

AGENDA ITEM BRIEFING

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

Subject: Approval to Amend the FY 2020-FY 2024 Texas A&M University System Capital Plan to Add the BCDC: Innovation Proving Grounds Project (Project No. 28-3322) for Texas A&M Engineering Experiment Station with a FY 2020 Start Date

Proposed Board Action:

- (1) Amend the approved FY 2020-FY 2024 Texas A&M University System Capital Plan to add the Bush Combat Development Complex (BCDC): Innovation Proving Grounds (IPG) Project for Texas A&M Engineering Experiment Station (TEES) with an FY 2020 start date and a total planning amount of \$42,000,000.
- (2) Appropriate \$4,200,000 for pre-construction services and related project costs, contingent upon the completion of a Program of Requirements (POR) scoped to the approved budget. The project will not move forward until the POR is complete.
- (3) Approve the following exception to system policy required by Item 1 above: Add the project to the Capital Plan prior to completion of a POR.

Funding/Planning Amount:

<u>Funding Source</u>	<u>Planning Amount</u>	<u>Average Estimated Annual Debt Service</u>	<u>Debt Service Source</u>
Cash (General Revenue)	<u>\$42,000,000</u>	N/A	N/A
Total Project Cost	<u>\$42,000,000</u>		

Project Justification:

The Army Futures Command, headquartered in Austin, is drawing on research from universities around the country and the private sector to modernize the United States Army (Army), and RELLIS will be a central hub where the newest and most innovative ideas are tested and evaluated – often by soldiers from nearby Fort Hood or members of the Texas A&M University Corps of Cadets.

The aim is to shorten the time it takes to get emerging technologies from the lab to the field and maximize technology capabilities through soldier feedback. A team of Army and Texas A&M

Agenda Item No. 3.3
Agenda Item Briefing

University System (A&M System) researchers will quickly evaluate prototypes that can be tested by soldiers in a real-world environment using a vast array of sensors and instruments at RELLIS.

TEES has formally executed a cooperative agreement with the Combat Capabilities Development Command (CCDC)-Army Research Laboratory (ARL) to conduct research that will discover and mature technologies leading to an ecosystem capable of generating novel approaches which will accelerate technology transfer across disparate science and technology fields specifically for the Army Futures Command (AFC) modernization mission. This is a five-year, \$65M research agreement. Included in the agreement is funding for TEES to develop, equip and operate an Innovation Proving Ground at the RELLIS Campus. In addition, the 86th Texas State Legislature appropriated \$50M to the Governor to transfer to TEES for Army Futures Command efforts. These funds are to be used for the purpose of engaging this state's public institutions of higher education with private sector industries to establish and equip a proving ground site and to commercialize and manufacture critical emerging technologies for infrastructure networks, public safety, and national defense. \$42M of the \$50M will be used for the IPG.

The IPG will be an integral part of the research efforts being built at the BCDC and the ongoing research efforts with the Army Futures Command. It will provide an experimentation site to enable a myriad of tests, evaluations, and research efforts. The IPG's distinct capabilities will directly assist in the development of innovative, synergistic strategies to support agile and rigorous assessments of cutting-edge technologies and prototypes. The IPG will provide TEES and TEES' clients a test environment to bridge the gap between "lab-scale" research and development and national/government scale testing and evaluation.

Scope:

The IPG project will consist of three "exterior" (land and air) platform test areas: 1.) IPG Mobility Challenge Course, an engineered one-mile test course capable of supporting a broad range of vehicles executing mobility operations under realistic and stressful conditions; 2.) IPG Off-Road Test Area, an engineered maneuver area that facilitates the assessment of a platform's ability to effectively operate in a cross-country environment; and 3.) an IPG Subterranean Test Area, an underground facility supporting the testing of navigational capabilities and sensor effectiveness in an area where communications are limited and autonomy can be stressed. These test areas will be supported by state-of-the-art instrumentation both off platform – all weather/all visibility cameras/audio generating devices, and on platform – audio recording, micro cameras, and data collecting sensors (automotive, network, Assured Position Navigation and Timing). Combined, this instrumentation will enable the capture and visualization of all data in terms of system and system of systems performance. The IPG will have the ability to download and store data for in-depth analysis, collaboration, and future use. Relatedly, the IPG will live stream data and audio/video feedback to a "Data Wall" in the new Innovative Technologies Development Complex (ITDC) facility (currently under construction) providing a real-time Common Operational Picture (COP) and real-time streaming analytics in allowing "as occurs" situational understanding and limited causality on system performance. A control/observation tower and proving ground storage facility will also be constructed.

Agenda Item No. 3.3
Agenda Item Briefing

Other Major Fiscal Impacts:

None.

Strategic Plan Imperative(s) this Item Advances:

Approval of this agenda item will advance the A&M System's Strategic Imperative #4 of increasing the A&M System's prominence by developing a state of the art research proving ground that will enhance defense and industry based research for TEES.

**THE TEXAS A&M UNIVERSITY SYSTEM
FACILITIES PLANNING AND CONSTRUCTION**
Office of the Deputy Chancellor and Chief Financial Officer
April 6, 2020

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

Subject: Approval to Amend the FY 2020-FY 2024 Texas A&M University System Capital Plan to Add the BCDC: Innovation Proving Grounds Project (Project No. 28-3322) for Texas A&M Engineering Experiment Station with a FY 2020 Start Date

I recommend adoption of the following minute order:

“The request to amend the FY 2020-FY 2024 Texas A&M University System Capital Plan to add the BCDC: Innovation Proving Grounds Project for Texas A&M Engineering Experiment Station with an FY 2020 start date and a total planning amount of \$42,000,000 is approved. The exception to system policy is approved to add the project to the Capital Plan prior to completion of a Program of Requirements.

Contingent upon the completion of the Program of Requirements scoped to the approved project budget, the amount of \$4,200,000 is appropriated from Account No. 28-810075, AFC IPG Funding, for pre-construction services and related project costs.”

Respectfully submitted,

[ORIGINAL SIGNED BY]

Billy Hamilton
Deputy Chancellor and
Chief Financial Officer

Approval Recommended:

[ORIGINAL SIGNED BY]

John Sharp
Chancellor

Approved for Legal Sufficiency:

[ORIGINAL SIGNED BY]

Ray Bonilla
General Counsel

[ORIGINAL SIGNED BY]

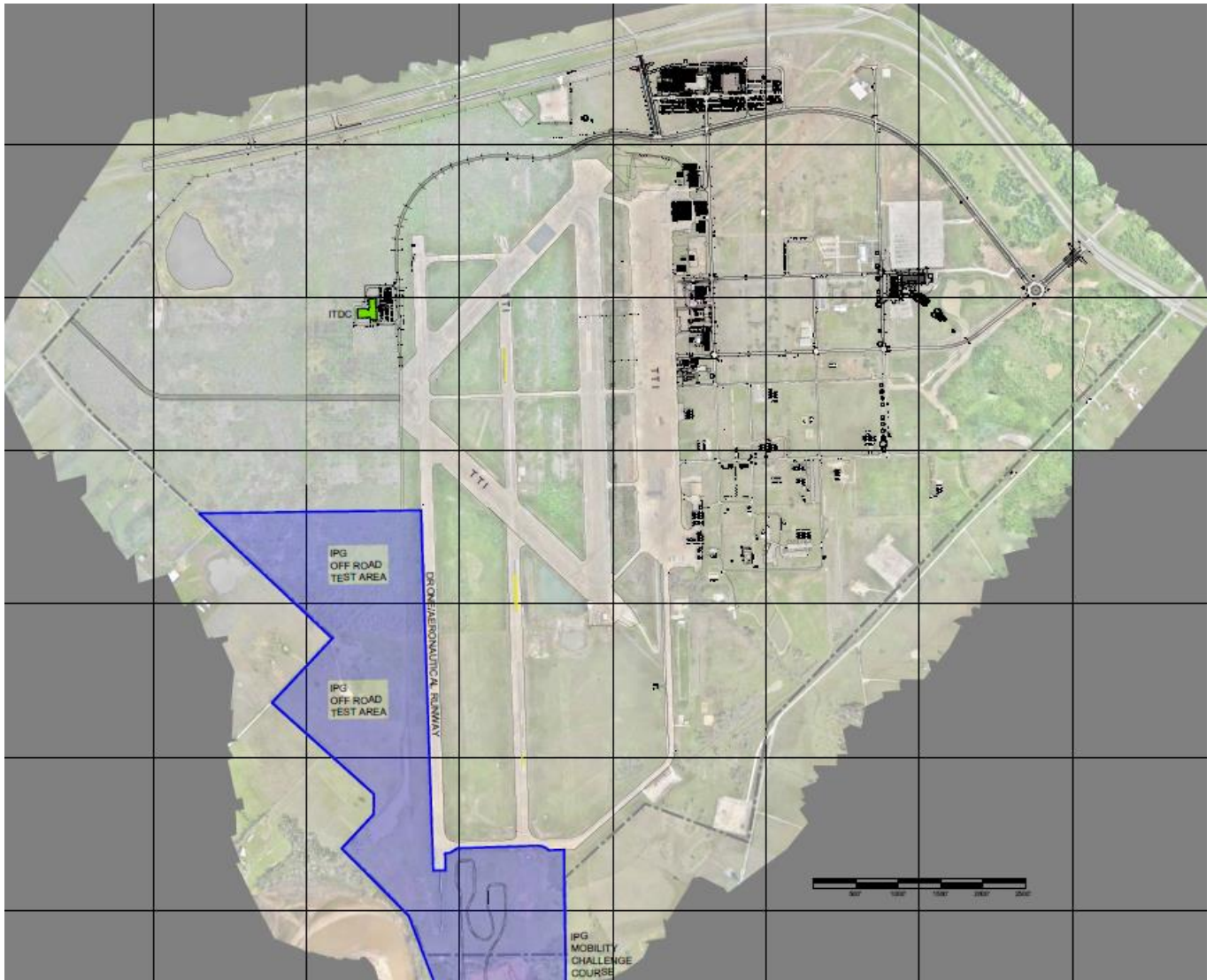
Phillip Ray
Vice Chancellor for Business Services

[ORIGINAL SIGNED BY]

Kelly Templin, Director
The Texas A&M University System
RELLIS Campus

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M. Katherine Banks, Ph.D., P.E.
Vice Chancellor of Engineering and National Laboratories
The Texas A&M University System
Director, Texas A&M Engineering Experiment Station



IPG SITE PLAN –RELLIS

BCDC: Innovation Proving Grounds

Texas A&M Engineering Experiment Station

Project No. 28-3322

BCDC: Innovation Proving Grounds

Texas A&M Engineering Experiment Station
Bryan, Texas



**TEXAS A&M ENGINEERING
EXPERIMENT STATION**

Project No. 28-3322

May 2020



Russell E. Wallace
Executive Director
Office of Facilities Planning & Construction

The Texas A&M University System

Site Location Map

