

Public Safety Facility Building Committee



MEETING MINUTES

DATE: 9/2/2021

PLACE: Town Hall, North Central Meeting Room

MEMBERS PRESENT: Garrity, Healey, Kelly, MacAloney, Lauter, Touchette, Jones, Murphy

GUESTS: Sean Schmigle and Todd Costa, Kaestle Boos Associates (KBA)
Steve Karan, Building Engineering Resources (BER)
Mary Mahoney and Duclinh Hoang, Hill International (Hill)

The Chair called the duly noticed meeting to order at 7:05 pm.

Regular Members Robert Garrity, Chair, Paul Healey, Vice Chair, Joe Kelly, Bruce MacAloney, Talbert Lauter and Andy Touchette were in attendance. Non-voting members Police Chief David Jones and Fire Chief Steve Murphy were in attendance. Town consultants, Sean Schmigle and Keith Mercy from Kaestle Boos Associates, Steve Karan from Building Engineering Resources, and Mary Mahoney and Duclinh Hoang from Hill International were also in attendance.

Approval of minutes

Bruce MacAloney made a motion to approve the August 19, 2021 meeting minutes. Talbert Lauter seconded. Motion carried unanimously.

Net Zero Concept Discussion

Sean Schmigle, with KBA, reported to the committee on Net Zero Ready and Carbon Neutral building design. Mr. Schmigle noted Net Zero means the total amount of energy used by the building on an annual basis is equal to the amount of renewable energy created on site. For Net Zero, the highest efficiency HVAC system and building envelope, should be used to reduce the size of the HVAC system loads. Carbon Neutral is where the carbon emissions incurred during operation of the building are balanced out by finding an equivalent amount of carbon savings elsewhere.

Steve Karan, with BER, reported on five (5) options for HVAC system design being considered for the Public Safety Facility. The options are: 1) Packaged rooftop units with air supply control by variable air volume devices, 2) Air handling units with chilled water and hot water pipe loops, 3) Four (4) pipe heat and cooling supplied fan coil units, 4) Variable refrigerant flow unit system (VRF), and 5) Geothermal heat pumps. Mr. Karan presented the recommended HVAC system for Police Station which is a combined VRF system with energy recovery ventilation (ERV) air and a building energy management system (BMS). Additionally for the Fire Station, use of a gas-fired boiler to support radiant heating coil system in the slab and overhead unit heaters at the apparatus bays for rapid heat recovery based on heat loss when the bay doors open.

Mr. Schmigle reported opportunities and requirements for accomplishing Net Zero based on the square footage of the facility (55,000 sf), estimated average watt per square feet (12 w/sf), average power produced by solar panel (300 watts), and average size of solar panel (17.55 sq ft). Mr. Schmigle reported that an estimated cost for installation of solar panels at \$1.98/watt equates to about \$1,306,800. The current design based on a gabled roof structure provides 7,500 sf of south facing roof and 15,000 sf car port coverage opportunity at the upper

level parking deck. The project has an opportunity of another 17,000 sf area for solar car ports from the non-structure parking areas. Mr. Karan reported that VRF system is the lowest in operating costs as compared to a VAV system/hot water reheat, four (4) pipe fan coil units and geothermal system. BER will be performing a life cycle cost analysis as part of the schematic design documentation to further define capital costs, operating costs and pay back analysis to evaluate the different building systems with recommendation on the most cost effective system for the building.

Mr. Schmigle reported on a construction cost comparison to meet Mass Building Code-Stretch Code and incremental construction costs to meet LEED Silver certified, LEED Gold Certified and LEED Platinum Certified. He noted that the base design criteria and budget for the project is based on the Stretch Code and that LEED certifications would add costs in 5% incremental increase in total construction cost depending on the level of certification. There is also additional soft cost to the project associated with LEED certification design documentation, construction documentation and certification audit process at the completion of design and completion of construction. KBA identified LEED Silver design/documentation as an additional service in its designer services proposal with a fee of \$200,000.

General discussion ensued regarding the proposed HVAC system, upfront cost to study geothermal feasibility, schedule for determining the preferred system without impact to the project design schedule, and next goals for the design team. KBA noted that Schematic Design phase is moving towards completion of documentation with cost estimating schedule to start mid-September 2021.

Design Progress Report

Mary Mahoney, Project Manager for Hill International, reported that four design progress meetings were conducted since the last committee meeting: (2) with Fire Department representatives, (1) with Police Department representatives, and (1) joint meeting with Police and Fire Department representatives. During the meetings, KBA reviewed and continued making floor plan adjustments to improve circulation and building efficiency while incorporating comments received from the Fire Chief and Police Chief.

Sean Schmigle, KBA, presented updates to the floor plans and discussed design advancements. Mr. Schmigle noted that changes to the 1st floor include the Emergency Operations Center (EOC)/ Training room area increased to accommodate include 60 seats from 48 seats, add of one single use toilet room near EOC with two toilet rooms remaining in the main lobby, reconfigured locker rooms, added storage rooms within the sally port and rotation of the stair at the main lobby. The design team reviewing set up and partition types for the toilet rooms, detainee release area, and access from the Sally port to the K-9/Kennel room.

In review of the 2nd floor, Mr. Schmigle noted the fire apparatus bays are set up for two engines, primary and reserve, two ambulances, primary and reserve, and bay to house the fire department boat and towing vehicle. Other space adjustments include inclusion of a direct access from Wellness to the Apparatus Bays, relocation of a break room to a location with daylighting, and Fire Decon showers moved to the warm zone of the building. KBA is continuing to review the location of the Decon showers with the Fire Department's preferred location to be in a hot zone.

On the 3rd floor, Mr. Schmigle noted adjustments to consolidate the Fire Department Living and Day Rooms and the adjacent stairwell was rotated. The design team is still reviewing the location and layout for the Fire Department outdoor cooking area as it relates to building massing plans. For Police Department areas adjustments made include locating the Clerical Office closer to the third floor lobby and locating administration office to face Essington (ocean side).

Mr. Schmigle noted changes to the site plan including Fire Department apparatus apron width was increased to accommodate the five (5) apparatus bays. The Fire Department has requested and KBA is reviewing options to provide 180 degree vehicle access around the building.

Budget Report

The Chair reported that Hill's contract amendment #1, to provide an independent cost estimate of the schematic design was identified in Hill's original service proposal as an extra service. Hill's

contract amendment #1 includes the additional fee as stated in its original proposal. Paul Healey made a motion to approve Hill's contract amendment #1 and authorize Hill to proceed with independent cost estimator services for schematic design phase in the amount of \$6,600. Motion was seconded by Bruce MacAloney. Motion carried unanimously.

Ms. Mahoney reported on receiving KBA invoice #7 for the amount of \$126,924 which represents a total fee request of 66% of its schematic design fee. Following invoice receipt, KBA was asked to provide certain documentation to support its performance to 66% completion of schematic design phase. Invoice payment recommendation is pending receipt of the supporting documentation.

Next meeting

Thursday, September 23, 2021 at 7 P.M.

Bruce MacAloney motioned to adjourn the meeting, seconded Talbert Lauter.

The motion passed unanimously

The meeting adjourned at 10:00 pm.