

Agenda Item No. 3.3

AGENDA ITEM BRIEFING

Submitted by: Billy Hamilton, Deputy Chancellor and Chief Financial Officer
The Texas A&M University System

Subject: Approval of the Project Scope and Revised Budget, Appropriation for Construction Services, and Approval for Construction for the Nuclear Engineering Education Building Project, Texas A&M Engineering Experiment Station, College Station, Texas (Project No. 28-3324)

Background and Prior Actions:

The Nuclear Engineering Education Building Project was included as a proposed project with a FY 2023 start date on the FY 2022 – FY 2026 A&M System Capital Plan approved by the Board at the August 2021 meeting with a planning amount of \$11,500,000. The project was approved to be moved to FY 2022 by letter in November 2021 (see attachment). Approval to design to the increased budget shown below was received by letter on December 1, 2022 (see attachment).

Proposed Board Action:

- (1) Approve the project scope and revised budget.
- (2) Appropriate \$13,950,000 for construction services and related project costs. \$1,150,000 has been previously appropriated to this project.
- (3) Approve construction of the Nuclear Engineering Education Building Project at Texas A&M Engineering Experiment Station (TEES).

Funding/Budget Amount:

<u>Funding Source</u>	<u>Planning Amount</u>	<u>Proposed Adjustment</u>	<u>Proposed Planning Amount</u>	<u>Average Estimated Annual Debt Service</u>	<u>Debt Service Source</u> Available University Fund
Permanent University Fund	\$0	\$4,500,000	\$4,500,000	\$364,538	
Cash (Chancellor's Research Initiative (CRI – Hassan))	\$8,000,000	\$0	\$8,000,000	N/A	N/A
Cash (Designated Tuition)	3,500,000	\$(2,000,000)	\$1,500,000	N/A	N/A
Cash (Indirect Cost Recoveries)	<u>\$0</u>	<u>\$1,100,000</u>	<u>\$1,100,000</u>	N/A	N/A
Total Project Cost	<u>\$11,500,000</u>	<u>\$3,600,000</u>	<u>\$15,100,000</u>		

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*TEES is using \$4 million from the Hedrick CRI Award and \$500,000 from its PUF Equipment Allocations to provide funding for this project. These funds have been reverted back to the A&M System so they can be appropriated to this major project.

Project Justification:

For over 100 years, TEES has served the citizens of Texas through engineering, technology-oriented research, and educational collaborations. TEES research has made significant impacts on the health, safety and quality of life of Texas citizens and has contributed to the state's economic growth and development. In support of its mission, TEES engineering and technology research programs continue to evolve and expand.

Over the past several years, Texas A&M University has assembled a critical mass of Nuclear Engineering (NUEN) faculty members who have complementary research programs in thermal hydraulic flow phenomena, ion irradiation, nuclear fuel cycles, and development of thermal-fluid technologies. State-of-the-art research in these areas, both fundamental and applied, requires laboratory facilities that are adequately suited to the unique technical and safety requirements of nuclear engineering. To this end, we propose the construction and renovation of the Nuclear Engineering Education Building (NEEB), to be located near the existing Nuclear Science Center (NSC).

Currently, NUEN research scientists are housed in multiple isolated laboratory facilities in the University Services Building (3400), the Donald L. Houston Building (1603), and at the Nuclear Science Center (1095) near Easterwood Airfield. The consolidation of research faculty and laboratories to a single complex located at the NSC will allow related research to be carried out at a single location and enhance collaborative efforts between faculty, researchers, and students.

Scope:

NEEB will be a renovation of the existing Range Science Field Lab Building located on Fish Tank Road, adjacent and immediately to the south of the Nuclear Science Center. This facility includes an approximately 9,200 GSF freestanding steel-framed building and surrounding 1.4-acre property. Building 1183 is currently under the purview of the College of Agriculture and Life Sciences. Official transfer of this facility from AgriLife to TEES occurred in September 2022.

Due to the age and prior unrelated use of the structure, there is little of the existing interior construction that is of value for reuse as a technical laboratory facility. A large portion of the building is currently unconditioned storage space. The roof is original to the building and at the end of its useful life. The building envelope will require significant repairs and upgrades to ensure proper water resistance, as well as the addition of thermal insulation to meet current codes. All of the existing mechanical and electrical systems are either inadequate for the proposed building use or beyond the end of their useful life. Plumbing systems will require upgrades to support laboratory spaces. A fire sprinkler system will need to be added to the building and upgrades performed to fire alarm and building security systems.

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Construction on this project is scheduled to start in March 2023 with substantial completion scheduled for April 2024. The total project budget is \$15,100,000.

Other Major Fiscal Impacts:

None.

Strategic Plan Imperative(s) this Item Advances:

The Nuclear Engineering Education Building Project advances *System Strategic Plan Imperative #4*, increasing the A&M System's prominence by developing state-of-the-art nuclear engineering facilities that will enhance industry-based research.

THE TEXAS A&M UNIVERSITY SYSTEM
FACILITIES PLANNING AND CONSTRUCTION
Office of the Deputy Chancellor and Chief Financial Officer
January 3, 2023

Members, Board of Regents
The Texas A&M University System

Subject: Approval of the Project Scope and Revised Budget, Appropriation for Construction Services, and Approval for Construction for the Nuclear Engineering Education Building Project, Texas A&M Engineering Experiment Station, College Station, Texas (Project No. 28-3324)

I recommend adoption of the following minute order:

“The project scope along with a revised project budget of \$15,100,000 for the Nuclear Engineering Education Building Project is approved.

The amount of \$4,500,000 is appropriated from Account No. 01-084243 Permanent University Fund Debt Proceeds (AUF), the amount of \$6,850,000 is appropriated from Account No. 02-292154 TAMU CRI Award – Hassan, the amount of \$1,500,000 is appropriated from Account 02-808816, and the amount of \$1,100,000 is appropriated from Account 28-810093, for construction services and related project costs.

The Nuclear Engineering Education Building Project, Texas A&M Engineering Experiment Station, College Station, Texas, is approved for construction.

The Board of Regents of The Texas A&M University System (Board) reasonably expects to incur debt in one or more obligations for this project, and all or a portion of the proceeds received from the sale of such obligations is reasonably expected to be used to reimburse the account(s) for amounts previously appropriated and/or expended from such account(s).”

Respectfully submitted,

[ORIGINAL SIGNED BY]

Billy Hamilton
Deputy Chancellor and
Chief Financial Officer

Approval Recommended:

[ORIGINAL SIGNED BY]

John Sharp
Chancellor

[ORIGINAL SIGNED BY]

Phillip Ray
Vice Chancellor for Business Affairs

Approved for Legal Sufficiency:

[ORIGINAL SIGNED BY]

Ray Bonilla
General Counsel

[ORIGINAL SIGNED BY]

Dr. John E. Hurtado, Interim Director
Texas A&M Engineering Experiment Station

NUCLEAR ENGINEERING EDUCATION BUILDING TEXAS A&M ENGINEERING EXPERIMENT STATION PROJECT NO. 28-3324	PROJECT BUDGET
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1.	Construction	\$12,080,000
2.	Project Contingency	982,560
3.	Program of Requirements.....	0
4.	Pre-Construction Services	860,290
5.	Commissioning.....	44,000
6.	Construction Testing	105,000
7.	Campus Services & Technology	220,000
8.	Furnishings	200,000
9.	Equipment	200,000
10.	Other Project Costs.....	8,000
11.	Project Management & Inspection	<u>400,150</u>
12.	TOTAL ESTIMATED COST OF PROJECT	<u>\$15,100,000</u>

**NUCLEAR ENGINEERING EDUCATION BUILDING
TEXAS A&M ENGINEERING EXPERIMENT STATION
PROJECT NO. 28-3324**

PROJECT SCHEDULE

1. Issue A/E RFQ February 15, 2022
2. Issue CMAR RFP February 22, 2022
3. Receive A/E RFQ Responses..... March 16, 2022
4. Receive CMAR RFP Response March 24, 2022
5. Shortlist A/E Firms March 25, 2022
6. Interview A/E Shortlist April 1, 2022
7. A/E Ranked Order Approved by Chancellor April 7, 2022
8. CMAR Ranked Order Approved by Chancellor April 20, 2022
9. Execute A/E Agreement June 21, 2022
10. Execute CMAR Agreement July 18, 2022
11. Complete Schematic Design November 7, 2022
12. Complete Design Development December 20, 2022
13. Receive GMP from CMAR January 10, 2023
14. BOR Approval for Construction February 2023
15. Begin Construction March 2023
16. Complete Construction Documents March 2023
17. Submit THECB Application March 2023
18. Substantial Completion April 2024
19. Owner Occupancy May 2024



Nuclear Engineering Education Building

Texas A&M Engineering Experiment Station

Project No. 28-3324

TEXAS A&M ENGINEERING EXPERIMENT STATION
PERMANENT UNIVERSITY FUND
28-3324 Nuclear Engineering Education Building
Available University Fund

Dates	Outstanding Principal	Principal Amount	Interest Amount	Annual Total
BONDS	4,545,000.00			
YEAR 1	4,405,000.00	140,000.00	227,250.00	367,250.00
YEAR 2	4,260,000.00	145,000.00	220,250.00	365,250.00
YEAR 3	4,110,000.00	150,000.00	213,000.00	363,000.00
YEAR 4	3,950,000.00	160,000.00	205,500.00	365,500.00
YEAR 5	3,785,000.00	165,000.00	197,500.00	362,500.00
YEAR 6	3,610,000.00	175,000.00	189,250.00	364,250.00
YEAR 7	3,425,000.00	185,000.00	180,500.00	365,500.00
YEAR 8	3,230,000.00	195,000.00	171,250.00	366,250.00
YEAR 9	3,025,000.00	205,000.00	161,500.00	366,500.00
YEAR 10	2,810,000.00	215,000.00	151,250.00	366,250.00
YEAR 11	2,585,000.00	225,000.00	140,500.00	365,500.00
YEAR 12	2,350,000.00	235,000.00	129,250.00	364,250.00
YEAR 13	2,105,000.00	245,000.00	117,500.00	362,500.00
YEAR 14	1,845,000.00	260,000.00	105,250.00	365,250.00
YEAR 15	1,575,000.00	270,000.00	92,250.00	362,250.00
YEAR 16	1,290,000.00	285,000.00	78,750.00	363,750.00
YEAR 17	990,000.00	300,000.00	64,500.00	364,500.00
YEAR 18	675,000.00	315,000.00	49,500.00	364,500.00
YEAR 19	345,000.00	330,000.00	33,750.00	363,750.00
YEAR 20	-	345,000.00	17,250.00	362,250.00
		<u>\$ 4,545,000.00</u>	<u>\$ 2,745,750.00</u>	<u>\$ 7,290,750.00</u>

Estimated issuance costs and rounding of \$45,000 are included in this schedule.
Long-term rates are assumed to be 5.00%. Rates are subject to market change.
Prepared by the Office of the Treasurer - Treasury Services 12/06/2022

Rates are subject to market change. Amounts are preliminary estimates that will be revised at the time bonds are issued.



Office of Facilities Planning & Construction
THE TEXAS A&M UNIVERSITY SYSTEM

November 22, 2021

MEMORANDUM

TO: Mr. Michael Plank
Chair, Committee on Buildings & Physical Plant
Board of Regents

Mr. John Sharp
Chancellor

THROUGH: Mr. Billy C. Hamilton
Deputy Chancellor and Chief Financial Officer

THROUGH: Mr. Phillip Ray *PR*
Vice Chancellor for Business Affairs

FROM: Mr. Brett McCully *B. McCully*
Chief Facilities Officer

SUBJECT: Revision to Fiscal Year Designation
Nuclear Engineering Education Building
Project No. 28-3324
Texas A&M Engineering Experiment Station

Pursuant to System Policy 51.01.1.3, Facilities Planning & Construction (FP&C) requests approval to change the fiscal year designation for project initiation of the Nuclear Engineering Education Building Project for the Texas A&M Engineering Experiment Station from fiscal year 2023 to fiscal year 2022 at a planning amount of \$11,500,000.

As background, The Texas A&M University System Board of Regents approved the A&M System Capital Plan at its August 26, 2021 meeting, which included the Nuclear Engineering Education Building Project for FY 2023. Given that the Program of Requirements is now complete, FP&C recommends approval of changing the initiation date for this project to the current fiscal year, FY 2022.

Approved:

[Signature]
John Sharp
Chancellor

23 Nov 21
Date

[Signature]
Michael Plank
Chair, Committee on Buildings & Physical Plant

Nov 24, 2021
Date



THE TEXAS A&M UNIVERSITY SYSTEM

November 7, 2022

MEMORANDUM

TO: Mr. Michael Plank
Chair, Committee on Buildings & Physical Plant
Board of Regents

Mr. John Sharp
Chancellor

THROUGH: Mr. Billy C. Hamilton *[Signature]*
Deputy Chancellor and Chief Financial Officer

FROM: Ms. Maria Robinson *[Signature]*
Chief Investment Officer and Treasurer

FROM: Mr. Brett McCully *[Signature]*
Chief Facilities Officer

SUBJECT: Proposed Revision to Capital Plan Project Amount
Nuclear Engineering Education Building (NEEB)
Project No. 28-3324
Proposed Project Planning Amount \$15,100,000
Texas A&M Engineering Extension Station (TEES)

The Texas A&M University System Board of Regents (BOR) approved the A&M System Capital Plan at its August 2021 meeting, which included the TEES Nuclear Engineering Education Building Project (NEEB) at Texas A&M University (Texas A&M) for initiation in FY 2023 at a planning amount of \$11,500,000.

On August 12, 2022, Ben Sasse, Associate Director of Texas A&M Campus Planning, Design and Construction (CPDC), on behalf of TEES provided a request to Facilities Planning and Construction (FP&C) to increase the project funding in order to incorporate desired scope changes. A copy of the request is attached for reference.

This project will be a renovation of the existing Range Science Field Lab Building located on Fish Tank Road, adjacent and immediately to the south of the Nuclear Science Center. This facility includes an approximately 9,200 GSF freestanding steel framed building and surrounding 1.4-acre property.

The Program of Requirements (POR) for the NEEB project was developed and finalized in November 2021, and the project was moved from FY2023 to FY2022 by letter in the same month. However, funding was not secured to start solicitations for project Architect/Engineer (A/E) and Construction Manager at Risk (CMAR) services until February 2022. Following a standard procurement process and confirmed team selection, design began in May 2022 and cost estimators from the selected A/E and CMAR immediately

Mr. John Sharp
Mr. Michael Plank
November 7, 2022
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conducted independent reviews of the POR. The reconciled estimates showed that the cost of work for the scope outlined in the POR, along with scope increases due to further development of the program, exceeded the project budget by approximately 22%. The A/E and CMAR developed several revised project concepts with aligned scope and budget, and TEES requested to increase the project budget. The misalignment of project scope and budget and the development of revised details for BOR approval has delayed the project schedule three months in addition to the funding for a total delay to the project schedule of six months. Proportional increases in bonds/insurance, contingency, and fee make up the balance of the requested budget change.

Funding for the increase to this project is as follows:

<u>Funding Source</u>	<u>Planning Amount</u>	<u>Proposed Adjustment</u>	<u>Proposed Planning Amount</u>	<u>Debt Service Source</u>
Permanent University Fund	\$0	\$4,500,000	\$4,500,000	Available University Fund
Cash (Chancellor's Research Initiative (CRI – Hassan))	\$8,000,000	\$0	\$8,000,000	N/A
Cash (Designated Tuition)	3,500,000	\$(2,000,000)	\$1,500,000	N/A
Cash (Indirect Cost Recoveries)	\$0	\$1,100,000	\$1,100,000	N/A
Total Project Cost	<u>\$11,500,000</u>	<u>\$3,600,000</u>	<u>\$15,100,000</u>	

By notice of this memo, the Chief Facilities Officer and Chief Investment Officer and Treasurer have no objections to the requested revision to the project amount; therefore, approval is recommended to increase the project planning amount of the TEES NEEB Project at Texas A&M University from \$11,500,000 to \$15,100,000. This is an increase of 31%. Unless we receive direction otherwise, the adjustment of the capital plan amount and project funding will be brought forward with the request for construction approval for this project.

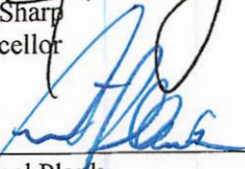
Approved:



John Sharp
Chancellor

17 Nov 22

Date



Michael Plank
Chair, Committee on Buildings & Physical Plant

12/1/22

Date