



500 Fourth Ave. NE
Austin, MN 55912-3773

www.ci.austin.mn.us

507-437-9940
Fax: 507-434-7197

AGENDA
PORT AUTHORITY
MONDAY, APRIL 5, 2021
CITY HALL - COUNCIL CHAMBERS
4:00 PM

1. Roll Call.
2. Approval of minutes of the March 10, 2021 meeting.
3. The Hormel Institute state bonding request. (Craig Clark).
4. Executive Director Report. (Craig Clark)
5. Any other business.
6. Adjourn.

**MINUTES
PORT AUTHORITY SPECIAL MEETING
WEDNESDAY, MARCH 10, 2021
4:00 P.M.
LOWER-LEVEL CONFERENCE ROOM**

Members Present: Commissioners Jerry McCarthy, Jeff Austin, Jason Baskin, and Jerry Mohrfeld.

Members Appearing via Zoom: Commissioners Chuck Moline and Michael Bednar.

Members Absent: Commissioner Lee Bjorndal.

Staff Present: Port Authority Attorney Craig Byram, Port Authority Executive Director Craig Clark and Port Authority Secretary Tom Dankert.

Others Present via Zoom: John Garry (DCA),

Others Present: Curt Johnson, Dean Goette, Don Hagen, and Craig Fink representing Patriot Land and Construction Co. LLC

President McCarthy called the meeting to order at 4:00 p.m.

Item #2. – Approval of minutes of the January 27, 2021 regular meeting: Motion by Commissioner Bednar, seconded by Commissioner Mohrfeld to approve the minutes of the January 27, 2021 regular meeting. Carried 6-0.

Item #3. – Due diligence request for property along 11th Drive and 14th Street NE: Mr. Clark discussed a proposal to give Patriot Land and Construction Co. LLC an exclusive 90-day window to perform due diligence on both the 13.55-acre site across from the I90 Kwik Trip and the 25-acre site across the road behind the I90 Kwik Trip for a proposed new truck wash facility. Giving them the 90-day period would provide them assurance that we would not sell the property out from underneath them, though this agreement does not provide any terms of sale.

Curt Johnson noted his real estate experience in this type of project, as he was the one who worked on the first McDonalds McStop up in Lakeville right off I35 back in the 1980's.

Dan Goette noted he is also well versed in this type of project, as he is an expert in truck wash waste and its usage as a fertilizer.

Don Hagen noted he is currently managing the G&R Truck Wash down the street for the last 10 years and would be managing this one if it is constructed. Mr. Hagen noted there are 115 hog trailers every day in Austin, and most all need to be washed out these days. This proposed project would be a more efficient operation.

Mr. Fink noted his experience in real estate development and noted this project would have local ownership.

Motion by Commissioner Austin, seconded by Commissioner Baskin to approve the 90-day due diligence period for Patriot Land and Construction Co LLC as presented. Carried 6-0.

Item #4. – Executive Director Report: Mr. Clark noted the Nu-Tek project has had the lots combined as requested, we have had an implementation meeting with the State for the MIF grant, and the tax increment financing plan is on the Council agenda for Monday.

International Paper has some damage at the Walker Building, and they are agreeable to a workable solution as they have driven through an internal wall again. We are proposing to remove the wall and lease the space out to them for an additional approximate \$2,000 per year.

The MetroFibernet site has had the phase 2 completed with no findings. The purchase agreement has been signed and sent back to them as we await a closing date.

Mr. Clark noted we may need to have discussions in the future about building standards in the Creekside Business Park, as a question of whether or not we want to allow pole sheds in this area might need to be reviewed.

Item #5. – Any other business: None.

Item #6. Adjournment: With no further business, motion by Commissioner Austin, seconded by Commissioner Mohrfeld to adjourn the meeting at 4:28 pm. Carried 6-0.

Approved: _____

President: _____

Secretary: _____

RESOLUTION NO.

IN SUPPORT OF STATE BONDING FUNDING FOR THE MINNESOTA BIOIMAGING CENTER

WHEREAS, the Austin Port Authority desires to enter into a development and construction agreement with The Hormel Institute to construct the Minnesota BioImaging Center (MBiC); and

WHEREAS, the requested amount is \$18,124,000.00 for the infrastructure improvements and building expansion for technology that will serve to support scientist working to find a cure for cancer; and

WHEREAS, the financing of this project will further help create jobs which is consistent with the Port Authority's vision of supporting good paying positions within the community; and

WHEREAS, the proposed additions to The Hormel Institute will further leverage their current strengths in bioimaging and expand this to a new level and bring researchers from our neighboring states and around the world to the Center; and

WHEREAS, The Hormel Institute is a research unit within the University of Minnesota and research partner of Mayo Clinic and supports the entire state of Minnesota and its people demonstrating a clear statewide need; and

NOW, THEREFORE, BE IT RESOLVED that the Austin Port Authority does hereby approve the submission of state bonding funding in connection with the MBiC construction, remodel and infrastructure of new technologies within the facility to further leverage the existing The Hormel Institute's position of innovation.

Passed by a vote of yeas and nays this 5th day of April, 2021.

YEAS

NAYS

ABSTAIN

ATTEST:

APPROVED:

Port Secretary

President, Austin Port Authority

Minnesota BioImaging Center (MBic)



THE HORMEL INSTITUTE
UNIVERSITY OF MINNESOTA
MAYO CLINIC

Letter from the Executive Director



The Hormel Institute, University of Minnesota is a premier US and emerging world leader in biomedical research with a focus on cancer prevention and treatment. An independent biomedical research unit within the University of Minnesota's Office of the Vice President for Research, The Hormel Institute has been contributing to research for over 75 years.

Located in Austin, Minnesota, The Hormel Institute brings important jobs to greater Minnesota and strengthens the important medical research industry in our state. Thanks to the support of The Hormel Foundation and our community, The Hormel Institute tripled in size in 2008 and again doubled in size in 2016 with additional support from the State. As part of this growth, the International Center for Research Technology (ICRT) was formed to provide important cutting-edge technology to further cancer research. The ICRT continues to provide required technologies to accelerate research to find answers to cancer. The Minnesota Bioimaging Center (MBiC) project proposed herein will expand ICRT capabilities in the areas of bioimaging and data analysis.

The Hormel Institute's current technology already differentiates it from other research centers in the region. Recent investments include one of the most powerful microscopes in the world – the high-resolution CRYO-EM – two supercomputers, mass spectrometry, and more. The Hormel Institute's CRYO-EM is the only one of its kind in Minnesota and several neighboring states.

The MBiC will be located within The Hormel Institute, and will house some of the world's most important technologies needed for Institute scientists to further cancer research discoveries. This project will leverage, dramatically expand, and complement the current bioimaging capabilities at The Hormel Institute, open up these new capabilities to use across the entire state, and attract additional researchers from several of our neighboring states that lack access to these new technologies. The MBiC will support current and future research at the Institute and the growing number of Institute scientists who are advancing The Hormel Institute's mission to accelerate answers to cancer through scientific research.

The MBiC project is a unique opportunity to expand on the bioimaging specialty already available at The Hormel Institute and continue to build Minnesota's reputation as one of the nation's top medical destinations. The three-year project includes the required construction/remodel/infrastructure and the new technologies. The remarkably collaborative effort from our community, region and State is among the very best examples of bi-partisan collaboration as together our research benefits us all, preventing and treating cancer and extending lives in Minnesota and beyond.

With regards,

Robert Clarke, Ph.D., D.Sc.
Executive Director
The Hormel Institute

Project Overview

The **Minnesota BioImaging Center (MBiC)** will leverage and expand The Hormel Institute UMN's unique capabilities for high resolution single particle cryo-electron microscopy (cryo-EM) analysis and will establish a state-of-the-art center for biomolecular structure and function research in rural Austin, MN that operates in service to the needs of research across Minnesota and our neighbors in nearby states.

The MBiC will have a sustained, transformative, and multi-level impact on the research and training capabilities within and beyond Minnesota.

Main Goals:

1. Expand the current capabilities of The Hormel Institute, e.g., the ability to perform cryo-electron tomography (cryo-ET) research in addition to cryo-electron microscopy (cryo-EM)
2. Overcome space limitations that severely restrict Institute user base and capabilities
3. Create a center that serves a critical need in, at the very least, four adjacent Midwestern states (MN, ND, SD, IA)

The completed project will create a new biophysics and imaging wing of The Hormel Institute, housing the bulk of the MBiC instrumentation, support laboratories, offices for operations staff, and shared common areas for external users/visitors that enhance and encourage collaboration. Upgrades will facilitate the expected 24 hours/day, 7 days/week operation. The new and expanded infrastructure will support versatile space usage while leaving room for bioimaging expansion over the next 20 years.

The MBiC will add specialist jobs to accommodate the expanded services and user base and will offer researchers from across the Midwest direct access to advanced cryo-EM capabilities.

Impact on Research

Cryo-EM is the premier method for macromolecular structure determination for a broad range of targets thanks to rapid advances in instrumentation and data analysis capabilities, sample production, and biochemical characterization. The last five years have seen a rapid growth in the available uses of this technology for biological and health-related breakthroughs. Despite this progress, significant roadblocks remain that prevent the widespread use of state-of-the-art cryo-EM and cryo-ET methods.

The Hormel Foundation, University of Minnesota, Mayo Clinic and other sources have committed and will provide matching funds.



Development Corporation of Austin

"The Minnesota BioImaging Center is an exciting project, both for The Hormel Institute and for the Austin area. The project will bring new jobs and business growth to Greater Minnesota, not to mention the impact on the technology capabilities at The Hormel Institute and the effects on their research."

John Garry
President & CEO
Austin DCA



- 30+ new people in the community
 - 10 new faculty/staff hired at The Hormel Institute
- MBiC 24/7/365 use means visiting researchers will increase local hotel and restaurant business
- An opening symposium for MBiC has already attracted international interest
 - This international symposium could become an annual or biennial event generating business for hotels, restaurants, etc.
- Opportunity for community engagement and education around MBiC

Testimonials

 "The Hormel Foundation has long supported the excellent scientific research conducted at The Hormel Institute here in Austin and its positive impact on human health. The continued growth of the work of The Hormel Institute and our collaborative investment in their research also has a positive economic benefit in our community and state." Jeffrey M. Ettlinger Chair, The Hormel Foundation Former CEO, President and Chairman of the Board, Hormel Foods Corp.	 "Copy to come.." Joan Gabel President, University of Minnesota
 "Copy to come.." Greg J. Gores, M.D. Executive Dean for Research Mayo Clinic	 "Copy to come.." Rafael Fonseca, M.D. Interim Director, Mayo Clinic Cancer Center
 "We are proud to be a partner supporting the important cancer research work of The Hormel Institute. Their collaborations with University of Minnesota and Mayo Clinic as well as research institutions around the world bring new and important jobs to rural Minnesota that compete with no others – and their work in cancer research is aimed for the public good." Governor Tim Walz State of Minnesota	 "The Hormel Institute is a successful collaboration of many groups – Hormel Foods, Mayo Clinic, the University of Minnesota, the City of Austin and also the federal support that comes from NIH – the National Institutes of Health. In Minnesota, we believe in science and technology. The accomplishments of The Hormel Institute are significant for our state and will help us grow in the important bioscience industry." U.S. Senator Amy Klobuchar Minnesota

Testimonials

 "Copy to come.." U.S. Senator Tina Smith Minnesota	 "Copy to come.." Rep. Jim Hagedorn Minnesota
 "Copy to come.." U.S. Sen. Dave Senjem Minnesota State Senator	 "Copy to come.." U.S. Sen. Carla Nelson Minnesota
 "Copy to come.." Sen. Gene Domink Minnesota State Senator	 "Copy to come.." Rep. Patricia Mueller Minnesota House of Representatives

Testimonials

"Copy to come.."  Mary Davenport UMN Reagent	"Copy to come.."  Steve Grove DEED Commissioner
"Copy to come.."  Steve King Mayor City of Austin	"Copy to come.."  Craig Clark City Administrator City of Austin

	LEICA DMIRB FLUORESCENT MICROSCOPE Fluorescent microscope with high-end optics and a quality camera to take higher quality (sharper and with more resolution) images. Would replace existing outdated Leica fluorescent microscope for enhanced image capturing. FEATURES: • 4X, 10X, 20X, 40X, 63X oil objectives • Fluorescence, Phase and brightfield, with camera and mechanical stage • Has automated soft agar colony counting program	LEICA DMIRB FLUORESCENT MICROSCOPE - \$250,000 RESEARCH IMPACT: An updated microscope would be easier to use and give the researcher sharper and more detailed images. A better camera would help the researcher record those images. Researchers can use these images to learn how cancer is affecting the cell and how the cells respond to different treatments. A fluorescent microscope is also used extensively in basic cancer research.
	NIKON C2+ CONFOCAL MICROSCOPE The confocal microscope can provide simultaneous acquisition of 3 fluorescent channels (colors) plus DIC in a single scan. It comes with a spectral detector helps remove autofluorescence and any overlapping fluorescent spectra. The scan head and pinhole system can be controlled to allow for high speed image acquisition or a high quality image. FEATURES: • 4x, 10x, 20x, 40x oil. 60x water 100x oil objective • DAPI, FITC, GFP, Texas Red, Cy2, Cy3, Cy5 plus spectral imaging	NIKON C2+ CONFOCAL MICROSCOPE - \$350,000 RESEARCH IMPACT: A confocal microscope can focus on multiple levels in the same specimen. Light coming from areas not in that focal plane are blocked. This allows for higher resolution image (sharper) and can show two events occurring in the same cell (co-localization). This cannot be achieved using a standard fluorescent microscope.
	BD ARIA III FLOW CYTOMETRY CELL SORTER The variety of excitation lasers and detectors allows the researcher to use fluorophores (colors) that do not overlap and allows for more complex multicolor sorting experiments. Can sort at high speeds, into as many as 4 tubes at once, or sort into well plates, or onto slides. The cell sorter can be set up for aseptic sorting if the researcher wishes to grow the cells after sorting. FEATURES: • Biosafety cabinet for sorting human based cells • Has five excitation lasers and 15 detectors (colors) • System is upgradeable and compatible with our existing flow cytometer	BD ARIA III FLOW CYTOMETRY CELL SORTER - \$400,000* *The total cost of this equipment is \$650,000. \$250,000 of support will be provided by other sources. RESEARCH IMPACT: The sorter can be used to separate a target population (or several different populations) of cells from other cells in a tissue or tumor at a rapid rate. The separated cells can be studied to see what makes them different from other cells in the tissue or tumor and information about cancer pathways and possible treatments can be discovered. RELATED CONSTRUCTION - \$4,000,000

	FEI Thermo Fisher Scientific Glacios Cryo-Transmission Electron Microscope (Cryo-TEM) Krios G3i and Glacios Cryo Transmission Electron Microscopes are used in single particle analysis (SPA) workflow, structural analysis of proteins and protein complexes. Krios G3i is enhanced in auto-alignment, simplified user interface, and extended sample lifetime and offers 4 Å resolution of Electron Microscopy Data Bank. Designed to be integrated together in a single-particle analysis (SPA) workflow, pre-screening samples in the Glacios before imaging them at high-resolution in the Krios. The interconnectivity between the Krios and the Glacios enhances the efficiency of the pre-screening process for facilities that have a Krios, and provides a pathway to higher-resolution imaging for Glacios-based laboratories by permitting them to pass samples directly to a Krios at another location for additional analysis. FEATURES: • 200 kV XFEG optics • Autoloader (cryogenic sample manipulation robot) • Same automation as the Titan Krios • Small footprint • Designed-in connectivity ensures a robust and contamination-free pathway throughout the entire workflow • Can be configured with a Direct Electron Detector and/or Volta Phase Plate to be a complete standalone SPA data acquisition solution	FEI Thermo Fisher Scientific Glacios Cryo-Transmission Electron Microscope (Cryo-TEM) \$4,500,000* *The total cost of this equipment is \$5,000,000. \$500,000 of support will be provided by other sources. RESEARCH IMPACT: Working in tandem with our current Krios, the Glacios will immediately enhance the throughput of the Cryo-EM Center for Biomedical Discovery at The Hormel Institute, allowing our researchers to facilitate drug screening targets and to solve structures of proteins involved in the cancer signaling cascade in a much more efficient and faster pace. RELATED CONSTRUCTION \$500,000
---	---	---



BRUKER BIOSPEC 70/20 USR 7 TESLA

The BioSpec 70/20 is a MR imager capable of label free non – invasive imaging of small animals. Can track tumor growth and eventual metastases over the course of an animal study without having to inject the animal with a luciferase or fluorescent label.

FEATURES:

- 7 Tesla Ultra 20 cm Bore Ultra Shielded Magnet
- Actively shielded superconducting magnet
- Motorized and software controlled animal positioning

BRUKER BIOSPEC 70/20 USR 7 TESLA

\$2,000,000*

MAGNETIC RESONANCE IMAGING

*The total cost of this equipment is \$3,000,000.
\$1,000,000 of support will be provided by other sources.

RESEARCH IMPACT:

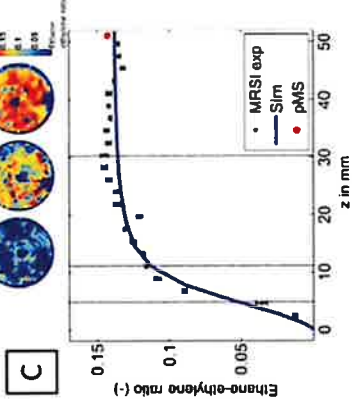
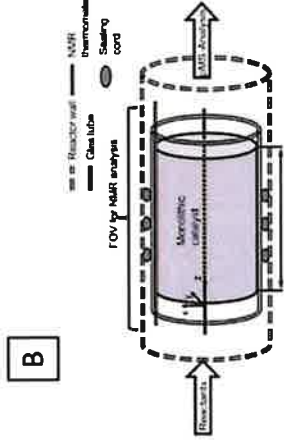
An MRI imager would be able to image tumors and metastases that are too small to be imaged by a luminescence based imager and is considered superior to a luminescence based imager because it provides a better idea of shape and location of the tumor.

RELATED CONSTRUCTION

\$3,000,000



A. 7-Tesla MRI system
(Bruker Biospec 70/20 USR)



3D magnetic resonance spectroscopic imaging (MRSI) used for characterizing a gas phase hydrogenation reaction in a monolithic catalyst. B. Scheme of setup with NMR compatible reactor, C. 2D maps of ethane/ethylene ratio at three z positions and profile of the averaged ethane/ethylene ratio along the reactor axis z, compared to simulations (cf., J. Ulpts et al., Catalysis Today 310, 176-186(2018).)

Phase 3

Project Phase	Goals (non-construction)	Actions	Success Metrics
Phase 3 (Years 3-5)	• Add second Titan Krios • Expand user base to maximum capacity • Increase access to mass spectrometry and X-ray crystallography • Expand training and education; integrate with graduate coursework and new/existing training grants • Implement monthly user-group discussions First annual MCBSF research conference	• Install new Titan Krios microscope (or equivalent) • Add additional user groups from Mayo • Add additional user groups from UMN • Add additional external user groups • Hire new technician(s) to support expanded user base • Continue to update, improve, and expand all training programs	• Second Titan Krios (or equivalent) installed • First data collected on second Titan Krios (end of 2025) • User base expanded to 25 user groups (end of 2025) • Capacity for 25 independent users (end of 2026) • Facility fully staffed with trained personnel (manager + 1-2 technicians) • Fill all training programs • Successful completion of first annual conference

Budget



Owner: The Hormel Institute
Project: MN Center For Biomolecular Structure & Function
GSF: 19,800

Addition With Penthouse

Estimator: GK
Design Phase: Conceptual
Date: 3/19/2021

Description	Quantity	Unit	Rate	Total \$	Total %
Construction Costs					
1 Existing Conditions	19,800	GSF	5.33	\$105,611	0.74%
2 Sitemwork	19,800	GSF	16.63	\$329,353	2.31%
3 Substructure	8,000	FP	53.06	\$424,492	2.97%
4 Structure	19,800	GSF	45.89	\$908,546	6.36%
5 Exterior Enclosure	17,578	Ext SF	53.13	\$933,853	6.54%
6 Roofing	13,500	Roof SF	14.57	\$196,729	1.38%
7 Interiors	19,800	GSF	38.90	\$770,190	5.39%
8 Stairs	4	Flights	25,172.96	\$100,692	0.71%
9 Building Equipment	19,800	GSF	12.26	\$242,776	1.70%
10 Conveying Systems	4	EA	41,562.50	\$166,250	1.16%
11 Mechanical	19,800	GSF	192.80	\$3,817,387	26.74%
12 Fire Protection	19,800	GSF	4.93	\$97,687	0.68%
13 Electrical	19,800	GSF	126.40	\$2,502,737	17.53%
14 Low Voltage Electrical Systems	19,800	GSF	0.00	\$0	0.00%
15 General Conditions	12	MO	71,173	\$854,071	5.98%
16 Weather Conditions	19,800	GSF	3.00	\$59,400	0.42%
17 Hoisting	12	MO	12,506.40	\$150,077	1.05%
Subtotal of Construction Costs	19,800	GSF	588.88	\$11,659,852	81.67%

Description	Quantity	Unit	Rate	Total \$	Total %
Miscellaneous Costs					
18 Permit Fees				\$85,000	0.60%
19 SAC/WAC Fees				\$0	0.00%
20 Surveying/Layout				\$9,397	0.07%
21 Testing & Inspections				\$15,000	0.11%
22 Builder's Risk & Deductibles				\$9,500	0.07%
23 Performance Bond				\$0	0.00%
24 Subcontractor Default Insurance				\$124,035	0.87%
25 Pre-Construction Services				\$20,000	0.14%
26 General Liability Insurance				\$113,266	0.79%
Subtotal Construction & Misc. Items	19,800	GSF	607.88	\$12,036,050	84.30%
Fees & Contingency					
27 Design Contingency	5.00	%		\$601,803	4.22%
28 Construction Contingency	5.00	%		\$601,803	4.22%
29 Escalation: Mid Pt of Construction	0.0360	%		\$488,543	3.42%
30 D-B Design Fees	0.00	%		\$0	0.00%
31 Construction Fee	4.00	%		\$549,128	3.85%
Grand Total Construction Costs	19,800	GSF	721.08	\$14,277,326	100.00%
Added Project Costs					
32 RSP Architecture and Engineering Fee				\$932,000	6.53%
33 Added Soft Costs - (75% of Construction)				\$7,914,963	20.42%
Total Project Costs	19,800	GSF	915.37	\$18,124,289	126.94%

UMN
The Hormel Foundation
The Mayo Clinic
Total

\$7 million
\$13 million
\$2 million
\$22 million

On behalf of The Hormel Institute, Austin Port Authority is requesting \$18.124 million from the State of Minnesota in the 2022 bonding bill and matched by The Hormel Foundation, University of Minnesota, Mayo Clinic, and others.



The 2016 expansion doubled the size of The Hormel Institute providing critically needed labs and technology space. Austin Port Authority secured \$13.5 million from the State of Minnesota in the 2012 bonding bill, which was matched by The Hormel Foundation. The community supported a \$4.5 million expansion during the same period, adding the Ray Live Learning Center, a 250-person event room and auditorium. The 2016 expansion resulted in new jobs, new technology, and increased research capabilities.



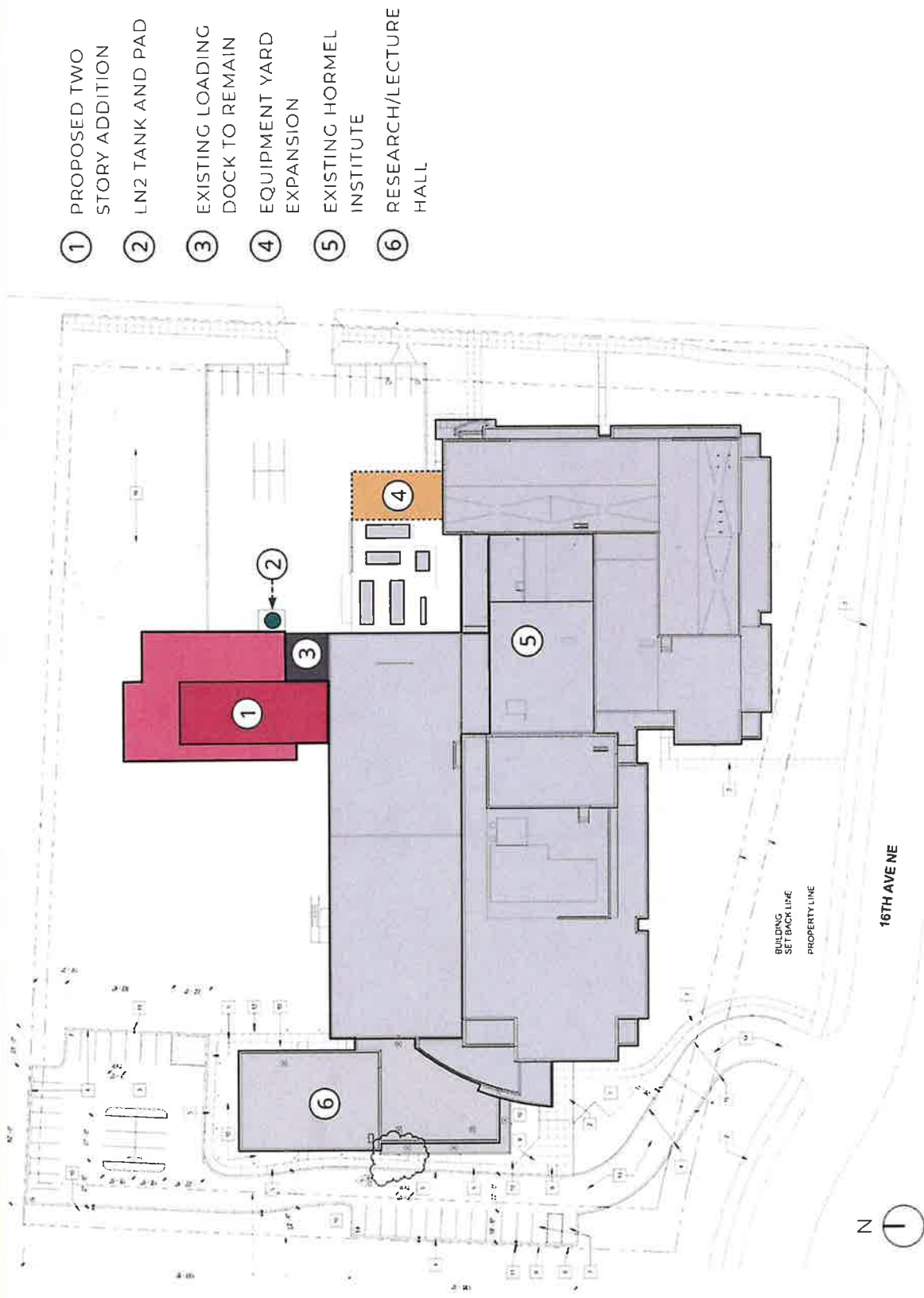
Jerry McCarthy, President

“Quote by Jerry”

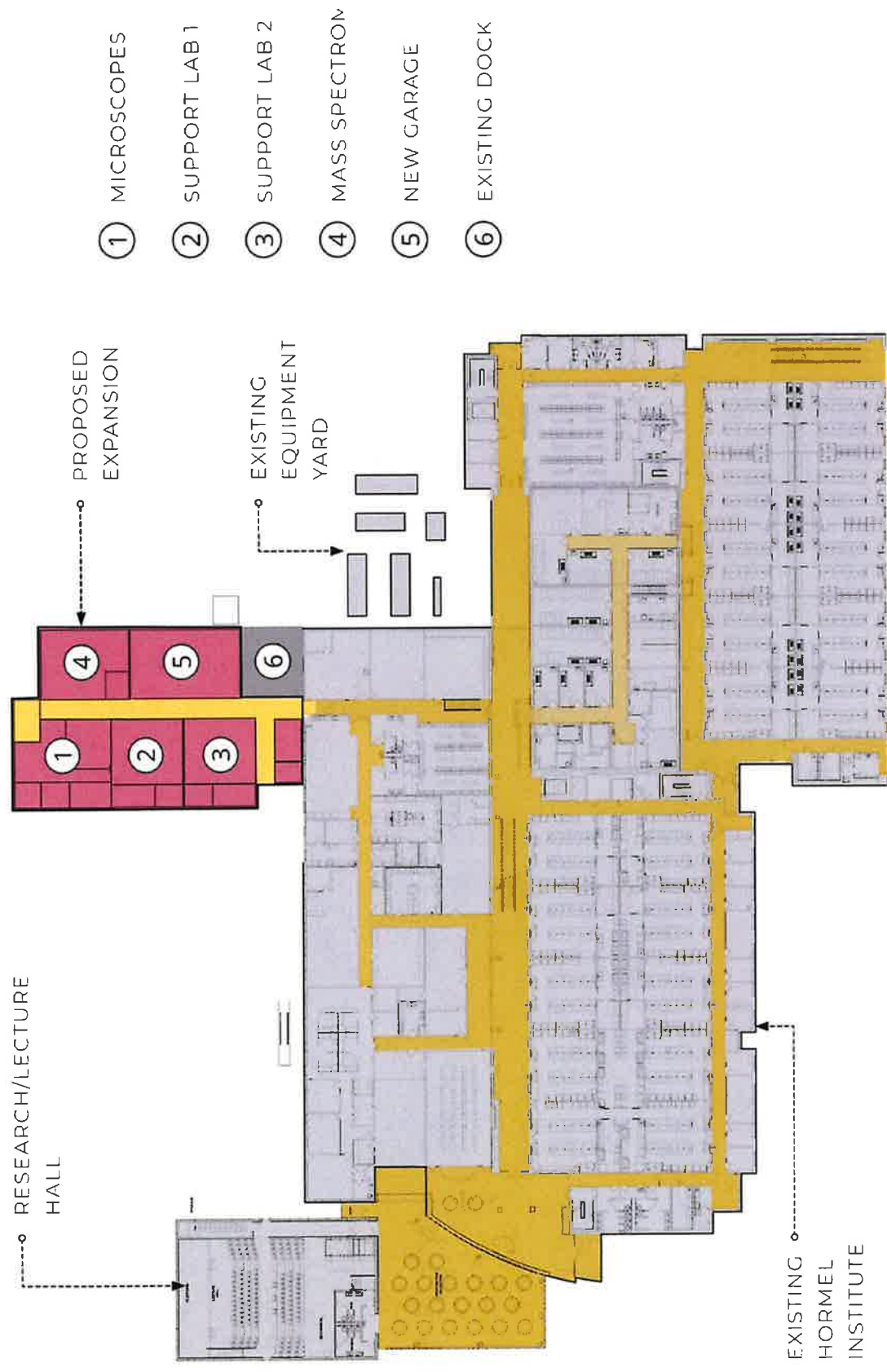
Board Members

Jason Baskin
Chuck Moline
Michael Bednar
Jerry Mohrfeld
Lee Bjorndal
Jeff Austin

Site Plan



Overall First Floor Plan



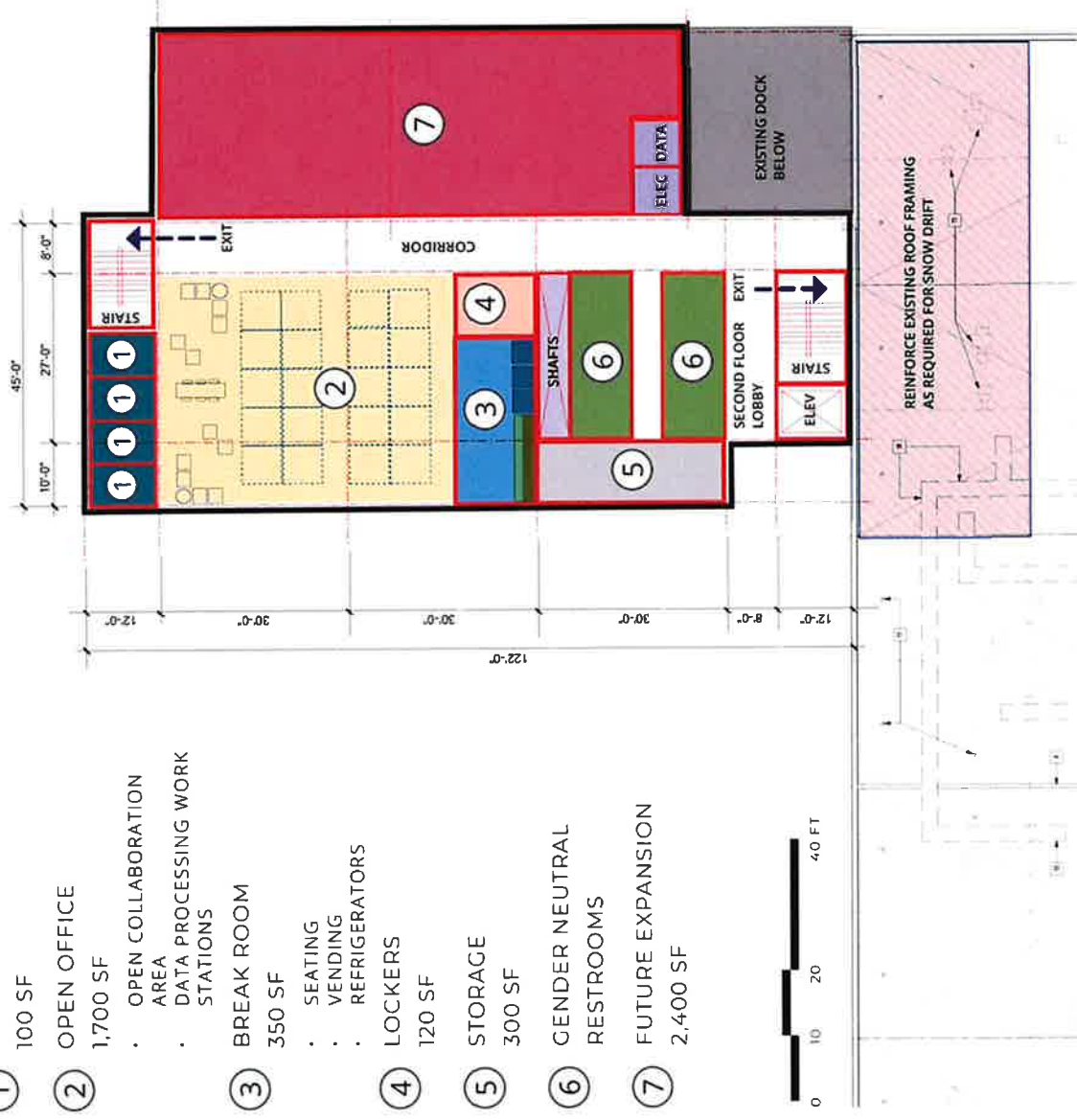
First Floor Plan

- ① MICROSCOPES
1,500 SF
 - KRIOS
 - GLACIOS
 - TECHNAI SPIRIT
- ② SUPPORT LAB 1
1,100 SF
 - FUME HOODS
 - SINKS
 - REFRIGERATORS
- ③ SUPPORT LAB 2
1,100 SF
 - FUME HOODS
 - SINKS
 - REFRIGERATORS
- ④ MASS SPECTROMETER
1,100 SF
 - MASS SPECTROMETER
 - LIQUID CHROMATOGRAPH
 - ROUGHING PUMP
 - IMAGER
 - FOCUSING SYSTEM
- ⑤ NEW GARAGE
1,250 SF



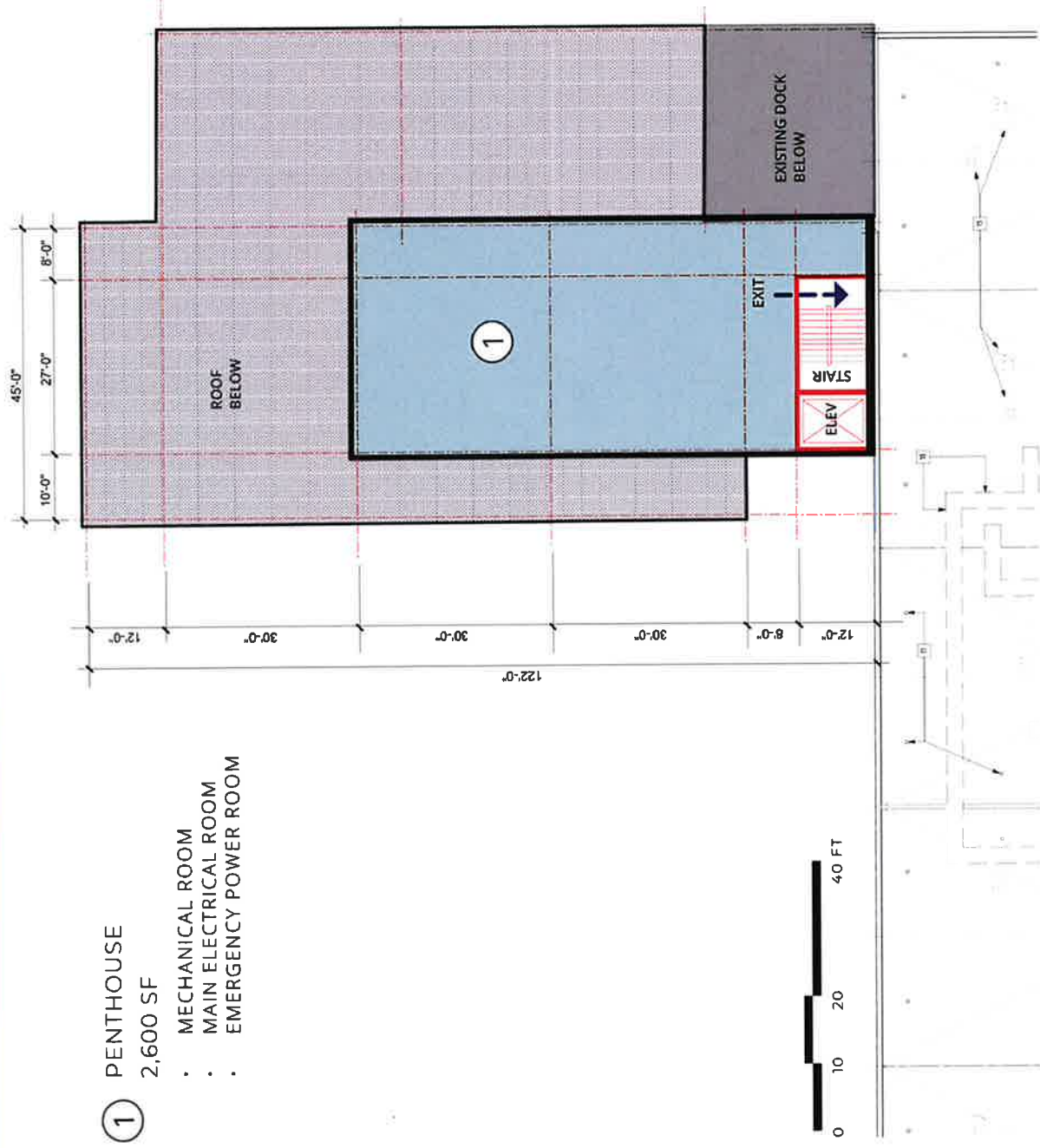
Second Floor Plan

- ① OFFICE
100 SF
- ② OPEN OFFICE
1,700 SF
 - OPEN COLLABORATION AREA
 - DATA PROCESSING WORK STATIONS
- ③ BREAK ROOM
350 SF
 - SEATING
 - VENDING
 - REFRIGERATORS
- ④ LOCKERS
120 SF
- ⑤ STORAGE
300 SF
- ⑥ GENDER NEUTRAL RESTROOMS
- ⑦ FUTURE EXPANSION
2,400 SF



Penthouse Floor Plan

- ① PENTHOUSE
2,600 SF
- MECHANICAL ROOM
 - MAIN ELECTRICAL ROOM
 - EMERGENCY POWER ROOM



Basement Floor Plan

- 1 NEW SERVER ROOM 900
SF
 - SERVER RACKS
 - IN-RACK COOLING SYSTEM
 - CRAC UNITS
- 2 NEW HAZ MAT CONTROL AREA
900 SF

