Here				
Sub TOTAL	**$0**	**1.0258**	**$0**	Escalated to Design Start
2) Construction Documents				
A/E Basic Design Services	$303,630			69% of A/E Basic Services
Other				
Insert Row Here				
Sub TOTAL	**$303,630**	**1.0309**	**$313,012**	Escalated to Mid-Design
3) Extra Services				
Civil Design (Above Basic Svcs)				
Geotechnical Investigation	$30,000			
Commissioning				
Site Survey				
Testing				
LEED Services				
Voice/Data Consultant				
Value Engineering				
Constructability Review				
Environmental Mitigation (EIS)				
Landscape Consultant				
Other				
Insert Row Here				
Sub TOTAL	**$30,000**	**1.0309**	**$30,927**	Escalated to Mid-Design
4) Other Services				
Bid/Construction/Closeout	$136,413			31% of A/E Basic Services
HVAC Balancing				
Staffing				
Specialty Consultants	$50,000			
Insert Row Here				
Sub TOTAL	**$186,413**	**1.0441**	**$194,635**	Escalated to Mid-Const.
5) Design Services Contingency				
Design Services Contingency	$26,002			
Correction Factor	-$83,512			
Insert Row Here				
Sub TOTAL	**-$57,510**	**1.0441**	**-$60,047**	Escalated to Mid-Const.
CONSULTANT SERVICES TOTAL	**$462,533**		**$478,527**	

Green cells must be filled in by user

Cost Estimate Details

Construction Contracts				
Item	**Base Amount**	**Escalation Factor**	**Escalated Cost**	**Notes**
1) Site Work				
G10 - Site Preparation	$350,000			
G20 - Site Improvements	$60,000			
G30 - Site Mechanical Utilities				
G40 - Site Electrical Utilities				
G60 - Other Site Construction				
Other				
Insert Row Here				
Sub TOTAL	**$410,000**	**1.0379**	**$425,539**	
2) Related Project Costs				
Offsite Improvements				
City Utilities Relocation				
Parking Mitigation				
Stormwater Retention/Detention	$70,000			
Water Line Replacement	$1,030,600			
Insert Row Here				
Sub TOTAL	**$1,100,600**	**1.0379**	**$1,142,313**	
3) Facility Construction				
A10 - Foundations	$300,000			
A20 - Basement Construction				
B10 - Superstructure				
B20 - Exterior Closure				
B30 - Roofing				
C10 - Interior Construction				
C20 - Stairs				
C30 - Interior Finishes				
D10 - Conveying				
D20 - Plumbing Systems	$80,000			
D30 - HVAC Systems				
D40 - Fire Protection Systems				
D50 - Electrical Systems	$200,000			
F10 - Special Construction	$50,000			
F20 - Selective Demolition	$472,000			
General Conditions				
Welded Steel Reservoir	$3,200,000			
Insert Row Here				
Sub TOTAL	**$4,302,000**	**1.0441**	**$4,491,719**	
4) Maximum Allowable Construction Cost				
MACC Sub TOTAL	**$5,812,600**		**$6,059,571**	

5) GCCM Risk Contingency				
GCCM Risk Contingency				
Other				
Insert Row Here				
Sub TOTAL	**$0**	**1.0441**	**$0**	
6) GCCM or Design Build Costs				
GCCM Fee				
Bid General Conditions				
GCCM Preconstruction Services				
Other				
Insert Row Here				
Sub TOTAL	**$0**	**1.0441**	**$0**	
7) Construction Contingency				
Allowance for Change Orders	$290,630			
Other				
Insert Row Here				
Sub TOTAL	**$290,630**	**1.0441**	**$303,447**	
8) Non-Taxable Items				
Other				
Insert Row Here				
Sub TOTAL	**$0**	**1.0441**	**$0**	
Sales Tax				
Sub TOTAL	**$476,052**		**$496,316**	
CONSTRUCTION CONTRACTS TOTAL	**$6,579,282**		**$6,859,334**	

Green cells must be filled in by user

Cost Estimate Details

Equipment				
Item	**Base Amount**	**Escalation Factor**	**Escalated Cost**	**Notes**
E10 - Equipment				
E20 - Furnishings				
F10 - Special Construction				
Other				
Insert Row Here				
Sub TOTAL	**$0**	**1.0441**	**$0**	
1) Non Taxable Items				
Other				
Insert Row Here				
Sub TOTAL	**$0**	**1.0441**	**$0**	
Sales Tax				
Sub TOTAL	**$0**		**$0**	
EQUIPMENT TOTAL	**$0**		**$0**	

Green cells must be filled in by user

Cost Estimate Details

Artwork					
Item	**Base Amount**		**Escalation Factor**	**Escalated Cost**	**Notes**
Project Artwork	$0				0.5% of total project cost for new construction
Higher Ed Artwork	$39,801				0.5% of total project cost for new and renewal construction
Other					
Insert Row Here					
ARTWORK TOTAL	**$39,801**		**NA**	**$39,801**	

Green cells must be filled in by user

Cost Estimate Details

Project Management					
Item	**Base Amount**		**Escalation Factor**	**Escalated Cost**	**Notes**
Agency Project Management	$213,175				
Additional Services					
Construction Management	$308,126				
Insert Row Here					
PROJECT MANAGEMENT TOTAL	**$521,301**		**1.0441**	**$544,291**	

Green cells must be filled in by user

Cost Estimate Details

Other Costs					
Item	**Base Amount**		**Escalation Factor**	**Escalated Cost**	**Notes**
Mitigation Costs					
Hazardous Material Remediation/Removal					
Historic and Archeological Mitigation					
Permits	$40,000				
Builders Risk	$14,200				
Facilities Support	$21,000				
OTHER COSTS TOTAL	**$75,200**		**1.0379**	**$78,051**	

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C-100(2020)
Additional Notes

Tab A. Acquisition
Insert Row Here

Tab B. Consultant Services
Insert Row Here

Tab C. Construction Contracts
Insert Row Here

Tab D. Equipment
Insert Row Here

Tab E. Artwork
Insert Row Here

Tab F. Project Management
Insert Row Here

Tab G. Other Costs
Insert Row Here

Appendix A - Dept. of Health Correspondence

Streva, Gregory Martin

From: Leachman, Timothy Ray
Sent: Tuesday, July 17, 2018 12:21 PM
To: Streva, Gregory Martin
Subject: FW: east reservoir

From: Cervantes, Andres (DOH) <Andres.Cervantes@DOH.WA.GOV>
Sent: Tuesday, July 17, 2018 12:19 PM
To: Leachman, Timothy Ray <trleachman@wsu.edu>
Subject: RE: east reservoir

Not a problem Tim,

Let him know, that as the Regional Engineer, I don't approve the wooden covers for new reservoirs.

Andres R. Cervantes
Regional Engineer
Office of Drinking Watet
Washington State Department of Health
andres.cervantes@doh.wa.gov
509-329-2120 | www.doh.wa.gov

From: Leachman, Timothy Ray [mailto:trleachman@wsu.edu]
Sent: Tuesday, July 17, 2018 11:41 AM
To: Cervantes, Andres (DOH) <Andres.Cervantes@DOH.WA.GOV>
Subject: RE: east reservoir

Thank you ! this will surely help

From: Cervantes, Andres (DOH) <Andres.Cervantes@DOH.WA.GOV>
Sent: Tuesday, July 17, 2018 6:50 AM
To: Leachman, Timothy Ray <trleachman@wsu.edu>
Subject: RE: east reservoir

Hi Tim,

The following WAC outlines the requirement for the design and construction of a potable water reservoir. When you research the 10-State Standards, they go further to single out porous materials in contact with the water are not suitable for use in the construction of reservoirs.

Keep in mind:

* A wooden cover over a slow sand filter is fine. However, the slow sand and disinfection (Inactivation Ratio), are designed for the removal of harmful bacteria and other pathogens.
* The wood is not considered a durable product, and the pretreated materials can provide VOC's that can go into solution.
* The ability of the wood roof structure to remain watertight overtime becomes more difficult with age. Moisture, heat, extreme cold will deteriorate and breakdown the cover quickly.

Appendix A - Dept. of Health Correspondence

WAC 246-290-235

Finished water storage facilities.

(1) Finished water storage facilities shall be designed to:

(a) Prevent entry by birds, animals, insects, excessive dust, and other potential sources of external contamination. The design shall include provisions for a lockable weathertight roof, a screened roof vent, an overflow pipe with atmospheric discharge or other suitable means to prevent a cross-connection, sample collection capability, a drain to daylight (or an approved alternative that is adequate to protect against cross-connection), a provision for tank isolation in order to perform maintenance procedures, and other appurtenances appropriate to the protection of stored water from contamination;

(b) Maintain water circulation, prevent water stagnation, and provide adequate disinfection contact time; and

(c) Be accessible for routine maintenance and water quality monitoring.

(2) Equalizing storage, as defined in WAC 246-290-010, shall be provided to meet peak periods of demand, either daily or longer, when determined to be necessary based on available, or designed, source pumping capacity.

(3) Operational, standby, and fire suppression storage volumes as defined in WAC 246-290-010 shall be provided, as applicable, for all pressure zones to meet both normal as well as abnormal demands of the system.

(4) Standby and fire suppression storage volumes may be nested with the larger of the two volumes being the minimum available, provided the local fire protection authority does not require them to be additive.

[Statutory Authority: RCW 70.119A.180 and 43.20.050. WSR 08-03-061, § 246-290-235, filed 1/14/08, effective 2/14/08. Statutory Authority: RCW 43.02.050 [43.20.050]. WSR 99-07-021, § 246-290-235, filed 3/9/99, effective 4/9/99.]

Andres R. Cervantes
Regional Engineer
Office of Drinking Watet
Washington State Department of Health
andres.cervantes@doh.wa.gov
509-329-2120 | www.doh.wa.gov

Appendix B - Work Order History

Work Order	Description	Date Created
2020-021881	RESERVOIR ALARM IS BEEPING	3/19/20 2:03 AM
2020-021665	OBSERVATORY HILL PUMPHOUSE DID NOT SEND SIGNAL TO WHITCOM TODAY PLEASE CHECK	3/13/20 11:14 AM
2020-011811	HIGH OBSERVATORY TANK IN ALARM (ALTITUDE VALVE)	11/11/19 1:55 AM
2020-009384	HIGH OBSERVATORY TANK IN ALARM (ALTITUDE VALVE)	10/10/19 2:39 AM
2020-008015	CHECK ALL PROGRAMMING FOR THE DOMESTIC WATER SYSTEM ON CAMPUS. PER RALPH WEBB.	9/27/19 9:09 AM
2020-007884	PROBLEMS WITH TRANSFER PUMP & WELL #8.	9/25/19 5:57 PM
2020-006645	OBSERVATORY RESERVOIR OVERFLOWED, CAUSING RESERVOIR LEVEL ALARM. MANUALLY SHUT DOWN WELL #7	9/6/19 5:19 PM
2020-005418	ASSIST CAMPUS POLICE AT OBSERVATORY TANK FOR BUGLER ALARM	8/26/19 1:27 AM
2020-005286	THE ALARM AT OBSERVATORY HILL WILL NOT REARM LOCK SWITCH PROBLEM	8/22/19 7:59 AM
2020-004747	OBSERVATORY HIGH TANK IS SHOWING LOW LEVEL	8/15/19 6:36 AM
2020-002988	MAKE SURE THE OBSERVATORY IS FULL FOR THE DAY CREW TOMORROW	7/25/19 3:35 PM
2020-001555	WEB REQUEST: WATER AND SEWER PROBLEMS | REPLACE LEVEL SENSOR SEND TO CONTROL SHOP	7/10/19 8:35 AM
2020-001154	WEB REQUEST: WATER AND SEWER PROBLEMS | LEVEL SENSOR FOR WELL 7 NEEDS TO BE REPAIRED MAYBE ISOLATED AND ZEROED OUT AND LINES BLOWN OUT S	7/2/19 3:55 PM
2019-029399	ASSIST CAMPUS POLICE AT THE RESERVOIR	6/28/19 2:37 AM
2019-028913	WEB REQUEST: WATER AND SEWER PROBLEMS | ASSIST LEE WITH LEVEL SENSOR AT O BSERVATORY SEND TO CONTROL SHOP	6/25/19 2:34 PM
2019-028295	REMOVE ULTRASONIC SENSOR FROM WEST RESERVOIR - VERIFY AND CALIBRATE NEW SENSOR, AND BACKUP SENSOR.	6/17/19 1:39 PM
2019-020837	WEB REQUEST: LIGHTING-INDOOR | PLEASE REPAIR THE LIGHTING IN THE WEST RESIVOR AT THE OBSERVATORY AND IN THE OBSERVATORY PUMP HOUSE SEND TC	3/18/19 5:09 AM
2019-020153	WEB REQUEST: WATER AND SEWER PROBLEMS | CHECK OLD LEVEL SENSOR AT OBSERVATORY TO WEST RESIVOUR SEND TO CONTROL SHOP	3/7/19 2:30 PM
2019-017892	FOMS NEED TO PHYSICALLY OBSERVE THE WATER LEVEL AT OBSERVATORY RESERVOIR.	2/11/19 9:16 PM
2019-014820	WEB REQUEST: ROOFING REPAIRS | PLEASE INSPECT ROOF ON WEST OBS RESERVOIR THIS IS FOR THE ROOFING SHOP THANK YOU	1/7/19 11:40 AM
2019-014819	WEB REQUEST: WATER AND SEWER PROBLEMS | EXCAVATE AROUND BROKEN WATER VALVE AT OBS HILL	1/7/19 11:37 AM
2019-012918	WEB REQUEST: LOCKS/KEY REPAIRS | CAN NOT DIS ABLE INTRUDER ALARM AT OBSERVATORY HILL	12/6/18 8:36 AM
2019-012540	OBSERVATORY WEST RESERVOIR ON ALARM AT LEVEL 119.16	11/29/18 8:21 PM
2019-010436	WEB REQUEST: WATER AND SEWER PROBLEMS | OBSERVATORY PUMP HOUSE POINT 310003P.RESV OVRFLW DET IS NOT WORKING. PLEASE CHECK. FOR CONTRO	11/5/18 8:36 AM
2019-010295	310003B E.W RESV LEVEL AND 3100003L WRT LVL PSI KEEP GOING IN AND OUT OF ALARM	11/2/18 9:15 AM
2019-002285	OB04C.OB TANK LEVEL	7/22/18 11:39 PM
2019-002280	OBSERVATORY HIGH TANK: LOW LEVEL ALARM IS ON	7/22/18 6:01 AM
2018-026280	OBSERVATORY HILL - TRANSFER PUMP HOUSE HAS THE ALARM KEY SWITCH NOT WORKING - THEIR KEY WILL NOT TURN THE LOCK.	6/14/18 12:12 PM
2018-018627	OBSERVATORY HILL PUMPHOUSE: CONSTRUCT SLOPED ROOF CAPITAL PROJECT 9396-2017	3/5/18 11:41 AM
2018-017882	WELL 7/OBSERVATORY: WHEN THE TANK FILLS, IT OVER FILLS. IT SHOULD STOP AT 8 FEET, BUT OVERFILLS TO 19.56 FEET. (CCMS PT: OB03M)	2/25/18 12:40 PM
2018-015797	OBSERVATORY HILL - BAS NETWORK IMPROVEMENTS CAPITAL PROJECT 9836-2018	1/30/18 10:30 AM
2018-015029	TAKE OB TRANSFER PUMPS OUT OF HAND OFF	1/18/18 3:09 PM
2018-007547	CHECK OUT ALARM BOX ON GATE AT OBSERVATORY IT WILL NOT UNALARM	10/3/17 10:56 AM
2018-003134	OBSERVATORY RESERVOIR FAILED.	8/2/17 9:54 PM
2018-002234	WEB REQUEST: WATER AND SEWER PROBLEMS | OBSERVATORY HILL PUMP HOUSE MEC. RECODE AND RE-CONFIGURE CONTROLS AND PROGRAM FOR CONTROL (	7/20/17 2:57 PM
2018-001490	WEB REQUEST: ELECTRICAL REPAIR | OBSERVATORY LOW RESERVOIR LIGHTS DON'T WORK. ALSO, THE RED LIGHT ON THE ALARM ANNUNCIATOR DOESN'T WORK E	7/10/17 7:52 PM
2018-001313	WEST OBSERV RES PLNT - PLEASE REMOVE KEY FROM LOCK AND PROVIDE SPARE	7/6/17 11:04 PM
2018-001312	PLEASE CHECK WEST OBSERV RES PLNT - VERY HOT AND HUMID COMPARED TO EAST OBSERV RES	7/6/17 11:01 PM
2017-024433	POOL OF WATER BETWEEN PARKING LOT BY OLD CENTRAL STORES AND THE JEWETT OBSERVATORY.	5/16/17 6:27 PM
2017-023024	ON FRIDAY TIM IS CLIMBING THE BIG WATER TANK. HE NEEDS A TRUCK DRIVER AND LIFT OPERATPR	4/26/17 1:22 PM
2017-010978	WEB REQUEST: WATER AND SEWER PROBLEMS | WELL EBLN NODE TABLE NEEDS TO BE CHECKED.	11/10/16 4:14 PM
2017-010576	OBCOM6.COMM FAIL OBSERVATORY	11/6/16 10:33 PM
2017-010256	REPAIR SPOTLIGHT ON THE SOUTH SIDE OF THE EAST OBSERVATORY RESEVOIR BUILDING.	11/1/16 7:38 PM
2017-010255	REPLACE LIGHT ON STAIRWAY.	11/1/16 7:32 PM

Appendix B - Work Order History

2017-010010	COMMUNICATION FAILURE TO THE WELLS.	10/30/16 11:38 AM
2017-005835	CHECK COMM FAIL OBSERVATORY TO WELL #6 ALARM.GOES IN/OUT OF ALARM. CCMS PT OBCOM6.	9/5/16 1:30 PM
2016-025698	OB03M OB E W RESV LEVEL SURF ON ALARM ON HIGH ALARM CAME IN YESTERDAY THEN CLEARED. BACK TODAY	6/3/16 1:29 PM
2016-024736	MCR REPLACE FAILED TELGUARD COMMUNICATORS	5/20/16 12:43 PM
2016-024373	NO SIGNAL RECEIVED AT WSU RESERVOIR HILL PUMP HOUSE.	5/16/16 5:32 PM
2016-010880	CHECKING WELLS.	11/18/15 11:33 PM
2016-003933	| OB05A DEHUMIDIFIER ALARM. CHECK WITH REFRIGERATION SHOP ABOUT THIS, DOES THIS NEED TO BE FIXED BEFORE FALL.	8/16/15 6:35 PM
2016-002546	| DEHUMIDIFIER ALARM. CHECKED FOUND COMP CLICKING ON AND OFF ON OVERLOAD. NEEDS REFRIG. DEPT. TO CHECK OUT.	7/26/15 7:57 PM
2015-025147	WEB REQUEST: HEATING/COOLING | OBSERVATORY TANK LEVEL COMING INTO HIGH ALRM. CHECKED LEVEL AND FOUND IT HIGH NEAR 20 FT. CHANGED WELL 7 D	5/26/15 2:39 AM
2015-024721	CCMS PT: OB03M; OBSERVATORY RESERVOIR LEVEL SURFACE WENT INTO ALARM.FOMS RESPONDED.	5/18/15 10:02 PM
2015-024090	WEB REQUEST: WATER AND SEWER PROBLEMS | OBSERVATORY LOW TANK HIGH ALRM. AT 19.18. HAD FOMS CHECK TANK LEVEL AT 19.9 SHUT WELL 7 OFF NEED	5/8/15 1:38 AM
2015-023891	WEB REQUEST: WATER AND SEWER PROBLEMS | OBSERVATORY OVERFLOW LEVEL ALRM. (OB03M) TANK LEVEL READING 18.12 TOOK PIC AND MANUALLY SHUT W	5/6/15 2:40 AM
2015-023888	LOW ALARM, OBSERVATORY HIGH TANK (OB04C)	5/5/15 10:13 PM
2015-023214	WEB REQUEST: WATER AND SEWER PROBLEMS | OBSERVATORY TANK LEVEL ALRM. (OB04C) CHECKED WELLS AND TANK LEVEL OK WELL 6 RUNNING SYSTEM WEN	4/28/15 1:23 AM
2015-015525	AT THE PUMP HOUSE ON OBSERVATORY HILL THE HUMIDIFIER IS ICING UP WRONG SHOP	1/9/15 1:44 PM

Appendix C - Parametrix Cost Estimate

Parametrix
ENGINEERING . PLANNING . ENVIRONMENTAL SCIENCES

Engineer's Opinion of Preliminary Project Costs
Washington State University - High Zone Tank

Prepared By: Ron Pace PE, Tom Jordan
Date: 6/9/2020

ITEM	DESCRIPTION	QTY	UNIT	UNIT PRICE	TOTAL COST
Construction of New Water Tank					
1	Mobilization	1	LS	$ 200,000.00	$ 200,000.00
2	Site Preparation / Grading / Temporary Erosion Control	1	LS	$ 150,000.00	$ 150,000.00
3	Paved Access Road and Tank Ring Road	1,200	SY	$ 50.00	$ 60,000.00
4	Welded Steel Reservoir	2,000,000	GAL	$ 1.60	$ 3,200,000.00
5	Tank Foundation	1	LS	$ 300,000.00	$ 300,000.00
6	Controls Building	1	LS	$ 50,000.00	$ 50,000.00
7	Electrical and Controls	1	LS	$ 200,000.00	$ 200,000.00
8	Piping and Appurtenances	1	LS	$ 80,000.00	$ 80,000.00
9	Tank Overflow Pond / Discharge to Storm Sewer	1	LS	$ 50,000.00	$ 50,000.00
10	Permanent and Low Impact Design (LID) Site Stabilization	1	LS	$ 20,000.00	$ 20,000.00
				Subtotal	**$ 4,310,000.00**
Offsite Waterline Replacement					
Full Road Replacement					
1	Mobilization	1	LS	$ 50,000.00	$ 50,000.00
2	Temporary Traffic Control	1	LS	$ 60,000.00	$ 60,000.00
3	Temp. Erosion Control / SPCC Plan	1	LS	$ 45,000.00	$ 45,000.00
4	12" C-900 PVC Water Line incl. Trench, Exc. & Backfill	4,300	LF	$ 65.00	$ 279,500.00
5	12" Resilient Seat Gate Valve	14	EA	$ 2,000.00	$ 28,000.00
6	Connection to Existing Water Line	5	EA	$ 2,500.00	$ 12,500.00
7	Remove Existing Water Line	4,300	LF	$ 12.00	$ 51,600.00
8	Remove and Replace Unsuitable Trench Foundation	800	CY	$ 50.00	$ 40,000.00
9	Fire Hydrant Assembly	15	EA	$ 6,000.00	$ 90,000.00
10	Water Service Connection	10	EA	$ 600.00	$ 6,000.00
11	Demo Existing Roadway	8,600	SY	$ 8.00	$ 68,800.00
12	3" Thick HMA Roadway (18' Width)	8,600	SY	$ 22.00	$ 189,200.00
13	9" CSTC (18' Width)	2,200	CY	$ 50.00	$ 110,000.00
				Subtotal	**$ 1,030,600.00**
				Cost Per Foot:	$ 239.67
Demolition of Existing Reservoir					
1	Mobilization	1	LS	$ 22,000.00	$ 22,000.00
2	Demolish Existing Reservoir	1	LS	$ 300,000.00	$ 300,000.00
3	Hazardous Material Abatement	1	LS	$ 150,000.00	$ 150,000.00
				Subtotal	**$ 472,000.00**
				Construction Subtotal	**$ 5,812,600.00**
				Contingency (10% of Construction Subtotal)	$ 581,260.00
				Sales Tax (7.8 Percent of Construction Subtotal)	$ 453,382.80
				Construction Total	**$ 6,847,242.80**
Design Costs					
1	Civil / Structural Design and Survey (6% of Construction Total)	1	LS	$ 410,834.57	$ 410,834.57
2	Geotechnical Engineering Evaluation	1	LS	$ 30,000.00	$ 30,000.00
				Design Cost Subtotal	**$ 440,834.57**
WSU Costs					
1	Other (Ops, FAIS, EHS, Admin)	1	LS	$ 30,000.00	$ 30,000.00
2	Specialty Consultants	1	LS	$ 50,000.00	$ 50,000.00
3	Permits and Insurance	1	LS	$ 40,000.00	$ 40,000.00
4	Construction Management (4.5% of Construction Total)	1	LS	$ 308,125.93	$ 308,125.93
5	Project Management (4.29% of Construction Total)	1	LS	$ 293,746.72	$ 293,746.72
				WSU Cost Subtotal	**$ 721,872.64**
				Final Total	**$ 8,009,950.01**

Parametrix
ENGINEERING . PLANNING . ENVIRONMENTAL SCIENCES

106 W MISSION AVENUE | SPOKANE, WA 99201 | P 509.328.3371

May 20, 2020
Parametrix No. 376-1937-029

Roxanne Holden, AUID, APAC
Jeffrey Lannigan, P.E.
Washington State University

Re: Executive Summary for WSU High Zone Tank Sizing Technical Memorandum

Dear Roxanne and Jeff:

Per our previous communications, we have completed the analysis of WSU's existing water system and plans for the addition of a new water tank in the high-pressure zone.

Based on our discussions and analysis, the existing water tanks are nearing the end of their useful life and will create significant risk of failure or contamination if they are not repaired or replaced soon. A new tank (approximately 2 million gallons) in the high-pressure zone will provide the University with the flexibility required to plan for the eventual rehabilitation of the remaining storage in the system, and drastically improve the ability of the rest of the water system to function and add fire flow capacity.

The University already owns vacant land which is in a prime location for the construction of a new water tank. This land is at the intersection of Ellis Way and Hog Lane and can be converted to serve a new water tank with minimal modifications.

We recommend that the University plan on seeking funding for the addition of this new water tank. The University should also plan on replacing old, undersized waterlines between the existing Well #8 pump house and the new tank, as well as demolishing the existing Eastern Observation Hill Tank. For more information and details, see the technical memorandum prepared by Parametrix, Inc. titled High Zone Tank Sizing and dated May 1, 2020.

Sincerely,

Ron Pace, P.E. – Principal

Tom Jordan, E.I.T. - Design Engineer

WSU Facility Development Plan

WSU Facilities Services | Geographic Information System

Pullman 2021-2023

Johnson Hall Demolition
$8,000,000 (Design and Construction)

ARS Plant Biosciences Building
$105,000,000 (Federal Funding)

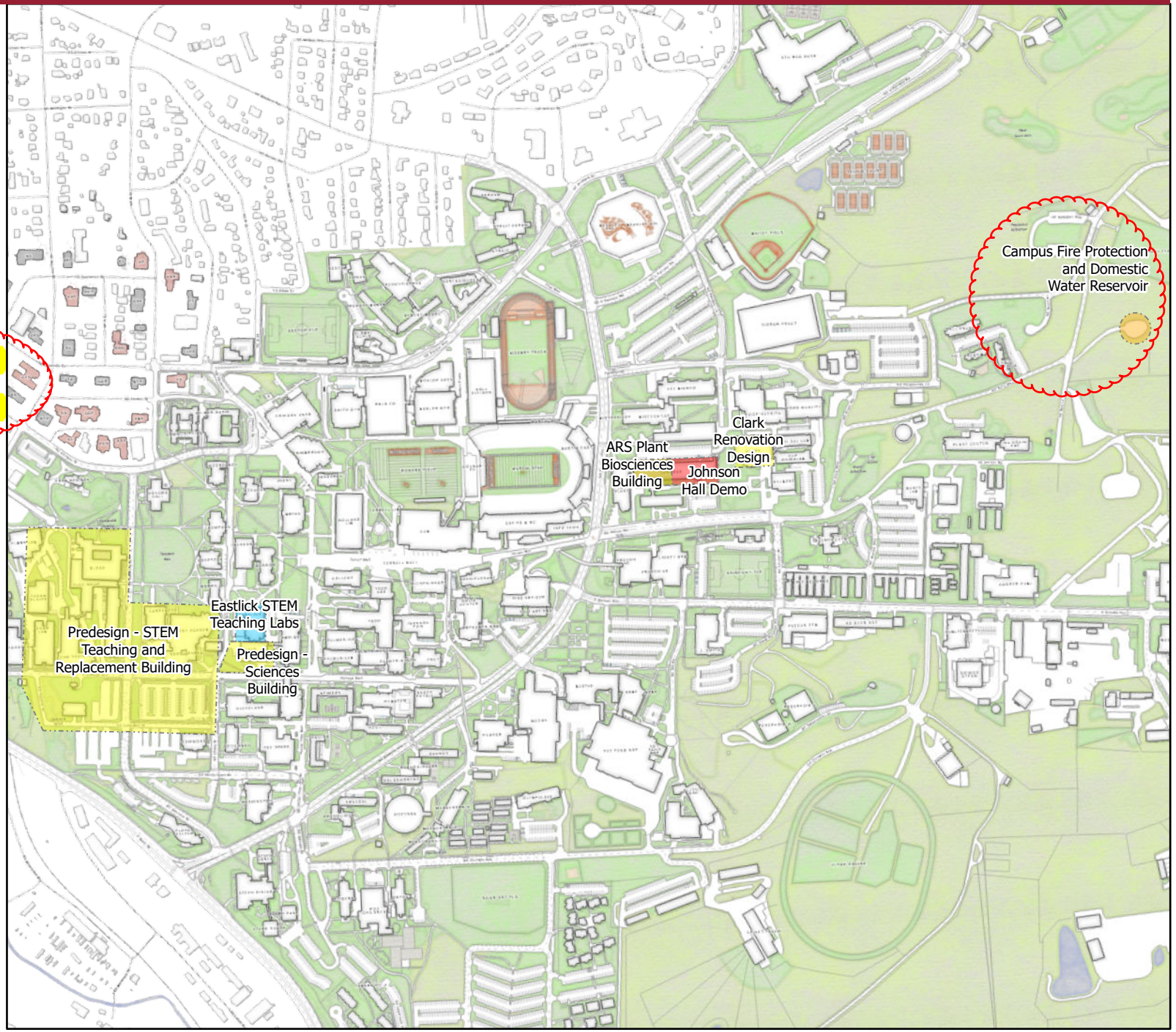
Campus Fire Protection and Domestic Water Reservoir
$8,000,000 (Design and Construction)

Pullman Sciences Building
$500,000 (Predesign)

STEM Teaching and Replacement Building – VCEA
$500,000 (Predesign)

STEM Teaching Labs
$4,900,000 (Design and Construction)

Clark Hall Research Lab Renovation
$4,900,000 (Design and Construction)



WSU Facility Development Plan

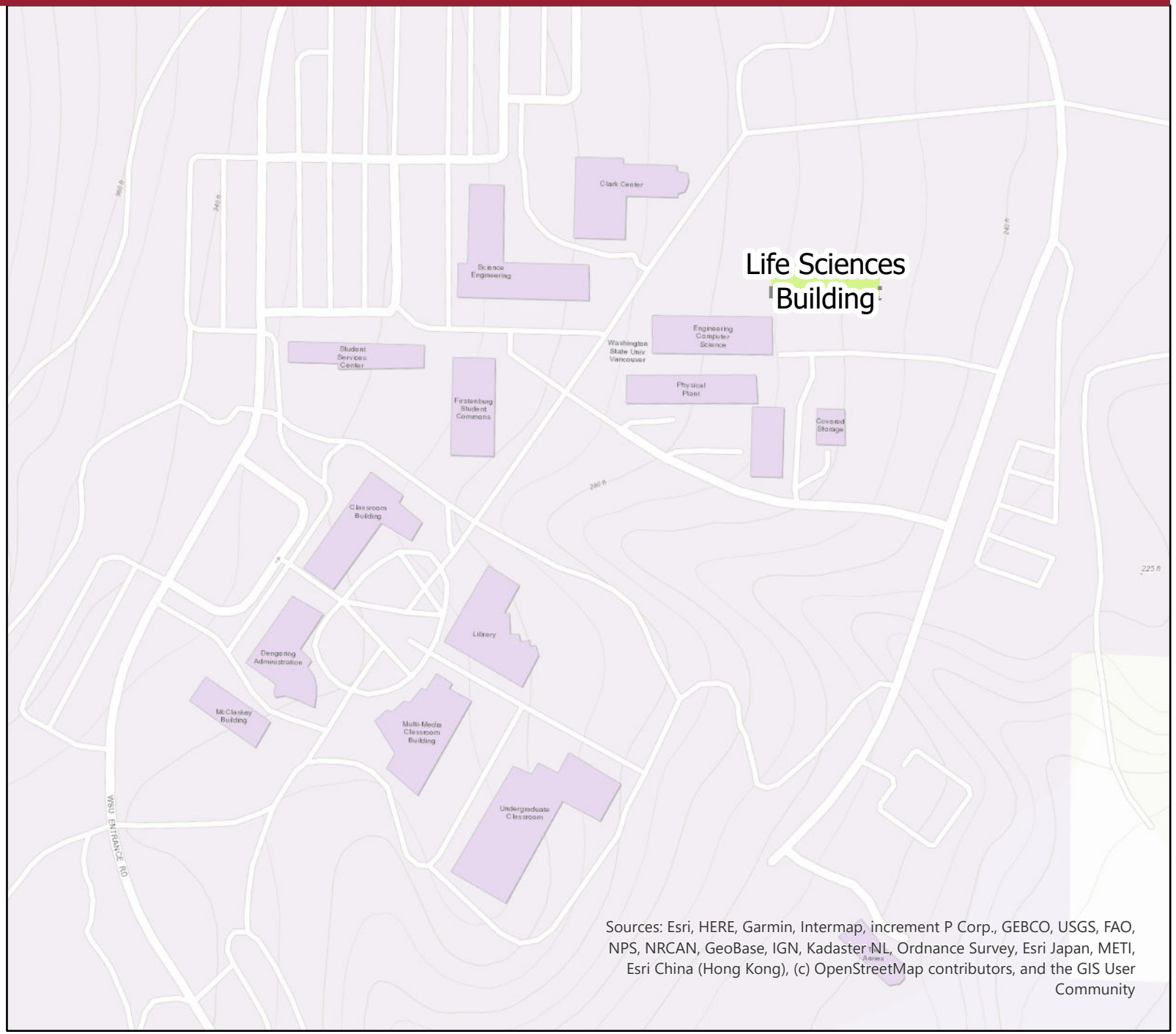
Spokane 2021-2023

Spokane Phase One Building Renovation
$15,000,000 (Design and Construction)

WSU Facility Development Plan

Vancouver 2021-2023

Vancouver Life Sciences Building
$52,600,000 (Construction)



WSU Facility Development Plan

WSU Facilities Services | Geographic Information System

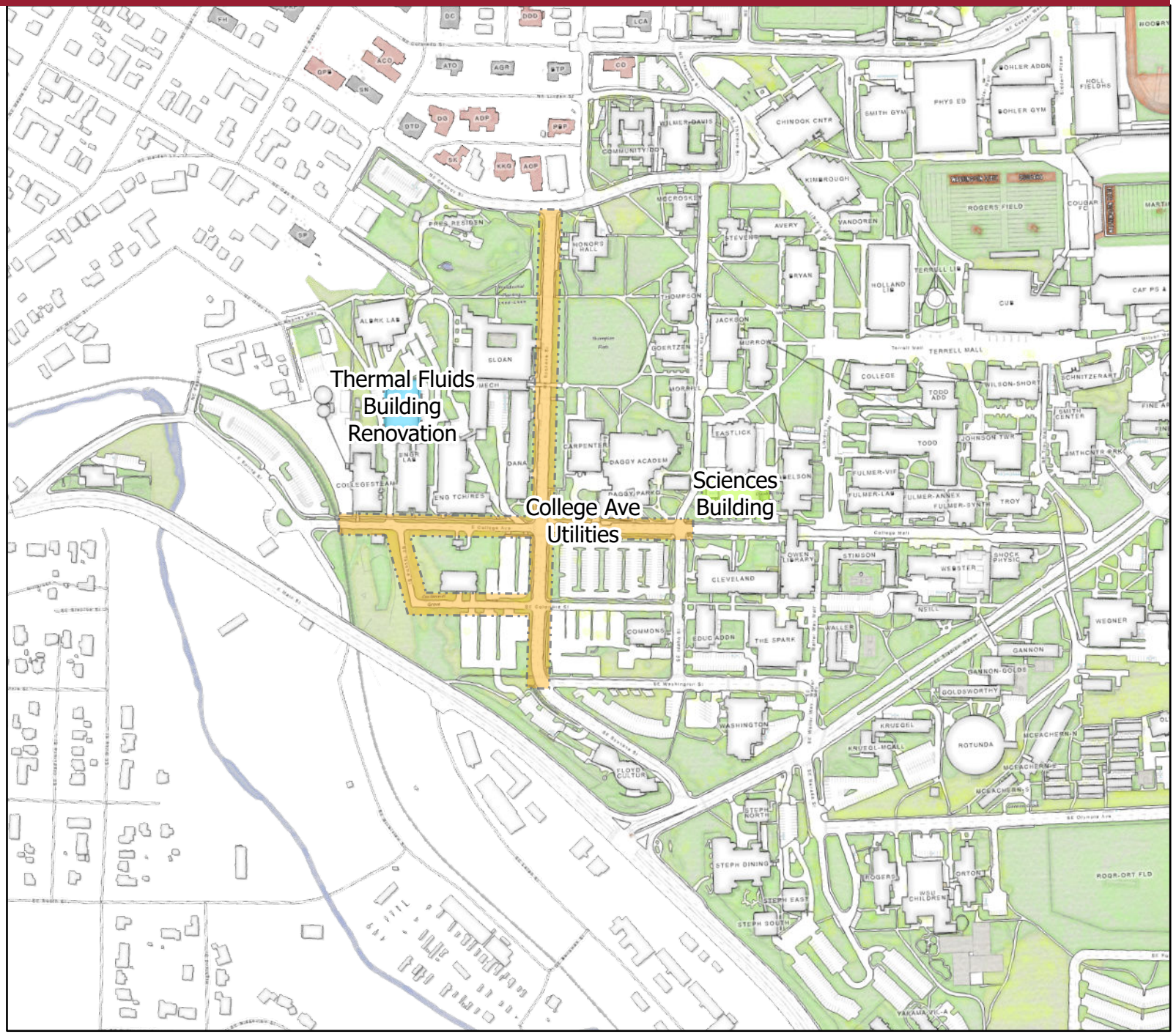
Pullman 2023-2025

Pullman Sciences Building
$53,000,000 (Design, Heald Hall Demolition and Construction)

College Avenue Utility Upgrades
$10,000,000 (Design and Construction)

Thermal Fluids Building Renovation
$10,000,000 (Design and Construction)

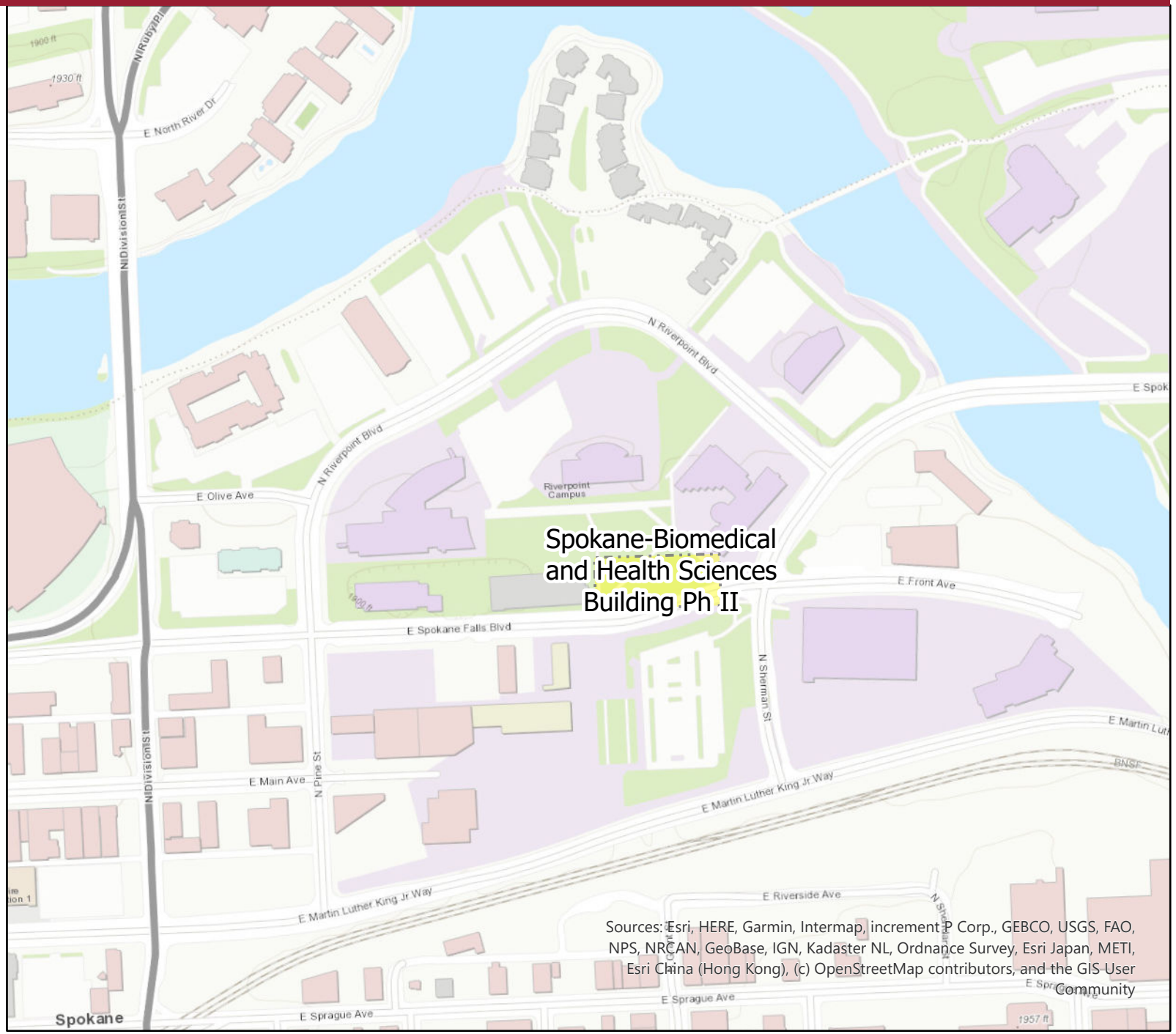
Building Systems (roofs, elevators, envelope, BAS, MEP)
$10,000,000 (Design and Construction)
(Multiple locations - not shown on map)



WSU Facility Development Plan

Spokane 2023-2025

Spokane-Biomedical and Health Sciences Building Ph II
$5,000,000 (Design)



WSU Facility Development Plan

WSU Facilities Services | Geographic Information System

Pullman 2025-2027

STEM Teaching and Replacement Building – VCEA
$8,000,000 (Design and Dana Hall Demolition)

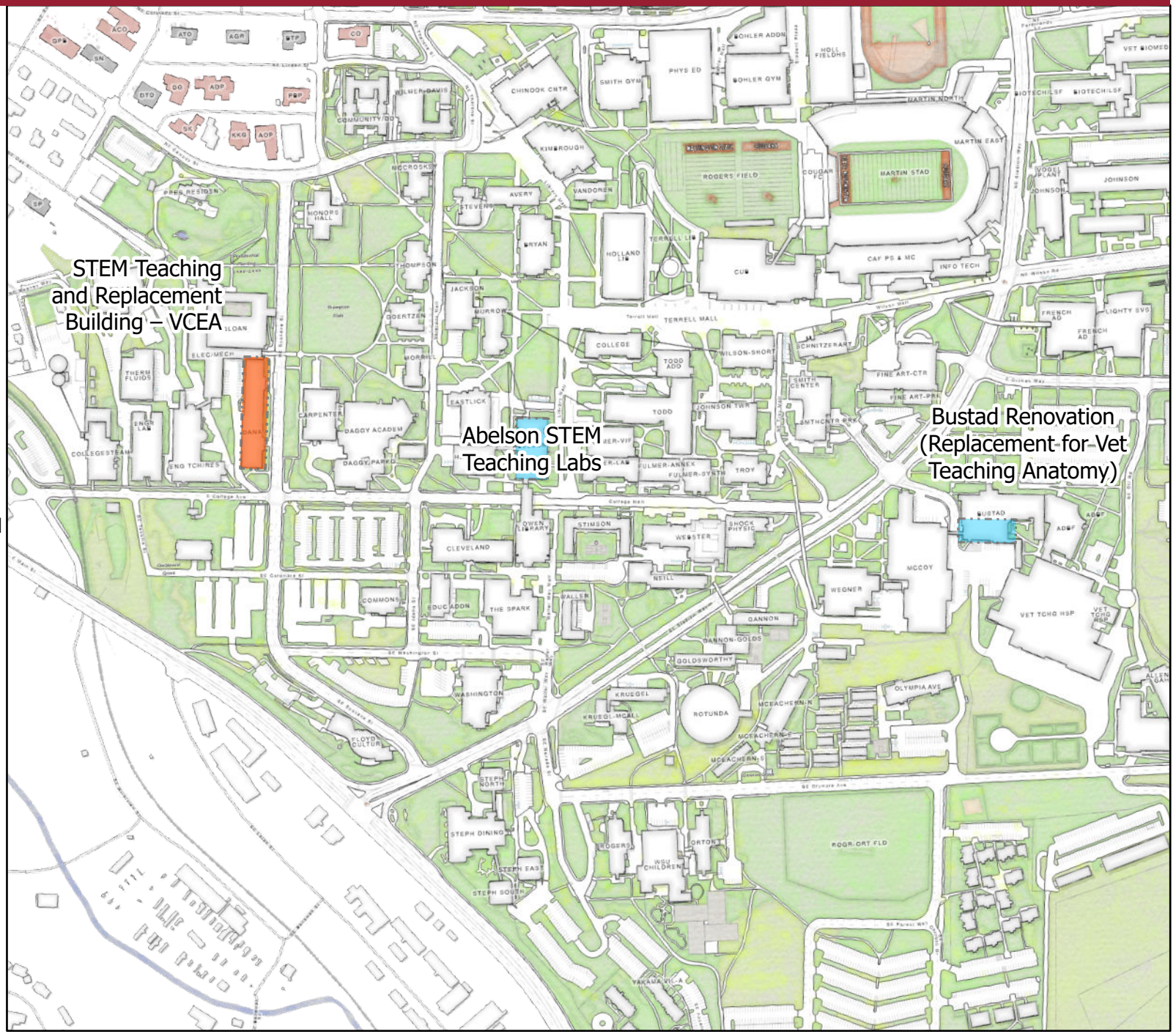
Washington State University Pullman - STEM Teaching Labs
$5,000,000 (Design and Construction)

Bustad Renovation (Replacement for Vet Teaching Anatomy)
$10,000,000 (Design and Construction)

Infrastructure (electrical, water, chilled water, steam, tunnels)
$10,000,000 (Design and Construction)
(Multiple locations - not shown on map)

Learning Renovations
$10,000,000 (Design and Construction)
(Multiple locations - not shown on map)

Information Technology Renovations
$5,000,000 (Design and Construction)
(Multiple locations - not shown on map)

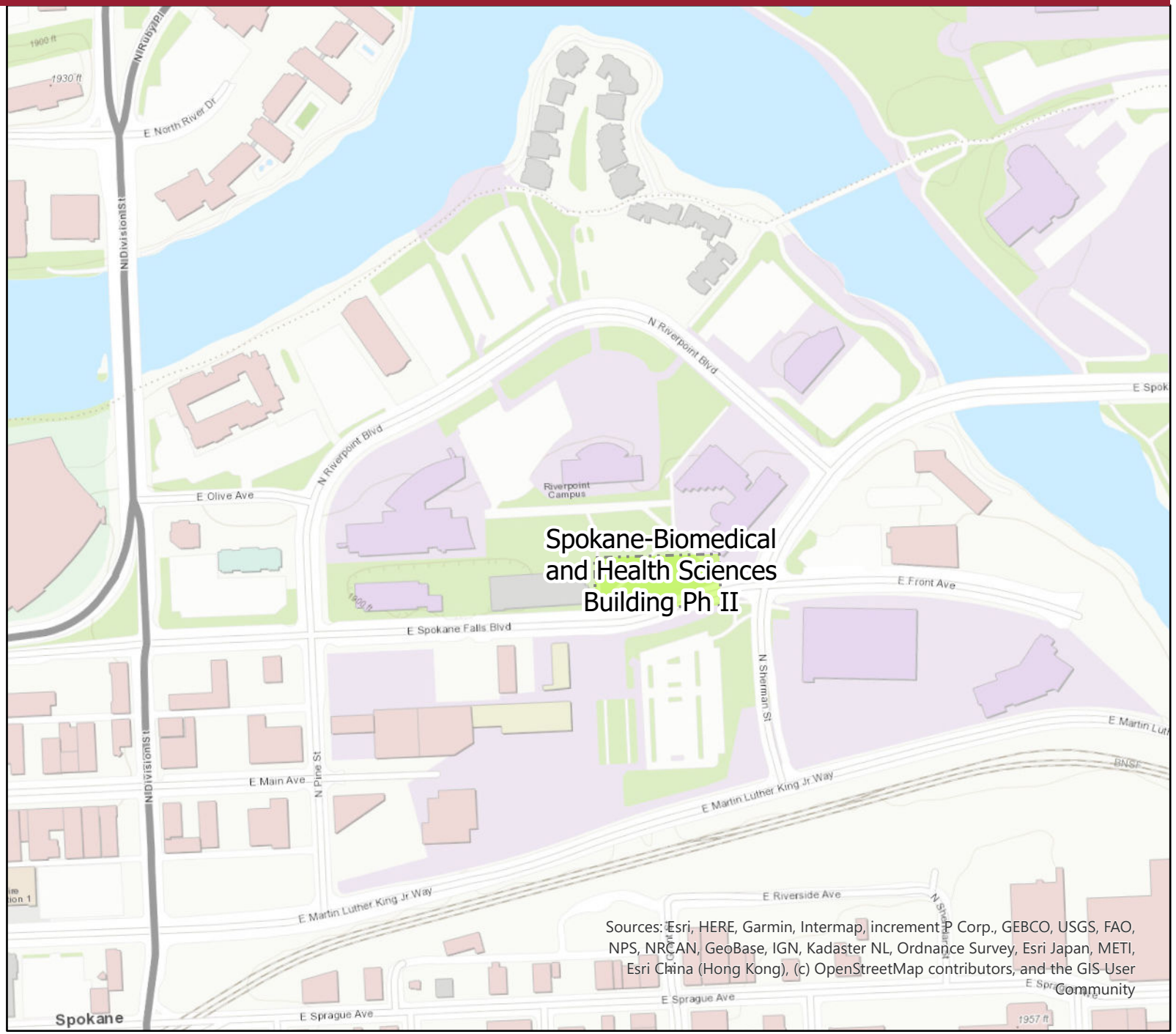


WSU Facility Development Plan

WSU Facilities Services | Geographic Information System

Spokane 2025-2027

Spokane-Biomedical and Health Sciences Building Ph II
$35,000,000 (Construction Phase 1)



WSU Facility Development Plan

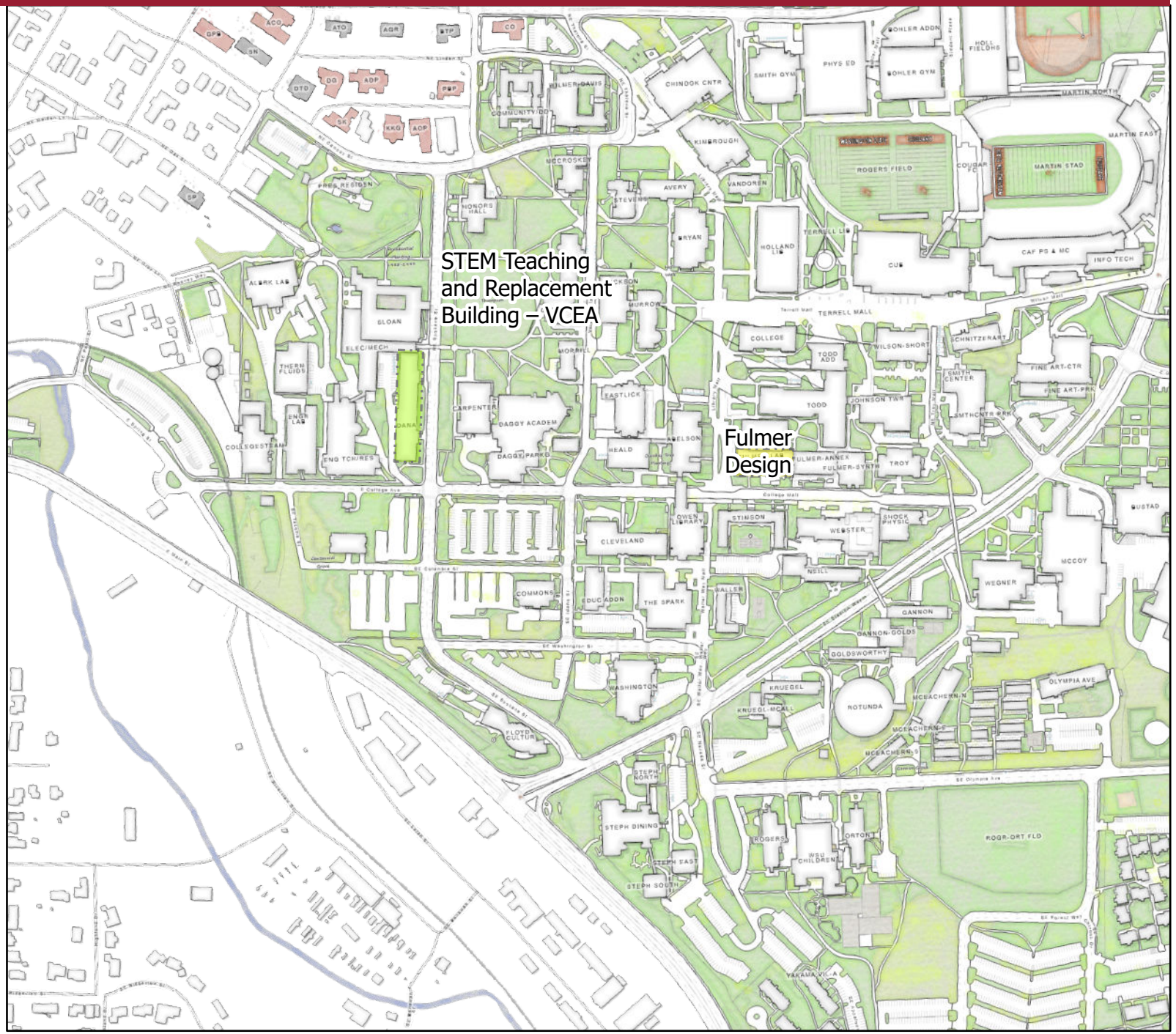
WSU Facilities Services | Geographic Information System

Pullman 2027-2029

STEM Teaching and Replacement Building – VCEA
$45,000,000 (Construction)

Fulmer Hall Renovation Phase 1
$3,000,000 (Design)

Research Renovations
$10,000,000 (Design and Construction)
(Multiple locations - not shown on map)

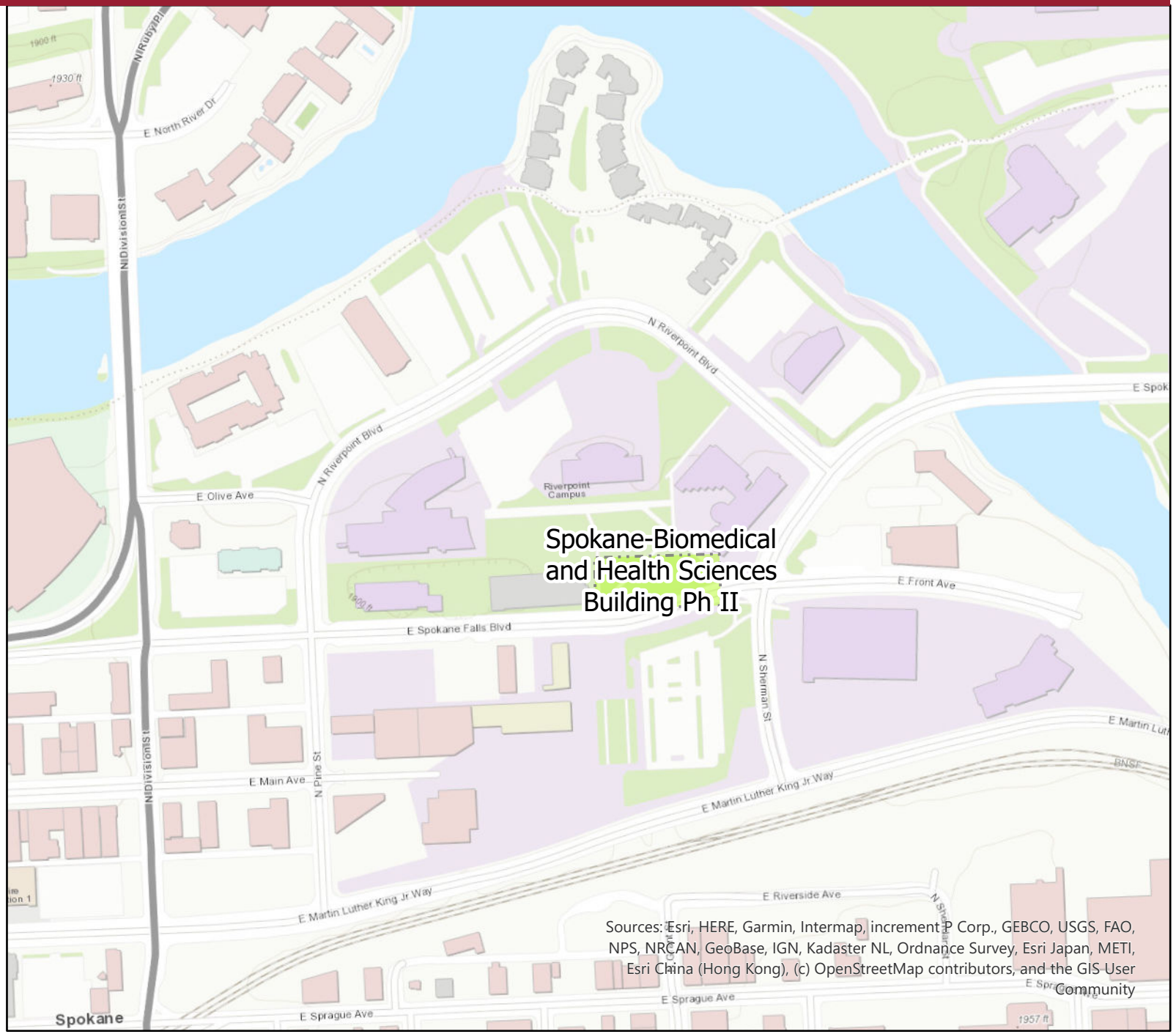


WSU Facility Development Plan

WSU Facilities Services | Geographic Information System

Spokane 2027-2029

Spokane-Biomedical and Health Sciences Building Ph II
$35,000,000 (Construction Phase 2)



WSU Facility Development Plan

WSU Facilities Services | Geographic Information System

Pullman 2029-2031

Fulmer Hall Renovation Phase 1
$35,000,000 (Construction)

Engineering Renovation/Replacement Ph 2 – VCEA
$8,000,000 (Design and Demolition of Daggy Hall)

McCoy Hall Demolition
$8,000,000 (Design and Demolition of McCoy Hall)

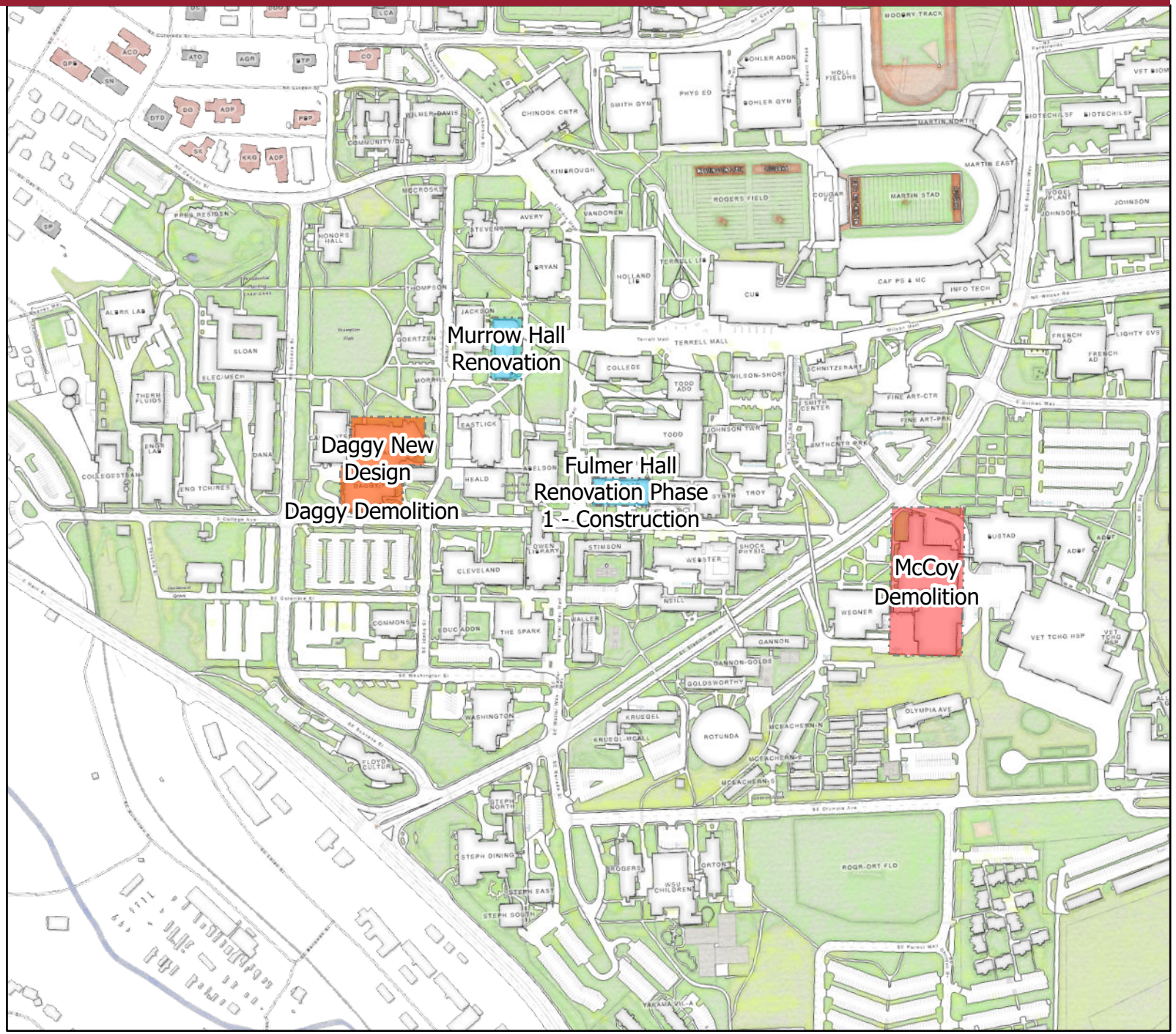
Murrow Hall Renovation
$3,000,000 (Design)

Building Systems (roofs, elevators, envelope, BAS, MEP)
$10,000,000 (Design and Construction)
(Multiple locations - not shown on map)

Infrastructure (electrical, water, chilled water, steam, tunnels)
$10,000,000 (Design and Construction)
(Multiple locations - not shown on map)

Learning Renovations
$10,000,000 (Design and Construction)
(Multiple locations - not shown on map)

Information Technology Renovations
$5,000,000 (Design and Construction)
(Multiple locations - not shown on map)



2020 PROJECT PROPOSAL CHECKLIST

2021-23 Biennium Four-year Higher Education Scoring Process

AINSTITUTION	CAMPUS LOCATION
365 - Washington State University	Pullman, WA
PROJECT TITLE	**FPMT UNIQUE FACILITY ID # (OR NA)**
WSU Vancouver - Life Sciences Building	NA (new building)
PROJECT CATEGORY	**PROJECT SUBCATEGORY**
Growth	Major
PROPOSAL IS	
New or Updated Proposal (for scoring)	Resubmitted Proposal (retain prior score)
☐ New proposal ☐ Resubmittal to be scored (more than 2 biennia old or significantly changed)	☒ Resubmittal from 2017-19 biennium ☐ Resubmittal from 2019-21 biennium
CONTACT	**PHONE NUMBER**
Kate Kamerrer	509-335-9314

PROPOSAL CONTENT

- ☒ Project Proposal Checklist: this form; one for each proposal
- ☐ Project Proposal Form: Specific to category/subcategory (10-page limit) **(NA)**
- ☒ Appendices: templates, forms, exhibits and supporting/supplemental documentation for scoring.

INSTITUTIONAL PRIORITY

- ☒ Institutional Priority Form. Sent separately (not in this packet) to: Darrell Jennings.

Check the corresponding boxes below if the proposed project meets the minimum threshold or if the item listed is provided in the proposal submittal.

MINIMUM THRESHOLDS

- ☒ Project is not an exclusive enterprise function such as a bookstore, dormitory or contract food service.
- ☒ Project meets LEED Silver Standard requirements.
- ☒ Institution has a greenhouse gas emissions reduction policy in place in accordance with RCW 70.235.070 and vehicle emissions reduction policy in place per RCW 47.01.440 or RCW 43.160.020 as applicable.
- ☐ Design proposals: A complete predesign study was submitted to OFM by July 1, 2020.
- ☒ Growth proposals: Based on solid enrollment projections and is more cost-effectively providing enrollment access than alternatives such as university centers and distance learning.
- ☐ Renovation proposals: Project should cost between 60 – 80% of current replacement value and extend the useful life of the facility by at least 25 years.
- ☐ Acquisition proposals: Land acquisition is not related to a current facility funding request.
- ☐ Infrastructure proposals: Project is not a facility repair project.
- ☐ Stand-alone, infrastructure and acquisition proposals: is a single project requesting funds for one biennium.

2020 PROJECT PROPOSAL CHECKLIST

2021-23 Biennium Four-year Higher Education Scoring Process

REQUIRED APPENDICES

- ☒ Capital Project Report CBS 002
- ☒ Project cost estimate:
  - CBS 003 for projects between $2 million and $5 million
  - Excel C-100 for projects greater than $5 million
- ☒ Degree Totals and Targets template to indicate the number of Bachelors, High Demand and Advanced degrees expected to be awarded in 2021. (Required for Overarching Criteria scoring criteria for Major Growth, Renovation, Replacement and Research proposals).
- ☒ Availability of Space/Campus Utilization template for the campus where the project is located. (Required for all categories/subcategories except Infrastructure and Acquisition proposals).
- ☒ Assignable Square Feet template to indicate program-related space allocation. (Required for Growth, Renovation and Replacement proposals, all categories/subcategories).

OPTIONAL APPENDICES

Attach supplemental and supporting project documentation, *limit to materials directly related to and needed for the evaluation criteria*, such as:

- ☐ Degree and enrollment growth projections
- ☐ Selected excerpts from institutional plans
- ☐ Data on instructional and/or research space utilization
- ☐ Additional documentation for selected cost comparables (acquisition)
- ☐ Selected materials on facility conditions
- ☐ Selected materials on code compliance
- ☐ Tables supporting calculation of program space allocations, weighted average facility age, etc.
- ☐ Evidence of consistency of proposed research projects with state, regional, or local economic development plans
- ☐ Evidence of availability of non-state matching funds
- ☐ Selected documentation of prior facility failures, high cost maintenance, and/or system unreliability for infrastructure projects
- ☐ Documentation of professional assessment of costs for land acquisition, land cleanup, and infrastructure projects
- ☐ Selected documentation of engineering studies, site survey and recommendations, or opinion letters for infrastructure and land cleanup projects
- ☒ Other: WSU Facility Development Plan

I certify that the above checked items indicate either that the proposed project meets the minimum thresholds or the corresponding items have been included in this submittal.

Name: Kate Kamerrer Title: Exec Director, Finance, Business and Building Services

Signature: Kate Kamerrer Date: 08/14/2020

OFM

365 - Washington State University
Capital Project Request

2021-23 Biennium

*

Version: 10 2021-23 WSU Capital Budget Request

Report Number: CBS002
Date Run: 8/6/2020 7:04PM

Project Number: **30000840**
Project Title: **WSU Vancouver - Life Sciences Building**

Description

Starting Fiscal Year: 2018
Project Class: Program
Agency Priority: 5

Project Summary

Washington State University requests $52,600,000 in the 2021-23 capital budget for construction of an instructional and research facility that will provide cutting edge learning opportunities for students in STEM disciplines at the WSU Vancouver campus. Basic wet labs supporting chemistry, biology, and physics are at or over capacity. Expansion of lab space is critical to continue to serve the needs of undergraduate students in Southwest Washington who are pursuing STEM careers (for example, neuroscience, molecular biology, and nursing). The specialized nature of planned laboratory facilities and the broad range of students to be served by them preclude the use of off-campus space if it were available. Construction of new on-campus facilities is determined to be the best alternative for serving these programs and the growing student population at Vancouver.

Project Description

Identify the problem or opportunity addressed. Why is the request a priority? This narrative should identify unserved/underserved people or communities, operating budget savings, public safety improvements or other backup necessary to understand the need for the request. For preservation projects, it is helpful to include information about the current condition of the facility or system.

WSU Vancouver opened as a branch campus in 1989, serving upper division and graduate students. By legislative directive, lower division students were admitted for the first time in 2006. WSU Vancouver serves students from the catchment area of Clark, Skamania, Cowlitz, and Lewis counties, legislatively defined as underserved regions. Nearly half of students qualify for the highest levels of state and federal grants and without WSU Vancouver, they would not have access to baccalaureate and graduate higher education. Nearly 100 percent of students served by this project are place-bound students coming from underserved regions.

The addition of lower division students in 2006 greatly increased the demand on campus teaching laboratories. Scheduled lab sessions doubled from 17 sections to 35. Currently, almost 90 sections per term are offered through maximum utilization of teaching labs in the Classroom and Science and Engineering buildings. No new wet labs have been created since the addition of lower division classes; WSU Vancouver is over capacity for general science instructional labs and is challenged to accommodate new growth. Without additional general science labs, many undergraduate students will be unable to register for chemistry, biology, or other classes requiring wet labs, creating a choke point in fulfilling general degree requirements for all majors - especially those in the STEM and healthcare fields. Because the WSU Vancouver campus is out of space for new labs, this new building fills a critical need by providing teaching and research laboratories for multiple disciplines in STEM related fields.

In addition to general instructional lab space, this project includes dedicated research space, which is required to retain highly productive faculty. To remain competitive, the university must have modern laboratories with cutting edge equipment and space for graduate students and post-docs. The success of the university's research program directly impacts students, as a research element is typically required for graduate degrees. WSU Vancouver research labs employ both graduate and undergraduate students, contributing to their academic experience and their future success as professionals in Washington, as 92 percent of alumni remain in the area.

After converting the only viable space on campus to add a teaching lab in the fall of 2013, no other suitable space exists on campus to serve these program needs. The specialized nature of planned laboratory facilities and the broad range of students to be served by them preclude the use of off-campus space if it were available. Construction of new on-campus facilities is determined to be the best alternative for serving these programs and the growing student population at Vancouver.

What will the request produce or construct (i.e., predesign or design of a building, construction of additional space, etc.)? When will the project start and be completed? Identify whether the project can be phased, and if so, which phase is included in the request. Please provide detailed cost backup.

The state Legislature funded predesign during 2017-19 and design funding in the 2020 supplemental capital budget. The 2021-23 capital budget request is for the construction phase that will complete the project. That will bring all components of Vancouver's basic, translational, applied, and clinical health programs together in one location on campus, including Nursing, Neuroscience, Psychology, Molecular Biology, and Medical Education.

How would the request address the problem or opportunity identified in question 1? What would be the result of not taking action?

If action is not taken, existing labs will continue to be over-capacity, limiting access to required lab classes and significantly

Description

affecting time-to-degree for students at all levels and across all fields of study. Opportunities for a STEM-based education for these place-bound students will be lost. Additionally, graduate students, post-docs and faculty may continue to leave WSU to competing universities and research labs in search of modern laboratories with cutting edge equipment and space. This project would add critical space to accommodate existing campus growth and continued expansion of mission-critical teaching and research activities, supporting WSU's statewide goals and land-grant mission.

What alternatives were explored? Why was the recommended alternative chosen? Be prepared to provide detailed cost backup. If this project has an associated predesign, please summarize the alternatives the predesign considered.

In addition to the No Action Alternative, three (3) Alternative designs were examined. Each is based on the same site and general building configuration, but with different mechanical systems. Because the mechanical system of any laboratory building is so extensive, comparing several system solutions with various life cycle cost advantages provides the university with valuable cost data with which to proceed. The Alternatives presented are:

· 1 - No Action Alternative (No new facility)
· 2 - 100% Outside Air VAV (Ownership Option 1)
· 3 - Dedicated Outside Air with Chilled Beams/Chilled Sails (Ownership Option 2)
· 4 - Enhanced Heat Recovery/Heat Recovery Chiller (Ownership Option 3)

The financial analysis of options identified that Ownership Option 1 has the lowest first initial cost and Option 3 the lowest life cycle cost. The final decision on with option will be pursued will be determined during the design phase that is set to begin in the fall of 2020.

Which clientele would be impacted by the budget request? Where and how many units would be added, people or communities served, etc.

This building will enable the campus to award an additional 85 bachelor's degrees annually (70 in high demand fields) as well as an additional 20 advanced degrees in high demand fields. All undergraduate programs would benefit from additional science teaching lab space. Neuroscience, psychology, nursing, and science disciplines would benefit at the upper-division and graduate academic programs. The building would be interdisciplinary, including Colleges of Nursing, Medicine, Arts and Science, and Veterinary Medicine. It would add simulation labs, which are used in instructional programs for nursing and medical fields; currently programs go off-site for simulation requirements, which is a stopgap measure. The success of WSU Vancouver's research program directly impacts students, as a research element is typically required for graduate degrees. The university's research labs employ both graduate and undergraduate students, contributing to their academic experience and their future success as professionals.

The Life Sciences facility will support the increase of students enrolled in STEM and high demand fields by over 100 annually, which is nearly 10 percent of the state goal. This building will increase the number of students enrolled in online and hybrid courses as the entire nursing program is structured in this manner. WSU Vancouver will increase the number of graduates in STEM and high demand fields with this project by 105 degrees annually, which is 11 percent of the state goal. This project will increase the percentage of post-secondary students or students employed in Washington.

Does this project or program leverage non-state funding? If yes, how much by source? If the other funding source requires cost share, also include the minimum state (or other) share of project cost allowable and the supporting citation or documentation.

While efforts are being made to leverage other funds, non-state funds have not been identified.

Describe how this project supports the agency's strategic master plan or would improve agency performance. Reference feasibility studies, master plans, space programming and other analyses as appropriate.

WSU's Facility Development plan is focused on identifying and prioritizing capital projects which balance continued stewardship and renewal of existing facilities and infrastructure within a framework for responsible growth. The plan recognizes the urgent need to address a large and rapidly growing deferred maintenance backlog which has been identified as a significant risk to future operations at all of the WSU campuses as they age. Additionally, the goals of this plan are consistent with the Master Plans for each of the WSU campuses which together include emphasis on open spaces, pedestrian access, community connection and campus identity, and research and/or program excellence.

This project will provide space for both enrollment growth in existing programs, and the implementation of several new degree programs. The Campus Vision Statement reflects increasing the campus size to 5,000 students. This project timeline would provide the first new building on campus in 12 years, adding space to accommodate that campus growth and continued expansion of mission-critical teaching and research activities.

In general, there will be quality improvements to all STEM-related programs on campus with new wet lab space. As the campus

Description

was originally designed for only upper division students, it has been difficult to adapt existing facilities to accommodate lower division needs. The lack of wet lab space and the inability to enroll students in required science classes can affect time-to-degree for students and limit program growth.

The Life Sciences Building will permit enrollment growth and quality improvements in the following existing programs:
· Nursing: WSU Vancouver offers BS, MN, and DNP degrees and has an emerging need for simulation facilities, exam rooms, technology (AMS) enabled classrooms, and faculty offices. The nursing program has more applicants than can be admitted due to a lack of teaching space and a shortage of clinical sites.
· Biology: WSU Vancouver offers a B.S. in biology, which is one of the most popular among the 24 degree-granting programs found on campus. High student demand for the degree, coupled with the campus commitment to creating undergraduate research opportunities, has created a pressing need for more teaching lab and research space.
· Neuroscience: WSU Vancouver has an emerging research strength in neuroscience. The B.S. in Neuroscience is one of the fastest growing majors and there is a need for both research and teaching lab space to accommodate this growth. This degree also serves as a pre-med pathway to graduate students.
· College of Medicine: Collaborative and shared spaces with the College of Nursing will be located in this building to allow for programmatic synergies with undergraduate and graduate student academic and research programs.

In addition to current program offerings, the project will permit initiation of the following new programs:
· B.A. in Human Biology, a multidisciplinary degree that leverages faculty expertise in the biological, environmental, and social sciences.
· B.A. in Chemistry, which the Vancouver campus will not be able to offer without additional lab space.
This building project directly supports the Results Washington initiative, as WSU Vancouver will be unable to sustain growth in STEM and health-related fields without new wet lab and clinic space. There is increasing pressure on upper-division and graduate instructional labs that compete for the same general lab resources, impacting time-to-degree for these students. Upper division and graduate students requiring lab coursework in general science labs are a targeted growth goal for the state of Washington; limiting classes due to lack of suitable space directly conflicts with those goals.
Specifically, the WSU Vancouver Life Sciences facility will support the following Results Washington goals:
· 1.3.a The project will increase the percentage of eligible students signing up for College Bound through numerous faculty outreach projects and WSU Vancouver's strategic partnership with the Vancouver School District, as the iTech Prep magnet high school is co-located on campus.
· 1.3.e The project will increase the percentage of postsecondary graduates from community colleges that transfer to WSU Vancouver. The campus accepts many community college transfers into STEM and nursing majors, which this facility will support.
· 1.3.f The Life Sciences facility will increase the number of students enrolled in STEM and high demand fields by over 100 annually, which is nearly 10 percent of the state goal.
· 1.3.g This building will increase the number of students enrolled in online and hybrid courses as the entire nursing program is structured in this manner, contributing to nearly 10 percent of the state goal.
· 1.3.h WSU Vancouver will increase the number of graduates in STEM and high demand fields with this project by 105 degrees annually, which is 11 percent of the state goal.
· 1.3.i This project will increase the percentage of post-secondary students or students employed in Washington. The building will directly support 20 post-secondary degrees and 92 percent of WSU alumni remain in the Vancouver area.

Does this decision package include funding for any Information Technology related costs including hardware, software (to include cloud-based services), contracts or staff? If the answer is yes, you will be prompted to attach a complete IT addendum. (See Chapter 10 of the operating budget instructions for additional requirements.)
This request does not include funding for any Information Technology related costs.

If the project is linked to the Puget Sound Action Agenda, describe the impacts on the Action Agenda, including expenditure and FTE detail. See Chapter 12 Puget Sound Recovery) in the 2021-23 Operating Budget Instructions.
This project is not linked to the Puget Sound Action Agenda.

How does this project contribute to statewide goals to reduce carbon pollution and/or improve energy efficiency? Please elaborate.
With the replacement of inefficient research space with new purpose built state of the art space this new facility will align WSU

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Project Number: 30000840
Project Title: WSU Vancouver - Life Sciences Building

Description

toward meeting our goal of reducing our carbon footprint. This project aligns with the guiding principles of the university's Facility Development Plan, including energy efficiency improvements, carbon reduction and water savings.
Preliminary planning associated with the new Life Science Building acknowledges the requirements of House Bill 1257 (Washington State Clean Energy Standards) and House Bill 2311 (Greenhouse Gas Emissions) and strives to include energy improvements and carbon reduction throughout all project planning and execution.

Is there additional information you would like decision makers to know when evaluating this request?

This project must be initiated soon in order to meet academic certification requirements. The neuroscience program is housed in labs that were originally designed to support plant physiology research but now contain laboratory animals. These labs are at capacity and cannot accommodate expanding research programs and additional scientists. Minor capital remodels and facilities upgrades have been employed to retrofit facilities, which are marginally adequate. Compliance with federally mandated AAALAC standards (regulating animal holding) has been a struggle to maintain and growth of these vital research programs is not possible in the current facilities.

Additionally, WSU is accredited as an institution across all campuses through the Northwest Commission on Colleges and Universities. Not meeting accreditation standards on the Vancouver campus will affect the accreditation of WSU as a whole because degree requirements are expected to be equivalent statewide. Limited access to teaching wet-labs negatively impacts this academic imperative.

*Project was previously submitted and will retain score from 2017-19. Refer to project proposal checklist and supporting appendices for additional information.

Location

City: Vancouver **County:** Clark **Legislative District:** 017

Project Type

New Facilities/Additions (Major Projects)

Project Number: 30000840
Project Title: WSU Vancouver - Life Sciences Building

Description

Growth Management impacts

The project will be part of campus development identified in the WSU - Clark County Development Agreement as framed by the Clark County Comprehensive Plan under the umbrella of the State Growth Management Act. WSU Vancouver's physical planning policies are coordinated with many agencies and government units. The Growth Management Act and its companion Traffic Demand Management legislation and the State Environmental Policy Act, however, are applicable to WSU's physical facilities and programs. Growth Management Act (GMA)-WSU will coordinate with Counties and Municipalities throughout the State to ensure compliance with GMA. WSU will avoid construction or activities which would permanently impair "critical" areas on its campuses as they are defined in the GMA. Transportation Demand Management-A companion piece of legislation sets forth a policy for Transportation Demand Management in which the State of Washington will provide leadership. The Director of the State of Washington Department of General Administration (DGA) is required to develop a commute trip reduction plan for state agencies which are Phase I major employers. WSU will conform to the plans developed by DGA. State Environmental Policy Act (SEPA)-WSU has adopted procedures set forth in the State Environmental Policy Act Handbook December 1988 and the State Environmental Policy Act Rules Chapter 197-11 Washington Administrative Code Effective April 4, 1984. Adherence to these procedures will be one of the principal means by which WSU coordinates its compliance with Growth Management requirements.

New Facility: Yes

How does this fit in master plan

WSU's Facility Development plan is focused on identifying and prioritizing capital projects which balance continued stewardship and renewal of existing facilities and infrastructure within a framework for responsible growth. The plan recognizes the urgent need to address a large and rapidly growing deferred maintenance backlog which has been identified as a significant risk to future operations at all of the WSU campuses as they age. Additionally, the goals of this plan are consistent with the Master Plans for each of the WSU campuses which together include emphasis on open spaces, pedestrian access, community connection and campus identity, and research and/or program excellence. This project will provide space for both enrollment growth in existing programs, and the implementation of several new degree programs. The Campus Vision Statement reflects increasing the campus size to 5,000 students. This project timeline would provide the first new building on campus in 12 years, adding space to accommodate that campus growth and continued expansion of mission-critical teaching and research activities. In general, there will be quality improvements to all STEM-related programs on campus with new wet lab space. As the campus was originally designed for only upper division students, it has been difficult to adapt existing facilities to accommodate lower division needs. The lack of wet lab space and the inability to enroll students in required science classes can affect time-to-degree for students and limit program growth. The Life Sciences Building will permit enrollment growth and quality improvements in the following existing programs: • Nursing: WSU Vancouver offers BS, MN, and DNP degrees and has an emerging need for simulation facilities, exam rooms, technology (AMS) enabled classrooms, and faculty offices. The nursing program has more applicants than can be admitted due to a lack of teaching space and a shortage of clinical sites. • Biology: WSU Vancouver offers a B.S. in biology, which is one of the most popular among the 24 degree-granting programs found on campus. High student demand for the degree, coupled with the campus commitment to creating undergraduate research opportunities, has created a pressing need for more teaching lab and research space. • Neuroscience: WSU Vancouver has an emerging research strength in neuroscience. The B.S. in Neuroscience is one of the fastest growing majors and there is a need for both research and teaching lab space to accommodate this growth. This degree also serves as a pre-med pathway to graduate students. • College of Medicine: Collaborative and shared spaces with the College of Nursing will be located in this building to allow for programmatic synergies with undergraduate and graduate student academic and research programs. In addition to current program offerings, the project will permit initiation of the following new programs: • B.A. in Human Biology, a multidisciplinary degree that leverages faculty expertise in the biological, environmental, and social sciences. • B.A. in Chemistry, which the Vancouver campus will not be able to offer without additional lab space. This building project directly supports the Results Washington initiative, as WSU Vancouver will be unable to sustain growth in STEM and health-related fields without new wet lab and clinic space. There is increasing pressure on upper-division and graduate instructional labs that compete for the same general lab resources, impacting time-to-degree for these students. Upper division and graduate students requiring lab coursework in general science labs are a targeted growth goal for the state of Washington; limiting classes due to lack of suitable space directly conflicts with those goals. Specifically, the WSU Vancouver Life Sciences facility will support the following Results Washington goals: • 1.3.a The project will increase the percentage of eligible students signing up for College Bound through numerous faculty outreach projects and WSU Vancouver's strategic partnership with the Vancouver School District, as the iTech Prep magnet high school is co-located on campus. • 1.3.e The project will increase the percentage of postsecondary graduates from community colleges that transfer to WSU Vancouver. The campus accepts many

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Project Title: WSU Vancouver - Life Sciences Building

Description

community college transfers into STEM and nursing majors, which this facility will support. • 1.3.f The Life Sciences facility will increase the number of students enrolled in STEM and high demand fields by over 100 annually, which is nearly 10 percent of the state goal. • 1.3.g This building will increase the number of students enrolled in online and hybrid courses as the entire nursing program is structured in this manner, contributing to nearly 10 percent of the state goal. • 1.3.h WSU Vancouver will increase the number of graduates in STEM and high demand fields with this project by 105 degrees annually, which is 11 percent of the state goal. • 1.3.i This project will increase the percentage of post-secondary students or students employed in Washington. The building will directly support 20 post-secondary degrees and 92 percent of WSU alumni remain in the Vancouver area. See: https://gis.wsu.edu/portal/apps/MapSeries/index.html?appid=9cc577c31d314e0fb75c0d519e82802f

Funding

Acct Code	Account Title	Estimated Total	Expenditures Prior Biennium	Expenditures Current Biennium	2021-23 Fiscal Period Reapprops	2021-23 Fiscal Period New Approps
057-1	State Bldg Constr-State	56,600,000		4,000,000		52,600,000
062-1	WSU Building Account-State	500,000	500,000			
	Total	**57,100,000**	**500,000**	**4,000,000**	**0**	**52,600,000**

Acct Code	Account Title	Future Fiscal Periods 2023-25	2025-27	2027-29	2029-31
057-1	State Bldg Constr-State				
062-1	WSU Building Account-State				
	Total	**0**	**0**	**0**	**0**

Schedule and Statistics

	Start Date	End Date
Predesign	02/01/2018	06/01/2018
Design	4/1/2020	9/1/2021
Construction	7/1/2021	5/1/2023

	Total
Gross Square Feet:	60,000
Usable Square Feet:	36,607
Efficiency:	61.0%
Escalated MACC Cost per Sq. Ft.:	592
Construction Type:	Science Labs (teaching)
Is this a remodel?	No
A/E Fee Class:	B
A/E Fee Percentage:	6.57%

Cost Summary

	Escalated Cost	% of Project
Acquisition Costs Total	**0**	**0.0%**
Consultant Services		

OFM

365 - Washington State University
Capital Project Request
2021-23 Biennium

*

Version: 10 2021-23 WSU Capital Budget Request

Report Number: CBS002
Date Run: 8/6/2020 7:04PM

Project Number: **30000840**
Project Title: **WSU Vancouver - Life Sciences Building**

Cost Summary

		Escalated Cost	% of Project
Consultant Services			
Pre-Schematic Design Services		650,000	1.1%
Construction Documents		1,524,992	2.7%
Extra Services		686,203	1.2%
Other Services		710,386	1.2%
Design Services Contingency		193,111	0.3%
Consultant Services Total		**3,940,827**	**6.9%**
Maximum Allowable Construction Cost(MACC)	**35,501,169**		
Site work		1,517,957	2.7%
Related Project Costs		153,270	0.3%
Facility Construction		33,829,942	59.3%
GCCM Risk Contingency		4,487,352	7.9%
GCCM or Design Build Costs		2,455,474	4.3%
Construction Contingencies		2,090,074	3.7%
Non Taxable Items		0	0.0%
Sales Tax		3,740,861	6.6%
Construction Contracts Total		**48,274,927**	**84.5%**
Equipment			
Equipment		2,866,339	5.0%
Non Taxable Items		0	0.0%
Sales Tax		240,772	0.4%
Equipment Total		**3,107,111**	**5.4%**
Art Work Total		**284,081**	**0.5%**
Other Costs Total		**284,060**	**0.5%**
Project Management Total		**1,209,209**	**2.1%**
Grand Total Escalated Costs		**57,100,215**	
Rounded Grand Total Escalated Costs		**57,100,000**	

Operating Impacts

Total one time start up and ongoing operating costs

Acct Code	Account Title	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
FTE	Full Time Employee	5.8	5.9	5.9	5.9	5.9

365 - Washington State University
Capital Project Request
2021-23 Biennium

*

Version: 10 2021-23 WSU Capital Budget Request

Report Number: CBS002
Date Run: 8/6/2020 7:04PM

Project Number: **30000840**
Project Title: **WSU Vancouver - Life Sciences Building**

Operating Impacts

Acct Code	Account Title	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
001-1	General Fund-State	893,000	921,000	921,000	921,000	921,000
	Total	**893,000**	**921,000**	**921,000**	**921,000**	**921,000**

Narrative

Costs are based on calculated M&O rates by building type.

Capital Project Request

2021-23 Biennium

*

Parameter	Entered As	Interpreted As
Biennium	2021-23	2021-23
Agency	365	365
Version	10-A	10-A
Project Classification	*	All Project Classifications
Capital Project Number	30000840	30000840
Sort Order	Project Priority	Priority
Include Page Numbers	Y	Yes
For Word or Excel	N	N
User Group	Agency Budget	Agency Budget
User Id	*	All User Ids

STATE OF WASHINGTON
AGENCY / INSTITUTION PROJECT COST SUMMARY

Updated June 2020

Agency	Washington State University
Project Name	WSU Vancouver - Life Sciences Building
OFM Project Number	30000840

Contact Information	
Name	Jason Baerlocher
Phone Number	509-335-9012
Email	jason.baerlocher @wsu.edu

Statistics			
Gross Square Feet	60,000	MACC per Square Foot	$567
Usable Square Feet	36,607	Escalated MACC per Square Foot	$592
Space Efficiency	61.0%	A/E Fee Class	B
Construction Type	Science labs (teaching)	A/E Fee Percentage	6.57%
Remodel	No	Projected Life of Asset (Years)	75
Additional Project Details			
Alternative Public Works Project	Yes	Art Requirement Applies	Yes
Inflation Rate	2.38%	Higher Ed Institution	Yes
Sales Tax Rate %	8.40%	Location Used for Tax Rate	605
Contingency Rate	5%		
Base Month	August-20	OFM UFI# (from FPMT, if available)	n/a (new bldg)
Project Administered By	Agency		

Schedule			
Predesign Start	February-18	Predesign End	June-18
Design Start	April-20	Design End	September-21
Construction Start	July-21	Construction End	May-23
Construction Duration	22 Months		

Green cells must be filled in by user

Project Cost Estimate

Total Project	**$54,854,429**	Total Project Escalated	**$57,100,277**
		Rounded Escalated Total	**$57,100,000**

STATE OF WASHINGTON
AGENCY / INSTITUTION PROJECT COST SUMMARY

Updated June 2020

Agency	Washington State University
Project Name	WSU Vancouver - Life Sciences Building
OFM Project Number	30000840

Cost Estimate Summary

Acquisition			
Acquisition Subtotal	**$0**	**Acquisition Subtotal Escalated**	**$0**

Consultant Services			
Predesign Services	$650,000		
A/E Basic Design Services	$1,633,879		
Extra Services	$677,300		
Other Services	$734,062		
Design Services Contingency	$184,762		
Consultant Services Subtotal	**$3,880,003**	**Consultant Services Subtotal Escalated**	**$3,941,002**

Construction			
GC/CM Risk Contingency	$4,298,229		
GC/CM or D/B Costs	$2,351,986		
Construction Contingencies	$2,001,986	Construction Contingencies Escalated	$2,090,074
Maximum Allowable Construction Cost (MACC)	$34,039,729	Maximum Allowable Construction Cost (MACC) Escalated	$35,501,168
Sales Tax	$3,586,122	Sales Tax Escalated	$3,740,862
Construction Subtotal	**$46,278,053**	**Construction Subtotal Escalated**	**$48,274,930**

Equipment			
Equipment	$2,745,535		
Sales Tax	$230,625		
Non-Taxable Items	$0		
Equipment Subtotal	**$2,976,160**	**Equipment Subtotal Escalated**	**$3,107,112**

Artwork			
Artwork Subtotal	**$284,081**	**Artwork Subtotal Escalated**	**$284,081**

Agency Project Administration			
Agency Project Administration Subtotal	$1,033,133		
DES Additional Services Subtotal	$0		
Other Project Admin Costs	$0		
Project Administration Subtotal	**$1,158,133**	**Project Administation Subtotal Escalated**	**$1,209,091**

Other Costs			
Other Costs Subtotal	**$278,000**	**Other Costs Subtotal Escalated**	**$284,061**

Project Cost Estimate

Total Project	**$54,854,429**	Total Project Escalated	**$57,100,277**
		Rounded Escalated Total	**$57,100,000**

Cost Estimate Details

Acquisition Costs					
Item	**Base Amount**		**Escalation Factor**	**Escalated Cost**	**Notes**
Purchase/Lease					
Appraisal and Closing					
Right of Way					
Demolition					
Pre-Site Development					
Other					
Insert Row Here					
ACQUISITION TOTAL	**$0**		**NA**	**$0**	

Green cells must be filled in by user

Cost Estimate Details

Consultant Services				
Item	**Base Amount**	**Escalation Factor**	**Escalated Cost**	**Notes**
1) Pre-Schematic Design Services				
Programming/Site Analysis				
Environmental Analysis				
Predesign Study	$350,000			
Honorarium / BOD	$300,000			
Insert Row Here				
Sub TOTAL	**$650,000**	**1.0000**	**$650,000**	Escalated to Design Start
2) Construction Documents				
A/E Basic Design Services	$1,633,879			69% of A/E Basic Services
Other				
Insert Row Here				
Sub TOTAL	**$1,633,879**	**1.0089**	**$1,648,421**	Escalated to Mid-Design
3) Extra Services				
Civil Design (Above Basic Svcs)				
Geotechnical Investigation	$85,000			
Commissioning	$120,000			
Site Survey	$25,000			
Testing	$121,000			
LEED Services	$115,000			
Voice/Data Consultant	$36,300			
Value Engineering				
Constructability Review				
Environmental Mitigation (EIS)	$25,000			
Landscape Consultant				
Audit	$150,000			
Insert Row Here				
Sub TOTAL	**$677,300**	**1.0089**	**$683,328**	Escalated to Mid-Design
4) Other Services				
Bid/Construction/Closeout	$734,062			31% of A/E Basic Services
HVAC Balancing				
Staffing				
Other				
Insert Row Here				
Sub TOTAL	**$734,062**	**1.0440**	**$766,361**	Escalated to Mid-Const.
5) Design Services Contingency				
Design Services Contingency	$184,762			
Other				
Insert Row Here				
Sub TOTAL	**$184,762**	**1.0440**	**$192,892**	Escalated to Mid-Const.
CONSULTANT SERVICES TOTAL	**$3,880,003**		**$3,941,002**	

Green cells must be filled in by user

Cost Estimate Details

Construction Contracts				
Item	**Base Amount**	**Escalation Factor**	**Escalated Cost**	**Notes**
1) Site Work				
G10 - Site Preparation	$503,605			
G20 - Site Improvements	$681,266			
G30 - Site Mechanical Utilities	$200,700			
G40 - Site Electrical Utilities	$100,000			
G60 - Other Site Construction				
Other				
Insert Row Here				
Sub TOTAL	**$1,485,571**	**1.0218**	**$1,517,957**	
2) Related Project Costs				
Offsite Improvements				
City Utilities Relocation				
Parking Mitigation				
Stormwater Retention/Detention	$150,000			
Other				
Insert Row Here				
Sub TOTAL	**$150,000**	**1.0218**	**$153,270**	
3) Facility Construction				
A10 - Foundations	$440,993			
A20 - Basement Construction	$559,791			
B10 - Superstructure	$3,424,143			
B20 - Exterior Closure	$3,779,937			
B30 - Roofing	$594,590			
C10 - Interior Construction	$2,399,960			
C20 - Stairs	$383,994			
C30 - Interior Finishes	$1,673,972			
D10 - Conveying	$419,993			
D20 - Plumbing Systems	$3,599,940			
D30 - HVAC Systems	$7,799,870			
D40 - Fire Protection Systems	$329,995			
D50 - Electrical Systems	$3,359,944			
F10 - Special Construction	$416,822			
F20 - Selective Demolition	$0			
General Conditions	$2,640,000			
Lab Fixed Equipment	$580,215			
Insert Row Here				
Sub TOTAL	**$32,404,158**	**1.0440**	**$33,829,941**	
4) Maximum Allowable Construction Cost				
MACC Sub TOTAL	**$34,039,729**		**$35,501,168**	

5) GCCM Risk Contingency				
GCCM Risk Contingency	$4,298,229			
Other				
Insert Row Here				
Sub TOTAL	**$4,298,229**	**1.0440**	**$4,487,352**	
6) GCCM or Design Build Costs				
GCCM Fee	$1,701,986			
Bid General Conditions				
GCCM Preconstruction Services	$650,000			
Other				
Insert Row Here				
Sub TOTAL	**$2,351,986**	**1.0440**	**$2,455,474**	
7) Construction Contingency				
Allowance for Change Orders	$1,701,986			
Extra Allowance for Change Orders	$300,000			
Insert Row Here				
Sub TOTAL	**$2,001,986**	**1.0440**	**$2,090,074**	
8) Non-Taxable Items				
Other				
Insert Row Here				
Sub TOTAL	**$0**	**1.0440**	**$0**	
Sales Tax				
Sub TOTAL	**$3,586,122**		**$3,740,862**	
CONSTRUCTION CONTRACTS TOTAL	**$46,278,053**		**$48,274,930**	

Green cells must be filled in by user

Cost Estimate Details

Equipment				
Item	**Base Amount**	**Escalation Factor**	**Escalated Cost**	**Notes**
E10 - Equipment	$1,353,835			
E20 - Furnishings	$1,057,700			
F10 - Special Construction	$334,000			
Other				
Insert Row Here				
Sub TOTAL	**$2,745,535**	**1.0440**	**$2,866,339**	
1) Non Taxable Items				
Other				
Insert Row Here				
Sub TOTAL	**$0**	**1.0440**	**$0**	
Sales Tax				
Sub TOTAL	**$230,625**		**$240,773**	
EQUIPMENT TOTAL	**$2,976,160**		**$3,107,112**	

Green cells must be filled in by user

Cost Estimate Details

Artwork					
Item	**Base Amount**		**Escalation Factor**	**Escalated Cost**	**Notes**
Project Artwork	$0				0.5% of total project cost for new construction
Higher Ed Artwork	$284,081				0.5% of total project cost for new and renewal construction
Other					
Insert Row Here					
ARTWORK TOTAL	**$284,081**		**NA**	**$284,081**	

Green cells must be filled in by user

Cost Estimate Details

Project Management					
Item	**Base Amount**		**Escalation Factor**	**Escalated Cost**	**Notes**
Agency Project Management	$1,033,133				
Additional Services					
On-site Supervision	$125,000				
Insert Row Here					
PROJECT MANAGEMENT TOTAL	**$1,158,133**		**1.0440**	**$1,209,091**	

Green cells must be filled in by user

Cost Estimate Details

Other Costs					
Item	**Base Amount**		**Escalation Factor**	**Escalated Cost**	**Notes**
Mitigation Costs					
Hazardous Material Remediation/Removal					
Historic and Archeological Mitigation					
Facilities/Admin	$278,000				
Insert Row Here					
OTHER COSTS TOTAL	**$278,000**		**1.0218**	**$284,061**	

Green cells must be filled in by user

C-100(2020)
Additional Notes

Tab A. Acquisition
Insert Row Here

Tab B. Consultant Services
Insert Row Here

Tab C. Construction Contracts
Insert Row Here

Tab D. Equipment
Insert Row Here

Tab E. Artwork
Insert Row Here

Tab F. Project Management
Insert Row Here

Tab G. Other Costs
Insert Row Here

Degree Totals and Targets Template

Appendix A - Degree Totals

Required for Overarching Criteria for Major Growth, Renovation, Replacement and Research Proposals

Institution: Washington State University

Campus location: Vancouver

Project name: Vancouver Life Sciences Building

	Increase in bachelor's degrees awarded	Increase in bachelor's degrees awarded in high-demand fields	Increase in advanced degrees awarded
2018-19 Statewide Public Four-Year Dashboard (a)	5,836	2,170	1,480
Number of degrees targeted in 2021 (b)	5,703	2,064	1,521
2018-19 totals/2021 target (a/b)	102.3%	105.1%	97.3%
Score:	**0.00**	**0.00**	**1.00**

Comments:

Dashboard data and degree projections are for WSU system (not just Vancouver campus). Individual campus degree targets are not currently available. 2018-19 Bachelor Degrees awarded for Vancouver totaled 910; high demand degrees totaled 393; and advanced degrees totaled 112.

Availability of Space/Campus Utilization Template

2020 Four-year Higher Education Scoring Process

Required for all categories except Infrastructure and Acquisition.

Project Name:	Vancouver Life Sciences Building
Institution:	Washington State University
Campus Location:	Vancouver

Identify the average number of hours per week each (a) classroom seat and (b) classroom lab is expected to be utilized in Fall 2018 on the porposed porject's campus. Please fill in the green shaded cells for the **campus** where the project is located.

(a) General University Classroom Utilization		**(b) General University Lab Utilization**	
Fall 2019 Weekly Contact Hours	25,600	Fall 2019 Weekly Contact Hours	7,744
Multiply by % FTE Increase Budgeted	0.00%	Multiply by % FTE Increase Budgeted	0.00%
Expected Fall 2020 Contact Hours	25,600	Expected Fall 2020 Contact Hours	7,744
Expected Fall 2020 Classroom Seats	1,804	Expected Fall 2020 Class Lab Seats	588
Expected Hours per Week Utilization	**14.2**	**Expected Hours per Week Utilization**	**13.2**
HECB GUC Utilization Standard	22.0	HECB GUL Utilization Standard	16.0
Differrence in Utilization Standard	-35%	Differrence in Utilization Standard	-18%

If the campus does not meet the 22 hours per classroom seat and/or the 16 hours per class lab HECB utilization standards, describe any institutional plans for achieving that level of utilization.

WSU's Facility Development plan is focused on identifying and prioritizing capital projects which balance continued stewardship and renewal of existing facilities and infrastructure within a framework for responsible growth. While recent completed projects have aided progress towards reaching state targets for classroom and laboratory utilization, additional improvements are still required. This proposed project plans to add necessary teaching lab space that will exceed HECB utilization standards. This guiding principle for all WSU projects will contribute to achieving the state's target space utilization goals.

Appendix C - Space Allocation

Program Related Space Allocation Template

Assignable Square Feet

Required for all Growth, Renovation and Replacement proposals.

Institution: Washington State University

Campus location: Vancouver

Project name: Vancouver Life Sciences Building

Input the assignable square feet for the proposed project under the applicable space types below:

Type of Space	Points	Assignable Square Feet	Percentage of total	Score [Points x Percentage]
Instructional space (classroom, laboratories)	10	29,690	81.10	8.11
Research space	2		0.00	0.00
Office space	4	6,405	17.50	0.70
Library and study collaborative space	10		0.00	0.00
Other non-residential space	8		0.00	0.00
Support and physical plant space	6	512	1.40	0.08
Total		**36,607**	**100.0**	**8.89**

Appendix D - Facility Development Plan

WSU Facility Development Plan

WSU Facilities Services | Geographic Information System

Pullman 2021-2023

Johnson Hall Demolition
$8,000,000 (Design and Construction)

ARS Plant Biosciences Building
$105,000,000 (Federal Funding)

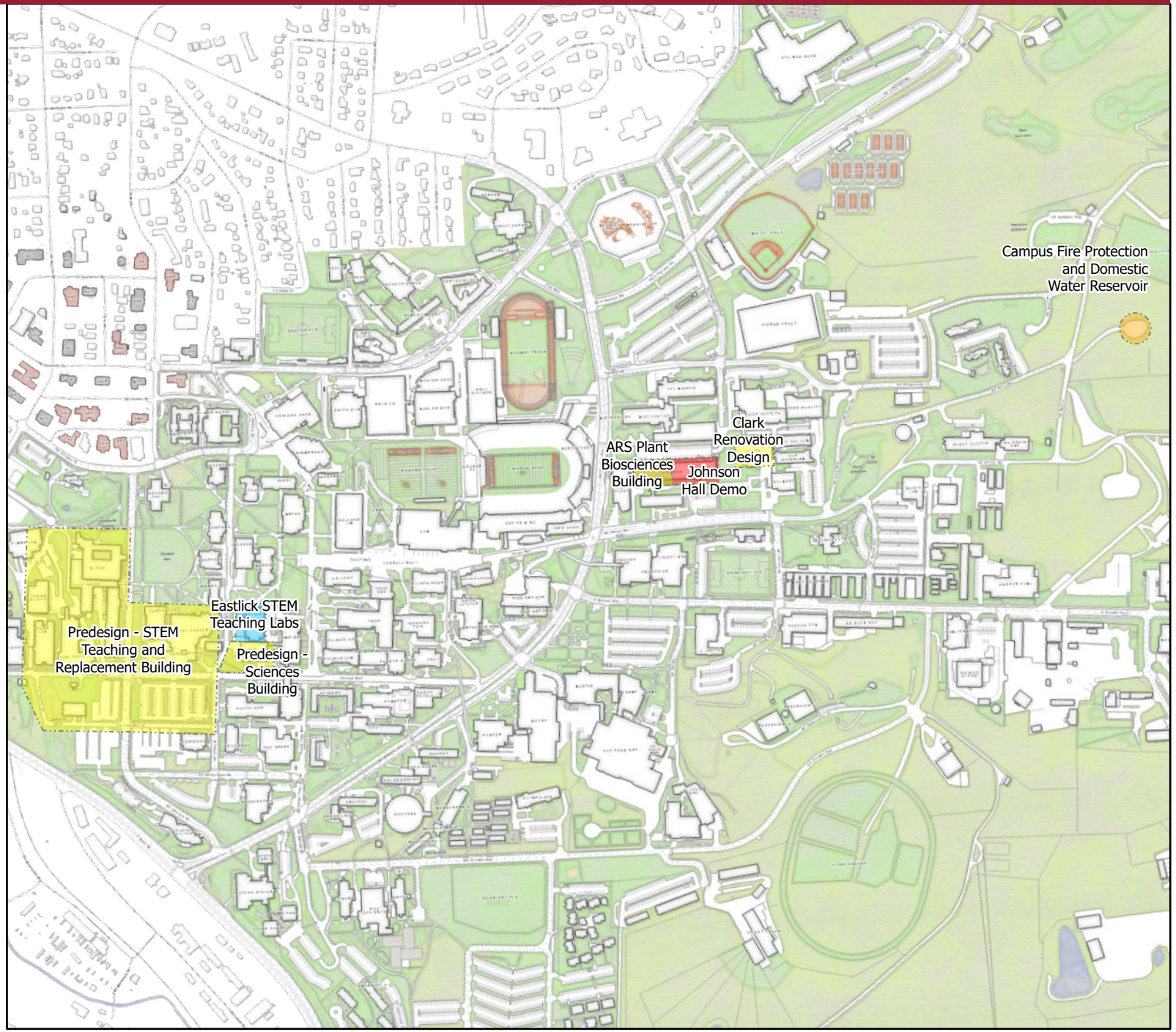
Campus Fire Protection and Domestic Water Reservoir
$8,000,000 (Design and Construction)

Pullman Sciences Building
$500,000 (Predesign)

STEM Teaching and Replacement Building – VCEA
$500,000 (Predesign)

STEM Teaching Labs
$4,900,000 (Design and Construction)

Clark Hall Research Lab Renovation
$4,900,000 (Design and Construction)



WSU Facility Development Plan

WSU Facilities Services | Geographic Information System

Spokane 2021-2023

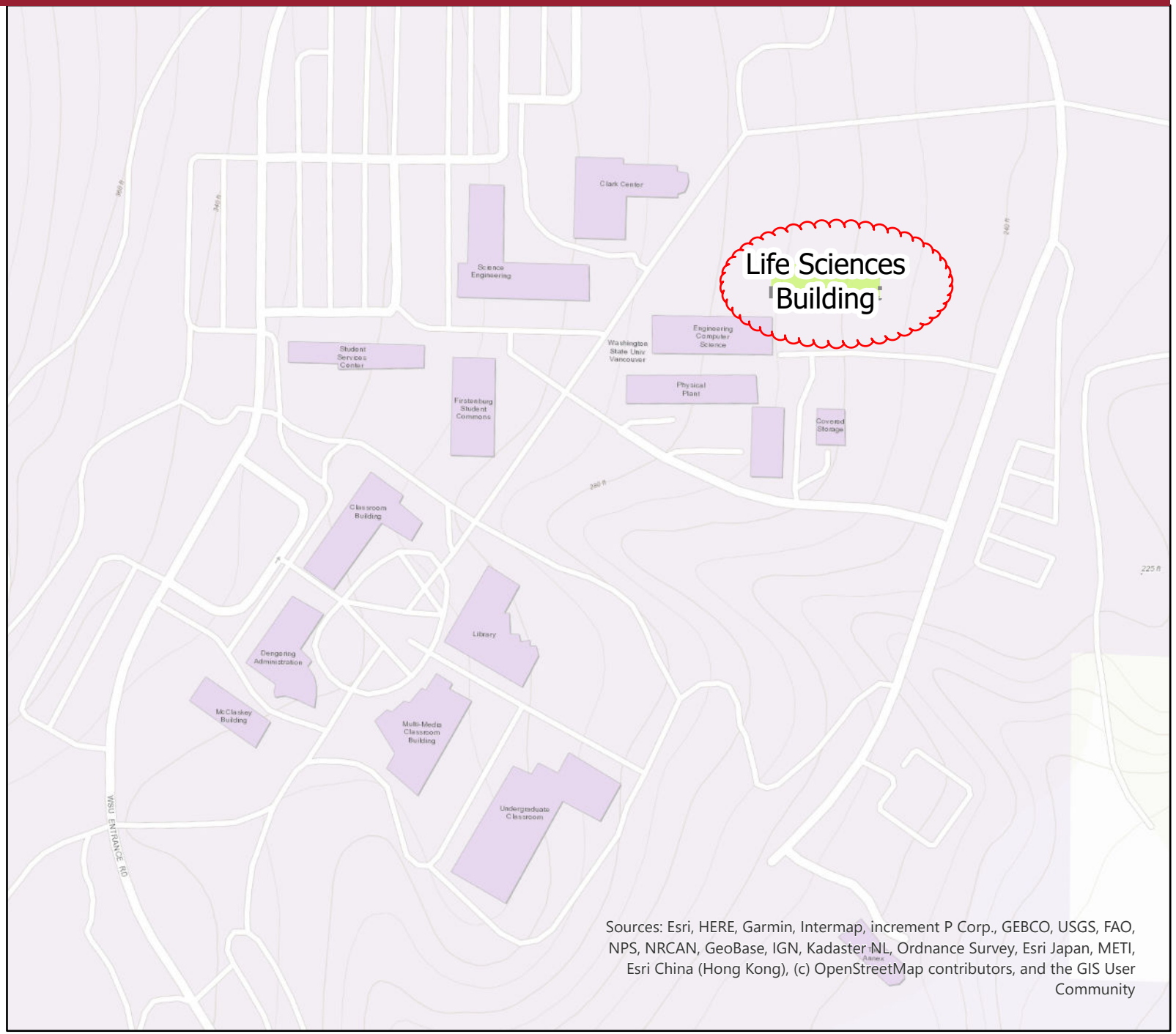
Spokane Phase One Building Renovation
$15,000,000 (Design and Construction)

WSU Facility Development Plan

WSU Facilities Services | Geographic Information System

Vancouver 2021-2023

Vancouver Life Sciences Building
$52,600,000 (Construction)



WSU Facility Development Plan

Appendix D - Facility Development Plan

WSU Facilities Services | Geographic Information System

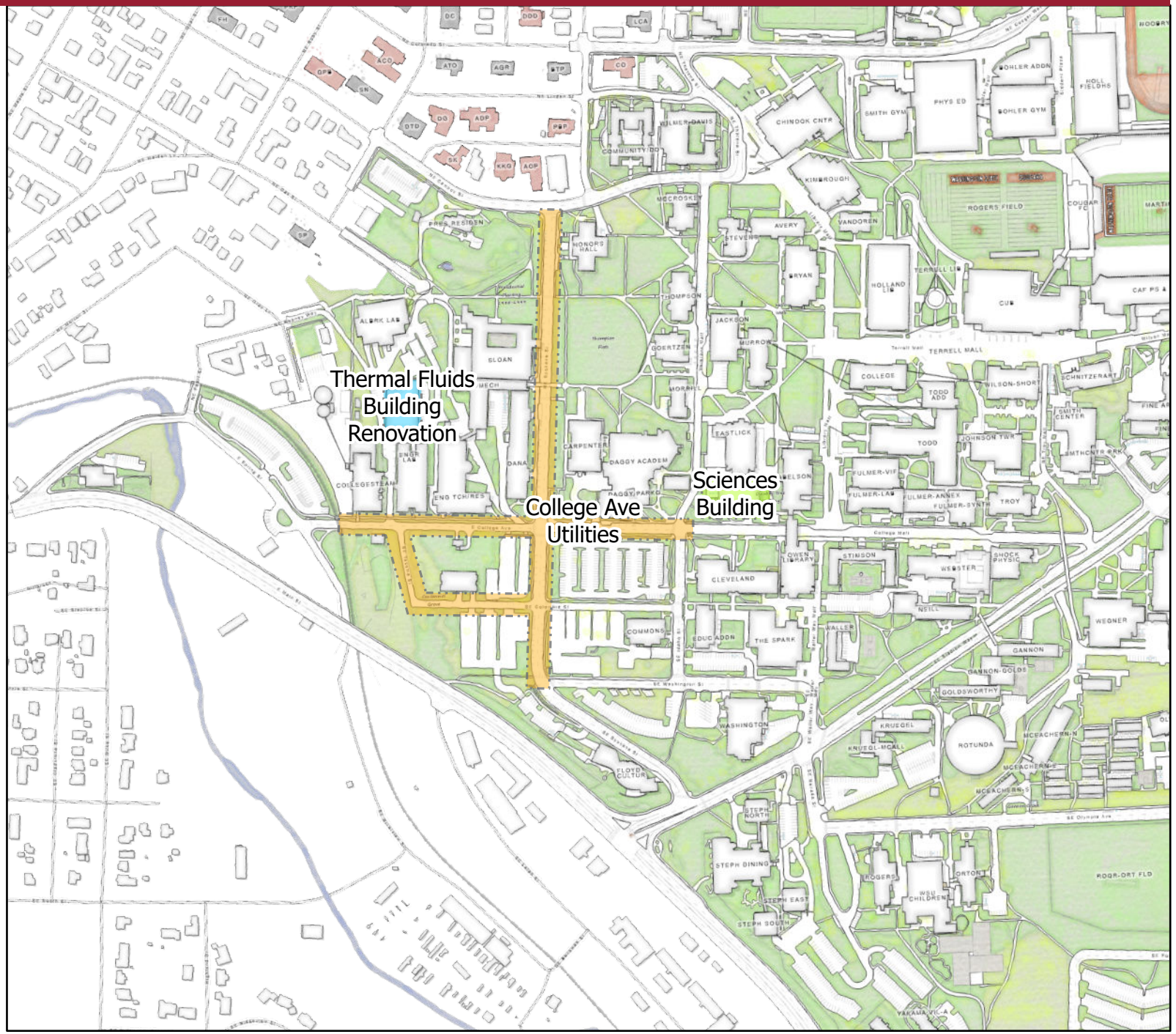
Pullman 2023-2025

Pullman Sciences Building
$53,000,000 (Design, Heald Hall Demolition and Construction)

College Avenue Utility Upgrades
$10,000,000 (Design and Construction)

Thermal Fluids Building Renovation
$10,000,000 (Design and Construction)

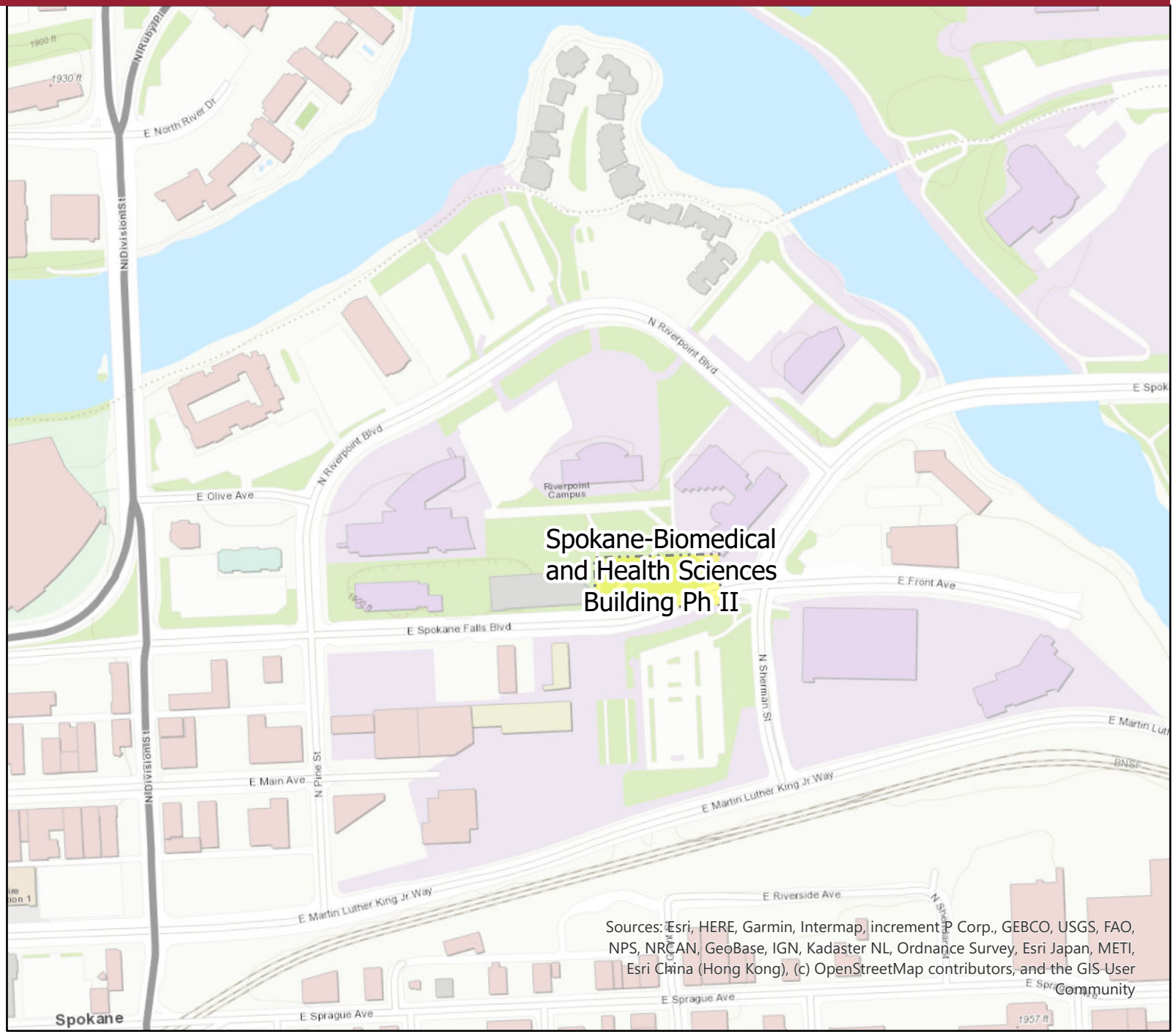
Building Systems (roofs, elevators, envelope, BAS, MEP)
$10,000,000 (Design and Construction)
(Multiple locations - not shown on map)



WSU Facility Development Plan

Spokane 2023-2025

Spokane-Biomedical and Health Sciences Building Ph II
$5,000,000 (Design)



WSU Facility Development Plan

WSU Facilities Services | Geographic Information System

Pullman 2025-2027

STEM Teaching and Replacement Building – VCEA
$8,000,000 (Design and Dana Hall Demolition)

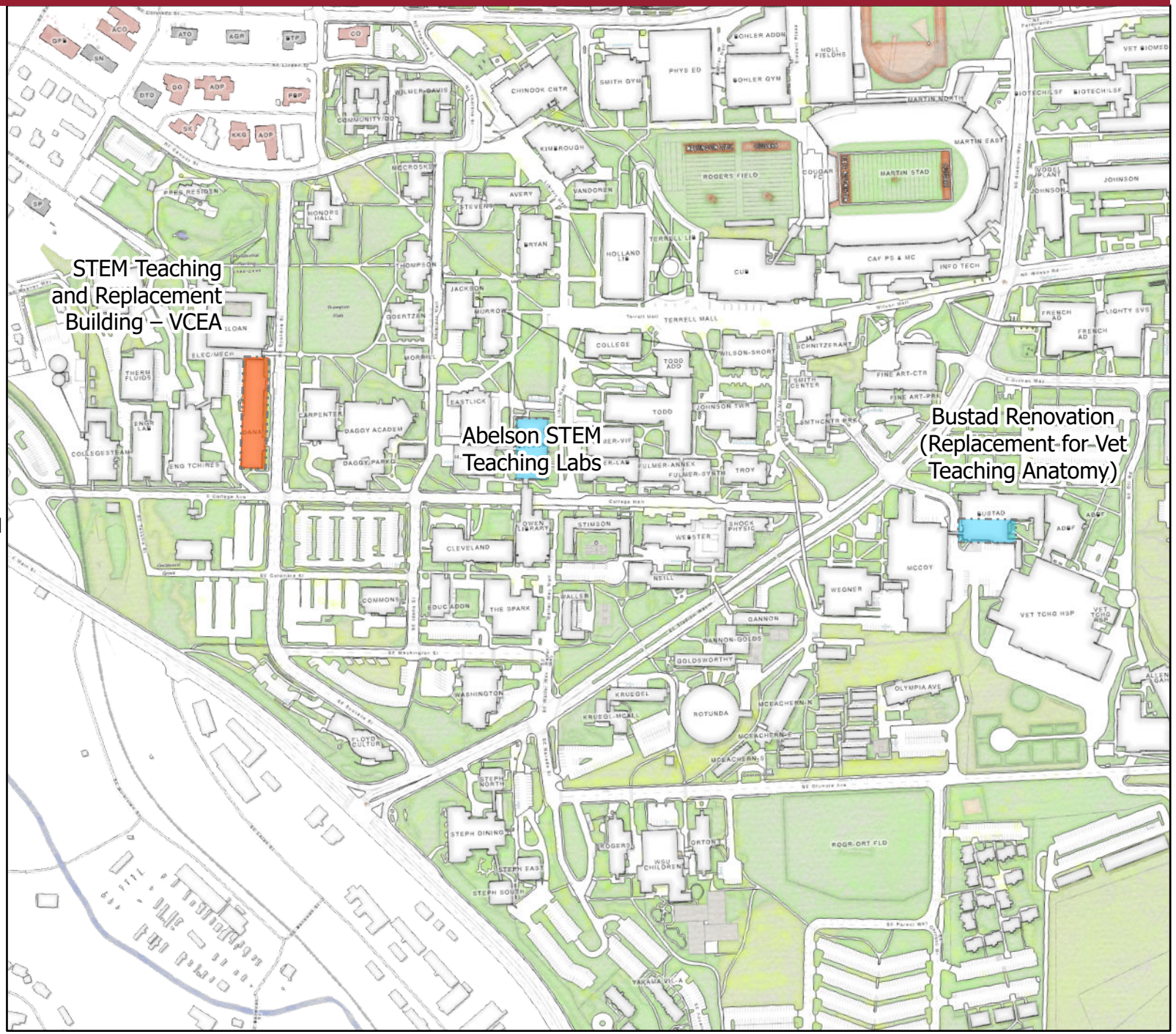
Washington State University Pullman - STEM Teaching Labs
$5,000,000 (Design and Construction)

Bustad Renovation (Replacement for Vet Teaching Anatomy)
$10,000,000 (Design and Construction)

Infrastructure (electrical, water, chilled water, steam, tunnels)
$10,000,000 (Design and Construction)
(Multiple locations - not shown on map)

Learning Renovations
$10,000,000 (Design and Construction)
(Multiple locations - not shown on map)

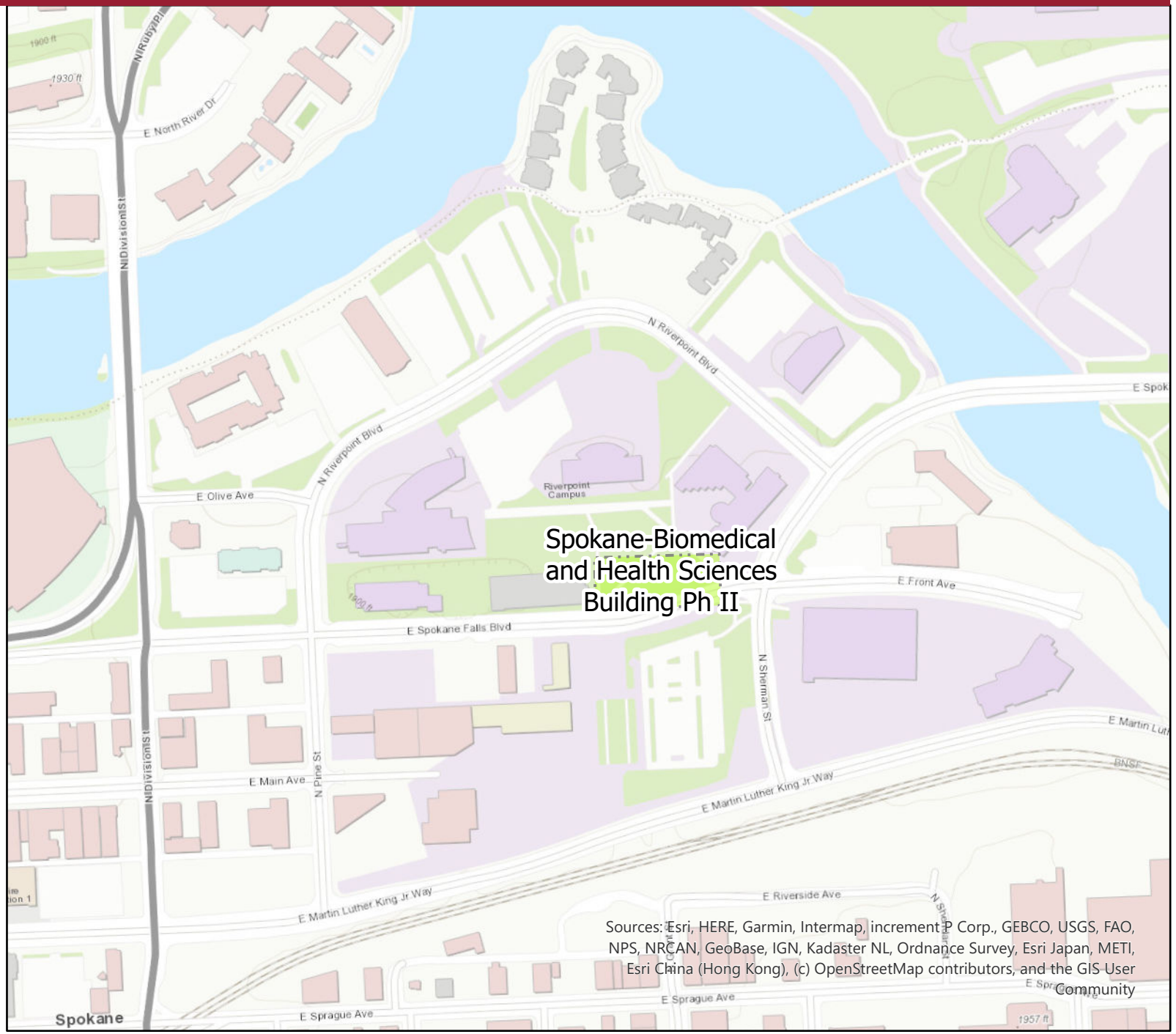
Information Technology Renovations
$5,000,000 (Design and Construction)
(Multiple locations - not shown on map)



WSU Facility Development Plan

Spokane 2025-2027

Spokane-Biomedical and Health Sciences Building Ph II
$35,000,000 (Construction Phase 1)



WSU Facility Development Plan

Appendix D - Facility Development Plan

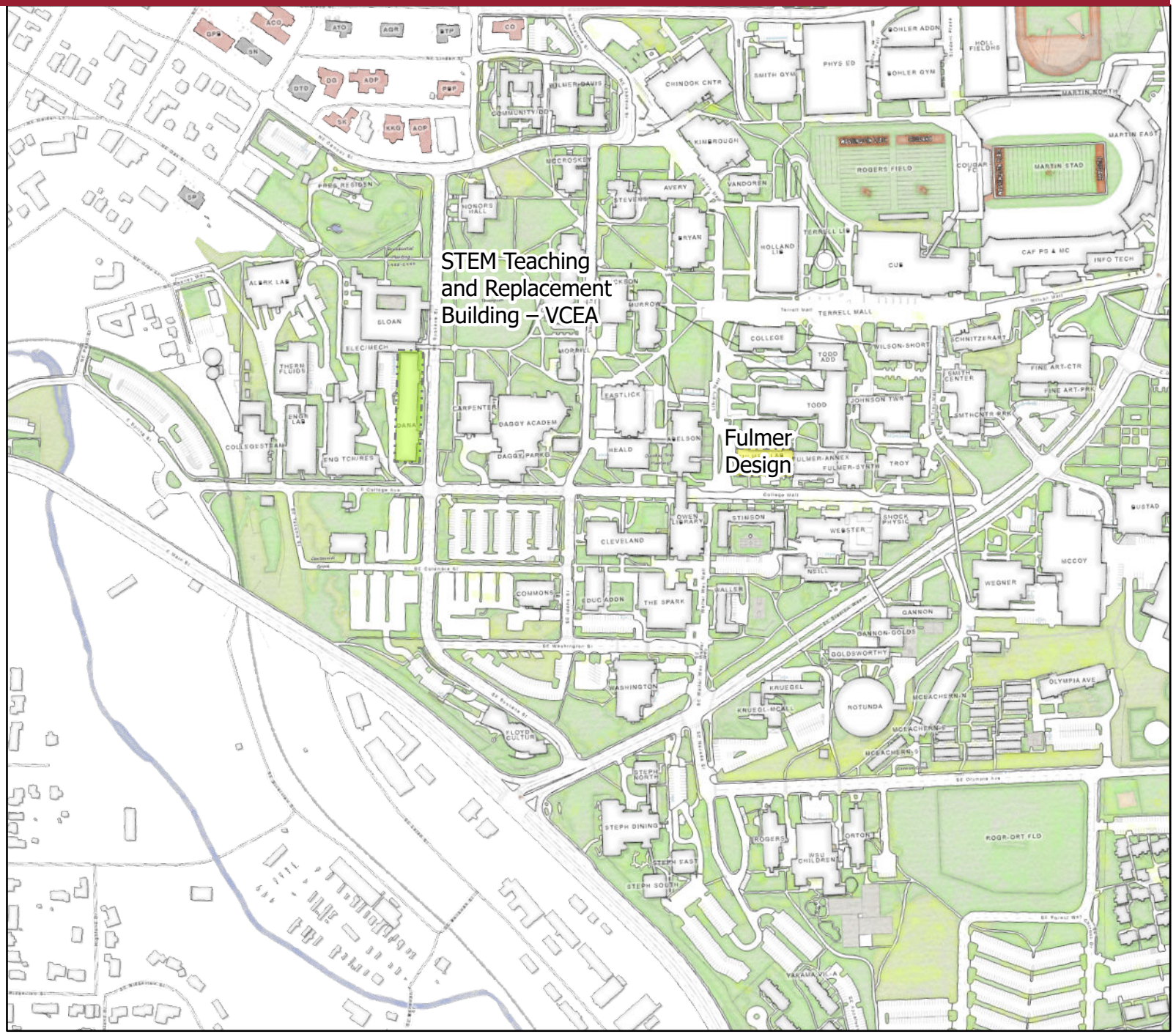
WSU Facilities Services | Geographic Information System

Pullman 2027-2029

STEM Teaching and Replacement Building – VCEA
$45,000,000 (Construction)

Fulmer Hall Renovation Phase 1
$3,000,000 (Design)

Research Renovations
$10,000,000 (Design and Construction)
(Multiple locations - not shown on map)

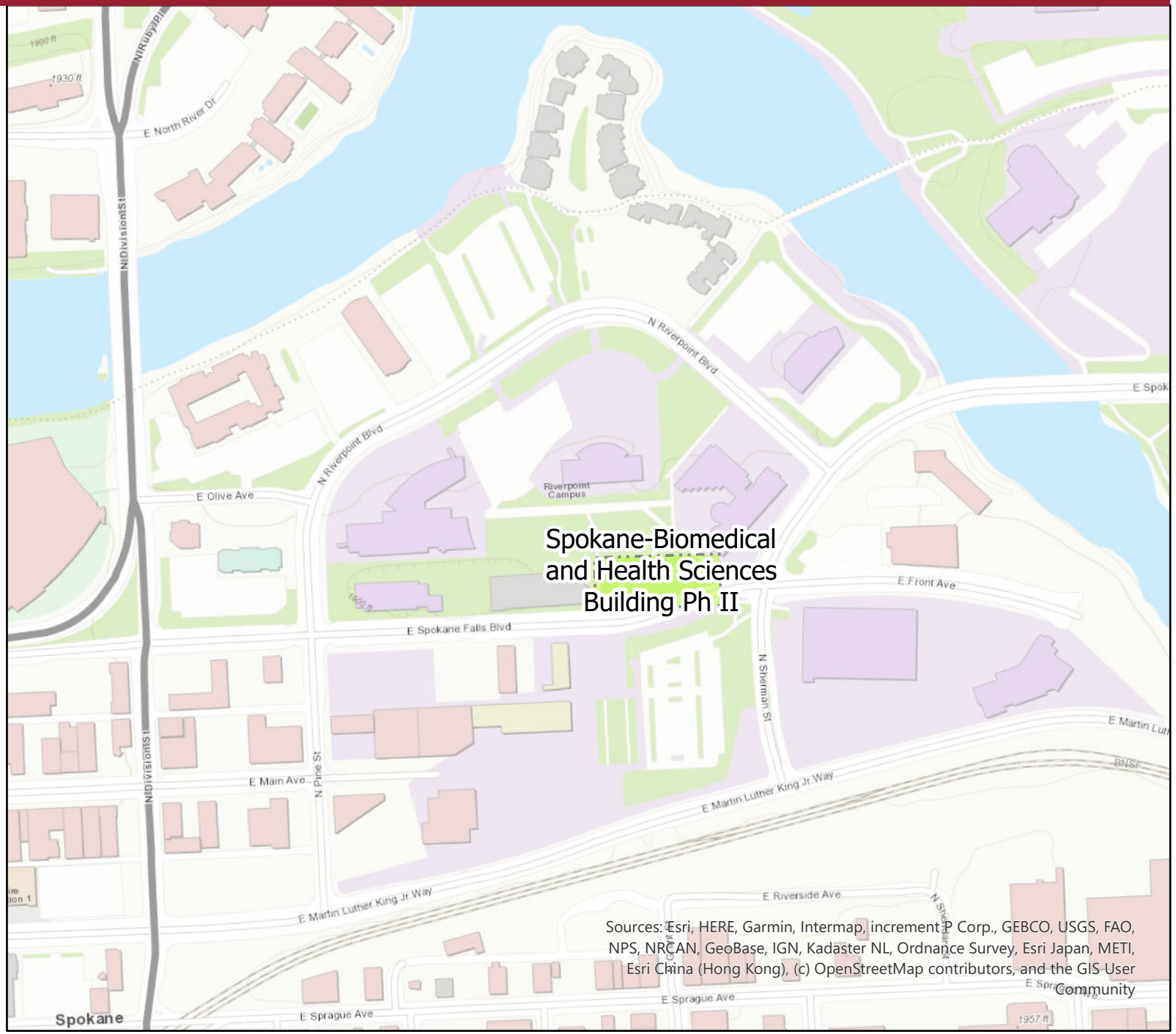


WSU Facility Development Plan

WSU Facilities Services | Geographic Information System

Spokane 2027-2029

Spokane-Biomedical and Health Sciences Building Ph II
$35,000,000 (Construction Phase 2)



WSU Facility Development Plan

Appendix D - Facility Development Plan

WSU Facilities Services | Geographic Information System

Pullman 2029-2031

Fulmer Hall Renovation Phase 1
$35,000,000 (Construction)

Engineering Renovation/Replacement Ph 2 – VCEA
$8,000,000 (Design and Demolition of Daggy Hall)

McCoy Hall Demolition
$8,000,000 (Design and Demolition of McCoy Hall)

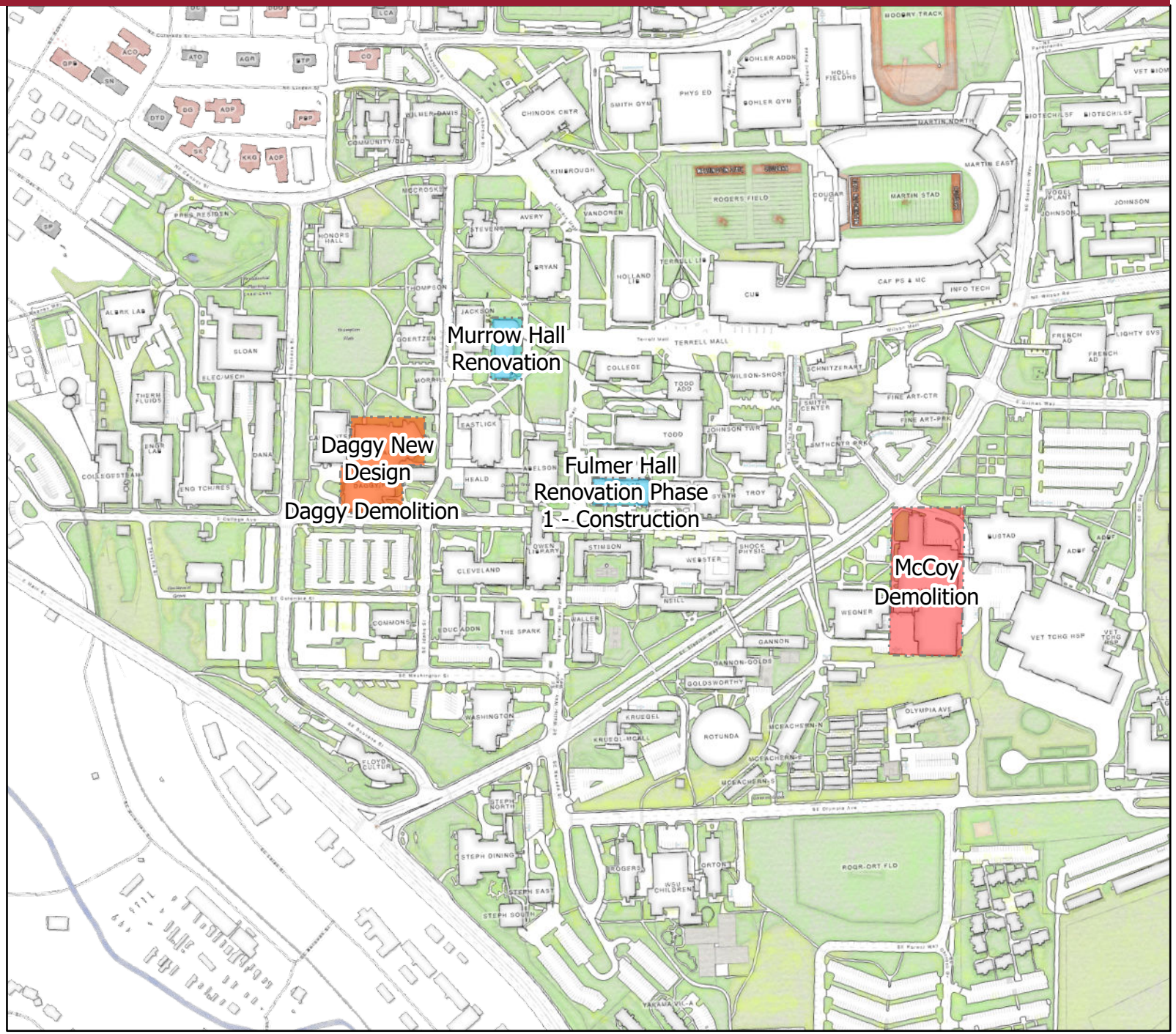
Murrow Hall Renovation
$3,000,000 (Design)

Building Systems (roofs, elevators, envelope, BAS, MEP)
$10,000,000 (Design and Construction)
(Multiple locations - not shown on map)

Infrastructure (electrical, water, chilled water, steam, tunnels)
$10,000,000 (Design and Construction)
(Multiple locations - not shown on map)

Learning Renovations
$10,000,000 (Design and Construction)
(Multiple locations - not shown on map)

Information Technology Renovations
$5,000,000 (Design and Construction)
(Multiple locations - not shown on map)



2020 PROJECT PROPOSAL CHECKLIST

2021-23 Biennium Four-year Higher Education Scoring Process

INSTITUTION	CAMPUS LOCATION
365 - Washington State University	Spokane, Washington
PROJECT TITLE	**FPMT UNIQUE FACILITY ID # (OR NA)**
Spokane – Phase One Building Renovation	A03104
PROJECT CATEGORY	**PROJECT SUBCATEGORY**
Renovation	Major
PROPOSAL IS	
New or Updated Proposal (for scoring)	Resubmitted Proposal (retain prior score)
☒ New proposal ☐ Resubmittal to be scored (more than 2 biennia old or significantly changed)	☐ Resubmittal from 2017-19 biennium ☐ Resubmittal from 2019-21 biennium
CONTACT	**PHONE NUMBER**
Kate Kamerrer	509-335-9314

PROPOSAL CONTENT

- ☒ Project Proposal Checklist: this form; one for each proposal
- ☒ Project Proposal Form: Specific to category/subcategory (10-page limit)
- ☒ Appendices: templates, forms, exhibits and supporting/supplemental documentation for scoring.

INSTITUTIONAL PRIORITY

- ☒ Institutional Priority Form. Sent separately (not in this packet) to: Darrell Jennings.

Check the corresponding boxes below if the proposed project meets the minimum threshold or if the item listed is provided in the proposal submittal.

MINIMUM THRESHOLDS

- ☒ Project is not an exclusive enterprise function such as a bookstore, dormitory or contract food service.
- ☒ Project meets LEED Silver Standard requirements.
- ☒ Institution has a greenhouse gas emissions reduction policy in place in accordance with RCW 70.235.070 and vehicle emissions reduction policy in place per RCW 47.01.440 or RCW 43.160.020 as applicable.
- ☒ Design proposals: A complete predesign study was submitted to OFM by July 1, 2020.
- ☐ Growth proposals: Based on solid enrollment projections and is more cost-effectively providing enrollment access than alternatives such as university centers and distance learning.
- ☒ Renovation proposals: Project should cost between 60 – 80% of current replacement value and extend the useful life of the facility by at least 25 years.
- ☐ Acquisition proposals: Land acquisition is not related to a current facility funding request.
- ☐ Infrastructure proposals: Project is not a facility repair project.
- ☒ Stand-alone, infrastructure and acquisition proposals: is a single project requesting funds for one biennium.

2020 PROJECT PROPOSAL CHECKLIST

2021-23 Biennium Four-year Higher Education Scoring Process

REQUIRED APPENDICES

- ☒ Capital Project Report CBS 002
- ☒ Project cost estimate:
  - CBS 003 for projects between $2 million and $5 million
  - Excel C-100 for projects greater than $5 million
- ☒ Degree Totals and Targets template to indicate the number of Bachelors, High Demand and Advanced degrees expected to be awarded in 2021. (Required for Overarching Criteria scoring criteria for Major Growth, Renovation, Replacement and Research proposals).
- ☒ Availability of Space/Campus Utilization template for the campus where the project is located. (Required for all categories/subcategories except Infrastructure and Acquisition proposals).
- ☒ Assignable Square Feet template to indicate program-related space allocation. (Required for Growth, Renovation and Replacement proposals, all categories/subcategories).

OPTIONAL APPENDICES

Attach supplemental and supporting project documentation, *limit to materials directly related to and needed for the evaluation criteria*, such as:

- ☐ Degree and enrollment growth projections
- ☐ Selected excerpts from institutional plans
- ☐ Data on instructional and/or research space utilization
- ☐ Additional documentation for selected cost comparables (acquisition)
- ☐ Selected materials on facility conditions
- ☐ Selected materials on code compliance
- ☐ Tables supporting calculation of program space allocations, weighted average facility age, etc.
- ☐ Evidence of consistency of proposed research projects with state, regional, or local economic development plans
- ☐ Evidence of availability of non-state matching funds
- ☐ Selected documentation of prior facility failures, high cost maintenance, and/or system unreliability for infrastructure projects
- ☐ Documentation of professional assessment of costs for land acquisition, land cleanup, and infrastructure projects
- ☐ Selected documentation of engineering studies, site survey and recommendations, or opinion letters for infrastructure and land cleanup projects
- ☒ Other: Development Plan Reference

I certify that the above checked items indicate either that the proposed project meets the minimum thresholds, or the corresponding items have been included in this submittal.

Name:	Kate Kamerrer	Title:	Exec Director, Finance, Business & Building Services
Signature:	Kate Kamerrer	Date:	08/14/2020

INSTITUTION	CAMPUS
Washington State University	Spokane, Washington
PROJECT TITLE	
Spokane – Phase One Building Renovation	

SUMMARY NARRATIVE

- *Problem statement (short description of the project – the needs and the benefits)*
- *History of the project or facility*
- *University programs addressed or encompassed by the project*

Problem Statement - Washington State University (WSU) is requesting $15 million in the 21-23 capital budget to renovate the WSU Phase One Building that was recently vacated when Eastern Washington University ended a lease agreement. Renovation of the space will relieve building pressure amassing on campus as academic programs and research activity swells and will support additional academic programming in the health sciences.

During the predesign efforts for the Biomedical and Health Sciences Building II, WSU was notified by Eastern Washington University that they would be relocating their Arts, Culture, Business and Public Administration Programs off the WSU Spokane campus. The relocation of these programs off campus will provide WSU with additional square footage on campus to renovate for the use of current and proposed programs. In order to effectively utilize space within the Spokane campus, the predesign effort has evaluated both the Phase One Building and the proposed Health Science Building II concurrently to ensure that both facilities complement the space needs across campus avoiding the duplication of space. This proposed renovation capitalizes on the available space within the Phase One building framework.

History – The U.S. healthcare system is vulnerable because we are not educating enough doctors and nurses to meet the growing demand, especially in rural areas of Washington. WSU Health in Spokane needs additional educational and research space to fulfill its land grant mission to conduct scientific research and provide higher education access to Washington residents including candidates in medicine, nursing, pharmacy, and other allied health professions. The three colleges (Medicine, Nursing, and Pharmacy and Pharmaceutical Sciences) headquartered on the Spokane campus serve high-demand fields.

Additional space for Elson S. Floyd College of Medicine on the Spokane campus has been a priority in WSU Spokane's master plan since the 2009 Spokane Riverpoint Campus Academic and Master Plan Overview. (See Appendices.) The Pharmaceutical and Biomedical Sciences building, completed in 2013, was the initial phase in achieving vision for robust research, simulation, and interdisciplinary health sciences education in Spokane. The renovation of the Phase One Building allows WSU to continue the process of reaching these goals.

University Programs - As Spokane evolves into a major clinical education and research center in Eastern Washington, the project will allow expansion of the health science programs associated with the colleges of Medicine, Nursing, and Pharmacy and Pharmaceutical Sciences. Those colleges currently offer programs and degrees in medicine, Nutrition and Exercise Physiology, Speech and Hearing Sciences, Nursing and Pharmacy and Pharmaceutical Sciences.

OVERARCHING SCORING CRITERIA

1. Integral to achieving statewide policy goals

Provide degree targets and describe how the project promotes improvement on 2018-19 degree production totals in the OFM Statewide Public Four-Year Dashboard. Include the degree totals and target template in an appendix.

The Degree Totals and Targets Template is included in **Appendix A**.

A. Indicate the number of bachelor's degrees awarded at the close of the 2018-19 academic year, and the number targeted for 2021.

5,836 and 5,703 (Numbers represent rates across WSU.)

B. Indicate the number of bachelor's degrees awarded in high-demand fields at the close of the 2018-19 academic year, and the number targeted for 2021.

2,170 and 2,064 (Numbers represent rates across WSU.)

C. Indicate the number of advanced degrees awarded at the close of the 2018-19 academic year, and the number targeted for 2021.

1,480 and 1,521

2. Integral to campus/facilities master plan

A. *Describe the proposed project's relationship and relative importance to the institution's most recent campus/facilities master plan or other applicable strategic plan.*

The renovation of the Phase One Building is outlined in the WSU Facility Development Plan and is integral to scheduled improvements across multiple campuses within the WSU system. The project has also been identified as a priority outlined in the Washington State University Health Sciences Spokane Campus Program Update and Health Science Building II Technical Predesign Report completed in 2020.

Justification:
WSU's Spokane Campus Program Update is focused on identifying and prioritizing capital projects which balance continued stewardship and renewal of existing facilities and infrastructure within a framework for responsible growth. The plan recognizes the urgent need to address a large and rapidly growing deferred maintenance backlog which has been identified as a significant risk to future operations at all the WSU campuses as they age. Additionally, the goals of this plan are consistent with the Development Plans for each of the WSU campuses which together include emphasis on open spaces, pedestrian access, community connection and campus identity, and research and/or program excellence. See **Appendix E** for WSU's Facility Development Plan**.**

B. *Does the project follow the sequencing laid out in the Master Plan (if applicable)? If not, explain why it is being requested now.*

Yes

3. Integral to institution's academic programs plan

Describe the proposed project's relationship and relative importance to the institution's most recent academic programs plan. Must the project be initiated soon in order to:

A. Meet academic certification requirements?

Improvements to the Phase One Building need to happen immediately because the Association of American Medical Colleges Liaison Committee on Medical Education has requirements for the continued certification of Elson S. Floyd College of Medicine. The certification evaluates the student's classrooms, student spaces and educational delivery methods. All of which will be improved as part of the renovation.

B. Permit enrollment growth and/or specific quality improvements in current programs?

Improvements are needed to permit enrollment growth and allow for the development of new programs such as a Physician Assistant program which will be possible through the renovation. Educational quality will also be improved by technology and physical improvements that are proposed within the classrooms.

C. Permit initiation of new programs?

Renovations will need to be completed to support interdisciplinary work within the three colleges and could facilitate new programs in Physician Assistant and the Nutrition and Exercise Physiology within Elson S. Floyd College of Medicine.

CATEGORY-SPECIFIC SCORING CRITERIA

1. Age of building since last major remodel

Identify the number of years since the last substantial renovation of the facility or portion proposed for renovation. If only one portion of a building is to be remodeled, provide the age of that portion only. If the project involves multiple wings of a building that were constructed or renovated at different times, calculate and provide a weighted average facility age, based upon the gross square feet and age of each wing.

The Phase One Building, constructed in 1998, has not had a major remodel and portions of the building are starting to age. As originally designed, the building includes classrooms, design studios, a 205-seat auditorium, computer labs, and a gallery. Minor revisions within the building have included a data center and the installation of audio video equipment in 2009.

2. Condition of building

A. Provide the facility's condition score (1 superior – 5 marginal functionality) from the 2016 comparable framework study, and summarize the major structural and systems conditions that resulted in that score. Provide selected supporting documentation in appendix, and reference them in the body of the proposal.

The Comparable Framework Score for the Phase One Building is 3 (Fair – Systems approaching end of expected life cycles).

Justification

The reinforced concrete structural systems are in good condition and are not showing any signs of settlement that are typically manifested in the cracking of structural columns/beams, broken windows, failed window seals and/or doors that are difficult to open or close.

Mechanical systems consist of a traditional hot deck/cold deck heating system which is less efficient than a reheat system. Regular maintenance and/or inspections on these mechanical systems are completed on a yearly basis. The existing cooling tower and the building automation system are at the end of their life spans and will be upgraded as part of the project.

B. Identify whether the building is listed on the Washington Heritage Register, and if so, summarize its historic significance.

No, the building is not listed on the Washington Heritage Register.

3. Significant health, safety, and code issues

It is understood that all projects that obtain a building permit will have to comply with current building codes. Identify whether the project is needed to bring the facility within current life safety (including seismic and ADA), or energy code requirements. Clearly identify the applicable standard or code and describe how the project will improve consistency with it. Provide selected supporting documentation in appendix and reference them in the body of the proposal.

With the building being constructed in 1998, multiple systems within the building are nearing the end of their useful life and/or their operational efficiency can be upgraded to minimize operational costs. Energy and mechanical systems will be upgraded to meet current Energy Code requirements. The project will upgrade health, safety and code issues elements include:

- Fire/Life Safety – The fire alarm panel, auto dialer, fire/smoke dampers smoke detectors, and horns/strobes are all starting to show points of failure. These systems are critical to maintaining the safety of the students and faculty. These systems always need to be operational to maintain building occupancy limits as developed by the City of Spokane Fire Marshall. (2016 NFPA 72 National Fire Alarm and Signaling Code)
- Classroom ADA Furniture – Several classroom configurations do not meet current ADA accessibility requirements due in part to ramp dimensions. Improvements will update these rooms to ensure ADA compliance. (2009 ICC/ANSI A117.1 Accessible and Usable Buildings and Facilities)
- Doors and Hardware – Exit devices, ADA Operators and Door Closers are all nearing the end of the lifespan. These devices will need to be replaced to ensure the building remains in compliance with the International Fire Code which was adopted by the City of Spokane. Access control will also be upgraded in the building to allow access control during an emergency event. (2015 International Building Code).
- Lighting Systems – Lights will be upgraded to include LED lighting to reduce lighting costs. All lights will be interconnected with a lighting systems controller to manage the lighting systems within the building to ensure conservation measures are maintained in accordance with the International Electrical Code.

4. Reasonableness of cost

Provide as much detailed cost information as possible, including baseline comparison of costs per square foot (SF) with the cost data provided in Chapter 5 of the scoring process instructions and a completed OFM C-100 form. Also, describe the construction methodology that will be used for the proposed project.

OFM Chapter 5		Proposed Project Estimates	
Program Type	Mixed	Anticipated Mid-Construction Date	August 15, 2022
Cost Index at Mid-Construction Date	1.081	Estimated MACC	$7,369,557
Expected MACC/GSF	$409	Estimated GSF	97,928

OFM Standard Comparison			
Metric	OFM Standard	Proposed Project	Proposal/OFM Standard
MACC/GSF at Mid-Construction Date	$442	$75	17%

Construction methodology: This facility will be renovated using the Design-Build method.

As indicated in the chart above, building renovation is estimated to have an escalated construction cost of $75 per square foot. Per Chapter Five of the Project Evaluation Guidelines, the construction cost per square foot should be no more than $442 per square foot. Therefore, the cost for this facility is well within the expected cost per square foot for this type of construction. Renovations to the building will not impact major system components or the structure and have been selected to improve utilization of the building. Improvements will include student spaces, classrooms, common areas and office spaces.

If applicable, provide life cycle cost analysis results demonstrating significant projected savings for selected system alternates (Uniformat Level II) over 50 years, in terms of net present savings.

Not Applicable

5. Availability of space/utilization on campus

Describe the institution's plan for improving space utilization and how the project will impact the following:

A. The utilization of classroom space

Classroom utilization within the building will greatly improve with the project. ADA accessibility will allow students full accessibility and technology within the rooms will increase education delivery. The technology upgrades will facilitate collaboration with other students on campuses in Pullman, Everett, Yakima, Vancouver, and Tri-Cities. Currently the Spokane campus does not have small group study rooms nor do the classrooms within the building have conferencing technology. The students have identified a need for these spaces. See **Appendix B**.

The WSU Spokane campus predominately offers upper division, graduate, and professional degree programs in health science fields and utilization rates are not in agreement with typical college facilities. Coursework does not involve traditional hours in classroom and teaching labs as expected at a campus offering regular four-year degree programs. The standard assumes use follows a traditional campus model which does not apply in the case of the Spokane campus. The professional degree programs

(Pharmacy, Nursing, Medicine, etc.) require students to spend much of their time in clinical settings, often off campus.

B. The utilization of class laboratory space

The renovations will not improve any laboratory space as the building does not have laboratories.

6. Efficiency of space allocation

A. For each major function in the proposed facility (classroom, instructional labs, offices), identify whether space allocations will be consistent with Facility Evaluation and Planning Guide (FEPG) assignable square feet standards. To the extent any proposed allocations exceed FEPG standards, explain the alternative standard that has been used, and why. See Chapter 4 of the scoring process instructions for an example. Supporting tables may be included in an appendix.

The FEPG standards, in general, meet the existing areas within the building. As the project is a renovation project, the intent of the project is not to reconfigure existing offices, conference room or classroom spaces within the building. The FEPG standards will be reviewed during the design project to ensure compliance can be maintained for all new spaces developed. In the event FEPG standards are not maintained, justification will be documented. See **Appendix C**.

B. Identify the following on form CBS002:

1. Usable square feet (USF) in the proposed facility	64,084 SF
2. Gross square feet (GSF)	97,928 SF
3. Building efficiency (USF divided GSF)	65.4%

See **Appendix D.**

7. Adequacy of space

Describe whether and the extent to which the project is needed to meet modern educational standards and/or to improve space configurations, and how it would accomplish that.

Renovation of the Phase One building will develop a space that allows students to improve health through their education in medicine, nursing, and pharmacy. The building, and proposed improvements are necessary to meet the Spokane campus' education and space needs as WSU continues to expand programs to educate students in health sciences and foster research. The updates in classrooms will include modern technology and furniture, establishing cutting edge standards for the education of students across the campus. The project will directly improve the utilization of the classrooms within the building. The project will renovate the following spaces:

- Classrooms (100 student and multiple 12 person classrooms) – Reconfiguration and improvements to classrooms will improve educational delivery methods and increase utilization of the spaces. Improvements to classroom spaces will include HDMI technology, audio systems that boost the speaker, video monitors that minimize viewing angles, and furniture that can be arranged to accommodate both large and small group configurations. Classrooms will be designed to maximize classroom utilization by avoiding placement of 12 students in a room designed for 40 students. The additional classrooms will also facilitate the development of new programs within the College of Medicine, without increasing current faculty.
- Medical Faculty Offices – Currently the College of Medicine has faculty distributed across six buildings on the Spokane campus. Development of new offices will improve collaboration and teamwork within the program and across both the nursing and pharmacy programs.

- Medical Student Spaces – Students need space on campus to study, collaborate, de-stress, and develop relationships between other students. Improvements will accommodate these needs and objectives by providing functional space designed around the needs of students today which have a large reliance upon technology.
- Testing Center – The Colleges of Medicine, Nursing and Pharmacy have requested a testing center that can accommodate approximately 120 students with the appropriate spacing. The testing center will allow the three colleges to maintain compliance with their accrediting bodies and ensure students are completing their required testing.
- Conference Rooms – Conference rooms will allow faculty and students to collaborate in small settings. These facilities will have technology available to facilitate collaboration for both faculty and students between the other health science campuses in Vancouver, Everett, Yakima, and Tri-Cities, in addition to Pullman.
- Floating Faculty Offices – The renovated building will include multiple offices to accommodate faculty and administration from other campuses visiting the Spokane campus.

TEMPLATES REQUIRED IN APPENDIX FOR SCORING

- Degree totals and targets

  Appendix A
- Availability of space/campus utilization

  Appendix B
- FEPG Summary

  Appendix C
- Program-related space allocation

  Appendix D
- Facility Development Plan

  Appendix E

OFM

365 - Washington State University
Capital Project Request

2021-23 Biennium

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Version: 10 2021-23 WSU Capital Budget Request

Report Number: CBS002
Date Run: 8/14/2020 10:15AM

Project Number: **40000141**
Project Title: **Spokane Phase One Building Renovation**

Description

Project Phase Title: Spokane Phase One Building Renovation
Starting Fiscal Year: 2022
Project Class: Preservation
Agency Priority: 6

Project Summary

Washington State University (WSU) requests $15,000,000 in the 2021-23 capital budget for the renovation of the Phase One Building on the Spokane campus. This funding request will renovate an existing WSU building recently vacated with Eastern Washington University ending a lease agreement. The renovation and use of this building will relieve building pressure amassing on campus as academic programs and research activity swells, support additional academic programming in the health sciences, and provide upgraded classrooms and student study spaces.

Project Description

Identify the problem or opportunity addressed. Why is the request a priority? This narrative should identify unserved/underserved people or communities, operating budget savings, public safety improvements or other backup necessary to understand the need for the request. For preservation projects, it is helpful to include information about the current condition of the facility or system.

The WSU Spokane Health Sciences campus, designated as the university's health sciences campus in 2010 by the WSU Board of Regents, requires additional facilities to expand this vitally important mission. Educational and research space will be utilized to support its land grant mission to conduct scientific research and provide higher education access to Washington residents including candidates in medicine, nursing, pharmacy, and other allied health professions. The renovation of this building will improve classrooms, add needed compliant testing classrooms and student group study rooms and will address programmed office space needs for the Elson S. Floyd College of Medicine within the building. The colleges of Nursing, and Pharmacy and Pharmaceutical Sciences will also utilize the building in the education of students across the state.

Additional space for Elson S. Floyd College of Medicine on the Spokane campus has been a priority in WSU Spokane's master plan since the 2009 Spokane Riverpoint Campus Academic and Master Plan Overview. The Pharmaceutical and Biomedical Sciences building, completed in 2013, was the initial phase in achieving the vision for robust research, simulation, and interdisciplinary health sciences education in Spokane. The renovation of the Phase One Building allows WSU to continue the process of reaching these goals.

The Phase One Building, constructed in 1998 has not had a major remodel and portions of the building are starting to age. As originally designed, the building includes classrooms, design studios, a 205-seat auditorium, computer labs, and a gallery.

What will the request produce or construct (i.e., predesign or design of a building, construction of additional space, etc.)? When will the project start and be completed?

During the predesign efforts for the Biomedical and Health Sciences Building II which was funded by the state Legislature in the 2019-21 biennium, WSU was notified by Eastern Washington University that they would be relocating their Arts, Culture, Business and Public Administration Programs off the WSU Spokane campus. The relocation of these programs off campus will provide WSU with additional square footage on campus in the Phase One Building which will be renovated as a result of this request for the use of current and proposed programs within the Health Sciences. Design is anticipated to start in October of 2021 following selection of a Design/Build Team with construction anticipated to be completed in March of 2023.

Identify whether the project can be phased, and if so, which phase is included in the request. Please provide detailed cost backup.

The Renovation phase would be completed in one biennium with this request funding design and construction. Reference the C100 for detailed cost estimate.

How would the request address the problem or opportunity identified in question 1?

High quality, modern facilities are vital for maintaining and expanding the health sciences education, research initiatives, and critical for effective classroom instruction. They are also a high priority for attracting and retaining the best faculty and undergraduate and graduate student scholars who contribute to the university's respected Drive to 25 initiative to improve service to the state. Renovation of the Phase One Building will upgrade the facility into a modern, flexible, energy efficient building providing for the delivery of educational and research opportunities while improving space utilization.

What would be the result of not taking action?

The timing of this renovation is critical for the WSU Health Sciences system. With the current pandemic, the demand for medical professionals is at an all-time high.

As building infrastructures continue to degrade across the WSU system, there are increased service failures and maintenance

Project Number: 40000141
Project Title: Spokane Phase One Building Renovation

Description

outages. Outages are a growing risk to researchers who rely on continuation of services, especially as outages grow in both frequency and length. Building systems have aged where parts are no longer manufactured and difficult to source. Delaying the renovation only adds to the deferred maintenance backlog and would continue to limit the increase in enrollment for future students as the building utilization will be limited due to old classrooms and dated technology delivery systems.
This renovation will not only flatten the deferred maintenance backlog curve but would facilitate enrollment growth and promote academic performance.

What alternatives were explored? Why was the recommended alternative chosen? Be prepared to provide detailed cost backup. If this project has an associated predesign, please summarize the alternatives the predesign considered.

Built in 1998, the Phase One Building was constructed without consideration of technology and the building was designed with large studio spaces associated with the educational needs of architects and interior designers. These features do not provide for the education of health science students that require small group collaboration areas that have technology integrated into the rooms. These areas and the lack of technology contribute to the low utilization rates within the building as the educational teams on campus are limited in the methods by which they can educate students. Old technology also prohibits the students from collaborating with other students within the WSU network across the state.
The university's Facility Development Plan recognizes the urgent need to address a large and rapidly growing deferred maintenance backlog by replacing or renovating old and obsolete buildings with efficient, purpose-built space. This building is currently at a crossroads where the renovation will prevent the building from slipping into an era where increased maintenance demands will add to the deferred maintenance backlog.
The Predesign Report completed in 2020 evaluated different alternatives for upgrading the existing heating and cooling system. Following the evaluation, replacements to existing components which are at the end of their service life will be completed. It was determined that a complete retrofit of the buildings heating/cooling system would not be cost effective.

Which clientele would be impacted by the budget request? Where and how many units would be added, people or communities served, etc.

As Spokane evolves into a major clinical education and research center in Eastern Washington, the renovated Phase One Building would allow expansion of the health science programs associated with the colleges of Nursing, Pharmacy and Pharmaceutical Sciences, and Medicine. Those colleges currently offer programs and degrees in the following: Medicine-M.D.; Nursing-B.S., R.N. to B.S.N., M.N., D.N.P., and Ph.D.; Nutrition and Exercise Physiology-B.S. and M.S. (Ph.D. to start in fall of 2018); Pharmacy-Pharm.D. and Ph.D.; Speech and Hearing Sciences-B.A. and M.S.
The renovated building will allow the colleges to continue to attract faculty who can produce translational research that refines basic science findings into sustainable applications for the variety of research that occurs on the campus. This research has a broad span, from addictions, autism and cancer, to drug discovery and development, to rare genetic disorders and sleep and performance. Space for additional research will continue to contribute to a growing state economy.

Does this project or program leverage non-state funding? If yes, how much by source? If the other funding source requires cost share, also include the minimum state (or other) share of project cost allowable and the supporting citation or documentation.

No other funds are identified for this project.

Describe how this project supports the agency's strategic master plan or would improve agency performance. Reference feasibility studies, master plans, space programming and other analyses as appropriate.

The renovation of the Phase One Building is a high priority in a series of planned replacements and renovations outlined in the university's Facility Development Plan.
WSU's Facility Development plan is focused on identifying and prioritizing capital projects which balance continued stewardship and renewal of existing facilities and infrastructure within a framework for responsible growth. The plan recognizes the urgent need to address a large and rapidly growing deferred maintenance backlog which has been identified as a significant risk to future operations at all of the WSU campuses as they age. Additionally, the goals of this plan are consistent with the Master Plans for each of the WSU campuses which together include emphasis on open spaces, pedestrian access, community connection and campus identity, and research and/or program excellence.
The renovated facility will be sited in the core of the Spokane campus adjacent to many of the existing facilities housing health science academic and research programs. This renovated facility will not only provide adequate space for these growing programs but will also renovate currently underutilized space that is obsolete and well beyond its useful life.

Does this decision package include funding for any Information Technology related costs including hardware, software (to include cloud-based services), contracts or staff? If the answer is yes, you will be prompted to attach a complete IT

Project Number: 40000141
Project Title: Spokane Phase One Building Renovation

Description

addendum. (See Chapter 10 of the operating budget instructions for additional requirements.)
This request does not include funding for any IT-related costs.
If the project is linked to the Puget Sound Action Agenda, describe the impacts on the Action Agenda, including expenditure and FTE detail. See Chapter 12 Puget Sound Recovery) in the 2021-23 Operating Budget Instructions.
This project is not linked to the Puget Sound Action Agenda.
How does this project contribute to statewide goals to reduce carbon pollution and/or improve energy efficiency? Please elaborate.
With the renovation of the Phase One Building, a new state of the art facility will be developed, effectively removing an inefficient building, and replacing it with one that would align WSU toward meeting its goal of reducing carbon footprint. This project will incorporate leading edge technology to promote the advances in the engineering, design and construction industry resulting in the reduction of greenhouse gases.
Capital projects identified in the university's Facility Development Plan contribute directly to a reduction in the deferred maintenance backlog, through either significant renovation, rehabilitation, or replacement of existing facilities. In addition, the development plan's guiding principles include energy efficiency improvements, carbon reduction and water savings.
Preliminary planning associated for this renovation acknowledges the requirements of House Bill 1257 (Washington State Clean Energy Standards) and House Bill 2311 (Greenhouse Gas Emissions) and strives to include energy improvements and carbon reduction throughout all project planning and execution.
Is there additional information you would like decision makers to know when evaluating this request?
The mission of the WSU Health Sciences campus is to serve the diverse metropolitan Spokane area, the Inland Northwest, and the state of Washington. What makes WSU Spokane distinct is its focus on providing community health tailored to the needs of Washington. WSU Spokane focuses on educating health professionals who are uniquely qualified to provide care to the citizens of this region. The programs support a diverse student population and strive to create equity for all students on campus.
The renovation of the Phase One Building is the first in a series of projects that were identified in the recently completed Campus Program Update and Health Sciences Building II Program Plan and Technical Predesign Report. These campus upgrades will allow WSU Spokane to continue its mission of educating community health practitioners.
The renovation work will address the programmed office space needs for the Elson S. Floyd College of Medicine, along with new dedicated student lounge space, group study rooms and a compliant testing classroom to meet accreditation requirements. The second project, the Health Sciences Building II, will include shared research labs and core research facilities, classroom and event space, and vivarium. This project will both address identified space deficits on campus and promote shared, inter-disciplinary research championed by the university's administration. The third project will be focused on clinical education and research and will house a new interprofessional simulation-based training center and outpatient clinic.

Location
City: Spokane **County:** Spokane **Legislative District:** 006

Project Type
Remodel/Renovate/Modernize (Major Projects)

OFM

365 - Washington State University
Capital Project Request
2021-23 Biennium

*

Version: 10 2021-23 WSU Capital Budget Request

Report Number: CBS002
Date Run: 8/14/2020 10:15AM

Project Number: **40000141**
Project Title: **Spokane Phase One Building Renovation**

Description

Growth Management impacts

WSU Spokane's physical planning policies are coordinated with many agencies and government units. The Growth Management Act and its companion Traffic Demand Management legislation and the State Environmental Policy Act, however, are applicable to WSU's physical facilities and programs. Growth Management Act (GMA)-WSU will coordinate with Counties and Municipalities throughout the State to ensure compliance with GMA. WSU will avoid construction or activities which would permanently impair "critical" areas on its campuses as they are defined in the GMA. Transportation Demand Management-A companion piece of legislation sets forth a policy for Transportation Demand Management in which the State of Washington will provide leadership. The Director of the State of Washington Department of General Administration (DGA) is required to develop a commute trip reduction plan for state agencies which are Phase I major employers. A major employer is a private or public employer with one hundred or more full time employees at a single work site located with a county containing a population in excess of 150,000. WSU will conform to the plans developed by DGA. State Environmental Policy Act (SEPA)-WSU has adopted procedures set forth in the State Environmental Policy Act Handbook December 1988 and the State Environmental Policy Act Rules Chapter 197-11 Washington Administrative Code Effective April 4, 1984. Adherence to these procedures will be one of the principal means by which WSU coordinates its compliance with Growth Management requirements.

Funding

			Expenditures		2021-23 Fiscal Period	
Acct Code	Account Title	Estimated Total	Prior Biennium	Current Biennium	Reapprops	New Approps
057-1	State Bldg Constr-State	15,000,000				15,000,000
	Total	**15,000,000**	**0**	**0**	**0**	**15,000,000**

		Future Fiscal Periods			
		2023-25	2025-27	2027-29	2029-31
057-1	State Bldg Constr-State				
	Total	**0**	**0**	**0**	**0**

Schedule and Statistics

	Start Date	End Date
Predesign		
Design	10/1/2021	5/1/2022
Construction	3/1/2022	3/1/2023

	Total
Gross Square Feet:	97,928
Usable Square Feet:	64,084
Efficiency:	65.4%
Escalated MACC Cost per Sq. Ft.:	75
Construction Type:	College Classroom Facilities
Is this a remodel?	Yes
A/E Fee Class:	B
A/E Fee Percentage:	11.38%

Cost Summary

OFM

365 - Washington State University
Capital Project Request
2021-23 Biennium

*

Version: 10 2021-23 WSU Capital Budget Request

Report Number: CBS002
Date Run: 8/14/2020 10:15AM

Project Number: **40000141**
Project Title: **Spokane Phase One Building Renovation**

Cost Summary

		Escalated Cost	% of Project
Acquisition Costs Total		**0**	**0.0%**
Consultant Services			
Pre-Schematic Design Services		0	0.0%
Construction Documents		598,790	4.0%
Extra Services		204,373	1.4%
Other Services		272,983	1.8%
Design Services Contingency		54,481	0.4%
Consultant Services Total		**1,130,626**	**7.5%**
Maximum Allowable Construction Cost(MACC)	**7,369,557**		
Site work		0	0.0%
Related Project Costs		0	0.0%
Facility Construction		7,369,557	49.1%
GCCM Risk Contingency		314,182	2.1%
GCCM or Design Build Costs		1,088,565	7.3%
Construction Contingencies		368,478	2.5%
Non Taxable Items		0	0.0%
Sales Tax		813,530	5.4%
Construction Contracts Total		**9,954,311**	**66.4%**
Equipment			
Equipment		2,830,796	18.9%
Non Taxable Items		0	0.0%
Sales Tax		251,941	1.7%
Equipment Total		**3,082,737**	**20.6%**
Art Work Total		**74,629**	**0.5%**
Other Costs Total		**0**	**0.0%**
Project Management Total		**758,043**	**5.1%**
Grand Total Escalated Costs		**15,000,346**	
Rounded Grand Total Escalated Costs		**15,000,000**	

Operating Impacts

No Operating Impact

Narrative

Renovation of existing facility.

Version: 10 2021-23 WSU Capital Budget Request

Report Number: CBS002
Date Run: 8/14/2020 10:15AM

Project Number: 40000141
Project Title: Spokane Phase One Building Renovation

Operating Impacts

Capital Project Request

2021-23 Biennium

*

Parameter	Entered As	Interpreted As
Biennium	2021-23	2021-23
Agency	365	365
Version	10-A	10-A
Project Classification	*	All Project Classifications
Capital Project Number	40000141	40000141
Sort Order	Project Priority	Priority
Include Page Numbers	Y	Yes
For Word or Excel	N	N
User Group	Agency Budget	Agency Budget
User Id	*	All User Ids

STATE OF WASHINGTON
AGENCY / INSTITUTION PROJECT COST SUMMARY

Updated June 2020

Agency	Washington State University	
Project Name	Spokane - Phase One Building Renovation	
OFM Project Number	40000141	

Contact Information		
Name	Eric Smith	
Phone Number	509-358-7629	
Email	eric.smith2@wsu.edu	

Statistics			
Gross Square Feet	97,928	MACC per Square Foot	$71
Usable Square Feet	64,084	Escalated MACC per Square Foot	$75
Space Efficiency	65.4%	A/E Fee Class	B
Construction Type	College classroom facilit	A/E Fee Percentage	11.38%
Remodel	Yes	Projected Life of Asset (Years)	25
Additional Project Details			
Alternative Public Works Project	Yes	Art Requirement Applies	Yes
Inflation Rate	2.38%	Higher Ed Institution	Yes
Sales Tax Rate %	8.90%	Location Used for Tax Rate	3,210
Contingency Rate	5%		
Base Month	June-20	OFM UFI# (from FPMT, if available)	
Project Administered By	Agency		

Schedule			
Predesign Start		Predesign End	
Design Start	October-21	Design End	May-22
Construction Start	March-22	Construction End	March-23
Construction Duration	12 Months		

Green cells must be filled in by user

Project Cost Estimate			
Total Project	**$14,242,794**	Total Project Escalated	**$15,000,301**
		Rounded Escalated Total	**$15,000,000**

STATE OF WASHINGTON
AGENCY / INSTITUTION PROJECT COST SUMMARY

Updated June 2020

Agency	Washington State University	
Project Name	Spokane - Phase One Building Renovation	
OFM Project Number	40000141	

Cost Estimate Summary

Acquisition			
Acquisition Subtotal	**$0**	**Acquisition Subtotal Escalated**	**$0**

Consultant Services			
Predesign Services	$0		
A/E Basic Design Services	$576,312		
Extra Services	$196,800		
Other Services	$258,923		
Design Services Contingency	$51,602		
Consultant Services Subtotal	**$1,083,637**	**Consultant Services Subtotal Escalated**	**$1,130,652**

Construction			
GC/CM Risk Contingency	$298,000		
GC/CM or D/B Costs	$1,032,500		
Construction Contingencies	$349,500	Construction Contingencies Escalated	$368,478
Maximum Allowable Construction Cost (MACC)	$6,990,000	Maximum Allowable Construction Cost (MACC) Escalated	$7,369,557
Sales Tax	$771,630	Sales Tax Escalated	$813,530
Construction Subtotal	**$9,441,630**	**Construction Subtotal Escalated**	**$9,954,312**

Equipment			
Equipment	$2,685,000		
Sales Tax	$238,965		
Non-Taxable Items	$0		
Equipment Subtotal	**$2,923,965**	**Equipment Subtotal Escalated**	**$3,082,737**

Artwork			
Artwork Subtotal	**$74,628**	**Artwork Subtotal Escalated**	**$74,628**

Agency Project Administration			
Agency Project Administration Subtotal	$368,933		
DES Additional Services Subtotal	$0		
Other Project Admin Costs	$100,000		
Project Administration Subtotal	**$718,933**	**Project Administation Subtotal Escalated**	**$757,972**

Other Costs			
Other Costs Subtotal	**$0**	**Other Costs Subtotal Escalated**	**$0**

Project Cost Estimate			
Total Project	**$14,242,794**	Total Project Escalated	**$15,000,301**
		Rounded Escalated Total	**$15,000,000**

Cost Estimate Details

Acquisition Costs					
Item	**Base Amount**		**Escalation Factor**	**Escalated Cost**	**Notes**
Purchase/Lease					
Appraisal and Closing					
Right of Way					
Demolition					
Pre-Site Development					
Other					
ACQUISITION TOTAL	**$0**		**NA**	**$0**	

Green cells must be filled in by user

Cost Estimate Details

Consultant Services				
Item	**Base Amount**	**Escalation Factor**	**Escalated Cost**	**Notes**
1) Pre-Schematic Design Services				
Programming/Site Analysis				
Environmental Analysis				
Predesign Study				
Other				
Sub TOTAL	**$0**	**1.0319**	**$0**	Escalated to Design Start
2) Construction Documents				
A/E Basic Design Services	$576,312			69% of A/E Basic Services
Other				
Sub TOTAL	**$576,312**	**1.0390**	**$598,789**	Escalated to Mid-Design
3) Extra Services				
Civil Design (Above Basic Svcs)				
Geotechnical Investigation				
Commissioning	$80,000			
Site Survey				
Testing				
LEED Services	$80,000			
Voice/Data Consultant				
Value Engineering	$36,800			
Constructability Review				
Environmental Mitigation (EIS)				
Landscape Consultant				
Other				
Sub TOTAL	**$196,800**	**1.0390**	**$204,476**	Escalated to Mid-Design
4) Other Services				
Bid/Construction/Closeout	$258,923			31% of A/E Basic Services
HVAC Balancing				
Staffing				
Other				
Sub TOTAL	**$258,923**	**1.0543**	**$272,983**	Escalated to Mid-Const.
5) Design Services Contingency				
Design Services Contingency	$51,602			
Other				
Sub TOTAL	**$51,602**	**1.0543**	**$54,404**	Escalated to Mid-Const.
CONSULTANT SERVICES TOTAL	**$1,083,637**		**$1,130,652**	

Green cells must be filled in by user

Cost Estimate Details

Construction Contracts				
Item	**Base Amount**	**Escalation Factor**	**Escalated Cost**	**Notes**
1) Site Work				
G10 - Site Preparation				
G20 - Site Improvements				
G30 - Site Mechanical Utilities				
G40 - Site Electrical Utilities				
G60 - Other Site Construction				
Sub TOTAL	**$0**	**1.0420**	**$0**	
2) Related Project Costs				
Offsite Improvements				
City Utilities Relocation				
Parking Mitigation				
Stormwater Retention/Detention				
Other				
Sub TOTAL	**$0**	**1.0420**	**$0**	
3) Facility Construction				
A10 - Foundations				
A20 - Basement Construction				
B10 - Superstructure	$250,000			
B20 - Exterior Closure				
B30 - Roofing				
C10 - Interior Construction	$800,000			
C20 - Stairs				
C30 - Interior Finishes	$1,800,000			
D10 - Conveying				
D20 - Plumbing Systems	$690,000			
D30 - HVAC Systems	$1,600,000			
D40 - Fire Protection Systems				
D50 - Electrical Systems	$1,200,000			
F10 - Special Construction				
F20 - Selective Demolition	$650,000			
General Conditions				
Renovation				
Sub TOTAL	**$6,990,000**	**1.0543**	**$7,369,557**	
4) Maximum Allowable Construction Cost				
MACC Sub TOTAL	**$6,990,000**		**$7,369,557**	

5) GCCM Risk Contingency				
GCCM Risk Contingency	$298,000			
Other				
Sub TOTAL	**$298,000**	**1.0543**	**$314,182**	
6) GCCM or Design Build Costs				
GCCM Fee	$400,000			
Bid General Conditions	$520,000			
GCCM Preconstruction Services	$112,500			
Sub TOTAL	**$1,032,500**	**1.0543**	**$1,088,565**	
7) Construction Contingency				
Allowance for Change Orders	$349,500			
Other				
Sub TOTAL	**$349,500**	**1.0543**	**$368,478**	
8) Non-Taxable Items				
Other				
Sub TOTAL	**$0**	**1.0543**	**$0**	
Sales Tax				
Sub TOTAL	**$771,630**		**$813,530**	
CONSTRUCTION CONTRACTS TOTAL	**$9,441,630**		**$9,954,312**	

Green cells must be filled in by user

Cost Estimate Details

Equipment				
Item	**Base Amount**	**Escalation Factor**	**Escalated Cost**	**Notes**
E10 - Equipment	$850,000			
E20 - Furnishings	$1,835,000			
F10 - Special Construction				
Other				
Sub TOTAL	**$2,685,000**	**1.0543**	**$2,830,796**	
1) Non Taxable Items				
Other				
Sub TOTAL	**$0**	**1.0543**	**$0**	
Sales Tax				
Sub TOTAL	**$238,965**		**$251,941**	
EQUIPMENT TOTAL	**$2,923,965**		**$3,082,737**	

Green cells must be filled in by user

Cost Estimate Details

Artwork					
Item	**Base Amount**		**Escalation Factor**	**Escalated Cost**	**Notes**
Project Artwork	$0				0.5% of total project cost for new construction
Higher Ed Artwork	$74,628				0.5% of total project cost for new and renewal construction
Other					
ARTWORK TOTAL	**$74,628**		**NA**	**$74,628**	

Green cells must be filled in by user

Cost Estimate Details

Project Management				
Item	**Base Amount**	**Escalation Factor**	**Escalated Cost**	**Notes**
Agency Project Management	$368,933			
Additional Services				
On-site project management	$250,000			
Interior Design Services	$100,000			
PROJECT MANAGEMENT TOTAL	**$718,933**	**1.0543**	**$757,972**	

Green cells must be filled in by user

Cost Estimate Details

Other Costs					
Item	**Base Amount**		**Escalation Factor**	**Escalated Cost**	**Notes**
Mitigation Costs					
Hazardous Material Remediation/Removal					
Historic and Archeological Mitigation					
Facilities/Administration					
OTHER COSTS TOTAL	**$0**		**1.0420**	**$0**	

Green cells must be filled in by user

C-100(2020)
Additional Notes

Tab A. Acquisition

Tab B. Consultant Services

Tab C. Construction Contracts

Tab D. Equipment

Tab E. Artwork

Tab F. Project Management

Tab G. Other Costs

Degree Totals and Targets Template

Required for Overarching Criteria for Major Growth, Renovation, Replacement and Research Proposals

Institution: Washington State University

Campus location: Spokane

Project name: Spokane Phase One Building Renovation

	Increase in bachelor's degrees awarded	Increase in bachelor's degrees awarded in high-demand fields	Increase in advanced degrees awarded
2018-19 Statewide Public Four-Year Dashboard (a)	5,836	2,170	1,480
Number of degrees targeted in 2021 (b)	5,703	2,064	1,521
2018-19 totals/2021 target (a/b)	102.3%	105.1%	97.3%
Score:	**0.00**	**0.00**	**1.00**

Comments:

Dashboard data and degree projections are for WSU system (not just Spokane campus). Individual campus degree targets are not currently available. 2018-19 Bachelor Degrees awarded for Spokane totaled 283; high demand degrees totaled 283; and advanced degrees totaled 245.

Availability of Space/Campus Utilization Template

2020 Four-year Higher Education Scoring Process

Required for all categories except Infrastructure and Acquisition.

Project Name:	Spokane - Phase One Building Renovation
Institution:	Washington State University
Campus Location:	Spokane

Identify the average number of hours per week each (a) classroom seat and (b) classroom lab is expected to be utilized in Fall 2018 on the porposed porject's campus. Please fill in the green shaded cells for the **campus** where the project is located.

(a) General University Classroom Utilization		**(b) General University Lab Utilization**	
Fall 2019 Weekly Contact Hours	11,829	Fall 2019 Weekly Contact Hours	4,805
Multiply by % FTE Increase Budgeted	0.00%	Multiply by % FTE Increase Budgeted	0.00%
Expected Fall 2020 Contact Hours	11,829	Expected Fall 2020 Contact Hours	4,805
Expected Fall 2020 Classroom Seats	1,607	Expected Fall 2020 Class Lab Seats	1,586
Expected Hours per Week Utilization	**7.4**	**Expected Hours per Week Utilization**	**3.0**
HECB GUC Utilization Standard	22.0	HECB GUL Utilization Standard	16.0
Differrence in Utilization Standard	-67%	Differrence in Utilization Standard	-81%

If the campus does not meet the 22 hours per classroom seat and/or the 16 hours per class lab HECB utilization standards, describe any institutional plans for achieving that level of utilization.

The WSU Spokane campus predominately offers upper division, graduate, and professional degree programs in health science fields. Coursework does not involve traditional hours in classroom and teaching labs as expected at a campus offering regular four year degree programs. The standard assumes use follows a traditional campus model which does not apply in the case of the Spokane campus. The professional degree programs (Pharmacy, Nursing, Medicine, etc.) require students to spend much of their time in clinical settings, often off campus. EWU use of WSU space is not captured in this table but utilize approximately 1/4 of the entire campus.

Appendix C - Efficiency of Space

Efficiency of Space Allocation - Major Functions After Renovation - FEPG Comparisor

Institution:	Washington State University
Campus location:	Spokane
Project name:	Spokane - Phase One Building Renovation

Use Code	Major Function Space Type	Project ASF/Station	FEPG Standard	Meets Standard (Y/N)	Comments
110	Classroom (50 Seat Average Capacity)	938	1000	Y	Meets FEPG Guidelines
311	Academic (Faculty) Office	140	140	Y	Meets FEPG Guidelines
314	Clerical Office	140	140	Y	Meets FEPG Guidelines
315	Office Service, Clerical Station	600	100	N	Exceeds FEPG Guidelines as this is existing space and recofiguration may occur.
350	Conference Room	550	520	N	Exceeds FEPG Guidelines as this is existing space.

Appendix D - Assignable SF

Program Related Space Allocation Template

Assignable Square Feet

Required for all Growth, Renovation and Replacement proposals.

Institution: Washington State University

Campus location: Spokane

Project name: Spokane - Phase One Building Renovation

Input the assignable square feet for the proposed project under the applicable space types below:

Type of Space	Points	Assignable Square Feet	Percentage of total	Score [Points x Percentage]
Instructional space (classroom, laboratories)	10	25,157	39.26	3.93
Research space	2	-	0.00	0.00
Office space	4	29,373	45.84	1.83
Library and study collaborative space	10	3,941	6.15	0.61
Other non-residential space	8	4,565	7.12	0.57
Support and physical plant space	6	1,048	1.64	0.10
Total		**64,084**	**100.0**	**7.04**

WSU Facility Development Plan

Appendix E - Facility Development Plan

WSU Facilities Services | Geographic Information System

Pullman 2021-2023

Johnson Hall Demolition
$8,000,000 (Design and Construction)

ARS Plant Biosciences Building
$105,000,000 (Federal Funding)

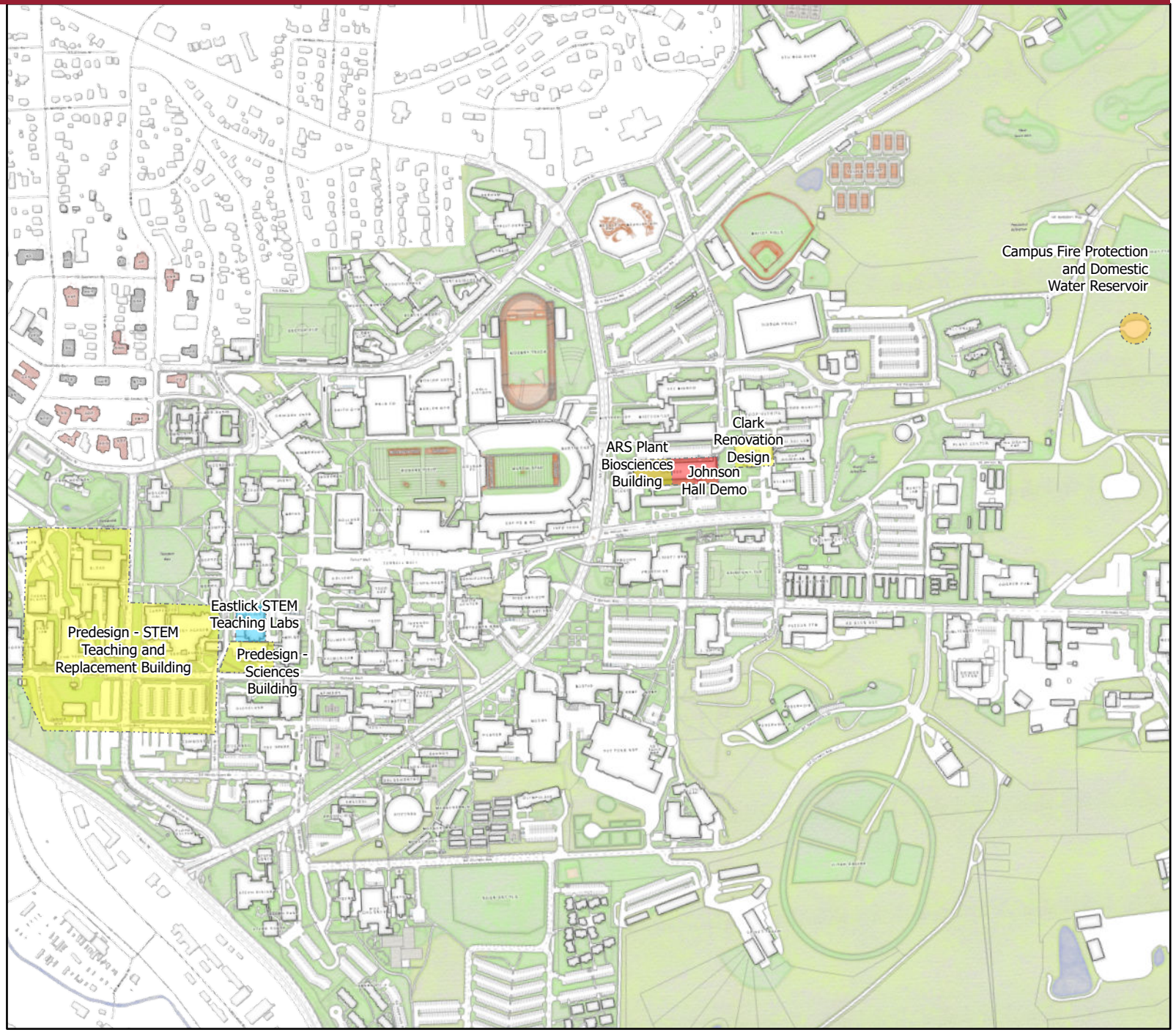
Campus Fire Protection and Domestic Water Reservoir
$8,000,000 (Design and Construction)

Pullman Sciences Building
$500,000 (Predesign)

STEM Teaching and Replacement Building – VCEA
$500,000 (Predesign)

STEM Teaching Labs
$4,900,000 (Design and Construction)

Clark Hall Research Lab Renovation
$4,900,000 (Design and Construction)



WSU Facility Development Plan

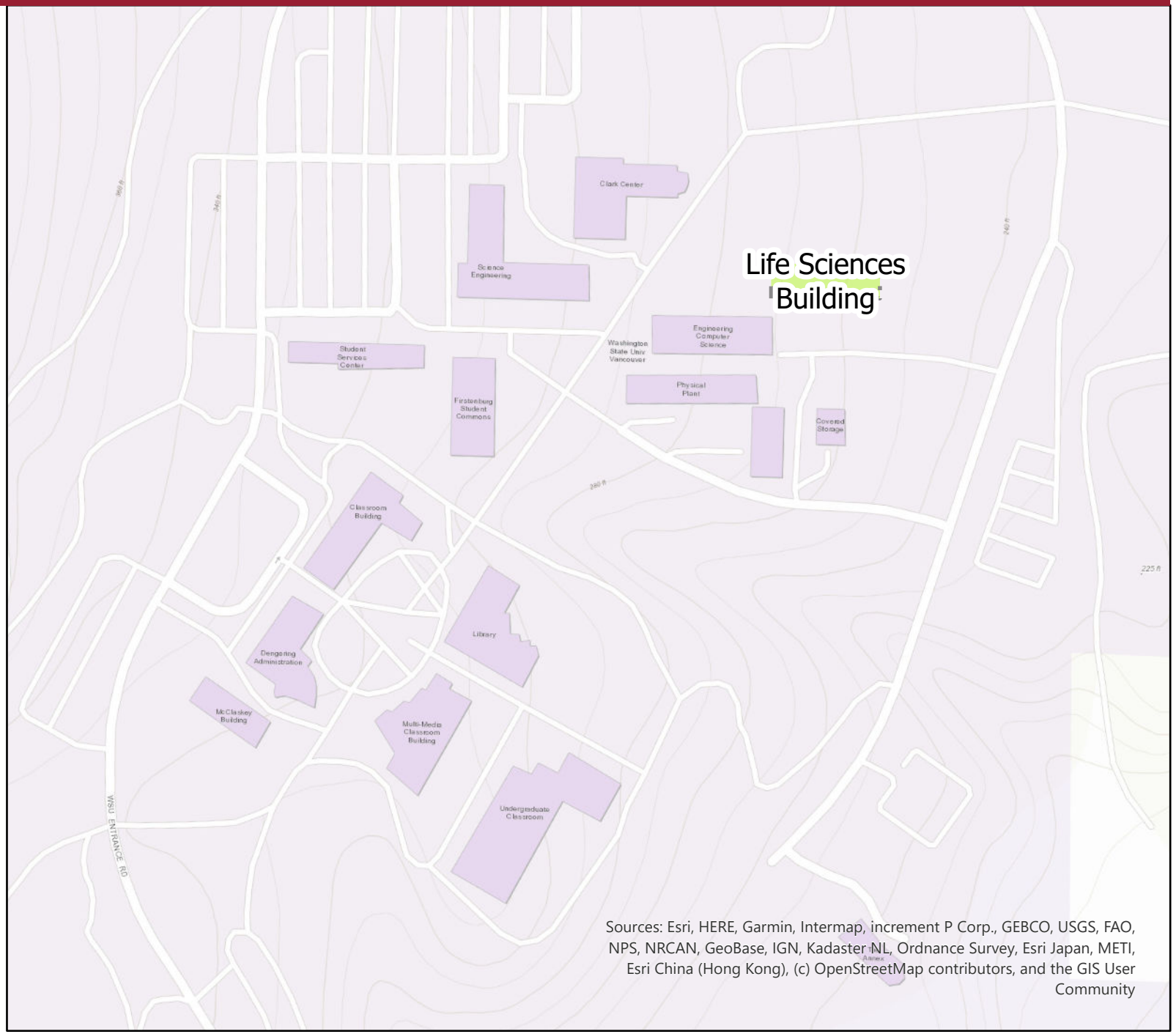
Spokane 2021-2023

Spokane Phase One Building Renovation
$15,000,000 (Design and Construction)

WSU Facility Development Plan

Vancouver 2021-2023

Vancouver Life Sciences Building
$52,600,000 (Construction)



WSU Facility Development Plan

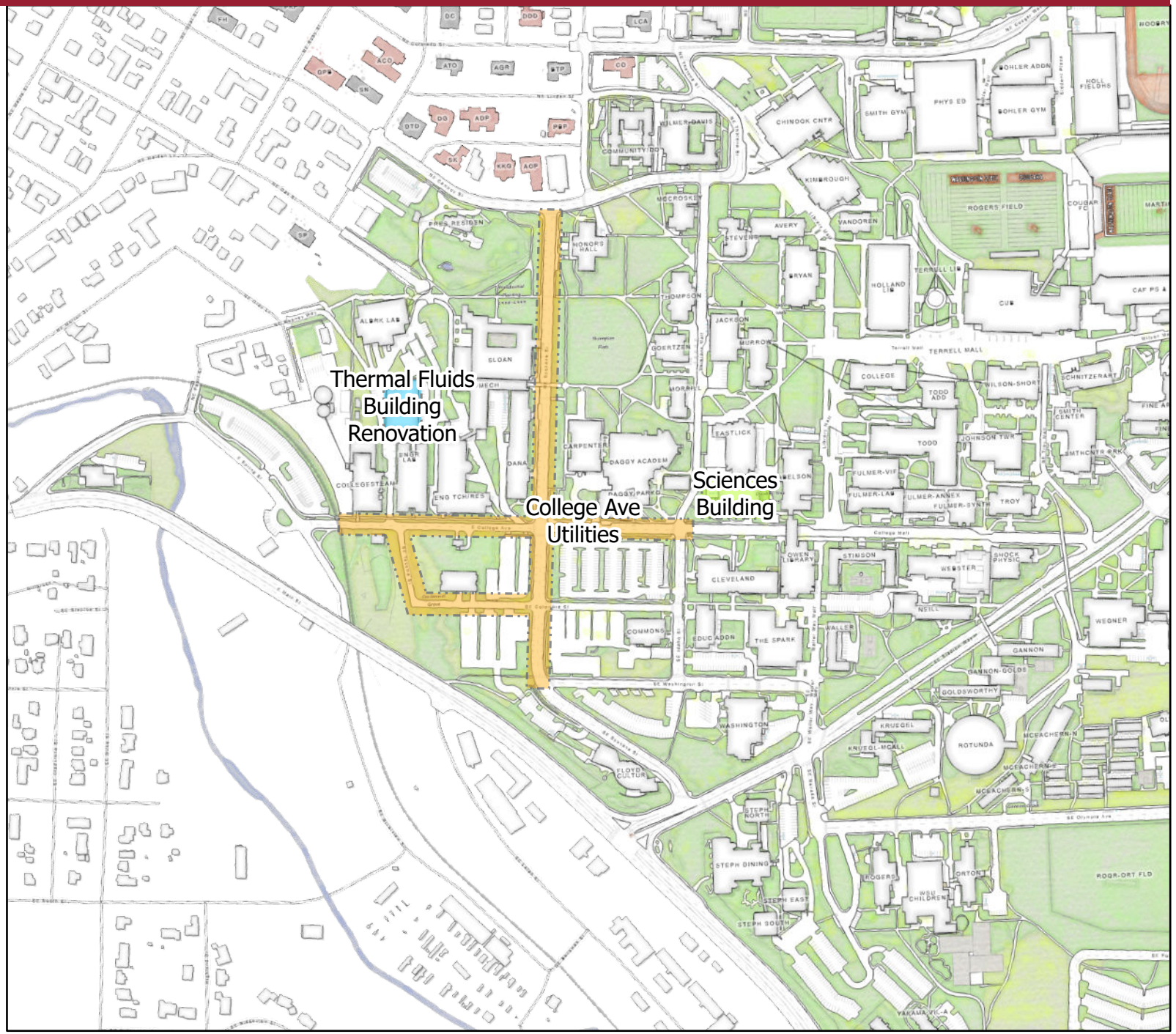
Pullman 2023-2025

Pullman Sciences Building
$53,000,000 (Design, Heald Hall Demolition and Construction)

College Avenue Utility Upgrades
$10,000,000 (Design and Construction)

Thermal Fluids Building Renovation
$10,000,000 (Design and Construction)

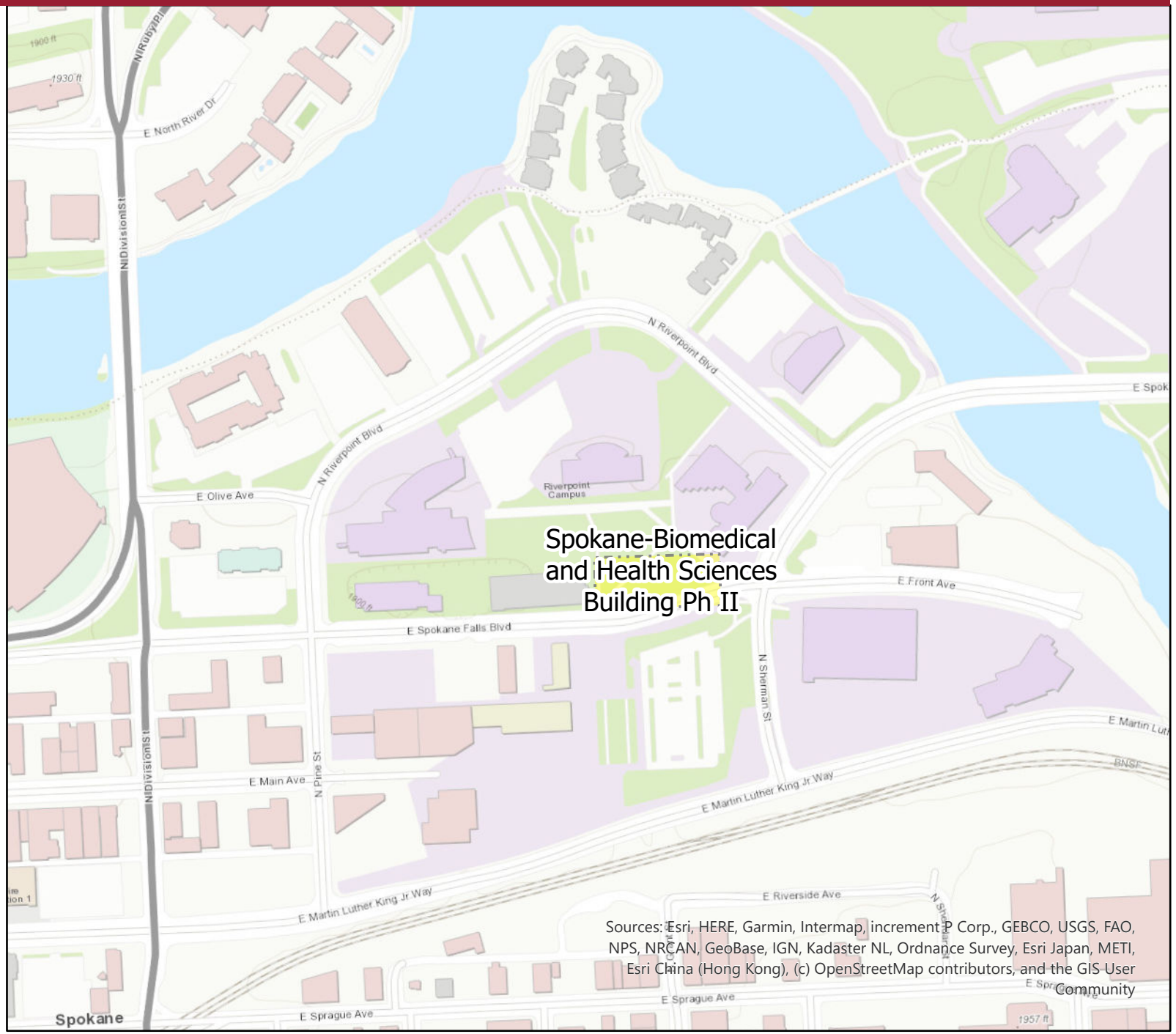
Building Systems (roofs, elevators, envelope, BAS, MEP)
$10,000,000 (Design and Construction)
(Multiple locations - not shown on map)



WSU Facility Development Plan

Spokane 2023-2025

Spokane-Biomedical and Health Sciences Building Ph II
$5,000,000 (Design)



WSU Facility Development Plan

Appendix E - Facility Development Plan

WSU Facilities Services | Geographic Information System

Pullman 2025-2027

STEM Teaching and Replacement Building – VCEA
$8,000,000 (Design and Dana Hall Demolition)

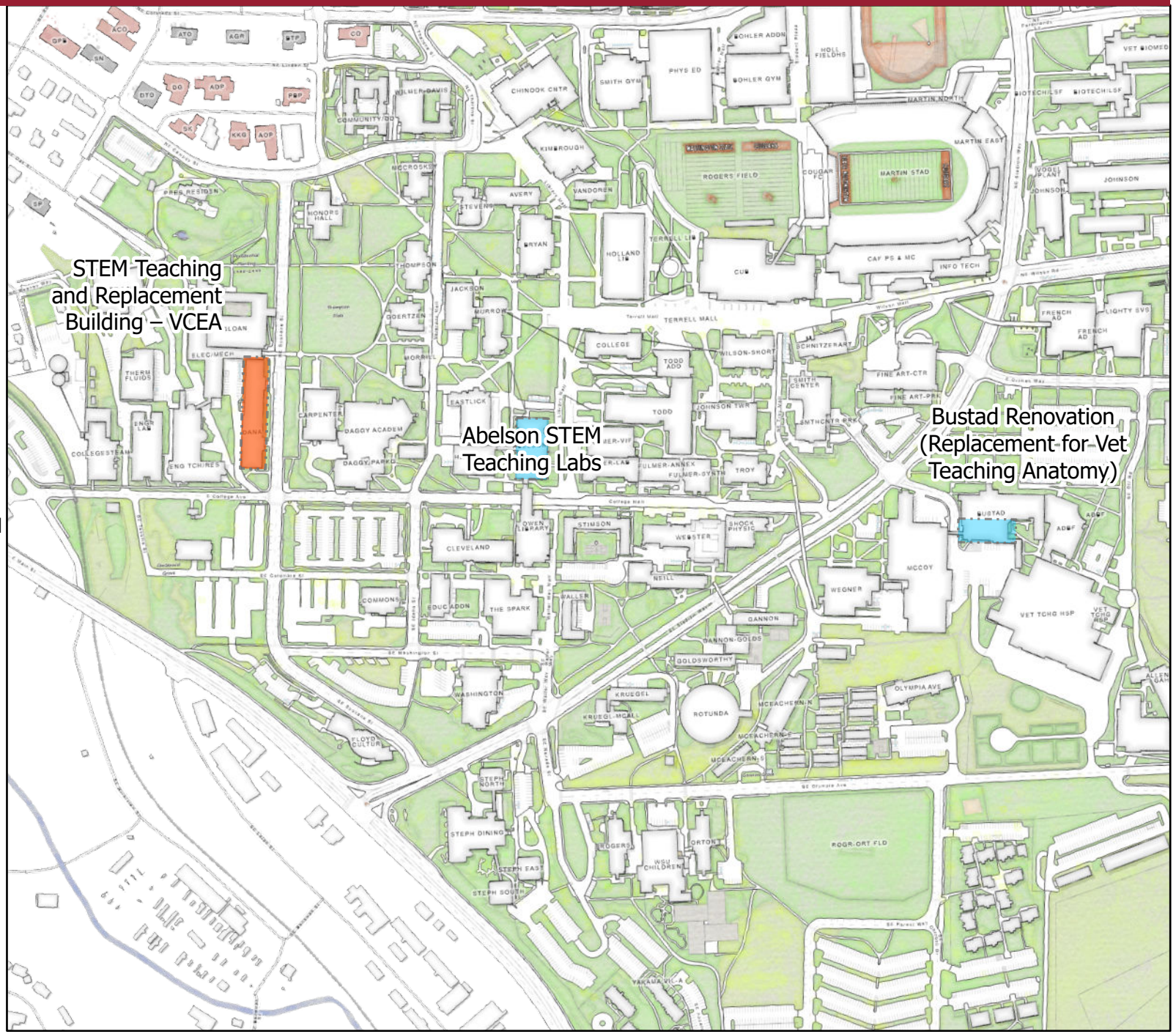
Washington State University Pullman - STEM Teaching Labs
$5,000,000 (Design and Construction)

Bustad Renovation (Replacement for Vet Teaching Anatomy)
$10,000,000 (Design and Construction)

Infrastructure (electrical, water, chilled water, steam, tunnels)
$10,000,000 (Design and Construction)
(Multiple locations - not shown on map)

Learning Renovations
$10,000,000 (Design and Construction)
(Multiple locations - not shown on map)

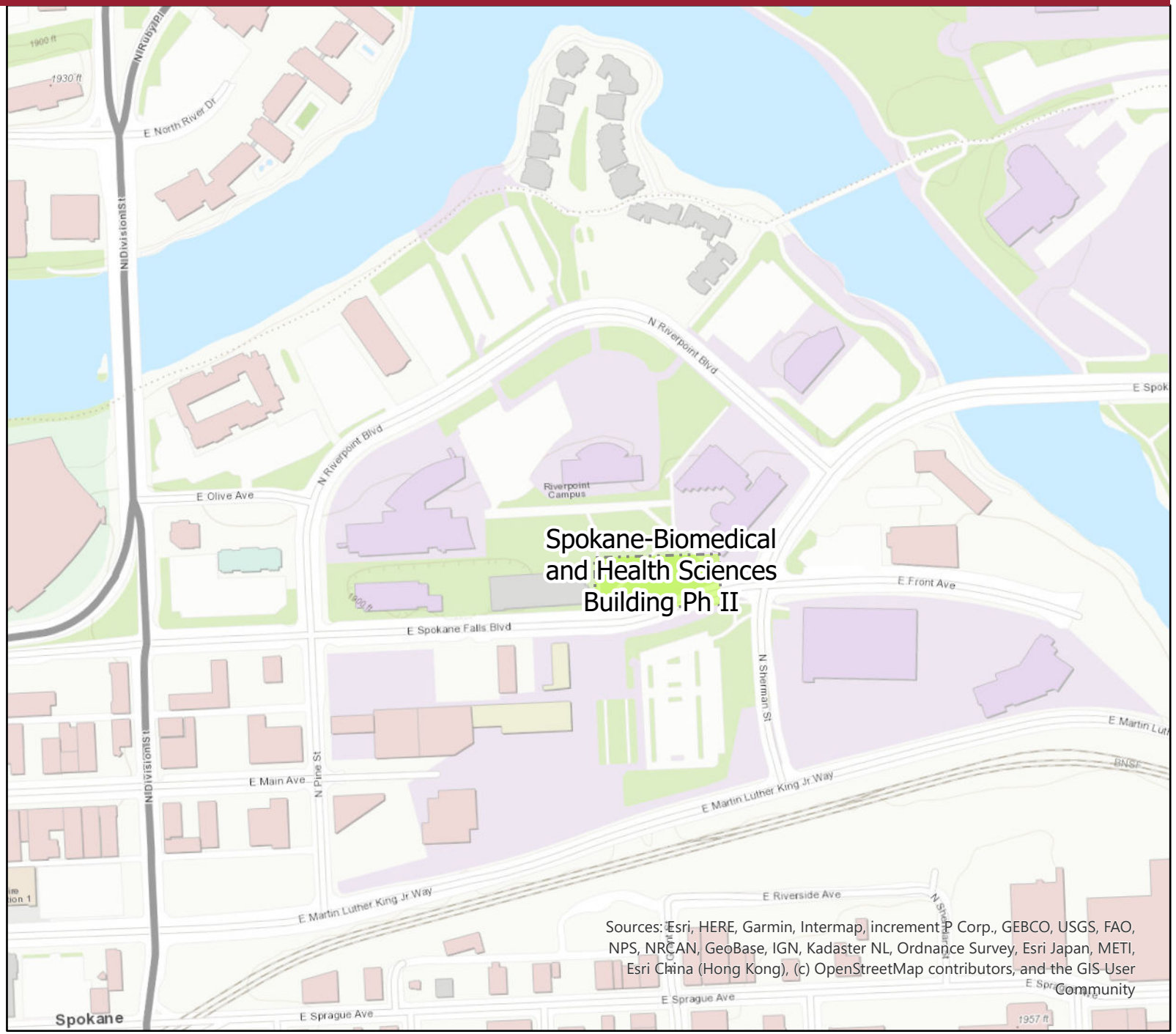
Information Technology Renovations
$5,000,000 (Design and Construction)
(Multiple locations - not shown on map)



WSU Facility Development Plan

Spokane 2025-2027

Spokane-Biomedical and Health Sciences Building Ph II
$35,000,000 (Construction Phase 1)



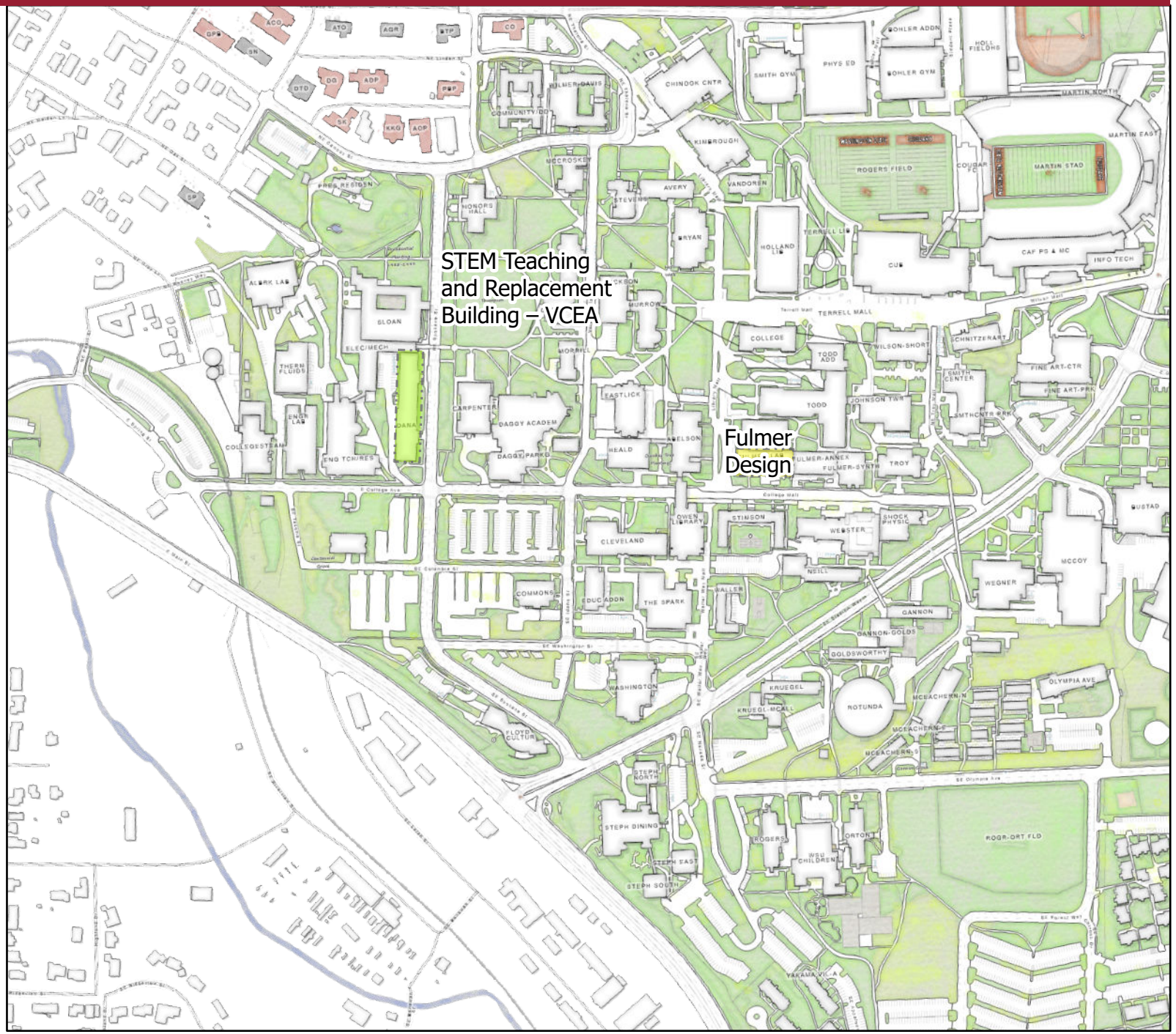
WSU Facility Development Plan

Pullman 2027-2029

STEM Teaching and Replacement Building – VCEA
$45,000,000 (Construction)

Fulmer Hall Renovation Phase 1
$3,000,000 (Design)

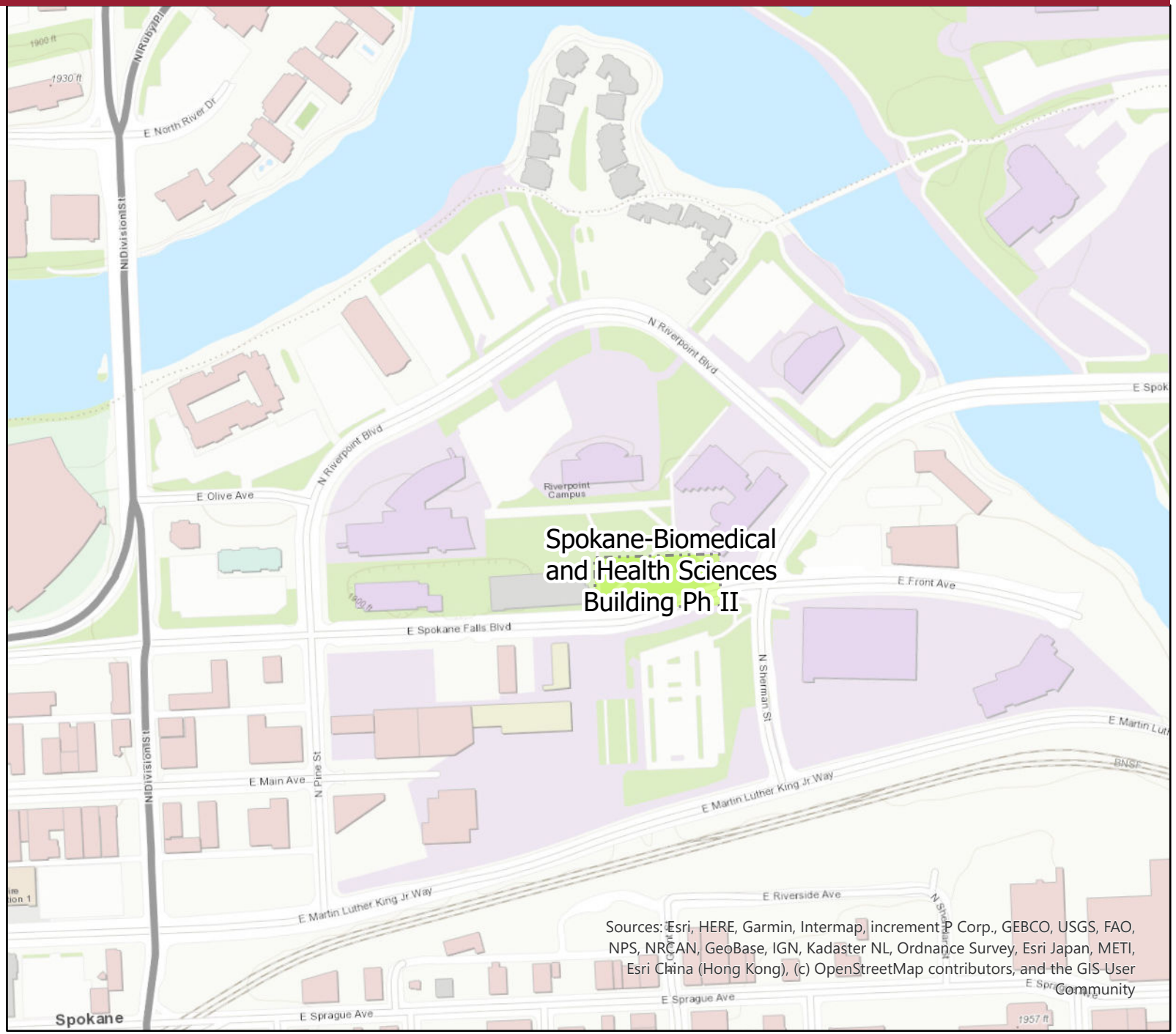
Research Renovations
$10,000,000 (Design and Construction)
(Multiple locations - not shown on map)



WSU Facility Development Plan

Spokane 2027-2029

Spokane-Biomedical and Health Sciences Building Ph II
$35,000,000 (Construction Phase 2)



WSU Facility Development Plan

Pullman 2029-2031

Fulmer Hall Renovation Phase 1
$35,000,000 (Construction)

Engineering Renovation/Replacement Ph 2 – VCEA
$8,000,000 (Design and Demolition of Daggy Hall)

McCoy Hall Demolition
$8,000,000 (Design and Demolition of McCoy Hall)

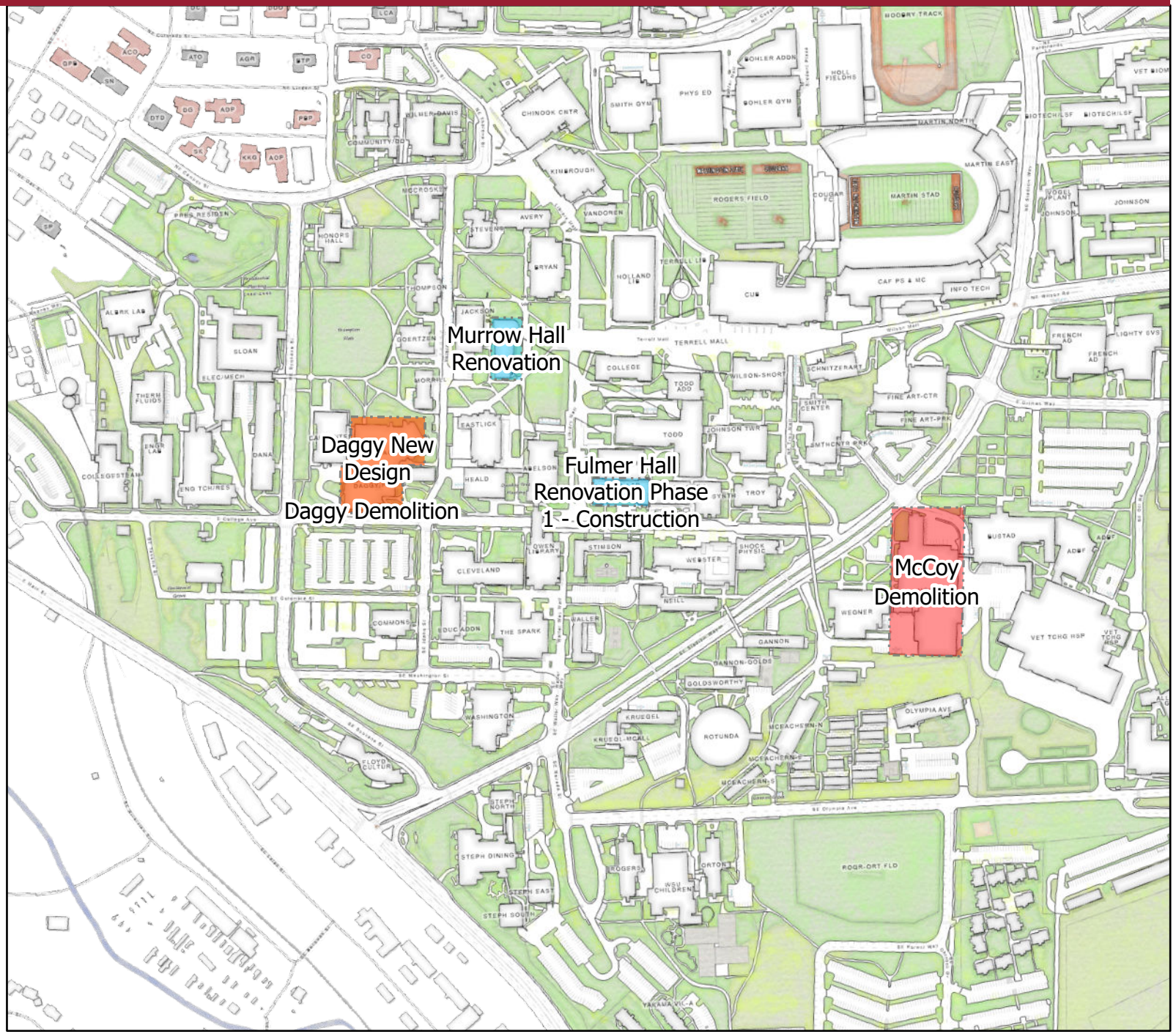
Murrow Hall Renovation
$3,000,000 (Design)

Building Systems (roofs, elevators, envelope, BAS, MEP)
$10,000,000 (Design and Construction)
(Multiple locations - not shown on map)

Infrastructure (electrical, water, chilled water, steam, tunnels)
$10,000,000 (Design and Construction)
(Multiple locations - not shown on map)

Learning Renovations
$10,000,000 (Design and Construction)
(Multiple locations - not shown on map)

Information Technology Renovations
$5,000,000 (Design and Construction)
(Multiple locations - not shown on map)



2020 PROJECT PROPOSAL CHECKLIST

2021-23 Biennium Four-year Higher Education Scoring Process

AINSTITUTION	CAMPUS LOCATION
365 - Washington State University	Pullman, WA
PROJECT TITLE	**FPMT UNIQUE FACILITY ID # (OR NA)**
Clark Hall Research Lab Renovation	A04270
PROJECT CATEGORY	**PROJECT SUBCATEGORY**
Renovation	Standalone
PROPOSAL IS	
New or Updated Proposal (for scoring)	Resubmitted Proposal (retain prior score)
☒ New proposal ☐ Resubmittal to be scored (more than 2 biennia old or significantly changed)	☐ Resubmittal from 2017-19 biennium ☐ Resubmittal from 2019-21 biennium
CONTACT	**PHONE NUMBER**
Kate Kamerrer	509-335-9314

PROPOSAL CONTENT

- ☒ Project Proposal Checklist: this form; one for each proposal
- ☒ Project Proposal Form: Specific to category/subcategory (10-page limit)
- ☒ Appendices: templates, forms, exhibits and supporting/supplemental documentation for scoring.

INSTITUTIONAL PRIORITY

- ☒ Institutional Priority Form. Sent separately (not in this packet) to: Darrell Jennings.

Check the corresponding boxes below if the proposed project meets the minimum threshold or if the item listed is provided in the proposal submittal.

MINIMUM THRESHOLDS

- ☒ Project is not an exclusive enterprise function such as a bookstore, dormitory or contract food service.
- ☒ Project meets LEED Silver Standard requirements.
- ☒ Institution has a greenhouse gas emissions reduction policy in place in accordance with RCW 70.235.070 and vehicle emissions reduction policy in place per RCW 47.01.440 or RCW 43.160.020 as applicable.
- ☐ Design proposals: A complete predesign study was submitted to OFM by July 1, 2020.
- ☐ Growth proposals: Based on solid enrollment projections and is more cost-effectively providing enrollment access than alternatives such as university centers and distance learning.
- ☐ Renovation proposals: Project should cost between 60 – 80% of current replacement value and extend the useful life of the facility by at least 25 years.
- ☐ Acquisition proposals: Land acquisition is not related to a current facility funding request.
- ☐ Infrastructure proposals: Project is not a facility repair project.
- ☒ Stand-alone, infrastructure and acquisition proposals: is a single project requesting funds for one biennium.

2020 PROJECT PROPOSAL CHECKLIST

2021-23 Biennium Four-year Higher Education Scoring Process

REQUIRED APPENDICES

- ☒ Capital Project Report CBS 002
- ☒ Project cost estimate:
  - CBS 003 for projects between $2 million and $5 million
  - Excel C-100 for projects greater than $5 million
- ☐ Degree Totals and Targets template to indicate the number of Bachelors, High Demand and Advanced degrees expected to be awarded in 2021. (Required for Overarching Criteria scoring criteria for Major Growth, Renovation, Replacement and Research proposals).
- ☒ Availability of Space/Campus Utilization template for the campus where the project is located. (Required for all categories/subcategories except Infrastructure and Acquisition proposals).
- ☒ Assignable Square Feet template to indicate program-related space allocation. (Required for Growth, Renovation and Replacement proposals, all categories/subcategories).

OPTIONAL APPENDICES

Attach supplemental and supporting project documentation, *limit to materials directly related to and needed for the evaluation criteria*, such as:

- ☐ Degree and enrollment growth projections
- ☐ Selected excerpts from institutional plans
- ☐ Data on instructional and/or research space utilization
- ☐ Additional documentation for selected cost comparables (acquisition)
- ☒ Selected materials on facility conditions
- ☐ Selected materials on code compliance
- ☐ Tables supporting calculation of program space allocations, weighted average facility age, etc.
- ☐ Evidence of consistency of proposed research projects with state, regional, or local economic development plans
- ☐ Evidence of availability of non-state matching funds
- ☐ Selected documentation of prior facility failures, high cost maintenance, and/or system unreliability for infrastructure projects
- ☐ Documentation of professional assessment of costs for land acquisition, land cleanup, and infrastructure projects
- ☐ Selected documentation of engineering studies, site survey and recommendations, or opinion letters for infrastructure and land cleanup projects
- ☒ Other: Washington State University Facility Development Plan

I certify that the above checked items indicate either that the proposed project meets the minimum thresholds or the corresponding items have been included in this submittal.

Name: Kate Kamerrer Title: Exec Director – Finance, Business & Building Services

Signature: Kate Kamerrer Date: 08/14/20

INSTITUTION	CAMPUS
Washington State University	Pullman, WA
PROJECT TITLE	
Clark Hall Research Lab Renovation	

SUMMARY NARRATIVE

- *Problem statement (short description of the project – the needs and the benefits)*
- *History of the project or facility*
- *University programs addressed or encompassed by the project*

Washington State University is requesting $4,900,000 in the 2021-23 capital budget for the renovation of research facilities in Clark Hall on the Pullman Campus.

Problem statement - Originally constructed in 1971, Clark Hall contains laboratories designed to support undergraduate instruction, research in agricultural chemicals, along with research in food and animal sciences. It was not designed to support modern teaching and research. Minor capital renovation and facilities upgrades have been employed to maintain their functionality, but those strategies have been exhausted. Many of the labs in this facility will be vacated with the recent completion of the Plant Science Building. This is a unique opportunity to update these labs to meet the needs of modern research. Once renovated, researchers can be relocated from facilities such as Johnson Hall and LJ Smith, both of which are scheduled for demolition as part of the Facility Development Plan. **(Appendix D)**.

History - A major component to the WSU Facility Development Plan **(Appendix D)** includes the vacation and demolition of inadequate spaces that are not feasible for renovation and to thoughtfully update spaces that can be modernized. In order for this development plan to serve the university, the current laboratory space within Clark Hall needs to be updated to meet the needs of modern research. As can be seen in Figure 1, imaging equipment not originally intended to be used in these labs has been retrofitted to work but not very efficiently. This renovation will allow for many programs in the College of Agricultural, Human, and Natural Resource Sciences (CAHNRS) to relocate to these improved labs from facilities on campus that are poor candidates for renovation.

Figure 1 – Clark Hall Imaging Lab

University Programs - The renovation of Clark Hall laboratories would allow for improved space for many departments within CAHNRS.

- WSU Crop and Soil Sciences Department
- WSU Horticulture Department
- WSU Plant Pathology Department
- WSU CAHNRS Reasearch Administrative and Advising Support Units
- WSU School of the Environment
- WSU Biological Systems Engineering

- WSU Apparel, Merchandising, Design and Textiles Department

The programs within CAHNRS that would be relocated to these modernized research facilities would be an integral component in the success of the state of Washington's agriculture industry and future economic development. Faculty are encouraged to broaden their programs by conducting more fundamental research as an investment in the future of Washington agricultural economics. Having better laboratories, core facilities for advanced equipment, and reliable facilities is an essential part of this effort.

CATEGORY-SPECIFIC SCORING CRITERIA

1. Age of building since last major remodel

Identify the number of years since the last substantial renovation of the facility or portion proposed for renovation. If only one portion of a building is to be remodeled, provide the age of that portion only. If the project involves multiple wings of a building that were constructed or renovated at different times, calculate and provide a weighted average facility age, based upon the gross square feet and age of each wing.

Clark Hall was originally constructed in 1971, 50 years ago, and has not had a substantial renovation since that time. Minor renovations have taken place to accommodate the ongoing research in the facility. No significant updates have been performed to the major components of the laboratories and they are desperately needed.

2. Condition of building

A. *Provide the facility's condition score (1 superior – 5 marginal functionality) from the 2016 Comparable Framework study, and summarize the major structural and systems conditions that resulted in that score. Provide selected supporting documentation in appendix, and reference them in the body of the proposal.*

Clark Hall has a current Comparable Framework Study score of 5 (Needs Improvement – Marginal Functionality). As a result of this project, the Comparable Framework Study score for Clark Hall will improve dramatically. This proposed renovation project will improve laboratories and address deferred maintenance by upgrading laboratory equipment, replacing obsolete lab furnishings and renewing mechanical systems.

Building	Gross Sq Ft	Year Constructed	Year Renovated	FCI Score	Comparable Framework Score	DM Backlog
Clark Hall	104,207	1971	n/a	0.72	5	$21,285,629

In 2014-2015, WSU conducted facility condition assessments of multiple buildings through VFA, a well-known consulting firm that provides facility assessment services. VFA determines overall building condition by Facility Condition Index (FCI), a ratio of facility requirements to the replacement value, and provides real time FCI updates based on lifecycle requirements associated with critical building systems **(Appendix B).** Facility requirements include (but are not limited to):

- HVAC systems (supply/exhaust fans, pumps, heating, cooling, fume hoods)
- Structure (foundations, gravity and lateral support systems)
- Life Safety (fire sprinklers, fire detection and alarms)
- Skin (envelope, doors, windows)
- Access (exiting, ADA)
- Finishes (floors, partitions, ceilings)

- Furnishings (furniture, casework, equipment)
- Building controls and IT infrastructure

B. *Identify whether the building is listed on the Washington Heritage Register, and if so, summarize its historic significance.*

Clark Hall is not on the Washington Heritage Register.

3. Significant health, safety, and code issues

It is understood that all projects that obtain a building permit will have to comply with current building codes. Identify whether the project is needed to bring the facility within current life safety (including seismic and ADA), or energy code requirements. Clearly identify the applicable standard or code, and describe how the project will improve consistency with it. Provide selected supporting documentation in appendix, and reference them in the body of the proposal.

This laboratory renovation project will dramatically improve the facilities compliance to current life safety, ADA and energy codes. Clark Hall was constructed to meet the building and energy codes of 1971. Most systems within the building are consistent with those codes, but not the current codes enforced today.

Justification:
The list below contains some of the critical items in Clark Hall that will be fully or partially addressed in this renovation:

Life Safety:

- NFPA 72, Sections 18.4.1 and 18.4.3 – Existing visual and audible fire alarm notifications are not compliant with current code standards and will be addressed with this project, including the necessary ADA upgrades noted below.
- NFPA 72, Sections 17.5.3.1 and 17.5.3.2 – Existing "spot" fire alarm coverage will be upgraded to meet the "selective" coverage requirements of the current code.
- Access Card Swipe – New door hardware will include card swipe access with electronic lock down capabilities necessary for an active shooter response.
- Asbestos Containing Materials - The ducting, control mixing boxes, flooring and other finishes are insulated or made with asbestos-containing materials as was common at the time of construction. This renovation project will abate these asbestos containing materials and replace with modern, safe materials.

ADA 2010 Standards:

- Section 702 – Fire alarm systems will be upgraded to include appropriate ADA audible and visible alarms.
- Section 404 – Existing door size, clearance and hardware do not comply with ADA requirements. This project will correct non-compliant doors and install appropriate ADA hardware.
- Section 308 – Existing laboratory furniture/casework are fixed and do not comply with ADA forward and side reach requirements. This project will provide new modular furniture/casework satisfying ADA reach requirements.

Washington Energy Code (WEC):

- Section C403.4.9 - Existing constant volume dual duct air handling systems are energy inefficient. WEC requires variable flow on heating and cooling water systems as well as air distribution.
- Section C403.4.5.4 - Existing controls for operation of room temperature and regulation of air flow are pneumatic or operated with manual dampers. WEC requires electronic controls that can vary with loading.

4. Reasonableness of cost

Provide as much detailed cost information as possible, including baseline comparison of costs per square foot (SF) with the cost data provided in Chapter 5 of the scoring process instructions and a completed OFM C-100 form. Also, describe the construction methodology that will be used for the proposed project.

If applicable, provide Life Cycle Cost Analysis results demonstrating significant projected savings for selected system alternates (Uniformat Level II) over 50 years, in terms of net present savings.

This renovation project will use the Design Build method of delivery and is well within OFM standards for reasonableness of cost. The estimated Maximum Allowable Construction Cost (MACC) for this proposed renovation project is approximately 39% of the expected MACC for a research facility escalated to the construction mid-point.

Justification:
Reference the following for comparison of estimated project MACC against OFM standards.

OFM Chapter 5		Proposed Project Estimates	
Program Type	Labs	Anticipated Mid-Const. Date	12/15/2021
Cost Index at Mid-Const. Date	1.0661	Estimated MACC	$2,638,760
Expected MACC/GSF	$482	Estimated GSF	13,322

OFM Standard Comparison			
Metric	OFM Standard	Proposed Project	% Difference
MACC/GSF at Mid-Const. Date	$514	$198	39%

The Maximum Allowable Construction Cost (MACC) for this renovation project was determined by comparing cost data from two recently constructed lab facilities on campus, along with other lab facilities constructed on other universities in the region.

5. Availability of space/utilization on campus

Describe the institution's plan for improving space utilization and how the project will impact the following:

A. *The utilization of classroom space*
Classroom improvements are not included in this program. Reference **Appendix A** for Availability of Space/Campus Utilization data for the Pullman campus.

B. *The utilization of class laboratory space*
This renovation will serve research laboratories, not teaching laboratories.

6. Efficiency of space allocation

A. For each major function in the proposed facility (classroom, instructional labs, offices), identify whether space allocations will be consistent with Facility Evaluation and Planning Guide (FEPG) assignable square feet standards. To the extent any proposed allocations exceed FEPG standards, explain the alternative standard that has been used, and why. See Chapter 4 of the scoring process instructions for an example. Supporting tables may be included in an appendix.

This FEPG Standard does not include a guideline for research labs and service areas, as they are particular to the specific research taking place. The proposed space allocations for this project will improve current efficiencies and encourage sharing of space and resources to allow for more collaboration among researchers and the disciplines that overlap.

B. Identify the following on form CBS002:

Reference **Appendix C** for the program-related space allocation summary.

1. *Usable square feet (USF) in the proposed facility* **9,516 USF**
2. *Gross square feet (GSF)* **13,322 GSF**
3. *Building efficiency (USF divided GSF)* **71%**

7. Adequacy of space

Describe whether and the extent to which the project is needed to meet modern educational standards and/or to improve space configurations, and how it would accomplish that.

Programs slated for occupying the new facility are currently housed in Johnson Hall which is considered inadequate for the needs of modern research and slated for demolition. The faculty, staff, and students working in this facility are unable to collaborate with each other due to the lay out of the facility, along with inadequate capacity and poor condition of electrical, water, Ethernet, and mechanical requirements to support modern laboratory equipment.

Modern, flexible lab space in Clark Hall will provide faculty, staff, and student researchers a place to innovate and collaborate together in a functional lab environment that meets current health and safety standards. The current layout of Clark Hall includes a central core of laboratories with offices and support areas along the perimeter. The central core can be reconfigured to increase efficiency and remove barriers, providing options to encourage multiple disciplines to collaborate and share resources.

TEMPLATES REQUIRED IN APPENDIX FOR SCORING

Availability of space/campus utilization Appendix A
Program-related space allocation Appendix C

OFM

365 - Washington State University
Capital Project Request

2021-23 Biennium

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Version: 10 2021-23 WSU Capital Budget Request

Report Number: CBS002
Date Run: 8/14/2020 10:02AM

Project Number: **40000274**
Project Title: **Clark Hall Research Lab Renovation**

Description

Starting Fiscal Year: 2022
Project Class: Preservation
Agency Priority: 10

Project Summary

Washington State University (WSU) requests $4,900,000 in the 2021-23 capital budget to renovate two floors of Clark Hall which will be vacated with the recent completion of the Plant Sciences Building. As such, the university will be afforded a unique opportunity to update these labs to meet the needs of modern research. Once complete, researchers will be moved into these newly renovated labs from aging facilities scheduled to be demolished as part of the Facility Development Plan.

Project Description

Identify the problem or opportunity addressed. Why is the request a priority? This narrative should identify unserved/underserved people or communities, operating budget savings, public safety improvements or other backup necessary to understand the need for the request. For preservation projects, it is helpful to include information about the current condition of the facility or system.

Originally constructed in 1971, Clark Hall contains laboratories designed to support undergraduate instruction, research in agricultural chemicals, along with research in food and animal sciences. It was not designed to support modern research. Clark Hall has a Comparable Framework Study score of 5 (Needs Improvement – Marginal Functionality). Minor capital renovation and facilities upgrades have been employed to maintain functionality, but those strategies have been exhausted. With the recent completion of the Plant Science Building and programs moving out of Clark Hall, the opportunity to update research space is considered a high priority for the university as it will reduce the deferred maintenance backlog while providing a safe and reliable environment for research to take place. Once renovated, researchers can be relocated from facilities such as Johnson Hall and LJ Smith, both of which are scheduled for demolition as part of the Facility Development Plan.

What will the request produce or construct (i.e., predesign or design of a building, construction of additional space, etc.)? When will the project start and be completed? Identify whether the project can be phased, and if so, which phase is included in the request. Please provide detailed cost backup.

A major component to the WSU Facility Development Plan includes the vacation and demolition of inadequate spaces that are not feasible for renovation and to thoughtfully update spaces that can be modernized. In order for this development plan to serve the university, the current laboratory space within Clark Hall must be updated to meet the needs of modern research. The design and construction of this project would be completed in the 21-23 biennia. This standalone renovation will allow for many programs in the College of Agricultural, Human, and Natural Resource Sciences (CAHNRS) to relocate to these improved labs from facilities on campus that are poor candidates for renovation. Reference the C100 for detailed cost estimate.

How would the request address the problem or opportunity identified in question 1? What would be the result of not taking action?

The recent completion of the Plant Biosciences building presents an opportunity by vacating two floors of Clark Hall. Modernizing facilities in Clark Hall will benefit the research programs which will in turn enhance the state's agriculture industry and impact the future economic development, as well as reduce the deferred maintenance backlog of the university. Not taking action would increase the deferred maintenance backlog and require researchers to move into 1970-era space, which does not meet current codes and safety guidelines.

What alternatives were explored? Why was the recommended alternative chosen? Be prepared to provide detailed cost backup. If this project has an associated predesign, please summarize the alternatives the predesign considered.

The university's Facility Development Plan includes a number of relocations to allow for building renovations and demolitions to meet our goals to reduce the deferred maintenance backlog and to improve program space. This project fits in well with the overall goal as it will renovate recently vacated space and vacate space designated for demolition. Clark Hall has the potential to provide efficient research space and consolidate programs that are not conveniently located.

Which clientele would be impacted by the budget request? Where and how many units would be added, people or communities served, etc.

The renovation of Clark Hall laboratories would allow for improved space for many departments within CAHNRS.

- WSU Crop and Soil Sciences Department
- WSU Horticulture Department
- WSU Plant Pathology Department
- WSU CAHNRS Research Administrative and Advising Support Units
- WSU School of the Environment

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Version: 10 2021-23 WSU Capital Budget Request

Report Number: CBS002
Date Run: 8/14/2020 10:02AM

Project Number: **40000274**
Project Title: **Clark Hall Research Lab Renovation**

Description

• WSU Biological Systems Engineering
• WSU Apparel, Merchandising, Design and Textiles Department
The programs within CAHNRS that would be relocated to these modernized research facilities would be an integral component in the success of the state of Washington's agriculture industry and future economic development. Faculty are encouraged to broaden their programs by conducting more fundamental research as an investment in the future of Washington agricultural economics. Having better laboratories, core facilities for advanced equipment, and reliable facilities is an essential part of this effort.

Does this project or program leverage non-state funding? If yes, how much by source? If the other funding source requires cost share, also include the minimum state (or other) share of project cost allowable and the supporting citation or documentation.

While efforts are being made to leverage other funds, non-state funds have not been identified.

Describe how this project supports the agency's strategic master plan or would improve agency performance. Reference feasibility studies, master plans, space programming and other analyses as appropriate.

WSU's Facility Development Plan is focused on identifying and prioritizing capital projects which balance continued stewardship and renewal of existing facilities and infrastructure within a framework for responsible growth. The plan recognizes the urgent need to address a large and rapidly growing deferred maintenance backlog which has been identified as a significant risk to future operations at all of the WSU campuses as they age. Additionally, the goals of this plan are consistent with the Master Plans for each of the WSU campuses which together include emphasis on open spaces, pedestrian access, community connection and campus identity, and research and/or program excellence.

The Facility Development Plan includes modernizing Clark Hall as vacated space becomes available and building systems are nearing the end of their lifecycle. Clark Hall is a sound structure in the center of campus and a worthy facility for renovation which would prolong its useful life and provide quality space for the future of research in the agricultural industry.

Does this decision package include funding for any Information Technology related costs including hardware, software (to include cloud-based services), contracts or staff? If the answer is yes, you will be prompted to attach a complete IT addendum. (See Chapter 10 of the operating budget instructions for additional requirements.)

This request does not include funding for any IT-related costs.

If the project is linked to the Puget Sound Action Agenda, describe the impacts on the Action Agenda, including expenditure and FTE detail. See Chapter 12 Puget Sound Recovery) in the 2021-23 Operating Budget Instructions.

This project is not linked to the Puget Sound Action Agenda.

How does this project contribute to statewide goals to reduce carbon pollution and/or improve energy efficiency? Please elaborate.

Capital projects identified in the university's Facility Development Plan contribute directly to a reduction in the deferred maintenance backlog, through either significant renovation, rehabilitation or replacement of existing facilities. In addition, the development plan's guiding principles include energy efficiency improvements, carbon reduction and water savings.

As a result, preliminary planning associated with this project acknowledges the requirements of House Bill 1257 (Washington State Clean Energy Standards) and House Bill 2311 (Greenhouse Gas Emissions) and strives to include energy improvements and carbon reduction throughout all project planning and execution.

Is there additional information you would like decision makers to know when evaluating this request?

Modern, flexible lab space in Clark Hall will provide faculty, staff, and student researchers a place to innovate and collaborate together in a functional lab environment that meets current health and safety standards. The current layout of Clark Hall includes a central core of laboratories with offices and support areas along the perimeter. The central core can be reconfigured to increase efficiency and remove barriers, providing options to encourage multiple disciplines to collaborate and share resources.

*Reference the project proposal and associated appendices for additional information.

Location

City: Pullman **County:** Whitman **Legislative District:** 009

Project Type

Remodel/Renovate/Modernize (Major Projects)

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Capital Project Request
2021-23 Biennium

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Version: 10 2021-23 WSU Capital Budget Request

Report Number: CBS002
Date Run: 8/14/2020 10:02AM

Project Number: **40000274**
Project Title: **Clark Hall Research Lab Renovation**

Description

Growth Management impacts

WSU Pullman's physical planning policies are coordinated with many agencies and government units. The Growth Management Act and its companion Traffic Demand Management legislation and the State Environmental Policy Act, however, are applicable to WSU's physical facilities and programs. Growth Management Act (GMA)-WSU will coordinate with Counties and Municipalities throughout the State to ensure compliance with GMA. WSU will avoid construction or activities which would permanently impair "critical" areas on its campuses as they are defined in the GMA. Transportation Demand Management-A companion piece of legislation sets forth a policy for Transportation Demand Management in which the State of Washington will provide leadership. The Director of the State of Washington Department of General Administration (DGA) is required to develop a commute trip reduction plan for state agencies which are Phase I major employers WSU will conform to the plans developed by DGA. State Environmental Policy Act (SEPA)-WSU has adopted procedures set forth in the State Environmental Policy Act Handbook December 1988 and the State Environmental Policy Act Rules Chapter 197-11 Washington Administrative Code Effective April 4, 1984. Adherence to these procedures will be one of the principal means by which WSU coordinates its compliance with Growth Management requirements.

Funding

Acct Code	Account Title	Estimated Total	Expenditures Prior Biennium	Current Biennium	2021-23 Fiscal Period Reapprops	2021-23 Fiscal Period New Approps
057-1	State Bldg Constr-State	4,900,000				4,900,000
	Total	**4,900,000**	**0**	**0**	**0**	**4,900,000**

Acct Code	Account Title	Future Fiscal Periods 2023-25	2025-27	2027-29	2029-31
057-1	State Bldg Constr-State				
	Total	**0**	**0**	**0**	**0**

Schedule and Statistics

	Start Date	End Date
Predesign	07/01/2021	08/01/2021
Design	8/1/2021	11/1/2021
Construction	10/1/2021	3/1/2022

	Total
Gross Square Feet:	13,322
Usable Square Feet:	9,516
Efficiency:	71.4%
Escalated MACC Cost per Sq. Ft.:	198
Construction Type:	Laboratories
Is this a remodel?	Yes
A/E Fee Class:	A
A/E Fee Percentage:	13.80%

Cost Summary

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Capital Project Request
2021-23 Biennium

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Version: 10 2021-23 WSU Capital Budget Request

Report Number: CBS002
Date Run: 8/14/2020 10:02AM

Project Number: **40000274**
Project Title: **Clark Hall Research Lab Renovation**

Cost Summary

		Escalated Cost	% of Project
Acquisition Costs Total		**0**	**0.0%**
Consultant Services			
Pre-Schematic Design Services		0	0.0%
Construction Documents		262,995	5.4%
Extra Services		61,794	1.3%
Other Services		118,960	2.4%
Design Services Contingency		46,278	0.9%
Consultant Services Total		**506,770**	**10.3%**
Maximum Allowable Construction Cost(MACC)	**2,638,760**		
Site work		0	0.0%
Related Project Costs		0	0.0%
Facility Construction		2,638,760	53.9%
GCCM Risk Contingency		220,935	4.5%
GCCM or Design Build Costs		273,801	5.6%
Construction Contingencies		263,875	5.4%
Non Taxable Items		0	0.0%
Sales Tax		264,994	5.4%
Construction Contracts Total		**3,662,363**	**74.8%**
Equipment			
Equipment		439,712	9.0%
Non Taxable Items		0	0.0%
Sales Tax		34,298	0.7%
Equipment Total		**474,010**	**9.7%**
Art Work Total		**24,376**	**0.5%**
Other Costs Total		**0**	**0.0%**
Project Management Total		**231,995**	**4.7%**
Grand Total Escalated Costs		**4,899,514**	
Rounded Grand Total Escalated Costs		**4,900,000**	

Operating Impacts

No Operating Impact

Narrative

Renovation of existing research/science facility.

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Capital Project Request

2021-23 Biennium

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Parameter	Entered As	Interpreted As
Biennium	2021-23	2021-23
Agency	365	365
Version	10-A	10-A
Project Classification	*	All Project Classifications
Capital Project Number	40000274	40000274
Sort Order	Project Priority	Priority
Include Page Numbers	Y	Yes
For Word or Excel	N	N
User Group	Agency Budget	Agency Budget
User Id	*	All User Ids

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Cost Estimate Summary
2021-23 Biennium

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Cost Estimate Number: 235
Cost Estimate Title: Clark Hall Research Lab Renovation

Report Number: CBS003
Date Run: 8/11/2020 3:10PM

Version: 10 2021-23 WSU Capital Budget Request
Agency Preferred: Yes
Project Number: 40000274
Project Title: Clark Hall Research Lab Renovation
Project Phase Title:

Contact Info **Contact Name:** Kelly Cornish **Contact Number:** 509.335.9101

Statistics

Gross Sq. Ft.:	13,322
Usable Sq. Ft.:	9,516
Space Efficiency:	71%
MACC Cost per Sq. Ft.:	191
Escalated MACC Cost per Sq. Ft.:	198
Remodel?	Yes
Construction Type:	Laboratories
A/E Fee Class:	A
A/E Fee Percentage:	13.80%

Schedule

	Start Date	End Date
Predesign:	07-2021	08-2021
Design:	08-2021	11-2021
Construction:	10-2021	03-2022
Duration of Construction (Months):	5	

Cost Summary Escalated

Acquisition Costs Total			**0**
Pre-Schematic Design Services		0	
Construction Documents		262,995	
Extra Services		61,794	
Other Services		118,960	
Design Services Contingency		46,278	
Consultant Services Total			**506,770**
Site work		0	
Related Project Costs		0	
Facility Construction		2,638,760	
Construction Contingencies		263,875	
Non Taxable Items		0	
Sales Tax		264,994	
Construction Contracts Total			**3,662,363**
Maximum Allowable Construction Cost(MACC)	**2,638,760**		
Equipment		439,712	
Non Taxable Items		0	
Sales Tax		34,298	
Equipment Total			**474,010**
Art Work Total			**24,376**
Other Costs Total			**0**
Project Management Total			**231,995**
Grand Total Escalated Costs			**4,899,514**
Rounded Grand Total Escalated Costs			**4,900,000**

Additional Details

Alternative Public Works Project:	Yes

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365 - Washington State University
Cost Estimate Summary
2021-23 Biennium

*

Cost Estimate Number: 235
Cost Estimate Title: Clark Hall Research Lab Renovation

Report Number: CBS003
Date Run: 8/11/2020 3:10PM

Version: 10 2021-23 WSU Capital Budget Request
Project Number: 40000274
Project Title: Clark Hall Research Lab Renovation
Project Phase Title:

Agency Preferred: Yes

Contact Info **Contact Name:** Kelly Cornish **Contact Number:** 509.335.9101

Additional Details

State Construction Inflation Rate:	2.38%
Base Month and Year:	06-2020
Project Administration By:	AGY
Project Admin Impact to DES that is NOT Included in Project Total:	$0

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365 - Washington State University
Cost Estimate Detail
2021-23 Biennium

*

Cost Estimate Number: 235 **Analysis Date:** August 11, 2020
Cost Estimate Title: Clark Hall Research Lab Renovation

Detail Title: Clark Hall Research Lab Renovation
Project Number: 40000274
Project Title: Clark Hall Research Lab Renovation
Project Phase Title:
Location: 3812

Contact Info **Contact Name:** Kelly Cornish **Contact Number:** 509.335.9101

Statistics

Gross Sq. Ft.:	13,322
Usable Sq. Ft.:	9,516
Rentable Sq. Ft.:	
Space Efficiency:	71%
Escalated MACC Cost per Sq. Ft.:	198
Escalated Cost per S. F. Explanation	

Construction Type:	Laboratories
Remodel?	Yes
A/E Fee Class:	A
A/E Fee Percentage:	13.80%
Contingency Rate:	10.00%
Contingency Explanation	

Projected Life of Asset (Years):	50
Location Used for Tax Rate:	3812
Tax Rate:	7.80%
Art Requirement Applies:	Yes
Project Administration by:	AGY
Higher Education Institution?:	Yes
Alternative Public Works?:	Yes

Project Schedule

	Start Date	End Date
Predesign:	07-2021	08-2021
Design:	08-2021	11-2021
Construction:	10-2021	03-2022
Duration of Construction (Months):	5	
State Construction Inflation Rate:	2.38%	
Base Month and Year:	6-2020	

Project Cost Summary

MACC:	$ 2,544,854
MACC (Escalated):	$ 2,638,760
Current Project Total:	$ 4,728,229
Rounded Current Project Total:	$ 4,728,000
Escalated Project Total:	$ 4,650,852
Rounded Escalated Project Total:	$ 4,651,000

ITEM	Base Amount	Sub Total	Escalation Factor	Escalated Cost
CONSULTANT SERVICES				
Construction Documents				
A/E Basic Design Services				266,553
SubTotal: Construction Documents				**262,995**
Extra Services				
Commissioning (Systems Check)	35,000			
Testing	20,000			
Environmental Mitigation Services (EIS)	5,000			
SubTotal: Extra Services		**60,000**	1.0299	**61,794**
Other Services				
Bid/Construction/Closeout				119,756
SubTotal: Other Services				**118,960**
Design Services Contingency				
Design Services Contingency	44,631			
SubTotal: Design Services Contingency		**44,631**	1.0369	**46,278**
Total: Consultant Services		**490,940**	1.0322	**506,770**
CONSTRUCTION CONTRACTS				
Facility Construction				
A10 - Foundations	19,984			
A20 - Basement Construction	13,322			
B20 - Exterior Closure	66,612			
B30 - Roofing	9,992			
C10 - Interior Construction	199,836			
C30 - Interior Finishes	173,191			
D10 - Conveying	96,161			
D20 - Plumbing Systems	438,360			
D30 - HVAC Systems	666,120			
D40 - Fire Protection Systems	35,287			
D50 - Electrical Systems	532,896			
F20 - Selective Demolition	26,645			
General Conditions	266,448			
SubTotal: Facility Construction		**2,544,854**	1.0369	**2,638,760**
GCCM Risk Contingency				
GCCM Risk Contingency	213,072			
SubTotal: GCCM Risk Contingency				**220,935**
GCCM or Design Build Costs				
GCCM Fee	182,633			
GCCM Preconstruction Services	81,424			
SubTotal: GCCM or Design Build Costs		**264,057**	1.0369	**273,801**
Construction Contingencies				
Allowance for Change Orders	254,485			
SubTotal: Construction Contingencies		**254,485**	1.0369	**263,875**
Sales Tax		**255,565**	1.0369	**264,994**
Total: Construction Contracts		**3,532,033**	1.0369	**3,662,363**

ITEM	Base Amount	Sub Total	Escalation Factor	Escalated Cost
CONSTRUCTION CONTRACTS				
Maximum Allowable Construction Cost (MACC)		**2,544,854**	1.0400	**2,638,760**
EQUIPMENT				
E10 - Equipment	352,000			
E20 - Furnishings	38,064			
F10 - Special Construction	34,000			
SubTotal:		**424,064**	1.0369	**439,712**
Sales Tax		**33,077**	1.0369	**34,298**
Total: Equipment		**457,141**	1.0369	**474,010**
ART WORK				
Higher Ed Artwork	24,450			
Total: Art Work		**24,376**	1.0000	**24,376**
PROJECT MANAGEMENT				
Agency Project Management	223,739			
Total: Project Management		**223,739**	1.0369	**231,995**

OFM

Cost Estimate Summary and Detail

2021-23 Biennium

*

Cost Estimate Number: 235
Cost Estimate Title: Clark Hall Research Lab Renovation

Report Number: CBS003
Date Run: 8/11/2020 3:10PM

Parameter	Entered As	Interpreted As
Associated or Unassociated	Associated	Associated
Biennium	2021-23	2021-23
Agency	365	365
Version	10-A	10-A
Project Classification	*	All Project Classifications
Capital Project Number	40000274	40000274
Cost Estimate Number	235	235
Sort Order	Cost Estimate Title	Title
Include Page Numbers	Y	Yes
For Word or Excel	N	N
User Group	Agency Budget	Agency Budget
User Id	*	All User Ids

Availability of Space/Campus Utilization Template

2020 Four-year Higher Education Scoring Process

Required for all categories except Infrastructure and Acquisition.

Project Name:	Clark Hall Research Lab Renovation
Institution:	Washington State University
Campus Location:	Pullman

Identify the average number of hours per week each (a) classroom seat and (b) classroom lab is expected to be utilized in Fall 2018 on the porposed porject's campus. Please fill in the green shaded cells for the **campus** where the project is located.

(a) General University Classroom Utilization		**(b) General University Lab Utilization**	
Fall 2019 Weekly Contact Hours	222,087	Fall 2019 Weekly Contact Hours	37,921
Multiply by % FTE Increase Budgeted	0.00%	Multiply by % FTE Increase Budgeted	0.00%
Expected Fall 2020 Contact Hours	222,087	Expected Fall 2020 Contact Hours	37,921
Expected Fall 2020 Classroom Seats	10,577	Expected Fall 2020 Class Lab Seats	2,592
Expected Hours per Week Utilization	**21.0**	**Expected Hours per Week Utilization**	**14.6**
HECB GUC Utilization Standard	22.0	HECB GUL Utilization Standard	16.0
Differrence in Utilization Standard	-5%	Differrence in Utilization Standard	-9%

If the campus does not meet the 22 hours per classroom seat and/or the 16 hours per class lab HECB utilization standards, describe any institutional plans for achieving that level of utilization.

WSU's Facilities Development plan is focused on identifying and prioritizing capital projects which balance continued stewardship and renewal of existing facilities and infrastructure within a framework for responsible growth. While recent completed projects have aided progress towards reaching state targets for classroom and laboratory utilization, additional improvements are still required. This proposed project plans to transform existing underutilized space into modern laboratorys and teaching space that will exceed HECB utilization standards. This guiding principle for all WSU projects will contribute to achieving the state's target space utilization goals.

FCI to Comparable Framework (CF) Conversion

Conversion Summary (for reference)			
FCI Range		Corresponding CF Score	CF to FCI Conversion
Lower	Upper		
0	0.03	1	0.02
0.03	0.11	2	0.07
0.11	0.27	3	0.19
0.27	0.54	4	0.4
0.54	9999	5	0.69

Instructions:

PM to enter WSU building name, number and FCI score. Spreadsheet will automatically calculate the Comparable Framework (CF) Score to be included in appropriate section of the capital budget request write-up.

Conversion Calculator - WSU			
Bldg Name	Bldg #	FCI	Calculated CF
Clark	99	0.72	5

Asset Detail Report

By Asset Name

Region: Pullman - WSU Main Campus **Asset:** CLARK HALL
Campus: Pullman Campus - Assessed Buildings **Asset Number:** 0099

Assets are ordered by Asset Name **Currency: USD**

Statistics

FCI Cost:	19,220,873	**FCI:**	0.72
RI Cost:	21,285,628	**RI:**	0.80
Total Requirements Cost:	21,285,629		
Current Replacement Value:	26,594,705	**Date of most Recent Assessment:**	Sep 2, 2014

Type	Building		
Area	104,207 SF		
Use	ACADEMIC INSTRUCTION	**Construction Type**	IBC - Type II A
Floors	5	**Historical Category**	Eligible
Address 1	2000 WILSON RD	**City**	PULLMAN
Address 2	-	**State/Province/Region**	UNITED STATES OF AMERICA
Year Constructed	1971	**Zip/Postal Code**	99164
Year Renovated	-	**Architect**	-
Ownership	Client Owned	**Commission Date**	-
		Decommission Date	-

Photo

CLARK HALL

Asset Description

General:

The Clark Hall is located on the Washington State University Campus in Pullman, Washington. The building is situated near Wilson Road and Ellis Way. The structure is a 104207 square-foot (GSF), 5 story structure (including basement, not penthouse).

According to WSU information, construction for the existing building was completed in 1971, underwent various minor work since.

The building contains mechanical equipment associated in the penthouse and basement. Per the 2012 International Building Code, Chapter 3, and Section 303 – Assembly Group, this building is classified as Occupancy Group A3. According to the 2012 International Building Code, Chapter 6, Section 602, this building's construction type is Type II - Noncombustible, as determined from field observations.

Requirements

Requirement Name	Renewal	Prime System	Category	Priority	Action Date	Estimated Cost
ACT System - Concealed Spline Renewal	Yes	C3030 - Ceiling Finishes	Lifecycle	1- Due within 1 Year of Inspection	Sep 2, 2014	12,398
AHU-1 - Const Volume w/Distribution Renewal	Yes	D3040 - Distribution Systems	Lifecycle	3- Due within 5 Years of Inspection	Sep 2, 2017	971,924
AHU-2 - VAV System w/Distribution Renewal	Yes	D3040 - Distribution Systems	Lifecycle	3- Due within 5 Years of Inspection	Sep 2, 2020	1,648,114
Aluminum Windows Renewal	Yes	B2020 - Exterior Windows	Lifecycle	1- Due within 1 Year of Inspection	Sep 2, 2014	446,308
Automatic Openers - Single Renewal	Yes	B2030 - Exterior Doors	Lifecycle	1- Due within 1 Year of Inspection	Sep 2, 2014	8,936
Branch Wiring - Non-GFCI Receptacle - Room 221	No	D5021 - Branch Wiring Devices	Life Safety	1- Due within 1 Year of Inspection	Sep 2, 2015	245
Branch Wiring - Power Receptacles Lacking - Rooftop	No	D5021 - Branch Wiring Devices	Life Safety	1- Due within 1 Year of Inspection	Sep 2, 2015	3,090
Building Wireless Upgrade	No	D5039 - Local Area Networks	Technological Improvements	1- Due within 1 Year of Inspection	Sep 2, 2015	437,364

Asset Detail Report

By Asset Name

Requirement Name	Renewal	Prime System	Category	Priority	Action Date	Estimated Cost
Ceramic Floor Tile Renewal	Yes	C3020 - Floor Finishes	Interior Finishes	1- Due within 1 Year of Inspection	Sep 2, 2014	103,933
Ceramic Wall Tile Renewal	Yes	C3010 - Wall Finishes	Lifecycle	1- Due within 1 Year of Inspection	Sep 2, 2014	32,973
Chillers - Centrifugal w/Cooling Tower Renewal	Yes	D3030 - Cooling Generating Systems	Lifecycle	3- Due within 5 Years of Inspection	Sep 2, 2023	2,674,230
Custodial/Utility Sinks Renewal	Yes	D2010 - Plumbing Fixtures	Lifecycle	3- Due within 5 Years of Inspection	Sep 2, 2017	49,799
DDC/Pneumatic System - Hybrid Renewal	Yes	D3060 - Controls and Instrumentation	Lifecycle	3- Due within 5 Years of Inspection	Sep 2, 2020	673,929
Distribution Equipment - 1200A 480Y/277V - Room 101 Renewal	Yes	D5012 - Low Tension Service and Dist.	Lifecycle	1- Due within 1 Year of Inspection	Sep 2, 2014	163,328
Distribution Equipment - 1200A 480Y/277V - Room 17 Renewal	Yes	D5012 - Low Tension Service and Dist.	Lifecycle	1- Due within 1 Year of Inspection	Sep 2, 2014	163,328
Distribution Equipment - 1600A 208Y/120V - Room 101 Renewal	Yes	D5012 - Low Tension Service and Dist.	Lifecycle	1- Due within 1 Year of Inspection	Sep 2, 2014	381,137
Distribution Equipment - 1600A 208Y/120V - Room 17 Renewal	Yes	D5012 - Low Tension Service and Dist.	Lifecycle	1- Due within 1 Year of Inspection	Sep 2, 2014	381,137
Door Assembly - 3 x 7 HM Renewal	Yes	B2030 - Exterior Doors	Lifecycle	1- Due within 1 Year of Inspection	Sep 2, 2014	29,877
Door Assembly - 6 x 7 HM	Yes	B2030 - Exterior	Lifecycle	1- Due	Sep 2, 2014	32,782

Requirement Name	Renewal	Prime System	Category	Priority	Action Date	Estimated Cost
Renewal		Doors		within 1 Year of Inspection		
Door Assembly - 6 x 7 Storefront Renewal	Yes	B2030 - Exterior Doors	Lifecycle	1- Due within 1 Year of Inspection	Sep 2, 2014	30,846
Emergency Eyewash and Shower Units Renewal	Yes	D2010 - Plumbing Fixtures	Lifecycle	3- Due within 5 Years of Inspection	Sep 2, 2017	18,607
Exhaust System - Fume Hoods - Ductwork/Fans Renewal	Yes	D3040 - Distribution Systems	Lifecycle	3- Due within 5 Years of Inspection	Sep 2, 2020	299,106
Exhaust System - General Building Renewal	Yes	D3040 - Distribution Systems	Lifecycle	3- Due within 5 Years of Inspection	Sep 2, 2020	130,008
Exit Signs Renewal	Yes	D5092 - Emergency Light and Power Systems	Lifecycle	3- Due within 5 Years of Inspection	Sep 2, 2019	103,882
Exterior Stairs - Concrete Renewal	Yes	B1015 - Exterior Stairs and Fire Escapes	Lifecycle	3- Due within 5 Years of Inspection	Sep 2, 2021	1,092
Fire Alarm System Renewal	Yes	D5037 - Fire Alarm Systems	Lifecycle	1- Due within 1 Year of Inspection	Sep 2, 2014	688,220
Fittings - Signage (Room Numbering and Identification) Renewal	Yes	C1035 - Identifying Devices	Interior Finishes	1- Due within 1 Year of Inspection	Sep 2, 2014	14,913
Fixed Theater Seating - Deluxe Renewal	Yes	E - Equipment and Furnishings	Lifecycle	1- Due within 1 Year of Inspection	Sep 2, 2014	18,603
Folding Partitions - Economy Renewal	Yes	C1010 - Partitions	Lifecycle	1- Due within 1	Sep 2, 2014	14,460

Requirement Name	Renewal	Prime System	Category	Priority	Action Date	Estimated Cost
				Year of Inspection		
GWB 2HR Rated Walls Renewal	Yes	C1010 - Partitions	Lifecycle	3- Due within 5 Years of Inspection	Sep 2, 2021	228,834
GWB Taped and Finished Renewal	Yes	C3030 - Ceiling Finishes	Lifecycle	1- Due within 1 Year of Inspection	Sep 2, 2014	11,554
HVAC Distribution System - Ductwork Renewal	Yes	D3040 - Distribution Systems	Lifecycle	3- Due within 5 Years of Inspection	Sep 2, 2020	513,233
Heat Exchanger - Steam/HW - Shell and Tube Renewal	Yes	D3040 - Distribution Systems	Lifecycle	3- Due within 5 Years of Inspection	Sep 2, 2017	277,254
INSTALL STEAM/CONDENSATE ISOLATION VALVES	No	D3014 - Steam Supply System	Reliability	2- Due within 2 Years of Inspection	Sep 2, 2017	28,784
LAN System Renewal	Yes	D5039 - Local Area Networks	Lifecycle	1- Due within 1 Year of Inspection	Sep 2, 2014	536
Lab Acid Waste System - Glass Pipe Renewal	Yes	D2090 - Other Plumbing Systems	Lifecycle	3- Due within 5 Years of Inspection	Sep 2, 2017	997,404
Laboratory Equipment - College Renewal	Yes	E - Equipment and Furnishings	Lifecycle	1- Due within 1 Year of Inspection	Sep 2, 2014	1,915,943
Laboratory Sinks Renewal	Yes	D2010 - Plumbing Fixtures	Lifecycle	3- Due within 5 Years of Inspection	Sep 2, 2017	810,271
Lighting - Interior - Emergency Power Lacking	No	D5022 - Lighting Equipment	Life Safety	1- Due within 1 Year of	Sep 2, 2015	24,169

Requirement Name	Renewal	Prime System	Category	Priority	Action Date	Estimated Cost
				Inspection		
Main Emergency Electrical Service - 480Y/277V - Room 15 Renewal	Yes	D5012 - Low Tension Service and Dist.	Lifecycle	1- Due within 1 Year of Inspection	Sep 2, 2014	20,699
Main Normal Electrical Service - 1200A 480Y/277V - Room 101 Renewal	Yes	D5012 - Low Tension Service and Dist.	Lifecycle	1- Due within 1 Year of Inspection	Sep 2, 2014	120,413
Main Normal Electrical Service - 1200A 480Y/277V - Room 17 Renewal	Yes	D5012 - Low Tension Service and Dist.	Lifecycle	1- Due within 1 Year of Inspection	Sep 2, 2014	120,413
Main Normal Electrical Service - 1600A 208Y/120V - Room 101 Renewal	Yes	D5012 - Low Tension Service and Dist.	Lifecycle	1- Due within 1 Year of Inspection	Sep 2, 2014	151,039
Main Normal Electrical Service - 1600A 208Y/120V - Room 17 Renewal	Yes	D5012 - Low Tension Service and Dist.	Lifecycle	1- Due within 1 Year of Inspection	Sep 2, 2014	151,039
Main Normal Electrical Service - 4000A 480Y/277V - Room 11 Renewal	Yes	D5012 - Low Tension Service and Dist.	Lifecycle	1- Due within 1 Year of Inspection	Sep 2, 2014	455,853
Natural Gas Distribution for Lab Renewal	Yes	D2090 - Other Plumbing Systems	Lifecycle	3- Due within 5 Years of Inspection	Sep 2, 2020	132,857
Overhead Rollup Door Renewal	Yes	B2034 - Overhead Doors	Lifecycle	3- Due within 5 Years of Inspection	Jan 1, 2005	5,757
Overhead/Rolling Fire Door - Small (Electric Operation) Renewal	Yes	C1020 - Interior Doors	Lifecycle	3- Due within 5 Years of Inspection	Sep 2, 2021	5,623
Partitions - Improper Fire Separation	No	C1010 - Partitions	Life Safety	1- Due within 1 Year of Inspection	Sep 2, 2015	18,410

Asset Detail Report

By Asset Name

Requirement Name	Renewal	Prime System	Category	Priority	Action Date	Estimated Cost
Perimeter Heat System - Hydronic Fin Tube Renewal	Yes	D3040 - Distribution Systems	Lifecycle	3- Due within 5 Years of Inspection	Sep 2, 2020	116,313
Restroom Fixtures - Std Density Renewal	Yes	D2010 - Plumbing Fixtures	Lifecycle	3- Due within 5 Years of Inspection	Sep 2, 2017	358,902
Restrooms - Aged and Not Accessible	No	C1030 - Fittings	Accessibility	3- Due within 5 Years of Inspection	Sep 2, 2019	371,226
Roof Drainage - Gravity Renewal	Yes	D2040 - Rain Water Drainage	Lifecycle	3- Due within 5 Years of Inspection	Sep 2, 2021	255,751
Sanitary Waste - Gravity Disch Renewal	Yes	D2030 - Sanitary Waste	Lifecycle	3- Due within 5 Years of Inspection	Sep 2, 2021	321,322
Stair Handrails - Non-Compliant (Exit Enclosure)	No	C20 - Stairs	Building Code	4- Not Time Based		75,774
Steam Valve - Leak Observed	No	D3020 - Heat Generating Systems	Life Safety	1- Due within 1 Year of Inspection	Sep 2, 2015	1,341
Steam valve installation	No	D3043 - Steam Distribution Systems	Reliability	1- Due within 1 Year of Inspection	Apr 19, 2019	0
Swinging Doors - 3 x 7 HM - Rated Renewal	Yes	C1020 - Interior Doors	Lifecycle	3- Due within 5 Years of Inspection	Sep 2, 2021	151,611
Swinging Doors - 3 x 7 Wd - NR Renewal	Yes	C1020 - Interior Doors	Lifecycle	3- Due within 5 Years of Inspection	Sep 2, 2021	842,941
Swinging Doors - Pair - 6 x 7 HM - Rated Renewal	Yes	C1020 - Interior Doors	Lifecycle	3- Due within 5 Years of	Sep 2, 2021	119,800

Requirement Name	Renewal	Prime System	Category	Priority	Action Date	Estimated Cost
				Inspection		
Swinging Doors - Pair - 6 x 7 HM - Rated, Full Glass Renewal	Yes	C1020 - Interior Doors	Lifecycle	3- Due within 5 Years of Inspection	Sep 2, 2021	10,011
Swinging Doors - Pair - 6 x 7 Wd - NR Renewal	Yes	C1020 - Interior Doors	Lifecycle	3- Due within 5 Years of Inspection	Sep 2, 2021	57,371
Swinging Doors - Pair - 8 x 8 Wd - NR Renewal	Yes	C1020 - Interior Doors	Lifecycle	3- Due within 5 Years of Inspection	Sep 2, 2021	17,510
TBar System Renewal	Yes	C3030 - Ceiling Finishes	Interior Finishes	1- Due within 1 Year of Inspection	Sep 2, 2014	1,099,787
Telephone System Renewal	Yes	D5033 - Telephone Systems	Lifecycle	1- Due within 1 Year of Inspection	Jan 1, 2021	433,001
Toilet Partitions - Average Renewal	Yes	C1030 - Fittings	Lifecycle	1- Due within 1 Year of Inspection	Sep 2, 2014	31,346
Two-Ply Membrane - Fully Adhered Renewal	Yes	B3010 - Roof Coverings	Lifecycle	3- Due within 5 Years of Inspection	Jul 10, 2021	452,273
Unit Heaters - Hot Water Renewal	Yes	D3050 - Terminal and Package Units	Lifecycle	3- Due within 5 Years of Inspection	Sep 2, 2020	24,312
VCT Renewal	Yes	C3020 - Floor Finishes	Interior Finishes	1- Due within 1 Year of Inspection	Sep 2, 2014	323,444
Vinyl Sheet Goods Renewal	Yes	C3020 - Floor Finishes	Interior Finishes	1- Due within 1 Year of Inspection	Sep 2, 2014	9,540

Asset Detail Report

By Asset Name

Requirement Name	Renewal	Prime System	Category	Priority	Action Date	Estimated Cost
Walk-In Coolers & Freezers Renewal	Yes	D3090 - Other HVAC Systems and Equipment	Lifecycle	3- Due within 5 Years of Inspection	Sep 2, 2021	225,703
Water Coolers - Wall-Mount Dual-Height Renewal	Yes	D2010 - Plumbing Fixtures	Lifecycle	3- Due within 5 Years of Inspection	Sep 2, 2017	17,170
Water Dist Complete Renewal	Yes	D2020 - Domestic Water Distribution	Lifecycle	3- Due within 5 Years of Inspection	Sep 2, 2020	379,535
Water Heater - Steam Instantaneous Renewal	Yes	D2020 - Domestic Water Distribution	Lifecycle	3- Due within 5 Years of Inspection	Sep 2, 2017	64,991
Total						**21,285,629**

Program Related Space Allocation Template

Assignable Square Feet

Required for all Growth, Renovation and Replacement proposals.

Institution: Washington State University

Campus location: Pullman, WA

Project name: Clark Hall Research lab Renovation

Input the assignable square feet for the proposed project under the applicable space types below:

Type of Space	Points	Assignable Square Feet	Percentage of total	Score [Points x Percentage]
Instructional space (classroom, laboratories)	10		0.00	0.00
Research space	2	7,306	54.84	1.10
Office space	4	6,016	45.16	1.81
Library and study collaborative space	10		0.00	0.00
Other non-residential space	8		0.00	0.00
Support and physical plant space	6		0.00	0.00
Total		**13,322**	**100.0**	**2.90**

WSU Facility Development Plan

Pullman 2021-2023

Johnson Hall Demolition
$8,000,000 (Design and Construction)

ARS Plant Biosciences Building
$105,000,000 (Federal Funding)

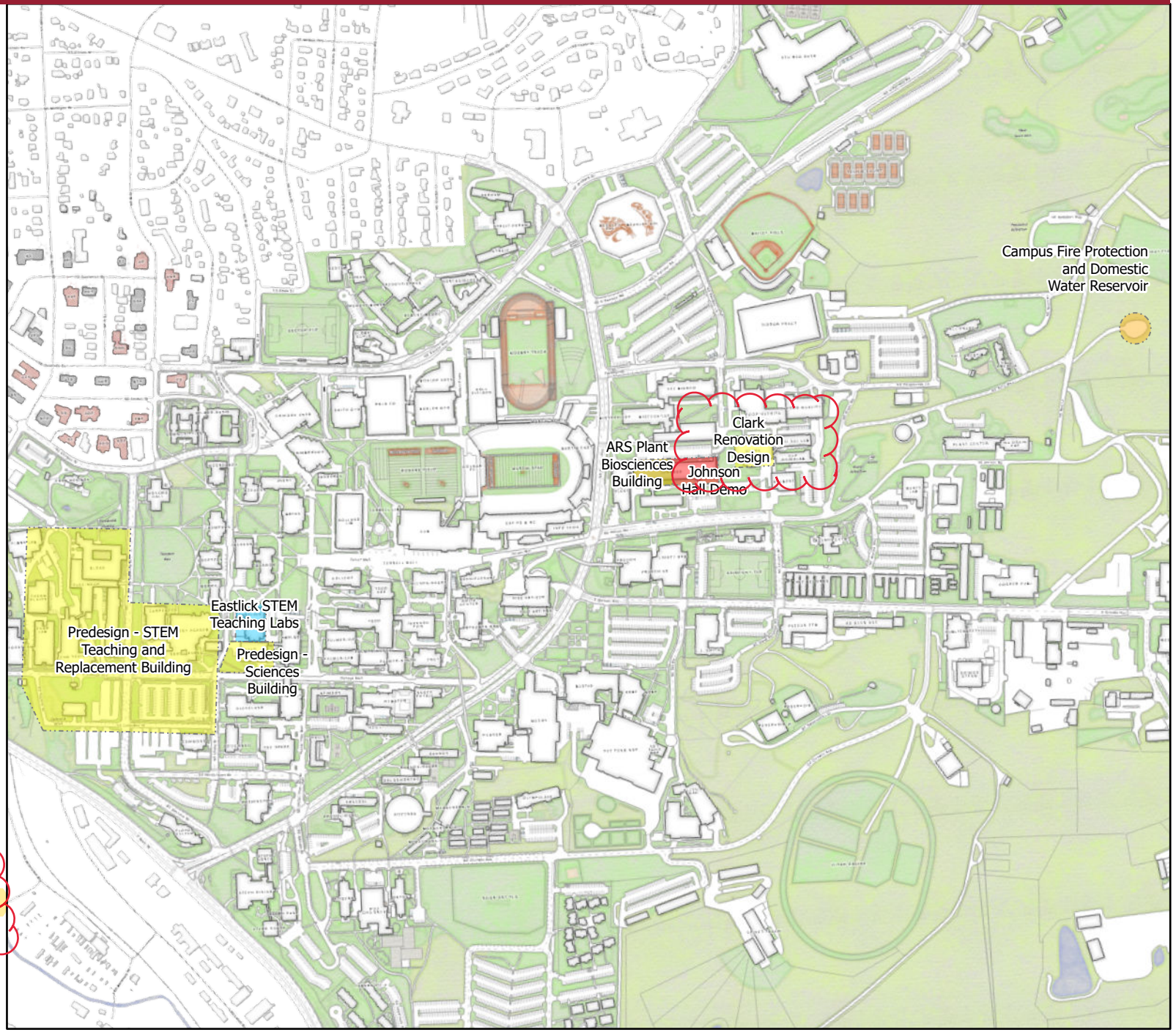
Campus Fire Protection and Domestic Water Reservoir
$8,000,000 (Design and Construction)

Pullman Sciences Building
$500,000 (Predesign)

STEM Teaching and Replacement Building – VCEA
$500,000 (Predesign)

STEM Teaching Labs
$4,900,000 (Design and Construction)

Clark Hall Research Lab Renovation
$4,900,000 (Design and Construction)



WSU Facility Development Plan

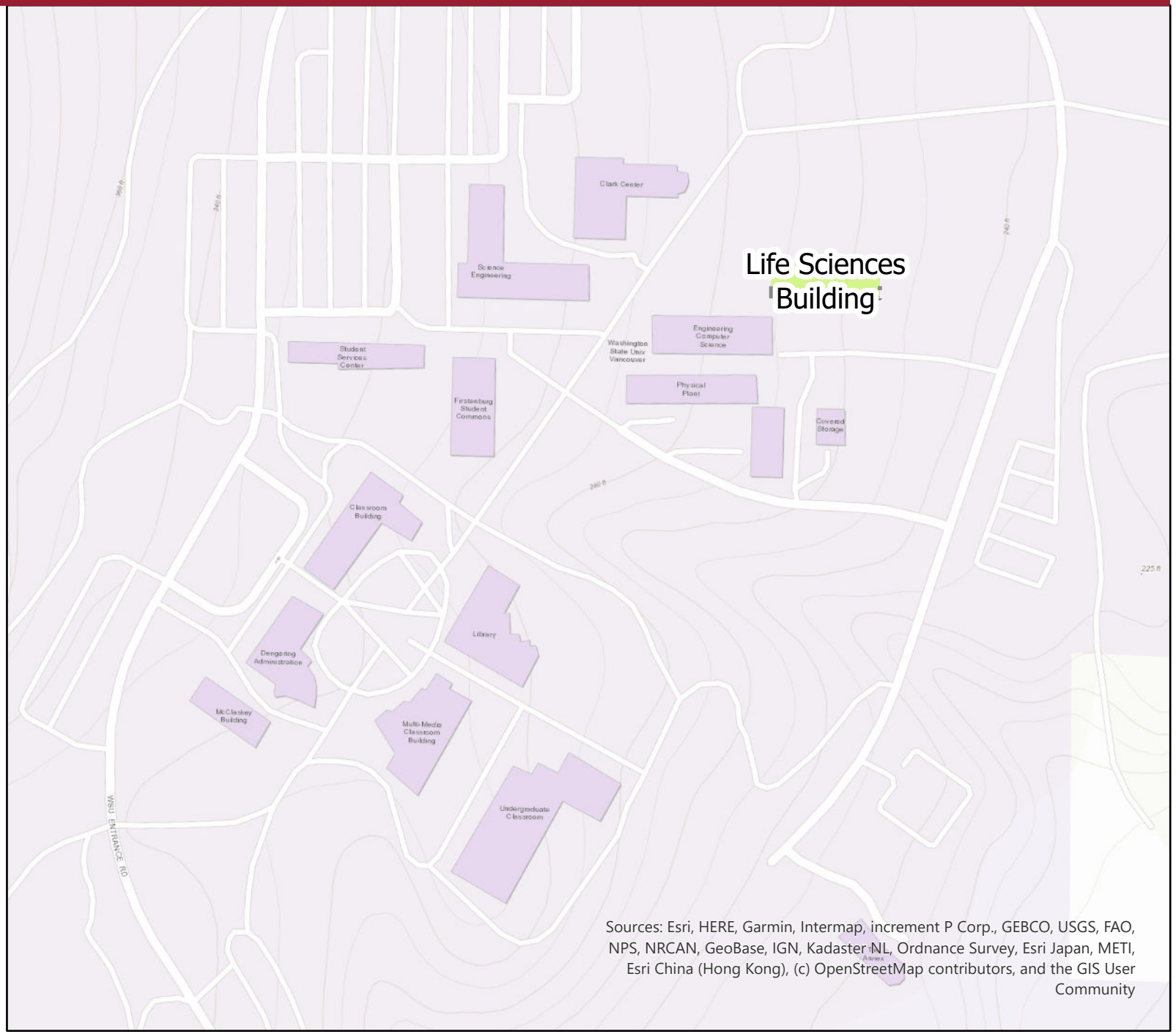
Spokane 2021-2023

Spokane Phase One Building Renovation
$15,000,000 (Design and Construction)

WSU Facility Development Plan

Vancouver 2021-2023

Vancouver Life Sciences Building
$52,600,000 (Construction)



WSU Facility Development Plan

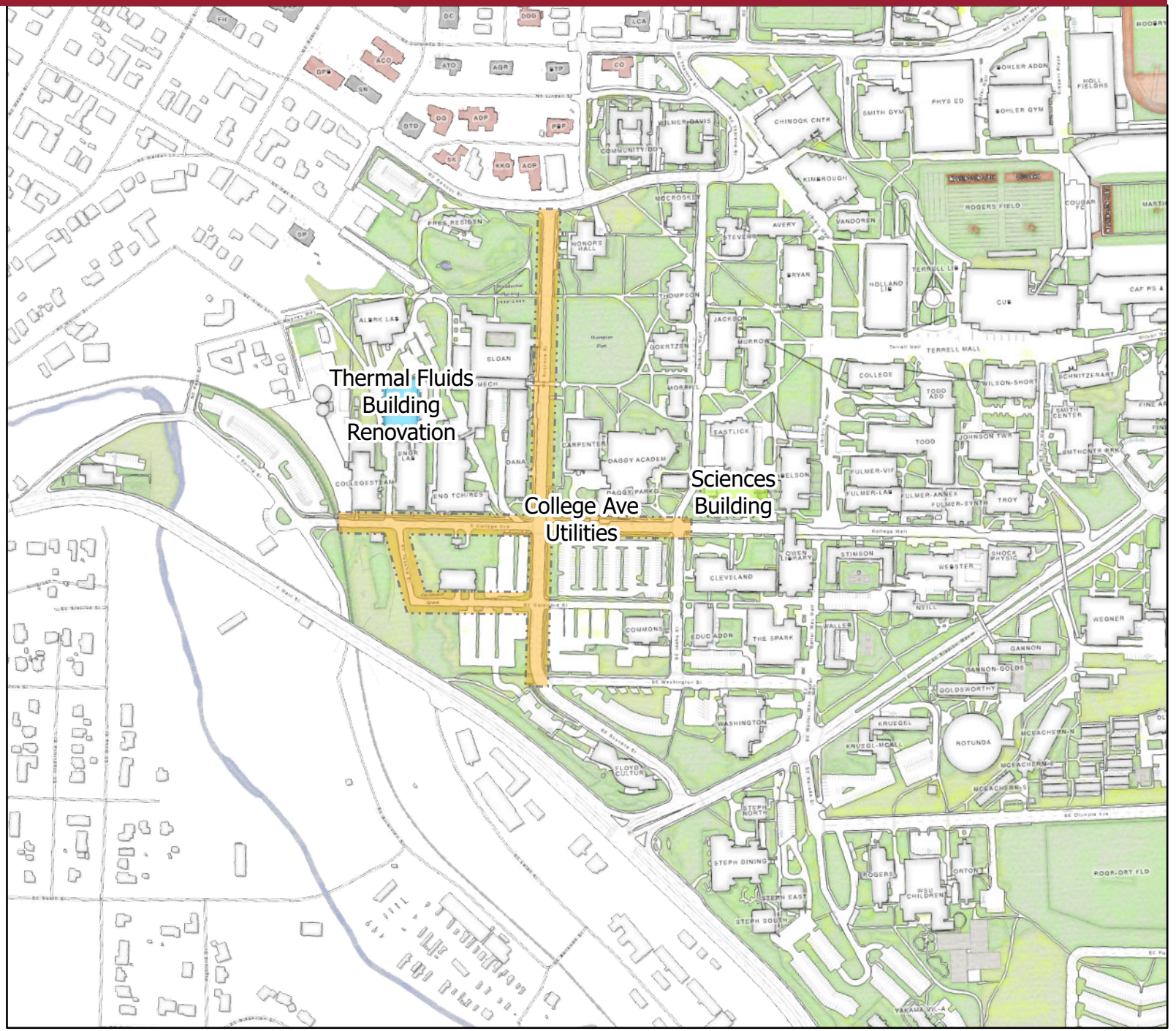
Pullman 2023-2025

Pullman Sciences Building
$53,000,000 (Design, Heald Hall Demolition and Construction)

College Avenue Utility Upgrades
$10,000,000 (Design and Construction)

Thermal Fluids Building Renovation
$10,000,000 (Design and Construction)

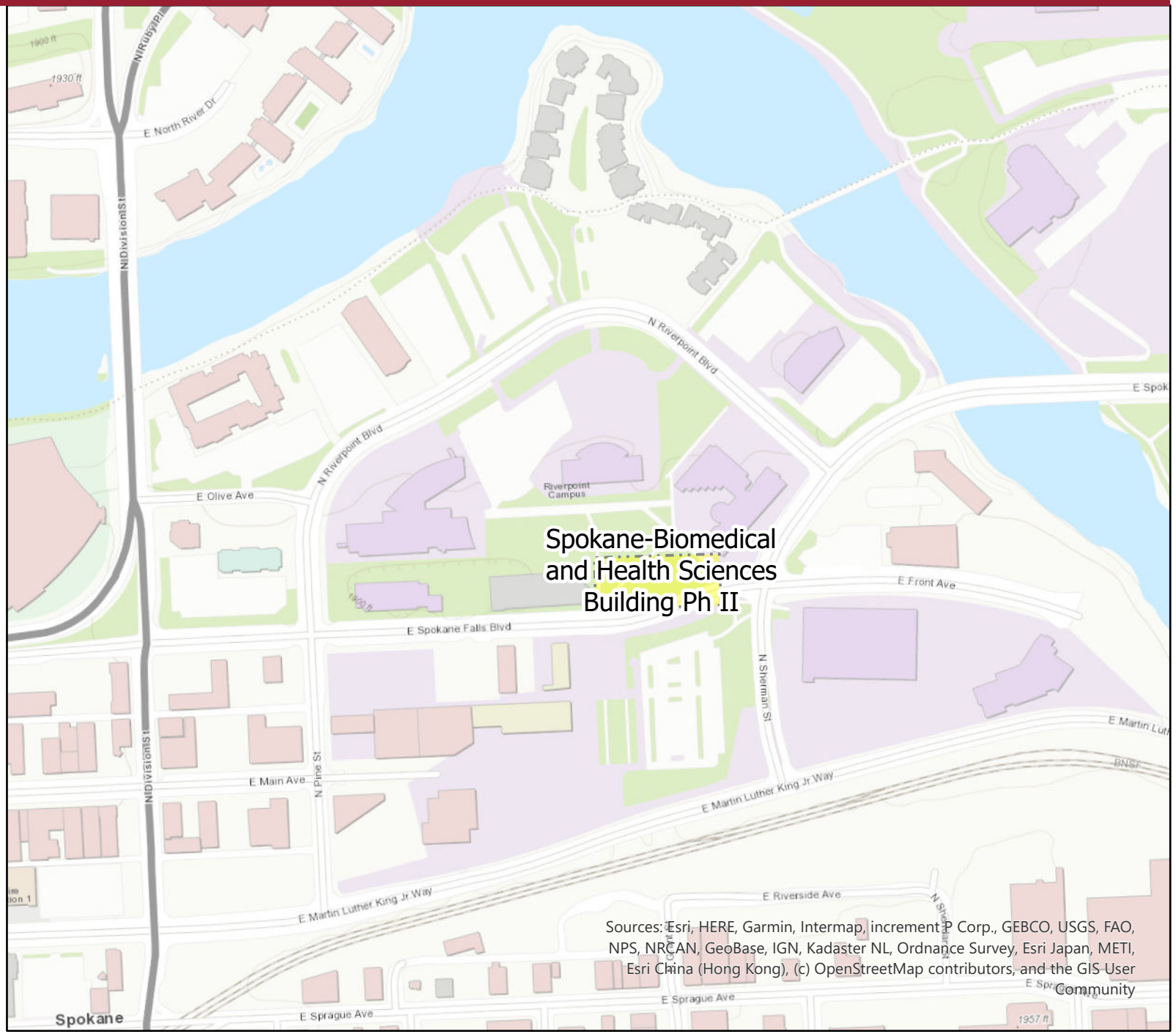
Building Systems (roofs, elevators, envelope, BAS, MEP)
$10,000,000 (Design and Construction)
(Multiple locations - not shown on map)



WSU Facility Development Plan

Spokane 2023-2025

Spokane-Biomedical and Health Sciences Building Ph II
$5,000,000 (Design)



WSU Facility Development Plan

Pullman 2025-2027

STEM Teaching and Replacement Building – VCEA
$8,000,000 (Design and Dana Hall Demolition)

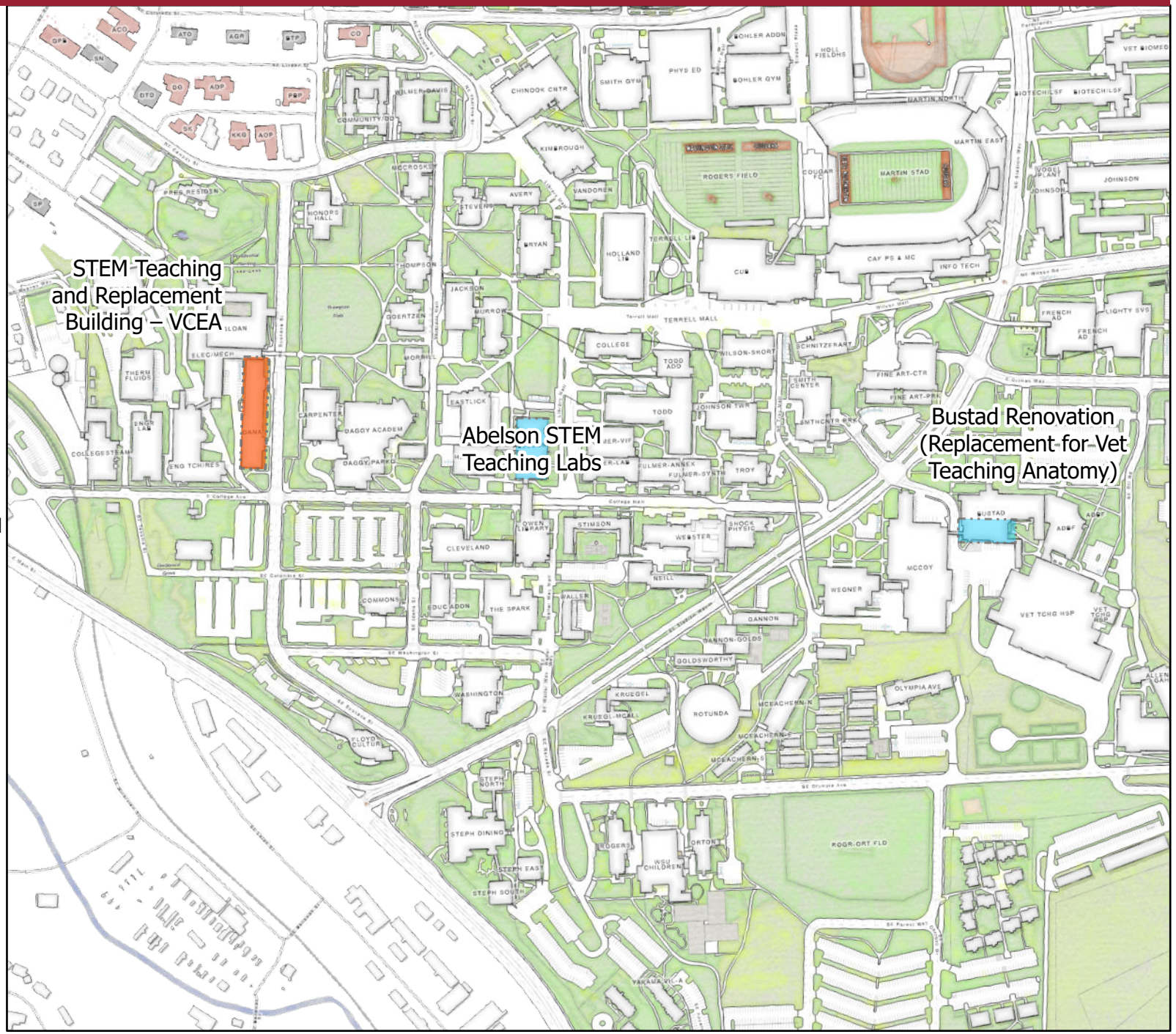
Washington State University Pullman - STEM Teaching Labs
$5,000,000 (Design and Construction)

Bustad Renovation (Replacement for Vet Teaching Anatomy)
$10,000,000 (Design and Construction)

Infrastructure (electrical, water, chilled water, steam, tunnels)
$10,000,000 (Design and Construction)
(Multiple locations - not shown on map)

Learning Renovations
$10,000,000 (Design and Construction)
(Multiple locations - not shown on map)

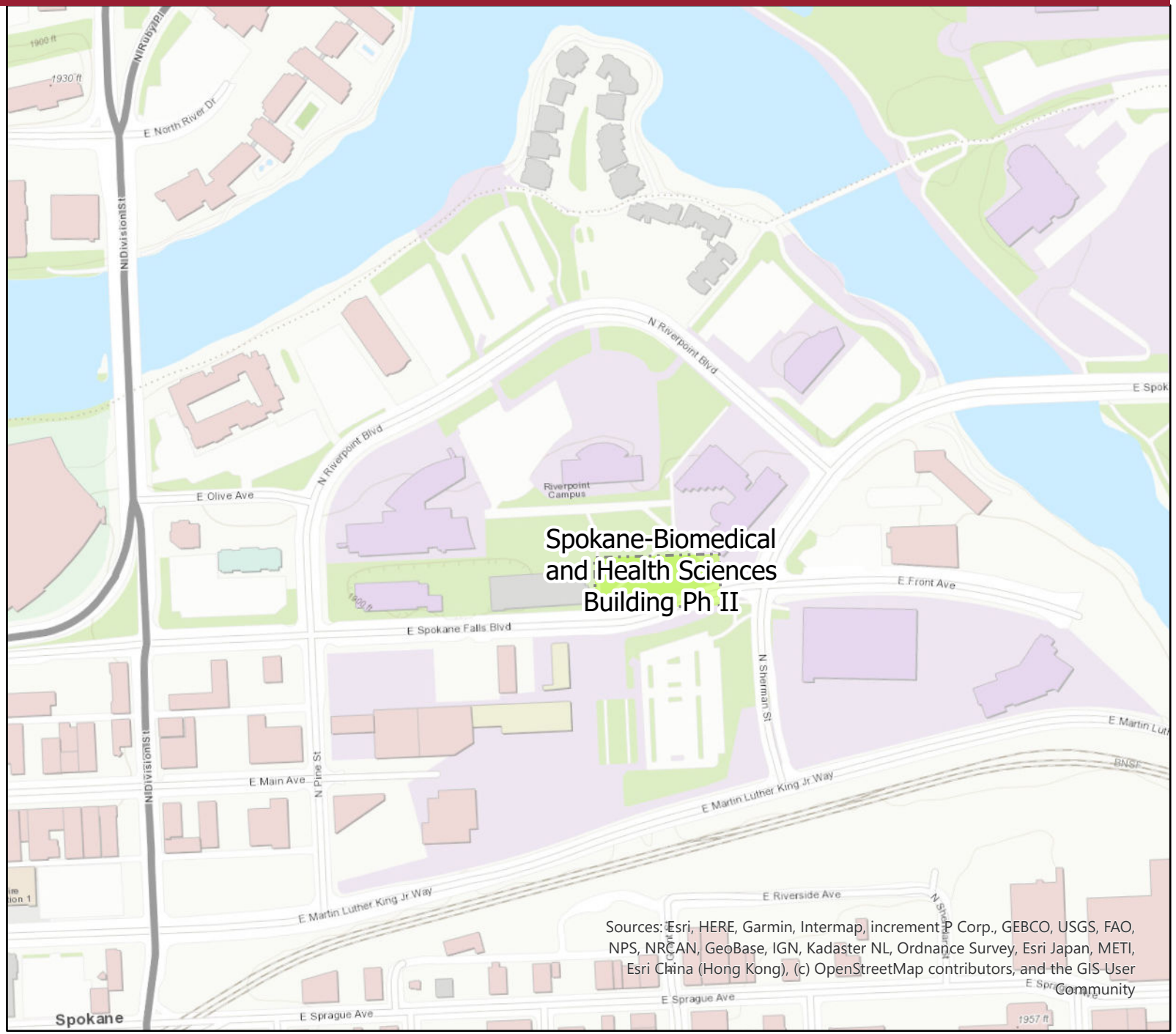
Information Technology Renovations
$5,000,000 (Design and Construction)
(Multiple locations - not shown on map)



WSU Facility Development Plan

Spokane 2025-2027

Spokane-Biomedical and Health Sciences Building Ph II
$35,000,000 (Construction Phase 1)



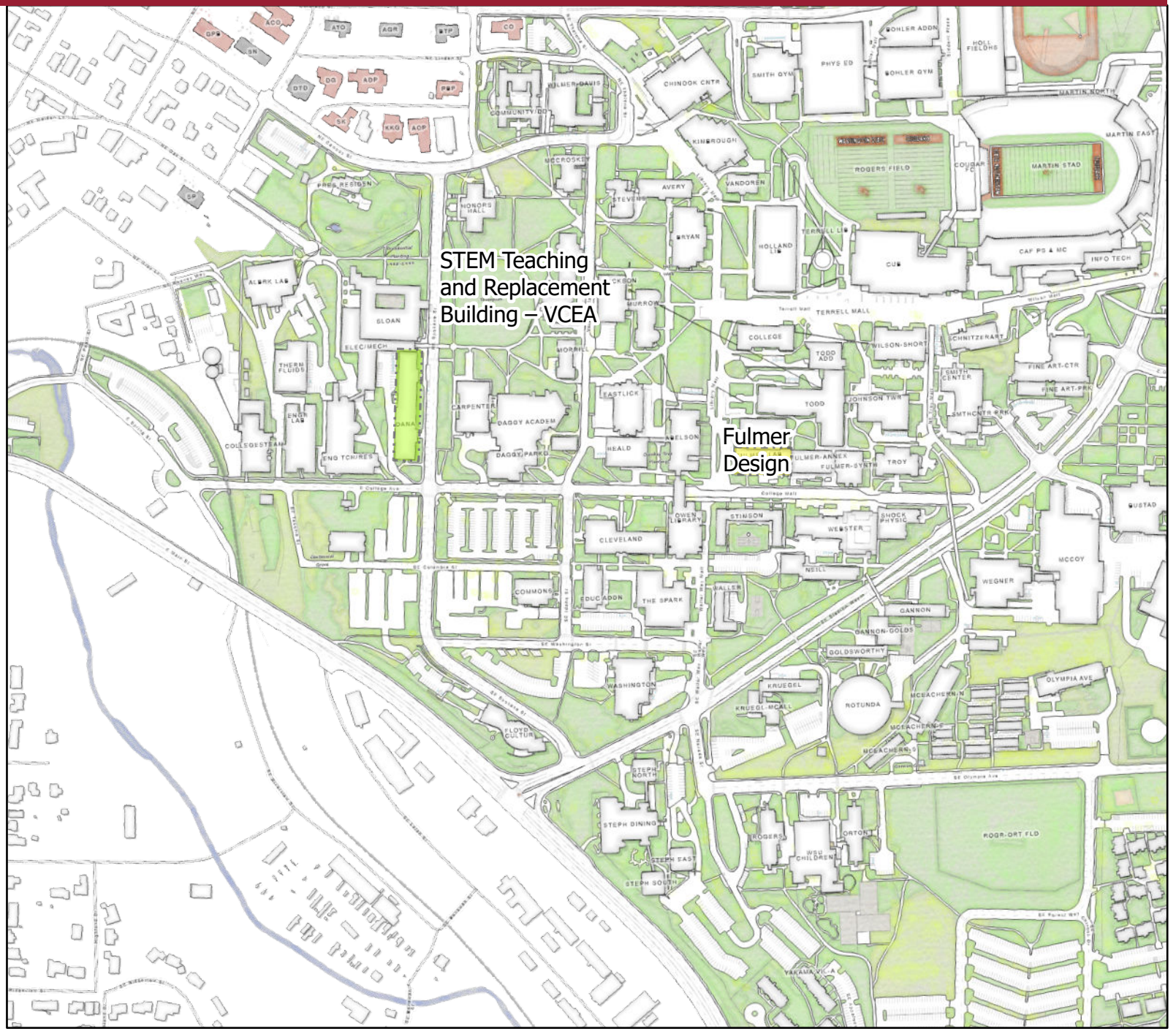
WSU Facility Development Plan

Pullman 2027-2029

STEM Teaching and Replacement Building – VCEA
$45,000,000 (Construction)

Fulmer Hall Renovation Phase 1
$3,000,000 (Design)

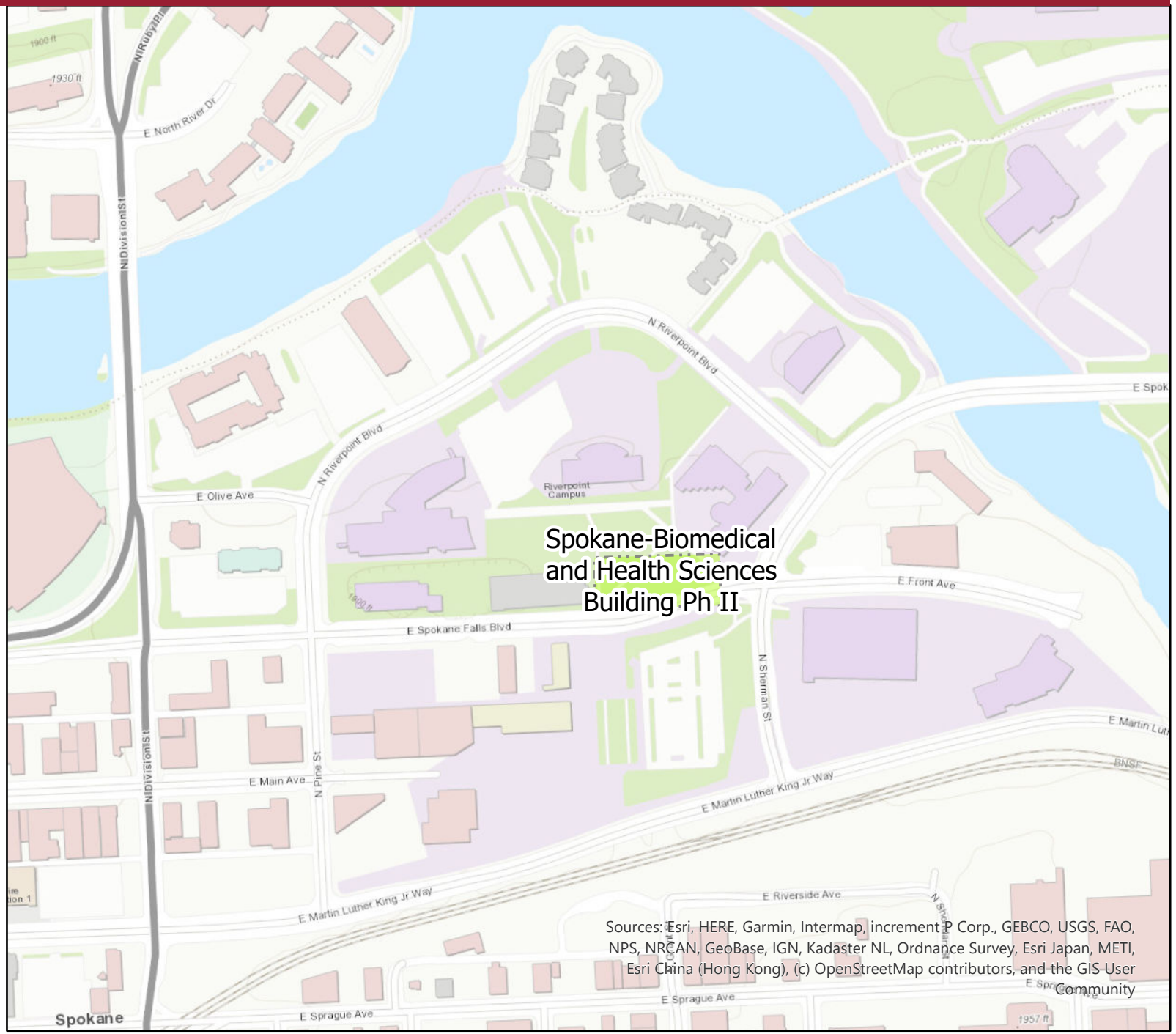
Research Renovations
$10,000,000 (Design and Construction)
(Multiple locations - not shown on map)



WSU Facility Development Plan

Spokane 2027-2029

Spokane-Biomedical and Health Sciences Building Ph II
$35,000,000 (Construction Phase 2)



WSU Facility Development Plan

Pullman 2029-2031

Fulmer Hall Renovation Phase 1
$35,000,000 (Construction)

Engineering Renovation/Replacement Ph 2 – VCEA
$8,000,000 (Design and Demolition of Daggy Hall)

McCoy Hall Demolition
$8,000,000 (Design and Demolition of McCoy Hall)

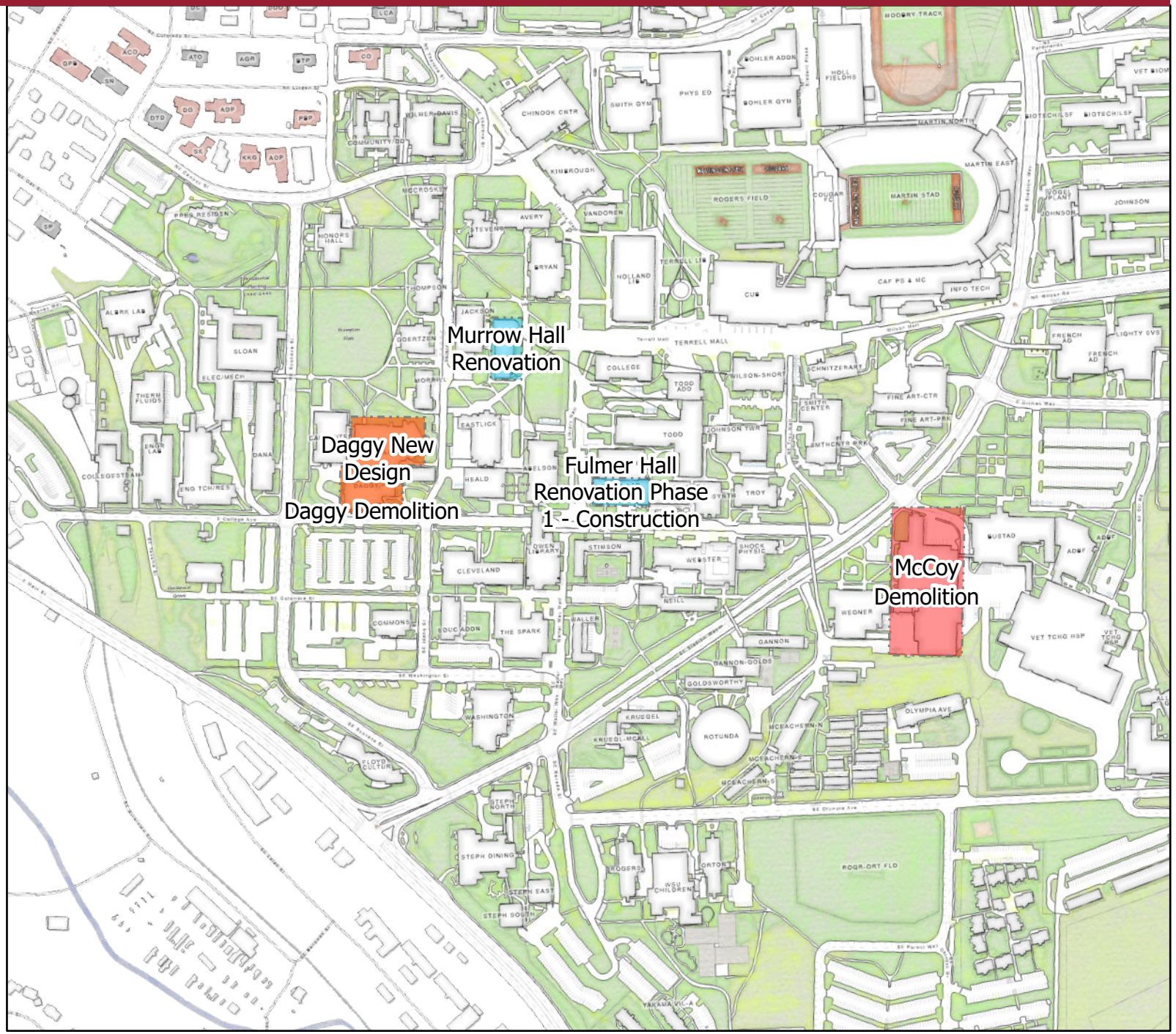
Murrow Hall Renovation
$3,000,000 (Design)

Building Systems (roofs, elevators, envelope, BAS, MEP)
$10,000,000 (Design and Construction)
(Multiple locations - not shown on map)

Infrastructure (electrical, water, chilled water, steam, tunnels)
$10,000,000 (Design and Construction)
(Multiple locations - not shown on map)

Learning Renovations
$10,000,000 (Design and Construction)
(Multiple locations - not shown on map)

Information Technology Renovations
$5,000,000 (Design and Construction)
(Multiple locations - not shown on map)



2020 PROJECT PROPOSAL CHECKLIST

2021-23 Biennium Four-year Higher Education Scoring Process

AINSTITUTION	CAMPUS LOCATION
365 - Washington State University	Pullman, WA
PROJECT TITLE	**FPMT UNIQUE FACILITY ID # (OR NA)**
Washington State University Pullman – STEM Teaching Labs	A09794
PROJECT CATEGORY	**PROJECT SUBCATEGORY**
Renovation	Standalone
PROPOSAL IS	
New or Updated Proposal (for scoring)	**Resubmitted Proposal (retain prior score)**
☐ New proposal ☐ Resubmittal to be scored (more than 2 biennia old or significantly changed)	☒ Resubmittal from 2017-19 biennium ☐ Resubmittal from 2019-21 biennium
CONTACT	**PHONE NUMBER**
Kate Kamerrer	509-335-9314

PROPOSAL CONTENT

- ☒ Project Proposal Checklist: this form; one for each proposal
- ☐ Project Proposal Form: Specific to category/subcategory (10-page limit) **(NA)**
- ☒ Appendices: templates, forms, exhibits and supporting/supplemental documentation for scoring.

INSTITUTIONAL PRIORITY

- ☒ Institutional Priority Form. Sent separately (not in this packet) to: Darrell Jennings.

Check the corresponding boxes below if the proposed project meets the minimum threshold or if the item listed is provided in the proposal submittal.

MINIMUM THRESHOLDS

- ☒ Project is not an exclusive enterprise function such as a bookstore, dormitory or contract food service.
- ☒ Project meets LEED Silver Standard requirements.
- ☒ Institution has a greenhouse gas emissions reduction policy in place in accordance with RCW 70.235.070 and vehicle emissions reduction policy in place per RCW 47.01.440 or RCW 43.160.020 as applicable.
- ☐ Design proposals: A complete predesign study was submitted to OFM by July 1, 2020.
- ☐ Growth proposals: Based on solid enrollment projections and is more cost-effectively providing enrollment access than alternatives such as university centers and distance learning.
- ☐ Renovation proposals: Project should cost between 60 – 80% of current replacement value and extend the useful life of the facility by at least 25 years.
- ☐ Acquisition proposals: Land acquisition is not related to a current facility funding request.
- ☐ Infrastructure proposals: Project is not a facility repair project.
- ☒ Stand-alone, infrastructure and acquisition proposals: is a single project requesting funds for one biennium.

2020 PROJECT PROPOSAL CHECKLIST

2021-23 Biennium Four-year Higher Education Scoring Process

REQUIRED APPENDICES

- ☒ Capital Project Report CBS 002
- ☒ Project cost estimate:
  - CBS 003 for projects between $2 million and $5 million
  - Excel C-100 for projects greater than $5 million
- ☐ Degree Totals and Targets template to indicate the number of Bachelors, High Demand and Advanced degrees expected to be awarded in 2021. (Required for Overarching Criteria scoring criteria for Major Growth, Renovation, Replacement and Research proposals).
- ☒ Availability of Space/Campus Utilization template for the campus where the project is located. (Required for all categories/subcategories except Infrastructure and Acquisition proposals).
- ☒ Assignable Square Feet template to indicate program-related space allocation. (Required for Growth, Renovation and Replacement proposals, all categories/subcategories).

OPTIONAL APPENDICES

Attach supplemental and supporting project documentation, *limit to materials directly related to and needed for the evaluation criteria*, such as:

- ☐ Degree and enrollment growth projections
- ☐ Selected excerpts from institutional plans
- ☐ Data on instructional and/or research space utilization
- ☐ Additional documentation for selected cost comparables (acquisition)
- ☐ Selected materials on facility conditions
- ☐ Selected materials on code compliance
- ☐ Tables supporting calculation of program space allocations, weighted average facility age, etc.
- ☐ Evidence of consistency of proposed research projects with state, regional, or local economic development plans
- ☐ Evidence of availability of non-state matching funds
- ☐ Selected documentation of prior facility failures, high cost maintenance, and/or system unreliability for infrastructure projects
- ☐ Documentation of professional assessment of costs for land acquisition, land cleanup, and infrastructure projects
- ☐ Selected documentation of engineering studies, site survey and recommendations, or opinion letters for infrastructure and land cleanup projects
- ☒ Other: WSU Facility Development Plan

I certify that the above checked items indicate either that the proposed project meets the minimum thresholds or the corresponding items have been included in this submittal.

Name: Kate Kamerrer Title: Exec Director – Finance, Business & Building Services

Signature: Kate Kamerrer Date: 08/14/2020

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365 - Washington State University
Capital Project Request

2021-23 Biennium

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Version: 10 2021-23 WSU Capital Budget Request

Report Number: CBS002
Date Run: 8/14/2020 10:32AM

Project Number: **30001326**
Project Title: **Washington State University Pullman - STEM Teaching Labs**

Description

Starting Fiscal Year: 2022
Project Class: Preservation
Agency Priority: 9

Project Summary

Washington State University (WSU) requests $4,900,000 in the 2021-23 capital budget for the renovation of STEM Undergraduate Teaching Labs in Eastlick Hall on the Pullman campus. This funding will support the design and construction necessary to renovate four teaching laboratories, including associated building systems and infrastructure. This project will create safe, collaborative, and technologically advanced learning spaces, which in turn, will promote active learning and enhance student success.

Project Description

Identify the problem or opportunity addressed. Why is the request a priority? This narrative should identify unserved/underserved people or communities, operating budget savings, public safety improvements or other backup necessary to understand the need for the request. For preservation projects, it is helpful to include information about the current condition of the facility or system.

Eastlick Hall was constructed in 1977 and its teaching laboratories still serve some of the university's largest and most important biological science courses, from introductory laboratory experiences for non-science majors through upper-division courses essential to students pursuing healthcare and STEM-related careers. The building systems supporting these science labs include aging air handling (HVAC) units that need to be renewed to ensure the health and safety of students and faculty. Other planned improvements to plumbing, electrical, storage and security (including card-swipe access) will extend the lifespan of laboratories, samples, and supplies.

Eastlick Hall has a current Comparable Framework Study score of 5 (Needs Improvement – Marginal Functionality). The proposed project scope is intended to provide state-of-the-art learning space, address deficiencies in the air handling and exhaust systems, and minimize energy losses associated with these aging systems.

What will the request produce or construct (i.e., predesign or design of a building, construction of additional space, etc.)? When will the project start and be completed? Identify whether the project can be phased, and if so, which phase is included in the request. Please provide detailed cost backup.

During the 2017-19 biennium, WSU made a similar request of $4,900,000 for STEM teaching laboratories and received $1,000,000. As a result of that funding, WSU was able to upgrade one of the five teaching laboratories on the first floor of Eastlick Hall along with critical building systems supporting the space. This follow-up request is intended to renovate the other four teaching laboratories, adjoining preparation rooms and remaining HVAC building systems.

Renovations will take place during summer months to minimize disrupting lab courses taught during the heavily scheduled academic year semesters. This intermediate-sized project is the second phase of the university's Facility Development Plan to systematically refurbish and modernize the Pullman campus STEM teaching labs. Funding for a standalone renovation project such as this would have a near-term impact on students' educational experience in contrast to waiting six years for a major construction project.

How would the request address the problem or opportunity identified in question 1? What would be the result of not taking action?

The proposed project scope to renovate Eastlick's first floor labs targets safety concerns for students and faculty along with teaching lab improvements necessary to meet modern pedagogical standards. In addition, this renovation will bring the building systems into compliance with current codes while maximizing energy efficiency by adding variable frequency drives to critical fan motors and pumps. Modern laboratory control strategies will be applied to maintain air quality as well as energy conservation throughout the project. Finishes, casework and furniture will be upgraded to provide maximum flexibility and compliance with current ADA standards. The teaching labs will incorporate new lab equipment and systems necessary for safe use of laboratory chemicals that are a part of the biological sciences teaching pedagogy.

The result of not taking action continues to put students and faculty in a building that does not comply with the current energy, ventilation and ADA codes. Because of the age and rigidity of the laboratory spaces, not doing the project prevents faculty and students from teaching and learning in updated science space using modern collaborative methods.

What alternatives were explored? Why was the recommended alternative chosen? Be prepared to provide detailed cost backup. If this project has an associated predesign, please summarize the alternatives the predesign considered.

This proposed project along with the previous $1,000,000 project completed in 2017-19 are both considered standalone renovations and therefore, not tied to a predesign. WSU's 10-year Facility Development Plan includes multiple standalone

Project Number: **30001326**
Project Title: **Washington State University Pullman - STEM Teaching Labs**

Description

renovation projects focused on renewing and improving learning space on the Pullman campus. This proposed STEM undergraduate teaching lab project will address the first floor in Eastlick Hall with similar future projects planned for the ground floor in Eastlick and numerous teaching labs in Abelson Hall. The primary project scope includes upgrades to interior finishes, casework, furniture, and critical building systems, but specific details and associated alternatives will be explored rigorously during the design process.

Which clientele would be impacted by the budget request? Where and how many units would be added, people or communities served, etc.

This proposed renovation project will impact nearly all undergraduate educational units on the Pullman campus as more than 2,500 undergraduate and graduate students are taught in Eastlick Hall each semester. Eastlick Hall supports multiple units and spans several colleges at WSU. The primary resident unit is the School of Biological Sciences, which enrolls the third-highest number of Average Annual Full-Time Equivalent students across the WSU system with student credit hours taught by the unit averaging almost 28,500 per year. The laboratories also provide foundational instruction for the large number of students taking University Core Requirement science classes along with those in high-demand STEM degree programs, including (but not limited to) zoology, bioengineering, natural resource sciences, nursing, pharmacy, and veterinary medicine.

Remodeling these outdated laboratories will foster small-group collaborations and use of modern audio-visual tools will diversify teaching capabilities improving instructor-student and student-student communications.

Does this project or program leverage non-state funding? If yes, how much by source? If the other funding source requires cost share, also include the minimum state (or other) share of project cost allowable and the supporting citation or documentation.

While efforts are being made to leverage other funds, non-state funds have not been identified.

Describe how this project supports the agency's strategic master plan or would improve agency performance. Reference feasibility studies, master plans, space programming and other analyses as appropriate.

WSU's Facility Development Plan is focused on identifying and prioritizing capital projects which balance continued stewardship and renewal of existing facilities and infrastructure within a framework for responsible growth. The plan recognizes the urgent need to address a large and rapidly growing deferred maintenance backlog which has been identified as a significant risk to future operations at all of the WSU campuses as they age. Additionally, the goals of this plan are consistent with the Master Plans for each of the WSU campuses which together include emphasis on open spaces, pedestrian access, community connection and campus identity, and research and/or program excellence.

The proposed STEM teaching laboratory renovations within Eastlick Hall are the first priority in a series of planned renovations that will not only improve STEM academic programs, but also remove inadequate space that is obsolete and well beyond its useful life. Once complete with this work in Eastlick Hall, the university plans to proceed with similar capital budget request for STEM teaching laboratory renovations in Abelson Hall during the 2025-27 biennium.

Does this decision package include funding for any Information Technology related costs including hardware, software (to include cloud-based services), contracts or staff? If the answer is yes, you will be prompted to attach a complete IT addendum. (See Chapter 10 of the operating budget instructions for additional requirements.)

This request does not include any Information Technology related costs.

If the project is linked to the Puget Sound Action Agenda, describe the impacts on the Action Agenda, including expenditure and FTE detail. See Chapter 12 Puget Sound Recovery) in the 2021-23 Operating Budget Instructions.

This proposed project is not linked to the Puget Sound Action Agenda.

How does this project contribute to statewide goals to reduce carbon pollution and/or improve energy efficiency? Please elaborate.

Capital projects identified in the University's Facility Development Plan contribute directly to a reduction in the deferred maintenance backlog, through either significant renovation, rehabilitation or replacement of existing facilities. In addition, the development plan's guiding principles include energy efficiency improvements, carbon reduction and water savings.

In addition to renovations within four teaching laboratories, this project will also renew obsolete building systems and HVAC equipment. This approach will allow the university to focus some funding on technology that will improve energy efficiency and reduce carbon emissions. As a result, preliminary planning associated with this project acknowledges the requirements of House Bill 1257 (Washington State Clean Energy Standards) and House Bill 2311 (Greenhouse Gas Emissions) and strives to include energy improvements and carbon reduction throughout all project planning and execution.

Is there additional information you would like decision makers to know when evaluating this request?

Renovation of teaching laboratories will also contribute to significant program growth (both current and anticipated) for the building's primary resident unit, the School of Biological Sciences, which delivers one of the highest teaching loads of all WSU

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365 - Washington State University
Capital Project Request
2021-23 Biennium

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Version: 10 2021-23 WSU Capital Budget Request

Report Number: CBS002
Date Run: 8/14/2020 10:32AM

Project Number: **30001326**
Project Title: **Washington State University Pullman - STEM Teaching Labs**

Description

academic units.
Undergraduate students at WSU, particularly in high-demand disciplines, will significantly benefit from the Eastlick teaching lab renovations. Providing safe, modern, hands-on learning spaces will also contribute to the university's economic impact for the state and the nation by developing well-qualified, workforce-ready graduates.
*Project was previously submitted and will retain score from 2017-19. Refer to project proposal checklist and supporting appendices for additional information.

Location
City: Pullman **County:** Whitman **Legislative District:** 009

Project Type
Remodel/Renovate/Modernize (Major Projects)

Growth Management impacts
WSU Pullman's physical planning policies are coordinated with many agencies and government units. The Growth Management Act and its companion Traffic Demand Management legislation and the State Environmental Policy Act, however, are applicable to WSU's physical facilities and programs. Growth Management Act (GMA)-WSU will coordinate with Counties and Municipalities throughout the State to ensure compliance with GMA. WSU will avoid construction or activities which would permanently impair "critical" areas on its campuses as they are defined in the GMA. Transportation Demand Management-A companion piece of legislation sets forth a policy for Transportation Demand Management in which the State of Washington will provide leadership. The Director of the State of Washington Department of General Administration (DGA) is required to develop a commute trip reduction plan for state agencies which are Phase I major employers WSU will conform to the plans developed by DGA. State Environmental Policy Act (SEPA)-WSU has adopted procedures set forth in the State Environmental Policy Act Handbook December 1988 and the State Environmental Policy Act Rules Chapter 197-11 Washington Administrative Code Effective April 4, 1984. Adherence to these procedures will be one of the principal means by which WSU coordinates its compliance with Growth Management requirements.

Funding

Acct Code	Account Title	Estimated Total	Expenditures Prior Biennium	Expenditures Current Biennium	2021-23 Fiscal Period Reapprops	2021-23 Fiscal Period New Approps
057-1	State Bldg Constr-State	9,900,000				4,900,000
062-1	WSU Building Account-State	1,000,000	1,000,000			
	Total	**10,900,000**	**1,000,000**	**0**	**0**	**4,900,000**

Acct Code	Account Title	Future Fiscal Periods 2023-25	2025-27	2027-29	2029-31
057-1	State Bldg Constr-State		5,000,000		
062-1	WSU Building Account-State				
	Total	**0**	**5,000,000**	**0**	**0**

Schedule and Statistics

Start Date	End Date

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365 - Washington State University
Capital Project Request
2021-23 Biennium

*

Version: 10 2021-23 WSU Capital Budget Request

Report Number: CBS002
Date Run: 8/14/2020 10:32AM

Project Number: **30001326**
Project Title: **Washington State University Pullman - STEM Teaching Labs**

Schedule and Statistics

	Start Date	End Date
Predesign		
Design	8/1/2021	5/1/2022
Construction	5/1/2022	6/1/2023

	Total
Gross Square Feet:	6,305
Usable Square Feet:	5,733
Efficiency:	90.9%
Escalated MACC Cost per Sq. Ft.:	389
Construction Type:	Science Labs (teaching)
Is this a remodel?	Yes
A/E Fee Class:	B
A/E Fee Percentage:	12.46%

Cost Summary

		Escalated Cost	% of Project
Acquisition Costs Total		**0**	**0.0%**
Consultant Services			
Pre-Schematic Design Services		0	0.0%
Construction Documents		227,092	4.6%
Extra Services		51,640	1.1%
Other Services		125,367	2.6%
Design Services Contingency		41,020	0.8%
Consultant Services Total		**445,118**	**9.1%**
Maximum Allowable Construction Cost(MACC)	**2,453,805**		
Site work		0	0.0%
Related Project Costs		0	0.0%
Facility Construction		2,453,805	50.1%
GCCM Risk Contingency		147,756	3.0%
GCCM or Design Build Costs		453,822	9.3%
Construction Contingencies		245,381	5.0%
Non Taxable Items		0	0.0%
Sales Tax		257,460	5.3%
Construction Contracts Total		**3,558,224**	**72.6%**
Equipment			
Equipment		527,700	10.8%
Non Taxable Items		0	0.0%
Sales Tax		41,161	0.8%

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Capital Project Request
2021-23 Biennium

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Version: 10 2021-23 WSU Capital Budget Request

Report Number: CBS002
Date Run: 8/14/2020 10:32AM

Project Number: **30001326**
Project Title: **Washington State University Pullman - STEM Teaching Labs**

Cost Summary

	Escalated Cost	% of Project
Equipment Total	**568,861**	**11.6%**
Art Work Total	**24,377**	**0.5%**
Other Costs Total	**40,784**	**0.8%**
Project Management Total	**262,398**	**5.4%**
Grand Total Escalated Costs	**4,899,762**	
Rounded Grand Total Escalated Costs	**4,900,000**	

Operating Impacts

No Operating Impact

Narrative

This is a lab upgrade and infrastructure project.

Capital Project Request

2021-23 Biennium

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Parameter	Entered As	Interpreted As
Biennium	2021-23	2021-23
Agency	365	365
Version	10-A	10-A
Project Classification	*	All Project Classifications
Capital Project Number	30001326	30001326
Sort Order	Project Priority	Priority
Include Page Numbers	Y	Yes
For Word or Excel	N	N
User Group	Agency Budget	Agency Budget
User Id	*	All User Ids

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365 - Washington State University
Cost Estimate Summary
2021-23 Biennium

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Cost Estimate Number: 230
Cost Estimate Title: WSU Pullman - STEM Teaching Labs
Report Number: CBS003
Date Run: 8/7/2020 9:20AM

Version: 10 2021-23 WSU Capital Budget Request
Agency Preferred: Yes
Project Number: 30001326
Project Title: Washington State University Pullman - STEM Teaching Labs
Project Phase Title:

Contact Info **Contact Name:** Kelly Cornish **Contact Number:** 509.335.9101

Statistics

Gross Sq. Ft.:	6,305
Usable Sq. Ft.:	5,733
Space Efficiency:	91%
MACC Cost per Sq. Ft.:	369
Escalated MACC Cost per Sq. Ft.:	389
Remodel?	Yes
Construction Type:	Science Labs (teaching)
A/E Fee Class:	B
A/E Fee Percentage:	12.46%

Schedule

	Start Date	End Date
Predesign:		
Design:	08-2021	05-2022
Construction:	05-2022	06-2023
Duration of Construction (Months):	13	

Cost Summary Escalated

Acquisition Costs Total		**0**
Pre-Schematic Design Services	0	
Construction Documents	227,092	
Extra Services	51,640	
Other Services	125,367	
Design Services Contingency	41,020	
Consultant Services Total		**445,118**
Site work	0	
Related Project Costs	0	
Facility Construction	2,453,805	
Construction Contingencies	245,381	
Non Taxable Items	0	
Sales Tax	257,460	
Construction Contracts Total		**3,558,224**
Maximum Allowable Construction Cost(MACC)	**2,453,805**	
Equipment	527,700	
Non Taxable Items	0	
Sales Tax	41,161	
Equipment Total		**568,861**
Art Work Total		**24,377**
Other Costs Total		**40,784**
Project Management Total		**262,398**
Grand Total Escalated Costs		**4,899,762**
Rounded Grand Total Escalated Costs		**4,900,000**

Additional Details

Alternative Public Works Project:	Yes

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365 - Washington State University
Cost Estimate Summary
2021-23 Biennium

*

Cost Estimate Number: 230
Cost Estimate Title: WSU Pullman - STEM Teaching Labs

Report Number: CBS003
Date Run: 8/7/2020 9:20AM

Version: 10 2021-23 WSU Capital Budget Request
Agency Preferred: Yes
Project Number: 30001326
Project Title: Washington State University Pullman - STEM Teaching Labs
Project Phase Title:

Contact Info **Contact Name:** Kelly Cornish **Contact Number:** 509.335.9101

Additional Details

State Construction Inflation Rate:	2.38%
Base Month and Year:	08-2020
Project Administration By:	AGY
Project Admin Impact to DES that is NOT Included in Project Total:	$0

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365 - Washington State University
Cost Estimate Detail
2021-23 Biennium

*

Cost Estimate Number: 230 **Analysis Date:** August 03, 2020
Cost Estimate Title: WSU Pullman - STEM Teaching Labs

Detail Title: WSU Pullman - STEM Teaching Labs
Project Number: 30001326
Project Title: Washington State University Pullman - STEM Teaching Labs
Project Phase Title:
Location: 3812

Contact Info **Contact Name:** Kelly Cornish **Contact Number:** 509.335.9101

Statistics

Gross Sq. Ft.:	6,305
Usable Sq. Ft.:	5,733
Rentable Sq. Ft.:	
Space Efficiency:	91%
Escalated MACC Cost per Sq. Ft.:	389
Escalated Cost per S. F. Explanation	

Construction Type:	Science Labs (teaching)
Remodel?	Yes
A/E Fee Class:	B
A/E Fee Percentage:	12.46%
Contingency Rate:	10.00%
Contingency Explanation	

Projected Life of Asset (Years):	50
Location Used for Tax Rate:	3812
Tax Rate:	7.80%
Art Requirement Applies:	Yes
Project Administration by:	AGY
Higher Education Institution?:	Yes
Alternative Public Works?:	Yes

Project Schedule

	Start Date	End Date
Predesign:		
Design:	08-2021	05-2022
Construction:	05-2022	06-2023
Duration of Construction (Months):	13	
State Construction Inflation Rate:	2.38%	
Base Month and Year:	8-2020	

Project Cost Summary

MACC:	$ 2,325,000
MACC (Escalated):	$ 2,453,805
Current Project Total:	$ 4,650,118
Rounded Current Project Total:	$ 4,650,000
Escalated Project Total:	$ 4,899,078
Rounded Escalated Project Total:	$ 4,899,000

ITEM	Base Amount	Sub Total	Escalation Factor	Escalated Cost
CONSULTANT SERVICES				
Construction Documents				
A/E Basic Design Services				219,879
SubTotal: Construction Documents				**227,092**
Extra Services				
Commissioning (Systems Check)	40,000			
Testing	10,000			
SubTotal: Extra Services		**50,000**	1.0328	**51,640**
Other Services				
Bid/Construction/Closeout				98,786
HVAC Balancing	20,000			
		118,786	1.0554	
SubTotal: Other Services				**125,367**
Design Services Contingency				
Design Services Contingency	38,867			
SubTotal: Design Services Contingency		**38,867**	1.0554	**41,020**
Total: Consultant Services		**427,532**	1.0411	**445,118**
CONSTRUCTION CONTRACTS				
Facility Construction				
C10 - Interior Construction	350,000			
C30 - Interior Finishes	270,000			
D20 - Plumbing Systems	270,000			
D40 - Fire Protection Systems	25,000			
F20 - Selective Demolition	20,000			
D30 - HVAC Systems	1,080,000			
D50 - Electrical Systems	250,000			
General Conditions	60,000			
SubTotal: Facility Construction		**2,325,000**	1.0554	**2,453,805**
GCCM Risk Contingency				
GCCM Risk Contingency	140,000			
SubTotal: GCCM Risk Contingency				**147,756**
GCCM or Design Build Costs				
GCCM Fee	130,000			
Bid General Conditions	170,000			
GCCM Preconstruction Services	50,000			
Bonds/Insurance	80,000			
SubTotal: GCCM or Design Build Costs		**430,000**	1.0554	**453,822**
Construction Contingencies				
Allowance for Change Orders	232,500			
SubTotal: Construction Contingencies		**232,500**	1.0554	**245,381**
Sales Tax		**243,945**	1.0554	**257,460**
Total: Construction Contracts		**3,371,445**	1.0554	**3,558,224**
Maximum Allowable Construction Cost (MACC)		**2,325,000**	1.0600	**2,453,805**
EQUIPMENT				

ITEM	Base Amount	Sub Total	Escalation Factor	Escalated Cost
EQUIPMENT				
E10 - Equipment	150,000			
E20 - Furnishings	350,000			
SubTotal:		**500,000**	1.0554	**527,700**
Sales Tax		**39,000**	1.0554	**41,161**
Total: Equipment		**539,000**	1.0554	**568,861**
ART WORK				
Higher Ed Artwork	23,721			
Total: Art Work		**24,377**	1.0000	**24,377**
OTHER COSTS				
Hazardous Material Remediation/Removal	6,000			
Facilities Services On-Site Supervision	15,140			
Facilities Services Interior Design	18,000			
Total: Other Costs		**39,140**	1.0420	**40,784**
PROJECT MANAGEMENT				
Agency Project Management	165,120			
Facilities Services PM	83,504			
Total: Project Management		**248,624**	1.0554	**262,398**

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Cost Estimate Summary and Detail

2021-23 Biennium

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Cost Estimate Number: 230
Cost Estimate Title: WSU Pullman - STEM Teaching Labs

Report Number: CBS003
Date Run: 8/7/2020 9:20AM

Parameter	Entered As	Interpreted As
Associated or Unassociated	Associated	Associated
Biennium	2021-23	2021-23
Agency	365	365
Version	10-A	10-A
Project Classification	*	All Project Classifications
Capital Project Number	30001326	30001326
Cost Estimate Number	230	230
Sort Order	Cost Estimate Title	Title
Include Page Numbers	Y	Yes
For Word or Excel	N	N
User Group	Agency Budget	Agency Budget
User Id	*	All User Ids

Availability of Space/Campus Utilization Template

2020 Four-year Higher Education Scoring Process

Required for all categories except Infrastructure and Acquisition.

Project Name:	Washington State University Pullman - STEM Teaching Labs
Institution:	Washington State University
Campus Location:	Pullman

Identify the average number of hours per week each (a) classroom seat and (b) classroom lab is expected to be utilized in Fall 2018 on the porposed porject's campus. Please fill in the green shaded cells for the **campus** where the project is located.

(a) General University Classroom Utilization		**(b) General University Lab Utilization**	
Fall 2019 Weekly Contact Hours	222,087	Fall 2019 Weekly Contact Hours	37,921
Multiply by % FTE Increase Budgeted	0.00%	Multiply by % FTE Increase Budgeted	0.00%
Expected Fall 2020 Contact Hours	222,087	Expected Fall 2020 Contact Hours	37,921
Expected Fall 2020 Classroom Seats	10,577	Expected Fall 2020 Class Lab Seats	2,592
Expected Hours per Week Utilization	**21.0**	**Expected Hours per Week Utilization**	**14.6**
HECB GUC Utilization Standard	22.0	HECB GUL Utilization Standard	16.0
Differrence in Utilization Standard	-5%	Differrence in Utilization Standard	-9%

If the campus does not meet the 22 hours per classroom seat and/or the 16 hours per class lab HECB utilization standards, describe any institutional plans for achieving that level of utilization.

WSU's Facility Development plan is focused on identifying and prioritizing capital projects which balance continued stewardship and renewal of existing facilities and infrastructure within a framework for responsible growth. While recent completed projects have aided progress towards reaching state targets for classroom and laboratory utilization, additional improvements are still required. This proposed project plans to transform existing underutilized space into modern classrooms and laboratories that will exceed HECB utilization standards. This guiding principle for all WSU projects will contribute to achieving the state's target space utilization goals.

Appendix B - Space Allocation

Program Related Space Allocation Template

Assignable Square Feet

Required for all Growth, Renovation and Replacement proposals.

Institution: Washington State University

Campus location: Pullman

Project name: STEM Teaching Labs

Input the assignable square feet for the proposed project under the applicable space types below:

Type of Space	Points	Assignable Square Feet	Percentage of total	Score [Points x Percentage]
Instructional space (classroom, laboratories)	10	5,733	100.00	10.00
Research space	2		0.00	0.00
Office space	4		0.00	0.00
Library and study collaborative space	10		0.00	0.00
Other non-residential space	8		0.00	0.00
Support and physical plant space	6		0.00	0.00
Total		**5,733**	**100.0**	**10.00**

Asset Detail Report

By Asset Name

Region: Pullman - WSU Main Campus **Asset:** EASTLICK HALL
Campus: Pullman Campus - Assessed Buildings **Asset Number:** 0082A

Assets are ordered by Asset Name **Currency: USD**

Statistics

FCI Cost:	15,025,572	**FCI:**	0.65
RI Cost:	16,904,252	**RI:**	0.73
Total Requirements Cost:	16,904,253		
Current Replacement Value:	23,157,984	**Date of most Recent Assessment:**	Oct 20, 2014

Type	Building		
Area	123,241 SF		
Use	ACADEMIC INSTRUCTION	**Construction Type**	
Floors	6	**Historical Category**	
Address 1	300 VETERANS WAY	**City**	PULLMAN
Address 2	-	**State/Province/Region**	UNITED STATES OF AMERICA
Year Constructed	1977	**Zip/Postal Code**	99164
Year Renovated	-	**Architect**	-
Ownership	Client Owned	**Commission Date**	-
		Decommission Date	-

Photo

EASTLICK HALL

Asset Description

General Description:

Eastlick Hall, also known as Building 82A, is located on the Washington State University campus in Pullman, WA at 300 Veteran's Way immediately adjacent and physically connected to Heald Hall on the south.

Asset Detail Report

By Asset Name

The structure is an 110,438 GSF, five-story structure with two basement levels and a penthouse. Portions of the Ground Floor project under paved patio areas above. According to Washington State University information the building was constructed in 1977.

The building contains offices, classrooms, and laboratories used primarily by the biological science program. The research lab spaces include a Vivarium Suite and a Biosafety Level 3 (BSL-3) Lab Suite, the latter of which not currently in use. The site slopes from northeast to southwest; the First Floor patio on the east is created by retaining walls, and the larger patio on the west, at the same floor level, is raised above the street elevation.

Generally, the survey included the portions of the site within ten feet of a building?s perimeter such as walks, fencing, retaining walls, loading dock pavement, etc. Corresponding deficiencies and corrections are then assigned to the building.

Per the Washington State Building Code, Chapter 51-50 WAC, Chapter 3, Section 304, this building is classified as Occupancy Group B Business. Based on field observations the building's Construction Type per the Washington State Building Code, Chapter 51-50 WAC, Chapter 6, Table 602, appears to meet the requirements of Type II-B, Noncombustible.

Requirements

Requirement Name	Renewal	Prime System	Category	Priority	Action Date	Estimated Cost
ACT System - Standard Renewal	Yes	C3030 - Ceiling Finishes	Interior Finishes	3- Due within 5 Years of Inspection	Oct 20, 2020	570,542
Accessible Ramp - NE Corner - Concrete Deteriorated and Handrail Maintenance	No	B1014 - Ramps	Accessibility	2- Due within 2 Years of Inspection	Oct 20, 2016	1,408
Air Balancing - B-56 Area	No	D30 - HVAC	Reliability	1- Due within 1 Year of Inspection	Oct 20, 2015	4,443
Aluminum Windows Renewal	Yes	B2020 - Exterior Windows	Lifecycle	1- Due within 1 Year of Inspection	Oct 20, 2014	278,080
Bio Fans Renewal	Yes	D3042 - Exhaust Ventilation Systems	Lifecycle	1- Due within 1 Year of Inspection	Oct 20, 2014	57,897
Branch Wiring Renewal	Yes	D5021 - Branch Wiring Devices	Lifecycle	3- Due within 5 Years of Inspection	Oct 20, 2019	563,829

Asset Detail Report

By Asset Name

Requirement Name	Renewal	Prime System	Category	Priority	Action Date	Estimated Cost
Brick Cavity Walls - CMU Backup Renewal	Yes	B2010 - Exterior Walls	Lifecycle	3- Due within 5 Years of Inspection	Oct 20, 2019	194,860
Brick Tile Renewal	Yes	G2031 - Paving and Surfacing	Lifecycle	1- Due within 1 Year of Inspection	Oct 20, 2014	5,579
Building Wireless Upgrade	No	D50393 - LAN Network - Wireless	Technological Improvements	2- Due within 2 Years of Inspection	Aug 25, 2018	260,464
CMU Walls - Settlement Cracks	No	C1010 - Partitions	Reliability	2- Due within 2 Years of Inspection	Oct 20, 2016	3,612
Carpeting - Tile Renewal	Yes	C3020 - Floor Finishes	Interior Finishes	3- Due within 5 Years of Inspection	Oct 20, 2020	10,690
Central AHU - SF 1 Renewal	Yes	D3040 - Distribution Systems	Lifecycle	3- Due within 5 Years of Inspection	Oct 20, 2020	311,884
Central AHU - SF 2 Renewal	Yes	D3040 - Distribution Systems	Lifecycle	3- Due within 5 Years of Inspection	Oct 20, 2020	312,611
Central AHU - SF 4 Renewal	Yes	D3040 - Distribution Systems	Lifecycle	3- Due within 5 Years of Inspection	Oct 20, 2020	314,294
Central AHU - SF 5 Renewal	Yes	D3040 - Distribution Systems	Lifecycle	3- Due within 5 Years of Inspection	Oct 20, 2020	313,887
Central AHU - SF 6 Renewal	Yes	D3040 - Distribution Systems	Lifecycle	1- Due within 1 Year of Inspection	Oct 20, 2014	316,201
Central AHU - SF 7 Renewal	Yes	D3040 -	Lifecycle	3- Due	Oct 20,	55,308

Asset Detail Report

By Asset Name

Requirement Name	Renewal	Prime System	Category	Priority	Action Date	Estimated Cost
		Distribution Systems		within 5 Years of Inspection	2021	
Ceramic Tile Renewal	Yes	C3020 - Floor Finishes	Interior Finishes	1- Due within 1 Year of Inspection	Oct 20, 2014	32,563
Chilled Water Distribution System Renewal	Yes	D3040 - Distribution Systems	Lifecycle	1- Due within 1 Year of Inspection	Oct 20, 2014	293,984
Cold Rooms Renewal	Yes	D30 - HVAC	Lifecycle	1- Due within 1 Year of Inspection	Oct 20, 2014	254,546
Concrete - Painted Renewal	Yes	C3020 - Floor Finishes	Interior Finishes	1- Due within 1 Year of Inspection	Oct 20, 2014	3,644
Concrete Overhangs - Sagging	No	B10 - Superstructure	Reliability	1- Due within 1 Year of Inspection	Oct 20, 2015	12,845
Concrete Stair - M51N and G63 - Handrails Non-Compliant	No	C20 - Stairs	Building Code	4- Not Time Based		1,119
Cooling Tower - Galvanized Renewal	Yes	D3030 - Cooling Generating Systems	Lifecycle	1- Due within 1 Year of Inspection	Oct 20, 2014	210,738
Curtain Wall System - Standard Renewal	Yes	B2020 - Exterior Windows	Lifecycle	3- Due within 5 Years of Inspection	Oct 20, 2017	129,038
Custodial/Utility Sinks Renewal	Yes	D2010 - Plumbing Fixtures	Lifecycle	1- Due within 1 Year of Inspection	Oct 20, 2014	17,668
DDC/Pneumatic System - Hybrid Renewal	Yes	D3060 - Controls and Instrumentation	Lifecycle	3- Due within 5 Years of Inspection	Oct 20, 2024	683,321

Asset Detail Report

By Asset Name

Requirement Name	Renewal	Prime System	Category	Priority	Action Date	Estimated Cost
Deionized Water System Renewal	Yes	D2020 - Domestic Water Distribution	Lifecycle	1- Due within 1 Year of Inspection	Oct 20, 2014	55,975
Distribution Equipment, Panelboards, and Feeders - 4000A 208Y/120V Renewal	Yes	D5012 - Low Tension Service and Dist.	Lifecycle	3- Due within 5 Years of Inspection	Oct 20, 2020	981,131
Door Assembly - 3 x 7 HM Renewal	Yes	B2030 - Exterior Doors	Lifecycle	1- Due within 1 Year of Inspection	Oct 20, 2014	21,788
Door Assembly - 3 x 7 Storefront Renewal	Yes	B2030 - Exterior Doors	Lifecycle	1- Due within 1 Year of Inspection	Oct 20, 2014	20,889
Door Assembly - 6 x 7 HM Renewal	Yes	B2030 - Exterior Doors	Lifecycle	1- Due within 1 Year of Inspection	Oct 20, 2014	16,749
Door Assembly - 6 x 7 Storefront Renewal	Yes	B2030 - Exterior Doors	Lifecycle	1- Due within 1 Year of Inspection	Oct 20, 2014	20,944
Dust Collector Renewal	Yes	D3093 - Dust and Fume Collectors	Lifecycle	3- Due within 5 Years of Inspection	Oct 20, 2025	7,151
Egress Stairs - Non-Compliant Handrails	No	C20 - Stairs	Building Code	4- Not Time Based		31,315
Emergency Electrical Service - 150A 208Y/120V + Distribution Renewal	Yes	D5012 - Low Tension Service and Dist.	Lifecycle	3- Due within 5 Years of Inspection	Oct 20, 2019	20,031
Emergency Eyewash and Shower Units Renewal	Yes	D2010 - Plumbing Fixtures	Lifecycle	1- Due within 1 Year of Inspection	Oct 20, 2014	52,061
Epoxy Flooring Renewal	Yes	C3020 - Floor Finishes	Lifecycle	2- Due within 2 Years of	Oct 20, 2016	15,507

Asset Detail Report

By Asset Name

Requirement Name	Renewal	Prime System	Category	Priority	Action Date	Estimated Cost
				Inspection		
Epoxy Flooring Renewal	Yes	C3020 - Floor Finishes	Lifecycle	2- Due within 2 Years of Inspection	Oct 20, 2016	87,910
Exhaust System - Fume Hoods Renewal	Yes	D3040 - Distribution Systems	Lifecycle	3- Due within 5 Years of Inspection	Oct 20, 2019	495,792
Exhaust System - General Building Renewal	Yes	D3040 - Distribution Systems	Lifecycle	3- Due within 5 Years of Inspection	Oct 20, 2020	153,754
Exit Signs Renewal	Yes	D5092 - Emergency Light and Power Systems	Lifecycle	2- Due within 2 Years of Inspection	Oct 20, 2016	82,032
Exterior Plaster Soffits - Damaged and Need Paint	No	B20 - Exterior Enclosure	Reliability	2- Due within 2 Years of Inspection	Oct 20, 2016	12,202
Exterior Ramp - Dock Area - Non-Compliant Rails	No	B1014 - Ramps	Building Code	4- Not Time Based		5,134
Fire Alarm System Renewal	Yes	D5037 - Fire Alarm Systems	Lifecycle	2- Due within 2 Years of Inspection	Oct 20, 2016	282,193
Fire Separation - Missing	No	B20 - Exterior Enclosure	Life Safety	1- Due within 1 Year of Inspection	Oct 20, 2015	84,800
Fixed Casework - Institutional - High End Renewal	Yes	E - Equipment and Furnishings	Lifecycle	3- Due within 5 Years of Inspection	Oct 20, 2019	28,784
GWB Ceiling - G51V - Damaged	No	C3030 - Ceiling Finishes	Reliability	2- Due within 2 Years of Inspection	Oct 20, 2016	1,171
GWB Taped and Finished Renewal	Yes	C3030 - Ceiling Finishes	Lifecycle	3- Due within 5	Oct 20, 2019	115,670

Asset Detail Report

By Asset Name

Requirement Name	Renewal	Prime System	Category	Priority	Action Date	Estimated Cost
				Years of Inspection		
HEPA Filter Room Renewal	Yes	D3040 - Distribution Systems	Lifecycle	1- Due within 1 Year of Inspection	Oct 20, 2014	19,554
Interior Stairs and Ramps - Heald Connector - Non-Compliant Rails	No	B1014 - Ramps	Building Code	4- Not Time Based		7,116
Investigate Cross Contamination Threat	No	D3040 - Distribution Systems	Life Safety	1- Due within 1 Year of Inspection	Oct 20, 2015	4,147
LAN System Renewal	Yes	D5039 - Local Area Networks	Lifecycle	3- Due within 5 Years of Inspection	Oct 20, 2019	332,310
Lab Air Compressor Renewal	Yes	D2090 - Other Plumbing Systems	Lifecycle	1- Due within 1 Year of Inspection	Oct 20, 2014	52,316
Lab Vacuum Pump Renewal	Yes	D2090 - Other Plumbing Systems	Lifecycle	2- Due within 2 Years of Inspection	Oct 20, 2016	140,198
Laboratory Casework - College Renewal	Yes	E - Equipment and Furnishings	Lifecycle	3- Due within 5 Years of Inspection	Oct 20, 2019	2,474,745
Laboratory Sinks Renewal	Yes	D2010 - Plumbing Fixtures	Lifecycle	1- Due within 1 Year of Inspection	Oct 20, 2014	383,884
Main Electrical Service - 4000A 208Y/120V Renewal	Yes	D5012 - Low Tension Service and Dist.	Lifecycle	3- Due within 5 Years of Inspection	Oct 20, 2020	425,470
Metal Ceiling System Renewal	Yes	C3030 - Ceiling Finishes	Interior Finishes	3- Due within 5 Years of Inspection	Oct 20, 2019	9,650
Mopped Membrane with	Yes	B30 - Roofing	Lifecycle	1- Due	Oct 20,	47,486

Asset Detail Report

By Asset Name

Requirement Name	Renewal	Prime System	Category	Priority	Action Date	Estimated Cost
Concrete Slab Renewal				within 1 Year of Inspection	2014	
Mopped Membrane with Pavers Renewal	Yes	B30 - Roofing	Lifecycle	1- Due within 1 Year of Inspection	Oct 20, 2014	244,255
Natural Gas Supply for Bldg Renewal	Yes	D2090 - Other Plumbing Systems	Lifecycle	3- Due within 5 Years of Inspection	Oct 20, 2017	63,287
Overhead Rolling Doors - Electric Operation Renewal	Yes	B2030 - Exterior Doors	Lifecycle	1- Due within 1 Year of Inspection	Oct 20, 2014	12,779
Paint 4 Ground Floor Classrooms,	No	C3010 - Wall Finishes	Reliability	2- Due within 2 Years of Inspection	Jun 14, 2018	24,833
Paint Masonry/Epoxy Finish - Economy Renewal	Yes	C3010 - Wall Finishes	Interior Finishes	3- Due within 5 Years of Inspection	Oct 20, 2020	61,875
Painted Finish - Average (1 Coat Prime - 2 Coats Finish) Renewal	Yes	C3010 - Wall Finishes	Interior Finishes	3- Due within 5 Years of Inspection	Oct 20, 2020	66,023
Painted Plaster Renewal	Yes	C3030 - Ceiling Finishes	Interior Finishes	3- Due within 5 Years of Inspection	Oct 20, 2019	11,533
Pedestrian Pavement - Concrete Renewal	Yes	G2031 - Paving and Surfacing	Lifecycle	3- Due within 5 Years of Inspection	Oct 20, 2020	49,598
Perimeter Heat System - Hydronic Fin Tube Renewal	Yes	D3040 - Distribution Systems	Lifecycle	1- Due within 1 Year of Inspection	Oct 20, 2014	183,799
Perimeter Heat System - Hydronic Fin Tube Renewal	Yes	D3040 - Distribution	Lifecycle	1- Due within 1	Oct 20, 2014	203,079

Asset Detail Report

By Asset Name

Requirement Name	Renewal	Prime System	Category	Priority	Action Date	Estimated Cost
		Systems		Year of Inspection		
REPAIR FLOORS, WALLS, AND DOORS IN BASEMENT VIVARIUM	No	C30 - Interior Finishes	Lifecycle	2- Due within 2 Years of Inspection	Sep 29, 2018	180,603
REPLACE CONTROL VALVES IN BASEMENT	No	D3060 - Controls and Instrumentation	Lifecycle	2- Due within 2 Years of Inspection	Jun 24, 2018	135,452
Restroom Accessories - Average Renewal	Yes	C1030 - Fittings	Lifecycle	3- Due within 5 Years of Inspection	Oct 20, 2020	147,802
Restroom Fixtures Renewal	Yes	D2010 - Plumbing Fixtures	Lifecycle	3- Due within 5 Years of Inspection	Oct 20, 2025	424,457
Return Fans (with heat recovery). Renewal	Yes	D3040 - Distribution Systems	Lifecycle	1- Due within 1 Year of Inspection	Oct 20, 2014	96,286
Roof Drainage - Gravity Renewal	Yes	D2040 - Rain Water Drainage	Lifecycle	1- Due within 1 Year of Inspection	Oct 20, 2014	302,465
Roof Hatch and Ladder Renewal	Yes	B3022 - Roof Hatches	Lifecycle	3- Due within 5 Years of Inspection	Oct 20, 2017	6,728
Rubber Treads - Stairs Renewal	Yes	C3020 - Floor Finishes	Interior Finishes	3- Due within 5 Years of Inspection	Oct 20, 2019	12,615
Signage - Non-Compliant	No	C1035 - Identifying Devices	Accessibility	2- Due within 2 Years of Inspection	Oct 20, 2016	21,749
Steam Piping and Condensate Return Renewal	Yes	D3040 - Distribution Systems	Lifecycle	3- Due within 5 Years of	Oct 20, 2025	323,233

Asset Detail Report

By Asset Name

Requirement Name	Renewal	Prime System	Category	Priority	Action Date	Estimated Cost
				Inspection		
Steel Ladders - Non-Compliant	No	B3022 - Roof Hatches	Building Code	4- Not Time Based		2,137
Sump Pump - Pedestal - 21 GPM Renewal	Yes	D20 - Plumbing	Lifecycle	1- Due within 1 Year of Inspection	Oct 20, 2014	2,933
Telephone System Renewal	Yes	D5033 - Telephone Systems	Technological Improvements	3- Due within 5 Years of Inspection	Oct 20, 2020	512,091
Test Gas/Air and Vacuum Distribution Renewal	Yes	D2090 - Other Plumbing Systems	Lifecycle	3- Due within 5 Years of Inspection	Oct 20, 2020	404,892
Toilet Partitions - Average Renewal	Yes	C1030 - Fittings	Lifecycle	3- Due within 5 Years of Inspection	Oct 20, 2017	173,826
Unit Heaters - Steam Renewal	Yes	D3050 - Terminal and Package Units	Lifecycle	3- Due within 5 Years of Inspection	Oct 20, 2021	38,702
VCT - Average Renewal	Yes	C3020 - Floor Finishes	Interior Finishes	3- Due within 5 Years of Inspection	Oct 20, 2019	280,172
Water Coolers - Wall-Mounted Renewal	Yes	D2010 - Plumbing Fixtures	Lifecycle	1- Due within 1 Year of Inspection	Oct 20, 2015	28,846
Water Dist Complete Renewal	Yes	D2020 - Domestic Water Distribution	Lifecycle	1- Due within 1 Year of Inspection	Oct 20, 2015	450,863
Water Heater - Steam Semi-Instantaneous Renewal	Yes	D2020 - Domestic Water Distribution	Lifecycle	1- Due within 1 Year of Inspection	Oct 20, 2014	138,026
Water Well - Average Renewal	Yes	D2023 - Domestic Water Supply	Lifecycle	1- Due within 1	Oct 20, 2014	6,366

Asset Detail Report

By Asset Name

Requirement Name	Renewal	Prime System	Category	Priority	Action Date	Estimated Cost
		Equipment		Year of Inspection		
Wet Sprinkler System - Ordinary Hazard Renewal	Yes	D40 - Fire Protection	Lifecycle	1- Due within 1 Year of Inspection	Oct 20, 2014	588,034
Total						**16,904,253**

WSU Facility Development Plan

Appendix D - Facility Development Plan

WSU Facilities Services | Geographic Information System

Pullman 2021-2023

Johnson Hall Demolition
$8,000,000 (Design and Construction)

ARS Plant Biosciences Building
$105,000,000 (Federal Funding)

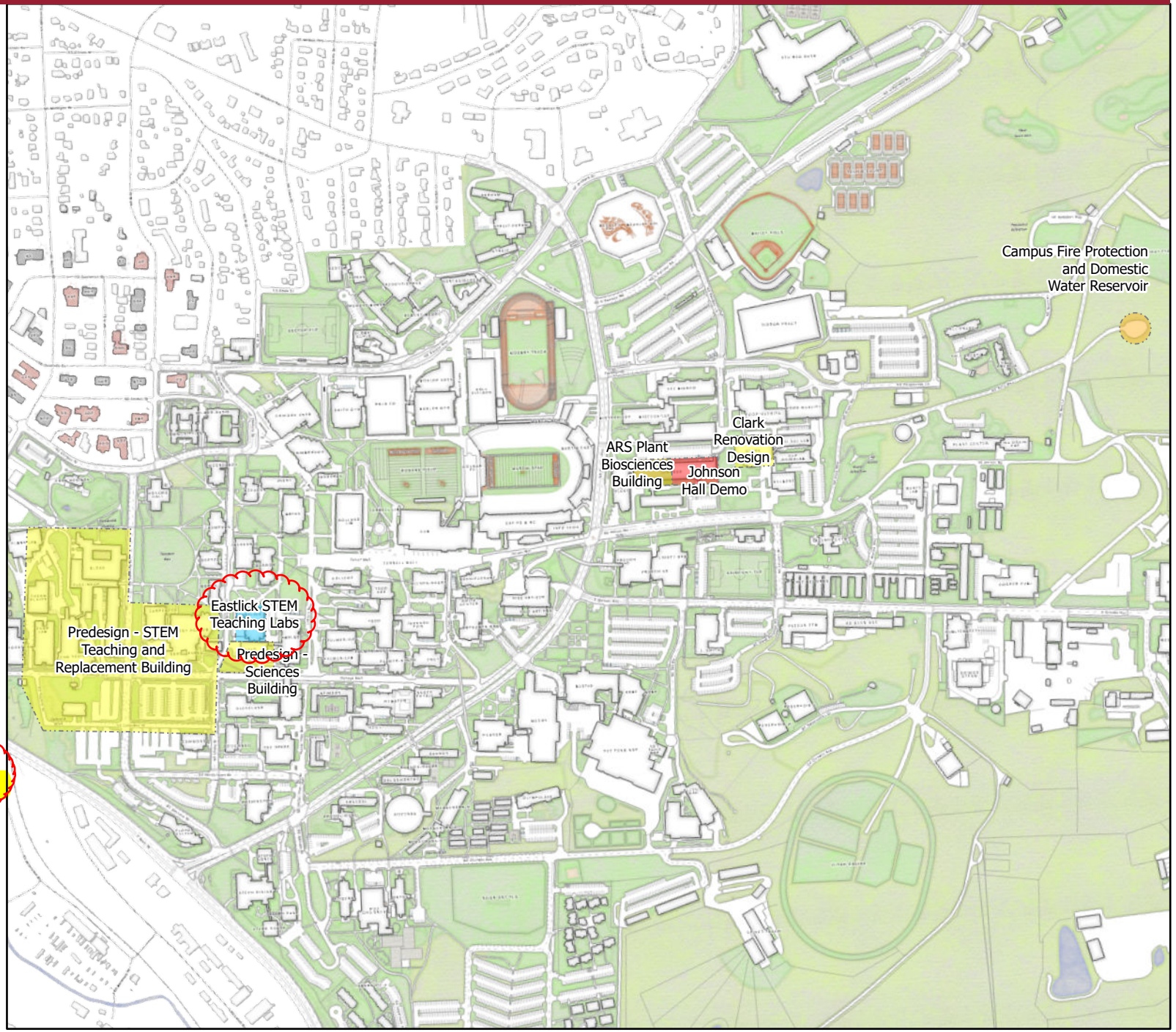
Campus Fire Protection and Domestic Water Reservoir
$8,000,000 (Design and Construction)

Pullman Sciences Building
$500,000 (Predesign)

STEM Teaching and Replacement Building – VCEA
$500,000 (Predesign)

STEM Teaching Labs
$4,900,000 (Design and Construction)

Clark Hall Research Lab Renovation
$4,900,000 (Design and Construction)



WSU Facility Development Plan

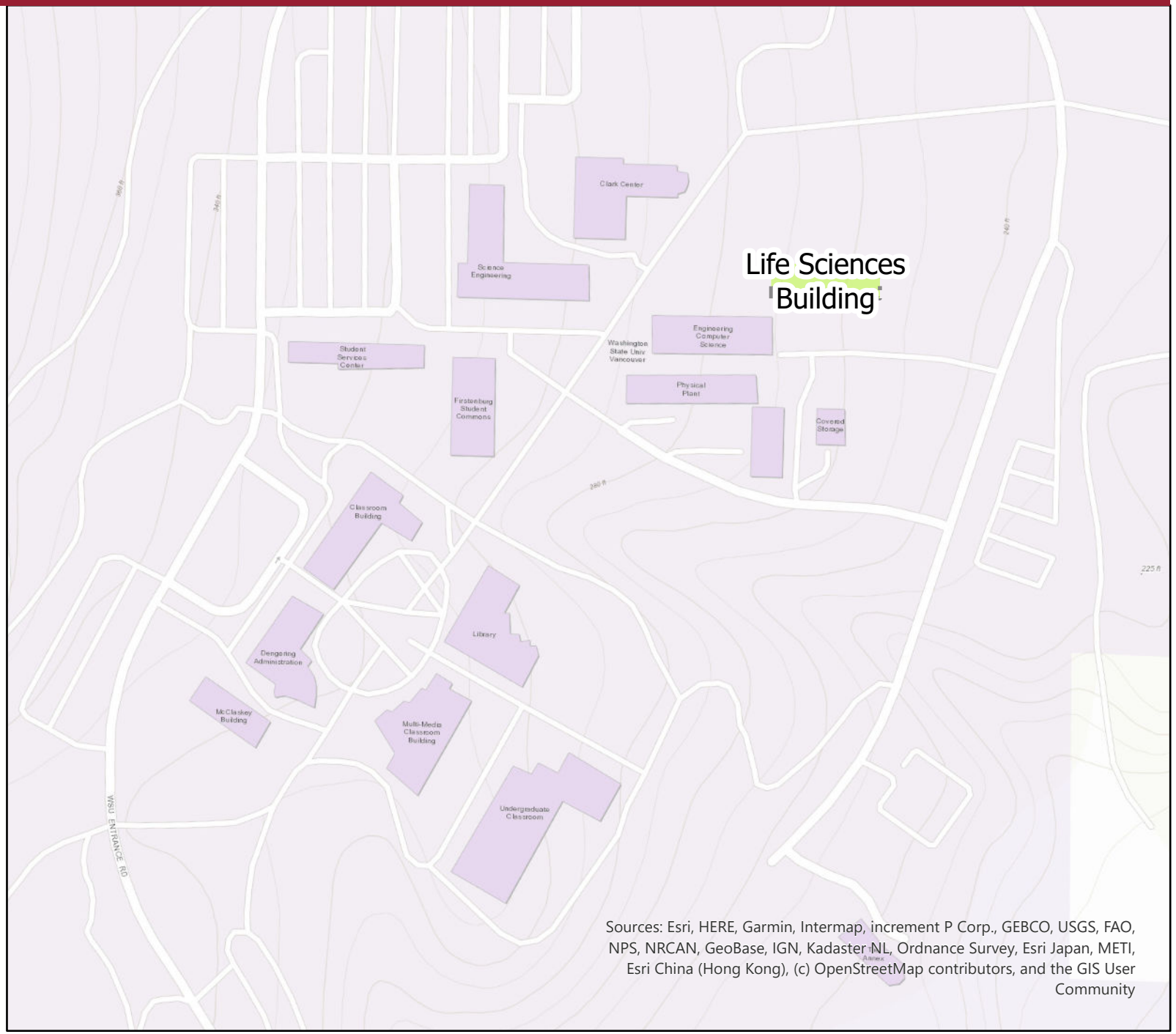
Spokane 2021-2023

Spokane Phase One Building Renovation
$15,000,000 (Design and Construction)

WSU Facility Development Plan

Vancouver 2021-2023

Vancouver Life Sciences Building
$52,600,000 (Construction)



WSU Facility Development Plan

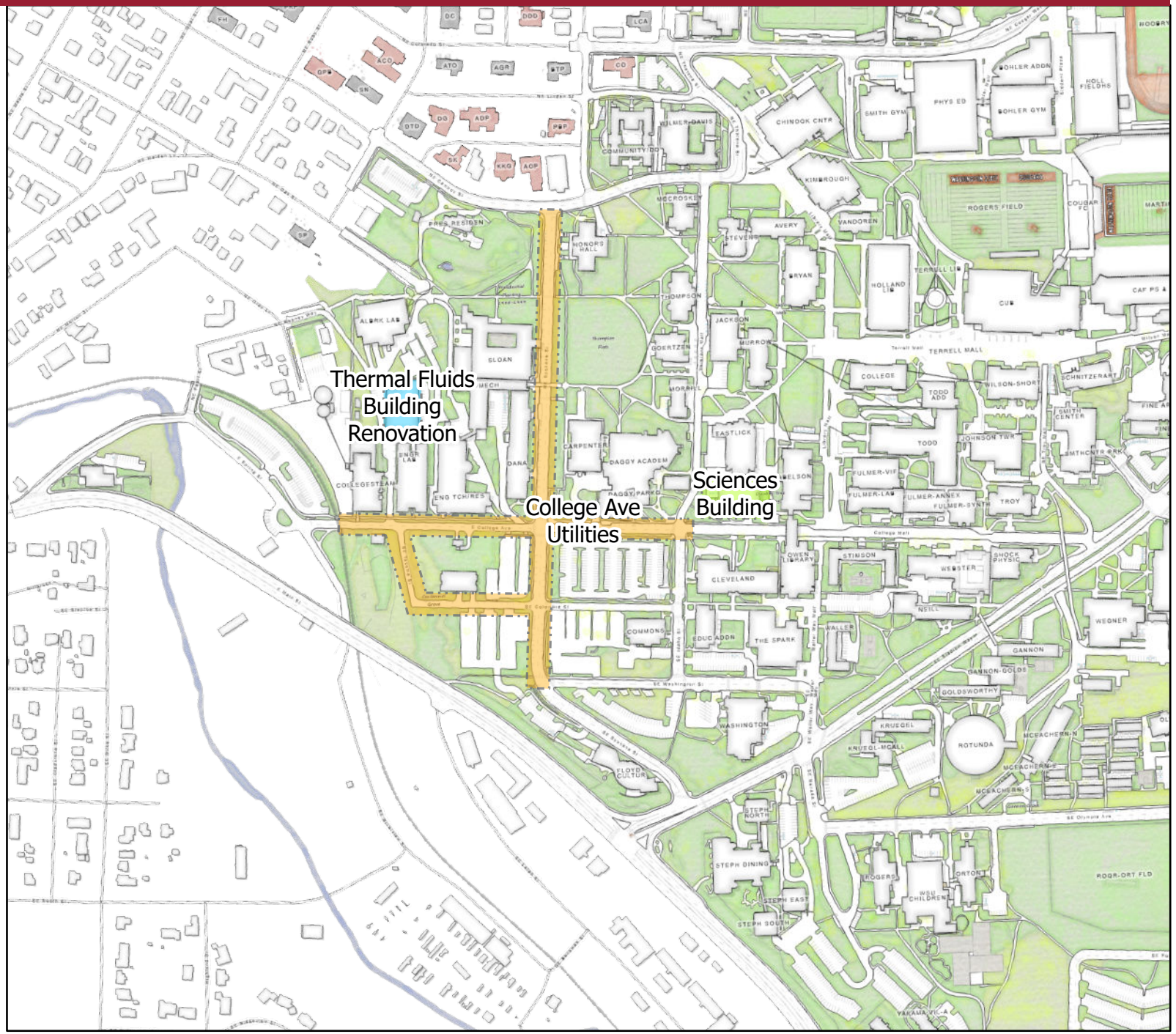
Pullman 2023-2025

Pullman Sciences Building
$53,000,000 (Design, Heald Hall Demolition and Construction)

College Avenue Utility Upgrades
$10,000,000 (Design and Construction)

Thermal Fluids Building Renovation
$10,000,000 (Design and Construction)

Building Systems (roofs, elevators, envelope, BAS, MEP)
$10,000,000 (Design and Construction)
(Multiple locations - not shown on map)

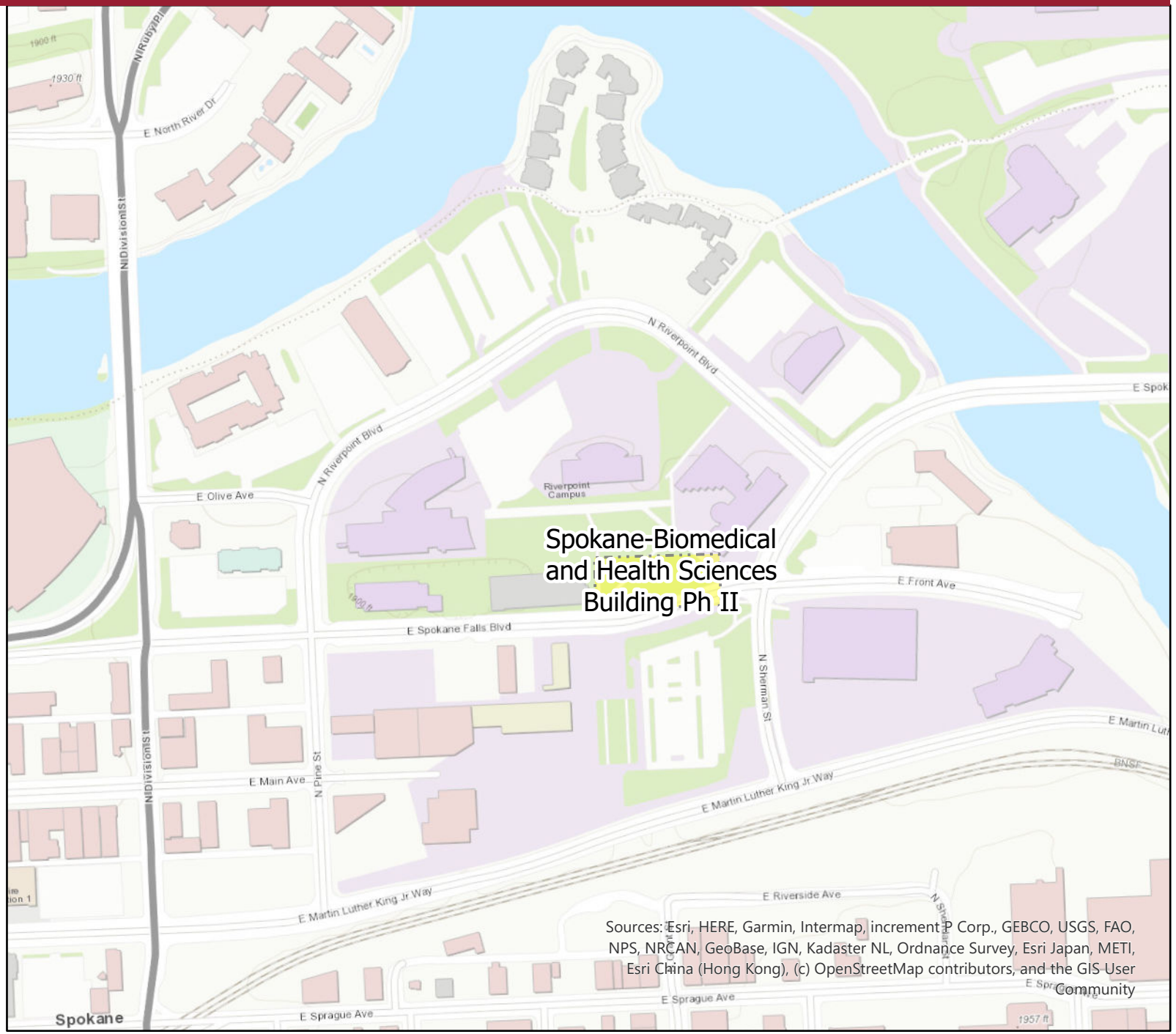


WSU Facility Development Plan

WSU Facilities Services | Geographic Information System

Spokane 2023-2025

Spokane-Biomedical and Health Sciences Building Ph II
$5,000,000 (Design)



WSU Facility Development Plan

Pullman 2025-2027

STEM Teaching and Replacement Building – VCEA
$8,000,000 (Design and Dana Hall Demolition)

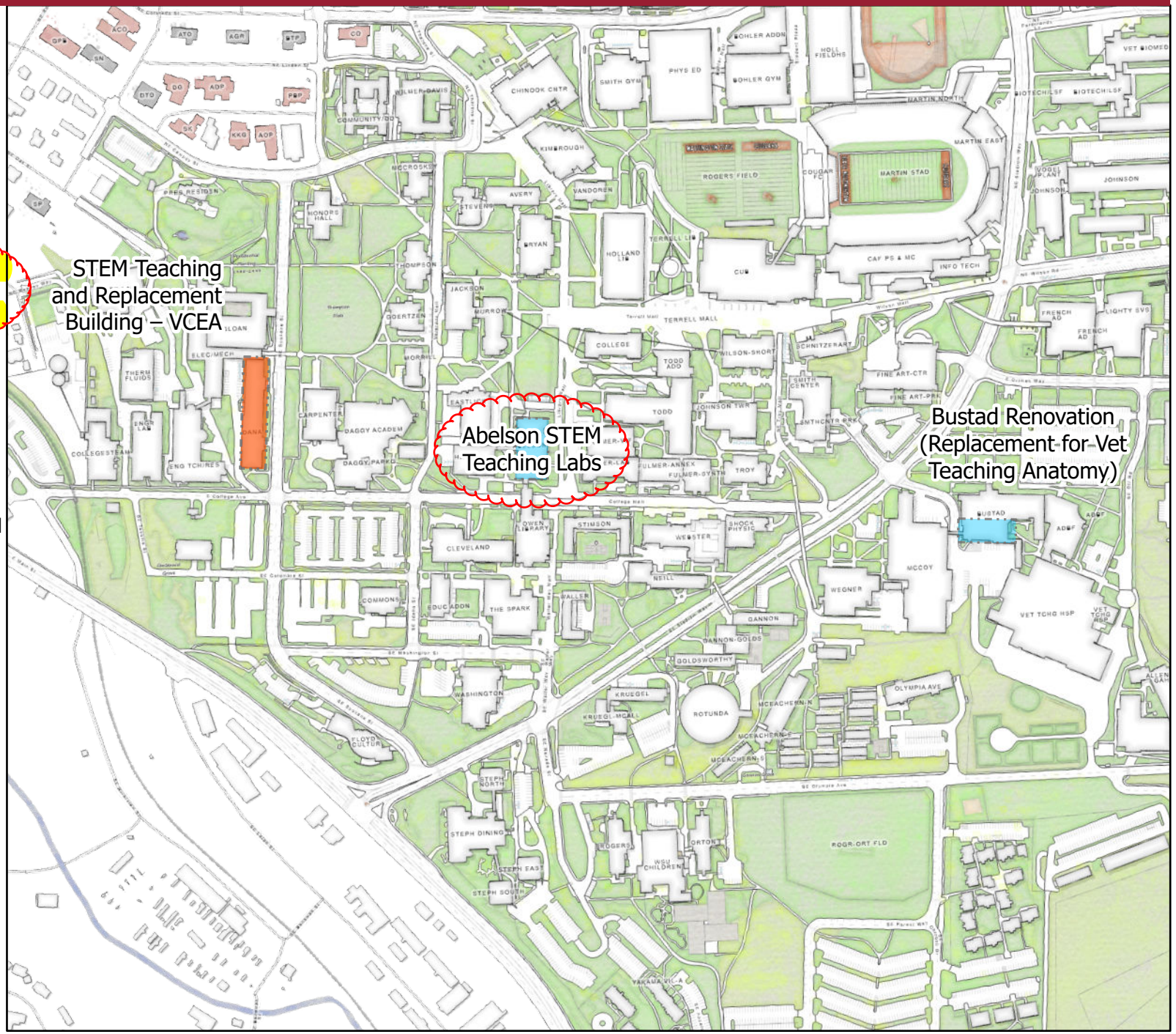
Washington State University Pullman - STEM Teaching Labs
$5,000,000 (Design and Construction)

Bustad Renovation (Replacement for Vet Teaching Anatomy)
$10,000,000 (Design and Construction)

Infrastructure (electrical, water, chilled water, steam, tunnels)
$10,000,000 (Design and Construction)
(Multiple locations - not shown on map)

Learning Renovations
$10,000,000 (Design and Construction)
(Multiple locations - not shown on map)

Information Technology Renovations
$5,000,000 (Design and Construction)
(Multiple locations - not shown on map)

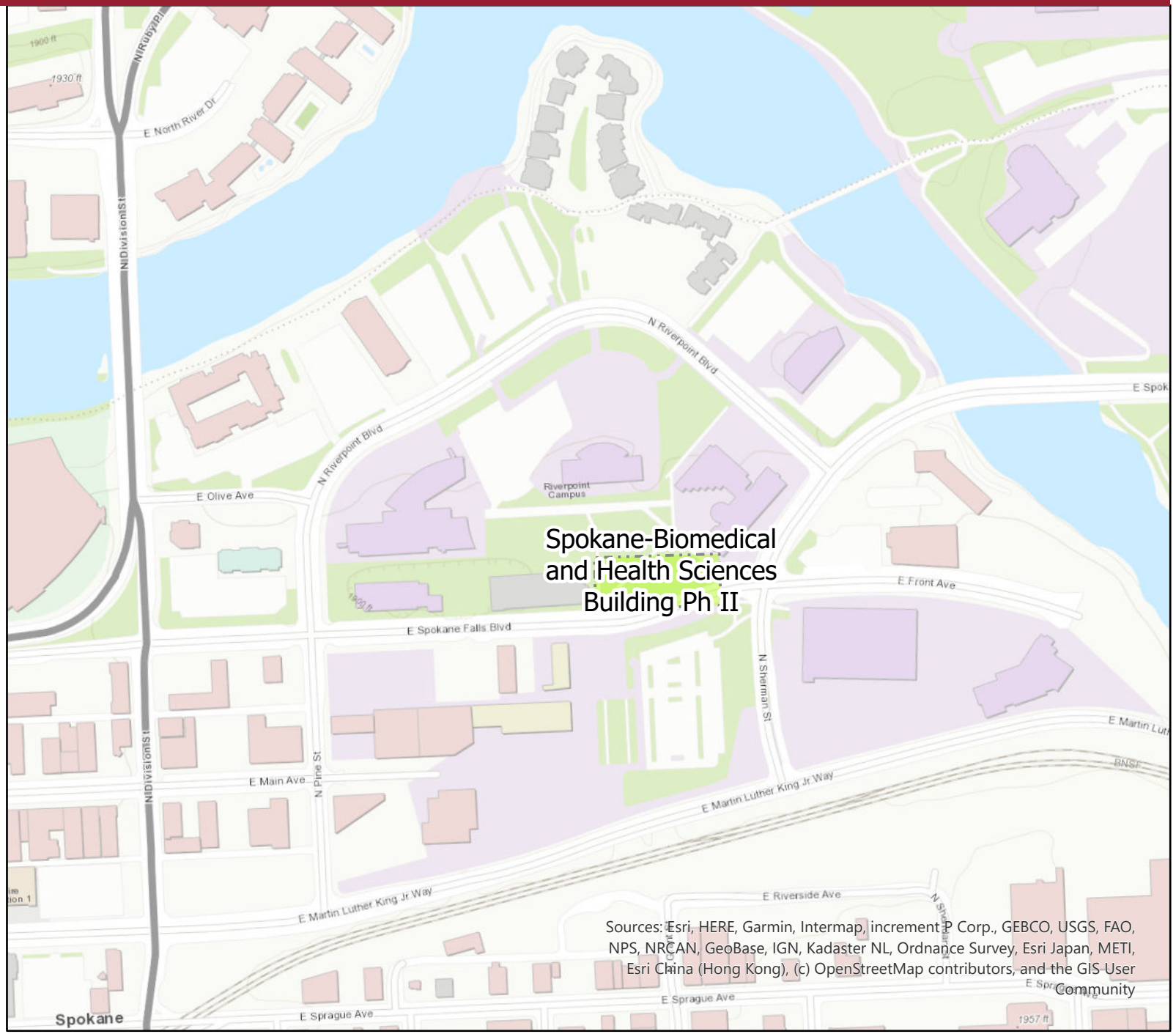


WSU Facility Development Plan

WSU Facilities Services | Geographic Information System

Spokane 2025-2027

Spokane-Biomedical and Health Sciences Building Ph II
$35,000,000 (Construction Phase 1)



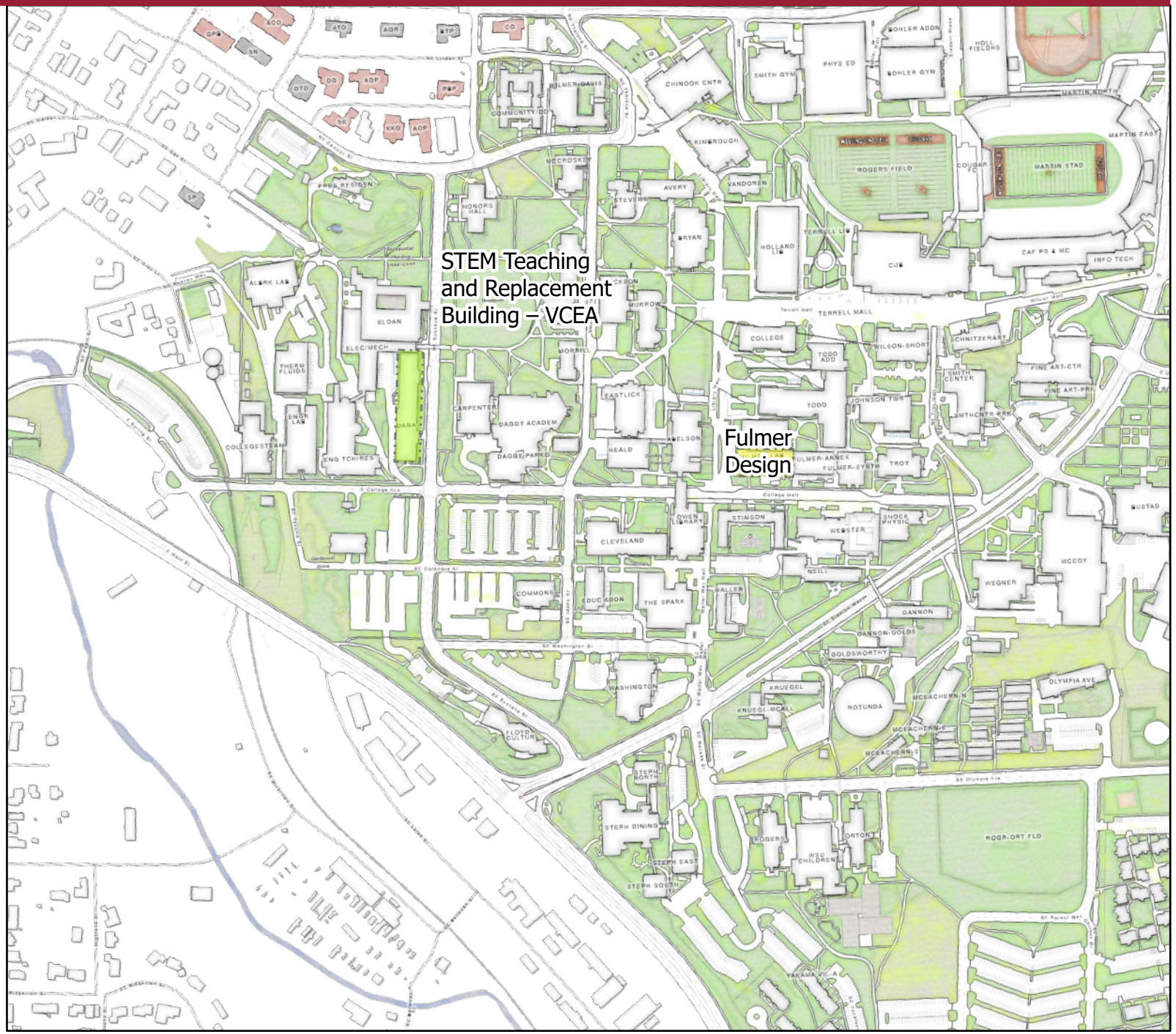
WSU Facility Development Plan

Pullman 2027-2029

STEM Teaching and Replacement Building – VCEA
$45,000,000 (Construction)

Fulmer Hall Renovation Phase 1
$3,000,000 (Design)

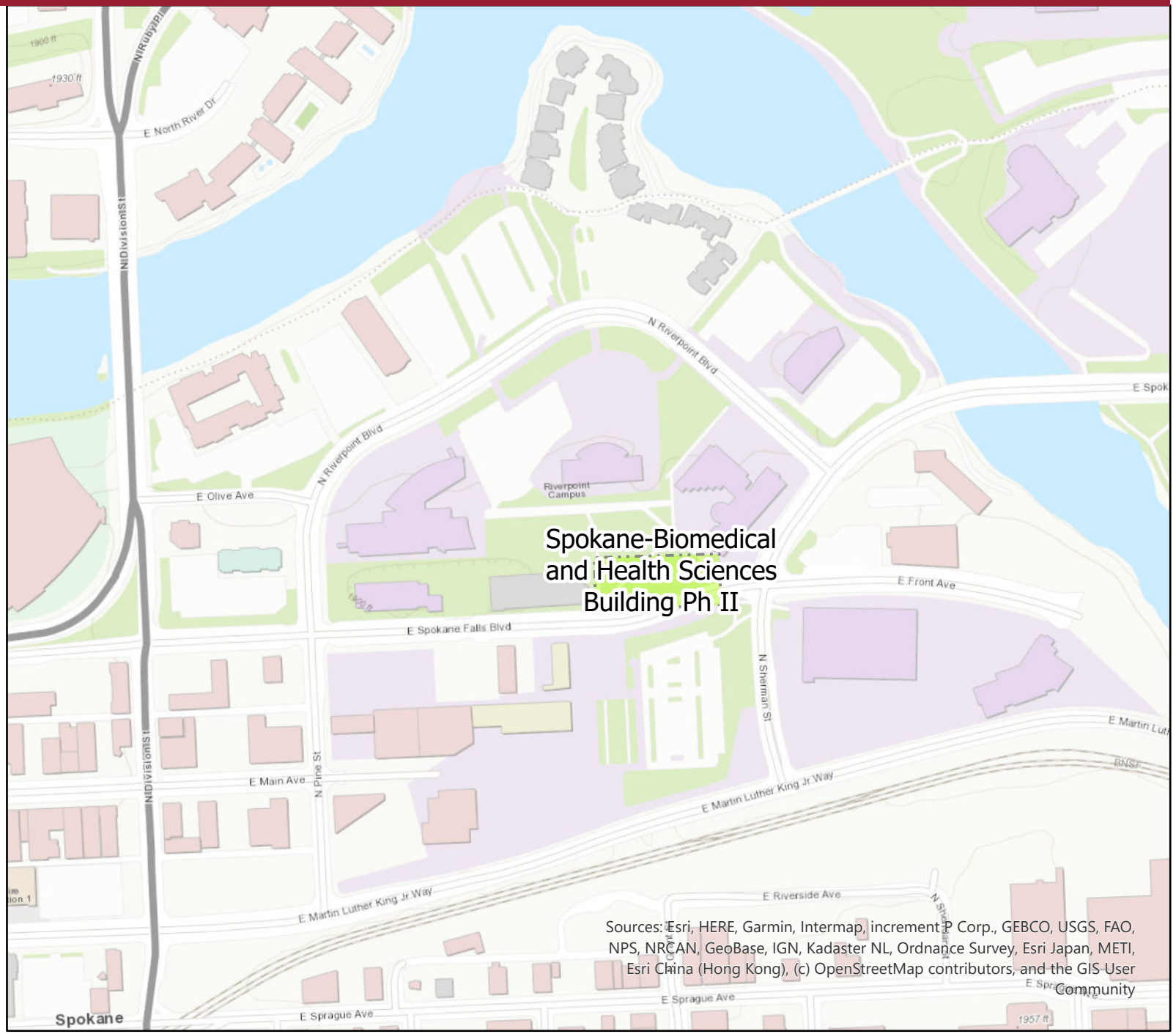
Research Renovations
$10,000,000 (Design and Construction)
(Multiple locations - not shown on map)



WSU Facility Development Plan

Spokane 2027-2029

Spokane-Biomedical and Health Sciences Building Ph II
$35,000,000 (Construction Phase 2)



WSU Facility Development Plan

WSU Facilities Services | Geographic Information System

Pullman 2029-2031

Fulmer Hall Renovation Phase 1
$35,000,000 (Construction)

Engineering Renovation/Replacement Ph 2 – VCEA
$8,000,000 (Design and Demolition of Daggy Hall)

McCoy Hall Demolition
$8,000,000 (Design and Demolition of McCoy Hall)

Murrow Hall Renovation
$3,000,000 (Design)

Building Systems (roofs, elevators, envelope, BAS, MEP)
$10,000,000 (Design and Construction)
(Multiple locations - not shown on map)

Infrastructure (electrical, water, chilled water, steam, tunnels)
$10,000,000 (Design and Construction)
(Multiple locations - not shown on map)

Learning Renovations
$10,000,000 (Design and Construction)
(Multiple locations - not shown on map)

Information Technology Renovations
$5,000,000 (Design and Construction)
(Multiple locations - not shown on map)