MINUTES

ONE HUNDRED TWENTY SIXTH MEETING

of the

BOARD of DIRECTORS

of the

MASSACHUSETTS TECHNOLOGY PARK CORPORATION

May 25, 2022 Zoom Videoconference

The One Hundred Twenty Sixth Meeting of the Board of Directors of the Massachusetts Technology Park Corporation ("MassTech") was held on May 25, 2022, via Zoom video conference, pursuant to notice duly given to the Directors of the Board and publicly posted on the MassTech website with corresponding notice provided to the Office of the Secretary of State and the Executive Office for Administration and Finance.

The following MassTech Directors were present and participated: Secretary of Housing and Economic Development Mike Kennealy (represented by Mark Fuller of the Executive Office of Housing and Economic Development), Christina Royal, Julie Chen, Rupa Cornell, Albion Calaj, Alok Tayi, Bogdan Vernescu, Joe Dorant, Michael Greeley, Richard Lester, Nate Walton, Secretary of Administration and Finance Michael Heffernan (represented by Patrick Lynch of the Executive Office for Administration and Finance), Carlos E. Santiago (represented by Tye Brady of Amazon Robotics), and Ernesto DiGiambattista.

The following Mass Tech Collaborative staff was present: Carolyn Kirk, Brianna Wehrs, Lisa Erlandson, Michael Baldino, Holly Lucas Murphy, Jennifer Saubermann, Kelly Kleanthous, Stephanie Helm, Pat Larkin, Colin McDonald, Christine Nolan, James Byrnes, Joseph Downing, Will Fuqua, Jason Hoch, and Ben Linville-Engler.

Mr. Fuller called the meeting of the MassTech Board of Directors to order at 2:04 p.m. He conducted attendance by roll call and observed the presence of a quorum.

Agenda Item I Approval of MassTech Meeting Minutes

Following a period of brief discussion, and upon motions duly made and seconded, it was VOTED unanimously by a roll call vote:

The Board of Directors of the Massachusetts Technology Park Corporation hereby adopts the Draft Minutes of the One Hundred Twenty Fifth Meeting of the Board of Directors of the Massachusetts Technology Park Corporation held on December 7, 2021 by Zoom video conference as the formal Minutes thereof.

Agenda Item II Report of the Mass Tech Collaborative Board Chair

Mr. Fuller provided a brief update, stating there has been a lot of activity on the economic development front. The Governor filed an economic development bond bill (the "Mass Forward Bill"), which includes capital funding for MassTech, as well as authorization for additional American Rescue Plan Act ("ARPA") spending. He stated that the bill runs the gamut of priorities for the Administration, including expanding funding for things such as advanced manufacturing, robotics and AI, as well as money for strengthening communities and workforce development. Mr. Fuller then stated that the Governor's office has also filed a supplemental budget as revenues across the state are strong right now. He then congratulated Dr. Chen on her appointment as Chancellor of University of Massachusetts Lowell, and following a brief discussion regarding the economic development initiatives, he turned the floor over to Ms. Kirk.

Agenda Item III Report of the Mass Tech Collaborative Executive Director

Ms. Kirk stated that the purpose of today's meeting will be to provide an overview of how Mass Tech will be positioning itself going forward. She gave a brief report indicating the following: we are following all the areas of legislation spoken about by Mr. Fuller, we are undertaking a number of hiring initiatives, and the finance team is working on the fiscal year 2023 budget, which will be forthcoming. Ms. Kirk stated Mass Tech is excited about where we are heading.

After some brief discussion Ms. Kirk turned the floor back to Mr. Fuller, who indicated that the first item for discussion was executive committee nominations, and tuned the floor back to Ms. Kirk and Ms. Saubermann.

Agenda Item IV Governance- Executive Committee Nominations

Ms. Saubermann briefly explained how Executive Committee nominations work procedurally. She then explained that two prior Executive Committee members resigned from the MassTech Board of Directors, therefore two new members are needed, and the recommendation of the Personnel and Governance Committee was now before the Board for a vote. Ms. Kirk stated the unanimous recommendations for the two new members of the Executive Committee were Bogdan Vernescu and Paige Fetzer-Borelli.

Following a period of brief discussion, and upon motions duly made and seconded, it was VOTED unanimously by a roll call vote:

The Board of Directors of the Massachusetts Technology Park Corporation ("MassTech Collaborative"), acting pursuant to the authority delegated under

Chapter 40J of the General Laws of the Commonwealth, does hereby elect the following Directors to serve on the Executive Committee of the Board of Directors to fill existing vacancies, as recommended by the Personnel and Governance Committee:

1. Bogdan Vernescu 2. Paige Fetzer-Borelli

Each of the individuals shall serve until a successor is elected.

Agenda Item V Investment Strategy and Program Delivery Strategy

Ms. Kirk then explained that Mr. Linville-Engler and Mr. Larkin will detail how Mass Tech approaches investment strategy and decision making, but first elaborated that much of this is driven by the opportunities Mr. Fuller talked about. The Mass Forward Bill filed by Governor Baker contained following funding for Mass Tech: \$50M for the Competitive and Secure Future Innovation Program, \$30M for the Massachusetts Manufacturing Innovation Initiative ("M2I2"), \$24M for Tech and Innovation and Collaborative Research & Development Matching grants, \$23M for the Massachusetts Manufacturing Accelerate Program ("MMAP"), and \$200M for a Federal Matching Grant program. Ms. Kirk indicated Mass Tech is optimistic regarding all this funding, and then provided a comparison with prior years' funding, indicating the total coming through Mass Tech in the next 12 months is almost \$80M, which requires an investment strategy. Ms. Kirk stated that the \$80M for FY23 is almost triple what is usually allocated to MassTech. She then turned the floor over to Mr. Linville-Engler.

Mr. Linville-Engler then explained the MassTech strategic operating model, and how we look at the different funding vehicles across our five divisions. He discussed the different layers of stakeholders, including education, government, and industry, who are pulled together to review opportunities for the different MassTech divisions. He also discussed the different areas each MassTech division deals with, from emerging technologies to workforce development, noting that each division looks at things a little differently but there is also overlap, and the goal is to develop some uniformity in how things are managed. Mr. Linville-Engler then turned it over to Mr. Larkin to discuss program implementation strategies.

Mr. Larkin stated that we are integrating the approach to program delivery across Mass Tech. He indicated there is a commitment at the executive level to facilitate more collaboration across the divisions. He explained that the first steps in this began with the development of two cross-division working groups, the first focused on investment activity and the second focused on Mass tech workforce activities, with the primary objective to educate Mass Tech personnel internally on what each other is doing to drive a deeper understanding of the work, to share and leverage best practices, and to promote a culture of collaboration.

Mr. Linville-Engler then provided an example of cross collaboration as it relates to our investments. There was an application that came in from MIT through the R&D

Matching Grant Program for additive manufacturing, but it did not fully fit the R&D Program, so the opportunity was shared with the M2I2 program team, which is a grant program administered by MassTech on behalf of EOHED. Ultimately it was determined that the MIT proposal fit partially within each of these programs and we are therefore proposing to fund the project jointly through the R&D and M2I2 funds. We are requesting that the Board approve an award from the R&D fund, and a request to utilize M2I2 funds is currently with EOHED for review. Mr. Byrnes was then asked to explain the proposal and recommendation.

Mr. Byrnes explained that MIT is seeking \$2,000,000 to develop an R&D and prototyping program for integrated and digitally seamless manufacturing methodologies. This program will combine additive manufacturing methods with complementary machining and metrology techniques and augmented and virtual reality technologies to establish end-to-end R&D capability for digital production of advanced metal and polymer components. The investment will result in the establishment of two lab spaces at MIT. Innovation Institute funds will be coupled with an approved \$2,000,000 grant from the M2I2 program. Expected economic development outcomes are increased adoption of technologies leading to new jobs and increased competitiveness, new products and manufacturing processes in key industries such as medical devices, and enhanced outcomes of research programs led by MIT and academic partners and enabling of new programs.

Following a period of brief discussion, and upon motions duly made and seconded, with Richard Lester abstaining, it was VOTED by a roll call vote:

The Board of Directors of the Massachusetts Technology Park Corporation ("Mass Tech Collaborative"), acting pursuant to the authority delegated under Chapter 40J of the General Laws of the Commonwealth, does hereby authorize the following grant award under the Collaborative Research Matching Grant Program (RFP No. 2020-JAII-04) to be funded through the Scientific and Technology Research and Development Matching Grant Fund (M.G.L. Chpt. 40J, Sec. 4G):

• to the Massachusetts Institute of Technology in an amount not to exceed \$2,000,000, to establish two laboratory facilities for the Digital Manufacturing of Advanced Aerospace, Defense, and Medical Components, as presented.

The grant award is subject to the execution of a grant agreement in a form and with terms approved by MassTech Collaborative's Executive Director.

Mr. Byrnes next explained that UMass Lowell is seeking \$4,996,701 to establish Massachusetts Alliance for Space Technology & Sciences ("MASTS") a "single-stop, small spacecraft support system" that will accelerate the introduction of new technologies to the small satellite market. In order to develop and supply technologies that facilitate and expand the functionality of nanosatellites, the MASTS project will build a concurrent design facility for nanosatellites and satellite constellations. The applicant has developed a closely coordinated consortium that will encompass a comprehensive mission design center at MIT, and purpose built facilities at the UMass Lowell Center for Space Science and Technology. These facilities will contribute to scientific and technical discoveries in the small satellite market and for broader uses in related fields such as UAV's, Marine Robotics and other autonomous systems. Mass Tech investment will be matched on a 1:1 basis with non-state matching funds in the form of industry and eligible federal funds.

Following a period of brief discussion, and upon motions duly made and seconded, with Julie Chen abstaining, it was VOTED by a roll call vote:

The Board of Directors of the Massachusetts Technology Park Corporation ("Mass Tech Collaborative"), acting pursuant to the authority delegated under Chapter 40J of the General Laws of the Commonwealth, does hereby authorize the following grant award under the Collaborative Research Matching Grant Program (RFP No. 2020-JAII-04) to be funded through the Scientific and Technology Research and Development Matching Grant Fund (M.G.L. Chpt. 40J, Sec. 4G): •to the University of Massachusetts Lowell in an amount not to exceed \$4,996,701, to build a design facility that will develop and supply technologies that facilitate and expand the functionality of nanosatellites, as presented.

The grant award is subject to the execution of a grant agreement in a form and with terms approved by MassTech Collaborative's Executive Director. Proposed Motion

Next Ms. Nolan provided an update on the Center for Advanced Manufacturing ("CAM"). Ms. Nolan indicated that in year one of the MMAP Program, 13 grants were awarded for a total of \$2.1M, 51 applications were submitted for over \$10M, awarded firms have hired an average of 4 employees, and an influx of new business has already been seen due to the increased capabilities. In year two there was an increased authorization for the program to \$6M, and small shifts in program criteria to align manufacturers with strong non-profit partners, progression to Industry 4.0, and projects that contribute to equity across the state. In addition CAM will be hosting the Advanced Manufacturing Collaborative (AMC) on June 14, 2022, at the NEXUS Center.

Mr. Larkin discussed the Innovation Institute, noting that Megan Marszalek, a MassTech employee has a strong acumen for entrepreneurship, and is a great resource for the entire organization. Mr. Larkin then highlighted two programs underway from last year. The first, Pathways to Scale, helps entrepreneurs overcome barriers to growth through mentor networks that connect scale-up founders with seasoned entrepreneurs who have experience growing innovative companies to scale. The second, Strong Entrepreneur Ecosystems, is a new solicitation supporting a community entrepreneurled approach to economic development.

Mr. Linville-Engler next gave a brief update on MeHI, stating great deal of activity was occurring around support of entrepreneurship and digital health and its intersection

with caregiving. Discussed the two challenges that MeHI undertook through the \$682,880 U.S. Economic Development Administration for the Scaling Pandemic Resilience through Innovation and Technology (SPRINT) Challenge grant. Through a partnership with Lever, the first Challenge, completed in December 2021, focused on solutions for family caregivers that help caregivers facing new challenges caring for loved ones during the pandemic or that help caregivers return to work. The second Challenge, launched in January 2022, and is currently ongoing, focuses on solutions for healthcare providers and health systems that are facing new challenges to providing care. This program will accelerate digital health innovations and validate the selected Challenge winners' innovations at Massachusetts digital health Sandboxes.

Mr. Baldino next provided an update on MBI. He stated there is an unprecedented amount of federal funding coming to the Commonwealth for broadband. This includes: \$50M in ARPA State and Local Fiscal Recovery Funds for digital equity initiatives, a \$1M planning grant from the Economic Development Administration to support our statewide broadband data collection and mapping effort, \$175M from the ARPA Capital Projects Fund for broadband projects, and under the Infrastructure Investment and Jobs Act ("IIJA") we are guaranteed a baseline of \$100M but it will actually be substantially more than that allocated on a formula basis. Ms. Wehrs then discussed how we'll be reviewing and allocating these funds going forward. Mr. Baldino said this is our opportunity to make transformational change in the Commonwealth around broadband and digital equity.

In her update on the MassCyberCenter, Ms. Helm indicated that progress is ongoing to establish the Cybersecurity Consortium and support Cybersecurity Centers of Excellence ("CCEs"). A non-profit entity will be established as the governing entity of the Consortium, and two consultants were hired to assist with this. Ms. Helm also indicated that several institutions have expressed interest in establishing cyber range and security operations center ("SOC") CCEs, and the CyberCenter is currently reviewing seven proposals received through an RFP process to find a vendor to provide a bundled cyber range license that will accelerate establishment of range CCEs.

After a brief discussion, there being no other business to discuss and upon motion duly made and seconded, the MassTech Board of Directors voted unanimously and without abstention by a roll call vote to adjourn the meeting at 3:26 p.m.

A TRUE COPY ATTEST: (Secretary)

DATE:

Materials and Exhibits Used at this Meeting:

- 1. Draft Minutes for the December 7, 2021, MassTech Board of Directors Meeting
- 2. Presentation- Governance Executive Committee Nominations (motion item)
- 3. Presentation- Investment Strategy and Program Delivery Strategy

• Innovation Institute – Collaborative Research and Development Matching Grants (motion items)

o MIT – Digital Manufacturing of Advanced Aerospace, Defense, and Medical Components

o UMass Lowell – Massachusetts Alliance for Space & Technology & Sciences (MASTS)

- Center for Advanced Manufacturing Update
- Mass Cyber Center Update
- Innovation Institute Update
- MeHI Update
- MBI Update