EXECUTIVE SUMMARY

Item Name: **Annual Capital Plan (ASU)**

☒ Action Item

Requested Action: Arizona State University (ASU) asks the board to approve its Annual Capital Plan (ACP). The ACP includes 8 new projects, 2 resubmitted projects, and 2 third-party projects. Excluding third-party projects, the ACP totals $667.7 million, as described in this executive summary.

Background/History of Previous Board Action

- Capital Development Plan — February 2022
  - Multipurpose Arena (Tempe Campus)
- Amended Capital Development Plan — October 2021
  - Classroom Office Building (Tempe Campus)
- FY 2023–2025 Capital Improvement — October 2021
  - Building and Infrastructure Enhancements and Modifications
  - Classroom and Academic Renovations
  - Research Laboratory Renovations
  - Thermal Energy Storage Installation (Polytechnic Campus)
  - Polytechnic Research and Educational Building (Polytechnic Campus)
  - Tempe Campus Academic and Office Space (Tempe Campus)
  - Herberger Residence Hall (Tempe Campus)
  - Herberger Dining and Academic Space (Tempe Campus)
  - Casa de Oro Residential Hall Phase II (West Campus)
  - West Campus New Academic Building (West Campus)

Prior Year Activity

- Nine projects totaling $450.1 million were substantially completed within the last 12 months.
- Eleven projects totaling $499.1 million began or continued construction activity in the last 12 months.
- Detail on completed and ongoing projects are listed in Exhibit 1.

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Overview and Alignment with Enterprise and University Goals and Objectives

- The ASU ACP includes 10 projects totaling $667.7 million, excluding 2 third-party projects.

- ASU has developed the ACP to align with the university's campus master plan, system enterprise, university strategic goals and objectives.

- The primary institutional priorities supported by the ACP include:

  - **Academic Success:** The proposed projects will contribute to advancing the university's twin pillars of academic success—leadership in academic excellence and accessibility and establishing national standing in academic quality. These projects will provide essential support to achieving these goals and metrics:
    - Enhance the university graduation rate to greater than 85 percent and more than 40,000 graduates
    - Attain national standing in the learning and post-graduation outcomes for students in all colleges and schools
    - Enhance our local impact and social embeddedness
    - Enhance research competitiveness to more than $1 billion in annual research expenditures by 2027.

  - **Research and Development:** The proposed projects will support the university's research goals, including the enhancement of its research competitiveness to more than $1 billion in annual research expenditures by 2027. University research expenditures are used in part to advance the state of knowledge in various fields; purchase local goods and services; help create new companies and jobs; support the development of next-generation scientists and innovators; and attract top research talent to the faculty. Research and development expenditures also support the state's competitive advantage in the fields of science, technology and medicine.

  - **Student Support and Engagement:** The proposed projects will enhance student development and learning to national leadership levels. These projects will foster student engagement in programs, events and activities that will enhance their learning and personal development by connecting them with their campus and community; building leadership skills; and preparing them for academic, personal and career success.

  - **Campus Operations and Infrastructure Priorities:** To advance the university's academic and research goals, its facilities and related infrastructure must be maintained in a safe and reliable operational condition. Buildings and utility systems also must be cost-effective to maximize the use of the university's operational funds over time.

- **Life Safety and Code Compliance:** Life safety and code compliance issues must be resolved promptly and assume the highest priority in ensuring the safety and security of students, faculty, staff and visitors, as well as supporting the achievement of the university's academic and research goals.

- **Community Service:** Serving Arizona communities is an integral aspect of the university's mission and its programs. Enhancing and expanding the university's local impact and social embeddedness is vital to improving the quality of life and economic prosperity in Arizona.

Annual Capital Plan Projects

- The following new projects are proposed for ACP approval:

  - Building and Infrastructure Enhancements and Modifications
  - Classroom and Academic Renovations
  - Research Laboratory Renovations
  - Thermal Energy Storage Installation (Polytechnic Campus)
  - Polytechnic Research and Educational Building (Polytechnic Campus)
  - Tempe Campus Academic and Office Space (Tempe Campus)
  - Herberger Residence Hall (Tempe Campus)
  - Herberger Dining and Academic Space (Tempe Campus)
  - Casa de Oro Residential Hall Phase II (West Campus)
  - West Campus New Academic Building (West Campus).

- The following lists the resubmitted projects proposed for ACP approval:

  - Classroom Office Building (Tempe Campus)
  - Multipurpose Arena (Tempe Campus)

- Additional detail on project costs, financing and scope can be found in the tables in Exhibits 2 and 3, and the individual project justification reports attached at the end.

Fiscal Impact and Management

- The ASU ACP, if fully implemented, will cost a total of $667.7 million.

- Of the total amount, $598.5 million will be financed using debt.

- **Debt Ratio Impact:** The debt service associated with projects in the ACP will increase the debt ratio by 0.66 percent excluding SPEED projects, and 0.83 percent

including SPEED projects. The current debt ratio prior to these projects is 4.7 percent.

- The tables in Exhibits 2 and 3 provide detail on project financing, funding sources and debt ratio impact.

Other Projects

- ASU anticipates 2 third-party projects, component unit projects, and commercial long-term leases that require board approval in the next year.

Statutory/Policy Requirements

- Pursuant to ABOR Policy 7-102.B.2, each university shall submit an ACP for the upcoming 12-month period in accordance with the calendar and form approved by the executive director of the board.

- ACPs are reviewed by the Finance, Capital and Resources Committee and approved by the board.

- Approval of the ACP authorizes the university to seek legislative review for debt-funded or third-party projects, if applicable. A university cannot proceed with financing or execute construction contracts for a project until the committee has reviewed and the board has approved the Individual Project and Financing phase.

Committee Review and Recommendation

The Finance, Capital and Resources Committee reviewed this item at its September 15, 2022 meeting, and recommended forwarding the item to the full board for approval.

EXECUTIVE SUMMARY

Exhibit 1

Arizona State University
Capital Project Status Report

Project Name	Est. Gross Square Footage	Total Budget	Direct Construction Budget	Percent Work Completed	Percent to Gift Target	Date Last Board Approval	Original/ Revised Occupancy Date
Ongoing Projects							
Bateman Physical Sciences Center Improvements	90,400	$60,000,000	$48,000,000	53	N/A	2/11/2021	6/5/2023
Building & Infrastructure Enhancements/Modifications	N/A	$20,000,000	$14,000,000	80	N/A	2/13/2020	12/31/2023
Building and Infrastructure Enhancements/Modifications	N/A	$20,000,000	$16,000,000	25	N/A	9/30/2021	10/1/2024
Classroom/Academic Renovations	50,000	$15,000,000	$11,250,000	80	N/A	2/13/2020	2/28/2023
Classroom/Academic Renovations	44,643	$15,000,000	$10,500,000	25	N/A	9/30/2021	10/1/2024
Classroom Office Building [1]	169,626	$113,100,000	$94,236,277	22	N/A	9/30/2021	6/24/2024
IT Infrastructure Improvements	N/A	$36,810,000	$0	24	N/A	9/30/2021	12/1/2024
Mill Avenue Parking Structure	401,874	$42,000,000	$35,360,000	23	N/A	9/30/2021	7/12/2023
Multipurpose Arena [1]	193,638	$137,200,000	$110,021,746	87	N/A	11/19/2020	11/30/2022
Research Labs/Faculty Startup	40,000	$20,000,000	$14,000,000	80	N/A	2/13/2020	2/28/2023
Research Laboratory Renovations	32,000	$20,000,000	$14,000,000	25	N/A	9/30/2021	10/1/2024
Ongoing Third-Party Projects							
No Ongoing Third-Party Projects							
Substantially Completed Projects							
ASU at Mesa City Center	118,386	$10,000,000	$10,000,000	100	N/A	11/7/2019	5/20/2022
ASU at Mesa City Center Tenant Improvements	118,386	$23,500,000	$0	100	N/A	2/11/2021	8/1/2022
Building and Infrastructure Enhancements/Modifications	N/A	$32,000,000	$17,600,000	100	N/A	11/15/2018	12/31/2021
Durham Hall Renovation	137,067	$65,000,000	$48,600,000	100	N/A	2/8/2018	12/1/2021
IT Infrastructure Improvements	N/A	$32,000,000	$32,000,000	100	N/A	9/28/2018	3/31/2022
Interdisciplinary Science and Technology Building (ISTB) 7	281,378	$192,000,000	$149,126,103	100	N/A	9/19/2019	12/23/2021
Research Labs/Faculty Startup	40,000	$15,000,000	$10,400,000	100	N/A	11/15/2018	10/31/2021
Thunderbird School Global Mgmt.	111,000	$67,000,000	$47,500,000	100	N/A	9/19/2019	9/242021
University Drive Pedestrian Bridge and Plaza	N/A	$13,600,000	$11,433,381	100	N/A	6/12/2020	9/30/2022
Substantially Completed Third-Party Projects							
No Substantially Completed Third-Party Projects							

This report reflects the status of Arizona State University capital projects effective September 15, 2022.
[1] Proposed revised budgets for the Classroom Office Building and the Multipurpose Arena projects are included in this ACP.

EXECUTIVE SUMMARY

Exhibit 2

Arizona State University Annual Capital Plan							
Project	**Board Approval Status**	**Est. Gross Square Footage**	**Project Cost**	**Amount Financed**	**Funding Method**	**Annual Debt Service**	**Debt Ratio**
New Projects							
ASU-Building and Infrastructure Enhancements/Modifications	CIP Oct. 2021	N/A	$35,000,000	$35,000,000	System Revenue Bonds	$2,706,800	0.07%
ASU-Classroom and Academic Renovations	CIP Oct. 2021	39,170	$15,000,000	$15,000,000	System Revenue Bonds	$1,546,800	0.04%
ASU-Research Laboratory Renovations	CIP Oct. 2021	28,400	$30,000,000	$20,000,000	System Revenue Bonds/ One-Time State Appropriation	$1,160,100	0.03%
ASUP-Thermal Energy Storage Installation	CIP Oct. 2021	20,000	$17,300,000	$17,300,000	System Revenue Bonds	$1,150,700	0.03%
ASUP-Polytechnic Research and Educational Building	CIP Oct. 2021	180,000	$175,000,000	$144,000,000	SPEED and System Revenue Bonds/ One-Time State Appropriation	$9,405,700	0.23%
ASUT-Tempe Campus Academic and Office Space	CIP Oct. 2021	128,000	$84,000,000	$84,000,000	System Revenue Bonds	$5,490,600	0.14%
ASUT-Herberger Dining and Academic Space	CIP Oct. 2021	28,247	$27,600,000	$27,600,000	System Revenue Bonds	$1,804,700	0.05%
ASUW-West Campus New Academic Building	CIP Oct. 2021	55,000	$33,500,000	$33,500,000	System Revenue Bonds	$2,132,700	0.06%
New Projects Subtotal		**478,817**	**$417,400,000**	**$376,400,000**		**$25,398,100**	**0.65%**
Resubmitted Projects							
ASUT-Classroom Office Building	Amended CDP Oct. 2021	169,626	$113,100,000	$107,100,000	System Revenue Bonds/ General University Funds	$6,818,000	0.18%
ASUT-Multipurpose Arena	CDP Feb. 2022	193,638	$137,200,000	$115,000,000	System Revenue Bonds/ Contractual Payments	$6,741,900	0.19%
Resubmitted Projects Subtotal		**363,264**	**$250,300,000**	**$222,100,000**		**$13,559,900**	**0.37%**
Third Party Projects							
ASUT-Herberger Residence Hall	CIP Oct. 2021	256,694	NA	NA	NA	NA	NA
ASUW-Casa de Oro Residential Hall Phase II	CIP Oct. 2021	141,608	NA	NA	NA	NA	NA
Third Party Projects Subtotal		**398,302**					
TOTAL ACP		**1,240,383**	**$667,700,000**	**$598,500,000**	**$0**	**$38,958,000**	**1.02%**

EXECUTIVE SUMMARY

Exhibit 3

Annual Capital Plan–Annual Debt Service by Funding Source											
Project	**Amount Financed**	**CIF**	**TUI**	**AUX**	**ICR**	**OLF**	**SLP**	**FGT**	**DFG**	**OTH**	**Total Annual Debt Service**
New Projects											
ASU-Building and Infrastructure Enhancements/Modifications	$35,000,000		$2,706,800								$2,706,800
ASU-Classroom and Academic Renovations	$15,000,000		$1,546,800								$1,546,800
ASU-Research Laboratory Renovations	$20,000,000		$1,160,100								$1,160,100
ASUP-Thermal Energy Storage Installation	$17,300,000		$1,150,700								$1,150,700
ASUP-Polytechnic Research and Educational Building	$144,000,000		$9,405,700								$9,405,700
ASUT-Tempe Campus Academic and Office Space	$84,000,000		$5,490,600								$5,490,600
ASUT-Herberger Academic and Dining Space	$27,600,000		$814,600	$990,100							$1,804,700
ASUW-West Campus New Academic Building	$33,500,000		$2,132,700								$2,132,700
New Projects Subtotal	**$376,400,000**	**$0**	**$24,408,000**	**$990,100**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$25,398,100**
Resubmitted Projects											
ASUT-Classroom Office Building	$107,100,000		$6,818,000								$6,818,000
ASUT-Multipurpose Arena	$115,000,000			$6,741,900							$6,741,900
Resubmitted Projects Subtotal	**$222,100,000**	**$0**	**$6,818,000**	**$6,741,900**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$13,559,900**
Total ACP	**$598,500,000**	**$0**	**$31,226,000**	**$7,732,000**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$38,958,000**

Funding Source Codes:
(CIF) Capital Infrastructure Fund
(TUI) Tuition
(AUX) Auxiliary
(ICR) Indirect Cost Recovery
(OLF) Other Local Funds
(SLP) State Lottery Proceeds
(FGT) Federal Grant
(DFG) Debt Financed by Gifts
(OTH) Other

EXECUTIVE SUMMARY

Annual Capital Plan–Operation and Maintenance by Funding Source										
Project	**CIF**	**TUI**	**AUX**	**ICR**	**OLF**	**GFA**	**FGT**	**DFG**	**OTH**	**Total Annual O&M**
New Projects										
ASU-Building and Infrastructure Enhancements/Modifications		$0								$0
ASU-Classroom and Academic Renovations		$0								$0
ASU-Research Laboratory Renovations		$0								$0
ASUP-Thermal Energy Storage Installation		$306,205								$306,205
ASUP-Polytechnic Research and Educational Building		$2,438,617								$2,438,617
ASUT-Tempe Campus Academic and Office Space		$1,102,868								$1,102,868
ASUT-Herberger Academic and Dining Space		$81,878	$91,158							$173,036
ASUW-West Campus New Academic Building		$530,224								$530,224
Subtotal	**$0**	**$4,459,792**	**$91,158**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$4,550,950**
Resubmitted Projects										
ASUT-Classroom Office Building		$1,143,245								$1,143,245
ASUT-Multipurpose Arena			$991,848							$991,848
Subtotal	**$0**	**$1,143,245**	**$991,848**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$2,135,093**
Total ACP	**$0**	**$5,603,037**	**$1,083,006**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$6,686,043**

Funding Source Codes:
(CIF) Capital Infrastructure Fund
(TUI) Tuition
(AUX) Auxiliary
(ICR) Indirect Cost Recovery
(OLF) Other Local Funds
(GFA) General Fund Appropriation
(FGT) Federal Grant
(DFG) Debt Financed by Gifts
(OTH) Other

EXECUTIVE SUMMARY

Exhibit 4(a)
Arizona State University
Tempe Campus Site Location Map

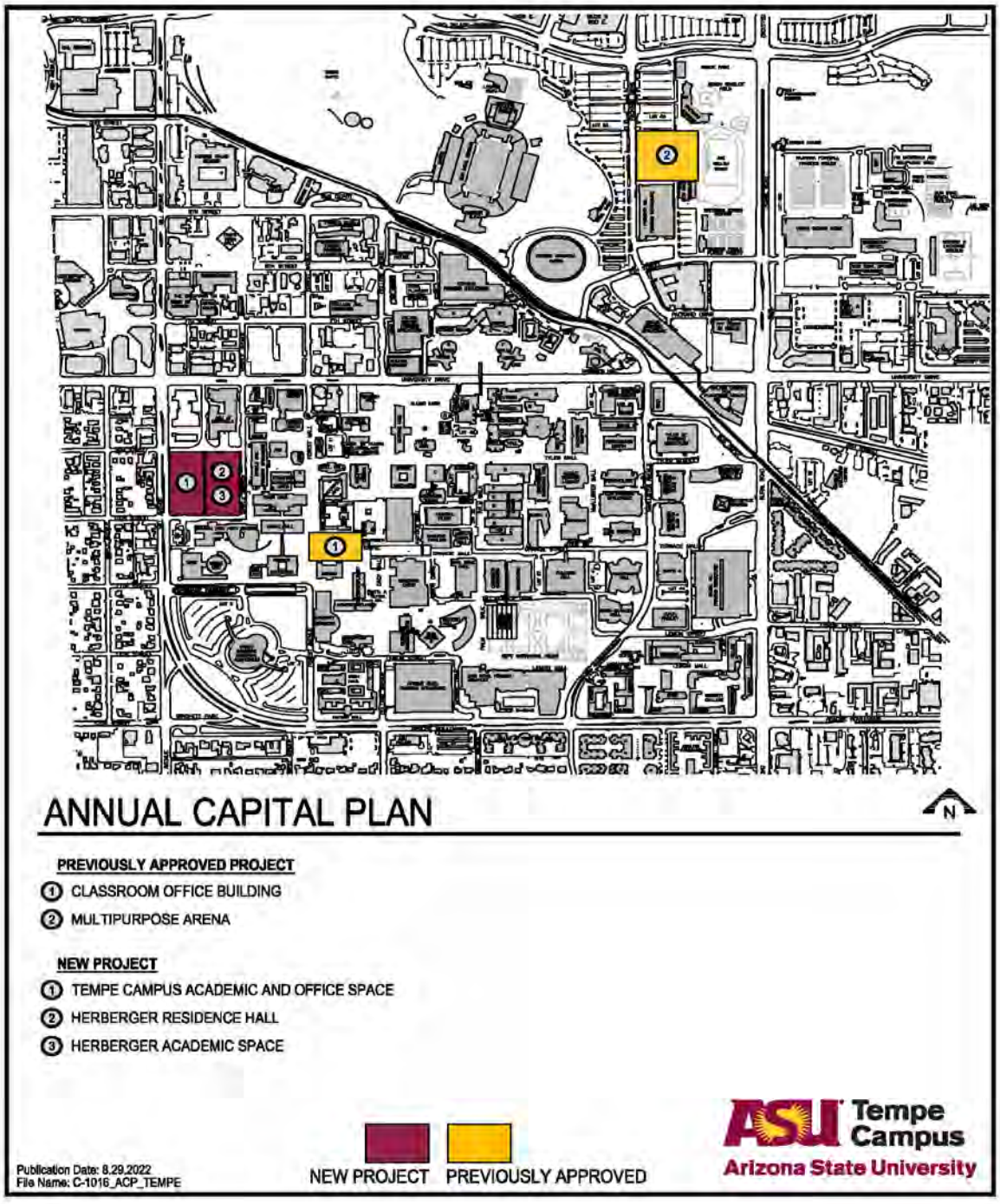


Exhibit 4(b)
Arizona State University
Polytechnic Campus Site Location Map

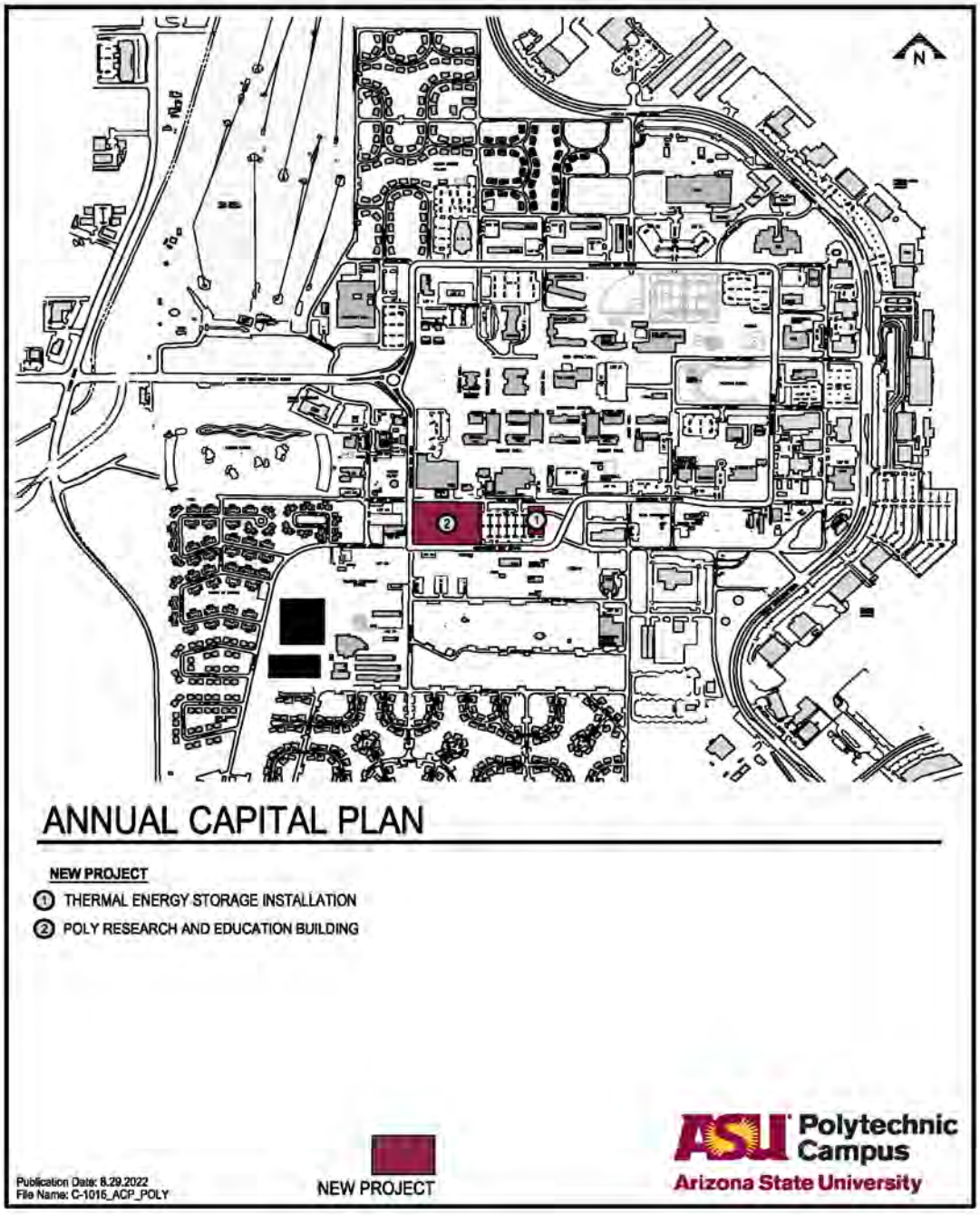


Exhibit 4(c)
Arizona State University
West Campus Site Location Map

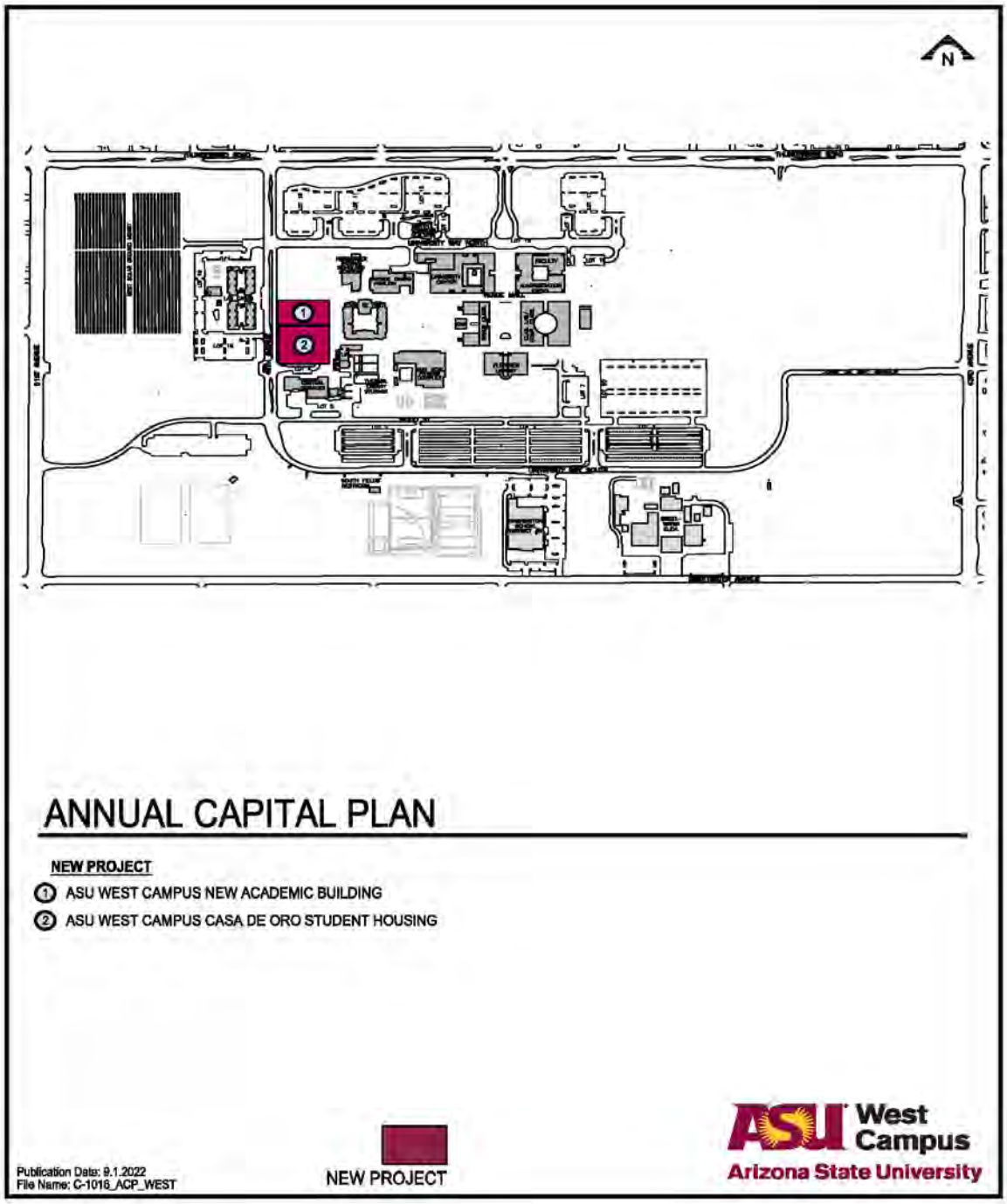


Exhibit 5
Debt Capacity Update

PURPOSE

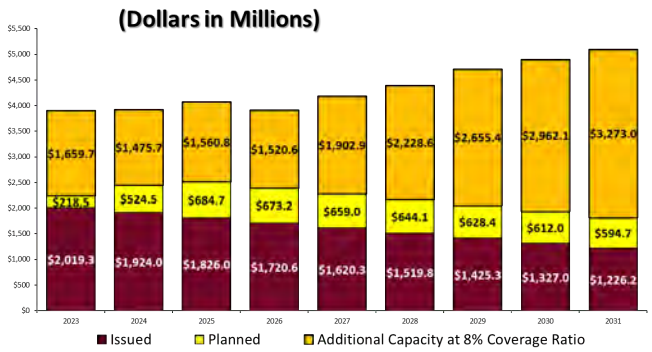
To demonstrate Arizona State University's ability to finance additional capital investment through debt instruments and to fund the related debt service (principal and interest).

PROJECTED DEBT CAPACITY

Maximum Projected Ratio of Debt Service to Total Expenditures Excluding/Including SPEED debt
5.3%/5.7%

Based upon the projects included in this ACP and the first year of the CIP, the maximum projected debt ratio is 5.3 percent in FY 2026. Outstanding debt in FY 2026 is projected to be $2.39 billion at par, with total annual debt service of $212.9 million. The 5.3 percent ratio is within the range used by credit rating firms to confirm an institution's creditworthiness and is significantly below the 8 percent statutory maximum.

Currently outstanding (issued) debt declines from $2.0 billion in FY 2023 to $1.2 billion in FY 2031 as debt is retired. Planned debt includes future financings of projects included in the first year of the 2024-2027 CIP and projects that have received ACP or CDP approval. Additional debt capacity represents debt that can be issued in any given year based on the statutory 8 percent debt ratio maximum.



FUTURE PROJECTS

Future debt-financed projects include those included in the first year of the FY 2024-27 Capital Improvement Plan (CIP) and those projects that have received ACP or CDP approval. These projects are included in the future debt capacity assumptions.

	Project Budget	Remaining Amount to be Financed
Polytechnic Research and Educational Building	$ 175,000,000	$ 144,000,000
Tempe Campus Classroom Office Building	113,100,000	107,100,000
New Creative Arts Building	84,000,000	84,000,000
Building & Infrastructure Enhancements and Modifications	55,000,000	55,000,000
Tempe District Utility Plant	52,200,000	52,200,000
Research Laboratory Renovations	50,000,000	40,000,000
University Athletic Track & Tennis Facilities	45,000,000	45,000,000
Mill Avenue Parking Structure	42,000,000	42,000,000
Information Technology (IT) Infrastructure Improvements	36,810,000	36,810,000
West Campus New Academic Building	33,500,000	33,500,000
Classroom and Academic Renovations	30,000,000	30,000,000
Tempe Campus Herberger Academic & Dining Space	27,600,000	27,600,000
Poly Campus Thermal Storage Installation	17,300,000	17,300,000
	$ 761,510,000	$ 714,510,000

CREDIT RATINGS

EXECUTIVE SUMMARY

Positive rating factors cited by the credit rating agencies include ASU's growing brand recognition that has translated into solid donor support, rising enrollment, growing tuition revenue, and growing research activity; excellent financial policy and risk management; consistently positive operating performance; and regular capital investment.

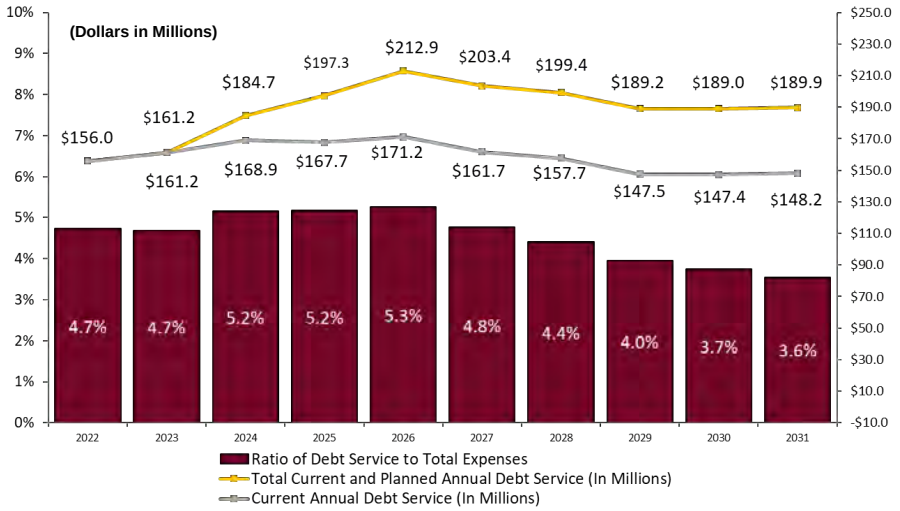
Offsetting factors identified by the agencies include high debt levels, modest state support, exposure to online education component, and limited revenue diversity with high student dependence.

	Moody's		Standard & Poor's (S&P)	
Fiscal Year	Rating	Outlook	Rating	Outlook
2015	Aa3	Stable	AA	Negative
2016	Aa3	Positive	AA	Stable
2017	Aa3	Positive	AA	Stable
2018	Aa2	Stable	AA	Stable
2019	Aa2	Stable	AA	Stable
2020	Aa2	Stable	AA	Stable
2021	Aa2	Stable	AA	Stable
2022	Aa2	Stable	AA	Stable

RATIO OF DEBT SERVICE TO TOTAL EXPENSES

Annual debt service on system revenue bonds and certificates of participation (COPs) is projected to increase from $156.0 million in FY 2022 to a maximum of $212.9 million in FY 2026. The projected ratio of debt service to total expenses is expected to reach its highest point in FY 2026, at 5.3 percent.

SPEED (Stimulus Plan for Economic and Educational Development) bonds are funded up to eighty percent by state lottery revenues, with the balance funded by the University. SPEED debt service is excluded from the statutory debt ratio, but if SPEED debt service is included, the highest projected debt ratio increases to 5.7 percent.



Arizona State University
Annual Capital Plan – Project Justification Report
Building and Infrastructure Enhancements and Modifications

Background/History of Previous Board Action

- FY 2023–2025 Capital Improvement Plan October 2021

Project Justification/Description/Scope

- These projects encompass enhancements and modifications to ASU buildings and infrastructure across all four campuses that will address the university's primary areas of concern, which include, but are not limited to, life safety deficiencies; aging mechanical, critical building and utility distribution systems; and timeworn and unreliable elevators and roofs.

- Many components of the ASU built environment have exceeded their useful life and some are incapable of effectively supporting the advancement of the university's mission of academic and research excellence. The planned projects will ensure the efficient, reliable and safe operation of all essential campus facilities, infrastructure and systems, including those that must continue without interruption to support the university's critical academic and research initiatives.

- These projects will enhance the quality of the campus infrastructure and systems, enable the university to maintain compliance with code requirements and address ABOR directives to reduce deferred maintenance. Projects essential for life safety, code compliance and the advancement of university strategic initiatives will be given top priority.

Project Delivery Method and Process

- Depending on the nature of the work, components of this project bundle may be delivered through the Design-Build (DB), Construction Manager at Risk (CMAR) or Job Order Contracting (JOC) methods.

- ASU has not yet selected a DB, CMAR, JOC or Design Professional (DP) firm for any components of this project bundle. Contractors and DPs will be selected according to ABOR policy and Arizona law.

Project Status and Schedule

- DPs will be selected after project approval is in place. The project design will be completed approximately six to twelve months after the DP contract has been awarded for that component of work.

- General construction is scheduled to begin when the design is complete and after all approvals are in place. Construction on all project components is targeted for completion by December 2026.

Project Cost

- The total budget for this project bundle is $35 million.

- Independent cost estimates will be provided by the DP, DB, CMAR or JOC contractor after these selections are complete.

- For projects selected to use the DB or CMAR delivery method, the construction manager will be at risk to provide the completed project within the agreed-upon GMP.

- The total project cost will vary depending on the scope and scale of the building and infrastructure modifications included in this bundle.

Fiscal Impact and Financing Plan

- The $35 million project bundle will be debt-financed with system revenue bonds and amortized over an approximate twenty-year term. The annual debt service will be funded by tuition and is included in current budget planning.

- There are no expected increases in O&M costs associated with this project bundle.

- **Debt Ratio Impact:** The projected incremental debt ratio impact for this project bundle is 0.07 percent.

Occupancy Plan

- These projects will not affect occupancy or programs, but will renew building and campus infrastructure and support the advancement of the university's academic and research initiatives.

Statutory/Policy Requirements

- ABOR Policy 7-102 requires all major capital projects with an estimated total project cost of $10 million or more to be included in the Annual Capital Plan, including new construction, renovation, infrastructure, information technology, or third-party projects.

Capital Project Information Summary

University: Arizona State University **Project Name:** Building and Infrastructure Enhancements and Modifications

Project Description and Location: These projects encompass enhancements and modifications to ASU buildings and infrastructure that will address the university's primary areas of concern at all campuses. These concerns include, but are not limited to, life safety deficiencies; the replacement of aging mechanical, critical building and utility distribution systems; and the repair and replacement of timeworn and unreliable elevators and roofs.

Project Schedule:

Planning	November	2022
Design Start	January	2023
Construction Start	April	2023
Construction Completion	December	2026

Project Budget:

Total Project Cost	$	35,000,000
Total Project Construction Cost	$	24,500,000
Total Project Cost per GSF	$	n/a
Construction Cost per GSF	$	n/a

Estimated Annual O&M Cost:

Utilities	$	0
Personnel		0
All Other Operations		0
Subtotal	$	0

Funding Sources:

A: System Revenue Bonds	$	35,000,000
Debt Service Funding Sources:		Tuition
Operation/Maintenance	$	0
Funding Sources:		Not Applicable

Arizona State University
Annual Capital Plan – Project Justification Report
Classroom and Academic Renovations

Background/History of Previous Board Action

- FY 2023–2025 Capital Improvement Plan October 2021

Project Justification/Description/Scope

- ASU plans to renovate existing classrooms, create new classrooms of various sizes and add smaller instructional spaces at all campuses. This project bundle will be comprised of the renovation of approximately 39,170 gross square feet of university classroom and academic space. The renovations may include heating, ventilation and air conditioning (HVAC); plumbing and electrical; flooring; ceiling; roof; elevator; window; door; internal wall; and partition components, as well as upgrades to address life safety and Americans with Disabilities Act deficiencies. These projects will comprise multiple components at each ASU campus.

- The ASU Strategic Enterprise Framework identifies several goals that will be supported by this project bundle, including improved retention and graduation performance, curricular reform and improved student outcomes. The resources needed to achieve these goals include a continued investment in faculty and in space renovations that will support teaching innovations and improved student and faculty interactions. These projects will renovate worn areas that distract from teaching and learning effectiveness and create updated and growth spaces for academic programs to enable student learning and success.

- The components included in this project bundle will enhance the quality of the built environment, comply with code requirements for safety, and reduce deferred maintenance. Project components essential for life safety and code compliance and those that support university strategic initiatives will be given top priority.

Project Delivery Method and Process

- Depending on the nature of the work, components of this project bundle may be delivered through either the CMAR or the JOC method.

- ASU has not yet selected a CMAR, JOC contractor or Design Professional (DP) firm for any components of this project bundle. Contractors and DPs will be selected according to ABOR policy and Arizona law.

Project Status and Schedule

- DPs will be selected after project approval is in place. The design will be completed within approximately six to nine months after the DP contract is awarded.

- General construction for these projects is scheduled to begin when the design is complete and after all approvals are in place. Construction on all project components is targeted for completion by December 2025.

Project Cost

- The total budget for this project bundle is $15.0 million. This budget represents an estimated construction cost of $268 per gross square foot. The estimated total project cost is $383 per gross square foot. The cost per square foot is higher than past comparable projects due to anticipated cost increases.

- For this ACP phase, no preliminary external cost estimates have been provided by third-party consultants. DP and CMAR or JOC contractor teams have not yet been selected for these projects. Independent cost estimates will be provided by the DP, CMAR or JOC contractor after these selections are complete.

- For projects selected to use the CMAR delivery method, the construction manager will be at risk to provide the completed project within the agreed-upon GMP.

- Comparable Projects:

Project	Location	Project Size GSF	Total Project Cost/GSF	Year Constructed
SSV Enrollment Services Office Renovation- 102079	Tempe	8,900	$266	2022
PSF 6th Floor Renovations 102525	Tempe	18,995	$367	2022
Payne LL Renovation to University Classrooms	Tempe	9,874	$292	2022
FY 21 UCL Summer Renovations 102516	Tempe	6,611	$194	2021
AZCT Mindfulness Center and CISA Office and Classroom	Tempe	600	$435	2021
Sun Devil Hall Interplanetary Initiative	Tempe	6,298	$533	2021
Average Comparable Total Project Cost			**$348**	

Fiscal Impact and Financing Plan

- The $15 million project bundle will be debt-financed with system revenue bonds and amortized over an approximate twenty-year term. The annual debt service will be funded by tuition and is included in current budget planning.

- There are no expected increases in O&M costs associated with this project bundle.

- **Debt Ratio Impact:** The projected incremental debt ratio impact for this project bundle is 0.04 percent.

Occupancy Plan

- These project components will reconfigure and renew spaces for classroom and academic areas. Programs may be temporarily displaced as spaces are renovated.

Statutory/Policy Requirements

- ABOR Policy 7-102 requires all major capital projects with an estimated total project cost of $10 million or more to be included in the Annual Capital Plan, including new construction, renovation, infrastructure, information technology, or third-party projects.

Capital Project Information Summary

University: Arizona State University **Project Name:** Classroom and Academic Renovations

Project Description and Location: This project bundle encompasses the renovation of approximately 39,170 gross square feet of classroom and academic space, including faculty and student space at all campuses. The renovations will include HVAC, plumbing and electrical, flooring, ceiling, roof, elevator, window, door, internal wall and partition components, as well as upgrades to address life safety and Americans with Disabilities Act deficiencies.

Project Schedule:

Planning	December	2022
Design Start	January	2023
Construction Start	March	2023
Construction Completion	December	2025

Project Budget:

Total Project Cost	$	15,000,000
Total Project Construction Cost	$	10,500,000
Total Project Cost per GSF	$	383
Construction Cost per GSF	$	268

Estimated Annual O&M Cost:

Utilities	$	0
Personnel		0
All Other Operations		0
Subtotal	$	0

Funding Sources:

A. System Revenue Bonds	$	15,000,000
Debt Service Funding Sources:		Tuition
Operation/Maintenance	$	0
Funding Sources:		Not applicable

Arizona State University
Annual Capital Plan - Project Justification Report
Research Laboratory Renovations

Previous Board Action

- FY 2023–2025 Capital Improvement Plan October 2021

Project Justification/Description/Scope

- ASU plans to renovate laboratories and associated spaces across all campuses to meet growing demand based on increased student enrollment, new programs as well as updated research requirements. Many existing laboratories and building systems are inadequate due to age and the requirements of emerging technologies.

- Multiple wet and dry laboratory spaces will be upgraded to provide future flexibility and better space utilization through shared services. These planned renovations will ensure that existing facility systems meet the growing demands of the university's research initiatives and comply with code requirements.

- Many existing university laboratories and building systems are inadequate, due to age and the requirements of emerging technologies. The poor condition of these spaces and the age of the building systems constrain the development of these strategically important areas. These projects will convert inadequate research laboratories into state-of-the-art facilities that will meet the growing demands of the university's research initiatives and comply with code requirements.

- Increasing research activity and the resultant arrival of new faculty continue to make laboratory renovation projects a university imperative. Spaces must be updated and renovated to address the needs of incoming researchers and to support successful grant applications. These laboratories will provide the core infrastructure required to enable faculty and students to compete in the global marketplace of ideas, not only stimulating advances in science and human health, but also potentially advancing the regional economy.

- The university's 2021 Masterplan Update identified a need for additional research space. This project bundle will contribute to meeting this need and accomplishing the goal of establishing the university as a leading global center for interdisciplinary research, discovery and development by 2026.

Project Delivery Method and Process

- Depending on the nature of the work, components of this project bundle may be delivered either through the CMAR or the JOC method.

- ASU has not yet selected a CMAR, JOC contractor or design professional (DP) firm for any components of this project bundle. Contractors and DPs will be selected according to ABOR policy and Arizona law.

Project Status and Schedule

- DPs will be selected after project approval is in place. The design will be completed within approximately 6-9 months after the DP contract is awarded.

- General construction for these projects is scheduled to begin when the design is complete and after all approvals are in place. Construction on all project components is targeted for completion by December 2026.

Project Cost

- The total budget for this project bundle is $30 million. This budget represents an estimated construction cost of $739 per gross square foot. The estimated total project cost is $1,056 per gross square foot. The cost per square foot is higher than past comparable projects due to anticipated cost increases.

- For this ACP phase, no preliminary external cost estimates have been provided by third-party consultants. DP and CMAR or JOC contractor teams have not yet been selected for these projects. Independent cost estimates will be provided by the DP, CMAR or JOC contractor after these selections are complete.

- For projects selected to use the CMAR delivery method, the construction manager will be at risk to provide the completed project within the agreed-upon GMP.

- Comparable Projects:

Project	Location	Project Size GSF	Total Project Cost/GSF	Year Constructed
ISTB1 Basement Surgical Suite	Tempe	400	$765	2022
PSC 1st Floor Redding Lab Relocation	Tempe	3,300	$683	2022
CLCC 3rd Floor Research Labs	Tempe	2,144	$986	2022
MTW Area 5 Rolston Lab Renovation	Tempe	860	$1,274	2022
MTW Area 3 & 5 Lab TI	Tempe	4,306	$1,254	2022
Average Comparable Total Project Cost			**$1,006**	

Fiscal Impact and Financing Plan

- Of the $30 million project bundle, $20 million will be debt-financed with system revenue bonds and amortized over an approximate twenty-year term. The annual debt service will be funded by tuition and is included in current budget planning. The balance of the project bundle will be funded by a one-time state appropriation of $10 million in accordance with Chapter 313, Laws 2022.

- There are no expected increases in O&M costs associated with this project bundle.

- **Debt Ratio Impact:** The projected incremental debt ratio impact for this project bundle is 0.03 percent.

Occupancy Plan

- These project components will not affect occupancy or programs but will renew research spaces and support the advancement of the university's research initiatives.

Statutory/Policy Requirements

- ABOR Policy 7-102 requires all major capital projects with an estimated total project cost of $10 million or more to be included in the Annual Capital Plan, including new construction, renovation, infrastructure, information technology, or third-party projects.

Capital Project Information Summary

University: Arizona State University **Project Name:** Research Laboratory Renovations

Project Description and Location: This project bundle will encompass the renovation of approximately 28,400 gross square feet of existing research laboratory space to establish the university as a leading global center for interdisciplinary research, discovery, and development. Multiple wet and dry lab spaces, as well as infrastructure and building systems, will be upgraded to maximize adaptable and flexible technologies.

Project Schedule:

Planning	December	2022
Design Start	January	2023
Construction Start	March	2023
Construction Completion	December	2026

Project Budget:

Total Project Cost	$	30,000,000
Total Project Construction Cost	$	21,000,000
Total Project Cost per GSF	$	1,056
Construction Cost per GSF	$	739

Estimated Annual O&M Cost:

Utilities	$	0
Personnel		0
All Other Operations		0
Subtotal	$	0

Funding Sources:

A: System Revenue Bonds	$	20,000,000
Debt Service Funding Sources:		Tuition
B: One-Time State Appropriation	$	10,000,000
Operation/Maintenance	$	0
Funding Sources:		Not Applicable

Arizona State University
Annual Capital Plan - Project Justification Report
Thermal Energy Storage Installation

Previous Board Action

- FY 2023–2025 Capital Improvement Plan October 2021

Project Justification/Description/Scope

- This project will create a new underground thermal energy storage facility to help provide critical climate control functions to existing and future buildings across the growing Polytechnic campus. This includes core facilities already connected to the chilled water loop, such as research facilities, food services, the Sun Devil Fitness Center and academic buildings, as well as planned facilities including the proposed multi-level Polytechnic Research and Educational Building for new manufacturing engineering programs.

- The plant will be built below grade and designed to support future built-in capacity above it, such as a parking structure or additional learning spaces. It will be located on the southeast section of campus between east Unity Avenue and south Innovation Way, as depicted on the attached map as Exhibit A.

- The ability to continuously create and store chilled water will reduce operating and utility costs through an overnight chilling process targeting off-peak hours. This approach places less demand on the utility grid and energy required to cool the water to the needed temperatures before distributing it to the surrounding facilities for critical climate control functions.

- This project not only will enhance the quality of the Polytechnic campus infrastructure and systems, but also support increased enrollment and program offerings within the Ira A. Fulton Schools of Engineering, one of the largest and most comprehensive engineering education programs in the United States.

Project Delivery Method and Process

- The project will be constructed through the Design Build (DB) delivery method. This approach was selected to streamline project delivery and to alleviate potentially adversarial project environments.

- ASU will solicit invitations to bid via a RFQ process in accordance with ABOR requirements for the construction of the project.

Project Status and Schedule

- It is anticipated that the project will begin construction in October 2023 to support operations for the fall 2024 term.

Project Cost

- The budget for this project is approximately $17.3 million. Total square footage is approximately 20,000 GSF, but may be subject to change as the project is still is the design phase. This budget represents an estimated construction cost of $640 per gross square foot. The estimated total project cost is $865 per gross square foot.

- By comparison, the existing Central Chiller Plant on Tempe Campus was upgraded in 2016 to replace obsolete mechanical equipment and upgrade the control system at a cost of $10,319,120. Unlike this renovation and upgrade, the new thermal storage facility at the Polytechnic Campus will be a completely new design build project.

Fiscal Impact and Financing Plan

- The $17.3 million project will be debt-financed with system revenue bonds and amortized over an approximate thirty-year term. The annual debt service will be funded by tuition and is included in current budget planning.

- **Debt Ratio Impact:** The projected incremental debt ratio impact for this project bundle is 0.03 percent.

Occupancy Plan

- This project will not affect occupancy or existing programs but will provide increased infrastructure to support continued physical expansion and new programs that support the advancement of the university's academic and research initiatives.

Statutory/Policy Requirements

- ABOR Policy 7-102 requires all major capital projects with an estimated total project cost of $10 million or more to be included in the Annual Capital Plan, including new construction, renovation, infrastructure, information technology or third-party projects.

Capital Project Information Summary

University: Arizona State University **Project Name:** Thermal Energy Storage Installation

Project Description and Location: This project will create a new underground thermal energy storage facility to help provide critical climate control functions to existing and future buildings across the growing Polytechnic campus. This includes core facilities already connected to the chilled water loop, such as research facilities, food services, the Sun Devil Fitness Center and academic buildings, as well as future facilities like the proposed multi-level Polytechnic Research and Educational Building for new manufacturing engineering programs. The facility will be located on the southeast section of campus between east Unity Avenue and south Innovation Way, as depicted on the map attached as Exhibit A.

Project Schedule:

Planning	June	2019
Design Start	October	2022
Construction Start	October	2023
Construction Completion	August	2024

Project Budget:

Total Project Cost	$ 17,300,000
Total Project Construction Cost	$ 12,800,000
Total Project Cost per GSF	$ 865
Construction Cost per GSF	$ 640

Estimated Annual O&M Cost:

Utilities	$ 98,208
Personnel	$ 91,354
All Other Operations	$116,643
Subtotal	$306,205

Funding Sources:

A. System Revenue Bonds	$ 17,300,000
Debt Service Funding Source:	Tuition
Operation/Maintenance	$ 306,205
Funding Source:	Tuition

EXECUTIVE SUMMARY

Capital Project Budget Summary

University: Arizona State University
Project: Thermal Energy Storage Installation

	Annual Capital Plan
Capital Costs	
1. Land Acquisition	
2. Construction Cost	
A. New Construction	$ 12,800,000
B. Tenant Improvement	
C. Special Fixed Equipment	-
D. Site Development (excl. 2.E.)	-
E. Parking and Landscaping	-
F. Utilities Extensions	904,480
G. Other* (Demolition/abatement)	-
Subtotal Construction Cost	$ 13,704,480
3. Fees	
A. DB Pre-Construction	$ 192,000
B. Architect/Engineer	1,220,000
C. Other	-
Subtotal Consultant Fees	$ 1,412,000
4. FF&E Movable	$ -
5. Contingency, Design Phase	640,000
6. Contingency, Constr. Phase	768,000
7. Parking Reserve	-
8. Telecommunications Equipment	-
Subtotal Items 4-8	$ 1,408,000
9. Additional University Costs	
A. Surveys, Tests, Haz. Mat. Abatement	$ 200,000
B. Move-in Costs	-
C. Printing Advertisement	10,000
D. Keying, signage, facilities support	10,000
E. Project Management Cost	512,000
F. State Risk Mgt. Ins. (.0034 **)	43,520
Subtotal Addl. Univ. Costs	$ 775,520
Total Capital Cost	$ 17,300,000

* Universities shall identify items included in this category.

** State Risk Management Insurance factor is calculated on construction costs and consultant fees.

Exhibit A
Thermal Energy Storage Installation
Site Location Map

Academic Center	CNTR 5D	Dean Hall	DEAN 6E	Santa Catalina Hall	SANCA 6E	Chandler-Gilbert Comm. College	
Administration	ADMIN 5D	ECET Research	ECET 7D	Santan Hall	SANTN 8D	Baylor Hall	BAYL 4H
Agribusiness Center	AGTC 8D	Engineering Studio	ENGR 8D	Simulator Building	SIM 3G	Bluford Hall	BLUF 3G
Altitude Chamber	AITCH 4C	Fac. Mgt. & Police Dept.	FMPD 6C	Student Health	SDFCP 4F	Bridget Hall	BRID 3G
Applied Arts Pavilion	AAPAV 5F	Facilities Services	FS 6C	Student Union	UNION 5E	Eagle Residence Hall	EAGL 4G
Aravaipa Auditorium	ARAVA 5D	Greenhouse	GRNHS 7G	Sun Devil Fitness Comp.	SDFCP 4E	Eagle Hall	EGEL 3G
Bell Residence Hall	BELL 5E	Inter. Sc. & Tech. III	ISTB3 6G	Sutton Hall	SUTON 5E	Falcon Residence Hall	FALCO 3E
Cedar Hall	CDRHL 8C	Ironwood Building	IRNWD 5C	Taylor Hall	TAYLO 5F	Mortuary Science Bldg.	MSB 3C
Central Receiving	RECVG 7C	Lantana Hall	LNTAHL 4E	Technology Center	TECH 6C	Mustang Res. Hall	MUSTA 3E
Century Hall	CNTRY 4E	Palo Blanco	PALOB 8F	Tech. Innovation Labs	TLABS 7F	Phantom Res. Hall	PHANT 5C
Citrus Dining Pavilion	CITRS 5F	Peralta Hall	PRLTA 8D	Union Aux. & Housing	UNION2 4D	Physical Ed. Center	PEC 4G
Classroom Building	C RR 6F	Picacho Hall	P C HO 6D	Wanner Hall	WANER 5E	Talon Residence Hall	TALON 3C
Communications	COM UN 6C	Prep. Poly. STEM High School	PRAHS 8F	Williams Comm. Schl.	WCS CR	Thomas Hall	THOM 6H
Creativity Hall	CRHL 4C	Quads	QUADS 4C				
Creativity Hall Admin.	CRHLA 4B	Rincon Building	RINCN 6G				
Creativity Hall Srvs.	CRHLS 4C	Sacaton Hall	SACTN 8F				

Arizona State University
Annual Capital Plan – Project Justification Report
Polytechnic Research and Educational Building

Background/History of Previous Board Action

- FY 2023–2025 Capital Improvement Plan October 2021

Project Justification/Description/Scope

- This new multi-level research and education building will provide a centralized location for ASU's new School of Manufacturing Systems and Networks at the Polytechnic campus, building on the Polytechnic School's longstanding reputation as a solutions-focused hub for engineering and technology education, research and collaboration.

- The approximately 180,000 gross-square-foot building will consist of 3 to 4 floors and 128,828 programmable SF for office, meeting, instructional, research and collaboration spaces to prepare students to contribute to engineering solutions for societal challenges. The facility will be located east of Innovation Way West between Unity Avenue and Innovation Way South, as depicted on the attached map as Exhibit B.

- It will support the needs of up to 50 facility members and 3,000 students within the School of Manufacturing Systems and Networks while also providing specialized spaces and labs for research and programs pertaining to Additive Manufacturing, Robotics for Smart Manufacturing and Industry Automation, Cyber Manufacturing and Operations Research, Semiconductor Manufacturing and Manufacturing Systems for the Energy Sector.

- The building will support ASU's mission to become a leading global center for interdisciplinary research, discovery, innovation, entrepreneurship and development by 2026. The facility will strengthen regional economic competitiveness for jobs through research, discovery and value-added programs. The education and innovations gained will serve the growing demand for engineering talent at companies like Intel and Taiwan Semiconductor Manufacturing Company, which both recently announced billions of dollars of investments into Arizona semiconductor manufacturing operations.

Project Delivery Method and Process

- This project will be delivered through the Construction Manager at Risk (CMAR) delivery method. This approach was selected to facilitate a coordinated design with constant contractor input and guidance throughout the project development and costing phases.

- The project delivery work plan maximizes value through creating efficiencies in both the design phase and construction phase as a team, while ensuring complete alignment with ASU standards.

- ASU has selected McCarthy Building Companies as the CMAR and SmithGroup as the Design Professional for this project. The selection process included 14 responses and 8 teams were interviewed.

Project Status and Schedule

- The project is scheduled to begin construction in August 2023 when the guaranteed maximum price (GMP) is complete and after all approvals are in place. The project is scheduled for completion in July 2025.

Project Cost

- The budget for this approximately 180,000 gross-square-foot project is $175 million. The budget represents an estimated construction cost of $750 per gross square foot. The estimated total project cost is $972 per gross square foot.

- The Design-Builder will be at risk to provide the completed project within the agreed-upon GMP.

- Comparable Projects:

Project	Description	Location	Project Size GSF	Total Project Cost/GSF	Year Completed
ISTB7	Five-story, high-performance research facility	Tempe	281,378	$682	2022
Biodesign C	Five-story, state-of-the-art research facility	Tempe	193,000	$622	2021
Average Comparable Total Project Cost				**$652**	

Fiscal Impact and Financing Plan

- Of the $175 million project budget, $103.6 million will be debt-financed with SPEED revenue bonds, $40.4 million debt-financed with system revenue bonds, and the balance of $31 million funded by a one-time state appropriation in accordance with Chapter 313, Laws 2022. The bonds will be amortized over an approximate thirty-year term. Up to 80 percent of the SPEED Bonds debt service will be paid from lottery revenue committed by the state legislature as part of the SPEED authorization. The balance of the annual debt service will be funded by tuition and is included in current budget planning.

- The estimated annual O&M costs associated with this project of $2,438,617 will be funded by tuition.

- **Debt Ratio Impact**: The debt ratio impact for this project is 0.17 percent excluding SPEED Bonds and 0.23 percent including SPEED Bonds.

Occupancy Plan

- The new facility will provide a centralized location for ASU's new School of Manufacturing Systems and Networks at the Polytechnic campus to support the needs of up to 50 faculty members and 3,000 students.

Statutory/Policy Requirements

- ABOR Policy 7-102 requires all major capital projects with an estimated total project cost of $10 million or more to be included in the Annual Capital Plan, including new construction, renovation, infrastructure, information technology, or third-party projects.

Capital Project Information Summary

University: Arizona State University **Project Name:** Polytechnic Research and Educational Building

Project Description and Location: This project will construct a multi-level facility designed to advance new university academic and research initiatives and programs focused on manufacturing systems and networks. The facility will include office, meeting, instructional, research and collaboration space to provide academic and research opportunities that prepare students to contribute engineering solutions to emerging societal challenges. The facility will be located east of Innovation Way West between Unity Avenue and Innovation Way South, as depicted on the attached map as Exhibit C.

Project Schedule:

Planning	September	2022
Design Start	August	2022
Construction Start	August	2023
Construction Completion	July	2025

Project Budget:

Total Project Cost	$	175,000,000
Total Project Construction Cost	$	135,000,000
Total Project Cost per GSF	$	972
Construction Cost per GSF	$	750

Estimated Annual O&M Cost:

Utilities	$	1,003,273
Personnel	$	475,424
All Other Operations	$	116,643
Subtotal	$	2,438,617

Funding Source:

A: SPEED and System Revenue Bonds	$	144,000,000
Debt Service Funding Sources	Lottery Revenue, Tuition	
B: One-Time State Appropriation	$	31,000,000
Operation/Maintenance	$	2,438,617
Funding Source		Tuition

Capital Project Budget Summary

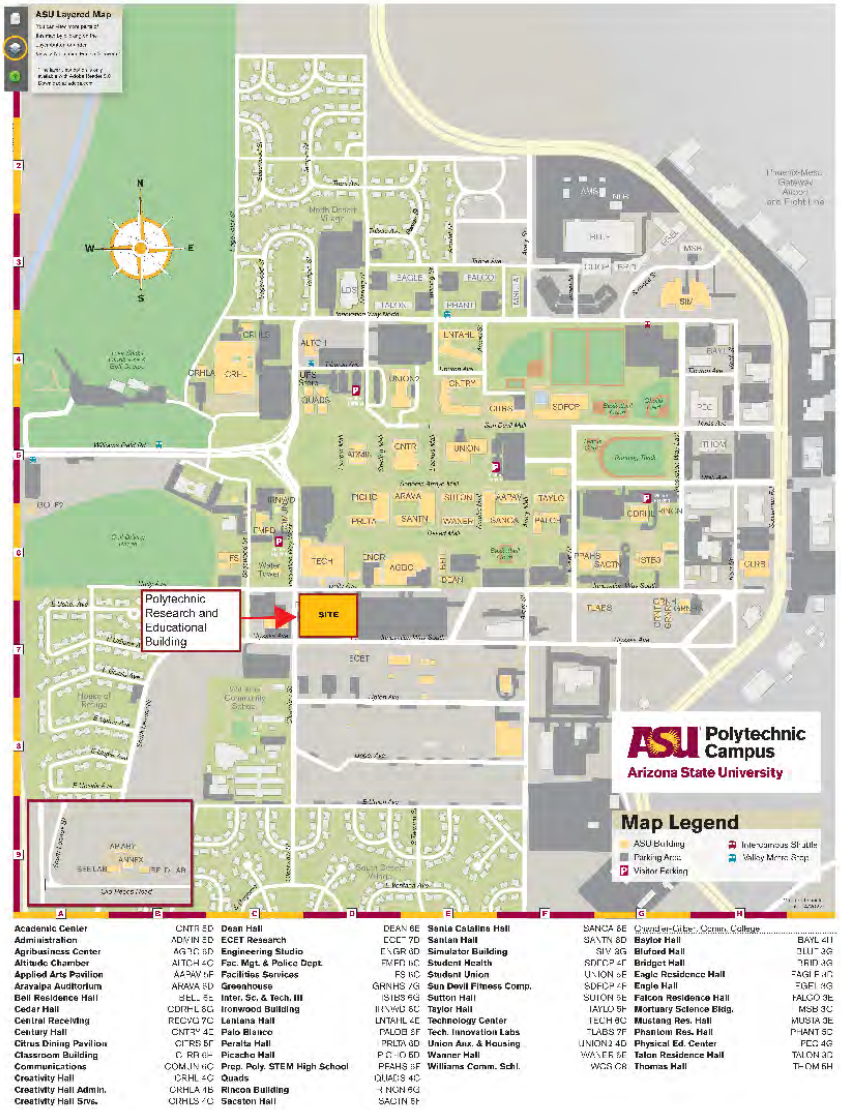
University: Arizona State University
Project: Polytechnic Research and Education Building

	Annual Capital Plan
Capital Costs	
1. Land Acquisition	
2. Construction Cost	
A. New Construction	$126,500,000
B. Tenant Improvement	1,600,000
C. Special Fixed Equipment	100,000
D. Site Development (excl. 2.E.)	-
E. Parking and Landscaping	450,000
F. Utilities Extensions	8,500,000
G. Other* (Demolition/abatement)	-
Subtotal Construction Cost	$137,150,000
3. Fees	
A. CMAR Pre-Construction	1,799,491
B. Architect/Engineer	$13,217,325
C. Other	617,000
Subtotal Consultant Fees	$15,633,816
4. FF&E Movable	2,572,056
5. Contingency, Design Phase	450,305
6. Contingency, Constr. Phase	8,000,000
7. Parking Reserve	5,000
8. Telecommunications Equipment	5,366,732
Subtotal Items 4-8	$16,394,093
9. Additional University Costs	
A. Surveys, Tests, Haz. Mat. Abatement	$475,000
B. Move-in Costs	200,000
C. Printing Advertisement	30,000
D. Keying, signage, facilities support	20,000
E. Project Management Cost	5,043,615
F. State Risk Mgt. Ins. (.0034 **)	53,476
Subtotal Addl. Univ. Costs	$5,822,091
Total Capital Cost	$175,000,000

* Universities shall identify items included in this category.

** State Risk Management Insurance factor is calculated on construction costs and consultant fees.

Exhibit B
Polytechnic Research and Educational Building
Site Location Map



Arizona State University
Annual Capital Plan - Project Justification Report
Tempe Campus Academic and Office Space

Previous Board Action

- FY 2023–2025 Capital Improvement Plan October 2021

Project Justification/Description/Scope

- This new five-story approximately 128,000 gross-square-foot facility will provide needed space for university academic programs, offices and leasable retail space. Located on the Tempe campus east of Mill Avenue between Ninth and Tenth Streets, as depicted on the attached map as Exhibit C, the new facility will share a common wall with the west end of the new Mill Avenue parking structure, which is currently under construction and will separate the two projects.

- The first floor of the building will include hospitality, restaurants and retail spaces with entrances along Mill Avenue.

- The upper stories will support university academic programs for the Herberger Institute for Design and the Arts (HIDA), including 12,600 SF for Photography, 7,200 SF for Animation, 10,000 SF for Expanded Arts, 7,000 SF for Music Therapy, 16,000 SF for Design Architecture, and 10,000 SF for Arts, Media and Engineering.

- The proposed building will allow for program growth and provide the university the opportunity to vacate older buildings that need replacement. In addition, the project enables the university to enhance the student experience and increase its impact and social embeddedness in the community.

Project Delivery Method and Process

- The project will be constructed through the Design-Build delivery method. This approach was selected to streamline project delivery and to alleviate potentially adversarial project environments.

- ASU has selected McCarthy Building Companies with DFDG Architecture as the DB team for this project. The selection process included eight responses and five teams were interviewed.

Project Status and Schedule

- Project construction is scheduled to start in December 2022 and completion is targeted for August 2024.

Project Cost

- The budget for this approximately 128,000 gross-square-foot project is $84 million. The budget represents an estimated construction cost of $67 million, which is $523 per GSF. The estimated total project cost is $656 per GSF.

- The DB contractor will be at risk to provide the completed project within the agreed-upon GMP.

- Comparable Projects:

Project	Description	Location	Project Size GSF	Total Project Cost/GSF	Year Completed
Thunderbird School of Global Management classroom/office	Multi-level classroom and office building.	Downtown Phoenix	111,000	$604	2021
Fusion on First (academic portion)	Lowest three levels of a 16-story building. Music and fashion studios, classrooms and maker spaces.	Downtown Phoenix	76,293	$650	2021
Average Comparable Total Project Cost				**$627**	

Fiscal Impact and Financing Plan

- The $84.0 million project will be debt-financed with system revenue bonds and amortized over an approximate thirty-year term. The annual debt service will be funded by tuition and is included in current budget planning.

- The estimated incremental increase in annual O&M costs associated with this project of $1,102,868 will be funded by tuition.

- **Debt Ratio Impact**: The projected incremental debt ratio impact for this project is 0.14 percent.

Occupancy Plan

- The Herberger Institute for Design and the Arts will consolidate academic programs into the new Tempe Campus Academic and Office Space including Photography, Animation, Expanded Arts, Music Therapy, Design Architecture, and Arts, Media and Engineering.

- Leasable retail space also will be available on the first floor.

Statutory/Policy Requirements

- ABOR Policy 7-102 requires all major capital projects with an estimated total project cost of $10 million or more to be included in the Annual Capital Plan, including new construction, renovation, infrastructure, information technology or third-party projects.

Capital Project Information Summary

University: Arizona State University **Project Name:** Tempe Campus Academic and Office Space

Project Description and Location: This new five-story, approximately 128,000 gross-square-foot facility will provide needed space for university academic programs, offices, hospitality and leasable retail space. Located on the Tempe campus east of Mill Avenue between Ninth and Tenth Streets, as depicted on the attached map as Exhibit C, the new facility will share a common wall with the west end of the new Mill Avenue parking structure, which is currently under construction and will separate the two projects.

Project Schedule:

Planning	June	2022
Design Start	July	2022
Construction Start	December	2022
Construction Completion	August	2024

Project Budget:

Total Project Cost	$	84,000,000
Total Project Construction Cost	$	67,000,000
Total Project Cost per GSF	$	656
Construction Cost per GSF	$	523

Estimated Annual O&M Cost:

Utilities	$	349,186
Personnel		285,280
All Other Operations		468,402
Subtotal	$	1,102,868

Funding Sources:

A. System Revenue Bonds	$	84,000,000
Debt Service Funding Source:		Tuition
Operation/Maintenance	$	1,102,868
Funding Source:		Tuition

EXECUTIVE SUMMARY

Capital Project Budget Summary

University: Arizona State University
Project: Tempe Campus Academic and Office Space

	Annual Capital Plan
Capital Costs	
1. Land Acquisition	
2. Construction Cost	
A. New Construction	$ 67,000,000
B. Tenant Improvement	
C. Special Fixed Equipment	-
D. Site Development (excl. 2.E.)	-
E. Parking and Landscaping	-
F. Utilities Extensions	-
G. Other* (Demolition/abatement)	-
Subtotal Construction Cost	$ 67,000,000
3. Fees	
A. CMAR Pre-Construction	$ 600,000
B. Architect/Engineer	6,400,000
C. Other	-
Subtotal Consultant Fees	$ 7,000,000
4. FF&E Movable	$ 1,600,000
5. Contingency, Design Phase	860,000
6. Contingency, Constr. Phase	1,500,000
7. Parking Reserve	-
8. Telecommunications Equipment	3,300,000
Subtotal Items 4-8	$ 7,260,000
9. Additional University Costs	
A. Surveys, Tests, Haz. Mat. Abatement	$ 101,000
B. Move-in Costs	100,000
C. Printing Advertisement	5,000
D. Keying, signage, facilities support	94,000
E. Project Management Cost	2,163,000
F. State Risk Mgt. Ins. (.0034 **)	277,000
Subtotal Addl. Univ. Costs	$ 2,740,000
Total Capital Cost	$ 84,000,000

* Universities shall identify items included in this category.

** State Risk Management Insurance factor is calculated on construction costs and consultant fees.

EXECUTIVE SUMMARY

Exhibit C
Tempe Campus Academic and Office Space
Site Location Map

Acacia Hall	ACACI 7E	**College Ave. Market**	CAM 3C	**Health Service**	HSB 4D	**Northern Chiller Plant**	NCP 3D	**Sun Devil Stadium**	STAD 2D
Accuritas Hall	ACHAL 6F	**College Ave. Commons**	CAWC 3C	**Honors Hall**	HONHAL 7F	**Off-Camp. Stdnt. Srv.**	OCSS 5G	**Sun Angel Stadium**	TRACK 2F
Adelphi Commons	ADEL 7F	**Cmb'd Heat & Pwr. Fac.**	CHPF 6F	**Interdisciplin. A/B**	INTDSA/B 6C	**Old Main**	MAIN 4D	**The Annex**	ANX 3C
Agave Hall	AGVHAL 7F	**Community Serv. Bldg.**	CSB 1F	**Intrdiscip. Sc. & Tech. 1**	ISTB1 5D	**Orchidhouse (Brckyd.)**	BYOH 3B	**Tooker House A-D**	TKRHA-D 3D
Aquatic Complex	AQUAT 3D	**Coor Hall**	COOR 5B	**Intrdiscip. Sc. & Tech. 2**	ISTB2 4E	**Palo Verde East**	PVE 3D	**Tower Center**	TOWER 4B
Armstrong Hall	ARM 6E	**Cottonwood Hall**	CWHAL 7F	**Intrdiscip. Sc. & Tech. 4**	ISTB4 6F	**Palo Verde West**	PVW 3D	**University Cntr. A-C**	UCNTRA-C 3H
Arroyo Hall	ARHAL 7E	**Cowden Fam. Rsrcs.**	COWDN 4C	**Intrdiscip. Sc. & Tech. 5**	ISTB5 4E	**Payne Hall**	EDB 5B	**University Club**	UCLUB 4D
Art Building	ART 4B	**Creativity Commons**	CRTVC 6D	**Irish Hall**	IRISH 7C	**Perform. & Media Arts**	APMA 3G	**University Services Bldg.**	USB 8G
Art Warehouse	ARWH 4B	**Danforth Chapel**	CHAPL 5C	**Jojoba Hall**	JOBA 7E	**Physical Sci. Wings**	PSB-H 4D	**Urban Systems Engin.**	USE 4E
ASU at Mirabella	MRBLA 4B	**Desert Financial Arena**	DFA 3E	**Juniper Hall**	JNHAL 7F	**Piper Writers House**	PWH 4D	**University Towers**	UNIVT 2C
Best Hall	MB 7C	**Design Annex**	DSGNX 3C	**Life Sciences Center**	LS 5D	**Police**	ASUPD 7C	**Verbena Hall**	VBHAL 6F
Business Admin.	BA 6C	**Design North**	CDN 4B	**Life Sciences C-wing**	LSC 5D	**Psychology Building**	PSY 5E	**Verde Dickey Dome**	VDDM 6F
Business Admin. C Wing	BAC 6D	**Design South**	CDS 4B	**Life Sciences Tower**	LSE 5D	**Psychology North**	PSYN 4E	**Vista del Sol Cmplx.**	VDS 8E
Biodsgn. Inst. Bldg. A	BDA 5F	**Discovery Hall**	DISCVRY 6C	**Lyceum Theatre**	LYC 4C	**Rosewood Hall**	RWHAL 6F	**Villas @ Vista del Sol**	VVDS 8E
Biodsgn. Inst. Bldg. B	BDB 5F	**Dixie Gammage Hall**	GHALL 5C	**Manzanita Hall**	MANZH 4E	**Ross-Blakley Hall**	RBHL 6E	**Walton Cntr. for Plntry. Hlth.**	WCPH 4F
Biodsgn. Inst. Bldg. C	BDC 5F	**Durham Hall**	DH 4C	**Matthews Center**	MCENT 5C	**Sage Hall**	SGHAL 7F	**Weatherup Center**	WUC 3H
Bookstore	BKSTR 6D	**Education Lecture Hall**	EDC 6B	**Material Srv. Bldg.**	MSB 8G	**San Pablo Hall**	PABLO 3D	**West Hall**	WHALL 5C
Brickyard Artisan Crtyrd.	BYAC 3B	**Engineering Center**	ECA-G 5D	**Matthews Hall**	MHALL 5C	**Schwada Building**	SCOB 5E	**Wexler Hall**	WXLR 4D
Brickyard Engnr.	BYENG 3A	**Englh. Research Cntr.**	ENGRC 5D	**McClintock Hall**	MCL 5C	**Sch. Hu. Ev. Soc. Chg.**	SHESC 4C	**Willow Hall**	WILOHAL 6F
Bulldog Hall	BDH 6E	**Farmer Education Bldg.**	ED 6B	**McCord Hall**	MCRD 6D	**Social Sciences**	SS 5C	**Wilson Hall**	WILSN 5C
Campus Chldrn's Cntr.	CHILD 5G	**Fulton Center**	FULTN 4C	**Memorial Union**	MU 8C	**Sonora Center**	SCD 8F	**Womens Gymst. Trng.**	WGTF 2H
Carson Stdnt Ath Cntr.	CSAC 2D	**Gammage Auditorium**	GGMA 6B	**Mesquite Hall**	MSHAL 6F	**Stauffer Comm.**	STAUF 5B	**Wrestling Training Fac.**	WTF 2H
Centerpoint	CTRPT 3A	**Goldwater Center**	GWC 4E	**Moeur Building**	MOEUR 6C	**Sun Devil Fit. Cmplx.**	SDFCT 8E	**Wrigley Hall**	WGHL 4C
Ceneus Hall	CERHAL 7F	**Greek Ldrsp. Vlg. A-D**	GLVA-D 5G	**Mohave Hall**	MVHAL 7E	**Student Athlete Facility**	SAF 1D	**Zero Waste Office**	ZWO 8G
Center for Fam. Studies	CFS 4C	**Greek Ldrsp. Vlg. CC.**	GLVCC 5G	**Murdock Lecture Hall**	MUR 5D	**Student Pavilion**	STPV 5D	**777 Tower at Novus**	NVS1 3F
Central Plant	CP 5D	**Grounds Maint. Facility**	GMF 8G	**Music Building**	MUSIC 6B	**Student Services Bldg.**	SSV 6C		
Central Plant South	CPS 8F	**Harrington-Birchett House**	HBH 3C	**Neeb Hall**	NEEB 5B	**Sun Angel Clubhouse**	SAC 1H		
Cholla Apartments	CHOLA 5G	**Hayden Hall**	HAYDN 7C	**Nelson Fine Arts Center**	FAC 5B	**Sun Devil Hall**	SDH 6D		
Chuparosa Hall	CHUPA 7E	**Hayden Library**	LIB 5C	**Noble Sci. Library**	NOBLE 5E	**Sun Devil Sports Perf.**	SDSP 3H		

Arizona State University
Annual Capital Plan - Project Justification Report
Herberger Residence Hall – Public Private Partnership

Previous Board Action

- FY 2023–2025 Capital Improvement Plan October 2021

Project Justification/Description/Scope

- This seven-story, approximately 256,694 gross-square-foot facility will consist of approximately 830 residence hall beds as well as an estimated 28,247 SF of dining, classroom and office spaces and indoor/outdoor common areas targeting the Herberger Institute of Design and the Arts lower-division undergraduate students on ASU Tempe campus. The facility will be located between Mill Avenue and South Myrtle Avenue and East 10th Street and East 9th Street, as depicted on the map attached as Exhibit D.

- The location is central to Herberger Institute of Design and the Arts-related facilities, including Grady Gammage Memorial Auditorium, the music school, Nelson Fine Arts Center, Stauffer Community Arts and the Design School.

- The university is not able to meet the need for on-campus student housing at the Tempe campus, as demand continues to outpace supply.

- This new living and learning facility will support University and ABOR goals of advancing student learning and empowering educational success through a safe, clean and affordable environment by facilitating connections, engagement and collaboration through student programming opportunities. Student success and retention rates improve significantly when students reside on campus. Purposeful student programming and the relationship development that occurs when staff live on-site and interact directly with students has been proven to increase student satisfaction, engagement and retention.

Project Delivery Method and Process

- ASU will contract with American Campus Communities (ACC) for development and management of this third-party project.

- ACC is a leading developer and manager of student housing that has developed and managed multiple residential housing projects for ASU, such as the Barrett Honors College, Tooker House and Greek Leadership Village.

Project Status and Schedule

- It is anticipated that the project will begin construction in September 2023 to support occupancy for the fall 2025 term.

Project Cost

- Presented to the board as a separate project, ASU will finance and develop the approximately 28,247 gross-square-feet of dining, academic and office space totaling $27.6 million.

Fiscal Impact and Financing Plan

- ACC will provide approximately $113.5 million for construction of the new facility, net of the dining, academic and office space which ASU will finance. The project will be financed by ACC through its American Campus Equity (ACE) program.

- ACC is responsible for the costs of maintaining the facility with the exception of the dining, classroom and office spaces, which ASU will manage. Minimum standards of operation (both maintenance and staffing) will be comparable to similar ASU-owned and operated student housing.

- ASU has determined that, given its existing debt capacity, the priority of academic and research facility needs, and the existence of a private sector capability to develop student housing, it can best meet the housing needs of the Tempe campus through a public/private partnership.

- Approval to enter into a long-term ground lease with ACC will be brought to ABOR for approval in a separate Board Action Item at a future meeting.

- ASU will provide appropriate residential life programming and staffing for the new facility at a level consistent with other comparable on-campus housing. ACC will employ a general manager and maintenance staff for the facility. ACC and ASU will establish a Joint Advisory Committee responsible for the day-to-day operations of the housing facility, including review and approval of the annual operating budget, capital budget, staffing plan and any proposed changes in programs, policies and

procedures. ACC retains ultimate control of those decisions that result in a material economic consequence to ACC, provided that minimum standards of operation have been satisfied.

Occupancy Plan

- When the hall opens in fall 2025 the mixed-unit housing complex will provide approximately 830 beds to meet demand for incoming freshman and sophomore-and-above students.

Statutory/Policy Requirements

- ABOR Policy 7-102(A)(3) requires approval of major capital projects where the board and the university share with other entities (e.g., federal, state, local, development groups, public/private ventures, etc.) the control, financing or ownership (current or future) of the project and/or its delivery process and that are for university use and subject to review under Board Policy 7-207(A)(1).

- ABR Policy 7-207 (A) requires that all lease agreements and amendments of lease agreements of real property, including lease agreements in connection with any development of capital projects, as defined in board policy 7-102(A)(3) shall be reviewed by the Finance, Capital and Resources Committee and approved by the board before becoming effective.

EXECUTIVE SUMMARY

Exhibit D
Herberger Residence Hall
Site Location Map

Arizona State University
Annual Capital Plan Project Justification Report
Herberger Dining and Academic Space within Herberger Residence Hall

Previous Board Action

- FY 2023–2025 Capital Improvement Plan October 2021

Project Justification/Description/Scope

- This project, totaling approximately 28,247 gross-square-feet, will include roughly 13,366 SF of academic space and 14,881 SF of dining/kitchen space within the proposed seven-story, 256,694 gross-square-foot Herberger residence hall on the ASU Tempe campus, to be located between Mill Avenue and South Myrtle Avenue and East 10th Street and East 9th Street, as depicted on the map attached as Exhibit E.

- The academic spaces will include instructional areas to support a variety of Herberger Institute programs as well as communal outdoor gathering spaces. The dining hall will include a kitchen and offer plenty of space for students to eat, study and gather.

- The location is central to the Herberger Institute of Design and the Arts-related facilities including Grady Gammage Memorial Auditorium, the music school, Nelson Fine Arts Center, Stauffer Community Arts and the Design School.

- The new academic space will facilitate university and ABOR goals of advancing student learning and empowering educational success through a safe, clean and affordable environment by offering connections, engagement and collaboration through student programming opportunities.

Project Delivery Method and Process

- ASU will contract with American Campus Communities (ACC) for development and management of this third-party project.

- ACC is a leading developer and manager of student housing that has developed and managed multiple residential housing projects for ASU such as the Barrett Honors College Housing, Tooker House and Greek Leadership Village.

- The developer in association with ASU selected Okland Construction as the contractor and Sherman Carter Barnhart Architects as the architect.

Project Status and Schedule

- It is anticipated that the project will begin construction in September 2023 to support occupancy for the fall 2025 term.

Project Cost

- The budget for this approximately 28,247 gross-square-foot project is $27.6 million. The budget represents an estimated construction cost of $21,463,118, which is $760 per GSF. The estimated total project cost is $977 per GSF.

- Comparable Projects:

Project	Description	Location	Project Size GSF	Total Project Cost/GSF	Year Completed
Fusion on First (academic portion)	Lowest three levels of a 16-story building. Music and fashion studios, classrooms and maker spaces.	Downtown Phoenix	76,293	$650	2021
Durham Hall	Six-level classroom and office building.	Tempe	142,913	$455	2021
Average Comparable Total Project Cost				**$553**	

Fiscal Impact and Financing Plan

- The project will be debt-financed with system revenue bonds totaling approximately $27.6 million and amortized over a thirty-year term. The annual debt service will be funded by auxiliary revenues and tuition. The auxiliary revenue portion of the debt service will be generated from the expansion of dining operations in the facility and the tuition portion is included in current budget planning.

- ASU will be responsible for operations and maintenance of the leased space and a portion of common facility expenses. Operations and maintenance costs are estimated at $173,036 annually and will be funded by auxiliary revenues and tuition.

- **Debt Ratio Impact**: The projected incremental debt ratio impact for this project is 0.05 percent.

Occupancy Plan

- When the hall opens in fall 2025, the facility will provide academic, kitchen, dining and common spaces for the approximately 830 students living within the Herberger Residence Hall and visitors.

- No backfill plan is associated with this new construction project.

Statutory/Policy Requirements

- ABOR Policy 7-102 requires all major capital projects with an estimated total project cost of $10 million or more to be included in the Annual Capital Plan, including new construction, renovation, infrastructure, information technology, and third-party projects.

Capital Project Information Summary

University: Arizona State University **Project Name:** Herberger Dining and Academic Space within Herberger Residence Hall

Project Description and Location: This project, totaling approximately 28,247 gross-square-feet, will include roughly 13,336 SF of academic space and 14,881 SF of dining/kitchen space within the proposed seven-story, 256,694 gross-square-foot Herberger residence hall on the ASU Tempe campus, located between Mill Avenue and South Myrtle Avenue and East 10th Street and East 9th Street, as depicted on the map attached as Exhibit A.

Project Schedule:

Planning	May	2022
Design Start	May	2022
Construction Start	September	2023
Construction Completion	August	2025

Project Budget:

Total Project Cost	$	27,600,000
Total Project Construction Cost	$	21,463,118
Total Project Cost per GSF	$	977
Construction Cost per GSF	$	760

Estimated Annual O&M Cost:

Utilities	$	78,747
Personnel	$	0
All Other Operations	$	94,289
Subtotal	$	173,036

Funding Sources:

A. System Revenue Bonds	$	27,600,000
Debt Service Funding:	Auxiliary Revenue, Tuition	
Operation/Maintenance	$	173,036
Funding Source:	Auxiliary Revenue, Tuition	

EXECUTIVE SUMMARY

Capital Project Budget Summary

University: Arizona State University
Project: Herberger Academic Space within Herberger Residence Hall

	Annual Capital Plan
Capital Costs	
1. Land Acquisition	
2. Construction Cost	
A. New Construction	$ 27,600,000
B. Tenant Improvement	
C. Special Fixed Equipment	-
D. Site Development (excl. 2.E.)	-
E. Parking and Landscaping	-
F. Utilities Extensions	-
G. Other* (Demolition/abatement)	-
Subtotal Construction Cost	$ 27,600,000
3. Fees	
A. CMAR Pre-Construction	$ -
B. Architect/Engineer	-
C. Other	-
Subtotal Consultant Fees	$ -
4. FF&E Movable	$ -
5. Contingency, Design Phase	-
6. Contingency, Constr. Phase	-
7. Parking Reserve	-
8. Telecommunications Equipment	-
Subtotal Items 4-8	$ -
9. Additional University Costs	
A. Surveys, Tests, Haz. Mat. Abatement	$ -
B. Move-in Costs	-
C. Printing Advertisement	-
D. Keying, signage, facilities support	-
E. Project Management Cost	-
F. State Risk Mgt. Ins. (.0034 **)	-
Subtotal Addl. Univ. Costs	$ -
Total Capital Cost	$ 27,600,000

* Universities shall identify items included in this category.

** State Risk Management Insurance factor is calculated on construction costs and consultant fees.

EXECUTIVE SUMMARY

Exhibit E
Herberger Academic Space within Herberger Residence Hall
Site Location Map

Acacia Hall	ACACI 7E	**College Ave. Market**	CAM 3C	**Health Service**	HSB 4D	**Northern Chiller Plant**	NCP 3D	**Sun Devil Stadium**	STAD 2D
Acourtia Hall	ACHAL 6F	**College Ave. Commons**	CAVC 3C	**Honors Hall**	HONHAL 7F	**Off-Camp. Stdnt. Srv.**	OCSS 5G	**Sun Angel Stadium**	TRACK 2F
Adelphi Commons	ADEL 7F	**Cmb'd Heat & Pwr. Fac.**	CHPF 6F	**Interdisciplin. A/B**	INTDSA/B 6C	**Old Main**	MAIN 4D	**The Annex**	ANX 3C
Agave Hall	AGVHAL 7F	**Community Serv. Bldg.**	CSB 1F	**Intrdiscip. Sc. & Tech. 1**	ISTB1 5D	**Orchidhouse (Brckyd.)**	BYOH 3B	**Tooker House A-D**	TKRHA-D 3D
Aquatic Complex	AQUAT 3D	**Coor Hall**	COOR 5B	**Intrdiscip. Sc. & Tech. 2**	ISTB2 4E	**Palo Verde East**	PVE 3D	**Tower Center**	TOWER 4B
Armstrong Hall	ARM 6E	**Cottonwood Hall**	CWHAL 7F	**Intrdiscip. Sc. & Tech. 4**	ISTB4 5F	**Palo Verde West**	PVW 3D	**University Cntr. A-C**	UCNTRA-C 3H
Arroyo Hall	ARHAL 7E	**Cowden Fam. Rsrcs.**	COWDN 4C	**Intrdiscip. Sc. & Tech. 5**	ISTB5 4E	**Payne Hall**	EDB 5B	**University Club**	UCLUB 4D
Art Building	ART 4B	**Creativity Commons**	CRTVC 6D	**Irish Hall**	IRISH 7C	**Perform. & Media Arts**	APMA 3G	**University Services Bldg.**	USB 8G
Art Warehouse	ARWH 4B	**Danforth Chapel**	CHAPL 5C	**Jojoba Hall**	JOBA 7E	**Physical Sci. Wings**	PSB-H 4D	**Urban Systems Engin.**	USE 4E
ASU at Mirabella	MRBLA 4B	**Desert Financial Arena**	DFA 3E	**Juniper Hall**	JNHAL 7F	**Piper Writers House**	PWH 4D	**University Towers**	UNIVT 2C
Best Hall	MB 7C	**Design Annex**	DSGNX 3C	**Life Sciences Center**	LS 5D	**Police**	ASUPD 7C	**Verbena Hall**	VBHAL 6F
Business Admin.	BA 6C	**Design North**	CDN 4B	**Life Sciences C-wing**	LSC 5D	**Psychology Building**	PSY 5E	**Verde Dickey Dome**	VDDM 6F
Business Admin. C Wing	BAC 6D	**Design South**	CDS 4B	**Life Sciences Tower**	LSE 5D	**Psychology North**	PSYN 4E	**Vista del Sol Cmplx.**	VDS 8E
Blodsgn. Inst. Bldg. A	BDA 5F	**Discovery Hall**	DISCVRY 6C	**Lyceum Theatre**	LYC 4C	**Rosewood Hall**	RWHAL 6F	**Villas @ Vista del Sol**	VVDS 8E
Blodsgn. Inst. Bldg. B	BDB 5F	**Dixie Gammage Hall**	GHALL 5C	**Manzanita Hall**	MANZH 1E	**Ross-Blakley Hall**	RBHL 8E	**Walton Cntr. for Plntry. Hlth.**	WCPH 4F
Blodsgn. Inst. Bldg. C	BDC 5F	**Durham Hall**	DH 4C	**Matthews Center**	MCENT 5C	**Sage Hall**	SGHAL 7F	**Weatherup Center**	WUC 3H
Bookstore	BKSTR 6D	**Education Lecture Hall**	EDC 6B	**Material Srv. Bldg.**	MSB 8G	**San Pablo Hall**	PABLO 3D	**West Hall**	WHALL 5C
Brickyard Artisan Crtyrd.	BYAC 3B	**Engineering Center**	ECA G 5D	**Matthews Hall**	MHALL 5C	**Schwada Building**	SCOB 5E	**Wexler Hall**	WXLR 4D
Brickyard Engnr.	BYENG 3A	**Engin. Research Cntr.**	ENGRC 5D	**McClintock Hall**	MCL 5C	**Sch. Hu. Ev. Soc. Chg.**	SHESC 4C	**Willow Hall**	WILOHAL 6F
Bulldog Hall	BDH 6E	**Farmer Education Bldg.**	ED 6B	**McCord Hall**	MCRD 6D	**Social Sciences**	SS 5C	**Wilson Hall**	WILSN 6C
Campus Chldrn's Cntr.	CHILD 5G	**Fulton Center**	FULTN 4C	**Memorial Union**	MU 6C	**Sonora Center**	SCD 8F	**Womens Gymst. Trng.**	WGTF 2H
Carson Stdnt Ath Cntr.	CSAC 2D	**Gammage Auditorium**	GGMA 6B	**Mesquite Hall**	MSHAL 6F	**Stauffer Comm.**	STAUF 5B	**Wrestling Training Fac.**	WTF 2H
Centerpoint	CTRPT 3A?	**Goldwater Center**	GWC 4E	**Moeur Building**	MOEUR 6C	**Sun Devil Fit. Cmplx.**	SDFCT 8E	**Wrigley Hall**	WGHL 4C
Cereus Hall	CERHAL 7F	**Greek Ldrsp. Vlg. A-D**	GLVA D 5G	**Mohave Hall**	MVHAL 7E	**Student Athlete Facility**	SAF 1D	**Zero Waste Office**	ZWO 8G
Center for Fam. Studies	CFS 4C	**Greek Ldrsp. Vlg. CC.**	GLVCC 5G	**Murdock Lecture Hall**	MUR 5D	**Student Pavilion**	STPV 5D	**777 Tower at Novus**	NVS1 3F
Central Plant	CP 5D	**Grounds Maint. Facility**	GMF 8G	**Music Building**	MUSIC 6B	**Student Services Bldg.**	SSV 6C		
Central Plant South	CPS 8F	**Harrington-Birchett House**	HBH 3C	**Neeb Hall**	NEEB 5B	**Sun Angel Clubhouse**	SAC 1H		
Cholla Apartments	CHOLA 5G	**Hayden Hall**	HAYDN 7C	**Nelson Fine Arts Center**	FAC 5B	**Sun Devil Hall**	SDH 6D		
Chuparosa Hall	CHUPA 7E	**Hayden Library**	LIB 5C	**Noble Sci. Library**	NOBLE 5E	**Sun Devil Sports Perf.**	SDSP 8H		

Arizona State University
Annual Capital Plan Project Justification Report
Casa De Oro Residence Hall Phase II – Public Private Partnership

Previous Board Action

- FY 2023–2025 Capital Improvement Plan October 2021

Project Justification/Description/Scope

- This four-story, approximately 134,264 gross-square-foot facility will consist of new student housing with academic, innovation and core support spaces for students at ASU West campus, between North University Way and West Wood Drive on North 49th Way, as depicted on the map attached as Exhibit F.

- ASU West campus programs continue to expand due to increased student enrollment. Enrollment increases are attributable to programs offerings in cyber security and gaming. Increases are anticipated within the following schools at the West Campus: New College, Barrett Honors College, Carey School of Business, Watts College of Public Service, Thunderbird Global Management, Health Solutions, Nursing and Mary Lou Fulton Teachers College.

- The university is not able to meet the demand for on-campus student housing at the West Campus, with Casa De Oro and Las Casas Residence Halls at capacity.

- Through its agreement with ASU, American Campus Communities Development Partners will construct the new residence hall that will support approximately 500 beds, targeted for college undergraduate students. Outdoor common areas and interior amenity spaces will be included to support student activities and events.

- The construction of this new living and learning facility will support University and ABOR goals of advancing student learning and empowering educational success through a safe, clean and affordable environment by facilitating connections, engagement and collaboration through student programming opportunities. Student success and retention rates improve significantly when students reside on campus. Purposeful student programming and the relationship development that occurs when staff live on-site and interact directly with students has been proven to increase student satisfaction, engagement and retention.

Project Delivery Method and Process

- ASU will contract with American Campus Communities (ACC) for development and management of the next phase of student housing at the West Campus.

- The university selected ACC due to its robust track record of successful student housing projects including as the developer and operator of Barrett Honors College Housing, Tooker House and Greek Leadership Village on the Tempe Campus.

- The developer in association with ASU selected Okland Construction as the contractor and Todd and Associates as the architect for this third-party project.

Project Status and Schedule

- It is anticipated that the project will begin construction in February 2023 to support occupancy for the fall 2024 term.

Fiscal Impact and Financing Plan

- American Campus Communities will provide approximately $54 million of capital for construction of the new facility and will be responsible for the costs of maintaining the student housing facility. Minimum standards of operation (both maintenance and staffing) will be comparable to similar ASU-owned and operated student housing.

- ASU has determined that, given its existing debt capacity, the priority of academic and research facility needs, and the existence of a private sector capability to develop student housing, it can best meet the housing needs of the West Campus through a public/private partnership.

- Approval to enter into a long-term ground lease will be brought to ABOR for approval in a separate Board Action Item at a future meeting.

- ASU may master lease a portion of the beds within the project. Annual leases within the project will be funded from University Housing revenues.

- ASU will provide appropriate residential life programming and staffing for the new facility at a level consistent with other comparable on-campus housing. ACC will employ a general manager and maintenance staff for the facility. ACC and ASU will establish a Joint Advisory Committee responsible for the day-to-day operations of the housing facility, including review and approval of the annual operating budget, capital budget, staffing plan and any proposed changes in programs, policies and

procedures. ACC retains ultimate control of those decisions that result in a material economic consequence to ACC, provided that minimum standards of operation have been satisfied

Occupancy Plan

- When the hall opens in fall 2024, the housing complex will provide approximately 500 beds to meet demand from incoming students.

Statutory/Policy Requirements

- ABOR Policy 7-102(A)(3) requires approval of major capital projects where the board and the university share with other entities (e.g., federal, state, local, development groups, public/private ventures, etc.) the control, financing, or ownership (current or future) of the project and/or its delivery process and that are for university use and are subject to review under Board Policy 7-207(A)(1).

- ABOR Policy 7-207(A) requires that all lease agreements and amendments of lease agreements of real property, including lease agreements in connection with any development of capital projects, as defined in board policy 7-102(A)(3) shall be reviewed by the Finance, Capital and Resources Committee and approved by the board before becoming effective.

Exhibit F
Casa De Oro Residence Hall Phase II – Public Private Partnership
Site Location Map

Casa de Oro CDOR 3D
- Student Housing

Central Plant CPL 4D

Central Services Complex CSC 4D
- ASU Police
- Facilities Development & Management
- Mail Services

Classroom Lab/ Computer Classroom CLCC 3F
- Faculty & Staff Offices

Faculty/Administration Bldg. FAB 3F
- Administration Offices
- Classrooms & Labs
- Faculty & Staff Offices
- Future Sun Devil Welcome Center
- Human Resources

Fletcher Library FLHLB 4E
- @west news
- Computing Commons
- Fletcher Library
- Starbucks®
- Student Group Study Rooms
- Student Success Center

Herberger Young Scholars Academy HYSA 3D

Kiva Lecture Hall KIVA 3E

Las Casas Residence Hall CASA 3C
- Student Housing

North Services Building NSB 2E
- Credit Union ATM
- Parking & Transit Services
- Sun Card Office

Sands Classroom Building SANDS 3E
- Classrooms

Sun Devil Fitness Cplx. SDFCW 3D
- Lost & Found

University Center Building UCB 3E
- ATM
- Barrett, the Honors College
- Café West
- Career Services
- Cashier's Office
- Chick-fil-A
- Disability Resource Center
- Financial Aid
- Game Room
- Health Services
- Information Desk
- Intramurals
- La Sala Auditorium
- Meeting Rooms / Classrooms
- Osher Lifelong Learning Inst. at ASU
- Second Stage West
- Student Government Offices
- Student Lounge
- Student Services
- Sun Devil Campus Store
- Veteran Services
- Writing Center

Verde Dining Pavilion VRDE 3D
- Devils Den
- Jamba Juice
- P.O.D. Market (Provisions on Demand)

Arizona State University
Annual Capital Plan Project Justification Report
West Campus New Academic Building

Previous Board Action

- FY 2023–2025 Capital Improvement Plan October 2021

Project Justification/Description/Scope

- This four-story, approximately 55,000 gross-square-foot facility will consist of new student gallery space, computer labs, drawing labs, faculty offices and future growth spaces on the ASU West campus, between North University Way and West Wood Drive on North 49th Way, as depicted on the map attached as Exhibit G.

- The university is not able to meet the demand for on-campus academic space at the West Campus. Increases are anticipated within the following schools at the West campus: New College, Barrett Honors College, Carey School of Business, Watts College of Public Service, Thunderbird Global Management, Health Solutions, Nursing and Mary Lou Fulton Teachers College, as well as new programs with Fulton Schools of Engineering.

- The new academic building, along with the proposed 141,608 gross-square-foot Casa De Oro Residence Hall with approximately 500 beds, at the West campus will facilitate university and ABOR goals of advancing student learning and empowering educational success through a safe, clean and affordable environment by offering connections, engagement and collaboration through student programming opportunities.

Project Delivery Method and Process

- The project will be constructed through the CMAR delivery method. This approach was selected to streamline project delivery and to alleviate potentially adversarial project environments.

- ASU selected Todd and Associates as the architect via a bid waiver as it has developed academic plans for the project and was selected via the design professionals ARFQ selection.

- ASU will solicit invitations to bid via a CMAR ARFQ process in accordance with ABOR requirements for the construction of the project.

Project Status and Schedule

- It is anticipated that the project will begin construction in March 2023 and complete in December 2024 to support occupancy for the spring 2025 term.

Project Cost

- The budget for this approximately 55,000 gross-square-foot project is $33.5 million. The budget represents an estimated construction cost of $468 per gross square foot. The estimated total cost is $609 per gross square foot.

- Comparable Projects:

Project	Description	Location	Project Size GSF	Total Project Cost/GSF	Year Completed
Fusion on First (academic portion)	Lowest three levels of a 16-story building. Music and fashion studios, classrooms and maker spaces.	Downtown Phoenix	76,293	$650	2021
Durham Hall Renovation	Six-level classroom and office building.	Tempe	142,913	$455	2021
Average Comparable Total Project Cost				**$553**	

Fiscal Impact and Financing Plan

- The project will be debt-financed with system revenue bonds totaling approximately $33.5 million and amortized over a thirty-year term. The annual debt service will be funded by tuition and is included in current budget planning.

- Operations and maintenance costs are estimated at $530,224 annually and will be funded by tuition.

- **Debt Ratio Impact**: The projected incremental debt ratio impact for this project is 0.06 percent.

Occupancy Plan

- When the facility opens in spring 2025, it will include new student gallery space, computer labs, drawing labs, faculty offices and future growth spaces serving students on ASU West campus

Statutory/Policy Requirements

- ABOR Policy 7-102 requires all major capital projects with an estimated total project cost of $10 million or more to be included in the Annual Capital Plan, including new construction, renovation, infrastructure, information technology or third-party projects.

Capital Project Information Summary

University: Arizona State University **Project Name:** West Campus New Academic Building

Project Description and Location: This four-story facility, totaling approximately 55,000 gross-square-feet, will consist of new student gallery space, computer labs, drawing labs, faculty offices and future growth spaces on the ASU West campus, between North University Way and West Wood Drive on North 49th Way, as depicted on the map attached as Exhibit A.

Project Schedule:

Planning	May	2022
Design Start	May	2022
Construction Start	March	2023
Construction Completion	December	2024

Project Budget:

Total Project Cost	$	33,500,000
Total Project Construction Cost	$	25,717,200
Total Project Cost per GSF	$	609
Construction Cost per GSF	$	468

Estimated Annual O&M Cost:

Utilities	$	163,681
Personnel	$	150,362
All Other Operations	$	216,181
Subtotal	$	530,224

Funding Sources:

A. System Revenue Bonds	$	33,500,000
Debt Service Funding Source:		Tuition
Operation/Maintenance	$	530,224
Funding Source:		Tuition

EXECUTIVE SUMMARY

Capital Project Budget Summary

University: Arizona State University
Project: West Campus New Academic Building

	Annual Capital Plan
Capital Costs	
1. Land Acquisition	
2. Construction Cost	
A. New Construction	$ 25,717,200
B. Tenant Improvement	
C. Special Fixed Equipment	-
D. Site Development (excl. 2.E.)	-
E. Parking and Landscaping	-
F. Utilities Extensions	200,000
G. Other* (Demolition/abatement)	-
Subtotal Construction Cost	$ 25,917,200
3. Fees	
A. CMAR Pre-Construction	$ -
B. Architect/Engineer	1,295,860
C. Other	105,266
Subtotal Consultant Fees	$ 1,401,126
4. FF&E Movable	$ -
5. Contingency, Design Phase	194,379
6. Contingency, Constr. Phase	2,591,720
7. Parking Reserve	-
8. Telecommunications Equipment	2,000,000
Subtotal Items 4-8	$ 4,786,099
9. Additional University Costs	
A. Surveys, Tests, Haz. Mat. Abatement	$ 65,000
B. Move-in Costs	50,000
C. Printing Advertisement	5,000
D. Keying, signage, facilities support	300,000
E. Project Management Cost	865,010
F. State Risk Mgt. Ins. (.0034 **)	110,565
Subtotal Addl. Univ. Costs	$ 1,395,575
Total Capital Cost	$ 33,500,000

* Universities shall identify items included in this category.

** State Risk Management Insurance factor is calculated on construction costs and consultant fees.

Exhibit G
West Campus New Academic Building
Site Location Map

Casa de Oro CDOR 3D
- Student Housing

Central Plant CPL 4D

Central Services Complex CSC 4D
- ASU Police
- Facilities Development & Management
- Mail Services

Classroom Lab/ Computer Classroom CLCC 3F
- Faculty & Staff Offices

Faculty/Administration Bldg. FAB 3F
- Administration Offices
- Classrooms & Labs
- Faculty & Staff Offices
- Future Sun Devil Welcome Center
- Human Resources

Fletcher Library FLHLB 4E
- @west news
- Computing Commons
- Fletcher Library
- Starbucks®
- Student Group Study Rooms
- Student Success Center

Herberger Young Scholars Academy HYSA 3D

Kiva Lecture Hall KIVA 3E

Las Casas Residence Hall CASA 3C
- Student Housing

North Services Building NSB 2E
- Credit Union ATM
- Parking & Transit Services
- Sun Card Office

Sands Classroom Building SANDS 3E
- Classrooms

Sun Devil Fitness Cplx. SDFCW 3D
- Lost & Found

University Center Building UCB 3E
- ATM
- Barrett, the Honors College
- Café West
- Career Services
- Cashier's Office
- Chick-fil-A
- Disability Resource Center
- Financial Aid
- Game Room
- Health Services
- Information Desk
- Intramurals
- La Sala Auditorium
- Meeting Rooms / Classrooms
- Osher Lifelong Learning Inst. at ASU
- Second Stage West
- Student Government Offices
- Student Lounge
- Student Services
- Sun Devil Campus Store
- Veteran Services
- Writing Center

Verde Dining Pavilion VRDE 3D
- Devils Den
- Jamba Juice
- P.O.D. Market (Provisions on Demand)

Arizona State University
Annual Capital Plan – Project Justification Report
Classroom Office Building

Background/History of Previous Board Action

- Amended Capital Development Plan October 2021
- FY 2023–2025 Capital Improvement Plan October 2021

Project Justification/Description/Scope

- This multi-level facility will provide needed classroom, instructional, collaboration and office space to support the growth of academic programs that will enable student success. The facility will be located in the heart of the Tempe Campus, just west of the Hayden Library, as depicted on the attached map as Exhibit H.

- The planned academic facility will replace Wilson Hall, which was constructed as an approximately 33,713 gross-square-foot residence hall in 1956. This facility is inadequate due to age and the growing demand for student-centric spaces that will accommodate technology and support the evolving program needs associated with new fields of learning and teaching methodologies. Demolition of Wilson Hall will begin September 26, 2022 to enable construction of the new classroom office building.

- The new, approximately 169,626 gross-square-foot building will be comprised of classrooms of various sizes, academic office and support space, collaboration areas and student services spaces that will serve the entire University community. The project includes five floors above grade, programmable balcony space, a partial basement to support building services and a mechanical penthouse to be located on the roof.

- The facility will provide a centralized location for the School of Social Transformation, enable the colocation of the Sanford School of Social and Family Dynamics, and include updated office, counseling and testing spaces for the Student Accessibility and Inclusive Learning Services (SAILS) office. The facility also will include needed replacement learning environments in multiple configurations to allow the University to vacate outdated learning spaces in other areas of the campus.

- Also encompassed in this project is the replacement of approximately 1,000 linear feet of the underground utility tunnel network that will serve this and other west Tempe campus facilities. The tunnel is in a deteriorating condition and its replacement will

ensure the safe, reliable and sustainable operation of campus utility and information technology systems, as well as reduce the University's deferred maintenance.

- A revision to the original project budget is proposed to address cost increases and schedule delays due to global supply chain issues and local Phoenix market conditions.
- Disruptions to global supply chains are adversely affecting the availability, order-to-delivery time and cost of key construction materials.
    - The Phoenix labor market is currently experiencing a demand for skilled trades that exceeds the available resources. This demand is causing subcontractors to be selective on the projects they pursue and creating cost escalation and schedule impacts to committed projects.
    - Rider Levett Bucknall, ASU's cost consultant on this project, estimates construction cost index escalation in the Phoenix market is 6.1% between October 2021 and September 2022.

- The new academic space will facilitate University and ABOR goals of advancing student learning and empowering educational success through a safe, clean and affordable environment by offering connections, engagement and collaboration through student programming opportunities.

Project Delivery Method and Process

- This project will be delivered through the Design-Build (DB) delivery method. This approach was selected to facilitate a coordinated design with constant contractor input and guidance throughout the project development and costing phases.

- The project delivery work plan maximizes value through creating efficiencies in both the design phase and construction phase as a unified DB team, while ensuring complete alignment with ASU standards.

- ASU has selected Holder Construction with RSP Architects as the DB team for this project. The selection process included 14 responses and 5 teams were interviewed.

Project Status and Schedule

- The project began construction in February 2022. Project substantial completion is targeted for June 2024.

Project Cost

- The total budget for this approximately 169,626 gross-square-foot project is $113.1 million, an increase of $6 million from the previously approved project budget, to address cost increases resulting from unusually high inflation, global supply chain issues and local market conditions.

- The budget represents an estimated construction cost for the Classroom Office Building of $461 per gross square foot. The estimated total project cost for the Classroom Office Building is $581 per gross square foot.

- The Design-Builder will be at risk to provide the completed project within the agreed-upon GMP.

- Comparable Projects:

Project	Description	Location	Project Size GSF	Total Project Cost/GSF	Year Completed
Fusion on First (academic portion)	Lowest three levels of a 16-story building. Music and fashion studios, classrooms and maker spaces.	Downtown Phoenix	76,293	$650	2021
Thunderbird School of Global Management classroom/office	Multi-level classroom and office building with first floor retail space.	Downtown Phoenix	111,000	$604	2021
Average Comparable Total Project Cost				**$627**	

Fiscal Impact and Financing Plan

- As previously approved in the October 2021 Amended Capital Development Plan, $107.1 million of the project will be debt-financed with system revenue bonds and amortized over an approximate thirty-year term. The annual debt service will be funded by tuition and is included in current budget planning.

- The budget increase of $6.0 million will be funded with available general university funds.

- The estimated incremental increase in annual O&M costs associated with this project of $1,143,245 will be funded by tuition.

- **Debt Ratio Impact**: The project budget increase will not impact the university's debt ratio.

Occupancy Plan

- When this new facility opens in fall 2024, it will be accessible to all ASU Tempe campus students, providing needed classroom, instructional, collaboration and office space to support growing demand.

Statutory/Policy Requirements

- ABOR Policy 7-102 requires all major capital projects with an estimated total project cost of $10 million or more to be included in the Annual Capital Plan, including new construction, renovation, infrastructure, information technology or third-party projects.

Capital Project Information Summary

University: Arizona State University **Project Name:** Classroom Office Building

Project Description and Location: This project will construct a multi-level facility to provide needed classroom, instructional, collaboration and office space to support the growth of academic programs that will enable student success. Also encompassed in this project is the replacement of approximately 1,000 linear feet of the underground utility tunnel network to serve this and other campus facilities. This new academic and office building will replace the aging Wilson Hall, located in the heart of the Tempe campus, just west of Hayden Library, as depicted on Exhibit B.

Project Schedule:

Planning	March	2020
Design Start	April	2021
Construction	February	2022
Construction Completion	June	2024

Project Budget:

Total Project Cost	$ 113,100,000
Total Classroom Office Building Cost	$ 98,600,000
Total Tunnel Replacement Cost	$ 14,500,000
Total Building Construction Cost	$ 78,124,366
Total Tunnel Construction Cost	$ 12,338,751
Total Building Cost per GSF	$ 581
Total Building Construction Cost per GSF	$ 461

Change in Estimated Annual O&M Cost:

Utilities	$ 396,548
Personnel	$ 302,150
All Other Operations	$ 444,547
Subtotal	$ 1,143,245

Funding Sources:

A: System Revenue Bonds	$ 107,100,000
Debt Service Funding Sources:	Tuition
B: General University Funds	$ 6,000,000
Operation/Maintenance	$ 1,143,245
Funding Source:	Tuition

EXECUTIVE SUMMARY

Capital Project Budget Summary

University: Arizona State University
Project: Classroom Office Building

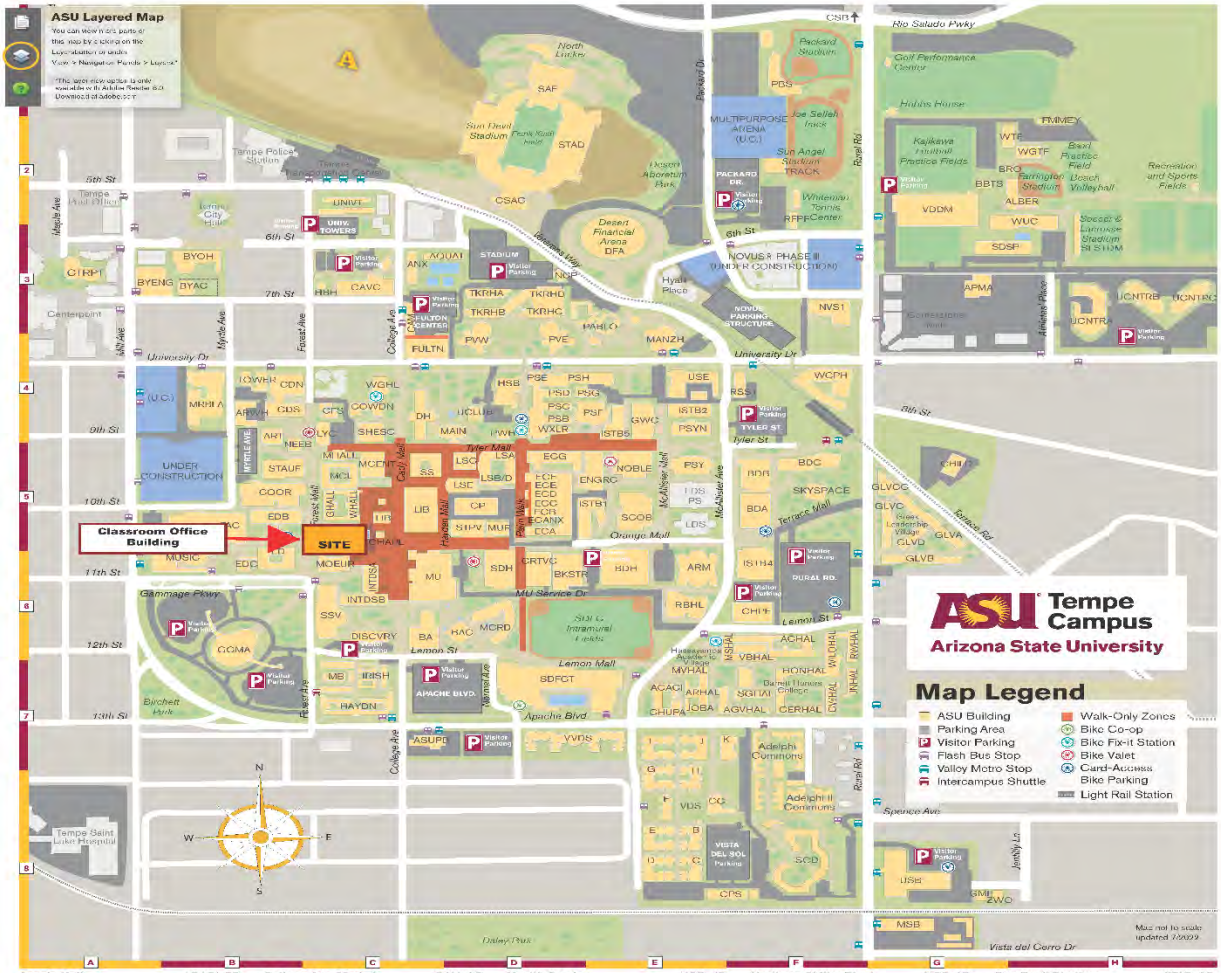
	Amended Capital Development Plan September 2021	Annual Capital Plan September 2022
Capital Costs		
1. Land Acquisition		
2. Construction Cost		
A. New Construction	$ 71,632,598	$ 74,941,366
B. Tenant Improvement		
C. Special Fixed Equipment	3,010,000	3,183,000
D. Site Development (excl. 2.E.)	-	-
E. Parking and Landscaping	770,000	-
F. Utilities Extensions	10,771,792	12,338,751
G. Other* (Demolition/abatement)	307,473	-
Subtotal Construction Cost	$ 86,491,863	$ 90,463,117
3. Fees		
A. DB Pre-Construction	$ 662,414	$ 662,414
B. Architect/Engineer	5,983,212	6,293,746
C. Other	2,205,175	2,162,950
Subtotal Consultant Fees	$ 8,850,801	$ 9,119,110
4. FF&E Movable	$ 2,700,000	$ 3,400,000
5. Contingency, Design Phase	30,000	-
6. Contingency, Constr. Phase	3,950,934	2,863,507
7. Parking Reserve	-	-
8. Telecommunications Equipment	1,080,000	2,800,000
Subtotal Items 4-8	$ 7,760,934	$ 9,063,507
9. Additional University Costs		
A. Surveys, Tests, Haz. Mat. Abatement	$ 405,000	$ 421,342
B. Move-in Costs	225,000	168,750
C. Printing Advertisement	10,000	10,000
D. Keying, signage, facilities support	120,000	560,000
E. Project Management Cost	2,869,610	2,920,834
F. State Risk Mgt. Ins. (.0034 **)	366,792	373,340
Subtotal Addl. Univ. Costs	$ 3,996,402	$ 4,454,266
Total Capital Cost	$ 107,100,000	$ 113,100,000

* Universities shall identify items included in this category.

** State Risk Management Insurance factor is calculated on construction costs and consultant fees.

EXECUTIVE SUMMARY

Exhibit H
Classroom Office Building
Site Location Map



Acacia Hall	ACACI 7E	**College Ave. Market**	CAM 3C	**Health Service**	HSB 4D	**Northern Chiller Plant**	NCP 3D	**Sun Devil Stadium**	STAD 2D
Acourtia Hall	AGHAL 6F	**College Ave. Commons**	CAVC 3C	**Honors Hall**	HONHAL 7F	**Off-Camp. Stdnt. Srv.**	OCSS 5G	**Sun Angel Stadium**	TRACK 2F
Adelphi Commons	ADEL 7F	**Cmty'd Heat & Pwr. Fac.**	CHPF 8F	**Interdiscplln. A/B**	INTDSA/B 6C	**Old Main**	MAIN 4D	**The Annex**	ANX 3C
Agave Hall	AGVHAL 7F	**Community Serv. Bldg.**	CSB 1F	**Intrdiscip. Sc. & Tech. 1**	ISTB1 5D	**Orchidhouse (Brckyd.)**	BYOH 3B	**Tooker House A-D**	TKRHA-D 3D
Aquatic Complex	AQUAT 3D	**Coor Hall**	COOR 5B	**Intrdiscip. Sc. & Tech. 2**	ISTB2 4E	**Palo Verde East**	PVE 3D	**Tower Center**	TOWER 4B
Armstrong Hall	ARM 8E	**Cottonwood Hall**	CWHAL 7F	**Intrdiscip. Sc. & Tech. 4**	ISTB4 6F	**Palo Verde West**	PVW 3D	**University Cntr. A-C**	UCNTRA-C 3H
Arroyo Hall	ARHAL 7E	**Cowden Fam. Rsrcs.**	COWDN 4C	**Intrdiscip. Sc. & Tech. 5**	ISTB5 4E	**Payne Hall**	EDB 5B	**University Club**	UCLUB 4D
Art Building	ART 4B	**Creativity Commons**	CRTVC 6D	**Irish Hall**	IRISH 7C	**Perform. & Media Arts**	APMA 3G	**University Services Bldg.**	USB 8G
Art Warehouse	ARWH 4B	**Danforth Chapel**	CHAPL 5C	**Jojoba Hall**	JOBA 7E	**Physical Sci. Wings**	PSB H 4D	**Urban Systems Engin.**	USE 4E
ASU at Mirabella	MRBLA 4B	**Desert Financial Arena**	DFA 3E	**Juniper Hall**	JNHAL 7F	**Piper Writers House**	PWH 4D	**University Towers**	UNIVT 2C
Best Hall	MB 7C	**Design Annex**	DSGNX 3C	**Life Sciences Center**	LS 5D	**Police**	ASUPD 7C	**Verbena Hall**	VBHAL 6F
Business Admin.	BA 6C	**Design North**	CDN 4B	**Life Sciences C-wing**	LSC 5D	**Psychology Building**	PSY 5E	**Verde Dickey Dome**	VDDM 6F
Business Admin. C Wing	BAC 6D	**Design South**	CDS 4D	**Life Sciences Tower**	LSE 5D	**Psychology North**	PSYN 4E	**Vista del Sol Cmplx.**	VDS 8E
Biodsgn. Inst. Bldg. A	BDA 5F	**Discovery Hall**	DISCVRY 6C	**Lyceum Theatre**	LYC 4C	**Rosewood Hall**	RWHAL 6F	**Villas @ Vista del Sol**	VVDS 8E
Biodsgn. Inst. Bldg. B	BDB 5F	**Dixie Gammage Hall**	GHALL 5C	**Manzanita Hall**	MANZH 4E	**Ross-Blakley Hall**	RBHL 6E	**Walton Cntr. for Plntry. Hlth.**	WCPH 4F
Biodsgn. Inst. Bldg. C	BDC 5F	**Durham Hall**	DH 1C	**Matthews Center**	MCENT 5C	**Sage Hall**	SGHAL 7F	**Weatherup Center**	WUC 3H
Bookstore	BKSTR 6D	**Education Lecture Hall**	EDC 6B	**Material Srv. Bldg.**	MSB 8G	**San Pablo Hall**	PABLO 3D	**West Hall**	WHALL 5C
Brickyard Artisan Crtyrd.	BYAC 3B	**Engineering Center**	ECA-C 5D	**Matthews Hall**	MHALL 5C	**Schwada Building**	SCOB 5E	**Wexler Hall**	WXLR 4D
Brickyard Engnr.	BYENG 3A	**Engin. Research Cntr.**	ENGRC 5D	**McClintock Hall**	MCL 5C	**Sch. Hu. Ev. Soc. Chg.**	SHESC 4C	**Willow Hall**	WILOHAL 6F
Bulldog Hall	BDH 6E	**Farmer Education Bldg.**	ED 6B	**McCord Hall**	MCRD 6D	**Social Sciences**	SS 5C	**Wilson Hall**	WILSN 5C
Campus Chldrn's Cntr.	CHILD 5G	**Fulton Center**	FULTN 4C	**Memorial Union**	MU 6C	**Sonora Center**	SCD 8F	**Womens Gymst. Trng.**	WGTF 2H
Carson Stdnt Ath Cntr.	CSAC 2D	**Gammage Auditorium**	GGMA 6B	**Mesquite Hall**	MSHAL 6F	**Stauffer Comm.**	STAUF 5B	**Wrestling Training Fac.**	WTF 2H
Centerpoint	CTRPT 3Az	**Goldwater Center**	GWC 4E	**Moeur Building**	MOEUR 6C	**Sun Devil Fit. Cmplx.**	SDFCT 8E	**Wrigley Hall**	WGHL 4C
Cereus Hall	CERHAL 7F	**Greek Ldrsp. Vlg. A-D**	GLVA-D 5G	**Mohave Hall**	MVHAL 7E	**Student Athlete Facility**	SAF 1D	**Zero Waste Office**	ZWO 8G
Center for Fam. Studies	CFS 4C	**Greek Ldrsp. Vlg. CC.**	GLVCC 5G	**Murdock Lecture Hall**	MUR 5D	**Student Pavilion**	STPV 5D	**777 Tower at Novus**	NVS1 9F
Central Plant	CP 5D	**Grounds Maint. Facility**	GMF 8G	**Music Building**	MUSIC 6B	**Student Services Bldg.**	SSV 6C		
Central Plant South	CPS 8F	**Harrington-Birchett House**	HBH 3C	**Neeb Hall**	NEEB 5B	**Sun Angel Clubhouse**	SAC 1H		
Cholla Apartments	CHOLA 5G	**Hayden Hall**	HAYDN 7C	**Nelson Fine Arts Center**	FAC 5B	**Sun Devil Hall**	SDH 6D		
Chuparosa Hall	CHUPA 7E	**Hayden Library**	LIB 5C	**Noble Sci. Library**	NOBLE 5E	**Sun Devil Sports Perf.**	SDSP 3H		

Arizona State University
Annual Capital Plan–Project Justification Report
Multipurpose Arena

Previous Board Action

- Capital Development Plan — February 2022
- Amended Capital Development Plan — November 2020
- FY 2022-2024 Capital Improvement Plan — October 2020

Project Justification/Description/Scope

- The National Hockey League (NHL) has requested several upgrades to the approved Multipurpose Arena and Annex to accommodate game day operations and national broadcasting requirements.

- Broadcasting trailer requirements include added power, data, fiber runs and parking at a new pad location north of the annex in the existing Packard Stadium construction yard. Emergency access also will be improved for this facility and the annex.

- This unique opportunity to host an NHL team at the new Multipurpose Arena will cast the ASU Sun Devils Ice Hockey program into the national and global spotlight and enhance the University's local impact and social embeddedness.

- The location of the Multipurpose Arena, recently renamed at Mullett Arena, will have an accretive impact to the development of the surrounding area by creating a unique center of activity with access to the retail spaces planned along Novus Place, while maximizing future development opportunities in support of the master development plan for the Novus Innovation Corridor. The project location is depicted in Exhibit I.

- In addition to hosting the Arizona Coyotes, the arena will be home to the ASU men's ice hockey program, host Sun Devil wrestling and gymnastics competitions, and include a second sheet of ice for the community to use for youth and adult hockey. The arena design allows the hosting of family shows, concerts and other public events to enhance community engagement and generate additional revenue.

Project Delivery Method and Process

- This project is being delivered through the Design-Build delivery method under a development and construction agreement with Mortenson, a nationally-recognized sports facilities contractor. This approach was selected to streamline project delivery, identify potential cost savings and alleviate potentially adversarial project environments.

Project Status and Schedule

- The Annex construction is on schedule for completion in January 2023 and includes the requested NHL upgrades, which will not delay the project's current completion schedule.

Project Cost

- The current project budget totals $134.7 million. Additional NHL upgrades totaling $2.5 million, funded solely by the Coyotes, will increase the budget to $137.2 million. Mortenson will complete the upgrades as part of the approved project contract.

- The estimated construction cost for the approximately 193,638 gross-square-foot (GSF) Mullett Arena and Annex is $558 per GSF. The estimated total project cost is $696 per GSF and includes construction costs, site development costs, FF&E and soft costs.

Fiscal Impact and Financing Plan

- As previously approved in the February 2022 Capital Development Plan, $115 million has been debt-financed with system revenue bonds amortized over an approximate thirty-year term. The annual debt service will be funded by auxiliary revenues, including facility revenues, charitable gifts and, in the longer term, Athletic Facilities District revenues.

- The balance of the project budget, $22.2 million including the budget increase of $2.5 million, will be funded by available contractual payments.

- The estimated incremental increase in annual O&M costs associated with this project of $991,848 will be funded by auxiliary revenue.

- **Debt Ratio Impact**: The increase in the project budget will not impact the University's debt ratio.

Occupancy Plan

- No backfill plan is associated with this project.

Statutory and Policy Requirements

- ABOR Policy 7-102 requires all major capital projects with an estimated total project cost of $10 million or more to be included in the Annual Capital Plan, including new construction, renovation, infrastructure, information technology and third-party projects.

- ABOR policy 7-208 - ABOR policy 7-208 allows the University to authorize the use of University athletic facilities by professional teams, provided the term of the agreement (including any renewals) shall not exceed three years.

Capital Project Information Summary

University: Arizona State University **Project Name:** Multipurpose Arena

Project Description and Location: The revisions to the project plan of record include the construction of a two-story, approximately 15,000 gross-square-foot annex structure adjacent to the Multipurpose Arena on the northeastern edge of the building. In addition to the two-story annex building, several facility upgrades are included in the revised project plan to meet NHL requirements. The project location is depicted in Exhibit I.

Project Schedule:

Planning	January	2020
Design Start	February	2020
Construction Start	January	2021
Construction Completion	January	2023

Project Budget:

Total Project Cost	$ 137,200,000
Total Project Construction Cost	$ 110,021,746
Total Project Cost per GSF	$ 696
Construction Cost per GSF	$ 558

Change in Annual O&M Cost:

Utilities	$ 473,845
Personnel	179,337
All Other Operating	338,666
Subtotal	$ 991,848

Funding Sources:

A: System Revenue Bonds	$ 115,000,000
Debt Service Funding Sources:	Auxiliary Revenue, Gifts
B: Contractual Payments	$ 22,200,000
Operation/Maintenance	$ 991,848
Funding Source:	Auxiliary Revenue

EXECUTIVE SUMMARY

Capital Project Budget Summary

University: Arizona State University
Project: Multipurpose Arena

	Capital Development Plan February 2022	Annual Capital Plan September 2022
Capital Costs		
1. Land Acquisition		
2. Construction Cost		
A. New Construction	$ 99,445,000	$ 101,410,746
B. Tenant Improvement		
C. Special Fixed Equipment	3,160,000	3,160,000
D. Site Development (excl. 2.E.)	3,250,000	3,250,000
E. Parking and Landscaping	-	-
F. Utilities Extensions	2,201,000	2,201,000
G. Other* (Demolition/abatement)	-	-
Subtotal Construction Cost	$ 108,056,000	$ 110,021,746
3. Fees		
A. DB Pre-Construction	$ -	$ -
B. Architect/Engineer	10,125,005	10,125,005
C. Other	-	-
Subtotal Consultant Fees	$ 10,125,005	$ 10,125,005
4. FF&E Movable	$ 4,100,000	$ 4,393,152
5. Contingency, Design Phase	3,529,700	3,529,700
6. Contingency, Constr. Phase	4,309,196	4,550,298
7. Parking Reserve	-	-
8. Telecommunications Equipment	-	-
Subtotal Items 4-8	$ 11,938,896	$ 12,473,150
9. Additional University Costs		
A. Surveys, Tests, Haz. Mat. Abatement	$ 300,000	$ 300,000
B. Move-in Costs	75,000	75,000
C. Printing Advertisement	47,800	47,800
D. Keying, signage, facilities support	402,058	402,058
E. Project Management Cost	3,350,000	3,350,000
F. State Risk Mgt. Ins. (.0034 **)	405,241	405,241
Subtotal Addl. Univ. Costs	$ 4,580,099	$ 4,580,099
Total Capital Cost	$ 134,700,000	$ 137,200,000

* Universities shall identify items included in this category.

** State Risk Management Insurance factor is calculated on construction costs and consultant fees.

Exhibit I
Multipurpose Arena
Site Location Map

Acacia Hall	ACACI 7E	College Ave. Market	CAM 3C	Heyden Library	LIB 5C	Nelson Fine Arts Center	FAC 5B	Sun Devil Hall	SDH 6D
Acuurtia Hall	ACHAL 6F	College Ave. Commons	CAVC 3C	Health Service	HSB 4D	Noble Sci. Library	NOBLE 5E	Sun Devil Sports Perf.	SDSP 3H
Adelphi Commons	ADEL 7F	Cmb'd Heat & Pwr. Fac.	CHPF 6F	Honors Hall	HONHAL 7F	Northern Chiller Plant	NCP 3D	Sun Devil Stadium	STAD 2D
Agave Hall	AGVHAL 7F	Community Serv. Bldg.	CSB 1F	Interdisciplin. A/B	INTDSA/B 6C	Off-Camp. Stdnt. Srv.	OCSS 5G	Sun Angel Stadium	TRACK 2F
Aquatic Complex	AQUAT 3D	Coor Hall	COOR 5B	Intrdiscip. Sc. & Tech. 1	ISTB1 3D	Old Main	MAIN 4D	The Annex	ANX 3C
Armstrong Hall	ARM 6E	Cottonwood Hall	CWHAL 7F	Intrdiscip. Sc. & Tech. 2	ISTB2 4E	Orchidhouse (Brckyd.)	BYOH 3B	Tooker House A-D	TKRHA D 3D
Arroyo Hall	ARHAL 7E	Cowden Fam. Rsrcs.	COWDN 4C	Intrdiscip. Sc. & Tech. 4	ISTB4 6F	Palo Verde East	PVE 3D	Tower Center	TOWER 4B
Art Building	ART 4B	Creativity Commons	CRTVC 6D	Intrdiscip. Sc. & Tech. 5	ISTB5 4E	Palo Verde West	PVW 3D	University Cntr. A-C	UCNTRA C 3H
Art Warehouse	ARWH 4B	Danforth Chapel	CHAPL 5C	Irish Hall	IRISH 7C	Payne Hall	EDB 5B	University Club	UCLUB 4D
ASU at Mirabella	MRBLA 4B	Desert Financial Arena	DFA 3E	Jojoba Hall	JOBA 7E	Perform. & Media Arts	APMA 3G	University Services Bldg.	USB 8G
Best Hall	MB 7C	Design Annex	DSGNX 3C	Juniper Hall	JNHAL 7F	Physical Sci. Wings	PSB-H 4D	Urban Systems Engin.	USE 4E
Business Admin.	BA 6C	Design North	CDN 4B	Life Sciences Center	LS 5D	Piper Writers House	PWH 4D	University Towers	UNIVT 2C
Business Admin. C Wing	BAC 6D	Design South	CDS 4B	Life Sciences C-wing	LSC 5D	Police	ASUPD 7C	Verbena Hall	VBHAL 6F
Biodsgn. Inst. Bldg. A	BDA 5F	Discovery Hall	DISCVRY 6C	Life Sciences Tower	LSE 5D	Psychology Building	PSY 5E	Verde Dickey Dome	VDDM 6F
Biodsgn. Inst. Bldg. B	BDB 5F	Dixie Gammage Hall	GHALL 5C	Lyceum Theatre	LYC 4C	Psychology North	PSYN 4E	Vista del Sol Cmplx.	VDS 8E
Biodsgn. Inst. Bldg. C	BDC 5F	Durham Hall	DH 4C	Manzanita Hall	MANZH 4E	Rosewood Hall	RWHAL 6F	Villas @ Vista del Sol	VVDS 8E
Bookstore	BKSTR 6D	Education Lecture Hall	EDC 6B	Matthews Center	MCENT 5C	Ross-Blakley Hall	RBHL 6E	Walton Cntr. for Plntry. Hlth.	WCPH 4F
Brickyard Artisan Crtyrd.	BYAC 9B	Engineering Center	ECA-G 5D	Material Srv. Bldg.	MSB 8G	Sage Hall	SCHAL 7F	Weatherup Center	WUC 3H
Brickyard Engnr.	BYENG 9A	Engin. Research Cntr.	ENGRC 5D	Matthews Hall	MHALL 5C	San Pablo Hall	PABLO 3D	West Hall	WHALL 5C
Bulldog Hall	BDH 6E	Farmer Education Bldg.	ED 6B	McClintock Hall	MCL 5C	Schwada Building	SCOB 5E	Wexler Hall	WXLR 4D
Campus Chldm's Cntr.	CHILD 5G	Farrington Softball Stdm.	ALBER 2H	McCord Hall	MCRD 6D	Sch. Hu. Ev. Soc. Chg.	SHESC 4C	Willow Hall	WILOHAL 6F
Carson Stdnt Ath Cntr.	CSAC 2D	Fulton Center	FULTN 4C	Memorial Union	MU 6C	Social Sciences	SS 5C	Wilson Hall	WILSN 6C
Centerpoint	CTRPT 3A	Gammage Auditorium	GGMA 6B	Mesquite Hall	MSHAL 6F	Sonora Center	SCD 8F	Womens Gymst. Tmg.	WGTF 2H
Cereus Hall	CERHAL 7F	Goldwater Center	GWC 4E	Moeur Building	MOEUR 6C	Stauffer Comm.	STAUF 5B	Wrestling Training Fac.	WTF 2H
Center for Fam. Studies	CFS 4C	Greek Ldrsp. Vlg. A-D	GLVA D 5G	Mohave Hall	MVHAL 7E	Sun Devil Fit. Cmplx.	SDFCT 8E	Wrigley Hall	WGHL 4C
Central Plant	CP 5D	Greek Ldrsp. Vlg. CC.	GLVCC 5G	Mullett Arena	MA 2F	Student Athlete Facility	SAF 1D	Zero Waste Office	ZWO 8G
Central Plant South	CPS 8F	Grounds Maint. Facility	GMF 8G	Murdock Lecture Hall	MUR 5D	Student Pavilion	STPV 5D	777 Tower at Novus	NVS1 3F
Cholla Apartments	CHOLA 5G	Harrington-Birchett House	HBH 3C	Music Building	MUSIC 6B	Student Services Bldg.	SSV 6C		
Chuparosa Hall	CHUPA 7E	Hayden Hall	HAYDN 7C	Neeb Hall	NEEB 5B	Sun Angel Clubhouse	SAC 1H		