



# Mendocino County

## Legislation Details (With Text)

**File #:** 20-0614      **Version:** 1      **Name:**  
**Type:** Approval      **Status:** Agenda Ready  
**File created:** 7/2/2020      **In control:** Executive Office  
**On agenda:** 7/14/2020      **Final action:**  
**Title:** Discussion and Possible Action Regarding an Energy Analysis of Mechanical Systems for the County SB844 Jail Expansion Project

**Sponsors:**

**Indexes:**

**Code sections:**

**Attachments:** 1. MCJ SB844\_Energy Study Final\_061820, 2. HHW Boiler NRK-Data-Sheet-2, 3. HP-Water Heater, 4. Rooftop HP, 5. 07-14-20 MCCAAC Correspondence, 6. 07-14-20 Revised Table

Date	Ver.	Action By	Action	Result
7/14/2020	1	Board of Supervisors		

**To: Board of Supervisors**

**From:** Executive Office and Sheriff-Coroner

**Meeting Date:** July 14, 2020

**Department Contact:** Steve Dunncliff

**Phone:** 463-4441

**Department Contact:** Doug Anderson

**Phone:** 234-6054

**Item Type:** Regular Agenda

**Time Allocated for Item:** 45 min

**Agenda Title:**

Discussion and Possible Action Regarding an Energy Analysis of Mechanical Systems for the County SB844 Jail Expansion Project  
(Sponsors: Executive Office and Sheriff-Coroner)

**Recommended Action/Motion:**

Receive the analysis, provide direction to staff regarding the Board's design preference.

**Previous Board/Board Committee Actions:**

On September 23, 2013 and again on August 4, 2015, resolutions were authorized to pursue grant funding for jail improvements; these applications were unsuccessful. On February 7, 2017, Resolution 17-019 authorized submittal of a proposal for funding through the Adult Local Criminal Justice Facilities Construction Financing Program (Senate Bill 844) for additional specialty housing and expanded program, training, and mental healthcare space at the County jail. The County's proposal was ultimately successful in securing \$25 million in state reimbursement; this item also authorized local match of approximately \$1.047 million. On December 19, 2017, an agreement was approved with Nacht & Lewis, in the amount of \$2.901 million, for architectural services related to this project. On April 24, 2018, a modification to the project location was approved with a local match increase of approximately \$1,000,000. FY 19-20 budget included \$500,000 increase in local

match to this project for a total of approximately \$27,547,000. On October 1, 2019 the Board approved a Construction Management Contract Award to Vanir and requested additional information regarding insulation and mechanical systems in the new building.

**Summary of Request:**

The purpose of this report was to compare mechanical system options based on their life-cycle energy performance for the proposed 22,000 square foot jail facility currently under design, and to consider the benefit of additional insulation on the exterior walls. The report confirmed that the current design and mechanical systems are the most cost effective. A return on investment for the cost of additional exterior insulation would take approximately 180 years, which is beyond the life of the building. Three electric heat pump options were analyzed- air source, water source, and ground source. All three electric heat pump options would cost more to install, maintain, and operate than the gas heat base option. However, any of the heat pump options would generate at least 37% less carbon than gas heat. The least expensive heat pump option (air source, Alternate 1) would add approximately \$200,000 to the construction cost and, and related project delay due to the new design would cost around \$120,000. Funds have been reserved by the Board for the most cost effective project, which has been designed with gas heat. Current estimates indicate that \$320,000 in additional local funding would be required for the expense of Alternate 1, which would replace gas heat in the current design with an air source heat pump.

**Alternative Action/Motion:**

Provide direction to staff

**Supervisorial District:** All

**vote requirement:** Majority

**Supplemental Information Available Online At:** N/A

**Fiscal Details:**

**source of funding:** Bu 1712

**current f/y cost:** N/A

**annual recurring cost:** N/A

**budget clarification:** In addition to the \$25 million committed by the State, \$2.5 million has been set aside by the Board as local match for this project, with a current total construction cost estimate of \$27.5 million. Any decision by the Board that increase the cost of this project will require additional local funding.

**budgeted in current f/y:** No

**if no, please describe:**

**revenue agreement:** No

**Agreement/Resolution/Ordinance Approved by County Counsel:** N/A

**CEO Liaison:** Executive Office

**CEO Review:** Yes

**CEO Comments:**

**FOR COB USE ONLY**

Executed By: Atlas Pearson, Deputy Clerk I

Date: July 20, 2020

Final Status: **Direction Given to Staff**

