President Stanley called the meeting of the Board of Trustees to order at 8:00 a.m. in the Board Room.

Trustees present: Dianne Byrum, Melanie Foster, Dan Kelly, Brian Mosallam, Brianna Scott, and Kelly Tebay.

Trustees absent: Joel Ferguson, Nancy Schlichting.

University officers present: President Stanley, Interim Provost and Executive Vice President Sullivan, Executive Vice Presidents Beauchamp and Wilbur, Secretary Barr, Acting Vice President and General Counsel Quinn, Senior Vice President Hsu, Vice Presidents Bales, Bollman, Byelich, Gore, Guerrant, Haas, Heil, Maybank, and Swain, and Senior Advisor and Director Granberry Russell. Faculty liaisons present: Richard Fulton, Jennifer Johnson, Deborah Moriarty, and Gwen Whittenbaum. Student liaisons present: Meagan Abel, Eric Delannoy, Selva Haidar, and Mario Kakos.

All actions taken were by unanimous vote of the Trustees present, unless otherwise noted.

1. On a motion by Trustee Byrum, supported by Trustee Foster, the BOARD VOTED to approve the agenda as amended.

2. On a motion by Trustee Scott, supported by Trustee Byrum, the BOARD VOTED to approve the minutes of the September 6, 2019 Board of Trustees meeting.

3. Public Participation
   a. Juyang Wang
   b. Cathleen Fry

4. President’s Report

President Stanley provided the following report to the Board.

I want to thank those who spoke this morning.

I have often said since I arrived here almost three months ago that one of my highest priorities is to make our campus as safe, respectful, and welcoming as it can be. This is a broad imperative. I often talk about it in the context of sexual misconduct or relationship violence, but it also is directly associated with diversity,
equity and inclusion on this campus. Safety includes being able to feel safe, respected and welcome.

Recent events have made it clear that many students do not feel that way when confronted with acts of bias, or when they hear about them, they respond. I discussed this in an email I sent to the MSU community Tuesday. In that message, I acknowledged reports and concerns of bias incidents on campus and described how seriously we take them. During the past week, I've also had conversations with student leaders, including some of the student liaisons to the Board of Trustees, who are seated here at every meeting. I look forward to continuing these conversations as we work together to address these issues. And as I mentioned in the email, I will continue to work closely with the campus community as we start strategic planning processes and focus on diversity, equity, and inclusion will be a core value in our planning as we go forward.

I had the opportunity to meet with survivors of sexual assault and their supporters in three meetings held this month. I learned a great deal and answered as many questions as I could during those meetings. I listened carefully and I heard some important concerns and requests for action. I want to reiterate my appreciation for each of the survivors' willingness to engage in these conversations. I want to make sure we are doing everything we can to prevent sexual assault, and to assist those affected by it in a trauma informed and supportive response.

The Relationship Violence and Sexual Misconduct (RVSM) Expert Advisory Workgroup and presidential advisers Rebecca Campbell and Andrea Munford will use input from the meetings, along with the results from the campus climate survey, and their own expertise, to draft a plan to address the concerns we heard and to better prevent and respond to RVSM issues. Along those lines, we have posted a website showing actions needed to comply with reviews conducted under the Federal Clery Act, the U.S. Department of Education's Office for Civil Rights and the U.S. Department of Health and Human Services. Those interested can find it at the Track Our Progress tab within the Our Commitment page on the MSU website.

An agenda item before the Board later this morning is confirmation of the appointment of Dr. Norman J. Beauchamp Jr. to the newly created position of Executive Vice President for the Health Sciences. In doing so, Dr. Beauchamp will step down as Dean of the College of Human Medicine and another capable administrator, Dr. Aron Sousa, will step in on an interim basis. These actions are part of a reorganization of the administration of the Colleges of Human Medicine, Osteopathic Medicine, and Nursing, and our health clinics, which we announced on October 11, 2019. The new organization and leadership structure will improve the alignment of MSU's patient care, medical research, and medical and nursing education. This kind of reporting structure is viewed as a best practice among leading universities operating medical schools, hospitals and clinics. I am confident
it will help make Michigan State’s health care activities more accountable and more effective.

Earlier this month we said goodbye to Rob McCurdy, our chief information officer. We wish him well as he moves on to a global accounting firm. Fred Sudler is doing an able job in the interim role. I am looking forward to welcoming Dr. Melissa Woo as our new senior vice president and chief information officer on December 1, 2019. I hired and worked with her at Stony Brook University (SBU) since 2016. A biophysicist by training, she did impressive work at SBU as well as impressive work as the CIO at the University of Oregon and at the University of Wisconsin-Milwaukee.

Since the board last met, Satish Udpa departed his position as executive vice president for administration to return to the College of Engineering and his beloved laboratory. He is at heart an educator and scientist and the college and his students will be the chief beneficiaries of his attention now. We are grateful for his leadership at a difficult time for this institution, particularly for his key role as acting president from January through July.

I also want to welcome Interim Provost, Dr. Teresa Sullivan. I look forward to tapping her experience in this important post and to her engagement in the search for our next provost. Most of you know that Terry is an alumna of the inaugural class of James Madison College. She was a Wharton Presidential Fellow at MSU, which you might have read about in a profile on her in last spring’s Spartan alumni magazine. She held faculty positions at the University of Chicago, Texas, Michigan and Virginia and has earned five major teaching awards. Her administrative CV includes provost at the University of Michigan, provost at the University of Texas system and, most recently, president of the University of Virginia. She also assisted in MSU’s presidential search as adviser to the Board and the search committee. Her dedication to her alma mater is as impressive as her experience in higher education. I’m very grateful to her for accepting this post, and I’m pleased to extend an official welcome to interim provost Terry Sullivan.

Of course, Dr. Sullivan expects us to recruit a new provost in a timely manner. It is a critical position, and I want to find someone who shares our priorities for student success and academic excellence, growth in disciplines across campus, faculty and staff development, diversity, equity and inclusion, world-changing research and scholarship and creative arts, and effort to develop the right culture on campus. Next week I will announce the search committee that will help me fill this position. I’ve been getting a lot of input about the composition of the search committee, which I hope will be representative and inclusive and the firm that will assist us in this process. We will expect finalist candidates to come to campus to meet the community, and I know they will be treated with respect and kindness by all Spartans.
5. Gift, Grant and Contract Report

Senior Vice President Hsu introduced Dr. Anna Moore, Department of Radiology and Human Medicine, who gave the Board a presentation entitled “Precision Health at MSU and Beyond: Shifting the Paradigm of Healthcare from Reactive to Proactive.” (Appendix A)

6. Personnel Actions

President Stanley presented the following personnel action.

Sullivan, Teresa, AN—Interim Provost and Executive Vice President for Academic Affairs, Provost EVP for Academic Affairs, effective October 1, 2019.

Trustee Foster moved to approve the recommendation, with support from Trustee Kelly.

THE BOARD VOTED to approve the recommendation.

Interim Provost Sullivan presented the following personnel actions.

The creation of an executive management position of Executive Vice President for Health Sciences effective October 28, 2019.

Beauchamp, Norman, AN—Dean, College of Human Medicine and Associate Provost and Assistant Vice President for Health Affairs, for a change in title to Executive Vice President for Health Sciences, effective October 28, 2019.

Sousa, Aron, AN—Senior Associate Dean, Human Medicine, for a change in title to Interim Dean, College of Human Medicine, effective October 28, 2019.

Woo, Melissa, AN—Senior Vice President for Information Technology and Chief Information Officer, IT Services VP and CIO, effective December 1, 2019.

Trustee Mosallam moved to approve the recommendations, with support from Trustee Byrum.

THE BOARD VOTED to approve the recommendations.

7. Committee on Budget and Finance

Trustee Foster presented the Trustee Budget and Finance Committee Report and the following recommendations and resolutions.

A. State of Michigan Fiscal Year (SFY) 2021 Capital Outlay Request and Five-Year Plan
It was recommended that the Board of Trustees adopt Michigan State University's SFY2021 Capital Outlay Request for State of Michigan cost participation for the project titled "Greenhouses—Renovation of Existing and Addition—Research Expansion and Learning", and the Five-Year Capital Plan.

BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby adopts the 2021 Capital Outlay Request and Five-Year Capital Plan included as Attachment A hereto. (Appendix B)

Trustee Foster moved to approve the recommendation, with support from Trustee Kelly.

THE BOARD VOTED to approve the recommendation.

B. Sale of Seevers Property in Iron County, MI

It was recommended that the Board of Trustees authorize the sale of property located in Iron County, Michigan.

BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby authorizes the Administration to sell approximately 670 acres of land located in Iron County, Michigan for $1,000,000 and upon such other terms and conditions as may be acceptable to the President or his designee.

Trustee Foster moved to approve the recommendation, with support from Trustee Byrum.

THE BOARD VOTED to approve the recommendation.

C. Conveyance of Property in Ingham County, Michigan to the Michigan Department of Transportation

It was recommended that the Board of Trustees authorize the transfer of property, located in Ingham County, Michigan, easterly of US-127 between Mt. Hope Ave. and Trowbridge Rd., back to the Michigan Department of Transportation (MDOT).

BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby authorizes the Administration to convey the property located in Ingham County, Michigan easterly of US-127 between Mt. Hope Ave. and Trowbridge Rd., back to the Michigan Department of Transportation.

Trustee Foster moved to approve the recommendation, with support from Trustee Mosallam.
THE BOARD VOTED to approve the recommendation.

D. Grand Rapids Innovation Park—Long-Term Lease of Space in the Medical Innovation Building, Construction and Sublease of Radiopharmacy

It was recommended that the Board of Trustees authorize the Administration (i) to enter into a lease for space and parking in new facilities being developed as part of the Grand Rapids Innovation Park, (ii) to complete tenant improvements creating a radiopharmacy in the leased space and (iii) to sublease all or a portion of the facilities to third party collaborators to use and operate the radiopharmacy.

BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby authorizes the Administration to negotiate and execute a lease for space and parking in the Grand Rapids Innovation Park for the purposes of constructing a radiopharmacy and office space, for a term that may exceed 10 years, and upon such other terms and conditions as may be acceptable to the President or his designee;

BE IT FURTHER RESOLVED, that the Board of Trustees of Michigan State University hereby authorizes the Administration to proceed with leasehold improvements to construct a radiopharmacy and office space; and procure and install scientific equipment, furnishings and technology for the facility; and

BE IT FURTHER RESOLVED, that the Board of Trustees of Michigan State University hereby authorizes the Administration to negotiate and execute subleases of the radiopharmacy and office space and parking, for terms that may exceed 10 years, and upon such other terms and conditions as may be acceptable to the President or his designee.

Trustee Foster moved to approve the recommendation, with support from Trustee Mosallam.

THE BOARD VOTED to approve the recommendation.

8. Academic Affairs Committee

Trustee Byrum presented the Trustee Academic Affairs Committee Report and the following recommendations and resolutions.

A. Naming Opportunity—Doug Meijer Medical Innovation Building
It was recommended that the Board of Trustees approves naming the new medical innovation building at the MSU Grand Rapids Innovation Park the Doug Meijer Medical Innovation Building.

BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby approves naming the new medical innovation building at the MSU Grand Rapids Innovation Park the Doug Meijer Medical Innovation Building.

Trustee Byrum moved to approve the recommendation, with support from Trustee Scott.

THE BOARD VOTED to approve the recommendation.

9. Audit, Risk and Compliance Committee

Trustee Kelly presented the Trustee Audit, Risk and Compliance Committee Report and the following recommendations and resolutions.

A. Acceptance of the Audited Financial Statements for the Year Ended June 30, 2019

It was recommended that the Board of Trustees approve and make official the financial statements of the University.

BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby accepts the audited financial statements for the year ended June 30, 2019.

Trustee Kelly moved to approve the recommendation, with support from Trustee Byrum.

THE BOARD VOTED to approve the recommendation.

B. Approval of Contract Terms

It was recommended that the Board of Trustees approve a contract between Michigan State University and Mr. Burton Bargerstock, an MSU academic staff member.

BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby approves renewal of a publishing contract with Mr. Burton Bargerstock consistent with earlier public notice and with a "Publishing Contract Term Sheet" presented to the Board for inclusion in its minutes. (Appendix C)
It was recommended that the Board of Trustees approve a contract between Michigan State University and Dr. Glenn Chambers, an MSU faculty member.

BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby approves renewal of a publishing contract with Dr. Glenn Chambers consistent with earlier public notice and with a "Publishing Contract Term Sheet" presented to the Board for inclusion in its minutes. (Appendix D)

It was recommended that the Board of Trustees approve a contract between Michigan State University and Great Lakes Crystal Technologies, Inc., a company in which MSU faculty member Dr. Timothy Grotjohn holds an interest.

BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby approves a services agreement with Great Lakes Crystal Technologies, Inc. consistent with earlier public notice and with a "Services Agreement Term Sheet" presented to the Board for inclusion in its minutes. (Appendix E)

It was recommended that the Board of Trustees approve a contract between Michigan State University and Dr. Tama Hamilton-Wray, an MSU faculty member.

BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby approves renewal of a publishing contract with Dr. Tama Hamilton-Wray consistent with earlier public notice and with a "Publishing Contract Term Sheet" presented to the Board for inclusion in its minutes. (Appendix F)

It was recommended that the Board of Trustees approve a contract between Michigan State University and Dr. Curtis Stokes, an MSU faculty member.

BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby approves a publishing contract with Dr. Curtis Stokes consistent with earlier public notice and with a "Publishing Contract Term Sheet" presented to the Board for inclusion in its minutes. (Appendix G)

It was recommended that the Board of Trustees approve a contract between Michigan State University and Dr. Laurie Van Egeren, an MSU academic staff member.

BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby approves renewal of a publishing contract with Dr. Laurie Van Egeren consistent with earlier public notice and with a "Publishing Contract
Term Sheet" presented to the Board for inclusion in its minutes. (Appendix H)

C. Notice of Intent to Negotiate Contracts

Pursuant to State law, the Chair of the Trustee Committee on Audit, Risk and Compliance gave public notice of the University’s intent to negotiate contracts with Advertent Biotherapeutics, Inc., a Michigan company. Dr. Erik Martinez Hackert, an Associate Professor in the Department of Biochemistry and Molecular Biology, and members of his family, have, or have options to buy, an interest in the company or are officers or paid employees of the company.

Pursuant to State law, the Chair of the Trustee Committee on Audit, Risk and Compliance gave public notice of the University’s intent to negotiate contracts with Dr. Janice Beecher, Director of the Institute of Public Utilities Policy Research & Education.

Pursuant to State law, the Chair of the Trustee Committee on Audit, Risk and Compliance gave public notice of the University’s intent to negotiate contracts with Nimble Acoustics, Inc., a Michigan company. Dr. Mi Zhang, an Assistant Professor in the Department of Electrical and Computer Engineering, and members of his family, have, or have options to buy, an interest in the company or are officers or paid employees of the company.

10. Student Life and Culture Committee

Trustee Scott presented the Trustee Student Life and Culture Committee Report.

The Committee on Student Life and Culture received an update on the new Counseling and Mental Health Services Fund and discussed Fraternity and Sorority Life with Vice President and Associate Provost for Student Affairs and Services, Dr. Maybank.

11. Chairperson’s Report and Trustee Comments

Trustee Byrum stated that she and the rest of the Board take bias incidents on campus very seriously and that she understands that there are impacts on the MSU community, and more work that they need to do. Trustee Byrum welcomed and thanked Dr. Sullivan for serving as interim provost. She stated her excitement for Dr. Beauchamp’s new position in the health sciences and is looking forward to increased research and increasing MSU’s NIH research profile. Trustee Byrum stated the naming of the Doug Meijer research facility in Grand Rapids is significant because it is the first financial gift to MSU from the Meijer family and will impact the entire State. Trustee Byrum stated the recent opening of the Minskoff
Pavilion will be transformational for the University and that this living-learning space will benefit students. Trustee Byrum stated upcoming alumni events in Detroit and Grand Rapids will allow the Trustees to increase engagement with alumni across the State.

Trustee Kelly welcomed Dr. Sullivan back to MSU and congratulated Dr. Beauchamp on his new position.

Trustee Foster welcomed Dr. Sullivan to MSU and congratulated Dr. Beauchamp.

Trustee Mosallam congratulated Dr. Beauchamp on his appointment and Dr. Sullivan on her appointment as Interim Provost. He stated it is unprecedented that two former AAU Presidents are leading MSU. He stated Dr. Stanley and Dr. Sullivan have taken decisive actions and have shown great leadership.

Trustee Scott welcomed and thanked Dr. Sullivan for serving MSU and thanked Dr. Beauchamp for his work in Grand Rapids. Trustee Scott stated her sincere sorrow for those affected by recent bias incidents on campus. She stated the university is working on improving the handling of situations like these in the future. She stated Michigan State is a place where all students should feel welcome and included.

Trustee Tebay thanked Dr. Sullivan for her leadership and thanked Dr. Beauchamp for his work in Grand Rapids and shared her excitement for the position. Trustee Tebay stated the Board is working to ensure communication about bias incidents are improved and that student safety is a priority for the Board.

12. Request to Adjourn

On a motion by Trustee Byrum, supported by Trustee Kelly, THE BOARD VOTED to adjourn at 8:45 a.m.

Respectfully submitted,

Nakia Barr
Secretary of the Board of Trustees
Precision Health at MSU and Beyond: Shifting the Paradigm of Healthcare from Reactive to Proactive

Anna Moore, Ph.D.
Professor of Radiology
Director, Precision Health Program
Assistant Dean for Precision Health
College of Human Medicine
Michigan State University
Precision Health Program
Approaches to Healthcare

Reacting to a problem after it arises

Preventing problems before they arise
Precision Health Components

Risk Assessment at early/all stages of life
- Genetic screening
- Family history
- Socioeconomic factors

Customized Monitoring
- eWare, implantables, Smart Home and Healthy Living, early detection

Big data analysis
- AI, Pattern recognition
- Machine learning
- Predictive modeling
- Digital twin

Precision Medicine, Nanomedicine
- Precision Imaging, In vitro diagnostics

Translation
- Clinical trials
- Implementation

Basic research in animals

Blood assays

wk1

wk12
MSU is uniquely poised to lead the transformation of healthcare in Michigan

- Availability of multidisciplinary research spanning pre-clinical, translational and clinical
- Dedicated facilities across colleges
- Statewide footprint
- Experience in managing critical healthcare issues
- Highest impact:
  - early diagnosis - improved outcomes; increased life expectancies
Building Collaborations and Partnerships - Clinical

McLaren-MSU

Spectrum Health

Karmanos Cancer Center

Sparrow

Mary Free Bed

Mercy Health
Building Collaborations and Partnerships - Industry

$5.7 M
Healthy Michigan

Precision Health is the Future of Healthcare
MEMORANDUM

To: Committee on Budget and Finance

From: Teresa A. Sullivan, Interim Provost and Executive Vice President for Academic Affairs
       Samuel L. Stanley, Jr., M.D., President
       Kathleen Wilbur, Executive Vice President for Government Communications and Advancement

Subject: State of Michigan Fiscal Year (SFY) 2021 Capital Outlay Request and Five-Year Plan

RECOMMENDATION
The Trustee Committee on Budget and Finance recommends that the Board of Trustees adopt Michigan State University’s SFY2021 Capital Outlay Request for State of Michigan cost participation for the project titled “Greenhouses – Renovation of Existing and Addition - Research Expansion and Learning”, and the Five-Year Capital Plan.

Action on the request authorizes the Administration to respond to the State of Michigan Budget Office reporting requirements and submit a Capital Outlay request for state cost participation. The report and request are due to the State Budget Office no later than October 31, 2019.

RESOLUTION
BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby adopts the 2021 Capital Outlay Request and Five-Year Capital Plan included as Attachment A hereto.

BACKGROUND
The State of Michigan Capital Outlay process requires that public universities and community colleges submit a Five-Year Capital Outlay Plan that is intended to provide state policymakers with the most current information available on institutional priorities and needs. Institutions may request state funding of a capital outlay project. The requested project must be a logical extension of information contained in the Five-Year Capital Outlay Plan and address a specific academic or research need of the institution. The plan must be approved annually by the institutions governing body and is to include state supported and institutional funded projects. To optimize flexibility the University provides a more significant potential list of priority projects, hence the list appears greater than the number of projects that would move forward in the five-year time frame.
**MSU SFY21 Capital Outlay Request - Renovation and Addition**

<table>
<thead>
<tr>
<th>Project Description</th>
<th>FY20 Estimate (mil.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Greenhouses – Renovation of Existing and Addition – Research Expansion and Learning</td>
<td>$20.9</td>
</tr>
</tbody>
</table>

**MSU 5-Year Capital Planning – Renovations and Additions**

<table>
<thead>
<tr>
<th>Project Description</th>
<th>FY20 Estimate (mil.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Biomedical Frontier</td>
<td></td>
</tr>
<tr>
<td>o Biomedical Animal Resources – Provision for Large Animal ($15.7M - $21.9M)</td>
<td>$11.3 – 16.5</td>
</tr>
<tr>
<td>▪ Housing and Surgery</td>
<td>$4.4 – 5.4</td>
</tr>
<tr>
<td>o Clinical Center A-Wing – Renovate for Research Expansion</td>
<td>$65.0 – 75.0</td>
</tr>
<tr>
<td>o Clinical Center B-Wing – Renovate for Research Expansion &amp; Learning</td>
<td>$15.0 – 20.0</td>
</tr>
<tr>
<td>o Research Laboratory Renovation – Various (STEM and ISTB related backfill)</td>
<td>$15.0 – 18.0</td>
</tr>
<tr>
<td>• BSL-3 – Research Expansion-Multi-Species Flexible Housing/Procedure Space (phase 2)</td>
<td>$9.2 – 10.5</td>
</tr>
<tr>
<td>• Detroit Initiative – MSU Places of Learning (long-term lease)</td>
<td>TBD</td>
</tr>
<tr>
<td>• Engineering – New Construction/Addition/Renovation</td>
<td>TBD</td>
</tr>
<tr>
<td>• Healthy Campus – Recreation, Fitness, Sport</td>
<td></td>
</tr>
<tr>
<td>o IM Circle – Convert former Pool to Multi-Purpose Space</td>
<td>$10.0 – 11.0</td>
</tr>
<tr>
<td>o IM Fields – Service Road Synthetic Turf</td>
<td>$9.5 – 10.5</td>
</tr>
<tr>
<td>• Large Animal - Teaching and Learning Support</td>
<td>TBD</td>
</tr>
<tr>
<td>• Learning Spaces</td>
<td></td>
</tr>
<tr>
<td>o Learning Space Improvements – Annual Investment for Updates and Improvements (5-year, $12.0M annually)</td>
<td>$60.0</td>
</tr>
<tr>
<td>o Library Improvements – Learning and Collections Support</td>
<td>$5.0 – 8.0</td>
</tr>
<tr>
<td>• Life Science Buildings (A &amp; B) HVAC Replacement and Related (phased approach)</td>
<td>TBD</td>
</tr>
<tr>
<td>• MSU Chapel and Columbarium – Renovation and Accessibility</td>
<td>TBD</td>
</tr>
<tr>
<td>• Music Building – Renovation of Existing for Improved Program Support</td>
<td>$9.4 – 33.3</td>
</tr>
<tr>
<td>• Old Botany – Comprehensive Renovation</td>
<td>$9.6 – 10.6</td>
</tr>
<tr>
<td>• Plant Biology Building – Comprehensive Renovation</td>
<td>$120.0 – 130.0</td>
</tr>
<tr>
<td>• Single Occupant/ADA Restrooms – High Priority Buildings</td>
<td>TBD</td>
</tr>
<tr>
<td>• 600 Crescent Road – Modifications to 1st and 2nd Floors for IT Services Space</td>
<td></td>
</tr>
<tr>
<td>Consolidation</td>
<td>TBD</td>
</tr>
<tr>
<td>• Student Services Building – Renovate for Student Support</td>
<td>$8.8 – 35.5</td>
</tr>
</tbody>
</table>

**New Construction – New Building**

<table>
<thead>
<tr>
<th>Project Description</th>
<th>FY20 Estimate (mil.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• MSU Health Care – Medical Services Building</td>
<td>TBD</td>
</tr>
<tr>
<td>• Transportation Services and Mobility Research Center</td>
<td>$20.0 – 22.0</td>
</tr>
</tbody>
</table>

**Major Systems Maintenance and Utilities**

<table>
<thead>
<tr>
<th>Project Description</th>
<th>FY20 Estimate (mil.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• 20MW Solar Array Installation (material change to the landscape and long-term lease)</td>
<td>NA</td>
</tr>
<tr>
<td>• Capital Renewal (5-year, $35.0M annually)</td>
<td>$175.0</td>
</tr>
<tr>
<td>• Farm Lane Infrastructure and Mobility Upgrades including Bridge Replacement</td>
<td>$35.0 – 40.0</td>
</tr>
<tr>
<td>• Service Road and Service/Bridge Intersection Reconstruction</td>
<td>$6.0 – 7.0</td>
</tr>
<tr>
<td>• Utilities (5-year) – Power Plant Modernization</td>
<td>TBD</td>
</tr>
<tr>
<td>o Battery Energy Storage System</td>
<td>TBD</td>
</tr>
<tr>
<td>o Combustion Turbine Rotor and Engine – Replace Unit 6</td>
<td>TBD</td>
</tr>
<tr>
<td>o Electrical Centrifugal Chillers – 8,400 Tons</td>
<td>TBD</td>
</tr>
<tr>
<td>o Shared Natural Gas Pipeline</td>
<td>TBD</td>
</tr>
</tbody>
</table>
PUBLISHING CONTRACT TERM SHEET

Party: Mr. Burton Bargerstock

Project Description: Renewal of a contract for the co-editing of a book series entitled *Transformations in Higher Education: The Scholarship of Engagement (THE)*

Term: Through December 31, 2021

Agreement: Mr. Bargerstock will receive two free copies of each published work, and additional copies at a 40% discount from the retail price.

Services Provided:
- By MSU to Mr. Bargerstock: Publication of books
- By Mr. Bargerstock to MSU: Co-editing the book manuscripts in the series

Use of University Facilities/Personnel: Not Applicable

Organization Type: Mr. Bargerstock is contracting as an individual.

Personnel Interest: This contract will be directly with Mr. Bargerstock, a Specialist in MSU University Outreach & Engagement.
# PUBLISHING CONTRACT TERM SHEET

## Party:
Dr. Glenn Chambers

## Project Description:
Renewal of a contract for the co-editing of a book series entitled *New Frontiers in the Study of Global African Diaspora: Between Uncharted Themes and Alternative Representation*

## Term:
Immediate

## Agreement:
Dr. Chambers will receive a royalty of 2% of net value from the net units sold of each edition of the work, plus three free copies of each published work, and additional copies at a 40% discount from the retail price.

## Services Provided:
- **By MSU to Dr. Chambers:** Publication of books
- **By Dr. Chambers to MSU:** Co-editing the book manuscripts in the series.

## Use of University Facilities/Personnel:
Not Applicable

## Organization Type:
Dr. Chambers is contracting as an individual.

## Personnel Interest:
This contract will be directly with Dr. Chambers, an Associate Professor in the Department of History, Director of the African-American and African Studies Program in the College of Arts & Letters, and Associate Dean for Undergraduate Studies.
### SERVICES AGREEMENT TERM SHEET

**Party:** Great Lakes Crystal Technologies, Inc.

**Agreement:** Subcontract from Great Lakes Crystal Technologies, Inc. prime award from the US Department of the Navy to MSU (IP00434331)

**Term:** November 1, 2019 – October 31, 2020

**Payment Terms:** $80,000 payment to MSU for services

**Services Provided:**
- By MSU to Great Lakes Crystal Technologies, Inc.: assist with design and testing of a diamond nitrogen vacancy magnetometer
- By Great Lakes Crystal Technologies, Inc. to MSU: None completed under the agreement

**Use of University Facilities/Personnel:** Services conducted in the Engineering Building by or under Dr. Timothy Grojohn and/or Dr. Elias Garratt.

**Organization Type:** Michigan corporation

**Personnel Interest:** Dr. Timothy Grojohn, a Professor in the Department of Electrical and Computer Engineering, and members of his family, have, or have options to buy, an interest in the company or are officers or paid employees of the company.
PUBLISHING CONTRACT TERM SHEET

Party: Dr. Tama Hamilton-Wary

Project Description: Renewal of a contract for the co-editing of a book series entitled *New Frontiers in the Study of Global African Diaspora: Between Uncharted Themes and Alternative Representation*

Term: Immediate

Agreement: Dr. Hamilton-Wray will receive a royalty of 2% of Net Value from the Net Units Sold of each edition of the work, plus three free copies of each published work, and additional copies at a 40% discount from the retail price.

Services Provided: By MSU to Dr. Hamilton-Wray: Publication of books

By Dr. Hamilton-Wray to MSU: Editing the book manuscripts in the series

Use of University Facilities/Personnel: Not Applicable

Organization Type: Dr. Hamilton-Wray is contracting as an individual.

Personnel Interest: This contract will be directly with Dr. Hamilton-Wray, an Associate Professor in the Residential College in the Arts & Humanities.
PUBLISHING CONTRACT TERM SHEET

Party: Dr. Curtis Stokes

Project Description: Publication of a collected volume of essays as a book entitled *Incarceration in Michigan: Grounding the National Debate in State Practice*

Term: Immediate

Agreement: Dr. Stokes will receive a royalty of 2.5% of net value from the net units sold of each edition, plus five free copies of each edition, and additional copies at a 40% discount from the retail price.

Services Provided: By MSU to Dr. Stokes: Publication of book
By Dr. Stokes to MSU: Editing the book

Use of University Facilities/Personnel: Not Applicable

Organization Type: Dr. Stokes is contracting as an individual.

Personnel Interest: This contract will be directly with Dr. Stokes, a Professor in James Madison College.
PUBLISHING CONTRACT TERM SHEET

Party: Dr. Laurie Van Egeren

Project Description: Renewal of a contract for the co-editing of a book series entitled: Transformations in Higher Education: The Scholarship of Engagement (THE)

Term: Through December 31, 2021

Agreement: Dr. Van Egeren will two free copies of each published work, and additional copies at a 40% discount form the retail price.

Services Provided: By MSU to Van Egeren: Publication of books

By Dr. Van Egeren to MSU: Co-editing the book manuscripts in the series

Use of University Facilities/ Personnel: Not Applicable

Organization Type: Dr. Van Egeren is contracting as an individual.

Personnel Interest: This contract will be directly with Dr. Van Egeren, Interim Associate Provost for University Outreach & Engagement.