D.7

Contra

Costa

County

To: Board of Supervisors

From: David Twa, County Administrator

Date: July 10, 2018

Subject: Hensel Phelps Contruction Company Contract Amendment

RECOMMENDATION(S):

APPROVE and AUTHORIZE the County Administrator, or designee, to execute a contract amendment with Hensel Phelps Construction Co., a Delaware General Partnership, subject to approval by the County Administrator and approval as to form by County Counsel, to increase the payment limit by \$4,300,000 to a new payment limit of \$100,113,000, for the design and construction of a new County Administration Building and a new Emergency Operations Center (EOC) and Public Safety Building.

FISCAL IMPACT:

100% General Fund.

BACKGROUND:

As part of the design refinement of the new Administration Building and new Emergency Operations Center (EOC) and Sheriff's Administration Building several changes to the design have been identified. These changes are suggested in order to improve energy efficiency, use more lasting, durable and maintainable materials and improve the operation of emergency facilities.

APPROVE			OTHER
RECOMMENDATION OF CNTY ADMINISTRATOR RECOMMENDATION OF BOARD COMMITTEE			
Action of Board On: 07/10/2018 APPROVED AS RECOMMENDED OTHER			
Clerks Notes:			
VOTE OF SUPERVISOF	RS		
AYE:John Gioia, District I SupervisorCandace Andersen, District IISupervisorDiane Burgis, District IIISupervisorDiane Burgis, District IIISupervisorKaren Mitchoff, District IVSupervisorFederal D. Glover, District VSupervisorBy: June McHuen, Deputy			
Contact: Eric Angs 925.335.1009	taat		



The following changes are recommended for the EOC building, increase the size of the electrical

BACKGROUND: (CONT'D)

service, increase the emergency generator size and capacity, increase the lightning protection and use a more robust roofing material and system.

For the new Administration Building the proposed changes are installing an electrical heat pump, using the more robust and built up roofing system and using glass fiber reinforced concrete (GFRC) panels as an exterior material instead of stucco.

The following bullet points outline the main reasons for each recommended change:

Emergency Operations Center:

Electric Service Upsize

• Increase service size to best support the EOC program

• Allows the building to meet the needs of the County

Lightning Protection

• Building Safety, if the building is struck by lightning, it will disperse any transient voltage from the strike safely to the earth avoiding any catastrophic damage to the electronics within the building. If the building is not grounded, a lightning strike may damage sensitive equipment and cause interference with specialized communications equipment.

• May prevent personal injury as a lightning strike can exceed one billion volts with temperatures as high as 36,000 degrees Fahrenheit which could cause fires and render the facility unusable.

Emergency Generator Upsize

• Increase in generator size will allow for the entire building to stay operational for seven in an emergency situation

Built-up Roofing System

- Consistency with new County standards
- Second membrane layer for additional resiliency to cuts/tears

Administration Building:

Carbon Free/Heat Pump

- Electric Heat Pumps More efficient systems (better use of natural resources)
- Carbon Free Heating (no need for Natural Gas)
- Future Proofing (allows path to Net Zero)
- Better for the environment

GRFC

- long life, will last the lifetime of the building
- will not leak
- never needs painting (repaint stucco every 10-20 years)
- sandblasted GFRC exposes colorful sands and small aggregates leading to a more

- aesthetic finish than stucco
- GFRC buildings look "high end" while stucco buildings may resemble strip malls or housing tracts
- GFRC is likely less susceptible to crushing type damage/vandalism than stucco

• GFRC is designed to withstand moderate seismic events without damage or cracking (stucco typically is not)

Built-up Roofing System

- Consistency with new County standards
- Second membrane layer for additional resiliency to cuts/tears

CONSEQUENCE OF NEGATIVE ACTION:

Not approving the contract amendment would reduce the capacity, energy efficiency and durability of two needed facilities potentially increasing the cost to add the functionality and/or maintain them in the future.