



***FISCAL YEAR 2024
SUPPLEMENTAL CAPITAL
BUDGET REQUEST
September 13, 2023***



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Projects

Project Number and Title	Index Number
40000523 SW: Security Electronics Renewal & Adaptation	1
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40000430 CBPS: CRCC Replace Leviton Site Lighting Controls	9



STATE OF WASHINGTON
DEPARTMENT OF CORRECTIONS
P.O. Box 41100 • Olympia, Washington 98504-1100

September 13, 2023

David Schumacher, Director
Office of Financial Management
Post Office Box 43113
Olympia, WA 98504-3113

Dear Mr. Schumacher:

It is my pleasure to submit the Department of Corrections' (DOC) fiscal year 2024 Supplemental Capital Budget Request. The department is committed to operating a safe and humane corrections system for both incarcerated individuals and staff. Our capital budget request addresses:

- Life safety failures, including fire panels, lighting, security controls and perimeter fencing;
- Enhanced funding for current initiatives; and
- Improved intake for reception at Washington Correction Center.

This request supports the Governor's Results Washington goals of Healthy and Safe Communities, Sustainable Energy and Clean Environments, and Efficient, Effective and Accountable Government. It also reflects the Results DOC Outcome Measure of Safe and Humane Systems and the operating process measure of Ensuring Safe Environments, while maintaining our vision of "Working Together for Safer Communities."

The DOC is committed to improving public safety and working together for safer communities for the citizens of the state of Washington, while working within the constraints of the current economic challenges.

If you have any questions regarding this submittal, please contact Eric Johnson, Capital Budget Manager at (360) 349-6799 or via email at erjohnson@doc1.wa.gov.

Sincerely,

Cheryl Strange
Secretary, Department of Corrections

cc: Nona Snell, Budget Director, OFM
Seth Nickerson, Capital Budget Assistant, OFM
Dawn Eychaner, Fiscal Analyst, House Capital Budget Committee
Barb Serrano, Office of the Governor, Senior Policy Advisor
Shani Bauer, Fiscal Analyst, Senate Ways and Means Committee
Sean Murphy, Deputy Secretary, DOC
Scott Edwards, Assistant Secretary, Budget, Strategy and Technology Admin, DOC
Ronell Witt, Budget Director, DOC
Chris Idso, Director of Capital Planning & Development, DOC

"Working Together for SAFER Communities"

List of Prison Facilities

Airway Heights Corrections Center (AHCC)

Custody Level: Medium and long-Term Minimum
Year Opened: 1992

Cedar Creek Corrections Center (CCCC)

Custody Level: Minimum
Year Opened: 1954

Clallam Bay Corrections Center (CBCC)

Custody Level: Medium, Close, Maximum
Year Opened: 1985

Coyote Ridge Corrections Center (CRCC)

Custody Level: Minimum, Medium and long-Term Minimum
Year Opened: Minimum Security – 1992 and Medium Security - 2009

Larch Corrections Center (LCC)

Custody Level: Minimum
Year Opened: 1956

Maple Lane Correction Center (MLCC)

Custody Level: Anticipated to be Minimum Security
Year Opened: Projected 2020

Mission Creek Corrections Center for Women (MCCCW)

Custody Level: Minimum
Year Opened: 2005

Monroe Correctional Complex (MCC)

Custody Level: Maximum, Close, Medium, and Minimum
Year Opened: 1910

Olympic Corrections Center (OCC)

Custody Level: Minimum
Year Opened: 1968

Stafford Creek Corrections Center (SCCC)

Custody Level: Minimum, Medium, and Maximum
Year Opened: 2000

Washington Corrections Center (WCC)

Custody Level: Medium, Close, and Maximum
Year Opened: 1964

Washington Corrections Center for Women (WCCW)

Custody Level: Minimum, Medium, and Close
Year Opened: 1971

Washington State Penitentiary (WSP)

Custody Level: Close, Medium, and Minimum
Year Opened: 1886

List of Reentry Center Facilities

Ahtanum View Reentry Center (AVRC)

DOC Owned Facility

Bellingham Reentry Center (BRC)

DOC Contracted Facility

Bishop Lewis Reentry Center (BLRC)

DOC Leased Facility

Brownstone Reentry Center (BSRC)

DOC Owned Facility

Eleanor Chase Reentry Center (ECRC)

DOC Owned Facility

Helen B. Ratcliff Reentry Center (HRRC)

DOC Leased Facility

Longview Reentry Center (LRC)

DOC Owned Facility

Olympia Reentry Center (ORC)

DOC Owned Facility

Peninsula Reentry Center (PRC)

DOC Owned Facility

Progress House Reentry Center (PHRC)

DOC Contracted Facility

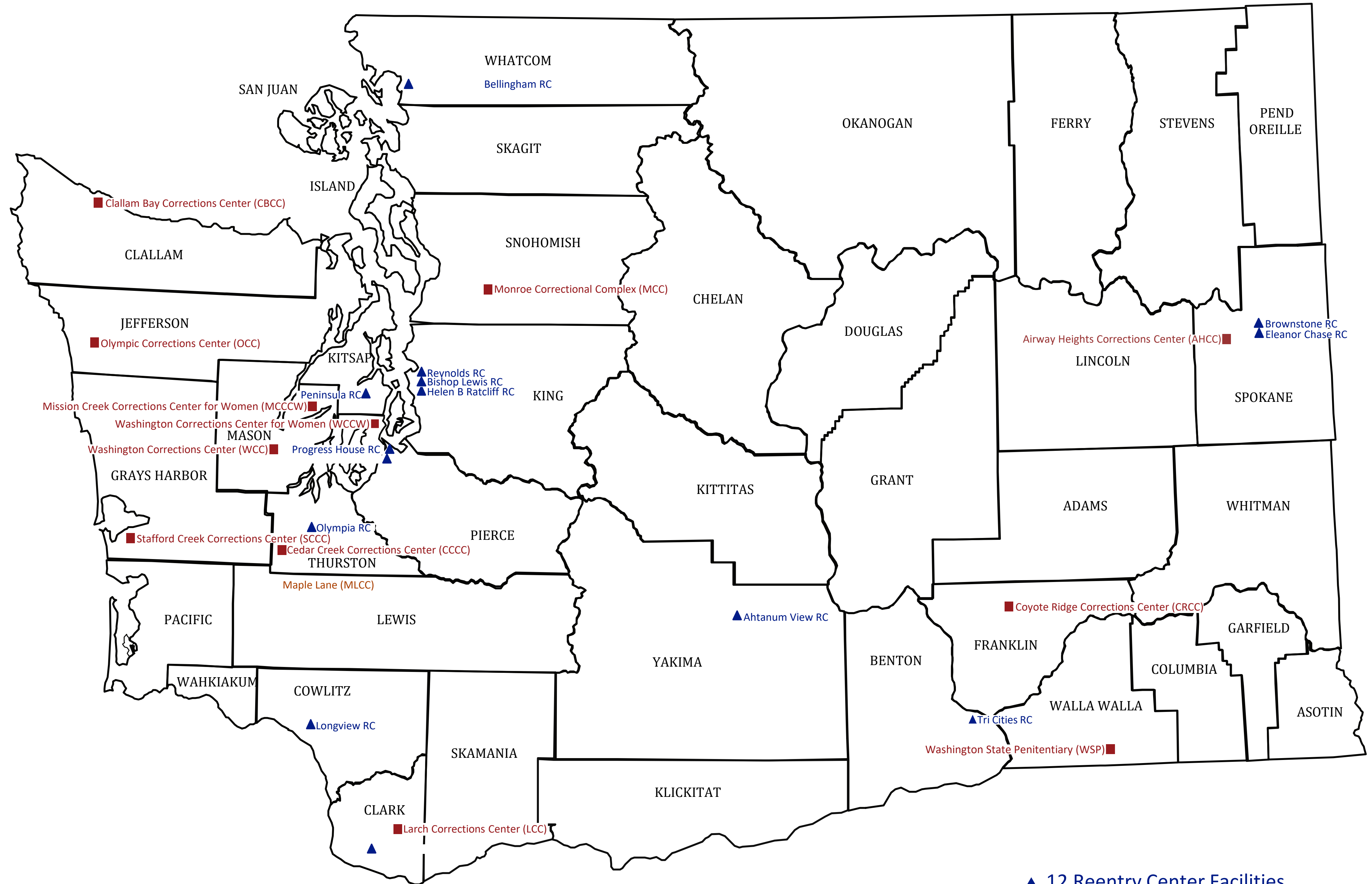
Reynolds Reentry Center (RRC)

DOC Leased Facility

Tri-Cities Reentry Center (TCRC)

DOC Owned Facility

Incarceration Facilities Map



▲ 12 Reentry Center Facilities
■ 12 Prison Facilities

Equity Statement

FY24 Capital Supplemental Budget

Point of Contact:
Ronell Witt (360) 489- 4417

EQUITY STATEMENT

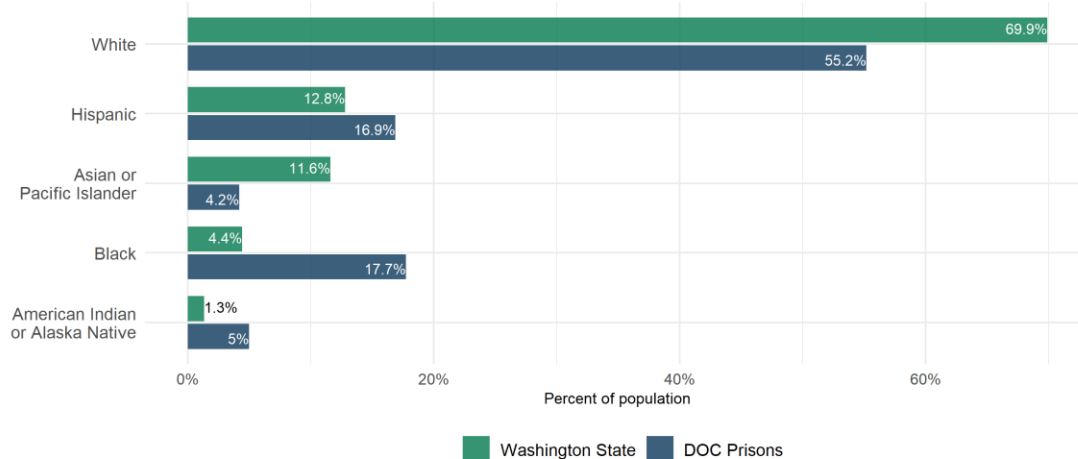
1. How is your proposal impacting equity in the state?

Individuals experiencing incarceration and serving community supervision sentences come from overwhelmingly poor communities (disproportionately communities of color), lacking educational and employment opportunities. They have higher levels of homelessness, substance use disorders, and struggle with physical and mental health disorders that are often undiagnosed or untreated. 96 percent of individuals are serving sentences with a chance of parole and 79 percent of individuals are serving non-life sentences. Many will eventually be released back into those same communities, where barriers will be further exacerbated by their criminal histories. This proposal funds basic services, treatment, and programs meant to not only address those inequities but to ensure success upon reentry to the community, and as a result increase public safety.

2. Which communities are impacted by this proposal?

There are over-represented racial minorities in Washington State prisons.

Percentage of Washington State and DOC Prison Population by Race and Ethnicity



NOTE: Washington State population data are OFM estimates for adults 20 to 64 as of April 1, 2020. DOC Prisons is inmate population as of April 1, 2022. Race and ethnicity are self-reported. Hispanic includes all individuals identified as Hispanic ethnicity regardless of race. <1% DOC individuals identified as non-Hispanic "Other" are not shown.

MISSION To improve public safety by positively changing lives | **VISION** Working together for safer communities



OUR COMMITMENT

To operate a safe and humane corrections system and partner with others to transform lives for a better Washington.

GOALS

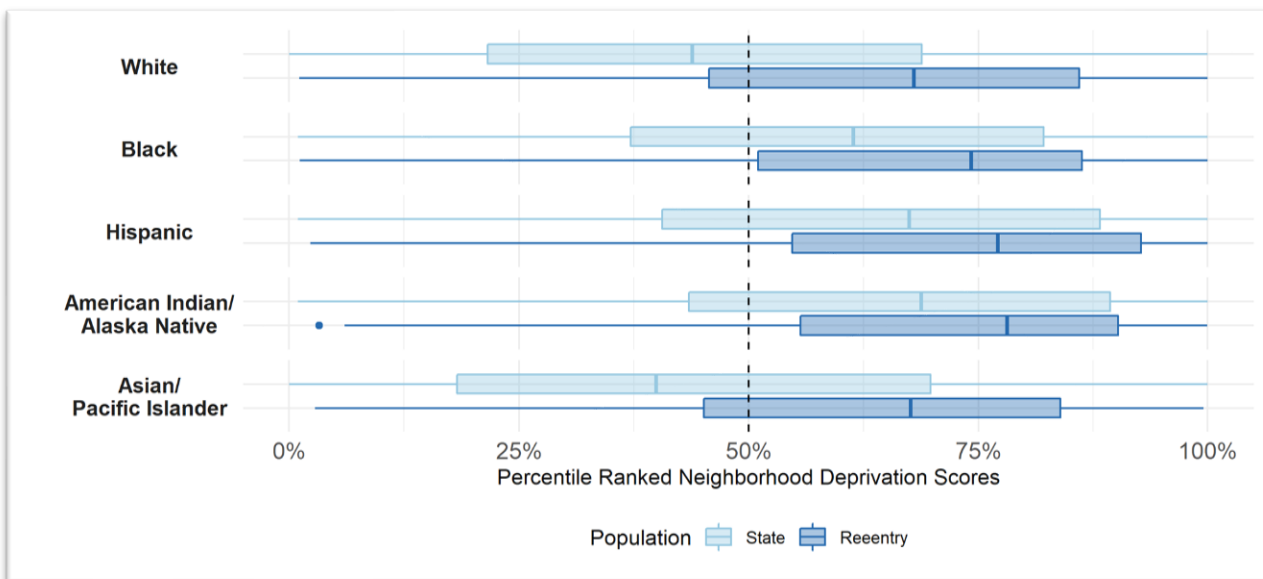
Safe Humane Systems | EDIR Culture | Healthy and Engaged Workforce | Successful Transitions

In each year of the past decade, Washington’s American Indian, Black, and Hispanic adult populations’ share of the prison population has exceeded the share of the state’s adult population. For example, in 2023, the American Indian population’s share of DOC’s prison population (5.0%) was nearly 4 times greater than its share of Washington’s population (1.3%). For the Black and Hispanic populations, share of prison population was 4.0 and 1.3 times greater, respectively, than the share of Washington’s population. That disparity is even larger when you look at the percentage of black individuals serving time for specific crime types like robbery (28%), murder (23%) and assault (19%). Research indicates that the over-representation can be explained in part by socioeconomic factors like poverty, education, and employment.

In addition to the racial and ethnic disparities, incarcerated individuals in Washington State are:

- More likely than the general population to reside in Washington’s most disadvantaged neighborhoods (with socioeconomic disadvantage based on multiple indicators including household income, unemployment, and educational attainment)¹;
- Four times more likely to not have a high school diploma or GED (compared to Washington’s adult population); and
- Have higher rates of chronic and infectious diseases (including Hepatitis C), Opioid Use and Substance Use Disorders, Mental Health disorders and/or Traumatic Brain Injuries.

¹Distribution of Washington State and DOC Reentry Population by Level of Neighborhood Socioeconomic Disadvantage, 2017-2020.



NOTE: Neighborhoods are represented by percentile ranking of disadvantage; 50th percentile indicates neighborhoods where half of all other areas across the state are less disadvantaged and half are more disadvantaged. Sources: OMNI, American Community Survey 2018 5-Year Estimates, OFM Small Area Demographic Estimates.

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Safe Humane Systems | EDIR Culture | Healthy and Engaged Workforce | Successful Transitions

In recent years, there has been a national trend where many states have begun to reduce the use of prison and jails through sentencing reforms, but that progress has been uneven. The non-partisan Council on Criminal Justice noted that while arrests and prison admission rates are dropping for individuals of color, they are still sentenced to longer terms in prison than their white peers.

3. How are disparities in communities impacted?

To address the current disparities within Washington state correctional facilities, reforms must be applied retrospectively, individuals already serving their sentences must be affected, and investments in treatment, services and programs must be made to address systemic and socioeconomic disadvantages.

Judgement and sentencing are determined by the courts, and as such Corrections cannot directly impact the individuals' sentenced nor their sentence length without legislative change. However, the department is well positioned to provide treatment, services and programs, necessary to improve outcomes and reduce racial and economic inequalities, to marginalized individuals both incarcerated and in the community under supervision.

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OUR COMMITMENT

To operate a safe and humane corrections system and partner with others to transform lives for a better Washington.

GOALS

Safe Humane Systems | EDIR Culture | Healthy and Engaged Workforce | Successful Transitions

**310 - Department of Corrections
Ten Year Capital Plan by Priority
2023-25 Biennium**

Version: 10 FY2024 Supplemental Agency Request

Report Number: CBS001
Date Run: 9/11/2023 4:08PM

Project by Agency Priority

<u>Priority</u>	<u>Project by Account-EA Type</u>	<u>Estimated Total</u>	<u>Prior Expenditures</u>	<u>Current Expenditures</u>	<u>Reapprop 2023-25</u>	<u>New Approp 2023-25</u>	<u>Estimated 2025-27</u>	<u>Estimated 2027-29</u>	<u>Estimated 2029-31</u>	<u>Estimated 2031-33</u>
1	40000523 SW: Security Electronics Renewal & Adaptation									
	057-1 State Bldg	800,000				800,000				
	Constr-State									
2	40000524 SW: Fire Alarm Systems Stabilization Project									
	057-1 State Bldg	750,000				750,000				
	Constr-State									
3	40000525 SW: Perimeter Fence Detection Stabilization Project									
	057-1 State Bldg	750,000				750,000				
	Constr-State									
4	40000526 WSP: IMU South Fire Protection & Smoke Dampers									
	057-1 State Bldg	4,622,000				4,622,000				
	Constr-State									
5	40000527 CBPS: WCCW Women's Elder Care Unit									
	057-1 State Bldg	400,000				400,000				
	Constr-State									
6	40000528 WCC: Medical Intake Tent Replacement									
	057-1 State Bldg	1,200,000				1,200,000				
	Constr-State									
7	40000516 Westside Prison Housing Unit HVAC									
	057-1 State Bldg	700,000				700,000				
	Constr-State									
8	40000531 CBPS: WSP Emergency Backup Power Supply									
	057-1 State Bldg	300,000				300,000				
	Constr-State									
9	40000430 CRCC Replace Leviton Site Lighting Controls									
	057-1 State Bldg	5,067,000				900,000	4,167,000			
	Constr-State									
	Total	14,589,000				10,422,000	4,167,000			

OFM

310 - Department of Corrections
Ten Year Capital Plan by Priority
2023-25 Biennium

Version: 10 FY2024 Supplemental Agency Request

Report Number: CBS001
Date Run: 9/11/2023 4:08PM

Total Account Summary

<u>Account-Expenditure Authority Type</u>	<u>Estimated Total</u>	<u>Prior Expenditures</u>	<u>Current Expenditures</u>	<u>Reapprop 2023-25</u>	<u>New Approp 2023-25</u>	<u>Estimated 2025-27</u>	<u>Estimated 2027-29</u>	<u>Estimated 2029-31</u>	<u>Estimated 2031-33</u>
057-1 State Bldg Constr-State	14,589,000				10,422,000	4,167,000			

310 - Department of Corrections Capital Project Request

2023-25 Biennium

Version: 10 FY2024 Supplemental Agency Request

Report Number: CBS002

Date Run: 9/12/2023 4:05PM

Project Number: 40000523

Project Title: SW: Security Electronics Renewal & Adaptation

Project Class: Preservation

Description

Project Phase Title: Condition Assessment

Starting Fiscal Year: 2025

Agency Priority: 1

Project Summary

Many of the Department of Corrections (DOC) security electronics systems are past their useful life and prone to malfunction. Replacement parts are obsolete, difficult to find, and the technology that allows for the communication and monitoring of the systems is outdated and/or no longer supported.

Project Description

1. 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.

DOC requests funding for a statewide condition assessment of its security electronics systems. The definition of security electronics systems to be evaluated in this project will include door controls, door intercoms, associated programmable logic controllers (PLC), access control, and integration with video surveillance. This condition assessment will provide an analysis of the operational status, condition, expected remaining service life, technology, and other indicators of the security electronics systems at our correctional facilities. The assessment will be used to develop a statewide security electronics renewal and adaptation program that identifies and prioritizes immediate replacement needs to avoid unexpected security electronics failures, plans for ongoing replacement of security electronics systems as they approach end of useful life, and provide an order of magnitude cost for these individual projects.

The confinement and restricted movement inherent in a correctional facility make security electronics critical to the safety of DOC facilities. In the last year, DOC received 297 service requests for issues related to our security electronics door control systems. Unresolved security electronics issues typically require manual keys and an officer to operate and maintain control of the keys. Staffing extra posts for door control related issues are costly. Depending on the scale of the door control issue, it can involve a single door, or as many as hundreds of doors that need to be operated manually with keys. Facilities built in the last 25 years are staffed based on the idea doors can be controlled with security electronics. Rarely are there enough staff available to manually operate doors in the case of a security electronics failure.

It is unclear statewide how many or what security electronics systems have failed because they have exceeded their expected useful life, not operating on the latest software update, or no longer have manufacturer support for parts and repairs. Some of our security electronics systems have components from various software generations or even different manufacturers. A common problem when trying to replace a failed component is not being able to load the latest software version because other components are operating on older versions of software that are not compatible. Security electronics system replacement may also require communication cables and conduit pathways between devices be replaced.

We also recognize some facilities have had all or portions of their security electronics systems recently replaced. Some have been replaced as part of capital projects and others as part of ongoing facility maintenance. These systems will be identified in the condition assessment and prioritized accordingly.

**310 - Department of Corrections
Capital Project Request**

2023-25 Biennium

Version: 10 FY2024 Supplemental Agency Request

Report Number: CBS002

Date Run: 9/12/2023 4:05PM

Project Number: 40000523

Project Title: SW: Security Electronics Renewal & Adaptation

Project Class: Preservation

Description

2. 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 will fund a statewide condition assessment of DOC security electronics systems. The condition assessment will provide us with direction for a statewide security electronics stabilization plan. First, the assessment will provide DOC with a more comprehensive idea of what systems have exceeded their expected useful life, not operating on the latest software update, or no longer have manufacturer support for parts and repairs. Second, it will identify and prioritize immediate replacement needs to avoid unexpected security electronics failures. Third, it will rank systems according to need and provide plans for ongoing replacement of security electronics systems as they approach end of useful life. Last, it will provide an order of magnitude cost for these projects and ongoing replacement.

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

DOC has security electronics systems in poor or critical condition. The security electronics renewal and adaptation project will rank and identify immediate security electronics system needs statewide so they can be addressed first. This project will categorize systems that are beyond expected useful life, not operating on the latest software update, or no longer have manufacturer support for technology, parts, or repair. The assessment will evaluate this information to develop a road map for continued renewal of security electronics systems.

DOC cannot accept failures with security electronics. DOC can use this assessment to plan for sustained stabilization of security electronics systems and continue to provide safe, secure, and humane living conditions for incarcerated individuals.

4. 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.

Alternatives will be identified and evaluated as part of this condition assessment.

Several DOC facilities have been trying to replace security electronics Programmable Logic Controllers (PLC's) as they fail. Typically, when these devices fail, they are at end of life. Software versions are no longer up to date because manufacturers no longer support the devices. If newer devices are installed, they are not usually compatible and cannot communicate with the older security electronics networks. Even if electronics technicians can get the newer devices operational there is still the risk of communication errors with older devices that crash the system and prevent other security electronic devices from continuing to operate. Ideally, door control PLCs and other security electronics devices are replaced at the same time to prevent incompatibility and failures that lead to manual operation of the door controls.

Most security electronics door control system failures result in additional staff to manually operate doors until the systems

310 - Department of Corrections Capital Project Request

2023-25 Biennium

Version: 10 FY2024 Supplemental Agency Request

Report Number: CBS002

Date Run: 9/12/2023 4:05PM

Project Number: 40000523

Project Title: SW: Security Electronics Renewal & Adaptation

Project Class: Preservation

Description

can be restored to normal operation. This is a short-term solution because the facilities are staffed to have doors controlled remotely.

DOC is requesting funding for a condition assessment to develop a statewide security electronics stabilization program. The assessment should identify immediate replacement needs to avoid unexpected security electronics failures, plan for ongoing replacement of security electronics systems as they approach end of useful life and provide an order of magnitude cost for these projects. A statewide security electronics stabilization program reduces the security risk of not having a functioning security electronics system.

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

The stabilization of DOC security electronics systems will improve security and safety for 13,000 incarcerated individuals and over 8,000 employees across the state. Washington state communities benefit from safe and secure prisons. Revitalized security electronics systems will reduce system failures and help avoid costly overtime.

6. 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.

State Construction funds (057) are being requested to conduct a condition assessment for this project in the FY2024 supplemental budget.

State Construction funds (057) will be requested for the design and construction of this project in 2025-27 (FY2026-27) and future biennia.

7. 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 mission of DOC is to improve public safety by positively changing lives. DOC's vision is working together for safer communities.

This Capital request aligns with the one or more of the following Results Washington Goals and Outcome Measures:

- World Class Education
- Prosperous Economy
- Sustainable Energy and Clean Environment

310 - Department of Corrections Capital Project Request

2023-25 Biennium

Version: 10 FY2024 Supplemental Agency Request

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Project Number: 40000523

Project Title: SW: Security Electronics Renewal & Adaptation

Project Class: Preservation

Description

Healthy and Safe Communities
Efficient, Effective, and Accountable Government

This request supports the following goals, objectives, approaches/strategies, and outcome measures in Doc's 2023-25 Strategic Plan:

Safe and Humane Systems

Cultivate a human-centered approach to our work that delivers on trauma-informed practices, safe, fair, and humane living and working conditions and supports a culture that reduces risk and increases positive opportunities for both justice-involved individuals and staff.

EDIR Culture

Eliminate disparities by implementing our pro-equity, anti-racism framework, and reinforcing a culture where every person is welcomed and feel they belong.

Healthy and Engaged Workforce

Foster a supportive work environment that promotes wellness and combats corrections fatigue.

Successful Transitions

Provide personalized support to justice-involved individuals, including the knowledge, skills, and abilities to successfully reenter their communities and thrive as better neighbors.

By committing to these strategic goals, DOC will achieve our ultimate goal of Correctional Excellence.

This capital project will ensure that DOC facilities are well maintained, safe and secure for incarcerated individuals and staff, and efficient to operate.

8. 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.)

There are no IT impacts related to the condition assessment. Capital projects identified in the assessment will likely have ongoing IT related operating impacts. These costs will be identified in the project design phases and submitted in future operating budget requests.

9. 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 13 (Puget Sound Recovery) in the 2023-25 Operating Budget

**310 - Department of Corrections
Capital Project Request**

2023-25 Biennium

Version: 10 FY2024 Supplemental Agency Request

Report Number: CBS002

Date Run: 9/12/2023 4:05PM

Project Number: 40000523

Project Title: SW: Security Electronics Renewal & Adaptation

Project Class: Preservation

Description**Instructions.**

This project is not linked to the Puget Sound Action Agenda.

10. How does this project contribute to meeting the greenhouse gas emissions limits established in RCW70A.45.050, Clean Buildings performance standards in RCW 19.27A.210, or other statewide goals to reduce carbon pollution and/or improve energy efficiency? Please elaborate.

This project does not directly contribute towards meeting the greenhouse gas emissions limits established in RCW 70A.45.050, Clean Buildings performance standards in RCW 19.27A.210, or other statewide goals to reduce carbon pollution and/or improve energy efficiency.

11. How is your proposal impacting equity in the state? Which communities are impacted by this proposal? Include both demographic and geographic communities. How are disparities in communities impacted?

One of DOC's Strategic Anchors is the commitment to operate a safe and humane corrections system and partner with others to transform lives for a better Washington. Corrections believes in creating an environment that values physical, mental, and emotional security and well-being for staff and incarcerated individuals.

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

Safety and security are a pivotal priority to DOC's mission. This project will help ensure the safety and security of the public, vendors, staff and the incarcerated individuals entrusted to DOC's care and custody. There is a great deal of risk associated with the delay of this project. There are many parts of the existing system that could fail. It is important to correct this problem now or design a solution that will address the concerns as soon as possible. If this project goes unfunded, the ongoing maintenance and emergency project costs will continue to increase.

Funding for ongoing operating cost impacts related to capital projects identified in this assessment will be submitted in future operating budget requests.

Location

City: Statewide

County: Statewide

Legislative District: 098

Project Type

Remodel/Renovate/Modernize (Major Projects)

**310 - Department of Corrections
Capital Project Request**

2023-25 Biennium

Version: 10 FY2024 Supplemental Agency Request

Report Number: CBS002

Date Run: 9/12/2023 4:05PM

Project Number: 40000523

Project Title: SW: Security Electronics Renewal & Adaptation

Project Class: Preservation

Description

Growth Management impacts

None.

Funding

Acct Code	Account Title	Estimated Total	Expenditures		2023-25 Fiscal Period	
			Prior Biennium	Current Biennium	Reapprops	New Approps
057-1	State Bldg Constr-State	800,000				800,000
	Total	800,000	0	0	0	800,000
Future Fiscal Periods						
		<u>2025-27</u>	<u>2027-29</u>	<u>2029-31</u>	<u>2031-33</u>	
057-1	State Bldg Constr-State					
	Total	0	0	0	0	

Operating Impacts

No Operating Impact

Narrative

We do not expect there will be any operating cost impacts related to this capital project.

STATE OF WASHINGTON
AGENCY / INSTITUTION PROJECT COST SUMMARY

Updated June 2022

Agency	Department of Corrections
Project Name	SW Security Electronics Renewal & Adaptation
OFM Project Number	40000523

Contact Information

Name	Chris Idso
Phone Number	360.580.8731
Email	clidso@doc1.wa.doc

Statistics

Gross Square Feet		MACC per Gross Square Foot	
Usable Square Feet		Escalated MACC per Gross Square Foot	
Alt Gross Unit of Measure			
Space Efficiency		A/E Fee Class	A
Construction Type	Detention/correctional f	A/E Fee Percentage	17.40%
Remodel	Yes	Projected Life of Asset (Years)	

Additional Project Details

Procurement Approach	DBB	Art Requirement Applies	No
Inflation Rate	4.90%	Higher Ed Institution	No
Sales Tax Rate %	9.00%	Location Used for Tax Rate	SW
Contingency Rate	10%		
Base Month (Estimate Date)	August-23	OFM UFI# (from FPMT, if available)	
Project Administered By	Agency		

Schedule

Predesign Start	September-24	Predesign End	June-25
Design Start		Design End	
Construction Start		Construction End	
Construction Duration	0 Months		

Green cells must be filled in by user

Project Cost Estimate

Total Project	\$799,760	Total Project Escalated	\$799,760
		Rounded Escalated Total	\$800,000

Cost Estimate Summary

Acquisition

Acquisition Subtotal	\$0	Acquisition Subtotal Escalated	\$0
-----------------------------	------------	---------------------------------------	------------

Consultant Services			
Pre-design Services	\$500,000		
Design Phase Services	\$0		
Extra Services	\$90,000		
Other Services	\$0		
Design Services Contingency	\$59,000		
Consultant Services Subtotal	\$649,000	Consultant Services Subtotal Escalated	\$649,000

Construction			
Maximum Allowable Construction Cost (MACC)	\$0	Maximum Allowable Construction Cost (MACC) Escalated	\$0
DBB Risk Contingencies	\$0		
DBB Management	\$0		
Owner Construction Contingency	\$0		\$0
Non-Taxable Items	\$0		\$0
Sales Tax	\$0	Sales Tax Escalated	\$0
Construction Subtotal	\$0	Construction Subtotal Escalated	\$0

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

Artwork			
Artwork Subtotal	\$0	Artwork Subtotal Escalated	\$0

Agency Project Administration			
Agency Project Administration Subtotal	\$30,760		
DES Additional Services Subtotal	\$0		
Other Project Admin Costs	\$0		
Project Administration Subtotal	\$30,760	Project Administration Subtotal Escalated	\$30,760

Other Costs			
Other Costs Subtotal	\$120,000	Other Costs Subtotal Escalated	\$120,000

Project Cost Estimate			
Total Project	\$799,760	Total Project Escalated	\$799,760
		Rounded Escalated Total	\$800,000

Funding Summary

	Project Cost (Escalated)	Funded in Prior Biennia	New Approp Request 2023-2025	2025-2027	Out Years
Acquisition					
Acquisition Subtotal	\$0				\$0
Consultant Services					
Consultant Services Subtotal	\$649,000		\$649,000		\$0
Construction					
Construction Subtotal	\$0				\$0
Equipment					
Equipment Subtotal	\$0				\$0
Artwork					
Artwork Subtotal	\$0				\$0
Agency Project Administration					
Project Administration Subtotal	\$30,760		\$30,760		\$0
Other Costs					
Other Costs Subtotal	\$120,000		\$120,000		\$0
Project Cost Estimate					
Total Project	\$799,760	\$0	\$799,760	\$0	\$0
	\$800,000	\$0	\$800,000	\$0	\$0
	Percentage requested as a new appropriation		100%		

What is planned for the requested new appropriation? (Ex. Acquisition and design, phase 1 construction, etc.)

Funding this request will support a condition assessment at all prison facilities that will identify and prioritize all security electronics network projects. Funding for

Insert Row Here

What has been completed or is underway with a previous appropriation?

Various SEN projects have been completed as equipment and systems fail. Often these are emergency requests that are expensive.

Insert Row Here

What is planned with a future appropriation?

Funding for design and construction of the projects identified in the Condition Assessment will be requested in future Capital budgets.

Insert Row Here

310 - Department of Corrections Capital Project Request

2023-25 Biennium

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Version: 10 FY2024 Supplemental Agency Request

Report Number: CBS002

Date Run: 9/11/2023 7:53AM

Project Number: 40000524

Project Title: SW: Fire Alarm Systems Stabilization Project

Description

Project Phase Title: Condition Assessment

Starting Fiscal Year: 2025

Project Class: Preservation

Agency Priority: 2

Project Summary

Many of the Department of Corrections (DOC) fire detection and annunciation systems are past their useful life and prone to malfunction. Replacement parts are obsolete, difficult to find, and the technology that allows for the communication and monitoring of the systems is outdated and/or no longer supported.

Project Description

1. 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.

The confinement and restricted movement inherent in a correctional facility make fire detection critical for life safety. In the last year, DOC received over 500 service requests for issues related to our fire alarm systems. Unresolved fire alarm issues require a fire watch in affected buildings. This requires staff to walk through the building every 30 minutes to look for fire or smoke and keep a log of this activity. A fire watch is required 24 hours a day, 7 days a week until the fire detection systems are functional. A fire watch is expensive because of staffing and overtime costs, as well as pulling staff away from their primary responsibilities. Rarely are there enough staff available to perform a fire watch on a normal shift.

A 2021 building condition rapid assessment found over 300 fire alarm systems that have exceeded expected useful life and should be replaced. 82 of these systems are rated "poor" or "critical" condition with a priority score of 42-74 out of 100. This rating indicates the building component associated with this project is in poor or critical condition and poses a risk to safety, security, and operations. This building condition rapid assessment focused on overall building conditions and does not provide detailed condition of fire alarm systems. The building condition rapid assessment did identify a compelling need to evaluate fire alarm system conditions.

It is unclear statewide how many or what systems have failed because they have exceeded their expected useful life, are no longer code compliant, or no longer have manufacturer support for parts and repairs. Some of our fire alarm systems have networks and components from the 1980's and early 1990's. In some cases, the main and sub fire alarm panels, power supplies, annunciating and detection devices need to be completely replaced. Fire alarm system replacement may also require communication wire and conduit pathways between panels and devices being replaced. Some buildings have been cold-closed and cannot be reopened until the fire alarm system is brought back into compliance with current life safety codes and laws.

We also recognize that some facilities have had all or portions of their fire alarm systems recently replaced. Some have been replaced as part of capital projects and others as part of ongoing facility maintenance. These systems will be identified in the condition assessment and prioritized accordingly.

DOC requests funding for a statewide condition assessment of its fire alarm systems. This condition assessment will provide an analysis of the operational status, condition, expected remaining service life, technology, and other indicators of the fire alarm systems at our correctional facilities. The assessment will be used to develop a statewide fire alarm

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2023-25 Biennium

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Version: 10 FY2024 Supplemental Agency Request

Report Number: CBS002

Date Run: 9/11/2023 7:53AM

Project Number: 40000524

Project Title: SW: Fire Alarm Systems Stabilization Project

Description

stabilization program to ensure code compliance and that identifies and prioritizes immediate replacement needs to avoid unexpected fire alarm failures, plans for ongoing maintenance and replacement of the fire alarm systems as they approach the end of their useful life, and provide an order of magnitude cost for these individual projects.

2. 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 will fund a statewide condition assessment of its fire alarm systems. The condition assessment will provide us with direction for a statewide fire alarm stabilization plan. First, the assessment will provide DOC with a more comprehensive idea of what systems have exceeded their expected useful life, are no longer code compliant, or no longer have manufacturer support for technology, parts, or repairs. Second, it will identify and prioritize immediate replacement needs to avoid unexpected fire alarm failures. Third, it will rank systems according to need and provide plans for ongoing replacement of fire alarm systems as they approach end of useful life. And lastly, it will provide an order of magnitude cost for these projects and ongoing replacement.

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

DOC recognizes we currently have over 80 fire alarm systems in poor or critical condition. The fire alarm stabilization project will rank and identify immediate fire alarm system needs statewide so they can be addressed first. This project will categorize systems that are beyond expected useful life, are no longer code compliant, or no longer have manufacturer support for technology, parts, or repair. The condition assessment will evaluate this information to develop a road map for continued renewal of fire alarm systems.

DOC cannot accept non-compliance with life safety codes. DOC can use this condition assessment to plan for sustained stabilization of fire alarm systems and continue to provide safe and humane living/working conditions for incarcerated individuals, DOC personnel, vendors, and visitors while achieving compliance with fire and life safety codes.

4. 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.

Alternatives will be identified and evaluated as part of this condition assessment.

The Washington State Penitentiary and Stafford Creek Corrections Center have been trying to replace fire alarm control panels as they fail. Panels have to be replaced with newer available panels that no longer communicate with the older fire alarm networks. This prevents panel communication to a central control responsible for reporting and communicating fire detection information to the shift commander and fire departments. Every additional standalone fire alarm control panel adds complexity to fire detection and increases safety risks.

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Capital Project Request

2023-25 Biennium

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Version: 10 FY2024 Supplemental Agency Request

Report Number: CBS002

Date Run: 9/11/2023 7:53AM

Project Number: 40000524

Project Title: SW: Fire Alarm Systems Stabilization Project

Description

All fire alarm system failures result in mandatory fire watch which requires 24/7 monitoring and building walkthroughs every 30 minutes, until the systems can be restored to normal operation. Fire watch is intended as a short-term solution because it requires extra staff to periodically check on the buildings that would normally be monitored remotely. Ultimately, fire alarm code does not support open ended fire watches or non-monitored fire alarm detection or notification systems.

DOC is requesting funding for a condition assessment to develop a statewide fire alarm stabilization program. The assessment will identify immediate replacement needs to avoid unexpected fire alarm failures, plan for ongoing replacement of fire alarm systems as they approach end of useful life and provide an order of magnitude cost for these projects. A statewide fire alarm stabilization program reduces the risk of not having a functioning fire detection and alarm system.

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

This project will create safer living and working conditions for 13,000 incarcerated individuals, over 8,000 employees, vendors, and visitors across the statewide correctional system. The stabilization of DOC fire alarm systems will improve life safety for the incarcerated population and staff. Renewed fire alarm systems will reduce system failures and costly fire watches, meet current fire codes, and provide timely fire notification to emergency response teams during fire events.

6. 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.

State Construction funds (057) are being requested for the condition assessment of this project in the FY2024 supplemental budget.

State Construction funds (057) will be requested for the design and construction of this project in 2025-27 (FY2026-27) and future biennia.

7. 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 mission of DOC is to improve public safety by positively changing lives. DOC’s vision is working together for safer communities.

This Capital request aligns with the one or more of the following Results Washington Goals and Outcome Measures:

- World Class Education
- Prosperous Economy

310 - Department of Corrections
Capital Project Request

2023-25 Biennium

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Version: 10 FY2024 Supplemental Agency Request

Report Number: CBS002

Date Run: 9/11/2023 7:53AM

Project Number: 40000524

Project Title: SW: Fire Alarm Systems Stabilization Project

Description

Sustainable Energy and Clean Environment
Healthy and Safe Communities
Efficient, Effective, and Accountable Government

This request supports the following goals, objectives, approaches/strategies, and outcome measures in Doc's 2023-25 Strategic Plan:

Safe and Humane Systems

Cultivate a human-centered approach to our work that delivers on trauma-informed practices, safe, fair, and humane living and working conditions and supports a culture that reduces risk and increases positive opportunities for both justice-involved individuals and staff.

EDIR Culture

Eliminate disparities by implementing our pro-equity, anti-racism framework, and reinforcing a culture where every person is welcomed and feel they belong.

Healthy and Engaged Workforce

Foster a supportive work environment that promotes wellness and combats corrections fatigue.

Successful Transitions

Provide personalized support to justice-involved individuals, including the knowledge, skills, and abilities to successfully reenter their communities and thrive as better neighbors.

By committing to these strategic goals, DOC will achieve our ultimate goal of Correctional Excellence.

This capital project will ensure that DOC facilities are well maintained, safe and secure for incarcerated individuals and staff, and efficient to operate.

8. 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.)

IT-related impacts will be identified during the condition assessments and any ongoing operational costs will be determined at that time.

9. 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 13 (Puget Sound Recovery) in the 2023-25 Operating Budget Instructions.

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Capital Project Request

2023-25 Biennium

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Version: 10 FY2024 Supplemental Agency Request

Report Number: CBS002

Date Run: 9/11/2023 7:53AM

Project Number: 40000524

Project Title: SW: Fire Alarm Systems Stabilization Project

Description

This project is not linked to the Puget Sound Action Agenda.

10. How does this project contribute to meeting the greenhouse gas emissions limits established in RCW 70A.45.050, Clean Buildings performance standards in RCW 19.27A.210, or other statewide goals to reduce carbon pollution and/or improve energy efficiency? Please elaborate.

This project does not directly contribute towards meeting the greenhouse gas emissions limits established in RCW 70A.45.050, Clean Buildings performance standards in RCW 19.27A.210, or other statewide goals to reduce carbon pollution and/or improve energy efficiency.

11. How is your proposal impacting equity in the state? Which communities are impacted by this proposal? Include both demographic and geographic communities. How are disparities in communities impacted?

One of DOC's Strategic Anchors is the commitment to operate a safe and humane corrections system and partner with others to transform lives for a better Washington. Corrections believes in creating an environment that values physical, mental, and emotional security and well-being for staff and incarcerated individuals.

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

There is a great deal of risk associated with the delay of this project. There are many parts of the existing systems that are prone to failure. Understanding the actual condition of this critical life safety system is important so that identification and prioritization of the systems can be considered in future rehabilitation and/or subsequent standalone projects are requested as an outcome of this condition assessment. It is important to correct this problem now and design a solution that will address the concerns as soon as possible. If this project goes unfunded, the ongoing maintenance and emergency project costs will continue to increase and incarcerated individuals, staff, vendors, and visitors will continue to be at risk in the event of an undetected fire/smoke event.

There are no known new one-time or ongoing operating cost impacts related to this capital project that will need to be funded as part of a condition assessment.

Location

City: Statewide

County: Statewide

Legislative District: 098

Project Type

Remodel/Renovate/Modernize (Major Projects)

**310 - Department of Corrections
Capital Project Request**

2023-25 Biennium

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Version: 10 FY2024 Supplemental Agency Request

Report Number: CBS002

Date Run: 9/11/2023 7:53AM

Project Number: 40000524

Project Title: SW: Fire Alarm Systems Stabilization Project

Description

Growth Management impacts
None.

Funding

Acct Code	Account Title	Estimated Total	Expenditures		2023-25 Fiscal Period	
			Prior Biennium	Current Biennium	Reapprops	New Approps
057-1	State Bldg Constr-State	750,000				750,000
	Total	750,000	0	0	0	750,000
Future Fiscal Periods						
		<u>2025-27</u>	<u>2027-29</u>	<u>2029-31</u>	<u>2031-33</u>	
057-1	State Bldg Constr-State					
	Total	0	0	0	0	

Operating Impacts

No Operating Impact

Narrative

We do not expect there will be any operating cost impacts related to this capital project.

STATE OF WASHINGTON
AGENCY / INSTITUTION PROJECT COST SUMMARY

Updated June 2022

Agency	Department of Corrections
Project Name	SW Fire Alarm Systems Stabilization Project
OFM Project Number	40000524

Contact Information

Name	Chris Idso
Phone Number	360.580.8731
Email	clidso@doc1.wa.doc

Statistics

Gross Square Feet		MACC per Gross Square Foot	
Usable Square Feet		Escalated MACC per Gross Square Foot	
Alt Gross Unit of Measure			
Space Efficiency		A/E Fee Class	A
Construction Type	Detention/correctional f	A/E Fee Percentage	17.40%
Remodel	Yes	Projected Life of Asset (Years)	

Additional Project Details

Procurement Approach	DBB	Art Requirement Applies	No
Inflation Rate	4.90%	Higher Ed Institution	No
Sales Tax Rate %	9.00%	Location Used for Tax Rate	SW
Contingency Rate	10%		
Base Month (Estimate Date)	August-23	OFM UFI# (from FPMT, if available)	
Project Administered By	Agency		

Schedule

Predesign Start	September-24	Predesign End	June-25
Design Start		Design End	
Construction Start		Construction End	
Construction Duration	0 Months		

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Project Cost Estimate

Total Project	\$750,152	Total Project Escalated	\$750,152
		Rounded Escalated Total	\$750,000

Cost Estimate Summary

Acquisition

Acquisition Subtotal	\$0	Acquisition Subtotal Escalated	\$0
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Consultant Services			
Pre-design Services	\$500,000		
Design Phase Services	\$0		
Extra Services	\$83,000		
Other Services	\$0		
Design Services Contingency	\$58,300		
Consultant Services Subtotal	\$641,300	Consultant Services Subtotal Escalated	\$641,300

Construction			
Maximum Allowable Construction Cost (MACC)	\$0	Maximum Allowable Construction Cost (MACC) Escalated	\$0
DBB Risk Contingencies	\$0		
DBB Management	\$0		
Owner Construction Contingency	\$0		\$0
Non-Taxable Items	\$0		\$0
Sales Tax	\$0	Sales Tax Escalated	\$0
Construction Subtotal	\$0	Construction Subtotal Escalated	\$0

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

Artwork			
Artwork Subtotal	\$0	Artwork Subtotal Escalated	\$0

Agency Project Administration			
Agency Project Administration Subtotal	\$28,852		
DES Additional Services Subtotal	\$0		
Other Project Admin Costs	\$0		
Project Administration Subtotal	\$28,852	Project Administration Subtotal Escalated	\$28,852

Other Costs			
Other Costs Subtotal	\$80,000	Other Costs Subtotal Escalated	\$80,000

Project Cost Estimate			
Total Project	\$750,152	Total Project Escalated	\$750,152
		Rounded Escalated Total	\$750,000

Funding Summary

	Project Cost (Escalated)	Funded in Prior Biennia	New Approp Request 2023-2025	2025-2027	Out Years
Acquisition					
Acquisition Subtotal	\$0				\$0
Consultant Services					
Consultant Services Subtotal	\$641,300		\$641,300		\$0
Construction					
Construction Subtotal	\$0				\$0
Equipment					
Equipment Subtotal	\$0				\$0
Artwork					
Artwork Subtotal	\$0				\$0
Agency Project Administration					
Project Administration Subtotal	\$28,852		\$28,852		\$0
Other Costs					
Other Costs Subtotal	\$80,000		\$80,000		\$0
Project Cost Estimate					
Total Project	\$750,152	\$0	\$750,152	\$0	\$0
	\$750,000	\$0	\$750,000	\$0	\$0
	Percentage requested as a new appropriation		100%		

What is planned for the requested new appropriation? (Ex. Acquisition and design, phase 1 construction, etc.)

Funding this request will support a Condition Assessment at all prison facilities that will identify and prioritize all fire alarm system projects.

Insert Row Here

What has been completed or is underway with a previous appropriation?

Various fire alarm projects have been completed as equipment and systems fail. Often these are emergency requests that are expensive.

Insert Row Here

What is planned with a future appropriation?

Funding for design and construction of the projects identified in the Condition Assessment will be requested in future Capital budgets.

Insert Row Here

310 - Department of Corrections Capital Project Request

2023-25 Biennium

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Version: 10 FY2024 Supplemental Agency Request

Report Number: CBS002

Date Run: 9/11/2023 7:54AM

Project Number: 40000525

Project Title: SW: Perimeter Fence Detection Stabilization Project

Description

Project Phase Title: Condition Assessment

Starting Fiscal Year: 2025

Project Class: Preservation

Agency Priority: 3

Project Summary

Many of the Department of Corrections (DOC) perimeter fence detection systems are past their useful life and prone to malfunction. Replacement parts are obsolete, difficult to find, and the technology that allows for the communication and monitoring of the systems is outdated and/or no longer supported.

Project Description

1. 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.

DOC requests funding for a statewide condition assessment of its perimeter fence detection systems. DOC's security system including the perimeter fence serves a dual purpose to keep incarcerated individuals within the boundaries of the prison campus and to keep outsiders out, including contraband. For this project, perimeter fence detection includes all portions of a perimeter fence related to the detection and notification of an escape or intrusion. This includes microwave detection, taut wire detection, and all other related equipment needed to make notification of an escape or intrusion detected by these systems. The condition assessment will provide an analysis of the operational status, condition, expected remaining service life, technology, and other indicators of the perimeter fence detection systems at our correctional facilities. The assessment will be used to develop a statewide perimeter fence detection stabilization program that identifies immediate replacement needs to avoid unexpected perimeter fence failures, plans for ongoing replacement of the perimeter fence systems as they approach end of useful life, and provide an order of magnitude cost for these projects.

Perimeter fence escape detection is critical to the security of DOC facilities. In the last year, DOC received 28 service requests for issues related to our perimeter fence systems. Unresolved perimeter fence issues typically require an armed officer post to monitor areas of the fence detection that are not functioning. Staffing extra posts for perimeter fence detection can be costly. Depending on the scale of the perimeter fence detection issue, it can involve just a single armed post and up to several armed posts.

It is unclear statewide how many or what perimeter fence detection systems have failed because they have exceeded their expected useful life and/or no longer have manufacturer support for parts and repairs. Some of our perimeter fence detection systems have components that are no longer manufactured. Few parts can be interchanged with next generation systems. This requires an entire perimeter fence detection system replacement.

DOC recognizes some facilities have had all or portions of their perimeter fence detection systems recently replaced. Some have been replaced as part of capital projects and others as part of ongoing facility maintenance. These systems will be identified in the condition assessment and prioritized accordingly.

2. 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.

310 - Department of Corrections
Capital Project Request

2023-25 Biennium

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Version: 10 FY2024 Supplemental Agency Request

Report Number: CBS002

Date Run: 9/11/2023 7:54AM

Project Number: 40000525

Project Title: SW: Perimeter Fence Detection Stabilization Project

Description

This project will fund a statewide condition assessment of DOC perimeter fence detection systems. The condition assessment will provide us with direction for a statewide perimeter fence detection stabilization plan. First, the assessment will provide DOC with a more comprehensive idea of what systems have exceeded their expected useful life or no longer have manufacturer support for parts and repairs. Second, it will identify immediate replacement needs to avoid unexpected perimeter fence detection failures. Third, it will rank systems according to need and provide plans for ongoing replacement of perimeter fence detection systems as they approach the end of useful life. And last, it will provide an order of magnitude cost for these projects and ongoing replacement.

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

DOC has perimeter fence detection systems in poor or critical condition. The perimeter fence detection stabilization project will rank and identify immediate perimeter fence detection system needs statewide so they can be addressed first. This project will categorize systems that are beyond expected useful life or no longer have manufacturer support for parts or repair. The assessment will evaluate this information to develop a strategy for continued stabilization of perimeter fence detection systems.

DOC cannot accept failures of the perimeter fence detection system. DOC can use this assessment to plan for sustained stabilization of perimeter fence detection systems and continue to provide safe, secure, and humane conditions for incarcerated individuals, DOC personnel, visitors, and Washington communities.

4. 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.

Alternatives will be identified and evaluated as part of this condition assessment.

Several DOC facilities have been trying to replace perimeter fence detection systems as they fail. Typically, when these systems fail, they are at end of life. Newer fence detection devices are rarely backwards compatible and do not communicate with the older perimeter fence detection networks. Even if electronics technicians can get the newer devices operational, there is still the risk of communication errors with older devices that crash the system and prevent the system from continuing to operate. Ideally, perimeter fence detection devices are replaced at the same time to prevent incompatibility and failures that lead to staffing the perimeter with extra armed posts.

Most perimeter fence detection system failures result in additional staff to patrol the perimeter until the systems can be restored to normal operation. This is a short-term solution because the facilities are staffed to have perimeter fences monitored electronically.

DOC is requesting funding for a condition assessment to develop a statewide perimeter fence detection stabilization

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Capital Project Request

2023-25 Biennium

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Version: 10 FY2024 Supplemental Agency Request

Report Number: CBS002

Date Run: 9/11/2023 7:54AM

Project Number: 40000525

Project Title: SW: Perimeter Fence Detection Stabilization Project

Description

program. The assessment should identify immediate replacement needs to avoid unexpected perimeter fence detection failures, plan for ongoing replacement of perimeter fence detection systems as they approach end of useful life and provide an order of magnitude cost for these projects. A statewide perimeter fence detection stabilization program reduces the security risk of not having a functioning perimeter fence system.

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

The stabilization of DOC perimeter fence systems will improve security and safety for 13,000 incarcerated individuals and over 8,000 employees across the state. Washington state communities benefit from safe and secure prisons. Revitalized perimeter fence systems will reduce escape detection failures.

6. 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.

State Construction funds (057) are being requested to conduct a condition assessment for this project in the FY2024 supplemental budget.

State Construction funds (057) will be requested for the design and construction of this project in 2025-27 (FY2026-27) and future biennia.

7. 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 mission of DOC is to improve public safety by positively changing lives. DOC’s vision is working together for safer communities.

This Capital request aligns with the one or more of the following Results Washington Goals and Outcome Measures:

- World Class Education
- Prosperous Economy
- Sustainable Energy and Clean Environment
- Healthy and Safe Communities
- Efficient, Effective, and Accountable Government

This request supports the following goals, objectives, approaches/strategies, and outcome measures in Doc’s 2023-25 Strategic Plan:

310 - Department of Corrections
Capital Project Request

2023-25 Biennium

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Version: 10 FY2024 Supplemental Agency Request

Report Number: CBS002

Date Run: 9/11/2023 7:54AM

Project Number: 40000525

Project Title: SW: Perimeter Fence Detection Stabilization Project

Description

Safe and Humane Systems

Cultivate a human-centered approach to our work that delivers on trauma-informed practices, safe, fair, and humane living and working conditions and supports a culture that reduces risk and increases positive opportunities for both justice-involved individuals and staff.

EDIR Culture

Eliminate disparities by implementing our pro-equity, anti-racism framework, and reinforcing a culture where every person is welcomed and feel they belong.

Healthy and Engaged Workforce

Foster a supportive work environment that promotes wellness and combats corrections fatigue.

Successful Transitions

Provide personalized support to justice-involved individuals, including the knowledge, skills, and abilities to successfully reenter their communities and thrive as better neighbors.

By committing to these strategic goals, DOC will achieve our ultimate goal of Correctional Excellence.

This capital project will ensure that DOC facilities are well maintained, safe and secure for incarcerated individuals and staff, and efficient to operate.

8. 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.)

There are no IT-related impacts as part of the condition assessment. Any ongoing IT-related operating costs will be identified in the assessment and submitted in future operating budget requests.

9. 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 13 (Puget Sound Recovery) in the 2023-25 Operating Budget Instructions.

This project is not linked to the Puget Sound Action Agenda.

10. How does this project contribute to meeting the greenhouse gas emissions limits established in RCW70A.45.050, Clean Buildings performance standards in RCW 19.27A.210, or other statewide goals to reduce carbon pollution and/or improve energy efficiency? Please elaborate.

**310 - Department of Corrections
Capital Project Request**

2023-25 Biennium

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Version: 10 FY2024 Supplemental Agency Request

Report Number: CBS002

Date Run: 9/11/2023 7:54AM

Project Number: 40000525

Project Title: SW: Perimeter Fence Detection Stabilization Project

Description

This project does not directly contribute towards meeting the greenhouse gas emissions limits established in RCW 70A.45.050, Clean Buildings performance standards in RCW 19.27A.210, or other statewide goals to reduce carbon pollution and/or improve energy efficiency.

11. How is your proposal impacting equity in the state? Which communities are impacted by this proposal? Include both demographic and geographic communities. How are disparities in communities impacted?

One of DOC's Strategic Anchors is the commitment to operate a safe and humane corrections system and partner with others to transform lives for a better Washington. Corrections believes in creating an environment that values physical, mental, and emotional security and well-being for staff and incarcerated individuals.

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

There is a great deal of risk associated with the delay of this project. There are many parts of the existing system that could fail. It is important to correct this problem now or design a solution that will address the concerns as soon as possible. If this project goes unfunded the ongoing maintenance and emergency project costs will continue to increase.

There are no ongoing operating cost impacts related to this capital project that will need to be funded.

Location

City: Statewide

County: Statewide

Legislative District: 098

Project Type

Remodel/Renovate/Modernize (Major Projects)

Growth Management impacts

None.

Funding

Acct Code	Account Title	Estimated Total	Expenditures		2023-25 Fiscal Period	
			Prior Biennium	Current Biennium	Reappropriations	New Appropriations
057-1	State Bldg Constr-State	750,000				750,000
	Total	750,000	0	0	0	750,000
			Future Fiscal Periods			
		<u>2025-27</u>	<u>2027-29</u>	<u>2029-31</u>	<u>2031-33</u>	
057-1	State Bldg Constr-State					

310 - Department of Corrections
Capital Project Request

2023-25 Biennium

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Version: 10 FY2024 Supplemental Agency Request

Report Number: CBS002

Date Run: 9/11/2023 7:54AM

Project Number: 40000525

Project Title: SW: Perimeter Fence Detection Stabilization Project

Funding				
Total	0	0	0	0

Operating Impacts

No Operating Impact

Narrative

We do not expect there will be any operating cost impacts related to this capital project.

STATE OF WASHINGTON
AGENCY / INSTITUTION PROJECT COST SUMMARY

Updated June 2022

Agency	Department of Corrections
Project Name	SW Perimeter Fence Detection Stabilization Project
OFM Project Number	40000525

Contact Information

Name	Chris Idso
Phone Number	360.580.8731
Email	clidso@doc1.wa.gov

Statistics

Gross Square Feet		MACC per Gross Square Foot	
Usable Square Feet		Escalated MACC per Gross Square Foot	
Alt Gross Unit of Measure			
Space Efficiency		A/E Fee Class	A
Construction Type	Detention/correctional f	A/E Fee Percentage	17.40%
Remodel	Yes	Projected Life of Asset (Years)	20

Additional Project Details

Procurement Approach	DBB	Art Requirement Applies	No
Inflation Rate	4.90%	Higher Ed Institution	No
Sales Tax Rate %	9.00%	Location Used for Tax Rate	SW
Contingency Rate	10%		
Base Month (Estimate Date)	July-22	OFM UFI# (from FPMT, if available)	
Project Administered By	Agency		

Schedule

Predesign Start	September-24	Predesign End	June-25
Design Start		Design End	
Construction Start		Construction End	
Construction Duration	0 Months		

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Project Cost Estimate

Total Project	\$750,152	Total Project Escalated	\$750,152
		Rounded Escalated Total	\$750,000

Cost Estimate Summary

Acquisition

Acquisition Subtotal	\$0	Acquisition Subtotal Escalated	\$0
-----------------------------	------------	---------------------------------------	------------

Consultant Services			
Pre-design Services	\$500,000		
Design Phase Services	\$0		
Extra Services	\$83,000		
Other Services	\$0		
Design Services Contingency	\$58,300		
Consultant Services Subtotal	\$641,300	Consultant Services Subtotal Escalated	\$641,300

Construction			
Maximum Allowable Construction Cost (MACC)	\$0	Maximum Allowable Construction Cost (MACC) Escalated	\$0
DBB Risk Contingencies	\$0		
DBB Management	\$0		
Owner Construction Contingency	\$0		\$0
Non-Taxable Items	\$0		\$0
Sales Tax	\$0	Sales Tax Escalated	\$0
Construction Subtotal	\$0	Construction Subtotal Escalated	\$0

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

Artwork			
Artwork Subtotal	\$0	Artwork Subtotal Escalated	\$0

Agency Project Administration			
Agency Project Administration Subtotal	\$28,852		
DES Additional Services Subtotal	\$0		
Other Project Admin Costs	\$0		
Project Administration Subtotal	\$28,852	Project Administration Subtotal Escalated	\$28,852

Other Costs			
Other Costs Subtotal	\$80,000	Other Costs Subtotal Escalated	\$80,000

Project Cost Estimate			
Total Project	\$750,152	Total Project Escalated	\$750,152
		Rounded Escalated Total	\$750,000

Funding Summary

	Project Cost (Escalated)	Funded in Prior Biennia	New Approp Request 2023-2025	2025-2027	Out Years
Acquisition					
Acquisition Subtotal	\$0		\$0		\$0
Consultant Services					
Consultant Services Subtotal	\$641,300		\$641,300		\$0
Construction					
Construction Subtotal	\$0		\$0		\$0
Equipment					
Equipment Subtotal	\$0		\$0		\$0
Artwork					
Artwork Subtotal	\$0		\$0		\$0
Agency Project Administration					
Project Administration Subtotal	\$28,852		\$28,852		\$0
Other Costs					
Other Costs Subtotal	\$80,000		\$80,000		\$0
Project Cost Estimate					
Total Project	\$750,152	\$0	\$750,152	\$0	\$0
	\$750,000	\$0	\$750,000	\$0	\$0
Percentage requested as a new appropriation			100%		

What is planned for the requested new appropriation? (Ex. Acquisition and design, phase 1 construction, etc.)

Funding this request will support a Condition Assessment at all prison facilities that will identify and prioritize all perimeter security fence projects.

Insert Row Here

What has been completed or is underway with a previous appropriation?

Various perimeter fence projects have been completed as equipment and systems fail. Often these are emergency requests that are expensive.

Insert Row Here

What is planned with a future appropriation?

Funding for design and construction of the projects identified in the Condition Assessment will be requested in future Capital budgets.

Insert Row Here

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2023-25 Biennium

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Version: 10 FY2024 Supplemental Agency Request

Report Number: CBS002

Date Run: 9/11/2023 7:55AM

Project Number: 40000526

Project Title: WSP: IMU South Fire Protection & Smoke Dampers

Description

Starting Fiscal Year: 2025

Project Class: Preservation

Agency Priority: 4

Project Summary

The Washington State Penitentiary (WSP) Intensive Management Unit (IMU) South houses incarcerated individuals that pose the highest risk to the public and staff. The security and controlled movement in this unit requires a defend-in-place firefighting strategy. The fire protection and smoke control system have failed and need to be replaced to preserve life safety and security in this living unit.

Project Description

1. 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.

DOC requests funding to replace the smoke control and energy management controls system (EMCS) in their entirety and upgrade the fire control system. The fire protection system is out of compliance with current code and requires a permanent 24/7 fire watch, pulling limited staffing away from their primary duties. The City of Walla Walla Fire Chief has already indicated a continuous fire watch is not acceptable.

The IMU South building at WSP is experiencing operational issues with the EMCS and Simplex fire alarm systems. The EMCS has primary control over the smoke control system; but EMCS has reached the end of its useful life, is not updatable, and is not performing to current fire code requirements. The IMU EMCS system also does not have the ability to network with the campus EMCS. The fire fighter smoke control panel is connected to the obsolete EMCS system making the smoke control panel obsolete and non-upgradable. This control architecture is not compliant with current fire code requirements because the critical life safety system is reliant on an obsolete EMCS system, not the fire alarm system.

The facility fire alarm system is a Simplex 4100U Fire Alarm Control Panel that was installed in 2007. The Simplex 4100U Fire Alarm Control Panel is obsolete and not currently manufactured but parts are still supported. The existing Simplex 4100U Fire Alarm Control Panel is not configured to takeover smoke control functions at the facility.

The IMU South heating, ventilation, and air conditioning (HVAC) system, installed in 2006, is in fair condition, but approaching the end of its expected serviceable life. The HVAC system is designed to control smoke in the living unit during a fire event. Some of the building roof top units (RTUs) and make-up air units (MAUs) serving smoke control functions have had their controls replaced or modified to the extent they no longer function as smoke control. The RTUs and MAUs controls and possibly the units will need to be replaced.

This issue is complicated because IMU South is a restricted housing unit requiring a defend-in-place firefighting strategy. Incarcerated individuals cannot be easily moved or relocated. Aerosol irritants are sometimes utilized in the living unit and the smoke control system is used to clear the building of irritants and minimize non-target exposure. Manually operating the smoke control system is problematic because the panel is in a remote area of the building requiring specialized access.

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Report Number: CBS002

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Project Number: 40000526

Project Title: WSP: IMU South Fire Protection & Smoke Dampers

Description

2. 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.

In August 2023, DOC used Coffman engineering to develop an IMU South Smoke Control Predesign Report for WSP. This report identified current problems listed in section one of this project request and recommended the installation of a new smoke control system that operates as two separate systems. Primary control should be assigned to the fire alarm control panel. Secondary control should be assigned to the EMCS for HVAC operation and irritant exhaust system.

DOC is requesting funding for design and construction of option 2 identified in the IMU South Smoke Control Predesign Report. This option replaces the smoke control and EMCS system in their entirety and upgrades the fire control system to incorporate smoke control functions.

Smoke control functions will be removed from the HVAC equipment controls and directly connected to the fire alarm system. The EMCS will be replaced and programmed to control and monitor building systems. The EMCS will be on an interoperable network and capable of communicating with the existing campus EMCS system and the fire alarm system.

New EMCS control modules will be installed in IMU South HVAC equipment for HVAC operations. Under normal conditions, the EMCS will operate HVAC equipment and provide an operator selected irritant exhaust function. In a fire alarm condition, the fire alarm system will have an EMCS override function and operate HVAC smoke control functions.

A fully functional smoke control system will be installed and connected directly to the fire control system for primary operation. A new fire fighters smoke control panel will be installed in the fire riser room and connected to the fire alarm panel. The fire alarm control system main controller will be replaced with a Simplex 4100ES or similar panel, and existing fire alarm control infrastructure will be reused. New addressable control and monitoring modules will be directly connected to smoke control equipment for automatic and manual operation. Existing IMU South HVAC equipment will have new fire alarm control modules that communicate with the new fire panel and the new firefighters smoke control panel.

This scope of work does not address all known code deficiencies, but it does create a functional fire control system.

This project has an 11-month project construction completion schedule. The estimated total project budget is \$4,622,000. This request is for design and construction funds in 2023-25 (FY2024-25).

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

This project installs a smoke control system that can be operated as two separate systems. The first system is controlled by the fire alarm control panel and used for the purpose of smoke control during a fire/smoke event. The second system is controlled by the EMCS for HVAC operation and irritant exhaust. This places primary function of the smoke control system with

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Project Title: WSP: IMU South Fire Protection & Smoke Dampers

Description

the fire alarm system as required by current fire code.

DOC cannot accept non-compliance with life safety codes. This project creates safe and humane living/working conditions for incarcerated individuals and WSP staff while achieving compliance with fire and life safety codes.

4. 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 August 2023 Coffman Engineering predesign report, IMU South Smoke Control for WSP provided 3 options.

The first option is a do-nothing option. This option leaves the fire protection system out of compliance with current code and requires a permanent fire watch. The City of Walla Walla Fire Chief has already indicated a continuous fire watch is not acceptable.

The third option includes all work in option two and replaces HVAC equipment, upgrades the fire control system, upgrades the smoke control system, and upgrades EMCS. This option includes replacement of gas fired equipment with energy efficient heat pump units required by the latest energy code. This project has a 10-month project completion and an estimated cost of \$7,249,000 according to the Coffman Engineering predesign report. This is not the recommended option.

The best option is the recommended second option. This option restores functionality of the smoke control system and fire alarm systems. This option will reduce system failures and fire watches, meet current fire codes, and extend time for emergency response events. DOC is requesting funding for this option.

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

This project creates a safe and humane living environment for individuals housed in IMU South by restoring functionality of the smoke control and fire alarm system. Because this is a restricted housing unit, DOC has a vested interest in the safety and security of this population. This project replaces equipment needed for staff to manage irritants and smoke safely and humanely in areas where there are limited options to move people during emergencies. The stabilization of the smoke control and fire alarm systems will reduce system failures and fire watches, meet current fire codes, and extend time for emergency response events.

6. 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.

State Construction funds (057) are being requested for the design and construction of this project in 2023-25 (FY2024-25).

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Description

7. 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 mission of DOC is to improve public safety by positively changing lives. DOC’s vision is working together for safer communities.

This Capital request aligns with the one or more of the following Results Washington Goals and Outcome Measures:

- World Class Education
- Prosperous Economy
- Sustainable Energy and Clean Environment
- Healthy and Safe Communities
- Efficient, Effective, and Accountable Government

This request supports the following goals, objectives, approaches/strategies, and outcome measures in Doc’s 2023-25 Strategic Plan:

Safe and Humane Systems

Cultivate a human-centered approach to our work that delivers on trauma-informed practices, safe, fair, and humane living and working conditions and supports a culture that reduces risk and increases positive opportunities for both justice-involved individuals and staff.

EDIR Culture

Eliminate disparities by implementing our pro-equity, anti-racism framework, and reinforcing a culture where every person is welcomed and feel they belong.

Healthy and Engaged Workforce

Foster a supportive work environment that promotes wellness and combats corrections fatigue.

Successful Transitions

Provide personalized support to justice-involved individuals, including the knowledge, skills, and abilities to successfully reenter their communities and thrive as better neighbors.

By committing to these strategic goals, DOC will achieve our ultimate goal of Correctional Excellence.

This capital project will ensure that DOC facilities are well maintained, safe and secure for incarcerated individuals and staff, and efficient to operate.

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Capital Project Request

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Project Title: WSP: IMU South Fire Protection & Smoke Dampers

Description

8.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.)

IT-related impacts will be identified during the design phase and any ongoing operational costs will be determined at that time.

9.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 13(Puget Sound Recovery) in the 2023-25 Operating Budget Instructions.

This project is not linked to the Puget Sound Action Agenda.

10.How does this project contribute to meeting the greenhouse gas emissions limits established in RCW 70A.45.050, Clean Buildings performance standards in RCW19.27A.210, or other statewide goals to reduce carbon pollution and/or improve energy efficiency? Please elaborate.

This project does not directly contribute towards meeting the greenhouse gas emissions limits established in RCW70A.45.050, Clean Buildings performance standards in RCW 19.27A.210, or other statewide goals to reduce carbon pollution and/or improve energy efficiency.

11.How is your proposal impacting equity in the state? Which communities are impacted by this proposal? Include both demographic and geographic communities. How are disparities in communities impacted?

One of DOC's Strategic Anchors is the commitment to operate a safe and humane corrections system and partner with others to transform lives for a better Washington. Corrections believes in creating an environment that values physical, mental, and emotional security and well-being for staff and incarcerated individuals.

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

There is a great deal of risk associated with the delay of this project. There are many parts of the existing system that are prone to failure. Understanding the actual condition of this critical life safety system is important so that identification and prioritization of the systems are considered in future rehabilitation and/or subsequent standalone projects are requested as an outcome of this condition assessment. It is important to correct this problem now or design a solution that will address the concerns as soon as possible. If this project goes unfunded, the ongoing maintenance and emergency project costs will continue to increase and incarcerated individuals, staff, vendors, and visitors will continue to be at risk in the event of an undetected fire/smoke event.

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Project Title: WSP: IMU South Fire Protection & Smoke Dampers

Description

There are no known new one-time or ongoing operating cost impacts related to this capital project that will need to be funded.

Location

City: Walla Walla

County: Walla Walla

Legislative District: 016

Project Type

Remodel/Renovate/Modernize (Major Projects)

Growth Management impacts

None.

Funding

Acct Code	Account Title	Estimated Total	Expenditures		2023-25 Fiscal Period	
			Prior Biennium	Current Biennium	Reappropriations	New Appropriations
057-1	State Bldg Constr-State	4,622,000				4,622,000
	Total	4,622,000	0	0	0	4,622,000
Future Fiscal Periods						
		<u>2025-27</u>	<u>2027-29</u>	<u>2029-31</u>	<u>2031-33</u>	
057-1	State Bldg Constr-State					
	Total	0	0	0	0	

Operating Impacts

No Operating Impact

Narrative

We do not expect there will be any operating cost impacts related to this capital project.

STATE OF WASHINGTON
AGENCY / INSTITUTION PROJECT COST SUMMARY

Updated June 2022

Agency	Department of Corrections
Project Name	WSP IMU South Fire Protection & Smoke Dampers
OFM Project Number	40000526

Contact Information

Name	Chris Idso
Phone Number	360.580.8731
Email	clidso@doc1.wa.gov

Statistics

Gross Square Feet	78,952	MACC per Gross Square Foot	\$32
Usable Square Feet		Escalated MACC per Gross Square Foot	\$35
Alt Gross Unit of Measure			
Space Efficiency	0.0%	A/E Fee Class	A
Construction Type	Detention/correctional f	A/E Fee Percentage	13.82%
Remodel	Yes	Projected Life of Asset (Years)	

Additional Project Details

Procurement Approach	DBB	Art Requirement Applies	No
Inflation Rate	4.90%	Higher Ed Institution	No
Sales Tax Rate %	8.90%	Location Used for Tax Rate	Walla Walla
Contingency Rate	10%		
Base Month (Estimate Date)	August-23	OFM UFI# (from FPMT, if available)	
Project Administered By	Agency		

Schedule

Predesign Start		Predesign End	
Design Start	July-24	Design End	March-25
Construction Start	July-25	Construction End	June-26
Construction Duration	11 Months		

Green cells must be filled in by user

Project Cost Estimate

Total Project	\$4,163,527	Total Project Escalated	\$4,621,956
		Rounded Escalated Total	\$4,622,000

Cost Estimate Summary

Acquisition

Acquisition Subtotal	\$0	Acquisition Subtotal Escalated	\$0
-----------------------------	------------	---------------------------------------	------------

Consultant Services			
Predesign Services	\$0		
Design Phase Services	\$262,235		
Extra Services	\$110,000		
Other Services	\$142,816		
Design Services Contingency	\$51,505		
Consultant Services Subtotal	\$566,555	Consultant Services Subtotal Escalated	\$611,144

Construction			
Maximum Allowable Construction Cost (MACC)	\$2,500,000	Maximum Allowable Construction Cost (MACC) Escalated	\$2,793,000
DBB Risk Contingencies	\$0		
DBB Management	\$0		
Owner Construction Contingency	\$250,000		\$279,300
Non-Taxable Items	\$0		\$0
Sales Tax	\$244,750	Sales Tax Escalated	\$273,435
Construction Subtotal	\$2,994,750	Construction Subtotal Escalated	\$3,345,735

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

Artwork			
Artwork Subtotal	\$0	Artwork Subtotal Escalated	\$0

Agency Project Administration			
Agency Project Administration Subtotal	\$284,222		
DES Additional Services Subtotal	\$0		
Other Project Admin Costs	\$0		
Project Administration Subtotal	\$284,222	Project Administration Subtotal Escalated	\$317,534

Other Costs			
Other Costs Subtotal	\$318,000	Other Costs Subtotal Escalated	\$347,543

Project Cost Estimate			
Total Project	\$4,163,527	Total Project Escalated	\$4,621,956
		Rounded Escalated Total	\$4,622,000

Funding Summary

	Project Cost (Escalated)	Funded in Prior Biennia	New Approp Request		
			2023-2025	2025-2027	Out Years
Acquisition					
Acquisition Subtotal	\$0				\$0
Consultant Services					
Consultant Services Subtotal	\$611,144		\$611,144		\$0
Construction					
Construction Subtotal	\$3,345,735		\$3,345,735		\$0
Equipment					
Equipment Subtotal	\$0				\$0
Artwork					
Artwork Subtotal	\$0				\$0
Agency Project Administration					
Project Administration Subtotal	\$317,534		\$317,534		\$0
Other Costs					
Other Costs Subtotal	\$347,543		\$347,543		\$0

Project Cost Estimate					
Total Project	\$4,621,956	\$0	\$4,621,956	\$0	\$0
	\$4,622,000	\$0	\$4,622,000	\$0	\$0
Percentage requested as a new appropriation			100%		

What is planned for the requested new appropriation? (Ex. Acquisition and design, phase 1 construction, etc.)

The FY2024 supplemental request is to fund the design phase and support permits, security escorts and PM during design.

Insert Row Here

What has been completed or is underway with a previous appropriation?

None.

Insert Row Here

What is planned with a future appropriation?

Construction funding will be requested in the 2025-27 Capital budget.

Insert Row Here



Predesign Report:
IMU South Smoke Control Predesign Report

Washington State Penitentiary, Walla Walla, WA



State Project No. 2023-311 A (1)
August 2, 2023



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1.0 REPORT INDEX

1.0 Report Index

2.0 Project Contacts

3.0 Executive Summary

3.1 Background

3.2 Problem Overview

3.3 Options Evaluated to Solve Problem

4.0 Analysis of Problems, Requirements for Solutions and Opportunity

4.1 Problems and Program Requirements

4.2 Opportunity

4.3 Statutory Requirements

4.4 Solution Requirements

5.0 Analysis Of Options

5.1 Design Options Overview

5.2 Detailed Description of Options

5.2.1 Option 1: Do Nothing

- Existing equipment assessment
- Option 1 Summary and Cost

5.2.2 Recommended Option 2: Upgrade Fire Control, Smoke Control, and EMCS

- Energy management and Control System
- Smoke Control System
- Fire Alarm Control Panel
- Sequence of Operation
- Electrical and Cabling
- Existing equipment
- Project Laydown and Personnel
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5.2.3 Option 3: HVAC Equipment Replacement and Option 2 Upgrades

- New Equipment and Installation
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- Option 3 Summary and Costs.

6.0 Appendices

APPENDIX A: PROPOSED IMU SMOKE CONTROLS BASIS OF DESIGN

APPENDIX B: EXISTING IMU SMOKE CONTROLS DIAGRAM

APPENDIX C: PROJECT COST PROJECTIONS

APPENDIX D: EQUIPMENT CONDITION PHOTOS

2.0 PROJECT CONTACTS

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3.0 EXECUTIVE SUMMARY

3.1 Background

Intensive Management Unit South (IMU South) is a close custody facility located in the newer perimeter of the West Campus at Washington State Penitentiary (WSP). The IMU South houses close custody inmates who represent a high risk to the public and staff. These inmates are assigned to a secure location and require controlled movement within the institution. IMU South was constructed in 2007 and consists of three housing pods and a central area administrative area all totaling 80,000 square feet. The central area houses the IMU administrative staff, inmate services, mechanical systems and is approximately 14,600 square feet in area. Each housing pod is two stories high with a control room and is approximately 21,800 square feet in area. IMU South utilizes a Johnson Controls Metasys NAE 11 controls platform as their Energy Management and Control Systems (EMCS) and a Simplex 4100U Fire Control system. Each IMU pod group is served by three HVAC zones providing the housing unit heating, cooling ventilation air and smoke control. Each zone has a single roof mounted HVAC unit (RTU) to provide heating and cooling, a single makeup air unit (MAU) to provide ventilation air, and a single exhaust fan (EF). Each zone is

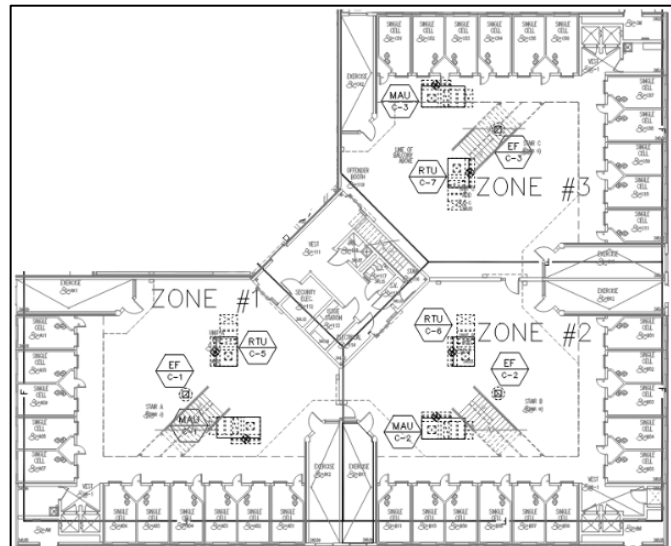


Figure 1 Typical HVAC Zone Layout

controlled by a remote EMCS controller that is networked with the main building



Figure 2 Existing Smoke Controls

EMCS system in mechanical room 155. The EMCS provides direct control over the building HVAC equipment and is networked with the Fire Control system by means of a gateway relay panel located in the mechanical room. Currently, the EMCS has primary control over the smoke control system. In the event of a fire alarm, the Fire Control system will send a signal to the EMCS via the relay panel to control the HVAC system. The smoke control system can be

manually controlled at the Fire Fighters Smoke Control Panel located in Fire Riser room 107. The fire fighters smoke control panel has priority over the automatic function of the EMCS.

IMU South is a closed custody environment requiring a defend-in-place firefighting strategy because inmates cannot be easily relocated. The smoke control system is utilized by the IMU for two functions. Primarily it is used to control smoke propagation in the event of a fire by providing exhaust air and air pressurization to cells. Secondly, the smoke control system is utilized as a operator selected tear gas exhaust system to remove irritants from the air.

3.2 Problem Overview

The IMU South building at WSP is experiencing operational issues with the EMCS and Simplex fire alarm systems. The EMCS has primary control over the smoke control system; but EMCS has reached the end of its useful life, is not updatable, and is not performing to current fire code requirements. The IMU EMCS system also does not have the ability to network with the campus EMCS. The fire fighter smoke control panel is connected to the obsolete EMCS system making the smoke control panel obsolete and non-upgradable. This control architecture is not compliant with current fire code requirements because the critical life safety measures are reliant on the obsolete EMCS system as opposed to the fire control system.

The facility fire alarm system is a Simplex 4100U Fire Alarm Control Panel that was installed in 2007. The Simplex 4100U Fire Alarm Control Panel is obsolete and not currently manufactured but parts are still supported. The existing Simplex 4100U Fire Alarm Control Panel is not configured to takeover smoke control functions at the facility.

The IMU South heating, ventilation and air conditioning (HVAC) systems are vintage 2006 and in fair condition but are approaching their expected serviceable life. In some cases, the RTUs and AHUs serving smoke control functions have had their controls replaced or modified to make proper smoke control functions inoperable. The RTUs and MAUs controls will need to be replaced and the units utilize R-22 refrigerant which has been phased out of production.

IMU South is a close custody facility where aerosol irritants are regularly released, and the smoke control system is used to clear the building of irritants. Manually operating the smoke control system is problematic because the panel is in a remote area of the building requiring specialized access.

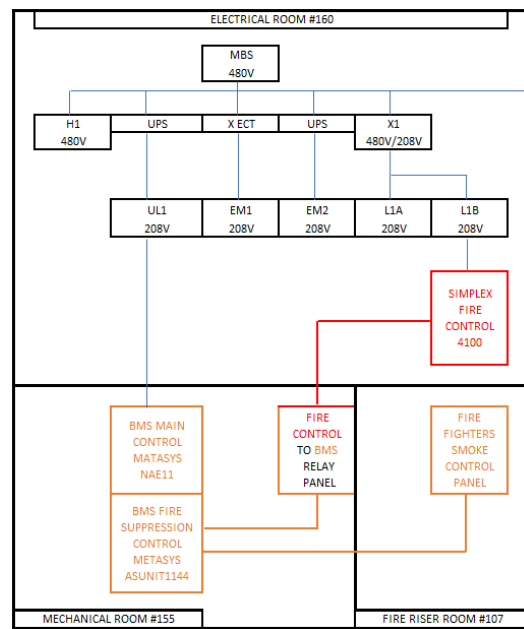


Figure 3 Electrical, EMCS, Fire Control Panel Diagram

3.3 Options Evaluated to Solve the Problem

This predesign evaluated three options for addressing the problem:

Option 1 Do Nothing / No Action - Option 1 is to not implement a capital project, resulting in continued deterioration of the EMCS and Fire Control system and permanent implementation of a fire watch at the facility. The deterioration would continue until the end of HVAC equipment useful life and the complete replacement of the HVAC system with controls. The estimated project budget for Option 1 is \$0, but the option will require the permanent implementation of a fire watch at the building which increases operation cost. Option 1 is not the recommended option.

Option 2 Upgrades to Fire Control, Smoke Control and EMCS - Option 2 replaces the smoke control and EMCS system in their entirety and upgrades the Fire Control System to incorporate smoke control functions.

Controls are to be partitioned so that smoke control functions will be removed from the HVAC equipment Metasys controls and directly connected to the Fire Panel. A complete Energy Management and Control System (EMCS) shall be provided to control and/or to monitor building systems. The EMCS will be a complete and working system that is an interoperable network capable of communicating with the existing campus EMCS system and the fire control system. New EMCS modules will be installed in IMU HVAC equipment for HVAC operations. The EMCS normally operates HVAC equipment and provides an operator selected tear gas exhaust function; but fire control is to have EMCS override function to operate fire alarm and smoke control functions.

A fully functional smoke control system will be installed and interlocked directly to the fire control system for primary operation. A new fire fighters smoke control panel will be installed in the fire riser room and connected to the fire alarm panel. The fire alarm control system main controller will be replaced with a Simplex 4100ES or similar panel, and existing fire alarm control infrastructure will be reused. New addressable control and monitoring modules will be directly connected to smoke control equipment for automatic and manual operation. Existing IMU HVAC equipment will have new fire alarm control modules installed that communicate with the new fire panel and the new firefighters smoke control panel.

Option 2 will allow DOC to meet program requirements for fire safety and improve overall building operations. While the scope of work does not address all known codes and standards deficiencies, it satisfies the essential needs to create a functional fire control system. This project has a 10-month project completion schedule. The estimated total project budget for Option 2 is \$3,792,000.

Option 2 is the recommended option because it represents a reasonable investment for the smoke control system repair and allows DOC and WSP to make some small operational improvements. Implementing Option 2 allows DOC and WSP to plan for future HVAC unit

replacements (Option 3) and lays the foundation for integrating the new equipment into the EMCS and Fire Control systems.

Option 3 HVAC Equipment Replacement and Upgrades to Fire Control, Smoke Control and EMCS - Option 3 includes all of the Option 2 scope plus complete replacement of RTUs and MAUs at IMU South. Option 3 includes replacement of gas fired equipment with energy efficient heat pump units required by the latest energy code. This project also has a 10-month project completion schedule. The estimated total project budget for Option 3 is \$7,249,000. Option 3 is not the recommended option.

4.0 ANALYSIS OF PROBLEMS, REQUIREMENTS FOR SOLUTIONS AND OPPORTUNITY

4.1 Problems and Program Requirements

The IMU South building at WSP is experiencing operational issues with the Johnson Controls (JCI) and Simplex fire systems. The facility is provided with a Simplex 4100U Fire Alarm Control Panel that was installed in 2007. The Simplex 4100U Fire Alarm Control Panel is obsolete and not currently manufactured but parts are still supported. It is recommended the existing Simplex 4100U Fire Alarm Control Panel be replaced with a Simplex 4100ES Fire Control Panel. Currently, Simplex 4100U Fire Control Panel is in an “Trouble” state and a fire watch is being performed to comply with state fire protection standards. The smoke control system serving the IMU South facility is provided by a JCI Metasys HVAC controller and not the fire control system. The Metasys system is obsolete, failing and non-upgradable. The WSP campus control system cannot communicate with the obsolete JCI control infrastructure in the IMU. Some HVAC equipment controllers have been modified or replaced which render the HVAC units out of compliance with UUKL smoke control listings.

A secondary problem is the existing rooftop units providing HVAC to the space are approximately 17 years old and approaching the end of their useful life. The R-22 refrigerant used in the HVAC equipment was phased out in US Clean Air Act; R-22 is expensive and difficult to procure. These units will reach end of life in the next five years and the new units will require a second controls upgrade at that time.

By RCW 72.09.10, DOC is obligated to provide for the “health, safety, and welfare” of correction officers and those in their custody. A capital investment in IMU South Housing will allow it to meet local and state code and its obligation to continue to serve DOC goals.

Program Requirements

IMU South is a closed custody environment requiring a defend-in-place firefighting strategy because inmates cannot be easily relocated. It is the intent of the Department of Corrections to continue operating this building while performing upgrades to the building and for the foreseeable future.

The existing fire control architecture consists of the fire control panel alarming to the EMCS through a bridging panel, then having the EMCS control modules perform smoke control operations. In this architecture the fire control panel, which typically is the master smoke controller, has the EMCS controller act as the master smoke control panel. This type of control architecture is problematic from a life-safety perspective because the existing smoke control system is controlled by the EMCS and separate from the fire control system. The existing EMCS system and the bridge panel are no longer rated for fire control use and their control architecture does not meet current code. The IMU current smoke control system is utilized for two functions. Primarily it is used to control smoke propagation in the event of a fire by providing exhaust air and air pressurization to cells. Secondly, the smoke control system is utilized as a tear gas exhaust system to remove irritants from the air. The new smoke control system should operate as two separate master-slave systems; with master control assigned to the Fire panel for emergency operation and slave control assigned to the EMCS for HVAC operation and tear gas exhaust system. See Appendix B for existing controls details.

The fire control system is 17 years old, is in a "Trouble" state, and is not operating as designed. The main Simplex 4100U controller is obsolete and should be upgraded to meet code and facilitate integration into the campus control system. The existing fire protection infrastructure consisting of smoke detectors, fire dampers, and satellite control modules are in fair condition and can be reused and integrated into the new controller. New fire control modules will need to be installed in HVAC equipment as master controllers for smoke control operations.

The existing IMU South EMCS system is obsolete, and its software cannot be upgraded to the latest controls infrastructure. These controls are no longer rated for smoke control operation, and do not have the ability to communicate with the campus EMCS system for alarming and monitoring. A new control system will be required to meet current fire protection standards.

Existing HVAC equipment serving the IMU South is nearing end of life. The older HVAC systems will create an increasing demand for an already burdensome need for maintenance and repair. The systems are moderately inefficient with limited and outdated controls. Some of the HVAC equipment and controls have been modified and are no longer operating as designed. These modifications would need to be reversed to have the equipment meet their intended fire control rated operating state. The existing systems should have their controls replaced and an additional fire protection controller installed to meet smoke control requirements. Replacing these systems is not essential to correcting the IMU smoke control issue but represents a great opportunity for improving the quality of the environment and significant energy savings.

The teargas exhaust control location is problematic. IMU South is a close custody facility where aerosol irritants are regularly released, and the operator selected tear gas exhaust function of the smoke control system is used to clear the building of irritants. Having the fire fighter smoke control panel located in the fire riser room is problematic from an operational standpoint for the IMU staff. The fire riser room is in a remote area of IMU South requiring staff to access special keys and travel through several secure door entries to access the panel. Accessing the panel to

exhaust the irritants takes a substantial amount of time and coordination, which increases the duration of irritant exposure to staff. The location of the panel also requires staff to exit the IMU building into inclement weather to access the fire riser room. It is not essential to have the operator selected tear gas exhaust function of the smoke control system accessible in each Pod control room, but it would decrease the time required to exhaust airborne irritants from the building and provide ease of operation to the staff.

4.2 Opportunity

This project represents an opportunity to create a safer and more comfortable environment for the IMU correction officers and those in their custody. A controls upgrade will also allow the IMU to meet fire safety requirements and network its operations with the penitentiary campus controls infrastructure. New equipment and controls installed at the IMU provide the opportunity for the facility to operate more efficiently meeting the 2021 Washington State Energy Code standards and energy use targets required by the 2019 Washington Clean Buildings Act.

4.3 Statutory Requirements

Statutory requirements are obligations imposed by laws. The statutory obligations applicable to the design, construction, remodel and operation of a correctional facility are extensive. Applicable statutory requirements for design and construction will vary depending upon the scope of work.

Statutory requirements for design, construction and operation differ depending upon the scope of the work proposed. The following is a list of applicable laws, codes, and standards.

Jurisdiction Data

Authority Having Jurisdiction: City of Walla Walla

Electrical: Washington State Department of Labor & Industries

Local Code Adoption

Title 15 – Building and Construction

Title 20 – Zoning

Title 21 – Environment

Applicable Laws, Codes, and Standards

- International Building Code (IBC) – 2021 edition (51-50 WAC)
- International Existing Building Code (IEBC) – 2021 edition (51-50 WAC)
- International Mechanical Code (IMC) – 2021 edition (51-52 WAC)
- International Fire Code (IFC) – 2021 edition (51-54A WAC)
- International Energy Conservation Code (WSEC), Commercial – 2021 edition (51-11C WAC)
- Uniform Plumbing Code (UPC) – 2021 edition (51-56 WAC)
- NFPA 70, National Electrical Code (NEC) – 2017 edition (296-46B WAC)

- NFPA 72, National Fire Alarm and Signaling Code – 2022 edition
- NFPA 13, Standard for Installation of Sprinkler Systems – 2022 edition
- NFPA 92, Standard for Smoke Control Systems
- ASHRAE 55
- ASHRAE 62.1
- ASHRAE 90.1

4.4 Solution Requirements

The smoke control system and EMCS are not compliant with current standards and are obsolete. Replacing the smoke control in its entirety and controlling it via the Fire Control System will allow the IMU to meet its goal of providing a safe and healthy environment for correction officers and inmates. The EMCS will be replaced in its entirety to provide networking ability with fire control system and the campus EMCS infrastructure. EMCS main controller in mechanical room and subordinate control modules in HVAC equipment and electrical room will be replaced. EMCS communication lines to existing equipment and to campus EMCS system will be replaced. The Fire Control System will be upgraded to facilitate the new smoke control system and network with EMCS. New, fire rated, control modules will be installed in HVAC equipment for smoke control operation.

The HVAC systems in IMU should be repaired and are nearing end of service life. The HVAC units must be repaired to an operating condition rated for fire protection service and have a complete controls replacement to meet project requirements. The existing rooftop HVAC equipment serving the IMU have experienced controls failures and scarcity of R-22 refrigerant make operating the existing equipment expensive and wasteful. If existing equipment is reused then contingency should be made for future replacement and all controls installed should be upgradable for use in latest generation equipment.

New equipment with new controls is an alternate option to the refurbishment of the existing equipment. New HVAC units will be rated for smoke control operation, reduce maintenance costs, and meet current energy standards. Total replacement of RTU and MAU units is not required on IMU but should be considered.

5.0 ANALYSIS OF OPTIONS

5.1 Design Options Overview

The purpose of a predesign study is to identify and explore alternatives to best solve a problem for a capital project. The conclusion of the predesign is a recommended course of action to implement the best solution to the problem identified. The basis of the options presented are a result of discussions with Agency representatives, facility operations, and an analysis of near and long-term plans for the building and the entire campus at WSP.

Three options were considered in this predesign study:

Option #1: Do Nothing.

This option considers the consequences of not addressing the EMCS and fire control system failures, leaving the smoke control system in its current operational state.

Option #2: EMCS and Fire Fighters Smoke Control Replacement.

This option removes and replaces the EMCS system in its entirety, upgrades the fire alarm panel control, and installs a new smoke control panel. New EMCS and fire protection control modules will be installed in all mechanical equipment. New control wiring will be run for new fire control modules in roof top equipment. Existing HVAC equipment will be repaired to facilitate smoke control operation.

Option #3: HVAC Equipment Replacement and Upgrades to Fire Control, Smoke Control and EMCS.

This option includes all of the Option 2 scope plus complete replacement of RTUs and MAUs at IMU South. Existing gas fired equipment RTU and MAU located on roof will be replaced with energy efficient heat pump units required by the latest energy code. Existing exhaust fans and other HVAC equipment will be retrofitted with new controls and reused.

Options 2 and 3 both address the fundamental need for building control upgrades, occupant health and safety. See Appendix A for options 2 and 3 smoke controls basis of design. **Option 2 for EMCS and Fire fighters smoke control replacement is the recommended option.**

5.2 Detailed Description of Options

5.2.1 Option 1: Do Nothing

This option considers the consequences of not addressing the EMCS and fire control system failures, leaving the smoke control system in its current operational state. Under this scenario, the DOC incurs no immediate capital costs. As of the presentation of this predesign, smoke control system is still connected to the EMCS system, the smoke control and fire protection system will be out of compliance with current code, and a fire watch will be permanently in place at the facility. The EMCS system is still obsolete, not networked with the campus EMCS system and bypassed in some areas.

Existing Equipment Assessment:

Existing gas fired RTUs and MAUs serving the IMU are vintage 2006, fair condition, but are nearing end of serviceable life. Equipment housing is showing signs of ageing but could be refurbished with paint. The interior of units is dirty, but the majority of the components are in fair condition. The existing DX system requires R-22 refrigerant, now banned by the EPA for purchase due to its negative environmental impact. The refrigeration condenser and evaporator coils are in good condition and do not show signs of corrosion or leaks. Refrigerant insulation shows signs of age and need repaired in some areas. HVAC gas furnace coils are operable, but will need to be replaced soon due to age. HVAC electrical systems are original and in good

condition. The majority of the integral HVAC controls are operable but are obsolete to today's standards. In some cases new sensors have been installed to bypass the intended operation of the units. All other existing HVAC equipment: like ducting, fans, VAV boxes, heaters, split-systems, and grilles are in good condition.

Without the ability to recharge the existing RTUs and MAUs with R-22 refrigerant, the equipment is now obsolete and cannot be repaired beyond its current condition. We anticipate these units will reach an end of serviceable life in the next five years, due to scarcity of parts and R-22 refrigerant. As the HVAC equipment fails and needs repair or replacement, the funding and planning will take a reactionary or emergency mode rather than a planned and budgeted expense.



Figure 4 RTU with Bypassed Controls

Option 1 Summary and cost:

The “do-nothing” option maintains potential for consequent or collateral damage from smoke inhalation in the event of a fire or from unwanted exposure to correction officers or inmates from chemical deterrents released in housing areas. As the HVAC equipment fails and needs repair or replacement, the funding and planning will take a reactionary or emergency mode rather than a planned and budgeted expense. This alternative would result in a loss of value as a state held asset, putting the DOC at increased risk for grievance and legal exposure, and the gradual complete failure of the EMCS and all HVAC systems. There is no estimated total project budget for Option 1, but there will be higher ongoing operational and maintenance costs than options 2 and 3. This is not the preferred option.

5.2.2 Recommended Option 2: Upgrades to Fire Control, Smoke Control and EMCS.

Under this scenario the smoke control panel and EMCS system will be replaced in their entirety; and the main fire control panel will be upgraded, including the firefighters smoke control panel. EMCS control modules will be replaced in all existing HVAC equipment and new fire rated smoke control modules will be installed in the same equipment. New control wire will be pulled through conduits to serve the new EMCS and fire control modules. Building smoke control and tear gas exhaust will be partitioned into separate functions administered by the fire control and EMCS systems respectively. Existing HVAC equipment and fire alarm systems will be repaired and reused to the greatest extent possible. See Appendix A for options 2 and 3 smoke controls basis of design.

Energy Management and Control Systems (EMCS):

The existing main EMCS control panel located in mechanical room #155 will be replaced by a new building management controller capable of communication and monitoring of all

mechanical equipment in the building and communication with the newly upgraded campus EMCS system. The new EMCS main controller will have the capability of connecting to the fire control system. The fire control panel will have the capability of overriding the new EMCS system for fire protection and smoke control purposes. New mechanical controls will be installed in control rooms #201, #203, and #205 to allow correction officers to manually exhaust tear gas from cells or day rooms in each pod. The existing RTU and MAU units located on the IMU roof and existing fan control modules located in electrical rooms #114, #131 and #175 will all receive new remote EMCS control modules. After refurbishment we believe that the RTU's and AHU's serving the IMU will reach the end of life in the next five years and then be replaced by heat pumps. Any new control modules installed in existing RTU's and AHU's will have will be equipped with enough functions to serve replacement heat pumps units.

New EMCS control modules and control wiring will be installed at the IMU South for other peripheral equipment control outside of smoke control retrofit scope of work. New remote EMCS control modules will connect with the EMCS in mechanical room #155 to allow the EMCS to control equipment for tear gas exhaust operation. Peripheral equipment would be RTUs and exhaust fans not serving smoke control functions, monitoring of split AC units and water heaters.

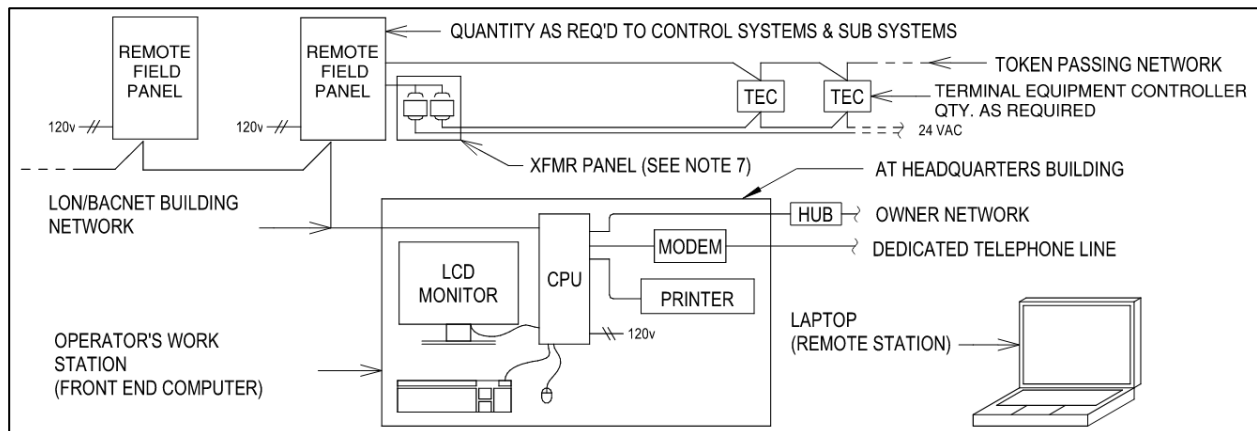


Figure 5 Typical EMCS Configuration

EMCS shall be provided to control and/or to monitor building systems. The EMCS shall employ direct digital control (DDC). The EMCS will consist of software, hardware and cabling necessary for communication between operator stations, controllers, sensors, actuators, and other devices. The EMCS will also be a complete and working system that is an interoperable network capable of communicating with the existing campus EMCS system and the fire control system. The EMCS network shall be BACnet compatible to new and existing equipment via the controls manufacturers specific network or ethernet. A new graphic user interface (GUI) will be created to display set points and equipment status. Operator interface with the installed EMCS equipment and the entire campus BAS shall be performed with portable computers and desktop computers using site licensed software. Operators shall be able to access information through

user interfaces at the application controller and the campus controller levels, as well as at the master display.

Smoke Control System:

The existing smoke control system functions will be removed from EMCS system control and relocated to the fire alarm control system. The existing firefighters smoke control panel located in Fire Riser room #107 will be removed and replaced with a new firefighters smoke control panel rated for fire control use. The new firefighters smoke control panel will be directly connected to the fire alarm control system which will have priority control over the smoke control system functions. The new firefighters smoke control panel will have similar graphic layouts and controls as the existing panel and be housed in a lockable enclosure. New fire/smoke control wiring will be installed from the smoke panel to the fire alarm control panel located in electrical room #160.

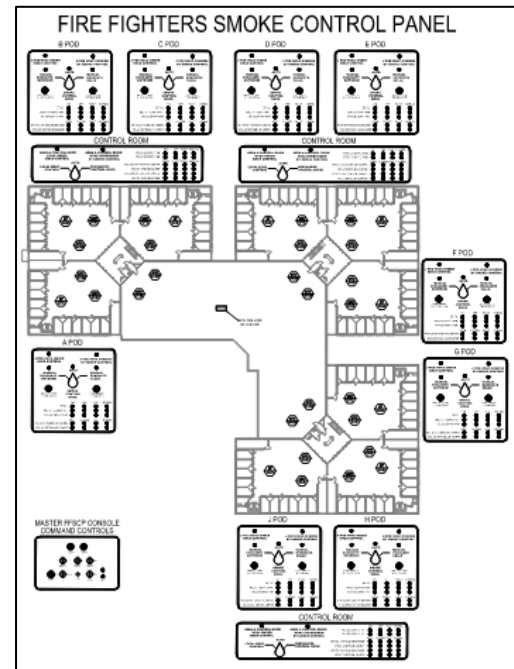


Figure 6 Proposed Smoke Control Panel

Fire Alarm Control Panel:

The existing Simplex 4100U Fire Alarm Control Panel is obsolete and not currently manufactured. Parts are still available for panel repair, but it is recommended the existing Simplex 4100U Fire Alarm Control Panel be upgraded to a new Simplex 4100ES Fire Control Panel. The new Fire Alarm Control Panel will be equipped with additional communication and control boards to allow override of existing HVAC equipment for smoke control purposes. Replacement of the 4100U panel will allow the system to efficiently communicate with the new smoke control panel, the new EMCS and external campus network. The panel replacement will increase the useful life of the entire fire control system and reduce future maintenance costs. Fire suppression disconnect/disable controls for cells located in electrical room #160 will be reused in their entirety and connected to upgraded fire system. New fire rated control modules will be installed in the existing HVAC equipment and wired directly to the fire control panel equipment to allow the fire control panel to override the EMCS system for control purposes. The existing RTU and MAU units located on the IMU roof and in electrical rooms #114, #131 and #175 will all receive both EMCS control modules and fire protection control modules. New fire protection control panels will be installed in electrical rooms #114, #131 and #175 to facilitate smoke control operation. New fire rated smoke control modules will connect with the new fire control system to allow the fire control system to override the EMCS and control IMU HVAC equipment in the event of a fire. The upgraded fire control system and new EMCS system should share the same communication protocols to allow direct cabling and ease of use. The existing fire alarm control infrastructure will be reused. Existing fire control systems and components; like smoke detectors, annunciators, fire dampers, wiring, and satellite control panels will be reused in place.

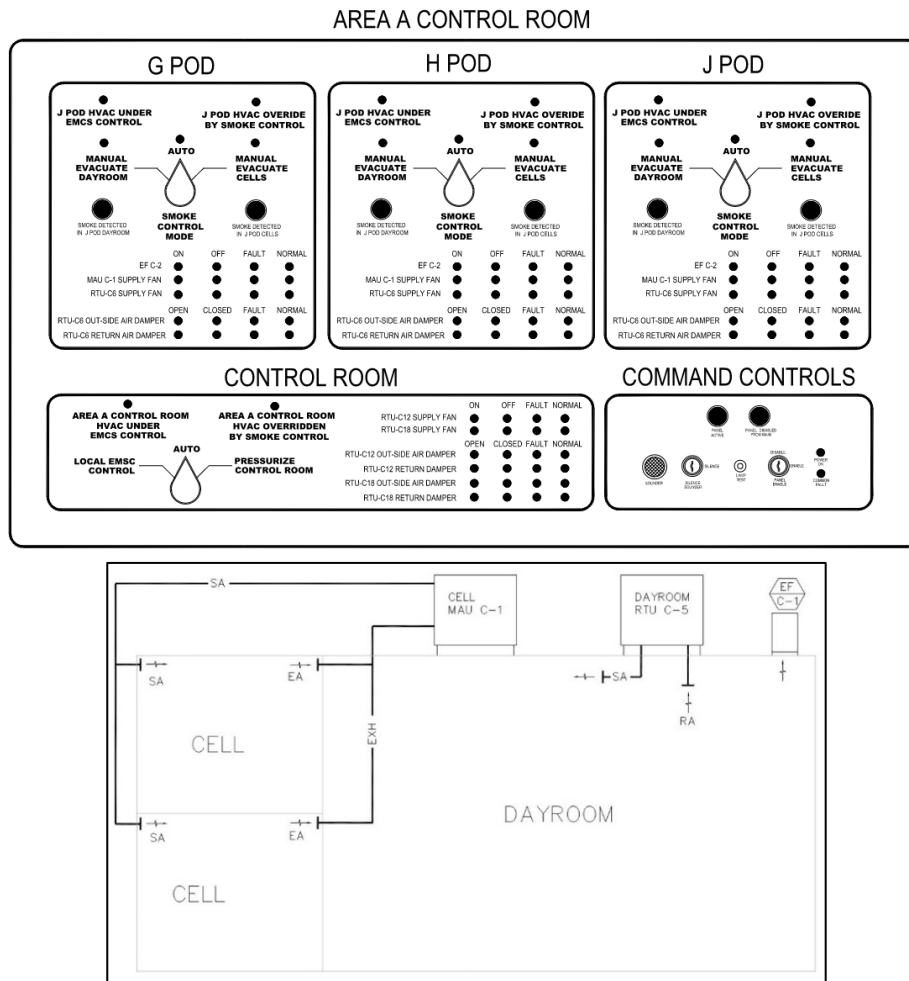
Sequence of Operation:

A new sequence of operation will be created to partition building operations for HVAC, teargas exhaust, and smoke control system functions. Existing HVAC and building systems not connected to smoke control operation will be integrated into the new controls and reuse their existing sequence of operations. See Appendix B for existing controls and sequence of operations details. The EMCS system will have control over daily HVAC operation and teargas exhaust operation by means of EMCS rated control modules installed in HVAC equipment of remote panels. In the event of a fire alarm EMCS control modules can be manually overridden for smoke control by the firefighter's smoke control panel connected to the new fire alarm control panel. The proposed sequence of operation is as follows:

UNIT AUTOMATIC TEARGAS CONTROL SYSTEM SEQUENCE

Teargas control system panels shall be installed in control rooms #201 #203 # 205, and in the sergeant's room #166. Panels in the control rooms are connected to EMCS panel in mechanical room #155 to provide HVAC override for the units monitored by control room. Example control panel for control room #201 is shown in figure below. Sergeant's room #166 shall have a teargas control system panel for all units.

1. If operator presses PURGE button in teargas control panel then teargas PURGE operation is commenced and normal HVAC operation is over ridden by EMCS:
 - a. Dayroom EF-1 fan shall energize exhaust air from dayroom.
 - b. Dayroom RTU-5 units shall energize fans to provide 100% outside air supply.
 - c. Cell block MAU-1 units shall energize supply fans go to 100% outside air and exhaust fan shall stop to pressurizes the cell space.
 - d. The control room RTU goes to 100% outside air and pressurizes the control room space.
 - e. PURGE indicator light is energized in control room and sergeants room teargas control system panels.
2. PURGE operation duration is 15 minutes (Adj.).
3. If operator presses PURGE button in teargas control panel then 15 minute timer countdown is rest.
4. If operator presses AUTO button in teargas control panel then normal HVAC operation is set by EMCS; and AUTO indicator light is energized in control room and sergeants room teargas control system panels.
5. Upon 15 minutes of uninterrupted PURGE operation then normal HVAC operation is set by EMCS; and AUTO indicator light is energized in control room and sergeants room teargas control system panels.



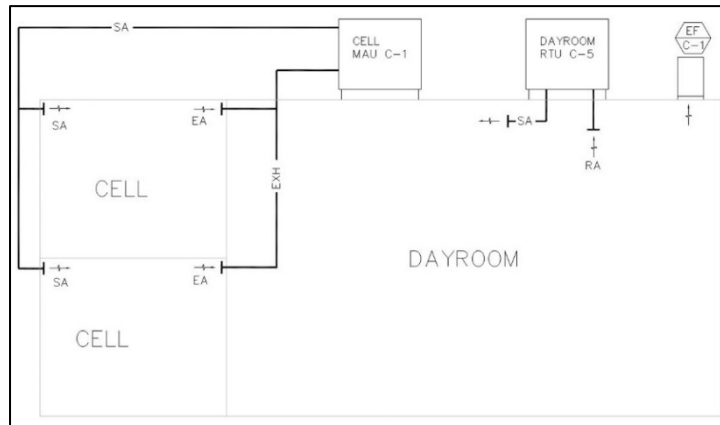
UNIT AUTOMATIC SMOKE CONTROL SYSTEM SEQUENCE

The firefighters smoke control system panel shall be installed in fire riser room #107. Smoke control interface panels will be connected to the fire alarm control panel located in electrical room #160. The fire alarm control panel will be connected to new fire rated control modules installed in the existing HVAC equipment to allow the fire control panel to override the EMCS system for control purposes. Smoke control operation shall be localized to specific smoke alarms and equipment for each housing unit in Pod.

SMOKE ALARM IN THE DAY ROOMS:

1. Upon alarm signal from dayroom smoke detector:
 - a. Fire control panel to override the EMCS system. Fire rated control modules in HVAC equipment shall signal EMCS control modules to cease operation. Fire system control modules shall assume control of equipment.
 - b. Day room RTU shall go to 100% outside air.

- c. The dayroom smoke control exhaust fans shall start and exhaust the space.
- d. The cell block MAU shall go to 100% supply and the exhaust fan shall stop, thus pressurizing the cell spaces with respect to the day room.
- e. The control room RTU goes to 100% outside air and pressurizes the control room space.



EXAMPLE: SMOKE CONTROL MATRIX ZONE #1

ACTION	ITEM	ON	OFF	CFM
NORMAL OPERATION	DAYROOM RTU-5	X	---	---
	CELL MAU-1	SUPPLY	X	---
		EXHAUST	X	---
	EF-1	---	X	---
SMOKE CONTROL DAYROOM DAYROOM NEGATIVE CELLS POSITIVE	DAYROOM RTU-5	X	---	100% OA
	CELL MAU-1	SUPPLY	X	---
		EXHAUST	---	X
	EF-1	X	---	7125 CFM
SMOKE CONTROL CELLS CELLS NEGATIVE DAYROOM POSITIVE	DAYROOM RTU-5	X	---	100% OA
	CELL MAU-1	SUPPLY	---	X
		EXHAUST	X	---
	EF-1	---	X	0 CFM

Figure 8 Smoke Controls Matrix

SMOKE ALARM IN THE CELLS:

1. Upon alarm signal from Cells smoke detector:
 - a. Fire control panel to override the EMCS system. Fire rated control modules in HVAC equipment shall signal EMCS control modules to cease operation fire system control modules shall assume control of equipment.
 - b. Cell MAU shall go to 100% exhaust and the supply fan shall stop.
 - c. The day room RTU shall go to 100% outside air.
 - d. The cell block MAU shall go to 100% supply and the exhaust fan shall stop, thus pressurizing the day room spaces with respect to the cells. The control room RTU goes to 100% outside air and pressurizes the control room space.

SMOKE CONTROL OPERATION RESET

2. Upon reset of smoke control operation,
 - a. Fire rated control modules in HVAC equipment shall signal EMCS to resume operation.
 - b. EMCS signals equipment to resume normal HVAC operation.

SMOKE CONTROL MANUAL OVERRIDE

1. Upon manual switch activation of the smoke control panel the associated mechanical equipment shall follow the state of the switch. I.E. Manual switch to “OFF” Turns off associated HVAC Fan that is automatically activated “ON”.

Electrical and Cabling:

The existing electrical components, conduit and wiring will be reused to the greatest extent possible to save project costs. New wiring and conduit will be routed in secure areas using rigid conduit and fittings. Conduits on the roof will be supported by rooftop channel supports. Existing unused wire and raceways will be removed and disposed.

New control cables for smoke control system will be pulled through existing conduit between new smoke control panel located in fire riser room #107 and the upgraded Fire Alarm Control Panel located in electrical room #160. New smoke control cabling and conduit will be installed between electrical room #160 and fan smoke control modules in remote electrical rooms #114, #131, and #176 to provide fire protection override to the EMCS system. Fire Alarm Control Panel located in room #160 will have a new control cable connecting to EMCS system in mechanical room #155 to replace the existing bridge panel.

Existing Equipment:

Existing RTU's and AHU's serving the smoke control system is in fair condition, but some equipment has been modified over time. This equipment will be evaluated and repaired to bring the it to a condition back to a fire rated condition and to facilitate the installation of new controls. Any bypassed controls or sensors should be repaired or replaced, and any holes or penetrations made in the equipment or ducting should be repaired. There is a risk that some equipment may have been irreversibly modified and contingency should be taken in the construction budget to cover the replacement cost of equipment found to be end of life. After refurbishment we believe that units will reach end of life in the next five years, due to scarcity of parts and R-22 refrigerant. Controls installed in all existing RTU's and AHU's should be upgradable and transferable to new replacement equipment that will be installed in the next five to ten years.

All other existing HVAC equipment; like ducting, fans, VAV boxes, heaters, split-systems, and grilles will be reused in place.

Project Laydown and Personnel:

Project laydown area will be composed of a fenced 65' X 35' area at the south entrance area of the IMU. The on-site trailer, secure tool storage container, and worker restroom facility will be enclosed in the area. Seven full-time on-site workers are planned to complete this project. It is anticipated three to four escort officers will be needed to supervise project.



Figure 9 Proposed Laydown Area

Project Schedule:

Option 2 has a 10-month project completion schedule. Anticipated daily work schedule is 4 shifts per week of 10 hours, Monday through Thursday, from 6:00a.m. until 4:30p.m.

Option 2 Summary and cost:

Option 2 will allow DOC to meet program requirements for fire safety and improve overall building operations. While the scope of work does not address all known codes and standards deficiencies, it satisfies the essential needs to create a functional fire control system. The estimated total project budget for Option 2 is \$3,792,000. See Appendix C for option 2 cost projection details. **Option 2 is the recommended option.**

5.2.3 Option 3: HVAC Equipment Replacement and Option 2 Upgrades.

This option includes all the Option 2 scope plus complete replacement of RTUs and MAUs at IMU South. All existing RTU and MAU located on roof will be replaced with energy efficient heat pump units required by the 2021 Washington State energy code. All other existing HVAC equipment; like ducting, fans, VAV boxes, heaters, split-systems, and grilles are in good condition and would be reused. See Appendix D for existing equipment assessment photos.

Option 3 is not the recommended option but should be considered if project has sufficient budget.

New Equipment and Installation:

Existing gas fired RTUs and MAUs serving both smoke control systems and other ancillary areas will be replaced with new heat pump units. New HVAC units will have factory wired control modules, which will reduce controls costs and provide a higher quality installation. Fire-rated control modules will still have to be field installed at each unit. All other existing HVAC equipment: like ducting, fans, VAV boxes, heaters, split-systems, and grilles will be reused in place. Existing exhaust fans and other HVAC equipment will be retrofitted with new controls and reused. Existing gas piping serving units will be used for backup heating. The proposed replacement RTU s were priced with the following features:

Replacement Equipment	
Type	Quantity
3 Ton RTU	5
4 Ton RTU	2
5 Ton RTU	1
6 Ton RTU	9
8 Ton RTU	1
6 Ton AHU	9

Figure 9 Replacement Quantities

- Outside air airflow measuring
- 2" MERV-8 + 4" MERV-14 filters
- Modulating gas heat
- Modulating (inverter) scroll compressor (high efficiency)
- Economizer fault diagnostics
- Field powered convenience outlet
- Return air smoke detector
- High SCCR / fused disconnecting means (65kAIC)
- Extended warranties

It is anticipated the project laydown area and project schedule for this option will be the same as option 2, but this option will require additional personnel. Nine full-time on-site workers are planned to complete this project. It is anticipated four to five escort officers will be needed to supervise the project.

Controls:

New heat pump units meeting current code have more control and alarm I/O points than existing mechanical equipment. The newer units will require a more robust control system that is capable of meeting the latest HVAC technology.

Electrical:

New heat pump units will have a slightly higher electrical connection than the existing RTU and MAU, and may require upsizing of electrical circuits to equipment. If electrical backup heat is used instead of gas, then heat pumps will require additional electrical connections and panels.

Refrigerants:

The existing RTU and AHU utilize the HCFC R-22 refrigerant which was phased out in US Clean Air Act; R-22 is expensive and difficult to procure. Use of many new generation HFC refrigerants like, R-410a, are currently being phased out through the federal AIM Act and Washingtons Climate Commitment Act. In many cases new replacement refrigerants are either slightly flammable or can break down into persistent organic pollutants. When selecting HVAC units the potential for future hazard or phase out should be considered. We recommend selecting new HVAC units with R-32 refrigerant as a working fluid.

Other Considerations:

This option will eliminate the Option 2 risk that some HVAC equipment may have been irreversibly modified and needed replacement, so there is less budget contingency spent to cover the replacement cost of defective equipment.

Washington State has enacted multiple environmental and energy efficiency standards effecting HVAC equipment. The Washington State Department of Corrections has earned a national reputation for its efforts to make both its operations and facilities more sustainable. Sustainable design and practices allow for a wiser use of taxpayer dollars. Replacement of the HVAC units reduced HVAC impact on the environment, make operations more efficient and assisted with

complying with the following State directives:

- State Environmental Policy Act (SEPA)
- Clean Energy Transformation Act
- Washington Clean Buildings Act
- Climate Commitment Act
- Executive order 18-01.

Option 3 Summary and cost:

Option 3 will allow DOC to meet program requirements for fire safety, improves building comfort, increases energy efficiency. This option has the added benefits of aiding the DOC to comply with Clean Energy Transformation Act, Washington Clean Buildings Act and reduce carbon emissions per Executive order 18-01. The estimated total project budget for Option 3 is \$7,249,000. Option 3 is not the recommended option but should be considered if project has sufficient budget. See Appendix C for option 3 cost projection details.

310 - Department of Corrections
Capital Project Request

2023-25 Biennium

*

Version: 10 FY2024 Supplemental Agency Request

Report Number: CBS002

Date Run: 9/11/2023 7:55AM

Project Number: 40000527

Project Title: CBPS: WCCW Women's Elder Care Unit

Description

Starting Fiscal Year: 2025

Project Class: Program

Agency Priority: 5

Project Summary

The construction of an elder care unit at Washington Corrections Center for Women (WCCW) is necessary to address the medical and elder life issues of the aging incarcerated female population. This project will provide these individuals and the staff that care for them an accessible facility that supports this special-needs population.

Project Description

1. 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.

The Department of Corrections (DOC) does not have an elder care facility with assisted living and skilled nursing to manage the continued care needs of the growing aged and infirm female population. The consequences are the requirement to use inpatient hospital beds, inadequate continuity of care, and lower quality of life for the aging female incarcerated individuals.

The aging female population at WCCW is increasing and will require special medical provisions and care. Currently, 45 of the 589 women at WCCW, approximately 8% of the prison's population, is aged 60 and above. Of that number, three women are living in the Inpatient Unit (IPU) and there are up to 12 more who qualify for infirm care and currently living in the housing units where it is difficult to manage their needs. WCCW has 23 incarcerated individuals serving life sentences who will remain at WCCW throughout their geriatric years. An elderly care unit is necessary to provide accessibility, medical support, and triage for the female incarcerated population.

2. 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.

In May 2023, MSGS Architecture completed a feasibility study to convert WCCW Building F-Dormitory into an elder care facility. The study indicates Building F is well constructed, with poured concrete walls on both the exterior and interior walls, as well as concrete floor and roof structure. A 1,500 SF addition to the building is proposed to accommodate at least 39 individuals. There is room to build this addition between the west end of Building F and the perimeter fence.

Current designs will accommodate 27 residents with 6 flexible offices that could be converted into living cells to house up to 39 incarcerated individuals. Walls between cells in Building F will be removed to create 2-women and 3-women cells to support the understanding that incarcerated individuals adapt to prison life better emotionally and physically when they are living in cells with other women. All cells will be ADA compliant with accessible water closets and adjustable hospital beds. Shower rooms will be designed as large single occupancy, fully accessible showers, spacious enough for one or two nursing assistants to help individuals shower. Dayrooms will be centrally located for easy access by residents for activities and dining. All building mechanical and electrical systems will be replaced.

The DOC is requesting pre-design funds in the 2024 supplemental budget and construction funds in the 2025-27 budget

310 - Department of Corrections Capital Project Request

2023-25 Biennium

*

Version: 10 FY2024 Supplemental Agency Request

Report Number: CBS002

Date Run: 9/11/2023 7:55AM

Project Number: 40000527

Project Title: CBPS: WCCW Women's Elder Care Unit

Description

request.

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

This project will remodel WCCW Building F to create a female elder care unit needed to support and house aging and infirm female incarcerated individuals. This construction is necessary to provide the level of care required, including ADA accessibility, health services, and safety improvements. Not acting will require this population to remain in inpatient hospital beds, receive inadequate continuity of care, and be subject to lower quality of life conditions for aging female incarcerated individuals.

4. 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 DOC hired MSGS Architects to explore the feasibility of converting an unused dormitory building, Building F, on the WCCW campus into an elder care facility. Building F was built as a medium security prison dormitory in 1969 and stopped being used by WCCW in 2006. The building was shut down 'cold', meaning that no part of the building was heated at any time of the year. The intent of this feasibility study was to explore converting Building F into an assisted living and skilled nursing facility, or to tear down the existing structure completely and build a new elder care facility in the same location. All of the land contained within the perimeter fence at WCCW already has structures or other improvements needed for the institution. The present site where Building F stands is the only location where an elder care facility could be placed. The 2025 escalated cost to remodel Building F is estimated at \$681 per square foot. The 2025 escalated cost to build a new facility is \$899 per square foot. It was recommended by MSGS Architects to remodel Building F into an elder care facility with assisted living and skilled nursing wings.

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

The construction of an elder care unit at WCCW will help address the medical and elder life issues of the aging female incarcerated individuals. This project will provide these individuals and the staff that care for them with an accessible facility that supports this special-needs population.

6. 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.

State Construction funds (057) are being requested for the predesign and design of this project in the FY2024 supplemental request.

310 - Department of Corrections
Capital Project Request

2023-25 Biennium

*

Version: 10 FY2024 Supplemental Agency Request

Report Number: CBS002

Date Run: 9/11/2023 7:55AM

Project Number: 40000527

Project Title: CBPS: WCCW Women's Elder Care Unit

Description

State Construction funds (057) will be requested for the construction of this project in 2025-27 (FY2026-27).

7. 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 mission of DOC is to improve public safety by positively changing lives. DOC's vision is working together for safer communities.

The mission of DOC is to improve public safety by positively changing lives. DOC's vision is working together for safer communities.

This Capital request aligns with the one or more of the following Results Washington Goals and Outcome Measures:

- World Class Education
- Prosperous Economy
- Sustainable Energy and Clean Environment
- Healthy and Safe Communities
- Efficient, Effective, and Accountable Government

This request supports the following goals, objectives, approaches/strategies, and outcome measures in Doc's 2023-25 Strategic Plan:

Safe and Humane Systems

Cultivate a human-centered approach to our work that delivers on trauma-informed practices, safe, fair, and humane living and working conditions and supports a culture that reduces risk and increases positive opportunities for both justice-involved individuals and staff.

EDIR Culture

Eliminate disparities by implementing our pro-equity, anti-racism framework, and reinforcing a culture where every person is welcomed and feel they belong.

Healthy and Engaged Workforce

Foster a supportive work environment that promotes wellness and combats corrections fatigue.

Successful Transitions

Provide personalized support to justice-involved individuals, including the knowledge, skills, and abilities to successfully reenter their communities and thrive as better neighbors.

By committing to these strategic goals, DOC will achieve our ultimate goal of Correctional Excellence.

310 - Department of Corrections
Capital Project Request

2023-25 Biennium

*

Version: 10 FY2024 Supplemental Agency Request

Report Number: CBS002

Date Run: 9/11/2023 7:55AM

Project Number: 40000527

Project Title: CBPS: WCCW Women's Elder Care Unit

Description

This capital project will ensure that DOC facilities are well maintained, safe and secure for incarcerated individuals and staff, and efficient to operate.

8. 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.)

There are no known IT-related impacts related to this project.

9. 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 13 (Puget Sound Recovery) in the 2023-25 Operating Budget Instructions.

This project is not linked to the Puget Sound Action Agenda.

10. How does this project contribute to meeting the greenhouse gas emissions limits established in RCW 70A.45.050, Clean Buildings performance standards in RCW 19.27A.210, or other statewide goals to reduce carbon pollution and/or improve energy efficiency? Please elaborate.

The DOC Capital Planning and Development team is working diligently to make sure DOC makes the most of every opportunity within each project to make progress toward reducing carbon pollution and improving energy efficiency.

The DOC is currently working on developing an Energy Master Plan, because every maintenance, equipment, renewal, or replacement decision has a long-term impact on the agency. These decisions can affect and limit DOC's ability to reach the goal of becoming a net zero agency. During the pre-design and design phases of this project, the Energy Master Plan will be considered. Alternative energy systems will be evaluated to determine the best cost-effective solutions to move DOC closer to reaching the goal of being a net zero agency.

11. How is your proposal impacting equity in the state? Which communities are impacted by this proposal? Include both demographic and geographic communities. How are disparities in communities impacted?

One of DOC's Strategic Anchors is the commitment to operate a safe and humane corrections system and partner with others to transform lives for a better Washington. Corrections believes in creating an environment that values physical, mental, and emotional security and well-being for staff and incarcerated individuals.

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

**310 - Department of Corrections
Capital Project Request**

2023-25 Biennium

*

Version: 10 FY2024 Supplemental Agency Request

Report Number: CBS002

Date Run: 9/11/2023 7:55AM

Project Number: 40000527

Project Title: CBPS: WCCW Women's Elder Care Unit

Description

There will be ongoing operating cost impacts related to this capital project that will need to be funded. The costs will be identified and quantified in the project pre-design and design phases and funding to support these costs will be requested in future operating budget submittals.

Location

City: Gig Harbor

County: Pierce

Legislative District: 026

Project Type

Remodel/Renovate/Modernize (Major Projects)

Growth Management impacts

None.

New Facility: No

Funding

Acct Code	Account Title	Estimated Total	Expenditures		2023-25 Fiscal Period	
			Prior Biennium	Current Biennium	Reapprops	New Approps
057-1	State Bldg Constr-State	400,000				400,000
	Total	400,000	0	0	0	400,000
			Future Fiscal Periods			
			2025-27	2027-29	2029-31	2031-33
057-1	State Bldg Constr-State					
	Total		0	0	0	0

Operating Impacts

No Operating Impact

Narrative

This project is expected to have ongoing operating cost impacts – either new costs or savings. The operating impacts will be determined during the project pre-design and/or design phases. Detailed operating impacts that are anticipated will be requested in an operating budget decision package at the time funding is requested for the project construction phase in the capital budget.

STATE OF WASHINGTON
AGENCY / INSTITUTION PROJECT COST SUMMARY

Updated June 2022

Agency	Department of Corrections
Project Name	CBPS WCCW Women's Elder Care Unit
OFM Project Number	40000527

Contact Information

Name	Chris Idso
Phone Number	360.580.8731
Email	clidso@doc1.wa.gov

Statistics

Gross Square Feet	8,319	MACC per Gross Square Foot	\$0
Usable Square Feet		Escalated MACC per Gross Square Foot	\$0
Alt Gross Unit of Measure			
Space Efficiency	0.0%	A/E Fee Class	A
Construction Type	Detention/correctional f	A/E Fee Percentage	17.40%
Remodel	Yes	Projected Life of Asset (Years)	50

Additional Project Details

Procurement Approach	DBB	Art Requirement Applies	No
Inflation Rate	4.90%	Higher Ed Institution	No
Sales Tax Rate %	8.10%	Location Used for Tax Rate	Gig Harbor
Contingency Rate	10%		
Base Month (Estimate Date)	June-23	OFM UFI# (from FPMT, if available)	
Project Administered By	Agency		

Schedule

Predesign Start	September-24	Predesign End	June-25
Design Start		Design End	
Construction Start		Construction End	
Construction Duration	0 Months		

Green cells must be filled in by user

Project Cost Estimate

Total Project	\$400,036	Total Project Escalated	\$400,036
		Rounded Escalated Total	\$400,000

Cost Estimate Summary

Acquisition

Acquisition Subtotal	\$0	Acquisition Subtotal Escalated	\$0
-----------------------------	------------	---------------------------------------	------------

Consultant Services			
Pre-design Services	\$300,000		
Design Phase Services	\$0		
Extra Services	\$11,500		
Other Services	\$0		
Design Services Contingency	\$31,150		
Consultant Services Subtotal	\$342,650	Consultant Services Subtotal Escalated	\$342,650

Construction			
Maximum Allowable Construction Cost (MACC)	\$0	Maximum Allowable Construction Cost (MACC) Escalated	\$0
DBB Risk Contingencies	\$0		
DBB Management	\$0		
Owner Construction Contingency	\$0		\$0
Non-Taxable Items	\$0		\$0
Sales Tax	\$0	Sales Tax Escalated	\$0
Construction Subtotal	\$0	Construction Subtotal Escalated	\$0

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

Artwork			
Artwork Subtotal	\$0	Artwork Subtotal Escalated	\$0

Agency Project Administration			
Agency Project Administration Subtotal	\$15,386		
DES Additional Services Subtotal	\$0		
Other Project Admin Costs	\$0		
Project Administration Subtotal	\$15,386	Project Administration Subtotal Escalated	\$15,386

Other Costs			
Other Costs Subtotal	\$42,000	Other Costs Subtotal Escalated	\$42,000

Project Cost Estimate			
Total Project	\$400,036	Total Project Escalated	\$400,036
		Rounded Escalated Total	\$400,000

Funding Summary

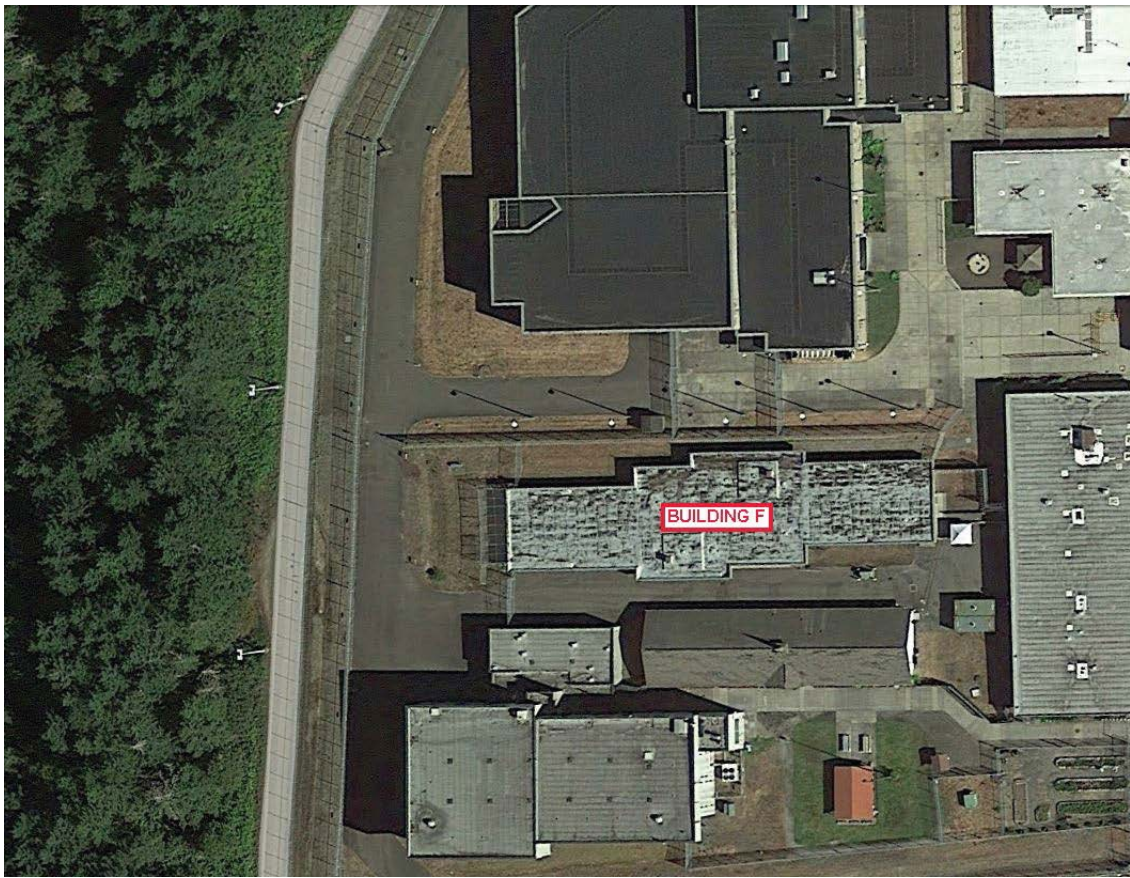
	Project Cost (Escalated)	Funded in Prior Biennia	New Approp Request 2023-2025	2025-2027	Out Years
Acquisition					
Acquisition Subtotal	\$0				\$0
Consultant Services					
Consultant Services Subtotal	\$342,650		\$342,650		\$0
Construction					
Construction Subtotal	\$0				\$0
Equipment					
Equipment Subtotal	\$0				\$0
Artwork					
Artwork Subtotal	\$0				\$0
Agency Project Administration					
Project Administration Subtotal	\$15,386		\$15,386		\$0
Other Costs					
Other Costs Subtotal	\$42,000		\$42,000		\$0
Project Cost Estimate					
Total Project	\$400,036	\$0	\$400,036	\$0	\$0
	\$400,000	\$0	\$400,000	\$0	\$0
Percentage requested as a new appropriation			100%		

What is planned for the requested new appropriation? (Ex. Acquisition and design, phase 1 construction, etc.)
 The FY2024 supplemental appropriation would support the project predesign phase and identify alternatives and construction costs.
 Insert Row Here

What has been completed or is underway with a previous appropriation?
 None
 Insert Row Here

What is planned with a future appropriation?
 Project design and construction funds will be requested in the 2025-27 and 2027-29 biennia.
 Insert Row Here

FEASIBILITY STUDY
FOR CONVERTING BUILDING 'F', INTO AN ELDER CARE
FACILITY OR BUILDING A NEW ELDER CARE FACILITY AT
WASHINGTON CORRECTION CENTER FOR WOMEN,
GIG HARBOR WASHINGTON



May 23, 2023



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WCCW Feasibility Study to Convert Building F into an Elder Care Facility or Build a New Elder Facility

FEASIBILITY STUDY CONTRIBUTORS

Project Steering Committee

Charlotte Headley, Superintendent,
Washington Correction Center for Women
Department of Corrections

Gerald Holter, Facility Manager WCCW
Washington Correction Center for Women
Department of Corrections

Chris Idso, Director of Capital Planning and
Development, *Department of Corrections*

Alexis Telles Registered Nurse 3
Washington Correction Center for Women
Department of Corrections

Julie Lee Contract-Instructor
Washington Correction Center for Women
Department of Corrections

Samuel Harris Const. Project Coordinator 4
Washington Correction Center for Women
Department of Corrections

Jimei Tang Construction Project Coordinator 4
Washington Correction Center for Women
Department of Corrections

Dr. Mary Curl, Chief Medical Officer
Washington Correction Center for Women
Department of Corrections

Zainab Ghazal – Administrator of Health
Services
Washington Correction Center for Women
Department of Corrections

Mark Wargo- Plant Manager WCCW
Washington Correction Center for Women
Department of Corrections

Jessica Cahill, Construction Project
Coordinator 3
Capital Planning and Development
Department of Corrections

Project Design Team

ARCHITECT | MSGS ARCHITECTS
Bill Sloane, AIA, Principal, Project Architect
Gene LaVaque, AIA, Architect

STRUCTURAL ENGINEER | AHBL
Drew McEachern, PE, SE, Principal,
Structural Engineer

MECHANICAL ENGINEER | P2S INC.
Peter Sloane, PE, GPCP, Associate Principal
Mechanical Engineer

ELECTRICAL ENGINEER | P2S INC.
Akshay Prabhu, PE, DBIA, Associate Principal
Electrical Engineer

COST ESTIMATOR | J B IRINGAN CONSULTING
Juan B. Iringan

CONDITIONS ASSESSMENT & CONVERSION INTO AN ELDER CARE FACILITY

BUILDING 'F' - WASHINGTON CORRECTION CENTER FOR WOMEN (WCCW):

The Department of Corrections hired MSGS Architects to explore the feasibility of converting an unused dormitory building, Building F, on the WCCW campus into an Elder Care Facility to address the medical and elder life issues of their aging female incarcerated individuals (I/I's), many of whom are incarcerated for life. Building F was built as a medium security prison dormitory in 1969 and stopped being used by WCCW in 2006. The building was shut down 'cold', meaning that no part of the building was heated at any time of the year. Water pipes were drained so as to not burst the pipes during below freezing weather.

The intent of this feasibility study is to explore either converting, through extensive remodeling, Building F into an Assisted Living and Skilled Nursing Facility, or to tear down the existing structure completely and build a new Elder Care Facility in the same location. All of the land contained within the perimeter fence at WCCW already has structures or other improvements needed for the institution. The present site where Building F stands is the only location where an Elder Care Facility could be placed.

EXISTING CONDITIONS:

When Building F was built as a medium security prison, all the exterior and interior walls were made from reinforced solid concrete, 6" thick on the exterior walls and 3 5/8" thick on the interior walls. The exterior walls were covered with veneer brick on their exterior face. See figure 1 below:



Figure 1

The building has a double loaded corridor down the cell wings with heavy plate steel doors on heavy duty hinges. There is an opening in each cell door just large enough to slide a food tray through for each inmate's meal. See figure 2 below:



Figure 2



Figure 3

Within each cell, designed for a single inmate, there is a combination water closet / lavatory. See figure 3 above.

The existing doors to the cells are not appropriate in an Elder Care Facility and would need to be replaced with 3'-0" wide heavy duty insulated hollow metal doors and frames. Better for an Elder Care Facility, wider doors, 42" wide, will provide greater accessibility for all residents.

The existing water closet / lavatory combination fixtures do not meet accessibility requirements. They are not practical for an Assisted Living or Skilled Nursing Facility and would need to be replaced in any remodel with an accessible water closet and an accessible lavatory.

TWO SOLUTIONS – REMODEL BUILDING F or BUILD A NEW ELDER CARE FACILITY

Building F was built in 1969 and the costs and embodied energy used to build this building remain in the existing structure. The building is very strong, with poured concrete walls on both the exterior and interior walls, as well as concrete floor and roof structure. Remodeling the building into an Elder Care Facility would require extensive demolition of existing walls. With correct structural engineering, as this report allows for, this is completely possible. To accommodate at least (35) elder I/I's in the facility, a 1,500 SF addition to the building is needed. There is room to build this addition on the west between the west end of Building F and the perimeter road against WCCW's Perimeter Security fence. See Figure 4 below:

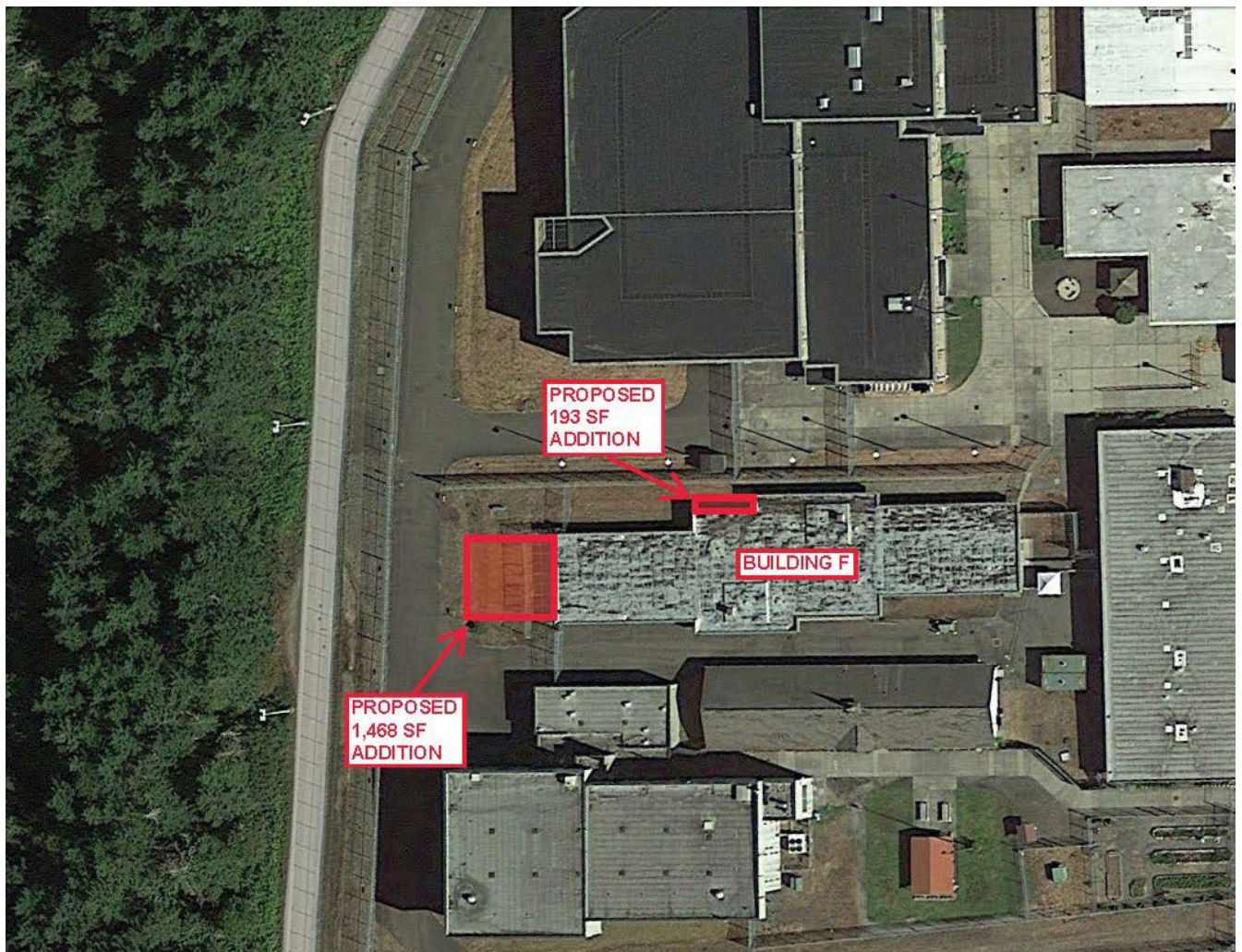


Figure 4

This Feasibility Report looks at (2) solutions to creating an Elder Care Facility at WCCW: Remodel and add on to the existing Building F, or demolish Building F entirely and build a new Elder Care Facility in the same location as Building F used to stand. For an ‘apples to apples’ comparison of construction costs, the size of the potential new building is very similar to the size of the remodeled and added onto existing Building F.

A two-story solution was explored early in the Feasibility Study, but ultimately rejected for a number of reasons. The biggest reason is that the structural engineer looked at the existing foundation of Building F and determined that to add a second story onto the building, that portion of the Building F that would be two stories would have to be 100% demolished and re-built with larger, more robust footings. Additionally, a two-story addition to the existing building would require an elevator, and two sets of stairs. A new elevator installed today, is not less than \$100,000, and probably more when all associated requirements for an elevator are accounted for. The two sets of stairs take up space needed for other functions. Finally, in an Assisted Living / Skilled Nursing Facility, the residents are not very mobile, with many needing to use a wheelchair to get around. A second story creates challenges to the residents to travel to, let alone use on a regular basis.

REMODEL EXISTING BUILDING F:

Per the superintendent of WCCW, Charlotte Headley, older women I/I’s with age related health issues, accommodate to prison life much better emotionally and physically when they are living in cells with other women. For this reason, for the majority of single occupancy cells in the existing Building F, we recommend that the walls between cells be removed to allow for 2-women and 3-women cells.

The combination lavatory / water closet fixtures that exist are completely impractical for an elder care environment. We recommend that all cells have a fully accessible water closet with the required ADA grab bars and a lavatory that also meets all required ADA clearances and heights. We recommend that all beds in all cells be hospital size beds, with the adjustable height features typical in beds of this type.

Since many of the elder I/I’s need assistance in showering, we recommend and show large single occupancy shower rooms, fully accessible, that are large enough for one or two nursing assistants to help women inmates bathe.

The ‘Day Room’ where meals are taken for those inmates that are mobile, and where daily activities take place, is centrally located in both the remodeled and new building designs, to create the easiest access to the day room, on the same level as the inmates live on.

In Appendix A of this report is a Proposed First Floor Plan of a Remodeled and Addition to existing Building F. The structure of the building is reinforced with new structural features as shown on the conceptual structural drawings in Appendix A. This remodel would replace all mechanical and electrical systems with new systems. The Basis of Design of the Structural, Mechanical and the Electrical systems are attached in Appendix C.

Current doors into the cells are 36” wide. We recommend that all cell doors be enlarged to a 42” width, to better accommodate wheelchair access. An exterior staircase to the basement, where the mechanical and electrical systems are housed is included in this design at the request of WCCW maintenance staff.

This design accommodates up to (27) I/I’s with (6) flexible offices that could be converted into I/I cells for a maximum accommodation of (39) I/I’s.

BUILD A NEW ELDER CARE FACILITY

Following the Proposed Floor Plan of a Remodeled and Addition to existing Building F, is a Proposed Floor Plan of a NEW BUILDING.

The square footage of the new building is similar to the existing remodeled building for cost comparison purposes. The central area is opened up in a more social and friendly manner as the WCCW I/I's that will be living in this facility need nursing and medical assistance on a daily basis, more than a facility that is designed to prevent I/I's from escaping. These I/I's have limited physical capacity for any sort of task.

All doors in the new building are 42" wide, to accommodate I/I's in wheelchairs. (4) large single occupancy shower rooms are included in the project, rooms large enough to allow one or two nursing aides to be in the shower room with the I/I, to help her bathe.

This design accommodates up to (31) women I/I's with (5) flexible offices that could be converted into inmates' cells for a maximum accommodation of (40) I/I's.

COST ESTIMATE:

Two cost estimates of the above described alternates, (1) remodeling the existing Building 'F', also known as SCHEME D, and (2) demolishing Building 'F' and building a new building, also known as SCHEME E, follow this page. Costs are summarized below, shown in today's construction dollars and with an escalation factor of 7.5% per year, for two years, for construction beginning on or after July 1, 2025, the beginning of the State of Washington's 2025-2027 Biennium budget cycle.

	<u>REMODEL BUILDING 'F'</u>	<u>COST per SF</u>	<u>BUILD NEW FACILITY</u>	<u>COST per SF</u>
Cost Today:	\$5,353,100	\$589.09 per SF	\$7,167,500	\$777.64 per SF
Escalated				
Cost in 2025:	\$6,186,200	\$680.77 per SF	\$8,283,000	\$898.67 per SF

CONCLUSION & RECOMMENDATION

The cost of construction today is experiencing an inflationary trend that occasionally occurs in our economy's business cycle. The construction industry experienced a similar trend in the 2007 – 2010 time period. The high inflation rate of construction costs at that time period eventually eased, but the cost per square foot of remodel or new construction did not do down, the rate of increase merely slowed.

The present rate of inflation in construction costs is also easing, as the world moves beyond the supply side issues and the resulting inflationary costs of building. As our cost estimates show, there is still significant savings to be realized in remodeling a well-built existing building for a new purpose, compared with the cost to demolish this building completely and then building a brand-new building in its place. Remodeling Building F into an Elder Care Facility with Assisted Living and Skilled Nursing wings may not provide as ideal a facility for Elder Care as is functionally possible, but the costs saving of the remodel scheme are significant, and the resulting facility is functionally very similar to a purpose-built new Elder Care facility.

Submitted by,

Bill Sloane, AIA, LEED AP
 MSGS Architects
 Olympia WA 98501



WCCW Feasibility Study to
Convert Building F into an
Elder Care Facility or
Build a New Elder Facility

APPENDIX A

COST ESTIMATE – REMODEL EXISTING BUILDING F

SUMAMRY: SCH-D

Project: **WCCW - ELDER CARE FACILITY, Renovations & Additions**
 Location: Gig Harbor, WA
 Architect: MSGS Architects
 Prepared by: J B Iringan Consulting
 Bldg (SF): 9,087 SF
 Date: May 22, 2023
 Phase: Feasibility Study Estimate

SEC	DESCRIPTION	TOTAL
BUILDING:		
A10	FOUNDATIONS	90,926
A20	BASEMENT CONSTRUCTION	148,128
A30	SLAB ON GRADE	25,253
B10	FLOOR CONSTRUCTION	32,651
B20	ROOF CONTRICTION	57,337
B30	EXTERIOR CLOSURE	209,338
B40	ROOFING	306,751
C10	INTERIOR CONSTRUCTION	353,534
C20	STAIRCASE	25,000
C30	INTERIOR FINISHES	368,568
D20	PLUMBING	342,913
D30	HVAC	339,969
D40	FIRE PROTECTION	
D50	ELECTRICAL	855,424
E10	EQUIPMENT	3,000
E20	FURNISHINGS	12,500
TOTAL BUILDING DIRECT COST		\$3,171,293
	GENERAL CONDITIONS INCL SITE OVERHEAD	18% 570,833
	GENERAL CONTRACTOR'S OH&P, B&O Tax, Insurance	8% 299,370
	DESIGN/ESTIMATING CONTINGENCY	15% 606,224
	TIGHT SECURITY CONDITIONS PREMIUM	5% 232,386
	TOTAL BUILDING COST @ BID TODAY	\$4,880,106
	9,087 SF	\$537.04
SITWORK:		
F20	SELECTIVE BUILDING DEMOLITION & MISC SITE WORK	227,377
G20	SITE IMPROVEMENTS	30,000
G30	SITE CIVIL / MECHANICAL UTILITIES	50,000
	Minor work - Allow	
	Minor work - Allow	
TOTAL SITEWORK DIRECT COST		\$307,377
	GENERAL CONDITIONS INCL SITE OVERHEAD	18% 55,328
	GENERAL CONTRACTOR'S OH&P, B&O Tax, Insurance	8% 29,016
	DESIGN/ESTIMATING CONTINGENCY	15% 58,758
	TIGHT SECURITY CONDITIONS PREMIUM	5% 22,524
	TOTAL SITEOWRK COST @ BID TODAY	\$473,004
TOTAL BUILDING & SITEWORK COST @ BID TODAY		\$589.09 \$5,353,100

EXCLUSIONS:

Permits	Construction Management Fees
Furnishings/Equip Not Listed	Traffic Control
A/E Fees	Artwork/Installations

Legends

GSF Gross Square Feet	CY Cubic Yard
FPA Foot Print Area	SY Square Yard
UFA Upper Floor Area	ACR Acre
RA Roof Area	EA Each
XWA Exterior wall Area	PR Pair
SF Square feet	LS Lump sum
LF Lineal Feet	LBS pounds

Estimate Detail: SCH-D

Project: **WCCW - ELDER CARE FACILITY, Renovations & Additions**
 Location: Gig Harbor, WA
 Architect: MSGS Architects
 Prepared by: J B Iringan Consulting
 Bldg (SF): 9,087 SF
 Date: May 22, 2023
 Phase: Feasibility Study Estimate

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL	\$/SF
A10	FOUNDATIONS					
	<i>New Additions:</i>					
	3' Wide strip footing w/ 3' H stem wall - basement level	125	LF	300.00	37,500	
	5' Wide strip footing w/ 3' H stem wall - basement level	29	LF	375.00	10,875	
	3' Wide strip footing w/ 3' H stem wall - 1st floor level	127	LF	300.00	38,100	
	Conc, forms & reinf		Included above			
	Excavate/trenching, native backfill		Included above			
	Waterproofing exterior face of perimeter footing	381	SF	2.35	895	
	Footing drainage with gravel around	127	LF	28.00	3,556	
A10	TOTAL FOUNDATIONS	1,661	SF		90,926	54.74
A20	BASEMENT CONSTRUCTION					
	Shoring/underpin exist foundations to install new basement - allow	300	SF	100.00	30,000	
	Gravel fill behind retaining walls	118	CY	50.00	5,911	
	8" Thick reinf concrete basement/retaining wall	1,596	SF	55.31	88,277	
	Waterproofing retaining walls with drainage composite system	1,596	SF	15.00	23,940	
A20	TOTAL BASEMENT CONSTRUCTION	1,596	SF		148,128	92.81
A30	SLAB-ON-GRADE					
	4" thick conc slab-on-grade (Basment & 1st Floor Level):	1,661	SF	15.20	25,253	93
	Gravel fill - 6" thk total, Visqueen - moisture barrier		included above			
	Slab reinf - WWF		included above			
	Fine grade/compact subgrade below slab		included above			
	Vapor barrier - 15 mil polyethylene sheathing		included above			
	Trowel, cure & finish slab on grade		included above r work - Allow			
	2" R-10 rigid insul at slab perimeter		included above r work - Allow			
	Construction & control joints		included above			
A30	TOTAL SLAB-ON-GRADE	1,661	SF		25,253	15.20
B10	FLOOR CONSTRUCTION					15
	<i>Composite floor (1st Floor- Addition)</i>					
	Steel beams & metal deck	505	SF	48.50	24,493	100
	4" Thk conc topping w/ #4 @12" OC E.W	505	SF	16.16	8,159	
	Spray fireproof under metal deck		Included above			
B10	TOTAL FLOOR CONSTRUCTION	505	UFA		32,651	64.66
B20	ROOF CONSTRUCTION					
	CMU pilasters 16" x 16"	80	LF	80.00	6,400	
	8" Thk hollow core planks, incl delivery & erection	1,661	SF	20.00	33,220	
	2-1/2" thick normal conc topping w/ WWF reinf, trowel & finish slab	1,661	SF	10.67	17,717	
B20	TOTAL ROOF CONSTRUCTION	1,661	RA		57,337	34.52
B30	EXTERIOR CLOSURE					
	8" CMU wall, solid grout, reinf	1,591	SF	27.00	42,964	
	Brick veneer	1,591	SF	38.00	60,468	
	Liquid applied weather resistant barrier	1,591	SF	1.50	2,387	

Estimate Detail: SCH-D

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL	\$/SF
	Furring, GWb, R19 batt insul, VB to exterior perimeter wall	1,424	SF	17.85	25,414	
	CMU Parapet incl brick veneer, 3.5' high	586	SF	65.00	38,106	
	4' x 5', new Windows @ dayroom/dining	3	EA	2,700.00	8,100	
	2.5'x4' Hardened new Windows at cell rooms	12	EA	1,575.00	18,900	
	New door w/ side glass wall at new West Entry	1	EA	13,000.00	13,000	
B30	TOTAL EXTERIOR CLOSURE	2,178	XWA		209,338	96.14
B40	ROOFING					
	<i>New Additions (1468+193 = 1,661 SF):</i>					
	PVC fully adhered sheet memb roofing, VB & coverboard	1,661	SF	13.50	22,424	
	Extend roofing to the parapet (vertical side)	600	SF	10.00	6,003	
	R-45 Rigid insulation over conc plank/conc roof	1,661	SF	10.80	17,939	
	Misc flashing - allow	1,661	SF	3.50	5,814	
	Extend/repair roofing transition between existing & new structure	60	LF	35.00	2,100	
	Parapet metal coping	172	LF	28.00	4,802	
	<i>Existing Areas (7,426 SF):</i>					
	PVC fully adhered sheet memb roofing, VB coverboard	7,426	SF	13.50	100,251	
	Extend roofing to the parapet (vertical side)	1,596	SF	10.00	15,960	
	R-45 Rigid insulation over conc plank/conc roof	7,426	SF	10.80	80,201	
	Misc flashing - allow	7,426	SF	3.50	25,991	
	Parapet metal coping	456	LF	28.00	12,768	
	Sealants/caulking/fire stopping allow	1	LS	12,500.00	12,500	
B40	TOTAL ROOFING	1,661	RA		306,751	184.68
C10	INTERIOR CONSTRUCTION: Partitions, Doors, Relights, Specialties & Casework					
	New 8" CMU CMU walls to new addition	816	SF	27.00	22,032	
	Mtl studs, 5/8" GWB (impact resistant) & sound batts - new addition	833	SF	22.95	19,117	
	Mtl studs, 5/8" GWB (impact resistant) & sound batts - exist areas	2,695	SF	22.95	61,850	
	Mtl studs, 5/8" GWB (impact resistant) - exist areas	136	SF	14.00	1,904	
	SCW Interior door, HM frame & hw to support rooms	14	EA	3,600.00	50,400	
	HD Interior metal door, HM frame & hw to cell rooms	12	EA	4,200.00	50,400	
	Add for laminated glass vision panel to interior doors	26	EA	800.00	20,800	
	Add for door closers	16	EA	450.00	7,200	
	Toilet partitions & doors - Reg	3	EA	2,000.00	6,000	
	Toilet partitions & doors - ADA	2	EA	2,500.00	5,000	
	Toilet specialties to common bathrooms	6	SETS	2,500.00	15,000	
	Shower specialties to common bathrooms	5	SETS	2,000.00	10,000	
	Toilet specialties to cell rooms	15	SETS	1,500.00	22,500	
	Nurses' station/counter	36	LF	600.00	21,600	
	Guards' station/counter	16	LF	600.00	9,600	
	Vanity cabinets with solid surface counter at bathrooms	35	LF	680.00	23,800	
	Base cab with solid counter tops at staff break room	6	LF	680.00	4,080	
	Upper cab at staff break room	9	LF	250.00	2,250	
C10	TOTAL INT PARTITIONS, DOORS, RELIGHTS & CASEWORK	9,087	GSF		353,534	38.91
C20	STAIRCASE					
	New exterior stair incl railing, down to basement	1	FLT	25,000.00	25,000	
	Retaining wall, incl footing & waterproofing		included			
	Excavation, backfill & gravel around		included			
C20	TOTAL STAIRCASE	9,087	GSF		25,000	2.75
C30	INTERIOR FINISHES					
	Luxury vinyl flooring incl RB base	7,928	SF	17.00	134,781	
	CT to shower room floor incl CT base	250	SF	36.00	9,000	
	CT to shower room wall - 8' high	1,088	SF	28.00	30,464	

Estimate Detail: SCH-D

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL	\$/SF
	Vinyl wainscot to hallway - 4' high	1,880	SF	12.00	22,560	
	GWB ceilings (impact resistant) incl framing	8,178	SF	15.00	122,675	
	Basement		No finishes			
	Paint new CMU walls (interior & exterior perimeter)	1,632	SF	1.85	3,019	
	Paint new GWB walls	8,783	SF	1.85	16,249	
	Paint existing walls	13,200	SF	1.85	24,420	
	Paint new & existing door/frame	36	LVS	150.00	5,400	
C30	TOTAL INTERIOR FINISHES	9,087	GSF		368,568	40.56
D20	PLUMBING					
	Plumbing system work, incl WC, Sink, Urinal & piping <i>Please refer to Mechanical Engineer's report for detail</i>	9,087	GSF	37.74	342,913	
D20	TOTAL PLUMBING	9,087	GSF		342,913	37.74
D30	HVAC					
	HVAC <i>Please refer to Mechanical Engineer's report for detail</i>	9,087	GSF	37.41	339,969	
D30	TOTAL HVAC	9,087	GSF		339,969	37.41
D40	FIRE PROTECTION					
	Fire sprinklering system		NIC	6.00		
D40	TOTAL FIRE PROTECTION	9,087	GSF			
D50	ELECTRICAL					
	Power, Distribution, lighting, switches	9,087	GSF	65.46	594,827	
	TAB, commissioning		Included above			
	Telecom, Security	9,087	GSF	21.01	190,927	
	Fire alarm <i>Please refer to Electrical Engineer's report for detail</i>	9,087	GSF	7.67	69,670	
D50	TOTAL ELECTRICAL	9,087	GSF		855,424	94.14
E10	EQUIPMENT					
	Kitchen appliances - allow	1	LS	3,000.00	3,000	
	Hoyer lifts		NIC			
E10	TOTAL EQUIPMENT	9,087	GSF		3,000	0.33
E20	FURNISHINGS					
	Entry mat	300	SF	20.00	6,000	
	Window blinds	1,000	SF	6.50	6,500	
E20	TOTAL FURNISHINGS	9,087	GSF		12,500	1.38
TOTAL BUILDING DIRECT COST					3,171,293	348.99

Estimate Detail: SCH-D

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL	\$/SF
SITWORK						
F20	SELECTIVE BUILDING DEMOLITION & SITE WORK					
	Sawcut/demo exterior wall at North Elev (give room for Addition)	28	LF	100.00	2,800	
	Sawcut/demo exterior wall at West Elev (give room for Addition)	8	LF	100.00	800	
	Demo exist roofing system inc misc flashing & parapet coping	7,426	SF	5.00	37,130	
	Demo interior walls	510	LF	25.50	13,005	
	Demo doors & frames	45	EA	150.00	6,750	
	Demo exist finishes: floor, RB base, ceiling	7,426	SF	3.50	25,991	
	Load haul & dispose debris	319	CY	100.00	31,863	
	<i>Asbestos abatement & disposal:</i>					
	Asbestos containing caulk around the door frames	39	LF	5.00	195	
	Mudded pipe joints containing asbestos	270	LF	5.00	1,350	
	Floor tile mastic containing materials	2,000	SF	5.00	10,000	
	Vinyl asbestos tile	8,000	SF	5.00	40,000	
	Silver paint on roof containing asbestos	10,000	SF	3.50	35,000	
	Light ballasts containing PCB's	96	EA	25.00	2,400	
	<i>Site:</i>					
	Clear & grub - allow	1.00	LS	2,500.00	2,500	
	Sawcut/demo portion of exist SOG to give room for new basement	63	SF	5.00	315	
	Mass excavate/dispose dirt for basement	363	CY	24.00	8,711	
	Native backfill around the basement	178	CY	20.00	3,567	
	Sedimentation, Construction Entrance & Erosion control	1	LS	5,000.00	5,000	
F20	TOTAL SITE PREPARATION				227,377	5.08
G20	SITE IMPROVEMENTS					
	Misc patch & Repair on conc sidewalk- allow	1	LS	30,000.00	30,000	
G20	TOTAL SITE IMPROVEMENTS				30,000	0.67
G30	SITE CIVIL /MECHANICAL /ELECTRICAL UTILITIES					
	Incidental works on utilities 5' away from the building - allow	1	LS	50,000.00	50,000	
G30	TOTAL SITE CIVIL /MECHANICAL /ELECTRICAL UTILITIES				50,000	1.79
TOTAL SITWORK DIRECT COST					307,377	7.19



WCCW Feasibility Study to
Convert Building F into an
Elder Care Facility or
Build a New Elder Facility

APPENDIX B

COST ESTIMATE – BUILD NEW ELDER CARE FACILITY

SUMMARY: SCH-E

Project: **WCCW - ELDER CARE FACILITY, New Construction**
 Location Gig Harbor, WA
 Bldg (SF) 9,217 SF
 Date May 22, 2023
 Phase: Feasibility Study Estimate

SEC	DESCRIPTION	TOTAL
BUILDING:		
A10	FOUNDATIONS	370,691
A30	SLAB ON GRADE	142,826
B20	ROOF CONTRICTION	257,085
B30	EXTERIOR CLOSURE	911,690
B40	ROOFING	307,793
C10	INTERIOR CONSTRUCTION	554,768
C30	INTERIOR FINISHES	397,421
D20	PLUMBING	315,864
D30	HVAC	374,416
D40	FIRE PROTECTION	
D50	ELECTRICAL	855,424
E10	EQUIPMENT	3,000
E20	FURNISHINGS	12,370
TOTAL BUILDING DIRECT COST		\$4,503,347
	GENERAL CONDITIONS INCL SITE OVERHEAD	15% 675,502
	GENERAL CONTRACTOR'S OH&P, B&O Tax, Insurance	5% 258,942
	DESIGN/ESTIMATING CONTINGENCY	15% 815,669
	TIGHT SECURITY CONDITIONS PREMIUM	5% 312,673
TOTAL BUILDING COST @ BID TODAY		\$6,566,134

SITWORK:		
F20	BUILDING DEMOLITION & MISC SITE WORK	332,464
G20	SITE IMPROVEMENTS	Minor work - Allow 30,000
G30	SITE CIVIL / MECHANICAL UTILITIES	Minor work - Allow 50,000
TOTAL SITWORK DIRECT COST		412,464
	GENERAL CONDITIONS INCL SITE OVERHEAD	15% 61,870
	GENERAL CONTRACTOR'S OH&P, B&O Tax, Insurance	5% 23,717
	DESIGN/ESTIMATING CONTINGENCY	15% 74,708
	TIGHT SECURITY CONDITIONS PREMIUM	5% 28,638
TOTAL SITEOWRK COST @ BID TODAY		\$601,395

TOTAL BUILDING & SITWORK COST @ BID TODAY \$777.64 **\$7,167,500**

EXCLUSIONS:

Permits	Construction Management Fees
Furnishings/Equip Not Listed	Traffic Control
A/E Fees	Artwork/Installations
Escalation	

Legends

GSF Gross Square Feet	CY Cubic Yard
FPA Foot Print Area	SY Square Yard
UFA Upper Floor Area	ACR Acre
RA Roof Area	EA Each
XWA Exterior wall Area	PR Pair
SF Square feet	LS Lump sum
LF Lineal Feet	LBS pounds

Estimate Detail: SCH-E

Project: **WCCW - ELDER CARE FACILITY, New Construction**
 Location: Gig Harbor, WA
 Bldg (SF): 9,217 SF
 Date: May 22, 2023
 Phase: Feasibility Study Estimate

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL	\$/SF
A10	FOUNDATIONS					
	2.5' Wide strip footing w/ 3' H stem wall - perimeter wall	620	LF	275.00	170,500	
	1.5' Wide strip footing w/ 3' H stem wall - Interior load bearing	609	LF	240.00	146,160	
	1.5' Wide strip footing - non-load bearing	340	LF	95.00	32,300	
	Conc, forms & reinf, Excavate/trenching, native backfill	Included	above			
	Waterproofing exterior face of perimeter footing	1,860	SF	2.35	4,371	
	Footing drainage with gravel around	620	LF	28.00	17,360	
A10	TOTAL FOUNDATIONS	9,217	SF		370,691	40.22
A30	SLAB-ON-GRADE					
	4" thick conc slab-on-grade (Basment & 1st Floor Level):	9,217	SF	15.50	142,826	
	Fine grade/compact subgrade below slab	Included	above			
	Gravel fill - 6" thk total	Included	above			
	Slab reinf - WWF	Included	above			
	Vapor barrier - 15 mil polyethylene sheathing	Included	above			
	Trowel, cure & finish slab on grade	Included	above			
	2" R-10 rigid insul at slab perimeter	Included	above			
	Construction & control joints	Included	above			
A30	TOTAL SLAB-ON-GRADE	9,217	SF		142,826	15.50
B20	ROOF CONSTRUCTION					
	8" Thk hollow core planks, incl Delivery & Erection	6,737	SF	15.50	104,424	
	12.5" Thk hollow core planks, incl Delivery & Erection	2,658	SF	16.50	43,857	
	2-1/2" thick normal conc topping w/ WWF reinf, trowel & finish slab	9,395	SF	10.67	100,213	
	Cast in Place Concrete Closure	203	SF	42.32	8,591	
	Misc lintel beam supports	200	LF	50.00	10,000	
B20	TOTAL ROOF CONSTRUCTION	9,217	RA		257,085	27.89
B30	EXTERIOR CLOSURE					
	8" CMU wall, solid grout, reinf	4,647	SF	27.00	125,469	
	10" CMU wall, solid grout, reinf	2,173	SF	28.00	60,844	
	Brick veneer	6,820	SF	38.00	259,160	
	Liquid applied weather resistant barrier	6,820	SF	1.50	10,230	
	Furring, 4" R19 batt insul VB and GWB to exterior perimeter wall	6,820	SF	17.85	121,737	
	8" CMU Parapet incl brick veneer, 3.5' high	2,170	SF	65.00	141,050	
	4' x 5' - Dayroom windows	7	EA	2,700.00	18,900	
	4' x 5' - Hardened Cell	42	EA	3,150.00	132,300	
	HM metal door at entry vestibule door	2	EA	8,000.00	16,000	
	HM metal door w/ side glass wall at East & West Entry	2	EA	13,000.00	26,000	
B30	TOTAL EXTERIOR CLOSURE	8,990	XWA		911,690	101.41
B40	ROOFING					
	PVC fully adhered sheet memb roofing, VB & coverboard	9,217	SF	13.50	124,430	
	Extend roofing to the parapet (vertical side)	2170	SF	10.00	21,700	
	R-45 Rigid insulation over conc plank/conc roof	9,217	SF	10.80	99,544	
	Misc flashing - allow	9,217	SF	3.50	32,260	
	Parapet metal coping	620	LF	28.00	17,360	
	Sealants/caulking/fire stopping allow	1	LS	12,500.00	12,500	
B40	TOTAL ROOFING	9,217	RA		307,793	33.39

Estimate Detail: SCH-E

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL	\$/SF
C10	INTERIOR CONSTRUCTION: Partitions, doors, relights, specialties & casework					
	8" CMU walls - Solid grout LB wall	8,382	SF	27.00	226,314	
	10" CMU walls - solid grout LB walls	1,523	SF	28.00	42,644	
	Interior relite 8' high - dayroom	72	SF	125.00	9,000	
	SCW Interior door, HM frame & hw to support rooms	13	EA	3,600.00	46,800	
	HD Interior metal door, HM frame & hw to cell rooms	22	EA	4,200.00	92,400	
	Add for laminated glass vision panel to interior doors	35	EA	800.00	28,000	
	Add for door closers	16	EA	450.00	7,200	
	Toilet partitions & doors - Reg	2	EA	2,000.00	4,000	
	Toilet partitions & doors - ADA	1	EA	2,500.00	2,500	
	Toilet specialties to common bathrooms	5	SETS	2,500.00	12,500	
	Shower specialties to common bathrooms	4	SETS	2,000.00	8,000	
	Toilet specialties to cell rooms	22	SETS	1,500.00	33,000	
	Nurses' station/counter	42	LF	600.00	25,200	
	Vanity cabinets with solid surface counter at bathrooms	16	LF	680.00	10,880	
	Base cab with solid counter tops at staff break room	6	LF	680.00	4,080	
	Upper cab at staff break room	9	LF	250.00	2,250	
C10	TOTAL INT PARTITIONS, DOORS, RELIGHTS & CASEWORK	9,217	GSF		554,768	60.19
C30	INTERIOR FINISHES					
	Luxury vinyl flooring incl RB base	7,946	SF	18.00	143,026	
	CT to shower room floor incl CT base	398	SF	36.00	14,328	
	CT to shower room wall - 8' high	832	SF	28.00	23,296	
	Vinyl wainscot to hallway - 4' high	2,000	SF	12.00	24,000	
	GWB ceilings (impact resistant) incl framing	9,217	SF	15.00	138,255	
	Paint new CMU walls - interior	19,810	SF	1.85	36,649	
	Paint new GWB walls	6,820	SF	1.85	12,617	
	Paint doors & frames	35	LVS	150.00	5,250	
C30	TOTAL INTERIOR FINISHES	9,217	GSF		397,421	43.12
D20	PLUMBING					
	Plumbing system work, incl WC, Sink, Urinal & piping <i>Please refer to Mechanical Engineer's report for detail</i>	9,217	GSF	34.27	315,864	
D20	TOTAL PLUMBING	9,217	GSF		315,864	34.27
D30	HVAC					
	HVAC <i>Please refer to Mechanical Engineer's report for detail</i>	9,217	GSF	40.62	374,416	
D30	TOTAL HVAC	9,217	GSF		374,416	40.62
D40	FIRE PROTECTION					
	Fire sprinklering system		NIC	6.00		
D40	TOTAL FIRE PROTECTION	9,217	GSF			
D50	ELECTRICAL					
	Power, Distribution, lighting, switches, TAB & Commissioning	9,217	GSF	64.54	594,827	
	Telecom, Security	9,217	GSF	20.71	190,927	
	Fire alarm <i>Please refer to Electrical Engineer's report for detail</i>	9,217	GSF	7.56	69,670	
D50	TOTAL ELECTRICAL	9,217	GSF		855,424	92.81

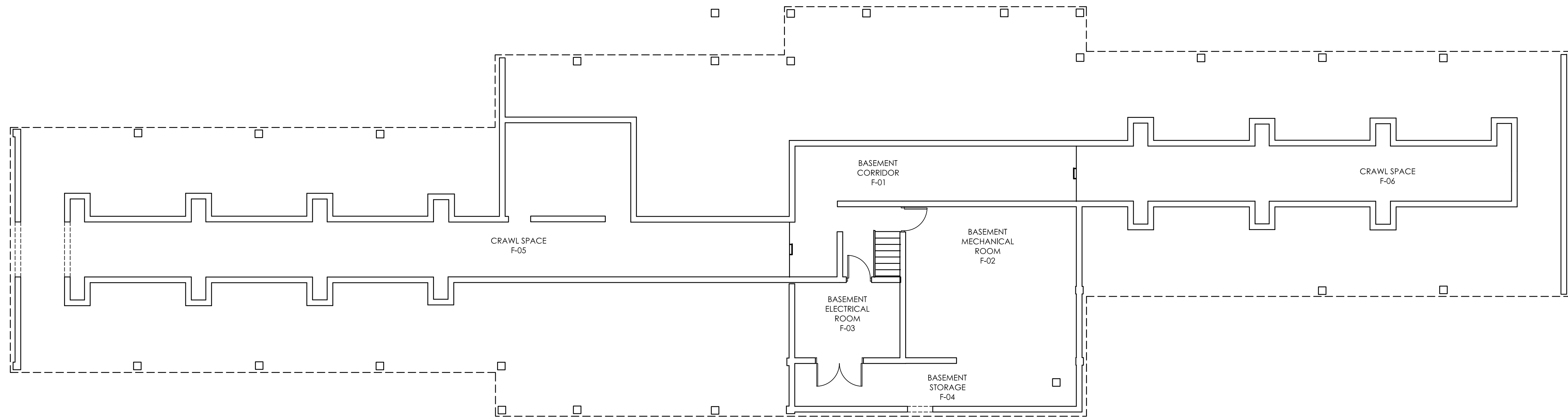
Estimate Detail: SCH-E

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL	\$/SF
E10	EQUIPMENT					
	Kitchen appliances - allow	1	LS	3,000.00	3,000	
	Hoyer lifts		NIC			
E10	TOTAL EQUIPMENT	9,217	GSF		3,000	0.33
E20	FURNISHINGS					
	Entry mat	300	SF	20.00	6,000	
	Window blinds	980	SF	6.50	6,370	
E20	TOTAL FURNISHINGS	9,217	GSF		12,370	1.34
TOTAL BUILDING DIRECT COST					4,508,347	489.13
SITWORK						
F20	BUILDING DEMOLITION & SITE PREPARATION					
	Demo dispose exist building - incl basement & 1st Floor	107,370	CF	0.85	91,265	
	Demo footing of the existing building	7,537	SF	5.00	37,685	
	Demo slab on grade of the existing building	7,537	LF	2.50	18,843	
	Load haul & dispose debris	349	CY	100.00	34,894	
	<i>Asbestos abatement & disposal:</i>					
	Asbestos containing caulk around the door frames	39	LF	5.00	195	
	Mudded pipe joints containing asbestos	270	LF	5.00	1,350	
	Floor tile mastic containing materials	2,000	SF	5.00	10,000	
	Vinyl asbestos tile	8,000	SF	5.00	40,000	
	Silver paint on roof containing asbestos	10,000	SF	3.50	35,000	
	Light ballasts containing PCB's	96	EA	25.00	2,400	
	<i>Site:</i>					
	Clear & grub - allow	1.00	LS	2,500.00	2,500	
	structural fill - to the footprint of the new building	1,185	CY	45.00	53,333	
	Sedimentation, Construction Entrance & Erosion control	1	LS	5,000.00	5,000	
F20	TOTAL SITE PREPARATION				332,464	7.43
G20	SITE IMPROVEMENTS					
	Misc patch & Repair on conc sidewalk- allow	1	LS	30,000.00	30,000	
G20	TOTAL SITE IMPROVEMENTS				30,000	0.67
G30	SITE CIVIL /MECHANICAL /ELECTRICAL UTILITIES					
	Incidental works on utilities 5' away from the building - allow	1	LS	50,000.00	50,000	
G30	TOTAL SITE CIVIL /MECHANICAL /ELECTRICAL UTILITIES				50,000	1.79
TOTAL SITWORK DIRECT COST					412,464	9.65

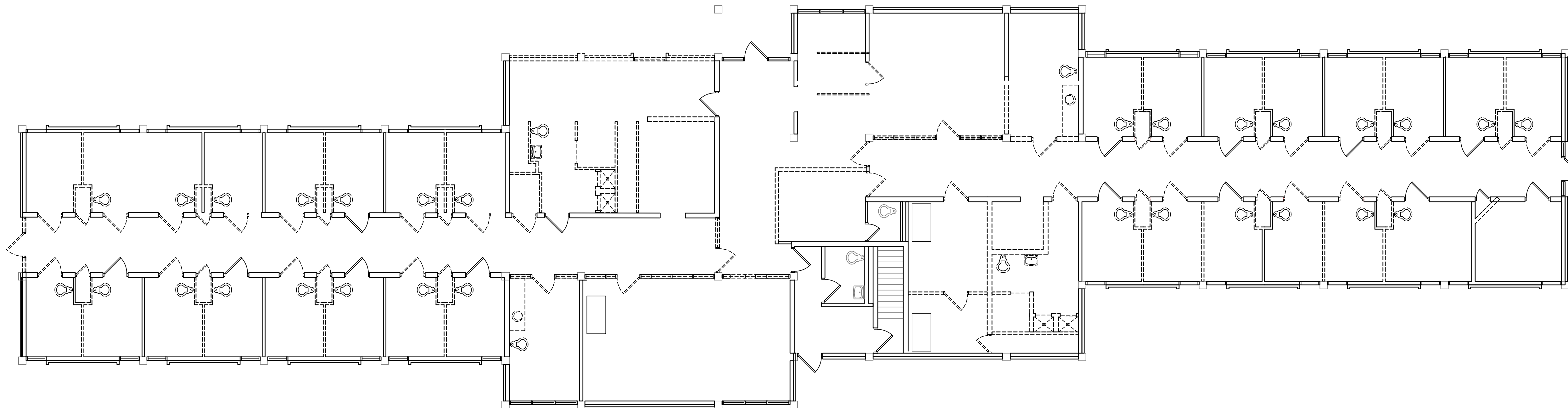


WCCW Feasibility Study to
Convert Building F into an
Elder Care Facility or
Build a New Elder Facility

**APPENDIX C –
ARCHITECTURAL & STRUCTURAL DRAWING
REMODEL EXISTING BUILDING 'F'**

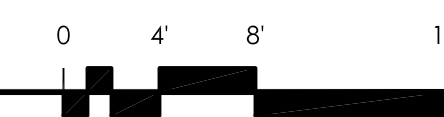



DEMOLITION BASEMENT FLOOR PLAN - SCHEME D




DEMOLITION FIRST FLOOR PLAN - SCHEME D

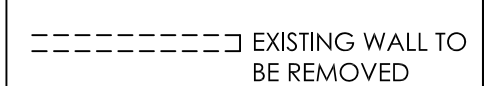
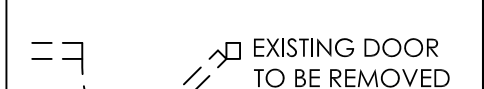
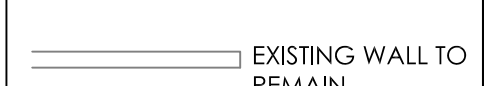

7,426 S.F.


 SCALE: 1/8" = 1'-0"

WASHINGTON CORRECTION CENTER FOR WOMEN - ASSISTED LIVING & SKILLED NURSING FACILITY

Keynotes

General Notes:

- Legend:
-  EXISTING WALL TO BE REMOVED
 -  EXISTING DOOR TO BE REMOVED
 -  EXISTING WALL TO REMAIN
 -  EXISTING DOOR TO REMAIN

PRELIMINARY
NOT FOR CONSTRUCTION

Prelim Design 04/27/23

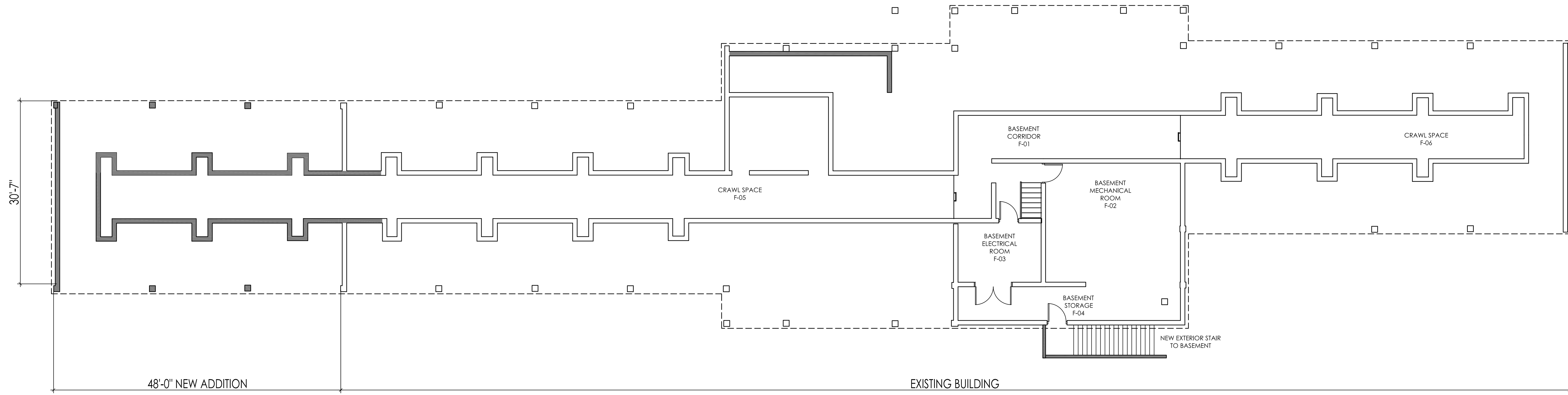
Revisions Closing Date

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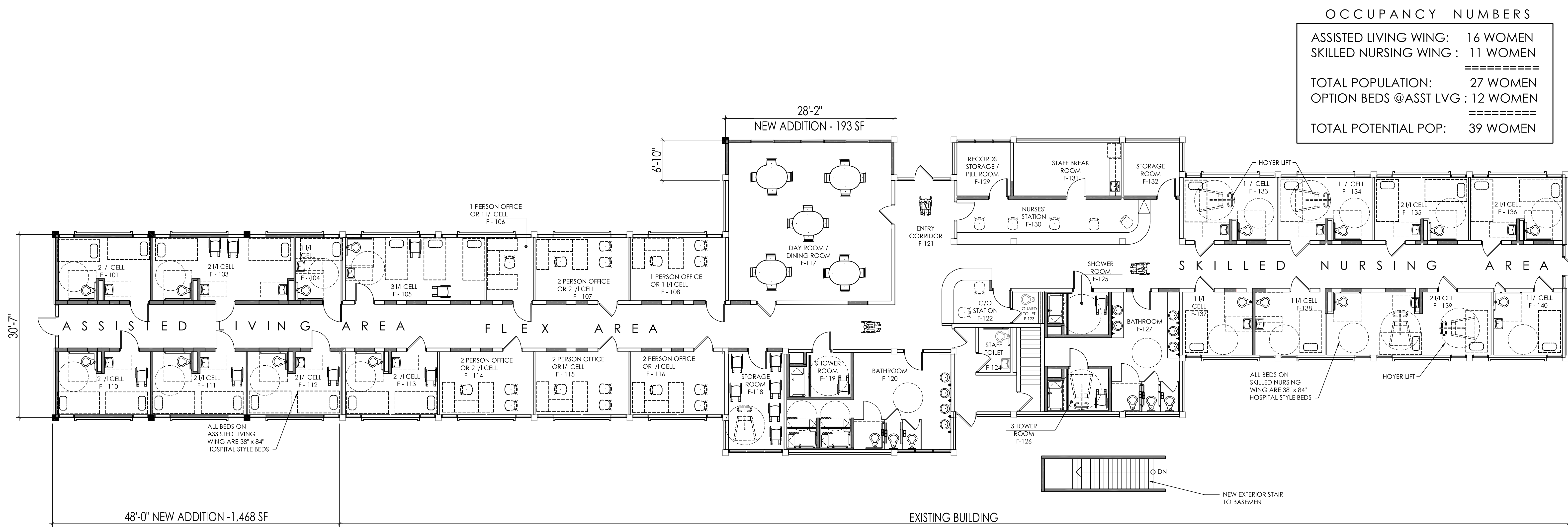
Sheet Title
BASEMENT & FIRST FLOOR DEMOLITION PLANS

Sheet No.
SCH-D

MSGS Project No.
22-152



PROPOSED BASEMENT FLOOR PLAN - SCHEME D
 A2.10 1/8" = 1'-0"



OCCUPANCY NUMBERS

ASSISTED LIVING WING:	16 WOMEN
SKILLED NURSING WING:	11 WOMEN
TOTAL POPULATION:	27 WOMEN
OPTION BEDS @ASST LVG:	12 WOMEN
TOTAL POTENTIAL POP:	39 WOMEN

PROPOSED FIRST FLOOR PLAN - SCHEME D
 A2.10 1/8" = 1'-0"

9,087 SF
 SCALE: 1/8" = 1'-0"

Keynotes

General Notes:

Legend:

- EXISTING WALL TO REMAIN
- EXISTING DOOR TO REMAIN
- NEW WALL
- NEW DOOR AND FRAME

PRELIMINARY
 NOT FOR CONSTRUCTION

Prelim. Design 05/24/23

Revisions Closing Date

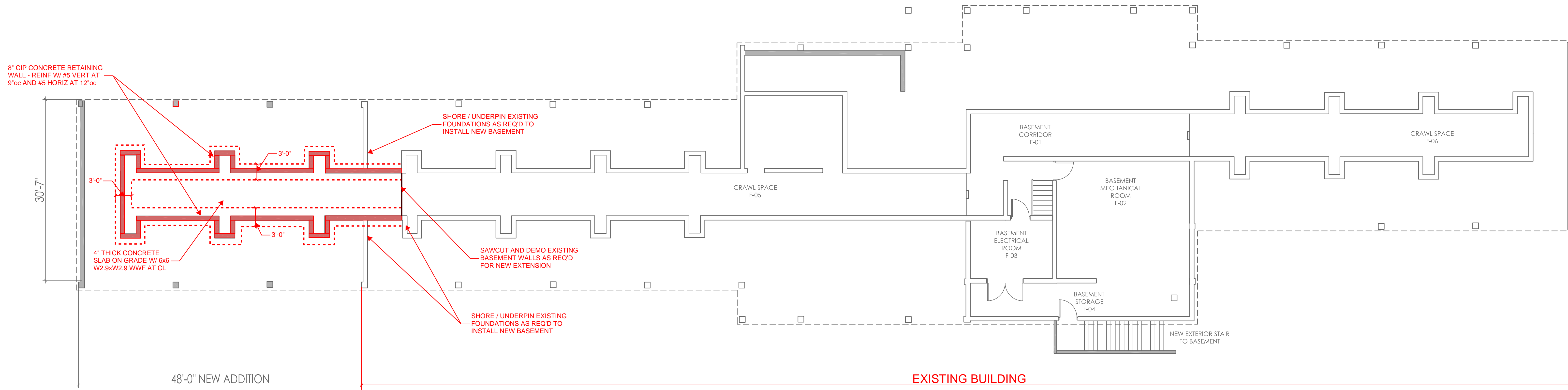
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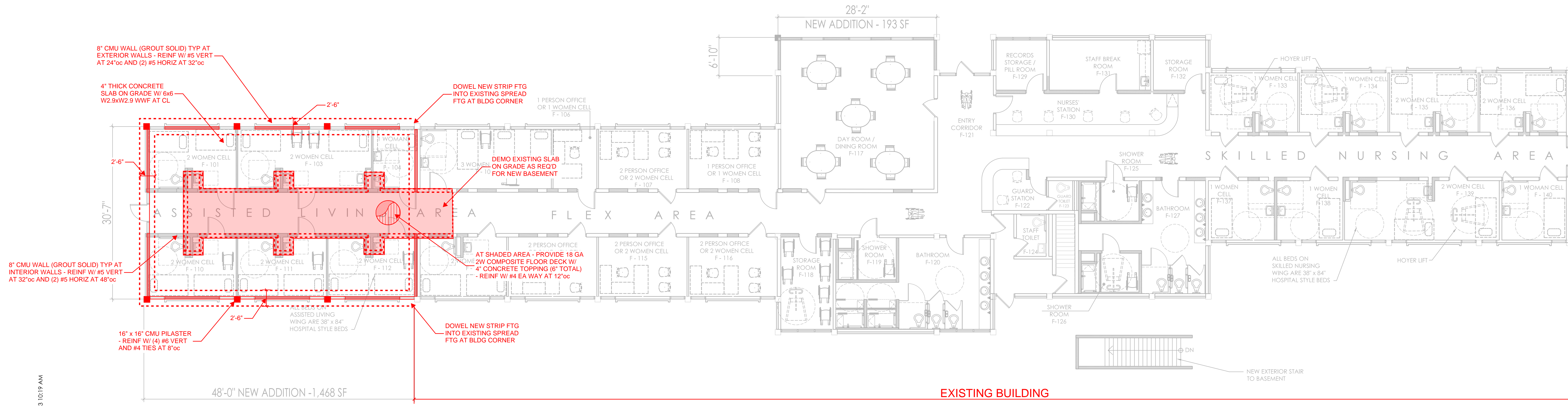
BASEMENT & FIRST FLOOR PLANS

Sheet No.
SCH-D

MSGS Project No.
 22-152



PROPOSED BASEMENT FLOOR PLAN - SCHEME D
 A2.10 1/8" = 1'-0"



PROPOSED FIRST FLOOR PLAN - SCHEME D
 A2.10 1/8" = 1'-0"

Keynotes

General Notes:

Legend:

- EXISTING WALL TO REMAIN
- EXISTING DOOR TO REMAIN
- NEW WALL
- NEW DOOR AND FRAME

PRELIMINARY
 NOT FOR CONSTRUCTION

Prelim. Design 04/27/23

Revisions Closing Date

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Sheet Title

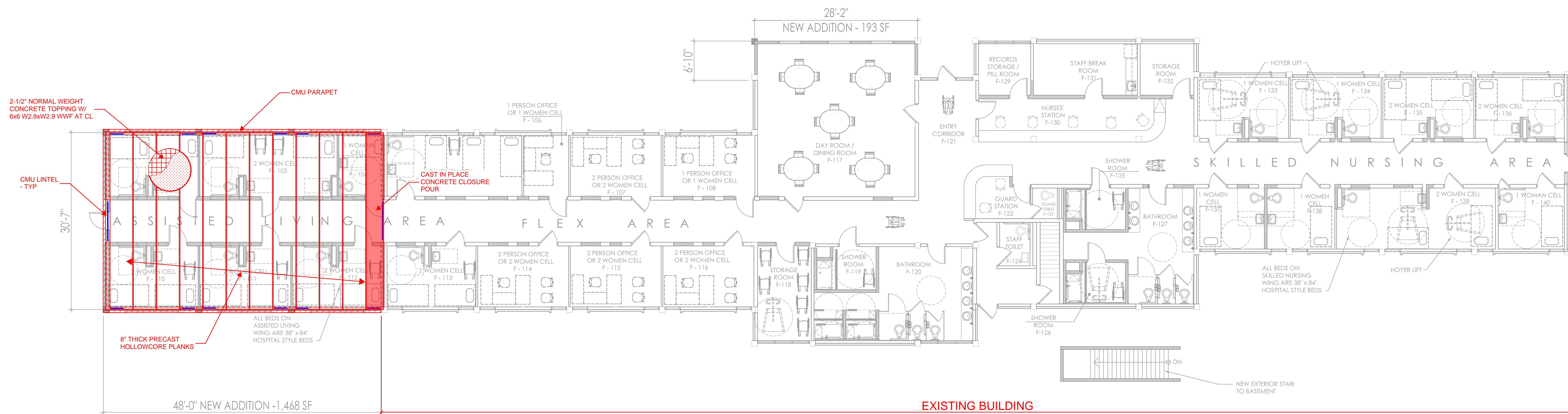
BASEMENT & FIRST FLOOR PLANS
SCHEME D

Sheet No.
S1.1D

MSGS Project No.
 22-152

22-152-221-S2-SCH-D-FIRST FLOOR PLAN.dwg - dbk - 4/28/2023 10:19 AM

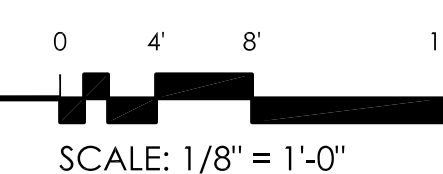
9,087 SF
 SCALE: 1/8" = 1'-0"



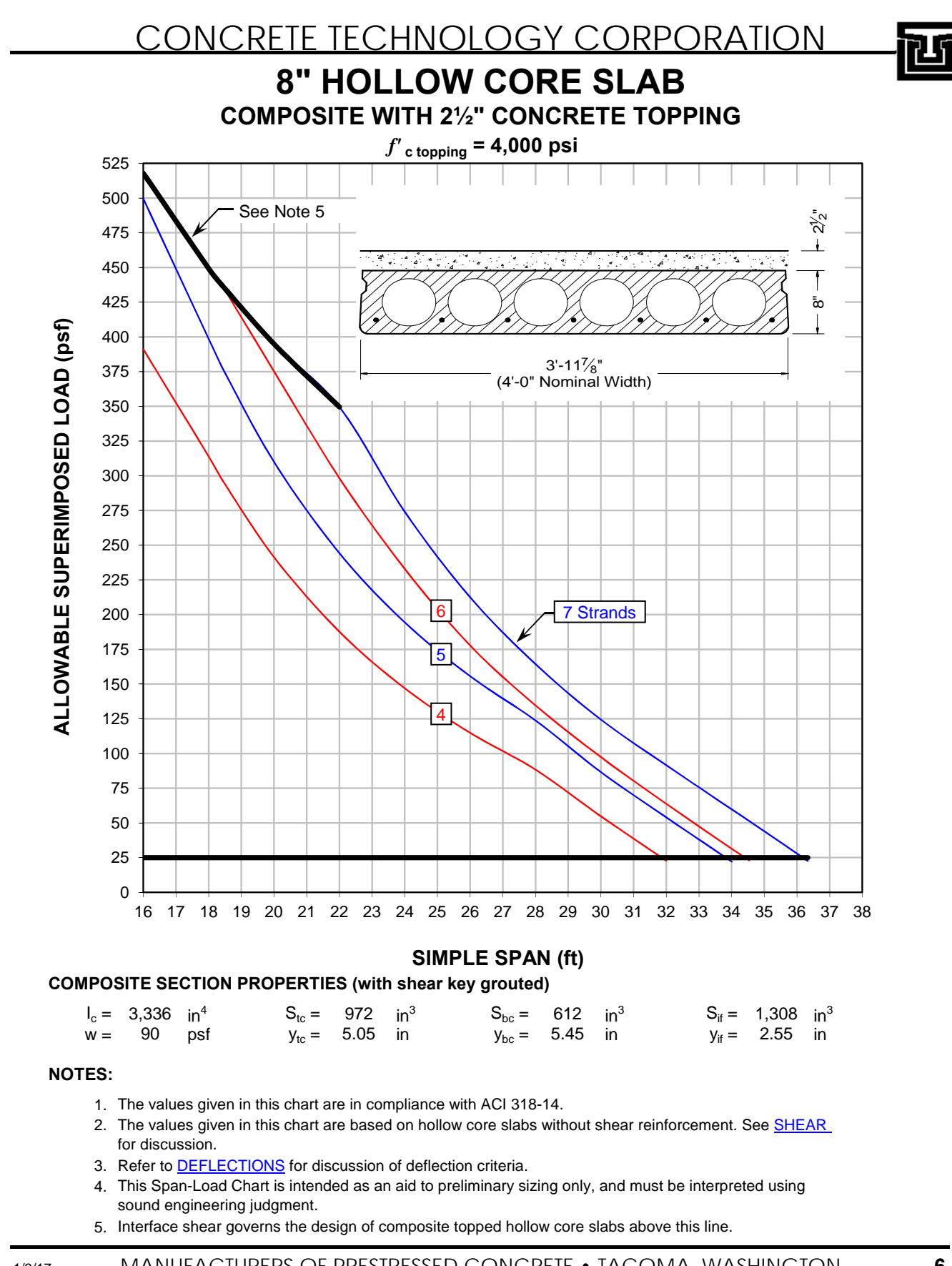
2-1/2" NORMAL WEIGHT CONCRETE TOPPING W/ 6x6 W2.9xW2.9 WWF AT CL
 CMU PARAPET
 CMU LINTEL - TYP
 CAST IN PLACE CONCRETE CLOSURE POUR
 8" THICK PRECAST HOLLOWCORE PLANKS
 ALL BEDS ON ASSISTED LIVING WING ARE 36" x 84" HOSPITAL STYLE BEDS

PROPOSED ROOF PLAN - SCHEME D

9,087 SF



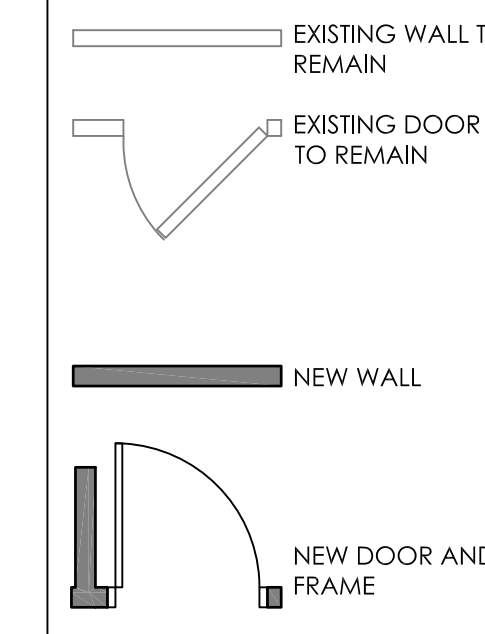
WASHINGTON CORRECTION CENTER FOR WOMEN - ASSISTED LIVING & SKILLED NURSING FACILITY



Keynotes

General Notes:

Legend:



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Sheet Title

ROOF FRAMING
 PLAN
 SCHEME D

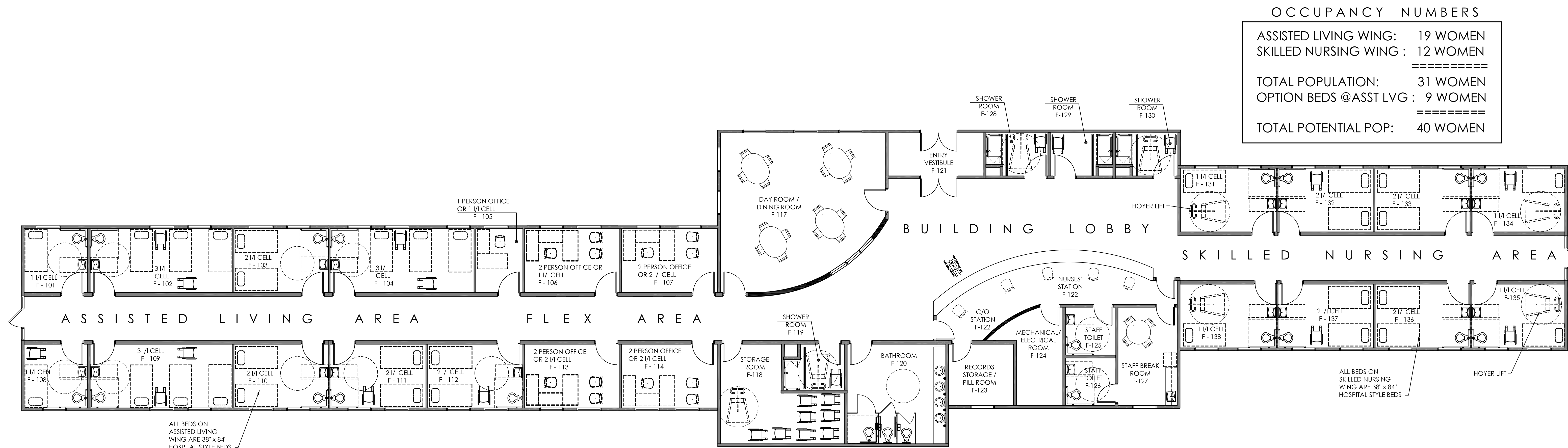
Sheet No.
S2.1D

MSGS Project No.
 22-152

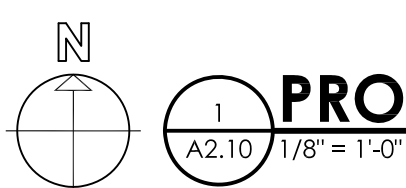


WCCW Feasibility Study to
Convert Building F into an
Elder Care Facility or
Build a New Elder Facility

**APPENDIX D –
ARCHITECTURAL & STRUCTURAL DRAWING
BUILD NEW ELDER CARE FACILITY**



OCCUPANCY NUMBERS
 ASSISTED LIVING WING: 19 WOMEN
 SKILLED NURSING WING: 12 WOMEN
 =====
 TOTAL POPULATION: 31 WOMEN
 OPTION BEDS @ASST LVG : 9 WOMEN
 =====
 TOTAL POTENTIAL POP: 40 WOMEN



PROPOSED FIRST FLOOR PLAN - NEW BUILDING - SCHEME E

9,217 SF
 SCALE: 1/8" = 1'-0"

WASHINGTON CORRECTION CENTER FOR WOMEN - ASSISTED LIVING & SKILLED NURSING FACILITY

Keynotes

General Notes:

Legend:

PRELIMINARY
 NOT FOR CONSTRUCTION

Prelim. Design 05/24/23

Revisions Closing Date

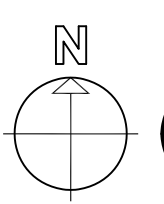
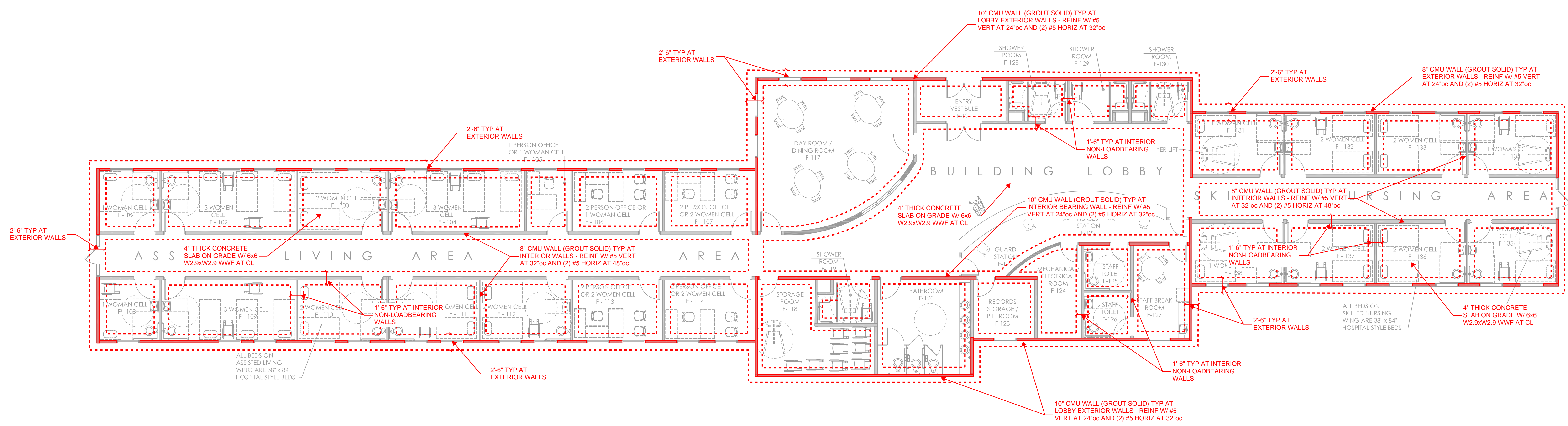
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FIRST FLOOR PLAN

SCH-E

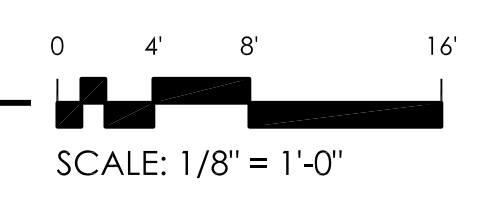
MSGS Project No. 22-152

Keynotes



PROPOSED FIRST FLOOR PLAN - NEW BUILDING - SCHEME E

9,217 SF



WASHINGTON CORRECTION CENTER FOR WOMEN - ASSISTED LIVING & SKILLED NURSING FACILITY

General Notes:

PRELIMINARY
 NOT FOR CONSTRUCTION

Prelim. Design 04/27/23

Legend:

Revisions Closing Date

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Sheet Title

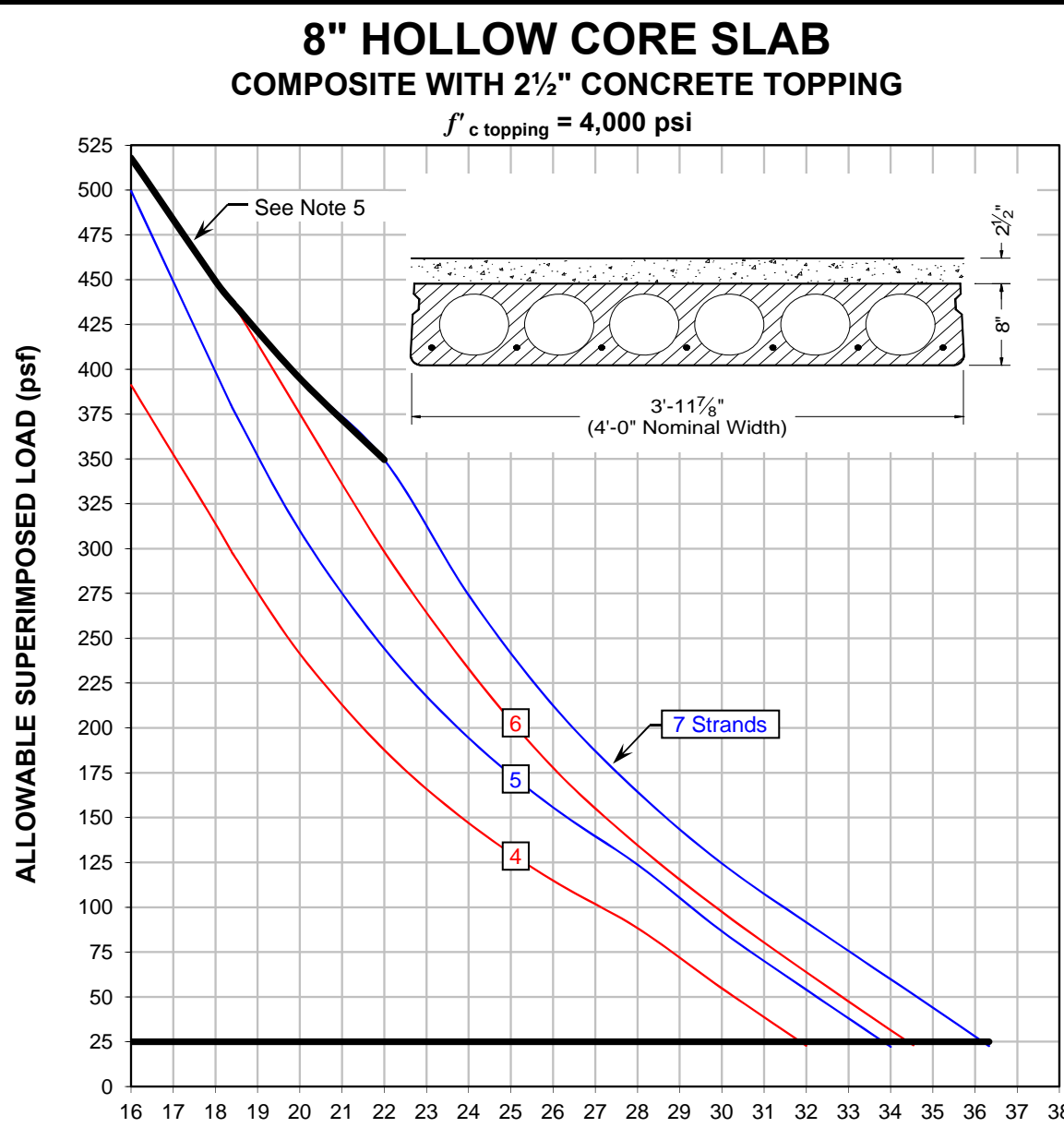
FIRST FLOOR PLAN

SCHEME E

Sheet No.

S1.1E

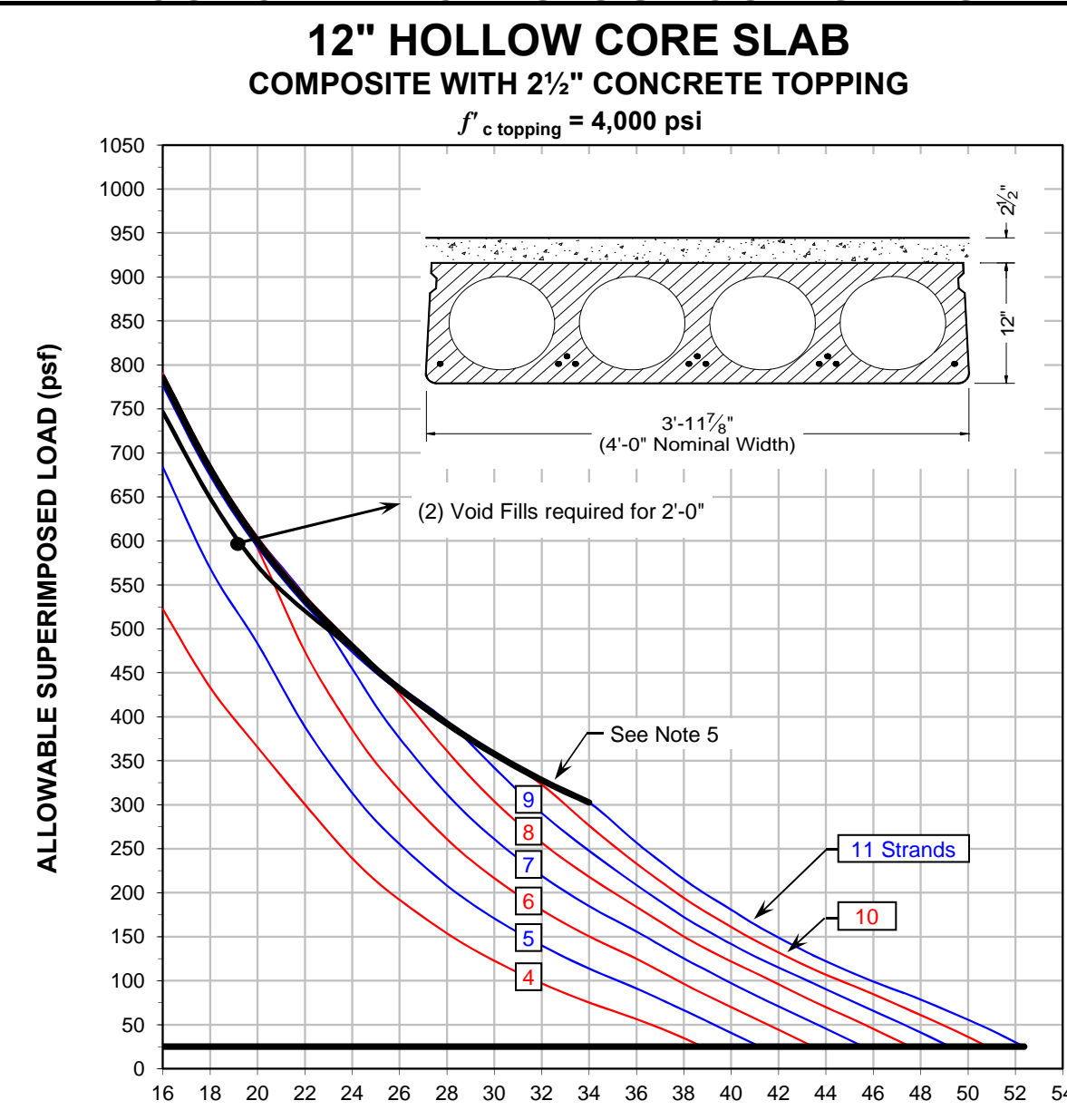
MSGS Project No. 22-152



COMPOSITE SECTION PROPERTIES (with shear key grouted)

$I_c = 3,336 \text{ in}^4$	$S_{xc} = 972 \text{ in}^3$	$S_{xc} = 612 \text{ in}^3$	$S_y = 1,308 \text{ in}^3$
$w = 90 \text{ psf}$	$y_{xc} = 5.05 \text{ in}$	$y_{xc} = 5.45 \text{ in}$	$y_t = 2.55 \text{ in}$

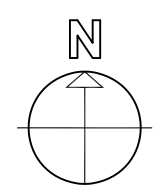
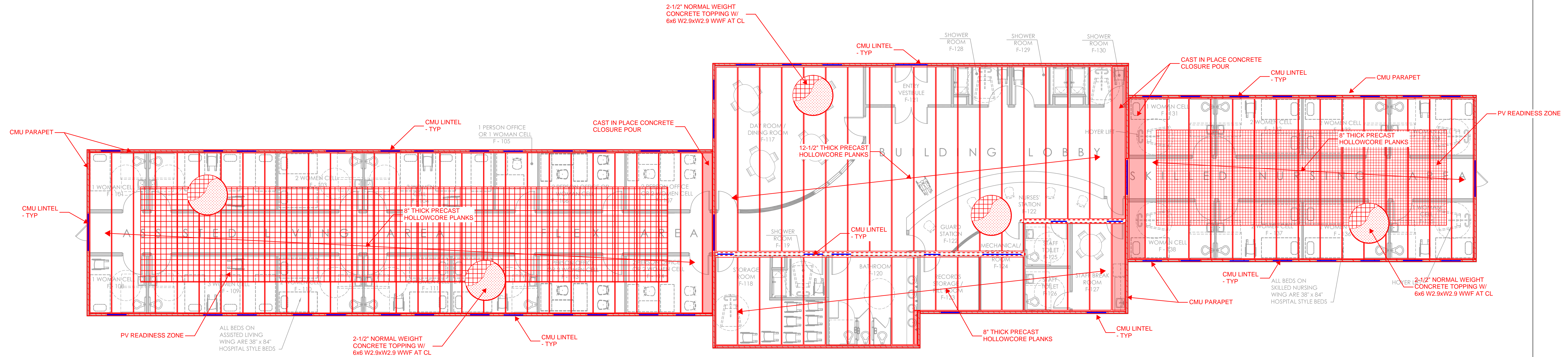
- NOTES:**
- The values given in this chart are in compliance with ACI 318-14.
 - The values given in this chart are based on hollow core slabs without shear reinforcement. See [SHEAR](#) for discussion.
 - Refer to [DEFLECTIONS](#) for discussion of deflection criteria.
 - This Span-Load Chart is intended as an aid to preliminary sizing only, and must be interpreted using sound engineering judgment.
 - Interface shear governs the design of composite topped hollow core slabs above this line.



COMPOSITE SECTION PROPERTIES (with shear key grouted)

$I_c = 8,656 \text{ in}^4$	$S_{xc} = 1,844 \text{ in}^3$	$S_{xc} = 1,140 \text{ in}^3$	$S_y = 1,965 \text{ in}^3$
$w = 111 \text{ psf}$	$y_{xc} = 6.90 \text{ in}$	$y_{xc} = 7.60 \text{ in}$	$y_t = 4.40 \text{ in}$

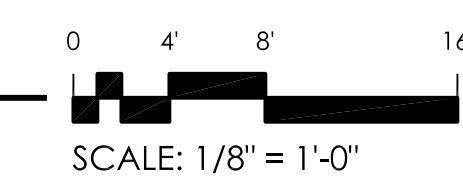
- NOTES:**
- The values given in this chart are in compliance with ACI 318-14.
 - The values given in this chart are based on hollow core slabs without shear reinforcement. See [SHEAR](#) for discussion.
 - Refer to [DEFLECTIONS](#) for discussion of deflection criteria.
 - This Span-Load Chart is intended as an aid to preliminary sizing only, and must be interpreted using sound engineering judgment.
 - Interface shear governs the design of composite topped hollow core slabs above this line.



PROPOSED ROOF PLAN - SCHEME E

WASHINGTON CORRECTION CENTER FOR WOMEN - ASSISTED LIVING & SKILLED NURSING FACILITY

9,217 SF



General Notes:

Legend:

PRELIMINARY
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Prelim. Design 04/27/23

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Sheet Title

ROOF FRAMING PLAN SCHEME E

Sheet No.

S2.1E

MSGS Project No.

22-152

Keynotes

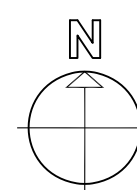
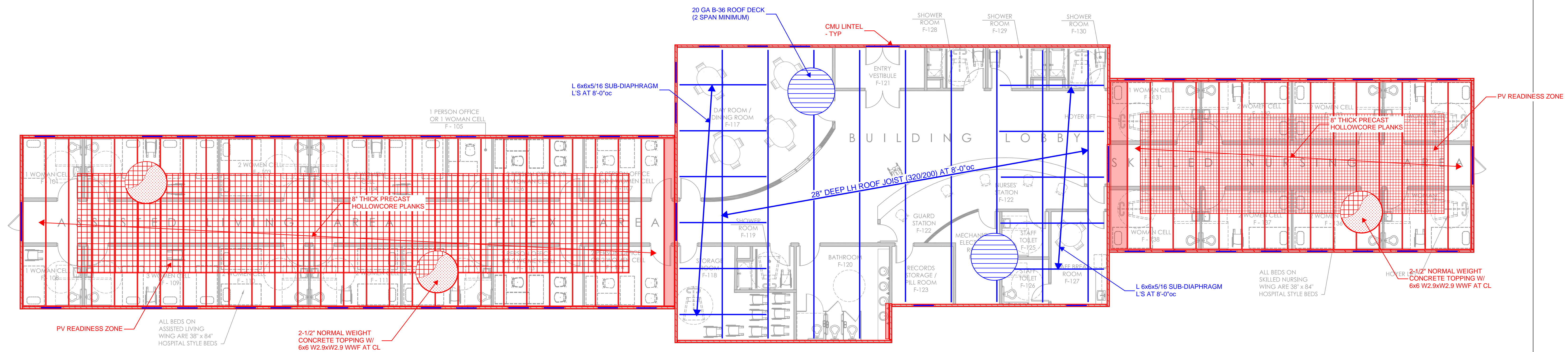
p. 360 943 6774 T. 360 392 7005
www.msgsarch.com

msg architects

510 capital way south
olympia, washington 98501

WCCW

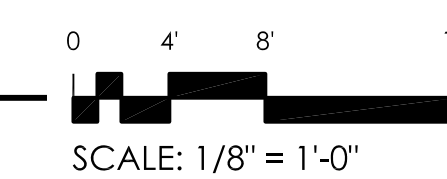
Feasibility Study for Elder Care
9601 Bujacich Road, Gig Harbor, WA, 98332
STATE PROJECT No. 23-314



PROPOSED ROOF PLAN - SCHEME E

1
 A2.10 1/8" = 1'-0"

9,217 SF



WASHINGTON CORRECTION CENTER FOR WOMEN - ASSISTED LIVING & SKILLED NURSING FACILITY

ALTERNATE ROOF FRAMING CONCEPT - STEEL ROOF FRAMING AT LOBBY AREA

Keynotes

General Notes:

Legend:

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Prelim. Design 04/27/23

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Sheet Title

ROOF FRAMING PLAN
SCHEME E

Sheet No.

S2.2E

MSGS Project No.
 22-152



WCCW Feasibility Study to
Convert Building F into an
Elder Care Facility or
Build a New Elder Facility

APPENDIX E – STRUCTURAL, MECHANICAL & ELECTRICAL DESIGN NARRATIVE



Structural Narrative
WCCW Elder Care Facility
Project Principal Andrew D. McEachern, P.E., S.E.

Design Criteria

Design Codes and Standards

Codes and Standards: Structural design and construction shall be in accordance with the applicable sections of the following codes and standards as adopted and amended by the local building authority: International Building Code, 2018 Edition.

Structural Design Criteria:

Live Load Criteria:

Roof (Min Blanket Snow):	25 psf
Slab on Grade:	125 psf
Concrete Deck at Basement Lid	125 psf

Wind Load Criteria:

Basic Wind Speed:	104 mph
Risk Category:	III
Wind Exposure:	B

Seismic Criteria:

Risk Category:	III
Seismic Importance Factor:	1.25
$S_s = 1.507$	$S_1 = 0.527$
$S_{ds} = 1.205$	$S_{d1} = N/A$
Site Class:	D – default (assumed)
Seismic Design Category:	D

Soil Criteria:

Soil Bearing Capacity: 1,500 psf minimum (assumed) allow 33% increase for loads from wind or seismic origin.

Project Description

The structural scope of work for this project involves either an addition to an existing one-story detention facility (with a partial basement), or a completely new one-story detention facility. It is the intention of the structural design to satisfy the force levels of the IBC 2018. The structural system for either building option will include the following:

Roof Framing

- Due to the security requirements for the facility, we have assumed that the new roof structure will closely match the construction of the existing facility. Precast hollow core roof planks will span between exterior loadbearing wall elements. The roof planks will be topped with a 2-1/2" thick reinforced topping slab to act as a horizontal diaphragm for resisting lateral forces.
- Reinforced concrete closure slabs will be used at discrete areas of the roof as needed to accommodate short or irregular slab spans as well as vertical penetrations.

Alternate Roof Framing

- If security considerations allow for a steel roof system, it is possible to frame the new roof with open web steel joists. This alternate roof system will consist of light gage metal deck spanning between open web steel joists (or wide flange joists). The joists will be able to span the full width of the building, and bear on the exterior load-bearing CMU walls.

Exterior Walls

- The exterior walls for the facility will utilize reinforced concrete masonry (CMU) walls. For security requirements, we anticipate that the walls will be grouted solid. These walls will be designed to support the roof loads above, and will also act as shearwalls to resist lateral loads from the roof structure.

Interior Walls

- A majority of the interior wall framing will be considered non-structural wall elements. The typical roof framing is anticipated to span between exterior load-bearing walls. The interior walls may consist of reinforced CMU walls where necessary for security requirements, or light gage steel studs walls where appropriate. These walls will be designed to allow vertical and lateral movement of the roof structure without delivering loads into the interior partitions (i.e. slip tracks or equivalent).
- At the Building Lobby, several of the interior walls will be used to support the roof structure. These bearing walls will be reinforced CMU framing similar to the exterior wall systems.

Foundations

- Based upon the original as-built drawings for the existing building, we have assumed that the new structures will be supported on conventional shallow foundations. Conventional strip footings will be located beneath all loadbearing wall elements. Discrete spread footings will be provided at any column locations.
- The interior floor of the building will consist of a conventional cast in place concrete slab on grade.
- At interior non-loadbearing CMU walls, a thickened slab strip footing will be provided integral with the interior slab on grade.

Basement Construction

- For the addition option, a narrow basement addition is indicated running down the central hallway of the building. The new basement walls will consist of conventional

cast in place concrete retaining walls. The retaining walls will be supported on continuous strip footings.

- The basement floor will consist of a cast in place concrete slab on grade.
- At the main floor level, the lid of the basement will be constructed with an elevated concrete slab. The slab construction will consist of a reinforced concrete topping slab placed over a light gage form deck.

MECHANICAL & ELECTRICAL DESIGN NARRATIVE – P2S:



1.0 INTRODUCTION

This project involves the renovation of the Washington Correctional Center for Women. Currently the building is a single story 7,426 square foot facility located in Gig Harbor, WA used to house inmates. There are two proposed alternatives for the renovation of the facility:

- **Renovation Scheme D** – Renovation Scheme D involves demolishing the all existing mechanical, electrical, and plumbing systems located in the facility. The existing structure is to remain. A 1,468 square foot addition shall be provided on the west side of the building and a 193 square foot addition shall be provided on the north side of the building. The resulting building shall be a total of 9,087 square feet. Mechanical, electrical, and plumbing systems shall be provided to serve the renovated building.
- **Renovation Scheme E** – Renovation Scheme E involves the complete demolition of the existing facility including the mechanical, electrical, and plumbing systems in addition the demolishing the existing structure. The new facility shall be a 9,217 square feet and mechanical, electrical, and plumbing systems shall be provided to serve provided spaces.

1.1 Codes and Standards

The following codes and standards apply to this project:

- International Building Code (IBC)—2018
- International Mechanical Code (IMC)—2018
- Uniform Plumbing Code (UPC)—2018
- Washington State Energy Code (IECC)(WAC 51-11C)—2018
- International Fire Code (IFC)—2018
- ADA Standards for Accessible Design (ADA)—2010
- ANSI/ASHRAE Standard 55, *Thermal Environmental Conditions for Human Occupancy* (ASHRAE)—2020
- ANSI/ASHRAE Standard 62.1, *Ventilation for Acceptable Indoor Air Quality* (ASHRAE)—2019
- ANSI/ASHRAE 90.1, *Standard for Energy Conservation in New Building Design* (AHSRAE)—2019
- NFPA 101, *Life Safety Code* (NFPA)—2018
- NFPA 13, *Fire Sprinkler Systems*—2019

MECHANICAL DESIGN

1.2 General

Mechanical work on this project will depend on which of two alternatives are chosen for the building's overall renovation strategy.

- **Renovation Scheme D** – Variable air volume (VAV) system. Split system heat pump air handling unit located in basement. Condensing unit located on the exterior of the building.
- **Renovation Scheme E** – Variable air volume (VAV) system. Packaged heat pump air handling unit located on roof.

Depending on the system chosen, specific rooms requiring 24/7 cooling may be provided with dedicated air conditioning systems. This will allow the building's overall HVAC system to enter "unoccupied" setback mode and reduce energy usage.

1.2.1 Design Conditions

Outdoor Spaces

Source: 2017 ASHRAE Fundamentals Weather Data for Tacoma Narrows Airport (WMO#: 727938),.

- Summer (cooling): 0.4% frequency of occurrence for dry-bulb temperature and mean coincident wet-bulb temperature. 83.8 degrees F DB and 64.3 degrees F WB.
- Winter (heating): 99.6% frequency for mean coincident dry-bulb temperature. 27.7 degrees F.

Indoor Spaces

- Offices, breakrooms, living spaces, work areas, lobbies, and corridors: 75 degrees F, 50% RH cooling and 68°F, 30% RH heating.
- Electrical equipment rooms: 75 degrees F, 50% RH cooling.
- Mechanical spaces: 80 degrees F cooling and 55 degrees F heating.

Note: relative humidity (RH) is noted above for criteria; there is no planned humidity control.

1.3 Proposed HVAC Alternatives

The following sections describe the proposed HVAC systems for the two renovation alternatives.

1.3.1 Renovation Scheme D

A variable air volume (VAV) system shall be provided to serve the facility. The system shall consist of a air-handling unit which shall be located in the basement mechanical room. The air handling unit shall be provided with a split system heat pump with the refrigerant coil located in the unit and a condensing unit located on the exterior of the building.

Supply and return ductwork shall be routed from the air-handling unit through the basement crawl space to serve each of the rooms in the facility. Supply air shall branch off of the main and shall be

connected to a low wall supply grille located in each of the spaces. Provided low wall supply grilles shall be tamper-proof. A VAV box shall be provided for each of the supply air branches. Return air grilles shall be provided in the corridors. Return air shall transfer from each room and shall accumulate in the corridor to be returned to the air handling unit.

General building exhaust will be provided by rooftop upblast exhaust fans. All provided exhaust grilles shall be tamper-proof. All equipment requiring electrical connections shall be 208V.

1.3.2 Renovation Scheme E

A variable air volume (VAV) system shall be provided to serve the facility. The system shall consist of a packaged heat pump air-handling unit which shall be located on the roof of the building.

Supply and return ductwork shall be routed from the air-handling unit through the corridors to serve each of the rooms in the facility. Supply air shall branch off of the main and shall be connected to a side wall supply grille located in each of the spaces. A VAV box shall be provided for each of the supply air branches. Return air grilles shall be provided in the corridors. Return air shall transfer from each room and shall accumulate in the corridor to be returned to the air handling unit.

General building exhaust will be provided by rooftop upblast exhaust fans. All provided exhaust grilles shall be tamper-proof. All equipment requiring electrical connections shall be 208V.

1.3.3 Control System

A Direct Digital Control (DDC) system will be provided for the central Building Automation System (BAS). The DDC system will control and monitor the HVAC systems serving the building. Additionally, select plumbing equipment (e.g., water heater, circulation pump, etc.) will also be controlled and monitored.

2.0 PLUMBING DESIGN

2.1 General

The plumbing design will conform to the requirements of the 2015 International Plumbing Code. For both Renovation Scheme D and Renovation Scheme E a complete plumbing system shall be provided for the facility consisting of plumbing fixtures, domestic cold water piping, domestic hot water piping, heating water equipment, sanitary waste piping and equipment, vent piping, and associated appurtenances.

2.2 Domestic Hot and Cold Water Systems

The domestic water supply water pressure should be verified. A reduced pressure backflow assembly (RPBA) device will be installed at the point of entry for cross-contamination control. Domestic hot and cold water will be piped throughout the building to all plumbing fixtures as required. The provided fixtures shall include water closets, lavatories, showers, and breakroom sinks. The building shall be provided with an electric, storage-type water heater to provide domestic hot water for the building. The

water heater shall be located in the building's mechanical room. The facility shall also be provided with a hot water recirculation system. The system shall include an in-line hot water circulation pump a shall have piping routed to the furthest point in the domestic hot water system to continuously circulate hot water through the building.

2.3 Sanitary Waste and Vent Systems

A complete sanitary waste and vent system shall serve the facility. Waste piping shall be routed from each of the provided plumbing fixtures and shall be connected to an underground sanitary sewer main. The provide sanitary sewer main shall be connected to the existing city sewer main. Vent piping shall be provided for each of the plumbing fixtures. Fixtures shall vent to a common vent system which shall be routed throughout the building and shall terminate above the roof.

Trap primers will be provided on all floor drains to prevent P-traps from drying up and sewer gases from entering the building.

2.4 Plumbing Fixtures

The provided plumbing fixtures shall be low flow. All water closets and lavatories located in the cells shall be ADA-compliant and shall be ligature resistant and tamper-proof. The showers, water closets, and lavatories located in the comment restroom shall also be ADA-compliant and shall be ligature resistant and tamper-proof.

3.0 ELECTRICAL SYSTEM DESIGN

3.1 General

A complete operational electrical system provided will meet all the requirements of the design scope and comply with code requirements. For Renovation Scheme D and E, a complete electrical system will replace the existing obsolete electrical system and consists of new electrical equipment, electrical outlets, interior and exterior light fixtures and controls, and power to HVAC, telecom/security equipment, fire alarm panels, plumbing equipment and other miscellaneous loads. All these systems will be designed to provide the user with maximum flexibility. All equipment that forms part of these systems will be selected for durability and maintenance ease consistent with the current design standards.

3.2 Existing Site Utility Services

The existing incoming power pole utility serves an existing 12.47kV main service distribution switchgear located in remote Building 'D'. Power is distributed from the 12.47kV main service distribution switchgear to 12.47kV distribution switchgear located in Buildings 'B', 'F', 'G' and 'C' via underground conduits and manholes distributed throughout the site. These 12.47kV switchgear serve various buildings on campus via medium voltage transformers. The 12.47kV switchgear located in Building 'B' serves the project scope Building 'F' electrical loads via a pad mount 12.47kV-480/277V, 3 phase, 4 wire

medium voltage transformer. The main building distribution panelboards and other equipment serving the Building 'F' electrical loads are located in the basement electrical room.

All campus building emergency loads are provided emergency power and normal power via a loop system consisting of a main Automatic Transfer Switch (ATS), selector switches, and 12.47kV-480/277V transformers. Three generators feed all campus loads requiring emergency power. Emergency is provided to Building 'F' via a 100A breaker from a 400A, 480/277V emergency switchboard located in Building 'B'. Building 'B' is fed from Building 'D' which in turn is fed from Building 'E'. Building 'E' is fed from a 500kVA transformer connected to the campus emergency loop system.

3.3 New Electrical System Design

3.3.1 Site Distribution System

Electrical Power to remodeled Building 'F' will be provided from an existing 12.47KV switchgear located in Building 'B' via an upsized pad mount medium voltage transformer located outside Building 'F' in a protected fenced enclosure. The location of the new medium voltage transformer would require coordination with Architect and client. New 12.47KV and 600V feeders will be provided in underground conduits between Buildings 'B' and 'F' to serve the Building 'F' electrical distribution system.

3.3.2 Building Electrical System Capacity

The following is the electrical load calculation based on the square footage and the occupancy of the building to be renovated.

Main Service Load Calculation

Total Area of the Building	9,087 sq ft
Lighting and Receptacle Load (8W/SF)	73KVA
Mechanical Load	76.7 KVA
Total Connected Building Load (with 25% spare capacity)	187.5 KVA, 520 A @208V, 3 ph, 4 W

3.3.3 New Building Electrical System

Based on the load calculations, a new 800A, 208/120V, 3 phase, 4 wire main switchboard will be provided in the main electrical room in the basement, fed from a new 225kVA, 12.47kV-208/120V, 3 phase, 4 wire pad mount medium voltage transformer located exterior to the Building 'F'. The 800A main switchboard will serve a 100A, 208/120V, 3 phase, 4 wire panel to serve lighting loads, a 100A, 208/120V, 3 phase, 4 wire panel to serve telecom/security loads, a 400A, 208/120V, 3 phase, 4 wire distribution panel for all mechanical loads, two 200A, 208/120V, 3 phase, 4 wire panel to serve receptacles and other miscellaneous loads. 400A, 200A panels and 100A telecom panel will be located in the first-floor electrical room and 100A lighting panel will be located in the basement electrical room.

3.3.4 Emergency System

Emergency power for Building 'F' will be derived from the existing 400A, 480/277V switchboard located in Building 'B'. This would require further coordination with the owner and investigation on existing loads on upstream switchboards and generators. Emergency switchboard in Building 'B' will serve a 225A, 208/120V, 3 phase, 4 wire panel via a 75KVA, 480-208/120V, 3ph, 4 wire dry type transformer to provide power to life safety loads like egress lighting, exit signs, door locks as applicable, and communication/telecom/security systems.

Emergency exit signs will be provided at all exits and emergency egress lighting will be provided along the path of egress. Security exterior lighting will be on emergency power. Power to door locks and telecom/security systems will be provided via Uninterruptible Power Source (UPS) to avoid re-booting of computers and security systems. The run-time of UPS will be decided during the design based on coordination with owner.

The following are the design voltage criteria that will be followed for the building:

- Primary Voltage: 12.47KV, 3 phase, 3 wire
- Secondary voltages, Normal/Emergency: 208Y/120V, 3 phase, 4 wire
- Distribution Voltages: Large motors (3/4 HP & larger)—208V, 3-phase
- Small motors (1/3 HP & smaller): 120V & 208V
- Lighting: LED—120V, 1 phase
- Receptacles, general purpose: 120V, 1 phase
- Receptacles, special purpose: 208V, 1-phase
- HVAC mixing boxes/VAV Boxes: 208V, 1 phase
- Misc. power: 120V and 208V, 1 phase or 3 phase

3.3.5 Electrical Requirements

All exposed electrical, fire alarm, lighting, and telecom devices will be provided with a lockable cover and be tamper-proof.

The electrical design will be based on using the following conduit types:

- Galvanized rigid steel (GRS) conduit in exterior and for work embedded in concrete
- Rigid non-metallic conduit (PVC) for all underground exterior work
- Electrical metallic tubing (EMT) for interior concealed work or above eight feet exposed
- Rigid Metallic Conduits (RGS) for interior exposed work
- Flexible metal conduit for interior work in short lengths (less than 6 feet) for the connection of recessed lighting fixtures, motors, separate building structures, and any vibrating equipment
- Liquid-tight flexible metal conduit wherever moisture may be present.

4.0 TELECOMMUNICATION SYSTEM DESIGN

4.1 General

This document serves as the basis of design for the telecommunications system WCCW Building F. The objective is to provide a secure, efficient, and reliable telecommunications infrastructure to support the operational needs of the facility. The design will comply with applicable codes, standards, and guidelines specific to correctional facilities in Washington State.

The telecommunications design for this facility will conform to the following codes and standards –

1. National Electrical Code (NEC)
2. National Fire Alarm and Signaling Code (NFPA 72)
3. Telecommunications Industry Association (TIA) Standards
4. Building Industry Consulting Service International (BICSI) Standards
5. Federal Communications Commission (FCC) Regulations
6. State and Local Building Codes
7. Washington State Department of Corrections (DOC) Guidelines

4.2 Design Principles

- Security: The design will prioritize the security of the telecommunications system to prevent unauthorized access, ensure confidentiality, and minimize the risk of tampering or misuse.
- Reliability: The telecommunications system will be designed to ensure continuous operation, minimize downtime, and provide redundancy where necessary.
- Scalability: The design will accommodate future growth and evolving technological requirements of the facility.
- Compliance: All design elements will adhere to relevant codes, standards, regulations, and guidelines established by local authorities, the Washington State Department of Corrections, and all other applicable entities.
- Structured Cabling: The facility will implement a structured cabling system based on TIA-568 standards, including appropriate pathways, spaces, and distribution equipment.
- Fiber Optic Backbone: A fiber optic backbone will be deployed to support high-speed data transmission, ensuring reliable communication between critical areas of the facility.
- Copper Cabling: Copper cabling will be used where necessary for voice and low-speed data connections, following TIA-568 standards.
- Outside Plant Cabling: If required, outside plant cabling will be deployed with appropriate grounding and protection to connect the facility to external telecommunications networks.

4.3 Voice Communications

- Telephone System: A reliable and secure telephone system infrastructure will be implemented, allowing authorized users to make internal and external calls. Call monitoring and recording

capabilities may be required for security purposes. The operating telephone system itself is by the Owner.

- **Public Address System:** A public address (PA) system will be installed throughout all areas of the facility for announcements, emergency mass notifications, and general communications. This PA system speakers shall interface with the Jail Door Control System (Jail Door Control System design by others)

4.4 Data Communications

- **Local Area Network (LAN):** A robust and secure LAN will be designed to provide network connectivity within the facility, supporting critical applications and services.
- **Wireless Network:** A wireless network infrastructure will be established, enabling secure wireless communication for authorized users and devices, while maintaining separation from public networks.
- **Internet Connectivity:** Secure internet connectivity will be provided, utilizing appropriate firewalls and content filtering mechanisms to restrict unauthorized access and ensure compliance with facility policies.

4.5 Emergency Communications

- **Emergency Notification:** The telecommunications system will support emergency notification capabilities, including integration with the PA system, to quickly disseminate critical information during emergencies.
- **Redundancy and Resilience:** Redundant communication paths, backup power supply, and failover mechanisms will be implemented to ensure continuous emergency communication even during power outages or equipment failures.

5.0 PHYSICAL SECURITY DESIGN

5.1 Intrusion Detection

- Intrusion detection design shall consist of sensors to detect –
 - Unauthorized portal openings – Door / Window Position Sensors
 - Presence of unauthorized personnel in controlled spaces – Infrared Motion Detectors
 - Panic or Duress condition among staff members – Panic Button, or “Man Down” system.
- Intrusion sensors in a correctional facility are typically integrated into the Jail Door Control System

5.2 Access Control

For a correctional facility, access control is typically a centralized function of the Jail Door Control System. Door locking mechanisms are typically pneumatic or electro-mechanical, and are typically “at the door” access consists of a key override for the Jail Door Control System.

5.3 Video Surveillance

- Video Surveillance shall be designed as to provide coverage of all areas within the facility.
- The video system shall follow typical design concepts including placement of cameras and streaming video data to a Video Management System (VMS).
- All cameras shall be integrated into the Jail Door Control system for automated display and/or touchscreen camera selection from the Jail Door Control System workstation(s)

6.0 LIGHTING DESIGN

Light fixtures will be LED and systems will be selected for efficiency, durability, ease of maintenance, vandal resistance, and provide no hold points. All light fixtures will be provided with local battery packs for continuous lighting back up during the switch over of normal power to generator power.

6.1.1 Light Sources

LED fixtures will meet State of Washington standards and be UL/CSA listed. Light fixtures will be provided with vandal resistant 8/10 gage steel cage with security screws.

Interior Lighting

Lighting fixtures will be LED, with a rated life of 50,000 hours and 80 CRI minimum. The color temperature will be 3500K.

Exterior Lighting

LEDs equal to 4000K will be used for wall packs with 70 CRI minimum and full cut-off to prevent light from going up into the sky.

The illumination levels will follow IES recommendations for correctional facilities.

6.1.2 Egress Lighting Design

All emergency light fixtures and exit signs will be served from the emergency generator power. Exit signs will be provided according to the path of egress requirements. All emergency light fixture controls will be wired so that emergency lights will be switched during normal conditions and remain unswitched and full ON during an emergency. For that purpose, UL924 relays will be provided for emergency light fixtures. All exit signs will be connected to an unswitched circuit and remain powered in normal and emergency conditions.

6.1.3 Lighting Control Systems

All lighting controls will be accessible only to building staff. Light fixtures in sleeping areas shall have controls that allow dimming for night and accommodate staff observation needs. All light fixtures shall have master controls and be accessible to staff in an emergency. The lighting control panel will be connected to the BMS or DDC system. All exposed lighting and control devices will be provided with a cover and be tamper-proof. Lighting control panel will be located in the first floor electrical room.

7.0 FIRE ALARM SYSTEM

The remodeled building will be provided with a complete manual/addressable fire alarm system with horn strobes. The system will conform to current Building, Fire, and NFPA 72 Codes.

The fire alarm system will be independent with full command and control from the campus command center. This system should report back to an existing main campus Fire Alarm Panel via fiber or copper line to match existing.

The fire alarm system for Building 'F' will include the following:

One remote LCD alphanumeric annunciator at the main building entrance with an eighty-character digital readout indicating which device is in alarm or trouble mode is required. Exact location will be coordinated with the State Fire Marshal.

The Fire Alarm Control Panel (FACP) will be provided with an eighty-character digital readout indicating which device is in alarm or trouble mode. The new building's fire alarm system will use the same fire alarm control panel manufacturer with compatible components and devices similar to other buildings nearby. The fire alarm control panel, power supplies, and accessories will be placed in the first-floor electrical room of the building.

It is required that the following devices be installed per latest WSBC and WSFC codes:

- Monitoring, control, and power: fire alarm control panel, battery backup.
- Initiating devices: manual pull stations, smoke and heat detectors, duct detectors, etc.
- Indicating devices: horn, strobes, etc.
- Modules and relays will be provided for HVAC shutdown on the equipment itself.
- All electrically-operated doors will be interlocked with the fire alarm system. Door locks will not be provided with automatic release during fire alarm event.
- The system will be installed in dedicated and marked conduits (red stripes at each end is required). All fire alarm boxes are required to have red covers. New initiating and indicating devices will be placed throughout the floors to meet current code requirements.
- All fire alarm pull stations will be lockable and be accessible only to building staff per code. All exposed fire alarm devices will be provided with a tamper-proof cover.
- Initiating and notification devices will be provided in non-prison cell spaces per NFPA 72. Prison cell spaces will be provided with smoke detectors with vandal resistant covers.

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Capital Project Request

2023-25 Biennium

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Version: 10 FY2024 Supplemental Agency Request

Report Number: CBS002

Date Run: 9/11/2023 7:56AM

Project Number: 40000528

Project Title: WCC: Medical Intake Tent Replacement

Description

Starting Fiscal Year: 2025

Project Class: Program

Agency Priority: 6

Project Summary

To reduce a backlog of over 850 intake physicals for convicted males entering incarceration in the corrections system, a temporary tent had been installed to meet this need. This temporary tent needs to be replaced with a more semi-permanent suitable structure.

Project Description

1. 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.

The Department of Corrections (DOC) had a backlog of 851 intake physicals for incarcerated individuals entering the corrections system. The backlog was a result of not having enough physical space at the Washington Corrections Center (WCC) reception facility to process individuals. A temporary tent is being used to increase physical space for intakes and reduce the backlog. The temporary tent needs to be replaced with a more semi-permanent and suitable structure.

The current reception and intake processes at WCC do not support the work streams, capacity, and flow of incarcerated individuals entering and/or returning to DOC. Currently, initial classification takes 60-90 days on average, while an industry benchmark is set at 30 days. The purpose of the Reception System Stabilization project (RSS) is to eliminate the need for incarcerated individuals to sleep on the floor, referred to as floor sleepers, reduce the intake process to 30 days, and help WCC streamline its reception systems to be as smooth and efficient as possible. Several attempts have been made over the years to increase capacity for reception at WCC. Additional living units have been repurposed to reception units at the expense of less general population beds to support the facility's operations. Additionally, the evolution of assessments over time to suit changing policy, statutes, court decisions and allocation of evidence-based resources also contributed to WCC having inadequate physical space and insufficient support resources to accommodate the intake process for males.

As DOC works to improve reception at WCC, the lack of space for intake physicals was identified as a limiting factor. Tents used to house patients during the COVID pandemic have been repurposed and used for intake physicals. The extra space has been critical to improving reception and reducing backlog. However, the temporary tents need to be replaced with a more semi-permanent suitable structure. DOC proposes replacing the tent with a modular building.

2. 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 will replace temporary tent used for intake physicals with a more semi-permanent suitable modular building. The modular building will provide space needed until the WCC Infirmary and Intake Building is replaced. The space will be used to provide incarcerated individuals with the initial medical, dental, and mental health screening processes required for intake. The building must provide a high level of security and be abuse-resistant in all areas and still allow for flexible use of space. The modular building should have an HVAC system capable of heating and cooling the building to maintain a year-round indoor air temperature between 70-74 degrees Fahrenheit. The size of the building should be 1,000 square feet.

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Project Number: 40000528

Project Title: WCC: Medical Intake Tent Replacement

Description

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

This project will support the RSS project by replacing a temporary tent with a more suitable modular building at WCC. The modular building will provide needed physical space to improve efficiency of intake physicals for the statewide men's reception center. Intake and reception of incarcerated individuals is taking longer than necessary, due in part to a lack of space for physicals.

4. 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.

DOC is addressing overall health services space issues at WCC with an interim mental health building and the request for a replacement infirmary and intake building. Eventually, the replacement of the infirmary and intake building will provide sufficient space for all intake and health-service needs. Until a new facility is funded to meet these needs it is necessary to address physical space demands of the RSS project with a modular building.

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

Incarcerated individuals entering the corrections system and waiting for intake classification will be most impacted. The current space used to conduct physicals is in a tent. The temporary tent has helped the RSS Project speed up the intake process, but the tent is temporary and needs to be replaced with a more suitable semi-permanent modular building until the replacement infirmary and intake building can be constructed.

6. 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.

State Construction funds (057) are being requested for the design and construction of this project in 2023-25 (FY2024-25).

7. 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 mission of DOC is to improve public safety by positively changing lives. DOC's vision is working together for safer communities.

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Project Number: 40000528

Project Title: WCC: Medical Intake Tent Replacement

Description

This Capital request aligns with the one or more of the following Results Washington Goals and Outcome Measures:

- World Class Education
- Prosperous Economy
- Sustainable Energy and Clean Environment
- Healthy and Safe Communities
- Efficient, Effective, and Accountable Government

This request supports the following goals, objectives, approaches/strategies, and outcome measures in Doc's 2023-25 Strategic Plan:

Safe and Humane Systems

Cultivate a human-centered approach to our work that delivers on trauma-informed practices, safe, fair, and humane living and working conditions and supports a culture that reduces risk and increases positive opportunities for both justice-involved individuals and staff.

EDIR Culture

Eliminate disparities by implementing our pro-equity, anti-racism framework, and reinforcing a culture where every person is welcomed and feel they belong.

Healthy and Engaged Workforce

Foster a supportive work environment that promotes wellness and combats corrections fatigue.

Successful Transitions

Provide personalized support to justice-involved individuals, including the knowledge, skills, and abilities to successfully reenter their communities and thrive as better neighbors.

By committing to these strategic goals, DOC will achieve our ultimate goal of Correctional Excellence.

This capital project will ensure that DOC facilities are well maintained, safe and secure for incarcerated individuals and staff, and efficient to operate.

8. 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.)

There are no IT-related impacts.

9. If the project is linked to the Puget Sound Action Agenda, describe the impacts on the Action Agenda, including

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Description

expenditure and FTE detail. See Chapter 13 (Puget Sound Recovery) in the 2023-25 Operating Budget Instructions.

This project is not linked to the Puget Sound Action Agenda.

10. How does this project contribute to meeting the greenhouse gas emissions limits established in RCW 70A.45.050, Clean Buildings performance standards in RCW 19.27A.210, or other statewide goals to reduce carbon pollution and/or improve energy efficiency? Please elaborate.

This project does not directly contribute towards meeting the greenhouse gas emissions limits established in RCW 70A.45.050, Clean Buildings performance standards in RCW 19.27A.210, or other statewide goals to reduce carbon pollution and/or improve energy efficiency.

11. How is your proposal impacting equity in the state? Which communities are impacted by this proposal? Include both demographic and geographic communities. How are disparities in communities impacted?

One of DOC's Strategic Anchors is the commitment to operate a safe and humane corrections system and partner with others to transform lives for a better Washington. Corrections believes in creating an environment that values physical, mental, and emotional security and well-being for staff and incarcerated individuals.

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

There may be minimal operating cost impacts related to this capital project. The costs will be identified during the project design phase and submitted in future operating budget requests.

Location

City: Shelton

County: Mason

Legislative District: 035

Project Type

Remodel/Renovate/Modernize (Major Projects)

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Description

Growth Management impacts
None.

New Facility: No

Funding

Acct Code	Account Title	Estimated Total	Expenditures		2023-25 Fiscal Period	
			Prior Biennium	Current Biennium	Reappropriations	New Appropriations
057-1	State Bldg Constr-State	1,200,000				1,200,000
	Total	1,200,000	0	0	0	1,200,000
		Future Fiscal Periods				
		<u>2025-27</u>	<u>2027-29</u>	<u>2029-31</u>	<u>2031-33</u>	
057-1	State Bldg Constr-State					
	Total	0	0	0	0	

Operating Impacts

No Operating Impact

Narrative

We do not expect there will be any operating cost impacts related to this capital project.

STATE OF WASHINGTON
AGENCY / INSTITUTION PROJECT COST SUMMARY

Updated June 2022

Agency	Department of Corrections
Project Name	WCC Medical Intake Tent Replacement
OFM Project Number	40000528

Contact Information

Name	Chris Idso
Phone Number	360.580.8731
Email	clidso@doc1.wa.gov

Statistics

Gross Square Feet	1,000	MACC per Gross Square Foot	\$707
Usable Square Feet	1,000	Escalated MACC per Gross Square Foot	\$787
Alt Gross Unit of Measure			
Space Efficiency	100.0%	A/E Fee Class	A
Construction Type	Detention/correctional f	A/E Fee Percentage	11.99%
Remodel	No	Projected Life of Asset (Years)	30

Additional Project Details

Procurement Approach	DBB	Art Requirement Applies	No
Inflation Rate	4.90%	Higher Ed Institution	No
Sales Tax Rate %	8.50%	Location Used for Tax Rate	Shelton
Contingency Rate	5%		
Base Month (Estimate Date)	August-23	OFM UFI# (from FPMT, if available)	
Project Administered By	Agency		

Schedule

Predesign Start		Predesign End	
Design Start	September-24	Design End	June-25
Construction Start	September-25	Construction End	June-26
Construction Duration	9 Months		

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Project Cost Estimate

Total Project	\$1,082,221	Total Project Escalated	\$1,199,789
		Rounded Escalated Total	\$1,200,000

Cost Estimate Summary

Acquisition

Acquisition Subtotal	\$0	Acquisition Subtotal Escalated	\$0
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Consultant Services			
Pre-design Services	\$0		
Design Phase Services	\$61,372		
Extra Services	\$55,000		
Other Services	\$27,573		
Design Services Contingency	\$7,197		
Consultant Services Subtotal	\$151,142	Consultant Services Subtotal Escalated	\$163,603

Construction			
Maximum Allowable Construction Cost (MACC)	\$706,500	Maximum Allowable Construction Cost (MACC) Escalated	\$786,512
DBB Risk Contingencies	\$0		
DBB Management	\$0		
Owner Construction Contingency	\$35,325		\$39,625
Non-Taxable Items	\$0		\$0
Sales Tax	\$63,055	Sales Tax Escalated	\$70,222
Construction Subtotal	\$804,880	Construction Subtotal Escalated	\$896,359

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

Artwork			
Artwork Subtotal	\$0	Artwork Subtotal Escalated	\$0

Agency Project Administration			
Agency Project Administration Subtotal	\$39,199		
DES Additional Services Subtotal	\$0		
Other Project Admin Costs	\$0		
Project Administration Subtotal	\$39,199	Project Administration Subtotal Escalated	\$43,970

Other Costs			
Other Costs Subtotal	\$87,000	Other Costs Subtotal Escalated	\$95,857

Project Cost Estimate			
Total Project	\$1,082,221	Total Project Escalated	\$1,199,789
		Rounded Escalated Total	\$1,200,000

Funding Summary

	Project Cost (Escalated)	Funded in Prior Biennia	New Approp Request 2023-2025	2025-2027	Out Years
Acquisition					
Acquisition Subtotal	\$0				\$0
Consultant Services					
Consultant Services Subtotal	\$163,603		\$163,603		\$0
Construction					
Construction Subtotal	\$896,359		\$896,359		\$0
Equipment					
Equipment Subtotal	\$0				\$0
Artwork					
Artwork Subtotal	\$0				\$0
Agency Project Administration					
Project Administration Subtotal	\$43,970		\$43,970		\$0
Other Costs					
Other Costs Subtotal	\$95,857		\$95,857		\$0
Project Cost Estimate					
Total Project	\$1,199,789	\$0	\$1,199,789	\$0	\$0
	\$1,200,000	\$0	\$1,200,000	\$0	\$0
Percentage requested as a new appropriation			100%		

What is planned for the requested new appropriation? (Ex. Acquisition and design, phase 1 construction, etc.)
 Funding this project in the FY2024 request will support the project design and construction phase.
 Insert Row Here

What has been completed or is underway with a previous appropriation?
 None.
 Insert Row Here

What is planned with a future appropriation?
 None, however some of the 2023-25 funds may need to reappropriate into the 2025-27 biennium.
 Insert Row Here

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Version: 10 FY2024 Supplemental Agency Request

Report Number: CBS002

Date Run: 9/11/2023 7:51AM

Project Number: 40000516

Project Title: Westside Prison Housing Unit HVAC

Description

Starting Fiscal Year: 2025

Project Class: Program

Agency Priority: 7

Project Summary

Prison facilities in Western Washington were originally constructed without cooling systems. With extreme heat waves in the Pacific Northwest becoming the norm, these facilities need to be retrofitted to reduce risks of heat related illness to incarcerated individuals, staff, and visitors in these facilities.

Project Description

1. 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.

The Department of Corrections (DOC) requests funding to support a new project that will address the HVAC systems at correctional facilities that pose the highest risk of heat related illness for the incarcerated population, DOC staff, and visitors.

The DOC is concerned about the increasing number of extreme heat wave events. The agency is actively planning, adapting, and mitigating effects of these recurring weather events. Ultimately the goal is to reduce risks of heat related illness for the incarcerated population, DOC staff and visitors. As a preliminary step, we prioritized those facilities including, the Monroe Correctional Complex (MCC), the Washington Corrections Center (WCC), and the Washington Corrections Center for Women (WCCW).

Recent heat wave events in Washington have highlighted the need for addressing HVAC systems at multiple prisons. Standard construction practices have excluded the addition of cooling as part of the HVAC system in most Western Washington prison housing units. Without cooling capabilities, these housing units are reaching temperatures outside of what is considered acceptable. Although there is not a specific national standard, it is generally accepted that 80 degrees Fahrenheit is the threshold that should be maintained. DOC has exceeded that threshold multiple times over the past two years in multiple housing units. This is causing unsafe conditions and putting incarcerated individuals and staff at risk of heat related illness.

2. 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 request will add cooling capabilities to housing units at the highest risk prisons in Western Washington. Specifically, MCC, WCC, and WCCW have been identified as the prisons with housing units needing immediate attention. These prisons have housing units without cooling capabilities and have been determined the highest risk based on geography, population, custody level, and building construction. It is unknown at this time what the best method to add cooling at each of these housing units will be. DOC will rely on a pre-design study to determine if current HVAC systems can be upgraded, or if entirely new systems will be needed.

This project will begin in September 2024(FY2025) and will be completed in June 2028 (FY2029). This project will be phased

310 - Department of Corrections
Capital Project Request

2023-25 Biennium

*

Version: 10 FY2024 Supplemental Agency Request

Report Number: CBS002

Date Run: 9/11/2023 7:51AM

Project Number: 40000516

Project Title: Westside Prison Housing Unit HVAC

Description

over two biennia. The DOC is requesting pre-design and design funding in the FY2024 supplemental budget and will request funding for construction in the 2025-27 biennium (FY2026-27).

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

This request will add cooling capabilities to the highest risk housing units in Western Washington. Based on the pre-design study, DOC will systematically address the highest risk housing units by adding cooling to current HVAC systems, or in some instances, replace entire systems with new HVAC system as recommended in the pre-design.

If no action is taken, and in consideration of accepted climate change effects, incarcerated individuals under the care and custody of DOC, DOC staff and visitors will be at risk of heat related illness in housing units that cannot maintain safe living conditions under the accepted threshold of 80 degrees Fahrenheit during extreme heat wave events.

4. 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.

Alternatives will be identified and evaluated as part of the project predesign.

It had been an accepted practice to exclude cooling in most housing units on the west side of the state. Temperatures were warm in the summers, but extreme heat events were the exception, not the norm. Heat waves are occurring more often with temperatures reaching record highs. Not taking action is not an acceptable alternative, DOC is responsible for the incarcerated individuals under our care, DOC staff and visitors and must act accordingly to provide safe living and working environments.

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

This project benefits incarcerated individuals, DOC staff and visitors at MCC, WCC, and WCCW by providing upgraded HVAC with cooling capabilities in housing units that currently do not have air conditioning.

6. 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.

State Construction funds (057) are being requested for predesign and design of this project in the FY2024 supplemental budget.

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Capital Project Request

2023-25 Biennium

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Version: 10 FY2024 Supplemental Agency Request

Report Number: CBS002

Date Run: 9/11/2023 7:51AM

Project Number: 40000516

Project Title: Westside Prison Housing Unit HVAC

Description

State Construction funds (057) will be requested for construction of this project in 2025-27 (FY2026-27).

7. 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 mission of DOC is to improve public safety by positively changing lives. DOC’s vision is working together for safer communities.

This Capital request aligns with the one or more of the following Results Washington Goals and Outcome Measures:

- World Class Education
- Prosperous Economy
- Sustainable Energy and Clean Environment
- Healthy and Safe Communities
- Efficient, Effective, and Accountable Government

This request supports the following goals, objectives, approaches/strategies, and outcome measures in Doc’s 2023-25 Strategic Plan:

Safe and Humane Systems

Cultivate a human-centered approach to our work that delivers on trauma-informed practices, safe, fair, and humane living and working conditions and supports a culture that reduces risk and increases positive opportunities for both justice-involved individuals and staff.

EDIR Culture

Eliminate disparities by implementing our pro-equity, anti-racism framework, and reinforcing a culture where every person is welcomed and feel they belong.

Healthy and Engaged Workforce

Foster a supportive work environment that promotes wellness and combats corrections fatigue.

Successful Transitions

Provide personalized support to justice-involved individuals, including the knowledge, skills, and abilities to successfully reenter their communities and thrive as better neighbors.

By committing to these strategic goals, DOC will achieve our ultimate goal of Correctional Excellence.

This capital project will ensure that DOC facilities are well maintained, safe and secure for incarcerated individuals and staff,

310 - Department of Corrections
Capital Project Request

2023-25 Biennium

*

Version: 10 FY2024 Supplemental Agency Request

Report Number: CBS002

Date Run: 9/11/2023 7:51AM

Project Number: 40000516

Project Title: Westside Prison Housing Unit HVAC

Description

and efficient to operate.

8. 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 project is not expected to have IT impacts.

9. 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 13 (Puget Sound Recovery) in the 2023-25 Operating Budget Instructions.

This project is not linked to the Puget Sound Action Agenda.

10. How does this project contribute to meeting the greenhouse gas emissions limits established in RCW 70A.45.050, Clean Buildings performance standards in RCW 19.27A.210, or other statewide goals to reduce carbon pollution and/or improve energy efficiency? Please elaborate.

The DOC Capital Planning and Development team is working diligently to make sure DOC makes the most of every opportunity within each project to make progress toward reducing carbon pollution and improving energy efficiency.

The DOC is currently working on developing an Energy Master Plan, because every maintenance, equipment, renewal, or replacement decision has a long-term impact on the agency. These decisions can affect and limit DOC's ability to reach the goal of becoming a net zero agency. During the pre-design or design phase of this project, the Energy Master Plan will be considered. Alternative systems will be evaluated to determine the best solution to move DOC closer to reaching the goal of being a net zero agency. Energy efficient equipment and materials will be a high priority and identified cost/benefits will be evaluated during the predesign and design phases with the goal of reducing carbon emissions and becoming more energy efficient.

11. How is your proposal impacting equity in the state? Which communities are impacted by this proposal? Include both demographic and geographic communities. How are disparities in communities impacted?

One of DOC's Strategic Anchors is the commitment to operate a safe and humane corrections system and partner with others to transform lives for a better Washington. Corrections believes in creating an environment that values physical, mental, and emotional security and well-being for staff and incarcerated individuals.

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

310 - Department of Corrections
 Capital Project Request

2023-25 Biennium

*

Version: 10 FY2024 Supplemental Agency Request

Report Number: CBS002

Date Run: 9/11/2023 7:51AM

Project Number: 40000516

Project Title: Westside Prison Housing Unit HVAC

Description

There is a great deal of risk associated with the delay of this project. There are many parts of the existing system that are inadequate and failing. It is important to correct this problem now or design a solution that will address the concerns as soon as possible. If this project goes unfunded the ongoing maintenance and emergency project costs will continue to increase along with posing a health safety risk to the incarcerated population.

There are no ongoing operating cost impacts related to this capital project that will need to be funded.

Location

City: Statewide

County: Statewide

Legislative District: 098

Project Type

Remodel/Renovate/Modernize (Major Projects)

Growth Management impacts

None.

New Facility: No

Funding

Acct Code	Account Title	Estimated Total	Expenditures		2023-25 Fiscal Period	
			Prior Biennium	Current Biennium	Reappropriations	New Appropriations
057-1	State Bldg Constr-State	700,000				700,000
	Total	700,000	0	0	0	700,000

		Future Fiscal Periods			
		2025-27	2027-29	2029-31	2031-33
057-1	State Bldg Constr-State				
	Total	0	0	0	0

Operating Impacts

No Operating Impact

Narrative

We do not expect there will be any operating cost impacts related to this capital project.

STATE OF WASHINGTON
AGENCY / INSTITUTION PROJECT COST SUMMARY

Updated June 2022

Agency	Department of Corrections
Project Name	CBPS Westside Prison Housing Unit HVAC
OFM Project Number	40000516

Contact Information

Name	Chris Idso
Phone Number	360-580-8731
Email	clidso@doc1.wa.gov

Statistics

Gross Square Feet		MACC per Gross Square Foot	
Usable Square Feet		Escalated MACC per Gross Square Foot	
Alt Gross Unit of Measure	Unknown	Multiple Housing Units	
Space Efficiency		A/E Fee Class	A
Construction Type	Detention/correctional f	A/E Fee Percentage	17.40%
Remodel	Yes	Projected Life of Asset (Years)	

Additional Project Details

Procurement Approach	DBB	Art Requirement Applies	No
Inflation Rate	4.90%	Higher Ed Institution	No
Sales Tax Rate %	9.00%	Location Used for Tax Rate	Western WA
Contingency Rate	10%		
Base Month (Estimate Date)	August-22	OFM UFI# (from FPMT, if available)	
Project Administered By	Agency		

Schedule

Predesign Start	September-24	Predesign End	June-25
Design Start		Design End	
Construction Start		Construction End	
Construction Duration	0 Months		

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Project Cost Estimate

Total Project	\$700,440	Total Project Escalated	\$700,440
		Rounded Escalated Total	\$700,000

Cost Estimate Summary

Acquisition

Acquisition Subtotal	\$0	Acquisition Subtotal Escalated	\$0
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Consultant Services			
Predesign Services	\$450,000		
Design Phase Services	\$0		
Extra Services	\$105,000		
Other Services	\$0		
Design Services Contingency	\$55,500		
Consultant Services Subtotal	\$610,500	Consultant Services Subtotal Escalated	\$610,500

Construction			
Maximum Allowable Construction Cost (MACC)	\$0	Maximum Allowable Construction Cost (MACC) Escalated	\$0
DBB Risk Contingencies	\$0		
DBB Management	\$0		
Owner Construction Contingency	\$0		\$0
Non-Taxable Items	\$0		\$0
Sales Tax	\$0	Sales Tax Escalated	\$0
Construction Subtotal	\$0	Construction Subtotal Escalated	\$0

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

Artwork			
Artwork Subtotal	\$0	Artwork Subtotal Escalated	\$0

Agency Project Administration			
Agency Project Administration Subtotal	\$26,940		
DES Additional Services Subtotal	\$0		
Other Project Admin Costs	\$0		
Project Administration Subtotal	\$26,940	Project Administration Subtotal Escalated	\$26,940

Other Costs			
Other Costs Subtotal	\$63,000	Other Costs Subtotal Escalated	\$63,000

Project Cost Estimate			
Total Project	\$700,440	Total Project Escalated	\$700,440
		Rounded Escalated Total	\$700,000

Funding Summary

	Project Cost (Escalated)	Funded in Prior Biennia	New Approp Request 2023-2025	2025-2027	Out Years
Acquisition					
Acquisition Subtotal	\$0		\$0		\$0
Consultant Services					
Consultant Services Subtotal	\$610,500		\$610,500		\$0
Construction					
Construction Subtotal	\$0		\$0		\$0
Equipment					
Equipment Subtotal	\$0		\$0		\$0
Artwork					
Artwork Subtotal	\$0		\$0		\$0
Agency Project Administration					
Project Administration Subtotal	\$26,940		\$26,940		\$0
Other Costs					
Other Costs Subtotal	\$63,000		\$63,000		\$0
Project Cost Estimate					
Total Project	\$700,440	\$0	\$700,440	\$0	\$0
	\$700,000	\$0	\$700,000	\$0	\$0
Percentage requested as a new appropriation			100%		

What is planned for the requested new appropriation? (Ex. Acquisition and design, phase 1 construction, etc.)

Funding this request will support predesign and design for adding HVAC units to selected housing units at three western WA prisons, including the Washington Corrections Center, Monroe Correctional Complex and the Washington Corrections Center for Women.

Insert Row Here

What has been completed or is underway with a previous appropriation?

None

Insert Row Here

What is planned with a future appropriation?

Construction costs will be identified in the predesign and design phases and then requested in the 2025-27 Capital budget request.

Insert Row Here

310 - Department of Corrections Capital Project Request

2023-25 Biennium

Version: 10 FY2024 Supplemental Agency Request

Report Number: CBS002

Date Run: 9/11/2023 4:03PM

Project Number: 40000531

Project Title: CBPS: WSP Emergency Backup Power Supply

Project Class: Preservation

Description

Starting Fiscal Year: 2025

Agency Priority: 8

Project Summary

The emergency backup power supply at the Washington State Penitentiary (WSP) can no longer be operated as a closed system with many of the various standalone units long past their useful life. Replacing these standalone units will support electrical resiliency for essential security, health care, and operational needs during a power outage.

Project Description

1. 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.

This project will consolidate the campus uninterrupted power supplies (UPS) and emergency generators. The project will consolidate UPS and emergency generation in the J60 Emergency Generator Building. This will eliminate eight small generators that serve the east complex and 25 UPS scattered across the WSP campus. Existing emergency generators in the J60 Emergency Generator Building have the capacity to supply emergency power to the east complex once the life safety loop is extended to this area. This project will reduce ongoing maintenance costs, improve facility safety, and allow WSP to operate within Department of Ecology (ECY) air quality permit limits.

The National Electric Code (NEC) requires that life safety power be provided to prison facilities. During the expansion projects at the WSP, DOC installed a centralized emergency generator plant, or the J60 Emergency Generator Building, outside the secure perimeter. ECY agreed to allow DOC to remove the remaining eight small, decentralized generators after the fourth 2.0-megawatt generator was brought online. However, due to budget shortfalls the life safety loop could not be extended to the buildings that are served by the eight small, decentralized generators during the expansion projects. ECY has continued to work with DOC, because this project continues to be a priority.

At the same time, UPS's were being installed in a decentralized approach in all buildings that required emergency lighting for life safety. These UPS's have reached the end of expected useful life and need to be replaced. The decentralized UPS's are maintenance intensive and expensive to support. The UPS's provide power to life safety and access control systems when power fails until emergency generators can come online. The UPS's prevent loss of data and programming of critical systems and provide power to critical security systems.

This project will remove the eight small generators that support the east complex, extend the life safety loop from J60 Emergency Generator Building to support the east complex, and centralize UPS in the J60 Emergency Generator Building. The consolidation of UPS's and emergency generators will reduce the amount of time spent on maintenance of scattered UPS's and generators and should improve dependability of the systems by reducing the number of failure points.

2. 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 request is for predesign, design and construction to consolidate emergency generators and UPS's in the J60 Emergency Generator Building and to extend the life safety loop to the east complex. Predesign should consider the use of a

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Capital Project Request
2023-25 Biennium

Version: 10 FY2024 Supplemental Agency Request

Report Number: CBS002

Date Run: 9/11/2023 4:03PM

Project Number: 4000531

Project Title: CBPS: WSP Emergency Backup Power Supply

Project Class: Preservation

Description

rotary UPS versus static UPS for this application. This project can be phased based on predesign recommendations. The life safety loop should be extended to the east complex before the smaller emergency generators are removed to limit the amount of time these buildings are without emergency power. This may limit contractors trying to use existing conduit and cabling for the life safety loop.

There is a concern that underground diesel fuel lines to the smaller generators have been leaking. Project predesign should include environmental consultation with recommendations for soil remediation. The project construction phase will request environmental cleanup funding of leaked fuel.

This project will begin in September 2024 (FY2025) and will be completed in June 2027 (FY2027). This project will be phased over two biennia. The DOC is requesting Pre-design and design funding in the 2023-25 (FY2024-25) biennium and will request funding for construction in the 2025-27 biennium (FY2026-27).

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

This project will replace the end-of-life generators in the east complex with a life safety loop that will connect the existing buildings to the centralized emergency generator plant as required by ECY and consolidate UPS's. Completing this project as soon as possible will preserve the positive relationship between DOC and ECY.

The benefits of this project include having a reliable emergency power system to ensure electrical resiliency for essential security, health care, and operational needs during a power outage, meet current electrical codes, remove a potentially dangerous fuel source from inside a prison, cleans up a potential fuel leak, and reduces maintenance workload.

Delaying this project could compromise security, health care and operations and strain DOC and ECY relationships. The smaller generators and existing UPS's are end of life and at risk of failure. Failure of the generators or UPS's could result in emergency projects and increased project costs. The best option is to replace the emergency equipment from a planned design before they fail.

4. 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.

Alternatives will be identified and evaluated as part of this condition assessment.

One alternative is to continue to operate multiple generators and UPS in dispersed locations. Prior to expansion of the north complex, WSP had 22 small generators sitewide. During the expansion, 14 small generators were removed. It was determined that construction of a centralized emergency generator plant would be more fuel efficient and more efficient to maintain. Funding was not available at the time to extend the life safety loop to the east complex and remove the remaining eight generators.

The emergency generators are required to be started and tested once a month and load tested once a year. Testing multiple small generators located all over the facility is time consuming and expensive. The annual load tests are performed by a vendor and can cost between \$5,000 and \$20,000 each depending on the size of the generator, and the difficulty to access generators. Continuing to operate multiple generators and UPS's throughout the facility is costly and time consuming.

310 - Department of Corrections Capital Project Request

2023-25 Biennium

Version: 10 FY2024 Supplemental Agency Request

Report Number: CBS002

Date Run: 9/11/2023 4:03PM

Project Number: 40000531

Project Title: CBPS: WSP Emergency Backup Power Supply

Project Class: Preservation

Description

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

This project impacts approximately 1,200 staff and 2,500 incarcerated individuals at WSP. Replacing the life safety systems, emergency generators, and UPS's, will improve electrical resiliency for essential security, health care, and operational needs during a power outage. This project also reduces the maintenance backlog by replacing an old, outdated emergency power system, and will allow maintenance resources to focus on other critical maintenance issues. The project will ensure a safe environment for staff, incarcerated individuals, and the community.

Funding of this project will confirm WSP's commitment to working with ECY to protect air, soil, and groundwater.

6. 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.

State Construction funds (057) are being requested for the pre-design and design of this project in 2023-25 (FY2024-25).

State Construction funds (057) will be requested for the construction of this project in 2025-27 (FY2026-27).

7. 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 mission of DOC is to improve public safety by positively changing lives. DOC's vision is working together for safer communities.

This Capital request aligns with the one or more of the following Results Washington Goals and Outcome Measures:

World Class Education
Prosperous Economy
Sustainable Energy and Clean Environment
Healthy and Safe Communities
Efficient, Effective, and Accountable Government

This request supports the following goals, objectives, approaches/strategies, and outcome measures in DOC's 2023-25 Strategic Plan:

Safe and Humane Systems Cultivate a human-centered approach to our work that delivers on trauma-informed practices, safe, fair, and humane living and working conditions, and supports a culture that reduces risk and increases positive opportunities for both justice-involved individuals and staff.

EDIR Culture

Eliminate disparities by implementing our pro-equity, anti-racism framework, and reinforcing a culture where every person is

310 - Department of Corrections Capital Project Request

2023-25 Biennium

Version: 10 FY2024 Supplemental Agency Request

Report Number: CBS002

Date Run: 9/11/2023 4:03PM

Project Number: 40000531

Project Title: CBPS: WSP Emergency Backup Power Supply

Project Class: Preservation

Description

welcomed and feel they belong.

Healthy and Engaged Workforce

Foster a supportive work environment that promotes wellness and combats corrections fatigue.

Successful Transitions

Provide personalized support to justice-involved individuals, including the knowledge, skills, and abilities to successfully reenter their communities and thrive as better neighbors.

By committing to these strategic goals, DOC will achieve our ultimate goal of Correctional Excellence.

This capital project will ensure that DOC facilities are well maintained, safe and secure for incarcerated individuals and staff, and efficient to operate.

8. 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.)

There are no IT-related impacts.

9. 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 13 (Puget Sound Recovery) in the 2023-25 Operating Budget Instructions.

This project is not linked to the Puget Sound Action Agenda.

10. How does this project contribute to meeting the greenhouse gas emissions limits established in RCW70A.45.050, Clean Buildings performance standards in RCW 19.27A.210, or other statewide goals to reduce carbon pollution and/or improve energy efficiency? Please elaborate.

The DOC Capital Planning and Development team is working diligently to make sure DOC makes the most of every opportunity within each project to make progress toward reducing carbon pollution and improving energy efficiency.

The DOC is currently working on developing an Energy Master Plan, because every maintenance, equipment, renewal, or replacement decision has a long-term impact on the agency. These decisions can affect and limit DOC's ability to reach the goal of becoming a net zero agency. During the pre-design or design phase of this project, the Energy Master Plan will be considered. Alternative systems will be evaluated to determine the best solution to move DOC closer to reaching the goal of being a net zero agency.

Currently the four large generators and the eight small generators must be operating during a power outage. This project removes eight generators which are tested monthly with a load test annually and will therefore result in a reduction of diesel consumption, and exhaust. In addition, it will remove leaking diesel fuel lines and remediate the contaminated soils. Once the life safety loop is completed and the eight small generators are removed, there will be less fuel used and less emissions during a power outage.

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 Capital Project Request

2023-25 Biennium

Version: 10 FY2024 Supplemental Agency Request

Report Number: CBS002

Date Run: 9/11/2023 4:03PM

Project Number: 40000531

Project Title: CBPS: WSP Emergency Backup Power Supply

Project Class: Preservation

Description

11. How is your proposal impacting equity in the state? Which communities are impacted by this proposal? Include both demographic and geographic communities. How are disparities in communities impacted?

One of DOC's Strategic Anchors is the commitment to operate a safe and humane corrections system and partner with others to transform lives for a better Washington. Corrections believes in creating an environment that values physical, mental, and emotional security and well-being for staff and incarcerated individuals.

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

There is a great deal of risk associated with the delay of this project. There are many parts of the existing system that could fail. It is important to correct this problem now or design a solution that will address the concerns as soon as possible. If this project goes unfunded the ongoing maintenance and emergency project costs will continue to increase.

There are no ongoing operating cost impacts related to this capital project that will need to be funded.

Location

City: Walla Walla

County: Wahkiakum

Legislative District: 016

Project Type

Infrastructure (Major Projects)

Growth Management impacts

None

Funding

Acct Code	Account Title	Estimated Total	Expenditures		2023-25 Fiscal Period	
			Prior Biennium	Current Biennium	Reappropriations	New Appropriations
057-1	State Bldg Constr-State	300,000				300,000
	Total	300,000	0	0	0	300,000
Future Fiscal Periods						
		<u>2025-27</u>	<u>2027-29</u>	<u>2029-31</u>	<u>2031-33</u>	
057-1	State Bldg Constr-State	0	0	0	0	
	Total	0	0	0	0	

Operating Impacts

No Operating Impact

Narrative

There are no operational cost impacts expected as a result of this project. There will be some efficiencies gained that may result in reduced electrical utility costs.

STATE OF WASHINGTON
AGENCY / INSTITUTION PROJECT COST SUMMARY

Updated June 2022

Agency	Department of Corrections
Project Name	CBPS WSP Emergency Backup Power Supply
OFM Project Number	40000531

Contact Information

Name	Chris Idso
Phone Number	360-580-8731
Email	clidso@doc1.wa.gov

Statistics

Gross Square Feet		MACC per Gross Square Foot	
Usable Square Feet		Escalated MACC per Gross Square Foot	
Alt Gross Unit of Measure			
Space Efficiency		A/E Fee Class	A
Construction Type	Detention/correctional f	A/E Fee Percentage	17.40%
Remodel	Yes	Projected Life of Asset (Years)	20

Additional Project Details

Procurement Approach	DBB	Art Requirement Applies	No
Inflation Rate	4.90%	Higher Ed Institution	No
Sales Tax Rate %	8.90%	Location Used for Tax Rate	Walla Walla
Contingency Rate	10%		
Base Month (Estimate Date)	August-23	OFM UFI# (from FPMT, if available)	
Project Administered By	Agency		

Schedule

Predesign Start	September-24	Predesign End	June-25
Design Start		Design End	
Construction Start		Construction End	
Construction Duration	0 Months		

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Project Cost Estimate

Total Project	\$299,520	Total Project Escalated	\$299,520
		Rounded Escalated Total	\$300,000

Cost Estimate Summary

Acquisition

Acquisition Subtotal	\$0	Acquisition Subtotal Escalated	\$0
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Consultant Services			
Pre-design Services	\$200,000		
Design Phase Services	\$0		
Extra Services	\$25,000		
Other Services	\$0		
Design Services Contingency	\$22,500		
Consultant Services Subtotal	\$247,500	Consultant Services Subtotal Escalated	\$247,500

Construction			
Maximum Allowable Construction Cost (MACC)	\$0	Maximum Allowable Construction Cost (MACC) Escalated	\$0
DBB Risk Contingencies	\$0		
DBB Management	\$0		
Owner Construction Contingency	\$0		\$0
Non-Taxable Items	\$0		\$0
Sales Tax	\$0	Sales Tax Escalated	\$0
Construction Subtotal	\$0	Construction Subtotal Escalated	\$0

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

Artwork			
Artwork Subtotal	\$0	Artwork Subtotal Escalated	\$0

Agency Project Administration			
Agency Project Administration Subtotal	\$11,520		
DES Additional Services Subtotal	\$0		
Other Project Admin Costs	\$0		
Project Administration Subtotal	\$11,520	Project Administration Subtotal Escalated	\$11,520

Other Costs			
Other Costs Subtotal	\$40,500	Other Costs Subtotal Escalated	\$40,500

Project Cost Estimate			
Total Project	\$299,520	Total Project Escalated	\$299,520
		Rounded Escalated Total	\$300,000

Funding Summary

	Project Cost (Escalated)	Funded in Prior Biennia	New Approp Request 2023-2025	2025-2027	Out Years
Acquisition					
Acquisition Subtotal	\$0				\$0
Consultant Services					
Consultant Services Subtotal	\$247,500		\$247,500		\$0
Construction					
Construction Subtotal	\$0		\$0		\$0
Equipment					
Equipment Subtotal	\$0		\$0		\$0
Artwork					
Artwork Subtotal	\$0		\$0		\$0
Agency Project Administration					
Project Administration Subtotal	\$11,520		\$11,520		\$0
Other Costs					
Other Costs Subtotal	\$40,500		\$40,500		\$0
Project Cost Estimate					
Total Project	\$299,520	\$0	\$299,520	\$0	\$0
	\$300,000	\$0	\$300,000	\$0	\$0
	Percentage requested as a new appropriation		100%		

What is planned for the requested new appropriation? (Ex. Acquisition and design, phase 1 construction, etc.)

The FY2024 supplemental request will fund the project predesign phase in FY25 and provide PM and other funds to support this phase.

Insert Row Here

What has been completed or is underway with a previous appropriation?

This project combines two important projects that have been submitted in previous DOC Capital ten year plans. They are WSP: Rotary UPS (40000253) and WSP: Complete Life Safety Loop (30000104).

Insert Row Here

What is planned with a future appropriation?

The 2025-27 appropriation would support the project construction phase. Total project costs are unknown at this time and will be determined in the predesign/design phase.

310 - Department of Corrections
Capital Project Request

2023-25 Biennium

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Version: 10 FY2024 Supplemental Agency Request

Report Number: CBS002

Date Run: 9/11/2023 3:56PM

Project Number: 40000430

Project Title: CRCC Replace Leviton Site Lighting Controls

Description

Starting Fiscal Year: 2025

Project Class: Preservation

Agency Priority: 9

Project Summary

This CBPS project at the Coyote Ridge Corrections Center (CRCC) addresses 20 buildings with failing lighting relay panels. Replacing the failing panels is a critical safety need. The panels have been repaired and or replaced repeatedly since installation in 2009. The system has been unreliable and needs to be replaced. This is an existing project where the title could not be changed to include the CBPS reference.

Project Description

1. 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.

The Department of Corrections (DOC) is requesting funding for the Coyote Ridge Corrections Center (CRCC) Leviton site lighting control replacement project.

The CRCC has 20 buildings with 23 lighting relay panels that have all malfunctioned at some point since installation in 2009. The main board has been replaced in over half of these panels. These microprocessor-based relays should perform reliably for 20 years. Given these panels are 14 years old and over half have failed, it is concerning. The cost to replace the main board increases every year. Replacement parts and service are no longer readily available for this panel model. A replacement lighting control system will reduce the frequency of failure and increase availability of parts and service. Improved reliability of lighting controls is critical to safety in a correctional facility.

Currently CRCC experiences issues with exterior lighting or interior lighting failures once a week on average. These issues occur after normal business hours and require staff call-back and overtime. When maintenance staff are not available after hours, extra officers and vehicles must be assigned to unlit areas. Additionally, when lighting controls fail, the lights are "forced on" until they are repaired by a technician, resulting in additional energy use and costs. CRCC has located one Leviton lighting control technician familiar with and capable of repairing this system. Because he is the only Leviton lighting control technician on the west coast, he is extremely busy and typically requires six months before he can respond to the facility.

2. 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.

Replacement of the Leviton site lighting controls includes design, engineering, labor, equipment, submittals, electrical installation, lighting control system materials, system start-up, and commissioning assistance. This project will integrate existing Alerton Ascent BACnet graphical operator's system, point mapping, custom graphics, and graphical screens. The project includes owner training and orientation by factory trained technicians.

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

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Description

taking action?

By replacing the current lighting system and putting it on Alerton BAS, we are addressing several issues at one time. Failure rate of the system will decrease by replacing lighting controls with the most current model. Migrating to Alerton BAS will improve functionality and dependability. CRCC has used Alerton BAS for HVAC systems since 2008. CRCC has service agreements with ATS to repair and service Alerton BAS. Available service and repair options are much better than Leviton. Panel and relay replacements will bring the panels back into compliance with the latest electrical codes. Not addressing these issues will result in increased lighting failures, overtime, difficulty sourcing replacement parts, difficulty in sourcing a contractor to keep the system operational, and energy use. Delaying this project will risk the safety and security of having reliable site lighting.

4. 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.

Alternatives to this project include disconnecting lighting from electronic lighting controls and operating manually. Manual operation will eliminate dependency on electronic controls. Manual operation will circumvent energy savings by eliminating astronomical clock timing of site lighting and lighting sweeps for lights not used in unoccupied spaces. The most energy efficient approach is to replace the site lighting controls so that the lighting system functions as designed.

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

This project provides reliable lighting controls for approximately 2,548 incarcerated individuals and 800 staff.

Maintenance staff will spend less time troubleshooting and repairing lighting control panels, relays, and switches. Unit officers will be able to reliably use lighting controls for population count and movement at night.

6. 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.

State Construction funds (057) are requested for the design phase of this project in FY2024 supplemental.

State Construction funds (057) will be requested for the construction of this project in the 2025-27 request (FY2024-25).

7. Describe how this project supports the agency’s strategic master plan or would improve agency performance.

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Description

Reference feasibility studies, master plans, space programming and other analyses as appropriate.

The mission of DOC is to improve public safety by positively changing lives. DOC's vision is working together for safer communities.

This Capital request aligns with the one or more of the following Results Washington Goals and Outcome Measures:

- World Class Education
- Prosperous Economy
- Sustainable Energy and Clean Environment
- Healthy and Safe Communities
- Efficient, Effective, and Accountable Government

This request supports the following goals, objectives, approaches/strategies, and outcome measures in Doc's 2023-25 Strategic Plan:

Safe and Humane Systems

Cultivate a human-centered approach to our work that delivers on trauma-informed practices, safe, fair, and humane living and working conditions and supports a culture that reduces risk and increases positive opportunities for both justice-involved individuals and staff.

EDIR Culture

Eliminate disparities by implementing our pro-equity, anti-racism framework, and reinforcing a culture where every person is welcomed and feel they belong.

Healthy and Engaged Workforce

Foster a supportive work environment that promotes wellness and combats corrections fatigue.

Successful Transitions

Provide personalized support to justice-involved individuals, including the knowledge, skills, and abilities to successfully reenter their communities and thrive as better neighbors.

By committing to these strategic goals, DOC will achieve our ultimate goal of Correctional Excellence.

This capital project will ensure that DOC facilities are well maintained, safe and secure for incarcerated individuals and staff, and efficient to operate.

8. Does this decision package include funding for any Information Technology related costs including

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Capital Project Request

2023-25 Biennium

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Description

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.)

There are no IT-related impacts.

9. 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 13 (Puget Sound Recovery) in the 2023-25 Operating Budget Instructions.

This project is not linked to the Puget Sound Action Agenda.

10. How does this project contribute to meeting the greenhouse gas emissions limits established in RCW 70A.45.050, Clean Buildings performance standards in RCW19.27A.210, or other statewide goals to reduce carbon pollution and/or improve energy efficiency? Please elaborate.

The DOC Capital Planning and Development team is working diligently to make sure DOC makes the most of every opportunity within each project to make progress toward reducing carbon pollution and improving energy efficiency.

The DOC is currently working on developing an Energy Master Plan, because every maintenance, equipment, renewal, or replacement decision has a long-term impact on the agency. These decisions can affect and limit Doc's ability to reach the goal of becoming a net zero agency. During the pre-design - design phase of this project, the Energy Master Plan will be considered. Alternative systems will be evaluated to determine the best solution to move DOC closer to reaching the goal of being a net zero agency.

11. How is your proposal impacting equity in the state? Which communities are impacted by this proposal? Include both demographic and geographic communities. How are disparities in communities impacted?

One of DOC's Strategic Anchors is the commitment to operate a safe and humane corrections system and partner with others to transform lives for a better Washington. Corrections believes in creating an environment that values physical, mental, and emotional security and well-being for staff and incarcerated individuals.

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

**310 - Department of Corrections
Capital Project Request**

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Description

There is a great deal of risk associated with the delay of this project. There are many parts of the existing system that could fail. It is important to correct this problem now or design a solution that will address the concerns as soon as possible. If this project goes unfunded the ongoing maintenance and emergency project costs will continue to increase.

There are no ongoing operating cost impacts related to this capital project that will need to be funded.

Location

City: Connell

County: Franklin

Legislative District: 009

Project Type

Remodel/Renovate/Modernize (Major Projects)

Growth Management impacts

None.

Funding

Acct Code	Account Title	Estimated Total	Expenditures		2023-25 Fiscal Period	
			Prior Biennium	Current Biennium	Reappropriations	New Appropriations
057-1	State Bldg Constr-State	5,067,000				900,000
	Total	5,067,000	0	0	0	900,000

Acct Code	Account Title	Future Fiscal Periods			
		2025-27	2027-29	2029-31	2031-33
057-1	State Bldg Constr-State	4,167,000			
	Total	4,167,000	0	0	0

Operating Impacts

No Operating Impact

Narrative

There are no new operating cost impacts expected as a result of this project. There may be some electrical utility costs savings due to energy efficient lights and control systems. These impacts will be identified in the project design phase.

STATE OF WASHINGTON
AGENCY / INSTITUTION PROJECT COST SUMMARY

Updated June 2022

Agency	Department of Corrections
Project Name	CBPS CRCC Replace Leviton Site Lighting Controls
OFM Project Number	40000430

Contact Information

Name	Chris Idso
Phone Number	360.580.8731
Email	clidso@doc1.wa.gov

Statistics

Gross Square Feet	743,645	MACC per Gross Square Foot	\$2
Usable Square Feet		Escalated MACC per Gross Square Foot	\$2
Alt Gross Unit of Measure			
Space Efficiency	0.0%	A/E Fee Class	A
Construction Type	Detention/correctional f	A/E Fee Percentage	14.37%
Remodel	Yes	Projected Life of Asset (Years)	20

Additional Project Details

Procurement Approach	DBB	Art Requirement Applies	No
Inflation Rate	4.90%	Higher Ed Institution	No
Sales Tax Rate %	8.30%	Location Used for Tax Rate	Connell
Contingency Rate	10%		
Base Month (Estimate Date)	July-22	OFM UFI# (from FPMT, if available)	
Project Administered By	Agency		

Schedule

Predesign Start		Predesign End	
Design Start	September-24	Design End	June-25
Construction Start	October-25	Construction End	October-26
Construction Duration	12 Months		

Green cells must be filled in by user

Project Cost Estimate

Total Project	\$4,281,389	Total Project Escalated	\$5,066,565
		Rounded Escalated Total	\$5,067,000

Cost Estimate Summary

Acquisition

Acquisition Subtotal	\$0	Acquisition Subtotal Escalated	\$0
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Consultant Services			
Pre-design Services	\$200,000		
Design Phase Services	\$154,550		
Extra Services	\$175,000		
Other Services	\$192,435		
Design Services Contingency	\$72,199		
Consultant Services Subtotal	\$794,184	Consultant Services Subtotal Escalated	\$910,875

Construction			
Maximum Allowable Construction Cost (MACC)	\$1,417,000	Maximum Allowable Construction Cost (MACC) Escalated	\$1,695,866
DBB Risk Contingencies	\$0		
DBB Management	\$0		
Owner Construction Contingency	\$141,700		\$169,587
Non-Taxable Items	\$0		\$0
Sales Tax	\$129,372	Sales Tax Escalated	\$154,833
Construction Subtotal	\$1,688,072	Construction Subtotal Escalated	\$2,020,286

Equipment			
Equipment	\$850,000		
Sales Tax	\$70,550		
Non-Taxable Items	\$0		
Equipment Subtotal	\$920,550	Equipment Subtotal Escalated	\$1,101,715

Artwork			
Artwork Subtotal	\$0	Artwork Subtotal Escalated	\$0

Agency Project Administration			
Agency Project Administration Subtotal	\$249,584		
DES Additional Services Subtotal	\$0		
Other Project Admin Costs	\$0		
Project Administration Subtotal	\$249,584	Project Administration Subtotal Escalated	\$298,702

Other Costs			
Other Costs Subtotal	\$629,000	Other Costs Subtotal Escalated	\$734,987

Project Cost Estimate			
Total Project	\$4,281,389	Total Project Escalated	\$5,066,565
		Rounded Escalated Total	\$5,067,000

Funding Summary

	Project Cost (Escalated)	Funded in Prior Biennia	New Approp Request 2023-2025	2025-2027	Out Years
Acquisition					
Acquisition Subtotal	\$0		\$0		\$0
Consultant Services					
Consultant Services Subtotal	\$910,875		\$650,000	\$260,875	\$0
Construction					
Construction Subtotal	\$2,020,286			\$2,020,286	\$0
Equipment					
Equipment Subtotal	\$1,101,715			\$1,101,715	\$0
Artwork					
Artwork Subtotal	\$0				\$0
Agency Project Administration					
Project Administration Subtotal	\$298,702		\$100,000	\$198,702	\$0
Other Costs					
Other Costs Subtotal	\$734,987		\$150,000	\$584,987	\$0
Project Cost Estimate					
Total Project	\$5,066,565	\$0	\$900,000	\$4,166,565	\$0
	\$5,067,000	\$0	\$900,000	\$4,167,000	\$0
Percentage requested as a new appropriation			18%		

What is planned for the requested new appropriation? (Ex. Acquisition and design, phase 1 construction, etc.)

The FY2024 supplemental request is to fund the design phase and support permits, security escorts and PM during design.

Insert Row Here

What has been completed or is underway with a previous appropriation?

None.

Insert Row Here

What is planned with a future appropriation?

Construction funding will be requested in the 2025-27 Capital budget.

Insert Row Here