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Mark D. Johnson - Airport Manager

## MEMORANDUM

TO: Livingston County Board of Commissioners

FROM: Mark D. Johnson   
Airport Manager

DATE: July 22, 2024

RE: SRE Building Final Design Contract

This Agreement with C&S Companies will provide the final design and contractor bidding documents for a new Snow Removal Equipment (SRE) building at the Livingston County Airport.

In 2022, the Board authorized the building site design and preliminary design of the SRE building (30% drawings) by C&S. These two contracts and an Independent Financial Engineer Estimate total \$87,900 and were funded by the airport. Approximately 50% of these costs are eligible for FAA grant funding.

The total amount of the final design project is \$154,951.80, which is also eligible for approximately 50% FAA grant funding. The final determination of what portion of the building is eligible for FAA funds is a part of the final design task. Portions of the building are ineligible due to FAA grant criteria and there is a size limit of 2,500 square foot of eligibility for the equipment storage area which is defined by airport size and location. A storage area for sand and chemical is eligible for FAA funding and will be included in the final project.

In order to use Bipartisan Infrastructure Legislation (BIL) funds for construction, the project needs to be designed and bids accepted prior to April 1, 2025. Ideally, we hope to start construction in the early fall of 2025, or earlier if the grant process moves more quickly than anticipated.

There are funds available in the airport's retained earnings for these expenses.



## **Livingston County Spencer J. Hardy Airport SRE Facility Investment Justification**

### **Introduction**

Livingston County's Spencer J. Hardy Airport is a county asset valued at more than \$50M. Established in the mid 1950's by the City of Howell, it has grown from a grass field and expanded to an all-weather regional airport with a single paved runway and precision instrument approach.

To maintain operational readiness of needed support equipment, and to preserve the County's equipment assets, heated space is required to service and protect these assets. Dedicated space does not exist at this time on the airport. A Snow Removal Equipment building is proposed to ensure each of the above is most economically and efficiently achieved.

### **THE SRE FACILITY**

#### **Definition**

A Snow Removal Equipment Building, known as a SRE by the FAA, stores an airport's equipment required for winter operations.

Based upon the winter equipment assets owned by the County, a draft concept would require a structure approximately 50' x 130' as depicted in the attached drawing, totaling 6,500 square feet. It is anticipated that the total square footage of the building may be reduced slightly during final design.

However, federal rules dictate that a general aviation airport eligible for two pieces of equipment is allowed 2,000 square feet of federally funded building space. By working with the FAA, the Airport Manager has demonstrated that our existing equipment cannot be stored in 2,000 square feet and an exception will be made to fund 2,500 square feet. Only equipment purchased with federal participation is eligible for SRE building funding. Restroom space is an example of what cannot be funded with FAA dollars but is required under the building code.

Livingston County Aeronautical Facilities Board members have met with both the engineers and MDOT officials to develop and plan for constructing and funding this facility. The attached preliminary design drawings have served as a basis for these discussions. The final percentage of FAA vs. local funding for building construction will be determined after the final design drawings are completed and it is anticipated that the ratio will not materially change from the current 50% estimate.

### **BACKGROUND**

#### **Growth**

As a non-towered airport current MDOT estimates are approximately 150 take offs and landings daily. Fuel sales in 2003 were 100,000 gallons of Avgas and 25,000 gallons of Jet-A. In 2023, Avgas sales were 91,000 gallons and Jet-A sales were 257,000 gallons (approximately a 278% increase, averaging nearly 14% per year). This change is mainly due to the construction of the new runway in 2006, which has changed the aircraft mix at the airport. The airport is now home to Crosswinds Aviation, one of Michigan's largest flight schools which is affiliated with Howell High Schools and Eastern Michigan

University, as well as a base for University of Michigan Survival Flight. We are also home to many full-time jobs with commercial development on the airport which includes maintenance facilities, corporate air charter, commercial helicopter service, government support aviation and manufacturing services, medical transport services, and multiple large private hangars.

With nearly 425 acres of land, over 50 acres of paved surfaces, 120 T-Hangars, and 5,000 s.f. of other buildings owned by the County to maintain, the airport requires timely maintenance and planned upkeep to ensure compliance with FAA grants and regulations, but more importantly to assure the community of the wise and justifiable use of every investment made.

The airport is a County designated enterprise fund which is self-sufficient, fiscally conservative in our operations, and whose Board remains committed to protecting and enhancing the County's premier aviation asset.

### **Livingston County's Investments**

In 2008, the airport was granted FAA funding to purchase a New Holland Bi-Directional tractor with a broom, snow blade and snow blower for snow removal purposes. This was the first airport owned equipment as previously all snow removal had been performed by a contractor.

When UM Survival Flight brought a fixed wing jet to the airport, this equipment was not capable of cleaning the runway in a timely manner to provide a safe operating environment for Survival Flight and other jet traffic.

In 2020, the airport received grant funds for a high-speed runway broom. This \$600,000 piece of equipment is capable of removing 1" of snow from the runway in approximately twenty minutes.

The SRE building will include storage areas for heated sand and runway de-icing fluids, which we presently do not utilize as we have no place to store these items. The use of sand and/or chemicals increases runway safety as they can either remove contaminants; or provide additional traction on icy surfaces.

### **Safety**

For the U of M / Survival Flight jet aircraft, the runway must have less than ¼" of snow contamination for them to take off or land. Because that aircraft does not operate on a scheduled basis, the high-speed broom is imperative to provide them with a safe operating environment, as it can quickly clean the runway surface. Livingston County can experience rapidly changing weather which can be rain one hour, snow and sleet the next, then followed by significant snow accumulation. The broom allows the fastest recovery time to clean the runway and taxi surfaces, cutting the time to clear to twenty minutes for the runway, versus two hours with the previous equipment. A clear runway is paramount to aviation safety.

### **Operational Readiness**

Currently all our maintenance equipment is kept in "T-hangar" space on the airport grounds. It is unheated and not large enough to perform even basic operational changes without being exposed to the weather. Further, after extensive work periods, commonly 24-hours non-stop, the equipment is put away covered in snow and ice, unable to thaw, before the next use required which could be a short period later. This is very hard on the equipment and accelerates wear and tear on the substantial investment.

**Financial Model/Request**

The current engineer's cost estimate for sitework and construction of the SRE is \$2,367,000. Based upon discussions with MDOT, it is estimated that roughly 50% of these costs will be eligible for federal funding, with the remainder falling to the airport. The Airport currently has a surplus of over \$1,000,000 in retained earnings. The Livingston County Aeronautical Facilities Board is proposing to use \$500,000 of this money for the project, keeping the balance as a rainy-day fund, and borrowing \$750,000 from the County (numbers have been rounded) for construction in 2025.

It is anticipated that the total square footage of the building may be reduced slightly during final design. This would reduce the total cost of the project as well as the airport's share of the cost.